Naval Facilities Engineering Command Mid-Atlantic
Norfolk, Virginia

Final
Fourth Five-Year Review Report

Former Naval Construction Battalion Center Davisville
North Kingstown, Rhode Island

March 2018

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SEMS Doc ID 100003653

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FINAL
FOURTH FIVE-YEAR REVIEW REPORT

FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

COMPREHENSIVE LONG-TERM
ENVIRONMENTAL ACTION NAVY (CLEAN) CONTRACT

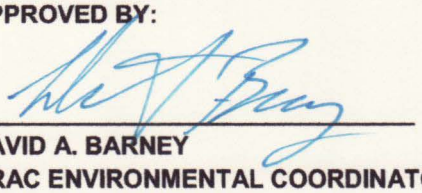
Submitted to:
Department of the Navy
Naval Facilities Engineering Command Mid-Atlantic
9324 Maryland Avenue
Norfolk, VA 23511-3095

Submitted by:
Tetra Tech
5700 Lake Wright Drive, Suite 102
Norfolk, Virginia 23502

CONTRACT NUMBER N6247016D9008
CONTRACT TASK ORDER N4008517F4376

MARCH 2018

APPROVED BY:



DAVID A. BARNEY
BRAC ENVIRONMENTAL COORDINATOR
BRAC PMO NORTHEAST

MARCH 28, 2018
DATE

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Five-Year Review Summary Form

SITE IDENTIFICATION		
Site name: Former Naval Construction Battalion Center Davisville		
EPA ID: RI6170022036		
Region: 1	**State:** RI	**City/County:** Washington
SITE STATUS		
NPL status: Final		
Remediation status: Operating		
Multiple OUs? Yes	**Construction completion date:**	
Has site been put into reuse? Yes		
REVIEW STATUS		
Lead agency: U.S. Department of the Navy		
Author name: Prepared by Tetra Tech under contract to the Navy		
Author title:	**Author affiliation:**	
EPA's Review period: January 2013 to December 2017		
Date(s) of site inspection: June 22, 2017		
Type of review: Post-SARA		
Review number: 4 (Fourth)		
Triggering action: Third Five-Year Review – March 28, 2013		
Triggering action date *(from WasteLAN)*: 03/28/2013		
Due date *(five years after triggering action date):* 03/28/2018		

Five-Year Review Summary Form, cont'd.

Issues:

Site 07 – Calf Pasture Point

1. Surface water and sediment should continue to be monitored to ensure ongoing protectiveness for recreational swimmers/waders, shell fisherman, and ecological receptors.
2. Site contaminants in the groundwater plume are migrating toward surface water in the southern, western, and eastern shores; however, it is unknown how long it will take for concentrations to reach levels at these exposure areas that may pose a risk to human health or the environment.

Site 09 – Allen Harbor Landfill

No issues affecting the protectiveness of the remedy were identified during this review.

Site 16 – Creosote Dip Tank Area, Fire-Fighting Training Area and Former Building 41

The Environmental Land Use Restriction (ELUR) for recording on the deed for Parcel 8, Zone 4 (area south of Davisville Road and the eastern Pier area were previously transferred) has not been completed. Coordination with current property owner(s) will be required.

Recommendations and Follow-Up Actions:

Site 07 - Calf Pasture Point

1. The Long-Term Monitoring Plan (LTMP) should be updated to include surface water and sediment monitoring and risk evaluations and/or assessments, as needed, to support future five-year reviews and to ensure ongoing protectiveness. The LTMP should also be revised to state that surface water and sediment monitoring will continue until such time that levels of site contaminants allow for unlimited use and unrestricted exposure.
2. Based on the results of a discussion concerning the CSM and analysis approach, an analysis should be conducted to evaluate the estimated amount of time (if ever) that it will take for the concentrations of site contaminants to reach levels in surface water and sediment that pose a risk to human health and the environment.

Site 09 - Allen Harbor Landfill

None.

Site 16 – Creosote Dip Tank Area, Fire-Fighting Training Area and Former Building 41

In coordination with current property owner(s), submit ELUR for recording on deed for Parcel 8, Zone 4 (area south of Davisville Road and the eastern Pier area were previously transferred).

Five-Year Review Summary Form, cont'd.

Protectiveness Statements:

Site 07 - Calf Pasture Point

The remedy at Calf Pasture Point is protective of human health and the environment in the short-term. Exposure pathways that could result in unacceptable risks from groundwater are being addressed through institutional controls. These controls are effectively preventing exposure to site-related contaminants in groundwater. A risk screening evaluation indicates that there is no unacceptable risk to recreational swimmers/waders, shell fisherman, or ecological receptors from site-related contaminants in surface water and sediment. However, to ensure that the remedy remains protective in the long term, the following actions will be taken: (1) Surface water and sediment monitoring results will continue to be compared to risk screening numbers to ensure ongoing protectiveness and (2) Based on the results of a discussion concerning the conceptual Site Model (CSM) and analysis approach, an analysis should be conducted to evaluate the estimated amount of time (if ever) for the concentrations of site contaminants to reach levels in surface water and sediment that pose a risk to human health and the environment.

Site 09 - Allen Harbor Landfill

The remedy at Allen Harbor Landfill is protective of human health and the environment. Exposure pathways that could result in unacceptable risks are being addressed through remedy-related institutional controls and a state-enforced prohibition of shellfishing in Allen Harbor. These controls are effectively preventing exposure to site-related contaminants.

Site 16 – Creosote Dip Tank Area, Fire-Fighting Training Area and Former Building 41

The remedy at Site 16 is currently protective of human health and the environment. The soil removal portion of the remedy was successful in removing soil with contaminant of concern (COC) concentrations exceeding industrial/commercial Direct Exposure Criteria (DECs) from the site, and the 0 to 2 feet of backfill used to restore the excavated areas prevents exposure to COCs at greater depths. Groundwater treatment was successful in reducing concentrations of tricholorethene (TCE) to levels that allowed for a transition to monitored natural attenuation (MNA). The results of future Long-Term Monitoring (LTM) will be used to evaluate the effectiveness of the remedy, including confirmation of the lack of migration of subsurface soil COCs to other media beyond the compliance boundary and by evaluating trends in groundwater COC concentrations. Implementation of Land Use Controls (LUCs) via the Land Use Control Implementation Plan (LUCIP) in the North Central Area (NCA) portion of the site will provide protection by prohibiting residential exposure to surface and subsurface soil and by preventing human exposure to groundwater. Although LUCs have not been formally implemented in the non-NCA portion of the site, inspections have confirmed that no activities that could facilitate human exposure to groundwater or to volatile organic compound (VOC) vapors migrating into buildings have been conducted at the site (i.e., no well installation and no building construction). Attempts by the Navy to implement the required LUCs via addition to the deed associated with previous transfer of the property are underway.

Based on the information available to date and the activities that are completed and ongoing, the Site 16 remedy is currently protective. Exposure pathways that could result in unacceptable risks are being addressed through implemented LUCs or by the confirmed lack of unacceptable site uses (i.e., no well installation or building construction) and therefore exposure to site-related contaminants in soil and groundwater is currently being prevented. To ensure the future protectiveness of the remedy, the Navy is coordinating with the current site owner to allow incorporation of an ELUR documenting the LUCs required by the Record of Decision (ROD) for the non-NCA portion of Site 16 into the deed for previous transfer of the property.

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Acronyms and Abbreviations

ALM	Adult Lead Methodology
ARAR	Applicable or Relevant and Appropriate Requirement
AWQC	Ambient Water Quality Criteria
BCT	BRAC Cleanup Team
BGS	Below Ground Surface
BRAC	Base Realignment and Closure
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
C.F.R.	Code of Federal Regulations
CLEAN	Comprehensive Long-Term Environmental Action Navy
CLTMP	Conceptual Long-Term Monitoring Plan
COC	Contaminant of Concern
COPC	Contaminant of Potential Concern
CSFs	Cancer Slope Factors
CSGWPP	Comprehensive State Groundwater Protection Program
CSM	Conceptual Site Model
CTO	Contract Task Order
CVOC	Chlorinated Volatile Organic Compound
DANC	Decontaminating Agent Non-Corrosive
DCA	Dichloroethane
DCE	Dichloroethene
DD	Decision Document

DDE	Dichlorodiphenyldichloroethylene
DEC	Direct exposure criterion
DI	Deionize
DNAPL	Dense Non-Aqueous Phase Liquid
DO	Dissolved Oxygen
DPT	Direct Push Technology
DQO	Data Quality Objective
EBS	Environmental Baseline Survey
ELCR	Excess lifetime cancer risk
ELUR	Environmental Land Use Restriction
EPA	Environmental Protection Agency
EPC(s)	Exposure Point Concentration(s)
ERA	Ecological Risk Assessment
ERM	Effects Range Median
ESD	Explanation of Significant Differences
FFA	Federal Facilities Agreement
FFTA	Fire Fighting Training Area
FOC	Fractional Organic Carbon
FOST	Finding of Suitability to Transfer
FS	Feasibility Study
FWENC	Foster Wheeler Environmental Corporation
GPR	Ground Penetrating Radar
GPS	Global Positioning System
HEAST	Health Effects Assessment Summary Tables

HHRA	Human Health Risk Assessment
HI	Hazard Index
HQ	Hazard Quotient
HRC	Hydrogen release compound
IAS	Initial Assessment Study
IR	Installation Restoration
IRIS	Integrated Risk Information System
IUR	Inhalation unit risk
LIFOC	Lease in Furtherance of Conveyance
LTM	Long-Term Monitoring
LTMP	Long-Term Monitoring Program
LUC	Land use control
LUCIP	Land Use Control Implementation Plan
MARAD	Maritime Administration
MOA	Memorandum of Agreement
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
ME	Monitoring Event
MNA	Monitored Natural Attenuation
MS	Matrix spike
MSD	Matrix spike duplicate
MSL	Mean Sea Level
NAS	Naval Air Station
NAVFAC	Naval Facilities Engineering Command

NCBC	Naval Construction Battalion Center
NCA	North Central Area
NCP	National Contingency Plan
NFA	No further action
NOAA	National Oceanic and Atmospheric Administration
NORAD	North Atlantic Distribution, Inc.
NPL	National Priorities List
NTU	Nephelometric Turbidity Unit
O&M	Operations and Management
ORP	Oxidation-Reduction Potential
OU	Operable Unit
PAH	Polynuclear Aromatic Hydrocarbon
PAL	Project Action Limit
PBC	Public Benefit Conveyance
PCA	Tetrachloroethane
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethene
PID	Photo Ionization Detectior
PFM	Passive Flux Meter
PPT	Parts Per Thousand
PRG	Preliminary Remediation Goal
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RAB	Restoration Advisory Board

RAGS	Risk Assessment Guidance for Superfund
RAO	Remedial Action Objective
RBCs	Risk-Based Concentrations
RCRA	Resource Conservation and Recovery Act
RfD(s)	Reference Dose(s)
RIDEC	Rhode Island Economic Development Corporation
RG	Remedial Goal
RI	Remedial Investigation
RIDEM	Rhode Island Department of Environmental Management
RIEDC	Rhode Island Economic Development Corporation
RME	Reasonable Maximum Exposure
ROD	Record of Decision
RSL	Regional Screening Level
SARA	Superfund Amendment and Reauthorization Act
SAP	Sampling and Analysis Plan
SDWA	Safe Drinking Water Act
SVOC	Semivolatile Organic Compound
TBC	To Be Considered
TCA	Trichloroethane
TCE	Trichloroethene (Trichloroethylene)
TPH	Total Petroleum Hydrocarbons
TRV	Toxicity reference value
UCL	Upper Concentration Limit
UF	University of Florida

UFP	Uniform Federal Policy
USFWS	United States Fish and Wildlife Service
UST	Underground storage tank
VC	Vinyl Chloride
VOC	Volatile Organic Compound
WMA	Waste management area
WQS	Water Quality Standard

Executive Summary

This report presents the results of the fourth Five-Year Review for the former Naval Construction Battalion Center (NCBC) Davisville, located in North Kingstown, Rhode Island. The Installation Restoration (IR) Program for the former NCBC Davisville includes 13 sites and 3 Study Areas. At three of the sites, Site 07 – Calf Pasture Point, Site 09 – Allen Harbor Landfill, and Site 16 – Creosote Dip Tank Area, Fire-Fighting Training Area (FFTA), and former Building 41, hazardous substances, pollutants, or contaminants remain after remedy implementation in excess of levels that allow for unlimited use and unrestricted exposure. These sites are therefore subject to the statutory requirement under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to review their remedies at least once every 5 years to assure that they continue to be protective of human health and the environment. The triggering action for this review is the completion of the Third Five-Year Review Report.

At Site 07 - Calf Pasture Point, the remedy includes institutional controls (CERCLA and non-CERCLA deed restrictions) and Long-Term Monitoring (LTM) of groundwater and sediment. Non-CERCLA Deed restrictions include a prohibition on the construction of buildings for residential or commercial use; CERCLA prohibition on the construction of any building, structure, or facility without adequate ventilation; and prohibition on the installation of water supply wells and use of groundwater for any purpose other than sampling or remediation. Compliance with deed restrictions is documented annually via land use controls (LUC) inspections in accordance with the land use control implementation plan (LUCIP) for NCBC Davisville.

Based on the data review and technical assessment performed for this Five-Year Review, the remedy at Calf Pasture Point is protective of human health and the environment in the short-term because exposure pathways that could result in unacceptable risks are being addressed through institutional controls that prevent exposure to contaminants in site groundwater and because a risk screening evaluation indicates there is no unacceptable risk to recreational swimmers/waders, shell fishermen, or ecological receptors from site-related contaminants in surface water and sediment. Supplemental risk assessment and monitoring program optimization will continue during the LTM program to verify the protectiveness of the remedy and to ensure that reasonable potential exposure pathways are being adequately monitored.

At Site 09 - Allen Harbor Landfill, the remedy includes a multimedia cap (including a passive gas venting system); stone shoreline revetment; an offshore breakwater structure; the construction of an inter-tidal wetland; institutional controls (deed

restrictions) and maintain warning signs to inform the public of the State ban on shellfishing in the harbor; and LTM of groundwater, sediment, shellfish, and landfill gas. Compliance with deed restrictions is documented annually via LUC inspections in accordance with the LUCIP.

Based on the data review and technical assessment performed for this Five-Year Review, the remedy at Site 09 is protective of human health and the environment. Exposure pathways that could result in unacceptable risks are being addressed through remedy-related institutional controls and a state-enforced prohibition on shellfishing in Allen Harbor. These controls are effectively preventing exposure to site-related contaminants. Supplemental risk assessment and monitoring program optimization will continue during the LTM program to verify the protectiveness of the remedy and to ensure that reasonable potential exposure pathways are being adequately monitored.

At Site 16 – Creosote Dip Tank Area, FFTA, and former Building 41, the remedy includes excavation and off-site disposal of surface soils (to a depth of 2 feet below ground surface [bgs]) in the north central area (NCA) of Site 16 with contaminant concentrations greater than Rhode Island Department of Environmental Management (RIDEM) industrial/commercial (I/C) direct exposure criterions (DECs); excavation and off-site disposal of surface soils (to a depth of 2 feet bgs) near the marina building (Building E-107) with backfilling and restoration; focused in-situ treatment of groundwater at the eastern end of former Building 41; Monitored Natural Attenuation (MNA) of the residual VOC-contaminated groundwater plume; and LTM of groundwater (and surface water and sediments, as necessary) after active groundwater treatment until groundwater standards are achieved. Deed restrictions include the establishment of a waste management area (WMA) in the NCA/marina to ensure that future use of the NCA is limited to non-residential activities (which also excludes recreational use as defined by RIDEM). A soil management plan is being implemented to address any disturbance to the soils and covers. Recreational use currently occurs at the marina (Quonset Davisville Navy Yacht Club).

Based on the data review and technical assessment performed for this Five-Year Review, the remedy at Site 16 is currently protective of human health and the environment. Exposure pathways that could result in unacceptable risks are being addressed through long-term maintenance and monitoring of the ROD remedies and implemented LUCs and by the confirmed acceptable site uses (i.e., no well installation or building construction) and therefore exposure to site-related contaminants in soil and groundwater is currently being prevented. To ensure the future protectiveness of the remedy, the Navy is coordinating with the current site owner to allow incorporation of an Environmental Land Use Restriction (ELUR) documenting the LUCs required by the

Record of Decision (ROD) for the non-NCA portion of Site 16 into the deed for previous transfer of the property. Supplemental risk assessment and monitoring program optimization will be used during the LTM program to verify the protectiveness of the remedy and to ensure that reasonable potential exposure pathways are being adequately monitored.

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1.0 Introduction

1.1 Overview of the Five-Year Review Process

The purpose of the Five-Year Review is to determine whether the remedies implemented at former Naval Construction Battalion Center (NCBC) are protective of human health and the environment. The methods, findings, and conclusions of the Five-Year Review for the former NCBC Davisville are documented in this Five-Year Review Report. In addition, this report presents issues identified during the review and provides recommendations to address them.

The following is a summary of the requirements for Five-Year Reviews:

- The statutory requirement for a Five-Year Review was added to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as part of the Superfund Amendments and Reauthorization Act (SARA) of 1986. A Five-Year Review is required when both of the following conditions are met, whether the site is on the National Priorities List (NPL) or not:

  1) Upon completion of the remedial actions at a site, hazardous substances, pollutants, or contaminants remain in excess of levels that allow for unlimited use and unrestricted exposure. For example, if a site is restricted to industrial use because hazardous substances, pollutants, or contaminants remain in excess of levels that allow for unlimited use and unrestricted exposure, Five-Year Reviews must be conducted.

  2) The ROD or Decision Document (DD) for the site was signed on or after October 17, 1986 (the effective date of SARA).

- CERCLA §121(c), as amended, states:

  "If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews."

- The National Contingency Plan (NCP), 40 Code of Federal Regulations (C.F.R.) Part 300.430(f)(4)(ii), states:

  If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited, and unrestricted exposure, the lead agency shall review such action no less often than every five years after initiation of the selected remedial action.

This is the fourth Five-Year Review for the former NCBC Davisville. The triggering action for this statutory review was the completion of the Third Five-Year Review Report on March 28, 2013.

This Five-Year Review Report has been prepared in accordance with the United States Environmental Protection Agency (EPA) *Comprehensive Five-Year Review Guidance*, dated June 2001, and United States Department of the Navy *Policy for Conducting Five-Year Reviews Under the CERCLA Program* (2004). Additionally, the EPA memorandum dated September 13, 2012, with the subject *Clarifying the Use of Protectiveness Determinations for Comprehensive Environmental Response, Compensation, and Liability Act Five-Year Reviews* was considered during the preparation of this report.

1.1.1 Public Notification

To initiate the Five-Year Review for NCBC Davisville, discussions occurred between the Navy and regulators [EPA and Rhode Island Department of Environmental Management (RIDEM)] during the Base Realignment and Closure (BRAC) Cleanup Team (BCT) meeting on June 22, 2017. Additionally, on the same day, the Navy gave a presentation at the Restoration Advisory Board (RAB) meeting summarizing the results of the third Five-Year Review and outlining the work to be completed during the fourth Five-Year Review.

The completed Fourth Five-Year Review Report will be available at the Information Repository maintained by Quonset Development Corporation in the Annex Building at 95 Cripe Street, North Kingstown, Rhode Island. A public notice will be published announcing the completion of the Five-Year Review and its availability at the Information Repository.

1.2 Roles and Responsibilities

In accordance with CERCLA, the Navy is the lead agency responsible for implementation and maintenance of the selected remedies for the affected sites as outlined in Section 1.1. The review team for this document includes EPA and RIDEM. The Navy is the responsible party and will issue the final Five-Year Review Report after revising this draft based on EPA and RIDEM comments. After EPA's review of this draft, EPA is expected to approve the Final Five-Year Review Report upon resolution and integration of EPA's comments. After RIDEM's review of this draft, RIDEM is expected to concur on the Final Five-Year Review Report upon resolution and integration of the State's comments.

1.3 Scope of the Five-Year Review

This fourth Five-Year Review addresses Navy Installation Restoration (IR) Site 07 [EPA Operable Unit (OU) 8], Calf Pasture Point; Navy IR Site 09 (EPA OU1), Allen Harbor Landfill; and Creosote Dip Tank Area, Fire Fighting Training Area (FFTA), and former Building 41, Navy IR Site 16 (EPA OU9). This is the first Five-Year Review for Site 16 because the ROD for this site was signed in 2014, after the finalization of the Third Five-Year Review Report. The locations of the IR sites are provided on Figure 1-1. Section 1 discusses the purpose of this report, and Sections 2 through 4 summarize the results of the Five-Year Review process for Sites 07, 09, and 16, respectively. Appendix A presents summaries of interview results, Appendix B presents photologs of site inspections performed in 2017, Appendix C presents updated risk tables, and Appendix D contains the Five Year Data Summary reports, which present the results of the comprehensive five-year monitoring event used to complete the Five-Year Reviews of Sites 07 and Site 09.

1.4 Status of Other CERCLA Sites at NCBC Davisville

Table 1-1 provides a summary of the status of other CERCLA sites at NCBC Davisville.

1.5 Next Review

The next Five-Year Review for the former NCBC Davisville is required by March 2023, 5 years from the date of this review.

Table 1-1: Summary of CERCLA Sites at NCBC Davisville

Site	OU	Site Description	Current Status	Phase	Date Completed
01*	7	Construction Equipment Department Drum Storage Area	RI	Under Investigation	Ongoing
02	7	Construction Equipment Department Battery Acid Disposal Area	RI	Under Investigation	Ongoing
03	7	Construction Equipment Department Solvent Disposal Area	RI	Under Investigation	Ongoing
04*	7	Construction Equipment Department Asphalt Disposal Area	RI	Under Investigation	Ongoing
05[1]	3	Transformer Oil Disposal Area	NFA ROD	AR, UU	September 1995
06	4	Solvent Disposal Area	NFA ROD	AR, UU	September 1998
07	8	Calf Pasture Point	LTM	ROD Requirement	Ongoing
08	Soil: 3 Groundwater: 5	Defense Property Disposal Office Film Processing Disposal Area	NFA ROD	AR, UU	Soils: September 1995 Groundwater: June 1998
09	1	Allen Harbor Landfill	LTM	ROD Requirement	Ongoing
10	5	Camp Fogarty Disposal Area	NFA ROD	RA, AR, UU	June 1998
11	4	Former Fire Fighting Training Area	NFA ROD	AR, UU	September 1998
12	2	Building 316, DPDO Transformer Oil Spill Area	NFA ESD	Rem. Action, AR, UU	ROD: September 1993 ESD: September 1998
13	4	Disposal Area Northwest of Buildings W-3, W-4, and T-1	NFA ROD	RA, AR, UU	September 1998
14	2	Building 38, Transformer Oil Leak	NFA ESD	RA, Rem. Action, AR, UU	ROD: September 1993 ESD: September 1998
15*	00	Building 56	NFA DD	RA, AR, UU	May 1998
16	9	Creosote Dip Tank and Fire Training Area	LTM	RA, ROD Requirement	Ongoing

* = Study Area
RI = Remedial Investigation
NFA ROD = No Further Action Record of Decision
NFA ESD = No Further Action Explanation of Significant Differences
NFA DD = No Further Action Decision Document
LTM = Long-Term Monitoring
AR = Acceptable Risks (human health and ecological risks within acceptable ranges)
UU = Suitable for Unrestricted Use (Five-Year Reviews not required)
RA = Removal Action performed to achieve condition of no unacceptable risks
Rem. Action = Remedial Actions performed to achieve condition of no unacceptable risks

Note
1 The ROD for Site 05 is for soils only, there is no ROD for groundwater at the site. There is, however, a soils and groundwater ROD at Sites 06, 11 and 13, which are in close proximity to Site 05

2.0 Site 07 – Calf Pasture Point

This section presents the findings of the Five-Year Review for the remedy implemented at Navy IR Site 07 (Calf Pasture Point) at the former NCBC Davisville.

2.1 Calf Pasture Point Summarized Site Chronology

A list of important Site 07 historical events and relevant dates in the site chronology are shown below. The identified events are illustrative, not comprehensive.

Event	Date
A trench was reportedly filled with containers of Decontaminating Agent Non-Corrosive (DANC) solution (1,1,2,2-tetrachloroethane [PCA] and oxidizing agents that readily break down to release chlorine when contacted by water).	1968 to 1974
Completion of the Initial Assessment Study (IAS) of the former NCBC Davisville facility (Hart, 1984).	9/1984
Completion of the Verification Step – Confirmation Study of the former NCBC Davisville facility (TRC, 1987).	2/1987
EPA's Hazard Ranking Scoring Package for the former NCBC Davisville facility.	1989
NCBC Davisville facility placed on the CERCLA NPL.	11/21/1989
Federal Facility Agreement (FFA) signed by the Navy, EPA, and State of Rhode Island.	3/1992
Munitions bunker, Building 339, demolished by the Navy (FWENC, 1997).	2/1997
RI completed (Three Phases I, II, and III) (EA, 1998a).	9/11/1998
ROD signed.	9/30/1999
Class I survey of Parcel 9 completed and annotated with references to the deed for groundwater use and land use restrictions.	2/2000
Final *Conceptual Long-Term Monitoring Plan* (LTMP), which included establishment of performance standards (NewFields, 2000a).	3/7/2000
Finding of Suitability to Transfer (FOST) to transfer the property (Parcel 9) to the United States Department of Interior for transfer to the Town of North Kingstown, Rhode Island (Navy, 2000a). The FOST cites the ROD requirement to record Environmental Land Use Restrictions (ELURs) to establish environmental restrictions on the property's title.	5/2000

Event	Date
Munitions bunker, Buildings 59 and 60, demolished by the Navy (FWENC, 2000a).	9/2000
Final Quality Assurance Project Plan (QAPP) for LTM of Site 07.	7/2001
LTM program Monitoring Event (ME) 01 for Site 07 completed, including 16 wells and 10 piezometers.	8/2001
Parcel 9 received by the Town of North Kingstown and the deed recorded (ELUR was not recorded with deed).	10/2001
Signature date of the *First Five-Year Review Report* for NCBC Davisville (EA, 2003c).	3/28/2003
Nine monitoring wells installed at Site 07 (MW07-27S, MW07-35D, MW07-37S/D, MW07-38S/D, and MW07-39S/I/D) as recommended in the *First Five-Year Review Report*	3/2004 - 4/2004
Signature date of the *Second Five-Year Review Report* for NCBC Davisville (Tetra tech, 2008b).	3/28/2008
Three additional groundwater monitoring wells added, MW07-24S, MW07-32D, MW07-32R.	5/2008
ELUR was recorded by Town of North Kingstown	5/2009
Draft Final Sampling and Analysis (SAP) for Source Area Investigation submitted (Tetra Tech, 2011a).	2/2011
Source Area Investigation conducted, including installation of eight new groundwater monitoring wells and tidal study.	4/2011 through 6/2012
Source Area Removal of trench filled with DANC cans conducted.	6 to 9/2011
Signature date of the *Third Five-Year Review Report* for the NCBC Davisville (Tetra Tech, 2013b).	3/28/2013
Final Source Area Investigation and Long-Term Monitoring Data Summary Report submitted, including investigative work conducted in 2010, 2011, and 2012 (Tetra Tech, 2015a).	7/31/2015
Draft Tier II SAP for LTM at Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill submitted (Resolution, 2016d).	6/24/2016
Draft Final Fall 2016 Five-Year Event Monitoring Report, Site 07 submitted (Resolution, 2018a).	2/8/2018

2.2 Calf Pasture Point Background Information

In this section, background information for Calf Pasture Point, such as physical characteristics, current and former land use, and a history of environmental actions is presented.

2.2.1 Physical Characteristics

Calf Pasture Point is a peninsula located in the northeastern portion of the Former NCBC Davisville facility (Figure 1-1). An existing tidal estuary was filled with dredged material during World War II to form the current peninsula. Site 07 is located in the southern portion of Calf Pasture Point (Parcel 9) on the northeastern edge of Allen Harbor (Figures 1-1 and 2-1). Narragansett Bay, the harbor Entrance Channel, and the harbor itself form the eastern, southern, and southwestern shorelines of Site 07, respectively.

A bedrock outcrop in the center of the peninsula, north of well MW07-07S, forms a prominent hill with a maximum elevation of approximately 55 feet above mean sea level (msl) (Figure 2-2).

2.2.2 Land and Resource Use

Currently, the site is undeveloped property with forest and grass cover. Site 07 will not be used for residential purposes in the future because Calf Pasture Point has been transferred to the Town of North Kingstown via Public Benefit Conveyance for use as an open space/conservation area. Acquisition in this manner restricts the transferee to use of the property as a park or for other recreational purposes in perpetuity, with no opportunity for residential or commercial development. The site is currently used for limited recreational activities such as walking, hiking and open space for dog walking. Several cut-grass style paths are annually maintained throughout the site, but no recreational building or other structures have been built at the site.

Groundwater underlying Calf Pasture Point has been classified by RIDEM as GA (i.e., presumed to be suitable for public or private drinking water use without treatment). No groundwater production wells or potable water supply wells are located on or downgradient of Site 07. Any potential future water needs would be met via municipal water available from the Town of North Kingstown.

Allen Harbor is used for recreational boating and contains two marinas. In 1984, RIDEM closed much of Allen Harbor to shellfishing due to suspected bacterial contamination. Subsequently, an additional basis for closure was due to surface runoff from Allen Harbor Landfill and other source areas. In 2004, the remainder of the harbor (the Entrance Channel) was closed to shellfishing.

Allen Harbor is classified by RIDEM as SA {b}. Class SA waters are designated for shellfish harvesting, contact recreational activities, and fish and wildlife habitat; the {b} designation indicates a “partial uses" status (that can affect the application of criteria)

for waters in the vicinity of marinas and/or mooring fields where seasonal shellfishing closures are likely.

2.2.3 History of Contamination

From the early 1940s until the mid-1970s, Site 07 was used for training of Naval Seabees (construction battalions) in the use of heavy construction equipment. Calf Pasture Point formerly contained three munitions bunkers (Buildings 59, 60, and 339) located along Magazine Road, which formerly traversed the site from north to south between Sanford Road/Finn Street and the southern tip of Calf Pasture Point. The bunkers were earthen covered and were located in the middle of Calf Pasture Point, to the north, east, and south of the bedrock outcrop. The bunkers were demolished by the Navy in February 1997 (Building 339) and September 2000 (Buildings 59 and 60). IR Site 07 is composed of the forest- and grass-covered area of Calf Pasture Point, south of the former munitions bunkers (i.e., south of the bedrock outcrop) to the Allen Harbor and Narragansett Bay shorelines.

Sometime between 1968 and 1974, in the area south of the former munitions bunkers, a trench was filled with cans that contained DANC solution. This trench (with cans of DANC) was located during the Source Area Investigation conducted in 2011. The chemicals buried in the trench are the source of a dissolved chlorinated volatile organic compound (CVOC) plume identified in groundwater at Site 07. The DANC cans (and impacted soils) in the trench were removed in 2011 as documented in the *Removal Action Completion Report* (Shaw, 2012).

2.2.4 Initial Response and Basis for Taking Action

Potential human health risks associated with exposure to the COCs at Site 07 were estimated through the evaluation of several potential exposure scenarios. These scenarios were developed to reflect the potential for exposure to COCs based on current land use, potential future land uses, and the location of the site. The Human Health Risk Assessment (HHRA) was prepared in accordance with CERCLA guidance using Phase I, II, and III RI data (TRC, 1991 and 1994; EA, 1998a).

The Base Re-Use Plan for Calf Pasture Point specifies that future use of the site will be for open space/conservation, which may include recreational activities. Accordingly, the Navy evaluated exposure pathways for hypothetical future recreational users and consumers of locally caught non-depurated shellfish. For purposes of completeness, the Navy also evaluated future construction/remediation workers and hypothetical future residents. The future recreational scenario assumed that a showering facility may be constructed using groundwater from the site; however, it is expected that any future

showering facility at Calf Pasture Point would use municipal water available in the area from the Town of North Kingstown. The following exposure pathways were considered to represent potentially complete pathways for receptor exposure to COCs in soil, groundwater, air, offshore sediment, shellfish, and/or surface water and were evaluated in the HHRA for Site 07:

- ***Exposures via Soil***
  - Incidental ingestion of total soil (surface and subsurface) by future construction workers.
  - Incidental ingestion of surface soil by recreational users.
- ***Exposure via Sediment***
  - Incidental ingestion of sediment by recreational users.
- ***Exposures via Groundwater***
  - Incidental ingestion of shallow groundwater by future construction workers.
  - Consumption of deep/bedrock groundwater by hypothetical future residents.
  - Inhalation of volatile organic compounds (VOCs) from deep/bedrock groundwater by recreational users while showering.
  - Dermal contact with deep/bedrock groundwater by recreational users while showering.
- ***Exposures via Surface Water***
  - Incidental ingestion of surface water by recreational child/adult users while swimming.
  - Dermal contact with surface water by recreational child/adult users while swimming.
- ***Exposure via Shellfish***
  - Ingestion of shellfish collected from Allen Harbor adjacent to Site 07.

Risk estimates for the following human exposure pathways were identified as unacceptable based on the Site 07 HHRA:

- Ingestion of deep and bedrock groundwater by residential populations (due to elevated concentrations of VOCs and several inorganics).
- Inhalation of VOCs in deep and bedrock groundwater by recreational populations while showering.

- Dermal contact with VOCs in deep and bedrock groundwater by recreational populations while showering.

CVOCs, predominantly 1,1,2,2-PCA and TCE in groundwater, were identified as the primary COCs for Site 07. Risk estimates for the following COCs exceeded a Hazard Index (HI) of 1 (i.e., an indication of the potential for adverse non-carcinogenic health effects) or the EPA target cancer risk range of 10^{-4} to 10^{-6}:

- Aluminum
- Arsenic
- Beryllium
- Chromium
- Manganese
- Chloroform
- Benzene
- Vinyl chloride
- 1,1-Dichloroethene (DCE)
- 1,2-DCE (total)
- 1,1,2-Trichloroethane (1,1,2-TCA)
- TCE
- 1,1,2,2-PCA
- Tetrachloroethene (PCE)

The marine Ecological Risk Assessment (ERA) (SAIC, 1996) evaluated risks to the environment using data from offshore sediment and shellfish samples collected along the western and southern shorelines of Calf Pasture Point. Inorganics and VOCs (the COCs at Site 07) were not identified as a concern in either the shoreline sediment or shellfish samples. No significant terrestrial ecological risks were identified at Site 07.

2.3 Remedial Actions

This section discusses the remedy selection and implementation history for Calf Pasture Point, along with a discussion of the LTM program currently in place at Site 07.

2.3.1 Remedy Selection

The ROD for Site 07 was signed on September 30, 1999. The selected remedy was deed restrictions with LTM. As stated in the ROD, the Remedial Action Objectives (RAOs) for Site 07 are to prevent human exposure to COCs in deep and bedrock groundwater and to ensure that the discharge of groundwater to wetlands and offshore areas continues to pose no unacceptable risks from COCs. The selected remedial alternative includes the following components:

- A deed restriction prohibiting the use of groundwater to prevent human contact with, or use of, impacted groundwater from the site (e.g., for drinking or

showering purposes) maintained for as long as the site groundwater conditions may pose an unacceptable risk to human health or the environment.

- No use of groundwater for any purpose (including showering, drinking, and irrigation) will be available onsite.

- In addition, any design, construction or development of any building, structure, facility, or other improvement within the southern portion of the property (Figure 2-2) shall include adequate ventilation, as approved by the Navy, EPA, and RIDEM.

- The Grantee under the deed shall be required to submit a yearly certification to the Navy, EPA, and RIDEM of compliance with the deed restrictions. The groundwater and land use restrictions contained in the deed shall be incorporated into an ELUR, which shall be filed and recorded by the Navy or disposal agency in the land records of the Town of North Kingstown, Rhode Island, in accordance with state and local law.

- LTM of the groundwater plume to ensure that the site continues to pose no unacceptable risks to human health or the environment. Other media such as sediment from the shoreline or interior wetlands are also sampled, based on trends identified from groundwater data.

- Five-Year Reviews of the remedy for the site by the Navy, EPA, and RIDEM to ensure the continued protection of human health and the environment (EA, 1999b).

Additionally, the ROD stated that signature of the ROD constituted final documentation that the three former munitions bunkers were closed appropriately, as described in the Foster Wheeler Environmental Corporation (FWENC) Closeout Report (1997).

2.3.2 Remedy Implementation

As summarized in the previous section, land use controls (LUCs) and LTM were the primary components of the selected remedy. LUC inspections were initiated in May 23, 2001, the deed was recorded on October 17, 2001, and the ELUR was recorded on May 8, 2009. LTM was initiated in August 2001.

2.3.2.1 LUCs

In accordance with the ROD (EA, 1999b) and as outlined in the LUCIP (EA, 2002b), Parcel 9 includes the following ELUR:

- No construction or development of any building, structure, facility, or other improvement without adequate ventilation, as approved by the Navy, EPA, and RIDEM, within the portion of land south of the east-west line shown on Figure 2-2. This restriction will be required for as long as site conditions may pose an unacceptable risk to human health and the environment.

- For the entire parcel, water supply wells will not be installed nor will groundwater be utilized, except for sampling or other remedial purposes.

Although not a requirement under the CERCLA remedy, for the entire parcel, no construction of buildings for residential or commercial use is mandated as part of the deed restrictions on the transfer of the property from the Navy (Department of the Interior) to the Town of North Kingstown.

These environmental land use restrictions apply to use of the contaminated site, as delineated on Figure 2-1 (land use restriction boundary).

LUC inspections of Parcel 9 are performed in conjunction with each Site 07 LTM event, no less frequently than annually, to document that there has been no variance from the environmental land use restrictions stated above and that there has been no interference with the implemented remedy.

At least once per year (usually more frequently), compliance with these controls is verified through a review of town records to ensure that no permits have been issued that would change the use of the site or allow the installation of groundwater supply wells. An updated LUCIP was submitted as draft on November 2016, and the final LUCIP is currently being prepared. Significant changes include a more comprehensive site-related questionnaire on updated land use and includes signature requirements for current tenant, not just land owner. The draft Annual LUCIP for 2016 report was submitted for review on February 9, 2018.

2.3.2.2 LTM

The objective of the monitoring component of the remedy is to obtain the data necessary to assess the long-term effectiveness of the remedy and to ensure that the groundwater plume continues to pose no unacceptable risks to human health and the environment. LTM was initiated in August 2001. A detailed summary of the LTM

performed between initiation in August 2001 (ME 01) and March 2013 (ME16, date of last Five-Year Review) is included in the Final Third Five Year Review Report (Tetra Tech, 2013b). A site map with long-term monitoring locations is provided on Figure 2-2.

Through ME16, the only approved LTMP for Site 07 was the 2001 QAPP for LTM at Site 07 (EA, 2001a). As summarized in this document, LTM consisted of sampling at 9-month intervals from a network of 16 wells and 10 shoreline piezometers, and sampling at 27-month intervals from an expanded list of 26 wells and 24 piezometers. These well lists do not include new wells installed since the inception of the plan.

The *Draft Source Area Investigation and Long-Term Monitoring Data Summary Report for Site 07: Calf Pasture Point* was submitted in February 2013. Based on the results of the Source Area Investigation and updated conceptual site model (CSM), changes to the LTM program were proposed, including decreasing the sampling frequency to annual. During subsequent monthly meetings, annual LTM beginning in 2013 was proposed and agreed by the BCT. The *Draft Source Area Investigation and Long-Term Monitoring Data Summary Report for Site 07: Calf Pasture Point* was completed in July 2015, and the approved changes to the LTM program are documented in the June 2016 *Draft Tier II Sampling and Analysis Plan, Long Term Monitoring, Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill.* This draft document is currently being finalized based on regulator comments.

2.4 Progress Since the Last Review

The previous Five-Year Review concluded that the remedy at Calf Pasture Point was protective of human health and the environment and that exposure pathways that could result in unacceptable risks are being addressed through institutional controls that prevent exposure to contaminants in site groundwater.

This section presents the concerns not related to remedy protectiveness that were included in the *Third Five-Year Review Report*, with a brief description of the actions taken by the Navy since the last review:

- Concern 1: Implement EPA Region 1 request to complete an ESD to document the removal action (excavation and off-site removal) of the source area that was not a component of the 1999 Site 07 ROD.

- Concern 2: LTM program needs to be reviewed/updated, including updating Project Action Limits (PALs) based on new Maximum Contaminant Levels (MCLs) or EPA Regional Screening Levels (RSLs) (as appropriate).

- Concern 3: LTM ME data reporting and LTM comprehensive reviews of site data need to be reviewed/updated to ensure appropriate data is shared with BCT in a timely manner to ensure continued protectiveness.

To address Concern 1, the *Third Five-Year Review Report* included a recommendation to prepare ESD to document the 2011 removal action. The *Draft Explanation of Significant Differences (ESD) OU8 Calf Pasture Point Solvent Disposal Area (Site 7)* was submitted in July 2013. Comments on the draft document were received from Region 1 EPA on August 22, 2013. Based on Navy attorney review of Region 1 EPA comments, it was determined that the removal action was a "self-contained event" that did not affect the ROD, thereby not requiring an ESD. This determination was presented to the BCT during the December 12, 2013, monthly teleconference. It was further agreed by the BCT that documentation of the removal action in the *Removal Action Completion Report* would confirm completion of the removal action and be adequate for the project record. The Final *Removal Action Completion Report* was submitted on October 1, 2012. The Navy sent a letter to EPA Region 1 and RIDEM on February 7, 2014, formally retracting the ESD for Site 7 removal action.

To address Concern 2, the Third Five-Year Review Report included recommendations to schedule a DQO meeting to discuss optimization of the LTMP and establish the objectives and scope of the LTMP and to prepare a revised SAP for LTM at Site 07. A scoping meeting was held on April 30, 2013, to discuss optimization of the LTMP and establish objectives of the LTMP. Further discussions on LTM optimization and objectives occurred during monthly BCT teleconferences following this scoping meeting. Based on the scoping meeting and subsequent teleconferences, agreements on optimization and objectives of the LTMP were achieved. As a result of the formal scoping meeting and subsequent teleconferences, a Draft *Tier II Sampling and Analysis Plan, Long Term Monitoring, Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill* was prepared and submitted on June 24, 2016. Currently, a final version of the document is being prepared based on regulator comments and Navy responses.

To address Concern 3, the *Third Five-Year Review Report* included a recommendation to schedule a DQO meeting to discuss reporting requirements for data reports and schedule for comprehensive data reviews. A scoping meeting was held on September 5, 2013, to discuss reporting requirements of the LTMP and frequency of reporting. Further discussions on the reporting requirements and frequency of reporting occurred during monthly BCT teleconferences following this scoping meeting. Reporting requirements and frequency of reporting are provided in the Draft *Tier II Sampling and Analysis Plan, Long Term Monitoring, Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill* submitted on June 24, 2016.

No significant activities or fieldwork efforts have occurred at the site since the last Five-Year Review.

2.5 Five-Year-Review Process

In this section, a description of the Five-Year Review process specific to Calf Pasture Point, including the document review, data review, and site inspection, is provided.

2.5.1 Document Review

Documents reviewed as part of this Five-Year Review are referenced throughout the text and are included in the reference section. Information in this subsection summarizes the results of LTM and are based on LTM reports.

A review of all of the Calf Pasture Point LTM data, along with data collected from investigative activities to supplement the LTM program, was performed as part of the Five-Year Review.

2.5.2 Data Review

As required by the ROD for Site 7, LTM (ME17 through ME20) was performed between 2013 and 2016, in accordance with the updated LTM scope and protocols documented in the Draft *Tier II Sampling and Analysis Plan, Long Term Monitoring, Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill (Resolution, 2016d).* Results of these LTM events were summarized in annual data reports, with the contents of these reports following the guidance outlined in the Draft Tier II SAP.

The following general conclusions are presented based on the comprehensive evaluation of site data as summarized from the *Draft Final Monitoring Event 20, Fall 2016 Five Year Event Monitoring Report* (Resolution, 2018a), which evaluates all LTM to date with a focus on the past 5 years (Figures 2-3 through 2-7 present spatial distributions of TCE, VC, cis-DCE, trans-DCE and PCE for ME20, taken from the draft final report):

- Analysis of Mann-Kendall trend test data indicates that groundwater concentration trends are generally consistent and stable throughout the site since 2012 (evaluations performed in the *Final Source Area Investigation and Long-Term Monitoring Data Summary Report* [Tetra Tech, 2015a]) and over the long term (since 2001).

- The primary plume migration pathways described in the *Final Source Area Investigation and Long-Term Monitoring Data Summary Report* (Tetra Tech, 2015a) remain consistent (i.e., no significant changes in plume migration patterns). The plumes appear generally stable (in both overall size and concentrations), with some localized increasing trends likely due to plume redistribution/equilibration (see Figures 2-3 through 2-7).

- Along the western portion of Site 07, contamination does not appear to be migrating upward through the silt layer to the shoreline, as evidenced by the lack of VOC detections in shallow zone wells MW07-04S, MW07-38S, and MW07-33S during ME20 (see Figures 2-3 through 2-7). VOC concentrations in the deep zone in the western portion of Site 07 are generally much lower compared to concentrations in other portions of the plume.

- Along the eastern portion of Site 07, contamination does not appear to be migrating up to the shallow zone along the eastern shoreline of Site 07 (see Figures 2-3 through 2-7). Low concentrations or non-detect results in MW07-18S and MW07-20S support the conclusion discussed in the *Final Source Area Investigation and Long-Term Monitoring Data Summary Report* (Tetra Tech, 2015a) that the silt and clay layers along the eastern shoreline are acting as a confining layer.

- Based on very low or non-detect concentrations in the sediment and surface water data, the current sampling schedule of once every 5 years is sufficient for these media.

- The *Final Source Area Investigation and Long-Term Monitoring Data Summary Report* (Tetra Tech, 2015a) concluded that sampling in different seasons does not appear to impact contaminant concentrations at any groundwater or piezometer locations with the possible exception of MW07-21S, P07-05, and P07-24. This conclusion is confirmed in the *Draft Final Monitoring Event 20, Fall 2016 Five Year Event Monitoring Report* (Resolution, 2018a) as well.

- The overall conclusion of the 2017 HHRA update included in the *Fall 2016 Five Year Event Monitoring Report* is that the conclusions of the 2012 HHRA remain valid and that exposure to shallow groundwater, surface water, and sediment along the Site 07 shoreline by recreational users does not result in a potential excess lifetime cancer risk (ELCR) or noncancer HI in excess of EPA or RIDEM target levels.

Based on concentrations of CVOCs observed through ME20, the relative stability of the plume, the degradation of the plume, and the overall conclusion of the 2017 HHRA update, the LTM component of the Site 07 remedy continues to be protective of human health and the environment.

2.5.3 Site Inspection

This section summarizes the routine LTM program site inspection activities, as well as the site inspection activities performed specifically for this fourth Five-Year Review.

2.5.3.1 LTM Program Site Inspections

Site inspections are conducted at Calf Pasture Point in conjunction with each LTM event. During the inspections, each monitoring well is checked to ensure that it is locked, labeled, and in good condition. Observations are noted on monitoring well inspection forms that are included in the appendices of the LTM reports. The site inspection also includes an on-site verification of the effectiveness of LUCs by observing land use conditions (presence of buildings and level of recreational use at the site) and evidence of groundwater extraction wells.

LUC inspections performed during the LTM program have not detected any evidence of newly installed groundwater wells or new construction at Site 07.

2.5.3.2 Five-Year Review Site Inspection

Tetra Tech performed a site inspection on September 20, 2017, as part of the fourth Five-Year Review. The inspection include a site walkover, including along the Narragansett Bay shoreline, and annotation of conditions. Photographs from the 2017 site inspections are included in Appendix B.

The site was observed to consist of a mix of forested, grassy, and sandy areas. The inspection began at Sanford Road, west of the site, and proceeded to the east along a gravel road and then south until reaching monitoring well MW07-23S. The inspection then proceeded toward the east along the southern shoreline of Calf Pasture Point, and monitoring wells MW07-21 and MW07-24 were observed. The portion of the site adjacent to Narragansett Bay was then observed.

Overall, the site was found to be in good conditions. All wells encountered along the western and southern shorelines of the site appeared in good condition, and the well casings were locked. Additionally, wells located within the site were also found to be in good conditions, and the well casings were locked. Piezometers within the Entrance Channel were observed to be in generally good condition, though piezometers along the

western shoreline were leaning and/or in various states of dis-repair. These will need to be replaced prior to sampling during a LTM event.

2.5.3.3 Interviews

The Navy holds annual RAB meetings for former NCBC Davisville to discuss the process of the cleanup program and ongoing investigations and/or site status. Comments and/or information received during these meetings are recorded and addressed by Navy, Region 1 EPA, and RIDEM representatives during these annual meetings. The RAB meeting notes are available to all attendees and are placed in the Administration Record.

The following individuals were interviewed as part of the fourth Five-Year Review for former NCBC Davisville.

Interviewee	Title/Affiliation
Nicole LaFontaine	North Kingstown Director of Planning and Development
Steven King	Quonset Development Corporation, Chief Operating Officer
Susan Licardi	North Kingstown Director of Water Department/Supply
Phil Bergeron	North Kingstown Director of Public Works
Chelsey Dumas	North Kingstown Department of Recreation
Ralph Mollis	North Kingstown Town Manager

The types of questions that were asked of interviewees are provided on the Typical Interview Questions from the June 22, 2017 RAB presentation, included in Appendix A. Steven King of Quonset Development Corporation was interviewed on September 21, 2017, and Susan Licardi of North Kingstown Water Department was interviewed on September 22, 2017. On Friday, September 23, 2017, Susan Licardi spoke with several other North Kingstown managers, with her questions focused on town-owned Sites 07 and 09. Appendix A includes a summary of information gathered during these interviews. The Typical Interview Questions from the June 22, 2017 RAB presentation were also provided to the Quonset Davisville Navy Yacht Club. However, no responses were received.

2.6 Technical Assessment

2.6.1 Question A: Is the remedy functioning as intended by the decision documents?

Based on the document review, data review, and site inspections, the remedy at Calf Pasture Point is functioning as intended by the ROD. Groundwater samples are collected from monitoring wells screened in the overburden (shallow and deep) and bedrock zones throughout the interior portions of Calf Pasture Point and from shallow piezometers along the western and southern shorelines of Calf Pasture Point (sampling was performed once in 2010 along the eastern shoreline with Narragansett Bay).

As demonstrated by the results of supplemental monitoring, investigations, and risk assessments discussed above, the remedy at Calf Pasture Point is meeting the RAO stated in the ROD, to "ensure that the discharge of groundwater to wetlands and offshore areas continues to pose no unacceptable risks from COCs." The current sampling network is adequate to evaluate the protectiveness of the remedy. The current network includes piezometers placed at a spacing of approximately 50 feet along the entire length of the eastern and southern Calf Pasture Point shorelines to monitor COC concentrations at the most likely points of human exposure where impacted groundwater may discharge. Temporary piezometers were sampled for COCs along the eastern shoreline (Narragansett Bay) in 2010 by Region 1 United States Environmental Protection Agency; no COCs were detected. Shallow and intermediate groundwater wells are routinely sampled at the eastern shoreline and evaluated as a component of the remedy; therefore, piezometer sampling at the eastern shoreline is not required to ensure protectiveness.

The other RAO identified in the ROD for Calf Pasture Point is to "prevent human exposure to COCs in deep and bedrock groundwater." To achieve this objective, the remedy includes environmental land use restrictions that: (a) prohibit the construction or development of any building, structure, facility, or other improvement without adequate ventilation and (b) prohibit the installation of water supply wells or the use of groundwater for any purpose, except for sampling or remediation. At least once per year (usually more frequently), compliance with these controls is verified through a review of town records to ensure that no permits have been issued that would change the use of the site, allow the construction of residential or commercial units, or allow the installation of groundwater supply wells. An on-site inspection is also conducted to verify that no buildings or water supply wells are installed on the site.

2.6.2 Question B: Are the exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection still valid?

There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy.

The HHRA for Site 07 was updated as part of the *Monitoring Event 20, Fall 2016 Five Year Monitoring Report, Site 07: Calf Pasture Point* (Resolution, 2017a and 2018a) (Appendix F). The objective of the updated HHRA was to determine whether there have been any changes and/or updates to EPA HHRA guidance or site-specific conditions since the 2012 HHRA performed in support of the *Third Five-Year Review Report* (Tetra Tech, 2013b) that would result in a change of the conclusions of the 2012 HHRA. The 2017 HHRA update included the following:

- Summary statistics calculations for 2016 LTM sediment, surface water, and shallow groundwater analytical data collected along the Site 07 shoreline (referred to as the 2017 HHRA update data set).

- Update of screening levels and contaminant of potential concern (COPC) selection for shoreline sediment, surface water, and shallow groundwater.

- Update of human receptor exposure assumptions/parameters.

- Calculation of exposure point concentrations (EPCs) for COPCs in each medium based on the 2017 HHRA update data set.

- Update of toxicity values for COPCs identified based on the 2017 HHRA update data set.

The receptors and exposure pathways evaluated in the 2012 HHRA are still relevant for the 2017 HHRA update based on current and potential future land use. These receptors and pathways include recreational users exposed to shoreline media while swimming, wading, or clamming/harvesting shellfish. Revised formal risk/hazard calculations were not performed as part of the 2017 HHRA update; however, a quantitative evaluation of the potential exposure to Site 07 shoreline shallow groundwater, surface water, and/or sediment by recreational users was conducted to determine whether updates to the 2012 HHRA would result in cumulative potential cancer risks and/or noncancer hazards greater than EPA and RIDEM target risk/hazard levels.

The overall conclusion of the updated HHRA was that the conclusions of the 2012 HHRA remain valid. There have been no changes in exposure assumptions, toxicity criteria, or contaminant characteristics that have affected the protectiveness of the selected remedy. Therefore, the RAOs are still valid, and applicable state and federal standards have not changed since the ROD was signed in September 1999.

The marine ERA (SAIC, 1996) evaluated risks to the environment using data for offshore sediment and shellfish samples collected along the western and southern shorelines of Calf Pasture Point. VOCs (the COCs at Site 07) were not identified as a concern in either the shoreline sediment or shellfish samples. No significant terrestrial ecological risks were identified at Site 07.

Ecological receptors may also be exposed to Site 07 shoreline shallow groundwater; this exposure pathway was not previously evaluated. Data evaluated in the 2017 HHRA update were compared to ecological screening criteria (Appendix C). Data evaluated include 2013 to 2016 shallow groundwater data from piezometers and 2016 surface and sediment data.

Shallow groundwater results were compared to surface water ecological criteria. After considering a minimal dilution factor of 10 to account for exposure to shallow sediment porewater after underlying groundwater mixes with overlying surface water, no chemicals were selected as COPCs for groundwater from piezometers. No chemical concentrations in surface water or sediment exceeded their applicable screening levels, so no chemicals were selected as COPCs for surface water or sediment. Therefore, unacceptable risks are not expected for ecological receptors exposed to Site 07 groundwater, surface water, or sediment.

2.6.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No additional human health or ecological risks have been identified and no weather-related events have affected the protectiveness of the remedy.

The rationale for remedy selection at Site 07 was based in part on the assumption that the extent of the plume was stable or decreasing. Based on an evaluation of CVOC plume configuration from 2012 to 2016 compared to 1995/96, some plume expansion has occurred to the east/southeast of the source area and previously unidentified migration pathways through MW07-11D toward Narragansett Bay and along an eastern migration pathway toward the DPT07-18/MW07-18D and DPT07-16/MW07-16 well clusters. The location of the center of mass in 2012 to 2016 is different from that observed in 1995/96 because the center of mass has moved from the source area to

the south and is currently located near the center of the site. This could be due in part to depletion of source material adsorbed to the aquifer material close to the release area.

With the exception of the migration pathway from the source area through MW07-11D toward Narragansett Bay and along an eastern migration pathway toward the DPT07-18/MW07-18D and DPT07-16/MW07-16 well clusters, there have been no changes regarding understanding of the extents of the leading edges of the plumes, although long-term trends are increasing at several locations along certain migration pathways (MW07-11D, -19D, -34D, and DPT07-16I).

Of particular note, contamination in areas where migration may be occurring (MW07-11D, -19D, -34D, and DPT07-16I) is all within the deep overburden groundwater aquifer (even though DPT07-16I is designated an "I" well) (see Figures 2-3 through 2-7). Along two of these pathways, MW07-19D (along cross-section A-A' of the *Monitoring Event 20, Fall 2016 Five Year Monitoring Report, Site 07: Calf Pasture Point* [Resolution, 2018a]) and MW07-34D (in the eastern portion of cross-section B-B' of the *Monitoring Event 20, Fall 2016 Five Year Monitoring Report, Site 07: Calf Pasture Point* [Resolution, 2018a]), contamination has already been detected beyond these locations, demonstrating that although the extent of contamination is not changing, the distribution along the migration pathways may be changing. The only identified migration pathways where the overall extent is changing is the pathway from the source area through MW07-11D and along the eastern migration arm to toward the DPT07-18/MW07-18D and DPT07-16/MW07-16 well clusters, where the plume is getting closer to Narragansett Bay over time. However, as determined through the tidal study, upward gradients in this area are infrequent (only occurring over short periods of time under certain low tides). Additionally, as determined from soil borings and well installations, a laterally extensive confining silt layer is present and typically is at least 10 to 15 feet thick. The silt layer is nearly 30 feet thick near the DPT07-18/MW07-18D and DPT07-16/MW07-16 well clusters. Consequently, the connection and discharge of deep groundwater to the shoreline environment are very complicated and limited. CVOC contamination may eventually reach the Narragansett Bay shoreline (likely nearly there based on fall 2016 results at DPT07-16I); however, the contaminant migration rate toward the shoreline is likely to be very slow as a consequence of both the gradient and laterally extensive silt layer. Also, the same groundwater/surface water interactions observed along the Entrance Channel are likely to impact both groundwater flow and contaminant discharge along the Narragansett Bay shoreline.

2.6.4 Technical Assessment Summary

Based on the data reviewed and the site inspection, the remedy is functioning as intended by the ROD. Supplemental data collection and risk assessments have been conducted during LTM to monitor the protectiveness of the remedy. There have been no changes in physical conditions at the site, toxicity factors, or to the standardized risk assessment methodology that would affect the protectiveness of the remedy. There is no other information at this time that calls into question the protectiveness of the remedy.

2.7 Issues

Although no deficiencies were identified during this five-year review for Site 07, and no issues related to site operations (LUCs and LTM), conditions or activities prevent the remedy from being protective in the short term, the following issues are identified to ensure future protectiveness -

Issue	Affects Current Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
Surface water and sediment should continue to be monitored to ensure ongoing protectiveness for recreational swimmers/waders, shell fisherman, and ecological receptors.	N	Y
Site contaminants in the groundwater plume are migrating toward surface water in the southern, western, and eastern shores; however, it is unknown how long it will take for concentrations to reach levels at these exposure areas that may pose a risk to human health or the environment.	N	Y

2.8 Recommendations and Follow-Up Actions

Issue	Recommendations/ Follow-Up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Y/N)	
					Current	Future
1	The LTMP should be updated to include surface water and sediment monitoring and risk evaluations and/or assessments, as needed, to support future five-year reviews and to ensure ongoing protectiveness. The LTMP should also be revised to state that surface water and sediment monitoring will continue until such time that levels of site contaminants allow for unlimited use and unrestricted exposure.	Navy	EPA/ RIDEM	8/1/18	N	Y
2	Based on the results of a discussion concerning the CSM and analysis approach, an analysis should be conducted to evaluate the estimated amount of time (if ever) that it will take for the concentrations of site contaminants to reach levels in surface water and sediment that pose a risk to human health and the environment.	Navy	EPA/ RIDEM	6/1/22	N	Y

Although not associated with the protectiveness of the remedy and based on comments received on the Draft *Fall 2016 Five Year Event Monitoring Report, Site 07 Monitoring Event 20 (*Resolution, 2017a) and Navy responses on July 12, 2017, the following three

concerns remain to be addressed with respect to long-term analysis of site data and contaminant fate and transport:

- Evaluation of mass balance and natural attenuation mechanisms for CVOC plumes identified at the site.

- Evaluation of tidal influence on contamination migration at the site.

- Evaluation of contaminant migration to the eastern shoreline with emphasis on increases observed at DPT06-16I between 2012 and 2016.

Mass Balance and Natural Attenuation Mechanisms

A quantitative mass balance and natural attenuation mechanism evaluation will be performed based on data from 2011, 2012, 2014 and 2016. Only data from these time frames will be used because a better understanding of the residual contamination and CSM was realized upon completion of the *Final Source Area Investigation and Long-Term Monitoring Data Summary Report* (Tetra Tech, 2015a). The evaluation will be completed as a technical memorandum separate from the Five-Year Review (included as concern at end of section).

Tidal Influence on Contaminant Migration

Most wells at Site 07 are tidally influenced, which also adds to the complexity of fate and transport at the site. The tidal cycles may influence contaminant concentrations observed in nearshore groundwater by introducing greater variability in contaminant concentrations during mid- and high tide conditions due to exchange of fresh and saline groundwater. However, during low tide, the plume is not prevented from discharging into surface waters. Tidal cycles do not prevent or block the plume from discharging into surface waters.

Tidal influence on contaminant migration (as well as other contributing factors) is discussed in Section 3.2.3 (Transport and Fate Analysis) of the Final *Source Area Investigation and Long-Term Monitoring Data Summary Report* (Tetra Tech, 2015a). Because tidal influences have not changed since the last Five-Year Review, the discussions and conclusions presented are still valid.

Evaluation of Contaminant Migration to Eastern Shoreline

Several comments from Region I EPA concerning migration of contamination to the eastern shoreline were received on the *Draft Fall 2016 Five Year Event Monitoring Report, Site 07 Monitoring Event 20* (Resolution, 2017a). A concern was raised about

the recent occurrence of elevated contamination at DPT07-16I (TCE at 83 µg/L, cis-1,2-DCE at 120 µg/L, and vinyl chloride at 5.2 µg/L) and its potential impact on the migration of contamination toward Narragansett Bay. The following text evaluates the migration of contamination toward the eastern shoreline based on all available site data and the CSM updated based on the results of various investigations performed between 2010 and 2012.

Contaminant migration from the central portion of the site toward the eastern shoreline (Narragansett Bay) was evaluated based on both groundwater and soil CVOC concentrations in the Final *Source Area Investigation and Long-Term Monitoring Data Summary Report* (Tetra Tech, 2015a). Sections 3.1 and 3.2 of this report present cross-sections and spatial analyses of CVOCs in groundwater, and Appendix E presents cross-sections and spatial analyses of CVOC results in soil (both fixed-based laboratory and Color-Tec results). As shown on Figures 3-8 and 3-11 of Tetra Tech (2015a), low-level CVOC concentrations were detected at MW07-18I (1,2-dichloroethane [DCA] at 3.3 µg/L in fall 2011) and DPT07-16I (TCE at 0.7 µg/L in summer 2012). TCE was also detected at DPT07-16S at 0.69 µg/L during summer 2012 sampling. Figures 3-9 and 3-12 show that a spatially expansive CVOC plume occurs throughout the site in the deep zone, which is vertically consistent with the well screen interval at DPT07-16I (monitoring sandy zones below vertically thick silt with clays), including migration toward Narragansett Bay. As shown on Figure E-1 of Tetra Tech (2015), two cross-sections are presented from the central portion of the site to the eastern shoreline. Both diverge at MW07-34D, with cross-section 4-4' projecting through well cluster DPT07-18/MW07-18D, and cross-section 5-5' projecting through well clusters DPT07-29/34 and DPT07-16/MW07-16. Although the DPT07-16/MW07-16 well cluster is not labeled in the southern portion of cross-section 5-5', the lithologies presented are based on the well log at MW07-16D, which exhibits a thick silt layer with some clay from approximately 17 to 44 feet below ground surface (bgs) (27 feet thick). Figures E-7 through E-19 present total CVOC isoconcentrations for soil at sequentially deeper elevations. Generally, migration toward the eastern shoreline is observed from approximately 35 to 60 feet bgs. Further, Figure E-24 shows elevated CVOC concentrations at SB-202 at a depth below the thick silt with clay layer at approximately -50 feet bgs, with an easterly component beyond SB-217. Based on results from 2016 at DPT07-16I, the extent of CVOC below the thick silt with clay layer extends to near the eastern shoreline, now to the DPT07-16/MW07-16 well cluster.

Concentrations and number of parameters detected at DPT07-16I increased in fall 2016 compared to summer 2012. In fall 2016, TCE was detected at 83 µg/L, cis-1,2-DCE at 120 µg/L, and vinyl chloride at 5.2 µg/L (see Figures 2-3 through 2-7). In summer 2012, only TCE was detected at 0.7 µg/L. Although these changes appear significant, no

CVOCs were detected at DPT07-16S in fall 2016, signifying that the advancement of CVOC contamination is restricted to the zone underlying the thick silt with clay unit. Further, it is important to continue to monitor the potential continued advancement of the CVOC plume underlying the thick silt with clay unit, based on the evaluation of data from 2012 to 2016, the conclusion of the CSM that elevated CVOC concentrations are restricted to below the thick silt with clay layer are still valid. Further, even if CVOCs were detected in DPT07-16S (they currently are not), this well is located approximately 100 feet from a potential surface water discharge point (assumed to be near the low-tide levels during typical low tides). Based on the conclusions that a low risk, within the risk range, occurs from piezometers that have elevated CVOC concentrations in the entrance channel, it can be concluded that a low or no risk occurs along the Bay shoreline.

The objective of the remedy was to "ensure that the discharge of groundwater to wetlands and offshore areas continues to pose no unacceptable risks from COCs." Although the extent of CVOC contamination may continue to increase along the MW07-11D pathway and toward the DPT07-18/MW07-18D and DPT07-16/MW07-16 pathways (i.e., towards Narragansett Bay), the protectiveness of the remedy is unaffected. Contaminant concentrations are at least an order of magnitude greater at MW07-21 (near the Entrance Channel) compared to those detected at MW07-11D (near Narragansett Bay) and DPT07-16I. Unacceptable risks are not predicted for CVOC concentrations in environmental media at the Entrance Channel. Based on the distribution of contamination observed during 2016, it is also unlikely that concentrations at MW07-11D or DPT07-16I will ever increase to the levels observed at MW07-21, and as a consequence, unacceptable human health risks would not be predicted as a consequence of potential discharge of CVOCs to the shoreline area downgradient of MW07-11D or DPT07-16I. Therefore, future risks are not predicted to occur along the Narragansett Bay shoreline or in the bay based on contaminant migration trends thick silt with clay layer impeding upward migration of elevated CVOC concentrations. However, LTM will continue to observe and evaluate the extent of the CVOC plume over time.

Although not associated with the protectiveness of the remedy, two concerns are identified that related to LTM and evaluation of LTM data. These concerns are:

- Finalize the UFP-SAP for Long-Term Monitoring at Site 07 (Draft is dated June 2016). A tentative submittal date is August 2018.

- Prepare and submit Technical Memorandum on mass balance and natural attenuation mechanisms for CVOC plume from 2012 to 2016. A tentative submittal date is October 2018.

2.9 Protectiveness Statement

The remedy at Calf Pasture Point is protective of human health and the environment in the short-term. Exposure pathways that could result in unacceptable risks from groundwater are being addressed through institutional controls. These controls are effectively preventing exposure to site-related contaminants in groundwater. A risk screening evaluation indicates that there is no unacceptable risk to recreational swimmers/waders, shell fisherman, or ecological receptors from site-related contaminants in surface water and sediment. However, to ensure that the remedy remains protective in the long term, the following actions will be taken: (1) Surface water and sediment monitoring results will continue to be compared to risk screening numbers to ensure ongoing protectiveness and (2) Based on the results of a discussion concerning the CSM and analysis approach, an analysis should be conducted to evaluate the estimated amount of time (if ever) for the concentrations of site contaminants to reach levels in surface water and sediment that pose a risk to human health and the environment.

3.0 Site 09 - Allen Harbor Landfill

This section presents the findings of the Five-Year Review for the remedy that was implemented at Navy IR Site 09 (Allen Harbor Landfill) at the former NCBC Davisville.

3.1 Allen Harbor Landfill Summarized Site Chronology

A list of important Site 09 historical events and relevant dates in the site chronology are shown below. The identified events are illustrative, not comprehensive.

Event	Date
Allen Harbor Landfill was used for the disposal of waste material generated by the former NCBC Davisville facility and NAS Quonset Point.	1946 to 1972
After landfilling operations ceased, the landfill was closed by placing a discontinuous 2-foot soil cover over the fill materials.	1972
Completion of the NCBC Davisville IAS (Hart, 1984).	9/1984
Completion of the *Verification Step - Confirmation Study of the former NCBC Davisville Facility* (TRC, 1987).	2/1987
EPA's Hazard Ranking Scoring Package for the former NCBC Davisville facility.	1989
NCBC Davisville facility placed on the CERCLA NPL.	11/21/1989
FFA signed by the Navy, EPA, and State of Rhode Island.	3/1992
RI for Allen Harbor Landfill completed.	12/1996
ROD signed.	9/29/1997
Submittal of Final *Design Analysis Report For Closure of the Allen Harbor Landfill* (EA, 1998b). Construction of landfill cap begins.	3/31/1998
Construction of landfill cap completed and ESD submitted for polychlorinated biphenyl (PCB)-contaminated soil removal and extension of the soil cap and revetment (EA, 1999a).	8/1999
Initiation of landfill inspections and settlement surveys.	12/29/1999
Final *Remedial Action Report for Site 09-Allen Harbor Landfill Cap* (FWENC, 2000b).	6/2000
FOST to transfer Parcel 10 to the U.S. Department of Interior for transfer to the Town of North Kingstown, Rhode Island (Navy, 2000b).	12/14/2000
Final *Conceptual Long-Term Monitoring Plan (CLTMP)* which included establishment of performance standards (Newfields, 2000b).	12/22/2000

Event	Date
Final *Remedial Action Operations and Long-Term Management Plan for Allen Harbor Landfill* (FWENC, 2001a).	5/2001
Final Landscape Plan for Allen Harbor Landfill (Beckman-Weremay, 2001).	10/2001
Final QAPP for LTM of Site 09 (EA, 2001b).	11/2001
LTM program initiated with ME 01.	11/30/2001
Final *Revision 1: Quality Assurance Project Plan for Long-Term Monitoring of Site 09 (Allen Harbor Landfill)* (EA, 2003b).	2/2003
Signature date of the *First Five-Year Review Report* for the NCBC Davisville facility.	3/30/2003
Parcel 10 transferred.	5/10/2004
Parcel 10 ELUR recorded.	6/8/2004
Revisions to QAPP for Long-Term Monitoring at Site 09 Allen Harbor Landfill (Tetra Tech, 2007r).	11/2007
Signature date of the *Second Five-Year Review Report* for the NCBC Davisville facility.	3/28/2008
Installation of replacement wells MW09-08DA, MW09-09DA, and MW09-14IA and landfill liner repairs (from installation of wells).	6/2009
Revision 2 to the LTM Program at Site 09 Allen Harbor Landfill, movement of sediment sampling zone from 2 to 3 feet bgs to 2 to 6 inches bgs (via BCT agreements).	12/2009 and 1/2010
Piezometers within the created wetland moved from the center of the created wetland to the base of the stone revetment based on EPA request.	9/2010
Proposed Revisions for Landfill Gas Monitoring Program for Site 09 Allen Harbor Landfill. RIDEM approval for reduced monitoring received April/May.	3 and 4/2012
Signature date of the *Third Five-Year Review Report* for the NCBC Davisville.	3/28/2013
Navy submits Final *Long-Term Monitoring Data Summary and Optimization Recommendations Report* (Tetra Tech, 2015b).	8/27/2015
Navy submits Draft *Tier II Sampling and Analysis Plan, Long Term Monitoring, Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill*	6/24/2016
Navy submits Draft Final F*all 2016 Five Year Event Monitoring Report, Site 09, Monitoring Event 45*	10/30/2017

3.2 Allen Harbor Landfill Background Information

In this section, background information for Allen Harbor Landfill such as physical characteristics, current and former land use, and a history of environmental actions is presented.

3.2.1 Physical Characteristics

Allen Harbor Landfill is located in the Main Center of the former NCBC Davisville facility, within Parcel 10, as shown on Figure 1-1 and 3-1. Allen Harbor Landfill is an approximately 15-acre grassy area formerly used by the Navy as a landfill. The site is located within a 100-year floodplain and is bounded to the north and south by vegetated wetlands, to the east by Allen Harbor, and to the west by Sanford Road. Allen Harbor is used for recreational boating and is supported by two marinas. In 1984, RIDEM closed Allen Harbor to shellfishing due to suspected contamination from several sources, including Site 09. The shellfishing ban is still in place.

The site was closed in accordance with the ROD (September 1997) including capping with an impermeable geosynthetic liner (a multimedia landfill cap) and is covered with grass and small shrubs. A revetment wall and constructed wetland are located along the southern and eastern boundaries of the landfill. A stone breakwater structure separates the wetland from the harbor (Figure 3-1). The site terrain is gently sloping, with a topographic high in the center of the landfill.

3.2.2 Land Resource Use

Parcel 10, which includes Site 09, is currently owned by the Town of North Kingstown after being transferred from the Navy via the U.S. Department of the Interior. In the future, Allen Harbor Landfill will not be used for residential purposes due to ELURs placed on the property, as required by the ROD. Currently and in the foreseeable future, the town's planned use of the property is as open space/conservation land. No formal land use currently occurs as there are no paths for limited reactional activities to occur.

Groundwater at the site is classified by RIDEM as GB (i.e., presumed to be not suitable for public or private drinking water use without treatment). No groundwater production wells or potable supply wells are located on or downgradient of the site. Any potential future water needs would be met via municipal water available from the Town of North Kingstown.

Allen Harbor is used for recreational boating and contains two marinas. In 1984, RIDEM closed much of Allen Harbor to shellfishing due to suspected bacterial contamination. Subsequently, an additional basis for closure was due to surface runoff from Allen Harbor Landfill and other source areas. In 2004, the remainder of the harbor (the Entrance Channel) was closed to shellfishing.

Allen Harbor is classified by RIDEM as SA {b}. Class SA waters are designated for shellfish harvesting, contact recreational activities, and fish and wildlife habitat; the {b} designation indicates a “partial uses" status (that can affect the application of criteria) for waters in the vicinity of marinas and/or mooring fields where seasonal shellfishing closures are likely.

3.2.3 History of Contamination

A 1939 aerial photograph of the Allen Harbor area depicts the landfill as an undeveloped open grass field lined with shrubs and bushes. From 1946 to 1972, the Allen Harbor Landfill was used for the disposal of waste materials including municipal-type waste, construction debris, rubble, preservatives, paint thinners, degreasers (e.g., solvents), PCB oil, asbestos, ash, sewage sludge, and waste fuel oil. Disposal activities usually included burning the waste and covering it with soil. In 1972, after landfilling operations had ceased, the landfill was closed by placing a discontinuous 2-foot soil cover over the fill materials.

3.2.4 Initial Response and Basis for Taking Action

Groundwater data from the RI indicated the presence of elevated concentrations of VOCs and low-level concentrations of polynuclear aromatic hydrocarbons (PAHs), pesticides, and metals. Elevated concentrations of PAHs, pesticides, PCBs, and metals were detected in surface and subsurface soil samples. Semivolatile organic compounds (SVOCs), pesticides, PCBs, and metals were detected in sediment samples throughout Allen Harbor.

According to the HHRA that was completed during the RI, contaminants with a cancer risk greater than 10^{-4} and/or HI greater than 1.0 included the following:

- Arsenic, manganese, bis(2-chloroethyl)ether, 1,2-DCE, 1,2-DCE (total), 1,2-dichloropropane, TCE, and vinyl chloride in groundwater.
- Heavy metals, PAHs, and PCBs in sediment.
- Arsenic, copper, zinc, Aroclor-1254, and Aroclor-1260 in shellfish.

The human health risks that exceeded risk management goals at Site 09 were associated with the following exposure scenarios:

- Ingestion of deep groundwater by future residents.
- Use of site groundwater for showering in a potential recreational facility.
- Dermal contact with or incidental ingestion of site surface soil by recreational users of the site.
- Incidental ingestion of shoreline sediment by recreational users of the site.
- Consumption of shellfish from the site shoreline.

Potential health risks to site workers during remedial activities were associated with the incidental ingestion of soil (EA, 1996c).

Ecological risks to marine organisms in Allen Harbor were reported to be "moderate" to "slight." Moderate risk to marine organisms was reported to be limited to the narrow inter-tidal zone to the north and south of the site. Risks to terrestrial ecological receptors were reported to be moderate to high within the Allen Harbor Watershed, within which the Allen Harbor Landfill was one of the contributors to elevated risk (EA, 1996c). Elevated concentrations of PAHs, pesticides, PCBs, and metals in surface soil and sediment were the primary sources of ecological risk to terrestrial receptors. Sediment samples collected from Allen Harbor had concentrations of PAHs, pesticides, PCBs, and metals in excess of benchmark screening values. A benthic community structure analysis showed no obvious toxicological effects relative to reference stations; however, the elevated concentrations of contaminants were identified in the risk assessment as "flags" of potential ecological risk (EA, 1996c).

3.3 Remedial Actions

This section discusses the remedy selection and implementation history for Site 09, along with a discussion of the LTM program currently in place at the site.

3.3.1 Remedy Selection

The ROD for Site 09, signed on September 29, 1997, documented selection of a remedy including construction of a multimedia cap (including a gas venting system), stone shoreline revetment, offshore breakwater, and inter-tidal wetlands, LTM, and LUCs. RIDEM concurred with the remedy on September 25, 1997.

As stated in the ROD, the RAOs for Allen Harbor Landfill are as follows:

Surface Soil

- Prevent human and terrestrial animal exposure to COCs in surface soil.
- Prevent off-site migration of surface soil and surface soil contaminants through overland runoff.

Subsurface Soil

- Reduce leachate generation.
- Reduce or eliminate surface erosion and exposure of fill materials along landfill shoreline.

Groundwater

- Prevent human exposure to COCs in deep groundwater.

Sediment

- Minimize risks from marine ecological exposure to COCs in sediment.
- Control potential future sediment contamination from landfill constituents (COCs).

Wetlands

- Control potential future contamination of wetlands from landfill constituents (COCs).
- Improve quality of existing wetlands and create new wetlands on site along the shoreline.

Shellfish

- Control potential future contamination of shellfish from landfill constituents
- Prevent or minimize human ingestion of shellfish from the landfill shoreline containing COCs in excess of health advisory concentrations.

Based on the results of the RI/Feasibility Study (FS) and the community response to the Proposed Plan, the selected remedy for Site 09 was Alternative 3 - Multimedia Cap. A complete description of the selected alternative is presented in Section VIII of the ROD (EA, 1997) and in the August 1999 ESD (EA, 1999a).

EPA's *Presumptive Remedy for CERCLA Municipal Landfill Sites* (OSWER Directive 9355.0-49FS) states that containment technologies are the preferred remedies for municipal-type landfill waste. Accordingly, cleanup goals (i.e., treatment goals) were not developed as part of the Site 09 remedy. The components of the selected alternative address the identified risk pathways and RAOs identified for Site 09. The

LTM program established as part of the selected alternative was designed to ensure the protection of human health and the environment over time. The selected remedy includes the following components:

- Construction of a multimedia cap above the 100-year storm elevation (14 feet above msl) that consists of multiple soil layers and two impermeable layers and a soil cap in the area below 14 feet msl to comply with current federal and state laws. This component of the remedy addressed the RAOs for surface and subsurface soil.

- Construction of a passive gas venting system as part of the cap system. Landfill gases collected within the gas vent layer are passively vented to the atmosphere via five vents at the landfill. The points of discharge (vents) were fenced to protect potential site visitors.

- Removal and/or covering of landfill debris from the landfill shoreline. This addressed the RAOs for surface soil, sediment, and shellfish.

- Construction of a stone revetment along the shoreline of Site 09 to protect the landfill face from wave action (e.g., tidal forces and storm events). This stabilization of the landfill face addressed the RAOs for surface soil, sediment, and shellfish.

- Construction of a breakwater structure just east of a majority of the revetment wall along with construction of a wetland area between the revetment wall and breakwater structure, which together act to trip waves and reduce energy reaching the revetment. Construction of this wetland area along the shoreline of the site also serves as a natural resources/habitat improvement. Material dredged from the Entrance Channel to Allen Harbor was used in the construction of the wetlands. The progression of wetland development is being monitored over time to verify its sustainability. This addressed the RAOs for sediment, shellfish, and wetlands.

- Establishment of institutional controls, as follows (addressing the RAO for groundwater):

    - Implementation of land use restrictions that include deed restrictions regarding site and groundwater use.
    - Implementation of appropriate land use restrictions (i.e., no use of motorized vehicles, no digging, no deep-rooted vegetation) to protect

human health and the environment through limiting site development to maintain the integrity of the cap.
- Prevention of the installation or use of groundwater wells that would be used for drinking water or showering purposes.

- Conduct LTM of landfill gas, groundwater, sediment, and shellfish quality to evaluate the effectiveness of the remedy.

- Five-year reviews of the decision for the site by the Navy, EPA, and RIDEM.

A Rhode Island prohibition on the collection of shellfish from Allen Harbor addresses human health risks associated with the ingestion of shellfish from the landfill shoreline. As part of the remedy for Allen Harbor Landfill, the Navy maintains signage along the landfill shoreline to warn the public about the shellfishing ban.

The Navy and EPA signed the ROD in September 1997, which declared that the selected remedy is protective of human health and the environment, complies with current federal and state applicable or relevant and appropriate requirements (ARARs), and is cost effective (EA, 1997).

3.3.2 Remedy Implementation

On March 31, 1998, the Final: *Design Analysis Report for Closure of the Allen Harbor Landfill* (EA, 1998b) was submitted, and the capping activity commenced. FWENC completed the remedial action in August 1999 (FWENC, 2000b). In addition to the remediation activities outlined in the ROD, a removal action was performed by FWENC in spring 1999, when PCB-contaminated soil was discovered at the northern end of the landfill. To document the addition of the PCB removal and a northerly extension of the soil cap and the revetment to the remedy for this site, an ESD was submitted in August 1999. The ESD did not fundamentally alter the remedy at the site.

3.3.2.1 Remedy Operations and Maintenance

On March 30, 2000, quarterly physical inspections of the landfill were initiated and were continued on a quarterly basis for 2 years. From 2002 to 2012, inspections were conducted semi-annually in accordance with the Final *Remedial Action Operations and Long-Term Management Plan for Allen Harbor Landfill* (FWENC, 2001a). Beginning in 2013, inspections have been conducted annually (biennially for landfill settlement surveys).

Maintenance and repairs are performed on an as-needed basis based on the findings of the inspections. Prior to 2008, most maintenance/repairs were performed annually,

typically in the fall (generally, August, September and October). From 2008 to 2012, most repairs are completed concurrent with quarterly LTM activities (or semi-annually, in 2012).

O&M or post-closure care at the Allen Harbor Landfill must be performed after the landfill closure, in accordance with Resource Conservation and Recovery Act (RCRA) requirements in 40 C.F.R 264 Subpart N; the Rhode Island Hazardous Waste Regulations, Section 8; and the ROD. Five-year reviews must be conducted as long as contamination remains at the site in excess of levels that allow for unlimited use and unrestricted exposure.

Landfill settlement surveys were conducted annually until 2012 at each monitoring well, each gas vent, and at six locations each on the revetment and breakwater to monitor subsidence in the landfill and along the shoreline. Currently, settlement surveys are conducted biennially. Settlement survey data are reviewed to determine if subsidence has exceeded the acceptable range of 6 inches over any 100-linear-foot area of the landfill cap.

Based on the landfill inspections conducted from 2000 through 2017, it appears that, overall, the cap, revetment slope, and breakwater structure portions of the site remedy are in good condition and functioning according to design. Based on settlement survey results, there has been minor subsidence in a few areas, but this has not exceeded the acceptable range. Additional details regarding the maintenance activities that have occurred are provided in Section 3.5.

3.3.2.2 LUCs

In accordance with the ROD (EA, 1997), deed, ELUR, and LUCIP (EA, 2002b), Parcel 10 (Site 09) includes the following:

- For the entire parcel, no residential or commercial use, as stated in the ROD (park/recreational uses are permitted).

- For the entire parcel, water supply wells shall not be installed nor shall groundwater be utilized, except for sampling or other remedial purposes

- For the contaminated site, as delineated on Figure 3-1 (land use restriction boundary), use by the Grantee, its successors, and assigns, will be for pedestrian traffic only. Restrictions include, but are not limited to: digging, use of motorized vehicles, or other activities that may damage the remedy components

(multimedia cap, gas vents, monitoring wells, stone revetment, etc.) or otherwise allow direct exposure to hazardous waste under the cap.

- The warning signs to inform the public of the State ban on shellfishing in Allen Harbor will be maintained.

On November 30, 2001, LUC inspections were initiated during ME 01. LUC inspections are performed in accordance with the QAPP for LTM at Site 09 (EA, 2001b and 2003b) and LUCIP (EA, 2002b). LUC inspections have been performed during each ME at Allen Harbor Landfill to verify compliance with the land use restrictions established as part of the site remedy (Section 3.3.1). Copies of the institutional controls inspection checklists are included in each of the ME reports and/or data reports. Compliance with LUCs is documented annually in LUCIP Annual Letter Reports.

Based on the Site 09 LUC inspections completed during ME 01 through ME 45 and the LUCIP Annual Letter Reports, there was compliance with the institutional controls stated in the ROD and LUCIP.

An updated LUCIP was submitted as draft on November 2016, and the final LUCIP is currently being prepared. The draft Annual LUCIP report for 2016 was submitted for review on February 9, 2018.

3.3.2.3 LTM

The objective of the monitoring component of the remedy is to obtain the data necessary to assess the long-term effectiveness of the remedy. LTM at Allen Harbor Landfill began in December 2001. Since the first ME, there have been four LTM scopes performed (as approved by the BCT) for LTM events at Site 09. The changes have generally been related to relocation of sampling locations (e.g., relocation of piezometers closer to revetment wall). The following presents a brief summary of the LTM scopes and/or changes since ME 01:

- Between December 2001 and December 2010, quarterly monitoring occurred.

- Beginning in January/February 2008, quarterly monitoring was revised to two semi-annual large events (26 wells) and two semi-annual small events (14 wells).

- Beginning in December 2009, the sampling depth of sediments was adjusted from 2 to 3 feet bgs to 2 to 6 inches bgs.

- In September 2012, at the request of EPA, the piezometers within the created wetland were moved to the base of the stone revetment wall.

- In March 2012, soil gas and vent monitoring and sampling was changed to monitoring annually, with fixed-base sampling once every 5 years, and sampling of piezometers and shellfish beyond the breakwater into Allen Harbor was initiated.

A detailed summary of the LTM performed between initiation in December 2001 (ME 01) and September/October 2012 (ME40, date of last Five-Year Review) is included in the Final *Third Five Year Review Report* (Tetra Tech, 2013b). A site map and long-term monitoring locations is provided as Figures 3-2 and 3-3.

The *Draft Long-Term Monitoring Data Summary and Optimization Recommendations Report for Site 09: Allen Harbor Landfill* was submitted in December 2013. Based on the results of the data summary and updated CSM, recommendations to the LTMP were proposed, including annual sampling. The recommendation for annual sampling was agreed to by the BCT and implemented beginning in 2013, although the report was not finalized until August 2015. The revised LTM program based on the approved report recommendations was documented in the June 2016 *Draft Tier II Sampling and Analysis Plan, Long Term Monitoring, Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill.* This draft document is currently being finalized based on regulator comments.

3.4 Progress Since the Last Review

The previous Five-Year Review concluded that the remedy at Allen Harbor Landfill was protective of human health and the environment, and exposure pathways that could result in unacceptable risks were being addressed through remedy-related institutional controls and a state-enforced prohibition on shellfishing in Allen Harbor. These controls were effectively preventing exposure to site-related contaminants.

This section presents the concerns not related to remedy protectiveness that were included in the *Third Five-Year Review Report*, with a brief description of the actions taken by the Navy since the last review:

- Concern 1: LTM program needs to be reviewed/updated, including updating PALs based on new MCLs or EPA RSLs (as appropriate).

- Concern 2: LTM ME data reporting and LTM comprehensive reviews of site data need to be reviewed/updated to ensure appropriate data is shared with BCT in a timely manner to ensure continued protectiveness.

- Concern 3: Evaluation of area downgradient and offshore (beyond breakwater) of MW09-20I needs to be completed.

To address the issue of reviewing and updating the LTM program (Concern 1), the following recommendations were made:

- *Schedule a DQO meeting to discuss optimization of the LTM program and establish the objectives and scope of the LTM program.*

- *Prepare a revised Work Plan/SAP for LTM at Site 09.*

A scoping meeting was held on August 20, 2014, to discuss optimization of the LTM and establish objectives of the LTM. Further discussions on the optimization and objectives occurred during monthly BCT teleconferences following this scoping meeting. Based on the scoping meeting and subsequent teleconferences, agreements on optimization and objectives of the LTM were achieved.

As a result of the formal scoping meeting and subsequent teleconferences, a Draft *Tier II Sampling and Analysis Plan, Long Term Monitoring, Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill* was prepared and submitted on June 24, 2016. Currently, a final version of the document is being prepared based on regulator comments and Navy responses. To address the issue of LTM reporting and comprehensive reviews of site data and sharing with the BCT in a timely manner (Concern 2), it was recommended that *a* DQO meeting be scheduled to discuss reporting requirements for data reports and to schedule for comprehensive data reviews.

A scoping meeting was held on September 5, 2013, to discuss reporting requirements of the LTM program and frequency of reporting. Further discussions on the reporting requirements and frequency of reporting occurred during monthly BCT teleconferences following this scoping meeting.

Reporting requirements and frequency of reporting are provided in the Draft *Tier II Sampling and Analysis Plan, Long Term Monitoring, Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill* currently being finalized.

To address the issue of evaluating the area downgradient and offshore (beyond breakwater) (Concern 3), the area downgradient and offshore of the landfill (beyond the breakwater) was investigated in 2012 as part of ME 40. The work performed and results of the investigation and associated interpretations are presented in Sections 2 and 3, respectively, with incorporation of these results in the CSM in Section 5, of the Final *Long-Term Monitoring Data Summary and Optimization Recommendations Report for Site 09: Allen Harbor Landfill* (Tetra Tech, 2015b). As summarized from Section 3.9 of the Final report, Color-Tec® field screening indicated the presence of low concentration (likely less than 10 µg/L) CVOC at five sediment sample locations along the revetment wall within the constructed wetland area and no positive field screening detections within the center of the constructed wetland. Further, Color-Tec® field screening was also performed in the sediment of the offshore beyond the breakwater and no positive results were identified at any field screening location (samples were collected approximately 10, 25 and 50 feet from the breakwater structure, between piezometers P09-07 to P09-08 to P09-12).

3.5 Five-Year Review Process

This section provides a description of the Five-Year Review process specific to Site 09 including the document review, data review, and site inspection.

3.5.1 Document Review

Documents reviewed as part of this Five-Year Review are referenced throughout the text and are included in the reference section. Information in this subsection summarizes the results of LTM and are based on LTM reports.

A review of documents relevant to the remedial actions and LTM activities conducted at Allen Harbor Landfill was undertaken as part of the Five-Year Review.

3.5.2 Data Review

A review of LTM data was performed as part of the Five-Year Review. Data from 45 rounds of sampling are included in the review. In the data review, all parameters detected in an environmental medium are evaluated, not just those parameters for which PALs have been established (as is typical in the LTM Data Summary Reports). Comprehensive evaluations of site-wide data from all environmental media were performed as part of the Final *Long-Term Data Summary and Recommendations Report for Site 09: Allen Harbor Landfill* (Tetra Tech, 2015b) and Draft Final *Fall 2016 Five Year Monitoring Report, Site 09 Monitoring Event 45* (Resolution, 2017c).

The following general conclusions are presented based on the comprehensive evaluation of site data presented in the Draft Final *Fall 2016 Five Year Monitoring Report, Site 09 Monitoring Event 45* (Figures 3-4 and 3-5 present spatial distributions of TCE and VC, and cis-DCE and trans-DCE, respectively for ME45, taken from the draft final report):

Hydrogeology

- The hydrogeology at Site 09 is stable, consistent, and well understood after 45 MEs. The hydrogeology data collected during ME 41 through ME 45 is consistent with previous events and the conclusions in the Site 09 LTM Data Summary and Optimization Recommendations Report.

Groundwater Beneath the Landfill

- Concentrations of CVOCs in groundwater beneath the landfill appear to be stable or possibly decreasing (see Figures 3-4 and 3-5). The combined TCE, cis-1,2-DCE, trans-1,2-DCE, and VC data indicate that anaerobic reduction dechlorination is occurring. The overall size, shape, and concentration profile of the CVOCs in groundwater beneath the landfill is consistent with those in the Site 09 LTM Data Summary and Optimization Recommendations Report.

- Benzene continues to be the only other VOC consistently detected at concentrations exceeding the PAL in groundwater beneath the landfill. The concentrations observed appear to be stable and limited to a few areas, consistent with previous MEs.

- Periodic PAL exceedances of other VOCs such as 1,1,2-TCA, 1,1-DCE, 1,2-DCE, methylene chloride, and chlorobenzene were observed, and these occurrences are consistent with previous MEs. The results during ME 41 through ME 45 were generally lower than historical averages.

- Detections of SVOCs and PAHs remain sporadic and infrequent. However, benzo(a)pyrene was detected in excess of the PAL (0.2 µg/l) for the first time during ME 45 at MW09-09S (0.21 µg/L) and MW09-20I (0.43 µg/L).

- Aroclor-1260 was only one PCB detected between ME 41 and ME 45, at MW09-11S (0.45 µg/L) during ME 41. The only two pesticide detections between ME 41 and ME 45 were beta-BHC at MW09-07S (0.020 µg/L) and MW09-24S (0.016 µg/L) during ME 44.

- Arsenic continues to be the only metal consistently detected in excess of the PAL in the groundwater beneath the landfill. Although arsenic concentrations exceed the PAL, the concentrations of arsenic in groundwater beneath the landfill are significantly less than those observed in the piezometers, and arsenic is naturally occurring in soil and groundwater.

Piezometers

- Only one CVOC was detected in piezometers during ME 42 through ME 45, vinyl chloride at P09-10 (1.1 µg/L) during ME 42.

- Benzene was only detected once in piezometers during ME 42 through ME 45 at P09-10 (1.3 µg/L) during ME 42.

- Arsenic copper, nickel, mercury, lead, chromium, and zinc have been frequently detected in excess of their PALs in piezometer samples during ME 42 through ME 45. However, the elevated concentrations appear to be largely the result of suspended solids in the samples because dissolved results for these metals are generally much less than total concentrations. The high suspended solids (i.e., turbidity) are due to poor groundwater recharge at these locations because groundwater does not significantly discharge along the shoreline of Site 09, which prevents collection of samples from piezometers via low-flow sampling. Furthermore, concentrations of these metals in monitoring wells (i.e., groundwater beneath the landfill) are much lower, further indicating that the elevated metals concentrations are not due to migration of groundwater beneath the landfill to the shoreline. It is possible that the elevated arsenic results are due to isobaric interferences from the metals ICP-MS analysis.

- Besides the metals listed above, there have been no PAL exceedances in groundwater since ME 42, and the vast majority of VOC, SVOC, PAH, pesticide, and PCB results have been non-detect.

Sediment

- VOCs, PAHs, pesticides, and PCBs were sporadically detected in sediment during ME 43 through ME 45. Mann-Kendall trend analyses indicate either no trend or downward trends. Zinc, 4,4'-DDT, phenanthrene, and pyrene were the only analytes with PAL exceedances during ME 43 through ME 45.

- Zinc was detected in excess of its PAL (219 mg/kg) at SED09-09 (263 mg/kg) during ME 44. The zinc concentration at this location decreased to 172 mg/kg during ME 45, less than the PAL.

- 4,4'-DDT was detected in excess of its PAL (6 µg/kg) at SED09-01 (8 µg/kg) during ME 43 and SED09-09 (9.3 µg/kg) during ME 44. 4,4'-DDT was not detected at either location during the following ME, with both reporting limits significantly less than the PAL.

- Phenanthrene was detected in excess of its PAL (1,500 µg/kg) at SED09-10 (3,300 µg/kg) during ME 44. The phenanthrene concentration decreased to 960 µg/kg during ME 45, less than the PAL.

- Pyrene was detected in excess of its PAL (2,600 µg/kg) at SED09-10 (2,700 µg/kg) during ME 44. The pyrene concentration decreased to 890 µg/kg during ME 45, less than the PAL.

Shellfish

- The 2013 through 2016 shellfish samples had concentrations of metals, PCBs, and PAHs greater than the maximum concentrations reported in reference samples collected from 2007 through 2011. However, a comparison to pre-remedy data indicates that site concentrations are significantly less than in samples collected from the same areas of the site in 1995, prior to installation of the cap.

- Overall, the trend analyses reported statistically significant upward trends for some metals including arsenic at ET09-03, ET09-04, ET09-05, and ET09-06 and for anthracene at ET09-04. However, comparison to landfill groundwater data indicates that these upward trends are not site related. In addition, Mann-Kendall trend analysis performed on arsenic at reference locations ET09-01 and ET09-02 in the Site 09 LTM and Optimization Recommendations Report indicated increasing trends for arsenic at these reference locations (Tetra Tech, 2015b), suggesting that arsenic in shellfish may be related to background conditions or other anthropogenic sources.

- The shellfish population appears to be more abundant and more diverse than observed during previous MEs. Quahogs, which were not frequently present during previous MEs, have become more common. Many parts of the stone

revetment and breakwater structure have become covered with shellfish shells from birds capturing and eating shellfish, indicating that the shellfish population is abundant enough to support the feeding habits of marine predatory birds.

Landfill Gas

- Laboratory VOC results were converted to emission rates and compared to newly calculated allowable emission rates based on updated RIDEM air toxic regulations in RIDEM Air Pollution Control Regulation No. 22 (RIDEM, 2008). There were no VOC exceedances of the new calculated allowable emission rates. The laboratory methane result was also converted to an emission rate. The methane emission rate was less than the calculated emission rate of 0.525 gram per second, which is based on the RIDEM maximum allowable emission of 100 pounds per day.

- Soil gas screening results from ME 41 through ME 45 indicate that the landfill cap has not been compromised and is functioning as designed.

Risk Assessment Updates

- The overall conclusion of this 2017 HHRA update is that the conclusions of the 2013 HHRA remain valid and that ingestion of shellfish tissue obtained from the Site 09 shoreline by a current/future recreational user poses a potential cancer risk or noncancer hazard exceeding RIDEM target levels due to arsenic, PCBs, and pesticides (specifically aldrin). Based on this conclusion, the current institutional control prohibiting ingestion of shellfish continues to be necessary to protect public health. However, the shellfish tissue EPCs for arsenic and aldrin are within the range of concentrations detected in reference tissue samples collected from the shoreline of Prudence Island and from Fishing Cove in Wickford, Rhode Island, between 2007 and 2011. These results indicate that concentrations of arsenic and aldrin in site shellfish tissue samples evaluated in the 2017 HHRA update may be due to background conditions rather than Site 09. In addition, the shellfish tissue EPC for PCBs is less than the range of PCB concentrations detected in samples collected in 2011 (the most currently available data set) through the National Oceanic and Atmospheric Administration Mussel Watch Program (https://products.coastalscience.noaa.gov/nsandt_data/data.aspx). This suggests that some of the PCB contamination detected in the Site 09 samples may reflect regional conditions.

The overall conclusion of the 2017 ERA update is that the conclusions of the 2015 ERA remain valid and that exposure to shallow sediment, pore water, surface water, and

shellfish along the Site 09 shoreline does not pose unacceptable site-related risk to ecological receptors. Concentrations of several metals were elevated in piezometer water, but it does not appear that these concentrations are related to groundwater at Site 09, as discussed above.

The data collected to date during the LTM program support the conclusions of the RI/FS that formed the basis for the ROD signed in 1997 by the Navy and EPA and concurred with by RIDEM. The LTM data indicate that groundwater continues to pose an unacceptable risk to human health if used for drinking or showering. Shallow groundwater data from the shoreline piezometers indicate that the VOC plume in shallow groundwater at the site extends into the offshore area south of the landfill (likely near the Allen Harbor side of the breakwater structure) but that groundwater does not transport significant concentrations of landfill constituents into near-shore sediments. The analysis of landfill gas samples indicates that VOCs, SVOCs, petroleum hydrocarbons, and methane are being released from the landfill at rates that are less than state criteria.

3.5.3 Site Inspection

This section summarizes the routine LTM program site inspection activities, as well as the site inspection activities performed specifically for this fourth Five-Year Review.

3.5.3.1 LTM Program Site Inspections

Site inspections are conducted annually at Allen Harbor Landfill in conjunction with each LTM event. During the inspection, each monitoring well is checked to ensure that it is locked, labeled, and in good condition. The site inspection also includes an on-site verification of the effectiveness of LUCs by observing land use conditions (presence of buildings and level of recreational use at the site) and evidence of groundwater extraction wells.

Review of site inspection forms completed during the LTM program indicates that all wells are locked and properly labeled. LUC inspections performed during the LTM program have not detected any evidence of water supply wells or new construction at the site.

3.5.3.2 Five-Year Review Site Inspection

Tetra Tech performed a site inspection on September 20, 2017, as part of the Five-Year Review. The inspection include a site walkover and annotation of conditions. Photographs from the 2017 site inspections are included in Appendix B.

The site inspections began at the southwestern corner of the landfill near the southern drainage swale and then proceeds along the exterior perimeter of the landfill. Groundwater monitoring wells and passive landfill gas vents are inspected as they were encountered.

Overall, the site was found to be in good conditions. All wells appeared in good condition, and the well casings were locked. Piezometers were observed to be in generally good condition. The stone revetment wall and break water structure also appears to be in good shape (no areas of settlement, missing rocks, etc. was observed). There were no barren portions (devoid of vegetation) in the created wetland. There were numerous ribbed mussels noted within the rocks of the breakwater structures along nearly the entire length of the structure. The warning signs to inform the public of the State ban on shellfishing in Allen Harbor were observed to be present and in good shape.

3.5.3.3 Interviews

The Navy holds annual RAB meetings for former NCBC Davisville to discuss the process of the cleanup program and ongoing investigations and/or site status. Comments and/or information received during these meetings are recorded and addressed by Navy, Region 1 EPA, and RIDEM representatives during these annual meetings. The RAB meeting notes are available to all attendees and are placed in the Administration Record.

The following individuals were interviewed as part of the fourth Five-Year Review for former NCBC Davisville.

Interviewee	Title/Affiliation
Nicole LaFontaine	North Kingstown Director of Planning and Development
Steven King	Quonset Development Corporation, Chief Operating Officer
Susan Licardi	North Kingstown Director of Water Department/Supply
Phil Bergeron	North Kingstown Director of Public Works
Chelsey Dumas	North Kingstown Department of Recreation
Ralph Mollis	North Kingstown Town Manager

The types of questions that were asked of interviewees are provided on the Typical Interview Questions from the June 22, 2017 RAB presentation, included in Appendix A. Steven King of Quonset Development Corporation was interviewed on September 21,

2017, and Susan Licardi of North Kingstown Water Department was interviewed on September 22, 2017. On Friday, September 23, 2017, Susan Licardi spoke with several other North Kingstown managers, with her questions focused on town-owned Sites 07 and 09. Appendix A includes a summary of information gathered during these interviews. The Typical Interview Questions from the June 22, 2017 RAB presentation were also provided to the Quonset Davisville Navy Yacht Club. However, no responses were received.

3.6 Technical Assessment

3.6.1 Question A: Is the remedy functioning as intended by the decision documents?

The review of LTM data, risk assumptions, site inspections, LUC inspections, and ARARs indicates that the remedy is functioning as intended by the ROD. The evaluation presented in this section includes a discussion of the performance of the remedy with respect to the objectives stated in the ROD.

Surface Soil. The RAOs stated in the ROD for surface soil include: (a) prevention of human and terrestrial animal exposure to contaminants in surface soil and (b) prevention of off-site migration of surface soil and surface soil constituents through overland runoff. The remedial actions taken to address these objectives were the construction of the RCRA cap and soil cap over the landfill surface and construction of the shoreline revetment. These actions prevent exposure to surface soils by human and terrestrial ecological receptors and prevent erosion of landfill materials into the shoreline environment, respectively. These site features are inspected by the Navy semi-annually or annually, as required by the ROD, to ensure their continued integrity and effectiveness. Although minor issues such as surface rutting and intrusive vegetation have been identified during inspections, they have been remedied and have not impacted the integrity of the landfill cap, drainage swales, or revetment.

Subsurface Soil. The RAOs stated in the ROD for subsurface soil include: (a) reduction in leachate generation and (b) reduction or elimination in surface erosion and exposure of fill materials along landfill shoreline.

The evaluation of water level data collected during LTM suggests that the cap is impeding the infiltration of rainwater through the unsaturated zone, which reduces the generation of leachate (Tetra Tech, 2015b; Resolution, 2017b). A qualitative comparison of on-site groundwater levels to those observed at the nearest United States Geological Survey monitoring well suggests water levels in monitoring wells located outside of the capped area (i.e., MW09-02S, MW09-24S, and MW09-25S)

correlate more closely to the off-site well than water levels measured in wells located within the capped area, indicating that water levels within the cap respond differently to seasonal variations in precipitation than wells located beyond the limits of the cap. These data, along with the evaluation of landfill survey data indicating the integrity of the cap is intact, provide evidence to support a reduction in leachate generation since construction of the remedy.

Erosion of and exposure to fill materials located along the landfill shoreline have been mitigated by the removal of debris and construction of the stone revetment. Semi-annual or annual inspections of the revetment have indicated only minor displacement of stones, occasional vegetative growth (which has been removed), and minimal erosion at the toe of the slope presumably resulting from a concentrated runoff from the edge of the landfill cap. None of these issues has negatively impacted the integrity or effectiveness of the revetment.

Groundwater. The RAO stated in the ROD for groundwater is to prevent human exposure to contaminants in deep groundwater. The Navy has performed LUC inspections at least annually at Allen Harbor Landfill to verify that no water supply wells are constructed on the site. Based on the findings of these inspections, there is no exposure to contaminated groundwater.

Sediment. The RAOs stated for sediment in the ROD include: (a) minimizing risks from marine ecological exposure to contaminants in sediment and (b) controlling potential future sediment contamination from landfill constituents. To evaluate risks along the shoreline associated with site contamination, sediment sampling results are compared to site-specific Shoreline Risk Monitoring and Remediation Goal (RG) Values that were developed for the protection of aquatic, terrestrial, and human health exposure pathways. Site-specific RG Values were developed for zinc, total Aroclors, and 4,4'-DDE based on the conclusions of a harbor-wide study presented in a report titled *Preliminary Remediation Goals (PRGs) for NCBC Allen Harbor Landfill (Site 09)* (SAIC, 1998). These site-specific values, together with Effect Range Median values, represent the PALs for sediment along the Allen Harbor Landfill shoreline.

The evaluation of LTM data collected during the first 45 events of monitoring indicates that exceedances of PALs in sediment samples are infrequent, with the exception of PCBs at SED09-01.

Remedial actions along the shoreline (i.e., sediment removal and wetland construction) have reduced contaminant levels to less than PALs at all locations except SED09-01, and sediments are not being recontaminated by landfill constituents.

Wetlands. The RAOs stated in the ROD for wetlands include (a) controlling potential future contamination of wetlands from landfill constituents and (b) improving the quality of existing wetlands and creating new wetlands along the landfill shoreline.

The evaluation of piezometer and sediment sampling data indicates that, in general, the remedial action is controlling the migration of landfill contaminants into the wetlands. The principle VOCs detected in water samples collected from piezometers are daughter product CVOCs (cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride) and benzene in monitoring wells located along the southern shoreline of the landfill (P09-08 and P09-10). Over the past several years, concentrations in piezometer samples have decreased at or near long-term lows, and there are no increasing trends for any CVOCs. Additionally, changes in the sampling locations of the piezometers with respect to the landfill did not result in changes in concentrations or trends. Exceedances of PALs in sediment samples collected from the constructed wetland (SED09-02 through SED09-08) are infrequent.

Wetland inspections have been conducted semi-annually/annually as part of the LTM program for Allen Harbor Landfill. Inspections include an evaluation of the enhanced wetland areas located north of the site and the constructed wetland east of the landfill. With few exceptions, these wetland areas are populated with abundant vegetation and are minimally impacted by invasive species.

During wetland inspections, several ospreys (*Pandion haliaetus*) and double-crested cormorants (*Phalacrocorax auritus*) were observed on poles near the constructed wetland. Two American egrets (*Casmerodius albus*) were observed in the natural marsh south of the constructed wetland. A belted kingfisher (*Megaceryle alcyon*) was observed on a pole near the enhanced wetland. All are predators of fish and/or shellfish and appear to be benefiting from the food sources provided by Allen Harbor, the constructed wetland, enhanced wetland, and other tidal marshes fringing Allen Harbor (Tetra Tech, 2007p).

Shellfish. The RAOs stated in the ROD for shellfish include: (a) controlling potential future contamination of shellfish from landfill constituents and (b) preventing or minimizing human ingestion of shellfish from the landfill shoreline containing site-related contaminants in excess of health advisory concentrations.

The comparison of shellfish sampling data collected from 2007 to 2016 to reference sample results (from the same species) collected during the RI in 1995 from similar locations indicates that the remedy is controlling contamination of shellfish from landfill constituents. There are three signs present along the landfill shoreline notifying

trespassers and the public of the state-imposed shellfishing ban that is in place for Allen Harbor. All three signs are in good condition.

3.6.2 Question B. Are the exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection still valid?

The HHRA for Site 09 was updated as part of the *Draft Final Fall 2016 Five Year Monitoring Report, Site 09, Monitoring Event 45* (Resolution, 2017c) (Appendix G-1). The objective of the updated HHRA was to determine whether there have been any changes and/or updates to EPA HHRA guidance or site-specific conditions since the 2013 HHRA performed in support of the *Long-Term Monitoring Data Summary and Optimization Recommendations Report* (Tetra Tech, 2015b) that would result in a change of the conclusions of the 2013 HHRA, or whether the conclusions of the 2013 HHRA remain valid. Revised risk/hazard calculations were performed as part of the 2017 HHRA update to estimate the cumulative potential cancer risk and/or noncancer hazard associated with a recreational user exposure scenario, to determine whether risk/hazard estimates exceed EPA and/or RIDEM target risk/hazard levels, and to identify whether the current institutional controls in place at Site 09 are still needed.

The receptors and exposure pathways evaluated in the 2017 HHRA update are consistent with those evaluated in the 2013 HHRA. These receptors and pathways include recreational users exposed to shoreline media while swimming, wading, or clamming/harvesting shellfish. There have been no changes in exposure assumptions, toxicity criteria, or contaminant characteristics that have affected the protectiveness of the selected remedy or monitoring activities. Therefore, the 2017 HHRA update supports that the conclusions of the 2013 HHRA remain valid. The RAOs are still valid, and applicable state and federal standards have not changed since the ROD was signed in September 1997. It still appears that ingestion of shellfish tissue obtained from the Site 09 shoreline by a current/future recreational user poses a potential cancer risk or noncancer hazard exceeding RIDEM target levels due to arsenic, PCBs, and aldrin. Based on this conclusion, the remedy is functioning as intended in that the current institutional control prohibiting ingestion of shellfish continues to be necessary to protect public health.

An ERA was conducted in 2015 for Site 09 in support of the *Third Five-Year Review Report* (Tetra Tech, 2015b) using recently collected (e.g., 2010 to 2012) sediment, shallow piezometer water (representing brackish sediment porewater, assumed to be a mixture of groundwater and surface water), seep water (representing surface water),

and shellfish data. The 2015 ERA identified no unacceptable risks to ecological receptors exposed to sediment, sediment pore water, or surface water.

An ERA update was conducted in 2017 (Resolution Consultants, 2017b) in support of the Site 09 Five Year Event LTM Report. The objective of the ERA update was to determine whether there have been any changes and/or updates to EPA ERA guidance or site-specific conditions since the 2015 ERA was conducted that would result in a change of the conclusions of the 2015 ERA. The 2017 ERA update presented updated risk screenings and food-web modeling evaluating birds and mammals exposed to shoreline sediment and shellfish. Toxicity values and exposure assumptions used in the 2017 ERA update are consistent with those used in the 2015 ERA. The overall conclusion of this 2017 ERA update is that the conclusions of the 2015 ERA remain valid and that exposure to shallow sediment, pore water, surface water, and shellfish along the Site 09 shoreline does not pose a site-related risk to ecological receptors. Concentrations of several metals were elevated in piezometer water, but it does not appear that these concentrations are related to groundwater at the site, as discussed above.

3.6.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No weather-related events have affected the protectiveness of the remedy, and there is no other information that calls into question the protectiveness of the remedy.

3.6.4 Technical Assessment Summary

Based on the LTM data reviewed and LUC inspections, the remedy at Allen Harbor Landfill is functioning as intended by the ROD. Regular monitoring of groundwater, sediment, and landfill gas is occurring at the locations where exposures to these media are most likely to occur. Shellfish sampling along the landfill shoreline commenced in 2007. Landfill inspections are being performed and documented to verify the integrity of the landfill cap, monitoring wells, gas vents, revetment, wetlands, breakwater, and other remedy features.

LUCs are effectively preventing exposure to groundwater contaminated with VOCs, SVOCs, and metals. The landfill cap components prevent contact with contaminants in surface and subsurface soils. Sediment sampling data indicate that contaminant levels in sediment are within acceptable ranges and that sediments are not being recontaminated by landfill constituents. Landfill gas sampling data indicate that emission rates from gas vents are within acceptable ranges. Shellfish sampling data

indicate that the remedy is controlling the contamination of shellfish by landfill constituents.

There have been no changes in physical conditions at the site, toxicity factors, or to the standardized risk assessment methodology that would affect the protectiveness of the remedy. There is no other information at this time that calls into question the protectiveness of the remedy.

3.7 Issues

No deficiencies were identified during this Five-Year Review for Allen Harbor Landfill, and no issues related to site operations (performance of LUCs and LTM), conditions, or activities prevent the remedy from being protective at this time or in the future.

3.8 Recommendations and Follow-Up Actions

Because no issues affecting the protectiveness of the remedy were identified, there are no recommendations for Site 09 Allen Harbor Landfill and no follow-up actions are required.

Although not associated with the protectiveness of the remedy and based on comments received on the Draft Final *Fall 2016 Five Year Monitoring Report, Site 09, Monitoring Event 45* (Resolution, 2017c) and Navy responses on August 9, 2017, there are three remaining concerns to be addressed with respect to long-term analysis of site data and contaminant fate and transport. These three concerns are:

- Evaluation of the whether organic or inorganic arsenic analysis for shellfish would be beneficial to the LTM evaluation and determination of remedy effectiveness.

- Evaluation of the recommendations for LTM optimization summarized in the *Draft Final Monitoring Event 45, Fall 2016 Five Year Monitoring Report.*

- Evaluation of the Conceptual Site Model for Groundwater with emphasis on the monitoring network of groundwater wells and shoreline piezometers used during LTM for determination of long-term effectiveness of the enacted remedy.

Evaluation of organic or inorganic arsenic analysis for shellfish tissue sampling

It is possible that the elevated arsenic results are due to isobaric interferences from the metals ICP-MS analysis. Further, current toxicity criteria are based on inorganic

arsenic. Therefore, an evaluation of organic arsenic would not yield usable data for evaluation of remedy protectiveness.

Evaluation of recommendations for LTM optimization

Based on the data review completed, the Navy feels that the modest recommendations for further optimization made in the *Draft Final Fall 2016 Five Year Monitoring Report, Site 09, Monitoring Event 45* deserve to be enacted in future LTM sampling.

Evaluation of Conceptual Site Model for Groundwater

Although the Navy addressed all of the comments pertaining to the CSM for groundwater in the August 9, 2017, response letter, this concern has been frequently and consistently raised by Region 1 EPA over the past several years. Additionally, this topic was a concern (Concern 3) for Site 09 in the *Third Five Year Review Report* (Tetra Tech, 2013b). As such, a technical meeting is needed to discuss the Conceptual Site Model for Groundwater to evaluate whether modifications to the monitoring network of groundwater wells and shoreline piezometers are necessary.

Although not associated with the protectiveness of the remedy, the following concerns are identified that related to LTM and evaluation of LTM data:

- UFP-SAP for Long-Term Monitoring at Site 09 needs to be finalized (Draft is dated June 2016). A tentative submittal date is August 2018.

- A technical meeting is needed to discuss the CSM for groundwater to evaluate whether modifications to the monitoring network of groundwater wells and shoreline piezometers are necessary. A tentative meeting date is March 2019.

- To evaluate isobaric interferences from the metals ICP-MS analysis, a subset of groundwater samples will be collected during the 2018 LTM event and analyzed by both ICP-MS and atomic absorption spectroscopy. A tentative submittal date for proposal of groundwater subset sampling is August 2018.

3.9 Protectiveness Statement

The remedy at Allen Harbor Landfill is protective of human health and the environment. Exposure pathways that could result in unacceptable risks are being addressed through remedy-related institutional controls and a state-enforced prohibition of shellfishing in Allen Harbor. These controls are effectively preventing exposure to site-related contaminants.

4.0 Site 16 – Creosote Dip Tank Area, Fire-Fighting Training Area and Former Building 41

This section presents the findings of the Five-Year Review for the remedy that was implemented at Navy IR Site 16 (Creosote Dip Tank Area, FFTA, and former Building 41) at the former NCBC Davisville.

4.1 Creosote Dip Tank Area, Fire-Fighting Training Area, and Former Building 41 Summarized Site Chronology

Event	Date
Creosote dipping of wood pilings and general fire-fighting operations performed in the north-central portion of the site	1960s–1990s
Completion of the *Initial Site Assessment of the former NCBC Davisville* (Hart, 1984).	9/1984
Completion of the *Verification Step - Confirmation Study of the former NCBC Davisville Facility* (TRC, 1987).	2/1987
EPA's Hazard Ranking Scoring Package for the former NCBC Davisville facility.	1989
NCBC Davisville facility placed on the CERCLA NPL.	11/21/1989
FFA signed by the Navy, EPA, and State of Rhode Island.	3/1992
Soil Removal Action performed around upended creosote dip tank.	1992
Basewide Environmental Baseline Survey (EBS) for NCBC Davisville performed.	1995
Phase II EBS – Initial Field Program performed (soil samples and test pits near Building E-107).	1996
Phase II EBS Follow-on Investigation (soil and groundwater sampling at creosote dip tank area, FFTA, etc.)	1997
Phase II EBS Follow-on Addendum Investigation (sampling near former Building 41).	1998
Phase I RI, Stage 1 (field investigation including membrane interface probe study in NCA).	1999-2001
Phase I RI, Stage 2 (site-wide field investigation).	1999-2001
Phase II RI (site-wide field investigation including well installation and sampling).	2002
Phase II Screening Level Ecological Risk Assessment (SLERA)	2004

Event	Date
Supplemental Phase II Hydrogeologic Investigation/Hydrogen Release Compound (HRC) Injection Pilot Study	2004
1,4-Dioxane Groundwater Study	2004/2006
Phase III RI (site-wide field investigation including (direct-push technology [DPT] and real-time field screening of CVOC concentrations).	2007-2008
FS Support Field Investigation (additional field data collection including test pitting and soil gas and offshore CVOC delineation).	2010
Perfluorooctanic Acid/Perfluorooctane Sulfonate Groundwater Study	2011
Draft RI Report for the Nike PR-58 Site (USACE)	2007-2011
FS (identified cleanup levels and RAOs)	2012
FS Addendum	2013
ROD for Site 16 signed	June 2014
Remedial Actions for soil and groundwater performed at Site 16.	2015-2016
Navy submits Draft Final *Tier II Sampling and Analysis Plan, Long Term Monitoring, Creosote Dip Tank Area, Fire-Fighting Training Area, and Former Building 41* (Resolution Consultant, 2017d)	November 2017
LTM program initiated with ME 01.	December 2017

4.2 Creosote Dip Tank Area, Fire-Fighting Training Area, and Former Building 41 Background Information

In this section, background information for Site 16 such as physical characteristics, current and former land use, and a history of environmental actions is presented.

4.2.1 Physical Characteristics

Site 16 is an irregularly shaped area bounded on the west by Thompson Road and to the south by railroad tracks (Figures 1-1 and 4-1); Site 16 also extends north to Allen Harbor and east to Narragansett Bay. The terrain at Site 16 is relatively flat to gently sloping towards the adjoining surface water bodies (Figure 4-1). Ground surface elevations range from approximately 10 to 33 feet above msl. Surface water runoff flows north to Allen Harbor and east to Narragansett Bay and is facilitated by the extensive pavement south and east of the NCA but mitigated by the significant vegetative cover that currently exists within the NCA. There are no freshwater streams within Site 16; however, an extensive stormwater drainage system exists in the area. In

addition to receiving surface water runoff from the surrounding environs, Allen Harbor and Narragansett Bay are also the discharge areas for groundwater underlying Site 16 and much of NCBC Davisville. Approximately 20 percent of the NCA is within the 100-year floodplain, and most of the NCA is within the 500-year floodplain.

4.2.2 Land and Resource Use

Most of Site 16 south of Davisville Road consists of parking areas and buildings. The developed portions of the site include mostly paved acreage south of Davisville Road and east of Allen Harbor Road, which is now primarily used for the temporary storage of cars delivered by ships and trains pending delivery to dealers. Most of the developed portion of Site 16 was transferred to the Quonset Development Corporation (QDC) as part of the Navy's 1998 MARAD property transfer. The portion of the site east of Allen Harbor Road and north of Davisville Road (the extreme eastern portion of the site) was part of the Naval Construction Battalion Center and was transferred along with the former Quonset Naval Air Station between 1975 and 1980 to the Town of North Kingstown, Rhode Island, Port Authority (now QDC) and the State of Rhode Island. The remaining area of the site is heavily wooded vacant land currently leased to QDC and will likely be the last parcel of the former NCBC Davisville property transferred by the Navy through the BRAC process. The NCA (the northern portion of Site 16 directly south of Allen Harbor) lies north of Davisville Road and is bounded by Allen Harbor to the north, Westcott Road to the west, Davisville Road to the south, and Allen Harbor Road to the east. Site 16 includes the area between former Building 41 and Narragansett Bay. There are no historical or archeological areas of importance at Site 16.

Allen Harbor (to the north) and Narragansett Bay (to the east) are the discharge areas for groundwater underlying Site 16. Three ponds (the Davol Pond system) located immediately southwest of the developed portion of Site 16 are not significant discharge points for groundwater underlying the site, but the ponds do appear to be a discharge area for groundwater in the NCBC area. An extensive storm water drainage system exists within the Site 16 site boundary. Much of the surface/storm water in the undeveloped and developed portions of the site drains to Allen Harbor and Narragansett Bay, respectively. Most buildings historically associated with Site 16 have been demolished. Building E-107 is at the northern boundary of the site near the southwestern corner of Allen Harbor. Buildings 39, 318, and E-319 are large commercial/industrial warehouse-type buildings located south of Davisville Road. The former Building 41 and several other smaller former buildings that previously existed within the site boundary have been demolished.

NCBC Davisville was decommissioned in March 1994 and closed on April 1, 1994, under the BRAC Program. The NCA portion of Site 16 is currently forested and shrub land. The small portion of Site 16 immediately north of the NCA and in the immediate vicinity of Building E-107 is used for marina (i.e., recreational) purposes. These areas of Site 16 are still owned by the Navy and are currently leased to QDC, which has sub-leased the marina area to the Allen Harbor Boating Association.

Prior to contamination being identified in this area, the remainder of Site 16 was previously transferred and includes mostly paved areas primarily used by the North Atlantic Distribution, Inc. (NORAD), a commercial automotive company, for the storage of cars delivered by ships and trains pending delivery to automotive dealers. Seafreeze Ltd., a commercial fish processing enterprise, is located at the eastern edge of Site 16 at the Narragansett Bay shoreline. The anticipated future land use for most of Site 16 (including the NCA) is commercial/industrial; however, it is anticipated that the area in the immediate vicinity of Building E-107 (the marina building) will continue to be used for marina (recreational) purposes.

Groundwater at the site is classified by RIDEM as GB (i.e., presumed to be not suitable for public or private drinking water use without treatment). However, per EPA groundwater remediation guidance, in states without an EPA-approved Comprehensive State Groundwater Protection Program (CSGWPP) such as Rhode Island, CERCLA groundwater remediation must meet federal drinking water standards *(i.e.,* MCLs and non-zero Maximum Contaminant Level Goals [MCLGs]) and risk-based standards, or more stringent state groundwater standards (unless the water is non-potable) based on the EPA classification of the groundwater, which is Class IIB in this area. No groundwater production wells are located on or downgradient of the site. Any potential future water needs would be met via municipal water available from the Town of North Kingstown.

4.2.3 History of Contamination

Creosote dipping of wood pilings occurred during the late 1960s in the western portion of the NCA of the Site 16 investigation area. The wood pilings were dipped into tanks containing creosote and staged in the area to dry before being loaded onto ships. In the early 1990s, an upended creosote dip tank was identified in the western portion of the site adjacent to the asphalt-paved road. A former FFTA was reportedly located in an asphalt-paved area east of the former Creosote Dip Tank Area. Reportedly, structures were constructed, doused with flammable materials, set on fire, and extinguished as part of fire-fighting training exercises during the late 1960s. Building 41 was a preservation and packing shop and construction equipment and automotive parts

storage building. Preservation and degreasing operations occurred within the building. Based on past activities, it is likely that petroleum products and solvents were used and stored within Building 41.

4.2.4 Initial Response and Basis for Taking Action

In the early 1990s, an upended creosote dip tank was identified in the western portion of the site adjacent to the asphalt-paved road. The location where the tank was found is the "original" Creosote Dip Tank Area and was first addressed by a removal action conducted by the Navy in 1992 (Halliburton NUS Corporation, 1994) and then further investigated during the Phase II EBS. During the EBS investigations, the reported underground storage tank (UST) located near the southeastern corner of Building E-107 was identified as two septic tanks (buried and interconnected pontoon tanks). They were excavated and removed along with the related total petroleum hydrocarbon (TPH)-impacted soil. NFA was recommended in the closure report prepared by FWENC for the septic tanks (1998).

Unacceptable risks to human health were identified for current and future site exposure scenarios. The results of the HHRA indicated that potential unacceptable risks were associated with (1) exposure to surface soil in the NCA by hypothetical future residents (due to PAHs, dioxins/furans, arsenic, and lead); (2) exposure to subsurface soil in the NCA by industrial workers, recreational users, and hypothetical future residents (due to PAHs, dioxins/furans, arsenic, and lead); (3) potable use of groundwater by hypothetical future residents (due to VOCs, naphthalene, and metals); and (4) exposures to the indoor air of a building constructed over the VOC groundwater plume by industrial workers and hypothetical future residents (due to TCE).

Soil COCs

Concentrations of the following chemicals exceeding threshold values for the industrial and residential exposure scenario or leachability concerns in either surface or subsurface soil were selected as risk-based COCs for soil:

- Carcinogenic PAHs, arsenic, lead, naphthalene, dioxins/furans, and benzene.

In addition to these risk-based COCs identified in the HHRA as the primary risk drivers, the following chemicals were also identified as COCs based on exceedances of chemical-specific ARARs (i.e., RIDEM's residential DEC and/or GA leachability criteria):

- Antimony, manganese, benzo(g,h,i)perylene, fluoranthene, fluorene, 2-methylnaphthalene, 1,1-DCE, 1,1-biphenyl, pyrene, vinyl chloride, TCE, and PCE.

Although TPH is not a contaminant under CERCLA, TPH concentrations at several locations exceeded the RIDEM residential DEC and leachability criteria. The TPH contamination in the Site 16 soils is generally collocated with PAH contamination.

Groundwater COCs

The following chemicals were selected as risk-based COCs for groundwater:

- Benzene, cis-1,2-DCE, PCE, TCE, vinyl chloride, and naphthalene.

In addition to these risk-based COCs identified in the HHRA as the primary risk drivers the following chemicals were also identified as COCs primarily based on their exceedances of chemical-specific ARARs (i.e., EPA MCLs or RIDEM GA groundwater objectives):

- 1,1-DCE, 1,1,2-TCA, bis(2-ethylhexyl) phthalate, methylene chloride, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, lead, nickel, nitrate, nitrite, selenium, and thallium.

Three ERAs were performed at Site 16, Phase I and II SLERAs in 2004 and an updated SLERA in 2009. The Phase I SLERA was conducted to evaluate risks to terrestrial ecological receptors exposed to chemicals in surface soil and aquatic ecological receptors exposed to chemicals in groundwater seeps and sediment collected in association with the groundwater seeps in Allen Harbor, located adjacent to Site 16. The Phase II SLERA evaluated ecological risks to benthic invertebrates and wildlife exposed to COPCs in sediment at Allen Harbor based on the sediment samples results evaluated in the Phase I SLERA, as well as additional sediment samples collected as part of the Phase II RI. An updated SLERA was conducted in 2009, using data from all sampling events, to evaluate the ecological risks to terrestrial plants, soil invertebrates, and wildlife exposed to COPCs in surface soil at Site 16 as part of the Phase III RI. The 2009 SLERA focused on surface soil in the NCA portion of Site 16. The developed area of Site 16 was not evaluated in the ERAs because it is largely paved, and viable habitat is very limited in this area.

Exposure pathways for ecological receptors included direct contact with contaminated soil, sediment, and surface water; incidental ingestion of contaminated soil and sediment; and ingestion of contaminated food items.

Based on the SLERA, there are no unacceptable ecological risks identified that are solely and definitely attributable to releases from Site 16.

4.3 Remedial Actions

This section discusses the remedy selection and implementation history for Site 16.

4.3.1 Remedy Selection

The ROD for Site 16, signed June 2014, documented selection of the remedy that included excavation and off-site disposal of surface soils, backfilling and restoration of excavated areas, focused in-situ treatment of groundwater at the eastern end of former Building 41, monitored natural attenuation of residual VOC-contaminated groundwater, and LUCs including the establishment of a waste management area (WMA).

As stated in the ROD, the RAOs for Site 16 are as follows:

Soil RAOs for the Northwestern Portion of the NCA, Excluding the Benzene Sub-Area

- No.1: Prevent industrial worker (including construction worker) exposure to subsurface soil containing concentrations of COCs (PAHs, arsenic, and lead) that cause unacceptable risk.

- No. 2: Ensure/verify that surface and subsurface soil contaminants (e.g., naphthalene) do not migrate to groundwater, surface water, and sediment causing the groundwater, surface water, and sediment to have associated unacceptable risk.

- No. 3: Prevent hypothetical future residential exposure to surface and subsurface soil contaminants (PAHs, arsenic, lead, and dioxins/furans) that cause unacceptable risk.

Soil RAOs for the Benzene Sub-Area (BTEX hot spot area)

- No.4: Prevent industrial worker (including construction worker) exposure to subsurface soil (in the benzene sub-area) containing concentrations of COCs (PAHs, arsenic, lead) that cause unacceptable risk.

- No. 5: Ensure/verify that surface and subsurface soil contaminants (e.g., benzene and naphthalene in the benzene sub-area) do not migrate to groundwater, surface water, and sediment causing the groundwater, surface water, and sediment to have associated unacceptable risk.

- No. 6: Prevent future residential exposure to surface and subsurface soil (in the benzene sub-area) containing concentrations of COCs (PAHs, arsenic, lead, and dioxins/furans) that cause unacceptable risk.

Soil RAO Specific to Soils in the Vicinity of the Marina Building

- No. 7: Prevent recreational user exposure to soil in the vicinity of the marina building containing concentrations of COCs (PAHs) that cause unacceptable risk.

Groundwater RAOs

- No. 1: Prevent human exposure (including drinking, showering, and irrigation) to groundwater containing COCs that cause unacceptable risk and does not meet the selected cleanup levels.

- No. 2: Verify that groundwater discharging to Allen Harbor and Narragansett Bay continues to pose no unacceptable risks.

- No. 3: Prevent unacceptable risks to industrial workers and hypothetical future residents that could result from exposure to VOC vapors migrating into buildings.

- No. 4: Restore groundwater quality to beneficial use.

The Selected Remedy for Site 16 includes selective excavation and off-site disposal of shallow soil (to a depth of 0-2 feet bgs), maintaining and monitoring the protective cover, establishment of a WMA at the NCA/marina, limited in-situ chemical oxidation of groundwater at the eastern end of former Building 41, MNA, and LUCs. This combination of alternatives was selected because it provides the best balance with respect to the nine evaluation criteria and will be least disruptive to continued industrial use of the property. The remedy will also allow for the continued recreational use of the area in the immediate vicinity of the marina.

4.3.2 Remedy Implementation

The Site 16 remedy included soil excavation and installation of soil covers over excavated areas, in-site groundwater treatment, LUCs, and LTM, as summarized below.

4.3.2.1 Soil Excavation and Protective Cover

As summarized in the previous section, the soil component of the remedy for Site 16 included selective excavation and off-site disposal of shallow soil (to a depth of 0-2 feet bgs) and maintaining and monitoring the protective cover. This work began in

November 2015. Initially, site clearing was performed to facilitate soil sampling and excavation activities. Vegetative material was chipped and left on-site. Soil sampling was performed to verify delineation of excavations and characterize the soils for disposal. A total of approximately 4,800 tons of impacted soils was removed and disposed of off-site at an approved facility. Since the impacted soils were fully delineated, no confirmation sampling was performed. After excavation was completed, backfilling was performed and the site was restored to match the existing conditions and grade. Backfill material was verified to be clean (few positive detections for various analytes – mostly metals - were well below applicable RIDEM Residential and Industrial DECs). Additional details and summary of work performed are included in the Final *Remedial Action Completion Report, Soil Remedial Action at Site 16* dated August 2016.

4.3.2.2 In-situ Groundwater Treatment

As summarized in the previous section, the initial groundwater component of the remedy for Site 16 included limited in-situ chemical oxidation of the groundwater at the eastern end of former Building 41. Groundwater remediation began in September 2015, which included initial site set-up and removal off all automobiles from the area. Prior to in-situ chemical oxidation, a baseline groundwater sampling event occurred, which included a focused synoptic groundwater event. Sampling was completed at 54 Site 16 groundwater monitoring wells. Upon completion of the baseline groundwater sampling, the 12 injection wells were re-developed by pumping groundwater out of each well for approximately 3 hours from August 26 to 28, 2016. From September 11 to 25, a total of 39,500 pounds of 100% permanganate (delivered as 99,567 pounds of 40% permanganate) was injected into the injection wells. After the injection phase was complete and permanganate concentrations returned to less than 1 part per million (ppm), four rounds of groundwater monitoring occurred. Sampling was performed at 25 Site 16 groundwater monitoring wells. Additional details and summary of the work completed are included in the Final *Remedial Action Completion Report, Groundwater Remedial Action at Site 16* dated April 2017.

Since groundwater remedial goals were not meet upon completion of the four rounds of groundwater monitoring as part of the groundwater remedial action (summarized in the Final *Remedial Action Completion Report, Groundwater Remedial Action at Site 16* report), an additional round of groundwater sampling was performed. Details and summary of the work completed are included in the Final *Groundwater Sampling Report, Groundwater Remedial Action at Site 16* dated October 2017. The following summarizes key interpretations of this additional sampling round:

- In almost all evaluation wells, TCE concentrations were less than in the final monitoring round compared to the baseline event.

- There was a significant decline in TCE concentrations from the baseline event to the first post-injection event (monitoring round 1) and a slight increase in concentrations have occurred since this first post-injection event.

Table 4-1 summarizes the groundwater sampling results as part of the Site 16 groundwater Remedy Implementation.

Table 4-1: Summary of VOC Analytical Results as part of Site 16 Groundwater Remedy Implementation

Sample ID	Date Collected	cis-1,2-DCE	TCE
INJ16-01D-BASE	9/2/2015	0.554 J	31.9
INJ16-01D-Q2	6/8/2016	ND	ND
INJ16-01D-Q3	9/14/2016	ND	0.369 J
INJ16-01D-Q4	12/6/2016	ND	24.4
INJ16-02D-BASE	9/2/2015	1.72 J	252
INJ16-02D-Q2	6/8/2016	ND	ND
INJ16-02D-Q3	9/14/2016	ND	0.422 J
INJ16-02D-Q4	12/6/2016	1.51	52
INJ16-03D-BASE	9/2/2015	94	234
INJ16-03D-Q2	6/8/2016	ND	70.3
INJ16-03D-Q3	9/14/2016	ND	190
INJ16-03D-Q4	12/8/2016	ND	1.57
INJ16-04D-BASE	9/2/2015	ND	262
INJ16-04D-Q1	3/2/2016	1.15 J	150 B
INJ16-04D-Q2	6/9/2016	2.87	311
INJ16-04D-Q3	9/15/2016	1.60 J	261
INJ16-04D-Q4	12/6/2016	1.47 J	328
INJ16-05D-BASE	9/2/2015	ND	339
INJ16-05D-Q1	3/1/2016	ND	ND
INJ16-05D-Q2	6/9/2016	0.309 J	105
INJ16-05D-Q3	9/14/2016	ND	49.9
INJ16-05D-Q4	12/7/2016	ND	194
INJ16-06D-BASE	9/3/2015	ND	305
INJ16-06D-Q2	6/8/2016	ND	54.7
INJ16-06D-Q3	9/15/2016	0.706 J	163
INJ16-06D-Q4	12/7/2016	ND	220
INJ16-07D-BASE	9/2/2015	ND	249
INJ16-07D-Q1	3/3/2016	ND	56.4 B

Sample ID	Date Collected	cis-1,2-DCE	TCE
INJ16-07D-Q2	6/8/2016	ND	217
INJ16-07D-Q3	9/14/2016	ND	152
INJ16-07D-Q4	12/7/2016	ND	189
INJ16-08D-BASE	9/2/2015	ND	260
INJ16-08D-Q2	6/9/2016	ND	1.38
INJ16-08D-Q3	9/14/2016	ND	175
INJ16-08D-Q4	12/7/2016	ND	241
INJ16-09D-BASE	9/2/2015	ND	256
INJ16-09D-Q2	6/9/2016	ND	276
INJ16-09D-Q3	9/15/2016	ND	237
INJ16-09D-Q4	12/7/2016	ND	211
INJ16-10D-BASE	9/3/2015	1.64 J	332
INJ16-10D-Q1	3/3/2016	ND	128 B
INJ16-10D-Q2	6/9/2016	0.511 J	241
INJ16-10D-Q3	9/15/2016	1.40 J	233
INJ16-10D-Q4	12/7/2016	1.26 J	206
INJ16-11D-BASE	9/3/2015	3.12 J	381
INJ16-11D-Q2	6/9/2016	1.08 J	191
INJ16-11D-Q3	9/15/2016	1.37 J	156
INJ16-11D-Q4	12/7/2017	1.44 J	243
INJ16-12D-BASE	9/3/2015	ND	771
INJ16-12D-Q1	3/2/2016	0.590 J	281 B
INJ16-12D-Q2	6/9/2016	0.782 J	373
INJ16-12D-Q3	9/15/2016	ND	493
INJ16-12D-Q4	12/7/2016	ND	619
INJ16-14D-BASE	9/9/2015	ND	976
INJ16-14D-Q1	3/2/2016	ND	276 B
INJ16-14D-Q2	6/7/2016	ND	217
INJ16-14D-Q3	9/15/2016	ND	404
INJ16-14D-Q4	12/8/2016	ND	849
MW16-31D-BASE	9/8/2015	ND	82.7
MW16-31D-Q1	3/2/2016	0.487 J	87.2 B
MW16-31D-Q2	6/8/2016	0.489 J	102
MW16-31D-Q3	9/15/2016	ND	47.9
MW16-31D-Q4	12/8/2016	ND	82.7
MW16-32D-Q2	6/8/2015	ND	72.5
MW16-32D-Q3	9/14/2016	ND	28.2
MW16-32D-Q4	12/8/2016	ND	34.2
MW16-66D-BASE	9/4/2015	1.04	17.3
MW16-66D-Q1	3/1/2016	0.763 J	8.22 B
MW16-66D-Q2	6/7/2016	0.730 J	9.26
MW16-66D-Q3	9/13/2016	0.986 J	15.5

Sample ID	Date Collected	cis-1,2-DCE	TCE
MW16-66D-Q4	12/6/2016	0.819 J	13
MW16-67D-BASE	9/3/2015	1.49 J	385
MW16-67D-Q1	3/1/2016	ND	1.06 J B
MW16-67D-Q2	6/7/2016	1.17 J	282
MW16-67D-Q3	9/13/2016	ND	270
MW16-67D-Q4	12/6/2016	ND	303
MW16-67I-BASE	9/4/2015	ND	4.58
MW16-67I-Q1	3/1/2016	ND	4.29 B
MW16-67I-Q2	6/7/2016	ND	4.57
MW16-67I-Q3	9/13/2016	ND	4.05
MW16-67I-Q4	12/8/2016	ND	3.92
MW16-68D-BASE	9/3/2015	2.60 J	309
MW16-68D-Q1	3/1/2016	ND	109 B
MW16-68D-Q2	6/7/2016	0.601 J	223
MW16-68D-Q3	9/13/2016	1.40 J	218
MW16-68D-Q4	12/6/2016	ND	243
MW16-68I-BASE	9/4/2015	ND	3.56
MW16-68I-Q1	3/2/2016	ND	2.96 B
MW16-68I-Q2	6/7/2016	ND	7.55
MW16-68I-Q3	9/13/2016	ND	3.32
MW16-68I-Q4	12/7/2016	ND	3.0
MW16-69D-BASE	9/3/2015	5.29	452
MW16-69D-Q1	3/1/2016	ND	ND
MW16-69D-Q2	6/7/2016	ND	ND
MW16-69D-Q3	9/13/2016	ND	23.9
MW16-69D-Q4	12/6/2016	0.723 J	79.1
MW16-70D-BASE	9/4/2015	1.40 J	354
MW16-70D-Q1	3/1/2016	ND	0.713 J B
MW16-70D-Q2	6/7/2016	ND	54.6
MW16-70D-Q3	9/13/2016	ND	146
MW16-70D-Q4	12/6/2016	ND	220
MW16-70I-BASE	9/4/2015	ND	3.24
MW16-70I-Q1	3/1/2016	ND	2.95 B
MW16-70I-Q2	6/7/2016	ND	2.95
MW16-70I-Q3	9/13/2016	ND	3.06
MW16-70I-Q4	12/6/2016	ND	3.19
MW16-71D-BASE	9/8/2015	ND	685
MW16-71D-Q1	3/2/2016	ND	ND
MW16-71D-Q2	6/8/2016	ND	97.8
MW16-71D-Q3	9/14/2016	ND	743
MW16-71D-Q4	12/7/2016	ND	924
MW16-71I-BASE	9/4/2015	ND	4.46

Sample ID	Date Collected	cis-1,2-DCE	TCE
MW16-71I-Q1	3/1/2016	ND	3.29 B
MW16-71I-Q2	6/7/2016	ND	3.84
MW16-71I-Q3	9/13/2016	ND	4.29
MW16-71I-Q4	12/6/2016	ND	4.16

Notes:
All results are in µg/L
J – Estimated value
B – Method Blank Contamination
Table 4-1 is based on Table 2 of the Final *Groundwater Sampling Report, Groundwater Remedial Action at Site 16* dated October 2017. See source table for additional information and analytes.

4.3.2.3 LUCs

As documented in the ROD, the LUC performance objectives for the LUCs at Site 16 are as follows:

- Allow recreational uses within the existing Allen Harbor Boating Association (AHBA) marina that are consistent with marina activities and will not disturb components of the remedy (e.g., soil cover, monitoring wells).

- Prohibit expansion of residential use (which also excludes recreational use as defined by RIDEM) within the NCA. Prohibited residential uses shall include, but are not limited to, any form of housing, child-care facilities, pre-schools, elementary schools, secondary schools, playgrounds, convalescent, or nursing care facilities.

- Establish a WMA to control excavation/disturbance of contaminated surface and subsurface soil by requiring all soil disturbance and excavation activities be conducted according to a health and safety plan and soil management plan approved in advance by the FFA signatories.

- Prohibit disturbance of the cover on the NCA and marina, within Site 16 boundaries, without approval from Navy, USEPA, and RIDEM.

- Prohibit any use of groundwater, unless authorized in advance by the FFA signatories, except for purposes of environmental monitoring or remediation.

- Prohibit construction and occupation of any future buildings unless (1) an investigation, concurred upon by FFA signatories, shows that risks to human health from vapor intrusion are within acceptable limits or (2) the FFA signatories

concur on the design of a vapor mitigation system for the building, and the vapor mitigation system is installed and operating properly and successfully.

- Maintain the integrity of any existing or future monitoring or remediation system(s).

The ROD included the following implementation actions for LUCs at Site 16:

- Modify the existing LUCIP to describe these LUCs.

- Incorporate these restrictions into any real estate property documents (i.e., deeds or leases) associated with future sale or lease of the site.

- Conduct annual inspections to ensure that there are no violations of these restrictions. The Navy will provide annual certifications of the inspections to EPA and RIDEM.

- If a violation of the restrictions occurs, report to EPA and RIDEM a description of the violation and the corrective actions to be taken to restore protectiveness.

- Establish restrictions, enforceable by the Navy, on properties that the Navy has already transferred to other parties.

The NCA portion of Site 16, north of Davisville Road, is owned by the Navy, and the LUCs required by the ROD for this area of the site are being implemented in accordance with the LUCIP (draft submitted in November 2016; final in preparation). Prior to the signing of the 2014 ROD, the area had prior deed restrictions which restricted use to activities consistent with a port facility (therefore, prohibiting residential/recreational development). Inspections of the NCA have been performed since 2002 in conjunction with CERCLA inspections of Sites 07 and 09 called for in a 2002 LUCIP. The LUCIP update will incorporate the LUCs required by the Site 16 ROD for both the NCA portion of Parcel 7 and the groundwater plume on previously transferred property.

The area of Site 16 south of Davisville Road was transferred out of Navy ownership, as part of Parcel 8, prior to the discovery of groundwater contamination in this area, and no environmental land use restrictions were imposed as part of the property transfer. Implementation of the ROD for this area will required coordination with/approval of the current property owner. Previous inspections of the NCA portion of Site 16 also included visual inspection of this area to confirm that no activities that

violate the LUCs are being conducted, and this process will continue during future inspections. The draft Annual LUCIP for 2016 report was submitted for review on February 9, 2018.

4.3.2.4 LTM

The *Draft Final Tier II Sampling and Analysis Plan, Long Term Monitoring, Creosote Dip Tank Area, Fire-Fighting Training Area, and Former Building 41 (Site 16)* report was submitted on November 20, 2017. The LTM component of the selected remedy for Site 16 began in December 2017. A site map with groundwater monitoring wells is provided as Figure 4-2.

4.4 Progress Since the Last Review

This is the first occurrence of Site 16 in a Five-Year Review because the ROD was signed in June 2014, after submission of the *Third Five-Year Review Report* on March 28, 2013.

4.5 Five-Year Review Process

This section provides a description of the Five-Year Review process specific to Site 16, including the document review, data review, and site inspection.

4.5.1 Document Review

Documents reviewed as part of this Five-Year Review are referenced throughout the text and are included in the reference section.

A review of documents relevant to the remedial actions activities conducted at Site 16 was undertaken as part of the Five-Year Review. The documents reviewed to complete the review included RI Reports and risk assessments, the FS, Proposed Plan, ROD, Remedial Action Completion Reports for soil and groundwater, and draft/draft final LTM work plans. For a complete list of documents that were reviewed during this Five-Year Review, please refer to the references section of this report.

4.5.2 Data Review

A review of data collected during the soil and groundwater remedial actions was performed as part of the Five-Year Review. The data collected for the soil remedial action consisted of confirmatory (either pre- or post-removal) sampling to verify that the remedial actions have been adequately performed. The data collected for the groundwater remedial action (focused in-situ chemical oxidation) included the collection

of a baseline and four post injection groundwater sampling events (a synoptic groundwater level event also occurred with each sampling round). The data collected during the completion of the soil and groundwater remedies at Site 16 support the conclusions of the RI/FS that formed the basis for the ROD signed in June 2014 by the Navy and EPA and concurred with by RIDEM. The Draft Final UFP-SAP for LTMP at Site 16 was submitted on November 20, 2017 and the Year 1 baseline groundwater sampling event occurred in December 2017. Preliminary results of this sampling event were shared with EPA and RIDEM on February 13, 2018. Figure 4-3 presents the spatial distribution of TCE based on previous investigations, prior to initiation of the remedy and LTMP.

4.5.3 Site Inspection

This section summarizes site inspection activities performed as part of annual LUCIP monitoring and the site inspection performed specifically for this Five-Year Review.

4.5.3.1 LTM Program Site Inspections

Site inspections will be conducted in a similar manner as those with Sites 07 and 09 once the LTM program is enacted.

4.5.3.2 Five-Year Review Site Inspection

Tetra Tech performed a site inspection on September 21, 2017, as part of the Five-Year Review. The inspection includes a site walkover and annotation of conditions. Photographs from the 2017 site inspections are included in Appendix B.

The site inspection began at the southwestern corner of Davisville and Marine Road and progresses eastward. Key observations recorded during the site inspections include:

- Condition of the soil cover and stone revetment wall by Building E-107
- Condition of the NCA
- Condition of the asphalt parking lots south and east of Davisville Road
- Any other adverse conditions encountered.

Overall, the site appears to be in good shape. No deficiencies were noted.

4.5.3.3 Interviews

The Navy holds annual RAB meetings for former NCBC Davisville to discuss the process of the cleanup program and ongoing investigations and/or site status. Comments and/or information received during these meetings are recorded and

addressed by Navy, Region 1 EPA, and RIDEM representatives during these annual meetings. The RAB meeting notes are available to all attendees and are placed in the Administration Record.

The following individuals were interviewed as part of the fourth Five-Year Review for former NCBC Davisville.

Interviewee	Title/Affiliation
Nicole LaFontaine	North Kingstown Director of Planning and Development
Steven King	Quonset Development Corporation, Chief Operating Officer
Susan Licardi	North Kingstown Director of Water Department/Supply
Phil Bergeron	North Kingstown Director of Public Works
Chelsey Dumas	North Kingstown Department of Recreation
Ralph Mollis	North Kingstown Town Manager

The types of questions that were asked of interviewees are provided on the Typical Interview Questions from the June 22, 2017 RAB presentation, included in Appendix A. Steven King of Quonset Development Corporation was interviewed on September 21, 2017, and Susan Licardi of North Kingstown Water Department was interviewed on September 22, 2017. On Friday, September 23, 2017, Susan Licardi spoke with several other North Kingstown managers, with her questions focused on town-owned Sites 07 and 09. Appendix A includes a summary of information gathered during these interviews. The Typical Interview Questions from the June 22, 2017 RAB presentation were also provided to the Quonset Davisville Navy Yacht Club. However, no responses were received.

4.6 Technical Assessment

4.6.1 Question A: Is the remedy functioning as intended by the decision documents?

The review of data collected during the soil and groundwater remedial actions performed between 2014 and 2017 and the results of site inspections indicate that the remedy is currently functioning as intended by the ROD. Although the LUCs required for the non-NCA portion of Site 16 have not been formally implemented (because the property was transferred prior to the identification of contamination), the current use of the site and results of visual inspections of the area confirm that activities that could

violate the LUCs are not taking place at the site. There is no evidence of the installation of wells for groundwater extraction or construction of buildings that could allow vapor intrusion.

4.6.2 Question B. Are the exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection still valid?

The *Remedial Investigation and Baseline Risk Assessment at Site 16* (Tetra Tech, 2009i) indicated the presence of soil and groundwater contamination from past operating practices that posed potentially unacceptable risk to current and possible future human receptors. There were no unacceptable ecological risks identified in the ecological risk assessment of the Remedial Investigation of Site 16 soil (Tetra Tech, 2009) or for surface water and sediment associated with Site 16 (Tetra Tech, 2004). Therefore, the RAOs in the FS and ROD included preventing exposure to industrial, recreational, and hypothetical future residential receptors to COCs in soil and groundwater and eliminating the potential for migration of soil COCs to groundwater. The implemented remedies address these RAOs.

There have been changes in some HHRA guidance and toxicity factors and changes in ecological screening levels since the preparation of the HHRA and SLERA (Tetra Tech, 2009i) and SLERAs for surface water and sediment (EA, 2004j and 2004k). Sections 4.6.2.1 and 4.6.2.2 summarize changes in factors or guidance for the HHRA and SLERA, respectively. Appendix C provides tables that show the factors that have changed compared to those used in the original risk assessments for Site 16 media. There have been no significant changes to ARARs that would affect cleanup levels developed for the site (Section 4.6.2.3).

The conclusion of the analysis of these changes in the sections that follow is that the RAOs are still valid and that the remedies for Site 16 are still protective.

4.6.2.1 Human Health Risk Assessment

Some changes have occurred in EPA Risk Assessment Guidance for Superfund (RAGS) since 2008 when the Site 16 HHRA was prepared. These include default exposure factors, toxicity criteria, and EPA RSLs. However, these result generally in lower risk estimates for the COCs that were remediated in soil (benzo(a)pyrene equivalents, arsenic, and lead). Therefore, in spite of changes in risk assessment methods, toxicity values, and cleanup targets, the remedy remains currently protective.

The changes in HHRA methods and values are organized below in the order of the steps of risk assessment (Hazard Identification, Exposure Assessment, and Toxicity Assessment) and then related to the RAOs and selected remedies.

Hazard Assessment (Identifying Chemicals of Potential Concern)

New Contaminants and/or Contaminant Sources: With the exception of pre- and post-confirmatory based sampling for the soil removal remedy, there has been no new soil sampling since the ROD was signed, and no new contaminants detected at the site since the groundwater remedy was implemented, and no new contaminant sources have been identified (LTM was initiated in December 2017).

Changes in Screening Criteria: The HHRA was prepared using the July 2008 RSLs and RIDEM DECs. Tables C-5 to C-7 (of Appendix C) present comparisons of the screening levels used in the HHRA to current values. There have been changes to the RSLs since 2008 due mainly to changes in toxicity criteria and exposure assumptions. The most significant change is that the July 2008 RSLs for tap water only considered exposures to ingestion of water and inhalation of volatiles, but the current RSLs also consider dermal exposures to water. In general, the current RSLs for soil are higher for most chemicals than those used in the HHRA, and the current RSLs for tap water and protection of groundwater are lower than those used in the HHRA. However, a review of the COPC selection tables for the chemicals with changes indicates that the list of COPCs would not significantly change if the current screening levels were used. In addition, the changes in screening criteria do not affect the protectiveness of the remedy for soil or groundwater because the same major COPCs would have been retained for evaluation in the HHRA.

Exposure Assessment

A key factor in Exposure Assessment that could impact the protectiveness of the remedy is if there were a change in land use designation for Site 16. However, current and reasonably anticipated future land use for Site 16 is the same as that considered in the signed ROD, which is commercial/industrial in all areas except the area in the immediate vicinity of Building E-107, which is used for marina (recreational) purposes. Therefore, the remedy remains protective since the anticipated land uses at the site have not changed.

The following changes in EPA risk assessment methodology related to exposure assessment have occurred since the HHRA and FS were finalized:

- In 2014, EPA updated standard exposure factors for human health. Tables C-8 to C-10 (of Appendix C) present a comparison of current exposure assumptions to those used in the HHRA. Tables C-11 and C-12 (of Appendix C) present a

comparison of the cancer intakes and noncancer intakes calculated using the exposure assumptions used in the HHRA and those based on the current exposure assumptions. For all exposure pathways with the exception of incidental ingestion of surface water and the noncancer intake for ingestion of groundwater by an adult resident, the intakes calculated with the current exposure assumptions are slightly less than those calculated using the exposure assumptions used in the HHRA. Consequently, the cancer risks and hazard indices would be slightly lower if they were calculated with the current exposure assumptions although cancer risks and hazard indices would still be unacceptable. Therefore, the conclusions of the HHRA and the remedy for Site 16 would not change.

- EPCs in the HHRA were calculated using EPA's ProUCL Version 4.00.02. There have been several updates to ProUCL since the HHRA was prepared, with the current version being Version 5.1.002. Some of the EPCs might change (increase or decrease) if they were calculated using the current version of ProUCL. However, the changes are not expected to be significant enough to result in major changes to the estimated cancer risks and hazard indices, and the overall conclusions of the HHRA and the remedy for Site 16 would not change.

Toxicity Assessment

Changes in Toxicity and Other Contaminant Characteristics: There have been no changes in human health toxicity criteria that would impact the protectiveness of the remedy. The toxicity factors [i.e., Cancer Slope Factors (CSFs) and Reference Doses (RfDs)] used in the HHRA for Site 16 were obtained primarily from Integrated Risk Information System (IRIS) or other sources. A comparison of toxicity criteria used in the HHRA to current toxicity criteria is provided in Tables C-1 through C-4 of Appendix C. Although the toxicity criteria for several chemicals have changed, the changes do not affect the protectiveness of the remedy. Carcinogenic PAHs, dioxins/furans, and arsenic were the major COCs identified in soil. The CSF and inhalation unit risk (IUR) for benzo(a)pyrene have decreased, but the criteria for dioxins/furans and arsenic have not changed. Therefore, the cancer risks for exposures to soil would decrease although risks would still exceed acceptable levels. However, these changes do not affect the protectiveness of the remedy for soil, which was - soil removal and off-site disposal, cover with clean fill, and LUCs. The soil removal areas were based on RIDEM DECs and these values have not changed, therefore the remedy for soil would not change.

Benzene, cis-1,2-DCE, PCE, TCE, vinyl chloride, and naphthalene were the major COCs identified in groundwater (Figure 4-3 presents the spatial distribution of TCE). Toxicity criteria for benzene, vinyl chloride, and naphthalene have not changed. The

current CSF and IUR for PCE are indicate lower toxicity than the values used in the HHRA, and the current CSF and IUR for TCE indicate higher toxicity than the values used in the HHRA. The RfDs and Reference Concentrations (RfCs) for PCE and TCE indicate that they are now considered more toxic than they were at the time of HHRA preparation. In addition, there is now an RfD available for cis-1,2-DCE. As a result, the cancer risks and HIs would be different than those presented in the HHRA. However, these changes do not affect the remedy for groundwater since the groundwater cleanup levels are based on MCLs, which have not changed- . Also, these changes do not affect the monitoring criteria for groundwater, which are also based on MCLs.

There have been updates to several of the input assumptions to EPA's Integrated Exposure Uptake Biokinetic model and Adult Lead Methodology (ALM) since the HHRA was prepared. In addition, the acceptable blood-lead level in the ALM has been lowered from 10 µg/dL to 5 µg/dL. The acceptable blood-lead level target change does not affect the soil cleanup levels because the RIDEM DEC was used as the cleanup goal for soil. The RIDEM DEC for lead has not changed and would still be lower than levels based on the updated ALM.

4.6.2.2 Ecological Risk Assessment

The EPA ERA guidance used to prepare the 2004 SLERA of Allen Harbor surface water and sediment potentially impacted by Site 16 and the 2009 SLERA of Site 16 remains the most current guidance. Toxicity reference values (TRVs) that were used to evaluate risks to wildlife from chemicals in sediment have been updated since preparation of the 2004 SLERA. The sediment TRVs were derived in the EPA Ecological Soil Screening Level (Eco SSL) guidance for several metals and a few organic chemicals (primarily DDTs and PAHs). The majority of the more recent TRVs are either similar to or greater than the TRVs used in the 2004 SLERA, although some TRVs are now lower. Therefore, the hazard quotients (HQs) would not change significantly for most chemicals based on the new TRVs and it is likely that a similar overall conclusion of acceptable ecological risk for sediment would be reached. The TRVs used in the 2009 SLERA to evaluate risks to wildlife from surface soil are the most recent TRVs; therefore, conclusions of acceptable ecological risk with soil would not change.

The 2004 SLERAs evaluated ecological risks to aquatic ecological receptors exposed to groundwater seeps and sediment associated with the seeps in Allen Harbor and evaluated risks to benthic invertebrates and wildlife exposed to sediment in Allen Harbor adjacent to Site 16. The SLERA included comparisons of seep water concentrations to EPA National Recommended Water Quality Criteria, which are periodically updated. The current EPA Water Quality Criteria are similar to the screening levels used in the 2004 evaluation, so the list of preliminary COPCs would not likely be expanded based

on updated criteria. The SLERA included comparisons of sediment chemistry to effects range low and effects range median benchmarks from Long and Morgan (1990) and Long et al. (1995). These sediment criteria have not been updated; therefore, the list of preliminary COPCs would not change. Risks to wildlife were based on food-chain modeling and as discussed above, changes in the TRVs would not result in significant changes to the risk conclusions.

A SLERA evaluating ecological risks to terrestrial plants, soil invertebrates, and wildlife exposed to COPCs in surface soil at Site 16 was conducted in 2009. Soil chemical concentrations were compared to EPA Eco SSLs supplemented with Canadian Soil Guidelines, Oak Ridge National Laboratory plant and invertebrate benchmarks, and Dutch Target Values, when necessary. These criteria have not been updated; therefore, the list of preliminary COPCs would not change. Risks to wildlife were based on food-chain modeling, and as discussed above, changes in the TRVs would not result in significant changes to the risk conclusions.

Several refinement factors were also considered when evaluating the results of the SLERAs and determining that chemical concentrations in soil do not present a risk to ecological receptors exposed to seep water, sediment, and/or surface soil. These factors, such as frequency of detection, comparison to background values, bioavailability, and comparison to alternate benchmarks would not be affected by any changes to screening criteria.

4.6.2.3 ARARs and TBCs

ARARs and TBCs considered during the preparation of the ROD were reviewed to determine changes since the ROD was signed. There have been no changes in ARARs or TBCs that would affect the protectiveness of the remedy. Toxicity values are TBCs per the Final FS Report for Site (Tetra Tech, 2012d), and there is an updated EPA toxicity assessment for benzo(a)pyrene (USEPA, 2017), which is a soil COC addressed in the soil remedies. The most significant change in benzo(a)pyrene toxicity is an oral CSF that is approximately seven times lower than the previous slope factor (resulting in EPA RSLs that are approximately 10 times higher than those calculated with the previous benzo(a)pyrene toxicity value). However, the PRGs for benzo(a)pyrene equivalents in soil were based on the RIDEM DEC, and these have not been updated to reflect the new benzo(a)pyrene toxicity assessment. Therefore, this TBC does not affect the specific remedial target for soil, but the updated benzo(a)pyrene toxicity assessment does support that the remedy remains protective.

One potential ARAR that developed after the ROD was signed is the listing of the northern long-eared bat as a threatened status by United States Fish and Wildlife

Service (USFWS). Therefore, a Phase 1 habitat assessment and consultation with the United States Fish and Wildlife Service (USFWS) and Rhode Island Fish and Wildlife Service was conducted by Resolution Consultants prior to mobilization for implementation of the soil removal portion of the remedy. The Phase I Habitat Assessment findings stated that potentially suitable northern long-eared bat summer habitat was not confirmed in the Site 16 NCA. Occurrence records for the bat are not reported by RIDEM, no known roost trees are present and suitable trees with exfoliating bark, crevices, cracks and cavities in the NCA are not present, and no water resources are present at the NCA. Additionally, no winter hibernacula are present in the vicinity of the NCA according to information received from RIDEM. USFWS issued a letter dated August 12, 2015, agreeing with the conclusion that northern long-eared bat summer habitat is not confirmed for Site 16.

4.6.3 Question C: Has any other information come to light that could call into question the protectiveness of the remedy?

No weather-related events have affected the protectiveness of the remedy, and there is no other information that calls into question the protectiveness of the remedy.

4.6.4 Technical Assessment Summary

Based on the data reviewed and the site inspections, the remedy is currently functioning as intended by the ROD. There have been no changes in physical conditions at the site, toxicity factors, changes to ARARs or TBC guidance, or to the standardized risk assessment methodology that would affect the protectiveness of the remedy. No other information has been discovered that calls into question the protectiveness of the remedy.

4.7 Issues

As summarized in Section 4.3.3.2, a portion of Site 16 was previously transferred without the LUCs subsequently required by the Site 16 ROD. In accordance with the lease for Parcel 7, annual inspections are conducted to verify compliance with the lease restrictions and include formerly owned lands (Parcel 8). Although there have been no non-compliance issues to date, without an ELUR recorded on the deed for this portion of the property, future remedy protectiveness cannot be ensured. Implementation of the ELURs will require necessary coordination with the current property owner(s). The Navy has begun the process of coordinating with the current property owner to accept the required restrictions on their property.

Issue	Affects Current Protectiveness (Y/N)	Affects Future Protectiveness (Y/N)
The ELUR for recording on the deed for Parcel 8, Zone 4 (area south of Davisville Road and the eastern Pier area were previously transferred) has not been completed. Coordination with current property owner(s) will be required.	N	Y

4.8 Recommendations and Follow-Up Actions

Issue	Recommendations/ Follow-Up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Y/N)	
					Current	Future
1	In coordination with current property owner(s), submit ELUR for recording on deed for Parcel 8, Zone 4 (area south of Davisville Road and the eastern Pier area were previously transferred).	Navy	EPA/ RIDEM	9/1/18	N	Y

4.9 Protectiveness Statement

The remedy at Site 16 is currently protective of human health and the environment. The soil removal portion of the remedy was successful in removing soil with COC concentrations exceeding industrial/commercial DECs from the site, and the 0 to 2 feet of backfill used to restore the excavated areas prevents exposure to COCs at greater depths. Groundwater treatment was successful in reducing concentrations of TCE to levels that allowed for a transition to MNA. The results of future LTM will be used to evaluate the effectiveness of the remedy, including confirmation of the lack of migration of subsurface soil COCs to other media beyond the compliance boundary and by evaluating trends in groundwater COC concentrations. Implementation of LUCs via the LUCIP in the NCA portion of the site will provide protection by prohibiting residential exposure to surface and subsurface soil and by preventing human exposure to groundwater. Although LUCs have not been formally implemented in the non-NCA portion of the site, inspections have confirmed that no activities that could facilitate

human exposure to groundwater or to VOC vapors migrating into buildings have been conducted at the site (i.e., no well installation and no building construction). Attempts by the Navy to implement the required LUCs via addition to the deed associated with previous transfer of the property are underway.

Based on the information available to date and the activities that are completed and ongoing, the Site 16 remedy is currently protective. Exposure pathways that could result in unacceptable risks are being addressed through implemented LUCs or by the confirmed lack of unacceptable site uses (i.e., no well installation or building construction) and therefore exposure to site-related contaminants in soil and groundwater is currently being prevented. To ensure the future protectiveness of the remedy, the Navy is coordinating with the current site owner to allow incorporation of an ELUR documenting the LUCs required by the ROD for the non-NCA portion of Site 16 into the deed for previous transfer of the property.

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FIGURES

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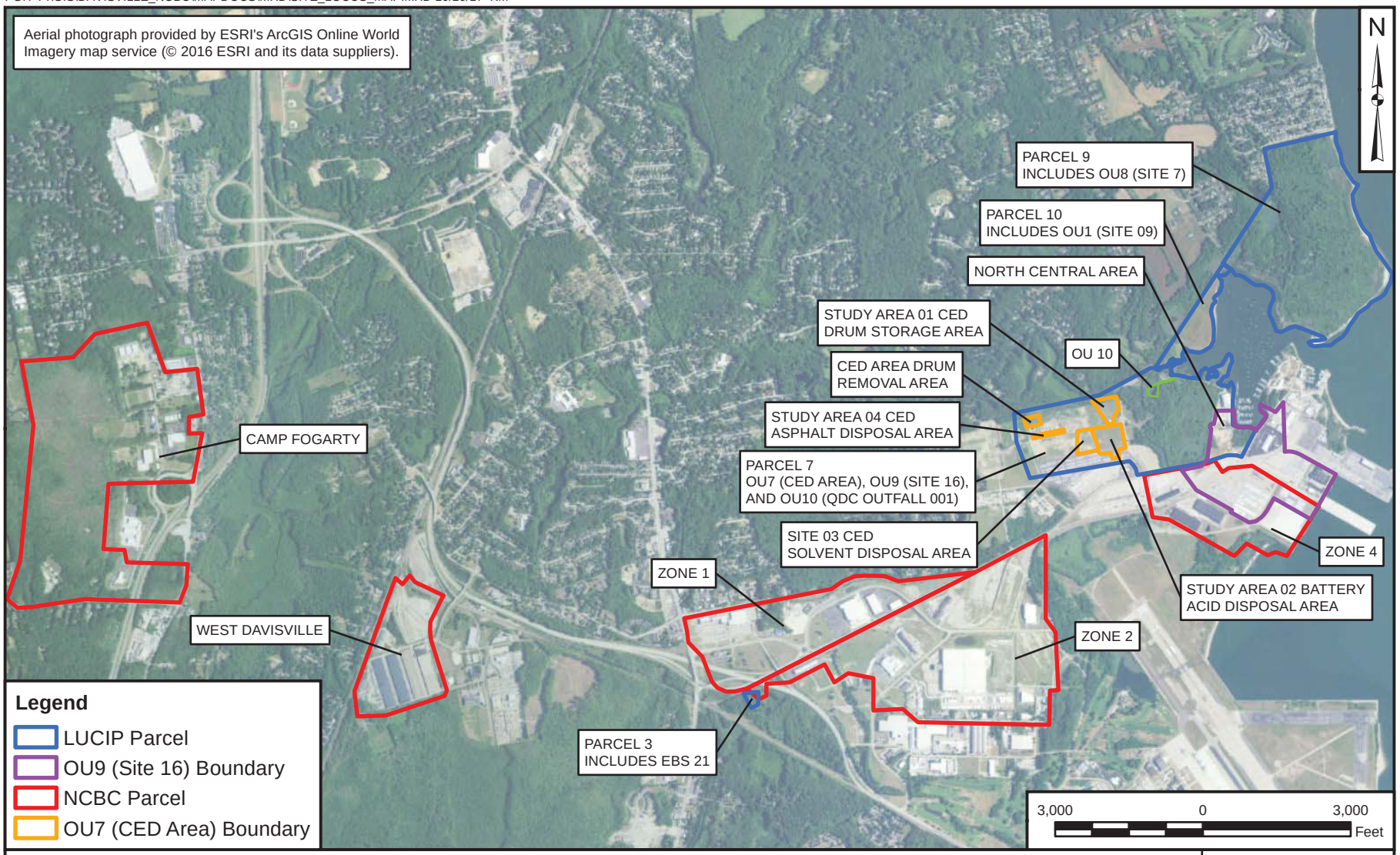

NAVFAC

SITE LOCUS MAP
FOUTH FIVE-YEAR REVIEW
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

CTO	ML4376
DRAWN BY	K. MOORE
DATE	10/11/17
CHECKED BY	S. ANDERSON
DATE	10/20/17
FIGURE NUMBER	1-1

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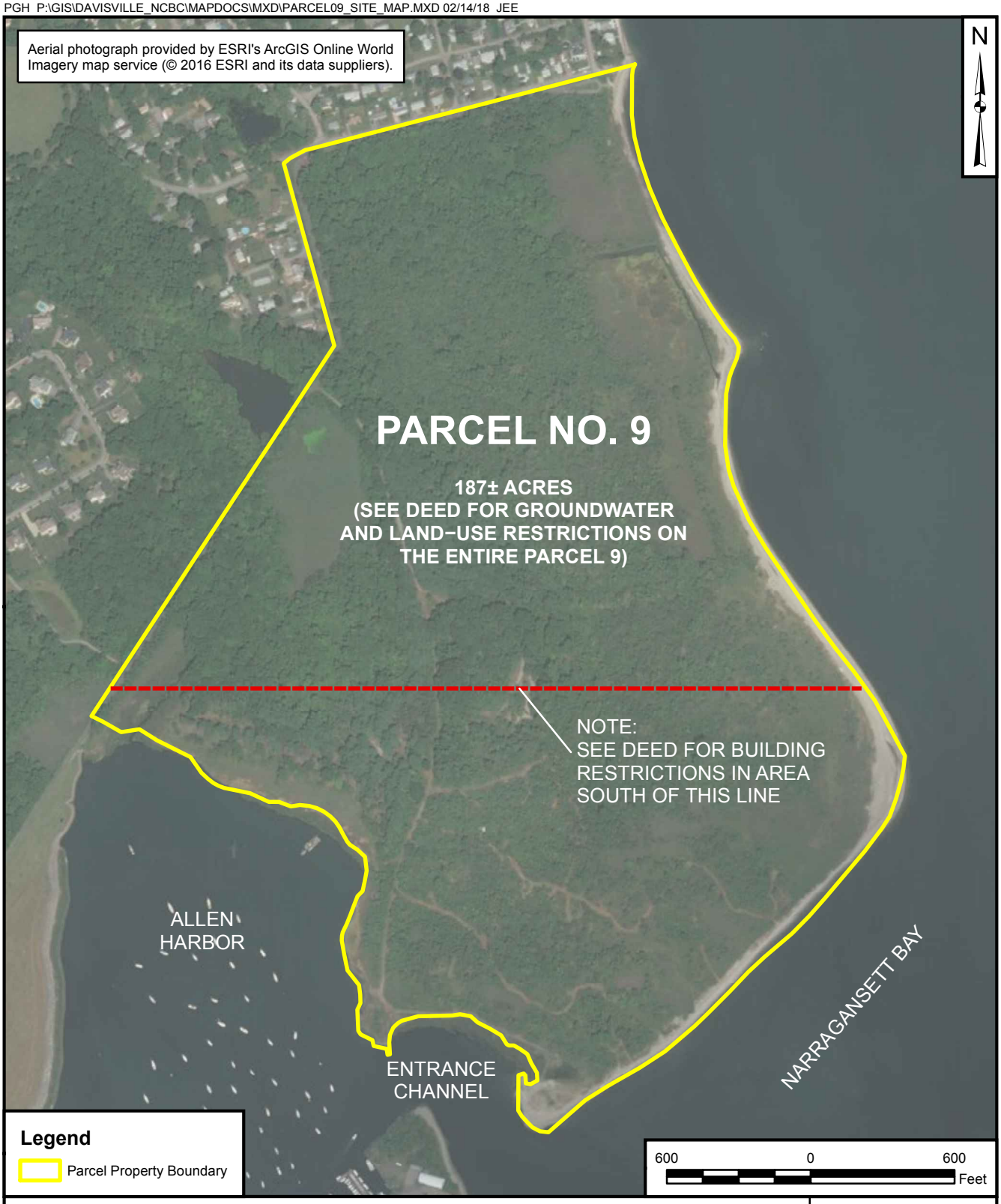

NAVFAC

PARCEL NO. 9 SITE MAP
FOURTH FIVE-YEAR REVIEW
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

CTO	
ML4376	
DRAWN BY	DATE
K. MOORE	10/12/17
CHECKED BY	DATE
S. ANDERSON	02/14/18
FIGURE NUMBER	
2-1	

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Aerial photograph provided by ESRI's ArcGIS Online World Imagery map service (© 2016 ESRI and its data suppliers).

N

MW07-28D
MW07-15D
MW07-01S
MW07-02S
MW07-03D
MW07-03S
MW07-04D
MW07-05R
MW07-05S
MW07-05D
MW07-04S
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MW07-38S
MW07-38D
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MW07-35S
MW07-40D
MW07-29D
P07-15
MW07-35D
MW07-30D
P07-16
DPT07-09-27D
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MW07-09D
P07-17
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MW07-10S
MW07-27S
MW07-27D
MW07-10D
DPT07-39-04D
DPT07-39-03D
MW07-25D
DPT07-39-03I
DPT07-29-34I
DPT07-29-34S
MW07-41I
MW07-45D
MW07-45S
DPT07-16I
DPT07-16S
MW07-26S
MW07-34D
MW07-16R
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MW07-42I
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MW07-24S
MW07-24D

Legend

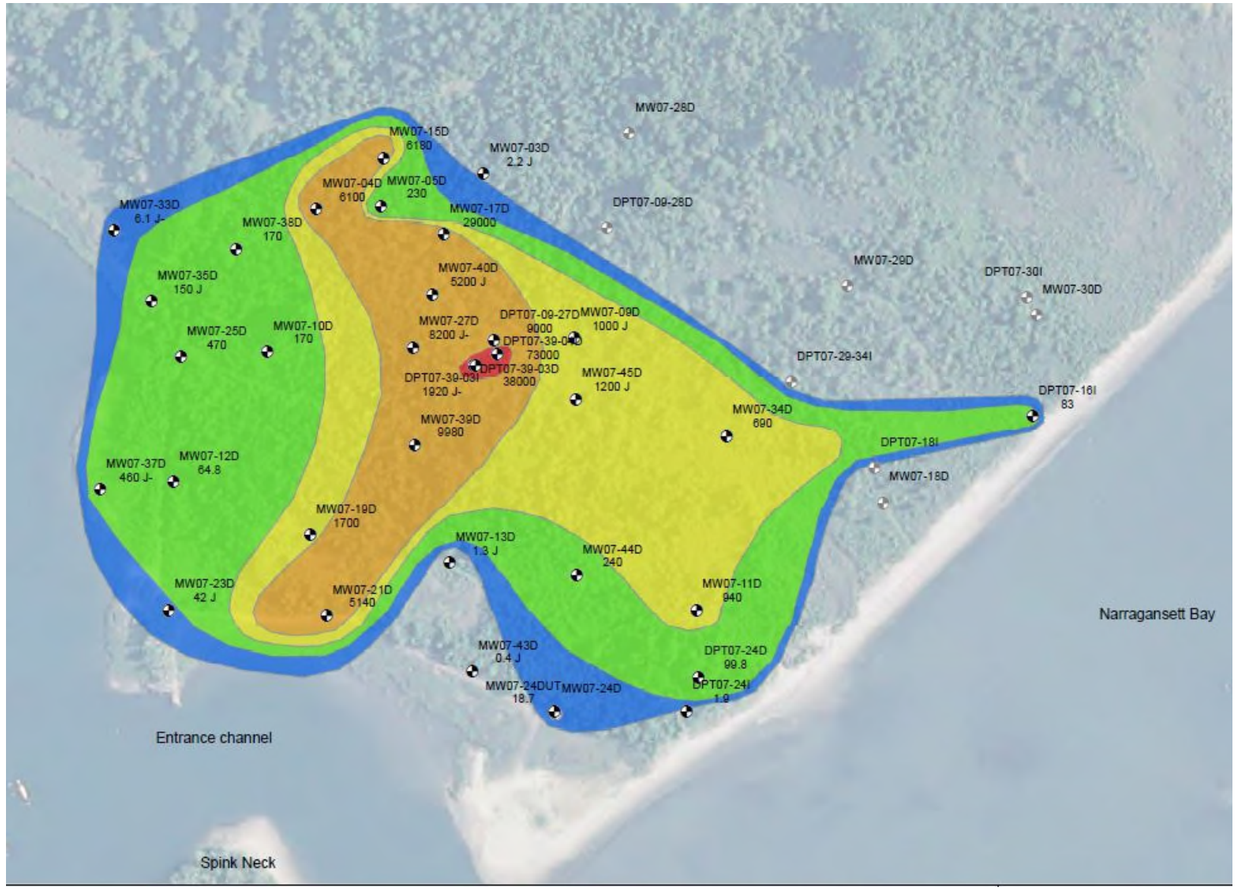
- Monitoring Well
- Piezometer and Sediment Sampled During Five Year Sampling Round
- Piezometer Sampled During Five Year Sampling Round
- Surface Water Sampling Transect

150 0 150 Feet

NAVFAC

SITE MAP AND LONG TERM MONITORING LOCATIONS
SITE 7 - CALF PASTURE POINT
FOURTH FIVE YEAR REVIEW
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

CTO	
ML4376	
DRAWN BY	DATE
J. ENGLISH	02/14/18
CHECKED BY	DATE
S. ANDERSON	02/23/18
FIGURE NUMBER	
2-2	



Shallow Groundwater

Deep Groundwater

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isoconcentrations in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

Isocontours are dashed where inferred

N

0 100 200

Scale in Feet

Concentrations in ug/L

NOTE

Source of Figure is Figures 24 and 25 of the Draft Final Monitoring Event 20, Fall 2016 Five Year Event Monitoring Report, Site 07: Calf Pasture Point, Draft Final Version 1, Resolution Consultants, February 06, 2018.

NAVFAC

Spatial Distribution of TCE – Fall 2016
Fourth Five-Year Review
Former NCBC Davisville
North Kingstown, Rhode Island

PROJECT: CTO ML4376
DATE: February 2018
SCALE: As Shown

Figure 2-3

Shallow Groundwater

Deep Groundwater

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

Isocontours are dashed where inferred

N

0 100 200

Scale in Feet

Concentrations in ug/L

NOTE

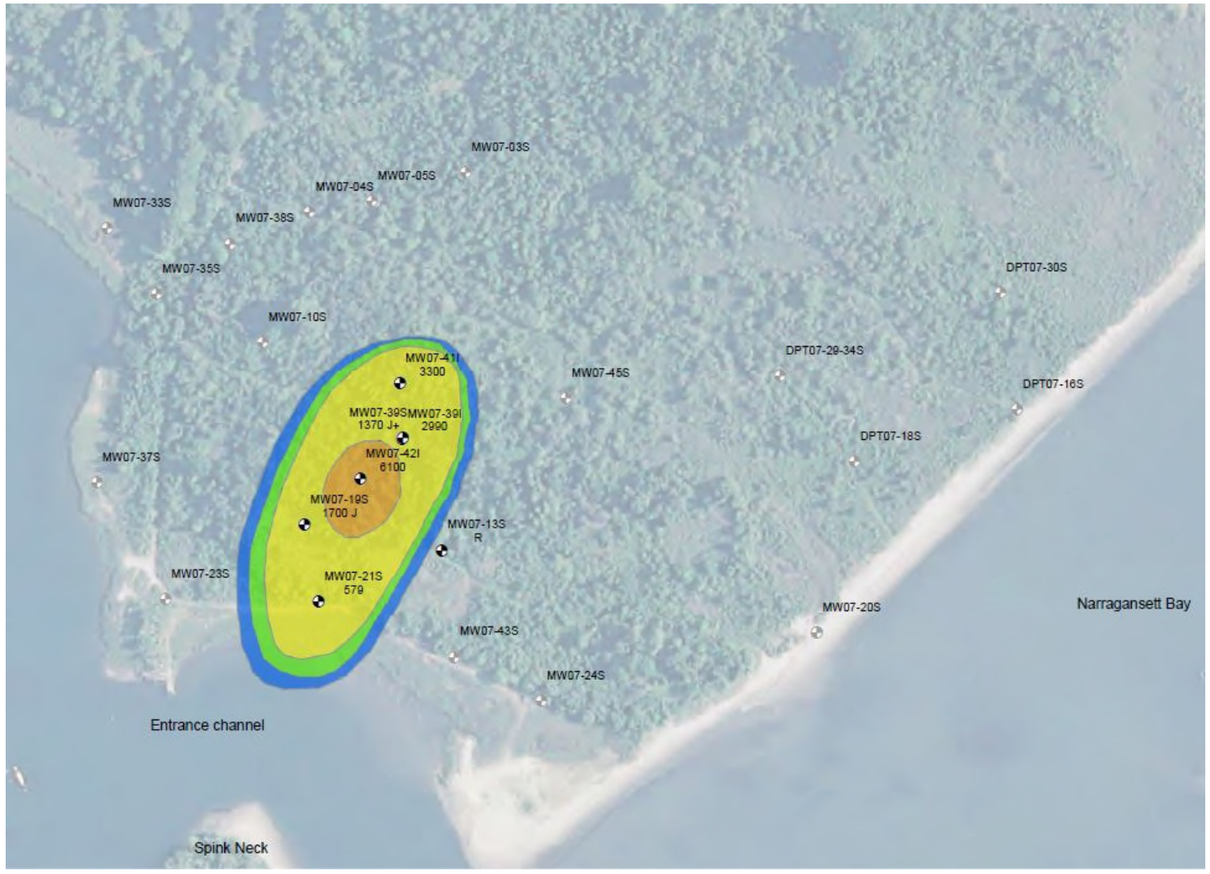
Source of Figure is Figures 26 and 27 of the Draft Final Monitoring Event 20, Fall 2016 Five Year Event Monitoring Report, Site 07: Calf Pasture Point, Draft Final Version 1, Resolution Consultants, February 06, 2018.

NAVFAC

Spatial Distribution of VC – Fall 2016
Fourth Five-Year Review
Former NCBC Davisville
North Kingstown, Rhode Island

PROJECT: CTO ML4376
DATE: February 2018
SCALE: As Shown

Figure 2-4



Shallow Groundwater

Deep Groundwater

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

NOTE

Source of Figure is Figures 28 and 29 of the Draft Final Monitoring Event 20, Fall 2016 Five Year Event Monitoring Report, Site 07: Calf Pasture Point, Draft Final Version 1, Resolution Consultants, February 06, 2018.

NAVFAC

Spatial Distribution of cis-DCE – Fall 2016
Fourth Five-Year Review
Former NCBC Davisville
North Kingstown, Rhode Island

PROJECT: CTO ML4376
DATE: February 2018
SCALE: As Shown

Figure 2-5

Shallow Groundwater

Deep Groundwater

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

NOTE

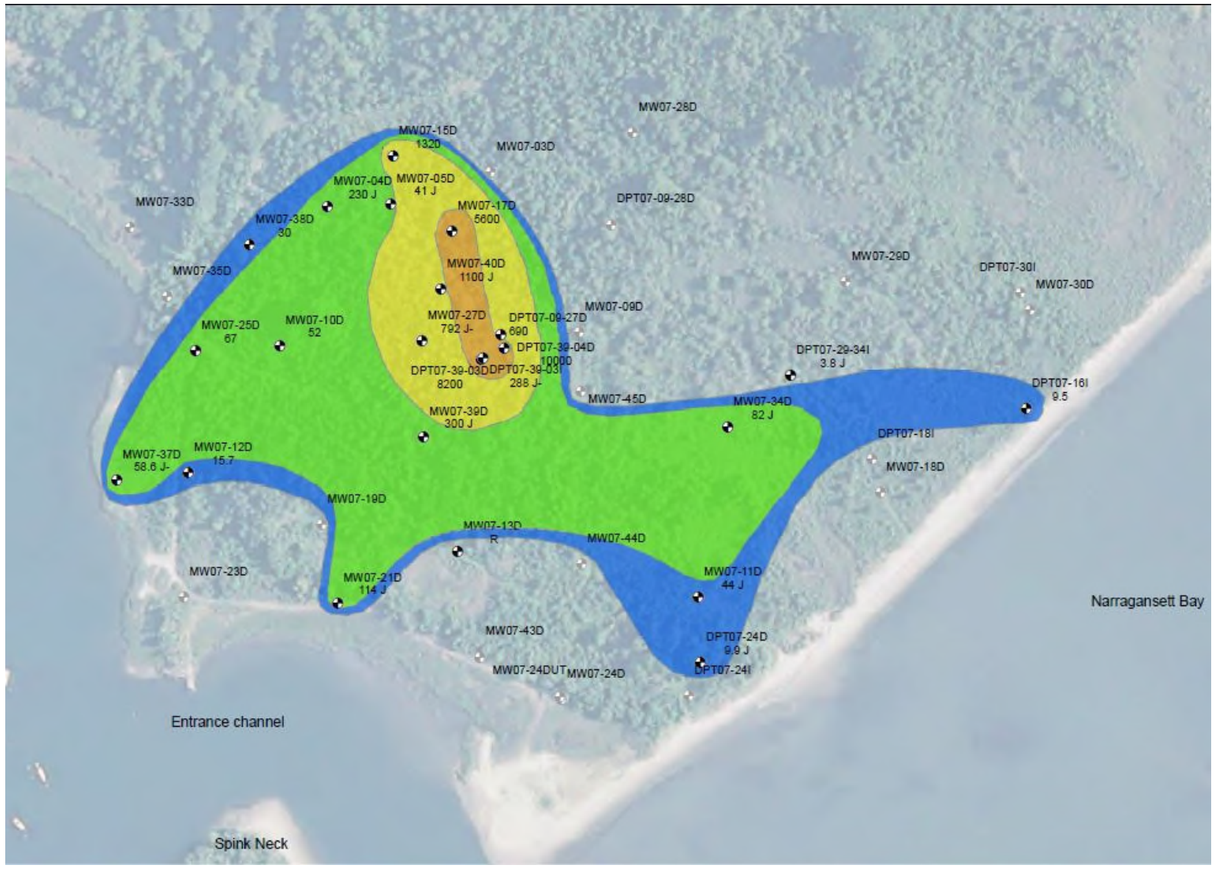
Source of Figure is Figures 30 and 31 of the Draft Final Monitoring Event 20, Fall 2016 Five Year Event Monitoring Report, Site 07: Calf Pasture Point, Draft Final Version 1, Resolution Consultants, February 06, 2018.

NAVFAC

Spatial Distribution of trans-DCE – Fall 2016
Fourth Five-Year Review
Former NCBC Davisville
North Kingstown, Rhode Island

PROJECT: CTO ML4376
DATE: February 2018
SCALE: As Shown

Figure 2-6



Shallow Groundwater

Deep Groundwater

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

Isocontours are dashed where inferred

N

0 100 200

Scale in Feet

Concentrations in ug/L

NOTE

Source of Figure is Figures 32 and 33 of the Draft Final Monitoring Event 20, Fall 2016 Five Year Event Monitoring Report, Site 07: Calf Pasture Point, Draft Final Version 1, Resolution Consultants, February 06, 2018.

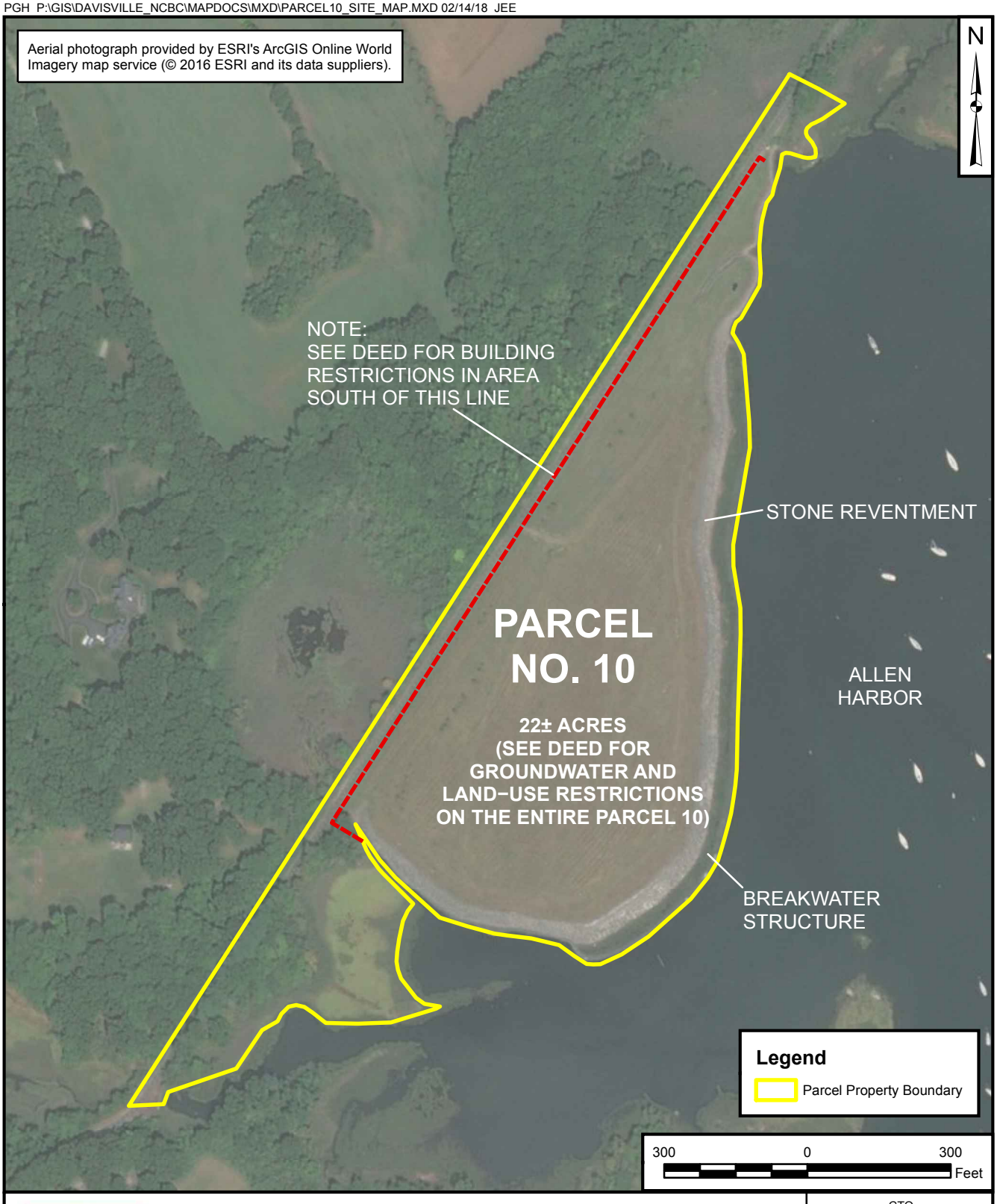
NAVFAC

Spatial Distribution of PCE – Fall 2016
Fourth Five-Year Review
Former NCBC Davisville
North Kingstown, Rhode Island

PROJECT: CTO ML4376
DATE: February 2018
SCALE: As Shown

Figure 2-7

PGH P:\GIS\DAVISVILLE_NCBC\MAPDOCS\MXD\PARCEL10_SITE_MAP.MXD 02/14/18 JEE

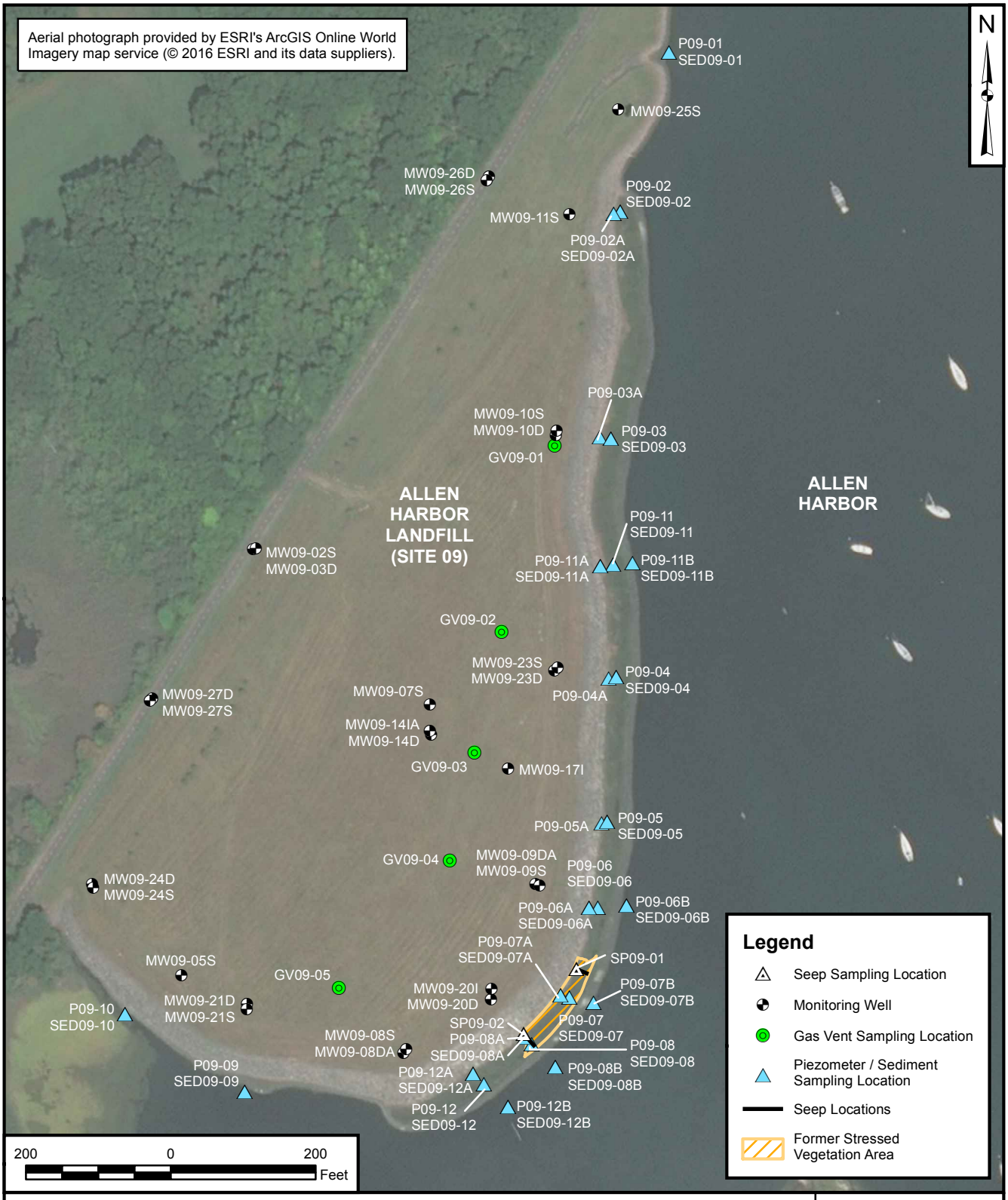


NAVFAC

PARCEL NO. 10 SITE MAP
FOURTH FIVE-YEAR REVIEW
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

CTO	
ML4376	
DRAWN BY	DATE
K. MOORE	10/12/17
CHECKED BY	DATE
S. ANDERSON	02/14/18
FIGURE NUMBER	
3-1	

PGH P:\GIS\DAVISVILLE_NCBC\MAPDOCS\MXD\SITE09_LTM_LOCS.MXD 02/14/18 JEE



NAVFAC

SITE MAP AND LONG TERM MONITORING LOCATIONS
SITE 9 - ALLEN HARBOR LANDFILL
FOURTH FIVE YEAR REVIEW
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

CTO	
ML4376	
DRAWN BY	DATE
K. MOORE	10/12/17
CHECKED BY	DATE
S. ANDERSON	02/14/18
FIGURE NUMBER	
3-2	

PGH P:\GIS\DAVISVILLE_NCBC\MAPDOCS\MXD\LANDFILL_PROB_LOCS.MXD 10/12/17 KM

NAVFAC

LANDFILL GAS PROBE SCREENING LOCATIONS
FOURTH FIVE-YEAR REVIEW
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

CTO	
ML4376	
DRAWN BY	DATE
K. MOORE	10/12/17
CHECKED BY	DATE
S. ANDERSON	10/12/17
FIGURE NUMBER	
3-3	

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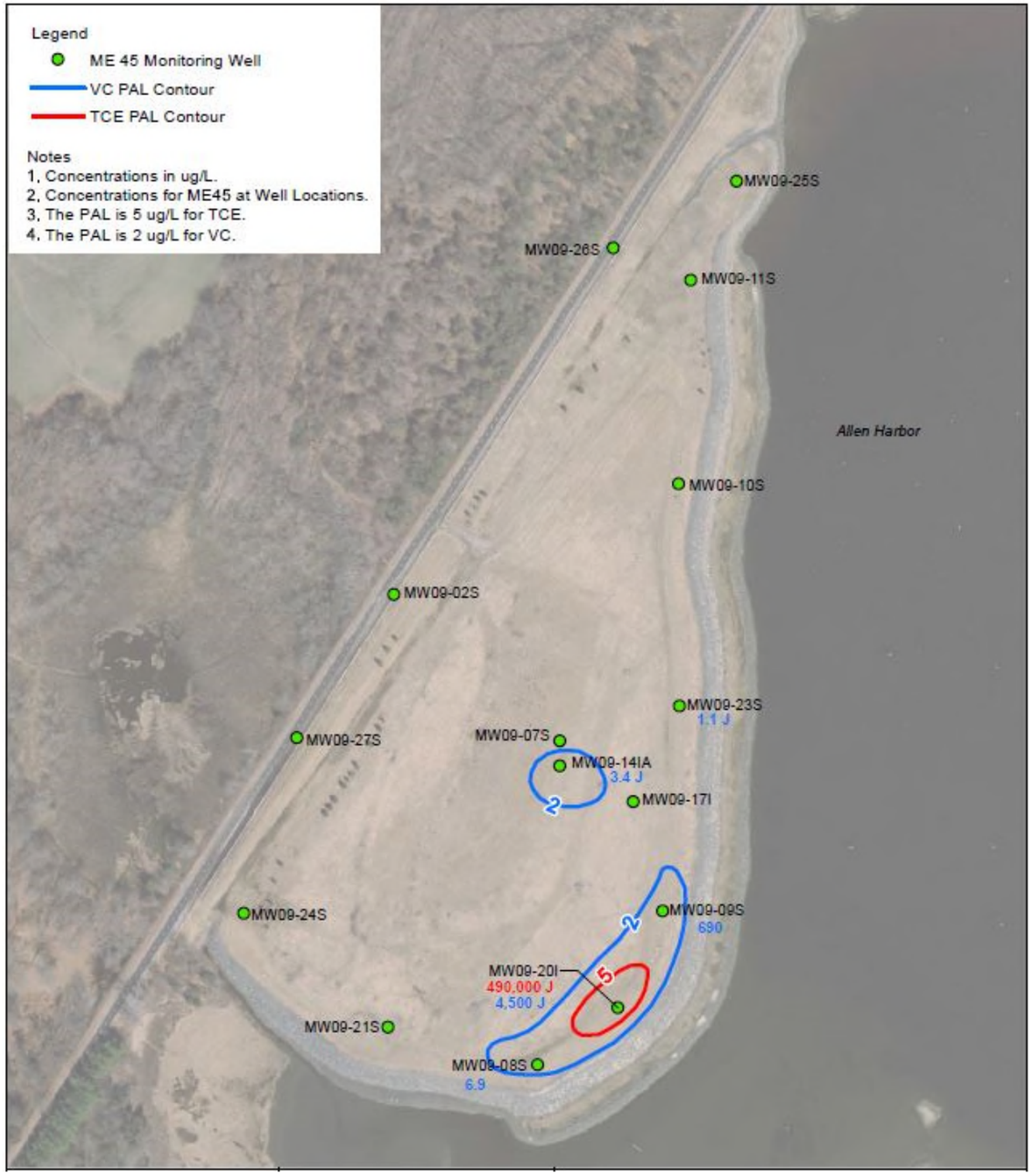
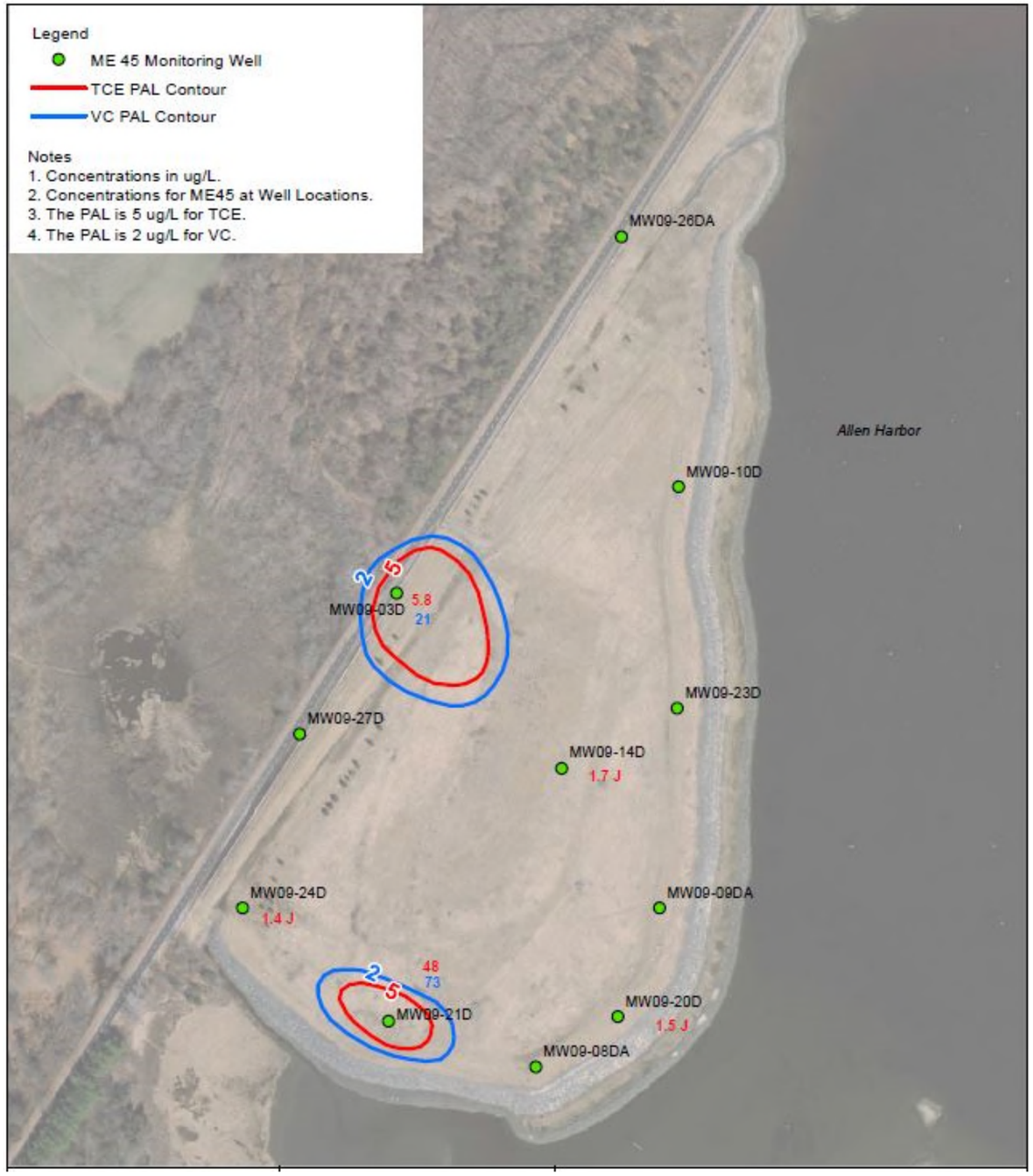


Shallow Groundwater



Deep Groundwater

NOTE

Source of Figure is Figures 57 and 58 of the Draft Final Monitoring Event 45, Fall 2016 Five Year Monitoring Report, Site 09: Allen Harbor Landfill, Draft Final Version 1, Resolution Consultants, October 30, 2017.

Spatial Distribution of TCE and VC – Fall 2016
Fourth Five-Year Review
Former NCBC Davisville
North Kingstown, Rhode Island

PROJECT: CTO ML4376
DATE: February 2018
SCALE: As Shown

Figure 3-4

Shallow Groundwater

Deep Groundwater

NOTE

Source of Figure is Figures 59 and 60 of the Draft Final Monitoring Event 45, Fall 2016 Five Year Monitoring Report, Site 09: Allen Harbor Landfill, Draft Final Version 1, Resolution Consultants, October 30, 2017.

Spatial Distribution of cis- and trans-DCE – Fall 2016
Fourth Five-Year Review
Former NCBC Davisville
North Kingstown, Rhode Island

PROJECT: CTO ML4376
DATE: February 2018
SCALE: As Shown

Figure 3-5

PGH P:\GIS\DAVISVILLE_NCBC\MAPDOCS\MXD\SITE16_SITE_LAYOUT.MXD 02/15/18 JEE

Aerial photograph provided by ESRI's ArcGIS Online World Imagery map service (© 2016 ESRI and its data suppliers).

N

Allen Harbor

SEPTIC TANK REMOVAL AREA

EARTH RAMP STRUCTURE

FORMER LOCATION OF UP-ENDED CREOSOTE DIP TANK

BTEX HOT SPOT AREA

WOODEN BERMED STRUCTURE

NORTH CENTRAL AREA

Davisville Road

Railroad Spur Area

Thompson Road

Building 39

Ash Street

Birch Street

Low Street

Dogwood Street

Fir Street

Elm Street

300 0 300 Feet

Legend

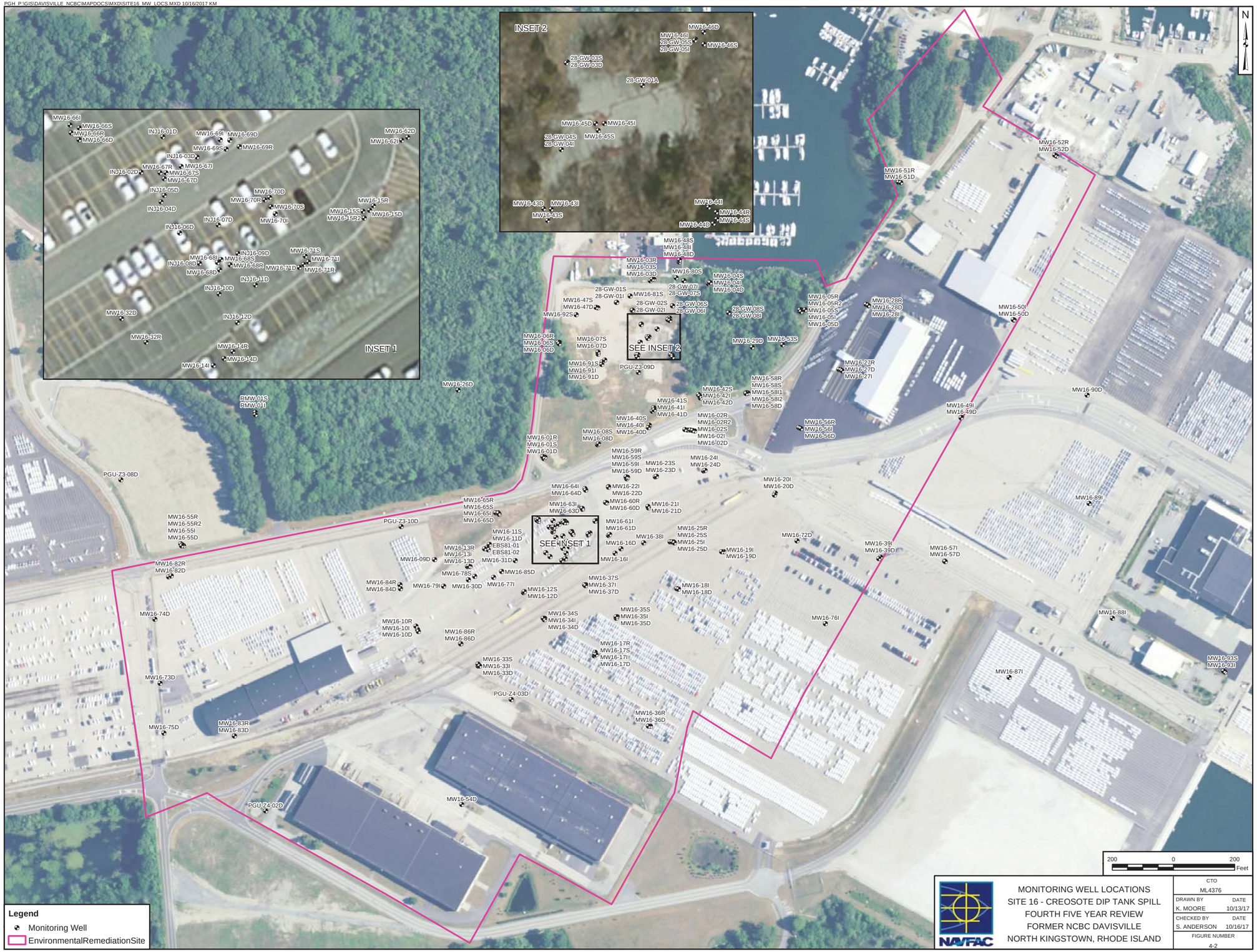
- Fence Line
- Road
- Railroad
- Implemented Groundwater LUC Boundary
- Waste Management Area Boundary
- Environmental Baseline Survey (EBS) Area
- Soil Cover Boundary

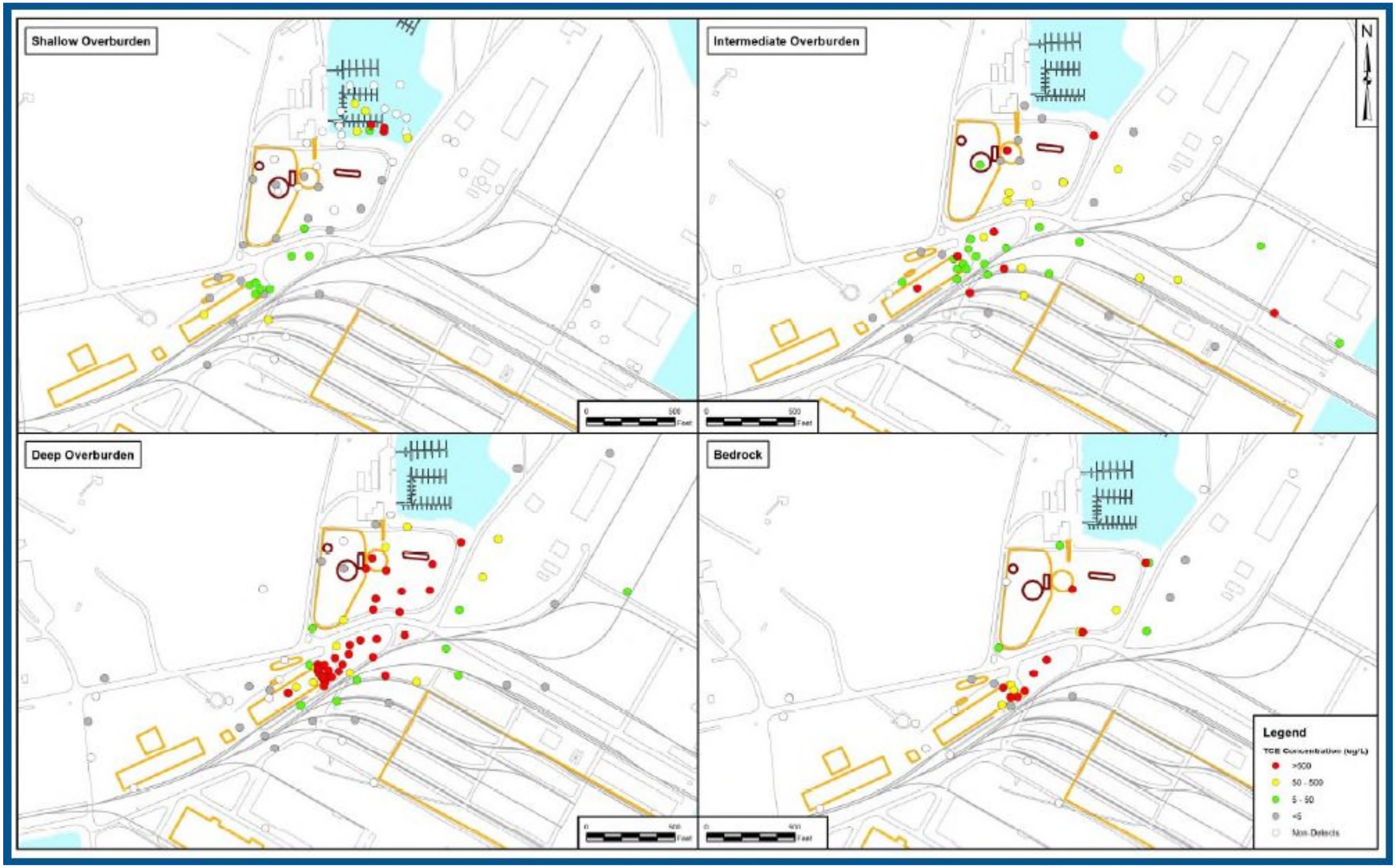
NAVFAC

SITE 16 SITE LAYOUT
FOURTH FIVE YEAR REVIEW
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RI

CTO	
ML4376	
DRAWN BY	DATE
K. MOORE	10/12/17
CHECKED BY	DATE
S. ANDERSON	02/15/18
FIGURE NUMBER	
4-1	

PGH_P:\GIS\DAVISVILLE_NCBC\MAPDOCS\MXD\SITE16_MW_LOCS.MXD 10/16/2017 KM





NOTE

Source of Figure is Figure 2-5 of Record of Decision, Operable Unit 9 (Site 16, Creosote Dip Tank Area, Fire-Fighting Training Area (FFTA), and Former Building 41), Tetra Tech, June 2014.

NAVFAC

TCE Distribution in Site 16 Groundwater
Fourth Five-Year Review
Former NCBC Davisville
North Kingstown, Rhode Island

PROJECT: CTO ML4376
DATE: February 2018
SCALE: As Shown

Figure 4-3

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APPENDIX A
INTERVIEW SUMMARIES

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Typical Interview Questions

1. What is your overall impression of the project?
2. Are you aware of any community concerns regarding either of these sites?
3. Are you aware of any problems, concerns associated with on-going monitoring and maintenance activities?
4. Do you feel that the land-use controls at these sites are adequately communicated to the public?
5. Do you feel well informed about the long-term monitoring activities?
6. Do you have any comments, suggestions, or recommendations regarding the management of the sites?

Fourth Five Year Review Interview

September 20, 2017

Steve King, Quonset Development Corporation, Chief Operating Officer

Answer to Question 1 –

For Sites 07 and 09, projects are going well. The land is being used and serving the intended purposes. For Site 16, the overall impression is that the process is moving too slowly. The main goal of QDC is to develop the properties and put them into productive use for the State. The goal is develop future business. In general, the process to complete the environmental work at Site 16 is going too slow and is impacting future business. However, we are excited about the cleanup at the North Central Area and hope to put the land into development soon for productive use.

Answer to Question 2 –

For Sites 07 and 09, there are no known community concerns. There are no community concerns for Site 16. However, upgradient of Site 16, at the adjacent Nike PR-58 site, there is concern about the newly constructed athletic parks. There are continued questions from the community about whether the fields are safe to use. A town council member refers to the plume that underlies the site as toxic, which raises concerns to the public. People also did not like that trees were cut down around the property (some clearing at Site 16).

Answer to Question 3 –

No concerns were raised for Sites 07 and 09. Two main concerns occur for Site 16 – business interruptions due to groundwater sampling and other activities and maintenance of flush mount wells in asphalt areas and stickups in areas that are cut/maintained. While QDC understands that sampling and maintaining wells need to occur, the hope is that interruptions and maintenance can be minimized.

Answer to Question 4 and 5 –

Yes, communication is good.

Answer to Question 6 –

For all sites, especially Site 16, get in and out quickly to minimize disturbances to the existing businesses and finish other sites quickly so that the land can be developed for commercial use.

Fourth Five Year Review Interview

September 21, 2017

Susan E. Licardi, North Kingstown Director of Water Supply

Answer to Questions 1 to 6 –

In general, the town's impressions of the projects is that all is going well and there are no outstanding problems or concerns. Additionally, communication with town and residents is very good.

On September 22, 2017, Susan spoke with several town leaders to see if they had anything to add as well. There were no concerns or problems identified.

Anderson, Scott

From: Sue Licardi <SLicardi@northkingstown.org>
Sent: Friday, September 22, 2017 10:18 AM
To: Anderson, Scott
Subject: RE: NCBC Davisville 5 Year Review Interview/Questions

Scott:
I have spoken to the Town Planner (Nicole LaFontaine), Public Works Director (Phil Bergeron), Rec. Dept. (Chelsey Dumas) and the Town Manager (Ralph Mollis) and none of them were aware of any problems or concerns regarding maintenance or monitoring associated with NCBC Davisville. The only property that came up was the Quonset site that is being used for soccer fields and questions about the contamination and land use restrictions. Let me know if you have any questions or need additional information.
Susan

Please note new address:
Susan E. Licardi
North Kingstown Director of Water Supply
100 Fairway Drive
North Kingstown, RI 02852
401 268-1520 (phone)

From: Anderson, Scott [mailto:Scott.Anderson@tetratech.com]
Sent: Monday, September 11, 2017 1:14 PM
To: Sue Licardi; 'sking@quonset.com'; Nicole LaFontaine
Cc: TownManager
Subject: NCBC Davisville 5 Year Review Interview/Questions

Hi Susan, Steve, Ms. LaFontaine and Mr. Mollis,

As some of you may know, Tetra Tech has been contracted by the Navy to perform a Five Year Review of NCBC Davisville for Site 9 (Allen Harbor Landfill), Site 7 (Calf Pasture Point) and Site 16 (Former Building 41 and North Central Area). Tetra Tech was the main contractor from about 2007 to 2012, though I had funding which extended my participation through 2015 and early 2016 (though I wasn't involved too much from fall 2015 onward). I received my new funding end of July/early August and I have been setting up the job to get various tasks moving again.

I know/see that Steve King and Susan Licardi are cc'd on various NCBC Davisville documents and I believe that John Reiner is no longer with the town. I've been kept in the loop enough to see that the RAB meetings have decreased in attendance and even frequency, many times only consisting of a single meeting per year with only Steve King and a representative from the town beyond the Navy, EPA and State members.

Since I've been off the job a short while and getting the job re-established, I was wondering if I could call you sometime this week for a brief interview/questionnaire to get your opinions on those sites related to the Five Year Report. I've attached the interview questions.

If it is more convenient for you, you can also just respond to my email. I wasn't sure who to include from the town and don't believe I need all three of you to respond (Susan, Nicole, Ralph). I was trying to limit the interview/questions to

those who are familiar with the site and would have an opinion on how work and interactions between Navy and QDC/Town of North Kingstown has been proceeding.

I am out the rest of today, but in all day tomorrow, Thursday and Friday. I'm in around lunch time on Wednesday and the rest of the day. Feel free to email me a time to talk as I don't want to be an inconvenience to your busy schedules.

Thank you for your time.

Thank you,

Scott R. Anderson, PG | **Senior Hydrogeologist/Project Manager**
Direct: 412.921.8608 | Main: 412.921.7090 | Fax: 412.921.4040 | Personal Cell: 724.513.7059
scott.anderson@tetratech.com

Tetra Tech | Geosciences Department
661 Andersen Drive Foster Plaza Building #7, Fifth Floor | Pittsburgh, PA 15220 | www.tetratech.com

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APPENDIX B
2017 SITE INSPECTION PHOTOGRAPHS

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APPENDIX B-1
SITE 7 CALF PASTURE POINT

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TETRA TECH

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

MW07-35S and MW07-35D

Date:	View:	Photographer:
9/20/2017	West	Scott Anderson (Tetra Tech)

MW07-33S, MW07-33D, MW07-33R

Date:	View:	Photographer:
9/20/2017	Northwest	Scott Anderson (Tetra Tech)

Near P07-14

Date:	View:	Photographer:
9/20/2017	West	Scott Anderson (Tetra Tech)

Near P07-14

TETRA TECH

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/20/2017	**View:** South	**Photographer:** Scott Anderson (Tetra Tech)

Near P07-14

Date: 9/20/2017	**View:** North	**Photographer:** Scott Anderson (Tetra Tech)

Near MW07-37S/MW07-37D

Date: 9/20/2017	**View:** North	**Photographer:** Scott Anderson (Tetra Tech)

Near MW07-37S/MW07-37D

Date: 9/20/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

Near MW07-37S/MW07-37D

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

Near MW07-37S/MW07-37D

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

Near P07-29

Date:	View:	Photographer:
9/20/2017	Southwest	Scott Anderson (Tetra Tech)

Near P07-20

Date:	View:	Photographer:
9/20/2017	West	Scott Anderson (Tetra Tech)

Near P07-20

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

Near P07-20

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

Near P07-21

Date:	View:	Photographer:
9/20/2017	West	Scott Anderson (Tetra Tech)

Near P07-20

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

Near P07-23

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/20/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

Near P07-23

Date: 9/20/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

Near P07-24

Date: 9/20/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

Near P07-10

Date: 9/20/2017	**View:** Southeast	**Photographer:** Scott Anderson (Tetra Tech)

P07-10

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	Down	Scott Anderson (Tetra Tech)

Ribbed mussels near P07-10

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

Near P07-09

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

Near P07-08

Date:	View:	Photographer:
9/20/2017	Southeast	Scott Anderson (Tetra Tech)

Near P07-08

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	West	Scott Anderson (Tetra Tech)

Near P07-04

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

Near P07-04

Date:	View:	Photographer:
9/20/2017	Southeast	Scott Anderson (Tetra Tech)

Near P07-03

Date:	View:	Photographer:
9/20/2017	Down	Scott Anderson (Tetra Tech)

Ribbed mussels near P07-03

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/20/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

Near P07-03

Date: 9/20/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

Near P07-03

Date: 9/20/2017	**View:** Down	**Photographer:** Scott Anderson (Tetra Tech)

Ribbed mussels near P07-03

Date: 9/20/2017	**View:** Down	**Photographer:** Scott Anderson (Tetra Tech)

Ribbed mussels near P07-03

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/20/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

Near P07-02

Date: 9/20/2017	**View:** Southeast	**Photographer:** Scott Anderson (Tetra Tech)

Near P07-02

Date: 9/20/2017	**View:** Down	**Photographer:** Scott Anderson (Tetra Tech)

Near P07-02

Date: 9/20/2017	**View:** North	**Photographer:** Scott Anderson (Tetra Tech)

MW07-24S, MW07-24D and MW07-24DUT

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/20/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

Entrance Channel

Date: 9/20/2017	**View:** Northeast	**Photographer:** Scott Anderson (Tetra Tech)

Narragansett Shoreline

Date: 9/20/2017	**View:** Northwest	**Photographer:** Scott Anderson (Tetra Tech)

MW07-20S and MW07-20D

Date: 9/20/2017	**View:** Northeast	**Photographer:** Scott Anderson (Tetra Tech)

MW07-16D and MW07-16R

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

MW07-21S, MW07-21D and MW-21R

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

Southern Path to MW07-39 Cluster

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

MW07-27D

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

MW07-10S and MW07-10D

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/20/2017	**View:** South	**Photographer:** Scott Anderson (Tetra Tech)

MW07-19S and MW07-19D

Date: 9/20/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

MW07-42I

Date: 9/20/2017	**View:** North	**Photographer:** Scott Anderson (Tetra Tech)

MW07-27S and MW07-27D

Date: 9/20/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

DPT07-39 Cluster

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	Down	Scott Anderson (Tetra Tech)

DPT07-39-03D

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

DPT07-09-27D

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

MW07-45S and MW07-45D

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

Northern Path toward MW07-34D

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	West	Scott Anderson (Tetra Tech)

MW07-34D

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

MW07-44D

Date:	View:	Photographer:
9/20/2017	Northwest	Scott Anderson (Tetra Tech)

MW07-45S and MW07-45D

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

MW07-29D

SITE 7 CALF PASTURE POINT
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	Northwest	Scott Anderson (Tetra Tech)

MW07-05S, MW07-05D, MW07-05R

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

MW07-15D and DPT07-15 Cluster

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

DPT07-15 Cluster, flush mount under trees

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

Northern path to MW07-05 Area

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APPENDIX B-2
SITE 9 ALLEN HARBOR LANDFILL

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TETRA TECH

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	Northwest	Scott Anderson (Tetra Tech)

View of Southern Drainage Ditch.

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

View of Landfill from Southwest Corner.

Date:	View:	Photographer:
9/20/2017	Northeast	Scott Anderson (Tetra Tech)

View of Landfill from Southwest Corner.

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

View of Landfill from Southwest Corner.

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

View of Revetment Wall from Southern portion of Landfill.

Date:	View:	Photographer:
9/20/2017	Southeast	Scott Anderson (Tetra Tech)

View of mudflat south of Landfill.

Date:	View:	Photographer:
9/20/2017	Southeast	Scott Anderson (Tetra Tech)

View of mudflat south of Landfill.

Date:	View:	Photographer:
9/20/2017	West	Scott Anderson (Tetra Tech)

View of mudflat south of Landfill, toward Bike Path Road.

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	Southwest	Scott Anderson (Tetra Tech)

Close-up of mudflat south of Landfill.

Date:	View:	Photographer:
9/20/2017	Southeast	Scott Anderson (Tetra Tech)

Southern most portion of Landfill, edge of Created Wetland.

Date:	View:	Photographer:
9/20/2017	Southeast	Scott Anderson (Tetra Tech)

Southern most portion of Landfill, edge of Created Wetland.

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

No Shellfishing sign in south.

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

Revetment Wall, Created Wetldand toward ET09-12.

Date:	View:	Photographer:
9/20/2017	Northeast	Scott Anderson (Tetra Tech)

Revetment, Created Wetldand toward ET09-12.

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

View of Revetment Wall and Created Wetland from near MW09-20I, MW09-20D

Date:	View:	Photographer:
9/20/2017	Northwest	Scott Anderson (Tetra Tech)

View of Revetment Wall and Created Wetland from near MW09-20I, MW09-20D

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	Southeast	Scott Anderson (Tetra Tech)

Southern portion of Created Wetland, toward ET09-12.

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

Created Wetland and Allen Harbor, from near MW09-09 Cluster.

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

Revetment Wall and Created Wetland from near MW09-09 Cluster.

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

Larger view of Revetment Wall and Created Wetland from near MW09-09 Cluster.

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

Revetment Wall and Created Wetland from near MW09-17I.

Date:	View:	Photographer:
9/20/2017	East	Scott Anderson (Tetra Tech)

Staff Gauge in Allen Harbor.

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

Revetment Wall and Created Wetland from near MW09-23 Cluster.

Date:	View:	Photographer:
9/20/2017	Southeast	Scott Anderson (Tetra Tech)

Revetment Wall and Created Wetland from near MW09-23 Cluster.

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/20/2017	**View:** Southeast	**Photographer:** Scott Anderson (Tetra Tech)

Revetment Wall and Created Wetland from near MW09-10S.

Date: 9/20/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

Revetment Wall and Created Wetland from near MW09-10S.

Date: 9/20/2017	**View:** North	**Photographer:** Scott Anderson (Tetra Tech)

Revetment Wall and Created Wetland from near MW09-10S.

Date: 9/20/2017	**View:** North	**Photographer:** Scott Anderson (Tetra Tech)

Northern most portion of Created Wetland (and Revetment Wall).

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

Northern most portion of Created Wetland (and Revetment Wall).

Date:	View:	Photographer:
9/20/2017	North	Scott Anderson (Tetra Tech)

Revetment Wall north of Created Wetland.

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

Revetment Wall and northern most portion of Created Wetland.

Date:	View:	Photographer:
9/20/2017	Northwest	Scott Anderson (Tetra Tech)

Northern Drainage Ditch.

TETRA TECH

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/20/2017	**View:** Northwest	**Photographer:** Scott Anderson (Tetra Tech)

Northern Drainage Ditch.

Date: 9/20/2017	**View:** North	**Photographer:** Scott Anderson (Tetra Tech)

Shoreline north of northern Drainage Ditch.

Date: 9/20/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

Allen Harbor from northern most portion of site.

Date: 9/20/2017	**View:** South	**Photographer:** Scott Anderson (Tetra Tech)

Allen Harbor and Landfill shoreline from northern most portion of site.

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/20/2017	Southwest	Scott Anderson (Tetra Tech)

Southern most portion of northern Drainage Ditch.

Date:	View:	Photographer:
9/20/2017	South	Scott Anderson (Tetra Tech)

Landfill looking south from northern portion of site.

Date:	View:	Photographer:
9/21/2017	North	Scott Anderson (Tetra Tech)

ET09-11 (upper right in photo).

Date:	View:	Photographer:
9/21/2017	Down	Scott Anderson (Tetra Tech)

Near ET09-11, showing shellfish.

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	North	Scott Anderson (Tetra Tech)

Breakwater Area south of ET09-11.

Date:	View:	Photographer:
9/21/2017	Down	Scott Anderson (Tetra Tech)

Area south of ET09-11, showing Shellfish.

Date:	View:	Photographer:
9/21/2017	Down	Scott Anderson (Tetra Tech)

Area south of ET09-11, showing Shellfish.

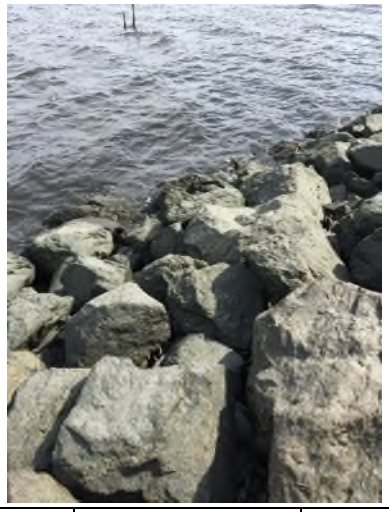
Date:	View:	Photographer:
9/21/2017	South	Scott Anderson (Tetra Tech)

Area south of ET09-11.

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	Southeast	Scott Anderson (Tetra Tech)

Breakwater near ET09-09.



Date:	View:	Photographer:
9/21/2017	East	Scott Anderson (Tetra Tech)

ET09-09.

Date:	View:	Photographer:
9/21/2017	South	Scott Anderson (Tetra Tech)

Breakwater at ET09-09 toward ET09-10, ET09-12

Date:	View:	Photographer:
9/21/2017	Down	Scott Anderson (Tetra Tech)

Breakwater near ET09-10.

SITE 9 ALLEN HARBOR LANDFILL
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/21/2017	**View:** South	**Photographer:** Scott Anderson (Tetra Tech)

Breakwater near ET09-12.

Date: 9/21/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

Red Fox at base of Revetment Wall west of ET09-04.

Date: 9/21/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

Base of Revetment Wall, near ET09-04

Date: 9/21/2017	**View:** Down	**Photographer:** Scott Anderson (Tetra Tech)

ET09-04 with lots of shellfish.

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APPENDIX B-3

SITE 16 CREOSOTE DIP TANK AREA, FIRE-FIGHTING TRAINING AREA AND FORMER BUILDING 41

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TETRA TECH

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	East	Scott Anderson (Tetra Tech)

Intersection of Davisville Road and Thompson Road, NORAD lot north of Building 39.

Date:	View:	Photographer:
9/21/2017	North	Scott Anderson (Tetra Tech)

Intersection of Davisville Road and Thompson Road, NORAD lot north of Davisville Road.

Date:	View:	Photographer:
9/21/2017	South	Scott Anderson (Tetra Tech)

Intersection of Davisville Road and Thompson Road, NORAD lot north of Building 39.

Date:	View:	Photographer:
9/21/2017	Southeast	Scott Anderson (Tetra Tech)

Intersection of Davisville Road and Thompson Road, NORAD lot north of Building 39.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	East	Scott Anderson (Tetra Tech)

Intersection of Davisville Road and Thompson Road, NORAD lot north of Building 39.

Date:	View:	Photographer:
9/21/2017	South	Scott Anderson (Tetra Tech)

Along Thompson Road.

Date:	View:	Photographer:
9/21/2017	Northwest	Scott Anderson (Tetra Tech)

Intersection of Davisville Road and Thompson Road, NORAD lot north of Davisville Road west of Marine Road.

Date:	View:	Photographer:
9/21/2017	West	Scott Anderson (Tetra Tech)

Along Davisville Road, NORAD lot toward Building 39.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	South	Scott Anderson (Tetra Tech)

Along Davisville Road, NORAD lot at Former Building 41.

Date:	View:	Photographer:
9/21/2017	South	Scott Anderson (Tetra Tech)

Along Davisville Road, NORAD lot at Building 39 and Former Building 41.

Date:	View:	Photographer:
9/21/2017	Southeast	Scott Anderson (Tetra Tech)

Along Davisville Road, NORAD lot at Former Building 41.

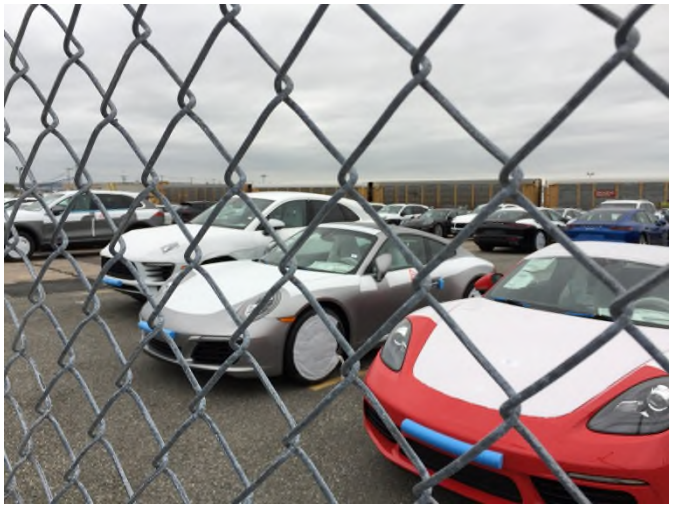
Date:	View:	Photographer:
9/21/2017	South	Scott Anderson (Tetra Tech)

Along Davisville Road, NORAD lot at Former Building 41.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	South	Scott Anderson (Tetra Tech)

Along Davisville Road, NORAD lot at Former Building 41.



Date:	View:	Photographer:
9/21/2017	Southeast	Scott Anderson (Tetra Tech)

Along Davisville Road, NORAD lot at Former Building 41.

Date:	View:	Photographer:
9/21/2017	Northwest	Scott Anderson (Tetra Tech)

Intersection of Wescott and Davisville Roads.

Date:	View:	Photographer:
9/21/2017	Northwest	Scott Anderson (Tetra Tech)

Just east of intersection of Wescott and Davisville Roads.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	Northeast	Scott Anderson (Tetra Tech)

South of Intersection of Wescott and Davisville Roads, toward North Central Area.

Date:	View:	Photographer:
9/21/2017	East	Scott Anderson (Tetra Tech)

South of Intersection of Wescott and Davisville Roads, toward North Central Area.

Date:	View:	Photographer:
9/21/2017	Northeast	Scott Anderson (Tetra Tech)

South of Intersection of Wescott and Davisville Roads, toward North Central Area.

Date:	View:	Photographer:
9/21/2017	North	Scott Anderson (Tetra Tech)

Off Davisville Road, North Central Area.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	North	Scott Anderson (Tetra Tech)

Off Davisville Road, North Central Area.

Date:	View:	Photographer:
9/21/2017	Southeast	Scott Anderson (Tetra Tech)

Along eastern portion of North Central Area, toward Eastern Arm/Sea Freeze Area.

Date:	View:	Photographer:
9/21/2017	East	Scott Anderson (Tetra Tech)

From Davisville Road, toward area north of Eastern Arm/Sea Freeze.

Date:	View:	Photographer:
9/21/2017	Northeast	Scott Anderson (Tetra Tech)

From Davisville Road, toward area north of Eastern Arm/Sea Freeze, near NORAD facility.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	Northeast	Scott Anderson (Tetra Tech)

From Davisville Road, toward area north of Eastern Arm/Sea Freeze, near NORAD facility.

Date:	View:	Photographer:
9/21/2017	East	Scott Anderson (Tetra Tech)

From Davisville Road, toward area north of Eastern Arm/Sea Freeze, near NORAD facility.

Date:	View:	Photographer:
9/21/2017	East	Scott Anderson (Tetra Tech)

From Davisville Road, toward area north of Eastern Arm/Sea Freeze, near NORAD facility.

Date:	View:	Photographer:
9/21/2017	Southeast	Scott Anderson (Tetra Tech)

From Davisville Road, toward area north of Eastern Arm/Sea Freeze, near NORAD facility.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/21/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

From Davisville Road, southern portion of Allen Harbor at Marina.

Date: 9/21/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

From Davisville Road, central portion of Allen Harbor at Marina.

Date: 9/21/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

From Davisville Road, northern portion of Allen Harbor at Marina.

Date: 9/21/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

From Davisville Road, southern portion of Allen Harbor (Closeup).

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/21/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

From Davisville Road, central portion of Allen Harbor at Marina (Closeup).

Date: 9/21/2017	**View:** Northwest	**Photographer:** Scott Anderson (Tetra Tech)

From Davisville Road, northern portion of Allen Harbor (Closeup).

Date: 9/21/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

From Davisville Road, northern portion of NORAD facility.

Date: 9/21/2017	**View:** Northeast	**Photographer:** Scott Anderson (Tetra Tech)

View of North Central Area from southwest corner.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	East	Scott Anderson (Tetra Tech)

View of North Central Area from northwest corner.

Date:	View:	Photographer:
9/21/2017	South	Scott Anderson (Tetra Tech)

View of North Central Area from northwest corner.

Date:	View:	Photographer:
9/21/2017	Southeast	Scott Anderson (Tetra Tech)

View of North Central Area from northwestern area.

Date:	View:	Photographer:
9/21/2017	Southeast	Scott Anderson (Tetra Tech)

View of North Central Area from northwestern area (trees in distant is eastern portion of North Central Area).

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/21/2017	**View:** South	**Photographer:** Scott Anderson (Tetra Tech)

View of FFTA of North Central Area.

Date: 9/21/2017	**View:** Southeast	**Photographer:** Scott Anderson (Tetra Tech)

View of North Central Area from northwestern area (trees in distant is eastern portion of North Central Area).

Date: 9/21/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

Southern storage area of Building E-107.

Date: 9/21/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

View of North Central Area from south of Building E-107.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	Southwest	Scott Anderson (Tetra Tech)

View of North Central Area from south of Building E-107.

Date:	View:	Photographer:
9/21/2017	Northwest	Scott Anderson (Tetra Tech)

Southern storage area of Building E-107.

Date:	View:	Photographer:
9/21/2017	North	Scott Anderson (Tetra Tech)

Area south and east of Building E-107.

Date:	View:	Photographer:
9/21/2017	Northeast	Scott Anderson (Tetra Tech)

Area south and east of Building E-107.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/21/2017	**View:** Northeast	**Photographer:** Scott Anderson (Tetra Tech)

Area south and east of Building E-107.

Date: 9/21/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

Area south and east of Building E-107 and northern portion of North Central Area.

Date: 9/21/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

Southern storage area of Building E-107.

Date: 9/21/2017	**View:** Northwest	**Photographer:** Scott Anderson (Tetra Tech)

Area east of Building E-107.

Date:	View:	Photographer:
9/21/2017	North	Scott Anderson (Tetra Tech)

Area east of Building E-107.

Date:	View:	Photographer:
9/21/2017	East	Scott Anderson (Tetra Tech)

Southern portion of Allen Harbor showing shoreline with North Central Area.

Date:	View:	Photographer:
9/21/2017	North	Scott Anderson (Tetra Tech)

MW16-04 Cluster.

Date:	View:	Photographer:
9/21/2017	West	Scott Anderson (Tetra Tech)

Paved portion along northern extent of North Central Area, looking from the northeast corner.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	West	Scott Anderson (Tetra Tech)

Below paved portion along northern extent of North Central Area, looking from the northeast corner.

Date:	View:	Photographer:
9/21/2017	Northeast	Scott Anderson (Tetra Tech)

Northeast corner of North Central Area.

Date:	View:	Photographer:
9/21/2017	East	Scott Anderson (Tetra Tech)

MW16-05 Cluster.

Date:	View:	Photographer:
9/21/2017	West	Scott Anderson (Tetra Tech)

MW16-53S.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/21/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

MW16-58 Cluster.

Date: 9/21/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

MW16-42 Cluster.

Date: 9/21/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

View of southern portion of North Central Area from southeast corner.

Date: 9/21/2017	**View:** West	**Photographer:** Scott Anderson (Tetra Tech)

View of central portion of North Central Area from southeast corner.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date:	View:	Photographer:
9/21/2017	Northwest	Scott Anderson (Tetra Tech)

View of central portion of North Central Area from southeast corner.

Date:	View:	Photographer:
9/21/2017	North	Scott Anderson (Tetra Tech)

View of central portion of North Central Area from southeast corner.

Date:	View:	Photographer:
9/21/2017	West	Scott Anderson (Tetra Tech)

MW16-44 Cluster.

Date:	View:	Photographer:
9/21/2017	Southwest	Scott Anderson (Tetra Tech)

MW16-91 Cluster.

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41
SEPTEMBER 2017 SITE WALK
PHOTOGRAPHIC LOG

Date: 9/21/2017	**View:** South	**Photographer:** Scott Anderson (Tetra Tech)

MW16-07 Cluster.

Date: 9/21/2017	**View:** East	**Photographer:** Scott Anderson (Tetra Tech)

MW16-06 Cluster.

APPENDIX C
RISK ASSESSMENT SUPPORT DOCUMENTATION

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APPENDIX C-1
SITE 7 CALF PASTURE POINT ECOLOGICAL RISK UPDATES

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TABLE C-a
SELECTION OF PIEZOMETER COPCS
SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Frequency of Detection	Mininum Detected Concentration	Maximum Detected Concentration	Location of Maximum Detection	Mean of All	Mean of Detected Concentrations	Screening Value		Hazard Quotient	Hazard Quotient Accounting for Dilution (10x)	Selected as COPC?
							Value	Source			
VOCs											
1,1,2,2-TETRACHLOROETHANE	26/54	0.55 J	180	P07-09-101613	18.0	37.2	90.2	Region 3	2	0.2	No
1,1,2-TRICHLOROETHANE	20/54	0.4 J-	49	P07-09-101613	3.91	9.92	550	Region 3	0.09	0.009	No
1,1-DICHLOROETHENE	10/53	0.53 J	6.7	P07-09-101613	0.725	2.27	2240	Region 3	0.003	0.0003	No
1,2-DICHLOROETHANE	9/53	0.6 J-	2.5 J-	P07-16-ME20-1	0.543	1.63	1130	Region 3	0.002	0.0002	No
BENZENE	3/53	0.45 J	1.6 J-	P07-20-ME20-1	0.308	0.923	110	Region 3	0.01	0.001	No
CHLOROFORM	1/53	0.66 J	0.66 J	P07-09-101613	0.333	0.660	815	Region 3	0.0008	0.00008	No
CIS-1,2-DICHLOROETHENE	39/54	0.5 J-	1700	P07-09-101613	130	180	680	Region 3	3	0.3	No
TETRACHLOROETHENE	1/53	0.43 J	0.43 J	P07-09-101613	0.497	0.430	45	Region 3	0.01	0.001	No
TRANS-1,2-DICHLOROETHENE	32/54	0.4 J-	160	P07-09-101613	12.6	20.9	680	Region 3	0.2	0.02	No
TRICHLOROETHENE	36/54	0.5 J-	1200	P07-09-101613	79.8	119	1940	Region 3	0.6	0.06	No
VINYL CHLORIDE	22/53	0.7 J-	49.7	P07-05-ME20-1	6.92	16.1	930	Region 3 FW	0.05	0.005	No

Only detected chemicals are presented. All concentrations reported in micrograms per liter (µg/L).
COPC - Chemical of Potential Concern
HQ - Hazard Quotient (maximum detected concentration/screening value)
J - Estimated concentration
J- - Estimated concentration, biased low

Screening Level Sources:
Region 3 - USEPA Region 3 marine screening benchmarks (USEPA, 2006c).
Region 3 FW - USEPA Region 3 freshwater screening benchmarks (USEPA, 2006d).

Associated Samples

P07-02-ME20-1	P07-07-101613	P07-10-ME20-1	P07-22-100314-1
P07-03-100714-1	P07-07-100614-1	P07-14-ME20-1	P07-22-ME20-1
P07-03-ME20-1	P07-07-091015-1	P07-15-101713	P07-23-101813
P07-04-100614-1	P07-07-ME20-1	P07-15_100714-1	P07-23-100614-1
P07-04-100614 (avg)	P07-08-101613	P07-15-100714-1	P07-23-091015-1
P07-04-100614-2	P07-08-100614-1	P07-15-091015-1	P07-23-ME20-1
P07-04-ME20-1	P07-08-091015-1	P07-15-ME20-1	P07-24-101713
P07-05-101613	P07-08-ME20-1	P07-16-ME20-1	P07-24-100314-1
P07-05-100814-1	P07-09-101613	P07-17-ME20-1	P07-24-100314 (avg)
P07-05-091015-1	P07-09-100614-1	P07-20-100314-1	P07-24-100314-2
P07-05-ME20-1	P07-09-091015-1	P07-20-ME20-1	P07-24-091015-1
P07-06-101613	P07-09-ME20-1	P07-21-101713	P07-24-ME20-1
P07-06-100614-1	P07-10-101613	P07-21-100314-1	P07-28-ME20-1
P07-06-091015-1	P07-10-100314-1	P07-21-091015-1	P07-29-ME20-1
P07-06-ME20-1	P07-10-091015-1	P07-21-ME20-1	

TABLE C-b
SELECTION OF SURFACE WATER COPCS
SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Frequency of Detection	Mininum Detected Concentration	Maximum Detected Concentration	Location of Maximum Detection	Mean of All	Mean of Detected Concentrations	Screening Value		Hazard Quotient	Selected as COPC?
							Value	Source		
VOCs										
1,2-DICHLOROETHANE	1/30	1 J	1 J	SW07-24-MID01-ME20-1	0.517	1.00	1130	Region 3	0.0009	No
CIS-1,2-DICHLOROETHENE	2/30	1.5 J	6.4	SW07-24-FLOOR01-ME20-1	0.730	3.95	680	Region 3	0.009	No
TRICHLOROETHENE	1/30	5.9	5.9	SW07-24-FLOOR01-ME20-1	0.680	5.90	1940	Region 3	0.003	No
VINYL CHLORIDE	1/30	3.7 J	3.7 J	SW07-24-FLOOR01-ME20-1	0.607	3.70	930	Region 3 FW	0.004	No

Only detected chemicals are presented. All concentrations reported in micrograms per liter (μg/L).
COPC - Chemical of Potential Concern
HQ - Hazard Quotient (maximum detected concentration/screening value)
J - Estimated concentration

Screening Level Sources:
Region 3 - USEPA Region 3 Biological Technical Assistance Group (BTAG) marine or freshwater screening benchmarks (USEPA, 2006)
Freshwater (FW) values were only selected if marine values were not available.

Associated Samples

SW07-02-FLOOR01-ME20-1	SW07-08-FLOOR02-ME20-1
SW07-02-FLOOR01-ME20 (avg)	SW07-09-FLOOR01-ME20-1
SW07-02-FLOOR01-ME20-2	SW07-09-FLOOR02-ME20-1
SW07-02-FLOOR02-ME20-1	SW07-09-MID01-ME20-1
SW07-02-MID01-ME20-1	SW07-10-FLOOR01-ME20-1
SW07-04-FLOOR01-ME20-1	SW07-10-FLOOR02-ME20-1
SW07-04-MID01-ME20-1	SW07-10-MID01-ME20-1
SW07-04-FLOOR02-ME20-1	SW07-20-FLOOR01-ME20-1
SW07-04-FLOOR02-ME20 (avg)	SW07-20-FLOOR02-ME20-1
SW07-04-FLOOR02-ME20-2	SW07-20-FLOOR02-ME20 (avg)
SW07-06-FLOOR01-ME20-1	SW07-20-FLOOR02-ME20-2
SW07-06-FLOOR02-ME20-1	SW07-20-MID01-ME20-1
SW07-06-MID01-ME20-1	SW07-24-FLOOR01-ME20-1
SW07-07-FLOOR01-ME20-1	SW07-24-FLOOR02-ME20-1
SW07-07-FLOOR02-ME20-1	SW07-24-MID01-ME20-1
SW07-07-MID01-ME20-1	SW07-43S/D-FLOOR01-ME20-1
SW07-08-FLOOR01-ME20-1	SW07-43S/D-FLOOR02-ME20-1
SW07-08-MID01-ME20-1	SW07-43S/D-MID01-ME20-1

TABLE C-c
SELECTION OF SHALLOW SEDIMENT COPCS
SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Frequency of Detection	Mininum Detected Concentration	Maximum Detected Concentration	Location of Maximum Detection	Mean of All	Mean of Detected Concentrations	Screening Value		Hazard Quotient	Selected as COPC?
							Value	Source		
VOCs										
TETRACHLOROETHENE	2/6	0.012 J+	0.012 J+	SED07-05, SED07-10	0.004	0.009	0.19	Region 3	0.06	No

Only detected chemicals are presented. All concentrations reported in milligrams per kilogram (mg/kg).
COPC - Chemical of Potential Concern
HQ - Hazard Quotient (maximum detected concentration/screening value)
J+ - Estimated concentration, biased high

Screening Level Source:
Region 3 - USEPA Region 3 Biological Technical Assistance Group (BTAG) marine sediment screening benchmarks (USEPA, 2006)

Associated Samples
SED07-05-ME20-1
SED07-06-ME20-1
SED07-07-ME20-1
SED07-08-ME20-1
SED07-09-ME20-1
SED07-10-ME20-1
SED07-10-ME20 (avg)
SED07-10-ME20-2

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APPENDIX C-2

SITE 16 CREOSOTE DIP TANK AREA, FFTA AND FORMER BUILDING 41 HUMAN HEALTH RISK UPDATES

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TABLE C-1

COMPARISON OF NON-CANCER TOXICITY DATA -- ORAL/DERMAL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD			Oral Absorption Efficiency for Dermal[1]	Absorbed RfD for Dermal[2]			Primary Target Organ(s)		Combined Uncertainty/Modifying Factors		RfD:Target Organ(s)			
		Value		Units		Value		Units					2009 HHRA		Current	
		2009 HHRA	Current			2009 HHRA	Current		2009 HHRA	Current	2009 HHRA	Current	Source(s)	Date(s) (MM/DD/YYYY)	Source(s)	Date(s) (MM/DD/YYYY)
Volatile Organic Compounds																
1,1,2-Trichloroethane	Chronic	4.0E-03	4.0E-03	mg/kg/day	1	4.0E-03	4.0E-03	mg/kg/day	Hematologic	Hematologic, Immune	1000	1000	H	9/12/2008	IRIS	8/1/2017
1,1-Dichloroethene	Chronic	5.0E-02	5.0E-02	mg/kg/day	1	5.0E-02	5.0E-02	mg/kg/day	Hepatic	Hepatic	100	100	IRIS	9/12/2008	IRIS	8/1/2017
1,1-Dichloroethane	Chronic	2.0E-01	2.0E-01	mg/kg/day	1	2.0E-01	2.0E-01	mg/kg/day	Urinary	Urinary	3000	3000	PPRTV	9/27/2006	PPRTV	9/27/2006
1,4-Dichlorobenzene	Chronic	NA	7.0E-02	NA	1	NA	7.0E-02	mg/kg/day	NA	Hepatic	100	100	NA	NA	ATSDR	8/2006
1,2,4-Trichlorobenzene	Chronic	1.0E-02	1.0E-02	mg/kg/day	1	1.0E-02	1.0E-02	mg/kg/day	Adrenals	Endocrine	1000	1000	IRIS	9/12/2008	IRIS	8/1/2017
1,2-Dibromoethane	Chronic	9.0E-03	9.0E-03	mg/kg/day	1	9.0E-03	9.0E-03	mg/kg/day	Hepatic, Urinary	Endocrine, Reproductive, Hepatic	3000	3000	IRIS	9/12/2008	IRIS	8/1/2017
1,2-Dichloroethane	Chronic	NA	6.0E-03	NA	1	NA	6.0E-03	mg/kg/day	NA	Urinary	10000	10000	NA	NA	PPRTVX	10/1/2010
2-Butanone	Chronic	6.0E-01	6.0E-01	mg/kg/day	1	6.0E-01	6.0E-01	mg/kg/day	Body Weight	Developmental	1000	1000	IRIS	9/12/2008	IRIS	8/1/2017
Acetone	Chronic	9.0E-01	9.0E-01	mg/kg/day	1	9.0E-01	9.0E-01	mg/kg/day	Hepatic, Urinary, Nervous	Urinary	1000	1000	IRIS	9/12/2008	IRIS	8/1/2017
Benzene	Chronic	4.0E-03	4.0E-03	mg/kg/day	1	4.0E-03	4.0E-03	mg/kg/day	Hematologic	Immune	300	300	IRIS	9/12/2008	IRIS	8/1/2017
Bromodichloromethane	Chronic	2.0E-02	2.0E-02	mg/kg/day	1	2.0E-02	2.0E-02	mg/kg/day	Urinary	Urinary	1000	1000	IRIS	9/12/2008	IRIS	8/1/2017
Chlorodibromomethane	Chronic	2.0E-02	2.0E-02	mg/kg/day	1	2.0E-02	2.0E-02	mg/kg/day	Hepatic	Hepatic	1000	1000	IRIS	9/12/2008	IRIS	8/1/2017
Chloroform	Chronic	1.0E-02	1.0E-02	mg/kg/day	1	1.0E-02	1.0E-02	mg/kg/day	Hepatic	Hepatic	100	100	IRIS	9/12/2008	IRIS	8/1/2017
cis-1,2-Dichloroethene	Chronic	1.0E-02	2.0E-03	mg/kg/day	1	1.0E-02	2.0E-03	mg/kg/day	Hematologic	Urinary	3000	3000	PPRTV	5/20/2008	IRIS	8/1/2017
Ethylbenzene	Chronic	1.0E-01	1.0E-01	mg/kg/day	1	1.0E-01	1.0E-01	mg/kg/day	Hepatic, Urinary	Hepatic, Urinary	1000	1000	IRIS	9/12/2008	IRIS	8/1/2017
Methylene Chloride	Chronic	6.0E-02	6.0E-03	mg/kg/day	1	6.0E-02	6.0E-03	mg/kg/day	Hepatic	Hepatic	100	30	IRIS	9/12/2008	IRIS	8/1/2017
Tetrachloroethene	Chronic	1.0E-02	6.0E-03	mg/kg/day	1	1.0E-02	6.0E-03	mg/kg/day	Hepatic	Nervous, Ocular	1000	1000	IRIS	9/12/2008	IRIS	8/1/2017
trans-1,2-Dichloroethene	Chronic	2.0E-02	2.0E-02	mg/kg/day	1	2.0E-02	2.0E-02	mg/kg/day	Hematologic	Immune	1000	3000	IRIS	9/12/2008	IRIS	8/1/2017
Trichloroethene	Chronic	NA	5.0E-04	NA	1	NA	5.0E-04	mg/kg/day	NA	Cardiovascular, Developmental, Immune	NA	10-1000	NA	NA	IRIS	8/1/2017
Vinyl Chloride	Chronic	3.0E-03	3.0E-03	mg/kg/day	1	3.0E-03	3.0E-03	mg/kg/day	Hepatic	Hepatic	30	30	IRIS	9/12/2008	IRIS	8/1/2017
Semivolatile Organic Compounds																
2,6-Dinitrotoluene	Chronic	1.0E-03	3.0E-04	mg/kg/day	1	1.0E-03	3.0E-04	mg/kg/day	Hematologic, Urinary, Nervous	Hematologic	3000	10000	PPRTV	12/13/2004	PPRTVX	4/10/2013
2-Methylnaphthalene	Chronic	4.0E-03	4.0E-03	mg/kg/day	1	4.0E-03	4.0E-03	mg/kg/day	Respiratory	Respiratory	1000	1000	IRIS	9/12/2008	IRIS	8/1/2017
Acenaphthene	Chronic	6.0E-02	6.0E-02	mg/kg/day	1	6.0E-02	6.0E-02	mg/kg/day	Hematologic	Hepatic	3000	3000	IRIS	9/12/2008	IRIS	8/1/2017
Anthracene	Chronic	3.0E-01	3.0E-01	mg/kg/day	1	3.0E-01	3.0E-01	mg/kg/day	None Specified	None Specified	3000	3000	IRIS	9/12/2008	IRIS	8/1/2017
Benzo(a)pyrene	Chronic	NA	3.0E-04	mg/kg/day	1	NA	3.0E-04	mg/kg/day	NA	Developmental	NA	300	NA	NA	IRIS	8/1/2017
Benzo(g,h,i)perylene[3]	Chronic	3.0E-02	3.0E-02	mg/kg/day	1	3.0E-02	3.0E-02	mg/kg/day	Urinary	Urinary	3000	3000	IRIS	9/12/2008	IRIS	8/1/2017
Bis(2-ethylhexyl)phthalate	Chronic	2.0E-02	2.0E-02	mg/kg/day	1	2.0E-02	2.0E-02	mg/kg/day	Hepatic	Hepatic	1000	1000	IRIS	9/12/2008	IRIS	8/1/2017
Carbazole	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	Chronic	NA	1.0E-03	mg/kg/day	1	NA	1.0E-03	mg/kg/day	NA	Developmental	NA	10000	NA	NA	PPRTVX	6/11/2007
Fluoranthene	Chronic	4.0E-02	4.0E-02	mg/kg/day	1	4.0E-02	4.0E-02	mg/kg/day	Hepatic	Hepatic, Urinary	3000	3000	IRIS	9/12/2008	IRIS	8/1/2017
Fluorene	Chronic	4.0E-02	4.0E-02	mg/kg/day	1	4.0E-02	4.0E-02	mg/kg/day	Hematologic	Hematologic	3000	3000	IRIS	9/12/2008	IRIS	8/1/2017
Hexachlorobenzene	Chronic	8.0E-04	8.0E-04	mg/kg/day	1	8.0E-04	8.0E-04	mg/kg/day	Hepatic	Hepatic	100	100	IRIS	9/12/2008	IRIS	8/1/2017
Naphthalene	Chronic	2.0E-02	2.0E-02	mg/kg/day	1	2.0E-02	2.0E-02	mg/kg/day	Body Weight	Body Weight	3000	3000	IRIS	9/12/2008	IRIS	8/1/2017
Phenanthrene[3]	Chronic	3.0E-02	3.0E-02	mg/kg/day	1	3.0E-02	3.0E-02	mg/kg/day	Urinary	Urinary	3000	3000	IRIS	9/12/2008	IRIS	8/1/2017
Pyrene	Chronic	3.0E-02	3.0E-02	mg/kg/day	1	3.0E-02	3.0E-02	mg/kg/day	Urinary	Urinary	3000	3000	IRIS	9/12/2008	IRIS	8/1/2017
Dioxin/Furans																
2,3,7,8-TCDD	Chronic	1.0E-09	7.0E-10	mg/kg/day	1	1.0E-09	7.0E-10	mg/kg/day	NA	Reproductive	NA	30	RSL	7/7/2008	IRIS	8/1/2017
Pesticides/PCBs																
alpha-BHC	Chronic	NA	8.0E-03	mg/kg/day	1	NA	8.0E-03	NA	NA	Hepatic	NA	100	NA	NA	ATSDR	8/2005
Aroclor-1254	Chronic	2.0E-05	2.0E-05	mg/kg/day	1	2.0E-05	2.0E-05	mg/kg/day	Immune	Immune, Dermal, Ocular	300	300	IRIS	9/12/2008	IRIS	8/1/2017
Dieldrin	Chronic	5.0E-05	5.0E-05	mg/kg/day	1	5.0E-05	5.0E-05	mg/kg/day	Hepatic	Hepatic	100	100	IRIS	9/12/2008	IRIS	8/1/2017
Heptachlor Epoxide	Chronic	1.3E-05	1.3E-05	mg/kg/day	1	1.3E-05	1.3E-05	mg/kg/day	Hepatic	Hepatic	1000	1000	IRIS	9/12/2008	IRIS	8/1/2017
Inorganics																
Aluminum	Chronic	1.0E+00	1.0E+00	mg/kg/day	1	1.0E+00	1.0E+00	mg/kg/day	Nervous	Nervous	100	100	PPRTV	10/23/2006	PPRTV	10/23/2006
Antimony	Chronic	4.0E-04	4.0E-04	mg/kg/day	0.15	6.0E-05	6.0E-05	mg/kg/day	Hematologic	Hematologic	1000	1000	IRIS	9/12/2008	IRIS	8/1/2017
Arsenic	Chronic	3.0E-04	3.0E-04	mg/kg/day	1	3.0E-04	3.0E-04	mg/kg/day	Cardiovascular, Dermal	Cardiovascular, Dermal	3	3	IRIS	9/12/2008	IRIS	8/1/2017
Barium	Chronic	2.0E-01	2.0E-01	mg/kg/day	0.07	1.4E-02	1.4E-02	mg/kg/day	Urinary	Urinary	300	300	IRIS	9/12/2008	IRIS	8/1/2017
Beryllium	Chronic	2.0E-03	2.0E-03	mg/kg/day	0.007	1.4E-05	1.4E-05	mg/kg/day	Gastrointestinal	Gastrointestinal	300	300	IRIS	9/12/2008	IRIS	8/1/2017
Cadmium[4]	Chronic	5.0E-04	5.0E-04	mg/kg/day	0.05	2.5E-05	2.5E-05	mg/kg/day	Urinary	Urinary	10	10	IRIS	9/12/2008	IRIS	8/1/2017
Chromium[5]	Chronic	3.0E-03	3.0E-03	mg/kg/day	0.025	7.5E-05	7.5E-05	mg/kg/day	Fetotoxicity, Gastrointestinal, Bone	None Reported	100	100	IRIS	9/12/2008	IRIS	8/1/2017
Cobalt	Chronic	3.0E-04	3.0E-04	mg/kg/day	1	3.0E-04	3.0E-04	mg/kg/day	Hematologic	Thyroid	NA	3000	RSL	9/12/2008	PPRTV	8/25/2008
Copper	Chronic	4.0E-02	4.0E-02	mg/kg/day	1	4.0E-02	4.0E-02	mg/kg/day	Gastrointestinal	Gastrointestinal	NA	NA	HEAST	7/1997	HEAST	8/1/2017
Iron	Chronic	7.0E-01	7.0E-01	mg/kg/day	1	7.0E-01	7.0E-01	mg/kg/day	Gastrointestinal	Gastrointestinal	1.5	1.5	PPRTV	9/11/2006	PPRTV	9/11/2006
Lead	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (soil)[6]	Chronic	7.0E-02	2.4E-02	mg/kg/day	0.04	2.8E-03	9.6E-04	mg/kg/day	Nervous	Nervous	1/1	1/3	IRIS	9/12/2008	IRIS	8/1/2017
Manganese (water)[6]	Chronic	2.4E-02	2.4E-02	mg/kg/day	0.04	9.6E-04	9.6E-04	mg/kg/day	Nervous	Nervous	1/3	1/3	IRIS	9/12/2008	IRIS	8/1/2017
Nickel	Chronic	2.0E-02	2.0E-02	mg/kg/day	0.04	8.0E-04	8.0E-04	mg/kg/day	Body Weight	Body Weight	300	300	IRIS	9/12/2008	IRIS	8/1/2017
Selenium	Chronic	5.0E-03	5.0E-03	mg/kg/day	1	5.0E-03	5.0E-03	mg/kg/day	Hair Loss, Nervous, Skin	Nervous, Hematologic, Dermal	3	3	IRIS	9/12/2008	IRIS	8/1/2017
Silver	Chronic	5.0E-03	5.0E-03	mg/kg/day	0.04	2.0E-04	2.0E-04	mg/kg/day	Dermal	Dermal	3	3	IRIS	9/12/2008	IRIS	8/1/2017
Thallium	Chronic	8.0E-05	1.0E-05	mg/kg/day	1	8.0E-05	1.0E-05	mg/kg/day	Hepatic	Dermal	3000	3000	IRIS	9/12/2008	PPRTVX	9/17/2012
Vanadium	Chronic	5.0E-03	5.0E-03	mg/kg/day	0.026	1.3E-04	1.3E-04	mg/kg/day	Urinary	Dermal	300	100	RSL	7/7/2008	IRIS	8/1/2017
Zinc	Chronic	3.0E-01	3.0E-01	mg/kg/day	1	3.0E-01	3.0E-01	mg/kg/day	Hematologic	Immune, Hematologic	3	3	IRIS	9/12/2008	IRIS	8/1/2017
Miscellaneous Parameters																
Nitrate	Chronic	1.6E+00	1.6E+00	mg/kg/day	1	1.6E+00	1.6E+00	mg/kg/day	Hematologic	Hematologic	1	1	IRIS	9/12/2008	IRIS	8/1/2017
Nitrite	Chronic	1.0E-01	1.0E-01	mg/kg/day	1	1.0E-01	1.0E-01	mg/kg/day	Hematologic	Hematologic	0.1	0.1	IRIS	9/12/2008	IRIS	8/1/2017

Notes:
1 - U.S. EPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted dermal RfD = Oral RfD x Oral Absorption Efficiency for Dermal.
3 - Values are for pyrene.
4 - Values are for cadmium - water.
5 - Values are for hexavalent chromium.
6 - Values used in the 2009 risk assessment were IRIS values adjusted following USEPA Region I Risk Update Number 4, November 1996 which specified different adjustments for soil and water.

Indicates current toxicity criteria is less toxic than previous value.
Indicates current toxicity value is more toxic than previous value.
Indicates target organs have changed.

Acronyms:
ATSDR = Agency for Toxic Substances and Disease Registry
HEAST = Health Effects Assessment Summary Tables
IRIS = Integrated Risk Information System
NA = Not Available.
PPRTV = Provisional Peer Reviewed Toxicity Values
PPRTVX = Provisional Peer Reviewed Toxicity Values Appendix
RSL = Regional Screening Levels for Chemical Contaminants at Superfund Sites, July 7, 2008.

TABLE C-2

COMPARISON ON NON-CANCER TOXICITY DATA -- INHALATION
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfC			Primary Target Organ(s)		Combined Uncertainty/Modifying Factors		RfC : Target Organ(s)			
		Value		Units					Source(s)	Date(s) (MM/DD/YYYY)	Source(s)	Date(s) (MM/DD/YYYY)
		2009 HHRA	Current		2009 HHRA	Current	2009 HHRA	Current				
Volatile Organic Compounds												
1,1,2-Trichloroethane	Chronic	NA	2.0E-04	NA	NA	Respiratory	NA	3000	NA	NA	PPRTVX	4/1/2011
1,1-Dichloroethene	Chronic	2.0E-01	2.0E-01	mg/m^3	Hepatic	Hepatic	30	30	IRIS	9/12/2008	IRIS	8/1/2017
1,1-Dichloroethane	Chronic	5.0E-01	NA	mg/m^3	None Reported	NA	1000	NA	HEAST	7/1997	NA	NA
1,4-Dichlorobenzene	Chronic	8.0E-01	8.0E-01	mg/m^3	Hepatic	Hepatic	100	100	IRIS	9/12/2008	IRIS	8/1/2017
1,2,4-Trichlorobenzene	Chronic	NA	2.0E-03	mg/m^3	NA	Hepatic, Urinary	NA	100	NA	NA	PPRTV	6/16/2009
1,2-Dibromoethane	Chronic	9.0E-03	9.0E-03	mg/m^3	Respiratory	Respiratory	300	300	IRIS	9/12/2008	IRIS	8/1/2017
1,2-Dichloroethane	Chronic	2.4E+00	7.0E-03	mg/m^3	NA	Nervous	NA	3000	RSL	7/7/2008	PPRTV	10/1/2010
2-Butanone	Chronic	5.0E+00	5.0E+00	mg/m^3	Developmental	Developmental, Musculoskeletal	300	300	IRIS	9/12/2008	IRIS	8/1/2017
Acetone	Chronic	3.1E+01	3.1E+01	mg/m^3	NA	Nervous	NA	100	RSL	7/7/2008	ATSDR	5/1994
Benzene	Chronic	3.0E-02	3.0E-02	mg/m^3	Hematologic	Immune	300	300	IRIS	9/12/2008	IRIS	8/1/2017
Bromodichloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorodibromomethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	Chronic	9.8E-02	9.8E-02	mg/m^3	Hepatic	Hepatic	NA	100	RSL	7/7/2008	ATSDR	9/1997
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	Chronic	1.0E+00	1.0E+00	mg/m^3	Developmental	Developmental	300	300	IRIS	9/12/2008	IRIS	8/1/2017
Methylene Chloride	Chronic	1.1E+00	6.0E-01	mg/m^3	Hepatic	Hepatic	NA	30	RSL	7/7/2008	IRIS	8/1/2017
Tetrachloroethene	Chronic	2.7E-01	4.0E-02	mg/m^3	Hepatic	Nervous, Ocular	NA	1000	RSL	7/7/2008	IRIS	8/1/2017
trans-1,2-Dichloroethene	Chronic	6.0E-02	NA	mg/m^3	Fetotoxicity	NA	3000	NA	PPRTV	3/1/2006	NA	NA
Trichloroethene	Chronic	1.0E-02	2.0E-03	mg/m^3	Nervous	Developmental, Cardiovascular, Immune	NA	10-100	NYSDOH	10/2006	IRIS	8/1/2017
Vinyl Chloride	Chronic	1.0E-01	1.0E-01	mg/m^3	Hepatic	Hepatic	30	30	IRIS	9/12/2008	IRIS	8/1/2017
Semivolatile Organic Compounds												
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	Chronic	NA	2.0E-06	mg/m^3	NA	Developmental	NA	3000	NA	NA	IRIS	8/1/2017
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	Chronic	3.0E-03	3.0E-03	mg/m^3	Respiratory	Respiratory	3000	3000	IRIS	9/12/2008	IRIS	8/1/2017
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dioxin/Furans												
2,3,7,8-TCDD	Chronic	NA	4.0E-08	mg/m^3	NA	Hepatic, Reproductive, Developmental, Endocrine, Respiratory, Hematologic	NA	NA	NA	NA	Cal EPA[1]	12/2008
Pesticides/PCBs												
alpha-BHC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dieldrin	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics												
Aluminum	Chronic	5.0E-03	5.0E-03	mg/m^3	Nervous	Nervous	300	300	PPRTV	10/23/2006	PPRTV	10/23/2006
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	Chronic	3.0E-05	1.5E-05	mg/m^3	NA	Reproductive, Cardiovascular, Nervous	NA	NA	RSL	7/7/2008	Cal EPA[2]	12/2008
Barium	Chronic	5.0E-04	5.0E-04	mg/m^3	Fetotoxicity	Fetotoxicity	1000	1000	HEAST	9/97	HEAST	8/1/2017
Beryllium	Chronic	2.0E-05	2.0E-05	mg/m^3	Respiratory	Immune, Respiratory	10	10	IRIS	9/12/2008	IRIS	8/1/2017
Cadmium	Chronic	NA	1.0E-05	mg/m^3	NA	Urinary	NA	9	NA	NA	ATSDR	9/2012
Chromium	Chronic	1.0E-04	1.0E-04	mg/m^3	Respiratory	Respiratory	300	300	IRIS	7/20/2007	IRIS	8/1/2017
Cobalt	Chronic	6.0E-06	6.0E-06	mg/m^3	Respiratory	Thyroid	NA	300	RSL	9/12/2008	PPRTV	8/25/2008
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C-2

COMPARISON ON NON-CANCER TOXICITY DATA -- INHALATION
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
PAGE 2 OF 2

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfC			Primary Target Organ(s)		Combined Uncertainty/Modifying Factors		RfC : Target Organ(s)			
		Value		Units					Source(s)	Date(s) (MM/DD/YYYY)	Source(s)	Date(s) (MM/DD/YYYY)
		2009 HHRA	Current		2009 HHRA	Current	2009 HHRA	Current				
Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	Chronic	5.0E-05	5.0E-05	mg/m^3	Nervous	Nervous	1000	1000	IRIS	7/20/2007	IRIS	8/1/2017
Nickel	Chronic	NA	9.0E-05	mg/m^3	NA	Respiratory	NA	30	NA	NA	ATSDR	8/2005
Selenium	Chronic	NA	2.0E-02	mg/m^3	NA	Hepatic, Cardiovascular, Nervous	NA	NA	NA	NA	Cal EPA[1]	12/2008
Silver	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	Chronic	NA	1.0E-04	mg/m^3	NA	Respiratory	NA	30	NA	NA	ATSDR	9/2012
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Miscellaneous Parameters												
Nitrate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

1 - Technical Support Document for Noncancer RELs, Appendix D3.

2 - Technical Support Document for Noncancer RELs, Appendix D1.

Indicates current toxicity criteria is less toxic than previous value.

Indicates current toxicity value is more toxic than previous value.

Indicates target organs have changed.

Acronyms:

ATSDR = Agency for Toxic Substances and Disease Registry

Cal EPA = California Environmental Protection Agency

HEAST= Health Effects Assessment Summary Tables

IRIS = Integrated Risk Information System

NA = Not Applicable

NYSDOH = Final Report Trichloroethene Air Criteria Document, New York State Department of Health, October 2006.

PPRTV = Provisional Peer Reviewed Toxicity Values

PPRTVX = Provisional Peer Reviewed Toxicity Values Appendix

RSL = Regional Screening Levels for Chemical Contaminants at Superfund Sites, July 7, 2008.

TABLE C-3

CANCER TOXICITY DATA -- ORAL/DERMAL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Chemical of Potential Concern	Oral Cancer Slope Factor			Oral Absorption Efficiency for Dermal[1]	Absorbed Cancer Slope Factor for Dermal[2]			Weight of Evidence/ Cancer Guideline Description	Oral CSF			
	Value		Units		Value		Units		2009 HHRA		Current	
	2009 HHRA	Current			2009 HHRA	Current			Source(s)	Date(s) (MM/DD/YYYY)	Source(s)	Date(s) (MM/DD/YYYY)
Volatile Organic Compounds												
1,1,2-Trichloroethane	5.7E-02	5.7E-02	(mg/kg/day)$^{-1}$	1	5.7E-02	5.7E-02	(mg/kg/day)$^{-1}$	C / Possible Human Carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	Data are inadequate for an assessment of human carcinogenic potential	IRIS	9/12/2008	IRIS	8/1/2017
1,1-Dichloroethane	5.7E-03	5.7E-03	(mg/kg/day)$^{-1}$	1	5.7E-03	5.7E-03	(mg/kg/day)$^{-1}$	C / Possible Human Carcinogen	RSL	7/7/2008	Cal EPA[4]	6/1/2009
1,4-Dichlorobenzene	5.4E-03	5.4E-03	(mg/kg/day)$^{-1}$	1	5.4E-03	5.4E-03	(mg/kg/day)$^{-1}$	NA	RSL	7/7/2008	Cal EPA[4]	6/1/2009
1,2,4-Trichlorobenzene	3.6E-03	2.9E-02	(mg/kg/day)$^{-1}$	1	3.6E-03	2.9E-02	(mg/kg/day)$^{-1}$	D / Not classifiable as to human carcinogenicity	RSL	7/7/2008	PPRTV	6/16/2009
1,2-Dibromoethane	2.0E+00	2.0E+00	(mg/kg/day)$^{-1}$	1	2.0E+00	2.0E+00	(mg/kg/day)$^{-1}$	Likely to be carcinogenic to humans	IRIS	9/12/2008	IRIS	8/1/2017
1,2-Dichloroethane	9.1E-02	9.1E-02	(mg/kg/day)$^{-1}$	1	9.1E-02	9.1E-02	(mg/kg/day)$^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
2-Butanone	NA	NA	NA	NA	NA	NA	NA	Data are inadequate for an assessment of human carcinogenic potential	IRIS	9/12/2008	IRIS	8/1/2017
Acetone	NA	NA	NA	NA	NA	NA	NA	Data are inadequate for an assessment of human carcinogenic potential	IRIS	9/12/2008	IRIS	8/1/2017
Benzene	5.5E-02	5.5E-02	(mg/kg/day)$^{-1}$	1	5.5E-02	5.5E-02	(mg/kg/day)$^{-1}$	Known/likely human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Bromodichloromethane	6.2E-02	6.2E-02	(mg/kg/day)$^{-1}$	1	6.2E-02	6.2E-02	(mg/kg/day)$^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Chlorodibromomethane	8.4E-02	8.4E-02	(mg/kg/day)$^{-1}$	1	8.4E-02	8.4E-02	(mg/kg/day)$^{-1}$	C / Possible Human Carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Chloroform	3.1E-02	3.1E-02	(mg/kg/day)$^{-1}$	1	3.1E-02	3.1E-02	(mg/kg/day)$^{-1}$	Likely to be carcinogenic to humans	RSL	7/7/2008	Cal EPA[4]	6/1/2009
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	Inadequate information to assess carcinogenic potential	IRIS	9/12/2008	IRIS	8/1/2017
Ethylbenzene	1.1E-02	1.1E-02	(mg/kg/day)$^{-1}$	1	1.1E-02	1.1E-02	(mg/kg/day)$^{-1}$	D / Not classifiable as to human carcinogenicity	RSL	7/7/2008	Cal EPA[4]	6/1/2009
Methylene Chloride	7.5E-03	2.0E-03	(mg/kg/day)$^{-1}$	1	7.5E-03	2.0E-03	(mg/kg/day)$^{-1}$	Likely to be carcinogenic to humans	IRIS	9/12/2008	IRIS	8/1/2017
Tetrachloroethene	5.4E-01	2.1E-03	(mg/kg/day)$^{-1}$	1	5.4E-01	2.1E-03	(mg/kg/day)$^{-1}$	Likely to be carcinogenic to humans	USEPA[6]	6/12/2003	IRIS	8/1/2017
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	Inadequate information to assess carcinogenic potential	NA	NA	IRIS	8/1/2017
Trichloroethene[3]	1.3E-02	4.6E-02	(mg/kg/day)-1	1	1.3E-02	4.6E-02	(mg/kg/day)-1	Carcinogenic to humans	Cal EPA	12/2002	IRIS	8/1/2017
Vinyl Chloride	7.2E-01	7.2E-01	(mg/kg/day)$^{-1}$	1	7.2E-01	7.2E-01	(mg/kg/day)$^{-1}$	Known/likely human carcinogen	IRIS	NA	IRIS	8/1/2017
Semivolatile Organic Compounds												
2,6-Dinitrotoluene	NA	1.5E+00	(mg/kg/day)$^{-1}$	1	NA	1.5E+00	(mg/kg/day)$^{-1}$	NA	NA	NA	PPRTV	4/10/2013
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	Data are inadequate for an assessment of human carcinogenic potential	IRIS	9/12/2008	IRIS	8/1/2017
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	NA	NA	IRIS	8/1/2017
Benzo(a)pyrene[3]	7.3E+00	1.0E+00	(mg/kg/day)$^{-1}$	1	7.3E+00	1.0E+00	(mg/kg/day)$^{-1}$	Carcinogenic to humans	IRIS	9/12/2008	IRIS	8/1/2017
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Bis(2-ethylhexyl)phthalate	1.4E-02	1.4E-02	(mg/kg/day)$^{-1}$	1	1.4E-02	1.4E-02	(mg/kg/day)$^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Carbazole	2.0E-02	NA	(mg/kg/day)$^{-1}$	1	2.0E-02	NA	(mg/kg/day)$^{-1}$	NA	HEAST	7/1997	NA	NA
Dibenzofuran	NA	NA	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Fluorene	NA	NA	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Hexachlorobenzene	1.6E+00	1.6E+00	(mg/kg/day)$^{-1}$	1	1.6E+00	1.6E+00	(mg/kg/day)$^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Naphthalene	NA	NA	NA	NA	NA	NA	NA	Carcinogenic potential cannot be determined	IRIS	9/12/2008	IRIS	8/1/2017
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Pyrene	NA	NA	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Dioxin/Furans												
2,3,7,8-TCDD	1.3E+05	1.3E+05	(mg/kg/day)$^{-1}$	1	1.3E+05	1.3E+05	(mg/kg/day)$^{-1}$	NA	RSL	7/7/2008	Cal EPA[4]	6/1/2009
Pesticides/PCBs												
alpha-BHC	6.3E+00	6.3E+00	(mg/kg/day)$^{-1}$	1	6.3E+00	6.3E+00	(mg/kg/day)$^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Aroclor-1254	2.0E+00	2.0E+00	(mg/kg/day)$^{-1}$	1	2.0E+00	2.0E+00	(mg/kg/day)$^{-1}$	B2 / Probable human carcinogen	USEPA[7]	9/1996	USEPA[7]	9/1996
Dieldrin	1.6E+01	1.6E+01	(mg/kg/day)$^{-1}$	1	1.6E+01	1.6E+01	(mg/kg/day)$^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Heptachlor Epoxide	9.1E+00	9.1E+00	(mg/kg/day)$^{-1}$	1	9.1E+00	9.1E+00	(mg/kg/day)$^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Inorganics												
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	1.5E+00	1.5E+00	(mg/kg/day)$^{-1}$	1	1.5E+00	1.5E+00	(mg/kg/day)$^{-1}$	A (Human carcinogen)	IRIS	9/12/2008	IRIS	8/1/2017
Barium	NA	NA	NA	NA	NA	NA	NA	Not likely to be carcinogenic to humans	IRIS	9/12/2008	IRIS	8/1/2017
Beryllium	NA	NA	NA	NA	NA	NA	NA	Carcinogenic potential cannot be determined	IRIS	9/12/2008	IRIS	8/1/2017
Cadmium	NA	NA	NA	NA	NA	NA	NA	B1 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Chromium[3,8]	NA	5.0E-01	(mg/kg/day)$^{-1}$	0.025	NA	2.0E+01	(mg/kg/day)$^{-1}$	Carcinogenic potential cannot be determined	IRIS	9/12/2008	Cal EPA[5]	7/29/2011
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C-3

CANCER TOXICITY DATA -- ORAL/DERMAL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
PAGE 2 OF 2

Chemical of Potential Concern	Oral Cancer Slope Factor			Oral Absorption Efficiency for Dermal[1]	Absorbed Cancer Slope Factor for Dermal[2]			Weight of Evidence/ Cancer Guideline Description	Oral CSF			
	Value		Units		Value		Units		2009 HHRA		Current	
	2009 HHRA	Current			2009 HHRA	Current			Source(s)	Date(s) (MM/DD/YYYY)	Source(s)	Date(s) (MM/DD/YYYY)
Copper	NA	NA	NA	NA	NA	NA	NA	D (Not classifiable as to human carcinogenicity)	IRIS	9/12/2008	IRIS	8/1/2017
Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA
Lead	NA	NA	NA	NA	NA	NA	NA	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Manganese	NA	NA	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA
Selenium	NA	NA	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Silver	NA	NA	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Thallium	NA	NA	NA	NA	NA	NA	NA	Inadequate information to assess carcinogenic potential	NA	NA	IRIS	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		NA
Zinc	NA	NA	NA	NA	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Miscellaneous Parameters												
Nitrate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:
1 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted cancer slope factor for dermal = Oral cancer slope factor / Oral Absorption Efficiency for Dermal.
3 - Trichloroethene, carcinogenic PAHs, and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
4 - Air Toxics Hot Spots Program Technical Support Document for Cancer Potencies. Appendix B.
5 - Public Health Goals for Chemicals in Drinking Water; Hexavalent Chromium (Cr VI).
6 - OSWER Directive No.9285.7-75.
7 - USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.
8 - Values are for hexavalent chromium.
Indicates current toxicity criteria is less toxic than previous value.
Indicates current toxicity value is more toxic than previous value.

Acronyms:
Cal EPA = California Environmental Protection Agency
HEAST = Health Effects Assessment Summary Tables
IRIS = Integrated Risk Information System.
NA = Not Available.
PPRTV = Provisional Peer Reviewed Toxicity Values
RSL = Regional Screening Levels for Chemical Contaminants at Superfund Sites, July 7, 2008.

TABLE C-4

CANCER TOXICITY DATA -- INHALATION
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
PAGE 1 OF 3

Chemical of Potential Concern	Unit Risk			Weight of Evidence/ Cancer Guideline Description	Unit Risk : Inhalation CSF			
					2009 HHRA		Current	
	Value		Units		Source(s)	Date(s) (MM/DD/YYYY)	Source(s)	Date(s) (MM/DD/YYYY)
	2009 HHRA	Current						
Volatile Organic Compounds								
1,1,2-Trichloroethane	1.6E-05	1.6E-05	$(ug/m^3)^{-1}$	C / Possible Human Carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
1,1-Dichloroethene	NA	NA	NA	Suggestive evidence of carcinogenicity, but not sufficient to assess human carcinogenic potential	IRIS	9/12/2008	IRIS	8/1/2017
1,1-Dichloroethane	1.6E-06	1.6E-06	$(ug/m^3)^{-1}$	C / Possible Human Carcinogen	RSL	7/7/2008	Cal EPA(1)	6/1/2009
1,4-Dichlorobenzene	1.1E-05	1.5E-05	$(ug/m^3)^{-1}$	NA	RSL	7/7/2008	Cal EPA(1)	6/1/2009
1,2,4-Trichlorobenzene	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
1,2-Dibromoethane	6.0E-04	6.0E-04	$(ug/m^3)^{-1}$	Likely to be carcinogenic to humans	IRIS	9/12/2008	IRIS	8/1/2017
1,2-Dichloroethane	2.6E-05	2.6E-05	$(ug/m^3)^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
2-Butanone	NA	NA	NA	Data are inadequate for an assessment of human carcinogenic potential	IRIS	9/12/2008	IRIS	8/1/2017
Acetone	NA	NA	NA	Data are inadequate for an assessment of human carcinogenic potential	IRIS	9/12/2008	IRIS	8/1/2017
Benzene	7.8E-06	7.8E-06	$(ug/m^3)^{-1}$	Known/likely human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Bromodichloromethane	NA	3.7E-05	$(ug/m^3)^{-1}$	B2 / Probable human carcinogen	NA	NA	Cal EPA(1)	6/1/2009
Chlorodibromomethane	NA	NA	NA	C / Possible Human Carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Chloroform	2.3E-05	2.3E-05	$(ug/m^3)^{-1}$	Likely to be carcinogenic to humans	IRIS	9/12/2008	IRIS	8/1/2017
cis-1,2-Dichloroethene	NA	NA	NA	Inadequate information to assess carcinogenic potential	IRIS	9/12/2008	IRIS	8/1/2017
Ethylbenzene	2.5E-06	2.5E-06	NA	D / Not classifiable as to human carcinogenicity	RSL	7/7/2008	Cal EPA(1)	6/1/2009
Methylene Chloride	4.7E-07	1.0E-08	$(ug/m^3)^{-1}$	Likely to be carcinogenic to humans	IRIS	9/12/2008	IRIS	8/1/2017
Tetrachloroethene	5.9E-06	2.6E-07	$(ug/m^3)^{-1}$	Likely to be carcinogenic to humans	USEPA(2)	6/12/2003	IRIS	8/1/2017
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene(3)	2.0E-06	4.1E-06	$(ug/m^3)^{-1}$	Carcinogenic to humans	Cal EPA	12/2002	IRIS	8/1/2017
Vinyl Chloride	4.4E-06	4.4E-06	$(ug/m^3)^{-1}$	Known/likely human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Semivolatile Organic Compounds								
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	Data are inadequate for an assessment of human carcinogenic potential	IRIS	9/12/2008	IRIS	8/1/2017
Acenaphthene	NA	NA	NA	NA	NA	NA		8/1/2017
Anthracene	NA	NA	NA	D / Not classifiable as to human carcinogenicity	NA	NA	IRIS	8/1/2017
Benzo(a)pyrene(3)	1.1E-03	6.0E-04	$(ug/m^3)^{-1}$	Carcinogenic to humans	RSL	7/7/2008	IRIS	8/1/2017
Benzo(g,h,i)perylene	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Bis(2-ethylhexyl)phthalate	NA	2.4E-06	$(ug/m^3)^{-1}$	NA	NA	NA	Cal EPA(1)	6/1/2009
Carbazole	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Fluoranthene	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Fluorene	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017

TABLE C-4

CANCER TOXICITY DATA -- INHALATION
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
PAGE 2 OF 3

Chemical of Potential Concern	Unit Risk			Weight of Evidence/ Cancer Guideline Description	Unit Risk : Inhalation CSF			
					2009 HHRA		Current	
	Value		Units		Source(s)	Date(s) (MM/DD/YYYY)	Source(s)	Date(s) (MM/DD/YYYY)
	2009 HHRA	Current						
Hexachlorobenzene	4.6E-04	4.6E-04	$(ug/m3)^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Naphthalene	3.4E-05	3.4E-05	$(ug/m3)^{-1}$	Carcinogenic potential cannot be determined	RSL	7/7/2008	Cal EPA[1]	6/1/2009
Phenanthrene	NA	NA	NA	D / Not classifiable as to human carcinogenicity	NA	9/12/2008	IRIS	8/1/2017
Pyrene	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Dioxin/Furans								
2,3,7,8-TCDD	3.8E+01	3.8E+01	$(ug/m3)^{-1}$	B2 / Probable human carcinogen	RSL	7/7/2008	Cal EPA[1]	6/1/2009
Pesticides/PCBs								
alpha-BHC	1.8E-03	1.8E-03	$(ug/m^3)^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Aroclor-1254	5.7E-04	5.7E-04	$(ug/m^3)^{-1}$	B2 / Probable human carcinogen	USEPA[4]	9/1996	USEPA[4]	9/1996
Dieldrin	4.6E-03	4.6E-03	$(ug/m^3)^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Heptachlor Epoxide	2.6E-03	2.6E-03	$(ug/m^3)^{-1}$	B2 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Inorganics								
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	4.3E-03	4.3E-03	$(ug/m^3)^{-1}$	A / Known human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Barium	NA	NA	NA	Carcinogenic potential cannot be determined	IRIS	9/12/2008	IRIS	8/1/2017
Beryllium	2.4E-03	2.4E-03	$(ug/m^3)^{-1}$	Known/likely human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Cadmium	1.8E-03	1.8E-03	$(ug/m^3)^{-1}$	B1 / Probable human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Chromium[3,5,6]	1.2E-02	8.4E-02	$(ug/m^3)^{-1}$	Known/likely human carcinogen	IRIS	9/12/2008	IRIS	8/1/2017
Cobalt	9.0E-03	9.0E-03	$(ug/m^3)^{-1}$	NA	RSL	9/12/2008	PPRTV	8/25/2008
Copper	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Iron	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	NA	B2 / Probable human carcinogen	IRIS	9/12/2008	NA	NA
Manganese	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	NA	NA
Nickel	NA	2.6E-04	$(ug/m^3)^{-1}$	NA	NA	NA	Cal EPA[1]	6/1/2009
Selenium	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Silver	NA	NA	NA	D / Not classifiable as to human carcinogenicity	IRIS	9/12/2008	IRIS	8/1/2017
Thallium	NA	NA	NA	Inadequate information to assess carcinogenic potential	NA	NA	IRIS	8/1/2017
Vanadium	NA	NA	NA	NA	NA	NA		8/1/2017
Zinc	NA	NA	NA	Inadequate information to assess carcinogenic potential	IRIS	9/12/2008	IRIS	8/1/2017
Miscellaneous Parameters								
Nitrate	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C-4

CANCER TOXICITY DATA -- INHALATION
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
PAGE 3 OF 3

Chemical of Potential Concern	Unit Risk			Weight of Evidence/ Cancer Guideline Description	Unit Risk : Inhalation CSF			
					2009 HHRA		Current	
	Value		Units		Source(s)	Date(s) (MM/DD/YYYY)	Source(s)	Date(s) (MM/DD/YYYY)
	2009 HHRA	Current						

Notes:

1 - Air Toxics Hot Spots Program Technical Support Document for Cancer Potencies. Appendix B.

2 - OSWER Directive No.9285.7-75.

3 - Trichloroethene, carcinogenic PAHs, and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

4 - USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.

5 - Values are for hexavalent chromium.

6 - IRIS presents a value of 1.2E-02 $(ug/m^3)^{-1}$ for hexavalent chromium and assumes a trivalent chromium to hexavalent chromium ration of 6:1. The IRIS value is multiplied by 7 as recommended in the RSL user guide.

Indicates current toxicity criteria is less toxic than previous value.

Indicates current toxicity value is more toxic than previous value.

Acronyms:

Cal EPA = California Environmental Protection Agency

IRIS = Integrated Risk Information System.

NA = Not Available.

RSL = Regional Screening Levels for Chemical Contaminants at Superfund Sites, July 7, 2008.

TABLE C-5
COMPARISON OF SCREENING CRITERIA FOR DIRECT CONTACT WITH SOIL/SEDIMENT
FORMER NCBC DAVISVILLE,NORTH KINGSTOWN, RHODE ISLAND

CAS No.	Parameter	USEPA Regional Screening Levels for Residential Exposures[1]		RIDEM Residential Direct Contact Criteria[2]	
		2009 HHRA	Current/June 2017	2009 HHRA	Current/2011
Dioxins/Furans (ng/kg)					
3268-87-9	1,2,3,4,6,7,8,9-OCDD	13,000 C	16,000 C[3]	NA	NA
39001-02-0	1,2,3,4,6,7,8,9-OCDF	11,000 C	16,000 C[3]	NA	NA
35822-46-9	1,2,3,4,6,7,8-HPCDD	390 C	480 C[3]	NA	NA
67562-39-4	1,2,3,4,6,7,8-HPCDF	320 C	480 C[3]	NA	NA
55673-89-7	1,2,3,4,7,8,9-HPCDF	320 C	480 C[3]	NA	NA
39227-28-6	1,2,3,4,7,8-HXCDD	39 C	48 C[3]	NA	NA
70648-26-9	1,2,3,4,7,8-HXCDF	32 C	48 C[3]	NA	NA
57653-85-7	1,2,3,6,7,8-HXCDD	32 C	48 C[3]	NA	NA
57117-44-9	1,2,3,6,7,8-HXCDF	32 C	48 C[3]	NA	NA
19408-74-3	1,2,3,7,8,9-HXCDD	32 C	48 C[3]	NA	NA
72918-21-9	1,2,3,7,8,9-HXCDF	32 C	48 C[3]	NA	NA
40321-76-4	1,2,3,7,8-PECDD	3.9 C	4.8 C[3]	NA	NA
57117-41-6	1,2,3,7,8-PECDF	110 C	160 C[3]	NA	NA
60851-34-5	2,3,4,6,7,8-HXCDF	32 C	48 C[3]	NA	NA
57117-31-4	2,3,4,7,8-PECDF	11 C	16 C[3]	NA	NA
1746-01-6	2,3,7,8-TCDD	4.5 C	4.8 C	NA	NA
51207-31-9	2,3,7,8-TCDF	32 C	48 C[3]	NA	NA
-	2,3,7,8-TCDD Equivalents	4.5 C	4.8 C	NA	NA
Volatile Organic Compounds (ug/kg)					
79-00-5	1,1,2-Trichloroethane	1,100 C	150 N	3,600	3,600
120-82-1	1,2,4-Trichlorobenzene	7,800 N	5,800 N	96,000	96,000
75-34-3	1,1-Dichloroethane	3,400 C	3,600 C	920,000	920,000
75-35-4	1,1-Dichloroethene	25,000 N	23,000 N	200	200
107-06-2	1,2-Dichloroethane	450 C	460 C	900	900
106-46-7	1,4-Dichlorobenzene	2,600 C	2,600 C	27,000	27,000
78-93-3	2-Butanone	2,800,000 N	2,700,000 N	10,000,000	10,000,000
591-78-6	2-Hexanone	NA	20,000 N	NA	NA
108-10-1	4-Methyl-2-Pentanone	530,000 N	3,300,000 N	1,200,000	1,200,000
67-64-1	Acetone	6,100,000 N	6,100,000 N	7,800,000	7,800,000
71-43-2	Benzene	1,100 C	1,200 C	2,500	2,500
75-27-4	Bromodichloromethane	10,000 C	290 C	10,000	10,000
75-15-0	Carbon Disulfide	67,000 N	77,000 N	NA	NA
108-90-7	Chlorobenzene	31,000 N	28,000 N	210,000	210,000
124-48-1	Chlorodibromomethane	5,800 C	8,300 C	7,600	7,600
75-00-3	Chloroethane	1,500,000 N	1,400,000 N	NA	NA
67-66-3	Chloroform	300 C	320 C	1,200	1,200
74-87-3	Chloromethane	1,700 C	11,000 N	NA	NA
156-59-2	cis-1,2-Dichloroethene	78,000 N	16,000 N	630,000	630,000
110-82-7	Cyclohexane	720,000 N	650,000 N	NA	NA
74-84-0	Ethane	NA	NA	NA	NA
74-85-1	Ethene	NA	NA	NA	NA
100-41-4	Ethylbenzene	5,700 C	5,800 C	71,000	71,000
98-82-8	Isopropylbenzene	220,000 N	190,000 N	NA	NA
-	m+p-Xylenes	45,000 N[4]	55,000 N[4]	NA	NA
74-82-8	Methane	NA	NA	NA	NA
79-20-9	Methyl Acetate	7,800,000 N	7,800,000 N	NA	NA
108-87-2	Methyl Cyclohexane	340,000 N	NA	NA	NA
1634-04-4	Methyl tert-Butyl Ether	39,000 C	47,000 C	390,000	390,000
75-09-2	Methylene Chloride	11,000 C	35,000 N	45,000	45,000
95-47-6	o-Xylene	53,000 N	65,000 N	NA	NA
100-42-5	Styrene	650,000 N	600,000 N	13,000	13,000
127-18-4	Tetrachloroethene	570 C	8,100 N	12,000	12,000
108-88-3	Toluene	500,000 N	490,000 N	190,000	190,000
540-59-0	Total 1,2-Dichloroethene	70,000 N	NA	630,000 [5]	630,000 [5]
1330-20-7	Total Xylenes	60,000 N	58,000 N	110,000	110,000
156-60-5	trans-1,2-Dichloroethene	11,000 N	160,000 N	1,100,000	1,100,000
79-01-6	Trichloroethene	2,800 C	410 N	13,000	13,000
75-01-4	Vinyl Chloride	60 C	59 C	20	20

TABLE C-5
COMPARISON OF SCREENING CRITERIA FOR DIRECT CONTACT WITH SOIL/SEDIMENT
FORMER NCBC DAVISVILLE,NORTH KINGSTOWN, RHODE ISLAND

CAS No.	Parameter	USEPA Regional Screening Levels for Residential Exposures[1]		RIDEM Residential Direct Contact Criteria[2]	
		2009 HHRA	Current/June 2017	2009 HHRA	Current/2011
Semivolatile Organic Compounds (ug/kg)					
92-52-4	1,1-Biphenyl	390,000 N	4,700 N	800	800
95-95-4	2,4,5-Trichlorophenol	610,000 N	630,000 N	330,000	330,000
118-79-6	2,4,6-Tribromophenol	NA	57,000 N	NA	NA
88-06-2	2,4,6-Trichlorophenol	6,100 N	6,300 N	58,000	58,000
105-67-9	2,4-Dimethylphenol	120,000 N	130,000 N	1,400,000	1,400,000
606-20-2	2,6-Dinitrotoluene	6,100 N	360 C	NA	NA
91-57-6	2-Methylnaphthalene	31,000 N	24,000 N	123,000	123,000
95-48-7	2-Methylphenol	310,000 N	320,000 N	NA	NA
101-55-3	4-Bromophenyl Phenyl Ether	NA	NA	NA	NA
106-47-8	4-Chloroaniline	24,000 N	2,700 C	310,000	310,000
7005-72-3	4-Chlorophenyl Phenyl Ether	NA	NA	NA	NA
106-44-5	4-Methylphenol	31,000 N	630,000 N	NA	NA
83-32-9	Acenaphthene	340,000 N	360,000 N	43,000	43,000
208-96-8	Acenaphthylene	340,000 N[6]	360,000 N[6]	23,000	23,000
120-12-7	Anthracene	1,700,000 N	1,800,000 N	35,000	35,000
56-55-3	Benzo(a)anthracene	150 C	1,100 C	900	900
50-32-8	Benzo(a)pyrene	15 C	110 C	400	400
-	Benzo(a)pyrene Equivalents	15 C	110 C	400	400
205-99-2	Benzo(b)fluoranthene	150 C	1,100 C	900	900
191-24-2	Benzo(g,h,i)perylene	170,000 N[7]	180,000 N[7]	800	800
207-08-9	Benzo(k)fluoranthene	1,500 C	11,000 C	900	900
117-81-7	Bis(2-Ethylhexyl)phthalate	35,000 C	39,000 C	46,000	46,000
85-68-7	Butyl Benzyl Phthalate	1,200,000 N	290,000 C	NA	NA
86-74-8	Carbazole	24,000 C	NA	NA	NA
218-01-9	Chrysene	15,000 C	110,000 C	400	400
53-70-3	Dibenzo(a,h)anthracene	15 C	110 C	400	400
132-64-9	Dibenzofuran	NA	7,300 N	NA	NA
84-66-2	Diethyl Phthalate	4,900,000 N	5,100,000 N	340,000	340,000
84-74-2	di-n-Butyl Phthalate	610,000 N	630,000 N	NA	NA
117-84-0	di-n-Octyl Phthalate	240,000 N	63,000 N	NA	NA
206-44-0	Fluoranthene	230,000 N	240,000 N	20,000	20,000
86-73-7	Fluorene	230,000 N	240,000 N	28,000	28,000
118-74-1	Hexachlorobenzene	300 C	210 C	400	400
193-39-5	Indeno(1,2,3-cd)pyrene	150 C	1,100 C	900	900
91-20-3	Naphthalene	3,900 C	3,800 C	54,000	54,000
86-30-6	N-Nitrosodiphenylamine	99,000 C	110,000 C	NA	NA
85-01-8	Phenanthrene	170,000 N[7]	180,000 N[7]	40,000	40,000
129-00-0	Pyrene	170,000 N	180,000 N	13,000	13,000
Pesticides/PCBs (ug/kg)					
72-54-8	4,4'-DDD	2,000 C	2,300 C	NA	NA
72-55-9	4,4'-DDE	1,400 C	2,000 C	NA	NA
50-29-3	4,4'-DDT	1,700 C	1,900 C	NA	NA
319-84-6	alpha-BHC	77 C	86 C	NA	NA
5103-71-9	alpha-Chlordane	1,600 C[8]	1,700 C[8]	NA	NA
11097-69-1	Aroclor-1254	220 C	120 N	NA	NA
11096-82-5	Aroclor-1260	220 C	240 C	NA	NA
319-85-7	beta-BHC	270 C	300 C	NA	NA
319-86-8	delta-BHC	77 C[9]	86 C[9]	NA	NA
60-57-1	Dieldrin	30 C	34 C	40	40
33213-65-9	Endosulfan II	37,000 N[10]	47,000 N[10]	NA	NA
1031-07-8	Endosulfan Sulfate	37,000 N[10]	47,000 N[10]	NA	NA
72-20-8	Endrin	1,800 N	1,900 N	NA	NA
7421-93-4	Endrin Aldehyde	1,800 N[11]	1,900 N[11]	NA	NA
53494-70-5	Endrin Ketone	1,800 N[11]	1,900 N[11]	NA	NA
58-89-9	gamma-BHC (Lindane)	520 C	570 C	NA	NA
5103-74-2	gamma-Chlordane	1,600 C[8]	1,700 C[8]	NA	NA
76-44-8	Heptachlor	110 C	130 C	NA	NA
1024-57-3	Heptachlor Epoxide	53 C	70 C	NA	NA
1336-36-3	Total Aroclor	240 C[12]	230 C[12]	10,000	10,000

TABLE C-5
COMPARISON OF SCREENING CRITERIA FOR DIRECT CONTACT WITH SOIL/SEDIMENT
FORMER NCBC DAVISVILLE,NORTH KINGSTOWN, RHODE ISLAND

CAS No.	Parameter	USEPA Regional Screening Levels for Residential Exposures[1]		RIDEM Residential Direct Contact Criteria[2]	
		2009 HHRA	Current/June 2017	2009 HHRA	Current/2011
Inorganics (mg/kg)					
7429-90-5	Aluminum	7,700 N	7,700 N	NA	NA
7440-36-0	Antimony	3.1 N	3.1 N	10	10
7440-38-2	Arsenic	0.39 C	0.68 C	7	7
7440-39-3	Barium	1,500 N	1,500 N	5,500	5,500
7440-41-7	Beryllium	16 N	16 N	0.4	1.5
7440-43-9	Cadmium	7 N	7.1 N	39	39
7440-70-2	Calcium	NA	NA	NA	NA
7440-47-3	Chromium	23 C[13]	0.3 C[13]	390 [13]	390 [13]
7440-48-4	Cobalt	NA	2.3 N	NA	NA
7440-50-8	Copper	310 N	310 N	3,100	3,100
7439-89-6	Iron	5,500 N	5,500 N	NA	NA
7439-92-1	Lead	400	400	150	150
7439-95-4	Magnesium	NA	NA	NA	NA
7439-96-5	Manganese	180 N	180 N	390	390
7439-97-6	Mercury	2.3 N[14]	2.3 N[14]	23	23
7440-02-0	Nickel	160 N	150 N	1,000	1,000
7440-09-7	Potassium	NA	NA	NA	NA
7782-49-2	Selenium	39 N	39 N	390	390
7440-22-4	Silver	39 N	39 N	200	200
7440-23-5	Sodium	NA	NA	NA	NA
7440-28-0	Thallium	0.51 N	0.078 N	5.5	5.5
7440-62-2	Vanadium	55 N	39 N	550	550
7440-66-6	Zinc	2,300 N	2,300 N	6,000	6,000
Miscellaneous Compounds (mg/kg)					
-	Total Petroleum Hydrocarbons	NA	NA	500	500
57-12-5	Cyanide	160 N	2.3 N	200	200

Notes

1 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites. Values used in the 2009 risk assessment are from the June 2008 RSL table. Current values are from the June 2017 RSL table. Values correspond to a cancer risk of 1E-06 for carcinogens and hazard index of 0.1 for noncarcinogens.
2 - RIDEM values are from Rules and Regulations for the Investigation and Remediation of Hazardous Waste Materials Releases, DEM-DSR-01-93, March 31, 1993. Values used in the 2009 risk assessment were from the February 2004 amended version of the regulations. The current values are from the November 2011 amended version of the regulations.
3 - Value is derived by dividing criteria for 2,3,7,8-TCDD by World Health Organization Toxicity Equivalent Factor.
4 - Value is for m-xylenes.
5 - The value for cis-1,2-dichloroethene has been used as a surrogate for total 1,2-dichloroethene.
6 - The value for acenaphthene was used as a surrogate for acenaphthylene.
7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
8 - The value for chlordane was used as a surrogate for alpha- and gamma-chlordane.
9 - The value for alpha-BHC has been used as a surrogate for delta-BHC.
10 - The value for endosulfan has been used as a surrogate for endosulfan II and endosulfan sulfate.
11 - The value for endrin has been used as a surrogate for endrin aldehyde and endrin ketone.
12 - The value for total PCB congeners (Aroclors) is presented.
13 - The values for chromium VI are presented.
14 - Value is for mercuric chloride.

Indicates current screening level is greater than value used in 2009 risk assessment.
Indicates current screening level is less than value used in 2009 risk assessment.

Qualifiers:
C - Carcinogen.
HI - Hazard index
N - Non-carcinogen.

Acronyms:
USEPA - United States Environmental Protection Agency
NA - No criteria available.
PCB - Polychlorinated biphenyl
RIDEM - Rhode Island Department of Environmental Management

TABLE C-6

COMPARISON OF HUMAN HEALTH SCREENING CRITERIA FOR GROUNDWATER/SURFACE WATER/SEEPS
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

CAS No.	Parameter	USEPA Regional Screening Levels for Tap Water[1]		USEPA Maximum Contaminant Levels[2]		RIDEM GA Groundwater Objective[3]		RIDEM GB Groundwater Objective[3]	
		2009 HHRA	Current/June 2017	2009 HHRA	Current	2009 HHRA	Current/2011	2009 HHRA	Current/2011
Volatile Organic Compounds (ug/L)									
79-00-5	1,1,2-Trichloroethane	0.24 C	0.041 N	5	5	5	5	NA	NA
75-34-3	1,1-Dichloroethane	2.4 C	2.8 C	NA	NA	NA	NA	NA	NA
75-35-4	1,1-Dichloroethene	340 C	28 N	7	7	7	7	7	7
107-06-2	1,2-Dichloroethane	0.15 C	0.17 C	5	5	5	5	110	110
120-82-1	1,2,4-Trichlorobenzene	19 C	0.4 N	70	70	70	70	NA	NA
106-46-7	1,4-Dichlorobenzene	0.43 C	0.48 C	75	75	75	75	NA	NA
78-93-3	2-Butanone	710 N	560 N	NA	NA	NA	NA	NA	NA
591-78-6	2-Hexanone	NA	3.8 N	NA	NA	NA	NA	NA	NA
108-10-1	4-Methyl-2-Pentanone	200 N	630 N	NA	NA	NA	NA	NA	NA
67-64-1	Acetone	2,200 N	1,400 N	NA	NA	NA	NA	NA	NA
71-43-2	Benzene	0.41 C	0.46 C	5	5	5	5	140	140
75-27-4	Bromodichloromethane	1.1 C	0.13 C	80	80	NA	NA	NA	NA
75-15-0	Carbon Disulfide	100 N	81 N	NA	NA	NA	NA	NA	NA
124-48-1	Chlorodibromomethane	0.8 C	0.87 C	80	80	NA	NA	NA	NA
75-00-3	Chloroethane	2,100 N	2,100 N	NA	NA	NA	NA	NA	NA
67-66-3	Chloroform	0.19 C	0.22 C	80	80	NA	NA	NA	NA
74-87-3	Chloromethane	1.8 C	19 N	NA	NA	NA	NA	NA	NA
156-59-2	cis-1,2-Dichloroethene	37 N	3.6 N	70	70	70[4]	70[4]	2,400	2,400
74-84-0	Ethane	NA	NA	NA	NA	NA	NA	NA	NA
74-85-1	Ethene	NA	NA	NA	NA	NA	NA	NA	NA
100-41-4	Ethylbenzene	1.5 C	1.5 C	700	700	700	700	1,600	1,600
-	m+p-Xylenes	21 N[5]	19 N[5]	10,000[5]	10,000[5]	10,000[5]	10,000[5]	NA	NA
74-82-8	Methane	NA	NA	NA	NA	NA	NA	NA	NA
75-09-2	Methylene Chloride	4.8 C	11 N	5	5	5	5	NA	NA
79-20-9	Methyl Acetate	3,700 N	2,000 N	NA	NA	NA	NA	NA	NA
1634-04-4	Methyl Tert-Butyl Ether	12 C	14 C	NA	NA	40	40	5,000	5,000
95-47-6	o-Xylene	140 N	19 N	10,000[5]	10,000[5]	10,000[5]	10,000[5]	NA	NA
100-42-5	Styrene	160 N	120 N	100	100	100	100	2,200	2,200
127-18-4	Tetrachloroethene	0.11 C	4.1 N	5	5	5	5	150	150
108-88-3	Toluene	230 N	110 N	1,000	1,000	1,000	1,000	1,700	1,700
540-59-0	Total 1,2-Dichloroethene	33 N	NA	NA	NA	70	70	NA	NA
1330-20-7	Total Xylenes	20 N	19 N	10,000	10,000	10,000	10,000	NA	NA
156-60-5	trans-1,2-Dichloroethene	11 N	36 N	100	100	100	100	2,800	2,800
79-01-6	Trichloroethene	1.7 C	0.28 N	5	5	5	5	540	540
75-01-4	Vinyl Chloride	0.016 C	0.019 C	2	2	2	2	NA	2
Semivolatile Organic Compounds (ug/L)									
92-52-4	1,1-Biphenyl	180 N	0.083 N	NA	NA	NA	NA	NA	NA
106-46-7	1,4-Dichlorobenzene	0.43 C	0.48 C	75	75	75	75	NA	NA
95-95-4	2,4,5-Trichlorophenol	370 N	120 N	NA	NA	NA	NA	NA	NA
118-79-6	2,4,6-Tribromophenol	NA	12 N	NA	NA	NA	NA	NA	NA
88-06-2	2,4,6-Trichlorophenol	3.7 N	1.2 N	NA	NA	NA	NA	NA	NA
105-67-9	2,4-Dimethylphenol	73 N	36 N	NA	NA	NA	NA	NA	NA
606-20-2	2,6-Dinitrotoluene	3.7 N	0.049 C	NA	NA	NA	NA	NA	NA
91-57-6	2-Methylnaphthalene	15 N	3.6 N	NA	NA	NA	NA	NA	NA
95-48-7	2-Methylphenol	180 N	93 N	NA	NA	NA	NA	NA	NA
101-55-3	4-Bromophenyl Phenyl Ether	NA	NA	NA	NA	NA	NA	NA	NA
106-47-8	4-Chloroaniline	15 N	0.37 C	NA	NA	NA	NA	NA	NA
7005-72-3	4-Chlorophenyl Phenyl Ether	NA	NA	NA	NA	NA	NA	NA	NA

TABLE C-6

COMPARISON OF HUMAN HEALTH SCREENING CRITERIA FOR GROUNDWATER/SURFACE WATER/SEEPS
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

CAS No.	Parameter	USEPA Regional Screening Levels for Tap Water[1]		USEPA Maximum Contaminant Levels[2]		RIDEM GA Groundwater Objective[3]		RIDEM GB Groundwater Objective[3]	
		2009 HHRA	Current/June 2017	2009 HHRA	Current	2009 HHRA	Current/2011	2009 HHRA	Current/2011
106-44-5	4-Methylphenol	18 N	190 N	NA	NA	NA	NA	NA	NA
83-32-9	Acenaphthene	220 N	53 N	NA	NA	NA	NA	NA	NA
208-96-8	Acenaphthylene	220 N[6]	53 N[6]	NA	NA	NA	NA	NA	NA
120-12-7	Anthracene	1,100 N	180 N	NA	NA	NA	NA	NA	NA
56-55-3	Benzo(a)anthracene	0.029 C	0.03 C	NA	NA	NA	NA	NA	NA
50-32-8	Benzo(a)pyrene	0.0029 C	0.025 C	0.2	0.2	0.2	0.2	NA	NA
	Benzo(a)pyrene Equivalents	0.0029 C	0.025 C	0.2	0.2	0.2	0.2	NA	NA
205-99-2	Benzo(b)fluoranthene	0.029 C	0.25 C	NA	NA	NA	NA	NA	NA
191-24-2	Benzo(g,h,i)perylene	110 N[7]	12 N[7]	NA	NA	NA	NA	NA	NA
207-08-9	Benzo(k)fluoranthene	0.29 C	2.5 C	NA	NA	NA	NA	NA	NA
117-81-7	Bis(2-Ethylhexyl) Phthalate	4.8 C	5.6 C	6	6	6	6	NA	NA
85-68-7	Butyl Benzyl Phthalate	730 N	16 C	NA	NA	NA	NA	NA	NA
86-74-8	Carbazole	3.4 C	NA	NA	NA	NA	NA	NA	NA
218-01-9	Chrysene	2.9 C	25 C	NA	NA	NA	NA	NA	NA
53-70-3	Dibenzo(a,h)anthracene	0.0029 C	0.025 C	NA	NA	NA	NA	NA	NA
132-64-9	Dibenzofuran	NA	0.79 N	NA	NA	NA	NA	NA	NA
84-66-2	Diethyl Phthalate	2,900 N	1,500 N	NA	NA	NA	NA	NA	NA
84-74-2	di-n-Butyl Phthalate	370 N	90 N	NA	NA	NA	NA	NA	NA
117-84-0	di-n-Octyl Phthalate	150 N	20 N	NA	NA	NA	NA	NA	NA
206-44-0	Fluoranthene	150 N	80 N	NA	NA	NA	NA	NA	NA
86-73-7	Fluorene	150 N	29 N	NA	NA	NA	NA	NA	NA
118-74-1	Hexachlorobenzene	0.042 C	0.0098 C	1	1	1	1	NA	NA
193-39-5	Indeno(1,2,3-cd)pyrene	0.029 C	0.25 C	NA	NA	NA	NA	NA	NA
91-20-3	Naphthalene	0.14 C	0.17 C	NA	NA	20	100	NA	NA
86-30-6	N-Nitrosodiphenylamine	14 C	12 C	NA	NA	NA	NA	NA	NA
85-01-8	Phenanthrene	110 N[7]	12 N[7]	NA	NA	NA	NA	NA	NA
129-00-0	Pyrene	110 N	12 N	NA	NA	NA	NA	NA	NA
-	Total Bap Equivalents	0.0029 C	0.025 C	0.2	0.2	0.2	0.2	NA	NA
Pesticides/PCBs (ug/L)									
72-54-8	4,4'-DDD	0.28 C	0.032 C	NA	NA	NA	NA	NA	NA
72-55-9	4,4'-DDE	0.2 C	0.046 C	NA	NA	NA	NA	NA	NA
50-29-3	4,4'-DDT	0.2 C	0.23 C	NA	NA	NA	NA	NA	NA
319-84-6	alpha-BHC	0.011 C	0.0072 C	NA	NA	NA	NA	NA	NA
5103-71-9	alpha-Chlordane	0.19 C[8]	0.02 C[8]	2[8]	2[8]	NA	NA	NA	NA
11096-82-5	Aroclor-1260	0.034 C	0.0078 C	0.5[9]	0.5[9]	NA	NA	NA	NA
319-85-7	beta-BHC	0.037 C	0.025 C	NA	NA	NA	NA	NA	NA
319-86-8	delta-BHC	0.011 C[10]	0.0072 C[10]	NA	NA	NA	NA	NA	NA
60-57-1	Dieldrin	0.0042 C	0.0018 C	NA	NA	NA	NA	NA	NA
33213-65-9	Endosulfan II	22 N[11]	10 N[11]	NA	NA	NA	NA	NA	NA
1031-07-8	Endosulfan Sulfate	22 N[11]	10 N[11]	NA	NA	NA	NA	NA	NA
72-20-8	Endrin	1.1 N	0.23 N	2	2	NA	NA	NA	NA
7421-93-4	Endrin Aldehyde	1.1 N[12]	0.23 N[12]	NA	NA	NA	NA	NA	NA
53494-70-5	Endrin Ketone	1.1 N[12]	0.23 N[12]	NA	NA	NA	NA	NA	NA
58-89-9	gamma-BHC (Lindane)	0.061 C	0.042 C	0.2	0.2	NA	NA	NA	NA
5103-74-2	gamma-Chlordane	0.19 C[8]	0.02 C[8]	2[7]	2[7]	NA	NA	NA	NA
76-44-8	Heptachlor	0.015 C	0.0014 C	0.4	0.4	NA	NA	NA	NA
1024-57-3	Heptachlor Epoxide	0.0074 C	0.0014 C	0.2	0.2	NA	NA	NA	NA

TABLE C-6

COMPARISON OF HUMAN HEALTH SCREENING CRITERIA FOR GROUNDWATER/SURFACE WATER/SEEPS
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

CAS No.	Parameter	USEPA Regional Screening Levels for Tap Water[1]		USEPA Maximum Contaminant Levels[2]		RIDEM GA Groundwater Objective[3]		RIDEM GB Groundwater Objective[3]	
		2009 HHRA	Current/June 2017	2009 HHRA	Current	2009 HHRA	Current/2011	2009 HHRA	Current/2011
1336-36-3	Total Aroclor	0.17 C[9]	0.044 C[9]	0.5[9]	0.5[9]	0.5[9]	0.5[9]	NA	NA
-	Total PCB Congeners	0.17 C[9]	0.044 C[9]	0.5[9]	0.5[9]	0.5[9]	0.5[9]	NA	NA
Inorganics (ug/L)									
7429-90-5	Aluminum	3,700 N	2,000 N	NA	NA	NA	NA	NA	NA
7440-36-0	Antimony	1.5 N	0.78 N	6	6	6	6	NA	NA
7440-38-2	Arsenic	0.045 C	0.052 C	10	10	NA	10	NA	NA
7440-39-3	Barium	730 N	380 N	2,000	2,000	2,000	2,000	NA	NA
7440-41-7	Beryllium	7.3 N	2.5 N	4	4	4	4	NA	NA
7440-43-9	Cadmium	1.8 N	0.92 N	5	5	5	5	NA	NA
7440-70-2	Calcium	NA	NA	NA	NA	NA	NA	NA	NA
7440-47-3	Chromium	11 N[13]	0.035 C[13]	100	100	100	100	NA	NA
7440-48-4	Cobalt	1.1 N[14]	0.6 N	NA	NA	NA	NA	NA	NA
7440-50-8	Copper	150 N	80 N	1,300[15]	1,300[15]	NA	NA	NA	NA
7439-89-6	Iron	2,600 N	1,400 N	NA	NA	NA	NA	NA	NA
7439-92-1	Lead	NA	15	15[15]	15[15]	15	15	NA	NA
7439-95-4	Magnesium	NA	NA	NA	NA	NA	NA	NA	NA
7439-96-5	Manganese	88 N	43 N	NA	NA	NA	NA	NA	NA
7439-97-6	Mercury	1.1 N[16]	0.57 N[16]	2	2	2	2	NA	NA
7440-02-0	Nickel	73 N	39 N	NA	NA	100	100	NA	NA
7440-09-7	Potassium	NA	NA	NA	NA	NA	NA	NA	NA
7782-49-2	Selenium	18 N	10 N	50	50	50	50	NA	NA
7440-22-4	Silver	18 N	9.4 N	NA	NA	NA	NA	NA	NA
7440-23-5	Sodium	NA	NA	NA	NA	NA	NA	NA	NA
7440-28-0	Thallium	0.24 N	0.02 N	2	2	2	2	NA	NA
7440-62-2	Vanadium	18 N	8.6 N	NA	NA	NA	NA	NA	NA
7440-66-6	Zinc	1,100 N	600 N	NA	NA	NA	NA	NA	NA
Miscellaneous Compounds									
57-12-5	Cyanide (ug/L)	73 N	0.15 N	200	200	200	200	NA	NA
7783-06-4	Hydrogen Sulfide (mg/L)	0.011 N	0.00042 N	NA	NA	NA	NA	NA	NA
14797-55-8	Nitrate (mg/L)	5.8 N	3.2 N	10	10	NA	NA	NA	NA
14797-65-0	Nitrite (mg/L)	0.37 N	0.2 N	1	1	NA	NA	NA	NA

Footnotes:

1 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, July 7, 2008. Values used in the 2009 risk assessment are from the June 2008 RSL table. Current values are from the June 2017 RSL table. Values correspond to a cancer risk of 1E-06 for carcinogens and hazard index of 0.1 for noncarcinogens.

2 -Values used in the 2009 risk assessment are from the 2006 Edition of the Drinking Water Standards and Health Advisories, EPA 822-B-06-013. Current values are from the 2012 Edition of the Drinking Water Standards and Health Advisories, EPA 822-S-12-001.

3 - RIDEM values are from Rules and Regulations for the Investigation and Remediation of Hazardous Waste Materials Releases, DEM-DSR-01-93, March 31, 1993. Values used in the 2009 risk assessment were from the February 2004 amended version of the regulations. The current values are from the November 2011 amended version of the regulations.

4 - The value for cis-1,2-dichloroethene was used as a surrogate for total 1,2-dichloroethene.

5 - Value is for total xylenes

6 - The value for acenaphthene is used as a surrogate for acenaphthylene.

7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.

8 - The value for chlordane is used as a surrogate for alpha- and gamma-chlordane.

9 - The value for total PCB congeners (Aroclors) is presented.

10 - The value for alpha-BHC is used as a surrogate for delta-BHC.

11 - The value for endosulfan is used as a surrogate for endosulfan II and endosulfan sulfate.

12 - The value for endrin is used as a surrogate for endrin aldehyde and endrin ketone.

TABLE C-6

COMPARISON OF HUMAN HEALTH SCREENING CRITERIA FOR GROUNDWATER/SURFACE WATER/SEEPS
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

CAS No.	Parameter	USEPA Regional Screening Levels for Tap Water[1]		USEPA Maximum Contaminant Levels[2]		RIDEM GA Groundwater Objective[3]		RIDEM GB Groundwater Objective[3]	
		2009 HHRA	Current/June 2017	2009 HHRA	Current	2009 HHRA	Current/2011	2009 HHRA	Current/2011

13 - The value for chromium VI is presented.
14 - Value for cobalt is from the September 12, 2008 RSL table.
15 - The MCL for this parameter is actually a treatment technique. The SDWA action level (at the tap) has been presented.
16 - Value is for mercuric chloride.
Indicates current screening level is greater than value used in 2009 risk assessment.
Indicates current screening level is less than value used in 2009 risk assessment.

Qualifiers:
C - Carcinogenic.
N - Noncarcinogenic.

Acronyms:
MCL = Maximum Contaminant Level
NA = No criterion available
PCB = Polychlorinated biphenyl
RIDEM = Rhode Island Department of Environmental Management
RSL = Regional Screening Level
SDWA = Safe Drinking Water Act
USEPA = United States Environmental Protection Agency

TABLE C-7

COMPARISON OF SCREENING CRITERIA FOR MIGRATION OF CONTAMINANTS FROM SOIL TO GROUNDWATER
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

CAS No.	Parameter	Protection of Groundwater SSLs		RIDEM GA Leachability Criterion[3]	
		SSLs [1]	USEPA RSLs[2]		
		2009 HHRA	Current	2009 HHRA	Current
Dioxins/Furans (ng/kg)					
3268-87-9	1,2,3,4,6,7,8,9-OCDD	19,000 [4]	3,900 C[4]	NA	NA
39001-02-0	1,2,3,4,6,7,8,9-OCDF	19,000 [4]	3,900 C[4]	NA	NA
35822-46-9	1,2,3,4,6,7,8-HPCDD	560 [4]	120 C[4]	NA	NA
67562-39-4	1,2,3,4,6,7,8-HPCDF	560 [4]	120 C[4]	NA	NA
55673-89-7	1,2,3,4,7,8,9-HPCDF	560 [4]	120 C[4]	NA	NA
39227-28-6	1,2,3,4,7,8-HXCDD	56 [4]	12 C[4]	NA	NA
70648-26-9	1,2,3,4,7,8-HXCDF	56 [4]	12 C[4]	NA	NA
57653-85-7	1,2,3,6,7,8-HXCDD	56 [4]	12 C[4]	NA	NA
57117-44-9	1,2,3,6,7,8-HXCDF	56 [4]	12 C[4]	NA	NA
19408-74-3	1,2,3,7,8,9-HXCDD	56 [4]	12 C[4]	NA	NA
72918-21-9	1,2,3,7,8,9-HXCDF	56 [4]	12 C[4]	NA	NA
40321-76-4	1,2,3,7,8-PECDD	5.6 [4]	1.2 C[4]	NA	NA
57117-41-6	1,2,3,7,8-PECDF	190 [4]	39 C[4]	NA	NA
60851-34-5	2,3,4,6,7,8-HXCDF	56 [4]	12 C[4]	NA	NA
57117-31-4	2,3,4,7,8-PECDF	19 [4]	3.9 C[4]	NA	NA
1746-01-6	2,3,7,8-TCDD	5.6 MCL	1.2 C	NA	NA
51207-31-9	2,3,7,8-TCDF	56 C	12 C[4]	NA	NA
--	2,3,7,8-TCDD Equivalents	5.6 [4]	1.2 C	NA	NA
Volatile Organic Compounds (ug/kg)					
79-00-5	1,1,2-Trichloroethane	18 MCL	1.78 C	100	100
120-82-1	1,2,4-Trichlorobenzene	5,300 MCL	68 C	140,000	140,000
75-34-3	1,1-Dichloroethane	41,000 N	15.6 C	NA	NA
75-35-4	1,1-Dichloroethene	58 MCL	2,000 N	700	700
107-06-2	1,2-Dichloroethane	24 MCL	0.96 C	100	100
106-46-7	1,4-Dichlorobenzene	2,200 MCL	9.2 C	NA	NA
78-93-3	2-Butanone	89,000 N	24,000 N	NA	NA
591-78-6	2-Hexanone	NA	176 N	NA	NA
108-10-1	4-Methyl-2-Pentanone	12,000 N	28,000 N	NA	NA
67-64-1	Acetone	130,000 N	58,000 N	NA	NA
71-43-2	Benzene	34 MCL	4.6 C	200	200
75-27-4	Bromodichloromethane	630 MCL	0.72 C	NA	NA
75-15-0	Carbon Disulfide	29,000 N	4,800 N	NA	NA
108-90-7	Chlorobenzene	1,300 MCL	1,060 N	3,200	3,200
124-48-1	Chlorodibromomethane	2,000 C	4.6 C	NA	NA
75-00-3	Chloroethane	NA	118,000 N	NA	NA
67-66-3	Chloroform	590 MCL	1.22 C	NA	NA
74-87-3	Chloromethane	40 N	980 N	NA	NA
156-59-2	cis-1,2-Dichloroethene	400 MCL	220 N	1,700	1,700
110-82-7	Cyclohexane	NA	260,000 N	NA	NA
74-84-0	Ethane	NA	NA	NA	NA
74-85-1	Ethene	NA	NA	NA	NA
100-41-4	Ethylbenzene	13,000 MCL	34 C	27,000	27,000
98-82-8	Isopropylbenzene	350,000 N	14,800 N	NA	NA
-	m+p-Xylenes	190,000 MCL	3,800 N	NA	NA
74-82-8	Methane	NA	NA	NA	NA
79-20-9	Methyl Acetate	150,000 N	82,000 N	NA	NA
108-87-2	Methyl Cyclohexane	NA	NA	NA	NA
75-09-2	Methylene Chloride	23 MCL	58 C	NA	NA
95-47-6	o-Xylene	190,000 MCL	3,800 N	NA	NA
100-42-5	Styrene	3,500 MCL	26,000 N	2,900	2,900
127-18-4	Tetrachloroethene	58 MCL	102 C	100	100
108-88-3	Toluene	12,000 MCL	15,200 N	32,000	32,000
540-59-0	Total 1,2-Dichloroethene	NA	NA	NA	NA
1330-20-7	Total Xylenes	140,000 N	3,800 N	540,000	540,000
156-60-5	trans-1,2-Dichloroethene	680 MCL	2,200 N	3,300	3,300
79-01-6	Trichloroethene	57 C	3.6 C	200	200

TABLE C-7

COMPARISON OF SCREENING CRITERIA FOR MIGRATION OF CONTAMINANTS FROM SOIL TO GROUNDWATER
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

CAS No.	Parameter	Protection of Groundwater SSLs		RIDEM GA Leachability Criterion[3]	
		SSLs [1]	USEPA RSLs[2]		
		2009 HHRA	Current	2009 HHRA	Current
75-01-4	Vinyl Chloride	13 MCL	0.13 C	300	300
Semivolatile Organic Compounds (ug/kg)					
106-46-7	1,4-Dichlorobenzene	2,200 MCL	9.2 C	NA	NA
95-95-4	2,4,5-Trichlorophenol	250,000 N	80,000 N	NA	NA
118-79-6	2,4,6-Tribromophenol	NA	4,400 N	NA	NA
88-06-2	2,4,6-Trichlorophenol	150 C	80 C	NA	NA
105-67-9	2,4-Dimethylphenol	9,000 N	8,400 N	NA	NA
606-20-2	2,6-Dinitrotoluene	0.85 N	1.34 C	NA	NA
91-57-6	2-Methylnaphthalene	NA	3,800 N	NA	NA
95-48-7	2-Methylphenol	14,000 N	15,000 N	NA	NA
101-55-3	4-Bromophenyl Phenyl Ether	NA	NA	NA	NA
106-47-8	4-Chloroaniline	970 N	3.2 C	NA	NA
7005-72-3	4-Chlorophenyl Phenyl Ether	NA	NA	NA	NA
106-44-5	4-Methylphenol	1,300 N	30,000 N	NA	NA
83-32-9	Acenaphthene	630,000 N	110,000 N	NA	NA
208-96-8	Acenaphthylene	NA	NA	NA	NA
120-12-7	Anthracene	13,000,000 N	1,160,000 N	NA	NA
56-55-3	Benzo(a)anthracene	3,200 MCL	220 C	NA	NA
50-32-8	Benzo(a)pyrene	8,200 MCL	580 C	240,000	240,000
205-99-2	Benzo(b)fluoranthene	9,800 MCL	6,000 C	NA	NA
191-24-2	Benzo(g,h,i)perylene	NA	NA	NA	NA
207-08-9	Benzo(k)fluoranthene	9,800 MCL	58,000 C	NA	NA
117-81-7	Bis(2-Ethylhexyl) Phthalate	3,600,000 MCL	26,000 C	120,000	120,000
85-68-7	Butyl Benzyl Phthalate	17,000,000 N	4,800 C	NA	NA
86-74-8	Carbazole	590 C	NA	NA	NA
218-01-9	Chrysene	3,200 MCL	180,000 C	NA	NA
53-70-3	Dibenzo(a,h)anthracene	30,000 MCL	1,920 C	NA	NA
132-64-9	Dibenzofuran	48,000 N	3,000 N	NA	NA
84-66-2	Diethyl Phthalate	450,000 N	122,000 N	NA	NA
84-74-2	di-n-Butyl Phthalate	5,000,000 N	46,000 N	NA	NA
117-84-0	di-n-Octyl Phthalate	4,900,000,000 N	1,140,000 N	NA	NA
206-44-0	Fluoranthene	6,300,000 N	1,780,000 N	NA	NA
86-73-7	Fluorene	810,000 N	108,000 N	NA	NA
118-74-1	Hexachlorobenzene	2,200 MCL	2.4 C	NA	NA
193-39-5	Indeno(1,2,3-cd)pyrene	28,000 MCL	19,600 C	NA	NA
91-20-3	Naphthalene	61,000 N	10.8 C	800	800
86-30-6	N-Nitrosodiphenylamine	4,300 C	1,340 C	NA	NA
85-01-8	Phenanthrene	NA	NA	NA	NA
129-00-0	Pyrene	4,600,000 N	260,000 N	NA	NA
Pesticides/PCBs (ug/kg)					
72-54-8	4,4'-DDD	14,000 C	150 C	NA	NA
72-55-9	4,4'-DDE	45,000 C	220 C	NA	NA
50-29-3	4,4'-DDT	26,000 C	1,540 C	NA	NA
319-84-6	alpha-BHC	0.72 C	0.84 C	NA	NA
5103-71-9	alpha-Chlordane	9,600 MCL[5]	54 C[5]	NA	NA
11097-69-1	Aroclor-1254	NA	40 C	NA	NA
11096-82-5	Aroclor-1260	NA	110 C	NA	NA
319-85-7	beta-BHC	2.6 C	3 C	NA	NA
319-86-8	delta-BHC	NA	NA	NA	NA
60-57-1	Dieldrin	4.6 C	1.42 C	NA	NA
33213-65-9	Endosulfan II	20,000 N[6]	28,000 N[6]	NA	NA
1031-07-8	Endosulfan Sulfate	20,000 N[6]	28,000 N[6]	NA	NA
72-20-8	Endrin	990 MCL	1,840 N	NA	NA
7421-93-4	Endrin Aldehyde	NA	NA	NA	NA
53494-70-5	Endrin Ketone	NA	NA	NA	NA
58-89-9	gamma-BHC (Lindane)	9.4 MCL	4.8 C	NA	NA
5103-74-2	gamma-Chlordane	9,600 MCL[5]	54 C[5]	NA	NA
76-44-8	Heptachlor	23,000 MCL	2.4 C	NA	NA
1024-57-3	Heptachlor Epoxide	670 MCL	0.56 C	NA	NA
1336-36-3	Total Aroclor	NA	136 C	10,000	10,000

TABLE C-7

COMPARISON OF SCREENING CRITERIA FOR MIGRATION OF CONTAMINANTS FROM SOIL TO GROUNDWATER
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

CAS No.	Parameter	Protection of Groundwater SSLs		RIDEM GA Leachability Criterion[3]	
		SSLs [1]	USEPA RSLs[2]		
		2009 HHRA	Current	2009 HHRA	Current
Inorganics (mg/kg)					
7429-90-5	Aluminum	170 N	600,000 N	NA	NA
7440-36-0	Antimony	5.4 MCL	7 N	(8)	(8)
7440-38-2	Arsenic	5.8 C	0.03 C	NA	NA
7440-39-3	Barium	1,600 MCL	3,200 N	(8)	(8)
7440-41-7	Beryllium	63 MCL	380 N	(8)	(8)
7440-43-9	Cadmium	7.5 MCL	13.8 N	(8)	(8)
7440-70-2	Calcium	NA	NA	NA	NA
7440-47-3	Chromium	42 N[7]	0.0134 C[7]	(8)	(8)
7440-48-4	Cobalt	3.3 N	5.4 N	NA	NA
7440-50-8	Copper	11,000 MCL	560 N	NA	NA
7439-89-6	Iron	NA	7,000 N	NA	NA
7439-92-1	Lead	NA	15 [9]	(8)	(8)
7439-95-4	Magnesium	NA	NA	NA	NA
7439-96-5	Manganese	2,200 N	560 N	NA	NA
7439-97-6	Mercury	2.1 MCL	0.66 N	(8)	(8)
7440-02-0	Nickel	950 N	520 N	(8)	(8)
7440-09-7	Potassium	NA	NA	NA	NA
7782-49-2	Selenium	5.2 MCL	10.4 N	(8)	(8)
7440-22-4	Silver	31 N	16 N	NA	NA
7440-23-5	Sodium	NA	NA	NA	NA
7440-28-0	Thallium	1.1 N	0.28 N	(8)	(8)
7440-62-2	Vanadium	5,100 N	1,720 N	NA	NA
7440-66-6	Zinc	14,000 N	7,400 N	NA	NA
Miscellaneous Compounds (mg/kg)					
-	Total Petroleum Hydrocarbons	NA	NA	NA	NA
57-12-5	Cyanide	40 MCL	0.3 N	(8)	(8)

Notes:
1 - Protection of groundwater SSLs used in the 2009 risk assessment was calculated using the USEPA Soil Screening Levels calculator. This Internet site no longer exists and has been replaced with the RSL calculator.
2 - USEPA Regional Screening Level Table, June 2017. Values are adjusted for a dilution attenuation factor of 20.
3 - RIDEM values are from Rules and Regulations for the Investigation and Remediation of Hazardous Waste Materials Releases, DEM-DSR-01-93, March 31, 1993. Values used in the 2009 risk assessment were from the February 2004 amended version of the regulations. The current values are from the November 2011 amended version of the regulations.
4 - Value is derived by multiplying criteria for 2,3,7,8-TCDD by World Health Organization Toxicity Equivalent Factor.
5 - The value for chlordane was used as a surrogate for alpha- and gamma-chlordane.
6 - The value for endosulfan has been used as a surrogate for endosulfan II and endosulfan sulfate.
7 - The value for chromium VI is presented.
8 - Leachability criteria for inorganics are based on SPLP/TCLP analysis.
9 - Value is MCL based soil screening level.
Indicates current screening level is greater than value used in 2009 risk assessment.
Indicates current screening level is less than value used in 2009 risk assessment.

Qualifiers:
C - Carcinogen.
N - Noncarcinogen.
MCL - Maximum Contaminant Level.

Acronyms:
NA = No criteria available
PCB = Polychlorinated biphenyl
RIDEM = Rhode Island Department of Environmental Management
SPLP = Synthetic Precipitation Leaching Procedure
SSL = Soil Screening Level
TCLP = Toxicity Characteristics Leaching Procedure
USEPA = United States Environmental Protection Agency

TABLE C-8

SUMMARY OF EXPOSURE INPUT PARAMETERS - REASONABLE MAXIMUM EXPOSURES
CONSTRUCTION WORKERS AND INDUSTRIAL WORKERS
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Parameter Code	Exposure Parameter	Construction Worker		Industrial Worker	
		2009 HHRA	Current	2009 HHRA	Current
All Exposures					
ED	Exposure Duration (years)	1[1]	1[1]	25[2]	25[2]
BW	Body Weight (kg)	70[3]	**80[4]**	70[3]	**80[4]**
AT-N	Averaging Time (Non-Cancer) (days)	365[3]	365[3]	9,125[3]	9,125[4]
AT-C	Averaging Time (Cancer) (days)	25,550[3]	25,550[3]	25,550[3]	25,550[4]
Incidental Ingestion/Dermal Contact with Soil					
IR	Ingestion Rate (mg/day)	330[2]	330[2]	100[2]	100[4]
EF	Exposure Frequency Soil (days/year)	150[1]	150[1]	250[2]	250[4]
FI	Fraction Ingested (unitless)	1[2]	1[2]	1[2]	1[4]
SA	Skin Surface Available for Contact (cm^2)	3,300[2,5]	**3,527[4]**	3,300[5]	**3,527[4]**
AF	Soil to Skin Adherence Factor (mg/cm^2/event)	0.3[2,5]	0.3[2,5]	0.2[5]	**0.12[4]**
EV	Event Frequency (events/day)	1	1	1	1
ABS	Absorption Factor (unitless)	chemical-specific[5]	chemical-specific[5]	chemical-specific[5]	chemical-specific[5]
CF	Conversion Factor (kg/mg)	1E-06	1E-06	1E-06	1E-06
Inhalation Fugitive Dust/Volatile Emissions from Surface Soil					
ET	Exposure Time (hours/day)	8[6]	8[6]	8[6]	8[4]
EF	Exposure Frequency (days/year)	150[1]	150[1]	250[2]	250[4]
PEF	Particulate Emission Factor (m^3/kg)	1.62E+06[2]	1.62E+06[2]	1.1E+10[7]	1.1E+10[8]
Ingestion/Dermal Contact with Groundwater					
IR	Ingestion Rate (L/day)	0.01[9]	0.01[9]	NA	NA
EF	Exposure Frequency (days/year)	30[1]	30[1]	NA	NA
ET	Exposure Time (hours/day)	4[1]	4[1]	NA	NA
EV	Event Frequency (events/day)	1[1]	1[1]	NA	NA
SA	Skin Surface Available for Contact (cm^2)	3,300[5]	**3,527[4]**	NA	NA
	Kp (cm/hour), t* (hour/event), τ (hour), and B (unitless)	chemical-specific[5]	chemical-specific[5]	NA	NA
CF	Conversion Factor (L/cm^3)	1E-03	1E-03	NA	NA
Inhalation of Volatile Emissions from Groundwater					
ET	Exposure Time (hours/day)	4[1]	4[1]	NA	NA
EF	Exposure Frequency (days/year)	30[1]	30[1]	NA	NA
Vapor Intrusion					
EF	Exposure Frequency (days/year)	NA	NA	250[2]	250[4]

Notes:
1 - Assumes a 30 week construction project over a course of one year. Exposure to groundwater occurs only for 6 weeks.
2 - USEPA, 2002: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9365.4-24.
3 - USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.
4 - USEPA, 2014: Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Assumptions.
5 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. PA/540/R/99/005.
6 - Assume an 8-hour work shift.
7 - USEPA, 2008: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm.
Site-specific values for Hartford, Connecticut (This Internet site is no longer active).
8 - USEPA, 2017: Regional Screening Levels Calculator Internet site at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search.
Site-specific values for Hartford, Connecticut.
9 - Professional judgment.

Value is less conservative than value used in 2009 risk assessment.
Value is more conservative than value used in 2009 risk assessment.

TABLE C-9

SUMMARY OF EXPOSURE INPUT PARAMETERS - REASONABLE MAXIMUM EXPOSURES
TRESPASSERS AND RECREATIONAL USERS
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Parameter Code	Exposure Parameter	Adolescent Trespasser		Child Recreational User		Adult Recreational User	
		2009 HHRA	Current	2009 HHRA	Current	2009 HHRA	Current
All Exposures							
ED	Exposure Duration (years)	10[1]	10[1]	6[2]	6[3]	24[2]	**20[3]**
BW	Body Weight (kg)	43[2]	**44[4]**	15[2]	15[3]	70[2]	**80[3]**
AT-N	Averaging Time (Non-Cancer) (days)	3,650[2]	3,650[2]	2,190[2]	2,190[3]	8,760[2]	**7,300[3]**
AT-C	Averaging Time (Cancer) (days)	25,550[2]	25,550[2]	25,550[2]	25,550[3]	25,550[2]	25,550[3]
Incidental Ingestion/Dermal Contact with Soil							
IR	Ingestion Rate (mg/day)	100[5]	100[5]	200[5]	200[3]	100[5]	100[3]
EF	Exposure Frequency Soil (days/year)	26[6]	26[6]	100[7]	100[7]	100[7]	100[7]
FI	Fraction Ingested (unitless)	1[5]	1[5]	0.5[8]	0.5[8]	0.5[8]	0.5[8]
SA	Skin Surface Available for Contact (cm^2)	5,300[9]	**4,640[10]**	2,800[11]	**2,373[3]**	5,700[11]	**6,032[3]**
AF	Soil to Skin Adherence Factor (mg/cm^2/event)	0.2[11]	0.2[11]	0.2[11]	0.2[3]	0.07[11]	0.07[3]
EV	Event Frequency (events/day)	1	1	1	1	1	1
ABS	Absorption Factor (unitless)	chemical-specific[11]	chemical-specific[11]	chemical-specific[11]	chemical-specific[11]	chemical-specific[11]	chemical-specific[11]
CF	Conversion Factor (kg/mg)	1E-06	1E-06	1E-06	1E-06	1E-06	1E-06
Inhalation Fugitive Dust/Volatile Emissions from Surface Soil							
ET	Exposure Time (hours/day)	4[12]	4[12]	4[8]	4[8]	4[8]	4[8]
EF	Exposure Frequency (days/year)	26[6]	26[6]	100[7]	100[7]	100[7]	100[7]
PEF	Particulate Emission Factor (m^3/kg)	1.1E+10[13]	1.1E+10[14]	1.1E+10[13]	1.1E+10[14]	1.1E+10[13]	1.1E+10[14]
Ingestion/Dermal Contact with Surface Water							
IR	Incidental ingestion rate (L/hour)	NA	NA	0.01[15]	**0.12[4]**	0.01[15]	**0.071[4]**
EF	Exposure Frequency (days/year)	NA	NA	52[16]	52[16]	52[16]	52[16]
ET	Exposure Time (hours/day)	NA	NA	4[8]	4[8]	4[8]	4[8]
EV	Event Frequency (events/day)	NA	NA	1[12]	1[12]	1[12]	1[12]
SA	Skin Surface Available for Contact (cm^2)	NA	NA	2,800[11]	**2,373[3]**	5,700[11]	**6,032[3]**
	Kp (cm/hour), t* (hour/event), τ (hour), and B (unitless)	NA	NA	chemical-specific[11]	chemical-specific[11]	chemical-specific[11]	chemical-specific[11]
CF	Conversion Factor (L/cm^3)	NA	NA	1E-03	1E-03	1E-03	1E-03
Incidental Ingestion/Dermal Contact with Sediment							
IR	Ingestion Rate (mg/day)	NA	NA	200[17]	200[3]	100[17]	100[3]
EF	Exposure Frequency (days/year)	NA	NA	52[16]	52[16]	52[16]	52[16]
FI	Fraction Ingested (unitless)	NA	NA	0.5[8]	0.5[8]	0.5[8]	0.5[8]
SA	Skin Surface Available for Contact (cm^2)	NA	NA	2,800[11]	**2,373[3]**	5,700[11]	**6,032[3]**
AF	Soil to Skin Adherence Factor (mg/cm^2/event)	NA	NA	3.3[18]	3.3[18]	0.335[19]	0.335[19]
EV	Event Frequency (events/day)	NA	NA	1	1	1	1
ABS	Absorption Factor (unitless)	NA	NA	chemical-specific[11]	chemical-specific[11]	chemical-specific[11]	chemical-specific[11]
CF	Conversion Factor (kg/mg)	NA	NA	1E-06	1E-06	1E-06	1E-06

Notes:
1 - Adolescents ages 7 to 16 years old.
2 - USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.
3 - USEPA, 2014: Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Assumptions.
4 - USEPA, 2011: 2011 Exposures Factor Handbook, Table 3.5.
5 - USEPA, 1991: Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. OSWER Directive 9285.6-03.
6 - Assume one day a week in warm weather months.
7 - Assume four days a week in warm weather months.
8 - Child and adult recreational users are assumed to be at the site only a portion of the day.
9 - Assume that head, forearms, hands, lower legs, and feet are exposed, USEPA, 1997a.
10 - Assume that head, forearms, hands, lower legs, and feet are exposed, USEPA, 2011.
11 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. PA/540/R/99/005.
12 - Professional judgment.
13 - USEPA, 2008: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Hartford, Connecticut.
14 - USEPA, 2017: Regional Screening Levels Calculator Internet site at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search. Site-specific values for Hartford, Connecticut.
15 - USEPA Region 4, 2000: Supplement Guidance to RAGS: Region 4 Bulletins.
16 - Assume two days a week in warm weather months for reasonable maximum exposure and one day a week for central tendency exposure.
17 - USEPA, 1993: Superfund's Standard Default Exposure Factors for the Central Tendency and Reasonable Maximum Exposure.
18 - USEPA, 2004, 95th percentile for a child playing in wet soil, Exhibit 3-3.
19 - Shoaf et. Al. 2005: Child Dermal Sediment Loads Following Olay in Tide Flat, Journal of Exposure Analysis and Environmental Epidemiology 15, 407-412.

Value is less conservative than value used in 2009 risk assessment.
Value is more conservative than value used in 2009 risk assessment.

TABLE C-10

SUMMARY OF EXPOSURE INPUT PARAMETERS - REASONABLE MAXIMUM EXPOSURES
CHILD AND ADULT RESIDENTS
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Parameter Code	Exposure Parameter	Child Resident		Adult Resident	
		2009 HHRA	Current	2009 HHRA	Current
All Exposures					
ED	Exposure Duration (years)	6[1]	6[2]	24[1]	**20[2]**
BW	Body Weight (kg)	15[1]	15[2]	70[1]	**80[2]**
AT-N	Averaging Time (Non-Cancer) (days)	2,190[1]	2,190[2]	8,760[1]	**7,300[2]**
AT-C	Averaging Time (Cancer) (days)	25,550[1]	25,550[2]	25,550[1]	25,550[2]
Incidental Ingestion/Dermal Contact with Soil					
IR	Ingestion Rate (mg/day)	200[3]	200[2]	100[3]	100[2]
EF	Exposure Frequency Soil (days/year)	350[4]	350[2]	350[4]	350[2]
FI	Fraction Ingested (unitless)	1[3]	1[2]	1[5]	1[2]
SA	Skin Surface Available for Contact (cm^2)	2,800[6]	**2,373[2]**	5,700[6]	**6,032[2]**
AF	Soil to Skin Adherence Factor (mg/cm^2/event)	0.2[6]	0.2[2]	0.07[6]	0.07[2]
EV	Event Frequency (events/day)	1	1	1	1
ABS	Absorption Factor (unitless)	chemical-specific[6]	chemical-specific[6]	chemical-specific[6]	chemical-specific[6]
CF	Conversion Factor (kg/mg)	1E-06	1E-06	1E-06	1E-06
Inhalation Fugitive Dust/Volatile Emissions from Surface Soil					
ET	Exposure Time (hours/day)	24[3]	24[2]	24[3]	24[2]
EF	Exposure Frequency (days/year)	350[4]	350[2]	350[4]	350[2]
PEF	Particulate Emission Factor (m^3/kg)	1.1E+10[7]	1.1E+10[8]	1.1E+10[7]	1.1E+10[8]
Ingestion/Dermal Contact with Groundwater					
IR	Ingestion Rate (L/day)	1.0[9]	**0.78[2]**	2.0[9]	**2.5[2]**
EF	Exposure Frequency (days/year)	350[9]	350[2]	350[9]	350[2]
ET	Exposure Time (hours/day)	0.33[10]	**0.54[2]**	0.33[10]	**0.71[2]**
EV	Event Frequency (events/day)	1[6]	1[2]	1[6]	1[2]
SA	Skin Surface Available for Contact (cm^2)	6,600[6]	**6,365[2]**	18,000[6]	**19,652[2]**
-	Kp (cm/hour), t* (hour/event), τ (hour), and B (unitless)	chemical-specific[6]	chemical-specific[6]	chemical-specific[6]	chemical-specific[6]
CF	Conversion Factor (L/cm^3)	1E-03	1E-03	1E-03	1E-03
Vapor Intrusion					
EF	Exposure Frequency (days/year)	350[4]	350[2]	350[4]	350[2]

Notes:
1 - USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.
2 - USEPA, 2014: Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Assumptions.
3 - USEPA, 1991: Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. OSWER Directive 9285.6-03.
4 - USEPA, 2002: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9365.4-24.
5 - USEPA, 1993: Superfund's Standard Default Exposure Factors for the Central Tendency and Reasonable Maximum Exposure.
6 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. PA/540/R/99/005.
7 - USEPA, 2008: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm.
Site-specific values for Hartford, Connecticut (This Internet site is no longer active).
8 - USEPA, 2017: Regional Screening Levels Calculator Internet site at https://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search.
Site-specific values for Hartford, Connecticut.
9 - USEPA, 1994: USEPA Region I Risk Updates, August 1994.
10 - USEPA, 1997: Exposure Factors Handbook. EPA/600/8-95/002FA.

Value is less conservative than value used in 2009 risk assessment.
Value is more conservative than value used in 2009 risk assessment.

TABLE C-11

COMPARISON OF UNIT CANCER INTAKES
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Exposure	Construction Worker		Industrial Worker		Adolescent Trespasser		Child Recreational User		Adult Recreational User		Child Resident		Adult Resident	
Pathway	2009 HHRA	Current	2009 HHRA	Current	2009 HHRA	Current	2009 HHRA	Current	2009 HHRA	Current	2009 HHRA	Current	2009 HHRA	Current
Soil														
Incidental Ingestion (mg/kg/day)	2.77E-08	2.42E-08	3.49E-07	3.06E-07	2.37E-08	2.31E-08	1.57E-07	1.57E-07	6.71E-08	4.89E-08	1.10E-06	1.10E-06	4.70E-07	3.42E-07
Dermal Contact (mg/kg/day)	8.30E-08	7.76E-08	2.31E-06	1.29E-06	2.51E-07	2.15E-07	8.77E-07	7.43E-07	5.35E-07	4.13E-07	3.07E-06	2.60E-06	1.87E-06	1.45E-06
Inhalation (mg/m^3)	1.21E-09	1.21E-09	7.41E-12	7.41E-12	1.54E-13	1.54E-13	3.56E-13	3.56E-13	1.42E-12	1.19E-12	7.47E-12	7.47E-12	2.99E-11	2.49E-11
Groundwater														
Ingestion (mg/kg/day)	1.68E-10	1.47E-10	NA	NA	NA	NA	NA	NA	NA	NA	5.48E-06	4.27E-06	9.39E-06	8.56E-06
Dermal Contact (cm^2-event)/(kg-day)	5.54E-02	5.18E-02	NA	NA	NA	NA	NA	NA	NA	NA	3.62E+01	3.49E+01	8.45E+01	6.73E+01
Inhalation (mg/m^3)	1.96E-07	1.96E-07	NA	NA	NA	NA	NA	NA	NA	NA	(1)	8.22E-05	(1)	2.74E-04
Surface Water														
Ingestion (mg/kg/day)	NA	NA	NA	NA	NA	NA	3.26E-08	3.91E-07	2.79E-08	1.45E-07	NA	NA	NA	NA
Dermal Contact (cm^2-event)/(kg-day)	NA	NA	NA	NA	NA	NA	2.28E+00	1.93E+00	3.98E+00	3.07E+00	NA	NA	NA	NA
Sediment														
Incidental Ingestion (mg/kg/day)	NA	NA	NA	NA	NA	NA	8.14E-08	8.14E-08	3.49E-08	2.54E-08	NA	NA	NA	NA
Dermal Contact (mg/kg/day)	NA	NA	NA	NA	NA	NA	7.52E-06	6.38E-06	1.33E-06	1.03E-06	NA	NA	NA	NA

Notes:
1 - In the 2009 HHRA, the cancer risk from inhalation was assumed to be equal to the cancer risk from ingestion.
HHRA = human health risk assessment.
NA - Not applicable.
Intake based on current exposure assumptions is less than intake used in the 2009 HHRA.
Intake based on current exposure assumptions is greater than intake used in the 2009 HHRA.

TABLE C-12

COMPARISON OF UNIT NONCANCER INTAKES
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Exposure	Construction Worker		Industrial Worker		Adolescent Trespasser		Child Recreational User		Adult Recreational User		Child Resident		Adult Resident	
Pathway	2009 HHRA	Current	2009 HHRA	Current	2009 HHRA	Current	2009 HHRA	Current	2009 HHRA	Current	2009 HHRA	Current	2009 HHRA	Current
Soil														
Incidental Ingestion (mg/kg/day)	1.94E-06	1.70E-06	9.78E-07	8.56E-07	1.66E-07	1.62E-07	1.83E-06	1.83E-06	1.96E-07	1.71E-07	1.28E-05	1.28E-05	1.37E-06	1.20E-06
Dermal Contact (mg/kg/day)	5.81E-06	5.44E-06	6.46E-06	3.62E-06	1.76E-06	1.50E-06	1.02E-05	8.67E-06	1.56E-06	1.45E-06	3.58E-05	3.03E-05	5.47E-06	5.06E-06
Inhalation (mg/m^3)	8.46E-08	8.46E-08	2.08E-11	2.08E-11	1.08E-12	1.08E-12	4.15E-12	4.15E-12	4.15E-12	4.15E-12	8.72E-11	8.72E-11	8.72E-11	8.72E-11
Groundwater														
Ingestion (mg/kg/day)	1.17E-08	1.03E-08	NA	NA	NA	NA	NA	NA	NA	NA	6.39E-05	4.99E-05	2.74E-05	3.00E-05
Dermal Contact (cm^2-event)/(kg-day)	3.87E+00	3.62E+00	NA	NA	NA	NA	NA	NA	NA	NA	4.22E+02	4.07E+02	2.47E+02	2.36E+02
Inhalation (mg/m^3)	1.37E-05	1.37E-05	NA	NA	NA	NA	NA	NA	NA	NA	(1)	9.59E-04	(1)	9.59E-04
Surface Water														
Ingestion (mg/kg/day)	NA	NA	NA	NA	NA	NA	3.80E-07	4.56E-06	8.14E-08	5.06E-07	NA	NA	NA	NA
Dermal Contact (cm^2-event)/(kg-day)	NA	NA	NA	NA	NA	NA	2.66E+01	2.25E+01	1.16E+01	1.07E+01	NA	NA	NA	NA
Sediment														
Incidental Ingestion (mg/kg/day)	NA	NA	NA	NA	NA	NA	9.50E-07	9.50E-07	1.02E-07	8.90E-08	NA	NA	NA	NA
Dermal Contact (mg/kg/day)	NA	NA	NA	NA	NA	NA	8.78E-05	7.44E-05	3.89E-06	3.60E-06	NA	NA	NA	NA

Notes:
1 - In the 2009 HHRA, the cancer risk from inhalation was assumed to be equal to the cancer risk from ingestion.
HHRA = human health risk assessment.
NA - Not applicable.
Intake based on current exposure assumptions is less than intake used in the 2009 HHRA.
Intake based on current exposure assumptions is greater than intake used in the 2009 HHRA.

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APPENDIX D

DRAFT FINAL FIVE YEAR DATA SUMMARY REPORTS FOR SITE 07 AND 09

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Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, Virginia 23510

February 6, 2018

U.S. Environmental Protection Agency, Region 1
Federal Facilities Superfund Section
Attn: Ms. Christine Williams
5 Post Office Square, Suite 100
Mail Code: OSRR07-3
Boston, MA 02109-3912

Rhode Island, Department of Environmental Management
Office of Waste Management
Attn: Mr. Richard Gottlieb
235 Promenade Street
Providence, RI 02908-5767

RE: Draft Final Fall 2016 Five Year Event Monitoring Report, Site 07 Monitoring Event 20, Former NCBC Davisville, North Kingstown, Rhode Island

Dear Ms. Williams and Mr. Gottlieb:

On behalf of the Naval Facilities Engineering Command (NAVFAC), Mid-Atlantic (MIDLANT), Resolution Consultants is submitting the Draft Final Fall 2016 Five Year Event Monitoring Report for Site 07 Monitoring Event 20. If you have any questions regarding this deliverable, please contact the Navy RPM Mr. Todd Bober or myself.

Sincerely,

Resolution Consultants
Robert Shoemaker
NCBC Davisville Task Order Manager
9400 Amberlgen Boulevard
Austin, TX 78729
robert.shoemaker@aecom.com
512.419.5576

RESOLUTION CONSULTANTS

Document Distribution:
Christine Williams, USEPA (letter, 2 hard copy, 2 CD)
Richard Gottlieb, RIDEM (letter, hard copy, CD)
Todd Bober, Navy (electronic only)
David Barney, Navy (electronic only)
Andrew Glucksman, Mabbett & Associates, Inc. (letter, hard copy, CD)
Steven King, QDC (letter, hard copy, CD)
Susan Licardi, Town of North Kingstown (letter, CD)
Scott Anderson, Tetra Tech (letter, hard copy, CD)
Mark Kauffman, Resolution (letter)
Robert Shoemaker, Resolution (letter, hard copy, CD)

MONITORING EVENT 20
Fall 2016 Five Year Event Monitoring Report
Site 07: Calf Pasture Point
Former Naval Construction Battalion Center (NCBC) Davisville
North Kingstown, Rhode Island

DRAFT FINAL
Version: 1

Prepared for:

Department of the Navy
Naval Facilities Engineering Command
BRAC Program Management Office, East
4911 South Broad Street
Philadelphia, Pennsylvania 19112

Comprehensive Long-Term Environmental Action Navy
Contract Number N62470-11-D-8013

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CTO WE23

Prepared by:

Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, VA 23510

February 06, 2018

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List of Acronyms and Abbreviations

BCT	BRAC Cleanup Team
BRAC	Base Realignment and Closure
bgs	below ground surface
CB&I	Chicago Bridge and Iron
COC	chemical of concern
COPC	chemicals of potential concern
CVOC	Chlorinated Volatile Organic Compounds
EPA	Environmental Protection Agency
EPC	exposure point concentration
ELCR	excess lifetime cancer risk
ERA	Ecological Risk Assessment
ESTCP	Environmental Security Technology Certification Program
HHRA	Human Health Risk Assessment
HI	hazard index
IRP	Installation Restoration Program
LTMP	Long-Term Monitoring Program
LUCIP	Land-Use Control Implementation Plan
ME	Monitoring Event
MS/MSD	matrix spike/matrix spike duplicate
NCBC	Naval Construction Battalion Center
PALs	project action limits
PCB	polychlorinated biphenyls
PCE	tetrachloroethene
PID	photoionization detector
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control

ROD	Record of Decision
ug/L	micrograms per liter
ug/kg	microgram per kilogram
USEPA	United States Environmental Protection Agency
DANC	Decontaminating Agent, Non-Corrosive
RIDEM	Rhode Island Department of Environmental Management
SAP	Sampling and Analysis Plan
SOP	standard operating procedures
TCE	trichloroethene
VC	vinyl chloride
VOCs	volatile organic compounds

1.0 PROJECT BACKGROUND

1.1 Introduction

The results from Monitoring Event (ME) 20, conducted in August and September 2016, December 2016, and January 2017 as part of the Long-Term Monitoring Program (LTMP) at Installation Restoration Program (IRP) Site 07 Calf Pasture Point (see Figure 1), Former Naval Construction Battalion Center (NCBC) Davisville, North Kingstown, Rhode Island (hereafter referred to as Site 07) are provided in this Five Year Event Monitoring Report. ME 20 was conducted in accordance with the Draft Tier II Sampling And Analysis Plan Long Term Monitoring Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill (Tier II LTM SAP) dated June 24, 2016 (Resolution, 2016). A detailed discussion of the site history and conceptual site model can be found in Worksheet 10-1 of the Tier II LTM SAP.

Field and laboratory analytical data collected during ME 20 are summarized in tables and figures attached to this report. In order to facilitate a broader discussion of plume migration in the Discussion of Contaminant Transport Pathways (Section 3.2), plume maps and isoconcentration figures were also generated for ME 18. Data and backup for the tables and figures are provided as Attachments to this report: Field sampling forms are provided in Attachment A, data validation reports are provided in Attachment B, the land-use control implementation plan (LUCIP) checklist is provided as Attachment C, statistical data including Mann Kendall results, Frequency of Detection tables, Trend Plots, and Summary of Detected Analyte tables can be found in Attachment D, and a Tabular Evaluation of Long-Term Trends is provided in Attachment E.

2.0 FIVE YEAR EVENT MONITORING ACTIVITIES

Pre-field tasks (e.g., path clearing), sediment sampling, and surface water sampling were conducted from August 15, 2016 through August 26, 2016. The groundwater and piezometer sampling were conducted from September 07, 2016 through September 28, 2016. Synoptic water level measurements were performed on September 22, 2016. During the synoptic water level measurements, it was discovered that monitoring well MW07-20D was damaged to point that it could not be sampled. Therefore this well along with the corresponding shallow well MW07-20S were abandoned and reinstalled from December 12, 2016 through December 15, 2016 and redeveloped on December 27, 2016. See Section 2.2 for more detail. Newly installed MW07-20DA was sampled on January 13, 2017. The ME 20 sampling activities were conducted in conjunction with IRP Site 09 Allen Harbor Landfill ME 45. A summary of activities performed during ME 20 is summarized below:

- Groundwater samples were collected from 73 monitoring wells
- 20 piezometers were sampled in the intertidal zone along the southern and western shores of Calf Pasture Point.
- Outgoing mid-tide synoptic water level measurements were taken at 55 wells on Calf Pasture Point and the staff gauge in Allen Harbor
- Surface water samples were collected from transects that originate at piezometer locations P07-02, P07-04, P07-06 through P07-10, P07-20, P07-24, and the MW07-43 well cluster (EPA Line C). These samples were collected on August 16, 2016.
- Six surficial sediment samples were collected co-located with piezometers P07-05 through P07-10. These samples were collected on August 15, 2016.

All groundwater, piezometer, sediment and surface water samples were analyzed for the site specific list of volatile organic compounds (VOCs) according to SW-846 Method 8260: benzene, chloroform, 1,2-dichloroethane (1,2-DCA), 1,1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), 1,1,2,2-tetrachloroethane (1,1,2,2-PCA), tetrachloroethene (PCE), 1,1,2-trichloroethane (1,1,2-TCA), trichloroethene (TCE), and vinyl chloride (VC). The monitoring wells and piezometers sampled during ME 20 consist of the Site 07 Five Year Event suite of sampling locations. These sampling locations, along with the sampling rationale, are presented in Table 1.

Sampling locations are depicted on Figure 2. Detected VOCs in the shallow/intermediate overburden wells, deep overburden wells, bedrock wells, piezometers, sediment samples and surface water samples are depicted in Figures 3 through 8. Results are discussed is Section 3.

Synoptic water level measurements were collected from 55 on-site monitoring wells and the staff gauge in Allen Harbor during outgoing mid-tide conditions on September 22, 2016. Monitoring well casing elevations were utilized to calculate groundwater elevations in each well. Depth to groundwater measured in each well and calculated groundwater elevations are summarized in Table 2. These groundwater elevations were used to create shallow and intermediate overburden, deep overburden, and bedrock potentiometric contour maps, presented as Figures 9, 10, and 11, respectively. Groundwater Flow Net diagrams were also produced along cross sections A-A' and B-B' as shown in Figures 12 and 13. Groundwater conditions at Calf Pasture Point are further discussed in Section 3.3.

Field sampling forms completed during ME 20 are provided in Attachment A.

2.1 Monitoring Procedures

Groundwater samples were collected and analyzed for the site specific short list of VOCs from monitoring wells and piezometers using the Environmental Protection Agency (EPA) Region I Low Stress (Low Flow) methodology (EPA, 2010). In cases where a sampling point did not provide sufficient recharge to enable stabilization of the water level, the sampling point was evacuated of standing water and allowed to recharge prior to the collection of water quality data and the groundwater sample. This occurred at the following piezometers during ME 20: P07-15, P07-20, P07-21, and P07-22. All monitoring wells produced sufficient recharge for low-flow sampling. Consistent with EPA methodology, prior to the collection of sample aliquots for laboratory analysis water quality parameters including temperature, pH, specific conductivity, dissolved oxygen, oxidation-reduction potential, salinity and turbidity were measured (where sufficient water was available) and recorded with electronic data collection software. A summary of field measurements recorded during monitoring well and piezometer groundwater sample collection activities is provided on Tables 3 and 4, respectively. Analytical results for the monitoring wells and piezometers are provided in Tables 5 and 6, respectively.

In accordance with the procedures and standard operating procedures (SOPs) outlined in the Sampling and Analysis Plan (SAP), six surficial sediment samples co-located with piezometers P07-05, P07-06, P07-07, P07-08, P07-09, and P07-10 were collected as discreet undisturbed samples and analyzed for the site specific short list of VOCs. Sediment samples were collected at low tide from 0 - 6 inches below ground surface (bgs), immediately adjacent to piezometer locations. A

disposable plastic trowel was used to dig a hole six inches deep. A new, disposable trowel was used for each soil sample location. A photoionization detector (PID) was used to screen the hole for any elevated readings. During ME 20, no elevated PID readings were observed at any sediment location. Therefore, the samples were collected as a discreet sample using a dedicated coring device (i.e., Terra Core® Sampler) directly from the bottom of the sample hole (i.e., 6 inches bgs). Sediment sample locations are shown on Figure 2. Analytical results are provided in Table 7.

As a part of the Five Year Event, surface water samples were collected within a four hour window of two hours before and two hours after low tide along transects that originate at piezometer locations P07-02, P07-04, P07-06 through P07-10, P07-20, P07-24, and the MW07-43 well cluster (EPA Line C). These samples were collected and analyzed for the site specific short list of VOCs in accordance with the SOPs and procedures outlined in the SAP. For each transect, samples were collected at three distinct sampling depths as follows:

- Depth 1: At the harbor floor where water is approximately 6 inches deep (Identified in the sample ID as "FLOOR01");
- Depth 2: At the harbor floor where the water is 3 feet deep (Identified in the sample ID as "FLOOR02");
- Depth 3: At the mid-point of the water column where the water is 3 feet deep (Identified in the sample ID as "MID01")

Surface water transect locations are shown on Figure 2. Analytical results are provided in Table 8.

2.2 Deviations from Planned Monitoring Activities

Chicago Bridge and Iron (CB&I) has been conducting an Environmental Security Technology Certification Program (ESTCP) Rapid Assessment of Remedial Effectiveness and Rebound in Fractured Bedrock demonstration in the immediate vicinity of the MW07-05 well cluster since March 2015. As part of this research project, CB&I began injecting potable water in bedrock well MW07-05R in August 2016 and this continued through October 2016. As a result, the groundwater in this well was not representative of the bedrock aquifer at the time of the ME 20 event. Therefore, during the August 17, 2016 Base Realignment and Closure (BRAC) Cleanup Team (BCT) teleconference, the BCT agreed to skip the sampling of bedrock well MW07-05R during ME 20.

Monitoring well MW07-16D could not be located during the 2016 sampling event. Based on discussions with Tetra Tech, it is believed that this well was destroyed by a storm sometime around 2011 or 2012. The remnants of the well have never been found, so it is assumed that the protective casing was pulled off the well and swept away and the polyvinyl chloride (PVC) riser

snapped off. This well is not deemed critical for the LTM, as the shallow (DPT07-16S), intermediate (DPT07-16I), and bedrock (MW07-16R) wells for this cluster are still intact. As such, this well has been removed from Table 1 and Figure 2.

During the synoptic water level measurements, it was discovered that the well casing for monitoring well MW07-20D had corroded to the point that it had become detached from the well, there was no longer an expansion cap on the well riser, and the well was obstructed at approximately 26 feet bgs. The obstruction appeared to be the result of the well riser being plugged with sand at that depth. The well is 74.5 feet deep and Resolution was unable to determine whether the well riser was completely full of sand from the bottom of the well to the depth of the obstruction or if there was something else obstructing the well and the sand was on top of that obstruction. Regardless, Resolution was unable to clear the obstruction and the well was not able to be used for synoptic water level measurement or sampling. The BCT was notified of this situation via email on September 23, 2016. Following a site visit on September 30, 2016, it was proposed via email that both wells of the MW07-20 well pair (i.e., MW07-20D and MW07-20S) be abandoned and reinstalled approximately 25-30 feet inland of their current location to reduce their exposure to the shoreline elements and potential vandalism from beachgoers. The BCT agreed to this proposal via email on October 4, 2016. The MW07-20 well pair was abandoned and reinstalled as MW07-20SA and MW07-20DA from December 12, 2016 through December 15, 2016 according to the procedures in the Technical Memorandum included as Attachment G of this report. Boring logs and well construction details are also included in Attachment G. The replacement wells were redeveloped on December 27, 2016 and newly installed monitoring well MW07-20DA was sampled on January 13, 2017. Newly installed shallow well MW07-20SA was not sampled, as the original well MW07-20S had been sampled on September 22, 2016.

No other deviations from the planned monitoring activities occurred during ME 20. Synoptic water level measurements and sample collection was performed in accordance with the methodologies established in the Tier II LTM SAP (Resolution, 2016). The land-use control inspection was completed in accordance with the Final Land Use Control Implementation Plan (EA, 2002).

3.0 SUMMARY AND EVALUATION OF DATA

3.1 Analytical Results and discussion

This section discusses chlorinated volatile organic compounds (CVOCs) that were detected in monitoring well, piezometer, sediment, and surface water samples during ME 20 at concentrations exceeding the project action limits (PALs) (where applicable). The PALs for groundwater are established in the SAP (Resolution, 2016). Additional discussion of individual constituents (e.g., 1,1,2,2-PCA) is provided, as appropriate. Sample locations are shown on Figure 2.

Appendix D provides detected results summary tables for groundwater, piezometer, sediment and surface water samples for ME 1 through 20. Additional tables in Appendix D present summary statistics, including frequency of detection, and the mean and maximum of detected concentrations. These tables provide a summary of those contaminants which were detected in groundwater, piezometer and sediment samples, which represent the majority of constituents and are of greatest potential concern. Summary statistics were not performed on surface water data, as there are not enough comparable rounds of data collected to calculate statistics.

Analytical data were also evaluated to identify trends of increasing or decreasing concentrations. Trend graphs for all positively identified CVOCs in all media are provided in Appendix D. Statistical analysis of the data was also performed using the Mann-Kendall Trend Test. A summary of the Mann-Kendall analysis of trends for samples from groundwater monitoring wells and piezometers and for sediment samples are provided in Appendix D. Mann Kendall tests were not performed on surface water data, as there are not enough comparable rounds of data collected to perform the tests.

In order to spatially examine the distribution and temporal trends of selected constituents exceeding the PALs (or spatially and temporally extensive source contaminants), key constituent (i.e., 1,1,2,2-PCA, TCE, cis-1,2-DCE, trans-1,2-DCE and VC) plume maps were generated for ME 18 (Fall 2014 Biennial Event) and ME 20 (Fall 2016 Five Year Event). These plume maps are included as Figures 14 through 33 and discussed in detail in Section 3.2. Plume maps were not generated for ME 17 (Fall 2013 Annual Event) and ME 19 (Fall 2015 Annual Event), as these events reflect smaller sampling events and plume maps generated for these events would not be comparable to those of the larger ME 18 and ME 20 events. As stated in the Source Area Investigation Report (Tetra Tech, 2015), while other contaminants exceeding the PALs are observed at Site 07, these five constituents represent persistent concentrations above the PALs and are spatially extensive and temporally consistent.

To further evaluate the spatial and temporal trends of these selected compounds, isocontours were illustrated on cross-sections A-A' and B-B' for ME 18 and ME 20. These isocontour figures are provided as Figures 34 through 53 and discussed in detail in Section 3.2. Plume maps and isocontour figures were drawn according to the data set from that particular monitoring event. For the purposes of the plume maps the shallow zone was considered 0-30 feet bgs while the deep zone was considered 30 feet bgs and deeper. ME 18 represented the Biennial Event list of sampling locations, while ME 20 represented the Five Year Event list of sampling locations. Therefore, the isocontours and plumes were drawn with the data for that particular ME and may not accurately reflect the distribution of contamination in areas which were not sampled as part of that ME.

An extensive spatial and temporal analysis was performed using the available data. The analysis will assist in understanding current conditions and will allow for the estimation of future contaminant migration, where applicable, to ensure the selected remedy remains protective as mandated by the Record of Decision (ROD).

3.1.1 Volatile Organic Compounds in Groundwater Samples from Monitoring Wells

Consistent with previous monitoring reports and the Source Area Investigation Report (Tetra Tech, 2015), VOCs which have been detected in Site 07 groundwater samples collected from monitoring wells during ME 20 at concentrations greater than the PALs include the CVOCs TCE, 1,1,2-TCA, 1,1-DCE, 1,2-DCA, cis-1,2-DCE, trans-1,2-DCE, PCE, VC, and the non-chlorinated VOC benzene. The VOCs, 1,1,2,2-PCA, and chloroform were also detected, but these compounds have no associated PAL. The principle CVOCs discussed in this report include the parent constituent, 1,1,2,2-PCA, degradation product TCE, and TCE daughter products cis-1,2-DCE, trans-1,2-DCE and VC.

1,1,2,2-Tetrachloroethane. No PAL has been established for 1,1,2,2-PCA in the groundwater at Site 07; however, this is a commonly detected compound at NCBC Davisville and a known component of Decontaminating Agent, Non-Corrosive (DANC), and was therefore included in the statistical analysis and discussion.

Consistent with previous MEs, 1,1,2,2-PCA has been detected in shallow / intermediate zone groundwater samples collected from the central portion of the Site and near the entrance channel. The highest concentration of 1,1,2,2-PCA during ME 20 in the shallow / intermediate groundwater zone occurred at MW07-39S (1,650 ug/L). The maximum detected concentrations in the shallow groundwater zone have historically occurred at MW07-19S and MW07-39S. However, statistically-significant downward trends continue to be present at MW07-19S and MW07-39S (see Attachment D).

Detected concentrations of 1,1,2,2-PCA have occurred across much of the Site in the deep groundwater zone. Currently, the highest concentrations of 1,1,2,2-PCA are found in the central portion of the site between MW07-17D and MW07-39-03D with the highest concentration observed during ME 20 at DPT07-39-04D (10,000 ug/L). These wells (where detections greater than 5,000 ug/L occur) are in the central portion of the Site, immediately downgradient from the former source area. In general, 1,1,2,2-PCA concentrations at these wells have fluctuated slightly over time and all exhibit either statistically-significant decreasing trends or no trends.

Between the central portion of the Site and the shorelines, either statistically-significant downward trends or no trends are generally observed. This suggests that, overall, the 1,1,2,2-PCA plume in the deep zone is degrading in some areas and remaining relatively stable in other areas. One exception is MW07-11D, located in the eastern portion of the Site (i.e., toward Narragansett Bay), where an upward trend is observed. However, concentrations for 1,1,2,2-PCA have been 60 ug/L, 57 ug/L, 56 ug/L, and 44 ug/L over the past three monitoring events, respectively. More data is needed to determine if this represents a leveling off or perhaps even a decline in the 1,1,2,2-PCA concentration trend at MW07-11D. For the remainder of the site, concentrations of 1,1,2,2-PCA appear to be either stable or decreasing for the most part.

Trichloroethene. Consistent with previous MEs, TCE has been detected within the shallow / intermediate groundwater zone at concentrations exceeding the PAL (5 ug/L) across the central portion of the Site, from the Entrance Channel near monitoring well MW07-21S north to MW07-41I. The highest concentration in the shallow / intermediate zone observed during ME 20 was at MW07-39S (13,800 ug/L)

In the deep overburden zone, elevated levels of TCE (exceeding the PAL) have been detected across the Site. Values greater than 5,000 ug/L were observed along the primary migration pathway from MW07-15D in the northern central part of the site down to MW07-21D near the entrance channel, with the highest concentration in the deep zone observed at DPT07-39-04D (73,000 ug/L).

Statistically-significant upward trends are observed for TCE concentrations in monitoring wells MW07-09R, MW07-11D, MW07-12D, MW07-19D, MW07-21D, MW07-21R, MW07-24DUT, and MW07-34D. These observations are consistent with the trends observed in the Site Investigation Report (Tetra Tech, 2015) and all these wells except MW07-12D are already sampled annually (MW07-12D is sampled biennially). The recent data from these wells suggests that TCE concentrations may be leveling off. MW07-12D and MW07-24DUT have seen only minor TCE concentrations fluctuations since ME 18. While MW07-21D and MW07-21R saw their highest TCE

concentration during ME 18, TCE concentrations at both wells have decreased since that event. Similarly, MW07-11D and MW07-19D saw their highest TCE concentrations during ME 19, but their TCE concentrations decreased during ME 20. The lowest concentration in five years was observed in MW07-34D during ME 20. These wells with statistically significant upward trends are within the TCE plume boundaries, and these trends along with the recent data indicate that, while the overall plume extents are relatively unchanged, some dissolution, redistribution, and degradation of mass is occurring within the plume. Statistically significant downward trending TCE concentrations are observed at twenty eight monitoring wells sampled during ME 20. No trends were observed for the remaining wells sampled during ME 20 that had enough data to run the Mann Kendall trend test.

cis-1,2-Dichloroethene. cis-1,2-DCE is a degradation product of TCE, and was observed at elevated concentrations throughout the shallow and deep groundwater zones with a spatial distribution similar to TCE. Concentrations of cis-1,2-DCE have exceeded the PAL of 70 ug/L in the shallow / intermediate groundwater zone across the central portion of the Site, at monitoring well locations MW07-19S, MW07-21S, MW07-39I, MW07-39S, MW07-41I, MW07-42I. The highest concentration detected in the shallow / intermediate zone during ME 20 was at MW07-42I (6,100 ug/L).

PAL exceedances of cis-1,2-DCE were also observed in the deep groundwater zone across much of the site during ME 20 at monitoring wells MW07-09D, MW07-11D, MW07-17D,MW07-19D, MW07-21D, MW07-23D, MW07-24D, MW07-27D, MW07-34D, MW07-39D, MW07-40D, MW07-45D, DPT07-39-03D/I, DPT07-09-27D, DPT07-16I and DPT07-39-4D. The highest concentration detected in the deep zone during ME 20 was at DPT07-39-03I (2,990 ug/L).

Eight monitoring wells (MW07-09R, MW07-11D, MW07-19D, MW07-21D, MW07-23D, MW07-24DUT, MW07-27D, MW07-34D) had statistically significant upward trends for cis-1,2-DCE during ME 20. Four of these locations (MW07-19D, MW07-21D, MW07-23D, MW07-27D) saw their highest cis-1,2-DCE concentration during ME 18 and have shown decreasing concentrations since that event. MW07-24DUT has shown very stable concentrations over the past 5 years. MW07-09R has been decreasing in concentration over the past five years, with its lowest concentrations in five years during ME 20. MW07-11D and MW07-34D had their highest cis-1,2-DCE concentrations during ME 19, but their concentrations decreased significantly during ME 20. As mentioned above cis-1,2-DCE is a degradation product of TCE and similar to TCE these trends and recent data indicate that, while the overall plume extents are relatively unchanged, some dissolution, redistribution, and degradation of mass is occurring within the plume. There were 18 statistically significant downward trends for cis-1,2-DCE during ME 20 and the majority of sampled locations (27) had either no observable or no significant trend in concentrations.

trans-1,2-Dichloroethene. During ME 20, concentrations of trans-1,2-DCE exceeded the PAL of 100 ug/L in the shallow / intermediate groundwater zone at four monitoring well locations (MW07-19S, MW07-39I, MW07-39S, MW07-42I) in the central portion of the Site. The highest concentration detected in the shallow/intermediate zone during ME 20 was at MW07-39I (635 ug/L).

PAL exceedances of trans-1,2-DCE were observed in the deep groundwater zone along the primary migration pathway from the center of the site towards the entrance channel at monitoring wells MW07-09D, MW07-17D, MW07-21D, MW07-27D, MW07-39D, DPT07-09-27, DPT07-39-03I and DPT07-39-03D. The highest concentration detected in the deep zone during ME 20 was at MW07-17D (630 ug/L). trans-1,2-DCE is also a degradation product of TCE, and is also observed throughout the shallow and deep groundwater zones.

The concentration trends observed for trans-1,2-DCE are primarily no or not significant trends (35 locations) and decreasing trends (13 locations), compared to only 4 increasing trends (MW07-09R, MW07-11D, MW07-19D, and MW07-34D). Of the four wells with increasing trends, MW07-09R, MW07-19D, and MW07-34D showed the lowest concentration in the past five years during ME 20.

Vinyl Chloride. VC exceeded the PAL of 2 ug/L in groundwater from the shallow / intermediate zone during ME 20 at only three wells (MW07-41I, MW07-42I, MW07-21S) from the central portion of the Site to the shoreline. The highest concentration observed in the shallow / intermediate zone was 140 ug/L at MW07-42I.

In the deep zone, VC was detected above its PAL value at six locations (DPT07-39-04D, DPT07-39-03D, DPT07-39-03I, MW07-39D, MW07-27D and MW07-19D) across the central portion of the site down to the entrance channel, and at low levels below 10 μg/L at two locations on the western shoreline (DPT07-16I, and DPT07-24D).

Similar to trans-1,2-DCE, the concentration trends observed for VC are primarily no or not significant trends (35 locations) or decreasing trends (12 locations) compared to only 7 increasing trends (MW07-09R, MW07-11D, MW07-19D, MW07-27D, MW07-21D, MW07-39S and MW07-34D). Vinyl chloride is the final chlorinated VOC degradation product of TCE and most of the monitoring wells with increasing trends also show increasing trends for TCE and cis-1,2-DCE, indicating that biodegradation of TCE is occurring within the plume.

Other VOCs. The Site 07 VOC list also includes 1,1,2-TCA, chloroform, PCE, benzene, 1,2-DCA, and 1,1-DCE. A statistical summary of these compounds is provided Appendix D.

3.1.2 Volatile Organic Compounds in Groundwater Samples from Piezometers

This section summarizes the VOCs detected at concentrations exceeding PALs in aqueous samples from piezometers sampled during the ME 20 event. The principal VOCs which have been detected in groundwater at concentrations greater than the PALs include the parent compound 1,1,2,2-PCA and its degradation products TCE and VC.

1,1,2,2-Tetrachloroethene. During ME 20 1,1,2,2-PCA was detected at concentrations greater than the PAL of 13.9 ug/L in piezometers P07-07, P07-08, P07-09, and P07-10. These piezometers are located downgradient of the former source area and along the shoreline of the Entrance Channel, and these locations and concentrations are consistent with previous MEs. Concentrations at these shoreline piezometers have fluctuated over time and show either downward or no statistically-significant trend.

Trichloroethene. During ME 20, TCE was detected at concentrations greater than the PAL of 184 ug/L at piezometers P07-08 and P07-09. These locations are along the Entrance Channel shoreline downgradient of the former source area, as noted above, and TCE concentrations at these locations have fluctuated over time and show no statistically-significant trends.

Vinyl Chloride. During ME 20 VC exceeded the PAL of 3.78 ug/L at piezometers P07-05, P07-06, P07-09, and P07-20. VC concentrations at these piezometer locations along the shoreline and downgradient of the former source area have fluctuated over time, with statistically-significant upward trends at P07-05 and P07-06, consistent with previous MEs.

Other VOCs. Additional VOCs that have been detected in piezometers include 1,1,2-TCA, 1,1-DCE, 1,2-DCE, benzene, cis-1,2-DCE and trans-1,2-DCE. A statistical summary of these compounds is provided in Appendix D.

3.1.3 Volatile Organic Compounds in Sediments

The only compound detected in sediment during ME 20 was PCE, detected at a concentration of 12 ug/kg at locations SED07-05 and SED07-10. Consistent with previous reports, since sediment samples are collocated with piezometer samples where elevated detections are found, no further analysis is provided for these limited detections. A statistical summary of detected compounds in sediment is provided in Appendix D. The sediment data was also used as part of a shoreline human health risk assessment (HHRA) update at Site 07. A summary can be found in Section 3.4, the HHRA update in its entirety can be found in Attachment F.

3.1.4 Volatile Organic Compounds in Surface Water

Low detections of CVOCs were observed during the ME 20 event in surface water samples collected at transects beginning at P07-08 and P07-24. The CVOCs 1,2-DCA, cis-1,2-DCE, TCE, and VC were detected along transect P07-24 and cis-1,2-DCE was detected along transect P07-08. All detections were below 10 ug/L. Appendix D contains trend plots and summary tables comparing surface water data collected during ME 20 to the previous surface water sampling event in 2012. As there are only two comparable data points for this media, no further statistical analysis was performed. The surface water data was also used as part of a shoreline HHRA update at Site 07. A summary can be found in Section 3.4, the HHRA update in its entirety can be found in Attachment F.

3.2 Discussion of Contaminant Transport Pathways

In order to facilitate a greater understanding of the extent of groundwater contamination at Site 07, and to provide information to support the upcoming Fourth Five Year Review, updated plume maps and isocontour figures were prepared for TCE, cis-DCE, trans-DCE, 1,1,2,2-DCA, and VC. Plume maps were generated for the shallow and deep overburden zones, and isocontour figures were generated for cross sections A-A' and B-B'. One set of figures was produced using data collected during ME 20, and one set was produced using data collected during ME 18. These maps and figures are presented as Figures 14 through 53. Based on analysis of these updated maps and figures, along with review of the previous conclusions drawn in the Source Area Investigation and Long-Term Monitoring Data Summary Report (Tetra Tech, 2015), the following general conclusions have been made for the ME 20 Five Year Event Monitoring Report:

CVOC contamination in the shallow and intermediate groundwater zones occurs in the central portion of the site and the Entrance Channel.

- Highest concentrations of CVOCs in the shallow / intermediate groundwater zone are observed in wells MW07-42I, MW07-39S/I, MW07-41I and MW07-19S.
- Low level contamination extends to the shoreline piezometers (assumed to contain a mixture of groundwater and surface water).
- Very low or no detections were observed in the shallow/intermediate zone in the north, west, or eastern areas of Site 07.

The highest and most widespread concentrations of CVOCs at Calf Pasture Point are occurring in the deep overburden and shallow bedrock aquifers.

- Highest concentrations site wide occur in approximately the central portion of the Site near the former source area, between MW07-17D and DPT07-39-03.
- Three primary migration pathways are evident from the former source area as concluded in the Source area Investigation Report (Tetra Tech, 2015.) One toward Allen Harbor, one toward the Entrance Channel and one toward Narragansett Bay.
- The flow towards Narragansett Bay has two components, one heading to the east, and one heading towards the south east.
- The largest mass of CVOC contamination is following the primary pathway towards the entrance channel, consistent with the Source Area investigation Report. (Tetra Tech, 2015.)

Along cross-section A-A', CVOC concentrations are highest at the former source area between MW07-17D and DPT07-39-03. Contamination is migrating to the offshore environment through two main vertical pathways. Migration is observed from MW07-39I/S to MW07-42I to MW07-19S to MW07-21S in the shallow zone, and within the deep overburden and shallow bedrock toward MW07-21R in the deep zone.

- The highest concentrations appear to be moving in the deep overburden and shallow bedrock zones towards MW07-21R.
- Lower, but still elevated concentrations are migrating upward through MW07-39I/S, MW07-42I, MW07-19S, MW07-21S, and appear to be discharging near P07-09.

Consistent with previous MEs, contamination along cross section B-B' does not appear to be effectively migrating upward at the Narraganset Bay and Allen Harbor shorelines, likely due to increased silt thickness that limits upward migration on the eastern and western boundaries of Calf Pasture Point.

- Along the western portion of cross-section B-B' contamination does not appear to be migrating upward through the silt layer to the shoreline, as evidenced by the nondetect VOC results in shallow zone wells MW07-04S, MW07-38S, and MW07-33S during ME 20. Concentrations observed in the deep zone of the western portion of cross section B-B' are generally much lower compared to other portions of the plume.
- Along the eastern portion of cross section B-B', contamination does not appear to be reaching the eastern shoreline of Site 07. Low concentration or nondetect results in the MW07-18 cluster and MW07-20 cluster support the conclusion discussed in the Site Investigation Report

(Tetra Tech, 2015) that the silt and clay layers along the eastern shoreline are acting as a confining layer.

These observations are generally consistent with the conclusions reached in the Source Area Investigation Report (Tetra Tech, 2015). However, during ME 20 TCE, cis-1,2-DCE, and VC were detected above their PALs for the first time at well DPT07-16I, suggesting that migration along a new deep zone pathway may be occurring along the northeastern side of the Site. Migration along this pathway is limited to the deep zone, as evidenced by the absence of detected results in DPT07-16S. Therefore, migration along this new pathway does not pose risk to the eastern Narragansett Bay shoreline. In addition, the lateral extent of the pathway appears limited, as evidenced by the nondetect or detected results below the PALs at wells DPT07-09-28D, DPT07-29-34I, MW07-29D, DPT07-18I, MW07-18D, DPT07-30I, and MW07-30D.

The contaminant migration pathways are generally complex, with contaminants moving within different groundwater zones at different locations across the Site. Several wells on Site 07 are tidally influenced, which also adds to the complexity of fate and transport on the site. The tidal cycles may influence contaminant concentrations observed in nearshore groundwater by introducing greater variability in the contaminant concentrations during mid and high tide conditions due to the exchange of fresh and saline groundwater. During low tide the plume is not prevented from discharging into Narragansett Bay. However, discharge at the down gradient shoreline sample locations DPT07-016S and MW07-20S has not been observed, as evidenced by the consistent nondetect VOC results at these locations. In addition, EPA installed and sampled 31 piezometers along the Narragansett Bay shoreline in 2010 and did not detect any TCE. A detailed tidal study was conducted by Tetra Tech from March 21, 2012 through June 11, 2012; the findings of this study are described in the Source Area Investigation Report (Tetra Tech, 2015).

Consistent with previous monitoring events, the location of the highest contamination is near the central portion of the Site, downgradient from the former source area. From a migration perspective, the Entrance Channel appears to be the only shoreline location being effectively reached by contamination. However, low-level contamination also reaches Allen Harbor along the western portion of cross-section B-B', but this is generally confined to the deep overburden and shallow bedrock zones.

Mass balance calculations and specific detailed assessments of attenuation mechanisms for the CVOC plume were not performed as part of the ME 20 Five Year Event Monitoring Report. An analysis of mass balance and natural attenuation mechanisms will be provided in the upcoming Fourth Five Year Review.

3.3 Evaluation of long-term groundwater flow conditions

The hydrogeology for the Site was analyzed with two different methods in order to comprehensively understand how groundwater flows in the subsurface between the former source area and shorelines. Synoptic water level measurements were collected during each ME to provide hydraulic head data for the development of potentiometric maps for the evaluation of groundwater flow directions and estimation of hydraulic gradients. During each ME, a synoptic round of groundwater level measurements was collected from 55 monitoring wells and a staff gauge in Allen Harbor within a time frame of 45 minutes at mid-tide conditions. Since tides significantly impact the Site, a long-term tidal study was performed over several months in 2012 and data analyzed in order to determine transient flow and gradients. A summary of this event is provided in the Source Area Investigation Report (Tetra Tech, 2015). This section provides a discussion of hydrogeological interpretations made based on the synoptic water level data collected during ME 20 and since 1995.

3.3.1 Synoptic Groundwater Flow

Synoptic groundwater measurements were recorded on September 22, 2016 in 53 monitoring wells at Site 07. Measurements were not taken at MW07-05R due to an ongoing bedrock study by CB&I, and measurements were not taken at MW07-20D due to damage to the well (see Section 2.2). These groundwater measurements and the corresponding groundwater elevations from ME 20 are summarized on Table 2. A surface water level reading was also recorded from the Allen Harbor Staff Gauge as part of the synoptic water level measurements. Groundwater measurements were recorded during outgoing mid-tide within a 45 minute window to minimize the transient effects tide has on groundwater levels (and flow) at Site 07. Groundwater potentiometric contours were created using a kriging algorithm in Surfer® 9 modeling software for three distinct units of the aquifer at the Site: shallow and intermediate overburden, deep overburden, and bedrock. Potentiometric contour maps are presented for each depth interval as Figures 9, 10, and 11, respectively.

In general, groundwater flow directions at Site 07 are similar for the shallow and deep zones and are similar between monitoring events. Groundwater elevations are not expected to vary significantly based on the control elevation of the surrounding surface water. The following sections present a more detailed groundwater flow analysis for each groundwater zone.

Groundwater contours were also developed to show vertical groundwater flow along two transects trending approximately north to south (Transect A-A',Figure 12) and west to east (Transect B-B', Figure 13) across Site 07. The locations of these transects are presented on Figure 2. The associated cross sections incorporate all vertical depth intervals (i.e., shallow and intermediate

overburden, deep overburden, bedrock) to produce vertical head distributions. Vertical flow shown on cross sections A-A' and B-B' during ME 20 indicate slightly different flow patterns in the northern area of the site to previous year's maps due to lack of data at MW07-05R. The comparatively high groundwater elevation at this well observed in ME 17 through 19 as well as previous MEs creates a zone of upwelling in the northern area of Site 07 which is not reflected during ME 20 in Figures 12 and 13. It is assumed this area of upwelling is still present, however as Figures 12 and 13 were created using only data available from ME 20, these features are not observed.

3.3.2 Groundwater Flow Zones

The following sections describe groundwater flow by zone at Site 07.

Shallow Intermediate (Overburden) Zone

The shallow and intermediate overburden potentiometric surface is presented on Figure 9. Based on the groundwater elevation contours, groundwater generally flows from north to south across Site 07, with localized deviations. On the northwestern portion of Site 07, groundwater flows northeast to southwest, toward Allen Harbor. In central portions of Site 07, groundwater flows from northwest to southeast toward the Allen Harbor entrance channel and Narragansett Bay. Based on the groundwater contours, groundwater flow along the eastern portions of Site 07 is from north to south with a portion of the groundwater turning southwest toward the Allen Harbor entrance channel and a portion flowing toward Narragansett Bay, which is consistent with previous monitoring events. Based on groundwater contour maps, groundwater flow from the majority of the Site appears to be focused toward the Allen Harbor entrance channel.

Generally, the gradients are fairly uniform throughout the Site, especially from the vicinity of the bedrock outcrop in the northern portion of the site toward the shoreline of Allen Harbor and the Entrance Channel. Gradients are gentler (i.e., flatter) between the vicinity of the bedrock outcrop toward Narragansett Bay.

Deep (Overburden) Zone

The deep overburden potentiometric surface is presented on Figure 10. Based on the groundwater elevation contours, groundwater flows radially from the northwestern portions of the Site. In the western portion of the Site, groundwater flows northeast to southwest toward Allen Harbor. In eastern portions of the Site, groundwater generally flows from north to south, with components flowing northwest to southeast. The lowest observed groundwater elevation occurred at MW07-11D, upgradient of Narragansett Bay. It should be noted that historically, the lowest groundwater elevation is observed at MW07-20D, but as mentioned in Section 3.3.1 MW07-20D was not

available for the ME 20 synoptic water level measurements. The highest groundwater elevations are consistently in the vicinity of the bedrock outcrop. Water level elevations were approximately 3 to 4 feet above MSL in the vicinity of the bedrock outcrop and approximately 0.5 to 3 feet above MSL along the shorelines. Ultimately, deep groundwater would flow towards and beneath Narragansett Bay, but discharge to the shoreline is unlikely due to laterally extensive silt.

Bedrock Zone

The bedrock potentiometric surface is presented on Figure 11. Based on limited bedrock groundwater elevation data, groundwater flows radially from the Site 07 former source area southwest toward Allen Harbor, south toward the Allen Harbor entrance channel, and southeast toward Narragansett Bay. The lack of a synoptic water level measurement from MW07-05R (see Section 3.3.1) did not change the interpretation of bedrock groundwater flow as compared to previous MEs.

Overall, the gradient appears to be fairly uniform throughout the Site from the vicinity of the bedrock outcrop and central portions of the Site to the shorelines. Approximately 0.5 feet of elevation change occurs over this distance (highest elevations of Site to shoreline). As such, gradients are higher toward Allen Harbor and the Entrance Channel compared to Narragansett Bay since the total travel distance is shorter and potentiometric elevation along the shorelines is similar.

Cross Section – Vertical Flow

Cross section A-A' is located in the central portion of Site 07 and trends north to south originating in the former source area at Site 07 and ending in the Allen Harbor entrance channel (see Figure 2). The cross section A-A' groundwater contours are presented on Figure 12. As indicated by the groundwater contours, groundwater flows vertically downward with a component flowing horizontally from the north to south at the start of the cross section. In central to downgradient portions of the cross section, groundwater flow is horizontal to the south, with a slight upward vertical component in the south.

Cross section B-B' trends west to east from Allen Harbor to Narragansett Bay (see Figure 2). The cross section B-B' groundwater contours are presented on Figure 13. As shown on the cross section, in western portions of the cross section, groundwater flows vertically upwards and then downward from the west. In eastern portions of the cross section, flow is trending slightly upward and horizontally to the east.

3.3.3 Comparison with Previous Events

The hydrogelogy and groundwater flow observed during ME 20 is consistent with the previous three MEs. Groundwater elevations may vary from event to event, but overall groundwater flow pathways are generally uniform over the course of time. The highest groundwater elevations are consistently observed in the northern portion of the Site, near the bedrock outcrop, and the lowest are observed along the shoreline. Overall, groundwater flow is radial from the bedrock outcrop toward the eastern, southern and western shorelines of Calf Pasture Point. No significant changes in groundwater flow interpretation have been noted since the conclusions drawn in the Source Area Investigation Report (Tetra Tech, 2015).

3.4 Updated Human Health Risk Assessment Update

A HHRA update was conducted for the shoreline surface water, sediment, and groundwater in shallow piezometers at Site 07. An ecological risk assessment (ERA) update was not performed as part of the ME 20 Five Year Event Monitoring Report but will be performed as part of the upcoming Fourth Five Year Review. The objective of this HHRA update (also referred to as the 2017 HHRA update) is to determine whether there have been any changes and/or updates to USEPA HHRA guidance or site-specific conditions since the 2012 HHRA performed in support of the Third Five-Year Review Report (Tetra Tech, 2013) that would result in a change of the conclusions of the 2012 HHRA, or whether the conclusions of the 2012 HHRA remain valid. This section provides a summary of the HHRA update. The full HHRA update is provided as **Attachment F**.

Revised formal risk/hazard calculations were not performed as part of this 2017 HHRA update. However, a quantitative evaluation of the potential exposure to Site 07 shoreline shallow groundwater, surface water, and/or sediment by recreational users was conducted to determine whether updates to the 2012 HHRA would result in cumulative potential cancer risk and/or noncancer hazard above USEPA and RIDEM target risk/hazard levels.

The 2012 HHRA (Tetra Tech, 2013) concluded that the potential risks associated with potential human exposure to surface water, sediment, and shallow groundwater did not exceed United States Environmental Protection Agency (USEPA) or Rhode Island Department of Environmental Management (RIDEM) target levels. Potential risk associated with the consumption of shellfish obtained off the shoreline of Allen Harbor was identified above USEPA and RIDEM target levels for arsenic, mercury, and polychlorinated biphenyls (PCBs), however, these chemicals were determined not to be related to Site 07 activities.

Data evaluated in the 2017 HHRA update were selected to be representative of current conditions, and include shallow groundwater samples collected from the twenty shoreline piezometers located

on the southern and western boundaries of Site 07 between October 2013 and September 2016; surface water samples collected from three depths along ten transects located along the southern boundary of Site 07; and sediment samples collected in August 2016 from six locations along the southern boundary of Site 07.

The receptors and exposure pathways evaluated in the 2017 HHRA update are consistent with those evaluated in the 2012 HHRA based on current and potential future land use, including recreational users exposed to shoreline media while swimming, wading, or clamming/harvesting shellfish.

The overall conclusion of this 2017 HHRA update is that the conclusions of the 2012 HHRA remain valid and exposure to shallow groundwater, surface water, and sediment along the Site 07 shoreline by recreational users does not result in a potential excess lifetime cancer risk (ELCR) or noncancer hazard index (HI) above USEPA or RIDEM target levels. The potential cancer risk and noncancer HI results are summarized by receptor, as follows:

3.4.1 Current/Future Recreational Users – Swimming and Wading Scenarios

Child, adolescent, adult, and lifelong recreational users were evaluated for exposure to shoreline surface water and sediment via incidental ingestion and dermal contact while swimming or wading. No sediment chemicals of potential concern (COPCs) were identified (i.e., sediment concentrations are less than risk-based screening levels). This exposure scenario was evaluated based on surface water samples collected at low tide at the harbor floor and mid-point of the water column. Samples collected in surface water approximately three feet deep (i.e., Depths 2 and 3/Case 1) were utilized for evaluation of the swimming scenario. Samples collected in surface water approximately six inches deep (i.e., Depth 1/Case 3) were utilized for evaluation of the wading scenario.

The potential cumulative ELCRs associated with a recreational user wading scenario are less than USEPA's target risk range of 10^{-6} to 10^{-4} and RIDEM's target risk level of 10^{-5}. The total HI is less than USEPA/RIDEM's target HI of 1.

The potential cumulative ELCRs and HI associated with a recreational user wading scenario are less than or within USEPA's target risk range of 10^{-6} to 10^{-4}, and less than USEPA/RIDEM's target HI of 1, respectively. However, the potential cumulative ELCR associated with the child and lifelong recreational user wading scenario is slightly higher than RIDEM's target risk level of 10^{-5}. VC in surface water (incidental ingestion exposure route) was identified as the risk driver causing the exceedance of RIDEM's target risk level based on the exposure point concentration (EPC) equal to the one detected concentration. Due to the low frequency of detection (approximately 0.03

percent), VC is not identified as a surface water chemical of concern (COC). The total potential cumulative ELCRs for the child and lifelong recreational user wading scenario are less than 10^{-5} if vinyl chloride is excluded as a COPC.

These results indicate that the conclusions of the 2012 HHRA, which indicated that potential exposures to sediment and surface water along the Site 07 shoreline by recreational users while swimming or wading do not pose a cancer risk or noncancer hazard above USEPA or RIDEM target levels. As a result, adverse health effects are not anticipated for this receptor.

3.4.2 Current/Future Recreational Users – Shell Fisherman

Adolescent and adult recreational users were evaluated for exposure to shallow groundwater along the shoreline via dermal contact; and exposure to shoreline surface water and sediment via incidental ingestion and dermal contact while clamming/harvesting shellfish. No sediment COPCs were identified (i.e., sediment concentrations are less than risk-based screening levels). This exposure scenario was evaluated based on surface water samples collected at low tide at the harbor floor and mid-point of the water column where water is approximately six inches deep (i.e., Depths 1 and 2/Case 3), and shallow groundwater samples within each of the groundwater exposure points (Southern Boundary, Shoreline, Western Boundary, Mid-Southern Boundary).

The potential cumulative ELCRs associated with a recreational user – shell fisherman scenario are less than USEPA's target risk range of 10^{-6} to 10^{-4} and RIDEM's target risk level of 10^{-5}. The total HI is less than USEPA/RIDEM's target HI of 1. These results indicate that the conclusions of the 2012 HHRA, which indicated that potential exposures to shallow groundwater, sediment, and surface water along the Site 07 shoreline by recreational users while clamming/harvesting shellfish do not pose a cancer risk or noncancer hazard above USEPA or RIDEM target levels, remain valid. As a result, adverse health effects are not anticipated for this receptor.

4.0 QUALITY ASSURANCE/QUALITY CONTROL

The data obtained during ME 20 were determined to be of sufficient quality to be used to evaluate the long-term effectiveness of the remedial action (i.e., long-term monitoring and 5-year reviews). Quality assurance/quality control (QA/QC) samples collected during this sampling event included matrix spike/matrix spike duplicate (MS/MSD) samples, field duplicate samples, and trip blanks. Select non-compliances for accuracy, precision, and sensitivity are discussed in the data validation reports but are not expected to impact the overall usability of the data. Laboratory result data was 98.7% complete, with the following exceptions:

- The non-detected result for 1,1,2,2-tetrachloroethane in sediment sample SED07-10-ME20-1 was rejected (R) due to low internal standard areas. The affected result is not usable for project decisions.
- A total of twenty (20) non-detected results were rejected (R) in groundwater samples MW07-13S-ME20-1 and MW07-13D-ME20-1 due to holding time exceedances. The affected results are not usable for project decisions.

The analytical results from samples collected during ME 20 were subject to Tier I Plus (stage 2B manual) validation in accordance with the Draft Tier II LTM SAP (Resolution, 2016); *Region I, EPA New England Environmental Data Review Program Guidance (April 2013); EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Guidance/Procedures (April 2013);* and *National Functional Guidelines for Evaluation Organic Data Review* (September 2016). Standard EPA data qualifiers were assigned to the data during validation to assess data quality. These qualifiers include “J”, “UJ”, “U”, and “R” are defined in the data validation memoranda presented in Attachment B. The validated analytical data are presented in Tables 5 and 6.

5.0 SITE INSPECTION ACTIVITIES

Site inspection activities at Site 07 were completed on September 23, 2016 in accordance with the Final Land-Use Control Implementation Plan (EA, 2002). The on-site monitoring wells were observed to be capped, labeled, locked, and in good condition, with the exception of MW07-20D, which was found to be inundated with sand at the time of inspection. Weathered padlocks were replaced on select wells as needed during the ME 20 field activities. A copy of the LUCIP checklist is provided in Appendix C.

The MW07-20 well pair was abandoned and re-installed by Resolution Consultants in December 2016 (see Section 2.1). During the MW07-20 well pair installation activities on December 12, 2016, Resolution observed that the Town of North Kingstown had excavated soils from the access road at Calf Pasture Point. The excavated area was approximately 20 feet wide by 100 feet long and 1 to 2 feet deep. The soil was transported inland and staged along the side of the access road. The excavated area was backfilled with sand from unknown origin.

6.0 CONCLUSIONS

As required by the ROD for Site 07, LTM was performed between 2013 and 2016, in accordance with the updated LTM scope and protocols that are currently being memorialized in the Draft Tier II LTM SAP (Resolution, 2016). Recommendations in the Source Are Investigation Report (Tetra Tech, 2015) have been implemented and the conclusions drawn in that report have been updated and evaluated based on new site data collected during ME 17 through ME 20. The following general conclusions are presented based on the comprehensive evaluation of site data:

- Analysis of Mann Kendall trend test data indicates that groundwater concentration trends are generally consistent and stable throughout the site since the Source Area Investigation (Tetra Tech, 2015). Therefore, the current reporting schedule of performing Mann Kendall trend tests once every five years is sufficient.
- The primary plume migration pathways described in the Source Area Investigation Report (Tetra Tech, 2015) remain consistent. The plumes appear generally stable with some localized increasing trends likely due to localized plume redistribution. These wells with statistically significant upward trends are within the TCE plume boundaries, and these trends along with the recent data indicate that, while the overall plume extents are relatively unchanged, some dissolution, redistribution, and degradation of mass is occurring within the plume.
- Along the western portion of Site 07, contamination does not appear to be migrating upward through the silt layer to the shoreline, as evidenced by the nondetect VOC results in shallow zone wells MW07-04S, MW07-38S, and MW07-33S during ME 20. Concentrations observed in the deep zone of the western portion of Site 07 are generally much lower compared to other portions of the plume.
- During ME 20 TCE, cis-1,2-DCE, and VC were detected above their PALs for the first time at well DPT07-16I, suggesting that migration along a new deep zone pathway may be occurring along the northeastern side of the Site. However, along the eastern portion of Site 07, contamination does not appear to be migrating up to the shallow zone along the eastern shoreline of Site 07. Low concentration or nondetect results in monitoring wells MW07-18S and MW07-20S support the conclusion discussed in the Site Investigation Report (Tetra Tech, 2015) that the silt and clay layers along the eastern shoreline are acting as a confining layer.
- Based on very low or nondetect concentrations in the sediment and surface water data, the current sampling schedule of once every five years is sufficient for these media.
- The Source Area Investigation Report (Tetra Tech 2015) concluded that sampling in different seasons does not appear to impact contaminant concentrations at any groundwater or

piezometer locations with the possible exception of MW07-21S, P07-05 and P07-24. Monitoring events since 2012 have been conducted annually in the fall, therefore no further evaluation of seasonality have been performed.

- The overall conclusion of this 2017 HHRA update is that the conclusions of the 2012 HHRA remain valid and exposure to shallow groundwater, surface water, and sediment along the Site 07 shoreline by recreational users does not result in a potential ELCR or noncancer HI above USEPA or RIDEM target levels.

Based on concentrations of CVOCs observed through ME 20, the relative stability and/or degradation of the plume that is interpreted to be occurring, and the overall conclusion of the 2017 HHRA update, the remedy continues to be protective of human health and the environment. However, since TCE, cis-1,2-DCE, and VC were detected above their PALs for the first time at well DPT07-16I during ME 20, the upcoming Fourth Five Year Review should consider increasing the sample frequency of DPT07-16I to monitor these changes. The upcoming Fourth Five Year Review should also consider increasing the sample frequency of DPT07-16S to monitor any potential upward migration of COCs from DPT07-16I.

7.0 SCHEDULE OF FUTURE FIELD ACTIVITIES

Monitoring Event 21 at Calf Pasture Point is scheduled to occur in September/October 2017. This will include the annual suite of monitoring wells and piezometers (see Table 1).

8.0 REFERENCES

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Tables

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Table 1
Long-Term Monitoring Program
Site 07 - Calf Pasture Point
Former NCBC Davisville
North Kingstown, Rhode Island

Monitoring Well/Piezometer	Annual Sampling	Biennial Sampling	Five Year Sampling	Pump Type	Migration Pathway	Rationale
MW07-09D	X	X	X	Bladder	Narr. Bay	Leading edge of elevated plume
MW07-09R	X	X	X	Bladder	Narr. Bay	Increasing Trend, Leading edge of elevated plume
MW07-11D	X	X	X	Bladder	Narr. Bay	Increasing Trend, Leading edge of plume
MW07-34D	X	X	X	Bladder	Narr. Bay	Increasing Trend, Leading edge of plume
MW07-45D	X	X	X	Peristaltic	Narr. Bay	Evaluate plume along Narr. Bay
MW07-24DUT	X	X	X	Bladder	East Entrance	Increasing Trend
MW07-19D	X	X	X	Bladder	Entrance Channel	Increasing Trend
MW07-19S	X	X	X	Bladder	Entrance Channel	Edge of elevated portion of primary plume
MW07-21D	X	X	X	Bladder	Entrance Channel	Increasing Trend
MW07-21R	X	X	X	Bladder	Entrance Channel	Shoreline well
MW07-21S	X	X	X	Bladder	Entrance Channel	Shoreline well
MW07-23D	X	X	X	Bladder	Entrance Channel	Increasing Trend
MW07-39D	X	X	X	Bladder	Entrance Channel	Increasing Trend
MW07-39I	X	X	X	Bladder	Entrance Channel	Edge of elevated portion of primary plume
MW07-39S	X	X	X	Bladder	Entrance Channel	Edge of elevated portion of primary plume
MW07-42I	X	X	X	Peristaltic	Entrance Channel	Evaluate elevated portion of primary plume
MW07-33S	X	X	X	Bladder	Allen Harbor	Increasing Trend
MW07-33D	X	X	X	Bladder	Allen Harbor	Increasing Trend
P07-05	X	X	X (1)	Peristaltic	Discharge	Increasing Trend, Primary CVOC discharge area
P07-06	X	X	X (1)(2)	Peristaltic	Discharge	Increasing Trend, Primary CVOC discharge area
P07-07	X	X	X (1)(2)	Peristaltic	Discharge	Primary CVOC discharge area
P07-08	X	X	X (1)(2)	Peristaltic	Discharge	Primary CVOC discharge area
P07-09	X	X	X (1)(2)	Peristaltic	Discharge	Increasing Trend, Primary CVOC discharge area
P07-10	X	X	X (1)(2)	Peristaltic	Discharge	Primary CVOC discharge area
P07-15	X	X	X	Peristaltic	Discharge	Evaluate shoreline discharge
P07-21	X	X	X	Peristaltic	Discharge	Increasing Trend
P07-23	X	X	X	Peristaltic	Discharge	Increasing Trend, Primary CVOC discharge area
P07-24	X	X	X (2)	Peristaltic	Discharge	Increasing Trend, Primary CVOC discharge area
DPT07-09-27D		X	X	Peristaltic	Residual Source	Evaluate Residual Source Concentrations
DPT07-39-03D		X	X	Peristaltic	Residual Source	Evaluate Residual Source Concentrations
DPT07-39-03I		X	X	Peristaltic	Residual Source	Evaluate Residual Source Concentrations
DPT07-39-04D		X	X	Peristaltic	Residual Source	Evaluate Residual Source Concentrations
MW07-17D		X	X	Bladder	Residual Source	Evaluate Residual Source Concentrations
MW07-40D		X	X	Peristaltic	Source Area	Evaluate Source Removal Effectiveness
DPT07-18I		X	X	Peristaltic	Narr. Bay	Evaluate Narr. Bay Plume Extent
DPT07-18S		X	X	Peristaltic	Narr. Bay	Evaluate Narr. Bay Plume Extent
DPT07-24D		X	X	Peristaltic	Narr. Bay	Evaluate deep plume
DPT07-29-34I		X	X	Peristaltic	Narr. Bay	Evaluate Narr. Bay Plume Extent
DPT07-29-34S		X	X	Peristaltic	Narr. Bay	Evaluate Narr. Bay Plume Extent
MW07-18D		X	X	Bladder	Narr. Bay	Confirm leading edge of plume
MW07-20DA (3)		X	X	Bladder	Narr. Bay	Confirm leading edge of plume
MW07-20SA (3)		X	X	Bladder	Narr. Bay	Confirm leading edge of plume
MW07-44D		X	X	Bladder	Narr. Bay	Evaluate secondary Narr. Bay pathway
MW07-12D		X	X	Bladder	Allen Harbor	Evaluate lower edge of plume
MW07-37D		X	X	Bladder	Allen Harbor	Evaluate Allen Harbor Plume Extent
MW07-13D		X	X	Bladder	Entrance Channel	Evaluate Entrance Channel Plume Extent
MW07-13S		X	X	Bladder	Entrance Channel	Evaluate Entrance Channel Plume Extent
MW07-23S		X	X	Bladder	Entrance Channel	Evaluate lower edge of plume
MW07-27D		X	X	Bladder	Entrance Channel	Evaluate elevated portion of primary plume
MW07-41I		X	X	Peristaltic	Entrance Channel	Evaluate Entrance Channel Plume Extent
MW07-43D		X	X	Bladder	Entrance Channel	Evaluate Entrance Channel Plume Extent
MW07-43S		X	X (2)	Bladder	Entrance Channel	Evaluate Entrance Channel Plume Extent
P07-03		X	X	Peristaltic	Discharge	Evaluate shoreline discharge
P07-04		X	X (2)	Peristaltic	Discharge	Evaluate shoreline discharge
P07-20		X	X (2)	Peristaltic	Discharge	Primary CVOC discharge area
P07-22		X	X	Peristaltic	Discharge	Evaluate shoreline discharge
MW07-32D		X	X	Bladder	Site 16	Evaluate GW beyond Spink Neck
MW07-05S			X	Bladder	Source Area	Evaluate Source Removal Effectiveness
MW07-05D			X	Bladder	Source Area	Evaluate Source Removal Effectiveness
MW07-05R			X	Bladder	Source Area	Evaluate Source Removal Effectiveness
MW07-15D			X	Bladder	Source Area	Evaluate Source Removal Effectiveness
DPT07-09-28D			X	Peristaltic	Narr. Bay	Evaluate Narr. Bay Plume Extent
DPT07-16I			X	Peristaltic	Narr. Bay	Evaluate Narr. Bay Plume Extent
DPT07-16S			X	Peristaltic	Narr. Bay	Evaluate Narr. Bay Plume Extent
DPT07-24I			X	Peristaltic	Narr. Bay	Evaluate Narr. Bay Plume Extent
DPT07-30I			X	Peristaltic	Narr. Bay	Evaluate Narr. Bay Plume Extent
DPT07-30S			X	Peristaltic	Narr. Bay	Evaluate Narr. Bay Plume Extent
MW07-03D			X	Bladder	Narr. Bay	Evaluate Narr. Bay Plume Extent
MW07-03S			X	Bladder	Narr. Bay	Evaluate Narr. Bay Plume Extent
MW07-16R			X	Bladder	Narr. Bay	Evaluate Narr. Bay Plume Extent
MW07-28D			X	Bladder	Narr. Bay	Evaluate Narr. Bay Plume Extent
MW07-29D			X	Bladder	Narr. Bay	Evaluate Narr. Bay Plume Extent
MW07-30D			X	Bladder	Narr. Bay	Evaluate Narr. Bay Plume Extent
MW07-45S			X	Peristaltic	Narr. Bay	Evaluate Narr. Bay Plume Extent
MW07-24S			X	Bladder	Entrance Channel	Evaluate Entrance Channel Plume Extent
MW07-24D			X	Bladder	Entrance Channel	Evaluate Entrance Channel Plume Extent
MW07-10D			X	Bladder	Allen Harbor	Evaluate Allen Harbor Plume Extent
MW07-10S			X	Bladder	Allen Harbor	Evaluate Allen Harbor Plume Extent
MW07-25D			X	Bladder	Allen Harbor	Evaluate Allen Harbor Plume Extent
MW07-25R			X	Bladder	Allen Harbor	Evaluate Allen Harbor Plume Extent
MW07-35D			X	Bladder	Allen Harbor	Evaluate Allen Harbor Plume Extent
MW07-35S			X	Bladder	Allen Harbor	Evaluate Allen Harbor Plume Extent
MW07-37S			X	Bladder	Allen Harbor	Evaluate Allen Harbor Plume Extent
MW07-38D			X	Bladder	Allen Harbor	Evaluate Allen Harbor Plume Extent
MW07-38S			X	Bladder	Allen Harbor	Evaluate Allen Harbor Plume Extent
MW07-04S			X	Bladder	Source Area	Evaluate Source Removal Effectiveness
MW07-04D			X	Bladder	Source Area	Evaluate Source Removal Effectiveness
P07-02			X (2)	Peristaltic	Discharge	Evaluate shoreline discharge
P07-14			X	Peristaltic	Discharge	Increasing Trend
P07-16			X	Peristaltic	Discharge	Evaluate shoreline discharge
P07-17			X	Peristaltic	Discharge	Evaluate shoreline discharge
P07-28			X	Peristaltic	Discharge	Evaluate shoreline discharge
P07-29			X	Peristaltic	Discharge	Evaluate shoreline discharge
MW07-32R			X	Bladder	Site 16	Evaluate GW beyond Spink Neck

Notes:

(1) Sediment sample will be collected co-located with piezometer
(2) A surface water sampling transect will originate at this location and run perpendicular to the shore. Three samples per transect will be collected as decribed in Worksheet 17-1.
Analytical for site specific list of VOCs
(3) The MW07-20 well pair was abandoned and reinstalled in December 2016. The reinstalled wells were named MW07-20SA and MW07DA. See the Site 07 ME20 Five Year Event Report for details.

Benzene	1,1,2,2-Tetrachloroethane
Chloroform	Tetracholoethene
1,2-Dichloroethane	1,1,2-Trichloroethane
1,1-Dichloroethene	Trichloroethene
cis-1,2-Dichloroethene	Vinyl Chloride
trans-1,2-Dichloroethene	

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Table 2
Summary of Depth to Groundwater Measurements and Groundwater Elevations
September 2016
Site 07 - Calf Pasture Point
Former NCBC Davisville
North Kingstown, Rhode Island

Well ID	Time	Elevation of Measuring Point (feet AMSL)	Depth to Water (feet BTOC)	GW Elevation (feet AMSL)
DPT07-18I	15:15	8.9	5.94	2.96
DPT07-18S	15:17	9.23	6.92	2.31
DPT07-39-03I	15:06	7.02	4.63	2.39
DPT07-39-03S	15:05	7.1	4.6	2.50
MW07-03S	15:07	15.47	10.95	4.52
MW07-04D	15:31	13.26	9.96	3.30
MW07-05D	15:00	12.29	9.45	2.84
MW07-05R	-	11.8	-	-
MW07-05S	15:00	12.48	8.32	4.16
MW07-06S	15:27	15.55	10.66	4.89
MW07-07S	15:40	21.47	17.7	3.77
MW07-09D	15:11	9.71	7.12	2.59
MW07-09R	15:20	9.24	6.42	2.82
MW07-10D	15:21	12.09	9.47	2.62
MW07-10S	15:30	11.86	9.63	2.23
MW07-11D	15:14	10.7	9.75	0.95
MW07-13S	15:08	7.14	4.73	2.41
MW07-14D	15:32	13.44	9.87	3.57
MW07-16R	15:07	7.49	4.51	2.98
MW07-17D	15:02	10.05	7.35	2.70
MW07-19D	15:02	6.05	3.62	2.43
MW07-19S	15:03	6.3	4.13	2.17
MW07-20D	-	5.1	-	-
MW07-20S	15:20	4.58	3.39	1.19
MW07-21D	15:10	5.96	3.63	2.33
MW07-21R	15:12	6.8	4.41	2.39
MW07-21S	15:11	6.65	4.28	2.37
MW07-22D	15:42	16.94	13.86	3.08
MW07-22S	15:36	17.11	13.62	3.49
MW07-23D	15:15	6.07	3.59	2.48
MW07-23S	15:16	6.47	4.48	1.99
MW07-24DUT	15:28	6.31	3.89	2.42
MW07-24S	15:30	6.23	3.75	2.48
MW07-25D	15:08	11.48	8.85	2.63
MW07-25R	15:07	11.95	9	2.95
MW07-27D	15:26	9.84	7.39	2.45
MW07-27S	15:26	10.38	7.38	3.00
MW07-28D	15:19	9.07	6.7	2.37
MW07-29D	15:00	7.65	4.64	3.01

Table 2
Summary of Depth to Groundwater Measurements and Groundwater Elevations
September 2016
Site 07 - Calf Pasture Point
Former NCBC Davisville
North Kingstown, Rhode Island

Well ID	Time	Elevation of Measuring Point (feet AMSL)	Depth to Water (feet BTOC)	GW Elevation (feet AMSL)
MW07-32R	15:00	7.86	6.88	0.98
MW07-33D	15:06	5.57	2.8	2.77
MW07-33R	15:05	4.63	2.2	2.43
MW07-33S	15:04	5.57	3	2.57
MW07-34D	15:20	8.18	5.61	2.57
MW07-35S	15:02	9.21	6.5	2.71
MW07-37D	15:20	6.48	3.83	2.65
MW07-37S	15:20	6.57	3.01	3.56
MW07-38S	15:00	13.67	11.15	2.52
MW07-39D	15:19	9.98	7.47	2.51
MW07-39I	15:17	9.9	7.5	2.40
MW07-39S	15:18	9.98	7.52	2.46
MW07-41I	15:22	10.29	7.51	2.78
MW07-42I	15:05	9.86	7.39	2.47
MW07-45D	15:16	9.77	7.15	2.62
MW07-45S	15:15	9.66	7.68	1.98
Allen Harbor Staff Gauge	13:00	NA	1.30	NA

1. Water level measurements taken on September 22, 2016
2. Measuring point elevations based on October 2010 settlement survey data
3. AMSL = Above Mean Sea Level, BTOC = below top of casing
4. NA=not applicable
5. GW elevation not collected from MW-05R due to ungoing groundwater study
6. Well MW07-20D was inundated with sand during the 2016 synoptic water level round.
GW elevation for the well are not included.

Table 3
Groundwater Quality Parameters Measured Prior to Sampling Monitoring Wells
Site 07 - Calf Pasture Point
Former NCBC Davisville
North Kingstown, Rhode Island

Well ID	Event	Date	Time of Reading	Depth To Water (ft BTOC)	Temperature °C	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/L)	pH (S.U.)	ORP (mV)	Turbidity (NTU)	SALINITY (ppt)
DPT07-09/27D	07 ME20	9/20/2016	11:25	8.97	14.00	551.8	0.04	6.87	-25.80	4.54	0.27
DPT07-09/28D	07 ME20	9/27/2016	15:51	11.37	11.80	6916	0.00	6.64	12.00	0.99	3.81
DPT07-16I	07 ME20	9/22/2016	9:50	8.25	13.90	16162	0.53	6.69	12.10	0.56	9.50
DPT07-16S	07 ME20	9/22/2016	9:58	8.77	14.40	3298	0.20	6.83	-12.00	3.79	1.74
DPT07-18I	07 ME20	9/22/2016	11:45	6.86	13.50	9647	0.00	6.56	56.90	1.41	5.45
DPT07-18S	07 ME20	9/22/2016	11:41	7.92	17.00	3719	0.00	7.01	-93.20	8.36	1.97
DPT07-24D	07 ME20	9/22/2016	12:51	6.79	15.20	17827	0.00	633.00	11.80	7.29	10.57
DPT07-24I	07 ME20	9/22/2016	12:40	5.32	13.10	16948	0.00	6.65	71.40	3.08	10.04
DPT07-29/34I	07 ME20	9/21/2016	9:47	7.79	14.20	8357	0.00	6.26	31.00	24.10	4.67
DPT07-29/34S	07 ME20	9/21/2016	9:09	8.26	18.00	5149	0.00	6.52	-71.20	483	2.77
DPT07-30I	07 ME20	9/22/2016	9:35	8.44	12.90	39662	0.06	6.53	46.50	4.94	25.33
DPT07-30S	07 ME20	9/22/2016	10:25	10.24	14.20	1819	0.00	7.03	-55.80	3.11	0.93
DPT07-39/03D	07 ME20	9/16/2016	10:24	5.21	11.60	554.6	0.30	6.05	-38.50	3.66	0.27
DPT07-39/03I	07 ME20	9/28/2016	9:21	5.82	10.80	521.9	0.00	6.75	-96.20	3.40	0.25
DPT07-39/04D	07 ME20	10/5/2016	11:00	5.11	11.30	664	0.91	6.51	-64.30	4.20	0.26
MW07-03D	07 ME20	9/20/2016	14:45	11.53	14.80	397.7	0.35	6.99	-60.10	3.28	0.19
MW07-03S	07 ME20	9/20/2016	15:40	11.17	16.50	298.9	1.94	7.44	47.90	3.77	0.14
MW07-04D	07 ME20	9/19/2016	10:20	12.75	12.60	268.9	0.38	6.67	114.70	over range	0.13
MW07-04S	07 ME20	9/19/2016	10:27	13.01	15.00	414	0.88	6.82	60.90	4.58	0.20
MW07-05D	07 ME20	9/20/2016	15:27	9.68	14.20	321.6	0.15	6.42	8.90	11.50	0.15
MW07-05S	07 ME20	9/20/2016	14:45	8.60	14.30	331.2	0.20	7.18	-50.10	14.00	0.16
MW07-09D	07 ME20	9/20/2016	9:32	8.28	13.50	3317	0.00	6.65	-35.20	6.68	1.75
MW07-09R	07 ME20	9/19/2016	10:25	6.98	13.00	19161	0.00	7.07	-176.30	1.82	11.42
MW07-10D	07 ME20	9/20/2016	11:35	10.10	13.00	304.4	1.11	6.50	55.70	59.70	0.15
MW07-10S	07 ME20	9/20/2016	11:36	NA	19.30	388.6	5.61	7.25	-49.50	4.21	0.19
MW07-11D	07 ME20	9/21/2016	10:10	9.11	10.90	15200	0.00	6.53	12.60	84.80	8.87
MW07-12D	07 ME20	9/23/2016	11:41	9.01	14.60	783	0.00	5.96	133.20	42.80	0.39
MW07-13D	07 ME20	9/21/2016	14:00	5.85	12.70	1156	0.00	7.33	13.70	99.70	0.58
MW07-13S	07 ME20	9/21/2016	13:20	4.52	15.20	2173	0.00	7.19	-102.10	20.50	1.12
MW07-15D	07 ME20	9/27/2016	15:05	11.40	12.70	301.4	0.41	7.18	54.90	4.02	0.14
MW07-16R	07 ME20	9/22/2016	10:55	6.90	16.10	35899	0.30	7.04	-205.90	0.98	22.69
MW07-17D	07 ME20	9/20/2016	10:53	8.47	13.10	497.3	0.94	6.13	10.20	3.17	0.24
MW07-18D	07 ME20	9/22/2016	12:56	5.38	13.30	37317	0.02	6.97	-58.10	4.80	23.64
MW07-19D	07 ME20	9/21/2016	14:50	3.61	15.80	5409	0.09	6.91	1.30	13.90	2.93
MW07-19S	07 ME20	9/21/2016	14:35	4.10	14.60	1040	0.75	7.78	15.20	3.01	0.52
MW07-20D	07 ME20	1/16/2017	9:43	9.50	11.88	29916	0.78	8.09	-207.90	8.96	21.90
MW07-20S	07 ME20	9/22/2016	12:25	4.00	23.10	38137	0.47	6.90	-8.80	3.37	24.22
MW07-21D	07 ME20	9/23/2016	9:35	5.15	14.10	5283	0.00	6.73	15.50	14.20	2.86
MW07-21R	07 ME20	9/23/2016	10:41	5.30	15.40	6086	0.00	6.78	36.50	4.38	3.33
MW07-21S	07 ME20	9/23/2016	9:00	5.67	15.30	1596	0.00	6.52	44.50	3.06	0.81
MW07-23D	07 ME20	9/21/2016	11:45	4.60	14.70	4370	0.37	7.92	-30.60	4.98	2.34
MW07-23S	07 ME20	9/21/2016	11:25	4.69	21.70	10886	0.15	6.84	-72.80	1.19	6.15
MW07-24D	07 ME20	9/23/2016	9:25	5.50	14.30	18967	1.73	7.50	-3.30	4.13	1.29
MW07-24DUT	07 ME20	9/23/2016	9:43	5.50	14.80	9314	0.11	6.95	10.50	4.72	5.24
MW07-24S	07 ME20	9/23/2016	10:40	11.80	16.10	29493	1.45	7.59	-11.30	4.68	18.34
MW07-25D	07 ME20	9/20/2016	9:59	9.51	11.50	165.6	0.64	6.16	127.70	4.26	0.08
MW07-25R	07 ME20	9/20/2016	10:00	18.10	12.40	640.2	0.29	7.13	-77.10	3.05	0.30
MW07-27D	07 ME20	9/28/2016	15:30	8.29	10.40	1072	0.00	6.64	-11.50	9.05	0.53
MW07-28D	07 ME20	9/28/2016	12:04	7.81	10.30	6638	0.73	6.60	-12.00	34.20	3.65
MW07-29D	07 ME20	9/22/2016	9:48	6.88	13.40	26616	0.00	6.36	-19.60	17.30	16.33
MW07-30D	07 ME20	9/22/2016	10:35	6.53	13.30	10349	4.56	7.50	77.80	0.87	6.63
MW07-32D	07 ME20	9/28/2016	9:55	7.60	14.30	39288	4.59	9.56	16.40	2.31	25.06
MW07-32R	07 ME20	9/28/2016	9:00	7.50	14.50	39143	0.69	7.24	69.50	3.24	24.97
MW07-33D	07 ME20	9/28/2016	10:10	3.83	12.20	322.6	0.00	6.90	-46.30	1.81	0.17
MW07-33S	07 ME20	9/28/2016	9:10	NA	16.80	25607	0.06	5.60	63.50	3.40	15.68
MW07-34D	07 ME20	9/20/2016	15:28	6.18	15.10	12937	0.00	6.33	-13.20	21.50	7.47
MW07-35D	07 ME20	9/21/2016	9:35	7.50	12.40	205.8	0.97	7.10	95.90	over range	0.10
MW07-35S	07 ME20	9/21/2016	9:32	6.46	16.50	181.3	8.84	6.31	73.40	3.09	0.09
MW07-37D	07 ME20	9/27/2016	15:50	4.43	13.20	3728	0.03	6.20	27.40	24.50	1.99
MW07-37S	07 ME20	9/27/2016	9:25	3.67	16.00	47876	0.28	6.04	36.30	3.87	31.22
MW07-38D	07 ME20	9/19/2016	10:35	11.77	11.60	157.5	0.10	6.03	181.70	7.88	0.07
MW07-38S	07 ME20	9/19/2016	9:55	11.76	13.60	234.9	4.22	6.77	147.50	26.50	0.11
MW07-39D	07 ME20	9/23/2016	10:50	8.23	12.70	2311	0.02	7.23	-12.90	2.98	1.19
MW07-39I	07 ME20	9/23/2016	9:00	8.09	11.80	2553	0.00	6.93	-14.00	4.96	1.33
MW07-39S	07 ME20	9/23/2016	10:20	8.18	12.60	1061	0.18	6.91	-29.30	16.10	0.53
MW07-40D	07 ME20	9/20/2016	10:30	8.46	12.80	339.3	0.20	6.35	57.40	6.67	0.16
MW07-41I	07 ME20	9/21/2016	14:15	7.73	13.90	1748	0.00	6.50	-26.50	22.00	0.89
MW07-42I	07 ME20	9/21/2016	14:59	8.31	13.40	2183	0.00	6.69	1.10	9.96	1.13
MW07-43D	07 ME20	9/23/2016	11:40	6.50	15.30	755	0.51	7.64	25.30	1.05	3.96
MW07-43S	07 ME20	9/23/2016	11:44	4.97	20.00	45998	0.02	6.73	-31.10	4.37	29.9
MW07-44D	07 ME20	9/21/2016	12:13	7.79	16.20	6125	0.00	6.81	-13.10	16.80	3.41
MW07-45D	07 ME20	9/20/2016	9:30	9.22	13.10	1685	0.14	7.17	-11.20	4.70	0.84
MW07-45S	07 ME20	9/16/2016	10:20	10.02	13.90	491.7	0.00	7.29	-136.80	4.75	0.24

mS/cm = Millisiemens per centimeter
mg/L = Milligrams per liter
mV = Millivolts
NM = Not measured
°C = Degrees celsius
NTU = Nephelometric turbidity unit
BTOC = Below top of casing
S.U. = Standard pH units
ppt=parts per thousand

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Table 4
Groundwater Quality Parameters Measured Prior to Sampling Piezometers
Site 07 - Calf Pasture Point
Former NCBC Davisville
North Kingstown, Rhode Island

Piezometer ID	Event	Date	Time of Reading	Depth To Water (ft BTOC)	Temperature °C	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/L)	pH (S.U.)	ORP (mV)	Turbidity (NTU)	SALINITY (ppt)
P07-02	ME 20	9/26/2016	10:55	3.37	19.50	21592	0.57	8.01	-100.1	5.35	13.05
P07-03	ME 20	9/26/2016	10:43	4.00	17.90	25043	0.29	7.22	-107.2	1.46	15.29
P07-04	ME 20	9/26/2016	12:48	5.39	20.70	43355	0.63	8.91	-175.1	132	27.99
P07-05	ME 20	9/26/2016	12:28	5.59	17.30	8279	0.12	7.00	-241.0	2.13	4.67
P07-06	ME 20	9/26/2016	13:00	4.67	19.60	10444	0.34	7.76	-103.3	1.86	5.92
P07-07	ME 20	9/27/2016	13:23	4.59	18.20	22661	0.00	6.70	-48.3	1.08	13.72
P07-08	ME 20	9/16/2016	15:15	5.10	19.70	20524	0.05	6.56	-80.5	4.70	12.21
P07-09	ME 20	9/16/2016	14:36	4.08	20.30	7,621	0.00	6.49	-45.6	1.02	4.21
P07-10	ME 20	9/16/2016	13:35	4.14	19.40	19583	0.10	6.14	-44.5	1.40	11.70
P07-14	ME 20	9/27/2016	14:20	5.50	20.50	48411	0.45	7.79	-223.0	4.30	31.65
P07-15	ME 20	9/27/2016	13:40	5.65	21.50	37161	0.64	7.65	-86.5	657	23.57
P07-16	ME 20	9/28/2016	11:25	2.95	16.80	5068	0.21	6.33	-46.6	4.72	2.74
P07-17	ME 20	9/28/2016	13:06	4.00	17.10	14509	0.89	6.10	-19.7	410	8.53
P07-20	ME 20	9/27/2016	12:44	2.75	19.00	35500	0.60	6.68	-85.4	281	22.35
P07-21	ME 20	9/27/2016	12:30	4.80	21.50	37908	1.71	7.53	-88.3	575	17.20
P07-22	ME 20	9/27/2016	11:32	2.40	20.80	40510	0.35	8.09	-196.4	344	25.45
P07-23	ME 20	9/27/2016	11:53	4.63	18.30	47310	0.29	6.97	-47.9	0.88	30.84
P07-24	ME 20	9/16/2016	13:26	4.63	21.60	31,398	0.05	7.21	-108.3	0.43	19.63
P07-28	ME 20	9/27/2016	10:40	4.10	17.90	40568	0.43	6.35	-40.7	4.19	25.99
P07-29	ME 20	9/27/2016	11:45	4.15	18.40	30913	0.87	6.53	-54.5	27.40	19.26

mS/cm = Millisiemens per centimeter
mg/L = Milligrams per liter
mV = Millivolts
NM = Not measured
NTU = Nephelometric turbidity unit
BTOC = Below top of casing
S.U. = Standard pH units
°C = Degrees celsius
ppt=parts per thousand

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Table 5
Analytical Results - Monitoring Wells
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		DPT07-09-27D	DPT07-09-28D	DPT07-16I	DPT07-16S	DPT07-18I	DPT07-18I	DPT07-18S	DPT07-24D	DPT07-24I	DPT07-29-34I	DPT07-29-34S
	SAMPLE DATE		9/20/2016	9/27/2016	9/22/2016	9/22/2016	9/22/2016	9/22/2016	9/22/2016	9/22/2016	9/22/2016	9/21/2016	9/21/2016
	QC IDENTIFIER							DUP					
	SDG		R0864	R0928	R0886	R0886	R0886	R0886	R0886	R0886	R0886	R0868	R0868
	METHOD	PAL											
VOLATILES (UG/L)													
1,1,2,2-TETRACHLOROETHANE	8260	NE	680 J	< 0.3 UJ	9.5	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 1.0 U	9.9 J	< 0.5 UJ	3.8 J	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	**5**	< 200 U	< 0.4 UJ	< 1.0 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.0 U	**36.0 J+**	0.9 J	**11**	< 1.0 U
1,1-DICHLOROETHENE	8260	**7**	< 200 U	< 0.7 UJ	1.2 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.3	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	**5**	< 200 U	< 0.3 UJ	< 1.0 U	< 1.0 U	**7.6**	**8.0**	**6.5**	1.0	< 1.0 U	1.6 J	< 1.0 U
BENZENE	8260	**5**	< 200 U	< 0.3 UJ	< 1.0 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.0 U	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U
CHLOROFORM	8260	NE	< 200 U	< 0.4 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	**70**	**1600**	< 0.3 UJ	**120**	< 0.5 U	< 0.5 U	< 0.5 U	< 1.0 U	**114 J**	1.9	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	8260	**5**	< 400 U	< 0.6 UJ	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U
TRANS-1,2-DICHLOROETHENE	8260	**100**	**440 J**	< 0.3 UJ	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U	3.5	< 1.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	8260	**5**	**9000**	< 0.4 UJ	**83**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	**99.8**	1.9	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	**2**	< 200 U	< 0.5 UJ	**5.2**	< 1.0 U	0.7 J	0.8 J	< 1.0 U	**6.5**	< 1.0 U	< 1.0 U	< 1.0 U
TOTAL CVOCs	8260	NE	12000	< 0.7 U	220	< 1 U	8.3	8.8	6.5	272	4.7	16	< 2 U

DARK SHADING - CRITERIA EXCEEDED;
LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED;
NA - NOT ANALYZED OR NOT APPLICABLE

Table 5
Analytical Results - Monitoring Wells
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		DPT07-30I	DPT07-30S	DPT07-30S	DPT07-39-03D	DPT07-39-03I	DPT07-39-04D	MW07-03D	MW07-03S	MW07-04D	MW07-04S	MW07-05D
	SAMPLE DATE		9/22/2016	9/22/2016	9/22/2016	9/16/2016	9/28/2016	9/16/2016	9/20/2016	9/20/2016	9/19/2016	9/19/2016	9/20/2016
	QC IDENTIFIER				DUP								
	SDG		R0868	R0886	R0886	R0864	R0928	R0864	R0868	R0868	R0864	R0864	R0868
	METHOD	PAL											
VOLATILES (UG/L)													
1,1,2,2-TETRACHLOROETHANE	8260	NE	< 1.0 U	< 0.5 UJ	< 0.5 UJ	8200	288 J-	10000	< 1.0 U	< 1.0 U	230 J	< 1.0 U	41 J
1,1,2-TRICHLOROETHANE	8260	**5**	< 1.0 U	< 0.5 U	< 0.5 U	**170**	**22.5 J-**	< 500 U	< 1.0 U	< 1.0 U	< 50 U	< 1.0 U	< 20 U
1,1-DICHLOROETHENE	8260	**7**	< 1.0 U	< 1.0 U	< 1.0 U	**12**	< 34.6 UJ	**22**	< 1.0 U	< 1.0 U	< 50 U	< 1.0 U	< 20 U
1,2-DICHLOROETHANE	8260	**5**	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 14.4 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 50 U	< 1.0 U	< 20 U
BENZENE	8260	**5**	< 1.0 U	< 0.5 U	< 0.5 U	**5.2**	< 14.2 UJ	1.3 J	< 1.0 U	< 1.0 U	< 50 U	< 1.0 U	< 20 U
CHLOROFORM	8260	NE	< 1.0 U	< 1.0 U	< 1.0 U	5.5	< 20.4 UJ	4.9 J	< 1.0 U	< 1.0 U	< 50 U	< 1.0 U	< 20 U
CIS-1,2-DICHLOROETHENE	8260	**70**	< 1.0 U	< 0.5 U	< 0.5 U	**2000 J**	**1670 J-**	**2500**	12	< 1.0 U	< 50 U	< 1.0 U	< 20 U
TETRACHLOROETHENE	8260	**5**	< 2.0 U	< 1.0 U	< 1.0 U	< 2.0 U	< 28.5 UJ	< 2.0 U	< 2.0 U	< 2.0 U	**340**	< 2.0 U	< 40 U
TRANS-1,2-DICHLOROETHENE	8260	**100**	< 2.0 U	< 1.0 U	< 1.0 U	**550 J**	**147 J-**	< 1000 U	3.9 J	< 2.0 U	< 100 U	< 2.0 U	< 40 U
TRICHLOROETHENE	8260	**5**	< 1.0 U	< 1.0 U	< 1.0 U	**38000**	**1920 J-**	**73000**	2.2 J	< 1.0 U	**6100**	< 1.0 U	**230**
VINYL CHLORIDE	8260	**2**	< 1.0 U	< 1.0 U	< 1.0 U	**61 J**	**77.0 J-**	**53 J**	**2.5 J**	< 1.0 U	< 50 U	< 1.0 U	< 20 U
TOTAL CVOCs	8260	NE	< 2 U	< 1 U	< 1 U	49000	4120	86000	21	< 2 U	6700	< 2 U	270

DARK SHADING - CRITERIA EXCEEDED;
LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED;
NA - NOT ANALYZED OR NOT APPLICABLE

Table 5
Analytical Results - Monitoring Wells
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		MW07-05S	MW07-09D	MW07-09D	MW07-09R	MW07-10D	MW07-10D	MW07-10S	MW07-11D	MW07-12D	MW07-13D	MW07-13S
	SAMPLE DATE		9/20/2016	9/20/2016	9/20/2016	9/19/2016	9/20/2016	9/20/2016	9/20/2016	9/21/2016	9/23/2016	9/21/2016	9/21/2016
	QC IDENTIFIER				DUP			DUP					
	SDG		R0868	R0864	R0864	R0864	R0864	R0864	R0864	R0868	R0887	R0886	R0886
	METHOD	PAL											
VOLATILES (UG/L)													
1,1,2,2-TETRACHLOROETHANE	8260	NE	< 1.0 U	< 50 U	< 50 U	< 1.0 U	52	52	< 1.0 U	44 J	15.7	R	R
1,1,2-TRICHLOROETHANE	8260	**5**	< 1.0 U	< 50 U	< 50 U	4.5 J	**6.9 J**	< 5.0 UJ	< 1.0 U	**100 J**	1.0 J+	R	R
1,1-DICHLOROETHENE	8260	**7**	< 1.0 U	< 50 U	< 50 U	< 1.0 U	< 2.0 U	< 5.0 U	< 1.0 U	< 25 U	< 1.0 U	R	R
1,2-DICHLOROETHANE	8260	**5**	< 1.0 U	< 50 U	< 50 U	2.2 J	< 2.0 U	< 5.0 U	< 1.0 U	< 25 U	< 1.0 U	R	R
BENZENE	8260	**5**	< 1.0 U	< 50 U	< 50 U	< 1.0 U	< 2.0 U	< 5.0 U	< 1.0 U	< 25 U	3.9	R	R
CHLOROFORM	8260	NE	< 1.0 U	< 50 U	< 50 U	< 1.0 U	< 2.0 U	< 5.0 U	< 1.0 U	< 25 U	< 1.0 U	R	R
CIS-1,2-DICHLOROETHENE	8260	**70**	< 1.0 U	**3900 J**	**4000 J**	**250**	6.5 J	7.2 J	< 1.0 U	**670**	16.3	0.7 J	R
TETRACHLOROETHENE	8260	**5**	< 2.0 U	< 100 U	< 100 U	< 2.0 U	**5.4 J**	< 10 U	< 2.0 U	< 50 U	< 1.0 U	R	R
TRANS-1,2-DICHLOROETHENE	8260	**100**	< 2.0 U	**300 J**	**290 J**	16 J+	< 4.0 U	< 10 U	< 2.0 U	< 50 UJ	4.5	R	R
TRICHLOROETHENE	8260	**5**	< 1.0 U	**1000 J**	**980 J**	**62 J+**	**160**	**170**	< 1.0 U	**940**	**64.8**	1.3 J	R
VINYL CHLORIDE	8260	**2**	< 1.0 U	< 50 U	< 50 U	**15 J**	< 2.0 U	< 5.0 U	< 1.0 U	< 25 U	< 1.0 U	R	R
TOTAL CVOCs	8260	NE	< 2 U	5200	5300	350	230	230	< 2 U	1800	102	2.0	

DARK SHADING - CRITERIA EXCEEDED;
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NA - NOT ANALYZED OR NOT APPLICABLE

Table 5
Analytical Results - Monitoring Wells
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		MW07-15D	MW07-16R	MW07-17D	MW07-18D	MW07-19D	MW07-19S	MW07-19S	MW07-20DA	MW07-20DA	MW07-20S	MW07-21D
	SAMPLE DATE		9/27/2016	9/22/2016	9/20/2016	9/22/2016	9/21/2016	9/21/2016	9/21/2016	1/13/2017	1/13/2017	9/22/2016	9/23/2016
	QC IDENTIFIER								DUP		DUP		
	SDG		R0887	R0886	R0864	R0868	R0868	R0868	R0868	S0037	S0037	R0886	R0886
	METHOD	PAL											
VOLATILES (UG/L)													
1,1,2,2-TETRACHLOROETHANE	8260	NE	1320	< 0.5 UJ	5600	< 1.0 U	< 20 U	490	480 J	< 1.0 U	< 1.0 U	< 0.5 UJ	114 J
1,1,2-TRICHLOROETHANE	8260	**5**	< 50.0 U	< 0.5 U	**270**	< 1.0 U	< 20 U	< 50 U	**71 J**	< 1.0 U	< 1.0 U	< 0.5 U	**94.0 J**
1,1-DICHLOROETHENE	8260	**7**	< 100 U	< 1.0 U	< 50 U	< 1.0 U	< 20 U	< 50 U	< 50 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 100 U
1,2-DICHLOROETHANE	8260	**5**	< 100 U	< 1.0 U	< 50 U	< 1.0 U	< 20 U	< 50 U	< 50 U	< 1.0 U	< 1.0 U	< 1.0 U	< 100 U
BENZENE	8260	**5**	< 50.0 U	< 0.5 U	< 50 U	< 1.0 U	< 20 U	< 50 U	< 50 U	< 1.0 U	< 1.0 U	< 0.5 U	< 50.0 U
CHLOROFORM	8260	NE	< 100 U	< 1.0 U	< 50 U	< 1.0 U	< 20 U	< 50 U	< 50 U	< 1.0 U	< 1.0 U	< 1.0 U	< 100 U
CIS-1,2-DICHLOROETHENE	8260	**70**	< 50.0 U	< 0.5 U	**1200**	0.72 J	**760**	**1600**	**1700 J**	< 1.0 U	< 1.0 U	< 0.5 U	**1070**
TETRACHLOROETHENE	8260	**5**	**273**	< 1.0 U	**330**	< 2.0 U	< 40 U	< 100 U	< 100 U	< 2.0 U	< 2.0 U	< 1.0 U	< 100 U
TRANS-1,2-DICHLOROETHENE	8260	**100**	60.0 J	< 1.0 U	**630**	< 2.0 U	< 40 UJ	< 100 UJ	**130 J**	< 2.0 U	< 2.0 U	< 1.0 U	**164**
TRICHLOROETHENE	8260	**5**	**6180**	< 1.0 U	**29000**	< 1.0 U	**1700**	**4200**	**4500 J**	< 1.0 U	< 1.0 U	< 1.0 U	**5140**
VINYL CHLORIDE	8260	**2**	< 100 U	< 1.0 U	< 50 U	< 1.0 U	**160**	< 50 U	< 50 U	< 1.0 U	< 1.0 U	< 1.0 U	< 100 U
TOTAL CVOCs	8260	NE	7830	< 1 U	37000	0.72	2600	6300	6900	< 2 U	< 2 U	< 1 U	6580

DARK SHADING - CRITERIA EXCEEDED;
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NA - NOT ANALYZED OR NOT APPLICABLE

Table 5
Analytical Results - Monitoring Wells
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		MW07-21R	MW07-21S	MW07-23D	MW07-23S	MW07-24D	MW07-24DUT	MW07-24DUT	MW07-24S	MW07-25D	MW07-25R	MW07-27D
	SAMPLE DATE		9/23/2016	9/23/2016	9/21/2016	9/21/2016	9/23/2016	9/23/2016	9/23/2016	9/23/2016	9/20/2016	9/20/2016	9/28/2016
	QC IDENTIFIER								DUP				
	SDG		R0886	R0886	R0868	R0868	R0887	R0887	R0887	R0886	R0864	R0864	R0928
	METHOD	PAL											
VOLATILES (UG/L)													
1,1,2,2-TETRACHLOROETHANE	8260	NE	386 J	74.2 J	< 25 U	< 1.0 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	67	< 5.0 U	792 J-
1,1,2-TRICHLOROETHANE	8260	**5**	**61.0**	**11.7**	< 25 U	< 1.0 U	< 0.5 UJ	1.5 J+	1.7 J+	< 0.5 U	< 10 U	< 5.0 U	**95.0 J-**
1,1-DICHLOROETHENE	8260	**7**	< 50.0 U	< 10.0 U	< 25 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 5.0 U	< 69.3 UJ
1,2-DICHLOROETHANE	8260	**5**	< 50.0 U	< 10.0 U	< 25 U	< 1.0 U	< 1.0 UJ	0.7 J	0.8 J	< 1.0 U	< 10 U	< 5.0 U	< 28.7 UJ
BENZENE	8260	**5**	< 25.0 U	< 5.0 U	< 25 U	< 1.0 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 10 U	< 5.0 U	< 28.4 UJ
CHLOROFORM	8260	NE	< 50.0 U	< 10.0 U	< 25 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 5.0 U	< 40.7 UJ
CIS-1,2-DICHLOROETHENE	8260	**70**	**1700**	**579**	**730**	< 1.0 U	< 0.5 UJ	5.7	5.8	< 0.5 U	< 10 U	**520**	**2340 J-**
TETRACHLOROETHENE	8260	**5**	**29.5 J**	< 10.0 U	< 50 U	< 2.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	**32 J**	**6.7 J**	< 57.0 UJ
TRANS-1,2-DICHLOROETHENE	8260	**100**	**298**	23.8	< 50 UJ	< 2.0 U	< 1.0 UJ	0.5 J	0.5 J	< 1.0 U	< 20 U	35	**343 J-**
TRICHLOROETHENE	8260	**5**	**8930**	**351 J-**	**42 J**	< 1.0 U	< 1.0 UJ	**18.0**	**18.7**	< 1.0 U	**470**	**400**	**8200 J-**
VINYL CHLORIDE	8260	**2**	**150**	**14.2**	< 25 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 5.0 U	**122 J-**
TOTAL CVOCs	8260	NE	11600	1050	770	< 2 U	< 1 U	26.4	27.5	< 1 U	570	960	11900

DARK SHADING - CRITERIA EXCEEDED;
LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED;
NA - NOT ANALYZED OR NOT APPLICABLE

Table 5
Analytical Results - Monitoring Wells
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		MW07-28D	MW07-29D	MW07-30D	MW07-32D	MW07-32R	MW07-32R	MW07-33D	MW07-33D	MW07-33S	MW07-34D	MW07-35D
	SAMPLE DATE		9/28/2016	9/22/2016	9/22/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/28/2016	9/20/2016	9/21/2016
	QC IDENTIFIER							DUP		DUP			
	SDG		R0928	R0886	R0886	R0928	R0928	R0928	R0928	R0928	R0928	R0868	R0868
	METHOD	PAL											
VOLATILES (UG/L)													
1,1,2,2-TETRACHLOROETHANE	8260	NE	< 0.3 UJ	< 0.5 UJ	< 0.5 UJ	< 0.3 U	< 0.3 UJ	< 0.3 UJ	< 0.3 UJ	< 0.3 UJ	< 0.3 UJ	82 J	< 100 U
1,1,2-TRICHLOROETHANE	8260	**5**	< 0.4 UJ	< 0.5 U	< 0.5 U	< 0.4 U	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	**140 J**	< 100 U
1,1-DICHLOROETHENE	8260	**7**	< 0.7 UJ	< 1.0 U	< 1.0 U	< 0.7 UJ	< 0.7 UJ	< 0.7 UJ	< 0.7 UJ	< 0.7 UJ	< 0.7 UJ	< 25 U	< 100 U
1,2-DICHLOROETHANE	8260	**5**	< 0.3 UJ	< 1.0 U	< 1.0 U	< 0.3 U	< 0.3 UJ	< 0.3 UJ	< 0.3 UJ	< 0.3 UJ	< 0.3 UJ	< 25 U	< 100 U
BENZENE	8260	**5**	< 0.3 UJ	< 0.5 U	< 0.5 U	< 0.3 U	< 0.3 UJ	< 0.3 UJ	< 0.3 UJ	< 0.3 UJ	< 0.3 UJ	< 25 U	< 100 U
CHLOROFORM	8260	NE	< 0.4 UJ	< 1.0 U	< 1.0 U	< 0.4 U	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 25 U	< 100 U
CIS-1,2-DICHLOROETHENE	8260	**70**	< 0.3 UJ	< 0.5 U	1.1 J+	< 0.3 U	< 0.3 UJ	< 0.3 UJ	11.0 J-	11.2 J-	< 0.3 UJ	**960**	< 100 U
TETRACHLOROETHENE	8260	**5**	< 0.6 UJ	< 1.0 U	< 1.0 U	< 0.6 U	< 0.6 UJ	< 0.6 UJ	< 0.6 UJ	< 0.6 UJ	< 0.6 UJ	< 50 U	< 200 U
TRANS-1,2-DICHLOROETHENE	8260	**100**	< 0.3 UJ	< 1.0 U	< 1.0 U	< 0.3 U	< 0.3 UJ	< 0.3 UJ	2.2 J-	2.2 J-	< 0.3 UJ	39 J	< 200 UJ
TRICHLOROETHENE	8260	**5**	< 0.4 UJ	< 1.0 U	< 1.0 U	< 0.4 U	< 0.4 UJ	< 0.4 UJ	**6.1 J-**	**6.1 J-**	0.4 J-	**690**	**150 J**
VINYL CHLORIDE	8260	**2**	< 0.5 UJ	< 1.0 U	< 1.0 U	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 25 U	< 100 U
TOTAL CVOCs	8260	NE	< 0.7 U	< 1 U	1.1	< 0.7 U	< 0.7 U	< 0.7 U	19.3	19.5	0.4	1900	150

DARK SHADING - CRITERIA EXCEEDED;
LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED;
NA - NOT ANALYZED OR NOT APPLICABLE

Table 5
Analytical Results - Monitoring Wells
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		MW07-35S	MW07-35S	MW07-37D	MW07-37S	MW07-38D	MW07-38S	MW07-39D	MW07-39I	MW07-39I	MW07-39S	MW07-40D
	SAMPLE DATE		9/21/2016	9/21/2016	9/27/2016	9/27/2016	9/19/2016	9/19/2016	9/23/2016	9/23/2016	9/23/2016	9/23/2016	9/20/2016
	QC IDENTIFIER			DUP							DUP		
	SDG		R0868	R0868	R0887	R0887	R0864	R0864	R0886	R0887	R0887	R0886	R0864
	METHOD	PAL											
VOLATILES (UG/L)													
1,1,2,2-TETRACHLOROETHANE	8260	NE	< 1.0 U	< 1.0 U	58.6 J-	< 0.5 U	30	< 1.0 U	300 J	1040	1270	1650 J+	1100 J
1,1,2-TRICHLOROETHANE	8260	**5**	< 1.0 UJ	< 1.0 U	< 5.0 UJ	< 0.5 U	< 5.0 U	< 1.0 U	**186**	< 250 U	< 250 U	**140 J+**	< 50 U
1,1-DICHLOROETHENE	8260	**7**	< 1.0 UJ	< 1.0 U	< 10.0 UJ	< 1.0 U	< 5.0 U	< 1.0 U	< 100 U	< 500 U	< 500 U	< 250 U	< 50 U
1,2-DICHLOROETHANE	8260	**5**	< 1.0 U	< 1.0 U	< 10.0 UJ	< 1.0 U	< 5.0 U	< 1.0 U	< 100 U	< 500 U	< 500 U	< 250 U	< 50 U
BENZENE	8260	**5**	< 1.0 UJ	< 1.0 U	< 5.0 UJ	< 0.5 U	< 5.0 U	< 1.0 U	< 50.0 U	< 250 U	< 250 U	< 125 U	< 50 U
CHLOROFORM	8260	NE	< 1.0 UJ	< 1.0 U	< 10.0 UJ	< 1.0 U	< 5.0 U	< 1.0 U	< 100 U	< 500 U	< 500 U	< 250 U	< 50 U
CIS-1,2-DICHLOROETHENE	8260	**70**	< 1.0 UJ	< 1.0 U	30.9 J-	< 0.5 U	< 5.0 U	< 1.0 U	**1830**	**2680**	**2990**	**1370 J+**	**290 J**
TETRACHLOROETHENE	8260	**5**	< 2.0 UJ	< 2.0 U	< 10.0 UJ	< 1.0 U	**26**	< 2.0 U	< 100 U	< 500 U	< 500 U	< 250 U	< 100 U
TRANS-1,2-DICHLOROETHENE	8260	**100**	< 2.0 UJ	< 2.0 U	14.6 J-	< 1.0 U	< 10 U	< 2.0 U	**279**	**530**	**635**	**170 J+**	< 100 U
TRICHLOROETHENE	8260	**5**	< 1.0 UJ	< 1.0 U	**460 J-**	< 1.0 U	**170**	< 1.0 U	**9980**	**16000**	**18000**	**13800 J+**	**5200 J**
VINYL CHLORIDE	8260	**2**	< 1.0 UJ	< 1.0 U	< 10.0 UJ	< 1.0 U	< 5.0 U	< 1.0 U	**98.0 J**	< 500 U	< 500 U	< 250 U	< 50 U
TOTAL CVOCs	8260	NE	< 2 U	< 2 U	564	< 1 U	230	< 2 U	12700	20300	22900	17100	6600

DARK SHADING - CRITERIA EXCEEDED;
LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED;
NA - NOT ANALYZED OR NOT APPLICABLE

Table 5
Analytical Results - Monitoring Wells
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		MW07-41I	MW07-42I	MW07-43D	MW07-43S	MW07-44D	MW07-45D	MW07-45S
	SAMPLE DATE		9/21/2016	9/21/2016	9/23/2016	9/23/2016	9/21/2016	9/20/2016	9/16/2016
	QC IDENTIFIER								
	SDG		R0868	R0868	R0886	R0887	R0868	R0864	R0864
	METHOD	PAL							
VOLATILES (UG/L)									
1,1,2,2-TETRACHLOROETHANE	8260	NE	720	860	< 0.5 UJ	< 0.5 U	< 5.0 U	< 50 U	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	**5**	< 50 U	< 50 U	< 0.5 U	< 0.5 U	**8.4 J**	< 50 U	< 1.0 U
1,1-DICHLOROETHENE	8260	**7**	< 50 U	< 50 U	< 1.0 U	< 1.0 U	< 5.0 U	< 50 U	< 1.0 U
1,2-DICHLOROETHANE	8260	**5**	< 50 U	< 50 U	< 1.0 U	< 1.0 U	< 5.0 U	< 50 U	< 1.0 U
BENZENE	8260	**5**	< 50 U	< 50 U	< 0.5 U	< 0.5 U	< 5.0 U	< 50 U	< 1.0 U
CHLOROFORM	8260	NE	< 50 U	< 50 U	< 1.0 U	< 1.0 U	< 5.0 U	< 50 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	**70**	**3300**	**6100**	0.6 J	< 0.5 U	57	**200 J**	< 1.0 U
TETRACHLOROETHENE	8260	**5**	< 100 U	< 100 U	< 1.0 U	< 1.0 U	< 10 U	< 100 U	< 2.0 U
TRANS-1,2-DICHLOROETHENE	8260	**100**	< 100 UJ	**630 J**	< 1.0 U	< 1.0 U	< 10 UJ	< 100 U	< 2.0 U
TRICHLOROETHENE	8260	**5**	**2500**	**9000**	0.4 J	< 1.0 U	**240**	**1200 J**	< 1.0 U
VINYL CHLORIDE	8260	**2**	**88 J**	**140 J**	< 1.0 U	< 1.0 U	< 5.0 U	< 50 U	< 1.0 U
TOTAL CVOCs	8260	NE	6600	17000	1.0	< 1 U	310	1400	< 2 U

DARK SHADING - CRITERIA EXCEEDED;
LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED;
NA - NOT ANALYZED OR NOT APPLICABLE

Table 6
Analytical Results - Piezometer
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		P07-02	P07-03	P07-04	P07-05	P07-06	P07-07	P07-08	P07-09
	SAMPLE DATE		9/26/2016	9/26/2016	9/26/2016	9/26/2016	9/26/2016	9/27/2016	9/16/2016	9/16/2016
	QC IDENTIFIER									
	SDG		R0887	R0887	R0887	R0887	R0887	R0928	R0864	R0864
	METHOD	PAL								
VOLATILES (UG/L)										
1,1,2,2-TETRACHLOROETHANE	8260	**13.9**	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 UJ	**44.6 J-**	**75**	**110**
1,1,2-TRICHLOROETHANE	8260	60.2	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 UJ	7.8 J-	13	19
1,1-DICHLOROETHENE	8260	4.29	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 3.5 UJ	0.90 J	3.3 J
1,2-DICHLOROETHANE	8260	84.3	< 1.0 U	< 1.0 U	< 1.0 UJ	1.2	1.8 J-	< 1.4 UJ	< 1.0 U	< 1.0 U
BENZENE	8260	77.4	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 UJ	< 1.4 UJ	< 1.0 U	< 1.0 U
CHLOROFORM	8260	646	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 2.0 UJ	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	NE	< 0.5 U	< 0.5 U	< 0.5 UJ	68.9	87.2 J-	260 J-	160	1000
TETRACHLOROETHENE	8260	10.2	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 2.8 UJ	< 2.0 U	< 2.0 U
TRANS-1,2-DICHLOROETHENE	8260	NE	< 1.0 U	< 1.0 U	< 1.0 UJ	21.5	21.6 J-	19.8 J-	7.1	69
TRICHLOROETHENE	8260	**184**	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	151 J-	**250**	**490**
VINYL CHLORIDE	8260	**3.78**	< 1.0 U	< 1.0 U	< 1.0 UJ	**49.7**	**45.8 J-**	< 2.6 UJ	2.5 J	**11 J**
TOTAL CVOCs	8260	NE	< 1 U	< 1 U	< 1 U	141	156	483	510	1700

DARK SHADING - CRITERIA EXCEEDED;
LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED;
NA - NOT ANALYZED OR NOT APPLICABLE

Table 6
Analytical Results - Piezometer
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		P07-10	P07-14	P07-15	P07-16	P07-17	P07-20	P07-21	P07-22
	SAMPLE DATE		9/16/2016	9/27/2016	9/27/2016	9/28/2016	9/28/2016	9/27/2016	9/27/2016	9/27/2016
	QC IDENTIFIER									
	SDG		R0864	R0887	R0887	R0928	R0928	R0928	R0887	R0887
	METHOD	PAL								
VOLATILES (UG/L)										
1,1,2,2-TETRACHLOROETHANE	8260	**13.9**	**15**	< 0.5 UJ	< 0.5 UJ	< 0.3 UJ	< 0.3 UJ	0.7 J-	< 0.5 UJ	0.8 J
1,1,2-TRICHLOROETHANE	8260	60.2	2.9 J	< 0.5 UJ	< 0.5 UJ	< 0.4 UJ	< 0.4 UJ	0.4 J-	< 0.5 UJ	< 0.5 UJ
1,1-DICHLOROETHENE	8260	4.29	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 0.7 UJ	< 0.7 UJ	< 0.7 UJ	< 1.0 UJ	< 1.0 UJ
1,2-DICHLOROETHANE	8260	84.3	< 1.0 U	< 1.0 UJ	< 1.0 UJ	2.5 J-	< 0.3 UJ	0.6 J-	< 1.0 UJ	< 1.0 UJ
BENZENE	8260	77.4	< 1.0 U	< 0.5 UJ	< 0.5 UJ	< 0.3 UJ	< 0.3 UJ	1.6 J-	< 0.5 UJ	< 0.5 UJ
CHLOROFORM	8260	646	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 0.4 UJ	< 0.4 UJ	< 0.4 UJ	< 1.0 UJ	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	8260	NE	91	< 0.5 UJ	1.3 J-	1.0 J-	< 0.3 UJ	34.4 J-	56.9 J-	2.5 J-
TETRACHLOROETHENE	8260	10.2	< 2.0 U	< 1.0 UJ	< 1.0 UJ	< 0.6 UJ	< 0.6 UJ	< 0.6 UJ	< 1.0 UJ	< 1.0 UJ
TRANS-1,2-DICHLOROETHENE	8260	NE	6.5	< 1.0 UJ	0.6 J-	0.5 J-	< 0.3 UJ	6.9 J-	3.4 J-	0.4 J-
TRICHLOROETHENE	8260	**184**	78	< 1.0 UJ	0.5 J-	4.8 J-	< 0.4 UJ	< 0.4 UJ	5.2 J-	4.4 J-
VINYL CHLORIDE	8260	**3.78**	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 0.5 UJ	< 0.5 UJ	**5.6 J-**	0.7 J-	< 1.0 UJ
TOTAL CVOCs	8260	NE	190	< 1 U	2.4	8.8	< 0.7 U	48.6	66.2	8.1

DARK SHADING - CRITERIA EXCEEDED;
LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED;
NA - NOT ANALYZED OR NOT APPLICABLE

Table 6
Analytical Results - Piezometer
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		P07-23	P07-24	P07-28	P07-29
	SAMPLE DATE		9/27/2016	9/16/2016	9/27/2016	9/27/2016
	QC IDENTIFIER					
	SDG		R0928	R0864	R0887	R0928
	METHOD	PAL				
VOLATILES (UG/L)						
1,1,2,2-TETRACHLOROETHANE	8260	**13.9**	< 0.3 UJ	< 1.0 U	< 0.5 UJ	< 0.3 UJ
1,1,2-TRICHLOROETHANE	8260	60.2	< 0.4 UJ	< 1.0 U	< 0.5 UJ	< 0.4 UJ
1,1-DICHLOROETHENE	8260	4.29	< 0.7 UJ	< 1.0 U	< 1.0 UJ	< 0.7 UJ
1,2-DICHLOROETHANE	8260	84.3	< 0.3 UJ	< 1.0 U	< 1.0 UJ	< 0.3 UJ
BENZENE	8260	77.4	< 0.3 UJ	< 1.0 U	< 0.5 UJ	< 0.3 UJ
CHLOROFORM	8260	646	< 0.4 UJ	< 1.0 U	< 1.0 UJ	< 0.4 UJ
CIS-1,2-DICHLOROETHENE	8260	NE	0.5 J-	< 1.0 U	< 0.5 UJ	< 0.3 UJ
TETRACHLOROETHENE	8260	10.2	< 0.6 UJ	< 2.0 U	< 1.0 UJ	< 0.6 UJ
TRANS-1,2-DICHLOROETHENE	8260	NE	< 0.3 UJ	< 2.0 U	< 1.0 UJ	< 0.3 UJ
TRICHLOROETHENE	8260	**184**	1.8 J-	< 1.0 U	< 1.0 UJ	< 0.4 UJ
VINYL CHLORIDE	8260	**3.78**	< 0.5 UJ	< 1.0 U	< 1.0 UJ	< 0.5 UJ
TOTAL CVOCs	8260	NE	2.3	< 2 U	< 1 U	< 0.7 U

DARK SHADING - CRITERIA EXCEEDED;
LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED;
NA - NOT ANALYZED OR NOT APPLICABLE

Table 7
Analytical Results - Sediment
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID		SED07-05	SED07-06	SED07-07	SED07-08	SED07-09	SED07-10	SED07-10
	SAMPLE DATE		8/15/2016	8/15/2016	8/15/2016	8/15/2016	8/15/2016	8/15/2016	8/15/2016
	QC IDENTIFIER		N	N	N	N	N	N	N
	SDG		R0755	R0755	R0755	R0755	R0755	R0755	R0755
	METHOD	PAL							
MOISTURE CONTENT	D2216	--	31	20	18	30	19	21	23
VOLATILES (UG/KG)									
1,1,2,2-TETRACHLOROETHANE	8260	--	< 2.7 UJ	< 2.1 U	< 2.0 U	< 3.2 U	< 2.0 U	R	< 2.9 U
1,1,2-TRICHLOROETHANE	8260	--	< 2.7 UJ	< 2.1 U	< 2.0 U	< 3.2 U	< 2.0 U	< 2.5 UJ	< 2.9 U
1,1-DICHLOROETHENE	8260	--	< 2.7 UJ	< 2.1 U	< 2.0 U	< 3.2 U	< 2.0 U	< 2.5 UJ	< 2.9 U
1,2-DICHLOROETHANE	8260	--	< 2.7 UJ	< 2.1 U	< 2.0 U	< 3.2 U	< 2.0 U	< 2.5 UJ	< 2.9 U
BENZENE	8260	--	< 2.7 UJ	< 2.1 U	< 2.0 U	< 3.2 U	< 2.0 U	< 2.5 UJ	< 2.9 U
CHLOROFORM	8260	--	< 2.7 UJ	< 2.1 U	< 2.0 U	< 3.2 U	< 2.0 U	< 2.5 UJ	< 2.9 U
CIS-1,2-DICHLOROETHENE	8260	--	< 2.7 UJ	< 2.1 U	< 2.0 U	< 3.2 U	< 2.0 U	< 2.5 UJ	< 2.9 U
TETRACHLOROETHENE	8260	--	12 J+	< 2.1 U	< 2.0 U	< 3.2 U	< 2.0 U	12 J+	< 2.9 U
TOTAL CVOCs	8260	--	12	< 2.1 U	< 2 U	< 3.2 U	< 2 U	12	< 2.9 U
TRANS-1,2-DICHLOROETHENE	8260	--	< 2.7 UJ	< 2.1 U	< 2.0 U	< 3.2 U	< 2.0 U	< 2.5 UJ	< 2.9 U
TRICHLOROETHENE	8260	--	< 2.7 UJ	< 2.1 U	< 2.0 U	< 3.2 U	< 2.0 U	< 2.5 UJ	< 2.9 U
VINYL CHLORIDE	8260	--	< 2.7 UJ	< 2.1 U	< 2.0 U	< 3.2 U	< 2.0 U	< 2.5 UJ	< 2.9 U

DARK SHADING - CRITERIA EXCEEDED;
LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED;

Table 8
Analytical Results - Surface Water
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID	SW07-02	SW07-02	SW07-02	SW07-02
	SAMPLE DATE	8/16/2016	8/16/2016	8/16/2016	8/16/2016
	SAMPLE ID	SW07-02-FLOOR01-ME20-1	SW07-02-FLOOR01-ME20-2	SW07-02-FLOOR02-ME20-1	SW07-02-MID01-ME20-1
	QC IDENTIFIER	N	FD	N	N
	SDG	R0762	R0762	R0762	R0762
	METHOD				
VOLATILES (UG/L)					
1,1,2,2-TETRACHLOROETHANE	8260	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BENZENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	8260	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
TRANS-1,2-DICHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
TOTAL CVOCs	8260	< 2 U	< 2 U	< 2 U	< 2 U

LIGHT SHADING - DETECTED
U - NOT DETECTED; J - QUANTITATION APPROXIMATE

Table 8
Analytical Results - Surface Water
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID	SW07-04	SW07-04	SW07-04	SW07-04
	SAMPLE DATE	8/16/2016	8/16/2016	8/16/2016	8/16/2016
	SAMPLE ID	SW07-04-FLOOR01-ME20-1	SW07-04-MID01-ME20-1	SW07-04-FLOOR02-ME20-1	SW07-04-FLOOR02-ME20-2
	QC IDENTIFIER	N	N	N	FD
	SDG	R0761	R0761	R0761	R0762
	METHOD				
VOLATILES (UG/L)					
1,1,2,2-TETRACHLOROETHANE	8260	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BENZENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRANS-1,2-DICHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TOTAL CVOCs	8260	< 2 U	< 2 U	< 2 U	< 2 U

LIGHT SHADING - DETECTED
U - NOT DETECTED; J - QUANTITATION APPROXIMATE

Table 8
Analytical Results - Surface Water
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID	SW07-06	SW07-06	SW07-06	SW07-07
	SAMPLE DATE	8/16/2016	8/16/2016	8/16/2016	8/16/2016
	SAMPLE ID	SW07-06-FLOOR01-ME20-1	SW07-06-FLOOR02-ME20-1	SW07-06-MID01-ME20-1	SW07-07-FLOOR01-ME20-1
	QC IDENTIFIER	N	N	N	N
	SDG	R0761	R0761	R0761	R0761
	METHOD				
VOLATILES (UG/L)					
1,1,2,2-TETRACHLOROETHANE	8260	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BENZENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRANS-1,2-DICHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TOTAL CVOCs	8260	< 2 U	< 2 U	< 2 U	< 2 U

LIGHT SHADING - DETECTED
U - NOT DETECTED; J - QUANTITATION APPROXIMATE

Table 8
Analytical Results - Surface Water
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID	SW07-07	SW07-07	SW07-08	SW07-08
	SAMPLE DATE	8/16/2016	8/16/2016	8/16/2016	8/16/2016
	SAMPLE ID	SW07-07-FLOOR02-ME20-1	SW07-07-MID01-ME20-1	SW07-08-FLOOR01-ME20-1	SW07-08-MID01-ME20-1
	QC IDENTIFIER	N	N	N	N
	SDG	R0761	R0761	R0761	R0761
	METHOD				
VOLATILES (UG/L)					
1,1,2,2-TETRACHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BENZENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	1.5 J	< 1.0 U
TETRACHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRANS-1,2-DICHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TOTAL CVOCs	8260	< 2 U	< 2 U	1.5	< 2 U

LIGHT SHADING - DETECTED
U - NOT DETECTED; J - QUANTITATION APPROXIMATE

Table 8
Analytical Results - Surface Water
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID	SW07-08	SW07-09	SW07-09	SW07-09
	SAMPLE DATE	8/16/2016	8/16/2016	8/16/2016	8/16/2016
	SAMPLE ID	SW07-08-FLOOR02-ME20-1	SW07-09-FLOOR01-ME20-1	SW07-09-FLOOR02-ME20-1	SW07-09-MID01-ME20-1
	QC IDENTIFIER	N	N	N	N
	SDG	R0761	R0761	R0761	R0761
	METHOD				
VOLATILES (UG/L)					
1,1,2,2-TETRACHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BENZENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRANS-1,2-DICHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TOTAL CVOCs	8260	< 2 U	< 2 U	< 2 U	< 2 U

LIGHT SHADING - DETECTED
U - NOT DETECTED; J - QUANTITATION APPROXIMATE

Table 8
Analytical Results - Surface Water
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID	SW07-10	SW07-10	SW07-10	SW07-20
	SAMPLE DATE	8/16/2016	8/16/2016	8/16/2016	8/16/2016
	SAMPLE ID	SW07-10-FLOOR01-ME20-1	SW07-10-FLOOR02-ME20-1	SW07-10-MID01-ME20-1	SW07-20-FLOOR01-ME20-1
	QC IDENTIFIER	N	N	N	N
	SDG	R0761	R0761	R0761	R0762
	METHOD				
VOLATILES (UG/L)					
1,1,2,2-TETRACHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BENZENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ
TRANS-1,2-DICHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TOTAL CVOCs	8260	< 2 U	< 2 U	< 2 U	< 2 U

LIGHT SHADING - DETECTED
U - NOT DETECTED; J - QUANTITATION APPROXIMATE

Table 8
Analytical Results - Surface Water
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID	SW07-20	SW07-20	SW07-20	SW07-24
	SAMPLE DATE	8/16/2016	8/16/2016	8/16/2016	8/16/2016
	SAMPLE ID	SW07-20-FLOOR02-ME20-1	SW07-20-FLOOR02-ME20-2	SW07-20-MID01-ME20-1	SW07-24-FLOOR01-ME20-1
	QC IDENTIFIER	N	FD	N	N
	SDG	R0762	R0762	R0762	R0762
	METHOD				
VOLATILES (UG/L)					
1,1,2,2-TETRACHLOROETHANE	8260	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ
1,1,2-TRICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BENZENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	8260	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	6.4
TETRACHLOROETHENE	8260	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
TRANS-1,2-DICHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U	5.9
VINYL CHLORIDE	8260	< 1.0 U	< 1.0 UJ	< 1.0 U	3.7 J
TOTAL CVOCs	8260	< 2 U	< 2 U	< 2 U	16

LIGHT SHADING - DETECTED
U - NOT DETECTED; J - QUANTITATION APPROXIMATE

Table 8
Analytical Results - Surface Water
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID	SW07-24	SW07-24	SW07-43S/D
	SAMPLE DATE	8/16/2016	8/16/2016	8/16/2016
	SAMPLE ID	SW07-24-FLOOR02-ME20-1	SW07-24-MID01-ME20-1	SW07-43S/D-FLOOR01-ME20-1
	QC IDENTIFIER	N	N	N
	SDG	R0762	R0762	R0762
	METHOD			
VOLATILES (UG/L)				
1,1,2,2-TETRACHLOROETHANE	8260	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
1,1,2-TRICHLOROETHANE	8260	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	< 1.0 U	1.0 J	< 1.0 U
BENZENE	8260	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	8260	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	8260	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
TRANS-1,2-DICHLOROETHENE	8260	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	8260	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
TOTAL CVOCs	8260	< 2 U	1.0	< 2 U

LIGHT SHADING - DETECTED
U - NOT DETECTED; J - QUANTITATION APPROXIMATE

Table 8
Analytical Results - Surface Water
Site 07 - Calf Pasture Point
Former NCBC Davisville, North Kingstown, Rhode Island

PARAMETER	LOCATION ID	SW07-43S/D	SW07-43S/D
	SAMPLE DATE	8/16/2016	8/16/2016
	SAMPLE ID	SW07-43S/D-FLOOR02-ME20-1	SW07-43S/D-MID01-ME20-1
	QC IDENTIFIER	N	N
	SDG	R0762	R0762
	METHOD		
VOLATILES (UG/L)			
1,1,2,2-TETRACHLOROETHANE	8260	< 1.0 U	< 1.0 UJ
1,1,2-TRICHLOROETHANE	8260	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	< 1.0 U	< 1.0 U
BENZENE	8260	< 1.0 U	< 1.0 U
CHLOROFORM	8260	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	8260	< 2.0 U	< 2.0 UJ
TRANS-1,2-DICHLOROETHENE	8260	< 2.0 U	< 2.0 U
TRICHLOROETHENE	8260	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	< 1.0 U	< 1.0 UJ
TOTAL CVOCs	8260	< 2 U	< 2 U

LIGHT SHADING - DETECTED
U - NOT DETECTED; J - QUANTITATION APPROXIMATE

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Figures

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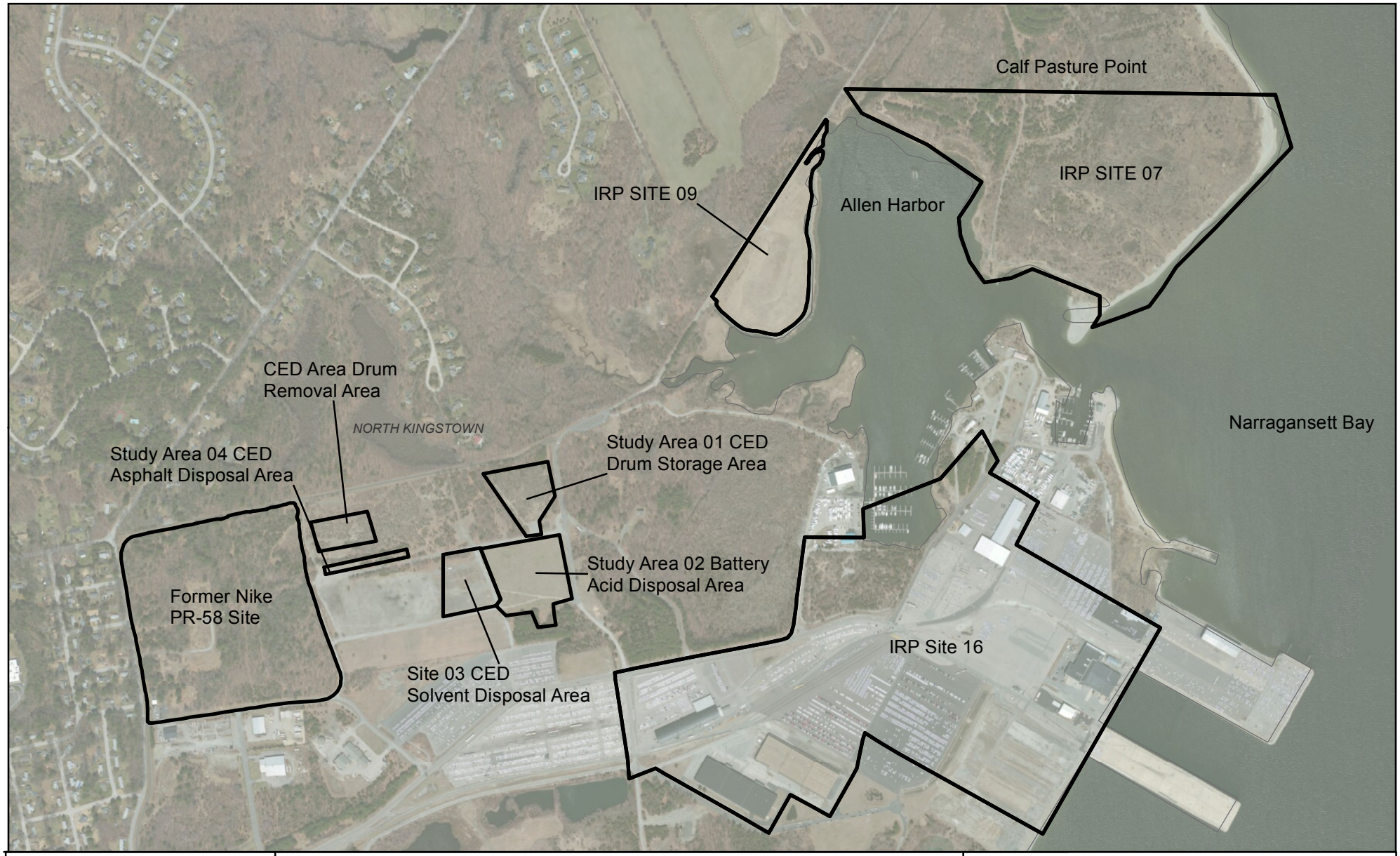

RESOLUTION CONSULTANTS

Drawn:	RNM	04/30/2015
Approved:	BS	04/30/2015
Project #:	60273164	

N

0 500 1,000 Feet

FIGURE 1 SITE LOCUS MAP

IRP SITE 07, FORMER NCBC DAVISVILLE

NORTH KINGSTOWN, RHODE ISLAND

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RESOLUTION CONSULTANTS

Drawn:	RM	03/09/2017
Approved:	BS	03/09/2017
Project #:	60273164	

Legend

- Surface Water Sampling Transect
- Piezometer And Sediment Sampled during the Five Year Sampling
- Monitoring Well Sampled during the Five Year Sampling
- Piezometer Sampled during the Five Year Sampling
- A-A' Cross Section
- B-B' Cross Section

N

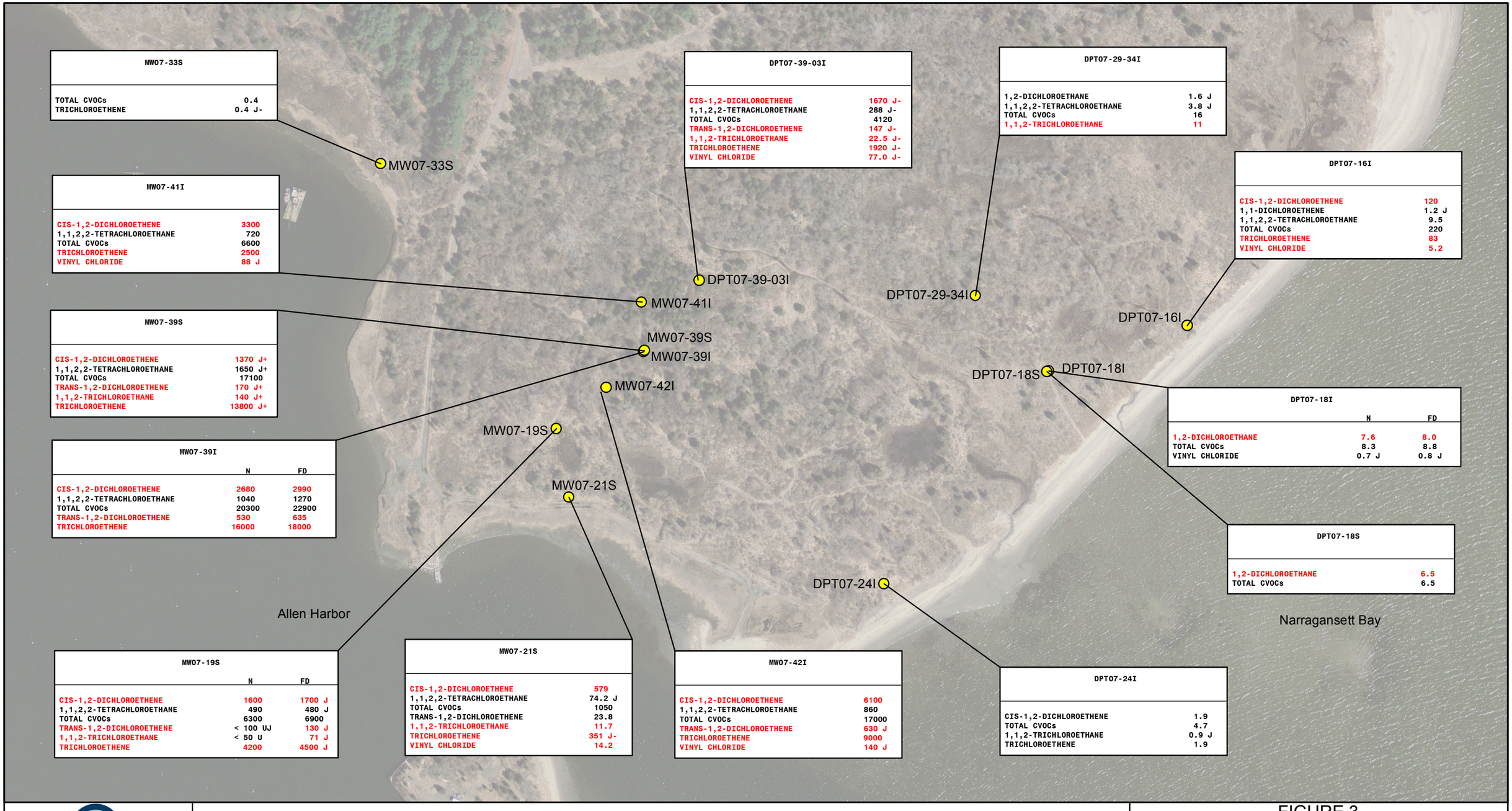
0 100 200

Scale in Feet

FIGURE 2
SITE MAP AND LONG TERM MONITORING LOCATIONS

IRP SITE 07, FORMER NCBC DAVISVILLE NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Figure 2.mxd



MW07-33S

TOTAL CVOCs	0.4
TRICHLOROETHENE	0.4 J-

MW07-41I

CIS-1,2-DICHLOROETHENE	3300
1,1,2,2-TETRACHLOROETHANE	720
TOTAL CVOCs	6600
TRICHLOROETHENE	2500
VINYL CHLORIDE	88 J

MW07-39S

CIS-1,2-DICHLOROETHENE	1370 J+
1,1,2,2-TETRACHLOROETHANE	1650 J+
TOTAL CVOCs	17100
TRANS-1,2-DICHLOROETHENE	170 J+
1,1,2-TRICHLOROETHANE	140 J+
TRICHLOROETHENE	13800 J+

MW07-39I

	N	FD
CIS-1,2-DICHLOROETHENE	2680	2990
1,1,2,2-TETRACHLOROETHANE	1040	1270
TOTAL CVOCs	20300	22900
TRANS-1,2-DICHLOROETHENE	530	635
TRICHLOROETHENE	16000	18000

DPT07-39-03I

CIS-1,2-DICHLOROETHENE	1670 J-
1,1,2,2-TETRACHLOROETHANE	288 J-
TOTAL CVOCs	4120
TRANS-1,2-DICHLOROETHENE	147 J-
1,1,2-TRICHLOROETHANE	22.5 J-
TRICHLOROETHENE	1920 J-
VINYL CHLORIDE	77.0 J-

DPT07-29-34I

1,2-DICHLOROETHANE	1.6 J
1,1,2,2-TETRACHLOROETHANE	3.8 J
TOTAL CVOCs	16
1,1,2-TRICHLOROETHANE	11

DPT07-16I

CIS-1,2-DICHLOROETHENE	120
1,1-DICHLOROETHENE	1.2 J
1,1,2,2-TETRACHLOROETHANE	9.5
TOTAL CVOCs	220
TRICHLOROETHENE	83
VINYL CHLORIDE	5.2

DPT07-18I

	N	FD
1,2-DICHLOROETHANE	7.6	8.0
TOTAL CVOCs	8.3	8.8
VINYL CHLORIDE	0.7 J	0.8 J

DPT07-18S

1,2-DICHLOROETHANE	6.5
TOTAL CVOCs	6.5

MW07-19S

	N	FD
CIS-1,2-DICHLOROETHENE	1600	1700 J
1,1,2,2-TETRACHLOROETHANE	490	480 J
TOTAL CVOCs	6300	6900
TRANS-1,2-DICHLOROETHENE	< 100 UJ	130 J
1,1,2-TRICHLOROETHANE	< 50 U	71 J
TRICHLOROETHENE	4200	4500 J

MW07-21S

CIS-1,2-DICHLOROETHENE	579
1,1,2,2-TETRACHLOROETHANE	74.2 J
TOTAL CVOCs	1050
TRANS-1,2-DICHLOROETHENE	23.8
1,1,2-TRICHLOROETHANE	11.7
TRICHLOROETHENE	351 J-
VINYL CHLORIDE	14.2

MW07-42I

CIS-1,2-DICHLOROETHENE	6100
1,1,2,2-TETRACHLOROETHANE	860
TOTAL CVOCs	17000
TRANS-1,2-DICHLOROETHENE	630 J
TRICHLOROETHENE	9000
VINYL CHLORIDE	140 J

DPT07-24I

CIS-1,2-DICHLOROETHENE	1.9
TOTAL CVOCs	4.7
1,1,2-TRICHLOROETHANE	0.9 J
TRICHLOROETHENE	1.9

RESOLUTION CONSULTANTS

Drawn:	JB	02/12/2017
Approved:	BS	02/12/2017
Project #:	60273164	

Legend

Monitoring Well Location

Results are in units of ug/L

Red font - above Project Action Limit

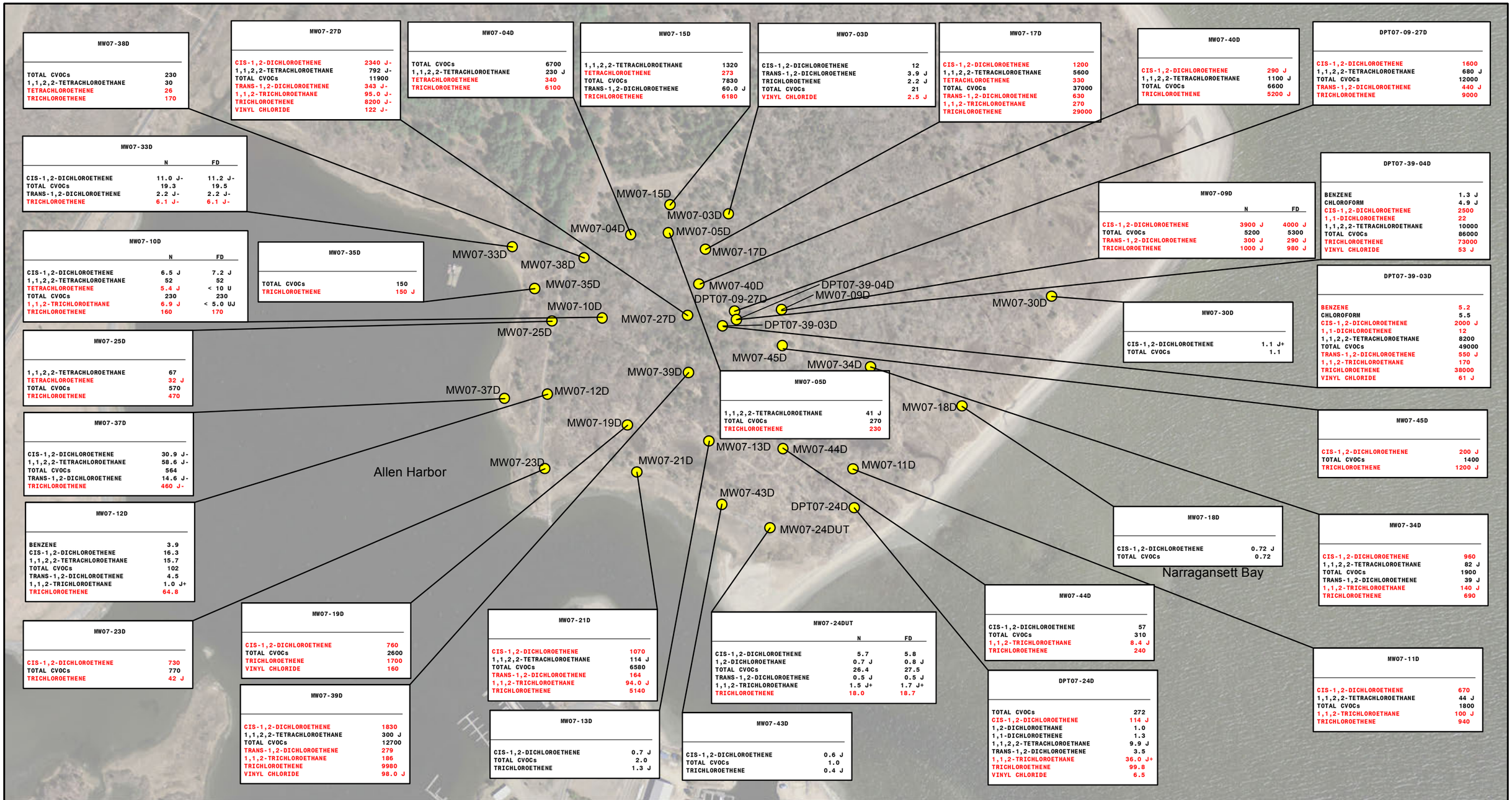
N

0 100 200

Scale in Feet

FIGURE 3
VOCS DETECTED IN SHALLOW AND INTERMEDIATE OVERBURDEN MONITORING WELLS
MONITORING EVENT 20 - SEPTEMBER 2016
IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Tag Maps\VOCs shallow\Fig_X_VOCs_in_shallow_overburden.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Monitoring Well Location

Results are in units of ug/L

Red font - above Project Action Limit

N

0 150 300

Scale in Feet

FIGURE 4
VOCS DETECTED IN DEEP OVERBURDEN MONITORING WELLS
MONITORING EVENT 20 - AUGUST 2016
IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Tag Maps\VOCs deep\Fig_4_VOCs_in_deep_overburden_11x17.mxd

RESOLUTION CONSULTANTS

Drawn:	JB	02/07/2017
Approved:	BS	02/07/2017
Project #:	60273164	

Legend

Monitoring Well Location

Results are in units of ug/L

Red font - above Project Action Limit

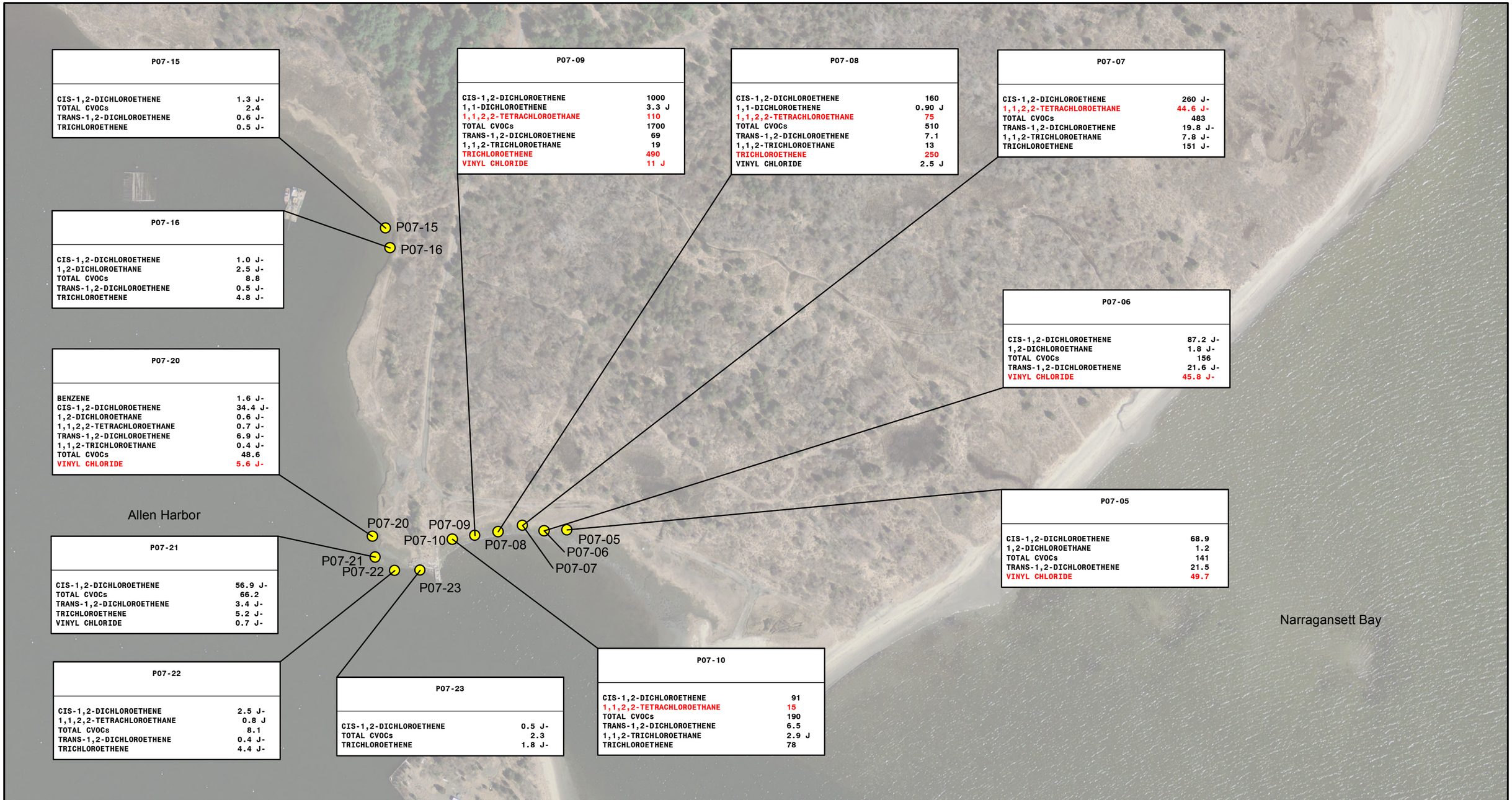
N

0 100 200

Scale in Feet

FIGURE 5
VOCS DETECTED IN BEDROCK MONITORING WELLS
MONITORING EVENT 20 - SEPTEMBER 2016
IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Tag Maps\VOCs bedrock\Fig_X_VOCs in bedrock.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	02/12/2017
Approved:	BS	02/12/2017
Project #:	60273164	

Legend

Piezometer Location

Results are in units of ug/L

Red font - above Project Action Limit

N

0 100 200

Scale in Feet

FIGURE 6
VOCS DETECTED IN PIEZOMETERS MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Tag Maps\VOCs piez\Fig_X_VOCs_in_piezometers.mxd

SED07-10	N	FD
TETRACHLOROETHENE	12 J+	< 2.9U
TOTAL CVOCS	12	< 2.9U

SED07-05	
TETRACHLOROETHENE	12 J+
TOTAL CVOCS	12

Allen Harbor

Narragansett Bay

RESOLUTION CONSULTANTS

Drawn:	JB	02/07/2017
Approved:	BS	02/07/2017
Project #:	60273164	

Legend

Sediment Sample Location

Results are in units of ug/kg

N

0 100 200

Scale in Feet

FIGURE 7
VOCS DETECTED IN SEDIMENT
MONITORING EVENT 20 - AUGUST 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Tag Maps\VOCs sediment\Fig_X_VOCs in sediment.mxd

RESOLUTION CONSULTANTS

Drawn:	JB	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Surface Water Location

Results are in units of ug/L

N

0 100 200

Scale in Feet

FIGURE 8
VOCS DETECTED IN SURFACE WATER MONITORING EVENT 20 - AUGUST 2016

IRP SITE 07 FORMER NCBC DAVISVILLE NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Tag Maps\VOCs surface water\Fig_8_VOCs in surface water.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	03/09/2017
Approved:	BS	03/09/2017
Project #:	60273164	

Legend

- Monitoring Well Location
- Groundwater Contour ft AMSL
- Approximate Groundwater Contour ft AMSL

Note: Based on the staff gauge in Allen Harbor, the surface water elevation was approximately 1.30 ft AMSL at the time of groundwater level measurements.

GW elevation at MW07-37S not used for contouring. Possible tidal influence has caused artificially high elevation.

N

0 100 200

Scale in Feet

FIGURE 9
SHALLOW/INTERMEDIATE POTENTIOMETRIC MAP
MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\GW flow maps\mxd\shallow_intermediate_water_level_map.mxd

RESOLUTION CONSULTANTS

Drawn:	JB	03/09/2017
Approved:	BS	03/09/2017
Project #:	60273164	

Legend

- Monitoring Well Location
- Groundwater Contour ft AMSL

Note: Based on the staff gauge in Allen Harbor, the surface water elevation was approximately 1.30 ft AMSL at the time of groundwater level measurements.

Well MW07-20D was inundated with sand during the 2016 synoptic water level round. GW elevation for the well are not included.

N

0 100 200

Scale in Feet

FIGURE 10
DEEP OVERBURDEN POTENTIOMETRIC MAP MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\GW flow maps\mxd\deep_water_level_map.mxd

RESOLUTION CONSULTANTS

Drawn:	JB	03/09/2017
Approved:	BS	03/09/2017
Project #:	60273164	

Legend

- Monitoring Well Location
- Groundwater Contour ft AMSL

Note: Based on the staff gauge in Allen Harbor, the surface water elevation was approximately 1.30 ft AMSL at the time of groundwater level measurements.

N

0 100 200

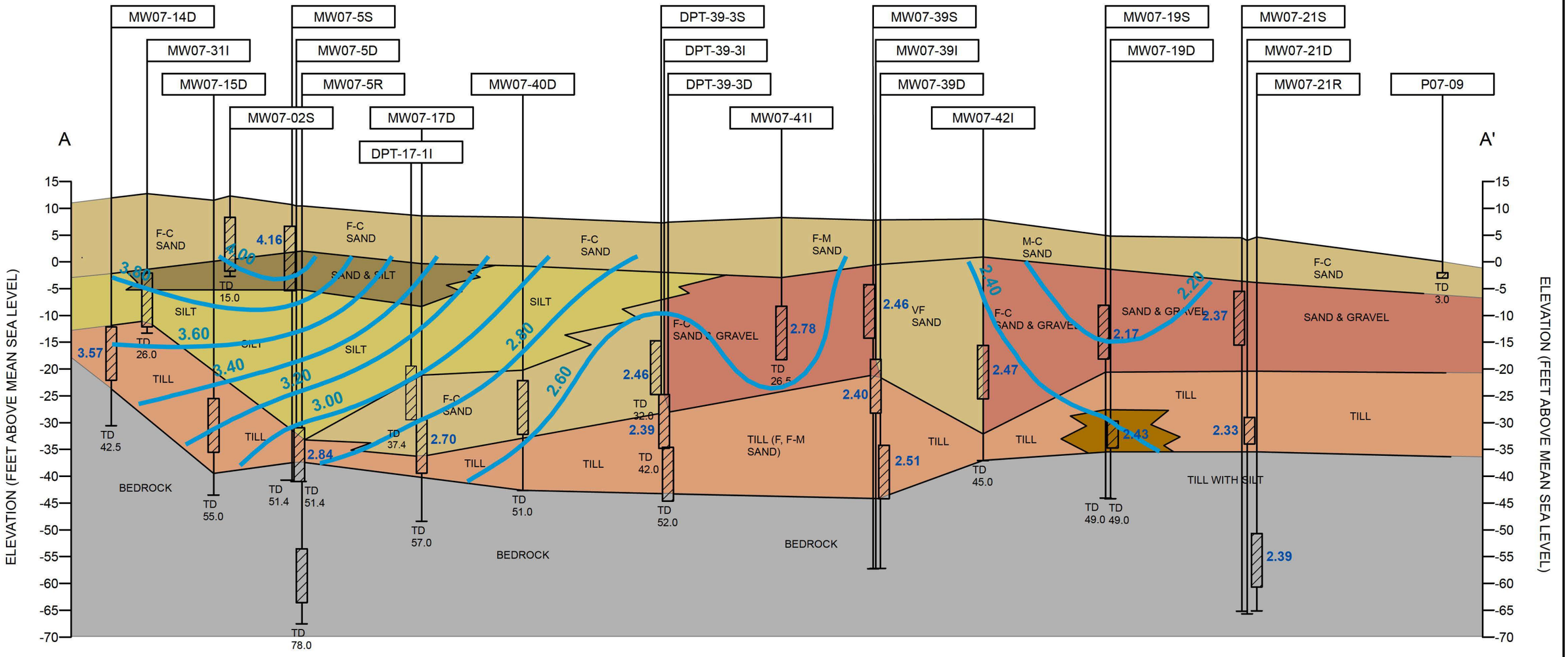
Scale in Feet

FIGURE 11
BEDROCK POTENTIOMETRIC MAP
MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\GW flow maps\mxd\bedrock_water_level_map.mxd

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\GW flow maps\mxd\FigureXX_cross_section_A-A'.mxd



RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Groundwater Contour
- Soil Boring
- Well Screens
- Bedrock
- Sand
- Sand & Gravel
- Sand & Silt
- Silt
- Till
- Till with Silt

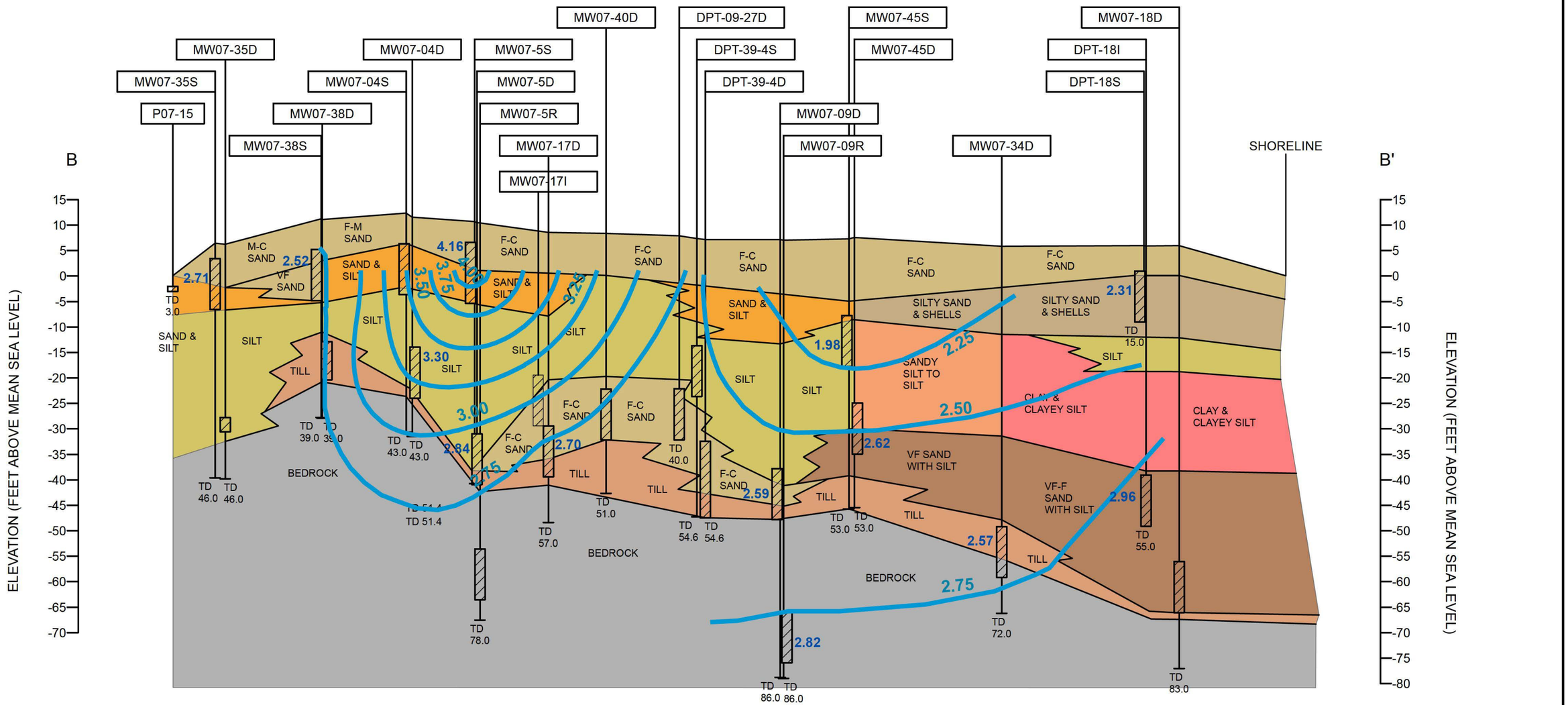
Key

Ground Surface
Monitoring Well
Monitoring Well Screen
Soil Boring/Well Location ID
Ground Surface
Top of Well Screen
Bottom of Well Screen
Bottom of Boring

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.

FIGURE 12
CROSS SECTION A-A' (GROUNDWATER)
MONITORING EVENT 20 - SEPTEMBER 2016
IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\GW flow maps\mxd\FigureXX_cross_section_B-B'.mxd



Legend

- Groundwater Contour
- Soil Boring
- Well Screens
- Bedrock
- Clay & Clayey Silt
- Sand
- Sand & Silt
- Sand with Silt
- Sandy Silt to Silt
- Silt
- Silty Sand & Shells
- Till

Key

- Ground Surface
- Monitoring Well
- Monitoring Well Screen
- Soil Boring/Well Location ID
- Ground Surface
- Top of Well Screen
- Bottom of Well Screen
- Bottom of Boring

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

FIGURE 13
CROSS SECTION B-B' (GROUNDWATER)
MONITORING EVENT 20 - SEPTEMBER 2016
IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

MW07-33S
0.86 J

MW07-41I
3300

MW07-39I
20000

MW07-39S
18000

MW07-42I
11000

MW07-19S
8700

MW07-13S

MW07-23S

MW07-21S
470

DPT07-29-34S

DPT07-18S
1.2

MW07-20S

MW07-43S

Allen Harbor

Narragansett Bay

Entrance channel

Spink Neck

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

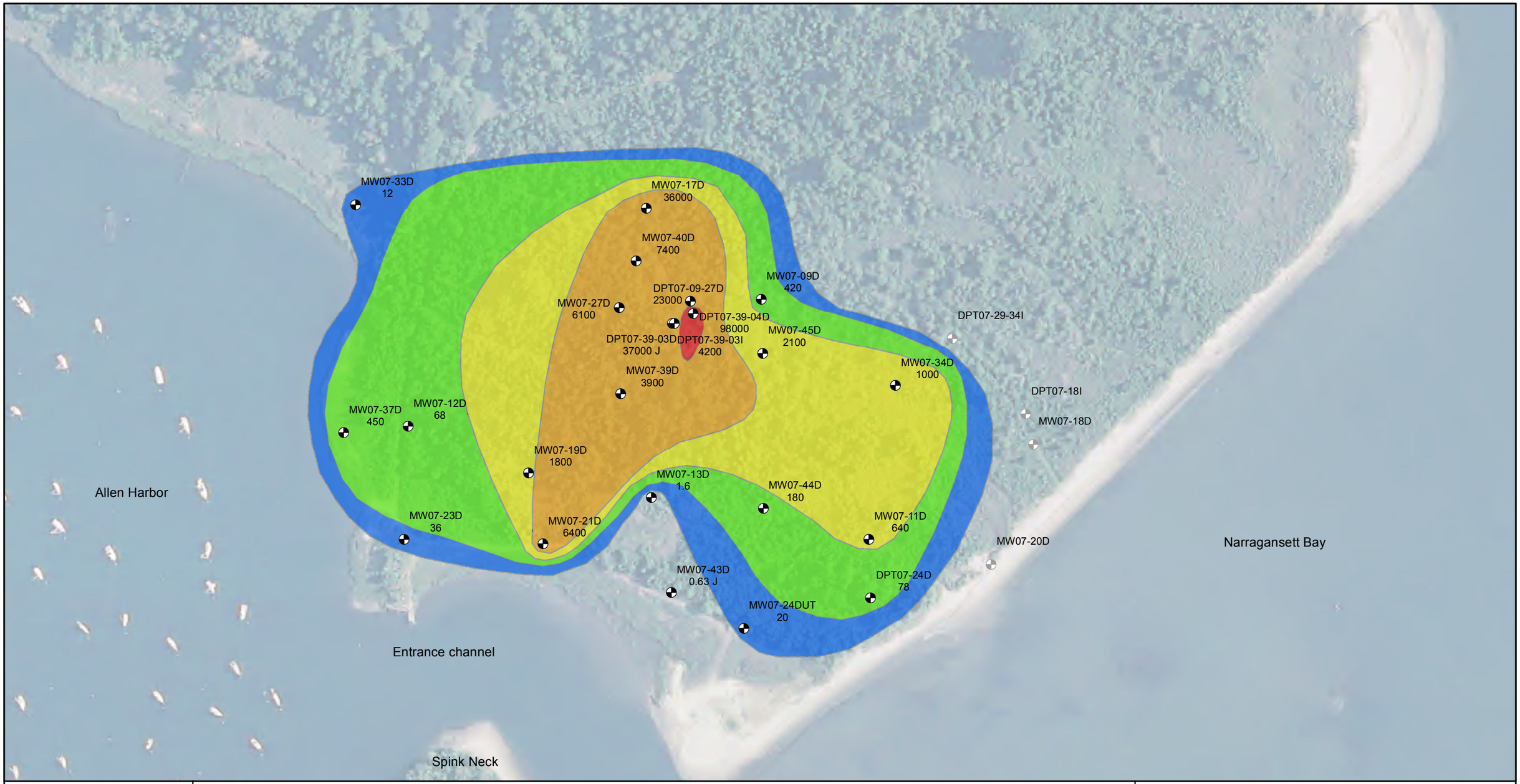
Scale in Feet

Concentrations in ug/L

FIGURE 14
SPATIAL DISTRIBUTION OF TRICHLOROETHENE CONCENTRATIONS IN SHALLOW GROUNDWATER MONITORING EVENT 18 - SEPTEMBER 2014

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME18 shallow_TCE.mxd



RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 15
SPATIAL DISTRIBUTION OF TRICHLOROETHENE CONCENTRATIONS IN DEEP GROUNDWATER MONITORING EVENT 18 - SEPTEMBER 2014

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME18 deep_TCE.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 16
SPATIAL DISTRIBUTION OF VINYL CHLORIDE CONCENTRATIONS IN SHALLOW GROUNDWATER MONITORING EVENT 18 - SEPTEMBER 2014

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME18 shallow_vc.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 17
SPATIAL DISTRIBUTION OF VINYL CHLORIDE CONCENTRATIONS IN DEEP GROUNDWATER MONITORING EVENT 18 - SEPTEMBER 2014

IRP SITE 07 FORMER NCBC DAVISVILLE NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME18 deep_VC.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

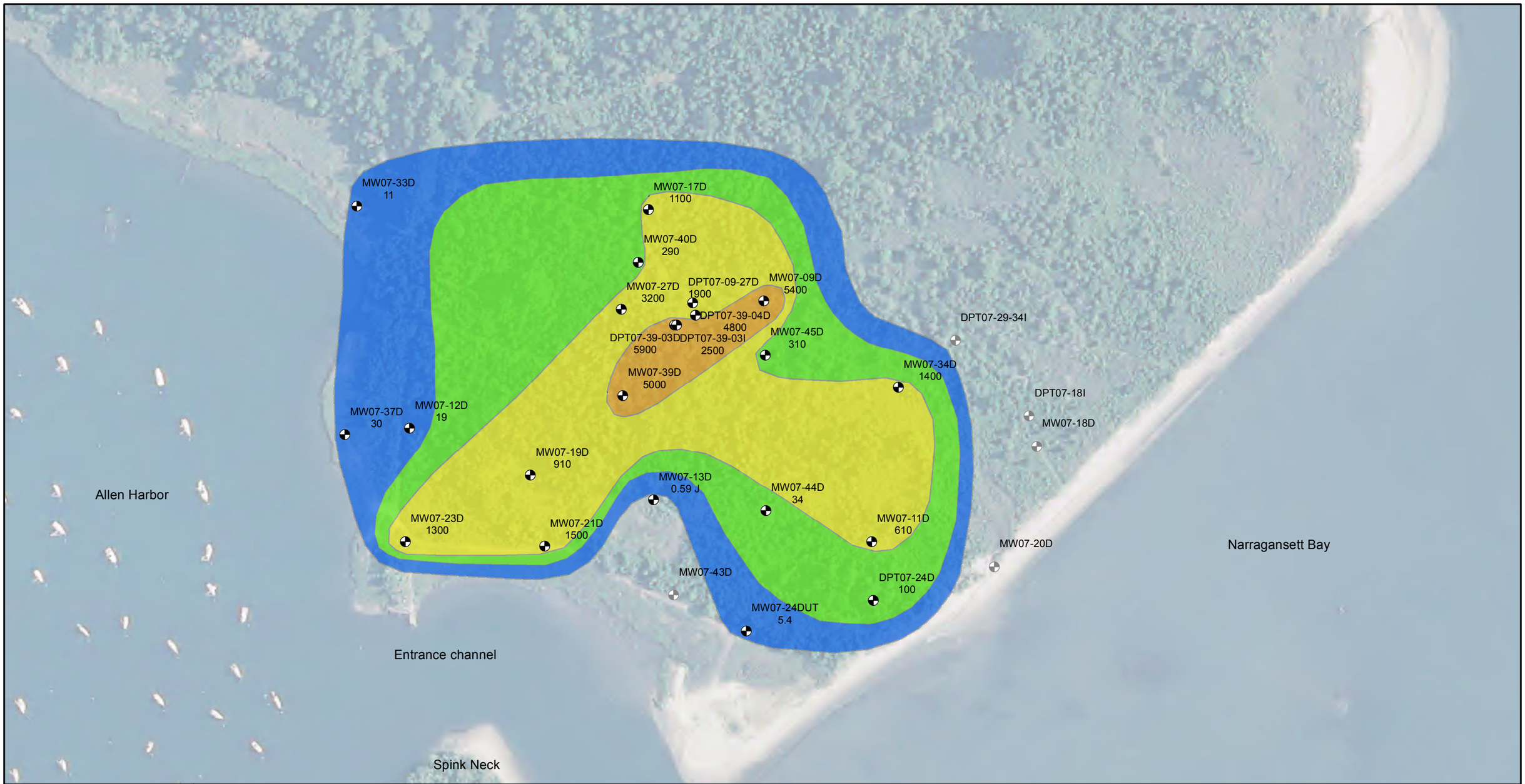
Scale in Feet

Concentrations in ug/L

FIGURE 18
SPATIAL DISTRIBUTION OF CIS-1,2-DICHLOROETHENE CONCENTRATIONS IN SHALLOW GROUNDWATER MONITORING EVENT 18 - SEPTEMBER 2014

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME18 shallow_cis.mxd



RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

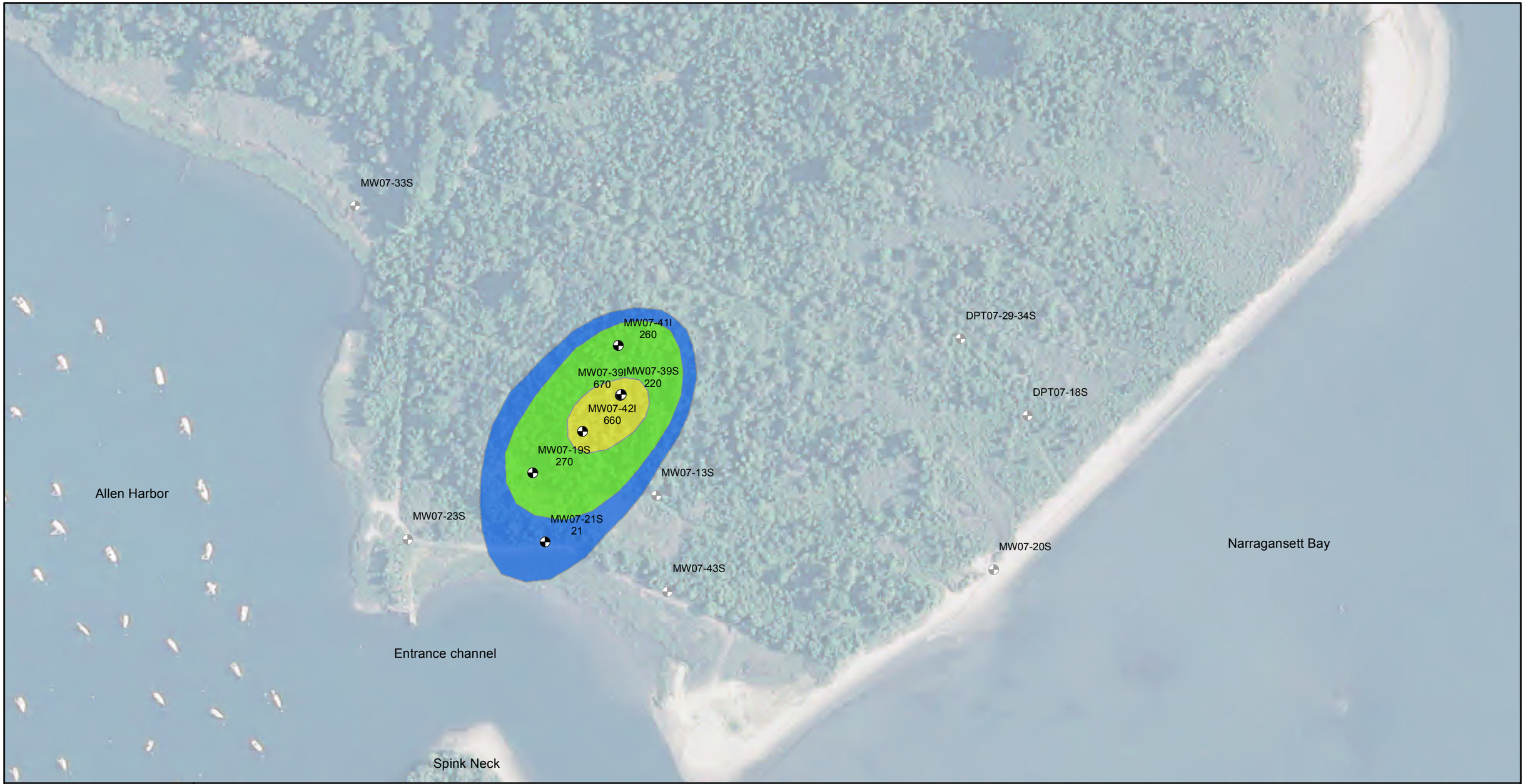
Scale in Feet

Concentrations in ug/L

FIGURE 19
SPATIAL DISTRIBUTION OF CIS-1,2-DICHLOROETHENE CONCENTRATIONS IN DEEP GROUNDWATER MONITORING EVENT 18 - SEPTEMBER 2014

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME18 deep_cis.mxd



RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 20
SPATIAL DISTRIBUTION OF TRANS-1,2-DICHLOROETHENE CONCENTRATIONS IN SHALLOW GROUNDWATER MONITORING EVENT 18 - SEPTEMBER 2014

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME18 shallow_trans.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 21
SPATIAL DISTRIBUTION OF TRANS-1,2-DICHLOROETHENE CONCENTRATIONS IN DEEP GROUNDWATER MONITORING EVENT 18 - SEPTEMBER 2014

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME18 deep_trans.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 22
SPATIAL DISTRIBUTION OF 1,1,2,2-TETRACHLOROETHANE CONCENTRATIONS IN SHALLOW GROUNDWATER MONITORING EVENT 18 - SEPTEMBER 2014

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME18 shallow_1122.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 23
SPATIAL DISTRIBUTION OF 1,1,2,2-TETRACHLOROETHANE CONCENTRATIONS IN DEEP GROUNDWATER MONITORING EVENT 18 - SEPTEMBER 2014

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME18 deep_1122.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	11/01/2017
Approved:	BS	11/01/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isoconcentrations in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

Isocontours are dashed where inferred

N

0 100 200

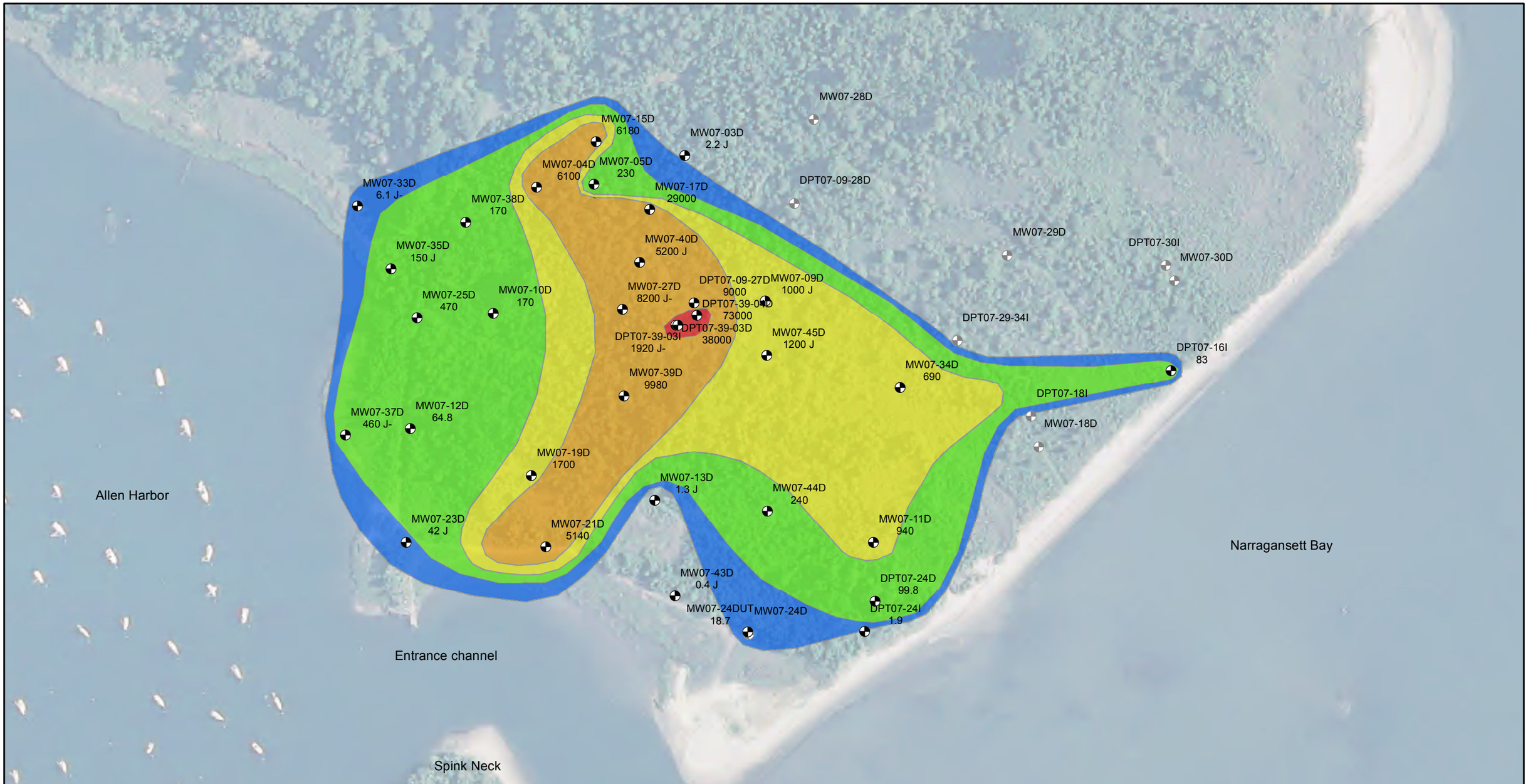
Scale in Feet

Concentrations in ug/L

FIGURE 24
SPATIAL DISTRIBUTION OF TRICHLOROETHENE CONCENTRATIONS IN SHALLOW GROUNDWATER MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME20 shallow_TCE.mxd



RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 25
SPATIAL DISTRIBUTION OF TRICHLOROETHENE CONCENTRATIONS IN DEEP GROUNDWATER MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME20 deep_TCE.mxd

MW07-03S
MW07-05S
MW07-04S
MW07-33S
MW07-38S
MW07-35S
DPT07-30S
MW07-10S
MW07-41I
88 J
DPT07-29-34S
MW07-45S
DPT07-16S
MW07-39I
MW07-39S
DPT07-18S
MW07-37S
MW07-42I
140 J
MW07-19S
MW07-13S
R
Allen Harbor
MW07-23S
MW07-21S
14.2
MW07-20S
Narragansett Bay
MW07-43S
MW07-24S
Entrance channel
Spink Neck

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 26
SPATIAL DISTRIBUTION OF VYNYL CHLORIDE CONCENTRATIONS IN SHALLOW GROUNDWATER MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME20 shallow vc_.mxd

MW07-28D
MW07-15D
MW07-03D
2.5 J
MW07-04D
MW07-05D
MW07-33D
MW07-17D
DPT07-09-28D
MW07-38D
MW07-40D
MW07-29D
DPT07-30I
MW07-35D
MW07-30D
MW07-27D
122 J-
DPT07-09-27D
MW07-09D
MW07-25D
MW07-10D
DPT07-39-04D
53 J
DPT07-29-34I
DPT07-39-03D
61 J
DPT07-39-03I
77.0 J-
MW07-45D
DPT07-16I
5.2
MW07-34D
MW07-39D
98.0 J
DPT07-18I
0.8 J
MW07-37D
MW07-12D
MW07-18D
MW07-19D
160
MW07-13D
R
MW07-44D
Allen Harbor
MW07-23D
MW07-21D
MW07-11D
Narragansett Bay
MW07-43D
DPT07-24D
6.5
MW07-24DUT
MW07-24D
DPT07-24I
Entrance channel
Spink Neck

RESOLUTION CONSULTANTS

Drawn:	RM	11/01/2017
Approved:	BS	11/01/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

Isocontours are dashed where inferred

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 27
SPATIAL DISTRIBUTION OF VYNYL CHLORIDE CONCENTRATIONS IN DEEP GROUNDWATER MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME20 deep vc_.mxd

MW07-03S
MW07-05S
MW07-04S
MW07-33S
MW07-38S
MW07-35S
DPT07-30S
MW07-10S
MW07-41I
3300
DPT07-29-34S
MW07-45S
DPT07-16S
MW07-39S
1370 J+
MW07-39I
2990
DPT07-18S
MW07-37S
MW07-42I
6100
MW07-19S
1700 J
MW07-13S
R
Allen Harbor
MW07-23S
MW07-21S
579
MW07-20S
Narragansett Bay
MW07-43S
MW07-24S
Entrance channel
Spink Neck

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 28
SPATIAL DISTRIBUTION OF
CIS-1,2-DICHLOROETHENE CONCENTRATIONS
IN SHALLOW GROUNDWATER
MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME20 shallow_cis.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 29
SPATIAL DISTRIBUTION OF CIS-1,2-DICHLOROETHENE CONCENTRATIONS IN DEEP GROUNDWATER MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME20 deep_cis.mxd

MW07-03S
MW07-05S
MW07-04S
MW07-33S
MW07-38S
MW07-35S
DPT07-30S
MW07-10S
MW07-41I
DPT07-29-34S
MW07-45S
DPT07-16S
MW07-39S
170 J+
MW07-39I
635
DPT07-18S
MW07-37S
MW07-42I
630 J
MW07-19S
130 J
MW07-13S
R
Allen Harbor
MW07-23S
MW07-21S
23.8
MW07-20S
Narragansett Bay
MW07-43S
MW07-24S
Entrance channel
Spink Neck

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

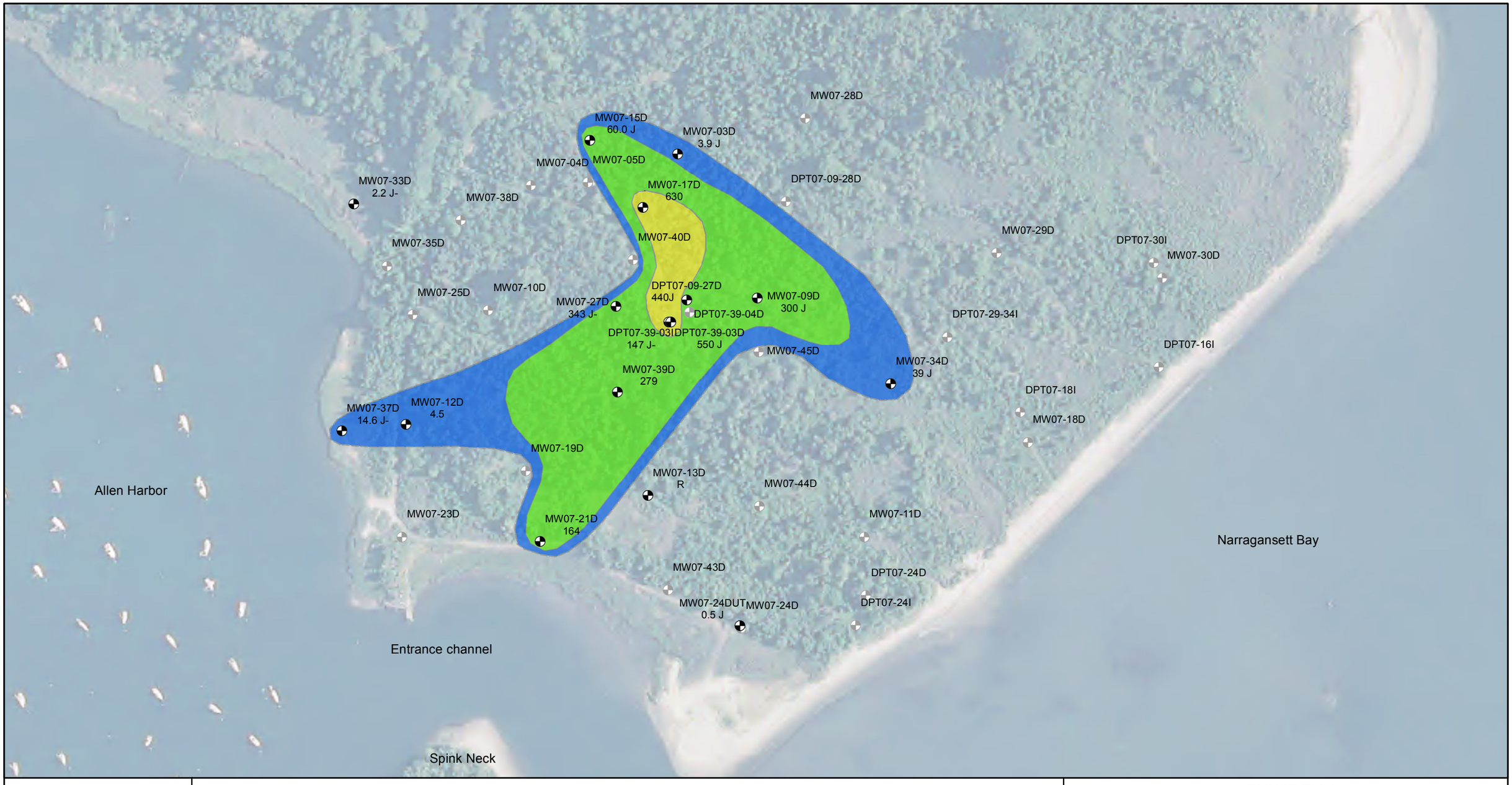
Scale in Feet

Concentrations in ug/L

FIGURE 30
SPATIAL DISTRIBUTION OF
TRANS-1,2-DICHLOROETHENE CONCENTRATIONS
IN SHALLOW GROUNDWATER
MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME20 shallow_trans.mxd



RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect
- R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 31
SPATIAL DISTRIBUTION OF TRANS-1,2-DICHLOROETHENE CONCENTRATIONS IN DEEP GROUNDWATER MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME20 deep_trans.mxd

MW07-03S
MW07-05S
MW07-04S
MW07-33S
MW07-38S
MW07-35S
DPT07-30S
MW07-10S
MW07-41I
720
DPT07-29-34S
MW07-45S
DPT07-16S
MW07-39S
1650 J+
MW07-39I
1270
DPT07-18S
MW07-37S
MW07-42I
860
MW07-19S
490
MW07-13S
R
Allen Harbor
MW07-23S
MW07-21S
74.2 J
MW07-20S
Narragansett Bay
MW07-43S
MW07-24S
Entrance channel
Spink Neck

RESOLUTION CONSULTANTS

Drawn:	RM	03/13/2017
Approved:	BS	03/13/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

N

0 100 200

Scale in Feet

Concentrations in ug/L

FIGURE 32
SPATIAL DISTRIBUTION OF 1,1,2,2-TETRACHLOROETHANE CONCENTRATIONS IN SHALLOW GROUNDWATER MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME20 shallow_1122.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	11/01/2017
Approved:	BS	11/01/2017
Project #:	60273164	

Legend

- Monitoring Well
- Monitoring Well - Non Detect

R - Rejected Data

Isocontours in GW (ug/L)

- 5-50
- 50-500
- 500-5,000
- 5,000-50,000
- >50,000

Isocontours are dashed where inferred

N

0 100 200

Scale in Feet

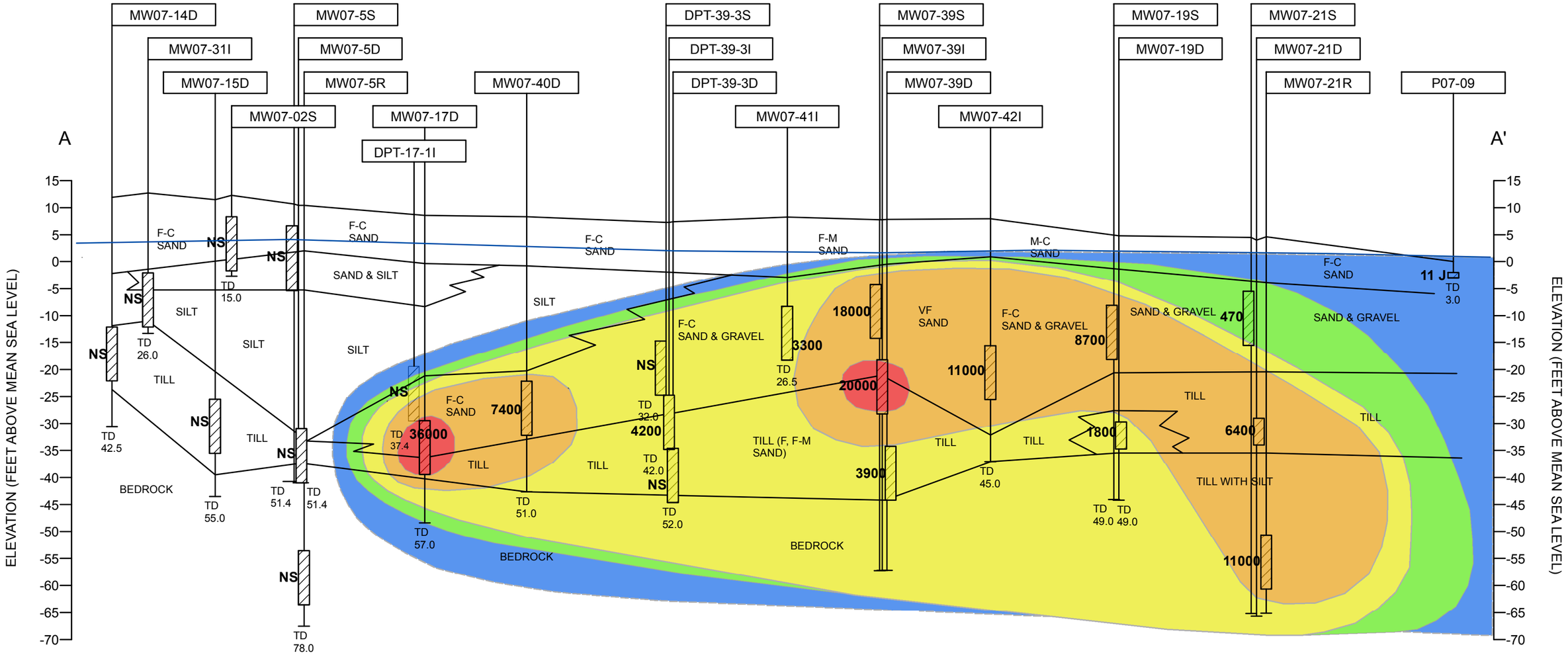
Concentrations in ug/L

FIGURE 33
SPATIAL DISTRIBUTION OF 1,1,2,2-TETRACHLOROETHANE CONCENTRATIONS IN DEEP GROUNDWATER MONITORING EVENT 20 - SEPTEMBER 2016

IRP SITE 07 FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\plume maps\ME20 deep_1122.mxd

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_A-A_TCE_ME18.mxd



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Sand

- Sand & Gravel
- Sand & Silt
- Silt
- Till
- Till with Silt

Key

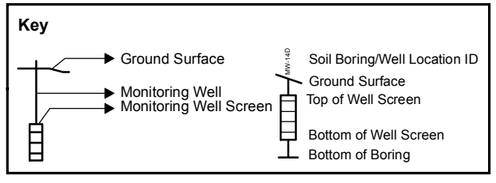
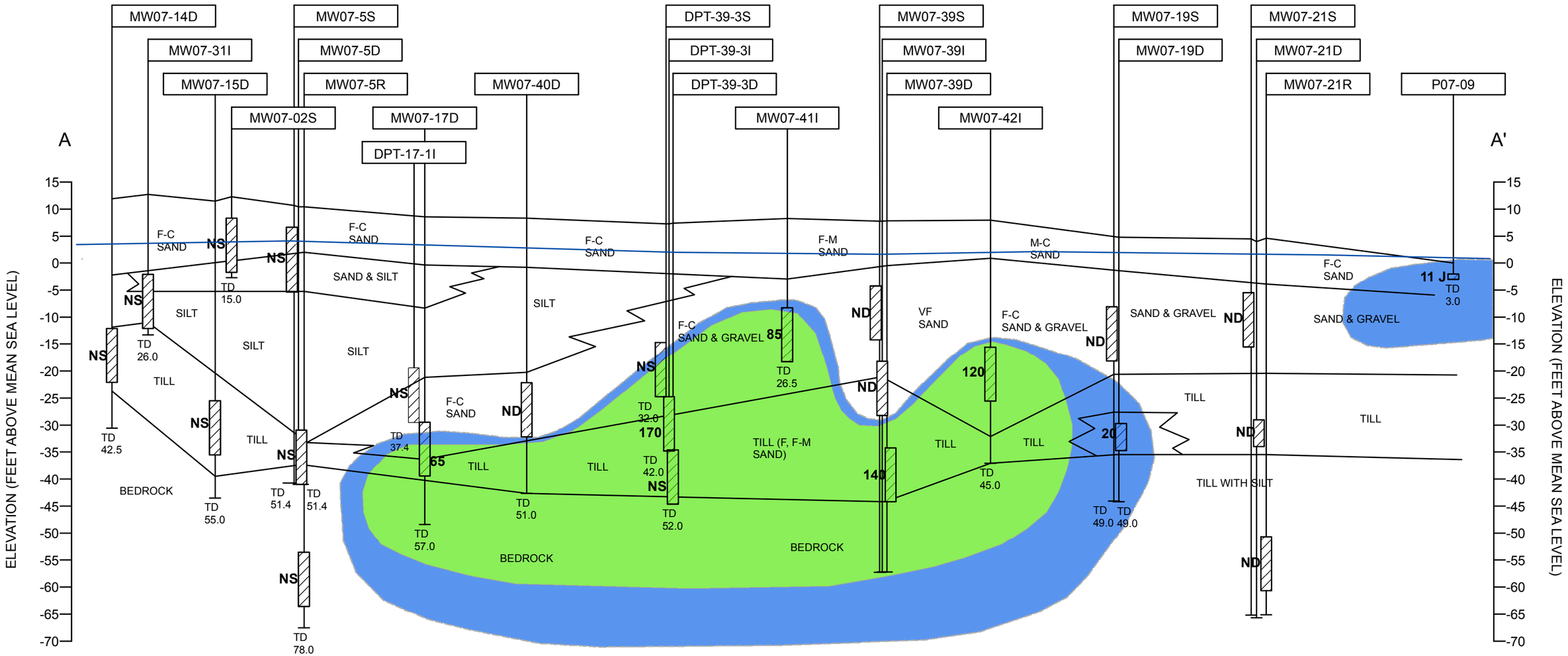


FIGURE 34
ISOCONCENTRATION RANGES FOR TCE
CROSS SECTION A-A', ME-18

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_A-A_VC_ME18.mxd



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Sand
- Sand & Gravel
- Sand & Silt
- Silt
- Till
- Till with Silt

Key

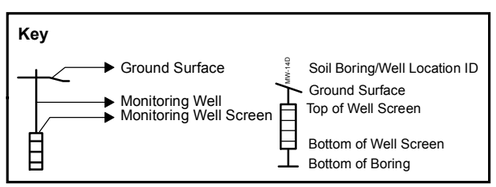
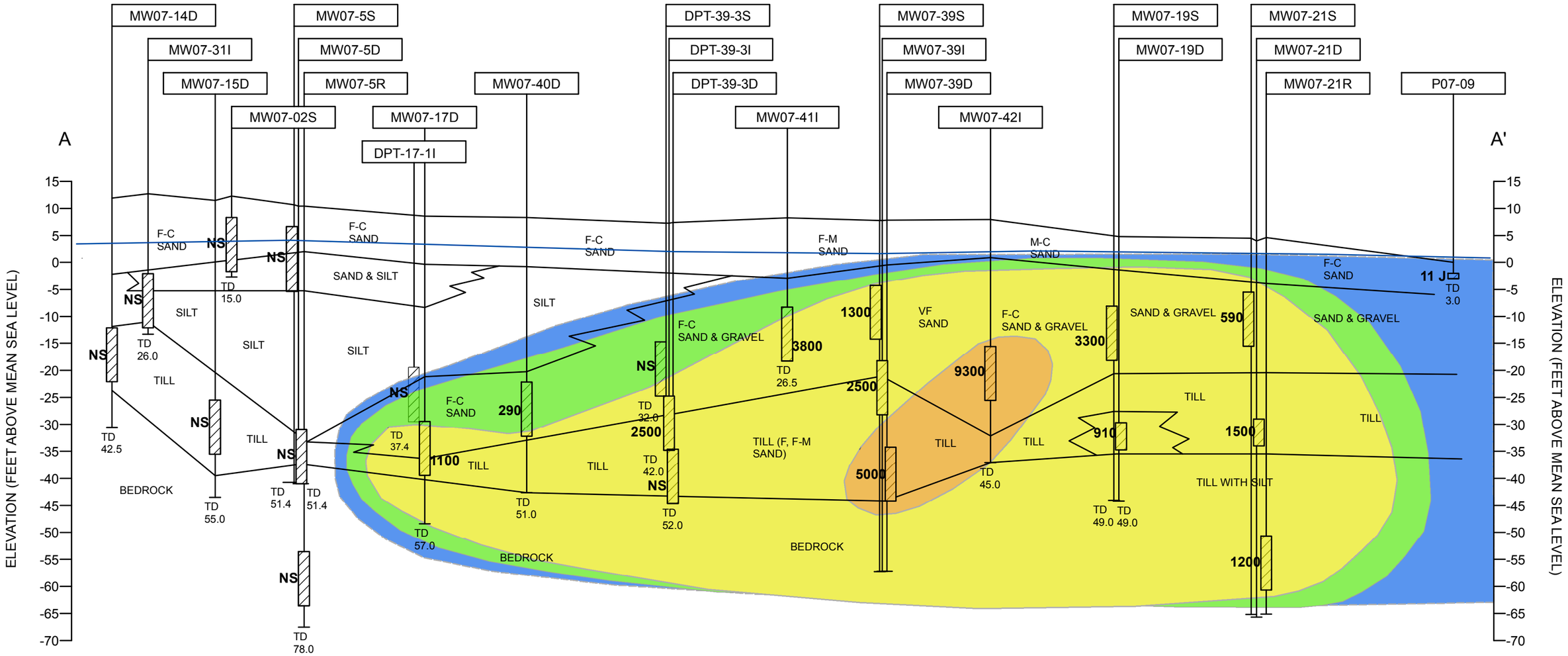


FIGURE 35
ISOCONCENTRATION RANGES FOR VC
CROSS SECTION A-A', ME-18

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_A-A_CIS_ME18.mxd



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Sand

- Sand & Gravel
- Sand & Silt
- Silt
- Till
- Till with Silt

Key

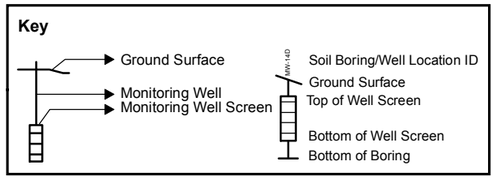
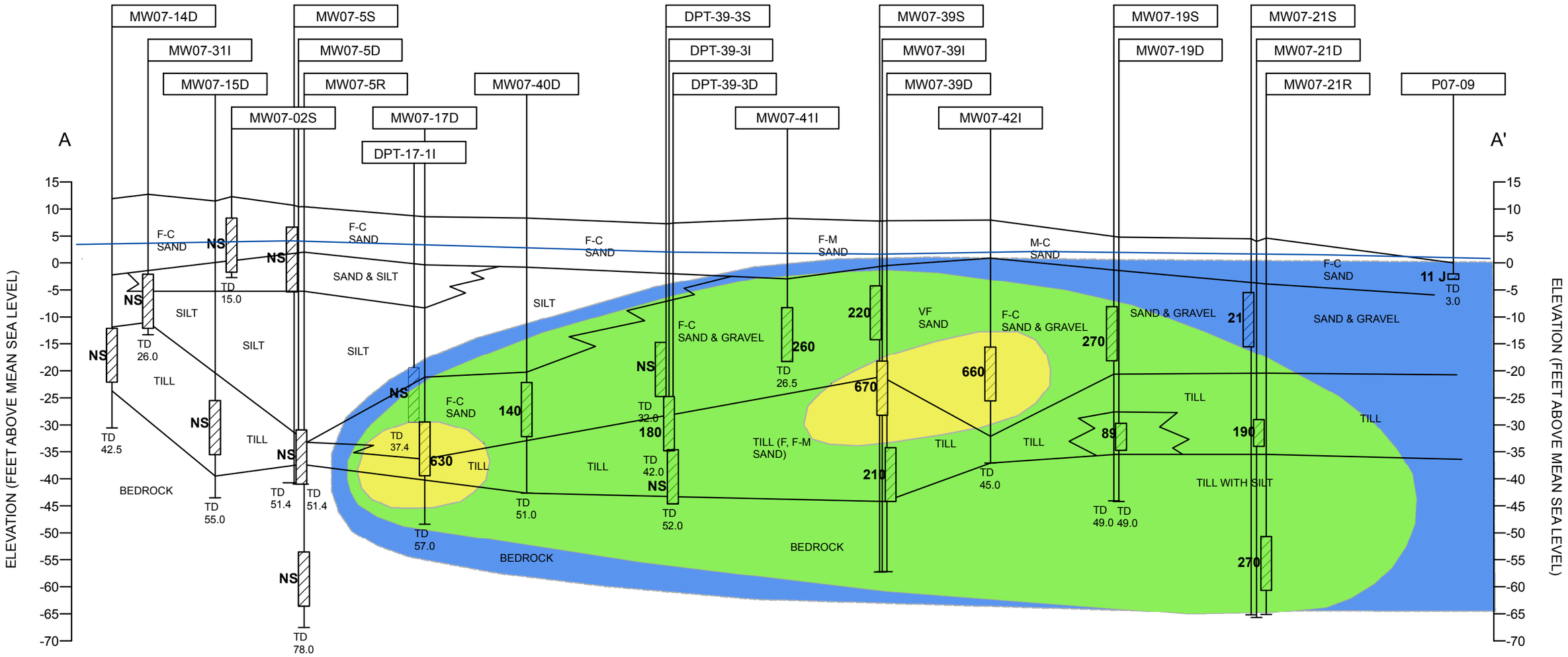


FIGURE 36
ISOCONCENTRATION RANGES FOR
CIS-1,2-DICHLOROETHENE
CROSS SECTION A-A', ME-18

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_A-A_TRANS_ME18.mxd



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Sand

- Sand & Gravel
- Sand & Silt
- Silt
- Till
- Till with Silt

Key

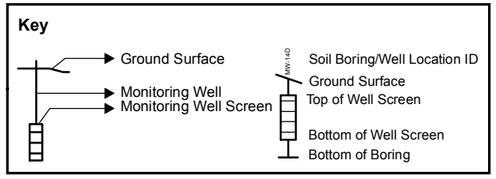
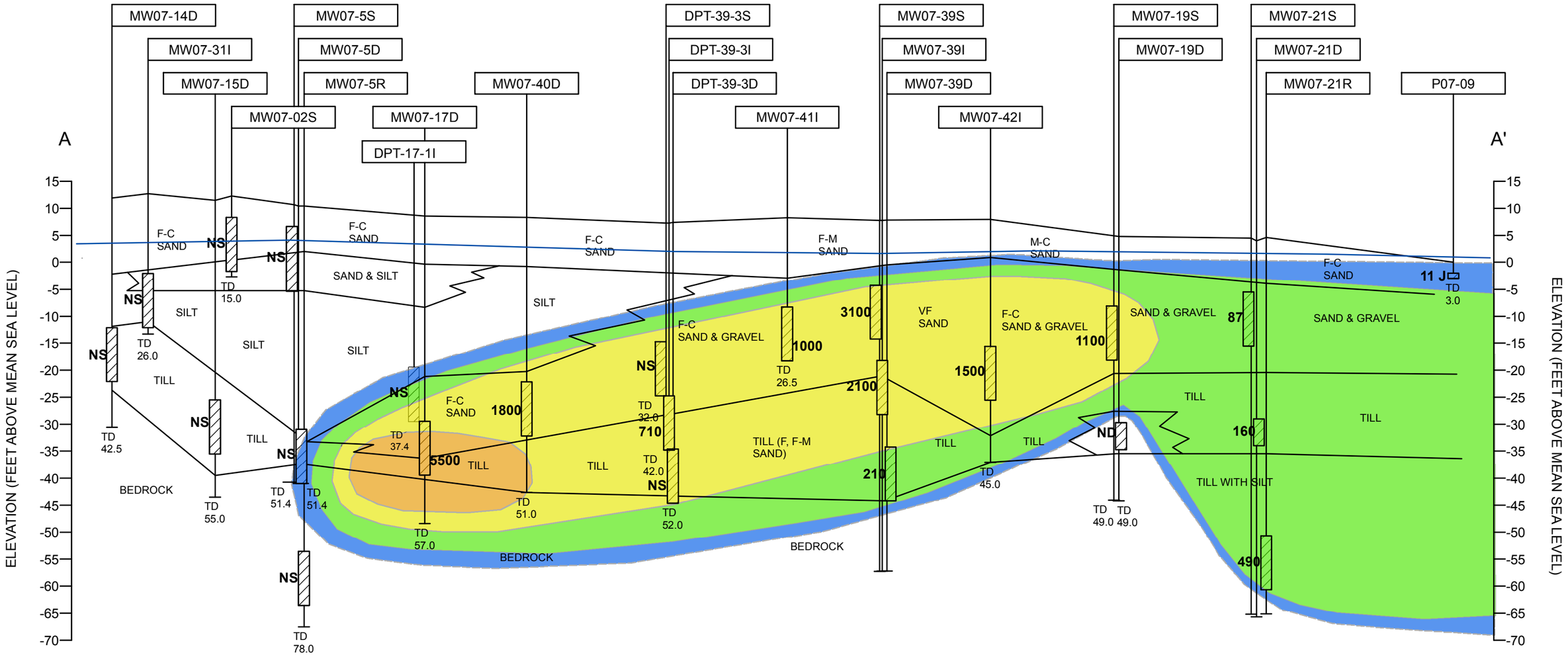


FIGURE 37
ISOCONCENTRATION RANGES FOR
TRANS-1,2-DICHLOROETHENE
CROSS SECTION A-A', ME-18

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_A-A_1122_ME18.mxd



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Sand

- Sand & Gravel
- Sand & Silt
- Silt
- Till
- Till with Silt

Key

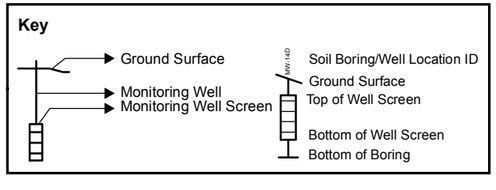
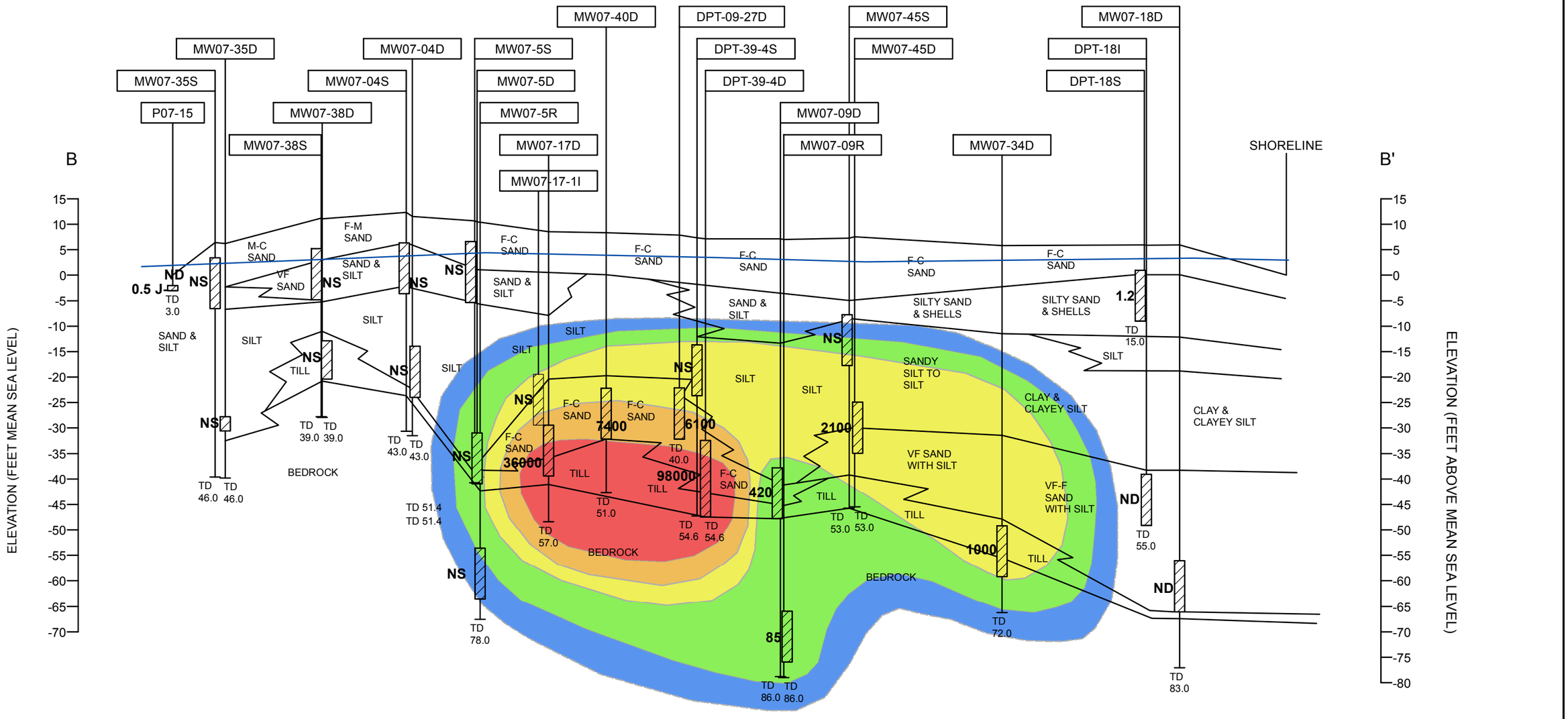


FIGURE 38
ISOCONCENTRATION RANGES FOR
1,1,2,2-TETRACHLOROETHANE
CROSS SECTION A-A', ME-18

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_B-B_TCE_ME18.mxd



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Clay & Clayey Silt
- Sand
- Sand & Silt
- Sand with Silt
- Sandy Silt to Silt
- Silt
- Silty Sand & Shells
- Till

Key

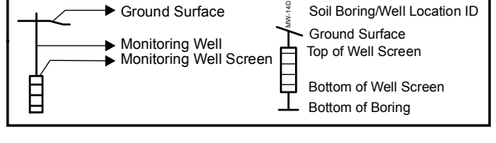
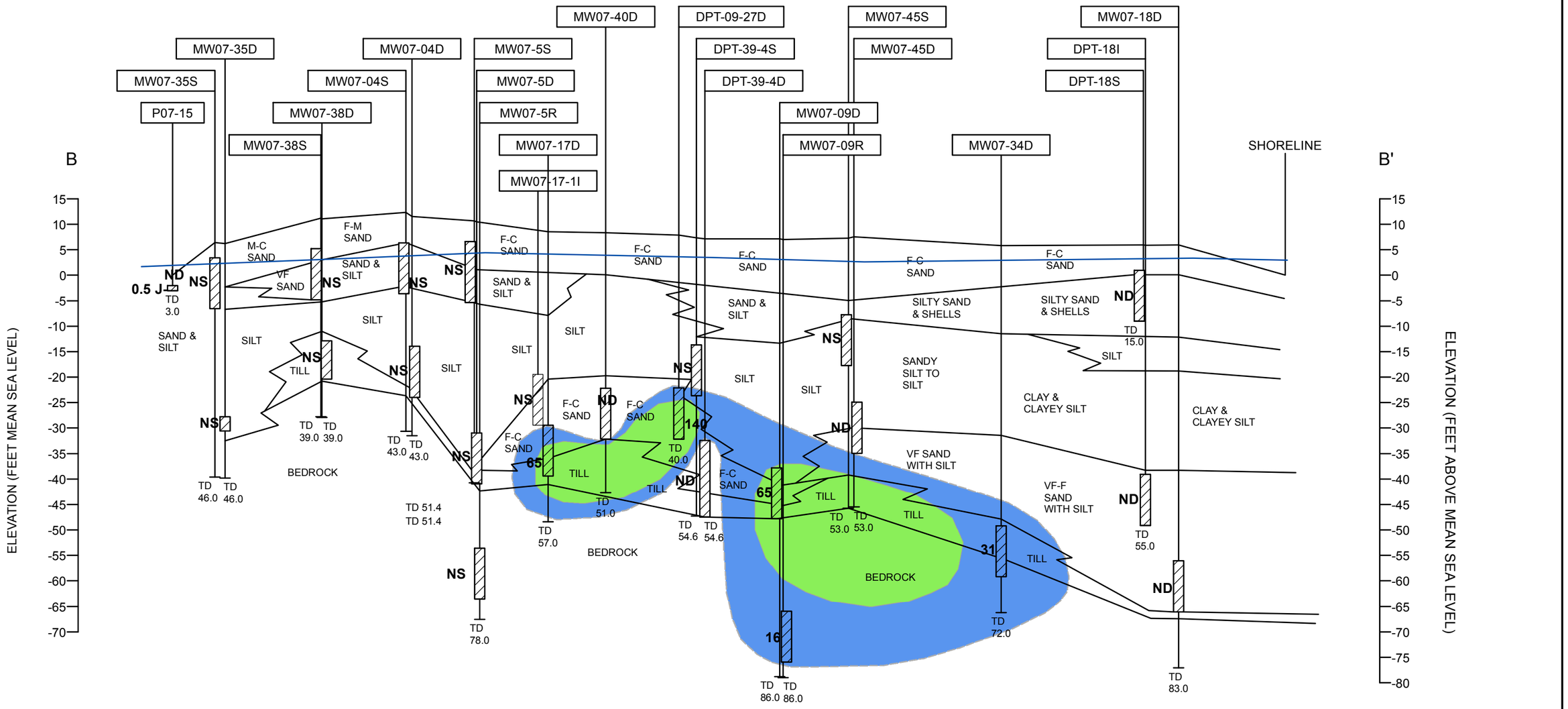


FIGURE 39
ISOCONCENTRATION RANGES FOR TCE
CROSS SECTION B-B', ME-18

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_B-B_VC_ME18.mxd



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Clay & Clayey Silt
- Sand
- Sand & Silt
- Sand with Silt
- Sandy Silt to Silt
- Silt
- Silty Sand & Shells
- Till

Key

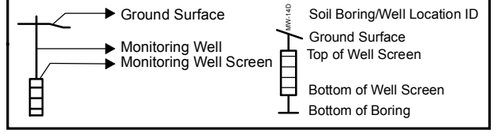
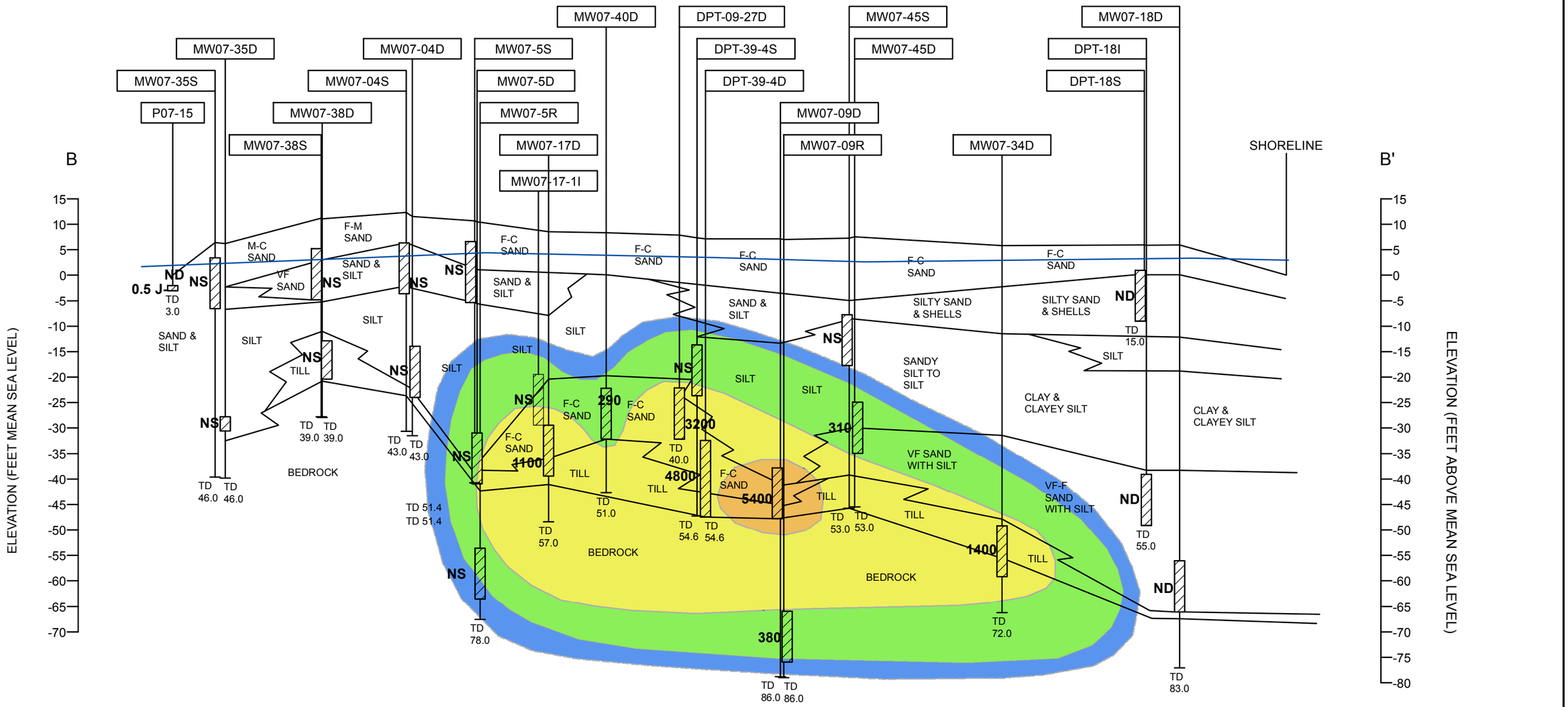


FIGURE 40
ISOCONCENTRATION RANGES FOR VC
CROSS SECTION B-B', ME-18

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_B-B_CIS_ME18.mxd



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

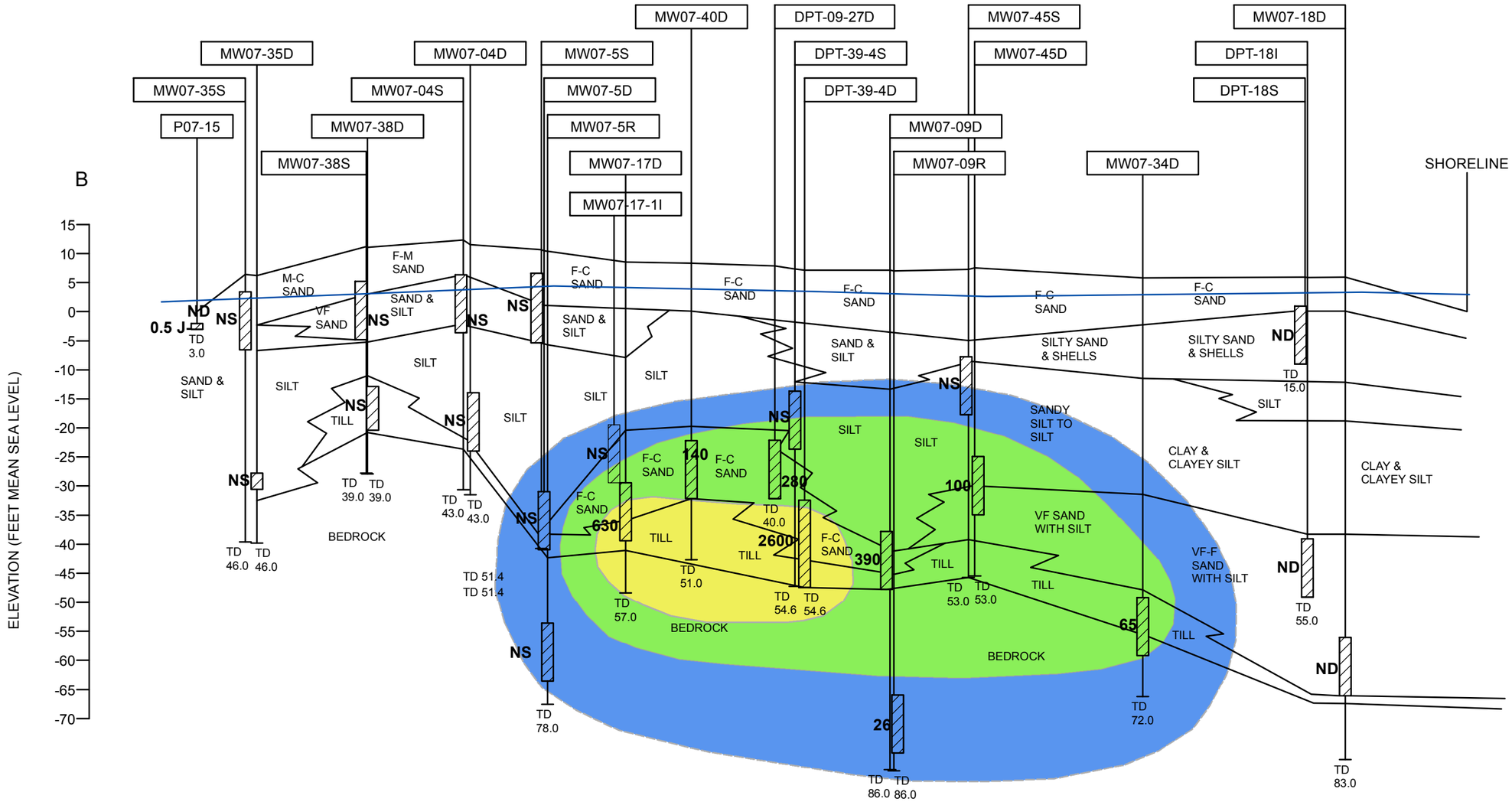
- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Clay & Clayey Silt
- Sand
- Sand & Silt
- Sand with Silt
- Sandy Silt to Silt
- Silt
- Silty Sand & Shells
- Till

Key
- Ground Surface
- Monitoring Well
- Monitoring Well Screen
- Soil Boring/Well Location ID
- Ground Surface
- Top of Well Screen
- Bottom of Well Screen
- Bottom of Boring

FIGURE 41
ISOCONCENTRATION RANGES FOR
CIS-1,2-DICHLOROETHENE
CROSS SECTION B-B', ME-18

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_B-B_TRANS_ME18.mxd



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Clay & Clayey Silt
- Sand
- Sand & Silt
- Sand with Silt
- Sandy Silt to Silt
- Silt
- Silty Sand & Shells
- Till

Key

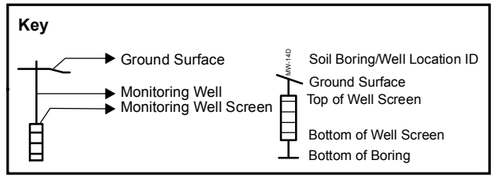
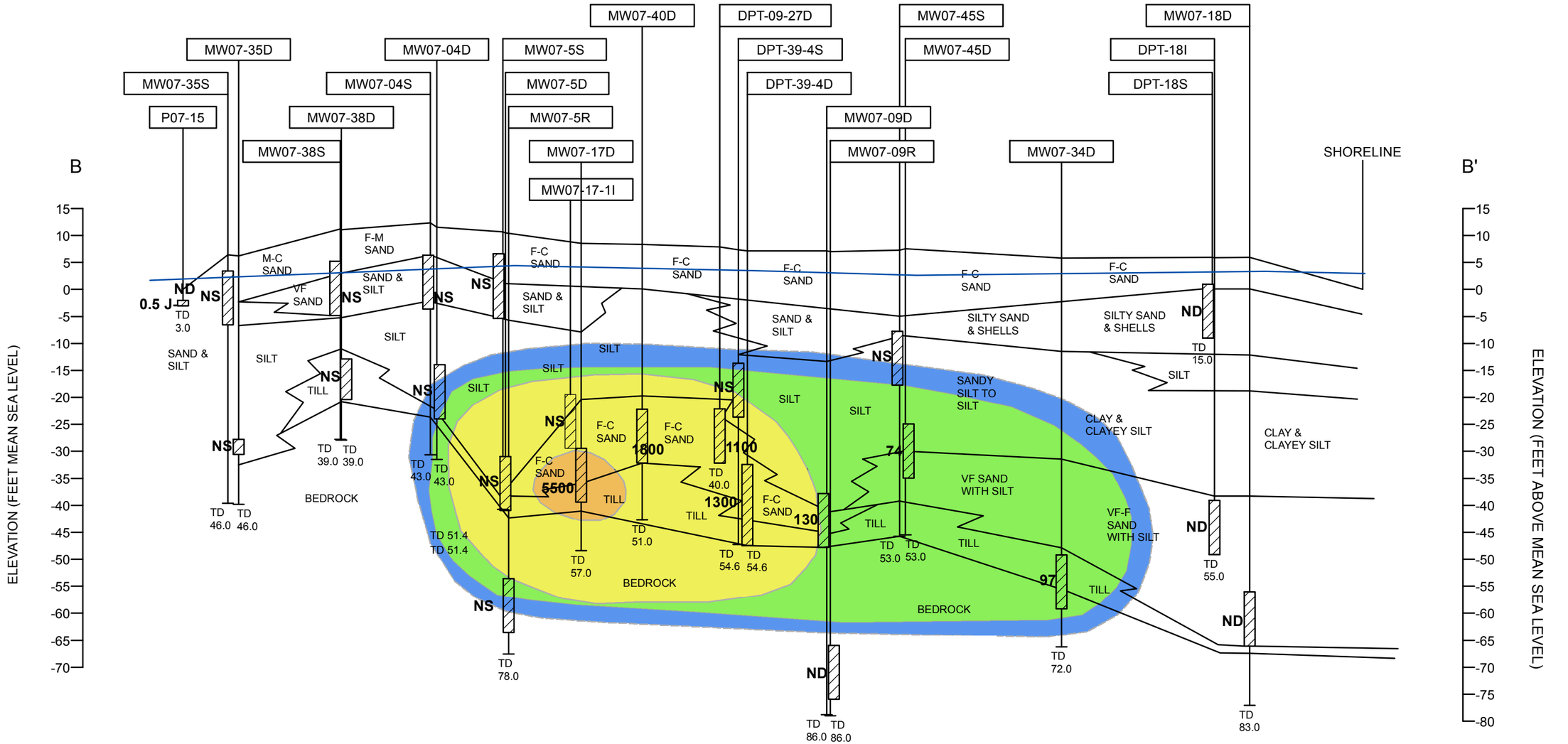


FIGURE 42
ISOCONCENTRATION RANGES FOR
TRANS-1,2-DICHLOROETHENE
CROSS SECTION B-B', ME-18

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_B-B_1122_ME18.mxd



Notes:
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2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
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4) * indicates the monitoring well was abandoned during landfill cap construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Clay & Clayey Silt
- Sand
- Sand & Silt
- Sand with Silt
- Sandy Silt to Silt
- Silt
- Silty Sand & Shells
- Till

Key

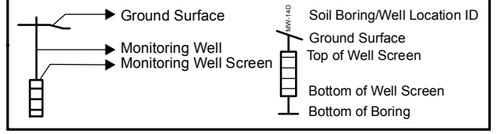
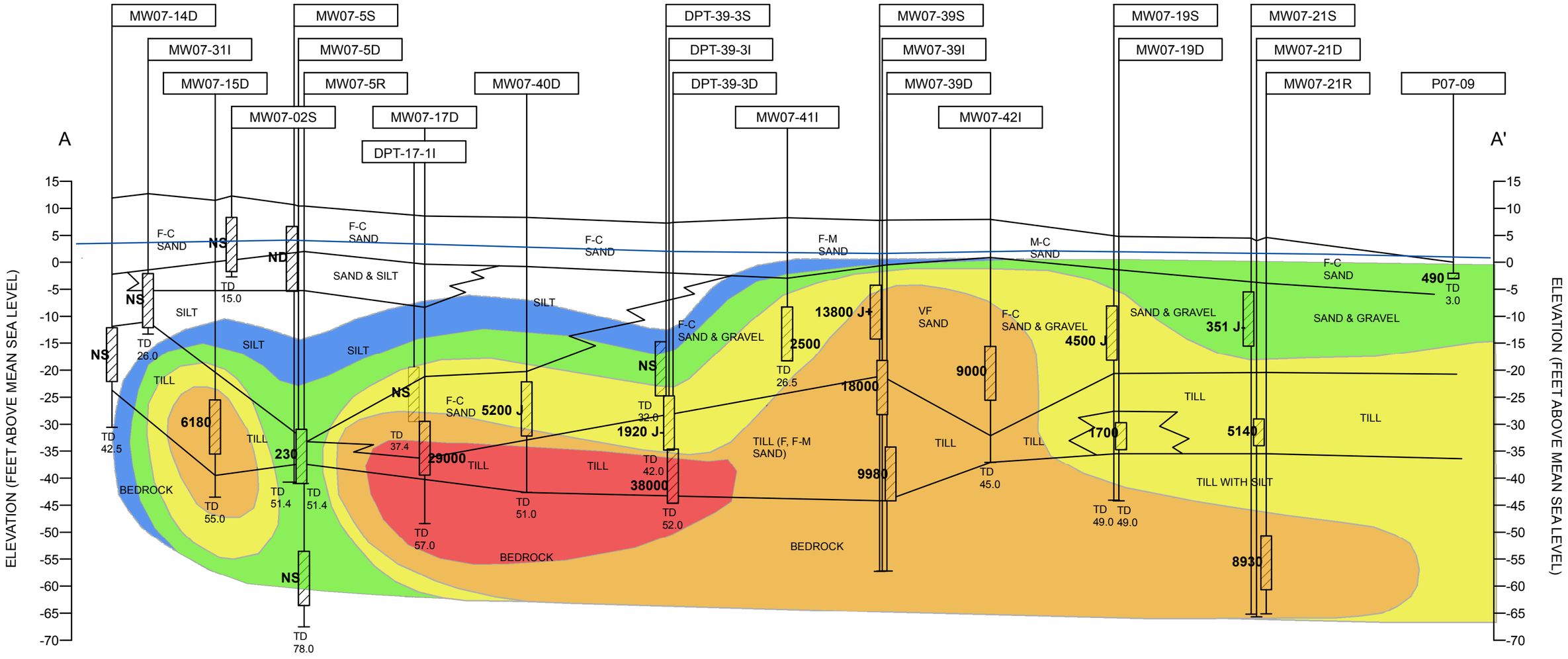


FIGURE 43
ISOCONCENTRATION RANGES FOR
1,1,2,2-TETRACHLOROETHANE
CROSS SECTION B-B', ME-18

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_A-A_TCE_MEE20.mxd



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Sand

- Sand & Gravel
- Sand & Silt
- Silt
- Till
- Till with Silt

Key

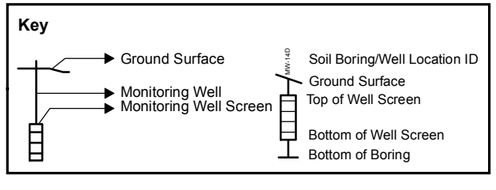
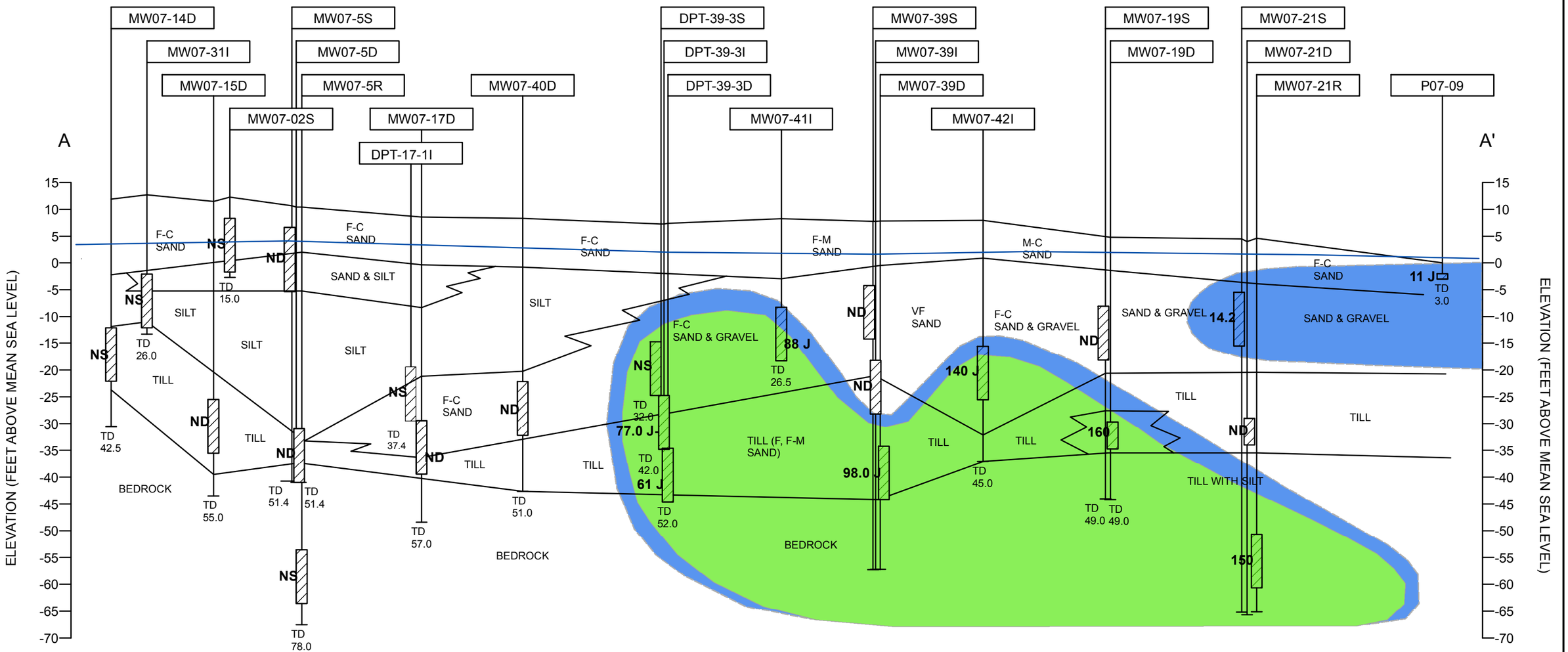


FIGURE 44
ISOCONCENTRATION RANGES FOR TCE
CROSS SECTION A-A', ME-20

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_A-A_VC_MEE20.mxd



Notes:
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RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Sand

- Sand & Gravel
- Sand & Silt
- Silt
- Till
- Till with Silt

Key

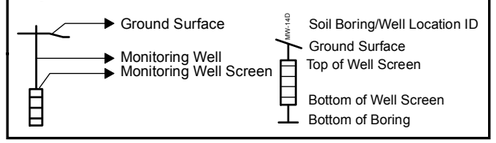
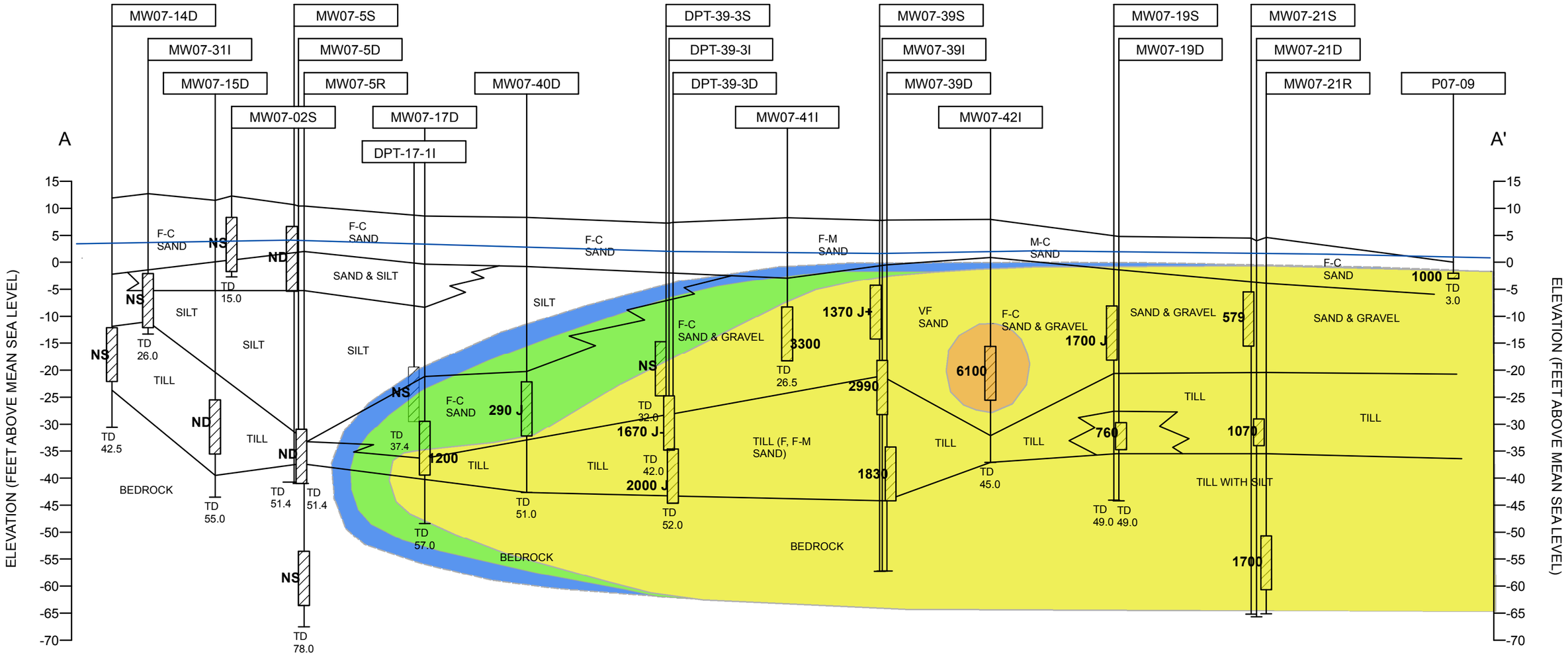


FIGURE 45
ISOCONCENTRATION RANGES FOR VC
CROSS SECTION A-A', ME-20

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_A-A_CIS_MEE20.mxd



Notes:
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RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Sand

- Sand & Gravel
- Sand & Silt
- Silt
- Till
- Till with Silt

Key

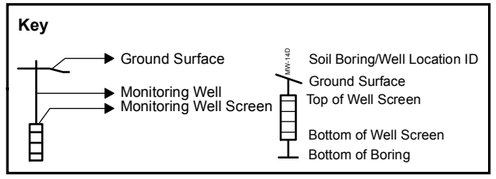
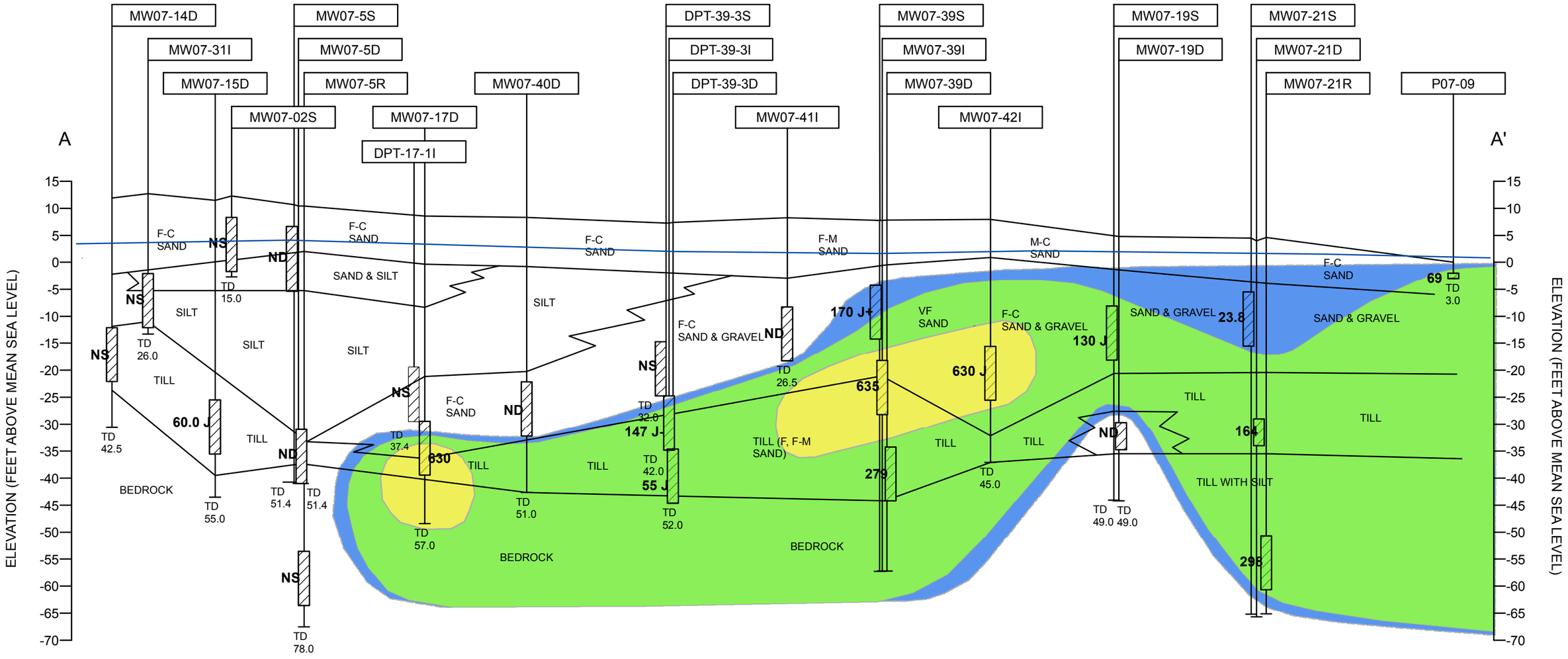


FIGURE 46
ISOCONCENTRATION RANGES FOR
CIS-1,2-DICHLOROETHENE
CROSS SECTION A-A', ME-20

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_A-A_TRANS_ME20.mxd



Notes:
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3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Sand

- Sand & Gravel
- Sand & Silt
- Silt
- Till
- Till with Silt

Key

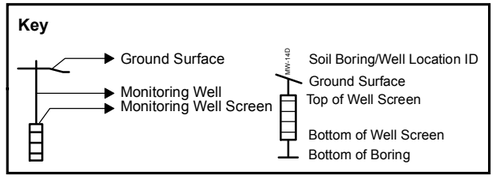
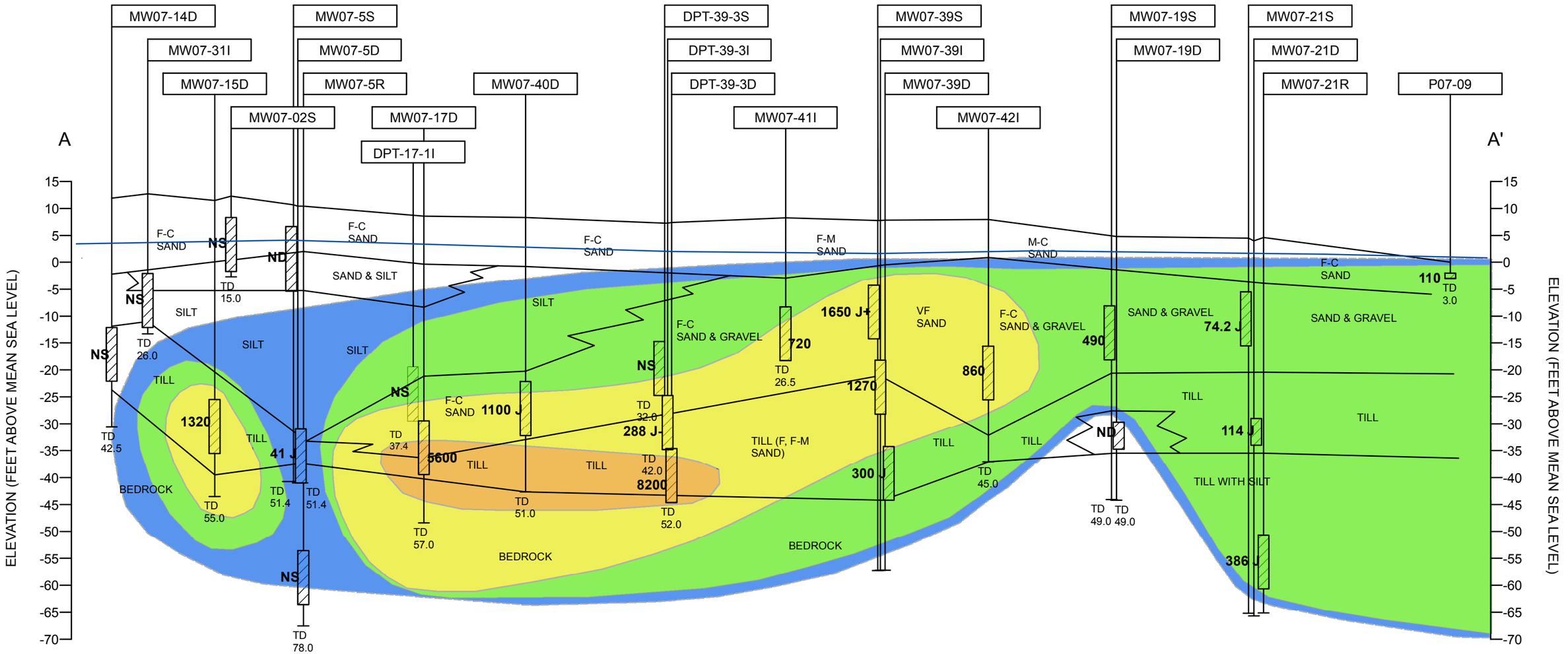


FIGURE 47
ISOCONCENTRATION RANGES FOR
TRANS-1,2-DICHLOROETHENE
CROSS SECTION A-A', ME-20

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_A-A_1122_ME20.mxd



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RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Sand

- Sand & Gravel
- Sand & Silt
- Silt
- Till
- Till with Silt

Key

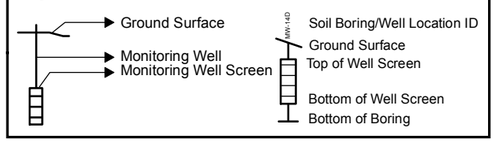
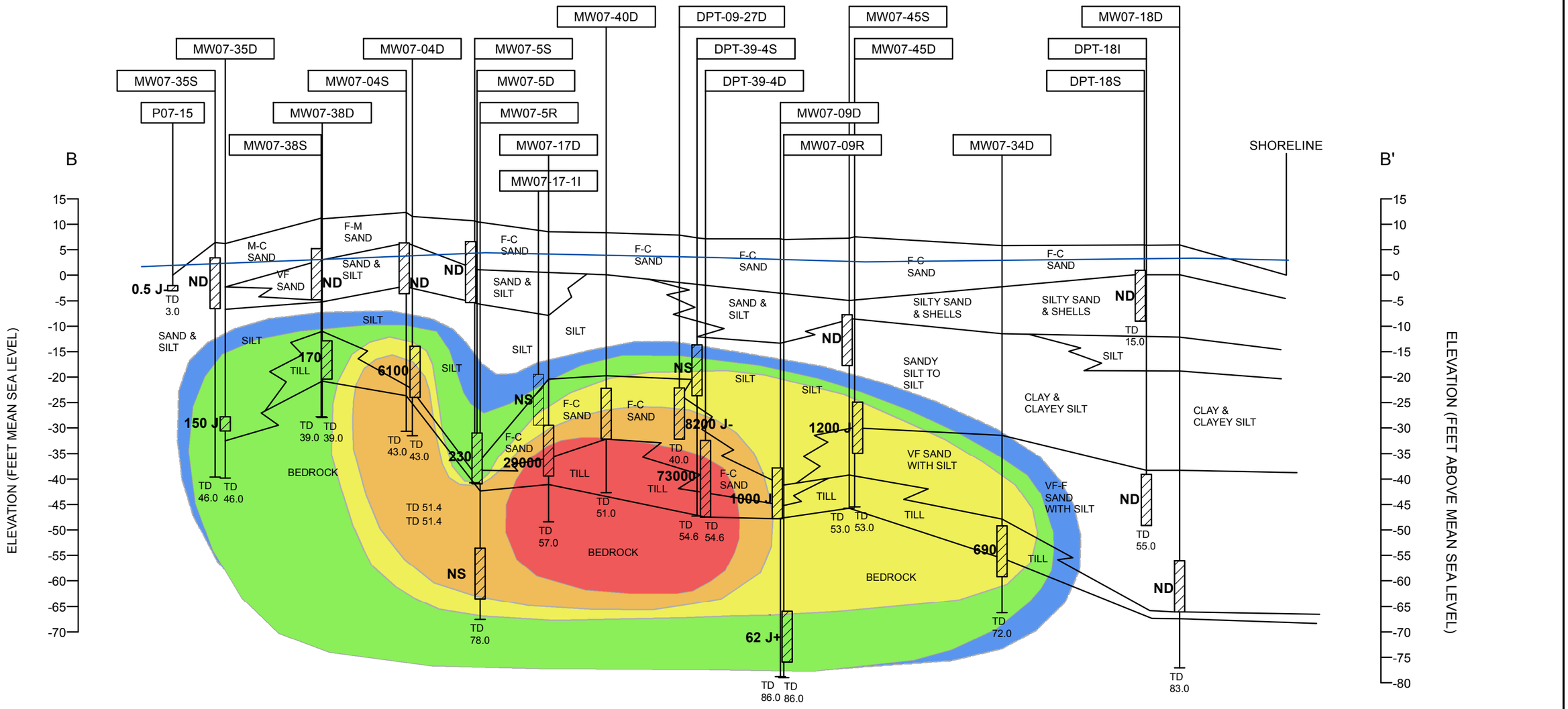


FIGURE 48
ISOCONCENTRATION RANGES FOR
1,1,2,2-TETRACHLOROETHANE
CROSS SECTION A-A', ME-20

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_B-B_TCE_MEE20.mxd



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4) * indicates the monitoring well was abandoned during landfill cap construction.

RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Clay & Clayey Silt
- Sand
- Sand & Silt
- Sand with Silt
- Sandy Silt to Silt
- Silt
- Silty Sand & Shells
- Till

Key

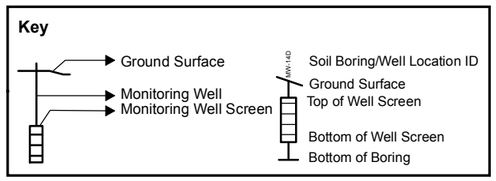
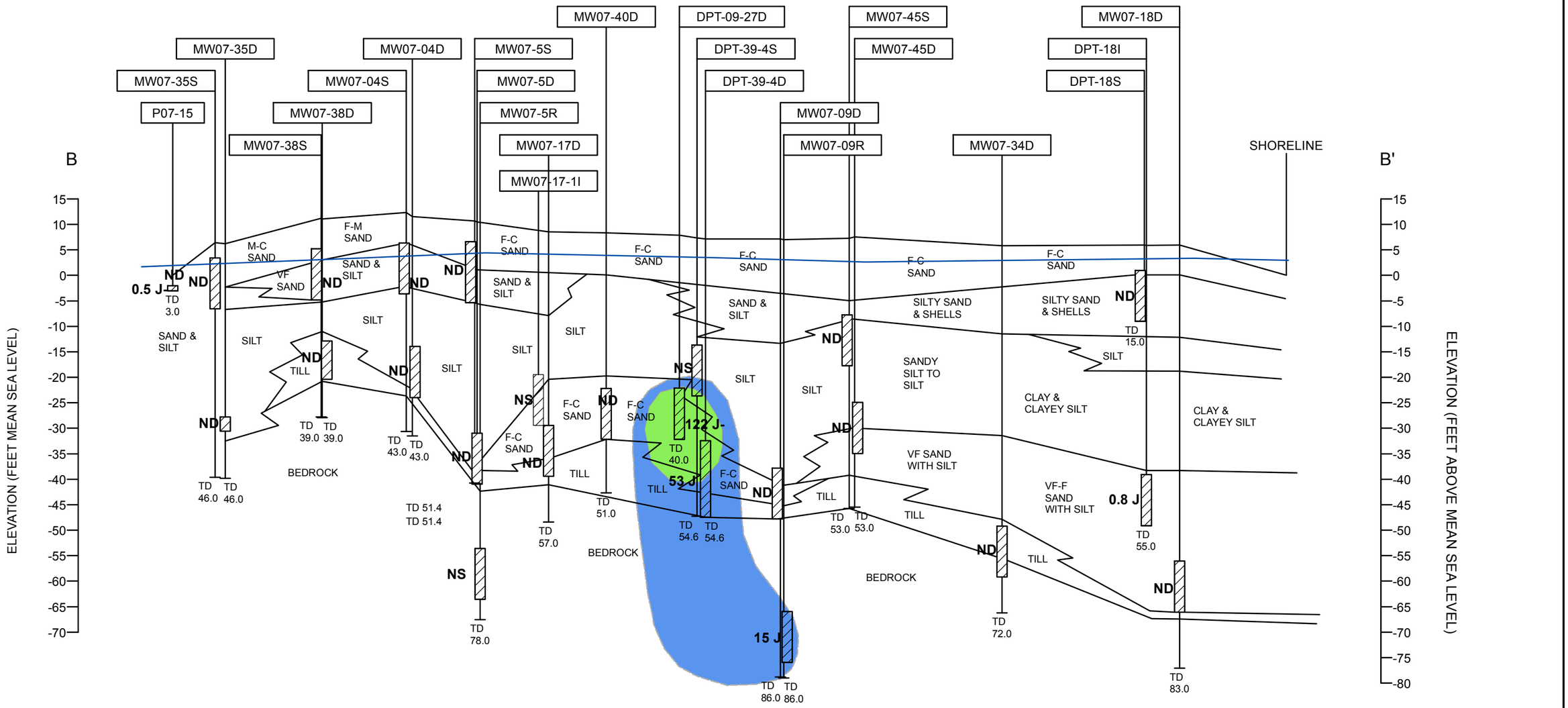


FIGURE 49
ISOCONCENTRATION RANGES FOR TCE
CROSS SECTION B-B', ME-20

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_B-B_VC_MEE20.mxd



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RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Clay & Clayey Silt
- Sand
- Sand & Silt
- Sand with Silt
- Sandy Silt to Silt
- Silt
- Silty Sand & Shells
- Till

Key

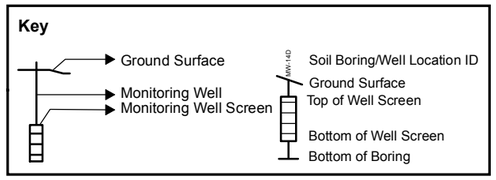
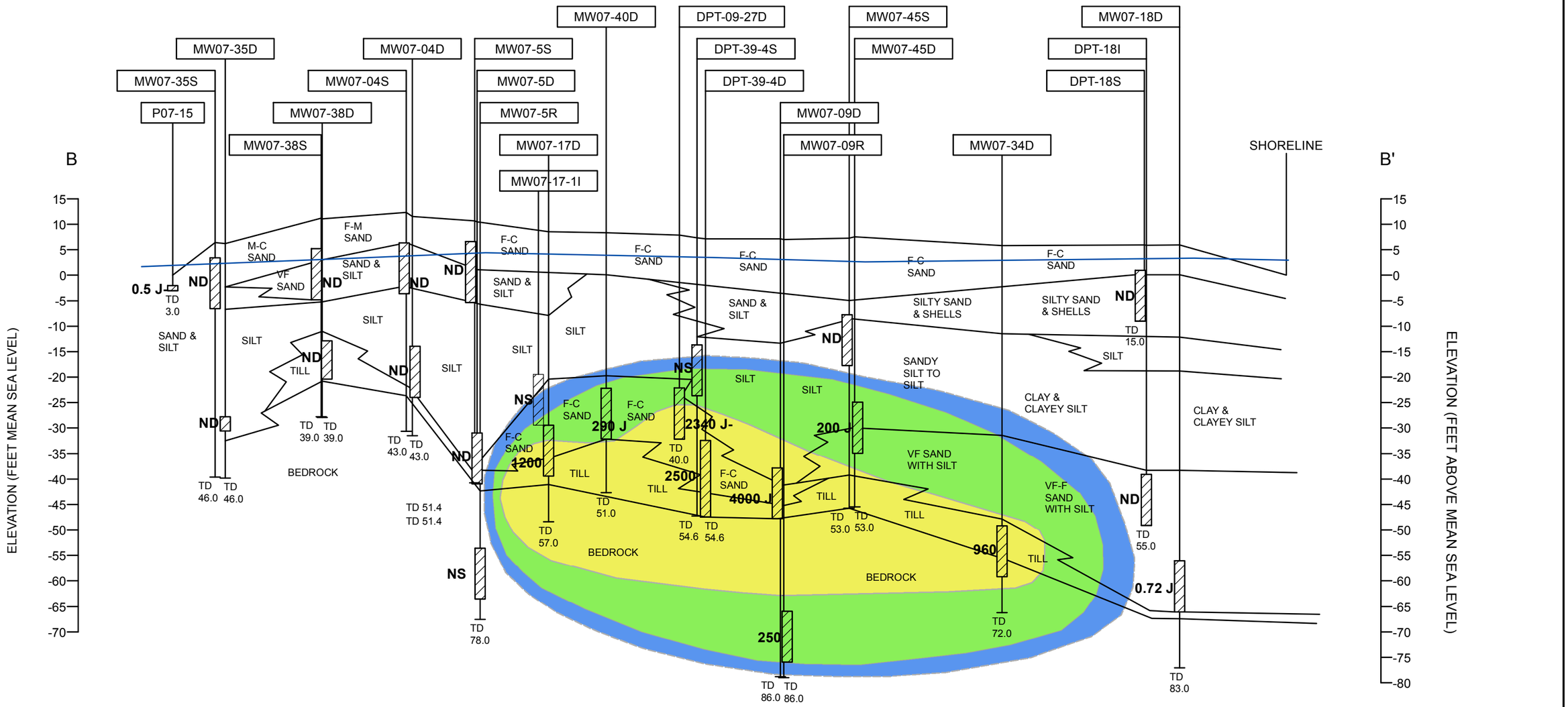


FIGURE 50
ISOCONCENTRATION RANGES FOR VC
CROSS SECTION B-B', ME-20

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_B-B_CIS_ME20.mxd



Notes:
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RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Clay & Clayey Silt
- Sand
- Sand & Silt
- Sand with Silt
- Sandy Silt to Silt
- Silt
- Silty Sand & Shells
- Till

Key

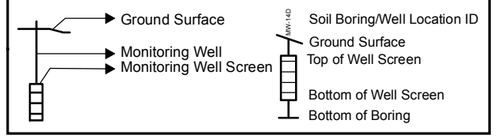
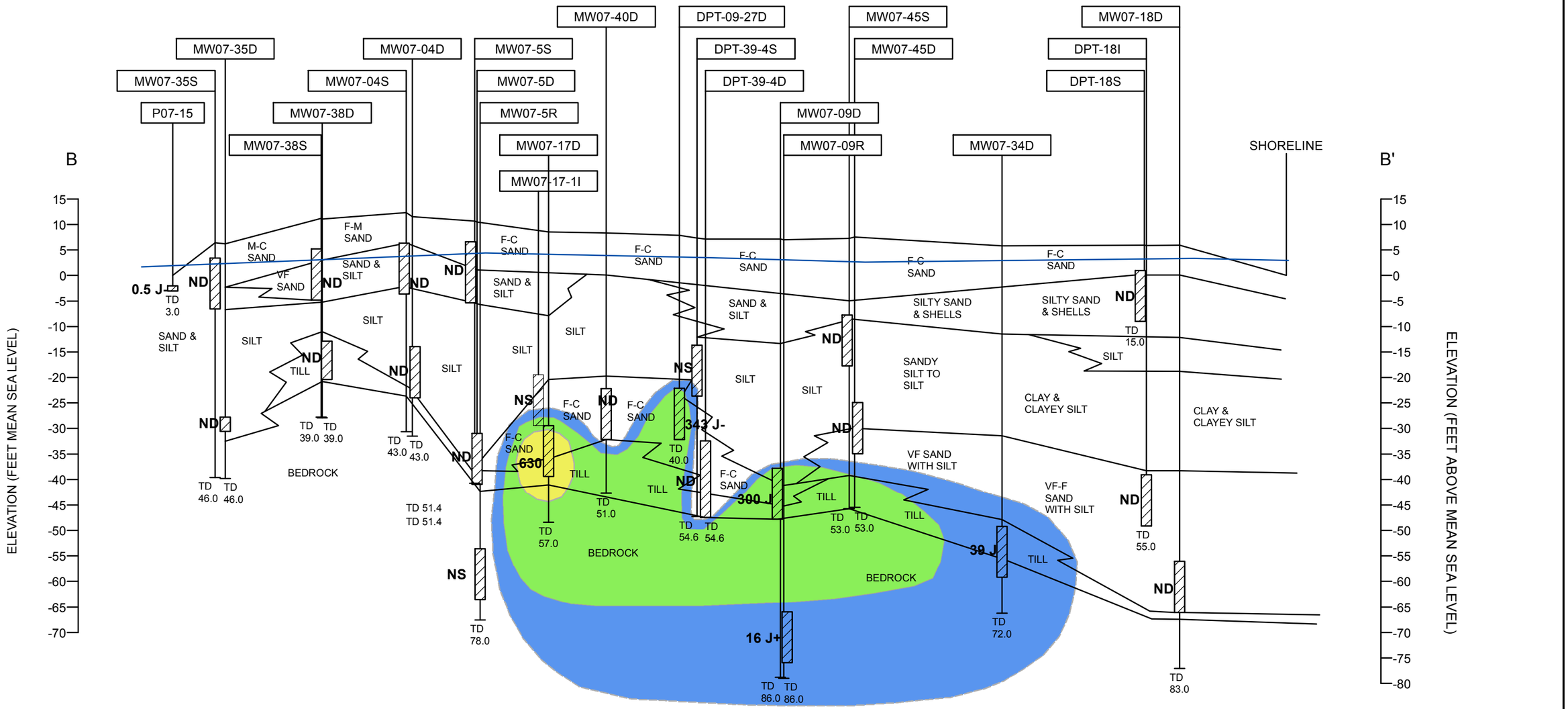


FIGURE 51
ISOCONCENTRATION RANGES FOR
CIS-1,2-DICHLOROETHENE
CROSS SECTION B-B', ME-20

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_B-B_TRANS_ME20.mxd



Notes:
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RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Clay & Clayey Silt
- Sand
- Sand & Silt
- Sand with Silt
- Sandy Silt to Silt
- Silt
- Silty Sand & Shells
- Till

Key

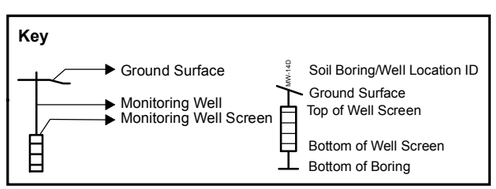
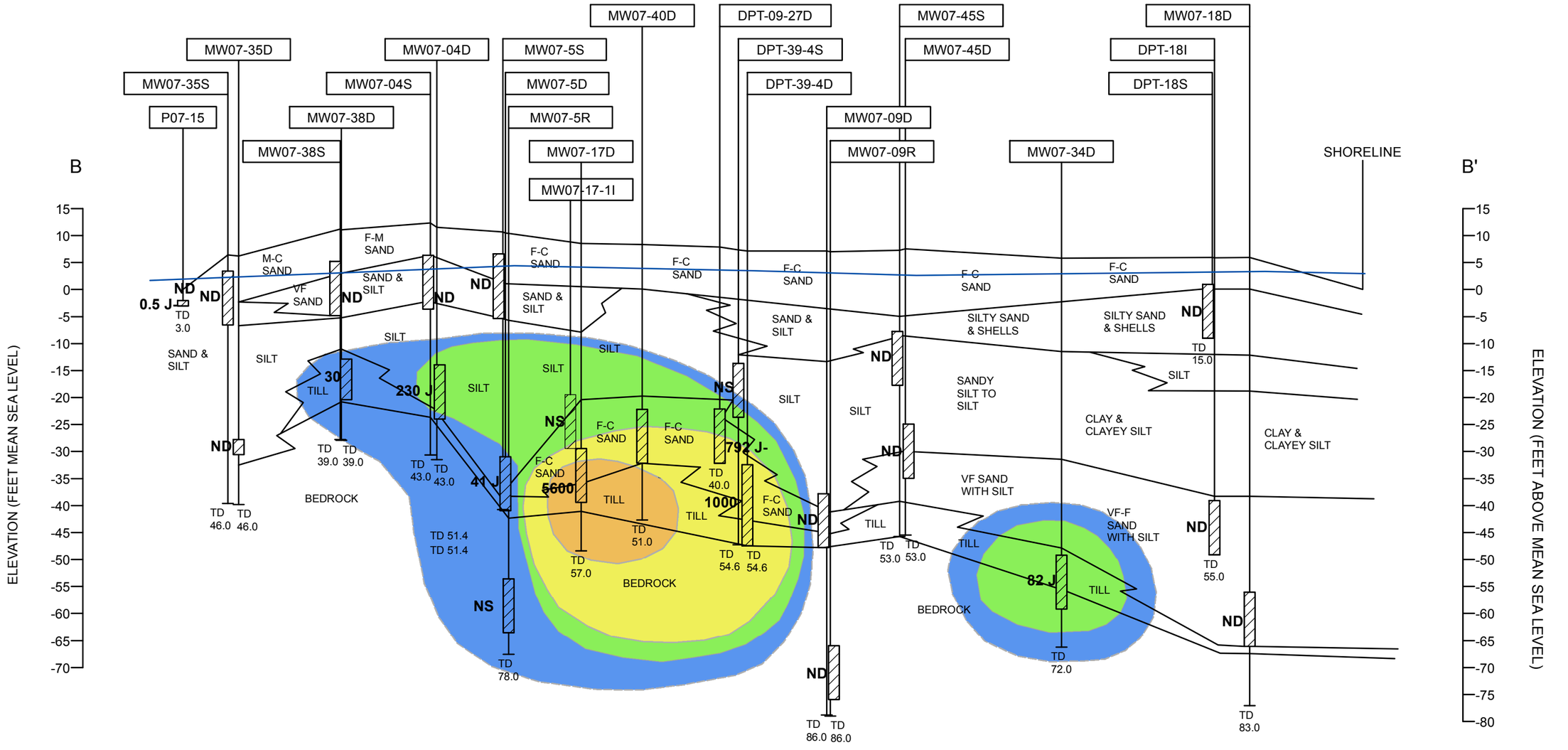


FIGURE 52
ISOCONCENTRATION RANGES FOR
TRANS-1,2-DICHLOROETHENE
CROSS SECTION B-B', ME-20

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 20\Iso figs\FigureXX_B-B_1122_MEE20.mxd



Notes:
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RESOLUTION CONSULTANTS

Drawn:	RM	03/17/2017
Approved:	BS	03/17/2017
Project #:	60273164	

Legend

Isocontours in GW (ug/L)
- 5-50
- 50-500
- 500-5,000
- 5,000-20,000
- >20,000

- Water Table
- Soil Boring
- Well Screens
- Bedrock
- Clay & Clayey Silt
- Sand
- Sand & Silt
- Sand with Silt
- Sandy Silt to Silt
- Silt
- Silty Sand & Shells
- Till

Key

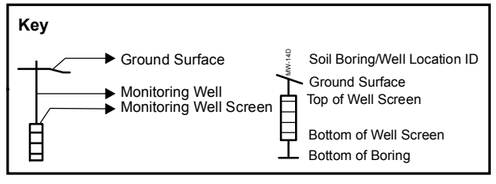

FIGURE 53
ISOCONCENTRATION RANGES FOR
1,1,2,2-TETRACHLOROETHANE
CROSS SECTION B-B', ME-20

IRP SITE 07. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Attachment A

Field Sampling Forms

Monitoring Well Field Forms

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-09-27D-ME20-1
Sampler: Tom Croft
Well ID: DPT07-09-27D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	5
Top of Screen (ft-BTOR):	30	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	40	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	11:05	9.04	160	clear	none	6.87	543.1	0.24	5.30	14.5	-18.2	0.26
9/20/2016	11:10	9.03	170	clear	none	6.85	527.1	0.21	3.19	14.1	-18.7	0.26
9/20/2016	11:15	9.01	170	clear	none	6.85	539.9	0.11	3.35	13.9	-21.4	0.26
9/20/2016	11:20	8.99	170	clear	none	6.86	541.4	0.05	2.87	14.0	-23.0	0.26
9/20/2016	11:25	8.97	180	clear	none	6.87	551.8	0.04	4.54	14.0	-25.8	0.27

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:05	11:25	20	3.35	clear	none	6.87	551.8	0.04	4.54	14.0	-25.8	0.27

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 11:30:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-09-28D-ME20-1
Sampler: Dylan Potter
Well ID: DPT07-09-28D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	4.1
Top of Screen (ft-BTOR):	40	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	50	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	15:11	11.34	136	clear	none	7.81	5143	1.49	3.49	12.5	-123.7	2.76
9/27/2016	15:16	11.34	136	clear	none	7.73	4963	0.35	3.77	12.6	-124.3	2.68
9/27/2016	15:21	11.34	136	clear	none	7.71	4961	0.19	1.90	12.7	-118.8	2.68
9/27/2016	15:26	11.34	136	clear	none	7.48	5211	0.13	1.46	12.6	-78.2	2.94
9/27/2016	15:31	11.35	152	clear	none	6.88	6543	0.11	0.83	12.0	-22.7	3.63
9/27/2016	15:36	11.35	152	clear	none	6.67	6854	0.15	0.56	12.0	-0.4	3.80
9/27/2016	15:41	11.36	152	clear	none	6.64	6926	0.05	1.22	11.9	6.8	3.81
9/27/2016	15:46	11.37	164	clear	none	6.64	6936	0.00	0.83	11.7	10.4	3.82
9/27/2016	15:51	11.37	164	clear	none	6.64	6916	0.00	0.99	11.8	12.0	3.81

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
15:11	15:51	40	5.82	clear	none	6.64	6916	0.00	0.99	11.8	12.0	3.81

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 3:55:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-16I-ME20-1
Well ID: DPT07-16I
QC Duplicate ID: NA
Sampler: Briley Morril
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	4.15
Top of Screen (ft-BTOR):	45	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	55	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	9:20	8.25	120	CLEAR	NONE	6.74	13864	0.56	6.45	14.0	19.3	8.07
9/22/2016	9:25	8.25	120	CLEAR	NONE	6.71	15115	0.53	3.56	14.1	14.8	8.89
9/22/2016	9:30	8.25	120	CLEAR	NONE	6.70	15371	0.50	1.93	14.1	14.3	9.01
9/22/2016	9:35	8.25	120	CLEAR	NONE	6.69	16070	0.52	1.08	13.9	13.6	9.21
9/22/2016	9:40	8.25	120	CLEAR	NONE	6.69	16087	0.53	0.88	13.9	12.5	9.46
9/22/2016	9:45	8.25	120	CLEAR	NONE	6.69	16141	0.50	0.67	14.0	12.5	9.50
9/22/2016	9:50	8.25	120	CLEAR	NONE	6.69	16162	0.53	0.56	13.9	12.1	9.50

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:20	9:50	30	2.60	CLEAR	NONE	6.69	16162	0.53	0.56	13.9	12.1	9.50

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 10:00:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-16S-ME20-1
Sampler: Joel Meunier
Well ID: DPT07-16S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	4.69
Top of Screen (ft-BTOR):	5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	15	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	9:28	8.77	150	BROWN	none	6.85	3465	0.58	125	14.7	24.6	1.8
9/22/2016	9:39	8.77	150	BROWNISH	none	6.83	3320	0.35	12.6	14.5	-1.0	1.75
9/22/2016	9:47	8.77	150	BROWNISH	none	6.83	3324	0.24	6.50	14.4	-6.8	1.75
9/22/2016	9:52	8.77	150	clear	none	6.83	3320	0.29	5.38	14.4	-9.3	1.75
9/22/2016	9:58	8.77	150	clear	none	6.83	3298	0.20	3.79	14.4	-12.0	1.74

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:28	9:58	30	4.50	clear	none	6.83	3298	0.20	3.79	14.4	-12.0	1.74

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 10:00:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-18I-ME20-1
Sampler: Tom Croft
Well ID: DPT07-18I
Well Type: Monitoring Well
QC Duplicate ID: MW07-ME20-FD06
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	9.95
Top of Screen (ft-BTOR):	45	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	55	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	11:15	7.10	180	clear	none	7.01	5281	2.03	5.11	14.0	69.5	2.92
9/22/2016	11:20	7.04	180	clear	none	6.80	6979	0.88	2.41	13.9	104.5	4.04
9/22/2016	11:25	7.01	180	clear	none	6.56	8474	0.10	4.82	13.6	124.6	4.83
9/22/2016	11:30	6.96	180	clear	none	6.49	9136	0	0.85	13.7	78.7	5.17
9/22/2016	11:35	6.91	180	clear	none	6.57	9445	0	0.78	13.6	63.1	5.34
9/22/2016	11:40	6.87	180	clear	none	6.57	9527	0	0.90	13.6	58.9	5.38
9/22/2016	11:45	6.86	180	clear	none	6.56	9647	0	1.41	13.5	56.9	5.45

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:15	11:45	30	5.40	clear	none	6.56	9647	0	1.41	13.5	56.9	5.45

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 11:50:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		4	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-18S-ME20-1
Sampler: Chris Hayden
Well ID: DPT07-18S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	9.47
Top of Screen (ft-BTOR):	5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	15	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	11:16	7.93	150	clear	none	7,01	4,046	0.0	46.5	16.3	-88.8	2.15
9/22/2016	11:21	7.93	150	clear	none	7.01	4,923	0.0	31.0	16.6	-90.7	2.12
9/22/2016	11:26	7.92	150	clear	none	7.02	3,895	0.0	17.3	16.9	-93.9	2.08
9/22/2016	11:31	7.92	150	clear	none	7.02	3,755	0.0	11.9	17.0	-94.3	2.00
9/22/2016	11:36	7.92	150	clear	none	7.01	3,743	0.0	8.38	17.0	-92.6	1.98
9/22/2016	11:41	7.92	150	clear	none	7.01	3,719	0.0	8.36	17.0	-93.2	1.97

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:16	11:41	25	3.75	clear	none	7.01	3,719	0.0	8.36	17.0	-93.2	1.97

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 11:41:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-24D-ME20-1
Sampler: Chris Hayden
Well ID: DPT07-24D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	6.58
Top of Screen (ft-BTOR):	45	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	55	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	12:29	6.90	160	clear	none	6.27	17,829	2.03	19.2	15.4	13.6	6.29
9/22/2016	12:34	6.90	160	clear	none	6.32	17,832	0.13	12.8	15.5	11.4	10.58
9/22/2016	12:39	6.86	160	clear	none	6.32	17,837	0.0	11.3	15.4	11.2	10.57
9/22/2016	12:44	6.80	160	clear	none	6.33	17,625	0.0	8.59	15.3	11.2	10.58
9/22/2016	12:51	6.79	160	clear	none	6,33	17,827	0.0	7.29	15.2	11.8	10.57

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:29	12:51	22	3.52	clear	none	6,33	17,827	0.0	7.29	15.2	11.8	10.57

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 12:51:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-24I-ME20-1
Sampler: Tom Croft
Well ID: DPT07-24I
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	6.79
Top of Screen (ft-BTOR):	33	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	43	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	12:30	5.39	220	clear	none	6.64	16997	0.03	13.1	13.4	79.8	10.03
9/22/2016	12:35	5.34	220	clear	none	6.64	16973	0.07	4.22	13.1	74.7	10.03
9/22/2016	12:40	5.32	220	clear	none	6.65	16948	0	3.08	13.1	71.4	10.04

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:30	12:40	10	2.20	clear	none	6.65	16948	0	3.08	13.1	71.4	10.04

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 12:45:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-29-34I-ME20-1
Sampler: Chris Hayden
Well ID: DPT07-29-34I
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	5.34
Top of Screen (ft-BTOR):	45	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	55	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	9:27	7.79	200	clear	none	6.27	8,318	0.0	15.0	14.5	38.3	4.65
9/21/2016	9:32	7.79	200	clear	none	6.26	8,350	0.0	21.7	14.4	34.3	4.63
9/21/2016	9:37	7.79	200	clear	none	6.26	8,335	0.0	22.7	14,1	32.9	4.66
9/21/2016	9:42	7.79	200	clear	none	6.27	8,344	0.0	23.6	14.1	31.6	4.66
9/21/2016	9:47	7.79	200	clear	none	6.26	8,357	0.0	24.1	14.2	31.0	4.67

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:27	9:47	20	4.00	clear	none	6.26	8,357	0.0	24.1	14.2	31.0	4.67

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 10:47:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-29-34S-ME20-1
Well ID: DPT07-29-34S
QC Duplicate ID: NA
Sampler: Chris Hayden
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	6.8
Top of Screen (ft-BTOR):	5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	15	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	8:49	8.20	180	clear	none	6.53	5,434	0.0	13.4	17.9	-73.9	2.91
9/21/2016	8:54	8.23	180	clear	none	6.51	5,369	0.0	9.49	17.9	-72.6	2.90
9/21/2016	8:59	8.26	180	clear	none	6.50	5,360	0.0	7.15	17.9	-71.7	2.90
9/21/2016	9:04	8.26	180	clear	none	6.52	5,279	0.02	5.14	18.0	-71.2	2.85
9/21/2016	9:09	8.26	180	clear	none	6.52	5,149	0.0	4,83	18.0	-71.2	2.77

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:49	9:09	20	3.60	clear	none	6.52	5,149	0.0	4,83	18.0	-71.2	2.77

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 9:09:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-30I-ME20-1
Well ID: DPT07-30I
QC Duplicate ID: NA
Sampler: Tom Croft
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	5.23
Top of Screen (ft-BTOR):	45	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	55	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	9:20	8.51	160	clear	none	6.50	39291	0.15	6.40	12.6	52.6	25.04
9/22/2016	9:25	8.48	160	clear	none	6.52	39480	0.12	4.48	12.6	49.4	25.17
9/22/2016	9:30	8.44	160	clear	none	6.53	39627	0.13	5.42	12.7	48.3	25.25
9/22/2016	9:35	8.44	160	clear	none	6.53	39662	0.06	4.94	12.9	46.5	25.33

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:20	9:35	15	2.40	clear	none	6.53	39662	0.06	4.94	12.9	46.5	25.33

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 9:40:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-30S-ME20-1
Sampler: Tom Croft
Well ID: DPT07-30S
Well Type: Monitoring Well
QC Duplicate ID: MW07-ME20-FD05
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	5.1
Top of Screen (ft-BTOR):	5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	15	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	9:55	9.18	150	clear	none	7.03	2473	0.02	5.94	14.1	-52.8	1.22
9/22/2016	10:00	9.90	150	clear	none	7.02	2105	0	4.97	13.9	-55.4	1.08
9/22/2016	10:05	10.12	130	clear	none	7.02	1947	0	5.29	14.2	-56.9	1.00
9/22/2016	10:10	10.13	130	clear	none	7.02	1861	0	7.07	14.2	-56.4	0.95
9/22/2016	10:15	10.14	130	clear	none	7.02	1843	0	5.69	14.3	-56.7	0.94
9/22/2016	10:21	10.16	130	clear	none	7.03	1830	0	4.48	14.2	-55.3	0.93
9/22/2016	10:25	10.24	130	clear	none	7.03	1819	0	3.11	14.2	-55.8	0.93

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:55	10:25	30	4.10	clear	none	7.03	1819	0	3.11	14.2	-55.8	0.93

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 10:30:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		4	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-39-03D-ME20-1
Sampler: Marc Smith
Well ID: DPT07-39-03D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	11.07
Top of Screen (ft-BTOR):	41.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	51.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/16/2016	9:44	5.11	120	clear	none	6.03	557.5	1.01	5.28	10.9	-29.4	0.27
9/16/2016	9:55	5.21	110	clear	none	6.06	562.2	.79	10.8	11.9	-35.9	0.27
9/16/2016	10:00	5.22	120	clear	none	6.04	562.7	.62	8.26	11.8	-35.8	0.27
9/16/2016	10:05	5.23	120	clear	none	6.04	560.2	.52	5.60	11.6	-36.6	0.27
9/16/2016	10:10	5.24	120	clear	none	6.04	557.3	.45	5.79	11.6	-37.5	0.27
9/16/2016	10:15	5.19	120	clear	none	6.04	556.2	.39	4.63	11.6	-37.9	0.27
9/16/2016	10:20	5.21	120	clear	none	6.05	555.2	.36	4.34	11.8	-38.5	0.27
9/16/2016	10:24	5.21	120	clear	none	6.05	554.6	.30	3.66	11.6	-38.5	0.27

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:44	10:24	40	4.75	clear	none	6.05	554.6	.30	3.66	11.6	-38.5	0.27

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/16/2016 10:25:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-39-03I-ME20-1
Sampler: Dylan Potter
Well ID: DPT07-39-03I
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	1.65
Top of Screen (ft-BTOR):	32	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	42	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/28/2016	8:46	5.49	140	clear	none	6.47	650.5	0.40	116	11.9	-70.3	0.32
9/28/2016	8:51	5.53	140	clear	none	6.51	629.5	0.19	20.4	11.5	-69.5	0.31
9/28/2016	8:56	5.53	140	clear	none	6.61	588.1	0.46	7.12	11.5	-81.8	0.28
9/28/2016	9:01	5.68	170	clear	none	6.66	553.2	0.42	6.48	11.2	-87.8	0.26
9/28/2016	9:06	5.74	170	clear	none	6.68	523.9	0.13	6.69	11.1	-91.0	0.25
9/28/2016	9:11	5.79	170	clear	none	6.70	523.5	0.02	4.55	11.0	-93.4	0.25
9/28/2016	9:16	5.81	194	clear	none	6.73	522.7	0.00	3.76	10.8	-95.8	0.25
9/28/2016	9:21	5.82	194	clear	none	6.75	521.9	0.00	3.40	10.8	-96.2	0.25

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:46	9:21	35	5.62	clear	none	6.75	521.9	0.00	3.40	10.8	-96.2	0.25

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/28/2016 9:25:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: DPT07-39-04D-ME20-1
Sampler: Joel Meunier
Well ID: DPT07-39-04D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	8.25
Top of Screen (ft-BTOR):	39.6	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	54.6	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10/5/2016	10:25	5.11	150	clear	none	6.40	699	0.99	146	11.2	-77.6	0.30
10/5/2016	10:30	5.11	150	clear	none	6.42	665	0.94	110	11.3	-78.6	0.28
10/5/2016	10:35	5.11	150	clear	none	6.44	665	0.91	125	11.2	-72.1	0.26
10/5/2016	10:40	5.11	150	clear	none	6.49	642	0.95	45	11.4	-66.5	0.26
10/5/2016	10:45	5.11	150	clear	none	6.51	664	0.92	41	11.3	-64.3	0.26
10/5/2016	10:50	5.11	150	clear	none	6.51	664	0.92	22	11.3	-64.3	0.26
10/5/2016	10:55	5.11	150	clear	none	6.51	665	0.92	15	11.3	-64.4	0.26
10/5/2016	11:00	5.11	150	clear	none	6.51	664	0.91	4.2	11.3	-64.3	0.26

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:25	11:00	35	5.25	clear	none	6.51	664	0.91	4.2	11.3	-64.3	0.26

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/16/2016 11:10:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-03D-ME20-1
Sampler: Tom Croft
Well ID: MW07-03D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	10.1
Top of Screen (ft-BTOR):	40	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	50	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	14:25	11.53	150	clear	none	6.99	398.2	0.39	5.53	14.6	-64.7	0.19
9/20/2016	14:30	11.57	150	clear	none	7.00	398.1	0.10	3.06	14.3	-65.7	0.19
9/20/2016	14:35	11.56	150	clear	none	7.00	396.3	0.12	2.80	14.6	-57.1	0.19
9/20/2016	14:40	11.53	150	clear	none	6.98	398.7	0.26	4.54	14.8	-58.9	0.19
9/20/2016	14:45	11.53	150	clear	none	6.99	397.7	0.35	3.28	14.8	-60.1	0.19

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
14:25	14:45	20	3.00	clear	none	6.99	397.7	0.35	3.28	14.8	-60.1	0.19

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 2:50:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-03S-ME20-1 Sampler: Tom Croft
Well ID: MW07-03S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	8.03
Top of Screen (ft-BTOR):	2	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	12	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	15:05	11.08	180	clear	none	7.33	333.9	2.94	15.7	18.1	-14.0	0.16
9/20/2016	15:10	11.08	180	clear	none	7.37	315.7	3.13	6.63	17.5	7.7	0.15
9/20/2016	15:15	11.08	180	clear	none	7.40	309.0	2.55	3.43	17.4	18.2	0.15
9/20/2016	15:20	11.08	180	clear	none	7.41	304.8	2.24	2.88	17.4	28.1	0.15
9/20/2016	15:25	11.14	240	clear	none	7.42	305.6	2.38	4.65	16.8	36.1	0.15
9/20/2016	15:30	11.17	240	clear	none	7.43	302.3	2.05	4.79	16.5	40.8	0.14
9/20/2016	15:35	11.17	240	clear	none	7.44	299.8	2.03	4.01	16.4	44.3	0.14
9/20/2016	15:40	11.17	240	clear	none	7.44	298.9	1.94	3.77	16.5	47.9	0.14

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
15:05	15:40	35	7.20	clear	none	7.44	298.9	1.94	3.77	16.5	47.9	0.14

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 3:45:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-04D-ME20-1
Sampler: Briley Morril
Well ID: MW07-04D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	7.97
Top of Screen (ft-BTOR):	25.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	35.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/19/2016	9:40	12.5	120	GREY	NONE	6.77	258.0	0.87	over range	13.0	139.8	0.12
9/19/2016	9:45	12.6	120	GREY	NONE	6.71	262.2	.80	over range	13.0	137.7	0.13
9/19/2016	9:50	12.7	120	GREY	NONE	6.67	268.4	0.72	over range	13.0	133.3	0.13
9/19/2016	9:55	12.7	120	GREY	NONE	6.66	275.3	0.62	over range	12.9	127.7	0.13
9/19/2016	10:00	12.75	120	GREY	NONE	6.65	277.9	0.51	over range	12.8	124.5	0.13
9/19/2016	10:05	12.75	120	GREY	NONE	6.65	278.6	0.47	over range	12.6	121.6	0.13
9/19/2016	10:10	12.75	120	GREY	NONE	6.65	276.0	0.44	over range	12.6	118.5	0.13
9/19/2016	10:15	12.75	120	GREY	NONE	6.67	273.4	0.42	over range	12.6	115.6	0.13
9/19/2016	10:20	12.75	120	GREY	NONE	6.67	268.9	0.38	over range	12.6	114.7	0.13

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:40	10:20	40	4.80	GREY	NONE	6.67	268.9	0.38	over range	12.6	114.7	0.13

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID:	MW07-04D-ME20-1	Sampler:	Briley Morril
Well ID:	MW07-04D	Well Type:	Monitoring Well
QC Duplicate ID:	NA	MS/MSD:	NA

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/19/2016 10:25:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-04S-ME20-1
Sampler: Briley Morril
Well ID: MW07-04S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	5.39
Top of Screen (ft-BTOR):	6.05	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	16.05	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/19/2016	9:36	12.02	120	clear	none	6.74	423.6	2.66	164	15.9	64.7	0.20
9/19/2016	9:46	12.17	120	clear	none	6.79	413.6	2.57	121	15.9	58.6	0.20
9/19/2016	9:57	12.37	120	clear	none	6.78	413.6	1.71	40.6	15.4	58.9	0.20
9/19/2016	10:06	12.59	120	clear	none	6.77	412.0	1.69	26.7	15.2	57.6	0.20
9/19/2016	10:15	12.74	120	clear	none	6.77	411.6	1.14	9.82	15.1	58.9	0.20
9/19/2016	10:22	12.90	120	clear	none	6.80	413.8	0.96	5.06	15.1	59.9	0.20
9/19/2016	10:27	13.01	120	clear	none	6.82	414.0	0.88	4.58	15.0	60.9	0.20

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:36	10:27	51	6.12	clear	none	6.82	414.0	0.88	4.58	15.0	60.9	0.20

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/19/2016 10:30:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-05D-ME20-1
Well ID: MW07-05D
QC Duplicate ID: NA
Sampler: Joel Meunier
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	8.35
Top of Screen (ft-BTOR):	41.4	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	51.4	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	14:00	9.51	100	clear	none	6.52	398.3	0.67	699	14.3	2.5	0.19
9/20/2016	14:17	9.68	100	clear	none	6.51	368.8	0.35	164	15.0	0.4	0.19
9/20/2016	14:25	9.68	100	clear	none	6.49	355.3	0.64	117	15.0	2.9	0.17
9/20/2016	14:33	9.68	100	clear	none	6.48	351.5	0.47	59.8	14.8	2.7	0.17
9/20/2016	14:40	9.68	100	clear	none	6.46	351.7	0.40	53.5	14.6	1.4	0.17
9/20/2016	14:45	9.68	100	clear	none	6.45	345.1	0.43	35.8	14.6	2.7	0.17
9/20/2016	14:50	9.68	100	clear	none	6.44	338.8	0.33	28.8	14.7	4.1	0.16
9/20/2016	14:55	9.68	100	clear	none	6.44	336.7	0.38	30.1	14.6	4.4	0.16
9/20/2016	15:02	9.68	100	clear	none	6.43	330.7	0.27	26.0	14.5	6.6	0.16
9/20/2016	15:07	9.68	100	clear	none	6.42	330.8	0.27	23.3	14.4	6.6	0.16
9/20/2016	15:12	9.68	100	clear	none	6.42	330.9	0.27	20.7	14.3	6.6	0.16
9/20/2016	15:17	9.68	100	clear clear	none	6.41	325.9	0.22	16.0	14.3	7.1	0.16
9/20/2016	15:22	9.68	100	clear	none	6.40	323.6	0.16	13.1	14.3	7.4	0.16
9/20/2016	15:27	9.68	100	c	none	6.42	321.6	0.15	11.5	14.2	8.9	0.15

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
14:00	15:27	87	8.70	c	none	6.42	321.6	0.15	11.5	14.2	8.9	0.15

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-05D-ME20-1 Sampler: Joel Meunier
Well ID: MW07-05D Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 3:40:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-05S-ME20-1
Sampler: Briley Morril
Well ID: MW07-05S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	11.39
Top of Screen (ft-BTOR):	4	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	16	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	13:50	8.60	200	LT ORANGE	NONE	7.12	338.4	0.8	647	16.1	-44.3	.16
9/20/2016	13:55	8.60	200	LT OR	NONE	7.10	338.4	0.2	181	15.9	-43.9	0.16
9/20/2016	14:00	8.60	200	CLEAR	NONE	7.09	335.2	0.2	56.7	15.7	-43.3	0.16
9/20/2016	14:05	8.60	200	CLEAR	NONE	7.11	336.0	0.2	25.5	14.8	-43.5	0.16
9/20/2016	14:10	8.60	200	CLEAR	NONE	7.14	334.6	0.2	14.4	14.2	-44.7	0.16
9/20/2016	14:15	8.60	200	CLEAR	NONE	7.16	332.4	0.2	15.6	14.5	-45.5	0.16
9/20/2016	14:20	8.60	200	CLEAR	NONE	7.17	332.6	0.2	14.3	14.3	-46.5	0.16
9/20/2016	14:25	8.60	200	CLEAR	NONE	7.18	331.3	0.2	13.8	14.3	-47.9	0.16
9/20/2016	14:30	8.60	200	CLEAR	NONE	7.19	331.6	0.2	14.0	14.3	-48.2	0.16
9/20/2016	14:35	8.60	200	CLEAR	NONE	7.20	330.2	0.2	13.8	14.3	-50.6	0.16
9/20/2016	14:40	8.60	200	CLEAR	NONE	7.19	330.7	0.2	14.2	14.4	-50.4	0.16
9/20/2016	14:45	8.60	200	CLEAR	NONE	7.18	331.2	0.2	14.0	14.3	-50.1	0.16

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:50	14:45	55	11.00	CLEAR	NONE	7.18	331.2	0.2	14.0	14.3	-50.1	0.16

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 2:55:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-09D-ME20-1
Sampler: Chris Hayden
Well ID: MW07-09D
Well Type: Monitoring Well
QC Duplicate ID: MW07-ME20-FD01
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	7.4
Top of Screen (ft-BTOR):	45	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	55	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	9:17	8.28	180	clear	none	6.66	3,326	0.0	12.7	14.2	-30.5	1.76
9/20/2016	9:22	8.28	180	clear	none	6.65	3,323	0.0	3.72	13.5	-32.7	1.75
9/20/2016	9:27	8.28	180	clear	none	6.65	3,317	0.0	5.03	13.4	-33.6	1.75
9/20/2016	9:32	8.28	180	clear	none	6.65	3,317	0.0	6.68	13.5	-35.2	1.75

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:17	9:32	15	2.70	clear	none	6.65	3,317	0.0	6.68	13.5	-35.2	1.75

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 9:32:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		4	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-09R-ME20-1
Well ID: MW07-09R
QC Duplicate ID: NA
Sampler: Marc Smith
Well Type: Monitoring Well
MS/MSD: MW07-09R-ME20-1MS/MSD

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	6.72
Top of Screen (ft-BTOR):	73	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	83	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/19/2016	9:45	6.98	250	clear	none	8.32	18,650	0.0	7.76	13.9	-200.7	11.16
9/19/2016	9:51	6.98	250	clear	none	8.21	18,713	0.0	2.45	13.7	-225.8	11.13
9/19/2016	9:56	6.98	250	clear	none	7.84	18,506	0.0	2.32	13.5	-216.6	11.01
9/19/2016	10:00	6.98	250	clear	none	7.61	18,631	0.0	2.21	13.5	-208.7	11.10
9/19/2016	10:05	6.98	250	clear	none	7.41	18,880	0.0	2.17	13.4	-202.0	11.22
9/19/2016	10:10	6.98	250	clear	none	7.29	18,923	0.0	2.09	13.2	-197.4	11.27
9/19/2016	10:15	6.98	250	clear	none	7.17	18,983	0.0	1.87	13.1	-186.7	11.31
9/19/2016	10:20	6.98	250	clear	none	7.11	19,110	0.0	1.88	13.0	-181.6	11.39
9/19/2016	10:25	6.98	250	clear	none	7.07	19,161	0.0	1.82	13.0	-176.3	11.42

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:45	10:25	40	10.00	clear	none	7.07	19,161	0.0	1.82	13.0	-176.3	11.42

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/19/2016 10:25:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		6	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-10D-ME20-1
Well ID: MW07-10D
QC Duplicate ID: MW07-ME20-FD02

Sampler: Briley Morril
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	10.97
Top of Screen (ft-BTOR):	27.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	37.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	10:55	10.00	250	CLEAR	NONE	6.60	327.5	1.24	60.1	12.6	49.5	0.16
9/20/2016	11:00	10.00	250	CLEAR	NONE	6.61	333.7	1.38	58.3	12.7	46.0	0.16
9/20/2016	11:05	10.05	250	CLEAR	NONE	6.68	318.9	1.32	59.3	12.9	49.2	0.16
9/20/2016	11:10	10.1	250	CLEAR	NONE	6.41	314.8	1.23	58.2	13.2	49.7	0.15
9/20/2016	11:15	10.1	250	CLEAR	NONE	6.43	311.8	1.15	60.7	12.9	50.3	0.15
9/20/2016	11:20	10.1	250	CLEAR	NONE	6.47	307.8	1.11	51.7	13.2	52.9	0.15
9/20/2016	11:25	10.1	250	CLEAR	NONE	6.51	306.0	1.13	55.7	13.0	48.7	0.15
9/20/2016	11:30	10.1	250	CLEAR	NONE	6.50	304.1	1.16	58.9	13.0	50.7	0.15
9/20/2016	11:35	10.1	250	CLEAR	NONE	6.50	304.4	1.11	59.7	13.0	55.7	0.15

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:55	11:35	40	10.00	CLEAR	NONE	6.50	304.4	1.11	59.7	13.0	55.7	0.15

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 11:42:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		4	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-10S-ME20-1
Sampler: Joel Meunier
Well ID: MW07-10S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	10:50	unk	120	BROWNISH	egg	7.17	401.6	4.76	113	16.7	-40.9	0.19
9/20/2016	11:00	unk	120	BROWN	egg	7.22	431.7	5.12	85.6	17.3	-74.8	0.21
9/20/2016	11:11	unk	120	BROWNISH	egg	7.23	411.7	5.05	16.8	18.6	-65.9	0.20
9/20/2016	11:17	unk	120	BROWNISH	egg	7.23	401.7	5.36	7.03	18.7	-59.8	0.19
9/20/2016	11:25	umk	120	clear	egg	7.25	394.4	5.46	5.77	19.0	-54.2	0.19
9/20/2016	11:30	unk	120	clear	egg	7.26	390.8	5.63	4.39	19.3	-51.8	0.19
9/20/2016	11:36	unk	120	clear	egg	7.25	388.6	5.61	4.21	19.3	-49.5	0.19

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:50	11:36	46	5.52	clear	egg	7.25	388.6	5.61	4.21	19.3	-49.5	0.19

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 11:40:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-11D-ME20-1
Sampler: Tom Croft
Well ID: MW07-11D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	9.8
Top of Screen (ft-BTOR):	47.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	57.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	8:50	9.85	170	MEDIUM GRA	none	6.42	19883	0,55	1000	11.9	31.6	11.91
9/21/2016	8:55	9.85	170	MEDIUM GRA	none	6.44	19140	0.36	1000	11.6	27.7	11.30
9/21/2016	9:00	9.75	200	MEDIUM GRA	none	6.45	17945	0.29	1000	11.2	24.9	10.55
9/21/2016	9:05	9.68	280	MEDIUM GRA	none	6.48	16722	0.16	1000	10.9	20.8	9.80
9/21/2016	9:10	9.64	280	MEDIUM GRA	none	6.49	16350	0.12	1000	10.8	19.0	9.55
9/21/2016	9:15	9.60	280	MEDIUM GRA	none	6.49	16177	0.05	1000	10.8	17.7	9.46
9/21/2016	9:20	9.56	280	MEDIUM GRA	none	6.49	16105	0.04	669	10.9	16.9	9.42
9/21/2016	9:30	9.48	280	LIGHT gray		6.50	15705	0	296	10.8	15.0	9.21
9/21/2016	9:35	9.43	280	cloudy		6.51	7938	0	174	10.9	14.6	5.41
9/21/2016	9:40	9.40	280	cloudy		6.51	10126	0	168	10.8	14.3	5.68
9/21/2016	9:45	9.35	280	cloudy		6.51	12689	0	134	10.8	13.9	7.54
9/21/2016	9:50	9.30	280	cloudy		6.51	13640	0	115	10.8	13.6	7.96
9/21/2016	9:55	9.25	280	cloudy		6.52	15342	0	96.4	10.9	13.2	8.96
9/21/2016	10:00	9.21	280	cloudy		6.52	15207	0	83.0	10.8	12.9	8.88
9/21/2016	10:05	9.16	280	cloudy		6.52	15249	0	88.4	10.9	12.9	8.91
9/21/2016	10:10	9.11	280	cloudy		6.53	15200	0	84.8	10.9	12.6	8.87

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:50	10:10	80	20.90	cloudy		6.53	15200	0	84.8	10.9	12.6	8.87

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-11D-ME20-1 Sampler: Tom Croft
Well ID: MW07-11D Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 10:15:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-12D-ME20-1
Sampler: Chris Hayden
Well ID: MW07-12D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	10.74
Top of Screen (ft-BTOR):	25	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	35	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	11:21	8.80	180	clear	none	5.99	800	0.03	81.4	17.6	120.4	0.39
9/23/2016	11:26	9.00	180	clear	none	6.00	776	0.0	41.0	14.6	130.6	0.38
9/23/2016	11:31	9.00	180	clear	none	5.98	776	0.0	52.2	14.5	132.1	0.38
9/23/2016	11:36	9.02	180	clear	none	5.98	782	0.0	44.3	14.6	133.1	0.39
9/23/2016	11:41	9.01	180	clear	none	5.96	783	0.0	42.8	14.6	133.2	0.39

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:21	11:41	20	3.60	clear	none	5.96	783	0.0	42.8	14.6	133.2	0.39

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 11:41:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-13D-ME20-1
Sampler: Tom Croft
Well ID: MW07-13D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	6.1
Top of Screen (ft-BTOR):	35	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	45	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	13:40	5.76	220	clear	none	7.38	1291	1.17	443	15.9	-3.8	0.62
9/21/2016	13:45	5.83	220	clear	none	7.37	1233	0	114	13.1	12.3	0.62
9/21/2016	13:50	5.85	220	clear	none	7.36	1190	0	94.2	12.9	12.7	0.59
9/21/2016	13:55	5.85	220	clear	none	7.36	1154	0	94.9	12.9	12.6	0.58
9/21/2016	14:00	5.85	220	clear	none	7.33	1156	0	99.7	12.7	13.7	0.58

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:40	14:00	20	4.40	clear	none	7.33	1156	0	99.7	12.7	13.7	0.58

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 2:05:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-13S-ME20-1
Sampler: Tom Croft
Well ID: MW07-13S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	7.75
Top of Screen (ft-BTOR):	4	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	13	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	12:55	4.48	200	clear	none	7.04	2414	0.18	59.3	16.1	-90.3	1.25
9/21/2016	13:00	4.49	200	clear	none	7.10	2203	0.42	36.6	15.4	-98.4	1.13
9/21/2016	13:05	4.50	200	clear	none	7.11	2182	0.04	29.1	15.4	-100.6	1.12
9/21/2016	13:10	4.50	200	clear	none	7.13	2190	0	21.3	15.3	-101.3	1.13
9/21/2016	13:15	4.51	200	clear	none	7.17	2182	0	20.8	15.3	-102.7	1.12
9/21/2016	13:20	4.52	200	clear	none	7.19	2173	0	20.5	15.2	-102.1	1.12

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:55	13:20	25	5.00	clear	none	7.19	2173	0	20.5	15.2	-102.1	1.12

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 1:25:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-15D-ME20-1
Sampler: Briley Morril
Well ID: MW07-15D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	2.96
Top of Screen (ft-BTOR):	37	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	47	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	14:30	11.4	120	CLEAR	NONE	7.50	308.5	0.43	9.45	12.6	37.7	0.15
9/27/2016	14:35	11.4	120	CLEAR	NONE	7.38	305.8	0.38	9.00	12.8	41.5	0.15
9/27/2016	14:40	11.4	120	CLEAR	NONE	7.29	318.3	0.42	8.05	13.2	47.3	0.15
9/27/2016	14:45	11.4	120	CLEAR	NONE	7.25	299.3	0.40	7.24	12.9	54.4	0.14
9/27/2016	14:50	11.4	120	CLEAR	NONE	7.24	301.2	0.40	6.65	12.9	54.1	0.14
9/27/2016	14:55	11.4	120	CLEAR	NONE	7.21	301.4	0.39	6.07	12.8	54.8	0.14
9/27/2016	15:00	11.4	120	CLEAR	NONE	7.18	300.9	0.40	5.45	12.7	54.9	0.14
9/27/2016	15:05	11.4	120	CLEAR	NONE	7.18	301.4	0.41	4.02	12.7	54.9	0.14

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
14:30	15:05	35	4.20	CLEAR	NONE	7.18	301.4	0.41	4.02	12.7	54.9	0.14

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 3:05:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-16R-ME20-1
Sampler: Briley Morril
Well ID: MW07-16R
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	5.5
Top of Screen (ft-BTOR):	100	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	110	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	10:25	6.90	200	CLEAR	NONE	7.07	34428	0.94	2.43	17.4	-134.1	21.84
9/22/2016	10:30	6.90	200	CLEAR	NONE	7.01	35607	0.32	2.09	16.7	-185.6	22.50
9/22/2016	10:35	6.90	200	CLEAR	NONE	7.02	35658	0.29	1.53	16.4	-197.6	22.57
9/22/2016	10:40	6.90	200	CLEAR	NONE	7.01	35674	0.28	1.43	16.3	-202.7	22.58
9/22/2016	10:45	6.90	200	CLEAR	NONE	7.02	35847	0.29	1.24	16.1	-212.3	22.64
9/22/2016	10:50	6.90	200	CLEAR	NONE	7.03	35810	0.29	1.13	16.3	-212.4	22.66
9/22/2016	10:55	6.90	200	CLEAR	NONE	7.04	35899	0.30	0.98	16.1	-205.9	22.69

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:25	10:55	30	6.00	CLEAR	NONE	7.04	35899	0.30	0.98	16.1	-205.9	22.69

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 11:05:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-17D-ME20-1
Sampler: Chris Hayden
Well ID: MW07-17D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	4.77
Top of Screen (ft-BTOR):	38	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	48	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	10:33	8.47	220	clear	none	6.15	502.2	1.52	4.76	13.2	15.2	0.24
9/20/2016	10:38	8.47	220	clear	none	6.14	501.5	1.16	3.11	13.3	12.8	0.24
9/20/2016	10:43	8.47	220	clear	none	6.14	500.4	1.09	2.97	13.2	10.0	0.24
9/20/2016	10:48	8.47	220	clear	none	6.13	498.0	0,98	3.69	13.2	10.5	0.24
9/20/2016	10:53	8.47	220	clear	none	6.13	497.3	0.94	3.17	13.1	10.2	0.24

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:33	10:53	20	4.40	clear	none	6.13	497.3	0.94	3.17	13.1	10.2	0.24

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 10:50:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-18D-ME20-1
Well ID: MW07-18D
QC Duplicate ID: NA
Sampler: Joel Meunier
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	6.72
Top of Screen (ft-BTOR):	62	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	72	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	11:34	5.40	150	clear	none	10.62	28709	0.45	82.8	14.3	88.3	18.03
9/22/2016	11:39	5.38	150	clear	none	10.15	29837	0.07	39.0	13.0	73.7	18.22
9/22/2016	11:50	5.38	150	brown	none	9.61	29577	0.07	70.1	12.7	-193.6	18.37
9/22/2016	11:58	5.38	150	BROWN	none	8.00	30853	0.06	20.8	12.3	-129.9	19.30
9/22/2016	12:03	5.38	150	clear	none	7.44	32884	0.06	33.4	12.4	-101.4	20.65
9/22/2016	12:10	5.38	150	clear	none	7.11	35754	0.05	14.1	12.5	-55.53	22.47
9/22/2016	12:17	5.38	150	clear	none	6.95	36424	0.05	10.1	12.5	-47.6	23.05
9/22/2016	12:28	5.38	150	clear	none	6.82	37218	0.04	10.9	12.7	-43.4	23.59
9/22/2016	12:33	5.38	150	clear	none	6.80	37133	0.04	7.06	12.9	-48.5	23.39
9/22/2016	12:45	5.38	150	clear	none	6.84	37256	0.03	6.57	13.7	-52.4	23.64
9/22/2016	12:51	5.38	150	clear	none	6.99	37299	0.02	5.20	13.2	-54.08	23.64
9/22/2016	12:56	5.38	150	clear	none	6.97	37317	0.02	4.80	13.3	-58.1	23.64

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:34	12:56	82	12.30	clear	none	6.97	37317	0.02	4.80	13.3	-58.1	23.64

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 1:00:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-19D-ME20-1
Sampler: Joel Meunier
Well ID: MW07-19D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	4.88
Top of Screen (ft-BTOR):	34.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	39.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	13:46	3.62	120	clear	none	7.04	5662	1.75	22.1	14.3	27.7	3.03
9/21/2016	13:51	3.61	120	clear	none	6.95	5409	0.57	15.7	17.3	25.3	2.93
9/21/2016	13:56	3.61	120	clear	none	6.94	5419	0.47	17.9	16.8	16.3	2.95
9/21/2016	14:01	3.61	120	clear	none	6.92	5430	0.33	15.7	16.2	4.5	2.95
9/21/2016	14:23	3.61	120	clear	none	6.89	5407	0.23	8.40	15.4	-2.4	2.94
9/21/2016	14:32	3.61	120	clear	none	6.89	5413	0.10	13.6	15.2	-1.7	2.94
9/21/2016	14:38	3.61	120	clear	none	6.89	5412	0.09	12.4	15.2	-1.6	2.94
9/21/2016	14:44	3.61	120	clear	none	6.90	5412	0.10	14.8	15.7	1.8	2.94
9/21/2016	14:50	3.61	120	clear	none	6.91	5409	0.09	13.9	15.8	1.3	2.93

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:46	14:50	64	7.68	clear	none	6.91	5409	0.09	13.9	15.8	1.3	2.93

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 3:00:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-19S-ME20-1
Well ID: MW07-19S
QC Duplicate ID: MW07-ME20-FD04
Sampler: Briley Morril
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	4.05
Top of Screen (ft-BTOR):	13	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	23	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	13:50	4.1	250	LT OR	NONE	7.70	1032	1.05	93.6	15.1	24.7	0.51
9/21/2016	13:55	4.1	250	LT OR	NONE	7.71	1035	0.95	90.6	15.1	21.6	0.52
9/21/2016	14:00	4.1	250	LT OR	NONE	7.73	1039	0.90	141	15.1	21.2	0.52
9/21/2016	14:05	4.1	250	LT OR	NONE	7.74	1038	0.90	133	15.1	21.1	0.52
9/21/2016	14:10	4.1	250	LT OR	NONE	7.74	1039	0.88	9.94	15.0	26.9	0.52
9/21/2016	14:15	4.1	250	CLEAR	NONE	7.77	1040	0.88	9.46	14.6	20.8	0.52
9/21/2016	14:20	4.1	250	CLEAR	NONE	7.78	1038	0.79	4.26	14.6	17.9	0.52
9/21/2016	14:25	4.1	250	CLEAR	NONE	7.78	1039	0.79	3.72	14.6	17.2	0.52
9/21/2016	14:30	4.1	250	CLEAR	NONE	7.78	1039	0.76	3.41	14.5	16.5	0.52
9/21/2016	14:35	4.1	250	CLEAR	NONE	7.78	1040	0.75	3.01	14.6	15.2	0.52

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:50	14:35	45	11.25	CLEAR	NONE	7.78	1040	0.75	3.01	14.6	15.2	0.52

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 2:50:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		8	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-20DA-ME20-1
Sampler: Tom Croft
Well ID: MW07-20D
Well Type: Monitoring Well
QC Duplicate ID: MW07-ME20-FD11
MS/MSD: MW07-20DA-ME20-1MS/MSD

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
1/16/2017	9:39	9.06	240	clear	none	7.97	29911	1.42	11.3	11.99	-193.0	21.45
1/16/2017	9:40	9.36	240	clear	none	8.00	29899	0.99	10.7	12.27	-199.0	21.33
1/16/2017	9:41	9.35	230	clear	none	8.05	29898	0.85	9.29	12.00	-202.5	21.95
1/16/2017	9:42	9.39	230	clear	none	8.08	29913	0.83	9.05	11.96	-205.8	21.99
1/16/2017	9:43	9.50	230	clear	none	8.09	29916	0.78	8.96	11.88	-207.9	21.90

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:39	9:43	4	0.90	clear	none	8.09	29916	0.78	8.96	11.88	-207.9	21.90

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-20S-ME20-1
Sampler: Briley Morril
Well ID: MW07-20S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	8.23
Top of Screen (ft-BTOR):	4.9	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	14.9	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	11:55	4.0	200	CLEAR	NONE	7.01	38220	0.50	19.5	22.8	4.8	24.27
9/22/2016	12:00	4.0	200	CLEAR	NONE	6.97	38262	0.46	17.6	22.8	1.2	24.30
9/22/2016	12:05	4.0	200	CLEAR	NONE	6.92	38217	0.41	9.87	22.9	-3.4	24.32
9/22/2016	12:10	4.0	200	CLEAR	NONE	6.90	38171	0.42	7.90	23.0	-6.5	24.24
9/22/2016	12:15	4.0	200	CLEAR	NONE	6.90	38156	0.43	5.87	23.1	-7.8	24.22
9/22/2016	12:20	4.0	200	CLEAR	NONE	6.90	38158	0.47	4.57	23.1	-8.3	24.22
9/22/2016	12:25	4.0	200	CLEAR	NONE	6.90	38137	0.47	3.37	23.1	-8.8	24.22

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:55	12:25	30	6.00	CLEAR	NONE	6.90	38137	0.47	3.37	23.1	-8.8	24.22

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 12:30:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-21D-ME20-1
Sampler: Chris Hayden
Well ID: MW07-21D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	3.27
Top of Screen (ft-BTOR):	33	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	38	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	9:15	5.15	190	clear	none	6.75	5,125	0.0	32,9	14.4	19.1	2.78
9/23/2016	9:20	5.15	190	clear	none	6.72	5,266	0.0	21.9	14.4	17.0	2.87
9/23/2016	9:25	5.15	190	clear	none	6.72	5,326	0.0	18.2	14.2	15.6	2.89
9/23/2016	9:30	5.16	190	clear	none	6.72	5,304	0.0	12.1	14.0	15.4	2.87
9/23/2016	9:35	5.15	190	clear	none	6.73	5,283	0.0	14.2	14.1	15.5	2.86

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:15	9:35	20	3.80	clear	none	6.73	5,283	0.0	14.2	14.1	15.5	2.86

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 9:35:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-21R-ME20-1
Well ID: MW07-21R
QC Duplicate ID: NA
Sampler: Chris Hayden
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	6.46
Top of Screen (ft-BTOR):	55.3	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	65.3	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	10:20	5.34	150	clear	none	6.97	6,217	0.42	9.51	15.5	14.6	3.41
9/23/2016	10:25	5.30	150	clear	none	6.92	6,179	0.0	6.01	15.4	22.0	3.38
9/23/2016	10:31	5.30	150	clear	none	6.86	6,142	0.0	5.54	15.4	30.4	3.36
9/23/2016	10:36	5.32	150	clear	none	6.80	6.098	0.0	3.76	15.4	35.4	3.34
9/23/2016	10:41	5.30	150	clear	none	6.78	6,086	0.0	4.38	15.4	36.5	3.33

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:20	10:41	21	3.20	clear	none	6.78	6,086	0.0	4.38	15.4	36.5	3.33

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 10:41:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-21S-ME20-1
Sampler: Chris Hayden
Well ID: MW07-21S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: MW07-21S-ME20-1MS/MSD

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	7.15
Top of Screen (ft-BTOR):	10	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	20	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	8:45	5.67	200	clear	none	6.49	1,582	0.11	3.80	15.2	45.9	0.80
9/23/2016	8:50	5.67	200	clear	none	6.50	1,586	0.03	4.96	15.2	45.6	0.80
9/23/2016	8:55	5.67	200	clear	none	6.51	1,592	0.0	4.25	15.3	44.9	0.81
9/23/2016	9:00	5.67	200	clear	none	6.52	1,596	0.0	3.06	15.3	44.5	0.81

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:45	9:00	15	3.00	clear	none	6.52	1,596	0.0	3.06	15.3	44.5	0.81

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 9:00:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		6	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-23D-ME20-1
Sampler: Briley Morril
Well ID: MW07-23D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	29.4
Top of Screen (ft-BTOR):	34.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	44.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	11:00	4.4	240	CLEAR	NONE	7.77	4335	0.70	33.4	14.8	46.1	2.32
9/21/2016	11:05	4.6	240	CLESR	NONE	7.79	4335	0.56	31.6	14.8	23.3	2.33
9/21/2016	11:10	4.6	240	CLEAR	NONE	7.79	4331	0.49	23.1	14.8	4.4	2.33
9/21/2016	11:15	4.6	240	CLEAR	NONE	7.78	4337	0.46	21.0	14.7	-5.2	2.32
9/21/2016	11:20	4.6	240	CLEAR	NONE	7.80	4351	0.41	11.3	14.5	-11.0	2.33
9/21/2016	11:25	4.6	240	CLEAR	NONE	7.80	4356	0.40	9.31	14.6	-12.8	2.33
9/21/2016	11:30	4.6	240	CLEAR	NONE	7.80	4372	0.33	7.98	14.8	-21.3	2.35
9/21/2016	11:35	4.6	240	CLEAR	NONE	7.80	4370	0.35	7.91	14.7	-22.0	2.34
9/21/2016	11:40	4.6	240	CLEAR	NONE	7.90	4366	0.38	6.09	14.7	-27.6	2.34
9/21/2016	11:45	4.6	240	CLEAR	NONE	7.92	4370	0.37	4.98	14.7	-30.6	2.34

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:00	11:45	45	10.80	CLEAR	NONE	7.92	4370	0.37	4.98	14.7	-30.6	2.34

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 11:55:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-23S-ME20-1
Sampler: Joel Meunier
Well ID: MW07-23S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	4.48
Top of Screen (ft-BTOR):	4	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	8	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	10:35	4.69	120	clear	none	6.37	10600	0.82	22.6	19.3	20.9	6.03
9/21/2016	10:55	4.69	120	clear	none	6.36	10974	0.19	1.87	20.5	-39.0	6.27
9/21/2016	11:00	4.69	120	clear	none	6.42	10956	0.21	1.66	20.6	-44.9	6.24
9/21/2016	11:05	4.69	120	clear	none	6.50	10913	0.18	1.43	20.7	-53.2	6.20
9/21/2016	11:10	4.69	120	clear	none	6.63	10854	0.16	1.20	21.0	-60.7	6.18
9/21/2016	11:15	4.69	120	clear	none	6.81	10822	0.16	1.44	21.4	-74.3	6.14
9/21/2016	11:20	4.69	120	clear	none	6.83	10842	0.15	1.13	21.5	-73.6	6.15
9/21/2016	11:25	4.69	120	clear	none	6.84	10886	0.15	1.19	21.7	-72.8	6.15

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:35	11:25	50	6.00	clear	none	6.84	10886	0.15	1.19	21.7	-72.8	6.15

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 11:30:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-24D-ME20-1
Well ID: MW07-24D
QC Duplicate ID: NA
Sampler: Briley Morril
Well Type: Monitoring Well
MS/MSD: MW07-24D-ME20-1MS1/MSD

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	4.02
Top of Screen (ft-BTOR):	43	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	53	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	8:45	5.25	200	CLEAR	NONE	7.45	18219	1.49	56.7	14.4	11.2	10.83
9/23/2016	8:50	5.5	200	CLEAR	NONE	7.47	18779	1.71	51.0	14.3	-2.4	11.20
9/23/2016	8:55	5.5	200	CLEAR	NONE	7.49	18764	1.91	19.8	14.3	-6.8	11.29
9/23/2016	9:00	5.5	200	CLEAR	NONE	7.49	18823	1.77	17.9	14.3	-6.5	11.30
9/23/2016	9:05	5.5	200	CLEAR	NONE	7.49	18882	1.72	15.7	14.2	-5.7	11.31
9/23/2016	9:10	5.5	200	CLEAR	NONE	7.49	18885	1.58	9.89	14.2	-5.4	11.30
9/23/2016	9:15	5.5	200	CLEAR	NONE	7.49	18971	1.48	8.68	14.3	-4.9	11.29
9/23/2016	9:20	5.5	200	CLEAR	NONE	7.49	18903	1.73	7.98	14.3	-4.2	11.28
9/23/2016	9:25	5.5	200	CLEAR	NONE	7.50	18967	1.73	4.13	14.3	-3.3	1.29

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:45	9:25	40	8.00	CLEAR	NONE	7.50	18967	1.73	4.13	14.3	-3.3	1.29

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 9:40:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		6	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-24DUT-ME20-1
Sampler: Joel Meunier
Well ID: MW07-24DUT
Well Type: Monitoring Well
QC Duplicate ID: MW07-ME20-FD08
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	5.92
Top of Screen (ft-BTOR):	26	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	36	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	8:40	5.50	120	clear	none	7.15	9414	0.69	77.4	17.5	-5.5	5.32
9/23/2016	9:00	5.50	120	clear	none	6.94	9855	0.56	30.8	14.3	13.7	5.55
9/23/2016	9:22	5.50	120	clear	none	6.95	9568	0.19	9.28	13.7	12.7	5.38
9/23/2016	9:28	5.50	120	clear	none	6.95	9299	0.13	7.92	14.6	11.8	5.24
9/23/2016	9:37	5.50	120	clear	none	6.95	9333	0.09	7.03	14.8	11.0	5.26
9/23/2016	9:43	5.50	120	clear	none	6.95	9314	0.11	4.72	14.8	10.5	5.24

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:40	9:43	63	7.60	clear	none	6.95	9314	0.11	4.72	14.8	10.5	5.24

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 9:50:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		4	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-24S-ME20-1
Sampler: Briley Morril
Well ID: MW07-24S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	4.59
Top of Screen (ft-BTOR):	9.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	19.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	10:05	11.5	260	CLEAR	NONE	7.57	29515	2.93	18.7	16.3	-4.8	17.64
9/23/2016	10:10	11.8	260	CLEAR	NONE	7.57	29080	2.89	16.3	16.4	-6.1	18.06
9/23/2016	10:15	11.8	260	CLEAR	NONE	7.57	29211	2.30	15.5	16.4	-5.9	18.08
9/23/2016	10:20	11.8	260	CLEAR	NONE	7.57	29380	1.63	9.87	16.2	-8.1	18.22
9/23/2016	10:25	11.8	260	CLEAR	NONE	7.57	29605	1.63	5.57	16.2	-10.0	18.41
9/23/2016	10:30	11.8	260	CLEAR	NON	7.58	29590	1.60	5.23	16.1	-10.9	18.39
9/23/2016	10:35	11.8	260	CLEAR	NONE	7.59	29526	1.50	5.05	16.1	-11.0	18.34
9/23/2016	10:40	11.8	260	CLEAR	NONE	7.59	29493	1.45	4.68	16.1	-11.3	18.34

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:05	10:40	35	9.10	CLEAR	NONE	7.59	29493	1.45	4.68	16.1	-11.3	18.34

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 10:45:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-25D-ME20-1
Sampler: Joel Meunier
Well ID: MW07-25D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	7.61
Top of Screen (ft-BTOR):	33	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	38	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	9:02	9.51	150	clear	none	5.92	127.9	0.87	6.21	11.3	122.9	0.06
9/20/2016	9:09	9.52	150	clear	none	5.97	126.2	0.96	5.64	11.2	120.8	0.06
9/20/2016	9:20	9.51	150	clear	none	6.04	124.9	0.96	5.86	11.2	119.7	0.06
9/20/2016	9:27	9.51	150	clear	none	6.07	165.8	0.94	5.53	11.3	128.1	0.08
9/20/2016	9:35	9.51	150	clear	none	6.15	165.4	0.90	5.02	11.3	130.1	0.08
9/20/2016	9:41	9.51	150	clear	none	6.17	165.5	0.79	4.51	11.4	130.8	0.08
9/20/2016	9:47	9.51	150	clear	none	6.16	165.6	0.72	4.71	11.5	129.7	0.08
9/20/2016	9:59	9.51	150	clear	none	6.16	165.6	0.64	4.26	11.5	127.7	0.08

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:02	9:59	57	8.55	clear	none	6.16	165.6	0.64	4.26	11.5	127.7	0.08

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 10:15:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-25R-ME20-1
Sampler: Briley Morril
Well ID: MW07-25R
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	4.81
Top of Screen (ft-BTOR):	57	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	67	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	9:05	14.5	250	clear	none	7.22	677	0.31	15.9	12.7	-89.6	0.33
9/20/2016	9:10	15.25	250	CLEAR	NONE	7.17	675	0.32	10.7	12.6	-89.6	0.33
9/20/2016	9:15	15.7	250	CLEAR	NONE	7.19	671	0.25	4.12	12.6	-88.1	0.33
9/20/2016	9:20	16.35	250	CLEAR	NONE	7.19	667	0.34	3.78	12.6	-87.0	0.33
9/20/2016	9:25	16.8	250	CLEAR	NONE	7.19	664	0.27	3.13	12.4	-85.7	0.33
9/20/2016	9:30	17.0	250	CLEAR	NONE	7.17	664	0.27	3.28	12.4	-85.9	0.32
9/20/2016	9:35	17.55	250	CLEAR	NONE	7.16	661	0.30	3.45	12.3	-84.7	0.32
9/20/2016	9:40	17.75	250	CLEAR	NONE	7.13	654.5	0.31	3.34	12.3	-81.8	0.32
9/20/2016	9:45	17.95	250	CLEAR	NONE	7.12	647.1	0.27	3.44	12.3	-80.1	0.32
9/20/2016	9:50	18.0	250	CLEAR	NONE	7.11	648.0	0.27	3.23	12.3	-79.8	0.32
9/20/2016	9:55	18.1	250	CLEAR	NONE	7.13	642.3	0.29	3.10	12.4	-77.7	0.31
9/20/2016	10:00	18.1	250	CLEAR	NONE	7.13	640.2	0.29	3.05	12.4	-77.1	0.30

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:05	10:00	55	13.75	CLEAR	NONE	7.13	640.2	0.29	3.05	12.4	-77.1	0.30

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 10:15:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-27D-ME20-1
Well ID: MW07-27D
QC Duplicate ID: NA
Sampler: Dylan Potter
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	2.01
Top of Screen (ft-BTOR):	45	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	52	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/28/2016	15:05	8.32	250	clear	none	7.10	1027	0.00	39.6	10.5	-32.0	0.51
9/28/2016	15:10	8.28	190	clear	none	6.95	1045	0.00	25.6	10.9	-24.2	0.52
9/28/2016	15:15	8.31	190	clear	none	6.81	1060	0.07	11.4	10.7	-18.1	0.53
9/28/2016	15:20	8.32	200	clear	none	6.72	1065	0.15	9.52	10.6	-16.2	0.53
9/28/2016	15:25	8.32	200	clear	none	6.65	1071	0.05	9.80	10.5	-13.7	0.53
9/28/2016	15:30	8.29	200	clear	none	6.64	1072	0.00	9.05	10.4	-11.5	0.53

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
15:05	15:30	25	5.15	clear	none	6.64	1072	0.00	9.05	10.4	-11.5	0.53

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/28/2016 3:40:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-28D-ME20-1
Sampler: Dylan Potter
Well ID: MW07-28D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	3.15
Top of Screen (ft-BTOR):	42	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	46	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/28/2016	11:19	7.19	96	LIGHT RED	none	6.71	6474	2.81	277	11.9	34.2	3.60
9/28/2016	11:24	8.01	376	LIGHT RED	none	6.62	6458	1.46	59.0	10.5	7.2	3.55
9/28/2016	11:29	7.83	376	clear	none	6.60	6500	1.33	44.9	10.5	-4.5	3.57
9/28/2016	11:34	7.61	200	clear	none	6.61	6542	1.43	27.4	11.0	-9.6	3.60
9/28/2016	11:39	7.92	310	clear	none	6.60	6569	0.54	49.6	10.9	-11.3	3.63
9/28/2016	11:44	8.23	310	clear	none	6.59	6592	0.54	36.9	10.1	-10.8	3.62
9/28/2016	11:49	7.87	250	clear	none	6.59	6616	0.45	28.4	10.6	-12.6	3.63
9/28/2016	11:54	7.66	220	clear	none	6.59	6616	0.71	32.4	10.5	-15.2	3.64
9/28/2016	11:59	7.65	220	clear	none	6.61	6631	0.76	34.0	10.3	-15.0	3.65
9/28/2016	12:04	7.81	250	clear	none	6.60	6638	0.73	34.2	10.3	-12.0	3.65

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:19	12:04	45	11.79	clear	none	6.60	6638	0.73	34.2	10.3	-12.0	3.65

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/28/2016 12:10:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-29D-ME20-1
Well ID: MW07-29D
QC Duplicate ID: NA
Sampler: Chris Hayden
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	5.69
Top of Screen (ft-BTOR):	66.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	76.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	9:28	6.88	200	clear	none	6.31	26,807	2.60	17.3	13.8	-10.1	16.45
9/22/2016	9:33	6.88	200	clear	none	6.34	26,841	1.05	17.2	13.6	-13.2	16.47
9/22/2016	9:38	6.88	200	clear	none	6.35	26,594	0.09	18.1	13.5	-15.5	16.30
9/22/2016	9:43	6.88	200	clear	none	6.36	26,592	0.0	12.1	13.4	-17.8	16.30
9/22/2016	9:48	6.88	200	clear	none	6.36	26,616	0.0	17.3	13.4	-19.6	16.33

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:28	9:48	20	4.00	clear	none	6.36	26,616	0.0	17.3	13.4	-19.6	16.33

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 9:48:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-30D-ME20-1
Well ID: MW07-30D
QC Duplicate ID: NA
Sampler: Chris Hayden
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	5.5
Top of Screen (ft-BTOR):	60.8	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	70.8	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/22/2016	10:14	7.61	200	clear	none	7.55	8.023	7.18	5.11	13.6	67.2	4.48
9/22/2016	10:20	6.57	200	clear	none	7.60	8,045	6.79	2.63	13.6	69.0	4.49
9/22/2016	10:25	6.53	200	clear	none	7.64	8,230	5,73	1.39	13.5	72.9	4.63
9/22/2016	10:30	6.53	200	clear	none	7.61	8,806	5.44	1.10	13.4	75.0	6.04
9/22/2016	10:35	6.53	200	clear	none	7.50	10,349	4.56	0.87	13.3	77.8	6.63

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:14	10:35	21	4.20	clear	none	7.50	10,349	4.56	0.87	13.3	77.8	6.63

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/22/2016 10:35:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-32D-ME20-1
Well ID: MW07-32D
QC Duplicate ID: NA
Sampler: Briley Morril
Well Type: Monitoring Well
MS/MSD: MW07-32D-ME20-1MS/MSD

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	2.07
Top of Screen (ft-BTOR):	41.6	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	51.6	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/28/2016	9:25	7.6	150	CLEAR	NONE	9.47	38989	5.13	6.34	14.6	-19.2	24.98
9/28/2016	9:30	7.6	150	CLEAR	NONE	9.44	39202	4.49	5.28	14.5	-9.7	25.02
9/28/2016	9:35	7.6	150	CLEAR	NONE	9.59	39305	4.97	3.76	14.3	1.3	25.05
9/28/2016	9:40	7.6	150	CLEAR	NONE	9.62	39299	4.87	3.45	14.4	9.0	25.05
9/28/2016	9:45	7.6	150	CLEAR	NONE	9.61	39260	4.70	3.20	14.3	12.0	25.03
9/28/2016	9:50	7.6	150	CLEAR	NONE	9.59	39315	4.67	3.41	14.3	15.3	25.05
9/28/2016	9:55	7.6	150	CLEAR	NONE	9.56	39288	4.59	2.31	14.3	16.4	25.06

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:25	9:55	30	4.50	CLEAR	NONE	9.56	39288	4.59	2.31	14.3	16.4	25.06

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/28/2016 10:00:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		6	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-32R-ME20-1
Well ID: MW07-32R
QC Duplicate ID: MW07-ME20-FD09
Sampler: Briley Morril
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	4.8
Top of Screen (ft-BTOR):	67.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	77.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/28/2016	8:30	7.5	140	CLEAR	NONE	7.57	39552	2.13	4.99	15.1	71.7	25.22
9/28/2016	8:35	7.5	140	CLEAR	NONE	7.43	39267	1.23	5.09	15.0	65.1	25.05
9/28/2016	8:40	7.5	140	CLEAR	NONE	7.31	39008	0.79	5.54	14.8	68.4	24.89
9/28/2016	8:45	7.5	140	CLEAR	NONE	7.26	39010	.63	4.98	14.6	65.8	24.85
9/28/2016	8:50	7.5	140	CLEAR	NONE	7.26	39058	0.67	4.07	14.6	66.2	24.87
9/28/2016	8:55	7.5	140	CLEAR	NONE	7.25	39108	0.69	3.43	14.6	68.3	24.95
9/28/2016	9:00	7.5	140	CLEAR	NONE	7.24	39143	0.69	3.24	14.5	69.5	24.97

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:30	9:00	30	4.20	CLEAR	NONE	7.24	39143	0.69	3.24	14.5	69.5	24.97

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/28/2016 9:10:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		4	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-33D-ME20-1
Sampler: Tom Croft
Well ID: MW07-33D
Well Type: Monitoring Well
QC Duplicate ID: MW07-ME20-FD10
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	3.3
Top of Screen (ft-BTOR):	36	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	46	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/28/2016	9:30	3.54	200	clear	none	7.09	369.8	0.85	7.12	12.9	7.6	0.17
9/28/2016	9:35	3.58	200	clear	none	6.96	265.2	0.67	4.79	12.6	28.2	0.13
9/28/2016	9:40	3.62	200	clear	none	6.79	321.2	0.64	5.41	12.5	25.5	0.20
9/28/2016	9:45	3.66	200	clear	none	6.89	270.1	0.48	4.28	12.4	38.6	0.13
9/28/2016	9:50	3.68	200	clear	none	6.87	430.7	0.38	7.01	12.6	7.0	0.19
9/28/2016	9:55	3.73	200	clear	none	6.86	414.9	0.08	4.29	12.3	-33.0	0.17
9/28/2016	10:00	3.75	200	clear	none	6.86	321.9	0.03	3.67	12.2	-37.6	0.15
9/28/2016	10:05	3.78	200	clear	none	6.88	317.8	0	2.95	12.3	-42.6	0.15
9/28/2016	10:10	3.83	200	clear	none	6.90	322.6	0	1.81	12.2	-46.3	0.17

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:30	10:10	40	8.00	clear	none	6.90	322.6	0	1.81	12.2	-46.3	0.17

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/28/2016 10:15:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		4	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-33S-ME20-1
Sampler: Tom Croft
Well ID: MW07-33S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	1.28
Top of Screen (ft-BTOR):	3	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	6	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/28/2016	8:50		160	clear	none	5.47	24875	0.32	11.3	16.8	85.9	15.21
9/28/2016	8:55		160	clear	none	5.51	25185	0.22	5.75	16.8	78.2	15.40
9/28/2016	9:00		160	clear	none	5.54	25358	0.15	4.12	16.8	72.2	15.52
9/28/2016	9:05		160	clear	none	5.58	25526	0.09	4.56	16.8	66.7	15.63
9/28/2016	9:10		160	clear	none	5.60	25607	0.06	3.40	16.8	63.5	15.68

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:50	9:10	20	3.20	clear	none	5.60	25607	0.06	3.40	16.8	63.5	15.68

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/28/2016 9:15:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-34D-ME20-1
Sampler: Chris Hayden
Well ID: MW07-34D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	9.35
Top of Screen (ft-BTOR):	55	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	65	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	14:58	6.18	200	clear	none	6.28	13,872	0.71	56.6	15.9	-6.8	8.06
9/20/2016	15:03	6.16	200	clear	none	6.29	13,772	0.33	47.0	15.9	-9.5	7.99
9/20/2016	15:08	6.19	200	clear	none	6.31	13,670	0.03	33.4	15.6	-12.3	7.91
9/20/2016	15:13	6.17	200	clear	none	6.32	13,240	0.0	18.9	15.2	-13.8	7.63
9/20/2016	15:18	6.18	200	clear	none	6.31	12,965	0.0	18.7	15.2	-13.6	7.49
9/20/2016	15:23	6.20	200	clear	none	6.32	12,942	0.0	17.8	15.1	-13.4	7.47
9/20/2016	15:28	6.18	200	clear	none	6.33	12,937	0.0	21.5	15.1	-13.2	7.47

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
14:58	15:28	30	6.00	clear	none	6.33	12,937	0.0	21.5	15.1	-13.2	7.47

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 3:28:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-35D-ME20-1
Sampler: Briley Morril
Well ID: MW07-35D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	9.9
Top of Screen (ft-BTOR):	34	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	38.8	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	8:45	7.45	180	ORANGE	NONE	7.06	211.0	1.39	over range	12.6	161.4	0.10
9/21/2016	8:50	7.50	180	GREY	NONE	6.97	209.3	1.24	over range	12.6	141.1	0.10
9/21/2016	8:55	7.50	180	GREY	NONE	7.01	207.5	1.12	over range	12.5	122.8	0.10
9/21/2016	9:00	7.50	180	GREY	NONE	7.02	207.8	1.14	over range	12.5	121.1	0.10
9/21/2016	9:05	7.50	180	GREY	NONE	7.05	207.4	1.10	over range	12.5	113.3	0.10
9/21/2016	9:10	7.50	180	GREY	NONE	7.07	206.6	1.09	over range	12.4	108.7	0.10
9/21/2016	9:15	7.50	180	GREY	NONE	7.06	205.0	1.10	over range	12.5	105.4	0.10
9/21/2016	9:20	7.50	180	GREY	NONE	7.08	206.4	1.12	over range	12.5	101.8	0.10
9/21/2016	9:25	7.50	180	GREY	NONE	7.08	206.0	1.00	over range	12.5	100.4	0.10
9/21/2016	9:30	7.50	180	GREY	NONE	7.10	206.0	1.02	over range	12.5	98.9	0.10
9/21/2016	9:35	7.50	180	GREY	NONE	7.10	205.8	0.97	over range	12.4	95.9	0.10

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:45	9:35	50	9.00	GREY	NONE	7.10	205.8	0.97	over range	12.4	95.9	0.10

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-35D-ME20-1 Sampler: Briley Morril
Well ID: MW07-35D Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 9:45:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-35S-ME20-1
Well ID: MW07-35S
QC Duplicate ID: MW07-ME20-FD03
Sampler: Joel Meunier
Well Type: Monitoring Well
MS/MSD: MW07-35S-ME20-1MS/MSD

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	8.17
Top of Screen (ft-BTOR):	3	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	13	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	8:34	6.46	100	BROWNISH	egg	5.97	176.1	3.35	308	16.1	92.2	0.08
9/21/2016	8:44	6.46	100	BROWNISH	egg	6.03	177.6	6.36	19.9	15.7	92.4	0.08
9/21/2016	8:57	6.46	100	clear	egg	6.23	178.5	8.82	8.10	16.3	95.2	0.08
9/21/2016	9:02	6.46	100	clear	egg	6.24	179.3	8.85	5.08	16.5	89.6	0.08
9/21/2016	9:07	6.46	100	clear	egg	6.25	180.5	8.88	3.76	16.6	85.4	0.09
9/21/2016	9:12	6.46	100	clear	egg	6.26	181.1	8.67	3.02	16.5	82.5	0.09
9/21/2016	9:17	6.46	100	clear	egg	6.27	181.5	8.57	3.11	16.5	80.7	0.09
9/21/2016	9:22	6.46	100	clear	egg	6.29	181.4	8.60	2.98	16.5	78.6	0.09
9/21/2016	9:27	6.46	100	clear	egg	6.30	181.3	8.67	2.87	16.5	75.9	0.09
9/21/2016	9:32	6.46	100	clear	egg	6.31	181.3	8.84	3.09	16.5	73.4	0.09

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:34	9:32	58	5.80	clear	egg	6.31	181.3	8.84	3.09	16.5	73.4	0.09

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 10:40:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		8	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-37D-ME20-1
Sampler: Tom Croft
Well ID: MW07-37D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	0.4
Top of Screen (ft-BTOR):	34.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	44.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	15:15	4.63	250	clear	none	6.85	3757	0.24	119	13.7	7.5	1.92
9/27/2016	15:20	4.63	250	clear	none	6.36	3209	0.20	76.8	13.4	17.9	1.69
9/27/2016	15:25	4.59	250	clear	none	6.27	3305	0.55	76.3	13.2	21.6	1.75
9/27/2016	15:30	4.54	250	clear	none	6.24	3395	0.37	35.6	13.1	23.9	1.80
9/27/2016	15:35	4.50	250	clear	none	6.22	3519	0.28	45.3	13.0	25.4	1.87
9/27/2016	15:40	4.49	250	clear	none	6.23	3649	0.13	24.1	13.0	25.6	1.94
9/27/2016	15:45	4.48	250	clear	none	6.21	3689	0.09	24.3	12.9	26.9	1.95
9/27/2016	15:50	4.43	250	clear	none	6.20	3728	0.03	24.5	13.2	27.4	1.99

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
15:15	15:50	35	8.75	clear	none	6.20	3728	0.03	24.5	13.2	27.4	1.99

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 3:55:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-37S-ME20-1
Sampler: Tom Croft
Well ID: MW07-37S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	5.6
Top of Screen (ft-BTOR):	3	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	13	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	9:15	3.56	170	clear	none	6.06	47853	0.43	7.34	15.9	36.7	31.22
9/27/2016	9:20	3.63	170	clear	none	6.05	47900	0.30	8.67	16.0	36.6	31.25
9/27/2016	9:25	3.67	170	clear	none	6.04	47876	0.28	3.87	16.0	36.3	31.22

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:15	9:25	10	1.70	clear	none	6.04	47876	0.28	3.87	16.0	36.3	31.22

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 9:30:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-38D-ME20-1
Well ID: MW07-38D
QC Duplicate ID: NA
Sampler: Tom Croft
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	7.79
Top of Screen (ft-BTOR):	24	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	31.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/19/2016	10:20	11.77	170	clear	none	6.13	161.2	1.05	18.1	11.9	171.4	0.08
9/19/2016	10:25	11.78	170	clear	none	5.97	158.0	0.59	13.1	11.8	179.8	0.07
9/19/2016	10:30	11.77	170	clear	none	6.00	157.3	0.13	11.3	11.6	181.2	0.07
9/19/2016	10:35	11.77	170	clear	none	6.03	157.5	0.10	7.88	11.6	181.7	0.07

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:20	10:35	15	2.55	clear	none	6.03	157.5	0.10	7.88	11.6	181.7	0.07

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/19/2016 10:40:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-38S-ME20-1
Sampler: Tom Croft
Well ID: MW07-38S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	6.91
Top of Screen (ft-BTOR):	6	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	16	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/19/2016	9:35	11.60	240	clear	none	6.67	260.8	5.36	54.5	13.2	150.7	0.13
9/19/2016	9:40	11.82	240	clear	none	6.74	231.2	5.02	27.9	13.3	146.1	0.11
9/19/2016	9:45	11.78	180	clear	none	6.76	232.6	4.52	26.3	13.7	145.8	0.11
9/19/2016	9:50	11.77	180	clear	none	6.76	236.6	4.32	27.2	13.7	146.6	0.11
9/19/2016	9:55	11.76	180	clear	none	6.77	234.9	4.22	26.5	13.6	147.5	0.11

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:35	9:55	20	4.20	clear	none	6.77	234.9	4.22	26.5	13.6	147.5	0.11

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/19/2016 10:00:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-39D-ME20-1
Well ID: MW07-39D
QC Duplicate ID: NA
Sampler: Tom Croft
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	3.22
Top of Screen (ft-BTOR):	42	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	53	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	10:40	8.23	150	clear	none	7.25	2250	0.38	3.43	12.8	-11.6	1.16
9/23/2016	10:45	8.23	150	clear	none	7.23	2301	0.05	1.62	12.6	-12.1	1.19
9/23/2016	10:50	8.23	150	clear	none	7.23	2311	0.02	2.98	12.7	-12.9	1.19

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:40	10:50	10	1.50	clear	none	7.23	2311	0.02	2.98	12.7	-12.9	1.19

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 10:55:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-39I-ME20-1
Sampler: Tom Croft
Well ID: MW07-39I
Well Type: Monitoring Well
QC Duplicate ID: MW07-ME20-FD07
MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	7.2
Top of Screen (ft-BTOR):	26	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	36	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	8:30	8.09	100	clear	none	6.89	2510	0.08	9.69	11.8	-9.8	1.30
9/23/2016	8:35	8.09	100	clear	none	6.90	2350	0.03	12.2	11.8	-11.0	1.22
9/23/2016	8:40	8.09	100	clear	none	6.91	2269	0	13.6	11.8	-12.0	1.18
9/23/2016	8:45	8.09	100	clear	none	6.92	2411	0.04	12.3	11.8	-12.2	1.25
9/23/2016	8:50	8.09	100	clear	none	6.92	2547	0	10.3	11.9	-13.3	1.32
9/23/2016	8:55	8.09	100	clear	none	6.92	2546	0	5.86	11.8	-13.8	1.32
9/23/2016	9:00	8.09	100	clear	none	6.93	2553	0	4.96	11.8	-14.0	1.33

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:30	9:00	30	3.00	clear	none	6.93	2553	0	4.96	11.8	-14.0	1.33

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 9:05:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		4	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-39S-ME20-1
Sampler: Tom Croft
Well ID: MW07-39S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: MW07-39S-ME20-1MS/MSD

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	6.65
Top of Screen (ft-BTOR):	12	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	22	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	10:00	8.19	120	clear	none	6.90	1065	0.24	22.3	12.3	-28.8	0.53
9/23/2016	10:05	8.19	120	clear	none	6.90	1062	0.27	20.2	12.4	-28.7	0.53
9/23/2016	10:10	8.19	120	clear	none	6.90	1060	0.15	15.7	12.8	-29.7	0.53
9/23/2016	10:15	8.18	120	clear	none	6.91	1060	0.18	15.4	12.7	-29.4	0.53
9/23/2016	10:20	8.18	120	clear	none	6.91	1061	0.18	16.1	12.6	-29.3	0.53

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:00	10:20	20	2.40	clear	none	6.91	1061	0.18	16.1	12.6	-29.3	0.53

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 10:25:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		6	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-40D-ME20-1
Sampler: Tom Croft
Well ID: MW07-40D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	10.87
Top of Screen (ft-BTOR):	30.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	40.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	10:10	8.53	200	clear	none	6.34	328.9	0.59	7.67	13.3	69.5	0.16
9/20/2016	10:15	8.52	200	clear	none	6.33	332.5	0.40	6.36	13.1	64.8	0.16
9/20/2016	10:20	8.50	200	clear	none	6.34	333.9	0.20	7.67	12.9	61.2	0.16
9/20/2016	10:25	8.48	200	clear	none	6.35	338.1	0.14	6.05	12.9	58.5	0.16
9/20/2016	10:30	8.46	200	clear	none	6.35	339.3	0.20	6.67	12.8	57.4	0.16

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:10	10:30	20	4.00	clear	none	6.35	339.3	0.20	6.67	12.8	57.4	0.16

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 11:35:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-41I-ME20-1
Well ID: MW07-41I
QC Duplicate ID: NA
Sampler: Chris Hayden
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	3.51
Top of Screen (ft-BTOR):	16.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	26.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	13:54	7.84	200	clear	none	6.51	1,785	1.39	16.5	14.1	-24.6	0.91
9/21/2016	14:00	7.74	200	clear	none	6.57	1,780	0.56	11.7	14.1	-24.7	0.91
9/21/2016	14:05	7.73	200	clear	none	6.51	1,765	0,0	16.3	14.0	-25.1	0.90
9/21/2016	14:10	7.73	200	clear	none	6.50	1.762	0.0	16.3	14.1	-26.3	0.90
9/21/2016	14:15	7.73	200	clear	none	6.50	1,748	0.0	22.0	13.9	-26.5	0.89

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:54	14:15	21	4.20	clear	none	6.50	1,748	0.0	22.0	13.9	-26.5	0.89

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 2:15:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-42I-ME20-1
Well ID: MW07-42I
QC Duplicate ID: NA
Sampler: Chris Hayden
Well Type: Monitoring Well
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	4
Top of Screen (ft-BTOR):	23.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	33.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	14:44	8.20	190	clear	none	6.69	2,186	0.0	11.6	13.7	4.5	1.13
9/21/2016	14:49	8.23	190	clear	none	6.68	2,182	0.0	13.4	13.6	3.8	1.12
9/21/2016	14:54	8.28	190	clear	none	6.69	2,181	0.0	10.9	13.6	2.8	1.12
9/21/2016	14:59	8.31	190	clear	none	6.69	2,183	0.0	9.96	13.4	1.1	1.13

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
14:44	14:59	15	2.80	clear	none	6.69	2,183	0.0	9.96	13.4	1.1	1.13

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 2:59:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-43D-ME20-1
Sampler: Briley Morril
Well ID: MW07-43D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	11.11
Top of Screen (ft-BTOR):	33	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	43	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	11:15	5.90	180	CLEAR	NONE	7.76	8234	0.64	4.56	15.5	22.5	4.59
9/23/2016	11:20	6.5	180	CLEAR	NONE	7.72	8119	0.61	2.94	15.5	23.5	4.52
9/23/2016	11:25	6.5	180	CLEAR	NONE	7.67	7407	0.61	2.63	15.6	26.5	4.10
9/23/2016	11:30	6.5	180	CLEAR	NONE	7.66	7279	0.54	2.42	15.6	25.8	4.02
9/23/2016	11:35	6.5	180	CLEAR	NONE	7.66	7199	0.52	1.06	15.4	25.1	3.96
9/23/2016	11:40	6.5	180	CLESR	NONE	7.64	755	0.51	1.05	15.3	25.3	3.96

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:15	11:40	25	4.50	CLESR	NONE	7.64	755	0.51	1.05	15.3	25.3	3.96

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 11:45:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-43S-ME20-1
Sampler: Joel Meunier
Well ID: MW07-43S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	8.17
Top of Screen (ft-BTOR):	10	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	15	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/23/2016	10:17	4.97	120	BROWNISH	none	6.74	45397	0.57	113	18.6	-31.7	29.66
9/23/2016	10:32	4.97	120	clear	none	6.71	45977	0.05	33.7	19.3	-31.6	29.88
9/23/2016	10:47	4.97	120	clear	none	6.72	46083	0.04	20.8	19.4	-31.9	29.92
9/23/2016	11:04	4.97	120	clear	none	6.72	46110	0.03	14.8	19.7	-32.2	29.94
9/23/2016	11:14	4.97	120	clear	none	6.72	46134	0.02	12.9	19.9	-31.9	29.98
9/23/2016	11:23	4.97	120	clear	none	6.72	46050	0.02	9.79	19.5	-31.3	29.92
9/23/2016	11:36	4.97	120	clear	none	6.73	46017	0.02	6.81	19.7	-31.7	29.90
9/23/2016	11:44	4.97	120	clear	none	6.73	45998	0.02	4.37	20.0	-31.1	

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:17	11:44	87	10.44	clear	none	6.73	45998	0.02	4.37	20.0	-31.1	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/23/2016 11:50:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-44D-ME20-1
Sampler: Chris Hayden
Well ID: MW07-44D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	6.9
Top of Screen (ft-BTOR):	44.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	54.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/21/2016	11:33	7.93	175	clear	none	7.37	3,259	4.76	21.5	17.0	65.3	1,72
9/21/2016	11:38	7.88	175	clear	none	7.36	3,270	4.04	24.9	16.6	69.1	1.72
9/21/2016	11:43	7.83	175	clear	none	7.28	3,307	2.92	14.1	16.4	71.5	1.74
9/21/2016	11:48	7.79	175	clear	none	7.20	3,370	1.22	16.5	16.5	73.0	1.78
9/21/2016	11:53	7.79	175	clear	none	7.09	3,756	0.54	20.4	16.3	73.9	1.92
9/21/2016	11:58	7.79	175	clear	none	6.95	3,983	0.32	22.1	16.3	12.2	2.13
9/21/2016	12:03	7.79	175	clear	none	6.95	4,086	0.12	18.0	16.3	-3.1	2.21
9/21/2016	12:08	7.79	175	clear	none	6.95	5,577	0.0	20.9	16.2	-9.7	2.93
9/21/2016	12:13	7.79	175	clear	none	6.81	6,125	0,0	16.8	16.2	-13.1	3.41

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:33	12:13	40	7.00	clear	none	6.81	6,125	0,0	16.8	16.2	-13.1	3.41

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/21/2016 12:13:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-45D-ME20-1
Sampler: Tom Croft
Well ID: MW07-45D
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	8.02
Top of Screen (ft-BTOR):	37.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	47.5	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/20/2016	9:00	9.15	150	clear	none	7.15	1753	0.76	48.0	13.8	13.2	0.89
9/20/2016	9:05	9.08	110	clear	none	7.15	1753	0.60	16.5	13.9	5.9	0.89
9/20/2016	9:10	9.04	110	clear	none	7.16	1751	0.44	11.8	13.6	1.1	0.89
9/20/2016	9:15	9.07	130	clear	none	7.16	1727	0.31	12.1	13.3	-3.7	0.88
9/20/2016	9:20	9.17	140	clear	none	7.16	1711	0.17	7.80	13.1	-6.9	0.87
9/20/2016	9:25	9.18	130	clear	none	7.16	1695	0.17	7.44	13.4	-8.6	0.86
9/20/2016	9:30	9.22	140	clear	none	7.17	1685	0.14	4.70	13.1	-11.2	0.84

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:00	9:30	30	3.85	clear	none	7.17	1685	0.14	4.70	13.1	-11.2	0.84

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/20/2016 9:35:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 07
Project No: 60273164 LT.F1

Sample ID: MW07-45S-ME20-1
Sampler: Chris Hayden
Well ID: MW07-45S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

Well Information

Well Diameter (in.):	1.5	Static Water Level (ft-BTOR):	9.03
Top of Screen (ft-BTOR):	15	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	25	Purge Method:	Low Flow - peristaltic
		Sample Method:	Low Flow - peristaltic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/16/2016	9:50	9.43	120	none	clear	7.19	552.2	0.65	131	14.0	-79.3	0.26
9/16/2016	9:55	9.74	120	none	clear	7.22	504	0.1	21.3	13.9	-96.4	0.24
9/16/2016	10:00	9.82	120	none	clear	7.24	487.9	0.0	15.2	13.8	-103.0	0.24
9/16/2016	10:05	9.89	120	none	clear	7.26	492.3	0.9	8.87	13.8	-113.8	0.24
9/16/2016	10:10	9.96	120	none	clear	7.27	495.4	0.0	10.3	13.8	-129.3	0.24
9/16/2016	10:15	10.00	120	none	clear	7.28	494.8	0.0	8.3	13.9	-136.0	0.24
9/16/2016	10:20	10.02	120	none	clear	7.29	491.7	0.0	4.75	13.9	-136.8	0.24

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:50	10:20	30	3.60	none	clear	7.29	491.7	0.0	4.75	13.9	-136.8	0.24

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/16/2016 10:20:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

Piezometer Field Forms

PEIZOMETER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-02-ME20-1
Sampler: Tom Croft
Well ID: P07-02
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-02-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/26/2016	10:30	2.98	100	BROWNISH	salty	7.78	20778	0.58	155	19.3	-132.3	12.50
9/26/2016	10:35	3.18	100	BROWNISH	salty	7.91	21217	0.93	86.6	19.3	-119.5	12.76
9/26/2016	10:40	3.29	100	cloudy	salty	7.99	21400	0.69	28.7	19.7	-111.4	12.92
9/26/2016	10:45	3.32	100	clear	salty	8.00	21622	0.63	17.4	19.4	-104.6	13.04
9/26/2016	10:50	3.35	100	clear	salty	8.01	21704	0.62	18.0	19.4	-98.0	13.08
9/26/2016	10:55	3.37	100	clear	salty	8.01	21592	0.57	5.35	19.5	-100.1	13.05

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:30	10:55	25	2.50	clear	salty	8.01	21592	0.57	5.35	19.5	-100.1	13.05

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/26/2016 11:00:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-03-ME20-1
Sampler: Tom Croft
Well ID: P07-03
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-03-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/26/2016	10:28	4.04	136	GRAYISH	none	7.27	23446	0.61	13.2	17.9	-116.1	14.28
9/26/2016	10:33	3.91	136	clear	none	7.22	24619	0.48	5.48	17.9	-108.4	15.04
9/26/2016	10:38	3.94	140	clear	none	7.22	24793	0.38	3.24	18.0	-108.2	15.17
9/26/2016	10:43	4.00	140	clear	none	7.22	25043	0.29	1.46	17.9	-107.2	15.29

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:28	10:43	15	2.06	clear	none	7.22	25043	0.29	1.46	17.9	-107.2	15.29

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/26/2016 10:50:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-04-ME20-1
Sampler: Tom Croft
Well ID: P07-04
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-04-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/26/2016	11:20	4.20	100	clear	salty	8.80	39729	0.79	68.5	20.1	-80.7	25.40
9/26/2016	11:25	5.26	100	clear	salty	8.99	40168	0.80	61.9	20.5	-81.6	25.73
9/26/2016	12:48	5.39	100	clear	salty	8.91	43355	0.63	132	20.7	-175.1	27.99

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:20	12:48	88	8.80	clear	salty	8.91	43355	0.63	132	20.7	-175.1	27.99

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/26/2016 12:50:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-05-ME20-1
Sampler: Tom Croft
Well ID: P07-05
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-05-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/26/2016	11:16	4.55	140	clear	none	7.33	21416	0.13	41.5	17.3	-55.4	12.87
9/26/2016	11:21	4.60	140	clear	none	7.32	20944	1.69	38.6	17.7	-72.0	12.26
9/26/2016	11:28	5.36	148	clear	none	7.25	11363	0.08	55.2	17.5	-86.3	6.30
9/26/2016	11:33	5.64	148	clear	none	7.22	10859	0.00	50.4	17.4	-111.4	6.12
9/26/2016	11:38	5.68	142	clear	none	7.22	9249	0.00	18.5	17.5	-112.8	6.09
9/26/2016	11:43	5.62	142	clear	none	7.17	7874	0.00	11.3	17.3	-122.6	4.36
9/26/2016	11:48	5.64	138	clear	none	7.11	8690	0.07	6.31	17.3	-150.6	4.84
9/26/2016	11:53	5.64	140	clear	none	7.10	8297	0.00	6.18	17.2	-178.6	4.68
9/26/2016	11:58	5.62	140	clear	none	7.08	8432	0.00	5.73	17.2	-205.2	4.64
9/26/2016	12:03	5.62	140	clear	none	7.06	8244	0.00	7.26	17.2	-215.2	4.60
9/26/2016	12:08	5.62	140	clear	none	7.07	8138	0.00	7.45	17.4	-218.7	4.64
9/26/2016	12:13	5.61	140	clear	none	7.03	8397	0.00	3.20	17.1	-228.0	4.69
9/26/2016	12:18	5.59	140	clear	none	7.00	8177	0.00	2.83	17.2	-233.9	4.60
9/26/2016	12:23	5.59	140	clear	none	7.01	8336	0.12	2.21	17.3	-240.1	4.58
9/26/2016	12:28	5.59	140	clear	none	7.00	8279	0.12	2.13	17.3	-241.0	4.67

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:16	12:28	72	10.17	clear	none	7.00	8279	0.12	2.13	17.3	-241.0	4.67

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/26/2016 12:35:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-06-ME20-1
Well ID: P07-06
QC Duplicate ID: NA
Sampler: Tom Croft
Well Type: Monitoring Well
MS/MSD: NA

P07-06-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/26/2016	12:10	4.23	130	clear	salty	8.56	30023	1.03	7.85	20.0	37.6	18.67
9/26/2016	12:15	4.78	130	clear	salty	8.25	22651	0.63	3.47	19.8	9.2	13.23
9/26/2016	12:20	4.87	130	clear	salty	7.98	13407	0.41	2.06	19.6	-2.3	7.61
9/26/2016	12:25	4.82	130	clear	salty	7.88	11671	0.35	1.72	19.7	-21.7	6.65
9/26/2016	12:30	4.72	130	clear	salty	7.82	11321	0.40	1.48	19.6	-40.2	6.43
9/26/2016	12:35	4.77	160	clear	salty	7.79	11104	0.45	1.64	19.6	-55.5	6.31
9/26/2016	12:40	4.83	160	clear	salty	7.79	10873	0.44	1.72	19.8	-69.8	6.18
9/26/2016	12:46	4.80	160	clear	salty	7.77	10766	0.39	2.20	19.8	-85.0	6.11
9/26/2016	12:51	4.76	160	clear	salty	7.76	10515	0.38	1.98	19.7	-93.6	5.96
9/26/2016	12:55	4.68	160	clear	salty	7.76	10554	0.34	1.93	19.6	-98.1	5.99
9/26/2016	13:00	4.67	160	clear	salty	7.76	10444	0.34	1.86	19.6	-103.3	5.92

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:10	13:00	50	7.20	clear	salty	7.76	10444	0.34	1.86	19.6	-103.3	5.92

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/26/2016 1:02:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-07-ME20-1
Sampler: Dylan Potter
Well ID: P07-07
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-07-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	12:36	4.52	120	clear	none	8.22	47443	0.97	14.5	18.8	-97.4	30.60
9/27/2016	12:41	4.67	120	clear	none	7.24	41234	0.70	11.8	18.7	-24.2	25.90
9/27/2016	12:46	4.63	120	clear	none	6.85	33205	0.96	7.04	18.6	-26.2	20.24
9/27/2016	12:51	4.51	120	clear	none	6.78	28469	0.54	2.79	18.6	-31.7	17.35
9/27/2016	12:56	4.52	120	clear	none	6.76	26354	0.32	3.77	18.5	-37.1	16.10
9/27/2016	13:13	4.68	120	clear	none	6.71	23197	0.0	1.10	18.2	-46.6	14.05
9/27/2016	13:18	4.65	120	clear	none	6.71	22919	0.00	2.14	18.2	-47.2	13.86
9/27/2016	13:23	4.59	120	clear	none	6.70	22661	0.00	1.08	18.2	-48.3	13.72

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:36	13:23	47	5.64	clear	none	6.70	22661	0.00	1.08	18.2	-48.3	13.72

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 1:30:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-08-ME20-1
Sampler: Marc Smith
Well ID: P07-08
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-08-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/16/2016	14:46	5.2	125	clear	none	6.66	23155	0.67	34.1	19.8	-68.4	13.99
9/16/2016	14:50	5.1	120	clear	none	6.63	22686	0.18	27.4	19.8	-62.6	13.68
9/16/2016	14:55	4.92	120	clear	none	6.61	22037	0.11	27.3	19.7	-67.4	13.25
9/16/2016	14:58	5.0	120	clear	none	6.60	21899	0.10	16.1	19.6	-69.7	13.13
9/16/2016	15:02	5.1	120	clear	none	6.58	21422	0.9	15.1	19.7	-74.5	12.86
9/16/2016	15:05	5	120	clear	none	6.58	21221	0.07	8.14	19.7	-76.9	12.73
9/16/2016	15:10	5.1	120	clear	none	6.56	10854	0.05	4.98	19.8	-79.9	12.5
9/16/2016	15:15	5.1	120	clear	none	6.56	20524	0.05	4.70	19.7	-80.5	12.21

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
14:46	15:15	29	3.50	clear	none	6.56	20524	0.05	4.70	19.7	-80.5	12.21

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/16/2016 3:50:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-09-ME20-1
Sampler: Chris Hayden
Well ID: P07-09
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-09-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/16/2016	14:00	4.20	120	clear	none	6.52	12,004	0.11	8.67	20.4	-26.5	6.72
9/16/2016	14:05	4.22	120	clear	none	6.50	10,746	0.0	5.32	20.4	-32.1	5.91
9/16/2016	14:11	4.24	120	clear	none	6,50	9,921	0.0	5.06	20.3	-36.1	5.52
9/16/2016	14:16	4.17	120	clear	none	6.50	8,848	0.0	3.25	20.2	-41.5	4.91
9/16/2016	14:21	4.22	120	clear	none	6.50	8,687	0.0	2.99	20.3	-40.7	6.40
9/16/2016	14:26	4.20	120	clear	none	6.49	7,912	0.09	2.77	20.3	-44.2	6.49
9/16/2016	14:31	4.10	120	clear	none	6.50	7,726	0.0	1.34	20.3	-45.4	4.27
9/16/2016	14:36	4.08	120	clear	none	6.49	7,621	0.0	1.02	20.3	-45.6	4.21

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
14:00	14:36	36	4.30	clear	none	6.49	7,621	0.0	1.02	20.3	-45.6	4.21

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/16/2016 2:36:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-10-ME20-1
Well ID: P07-10
QC Duplicate ID: NA
Sampler: Marc Smith
Well Type: Monitoring Well
MS/MSD: NA

P07-10-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/16/2016	12:59	4.1	120	clear	none	6.10	20666	0.36	6.35	19.2	-48.6	12.41
9/16/2016	13:05	4.1	120	clear	none	6.12	20231	0.33	2.42	19.2	-48.5	12.11
9/16/2016	13:08	4.1	120	clear	none	6.42	20091	0.28	3.17	19.3	-48,2	12.02
9/16/2016	13:14	4.12	120	clear	none	6.13	19910	0.22	1.69	19.4	-46.6	11.91
9/16/2016	13:20	4.14	120	clear	none	6.13	19815	0.16	1.02	19.3	-46.2	11.84
9/16/2016	13:24	4.16	120	clear	none	6.14	19722	0.12	1.16	19.3	-46.5	11.78
9/16/2016	13:31	4.1	120	clear	none	6.14	19636	0.10	1.26	19.4	-45.4	11.74
9/16/2016	13:35	4.14	120	clear	none	6.14	19583	0.10	1.4	19.4	-44.5	11.70

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:59	13:35	36	4.30	clear	none	6.14	19583	0.10	1.4	19.4	-44.5	11.70

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/16/2016 1:40:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-14-ME20-1
Sampler: Tom Croft
Well ID: P07-14
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-14-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	13:40	2.25	120	clear	none	7.77	48411	0.45	18.9	19.5	-126.0	31.65
9/27/2016	13:45	3.53	120	clear	none	8.12	48254	0.69	24.8	19.6	-137.2	31.58
9/27/2016	13:50	4.70	120	clear	none	8.14	48396	0.47	14.6	19.1	-155.2	31.64
9/27/2016	14:20	5.50	120	clear	none	7.79	35919	0	4.3	20.5	-223.0	23.41

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:40	14:20	40	4.80	clear	none	7.79	35919	0	4.3	20.5	-223.0	23.41

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 2:00:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-15-ME20-1
Sampler: Briley Morril
Well ID: P07-15
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-15-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	13:35	5.5	180	BROWN	NONE	7.58	39719	4.33	768	21.0	33.2	25.38
9/27/2016	13:40	5.65	180	LT BR	NONE	7.65	37161	0.64	657	21.5	-86.5	23.57

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:35	13:40	5	0.90	LT BR	NONE	7.65	37161	0.64	657	21.5	-86.5	23.57

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 1:40:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-16-ME20-1
Sampler: Tom Croft
Well ID: P07-16
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-16-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/28/2016	11:00	2.27	100	clear	none	6.31	5579	0.79	30.2	16.8	-45.4	3.02
9/28/2016	11:05	2.31	100	clear	none	6.34	5260	0.61	33.6	16.9	-46.2	2.84
9/28/2016	11:10	2.57	100	clear	none	6.34	5099	0.69	29.4	16.9	-43.3	2.76
9/28/2016	11:15	2.70	100	clear	none	6.34	5085	0.48	24.0	16.9	-43.1	2.75
9/28/2016	11:20	2.87	100	clear	none	6.33	5068	0.29	12.0	16.8	-44.1	2.74
9/28/2016	11:25	2.95	100	clear	none	6.33	5068	0.21	4.72	16.8	-46.6	2.74

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:00	11:25	25	2.50	clear	none	6.33	5068	0.21	4.72	16.8	-46.6	2.74

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/28/2016 11:30:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-17-ME20-1
Sampler: Tom Croft
Well ID: P07-17
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-17-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/28/2016	11:50	3.58	100	clear	none	6.44	15382	2.47	122	17.0	-70.0	9.00
9/28/2016	11:55	3.80	100	clear	none	6.32	15416	1.76	155	17.1	-63.8	9.01
9/28/2016	12:00	4.12	120	BLACKISH	none	6.23	14828	0.44	1000	17.1	-64.6	8.29
9/28/2016	12:05	4.14	150	BLACKISH	none	6.29	15100	0.07	659	17.3	-67.5	8.84
9/28/2016	12:10	4.15	130	BLACKISH	none	6.27	15141	0.27	424	16.8	-57.5	8.82
9/28/2016	12:15	4.15	150	BLACKISH	none	6.27	15128	0.44	90.0	16.8	-53.9	8.85
9/28/2016	12:30	4.14	150	cloudy	none	6.29	15142	0.31	213	17.3	-44.9	8.83
9/28/2016	12:35	4.12	160	cloudy	none	6.30	15012	0.33	95.0	17.2	-48.5	8.79
9/28/2016	12:40	4.43	200	cloudy	none	6.28	15363	0.42	1000	17.4	-40.8	9.01
9/28/2016	12:45	4.83	100	BLACKISH	none	6.22	15619	1.58	1000	17.1	-37.3	9.12
9/28/2016	13:06	4.00	100	cloudy	none	6.10	14509	0.89	410	17.1	-19.7	8.53

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:50	13:06	76	9.90	cloudy	none	6.10	14509	0.89	410	17.1	-19.7	8.53

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/28/2016 1:05:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-20-ME20-1
Sampler: Tom Croft
Well ID: P07-20
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-20-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	12:20	4.15	140	BLACKISH	none	6.75	37912	0.61	381	19.3	-97.7	23.90
9/27/2016	12:44	2.75	140	BLACKISH	none	6.68	35500	0.60	281	19.0	-85.4	22.35

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:20	12:44	24	3.36	BLACKISH	none	6.68	35500	0.60	281	19.0	-85.4	22.35

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 12:45:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-21-ME20-1
Sampler: Briley Morril
Well ID: P07-21
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-21-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	12:15	4.95	160	LT OR	NONE	8.15	40483	1.21	595	21.0	-198.7	25.92
9/27/2016	12:30	4.80	160	LT OR	NONE	7.53	37908	1.71	575	21.5	-88.3	17.20

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:15	12:30	15	2.40	LT OR	NONE	7.53	37908	1.71	575	21.5	-88.3	17.20

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 12:35:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-22-ME20-1
Sampler: Briley Morril
Well ID: P07-22
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-22-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	11:15	2.4	180	clear	none	8.50	40772	0.44	20.7	20.5	-202.5	26.05
9/27/2016	11:32	2.4	180	CLEARISH	NONE	8.09	40510	0.35	344	20.8	-196.4	25.45

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:15	11:32	17	3.06	CLEARISH	NONE	8.09	40510	0.35	344	20.8	-196.4	25.45

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 11:38:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-23-ME20-1
Well ID: P07-23
QC Duplicate ID: NA
Sampler: Dylan Potter
Well Type: Monitoring Well
MS/MSD: NA

P07-23-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	11:13	4.28	120	clear	none	8.44	48439	1.61	24.2	18.2	-103.7	31.70
9/27/2016	11:18	4.14	120	clear	none	7.89	48277	0.61	5.82	18.3	-127.7	31.52
9/27/2016	11:23	4.24	120	clear	none	7.55	48005	0.53	5.87	18.3	-89.6	31.32
9/27/2016	11:28	4.51	150	clear	none	7.29	47794	0.48	7.13	18.3	-68.3	31.15
9/27/2016	11:33	4.58	150	clear	none	7.15	47622	0.54	8.90	18.4	-59.4	31.05
9/27/2016	11:38	4.59	150	clear	none	7.06	47519	0.60	1.32	18.3	-54.0	30.98
9/27/2016	11:43	4.58	150	clear	none	7.02	47397	0.45	1.54	18.3	-53.1	30.90
9/27/2016	11:48	4.64	150	clear	none	7.00	47347	0.36	1.38	18.3	-50.9	30.86
9/27/2016	11:53	4.63	150	clear	none	6.97	47310	0.29	0.88	18.3	-47.9	30.84

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:13	11:53	40	5.55	clear	none	6.97	47310	0.29	0.88	18.3	-47.9	30.84

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 12:00:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-24-ME20-1
Well ID: P07-24
QC Duplicate ID: NA
Sampler: Chris Hayden
Well Type: Monitoring Well
MS/MSD: NA

P07-24-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/16/2016	12:55	4.63	120	clear	none	7.50	32,345	1.3	2.62	21.6	-145.2	20.23
9/16/2016	13:01	4.63	120	clear	none	7.45	32,248	0.08	1.23	21.6	-140.5	20.14
9/16/2016	13:06	4.63	120	clear	none	7.38	32,022	0.05	0.96	21.6	-131.8	20.00
9/16/2016	13:11	4.63	120	clear	none	7.34	31,879	0.05	0.76	21.6	-128.4	19.88
9/16/2016	13:16	4.63	120	clear	none	7.26	31,655	0.05	0.51	21.6	-118.6	19.74
9/16/2016	13:21	4.63	120	clear	none	7.24	31,465	0.05	0.49	21.6	-113.8	19.69
9/16/2016	13:26	4.63	120	clear	none	7.21	31,398	0.05	0.43	21.6	-108.3	19.63

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:55	13:26	31	3.72	clear	none	7.21	31,398	0.05	0.43	21.6	-108.3	19.63

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/16/2016 1:26:00 PM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-28-ME20-1
Sampler: Tom Croft
Well ID: P07-28
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-28-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	9:50	2.71	110	clear	none	7.10	41582	0.10	52.7	17.6	-190.2	26.57
9/27/2016	9:55	3.54	110	clear	none	6.93	40938	0.16	30.3	17.8	-136.2	26.25
9/27/2016	10:00	4.01	110	clear	none	6.62	40855	0.15	21.2	17.9	-101.7	26.20
9/27/2016	10:15	4.10	110	clear	none	6.39	40661	0.28	20.6	18.0	-62.0	26.06
9/27/2016	10:20	4.10	110	clear	none	6.36	40620	0.27	19.3	18.0	-55.1	26.04
9/27/2016	10:25	4.10	110	clear	none	6.35	40619	0.21	15.7	17.9	-50.7	26.03
9/27/2016	10:30	4.10	110	clear	none	6.35	40588	0.24	10.6	18.0	-46.7	26.01
9/27/2016	10:35	4.10	110	clear	none	6.36	40598	0.37	7.72	17.9	-43.2	26.01
9/27/2016	10:40	4.10	110	clear	none	6.35	40568	0.43	4.19	17.9	-40.7	25.99

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:50	10:40	50	5.50	clear	none	6.35	40568	0.43	4.19	17.9	-40.7	25.99

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 10:45:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

PEIZOMETER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME 20
Site Name: NCBC DAVISVILLE IRP SITE 01
Project No: 60273164 LT.F1

Sample ID: P07-29-ME20-1
Sampler: Tom Croft
Well ID: P07-29
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: NA

P07-29-ME20-1

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9/27/2016	11:00	4.07	150	clear	none	7.15	31165	0.10	79.3	18.1	-154.0	19.42
9/27/2016	11:05	4.15	150	clear	none	6.71	31087	0.27	23.2	18.2	-116.7	19.38
9/27/2016	11:10	4.15	150	clear	none	6.61	31059	0.13	25.0	18.3	-99.0	19.37
9/27/2016	11:15	4.15	150	clear	none	6.59	31056	0.11	23.4	18.3	-89.9	19.36
9/27/2016	11:20	4.15	150	clear	none	6.58	31001	0.14	22.1	18.3	-85.6	19.32
9/27/2016	11:25	4.15	150	clear	none	6.56	31012	0.25	23.5	18.4	-77.3	19.33
9/27/2016	11:30	4.15	150	clear	none	6.56	30982	0.35	24.7	18.4	-71.3	19.31
9/27/2016	11:35	4.15	150	clear	none	6.55	30972	0.74	26.8	18.4	-64.1	19.30
9/27/2016	11:40	4.15	150	clear	none	6.53	30948	0.79	25.5	18.4	-58.5	19.28
9/27/2016	11:45	4.15	150	clear	none	6.53	30913	0.87	27.4	18.4	-54.5	19.26

Last Set of Purge Information

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:00	11:45	45	6.75	clear	none	6.53	30913	0.87	27.4	18.4	-54.5	19.26

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/27/2016 11:50:00 AM	VOCs by SW8260B	Store cool at 4°C, HCl		2	40 mL vial

Sediment Collection Forms

SEDIMENT SAMPLE LOG SHEET

Event: ME20
Site Name: NCBC DAVISVILLE
Project No: 60273164 LT.F1

Location ID: SED07- 05
Sample ID: SED07-05-ME20-1
QC Duplicate ID: N/A

Sample Data Type: Grab
Sampler: Rachel MacPhee
MS/MSD: Yes

Sample Information

Date	08/15/2017 12:50	Sample Data Type:	Discreet

Sample Details

Date	Time	PID (PPM)	Start Depth (IN)	End Depth (IN)	Color	Notes
08/15/2017 12:50		13.5	0	6	brown	Dk brown, organic, silty f. sand

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Unfiltered Containers	Type/Vol.
08/15/2017 12:50	VOCS - Short List	MeOH	9	voa vial

SEDIMENT SAMPLE LOG SHEET

Event: ME20
Site Name: NCBC DAVISVILLE
Project No: 60273164 LT.F1

Location ID: SED07- 06
Sample ID: SED07-06-ME20-1
QC Duplicate ID: N/A

Sample Data Type: Grab
Sampler: Rachel MacPhee
MS/MSD: N/A

Sample Information

Date	08/15/2017 13:20	Sample Data Type:	Discreet

Sample Details

Date	Time	PID (PPM)	Start Depth (IN)	End Depth (IN)	Color	Notes
08/15/2017 13:20		0.0	0	6	brown	Dk brown, organic, silty f. sand

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Unfiltered Containers	Type/Vol.
08/15/2017 13:20	VOCS - Short List	MeOH	3	voa vial

SEDIMENT SAMPLE LOG SHEET

Event: ME20
Site Name: NCBC DAVISVILLE
Project No: 60273164 LT.F1

Location ID: SED07- 07
Sample ID: SED07-07-ME20-1
QC Duplicate ID: N/A

Sample Data Type: Grab
Sampler: Rachel MacPhee
MS/MSD: N/A

Sample Information

Date	08/15/2017 13:15	Sample Data Type:	Discreet

Sample Details

Date	Time	PID (PPM)	Start Depth (IN)	End Depth (IN)	Color	Notes
08/15/2017 13:15		0.0	0	6	brown	Dk brown, organic, silty f. sand

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Unfiltered Containers	Type/Vol.
08/15/2017 13:15	VOCS - Short List	MeOH	3	voa vial

SEDIMENT SAMPLE LOG SHEET

Event: ME20
Site Name: NCBC DAVISVILLE
Project No: 60273164 LT.F1

Location ID: SED07- 08
Sample ID: SED07-08-ME20-1
QC Duplicate ID: N/A

Sample Data Type: Grab
Sampler: Rachel MacPhee
MS/MSD: N/A

Sample Information

Date	08/15/2017 12:55	Sample Data Type:	Discreet

Sample Details

Date	Time	PID (PPM)	Start Depth (IN)	End Depth (IN)	Color	Notes
08/15/2017 12:55		0.0	0	6	brown	Dk brown, organic, silty f. sand

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Unfiltered Containers	Type/Vol.
08/15/2017 12:55	VOCS - Short List	MeOH	3	voa vial

SEDIMENT SAMPLE LOG SHEET

Event: ME20
Site Name: NCBC DAVISVILLE
Project No: 60273164 LT.F1

Location ID: SED07- 09
Sample ID: SED07-09-ME20-1
QC Duplicate ID: N/A

Sample Data Type: Grab
Sampler: Rachel MacPhee
MS/MSD: N/A

Sample Information

Date	08/15/2017 13:05	Sample Data Type:	Discreet

Sample Details

Date	Time	PID (PPM)	Start Depth (IN)	End Depth (IN)	Color	Notes
08/15/2017 13:05		0.0	0	6	brown	Dk brown, organic, silty f. sand

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Unfiltered Containers	Type/Vol.
08/15/2017 13:05	VOCS - Short List	MeOH	3	voa vial

SEDIMENT SAMPLE LOG SHEET

Event: ME20
Site Name: NCBC DAVISVILLE
Project No: 60273164 LT.F1

Location ID: SED07- 10
Sample ID: SED07-10-ME20-1
QC Duplicate ID: SED07-10-ME20-2

Sample Data Type: Grab
Sampler: Rachel MacPhee
MS/MSD: N/A

Sample Information

Date	08/15/2017 13:00	Sample Data Type:	Discreet

Sample Details

Date	Time	PID (PPM)	Start Depth (IN)	End Depth (IN)	Color	Notes
08/15/2017 13:00		0.0	0	6	brown	Dk brown, organic, silty f. sand

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Unfiltered Containers	Type/Vol.
08/15/2017 13:00	VOCS - Short List	MeOH	3	voa vial
08/15/2017 13:01	VOCS - Short List	MeOH	3	voa vial

Attachment B

Data Validation Reports

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 07 Calf Pasture Point LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0761
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants Completed on: 10/14/2016
Reviewed by:	Kristin Rutherford/Resolution Consultants File Name: R0761_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 07 Calf Pasture Point LTM, Former NCBC Davisville site on August 16, 2016.

Sample ID	Matrix/Sample Type
SW07-04-FLOOR01-ME20-1	Surface water
SW07-04-FLOOR02-ME20-1	Surface water
SW07-04-MID01-ME20-1	Surface water
SW07-06-FLOOR01-ME20-1	Surface water
SW07-06-FLOOR02-ME20-1	Surface water
SW07-06-MID01-ME20-1	Surface water
SW07-07-FLOOR01-ME20-1	Surface water
SW07-07-FLOOR02-ME20-1	Surface water
SW07-07-MID01-ME20-1	Surface water
SW07-08-FLOOR01-ME20-1	Surface water
SW07-08-FLOOR02-ME20-1	Surface water
SW07-08-MID01-ME20-1	Surface water
SW07-09-FLOOR01-ME20-1	Surface water
SW07-09-FLOOR02-ME20-1	Surface water
SW07-09-MID01-ME20-1	Surface water
SW07-10-FLOOR01-ME20-1	Surface water
SW07-10-FLOOR02-ME20-1	Surface water
SW07-10-MID01-ME20-1	Surface water
TB-081616-1	Trip Blank

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
✓	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
NA	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks and trip blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment rinsate blanks were not collected for surface water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank sample TB-081616-1.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met and/or qualification of the sample results was not required.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Field Duplicates

There were no field duplicate samples submitted with this data set. No validation actions were taken on this basis.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the limit of quantitation (LOQ) but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

The LOQs for vinyl chloride and 1,1-dichloroethene are greater than the Project Action Limit (PAL). The limit of detection (LOD) and the DL are less than the PAL. Results are usable for project objectives.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SW07-08-FLOOR01-ME20-1	SW	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-06-FLOOR02-ME20-1	SW	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-06-MID01-ME20-1	SW	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-04-FLOOR01-ME20-1	SW	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-04-FLOOR02-ME20-1	SW	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-04-MID01-ME20-1	SW	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1 Continuing Calibration – VOC

CCAL	Compound	% D	%D Limit	Associated Samples
Instrument: V10 08/19/16 00:38	1,1,2,2-TETRACHLOROETHANE	-20.3	<20	SW07-08-FLOOR01-ME20-1, SW07-06-FLOOR02-ME20-1, SW07-06-MID01-ME20-1, SW07-04-FLOOR01-ME20-1, SW07-04-FLOOR02-ME20-1, SW07-04-MID01-ME20-1

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 07 Calf Pasture Point LTM, Former NCBC Davisville	
Laboratory:	EUROFINS SPECTRUM ANALYTICAL	
Service Request:	R0762	
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C	
Validation Level:	Tier 1 Plus	
Resolution Consultants Project Number:	60273164.SA.DM	
Prepared by:	Elissa McDonagh/Resolution Consultants	Completed on: 10/14/2016
Reviewed by:	Lori Herberich/Resolution Consultants	File Name: R0762_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 07 Calf Pasture Point LTM, Former NCBC Davisville site on August 16, 2016.

Sample ID	Matrix/Sample Type
SW07-02-FLOOR01-ME20-1	Surface water
SW07-02-FLOOR01-ME20-2	Field Duplicate of SW07-02-FLOOR01-ME20-1
SW07-02-FLOOR02-ME20-1	Surface water
SW07-04-FLOOR02-ME20-2	Field Duplicate of SW07-02-FLOOR02-ME20-1
SW07-02-MID01-ME20-1	Surface water
SW07-20-FLOOR01-ME20-1	Surface water
SW07-20-FLOOR02-ME20-1	Surface water
SW07-20-FLOOR02-ME20-2	Field Duplicate of SW07-20-FLOOR02-ME20-1
SW07-20-MID01-ME20-1	Surface water
SW07-24-FLOOR01-ME20-1	Surface water
SW07-24-FLOOR02-ME20-1	Surface water
SW07-24-MID01-ME20-1	Surface water
SW07-43S/D-FLOOR01-ME20-1	Surface water
SW07-43S/D-FLOOR02-ME20-1	Surface water
SW07-43S/D-MID01-ME20-1	Surface water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);

- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.

- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1 and A-2. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

The RF for tetrachloroethene did not meet the method 8260C requirements for continuing calibrations as required by the QSM. The nonconformances are summarized in Table A-2. The RF results for tetrachloroethene met the National Functional Guidelines requirements. Professional judgement was used to qualify the affected results for tetrachloroethene as estimated (UJ).

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks and trip blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment rinsate blanks were not collected with surface water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-3. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R>UL	J+	No qualification
20% ≤ %R < LL	J-	UJ
%R <20% (see note 1)	J-	R*
RPD >UL	J	No qualification
Note: Actions are applied to the native unspiked sample only (see note 2) *When the native sample concentration is >4X the concentration of the spike added (based on Region I criteria), evaluate the MS, MSD, and native sample with regards to %RSD rather than %R (Resolution Consultants professional judgment).		

1. Based on NFG 2016 VOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in associated samples for any analyte with < 20% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.
2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis, professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

The LOQs for vinyl chloride and 1,1-dichloroethene are greater than the Project Action Limit (PAL). The limit of detection (LOD) and the DL are less than the PAL. Results are usable for project objectives.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SW07-02-FLOOR01-ME20-1	WG	VINYL CHLORIDE	1.0	1.0	5.0	UG/L	UJ	c
SW07-02-FLOOR01-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-02-FLOOR01-ME20-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	m,c
SW07-02-FLOOR01-ME20-2	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	m,c
SW07-02-FLOOR02-ME20-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	c
SW07-02-MID01-ME20-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	c
SW07-24-FLOOR01-ME20-1	WG	VINYL CHLORIDE	3.7	1.0	5.0	UG/L	J	c
SW07-24-FLOOR01-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-24-FLOOR01-ME20-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	c
SW07-24-FLOOR02-ME20-1	WG	VINYL CHLORIDE	1.0	1.0	5.0	UG/L	UJ	c
SW07-24-FLOOR02-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-24-FLOOR02-ME20-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	c
SW07-24-MID01-ME20-1	WG	VINYL CHLORIDE	1.0	1.0	5.0	UG/L	UJ	c
SW07-24-MID01-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-24-MID01-ME20-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	c
SW07-43S/D-FLOOR01-ME20-1	WG	VINYL CHLORIDE	1.0	1.0	5.0	UG/L	UJ	c
SW07-43S/D-FLOOR01-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-43S/D-FLOOR01-ME20-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	c
SW07-43S/D-MID01-ME20-1	WG	VINYL CHLORIDE	1.0	1.0	5.0	UG/L	UJ	c
SW07-43S/D-MID01-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-20-FLOOR01-ME20-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	c
SW07-20-FLOOR02-ME20-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	c
SW07-20-MID01-ME20-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	c
SW07-20-FLOOR02-ME20-2	WG	VINYL CHLORIDE	1.0	1.0	5.0	UG/L	UJ	c
SW07-20-FLOOR02-ME20-2	WG	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SW07-20-FLOOR02-ME20-2	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1 Continuing Calibration – VOC

CCAL	Compound	% D	%D Limit	Associated Samples
Instrument: V10 08/19/16 23:07 OPENING CCV	VINYL CHLORIDE	-22.1	<20	SW07-02-FLOOR01-ME20-1, SW07-24-FLOOR01-ME20-1, SW07-24-FLOOR02-ME20-1, SW07-24-MID01-ME20-1, SW07-43S/D-FLOOR01-ME20-1, SW07-43S/D-MID01-ME20-1, SW07-20-FLOOR02-ME20-2
	1,1,2,2-TETRACHLOROETHANE	-25.1	<20	

Table A-2 Continuing Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V10 08/19/16 10:07 OPENING CCV	TETRACHLOROETHENE	0.197	0.200	0.100	SW07-02-FLOOR02-ME20-1 SW07-02-MID01-ME20-1 SW07-02-FLOOR01-ME20-2 SW07-20-FLOOR01-ME20-1 SW07-20-FLOOR02-ME20-1 SW07-20-MID01-ME20-1
Instrument: V10 08/19/16 23:07 OPENING CCV	TETRACHLOROETHENE	0.193	0.200	0.100	SW07-02-FLOOR01-ME20-1 SW07-24-FLOOR01-ME20-1 SW07-24-FLOOR02-ME20-1 SW07-24-MID01-ME20-1 SW07-43S/D-FLOOR01-ME20-1 SW07-20-FLOOR02-ME20-2

NFG – National Functional Guidelines

Table A-3 - Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
SW07-02-FLOOR01-ME20-1	TETRACHLOROETHENE	OK	72	74	129	OK	20

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 07 Calf Pasture Point LTM, Former NCBC Davisville
Laboratory:	Eurofins Spectrum Analytical
Service Request:	R0864
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants — Completed on: 12/06/16
Reviewed by:	Lori Herberich/Resolution Consultants — File Name: R0864_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 07 Calf Pasture Point LTM, Former NCBC Davisville site on September 16, 19, and 20, 2016.

Sample ID	Matrix/Sample Type
DPT07-09-27D-ME20-1	Ground water
DPT07-39-03D-ME20-1	Ground water
DPT07-39-04D-ME20-1	Ground water
MW07-04D-ME20-1	Ground water
MW07-04S-ME20-1	Ground water
MW07-09D-ME20-1	Ground water
MW07-ME20-FD01	Field Duplicate of MW07-09D-ME20-1
MW07-09R-ME20-1	Ground water
MW07-10D-ME20-1	Ground water
MW07-ME20-FD02	Field Duplicate of MW07-10D-ME20-1
MW07-10S-ME20-1	Ground water
MW07-17D-ME20-1	Ground water
MW07-25D-ME20-1	Ground water
MW07-25R-ME20-1	Ground water
MW07-38D-ME20-1	Ground water
MW07-38S-ME20-1	Ground water
MW07-40D-ME20-1	Ground water
MW07-45D-ME20-1	Ground water
MW07-45S-ME20-1	Ground water
MW07-ME20-TB02	Trip Blank
P07-08-ME20-1	Ground water

Sample ID	Matrix/Sample Type
P07-09-ME20-1	Ground water
P07-10-ME20-1	Ground water
P07-24-ME20-1	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✗	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated, due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

The COC recorded samples R0864-17 as MW09-17D-ME20-1 and R0864-19 as MW07-27D-ME20-1 which were later changed to MW07-17D-ME20-1 and DPT07-09-27D-ME20-1 through email correspondence between Resolution Consultants and the laboratory.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks and trip blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks were not collected with ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank sample MW07-ME20-TB02.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R>UL	J+	No qualification
20% ≤ %R < LL	J-	UJ
%R <20% (see note 1)	J-	R*
RPD >UL	J	No qualification
Note: Actions are applied to the native unspiked sample only (see note 2) *When the native sample concentration is >4X the concentration of the spike added (based on Region I criteria), evaluate the MS, MSD, and native sample with regards to %RSD rather than %R (Resolution Consultants professional judgment).		

1. Based on NFG 2016 VOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in associated samples for any analyte with < 20% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.
2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis, professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-3. Data qualification to the analytes associated with the specific LCS %Rs or RPDs was as follows:

Criteria[1]	Action	
	Detected Compounds	Nondetected Compounds
%R > UL	J+	No qualification
%R < LL	J-	UJ
%R < 20% (see note 1)	J-	R
%RPD > UL	J	No qualification
(LL = lower limit, UL = upper limit)		
[1]Professional judgment was applied to use MS/MSD RPD actions in the absence of NFG or Region 1 actions.		

Qualified sample results are shown in Table 1.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and limits of detection (LODs) were adjusted accordingly by the laboratory.

The LOQs for vinyl chloride and 1,1-dichloroethene are greater than the Project Action Limit (PAL). The LOD and the DL are less than the PAL Results are usable for project objectives.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW07-09D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	3900	50	250	UG/L	J	lp
MW07-09D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	300	100	250	UG/L	J	lp
MW07-09D-ME20-1	WG	TRICHLOROETHENE	1000	50	250	UG/L	J	l,lp
MW07-09R-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	16	2.0	5.0	UG/L	J+	m
MW07-09R-ME20-1	WG	TRICHLOROETHENE	62	1.0	5.0	UG/L	J+	m
MW07-09R-ME20-1	WG	VINYL CHLORIDE	15	1.0	5.0	UG/L	J	lp
MW07-10D-ME20-1	WG	1,1,2-TRICHLOROETHANE	6.9	2.0	10	UG/L	J	c
MW07-40D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	1100	50	250	UG/L	J	lp
MW07-40D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	290	50	250	UG/L	J	lp
MW07-40D-ME20-1	WG	TRICHLOROETHENE	5200	50	250	UG/L	J	l,lp
MW07-45D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	200	50	250	UG/L	J	lp
MW07-45D-ME20-1	WG	TRICHLOROETHENE	1200	50	250	UG/L	J	l,lp
MW07-ME20-FD01	WG	CIS-1,2-DICHLOROETHENE	4000	50	250	UG/L	J	lp
MW07-ME20-FD01	WG	TRANS-1,2-DICHLOROETHENE	290	100	250	UG/L	J	lp
MW07-ME20-FD01	WG	TRICHLOROETHENE	980	50	250	UG/L	J	l,lp
MW07-ME20-FD02	WG	1,1,2-TRICHLOROETHANE		5.0	25	UG/L	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1 Initial Calibration – VOC

CCAL	Compound	%RSD	%RSD Limit	Associated Samples
Instrument: V10 10/1/16-10/2/16	1,1,2-TRICHLOROETHANE	17.5	<15	MW07-10D-ME20-1, MW07-ME20-FD02

Table A-2 - Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
MW07-09R-ME20-1	TRANS-1,2-DICHLOROETHENE	129	127	75	124	OK	20
MW07-09R-ME20-1	TRICHLOROETHENE	218	218	79	123	OK	20

Table A-3 - Lab Control Samples

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples
LCS-85534	VINYL CHLORIDE	OK	OK	58	137	30	20	DPT07-09-27D-ME20-1, MW07-17D-ME20-1, MW07-25R-ME20-1, MW07-38D-ME20-1
LCS-85512	VINYL CHLORIDE	OK	OK	58	137	22	20	DPT07-39-03D-ME20-1, DPT07-39-04D-ME20-1, MW07-04D-ME20-1, MW07-09R-ME20-1, MW07-45S-ME20-1 , P07-08-ME20-1 , P07-09-ME20-1, P07-10-ME20-1 , P07-24-ME20-1
LCS-85569	1,2-DICHLOROETHANE	OK	OK	73	128	23	20	MW07-09D-ME20-1 MW07-40D-ME20-1 MW07-45D-ME20-1 MW07-ME20-FD01
LCS-85569	TETRACHLOROETHENE	OK	OK	74	129	26	20	MW07-09D-ME20-1 MW07-40D-ME20-1 MW07-45D-ME20-1 MW07-ME20-FD01
LCS-85569	CIS-1,2-DICHLOROETHENE	OK	OK	78	123	22	20	MW07-09D-ME20-1 MW07-40D-ME20-1 MW07-45D-ME20-1 MW07-ME20-FD01

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples
LCS-85569	TRANS-1,2-DICHLOROETHENE	OK	OK	75	124	26	20	MW07-09D-ME20-1 MW07-40D-ME20-1 MW07-45D-ME20-1 MW07-ME20-FD01
LCS-85569	CHLOROFORM	OK	OK	79	124	24	20	MW07-09D-ME20-1 MW07-40D-ME20-1 MW07-45D-ME20-1 MW07-ME20-FD01
LCS-85569	BENZENE	OK	OK	79	120	25	20	MW07-09D-ME20-1 MW07-40D-ME20-1 MW07-45D-ME20-1 MW07-ME20-FD01
LCS-85569	VINYL CHLORIDE	OK	OK	58	137	21	20	MW07-09D-ME20-1 MW07-40D-ME20-1 MW07-45D-ME20-1 MW07-ME20-FD01
LCS-85569	1,1,2-TRICHLOROETHANE	OK	OK	80	119	26	20	MW07-09D-ME20-1 MW07-40D-ME20-1 MW07-45D-ME20-1 MW07-ME20-FD01
LCS-85569	TRICHLOROETHENE	OK	77	79	123	23	20	MW07-09D-ME20-1 MW07-40D-ME20-1 MW07-45D-ME20-1 MW07-ME20-FD01
LCS-85569	1,1,2,2-TETRACHLOROETHANE	OK	OK	71	121	25	20	MW07-09D-ME20-1 MW07-40D-ME20-1 MW07-45D-ME20-1 MW07-ME20-FD01

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 07 Calf Pasture Point LTM, Former NCBC Davisville
Laboratory:	Eurofins Spectrum Analytical
Service Request:	R0868
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants — Completed on: 11/10/2016
Reviewed by:	Lori Herberich/Resolution Consultants — File Name: R0868_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 07 Calf Pasture Point LTM, Former NCBC Davisville site on September 20, 21, and 22, 2016.

Sample ID	Matrix/Sample Type
DPT07-29-34I-ME20-1	Ground water
DPT07-29-34S-ME20-1	Ground water
DPT07-30I-ME20-1	Ground water
MW07-03D-ME20-1	Ground water
MW07-03S-ME20-1	Ground water
MW07-05D-ME20-1	Ground water
MW07-05S-ME20-1	Ground water
MW07-11D-ME20-1	Ground water
MW07-19D-ME20-1	Ground water
MW07-19S-ME20-1	Ground water
MW07-ME20-FD04	Field Duplicate of MW07-19S-ME20-1
MW07-23D-ME20-1	Ground water
MW07-23S-ME20-1	Ground water
MW07-34D-ME20-1	Ground water
MW07-35D-ME20-1	Ground water
MW07-35S-ME20-1	Ground water
MW07-ME20-FD03	Field Duplicate of MW07-35S-ME20-1
MW07-41I-ME20-1	Ground water
MW07-42I-ME20-1	Ground water
MW07-44D-ME20-1	Ground water
MW07-18D-ME20-1	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✗	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Sample R0868-19 (MW09-18D-ME20-1) was incorrectly listed on the COC and subsequently the laboratory report. The sample corresponds to location MW07-18D-ME20-1 and is referenced in the database and report as MW07-18D-ME20-1.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks and trip blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks were not collected with ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required. The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R>UL	J+	No qualification
20% ≤ %R < LL	J-	UJ
%R <20% (see note 1)	J-	R*
RPD >UL	J	No qualification
Note: Actions are applied to the native unspiked sample only (see note 2) *When the native sample concentration is >4X the concentration of the spike added (based on Region I criteria), evaluate the MS, MSD, and native sample with regards to %RSD rather than %R (Resolution Consultants professional judgment).		

1. Based on NFG 2016 VOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in associated samples for any analyte with < 20% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.
2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis, professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-3. Data qualification to the analytes associated with the specific LCS %Rs or RPDs was as follows:

Criteria[1]	Action	
	Detected Compounds	Nondetected Compounds
%R > UL	J+	No qualification
%R < LL	J-	UJ
%R < 20% (see note 1)	J-	R
%RPD > UL	J	No qualification
(LL = lower limit, UL = upper limit)		
[1]Professional judgment was applied to use MS/MSD RPD actions in the absence of NFG or Region 1 actions.		

Qualified sample results are shown in Table 1.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and limits of detection (LODs) were adjusted accordingly by the laboratory.

The LOQs for vinyl chloride and 1,1-dichloroethene are greater than the Project Action Limit (PAL). The LOD and the DL are less than the PAL. Results are usable for project objectives.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW07-34D-ME20-1	WG	1,1,2-TRICHLOROETHANE	140	25	130	UG/L	J	c
MW07-23D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE		50	130	UG/L	UJ	c
MW07-11D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE		50	130	UG/L	UJ	c
MW07-44D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE		10	25	UG/L	UJ	c
MW07-35D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE		200	500	UG/L	UJ	c
MW07-35S-ME20-1	WG	1,1,2-TRICHLOROETHANE		1.0	5.0	UG/L	UJ	m
MW07-35S-ME20-1	WG	1,1-DICHLOROETHENE		1.0	5.0	UG/L	UJ	m
MW07-35S-ME20-1	WG	BENZENE		1.0	5.0	UG/L	UJ	m
MW07-35S-ME20-1	WG	CHLOROFORM		1.0	5.0	UG/L	UJ	m
MW07-35S-ME20-1	WG	CIS-1,2-DICHLOROETHENE		1.0	5.0	UG/L	UJ	m
MW07-35S-ME20-1	WG	TETRACHLOROETHENE		2.0	5.0	UG/L	UJ	m
MW07-35S-ME20-1	WG	TRANS-1,2-DICHLOROETHENE		2.0	5.0	UG/L	UJ	m
MW07-35S-ME20-1	WG	TRICHLOROETHENE		1.0	5.0	UG/L	UJ	m,l,lp
MW07-35S-ME20-1	WG	VINYL CHLORIDE		1.0	5.0	UG/L	UJ	m
MW07-19D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE		40	100	UG/L	UJ	c
MW07-19S-ME20-1	WG	TRANS-1,2-DICHLOROETHENE		100	250	UG/L	UJ	c
MW07-41I-ME20-1	WG	TRANS-1,2-DICHLOROETHENE		100	250	UG/L	UJ	c
MW07-42I-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	630	100	250	UG/L	J	c
MW07-ME20-FD04	WG	1,1,2,2-TETRACHLOROETHANE	480	50	250	UG/L	J	lp
MW07-ME20-FD04	WG	1,1,2-TRICHLOROETHANE	71	50	250	UG/L	J	lp
MW07-ME20-FD04	WG	CIS-1,2-DICHLOROETHENE	1700	50	250	UG/L	J	lp
MW07-ME20-FD04	WG	TRANS-1,2-DICHLOROETHENE	130	100	250	UG/L	J	lp
MW07-ME20-FD04	WG	TRICHLOROETHENE	4500	50	250	UG/L	J	l,lp
MW07-03D-ME20-1	WG	VINYL CHLORIDE	2.5	1.0	5.0	UG/L	J	lp

Attachment A

Nonconformance Summary Tables

Table A-1 Initial Calibration – VOC

ICAL	Compound	%RSD	%RSD Limit	Associated Samples
Instrument: V6 10/4/16-10/4/16	TRANS-1,2-DICHLOROETHENE	22.3	<15	MW07-11D-ME20-1, MW07-19D-ME20-1, MW07-19S-ME20-1, MW07-23D-ME20-1, MW07-35D-ME20-1, MW07-41I-ME20-1, MW07-42I-ME20-1, MW07-44D-ME20-1
Instrument: V10 10/1/16-10/2/16	1,1,2-TRICHLOROETHANE	17.5	<15	MW07-34D-ME20-1

Table A-2- Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
MW07-35S-ME20-1	TETRACHLOROETHENE	33	38	74	129	OK	20
MW07-35S-ME20-1	CIS-1,2-DICHLOROETHENE	74	OK	78	123	OK	20
MW07-35S-ME20-1	TRANS-1,2-DICHLOROETHENE	56	67	75	124	OK	20
MW07-35S-ME20-1	CHLOROFORM	73	OK	79	124	OK	20
MW07-35S-ME20-1	BENZENE	63	72	79	120	OK	20
MW07-35S-ME20-1	VINYL CHLORIDE	54	OK	58	137	OK	20
MW07-35S-ME20-1	1,1-DICHLOROETHENE	53	52	71	131	OK	20
MW07-35S-ME20-1	1,1,2-TRICHLOROETHANE	79	76	80	119	OK	20
MW07-35S-ME20-1	TRICHLOROETHENE	48	51	79	123	OK	20

Table A-3- Lab Control Samples

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples
LCS-85569	CIS-1,2-DICHLOROETHENE	OK	OK	78	123	22	20	MW07-35S-ME20-1 MW07-ME20-FD04
LCS-85569	TRANS-1,2-DICHLOROETHENE	OK	OK	75	124	26	20	MW07-35S-ME20-1 MW07-ME20-FD04
LCS-85569	CHLOROFORM	OK	OK	79	124	24	20	MW07-35S-ME20-1 MW07-ME20-FD04
LCS-85569	BENZENE	OK	OK	79	120	25	20	MW07-35S-ME20-1 MW07-ME20-FD04

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples
LCS-85569	VINYL CHLORIDE	OK	OK	58	137	21	20	MW07-35S-ME20-1 MW07-ME20-FD04
LCS-85569	1,1,2-TRICHLOROETHANE	OK	OK	80	119	26	20	MW07-35S-ME20-1 MW07-ME20-FD04
LCS-85569	TRICHLOROETHENE	OK	77	79	123	23	20	MW07-35S-ME20-1 MW07-ME20-FD04
LCS-85569	1,1,2,2-TETRACHLOROETHANE	OK	OK	71	121	25	20	MW07-35S-ME20-1 MW07-ME20-FD04
LCS-85569	1,2-DICHLOROETHANE	OK	OK	73	128	23	20	MW07-35S-ME20-1 MW07-ME20-FD04
LCS-85569	TETRACHLOROETHENE	OK	OK	74	129	26	20	MW07-35S-ME20-1 MW07-ME20-FD04
LCS-85534	VINYL CHLORIDE	OK	OK	58	137	30	20	MW07-35S-ME20-1 MW07-ME20-FD04

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 07 Calf Pasture Point LTM, Former NCBC Davisville
Laboratory:	Eurofins Spectrum Analytical
Service Request:	R0886
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants — Completed on: 11/14/2016
Reviewed by:	Lori Herberich/Resolution Consultants — File Name: R0886_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 07 Calf Pasture Point LTM, Former NCBC Davisville site on September 21, 22 and 23, 2016.

Sample ID	Matrix/Sample Type
DPT07-16I-ME20-1	Ground water
DPT07-16S-ME20-1	Ground water
DPT07-18I-ME20-1	Ground water
MW07-ME20-FD06	Field Duplicate of DPT07-18I-ME20-1
DPT07-18S-ME20-1	Ground water
DPT07-24D-ME20-1	Ground water
DPT07-24I-ME20-1	Ground water
DPT07-30S-ME20-1	Ground water
MW07-ME20-FD05	Field Duplicate of DPT07-30S-ME20-1
MW07-13D-ME20-1	Ground water
MW07-13S-ME20-1	Ground water
MW07-16R-ME20-1	Ground water
MW07-20S-ME20-1	Ground water
MW07-21D-ME20-1	Ground water
MW07-21R-ME20-1	Ground water
MW07-21S-ME20-1	Ground water
MW07-24S-ME20-1	Ground water
MW07-29D-ME20-1	Ground water
MW07-30D-ME20-1	Ground water
MW07-39D-ME20-1	Ground water
MW07-39S-ME20-1	Ground water

Sample ID	Matrix/Sample Type
MW07-43D-ME20-1	Ground water
MW07-ME20-TB06	Trip Blank

Data validation activities were conducted with reference to:

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✗	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✗	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✗	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated and/or rejected due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-1.

Criteria	Detect	Non-detect
Sample temperature > 6°C but ≤ 10°C upon receipt at the laboratory	Use professional judgment	Use professional judgment
Sample temperature > 10°C upon receipt at the laboratory	Use professional judgment J-	Use professional judgment R
Aqueous sample properly preserved but analyzed outside the 14-day technical holding time	J*	R
Holding times grossly exceeded	J-	R

* The true direction of any bias may be unknown in this case. Use professional judgment based on knowledge of the chemistry of the analytes in the sample, or do not assign a direction to the bias.

Qualified sample results are shown in Table 1.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;

- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks and trip blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment rinsate blanks were not collected with ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank sample MW07-ME20-TB06.

Surrogate Spike Recoveries

Nonconformances are summarized in Attachment A in Table A-3. Data qualification on the basis of surrogate recovery nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R > Upper Limit (UL)	J+	No qualification
20% ≤%R < Lower Limit (LL)	J-	UJ
%R < 20%	J-	R

Qualified sample results are shown in Table 1.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-4. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R>UL	J+	No qualification
20% ≤ %R < LL	J-	UJ
%R <20% (see note 1)	J-	R*
RPD >UL	J	No qualification
Note: Actions are applied to the native unspiked sample only (see note 2) *When the native sample concentration is >4X the concentration of the spike added (based on Region I criteria), evaluate the MS, MSD, and native sample with regards to %RSD rather than %R (Resolution Consultants professional judgment).		

1. Based on NFG 2016 VOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in associated samples for any analyte with < 20% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.
2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis, professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-5. Data qualification to the analytes associated with the specific LCS %Rs or RPDs was as follows:

Criteria[1]	Action	
	Detected Compounds	Nondetected Compounds
%R > UL	J+	No qualification
%R < LL	J-	UJ
%R < 20% (see note 1)	J-	R
%RPD > UL	J	No qualification
(LL = lower limit, UL = upper limit)		
[1]Professional judgment was applied to use MS/MSD RPD actions in the absence of NFG or Region 1 actions.		

Qualified sample results are shown in Table 1.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and limits of detection (LODs) were adjusted accordingly by the laboratory. Samples requiring dilutions have not met all project action limits (PALs) due to the high concentration of target or non-target results.

The LOQs for vinyl chloride and 1, 1-dichloroethene in samples DPT07-18S-ME20-1 and DPT07-16I-ME20-1 are greater than the PAL. The LODs and the DLs are less than the PAL. Results are usable for project objectives.

Eurofins Spectrum Analytical in North Kingstown, RI analyzed samples DPT07-18S-ME20-1 and DPT07-16I-ME20-1. Eurofins Spectrum Analytical in Agawam, MA analyzed all other samples in the data package.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
DPT07-16I-ME20-1	WG	1,1-DICHLOROETHENE	1.2	1.0	5.0	UG/L	J	lp
DPT07-16S-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c
DPT07-18I-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c
DPT07-24D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	9.9	0.5	0.5	UG/L	J	c
DPT07-24D-ME20-1	WG	1,1,2-TRICHLOROETHANE	36.0	0.5	1.0	UG/L	J+	l
DPT07-24D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	114	2.5	5.0	UG/L	J	h
DPT07-24I-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c
DPT07-30S-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c
MW07-13D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE		0.5	0.5	UG/L	R	h
MW07-13D-ME20-1	WG	1,1,2-TRICHLOROETHANE		0.5	1.0	UG/L	R	h
MW07-13D-ME20-1	WG	1,1-DICHLOROETHENE		1.0	1.0	UG/L	R	h
MW07-13D-ME20-1	WG	1,2-DICHLOROETHANE		1.0	1.0	UG/L	R	h
MW07-13D-ME20-1	WG	BENZENE		0.5	1.0	UG/L	R	h
MW07-13D-ME20-1	WG	CHLOROFORM		1.0	1.0	UG/L	R	h
MW07-13D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.7	0.5	1.0	UG/L	J	h
MW07-13D-ME20-1	WG	TETRACHLOROETHENE		1.0	1.0	UG/L	R	h
MW07-13D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE		1.0	1.0	UG/L	R	h
MW07-13D-ME20-1	WG	TRICHLOROETHENE	1.3	1.0	1.0	UG/L	J	h
MW07-13D-ME20-1	WG	VINYL CHLORIDE		1.0	1.0	UG/L	R	h
MW07-13S-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE		0.5	0.5	UG/L	R	h
MW07-13S-ME20-1	WG	1,1,2-TRICHLOROETHANE		0.5	1.0	UG/L	R	h
MW07-13S-ME20-1	WG	1,1-DICHLOROETHENE		1.0	1.0	UG/L	R	h
MW07-13S-ME20-1	WG	1,2-DICHLOROETHANE		1.0	1.0	UG/L	R	h
MW07-13S-ME20-1	WG	BENZENE		0.5	1.0	UG/L	R	h
MW07-13S-ME20-1	WG	CHLOROFORM		1.0	1.0	UG/L	R	h
MW07-13S-ME20-1	WG	CIS-1,2-DICHLOROETHENE		0.5	1.0	UG/L	R	h
MW07-13S-ME20-1	WG	TETRACHLOROETHENE		1.0	1.0	UG/L	R	h
MW07-13S-ME20-1	WG	TRANS-1,2-DICHLOROETHENE		1.0	1.0	UG/L	R	h
MW07-13S-ME20-1	WG	TRICHLOROETHENE		1.0	1.0	UG/L	R	h
MW07-13S-ME20-1	WG	VINYL CHLORIDE		1.0	1.0	UG/L	R	h
MW07-16R-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c
MW07-20S-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c
MW07-21D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	114	50.0	50.0	UG/L	J	c
MW07-21R-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	386	25.0	25.0	UG/L	J	c
MW07-21S-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	74.2	5.0	5.0	UG/L	J	m,c
MW07-21S-ME20-1	WG	TRICHLOROETHENE	351	10.0	10.0	UG/L	J-	m
MW07-29D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c
MW07-30D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c
MW07-30D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	1.1	0.5	1.0	UG/L	J+	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW07-39D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	300	50.0	50.0	UG/L	J	c
MW07-39S-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	1650	125	125	UG/L	J+	m
MW07-39S-ME20-1	WG	1,1,2-TRICHLOROETHANE	140	125	250	UG/L	J+	l,m
MW07-39S-ME20-1	WG	CIS-1,2-DICHLOROETHENE	1370	125	250	UG/L	J+	m
MW07-39S-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	170	250	250	UG/L	J+	m
MW07-39S-ME20-1	WG	TRICHLOROETHENE	13800	250	250	UG/L	J+	m
MW07-43D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c
MW07-ME20-FD05	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c
MW07-ME20-FD06	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c
MW07-ME20-TB06	WQ	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1 - Hold Times

Sample ID	Days from Sampling to Prep	Days from Prep to Analysis	Days from Sampling to Analysis	Status
DPT07-24D-ME20-1	15	0	15	>14 days
MW07-13D-ME20-1	15	0	15	>14 days
MW07-13S-ME20-1	15	0	15	>14 days

Table A-2 Continuing Calibration – VOC

CCAL	Compound	% D	%D Limit	Associated Samples	Action
Instrument: HPV2 10/06/16 17:56	1,1,2,2-TETRACHLOROETHANE	22.7	<20	MW07-20S-ME20-1 MW07-30D-ME20-1 MW07-29D-ME20-1 MW07-16R-ME20-1 DPT07-24I-ME20-1 DPT07-18I-ME20-1 MW07-ME20-FD05 MW07-ME20-TB06 MW07-21D-ME20-1 MW07-21S-ME20-1 MW07-ME20-FD06 MW07-21R-ME20-1 MW07-39D-ME20-1	J/UJ
Instrument: HPV5 10/06/16 17:58	1,1,2,2-TETRACHLOROETHANE	20.9	<20	MW07-13S-ME20-1 MW07-13D-ME20-1 DPT07-24D-ME20-1 DPT07-30S-ME20-1 DPT07-16S-ME20-1 MW07-43D-ME20-1	J/UJ, with the exception of MW07-13D-ME20-1 and MW07-13S-ME20-1 results which were rejected due to holding time nonconformances.
Instrument: HPV2 10/06/16 17:56	1,1,2,2-TETRACHLOROETHANE	22.0	<20	DPT07-24D-ME20-1	No action, cis-1,2-dichloroethene only reported.

Table A-3 - Surrogates

Sample ID	Surrogate	% Recovery	Lower Limit	Upper Limit
MW07-30D-ME20-1	DIBROMOFLUOROMETHANE	126	80	119

Table A-4 - Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
MW07-39S-ME20-1	CIS-1,2-DICHLOROETHENE	133	OK	78	123	OK	30
MW07-39S-ME20-1	TRANS-1,2-DICHLOROETHENE	126	OK	75	124	OK	30
MW07-39S-ME20-1	CHLOROFORM	127	OK	79	124	OK	30
MW07-39S-ME20-1	BENZENE	126	OK	79	120	OK	30
MW07-39S-ME20-1	VINYL CHLORIDE	151	142	58	137	OK	30
MW07-39S-ME20-1	1,1,2-TRICHLOROETHANE	133	128	80	119	OK	30
MW07-39S-ME20-1	TRICHLOROETHENE	125	OK	79	123	OK	30
MW07-39S-ME20-1	1,1,2,2-TETRACHLOROETHANE	134	132	71	121	OK	30
MW07-21S-ME20-1	TRICHLOROETHENE	75	OK	79	123	OK	30
MW07-21S-ME20-1	1,1,2,2-TETRACHLOROETHANE	125	131	71	121	OK	30

Table A-5 - Lab Control Samples

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples
1617289-BS1	1,1,2-TRICHLOROETHANE	OK	122	80	119	OK	25	DPT07-16S-ME20-1 DPT07-24D-ME20-1 DPT07-30S-ME20-1 MW07-13D-ME20-1 MW07-13S-ME20-1 MW07-43D-ME20-1
LCS-85618	1,1-DICHLOROETHENE	OK	OK	71	131	23.7	20	DPT07-16I-ME20-1 DPT07-18S-ME20-1
1617305-BS1	1,1,2-TRICHLOROETHANE	OK	120	80	119	OK	25	MW07-12D-ME20-1 MW07-15D-ME20-1 MW07-21R-ME20-1 MW07-24DUT-ME20-1 MW07-24S-ME20-1 MW07-37S-ME20-1 MW07-39I-ME20-1 MW07-39S-ME20-1 MW07-43S-ME20-1 MW07-ME20-FD07 MW07-ME20-FD08 MW07-ME20-TB07 P07-02-ME20-1 P07-03-ME20-1 P07-05-ME20-1

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 07 Calf Pasture Point LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0887
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants — Completed on: 11/12/2016
Reviewed by:	Lori Herberich/Resolution Consultants — File Name: R0887_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 07 Calf Pasture Point LTM, Former NCBC Davisville site on September 23, 26 and 27, 2016.

Sample ID	Matrix/Sample Type
MW07-12D-ME20-1	Ground water
MW07-15D-ME20-1	Ground water
MW07-24D-ME20-1	Ground water
MW07-24DUT-ME20-1	Ground water
MW07-ME20-FD08	Field Duplicate of MW07-24DUT-ME20-1
MW07-37D-ME20-1	Ground water
MW07-37S-ME20-1	Ground water
MW07-39I-ME20-1	Ground water
MW07-ME20-FD07	Field Duplicate of MW07-39I-ME20-1
MW07-43S-ME20-1	Ground water
MW07-ME20-TB07	Trip Blank
P07-02-ME20-1	Ground water
P07-03-ME20-1	Ground water
P07-04-ME20-1	Ground water
P07-05-ME20-1	Ground water
P07-06-ME20-1	Ground water
P07-14-ME20-1	Ground water
P07-15-ME20-1	Ground water
P07-21-ME20-1	Ground water
P07-22-ME20-1	Ground water
P07-28-ME20-1	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✗	Surrogate spike recoveries
✓	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✗	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1, A-2 and A-3. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

The RF for tetrachloroethene did not meet the method 8260C requirements for initial and/or continuing calibrations as required by the QSM. The nonconformances are summarized in Table A-1 and A-3. The RF results for tetrachloroethene met the National Functional Guidelines requirements. Professional judgement was used to qualify the affected results for tetrachloroethene as estimated (UJ).

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks and trip blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment rinsate blanks were not collected with ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank sample MW07-ME20-TB07.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-4. Data qualification on the basis of surrogate recovery nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R > Upper Limit (UL)	J+	No qualification
20% ≤%R < Lower Limit (LL)	J-	UJ
%R < 20%	J-	R

Qualified sample results are shown in Table 1.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria. Qualifications were not required based on MS/MSD nonconformances.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-5. Data qualification to the analytes associated with the specific LCS %Rs or RPDs was as follows:

Criteria[1]	Action	
	Detected Compounds	Nondetected Compounds
%R > UL	J+	No qualification
%R < LL	J-	UJ
%R < 20% (see note 1)	J-	R
%RPD > UL	J	No qualification
(LL = lower limit, UL = upper limit)		

Notes:

1. Based on NFG 2016 VOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in all associated samples for any analyte with < 20% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather reject sample results previously negated (U) on the basis of blank contamination.

Qualified sample results are shown in Table 1.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and limits of detection (LODs) were adjusted accordingly by the laboratory. Samples requiring dilutions have not met all Project Action Limits (PALs) due to the high concentration of target or non-target results.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW07-12D-ME20-1	WG	1,1,2-TRICHLOROETHANE	1.0	0.5	1.0	UG/L	J+	l
MW07-24D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	s,c
MW07-24D-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.5	0.5	1.0	UG/L	UJ	s
MW07-24D-ME20-1	WG	1,1-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
MW07-24D-ME20-1	WG	1,2-DICHLOROETHANE	1.0	1.0	1.0	UG/L	UJ	s
MW07-24D-ME20-1	WG	BENZENE	0.5	0.5	1.0	UG/L	UJ	s
MW07-24D-ME20-1	WG	CHLOROFORM	1.0	1.0	1.0	UG/L	UJ	s
MW07-24D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.5	0.5	1.0	UG/L	UJ	s
MW07-24D-ME20-1	WG	TETRACHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s,c
MW07-24D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
MW07-24D-ME20-1	WG	TRICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
MW07-24D-ME20-1	WG	VINYL CHLORIDE	1.0	1.0	1.0	UG/L	UJ	s
MW07-24DUT-ME20-1	WG	1,1,2-TRICHLOROETHANE	1.5	0.5	1.0	UG/L	J+	l
MW07-37D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	58.6	5.0	5.0	UG/L	J	s
MW07-37D-ME20-1	WG	1,1,2-TRICHLOROETHANE	5.0	5.0	10.0	UG/L	UJ	s
MW07-37D-ME20-1	WG	1,1-DICHLOROETHENE	10.0	10.0	10.0	UG/L	UJ	s
MW07-37D-ME20-1	WG	1,2-DICHLOROETHANE	10.0	10.0	10.0	UG/L	UJ	s
MW07-37D-ME20-1	WG	BENZENE	5.0	5.0	10.0	UG/L	UJ	s
MW07-37D-ME20-1	WG	CHLOROFORM	10.0	10.0	10.0	UG/L	UJ	s
MW07-37D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	30.9	5.0	10.0	UG/L	J	s
MW07-37D-ME20-1	WG	TETRACHLOROETHENE	10.0	10.0	10.0	UG/L	UJ	s,c
MW07-37D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	14.6	10.0	10.0	UG/L	J	s
MW07-37D-ME20-1	WG	TRICHLOROETHENE	460	10.0	10.0	UG/L	J	s
MW07-37D-ME20-1	WG	VINYL CHLORIDE	10.0	10.0	10.0	UG/L	UJ	s
MW07-ME20-FD08	WG	1,1,2-TRICHLOROETHANE	1.7	0.5	1.0	UG/L	J+	l
P07-04-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	s,c
P07-04-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.5	0.5	1.0	UG/L	UJ	s
P07-04-ME20-1	WG	1,1-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-04-ME20-1	WG	1,2-DICHLOROETHANE	1.0	1.0	1.0	UG/L	UJ	s
P07-04-ME20-1	WG	BENZENE	0.5	0.5	1.0	UG/L	UJ	s
P07-04-ME20-1	WG	CHLOROFORM	1.0	1.0	1.0	UG/L	UJ	s
P07-04-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.5	0.5	1.0	UG/L	UJ	s
P07-04-ME20-1	WG	TETRACHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s,c
P07-04-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-04-ME20-1	WG	TRICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-04-ME20-1	WG	VINYL CHLORIDE	1.0	1.0	1.0	UG/L	UJ	s
P07-05-ME20-1	WG	VINYL CHLORIDE	49.7	5.0	5.0	UG/L	J	c
P07-06-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	s,c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
P07-06-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.5	0.5	1.0	UG/L	UJ	s
P07-06-ME20-1	WG	1,1-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-06-ME20-1	WG	1,2-DICHLOROETHANE	1.8	1.0	1.0	UG/L	J	s
P07-06-ME20-1	WG	BENZENE	0.5	0.5	1.0	UG/L	UJ	s
P07-06-ME20-1	WG	CHLOROFORM	1.0	1.0	1.0	UG/L	UJ	s
P07-06-ME20-1	WG	CIS-1,2-DICHLOROETHENE	87.2	2.5	5.0	UG/L	J	s
P07-06-ME20-1	WG	TETRACHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s,c
P07-06-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	21.6	1.0	1.0	UG/L	J	s
P07-06-ME20-1	WG	TRICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-06-ME20-1	WG	VINYL CHLORIDE	45.8	1.0	1.0	UG/L	J	s
P07-14-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	s,c
P07-14-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.5	0.5	1.0	UG/L	UJ	s
P07-14-ME20-1	WG	1,1-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-14-ME20-1	WG	1,2-DICHLOROETHANE	1.0	1.0	1.0	UG/L	UJ	s
P07-14-ME20-1	WG	BENZENE	0.5	0.5	1.0	UG/L	UJ	s
P07-14-ME20-1	WG	CHLOROFORM	1.0	1.0	1.0	UG/L	UJ	s
P07-14-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.5	0.5	1.0	UG/L	UJ	s
P07-14-ME20-1	WG	TETRACHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s,c
P07-14-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-14-ME20-1	WG	TRICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-14-ME20-1	WG	VINYL CHLORIDE	1.0	1.0	1.0	UG/L	UJ	s
P07-15-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	s,c
P07-15-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.5	0.5	1.0	UG/L	UJ	s
P07-15-ME20-1	WG	1,1-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-15-ME20-1	WG	1,2-DICHLOROETHANE	1.0	1.0	1.0	UG/L	UJ	s
P07-15-ME20-1	WG	BENZENE	0.5	0.5	1.0	UG/L	UJ	s
P07-15-ME20-1	WG	CHLOROFORM	1.0	1.0	1.0	UG/L	UJ	s
P07-15-ME20-1	WG	CIS-1,2-DICHLOROETHENE	1.3	0.5	1.0	UG/L	J	s
P07-15-ME20-1	WG	TETRACHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s,c
P07-15-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	0.6	1.0	1.0	UG/L	J	s
P07-15-ME20-1	WG	TRICHLOROETHENE	0.5	1.0	1.0	UG/L	J	s
P07-15-ME20-1	WG	VINYL CHLORIDE	1.0	1.0	1.0	UG/L	UJ	s
P07-21-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	s,c
P07-21-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.5	0.5	1.0	UG/L	UJ	s
P07-21-ME20-1	WG	1,1-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-21-ME20-1	WG	1,2-DICHLOROETHANE	1.0	1.0	1.0	UG/L	UJ	s
P07-21-ME20-1	WG	BENZENE	0.5	0.5	1.0	UG/L	UJ	s
P07-21-ME20-1	WG	CHLOROFORM	1.0	1.0	1.0	UG/L	UJ	s
P07-21-ME20-1	WG	CIS-1,2-DICHLOROETHENE	56.9	0.5	1.0	UG/L	J	s
P07-21-ME20-1	WG	TETRACHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s,c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
P07-21-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	3.4	1.0	1.0	UG/L	J	s
P07-21-ME20-1	WG	TRICHLOROETHENE	5.2	1.0	1.0	UG/L	J	s
P07-21-ME20-1	WG	VINYL CHLORIDE	0.7	1.0	1.0	UG/L	J	s
P07-22-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.8	0.5	0.5	UG/L	J	s,l,c
P07-22-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.5	0.5	1.0	UG/L	UJ	s
P07-22-ME20-1	WG	1,1-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-22-ME20-1	WG	1,2-DICHLOROETHANE	1.0	1.0	1.0	UG/L	UJ	s
P07-22-ME20-1	WG	BENZENE	0.5	0.5	1.0	UG/L	UJ	s
P07-22-ME20-1	WG	CHLOROFORM	1.0	1.0	1.0	UG/L	UJ	s
P07-22-ME20-1	WG	CIS-1,2-DICHLOROETHENE	2.5	0.5	1.0	UG/L	J	s
P07-22-ME20-1	WG	TETRACHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s,c
P07-22-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	0.4	1.0	1.0	UG/L	J	s
P07-22-ME20-1	WG	TRICHLOROETHENE	4.4	1.0	1.0	UG/L	J	s
P07-22-ME20-1	WG	VINYL CHLORIDE	1.0	1.0	1.0	UG/L	UJ	s
P07-28-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	s,c
P07-28-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.5	0.5	1.0	UG/L	UJ	s
P07-28-ME20-1	WG	1,1-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-28-ME20-1	WG	1,2-DICHLOROETHANE	1.0	1.0	1.0	UG/L	UJ	s
P07-28-ME20-1	WG	BENZENE	0.5	0.5	1.0	UG/L	UJ	s
P07-28-ME20-1	WG	CHLOROFORM	1.0	1.0	1.0	UG/L	UJ	s
P07-28-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.5	0.5	1.0	UG/L	UJ	s
P07-28-ME20-1	WG	TETRACHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s,c
P07-28-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-28-ME20-1	WG	TRICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
P07-28-ME20-1	WG	VINYL CHLORIDE	1.0	1.0	1.0	UG/L	UJ	s

Attachment A

Nonconformance Summary Tables

Table A-1 Initial Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: HPV2 10/04/16	TETRACHLOROETHENE	0.183	0.200	0.100	MW07-24D-ME20-1 P07-04-ME20-1 P07-06-ME20-1 P07-21-ME20-1 P07-22-ME20-1 P07-15-ME20-1 P07-28-ME20-1 P07-14-ME20-1

NFG – National Functional Guidelines

Table A-2 Continuing Calibration – VOC

CCAL	Compound	% D	%D Limit	Associated Samples
Instrument: HPV2 10/07/16 08:39	1,1,2,2-TETRACHLOROETHANE	22.0	<20	MW07-24D-ME20-1 P07-04-ME20-1 P07-06-ME20-1 P07-14-ME20-1 P07-15-ME20-1 P07-21-ME20-1 P07-22-ME20-1 P07-28-ME20-1

Table A-3 Continuing Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: HPV2 10/07/16 08:39 OPENING CCV	TETRACHLOROETHENE	0.198	0.200	0.100	MW07-24D-ME20-1 P07-04-ME20-1 P07-06-ME20-1 P07-21-ME20-1 P07-22-ME20-1 P07-15-ME20-1 P07-28-ME20-1 P07-14-ME20-1
Instrument: HPV2 10/07/16 18:48 CLOSING CCV	TETRACHLOROETHENE	0.153	0.200	0.100	MW07-24D-ME20-1 P07-04-ME20-1 P07-06-ME20-1 P07-21-ME20-1 P07-22-ME20-1 P07-15-ME20-1 P07-28-ME20-1 P07-14-ME20-1

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: HPV2 10/10/16 20:04 CLOSING CCV	TETRACHLOROETHENE	0.196	0.200	0.100	MW07-24D-ME20-1

NFG – National Functional Guidelines

Table A-4 - Surrogates

Sample ID	Surrogate	% Recovery	Lower Limit	Upper Limit
MW07-24D-ME20-1	4-BROMOFLUOROBENZENE	81	85	114
P07-04-ME20-1	4-BROMOFLUOROBENZENE	82	85	114
P07-06-ME20-1	4-BROMOFLUOROBENZENE	81	85	114
MW07-37D-ME20-1	4-BROMOFLUOROBENZENE	81	85	114
P07-21-ME20-1	4-BROMOFLUOROBENZENE	81	85	114
P07-22-ME20-1	4-BROMOFLUOROBENZENE	80	85	114
P07-15-ME20-1	4-BROMOFLUOROBENZENE	80	85	114
P07-28-ME20-1	4-BROMOFLUOROBENZENE	80	85	114
P07-14-ME20-1	4-BROMOFLUOROBENZENE	80	85	114

Table A-5 - Lab Control Samples

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples
1617306-BS1	1,1,2,2-TETRACHLOROETHANE	122	OK	71	121	OK	25	DPT07-24D-ME20-1 MW07-24D-ME20-1 P07-04-ME20-1 P07-06-ME20-1 P07-14-ME20-1 P07-15-ME20-1 P07-21-ME20-1 P07-22-ME20-1 P07-28-ME20-1
1617305-BS1	1,1,2-TRICHLOROETHANE	OK	120	80	119	OK	25	MW07-12D-ME20-1 MW07-15D-ME20-1 MW07-21R-ME20-1 MW07-24DUT-ME20-1 MW07-24S-ME20-1 MW07-37S-ME20-1 MW07-39I-ME20-1 MW07-39S-ME20-1 MW07-43S-ME20-1 MW07-ME20-FD07 MW07-ME20-FD08 MW07-ME20-TB07 P07-02-ME20-1 P07-03-ME20-1 P07-05-ME20-1

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 07 Calf Pasture Point LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0928
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants Completed on: 11/21/2016
Reviewed by:	Kristin Rutherford/Resolution Consultants File Name: R0928_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 07 Calf Pasture Point LTM, Former NCBC Davisville site on September 27 and 28, 2016.

Sample ID	Matrix/Sample Type
DPT07-09-28D-ME20-1	Ground water
DPT07-39-3I-ME20-1	Ground water
MW07-27D-ME20-1	Ground water
MW07-28D-ME20-1	Ground water
MW07-32D-ME20-1	Ground water
MW07-32R-ME20-1	Ground water
MW07-33D-ME20-1	Ground water
MW07-33S-ME20-1	Ground water
MW07-ME20-FD09	Field Duplicate of MW07-32R-ME20-1
MW07-ME20-FD10	Field Duplicate of MW07-33D-ME20-1
MW07-ME20-TB08	Trip Blank
P07-07-ME20-1	Ground water
P07-16-ME20-1	Ground water
P07-17-ME20-1	Ground water
P07-20-ME20-1	Ground water
P07-23-ME20-1	Ground water
P07-29-ME20-1	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✗	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated, due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1, A-2, A-3, and A-4. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

The response factor (RF) for tetrachloroethene did not meet the method 8260C requirements for initial and/or continuing calibrations as required by the QSM. The nonconformances are summarized in Tables A-1 and A-3. The RF results for tetrachloroethene met the National Functional Guidelines requirements. Professional judgement was used to qualify the affected results for tetrachloroethene as estimated (UJ).

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks and trip blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment rinsate blanks were not collected for ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank sample MW07-ME20-TB08.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-5. Data qualification on the basis of surrogate recovery nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R > Upper Limit (UL)	J+	No qualification
20% ≤%R < Lower Limit (LL)	J-	UJ
%R < 20%	J-	R

Qualified sample results are shown in Table 1.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-6. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R>UL	J+	No qualification
20% ≤ %R < LL	J-	UJ
%R <20% (see note 1)	J-	R*
RPD >UL	J	No qualification
Note: Actions are applied to the native unspiked sample only (see note 2) *When the native sample concentration is >4X the concentration of the spike added (based on Region I criteria), evaluate the MS, MSD, and native sample with regards to %RSD rather than %R (Resolution Consultants professional judgment).		

1. Based on NFG 2016 VOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in associated samples for any analyte with < 20% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.
2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis, professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and LODs were adjusted accordingly by the laboratory. Samples requiring dilutions have not met all Project Action Limits (PALs) due to the high concentration of target or non-target results.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
DPT07-09-28D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
DPT07-09-28D-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
DPT07-09-28D-ME20-1	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
DPT07-09-28D-ME20-1	WG	1,2-DICHLOROETHANE	0.3	0.3	1.0	UG/L	UJ	s
DPT07-09-28D-ME20-1	WG	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
DPT07-09-28D-ME20-1	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
DPT07-09-28D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
DPT07-09-28D-ME20-1	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
DPT07-09-28D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
DPT07-09-28D-ME20-1	WG	TRICHLOROETHENE	0.4	0.4	1.0	UG/L	UJ	s
DPT07-09-28D-ME20-1	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s
DPT07-39-3I-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	288	15.5	25.0	UG/L	J-	s
DPT07-39-3I-ME20-1	WG	1,1,2-TRICHLOROETHANE	22.5	18.2	50.0	UG/L	J-	s
DPT07-39-3I-ME20-1	WG	1,1-DICHLOROETHENE	34.6	34.6	50.0	UG/L	UJ	s
DPT07-39-3I-ME20-1	WG	1,2-DICHLOROETHANE	14.4	14.4	50.0	UG/L	UJ	s
DPT07-39-3I-ME20-1	WG	BENZENE	14.2	14.2	50.0	UG/L	UJ	s
DPT07-39-3I-ME20-1	WG	CHLOROFORM	20.4	20.4	50.0	UG/L	UJ	s
DPT07-39-3I-ME20-1	WG	CIS-1,2-DICHLOROETHENE	1670	12.8	50.0	UG/L	J-	s
DPT07-39-3I-ME20-1	WG	TETRACHLOROETHENE	28.5	28.5	50.0	UG/L	UJ	s,c
DPT07-39-3I-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	147	15.8	50.0	UG/L	J-	s
DPT07-39-3I-ME20-1	WG	TRICHLOROETHENE	1920	19.0	50.0	UG/L	J-	s
DPT07-39-3I-ME20-1	WG	VINYL CHLORIDE	77.0	25.6	50.0	UG/L	J-	s
MW07-27D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	792	31.0	50.0	UG/L	J-	s
MW07-27D-ME20-1	WG	1,1,2-TRICHLOROETHANE	95.0	36.4	100	UG/L	J-	s
MW07-27D-ME20-1	WG	1,1-DICHLOROETHENE	69.3	69.3	100	UG/L	UJ	s
MW07-27D-ME20-1	WG	1,2-DICHLOROETHANE	28.7	28.7	100	UG/L	UJ	s
MW07-27D-ME20-1	WG	BENZENE	28.4	28.4	100	UG/L	UJ	s
MW07-27D-ME20-1	WG	CHLOROFORM	40.7	40.7	100	UG/L	UJ	s
MW07-27D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	2340	25.7	100	UG/L	J-	s
MW07-27D-ME20-1	WG	TETRACHLOROETHENE	57.0	57.0	100	UG/L	UJ	s,c
MW07-27D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	343	31.7	100	UG/L	J-	s
MW07-27D-ME20-1	WG	TRICHLOROETHENE	8200	38.0	100	UG/L	J-	s
MW07-27D-ME20-1	WG	VINYL CHLORIDE	122	51.3	100	UG/L	J-	s
MW07-28D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
MW07-28D-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
MW07-28D-ME20-1	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
MW07-28D-ME20-1	WG	1,2-DICHLOROETHANE	0.3	0.3	1.0	UG/L	UJ	s
MW07-28D-ME20-1	WG	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-28D-ME20-1	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW07-28D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-28D-ME20-1	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
MW07-28D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-28D-ME20-1	WG	TRICHLOROETHENE	0.4	0.4	1.0	UG/L	UJ	s
MW07-28D-ME20-1	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s
MW07-32D-ME20-1	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	m
MW07-32D-ME20-1	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	c
MW07-32R-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
MW07-32R-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
MW07-32R-ME20-1	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
MW07-32R-ME20-1	WG	1,2-DICHLOROETHANE	0.3	0.3	1.0	UG/L	UJ	s
MW07-32R-ME20-1	WG	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-32R-ME20-1	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
MW07-32R-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-32R-ME20-1	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
MW07-32R-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-32R-ME20-1	WG	TRICHLOROETHENE	0.4	0.4	1.0	UG/L	UJ	s
MW07-32R-ME20-1	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s
MW07-33D-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
MW07-33D-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
MW07-33D-ME20-1	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
MW07-33D-ME20-1	WG	1,2-DICHLOROETHANE	0.3	0.3	1.0	UG/L	UJ	s
MW07-33D-ME20-1	WG	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-33D-ME20-1	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
MW07-33D-ME20-1	WG	CIS-1,2-DICHLOROETHENE	11.0	0.3	1.0	UG/L	J-	s
MW07-33D-ME20-1	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
MW07-33D-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	2.2	0.3	1.0	UG/L	J-	s
MW07-33D-ME20-1	WG	TRICHLOROETHENE	6.1	0.4	1.0	UG/L	J-	s
MW07-33D-ME20-1	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s
MW07-33S-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
MW07-33S-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
MW07-33S-ME20-1	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
MW07-33S-ME20-1	WG	1,2-DICHLOROETHANE	0.3	0.3	1.0	UG/L	UJ	s
MW07-33S-ME20-1	WG	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-33S-ME20-1	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
MW07-33S-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-33S-ME20-1	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
MW07-33S-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-33S-ME20-1	WG	TRICHLOROETHENE	0.4	0.4	1.0	UG/L	J-	s
MW07-33S-ME20-1	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW07-ME20-FD09	WG	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
MW07-ME20-FD09	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
MW07-ME20-FD09	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
MW07-ME20-FD09	WG	1,2-DICHLOROETHANE	0.3	0.3	1.0	UG/L	UJ	s
MW07-ME20-FD09	WG	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-ME20-FD09	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
MW07-ME20-FD09	WG	CIS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-ME20-FD09	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
MW07-ME20-FD09	WG	TRANS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-ME20-FD09	WG	TRICHLOROETHENE	0.4	0.4	1.0	UG/L	UJ	s
MW07-ME20-FD09	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s
MW07-ME20-FD10	WG	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
MW07-ME20-FD10	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
MW07-ME20-FD10	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
MW07-ME20-FD10	WG	1,2-DICHLOROETHANE	0.3	0.3	1.0	UG/L	UJ	s
MW07-ME20-FD10	WG	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-ME20-FD10	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
MW07-ME20-FD10	WG	CIS-1,2-DICHLOROETHENE	11.2	0.3	1.0	UG/L	J-	s
MW07-ME20-FD10	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
MW07-ME20-FD10	WG	TRANS-1,2-DICHLOROETHENE	2.2	0.3	1.0	UG/L	J-	s
MW07-ME20-FD10	WG	TRICHLOROETHENE	6.1	0.4	1.0	UG/L	J-	s
MW07-ME20-FD10	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s
MW07-ME20-TB08	WQ	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
MW07-ME20-TB08	WQ	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
MW07-ME20-TB08	WQ	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
MW07-ME20-TB08	WQ	1,2-DICHLOROETHANE	0.3	0.3	1.0	UG/L	UJ	s
MW07-ME20-TB08	WQ	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-ME20-TB08	WQ	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
MW07-ME20-TB08	WQ	CIS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-ME20-TB08	WQ	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
MW07-ME20-TB08	WQ	TRANS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
MW07-ME20-TB08	WQ	TRICHLOROETHENE	0.4	0.4	1.0	UG/L	UJ	s
MW07-ME20-TB08	WQ	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s
P07-07-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	44.6	1.6	2.5	UG/L	J-	s
P07-07-ME20-1	WG	1,1,2-TRICHLOROETHANE	7.8	1.8	5.0	UG/L	J-	s
P07-07-ME20-1	WG	1,1-DICHLOROETHENE	3.5	3.5	5.0	UG/L	UJ	s
P07-07-ME20-1	WG	1,2-DICHLOROETHANE	1.4	1.4	5.0	UG/L	UJ	s
P07-07-ME20-1	WG	BENZENE	1.4	1.4	5.0	UG/L	UJ	s
P07-07-ME20-1	WG	CHLOROFORM	2.0	2.0	5.0	UG/L	UJ	s
P07-07-ME20-1	WG	CIS-1,2-DICHLOROETHENE	260	1.3	5.0	UG/L	J-	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
P07-07-ME20-1	WG	TETRACHLOROETHENE	2.8	2.8	5.0	UG/L	UJ	s,c
P07-07-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	19.8	1.6	5.0	UG/L	J-	s
P07-07-ME20-1	WG	TRICHLOROETHENE	151	1.9	5.0	UG/L	J-	s
P07-07-ME20-1	WG	VINYL CHLORIDE	2.6	2.6	5.0	UG/L	UJ	s
P07-16-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
P07-16-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
P07-16-ME20-1	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
P07-16-ME20-1	WG	1,2-DICHLOROETHANE	2.5	0.3	1.0	UG/L	J-	s
P07-16-ME20-1	WG	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
P07-16-ME20-1	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
P07-16-ME20-1	WG	CIS-1,2-DICHLOROETHENE	1.0	0.3	1.0	UG/L	J-	s
P07-16-ME20-1	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
P07-16-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	0.5	0.3	1.0	UG/L	J-	s
P07-16-ME20-1	WG	TRICHLOROETHENE	4.8	0.4	1.0	UG/L	J-	s
P07-16-ME20-1	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s
P07-17-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
P07-17-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
P07-17-ME20-1	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
P07-17-ME20-1	WG	1,2-DICHLOROETHANE	0.3	0.3	1.0	UG/L	UJ	s
P07-17-ME20-1	WG	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
P07-17-ME20-1	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
P07-17-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
P07-17-ME20-1	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
P07-17-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
P07-17-ME20-1	WG	TRICHLOROETHENE	0.4	0.4	1.0	UG/L	UJ	s
P07-17-ME20-1	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s
P07-20-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.7	0.3	0.5	UG/L	J-	s
P07-20-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	J-	s
P07-20-ME20-1	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
P07-20-ME20-1	WG	1,2-DICHLOROETHANE	0.6	0.3	1.0	UG/L	J-	s
P07-20-ME20-1	WG	BENZENE	1.6	0.3	1.0	UG/L	J-	s
P07-20-ME20-1	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
P07-20-ME20-1	WG	CIS-1,2-DICHLOROETHENE	34.4	0.3	1.0	UG/L	J-	s
P07-20-ME20-1	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
P07-20-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	6.9	0.3	1.0	UG/L	J-	s
P07-20-ME20-1	WG	TRICHLOROETHENE	0.4	0.4	1.0	UG/L	UJ	s
P07-20-ME20-1	WG	VINYL CHLORIDE	5.6	0.5	1.0	UG/L	J-	s
P07-23-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
P07-23-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
P07-23-ME20-1	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
P07-23-ME20-1	WG	1,2-DICHLOROETHANE	0.3	0.3	1.0	UG/L	UJ	s
P07-23-ME20-1	WG	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
P07-23-ME20-1	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
P07-23-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.5	0.3	1.0	UG/L	J-	s
P07-23-ME20-1	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
P07-23-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
P07-23-ME20-1	WG	TRICHLOROETHENE	1.8	0.4	1.0	UG/L	J-	s
P07-23-ME20-1	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s
P07-29-ME20-1	WG	1,1,2,2-TETRACHLOROETHANE	0.3	0.3	0.5	UG/L	UJ	s
P07-29-ME20-1	WG	1,1,2-TRICHLOROETHANE	0.4	0.4	1.0	UG/L	UJ	s
P07-29-ME20-1	WG	1,1-DICHLOROETHENE	0.7	0.7	1.0	UG/L	UJ	s
P07-29-ME20-1	WG	1,2-DICHLOROETHANE	0.3	0.3	1.0	UG/L	UJ	s
P07-29-ME20-1	WG	BENZENE	0.3	0.3	1.0	UG/L	UJ	s
P07-29-ME20-1	WG	CHLOROFORM	0.4	0.4	1.0	UG/L	UJ	s
P07-29-ME20-1	WG	CIS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
P07-29-ME20-1	WG	TETRACHLOROETHENE	0.6	0.6	1.0	UG/L	UJ	s,c
P07-29-ME20-1	WG	TRANS-1,2-DICHLOROETHENE	0.3	0.3	1.0	UG/L	UJ	s
P07-29-ME20-1	WG	TRICHLOROETHENE	0.4	0.4	1.0	UG/L	UJ	s
P07-29-ME20-1	WG	VINYL CHLORIDE	0.5	0.5	1.0	UG/L	UJ	s

Attachment A

Nonconformance Summary Tables

Table A-1 Initial Calibration – VOC

ICAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: HPV2 10/04/16	TETRACHLOROETHENE	0.183	0.200	0.100	P07-29-ME20-1 P07-23-ME20-1 DPT07-09-28D-ME20-1 P07-20-ME20-1 P07-07-ME20-1 MW07-ME20-TB08 MW07-32R-ME20-1 MW07-ME20-FD09 MW07-28D-ME20-1 DPT07-39-3I-ME20-1 MW07-33S-ME20-1 MW07-ME20-FD10 MW07-33D-ME20-1 P07-17-ME20-1 P07-16-ME20-1 MW07-27D-ME20-1

NFG – National Functional Guidelines

Table A-2 Initial Calibration Verification – VOC

ICV	Compound	% R	%R Limit	Associated Samples	Action
Instrument: HPV1 09/21/16 03:09	VINYL CHLORIDE	65	80-120	MW07-32D-ME20-1	UJ

Table A-3 Continuing Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: HPV2 10/10/16 09:48 OPENING CCV	TETRACHLOROETHENE	0.193	0.200	0.100	P07-29-ME20-1 P07-23-ME20-1 DPT07-09-28D-ME20-1 P07-20-ME20-1 P07-07-ME20-1
Instrument: HPV2 10/10/16 20:04 CLOSING CCV	TETRACHLOROETHENE	0.196	0.200	0.100	P07-29-ME20-1 P07-23-ME20-1 DPT07-09-28D-ME20-1 P07-20-ME20-1 P07-07-ME20-1

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: HPV2 10/10/16 21:35 OPENING CCV	TETRACHLOROETHENE	0.163	0.200	0.100	MW07-ME20-TB08 MW07-32R-ME20-1 MW07-ME20-FD09 MW07-28D-ME20-1 DPT07-39-3I-ME20-1 MW07-33S-ME20-1 MW07-ME20-FD10 MW07-33D-ME20-1 P07-17-ME20-1 P07-16-ME20-1 MW07-27D-ME20-1

NFG – National Functional Guidelines

Table A-4 Continuing Calibration – VOC

CCAL	Compound	% D	%D Limit	Associated Samples	Action
Instrument: HPV1 10/10/16 09:51	VINYL CHLORIDE	-28.6	<20	MW07-32D-ME20-1	UJ

Table A-5 - Surrogates

Sample ID	Surrogate	% Recovery	Lower Limit	Upper Limit
DPT07-09-28D-ME20-1	4-BROMOFLUOROBENZENE	80	85	114
DPT07-39-3I-ME20-1	4-BROMOFLUOROBENZENE	81	85	114
MW07-27D-ME20-1	4-BROMOFLUOROBENZENE	78	85	114
MW07-28D-ME20-1	4-BROMOFLUOROBENZENE	81	85	114
MW07-32R-ME20-1	4-BROMOFLUOROBENZENE	80	85	114
MW07-33D-ME20-1	4-BROMOFLUOROBENZENE	79	85	114
MW07-33S-ME20-1	4-BROMOFLUOROBENZENE	78	85	114
MW07-ME20-FD09	4-BROMOFLUOROBENZENE	82	85	114
MW07-ME20-FD10	4-BROMOFLUOROBENZENE	80	85	114
MW07-ME20-TB08	4-BROMOFLUOROBENZENE	80	85	114
P07-07-ME20-1	4-BROMOFLUOROBENZENE	79	85	114
P07-16-ME20-1	4-BROMOFLUOROBENZENE	79	85	114
P07-17-ME20-1	4-BROMOFLUOROBENZENE	79	85	114
P07-20-ME20-1	4-BROMOFLUOROBENZENE	79	85	114
P07-23-ME20-1	4-BROMOFLUOROBENZENE	81	85	114
P07-29-ME20-1	4-BROMOFLUOROBENZENE	81	85	114

Table A-6 - Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
MW07-32D-ME20-1	1,1-DICHLOROETHENE	66	OK	71	131	OK	<30

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 07 Calf Pasture Point LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	S0037
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants Completed on: 01/26/2017
Reviewed by:	Kristin Rutherford/Resolution Consultants File Name: S0037_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 07 Calf Pasture Point LTM, Former NCBC Davisville site on January 13, 2017.

Sample ID	Matrix/Sample Type
GW07-TB01	Trip Blank
MW07-20DA-ME20-1	Ground water
MW07-ME20-FD11	Field Duplicate of MW07-20DA-ME20-1

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC]/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
✓	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicate results
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20% opening CCV	%D > 50%	J	UJ
%Drift >20% opening CCV	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks and trip blanks were evaluated as to whether there were contaminants detected above the method detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank sample GW07-TB01.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All criteria were met.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
GW07-TB01	WQ	1,1-DICHLOROETHENE	1.0	1.0	5.0	UG/L	UJ	c
MW07-20DA-ME20-1	WG	1,1-DICHLOROETHENE	1.0	1.0	5.0	UG/L	UJ	c
MW07-ME20-FD11	WG	1,1-DICHLOROETHENE	1.0	1.0	5.0	UG/L	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1 Initial Calibration – VOC

ICAL	Compound	%RSD	%RSD Limit	Associated Samples
Instrument: V5 01/17/17	1,1-DICHLOROETHENE	19.6	<15	GW07-TB01 MW07-20DA-E20-1 MW07-ME20-FD11

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 07 Calf Pasture Point LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0755
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants Completed on: 10/17/2016
Reviewed by:	Kristin Rutherford/Resolution Consultants File Name: R0755_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 07 Calf Pasture Point LTM, Former NCBC Davisville site on August 15, 2016.

Sample ID	Matrix/Sample Type
SED07-05-ME20-1	Sediment
SED07-06-ME20-1	Sediment
SED07-07-ME20-1	Sediment
SED07-08-ME20-1	Sediment
SED07-09-ME20-1	Sediment
SED07-10-ME20-1	Sediment
SED07-10-ME20-2	Field Duplicate of SED07-10-ME20-1
TB-081516-1	Trip Blank

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✓	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✗	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated and rejected due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

The QC acceptance criteria were met.

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks, trip blanks, and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank sample TB-081516-1.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-1. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R>UL	J+	No qualification
20% ≤ %R < LL	J-	UJ
%R <20% (see note 1)	J-	R*
RPD >UL	J	No qualification
Note: Actions are applied to the native unspiked sample only (see note 2) *When the native sample concentration is >4X the concentration of the spike added (based on Region I criteria), evaluate the MS, MSD, and native sample with regards to %RSD rather than %R (Resolution Consultants professional judgment).		

1. Based on NFG 2016 VOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in associated samples for any analyte with < 20% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.
2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis, professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification to the analytes associated with the specific IS on the basis of IS recoveries were as follows:

Sample IS area compared to CCV and CCV IS area compared to ICAL*		
Qualify results	Detect	Nondetect
Area response <20% of the opening CCV or mid-point standard from the ICAL	J+	R
20% ≤ Area response < 50% of the opening CCV or midpoint standard from the ICAL	J+	UJ
Area response > 200% of the opening CCV or mid-point standard from ICAL	J-	No qualification
RT shift between sample/blank and opening CCV or mid-point standard from ICAL > 10.0 seconds	R	R
* Per the DoD QSM v5.0, the laboratory may use the IS area of the CCV in place of the ICV. If an IS area fails with respect to the ICAL, but passes with respect to the CCV, then use professional judgment to evaluate the sensitivity and linearity of the analysis before applying validation actions. (Resolution Consultants professional judgment)		

Qualified sample results are shown in Table 1.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

The percent solids data were reviewed to ensure that NFG 2016 specified criteria were met.

All percent solids criteria were met.

Samples SED07-10-ME20-1 and SED07-05-ME20-1 were reanalyzed due to internal standard nonconformances. There were internal standard nonconformances and surrogate nonconformances in the reanalyses. The original analyses were reported and were qualified for internal standard nonconformances.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SED07-05-ME20-1	SE	1,1,2,2-TETRACHLOROETHANE	2.7	2.7	6.8	UG/KG	UJ	i,m
SED07-05-ME20-1	SE	1,1,2-TRICHLOROETHANE	2.7	2.7	6.8	UG/KG	UJ	i,m
SED07-05-ME20-1	SE	1,1-DICHLOROETHENE	2.7	2.7	6.8	UG/KG	UJ	i
SED07-05-ME20-1	SE	1,2-DICHLOROETHANE	2.7	2.7	6.8	UG/KG	UJ	i
SED07-05-ME20-1	SE	BENZENE	2.7	2.7	6.8	UG/KG	UJ	i
SED07-05-ME20-1	SE	CHLOROFORM	2.7	2.7	6.8	UG/KG	UJ	i
SED07-05-ME20-1	SE	CIS-1,2-DICHLOROETHENE	2.7	2.7	6.8	UG/KG	UJ	i
SED07-05-ME20-1	SE	TETRACHLOROETHENE	12	2.7	6.8	UG/KG	J+	i
SED07-05-ME20-1	SE	TRANS-1,2-DICHLOROETHENE	2.7	2.7	6.8	UG/KG	UJ	i
SED07-05-ME20-1	SE	TRICHLOROETHENE	2.7	2.7	6.8	UG/KG	UJ	i
SED07-05-ME20-1	SE	VINYL CHLORIDE	2.7	2.7	6.8	UG/KG	UJ	i
SED07-10-ME20-1	SE	1,1,2,2-TETRACHLOROETHANE		2.5	6.2	UG/KG	R	i
SED07-10-ME20-1	SE	1,1,2-TRICHLOROETHANE	2.5	2.5	6.2	UG/KG	UJ	i
SED07-10-ME20-1	SE	1,1-DICHLOROETHENE	2.5	2.5	6.2	UG/KG	UJ	i
SED07-10-ME20-1	SE	1,2-DICHLOROETHANE	2.5	2.5	6.2	UG/KG	UJ	i
SED07-10-ME20-1	SE	BENZENE	2.5	2.5	6.2	UG/KG	UJ	i
SED07-10-ME20-1	SE	CHLOROFORM	2.5	2.5	6.2	UG/KG	UJ	i
SED07-10-ME20-1	SE	CIS-1,2-DICHLOROETHENE	2.5	2.5	6.2	UG/KG	UJ	i
SED07-10-ME20-1	SE	TETRACHLOROETHENE	12	2.5	6.2	UG/KG	J+	i
SED07-10-ME20-1	SE	TRANS-1,2-DICHLOROETHENE	2.5	2.5	6.2	UG/KG	UJ	i
SED07-10-ME20-1	SE	TRICHLOROETHENE	2.5	2.5	6.2	UG/KG	UJ	i
SED07-10-ME20-1	SE	VINYL CHLORIDE	2.5	2.5	6.2	UG/KG	UJ	i

Attachment A

Nonconformance Summary Tables

Table A-1 - Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
SED07-05-ME20-1	1,1,2-TRICHLOROETHANE	75	78	78	121	4	20
SED07-05-ME20-1	1,1,2,2-TETRACHLOROETHANE	66	71	70	124	7	20

Table A-2 – Internal Standards

Sample ID	Internal Standard	IS Area	IS Area Window	% Recovery
SED07-10-ME20-1	Fluorobenzene	107055	238981-955922	22
SED07-10-ME20-1	Chlorobenzene-d5	82394	194145-776578	21
SED07-10-ME20-1	1,4-Dichlorobenzene-d4	32812	89360-357440	18
SED07-05-ME20-1	Fluorobenzene	169753	238981-955922	36
SED07-05-ME20-1	Chlorobenzene-d5	126187	194145-776578	32
SED07-05-ME20-1	1,4-Dichlorobenzene-d4	50974	89360-357440	28

Compounds associated with Internal Standards:

Fluorobenzene – vinyl chloride, 1,1-dichloroethene, trans-1,2-dichloroethene, cis-1,2-dichloroethene, chloroform, benzene, trichloroethene, 1,1,2-trichloroethane

Chlorobenzene-d5 – tetrachloroethene

1,4-Dichlorobenzene-d4 – 1,1,2,2-tetrachloroethane

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Attachment C

Institutional Control Checklist

INSTITUTIONAL CONTROL INSPECTION CHECKLIST
for LAND USE CONTROL AND IMPLEMENTATION PLAN
Parcel 9, Zone 3
(Includes OU8, Site 07)

A. Annual Certification:

Name: THOMAS J. MULLIGAN

Affiliation: TOWN MANAGER, TOWN OF NORTH KINGSTOWN

Signature: Thomas J Mulligan

Date: 12/27/2016

B. Documentation Inspection:

Inspect documentation to ensure no permits have been issued to change the use of the Site, build residential or commercial units, or install ground-water supply wells, including the following:

	ITEM	CHECK ONE	COMMENTS*
1.	Any related notice(s) filed with the Town of North Kingstown, RIDEM, or CRMC?	☐ Yes ☑ No	
2.	Any related building permits found?	☐ Yes ☑ No	
3.	Any related Department of Public Works Permits found?	☐ Yes ☑ No	
4.	Any related Zoning permits or variances found?	☐ Yes ☑ No	
5.	Any related Conservation Commission findings, proposals, or notices of intent found?	☐ Yes ☑ No	

C. Physical On-Site Inspection:

Name: Rachel MacPhee

Affiliation: Resolution Consultants

Signature:

Date: 09/23/16

	ITEM	CHECK ONE	COMMENTS*
1.	Land-Use Condition; i.e. Buildings Present? If yes, is there evidence of damage to the remedy?	☐ Yes ☒ No ☐ Yes ☒ No	
2.	Evidence of any ground-water supply wells? If yes, is there evidence of damage to the remedy?	☐ Yes ☒ No ☐ Yes ☒ No	
3.	Weather Conditions?	--	Sunny ~85°F

*If the answer to a question is 'Yes', use the 'Comments' column to explain, e.g. list type(s) and names(s) of notices, permits, variances, notices of intent found; describe the type and location of where a building or ground-water supply well was observed.

INSTITUTIONAL CONTROL INSPECTION CHECKLIST
for LAND USE CONTROL AND IMPLEMENTATION PLAN
Parcel 9, Zone 3
(Includes OU8, Site 07)

October 14

D. Additional Comments

The Town of North Kingstown excavated soils from the access road at Calf Pasture Point on 12-12-16. The excavated area was ~20 ft wide by ~100 ft long and ~1-2 ft deep. The soil was transported inland and staged along the side of the access road. The excavated area was backfilled with sand from unknown origin.

Attachment D

Statistical Analysis Data and Trend Plots

Frequency of Detection Tables

TABLE D-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR SEDIMENT LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
SED07-06	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-05	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_KG	4	0	0.00
SED07-06	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-07	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_KG	10	0	0.00
SED07-08	1,1,2,2-TETRACHLOROETHANE	2/28/2007 0:00	SED07-08_20070228	15.2 J	15.2	UG_KG	8	1	12.50
SED07-09	1,1,2,2-TETRACHLOROETHANE	2/28/2007 0:00	SED07-09_20070228	40.7 J	27	UG_KG	11	3	27.27
SED07-10	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-05	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_KG	4	0	0.00
SED07-06	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-07	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_KG	10	0	0.00
SED07-08	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_KG	8	0	0.00
SED07-09	1,1,2-TRICHLOROETHANE	5/25/2005 0:00	SED07-09-NSD-052505	5.5 J	2.6	UG_KG	11	3	27.27
SED07-10	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-06	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-05	1,1-DICHLOROETHENE	11/27/2007 0:00	SED07-05_20071127	130 J	130	UG_KG	4	1	25.00
SED07-06	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-07	1,1-DICHLOROETHENE	11/27/2007 0:00	SED07-07_20071127	72 J	72	UG_KG	10	1	10.00
SED07-08	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_KG	8	0	0.00
SED07-09	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_KG	11	0	0.00
SED07-10	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-05	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_KG	4	0	0.00
SED07-06	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-07	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_KG	10	0	0.00
SED07-08	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_KG	8	0	0.00
SED07-09	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_KG	11	0	0.00
SED07-10	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-05	1,2-DICHLOROETHENE, TOTAL	3/1/2007 0:00	SED07-05_20070301	4.9	4.9	UG_KG	2	1	50.00
SED07-06	1,2-DICHLOROETHENE, TOTAL	3/1/2007 0:00	SED07-06_20070301	12.6	12.6	UG_KG	4	1	25.00
SED07-07	1,2-DICHLOROETHENE, TOTAL	5/25/2005 0:00	SED07-07NSD-052505	63.3	21.1	UG_KG	8	4	50.00
SED07-08	1,2-DICHLOROETHENE, TOTAL	5/25/2005 0:00	SED07-08-NSD-052505	158.1	80.87	UG_KG	6	3	50.00
SED07-09	1,2-DICHLOROETHENE, TOTAL	5/25/2005 0:00	SED07-09-NSD-052505	334.5	94.51	UG_KG	9	7	77.78
SED07-10	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_KG	4	0	0.00
SED07-06	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-06	2-BUTANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	2-BUTANONE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	2-BUTANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	2-BUTANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	2-BUTANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-06	2-HEXANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	2-HEXANONE	NA	NA	NA	NA	UG_KG	2	0	0.00

TABLE D-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR SEDIMENT LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
SED07-08	2-HEXANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	2-HEXANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	2-HEXANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-06	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-06	ACETONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	ACETONE	5/22/2002 0:00	SED07-07NSD-052202	20	20	UG_KG	2	1	50.00
SED07-08	ACETONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	ACETONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	ACETONE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-05	BENZENE	NA	NA	NA	NA	UG_KG	4	0	0.00
SED07-06	BENZENE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-07	BENZENE	NA	NA	NA	NA	UG_KG	10	0	0.00
SED07-08	BENZENE	12/19/2003 0:00	SED07-08-NSD-121903	1 J	1	UG_KG	8	1	12.50
SED07-09	BENZENE	NA	NA	NA	NA	UG_KG	11	0	0.00
SED07-10	BENZENE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-06	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-06	BROMOMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	BROMOMETHANE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	BROMOMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	BROMOMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	BROMOMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-06	CARBON DISULFIDE	11/30/2006 7:45	SED 07-06-20061130	4.6	4.6	UG_KG	1	1	100.00
SED07-07	CARBON DISULFIDE	11/30/2006 7:55	SED 07-07-20061130	7.2	4.1	UG_KG	2	2	100.00
SED07-08	CARBON DISULFIDE	11/30/2006 8:05	SED 07-08-20061130	1.9 J	1.9	UG_KG	1	1	100.00
SED07-09	CARBON DISULFIDE	11/30/2006 8:15	SED 07-09-20061130	5.4 J	5.4	UG_KG	1	1	100.00
SED07-10	CARBON DISULFIDE	11/30/2006 8:25	SED 07-10-20061130	7.7 J	7.7	UG_KG	1	1	100.00
SED07-06	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-06	CHLOROBENZENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	CHLOROBENZENE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	CHLOROBENZENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	CHLOROBENZENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	CHLOROBENZENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-06	CHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	CHLOROETHANE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	CHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	CHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	CHLOROETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-05	CHLOROFORM	NA	NA	NA	NA	UG_KG	4	0	0.00
SED07-06	CHLOROFORM	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-07	CHLOROFORM	NA	NA	NA	NA	UG_KG	10	0	0.00

TABLE D-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR SEDIMENT LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
SED07-08	CHLOROFORM	NA	NA	NA	NA	UG_KG	8	0	0.00
SED07-09	CHLOROFORM	NA	NA	NA	NA	UG_KG	11	0	0.00
SED07-10	CHLOROFORM	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-06	CHLOROMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	CHLOROMETHANE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	CHLOROMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	CHLOROMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	CHLOROMETHANE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-05	CIS-1,2-DICHLOROETHENE	3/1/2007 0:00	SED07-05_20070301	4.9	4.9	UG_KG	4	1	25.00
SED07-06	CIS-1,2-DICHLOROETHENE	3/1/2007 0:00	SED07-06_20070301	4.2 J	4.2	UG_KG	6	1	16.67
SED07-07	CIS-1,2-DICHLOROETHENE	5/25/2005 0:00	SED07-07NSD-052505	53	17	UG_KG	10	4	40.00
SED07-08	CIS-1,2-DICHLOROETHENE	5/25/2005 0:00	SED07-08-NSD-052505	131	68	UG_KG	8	3	37.50
SED07-09	CIS-1,2-DICHLOROETHENE	5/25/2005 0:00	SED07-09-NSD-052505	271 J	78.3	UG_KG	11	7	63.64
SED07-10	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-06	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-06	ETHYLBENZENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	ETHYLBENZENE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	ETHYLBENZENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	ETHYLBENZENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	ETHYLBENZENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	M- AND P-XYLENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-06	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	O-XYLENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-05	TETRACHLOROETHENE	8/15/2016 12:50	SED07-05-ME20-1	12 J+	12	UG_KG	4	1	25.00
SED07-06	TETRACHLOROETHENE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-07	TETRACHLOROETHENE	NA	NA	NA	NA	UG_KG	10	0	0.00
SED07-08	TETRACHLOROETHENE	NA	NA	NA	NA	UG_KG	8	0	0.00
SED07-09	TETRACHLOROETHENE	NA	NA	NA	NA	UG_KG	11	0	0.00
SED07-10	TETRACHLOROETHENE	8/15/2016 13:00	SED07-10-ME20-1	12 J	12	UG_KG	6	1	16.67
SED07-06	TOLUENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	TOLUENE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	TOLUENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	TOLUENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	TOLUENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-05	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_KG	4	0	0.00
SED07-06	TRANS-1,2-DICHLOROETHENE	3/1/2007 0:00	SED07-06_20070301	8.4 J	8.4	UG_KG	6	1	16.67
SED07-07	TRANS-1,2-DICHLOROETHENE	5/25/2005 0:00	SED07-07NSD-052505	10.3	4.5	UG_KG	10	4	40.00
SED07-08	TRANS-1,2-DICHLOROETHENE	5/25/2005 0:00	SED07-08-NSD-052505	27.1	12.9	UG_KG	8	3	37.50
SED07-09	TRANS-1,2-DICHLOROETHENE	5/25/2005 0:00	SED07-09-NSD-052505	63.5	18.9	UG_KG	11	6	54.55
SED07-10	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-06	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_KG	1	0	0.00

TABLE D-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR SEDIMENT LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
SED07-10	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-05	TRICHLOROETHENE	11/27/2007 0:00	SED07-05_20071127	220	220	UG_KG	4	1	25.00
SED07-06	TRICHLOROETHENE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-07	TRICHLOROETHENE	11/27/2007 0:00	SED07-07_20071127	110 J	110	UG_KG	10	1	10.00
SED07-08	TRICHLOROETHENE	2/28/2007 0:00	SED07-08_20070228	11.3 J	8.45	UG_KG	8	2	25.00
SED07-09	TRICHLOROETHENE	5/25/2005 0:00	SED07-09-NSD-052505	152 J	73.1	UG_KG	11	5	45.45
SED07-10	TRICHLOROETHENE	11/27/2007 0:00	SED07-10_20071127	120 J	120	UG_KG	6	1	16.67
SED07-05	VINYL CHLORIDE	NA	NA	NA	NA	UG_KG	4	0	0.00
SED07-06	VINYL CHLORIDE	3/1/2007 0:00	SED07-06_20070301	8.4 J	8.4	UG_KG	6	1	16.67
SED07-07	VINYL CHLORIDE	NA	NA	NA	NA	UG_KG	10	0	0.00
SED07-08	VINYL CHLORIDE	5/25/2005 0:00	SED07-08-NSD-052505	9	9	UG_KG	8	1	12.50
SED07-09	VINYL CHLORIDE	12/19/2003 0:00	SED07-09-NSD-121903	110	48.8	UG_KG	11	4	36.36
SED07-10	VINYL CHLORIDE	NA	NA	NA	NA	UG_KG	6	0	0.00
SED07-06	XYLENES, TOTAL	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-07	XYLENES, TOTAL	NA	NA	NA	NA	UG_KG	2	0	0.00
SED07-08	XYLENES, TOTAL	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-09	XYLENES, TOTAL	NA	NA	NA	NA	UG_KG	1	0	0.00
SED07-10	XYLENES, TOTAL	NA	NA	NA	NA	UG_KG	1	0	0.00

Notes:

U = Not Detected; UJ = Detection Limit Approximate; J = Quantitation Approximate; R = Rejected

(1) If sample was not detected, one half of detection limit was used in calculation of average concentration.

Maximum value presented when original and duplicate samples were analyzed

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-04D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	1,1,1-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-09-27D	1,1,2,2-TETRACHLOROETHANE	9/29/2014 15:30	DPT07-09/27D-092914-1	1700	1300	UG_L	3	3	100.00
DPT07-09-28D	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-16I	1,1,2,2-TETRACHLOROETHANE	9/22/2016 10:00	DPT07-16I-ME20-1	9.5	9.5	UG_L	2	1	50.00
DPT07-16S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-18I	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-18S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24D	1,1,2,2-TETRACHLOROETHANE	10/2/2014 11:10	DPT07-24D-100214-1	11	9.8	UG_L	3	3	100.00
DPT07-24I	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-29-34I	1,1,2,2-TETRACHLOROETHANE	9/29/2014 13:55	DPT07-29/34I-092914-1	7	5.7	UG_L	3	3	100.00
DPT07-29-34S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-30I	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-30S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	1,1,2,2-TETRACHLOROETHANE	6/26/2012 10:05	DPT39-03D-062612	11000	7300	UG_L	4	4	100.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[1]	Units	Number of Samples	Number Detected	Percent Detects
DPT07-39-03I	1,1,2,2-TETRACHLOROETHANE	011 2:28:00 PM6/26/2012 11:20:00 A	NA	1100	800	UG_L	4	4	100.00
DPT07-39-04D	1,1,2,2-TETRACHLOROETHANE	6/28/2012 16:00	DPT39-04D-062812	18000	14000	UG_L	3	3	100.00
MW07-03D	1,1,2,2-TETRACHLOROETHANE	5/22/1996 0:00	MW07-03D-NWG-052296	8 J	8	UG_L	2	1	50.00
MW07-03S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-04D	1,1,2,2-TETRACHLOROETHANE	5/28/1996 0:00	MW07-04D-NWG-052896	77000	10200	UG_L	18	18	100.00
MW07-04S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-05D	1,1,2,2-TETRACHLOROETHANE	5/23/1996 0:00	MW07-05D-NWG-052396	48000 J	6410	UG_L	11	10	90.91
MW07-05S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-09D	1,1,2,2-TETRACHLOROETHANE	5/22/1996 0:00	MW07-09D-NWG-052296	2100 J	649	UG_L	17	16	94.12
MW07-09R	1,1,2,2-TETRACHLOROETHANE	11/7/2007 0:00	MW07-09R_20071107	5.5 J	2.63	UG_L	22	17	77.27
MW07-10D	1,1,2,2-TETRACHLOROETHANE	5/23/1996 0:00	MW07-10D-NWG-052396	1500	306	UG_L	14	14	100.00
MW07-10S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-11D	1,1,2,2-TETRACHLOROETHANE	10/8/2013 10:22	MW07-11D-100813	60	32.8	UG_L	20	18	90.00
MW07-12D	1,1,2,2-TETRACHLOROETHANE	5/29/1996 0:00	MW07-12D-NWG-052996	61	22.7	UG_L	19	19	100.00
MW07-13D	1,1,2,2-TETRACHLOROETHANE	2/16/2007 0:00	MW07-13D_20070216	6.8	4.6	UG_L	14	8	57.14
MW07-13S	1,1,2,2-TETRACHLOROETHANE	11/27/2007 0:00	MW07-13S_20071127	0.75 J	0.75	UG_L	14	1	7.14
MW07-15D	1,1,2,2-TETRACHLOROETHANE	5/24/1996 0:00	MW07-15D-NWG-052496	45000	12700	UG_L	4	4	100.00
MW07-16R	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-17D	1,1,2,2-TETRACHLOROETHANE	5/22/1996 0:00	MW07-17D-NWG-052296	66000 J	17400	UG_L	14	14	100.00
MW07-18D	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-19D	1,1,2,2-TETRACHLOROETHANE	2/16/2007 0:00	MW07-19D_20070216	41	21.8	UG_L	17	13	76.47
MW07-19S	1,1,2,2-TETRACHLOROETHANE	07 12:00:00 AM8/24/2004 12:00:00	NA	2200	1500	UG_L	17	17	100.00
MW07-20D	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-20S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-21D	1,1,2,2-TETRACHLOROETHANE	11/9/2007 0:00	MW07-21D_20071109	640 J	294	UG_L	22	22	100.00
MW07-21R	1,1,2,2-TETRACHLOROETHANE	8/31/2000 0:00	MW07-21R-NWG-083100	2400	1120	UG_L	22	21	95.45
MW07-21S	1,1,2,2-TETRACHLOROETHANE	12/22/2003 0:00	MW07-21S-NWG-122203	470	232	UG_L	22	21	95.45
MW07-23D	1,1,2,2-TETRACHLOROETHANE	5/29/1996 0:00	MW07-23D-NWG-052996	370	92.4	UG_L	22	21	95.45
MW07-23S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-24D	1,1,2,2-TETRACHLOROETHANE	11/9/2007 0:00	MW07-24D_20071109	2.7 J	2.7	UG_L	11	1	9.09
MW07-24DUT	1,1,2,2-TETRACHLOROETHANE	02 12:00:00 AM8/21/2001 12:00:00	NA	0.2 JJ	0.2	UG_L	20	2	10.00
MW07-24S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-25D	1,1,2,2-TETRACHLOROETHANE	5/22/1996 0:00	MW07-25D-NWG-052296	3600 J	612	UG_L	19	18	94.74
MW07-25R	1,1,2,2-TETRACHLOROETHANE	8/30/2000 0:00	MW07-25R-NWG-083000	1300	184	UG_L	19	17	89.47
MW07-27D	1,1,2,2-TETRACHLOROETHANE	8/31/2000 0:00	MW07-27D-NWG-083100	5500	2580	UG_L	14	14	100.00
MW07-28D	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-29D	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	8	0	0.00
MW07-30D	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-32D	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-32R	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-33D	1,1,2,2-TETRACHLOROETHANE	5/21/2002 0:00	MW07-33D-NWG-052102	5.9	2.38	UG_L	20	14	70.00
MW07-33S	1,1,2,2-TETRACHLOROETHANE	8/22/2001 0:00	MW07-33S-NWG-082201	26 J	9.63	UG_L	17	3	17.65
MW07-34D	1,1,2,2-TETRACHLOROETHANE	5/12/2005 0:00	MW07-34D-NWG-051205	183 J	111	UG_L	20	19	95.00
MW07-35D	1,1,2,2-TETRACHLOROETHANE	8/24/2004 0:00	MW07-35D-NWG-082404	528	285	UG_L	13	12	92.31
MW07-35S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-37D	1,1,2,2-TETRACHLOROETHANE	8/24/2004 0:00	MW07-37D-082404	461	216	UG_L	15	14	93.33
MW07-37S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-38D	1,1,2,2-TETRACHLOROETHANE	8/24/2004 0:00	MW07-38D-082404	423	143	UG_L	13	12	92.31
MW07-38S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-39D	1,1,2,2-TETRACHLOROETHANE	4/8/2009 9:22	MW07-39D-040809	5000	1840	UG_L	16	15	93.75
MW07-39I	1,1,2,2-TETRACHLOROETHANE	5/13/2008 16:49	MW07-39I	7900	4420	UG_L	16	16	100.00
MW07-39S	1,1,2,2-TETRACHLOROETHANE	5/15/2008 10:25	MW07-39S	7600 J	4900	UG_L	16	15	93.75
MW07-40D	1,1,2,2-TETRACHLOROETHANE	6/28/2012 15:34	MW07-40D-062812	3200	2000	UG_L	3	3	100.00
MW07-41I	1,1,2,2-TETRACHLOROETHANE	9/20/2011 16:45	MW07-41I-092011	1800	1200	UG_L	4	4	100.00
MW07-42I	1,1,2,2-TETRACHLOROETHANE	9/20/2011 14:55	MW07-42I-092011	2400	1600	UG_L	6	6	100.00
MW07-43D	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-43S	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	4	0	0.00

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SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[1]	Units	Number of Samples	Number Detected	Percent Detects
MW07-44D	1,1,2,2-TETRACHLOROETHANE	9/20/2011 11:00	MW07-44D-092011	4.5 J	2.7	UG_L	4	3	75.00
MW07-45D	1,1,2,2-TETRACHLOROETHANE	9/19/2011 15:00	MW07-45D-091911	300	120	UG_L	6	5	83.33
MW07-45S	1,1,2,2-TETRACHLOROETHANE	9/19/2011 11:45	MW07-45S-091911	0.41 J	0.41	UG_L	3	1	33.33
P07-02	1,1,2,2-TETRACHLOROETHANE	11/29/2006 10:25	P07-02-20061129	4.4	4.4	UG_L	16	1	6.25
P07-03	1,1,2,2-TETRACHLOROETHANE	4/14/2010 15:45	P07-03-041410	3	3	UG_L	17	1	5.88
P07-04	1,1,2,2-TETRACHLOROETHANE	4/21/2005 0:00	P07-04-NWG-042105	1.8 J	1.7	UG_L	25	2	8.00
P07-05	1,1,2,2-TETRACHLOROETHANE	4/21/2005 0:00	P07-05-NWG-042105	31.7	14.1	UG_L	28	9	32.14
P07-06	1,1,2,2-TETRACHLOROETHANE	11/29/2005 0:00	P07-06-NWG-112905	358	121	UG_L	29	3	10.34
P07-07	1,1,2,2-TETRACHLOROETHANE	12/18/2003 0:00	P07-07-NWG-121803	520 J	196	UG_L	30	29	96.67
P07-08	1,1,2,2-TETRACHLOROETHANE	12/19/2003 0:00	P07-08-NWG-121903	1200	313	UG_L	28	26	92.86
P07-09	1,1,2,2-TETRACHLOROETHANE	12/19/2003 0:00	P07-09-NWG-121903	1100	349	UG_L	30	28	93.33
P07-10	1,1,2,2-TETRACHLOROETHANE	2/27/2003 0:00	P07-10-NWG-022703	130	47.6	UG_L	30	29	96.67
P07-14	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	15	0	0.00
P07-15	1,1,2,2-TETRACHLOROETHANE	5/24/2005 0:00	P07-15-NWG-052405	35.1	13.1	UG_L	18	7	38.89
P07-16	1,1,2,2-TETRACHLOROETHANE	007 12:00:00 AM5/24/2005 12:00:00	NA	2.5 J	1.38	UG_L	15	9	60.00
P07-17	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	14	0	0.00
P07-20	1,1,2,2-TETRACHLOROETHANE	5/24/2005 0:00	P07-20-NWG-052405	213	42.4	UG_L	17	9	52.94
P07-21	1,1,2,2-TETRACHLOROETHANE	5/22/2002 0:00	P07-21-NWG-052202	36	14.8	UG_L	19	12	63.16
P07-22	1,1,2,2-TETRACHLOROETHANE	12/17/2003 0:00	P07-22-NWG-121703	100	42	UG_L	17	9	52.94
P07-23	1,1,2,2-TETRACHLOROETHANE	5/22/2002 0:00	P07-23-NWG-052202	36	14.3	UG_L	19	14	73.68
P07-24	1,1,2,2-TETRACHLOROETHANE	5/24/2005 0:00	P07-24-NWG-052405	47.7	24.8	UG_L	28	24	85.71
P07-28	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	12	0	0.00
P07-29	1,1,2,2-TETRACHLOROETHANE	NA	NA	NA	NA	UG_L	12	0	0.00
DPT07-09-27D	1,1,2-TRICHLOROETHANE	6/28/2012 11:39	DPT09-27D-062812	97	97	UG_L	3	1	33.33
DPT07-09-28D	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-16I	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-16S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-18I	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-18S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24D	1,1,2-TRICHLOROETHANE	9/22/2016 12:51	DPT07-24D-ME20-1	36 J+	30	UG_L	3	3	100.00
DPT07-24I	1,1,2-TRICHLOROETHANE	9/22/2016 12:45	DPT07-24I-ME20-1	0.9 J	0.77	UG_L	2	2	100.00
DPT07-29-34I	1,1,2-TRICHLOROETHANE	9/29/2014 13:55	DPT07-29/34I-092914-1	22	17	UG_L	3	3	100.00
DPT07-29-34S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-30I	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-30S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	1,1,2-TRICHLOROETHANE	6/26/2012 10:05	DPT39-03D-062612	250 J	200	UG_L	4	4	100.00
DPT07-39-03I	1,1,2-TRICHLOROETHANE	9/19/2011 14:28	DPT07-39-03I-091911	130	73.2	UG_L	4	3	75.00
DPT07-39-04D	1,1,2-TRICHLOROETHANE	6/28/2012 16:00	DPT39-04D-062812	630	630	UG_L	3	1	33.33
MW07-03D	1,1,2-TRICHLOROETHANE	5/22/1996 0:00	MW07-03D-NWG-052296	5 J	5	UG_L	2	1	50.00
MW07-03S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-04D	1,1,2-TRICHLOROETHANE	01 12:00:00 AM12/17/2003 12:00:00	NA	220 J	115	UG_L	18	15	83.33
MW07-04S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-05D	1,1,2-TRICHLOROETHANE	5/23/1996 0:00	MW07-05D-NWG-052396	390 J	64.9	UG_L	11	9	81.82
MW07-05S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-09D	1,1,2-TRICHLOROETHANE	5/22/1996 0:00	MW07-09D-NWG-052296	320 J	148	UG_L	17	16	94.12
MW07-09R	1,1,2-TRICHLOROETHANE	AM4/10/2009 10:30:00 AM5/12/2005	NA	13 J	8.04	UG_L	22	20	90.91
MW07-10D	1,1,2-TRICHLOROETHANE	5/23/1996 0:00	MW07-10D-NWG-052396	40 J	16.1	UG_L	14	14	100.00
MW07-10S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-11D	1,1,2-TRICHLOROETHANE	9/17/2015 9:30	MW07-11D-091715-1	120 J	57.3	UG_L	21	21	100.00
MW07-12D	1,1,2-TRICHLOROETHANE	8/22/2001 0:00	MW07-12D-NWG-082201	3	1.4	UG_L	19	11	57.89
MW07-13D	1,1,2-TRICHLOROETHANE	11/14/2007 0:00	MW07-13D_20071114	15	5.8	UG_L	14	11	78.57
MW07-13S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-15D	1,1,2-TRICHLOROETHANE	9/14/2011 9:46	MW07-15D-091411	43 J	38	UG_L	4	2	50.00
MW07-16R	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-17D	1,1,2-TRICHLOROETHANE	5/22/1996 0:00	MW07-17D-NWG-052296	1200	454	UG_L	14	11	78.57
MW07-18D	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-19D	1,1,2-TRICHLOROETHANE	9/17/2015 11:35	MW07-19D-091715-1	39 J	19.3	UG_L	17	15	88.24

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-19S	1,1,2-TRICHLOROETHANE	8/30/2000 0:00	MW07-19S-NWG-083000	180	118	UG_L	17	17	100.00
MW07-20D	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-20S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-21D	1,1,2-TRICHLOROETHANE	9/17/2015 10:10	MW07-21D-091715-1	97 J	65.1	UG_L	22	21	95.45
MW07-21R	1,1,2-TRICHLOROETHANE	12/22/2003 0:00	MW07-21R-NWG-122203	140 J	97.7	UG_L	22	20	90.91
MW07-21S	1,1,2-TRICHLOROETHANE	4/19/2010 12:30	MW07-21S-041910	68	28.9	UG_L	22	22	100.00
MW07-23D	1,1,2-TRICHLOROETHANE	5/29/1996 0:00	MW07-23D-NWG-052996	22 J	12.5	UG_L	22	20	90.91
MW07-23S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-24D	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-24DUT	1,1,2-TRICHLOROETHANE	9/23/2016 9:50	MW07-24DUT-ME20-1	1.7 J	1.07	UG_L	20	19	95.00
MW07-24S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-25D	1,1,2-TRICHLOROETHANE	8/30/2000 0:00	MW07-25D-NWG-083000	66	12.9	UG_L	19	17	89.47
MW07-25R	1,1,2-TRICHLOROETHANE	8/21/2001 0:00	MW07-25R-NWG-082101	46	18.2	UG_L	19	14	73.68
MW07-27D	1,1,2-TRICHLOROETHANE	8/31/2000 0:00	MW07-27D-NWG-083100	260	165	UG_L	14	14	100.00
MW07-28D	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-29D	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	8	0	0.00
MW07-30D	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-32D	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-32R	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-33D	1,1,2-TRICHLOROETHANE	5/21/2002 0:00	MW07-33D-NWG-052102	0.45	0.35	UG_L	20	3	15.00
MW07-33S	1,1,2-TRICHLOROETHANE	2/24/2003 0:00	MW07-33S-NWG-022403	0.27 J	0.23	UG_L	17	2	11.76
MW07-34D	1,1,2-TRICHLOROETHANE	9/17/2015 10:00	MW07-34D-091715-1	210 J	150	UG_L	20	20	100.00
MW07-35D	1,1,2-TRICHLOROETHANE	8/24/2004 0:00	MW07-35D-NWG-082404	13.1	7.72	UG_L	13	11	84.62
MW07-35S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-37D	1,1,2-TRICHLOROETHANE	11/15/2006 10:20	MW07-37D-20061115	12.8	7.14	UG_L	15	13	86.67
MW07-37S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-38D	1,1,2-TRICHLOROETHANE	8/24/2004 0:00	MW07-38D-082404	4.8	2.4	UG_L	13	11	84.62
MW07-38S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-39D	1,1,2-TRICHLOROETHANE	11/15/2006 11:30	MW07-39D-20061115	535	292	UG_L	16	16	100.00
MW07-39I	1,1,2-TRICHLOROETHANE	5/18/2005 0:00	MW07-39I-051805	497	344	UG_L	16	15	93.75
MW07-39S	1,1,2-TRICHLOROETHANE	10/8/2008 10:10	MW07-39S-100808	420	273	UG_L	16	16	100.00
MW07-40D	1,1,2-TRICHLOROETHANE	9/19/2011 16:30	MW07-40D-091911	28 J	28	UG_L	4	1	25.00
MW07-41I	1,1,2-TRICHLOROETHANE	9/20/2011 16:45	MW07-41I-092011	94	77	UG_L	4	3	75.00
MW07-42I	1,1,2-TRICHLOROETHANE	9/20/2011 14:55	MW07-42I-092011	300	230	UG_L	6	5	83.33
MW07-43D	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-43S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-44D	1,1,2-TRICHLOROETHANE	9/21/2016 12:13	MW07-44D-ME20-1	8.4 J	7	UG_L	4	4	100.00
MW07-45D	1,1,2-TRICHLOROETHANE	9/19/2011 15:00	MW07-45D-091911	45	24	UG_L	6	4	66.67
MW07-45S	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
P07-02	1,1,2-TRICHLOROETHANE	11/29/2006 10:25	P07-02-20061129	2.5	2.5	UG_L	16	1	6.25
P07-03	1,1,2-TRICHLOROETHANE	4/14/2010 15:45	P07-03-041410	0.5 J	0.5	UG_L	17	1	5.88
P07-04	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	25	0	0.00
P07-05	1,1,2-TRICHLOROETHANE	2/27/2003 0:00	P07-05-NWG-022703	12	4.49	UG_L	28	11	39.29
P07-06	1,1,2-TRICHLOROETHANE	11/29/2005 0:00	P07-06-NWG-112905	31	5	UG_L	29	10	34.48
P07-07	1,1,2-TRICHLOROETHANE	12/18/2003 0:00	P07-07-NWG-121803	42 J	19.5	UG_L	30	29	96.67
P07-08	1,1,2-TRICHLOROETHANE	12/19/2003 0:00	P07-08-NWG-121903	94	31.7	UG_L	28	24	85.71
P07-09	1,1,2-TRICHLOROETHANE	12/19/2003 0:00	P07-09-NWG-121903	150	47.1	UG_L	30	29	96.67
P07-10	1,1,2-TRICHLOROETHANE	03 12:00:00 AM3/23/2005 12:00:00	NA	15	8.72	UG_L	30	28	93.33
P07-14	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	15	0	0.00
P07-15	1,1,2-TRICHLOROETHANE	5/24/2005 0:00	P07-15-NWG-052405	6.9	3.21	UG_L	18	8	44.44
P07-16	1,1,2-TRICHLOROETHANE	5/24/2005 0:00	P07-16-NWG-052405	3.2	1.87	UG_L	15	13	86.67
P07-17	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	14	0	0.00
P07-20	1,1,2-TRICHLOROETHANE	5/24/2005 0:00	P07-20-NWG-052405	23.1	8.82	UG_L	17	8	47.06
P07-21	1,1,2-TRICHLOROETHANE	8/25/2004 0:00	P07-21-NWG-082504	6.2	3.31	UG_L	19	12	63.16
P07-22	1,1,2-TRICHLOROETHANE	5/24/2005 0:00	P07-22-NWG-052405	10.1	5.54	UG_L	17	9	52.94
P07-23	1,1,2-TRICHLOROETHANE	12/18/2003 0:00	P07-23-NWG-121803	3.14	1.84	UG_L	19	11	57.89
P07-24	1,1,2-TRICHLOROETHANE	2/27/2003 0:00	P07-24-NWG-022703	6.47	3.98	UG_L	28	22	78.57

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P07-28	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	12	0	0.00
P07-29	1,1,2-TRICHLOROETHANE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-04D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	1,1-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-09-27D	1,1-DICHLOROETHENE	6/28/2012 11:39	DPT09-27D-062812	6.9	6.9	UG_L	3	1	33.33
DPT07-09-28D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-16I	1,1-DICHLOROETHENE	9/22/2016 10:00	DPT07-16I-ME20-1	1.2 J	1.2	UG_L	2	1	50.00
DPT07-16S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-18I	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-18S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24D	1,1-DICHLOROETHENE	9/22/2016 12:51	DPT07-24D-ME20-1	1.3	0.87	UG_L	3	3	100.00
DPT07-24I	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-29-34I	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-29-34S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-30I	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
DPT07-30S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	1,1-DICHLOROETHENE	6/26/2012 10:05	DPT39-03D-062612	15	14	UG_L	4	2	50.00
DPT07-39-03I	1,1-DICHLOROETHENE	9/19/2011 14:28	DPT07-39-03I-091911	11 J	7.8	UG_L	4	2	50.00
DPT07-39-04D	1,1-DICHLOROETHENE	6/28/2012 16:00	DPT39-04D-062812	31	27	UG_L	3	2	66.67
MW07-03D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-03S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-04D	1,1-DICHLOROETHENE	5/29/2002 0:00	MW07-04D-NWG-052902	21 J	9.25	UG_L	18	12	66.67
MW07-04S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-05D	1,1-DICHLOROETHENE	11/15/2007 0:00	MW07-05D_20071115	3.1 J	1.9	UG_L	11	6	54.55
MW07-05S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-09D	1,1-DICHLOROETHENE	5/21/2002 0:00	MW07-09D-NWG-052102	15	10	UG_L	17	11	64.71
MW07-09R	1,1-DICHLOROETHENE	8 10:54:00 AM10/10/2013 12:45:00	NA	1.4 JJ	0.97	UG_L	22	10	45.45
MW07-10D	1,1-DICHLOROETHENE	5/30/2002 0:00	MW07-10D-NWG-053002	0.9 J	0.74	UG_L	14	5	35.71
MW07-10S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-11D	1,1-DICHLOROETHENE	10/8/2013 10:22	MW07-11D-100813	4.1	1.8	UG_L	21	12	57.14
MW07-12D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	19	0	0.00
MW07-13D	1,1-DICHLOROETHENE	5/12/2008 16:25	MW07-13D	1.2	0.83	UG_L	14	4	28.57
MW07-13S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-15D	1,1-DICHLOROETHENE	9/14/2011 9:46	MW07-15D-091411	4.6 J	3.9	UG_L	4	2	50.00
MW07-16R	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-17D	1,1-DICHLOROETHENE	5/29/2002 0:00	MW07-17D-NWG-052902	79 J	31.2	UG_L	14	8	57.14
MW07-18D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-19D	1,1-DICHLOROETHENE	10/8/2013 11:50	MW07-19D-100813	5.7 J	3.5	UG_L	17	8	47.06
MW07-19S	1,1-DICHLOROETHENE	11/13/2007 0:00	MW07-19S_20071113	23 J	12	UG_L	17	11	64.71
MW07-20D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-20S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-21D	1,1-DICHLOROETHENE	10/11/2013 12:15	MW07-21D-101113	7.5 J	4.63	UG_L	22	14	63.64
MW07-21R	1,1-DICHLOROETHENE	8/21/2001 0:00	MW07-21R-NWG-082101	18	11.8	UG_L	22	15	68.18
MW07-21S	1,1-DICHLOROETHENE	4/19/2010 12:30	MW07-21S-041910	6	2.28	UG_L	22	16	72.73
MW07-23D	1,1-DICHLOROETHENE	6/21/2012 9:55	MW07-23D-062112	3.5 J	1.92	UG_L	22	12	54.55
MW07-23S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-24D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-24DUT	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	20	0	0.00
MW07-24S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-25D	1,1-DICHLOROETHENE	8/30/2000 0:00	MW07-25D-NWG-083000	4	1.1	UG_L	19	7	36.84
MW07-25R	1,1-DICHLOROETHENE	5/21/2002 0:00	MW07-25R-NWG-052102	5.05	3.25	UG_L	19	9	47.37
MW07-27D	1,1-DICHLOROETHENE	10/7/2008 16:25	MW07-27D-100708	17	12.6	UG_L	14	10	71.43
MW07-28D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-29D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	8	0	0.00
MW07-30D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-32D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-32R	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-33D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	20	0	0.00
MW07-33S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	17	0	0.00
MW07-34D	1,1-DICHLOROETHENE	4/16/2009 10:06	MW07-34D-041609	6.9	4.53	UG_L	20	17	85.00
MW07-35D	1,1-DICHLOROETHENE	11/8/2007 0:00	MW07-35D_20071108	0.72 J	0.55	UG_L	13	4	30.77
MW07-35S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-37D	1,1-DICHLOROETHENE	10/15/2008 15:15	MW07-37D-101508	0.7 J	0.6	UG_L	15	6	40.00
MW07-37S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-38D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-38S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-39D	1,1-DICHLOROETHENE	5/13/2008 15:05	MW07-39D	21	14.5	UG_L	16	9	56.25
MW07-39I	1,1-DICHLOROETHENE	5/13/2008 16:49	MW07-39I	24 J	19	UG_L	16	5	31.25
MW07-39S	1,1-DICHLOROETHENE	10/8/2008 10:10	MW07-39S-100808	16 J	13.4	UG_L	16	7	43.75
MW07-40D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-41I	1,1-DICHLOROETHENE	9/20/2011 16:45	MW07-41I-092011	10	9.4	UG_L	4	2	50.00
MW07-42I	1,1-DICHLOROETHENE	9/20/2011 14:55	MW07-42I-092011	18	18	UG_L	6	2	33.33

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-43D	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-43S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-44D	1,1-DICHLOROETHENE	9/20/2011 11:00	MW07-44D-092011	0.45 J	0.45	UG_L	4	1	25.00
MW07-45D	1,1-DICHLOROETHENE	9/19/2011 15:00	MW07-45D-091911	3.4 J	2	UG_L	6	3	50.00
MW07-45S	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
P07-02	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	16	0	0.00
P07-03	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	17	0	0.00
P07-04	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	25	0	0.00
P07-05	1,1-DICHLOROETHENE	2/27/2003 0:00	P07-05-NWG-022703	1.04	0.71	UG_L	28	6	21.43
P07-06	1,1-DICHLOROETHENE	11/29/2005 0:00	P07-06-NWG-112905	3	1.2	UG_L	29	8	27.59
P07-07	1,1-DICHLOROETHENE	9/17/2009 12:05	P07-07-091709	6.8 J	2.64	UG_L	30	19	63.33
P07-08	1,1-DICHLOROETHENE	12/19/2003 0:00	P07-08-NWG-121903	7.06	3.22	UG_L	28	14	50.00
P07-09	1,1-DICHLOROETHENE	12/19/2003 0:00	P07-09-NWG-121903	9.77	5.08	UG_L	30	21	70.00
P07-10	1,1-DICHLOROETHENE	5/8/2008 15:15	P07-10	1.7	0.935	UG_L	30	13	43.33
P07-14	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	15	0	0.00
P07-15	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	18	0	0.00
P07-16	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	15	0	0.00
P07-17	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	14	0	0.00
P07-20	1,1-DICHLOROETHENE	5/24/2005 0:00	P07-20-NWG-052405	2.6	1.6	UG_L	17	3	17.65
P07-21	1,1-DICHLOROETHENE	5/22/2002 0:00	P07-21-NWG-052202	0.24	0.17	UG_L	18	2	11.11
P07-22	1,1-DICHLOROETHENE	2/27/2003 0:00	P07-22-NWG-022703	0.37 J	0.37	UG_L	17	1	5.88
P07-23	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	19	0	0.00
P07-24	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	28	0	0.00
P07-28	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
P07-29	1,1-DICHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
DPT07-09-27D	1,2-DICHLOROETHANE	6/28/2012 11:39	DPT09-27D-062812	1.4	1.4	UG_L	3	1	33.33
DPT07-09-28D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-16I	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-16S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-18I	1,2-DICHLOROETHANE	10/1/2014 11:00	DPT07-18I-100114-1	9.3	8.7	UG_L	3	2	66.67
DPT07-18S	1,2-DICHLOROETHANE	9/22/2016 11:41	DPT07-18S-ME20-1	6.5	6.5	UG_L	3	1	33.33
DPT07-24D	1,2-DICHLOROETHANE	9/22/2016 12:51	DPT07-24D-ME20-1	1	1	UG_L	3	1	33.33
DPT07-24I	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-29-34I	1,2-DICHLOROETHANE	9/21/2016 10:47	DPT07-29-34I-ME20-1	1.6 J	1.5	UG_L	3	2	66.67
DPT07-29-34S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-30I	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-30S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	1,2-DICHLOROETHANE	6/26/2012 10:05	DPT39-03D-062612	1.7	1.7	UG_L	4	1	25.00
DPT07-39-03I	1,2-DICHLOROETHANE	6/26/2012 11:20	DPT39-03I-062612	1.1	1.1	UG_L	4	1	25.00
DPT07-39-04D	1,2-DICHLOROETHANE	6/28/2012 16:00	DPT39-04D-062812	1.6	1.6	UG_L	3	1	33.33
MW07-03D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-03S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-04D	1,2-DICHLOROETHANE	5/29/2002 0:00	MW07-04D-NWG-052902	12 J	4.33	UG_L	17	11	64.71
MW07-04S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-05D	1,2-DICHLOROETHANE	5/23/1996 0:00	MW07-05D-NWG-052396	120 J	60	UG_L	10	2	20.00
MW07-05S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	9	0	0.00
MW07-09D	1,2-DICHLOROETHANE	10/9/2013 13:45	MW07-09D-100913	8.2 J	6.61	UG_L	16	8	50.00
MW07-09R	1,2-DICHLOROETHANE	4/21/2010 10:10	MW07-09R-042110	16	7.63	UG_L	21	17	80.95
MW07-10D	1,2-DICHLOROETHANE	007 12:00:00 AM10/8/2008 4:35:00	NA	2	1.5	UG_L	13	7	53.85
MW07-10S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-11D	1,2-DICHLOROETHANE	10/8/2013 10:22	MW07-11D-100813	2.3	1.54	UG_L	20	16	80.00
MW07-12D	1,2-DICHLOROETHANE	8/22/2001 0:00	MW07-12D-NWG-082201	0.5	0.5	UG_L	18	1	5.56
MW07-13D	1,2-DICHLOROETHANE	11/14/2007 0:00	MW07-13D_20071114	0.83 J	0.77	UG_L	13	2	15.38
MW07-13S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-15D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-16R	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-17D	1,2-DICHLOROETHANE	5/29/2002 0:00	MW07-17D-NWG-052902	3 J	1.3	UG_L	13	4	30.77

TABLE D-2
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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-18D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-19D	1,2-DICHLOROETHANE	11/13/2007 0:00	MW07-19D_20071113	1.4 J	1.1	UG_L	16	3	18.75
MW07-19S	1,2-DICHLOROETHANE	11/13/2007 0:00	MW07-19S_20071113	4.4 J	2.6	UG_L	16	8	50.00
MW07-20D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	9	0	0.00
MW07-20S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-21D	1,2-DICHLOROETHANE	008 2:38:00 PM11/9/2007 12:00:00 A	NA	2.6 J	1.61	UG_L	21	9	42.86
MW07-21R	1,2-DICHLOROETHANE	8/21/2001 0:00	MW07-21R-NWG-082101	2	0.93	UG_L	21	4	19.05
MW07-21S	1,2-DICHLOROETHANE	4/19/2010 12:30	MW07-21S-041910	3 J	1.15	UG_L	21	7	33.33
MW07-23D	1,2-DICHLOROETHANE	2/19/2003 0:00	MW07-23D-NWG-021903	0.44	0.42	UG_L	21	3	14.29
MW07-23S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	9	0	0.00
MW07-24D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-24DUT	1,2-DICHLOROETHANE	11/13/2007 0:00	MW07-24DUT_20071113	1.4 J	0.79	UG_L	19	7	36.84
MW07-24S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-25D	1,2-DICHLOROETHANE	8/21/2001 0:00	MW07-25D-NWG-082101	0.5	0.46	UG_L	18	2	11.11
MW07-25R	1,2-DICHLOROETHANE	8/21/2001 0:00	MW07-25R-NWG-082101	2	1.28	UG_L	18	4	22.22
MW07-27D	1,2-DICHLOROETHANE	8/31/2000 0:00	MW07-27D-NWG-083100	6	4.8	UG_L	13	10	76.92
MW07-28D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-29D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-30D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-32D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-32R	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	5	0	0.00
MW07-33D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	19	0	0.00
MW07-33S	1,2-DICHLOROETHANE	5/21/2002 0:00	MW07-33S-NWG-052102	0.2	0.2	UG_L	16	1	6.25
MW07-34D	1,2-DICHLOROETHANE	5/30/2002 0:00	MW07-34D-NWG-053002	33 J	9.14	UG_L	19	15	78.95
MW07-35D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-35S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-37D	1,2-DICHLOROETHANE	8/24/2004 0:00	MW07-37D-082404	1.4 J	1	UG_L	14	7	50.00
MW07-37S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-38D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-38S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-39D	1,2-DICHLOROETHANE	10/8/2008 10:15	MW07-39D-100808	13 J	8.27	UG_L	15	6	40.00
MW07-39I	1,2-DICHLOROETHANE	10/8/2008 10:15	MW07-39I-100808	13 J	6.1	UG_L	15	6	40.00
MW07-39S	1,2-DICHLOROETHANE	10/8/2008 10:10	MW07-39S-100808	6 J	2.9	UG_L	15	5	33.33
MW07-40D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-41I	1,2-DICHLOROETHANE	6/25/2012 15:13	MW07-41I-062812	2.6	2.6	UG_L	4	1	25.00
MW07-42I	1,2-DICHLOROETHANE	6/25/2012 15:13	MW07-42I-062512	4.1	4.1	UG_L	6	1	16.67
MW07-43D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-43S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-44D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-45D	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-45S	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	3	0	0.00
P07-02	1,2-DICHLOROETHANE	11/29/2006 10:25	P07-02-20061129	1.6	1.6	UG_L	15	1	6.67
P07-03	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	16	0	0.00
P07-04	1,2-DICHLOROETHANE	11/29/2005 0:00	P07-04-NWG-112905	0.56 J	0.5	UG_L	24	2	8.33
P07-05	1,2-DICHLOROETHANE	12/19/2003 0:00	P07-05-NWG-121903	2.3	1.1	UG_L	27	14	51.85
P07-06	1,2-DICHLOROETHANE	12/18/2003 0:00	P07-06-NWG-121803	5.33 J	2.46	UG_L	28	19	67.86
P07-07	1,2-DICHLOROETHANE	11/29/2005 0:00	P07-07-NWG-112905	1.7 J	0.823	UG_L	29	11	37.93
P07-08	1,2-DICHLOROETHANE	008 3:22:00 PM9/28/2005 12:00:00 F	NA	2.1 JJ	1.38	UG_L	27	10	37.04
P07-09	1,2-DICHLOROETHANE	12/19/2003 0:00	P07-09-NWG-121903	4.18	1.7	UG_L	29	15	51.72
P07-10	1,2-DICHLOROETHANE	11/29/2005 0:00	P07-10-NWG-112905	1.5	1.16	UG_L	28	14	50.00
P07-14	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	14	0	0.00
P07-15	1,2-DICHLOROETHANE	2/27/2003 0:00	P07-15-NWG-022703	1.4	0.798	UG_L	17	6	35.29
P07-16	1,2-DICHLOROETHANE	11/12/2007 0:00	P07-16_20071112	3.3 J	2.41	UG_L	14	10	71.43
P07-17	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	13	0	0.00
P07-20	1,2-DICHLOROETHANE	5/24/2005 0:00	P07-20-NWG-052405	2.5	1.16	UG_L	16	6	37.50
P07-21	1,2-DICHLOROETHANE	2/27/2003 0:00	P07-21-NWG-022703	0.92 J	0.59	UG_L	17	7	41.18
P07-22	1,2-DICHLOROETHANE	5/24/2005 0:00	P07-22-NWG-052405	0.97 J	0.74	UG_L	16	3	18.75

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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P07-23	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	18	0	0.00
P07-24	1,2-DICHLOROETHANE	11/29/2005 0:00	P07-24-NWG-112905	0.61 J	0.44	UG_L	27	4	14.81
P07-28	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	11	0	0.00
P07-29	1,2-DICHLOROETHANE	NA	NA	NA	NA	UG_L	11	0	0.00
DPT07-39-03D	1,2-DICHLOROETHENE, TOTAL	9/19/2011 15:42	DPT07-39-03D-091911	2800	2800	UG_L	1	1	100.00
DPT07-39-03I	1,2-DICHLOROETHENE, TOTAL	9/19/2011 14:28	DPT07-39-03I-091911	2060	2060	UG_L	1	1	100.00
MW07-03D	1,2-DICHLOROETHENE, TOTAL	5/22/1996 0:00	MW07-03D-NWG-052296	230	230	UG_L	1	1	100.00
MW07-03S	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-04D	1,2-DICHLOROETHENE, TOTAL	5/29/2002 0:00	MW07-04D-NWG-052902	760	193.9	UG_L	16	14	87.50
MW07-04S	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-05D	1,2-DICHLOROETHENE, TOTAL	5/23/1996 0:00	MW07-05D-NWG-052396	790 J	214	UG_L	9	9	100.00
MW07-05S	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	8	0	0.00
MW07-09D	1,2-DICHLOROETHENE, TOTAL	8/19/2004 0:00	MW07-09D-NWG-081904	4139	3141	UG_L	12	12	100.00
MW07-09R	1,2-DICHLOROETHENE, TOTAL	4/21/2010 10:10	MW07-09R-042110	432	226.97	UG_L	17	16	94.12
MW07-10D	1,2-DICHLOROETHENE, TOTAL	8/30/2000 0:00	MW07-10D-NWG-083000	38	22.6	UG_L	12	12	100.00
MW07-10S	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-11D	1,2-DICHLOROETHENE, TOTAL	4/20/2010 11:29	MW07-11D-042010	407	185.8	UG_L	16	15	93.75
MW07-12D	1,2-DICHLOROETHENE, TOTAL	5/29/1996 0:00	MW07-12D-NWG-052996	36	13	UG_L	16	16	100.00
MW07-13D	1,2-DICHLOROETHENE, TOTAL	5/12/2008 16:25	MW07-13D	67.4	32.5	UG_L	12	12	100.00
MW07-13S	1,2-DICHLOROETHENE, TOTAL	11/27/2007 0:00	MW07-13S_20071127	0.4	0.4	UG_L	12	1	8.33
MW07-15D	1,2-DICHLOROETHENE, TOTAL	5/24/1996 0:00	MW07-15D-NWG-052496	890 J	533	UG_L	2	2	100.00
MW07-16R	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	5	0	0.00
MW07-17D	1,2-DICHLOROETHENE, TOTAL	5/29/2002 0:00	MW07-17D-NWG-052902	12200	4573	UG_L	11	11	100.00
MW07-18D	1,2-DICHLOROETHENE, TOTAL	9/14/2011 14:00	MW07-18D-091411	0.53 J	0.53	UG_L	4	1	25.00
MW07-19D	1,2-DICHLOROETHENE, TOTAL	9/20/2011 10:02	MW07-19D-092011	597	311	UG_L	12	12	100.00
MW07-19S	1,2-DICHLOROETHENE, TOTAL	5/12/2008 14:15	MW07-19S	3570	2172	UG_L	12	12	100.00
MW07-20D	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-20S	1,2-DICHLOROETHENE, TOTAL	9/15/2011 15:30	MW07-20S-091511	0.23 J	0.23	UG_L	9	1	11.11
MW07-21D	1,2-DICHLOROETHENE, TOTAL	9/15/2011 15:15	MW07-21D-091511	1310	643.9	UG_L	17	17	100.00
MW07-21R	1,2-DICHLOROETHENE, TOTAL	8/21/2001 0:00	MW07-21R-NWG-082101	7170	2281	UG_L	17	17	100.00
MW07-21S	1,2-DICHLOROETHENE, TOTAL	5/23/2002 0:00	MW07-21S-NWG-052302	881	618.7	UG_L	17	17	100.00
MW07-23D	1,2-DICHLOROETHENE, TOTAL	9/7/2011 9:55	MW07-23D-090711	654	214.8	UG_L	17	17	100.00
MW07-23S	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	8	0	0.00
MW07-24D	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	9	0	0.00
MW07-24DUT	1,2-DICHLOROETHENE, TOTAL	11/13/2007 0:00	MW07-24DUT_20071113	6.35	3.26	UG_L	15	14	93.33
MW07-24S	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	9	0	0.00
MW07-25D	1,2-DICHLOROETHENE, TOTAL	8/30/2000 0:00	MW07-25D-NWG-083000	890	73.48	UG_L	17	16	94.12
MW07-25R	1,2-DICHLOROETHENE, TOTAL	9/7/2011 10:19	MW07-25R-090711	1260	677.8	UG_L	17	16	94.12
MW07-27D	1,2-DICHLOROETHENE, TOTAL	2/16/2007 0:00	MW07-27D_20070216	2412	2150	UG_L	11	11	100.00
MW07-28D	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	9	0	0.00
MW07-29D	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-30D	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-32D	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	5	0	0.00
MW07-32R	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	5	0	0.00
MW07-33D	1,2-DICHLOROETHENE, TOTAL	11/8/2007 0:00	MW07-33D_20071108	23.2	17.34	UG_L	15	15	100.00
MW07-33S	1,2-DICHLOROETHENE, TOTAL	5/11/2005 0:00	MW07-33S-NWG-051105	5.2	2.86	UG_L	12	6	50.00
MW07-34D	1,2-DICHLOROETHENE, TOTAL	5/30/2002 0:00	MW07-34D-NWG-053002	2012	1089.3	UG_L	15	15	100.00
MW07-35D	1,2-DICHLOROETHENE, TOTAL	5/8/2008 13:00	MW07-35D	30.3	17.2	UG_L	11	11	100.00
MW07-35S	1,2-DICHLOROETHENE, TOTAL	12/17/2003 0:00	MW07-35S-NWG-121703	2.83	1.94	UG_L	13	9	69.23
MW07-37D	1,2-DICHLOROETHENE, TOTAL	4/1/2009 16:45	MW07-37D-040109	98	74.7	UG_L	12	12	100.00
MW07-37S	1,2-DICHLOROETHENE, TOTAL	11/16/2007 0:00	MW07-37S_20071116	1.2	1.2	UG_L	11	1	9.09
MW07-38D	1,2-DICHLOROETHENE, TOTAL	8/24/2004 0:00	MW07-38D-082404	7.3	3.88	UG_L	11	11	100.00
MW07-38S	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-39D	1,2-DICHLOROETHENE, TOTAL	9/19/2011 10:46	MW07-39D-091911	6560	2929	UG_L	11	11	100.00
MW07-39I	1,2-DICHLOROETHENE, TOTAL	5/13/2008 16:49	MW07-39I	5500	3477	UG_L	11	11	100.00
MW07-39S	1,2-DICHLOROETHENE, TOTAL	9/19/2011 14:53	MW07-39S-091911	2230	1880	UG_L	11	11	100.00
MW07-41I	1,2-DICHLOROETHENE, TOTAL	9/20/2011 16:45	MW07-41I-092011	6390	6390	UG_L	1	1	100.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-42I	1,2-DICHLOROETHENE, TOTAL	9/20/2011 14:55	MW07-42I-092011	5380	5380	UG_L	1	1	100.00
MW07-43D	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-43S	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-44D	1,2-DICHLOROETHENE, TOTAL	9/20/2011 11:00	MW07-44D-092011	63.6 J	63.6	UG_L	1	1	100.00
MW07-45D	1,2-DICHLOROETHENE, TOTAL	9/19/2011 15:00	MW07-45D-091911	990	990	UG_L	1	1	100.00
MW07-45S	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	1,2-DICHLOROETHENE, TOTAL	11/29/2006 10:25	P07-02-20061129	3.1	3.1	UG_L	15	1	6.67
P07-03	1,2-DICHLOROETHENE, TOTAL	4/14/2010 15:45	P07-03-041410	9	2.7	UG_L	15	4	26.67
P07-04	1,2-DICHLOROETHENE, TOTAL	5/24/2005 0:00	P07-04-NWG-052405	21.2	5.62	UG_L	23	19	82.61
P07-05	1,2-DICHLOROETHENE, TOTAL	2/27/2003 0:00	P07-05-NWG-022703	339	126.1	UG_L	23	23	100.00
P07-06	1,2-DICHLOROETHENE, TOTAL	12/18/2003 0:00	P07-06-NWG-121803	538	299.39	UG_L	24	24	100.00
P07-07	1,2-DICHLOROETHENE, TOTAL	5/24/2005 0:00	P07-07-NWG-052405	1417.9	745.49	UG_L	25	25	100.00
P07-08	1,2-DICHLOROETHENE, TOTAL	12/19/2003 0:00	P07-08-NWG-121903	1520	722.71	UG_L	23	23	100.00
P07-09	1,2-DICHLOROETHENE, TOTAL	12/4/2007 0:00	P07-09_20071204	2060	1216	UG_L	25	25	100.00
P07-10	1,2-DICHLOROETHENE, TOTAL	3/23/2005 0:00	P07-10-NWG-032305	304.7	183.9	UG_L	25	24	96.00
P07-14	1,2-DICHLOROETHENE, TOTAL	10/13/2009 10:15	P07-14-101309	2	0.75	UG_L	13	6	46.15
P07-15	1,2-DICHLOROETHENE, TOTAL	5/3/2007 0:00	P07-15_20070503	28.2	14.2	UG_L	13	13	100.00
P07-16	1,2-DICHLOROETHENE, TOTAL	10/13/2009 9:49	P07-16-101309	4.1	1.5	UG_L	13	8	61.54
P07-17	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	13	0	0.00
P07-20	1,2-DICHLOROETHENE, TOTAL	5/24/2005 0:00	P07-20-NWG-052405	859	137.9	UG_L	14	14	100.00
P07-21	1,2-DICHLOROETHENE, TOTAL	4/13/2009 15:03	P07-21-041309	51	25.3	UG_L	14	14	100.00
P07-22	1,2-DICHLOROETHENE, TOTAL	2/27/2003 0:00	P07-22-NWG-022703	73.09	30.81	UG_L	14	13	92.86
P07-23	1,2-DICHLOROETHENE, TOTAL	4/13/2009 15:18	P07-23-041309	25.9	8.98	UG_L	14	12	85.71
P07-24	1,2-DICHLOROETHENE, TOTAL	5/8/2008 15:25	P07-24	34	12.99	UG_L	23	22	95.65
P07-28	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	11	0	0.00
P07-29	1,2-DICHLOROETHENE, TOTAL	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-04D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00

TABLE D-2
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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P07-07	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	1,2-DICHLOROPROPANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09R	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-10D	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-10S	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-13D	2-BUTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	2-BUTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	2-BUTANONE	5/29/2002 0:00	MW07-17D-NWG-052902	0.2 J	0.2	UG_L	1	1	100.00
MW07-19D	2-BUTANONE	5/23/2002 0:00	MW07-19D-NWG-052302	7 J	7	UG_L	2	1	50.00
MW07-19S	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-21D	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-21R	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-21S	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-23D	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-23S	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25R	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-27D	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-15	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-16	2-BUTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	2-BUTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09R	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-10D	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-10S	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-13D	2-HEXANONE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	2-HEXANONE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19D	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19S	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-21D	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-21R	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-21S	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-23D	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-23S	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00

TABLE D-2
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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-25D	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25R	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-27D	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-15	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-16	2-HEXANONE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	2-HEXANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09R	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-10D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-13D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-21R	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-21S	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-23D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25R	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-27D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-34D	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-15	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-16	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-24	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	4-METHYL-2-PENTANONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09R	ACETONE	5/21/2002 0:00	MW07-09R-NWG-052102	4.01 J	4.01	UG_L	2	1	50.00
MW07-10D	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-10S	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-13D	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-13S	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-17D	ACETONE	5/29/2002 0:00	MW07-17D-NWG-052902	18 J	18	UG_L	1	1	100.00
MW07-19D	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19S	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-21D	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-21R	ACETONE	8/31/2000 0:00	MW07-21R-NWG-083100	20	20	UG_L	1	1	100.00
MW07-21S	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-23D	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-23S	ACETONE	8/30/2000 0:00	MW07-23S-NWG-083000	1	1	UG_L	1	1	100.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[1]	Units	Number of Samples	Number Detected	Percent Detects
MW07-24D	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	ACETONE	8/31/2000 0:00	MW07-24S-NWG-083100	15	15	UG_L	1	1	100.00
MW07-25D	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25R	ACETONE	5/21/2002 0:00	MW07-25R-NWG-052102	14 J	14	UG_L	2	1	50.00
MW07-27D	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	ACETONE	5/22/2002 0:00	P07-04-NWG-052202	4.8 J	4.8	UG_L	1	1	100.00
P07-06	ACETONE	5/22/2002 0:00	P07-06-NWG-052202	3.12 J	3.12	UG_L	1	1	100.00
P07-07	ACETONE	5/22/2002 0:00	P07-07-NWG-052202	14 J	14	UG_L	1	1	100.00
P07-09	ACETONE	5/22/2002 0:00	P07-09-NWG-052202	3.6 J	3.6	UG_L	1	1	100.00
P07-14	ACETONE	5/23/2002 0:00	P07-14-NWG-052302	4.22 J	4.22	UG_L	2	1	50.00
P07-15	ACETONE	5/23/2002 0:00	P07-15-NWG-052302	3.97 J	3.97	UG_L	2	1	50.00
P07-16	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-17	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-20	ACETONE	5/22/2002 0:00	P07-20-NWG-052202	2.77 J	2.77	UG_L	1	1	100.00
P07-21	ACETONE	5/22/2002 0:00	P07-21-NWG-052202	4.35 J	4.35	UG_L	1	1	100.00
P07-22	ACETONE	5/22/2002 0:00	P07-22-NWG-052202	5.83 J	5.83	UG_L	1	1	100.00
P07-28	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	ACETONE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-09-27D	BENZENE	6/28/2012 11:39	DPT09-27D-062812	4.1	4.1	UG_L	3	1	33.33
DPT07-09-28D	BENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-16I	BENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-16S	BENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-18I	BENZENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-18S	BENZENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24D	BENZENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24I	BENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-29-34I	BENZENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-29-34S	BENZENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-30I	BENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-30S	BENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	BENZENE	9/19/2011 15:42	DPT07-39-03D-091911	11 J	7.4	UG_L	4	3	75.00
DPT07-39-03I	BENZENE	6/26/2012 11:20	DPT39-03I-062612	4.9	4.9	UG_L	4	1	25.00
DPT07-39-04D	BENZENE	6/28/2012 16:00	DPT39-04D-062812	2.6	2	UG_L	3	2	66.67
MW07-03D	BENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-03S	BENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-04D	BENZENE	5/29/2002 0:00	MW07-04D-NWG-052902	0.2 J	0.2	UG_L	18	1	5.56
MW07-04S	BENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-05D	BENZENE	5/23/1996 0:00	MW07-05D-NWG-052396	550	550	UG_L	11	1	9.09
MW07-05S	BENZENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-09D	BENZENE	5/21/2002 0:00	MW07-09D-NWG-052102	6.48	4.37	UG_L	17	11	64.71
MW07-09R	BENZENE	NA	NA	NA	NA	UG_L	22	0	0.00
MW07-10D	BENZENE	5/30/2002 0:00	MW07-10D-NWG-053002	13 J	7.2	UG_L	14	12	85.71
MW07-10S	BENZENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-11D	BENZENE	10/8/2013 10:22	MW07-11D-100813	0.54 J	0.54	UG_L	21	1	4.76
MW07-12D	BENZENE	10/2/2014 14:10	MW07-12D-100214-1	4.5	1.4	UG_L	19	17	89.47
MW07-13D	BENZENE	5/22/2002 0:00	MW07-13D-NWG-052202	0.1 J	0.1	UG_L	14	1	7.14
MW07-13S	BENZENE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-15D	BENZENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-16R	BENZENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-17D	BENZENE	5/29/2002 0:00	MW07-17D-NWG-052902	1 J	1	UG_L	14	1	7.14
MW07-18D	BENZENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-19D	BENZENE	NA	NA	NA	NA	UG_L	17	0	0.00
MW07-19S	BENZENE	11/13/2007 0:00	MW07-19S_20071113	0.76 J	0.54	UG_L	17	6	35.29
MW07-20D	BENZENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-20S	BENZENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-21D	BENZENE	4/19/2010 14:25	MW07-21D-041910	0.3 J	0.2	UG_L	22	2	9.09

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Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[1]	Units	Number of Samples	Number Detected	Percent Detects
MW07-21R	BENZENE	8/21/2001 0:00	MW07-21R-NWG-082101	0.2	0.15	UG_L	22	3	13.64
MW07-21S	BENZENE	2/20/2003 0:00	MW07-21S-NWG-022003	0.38	0.34	UG_L	22	4	18.18
MW07-23D	BENZENE	8/21/2001 0:00	MW07-23D-NWG-082101	0.2 J	0.2	UG_L	22	1	4.55
MW07-23S	BENZENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-24D	BENZENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-24DUT	BENZENE	NA	NA	NA	NA	UG_L	20	0	0.00
MW07-24S	BENZENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-25D	BENZENE	8/30/2000 0:00	MW07-25D-NWG-083000	4	1.78	UG_L	19	12	63.16
MW07-25R	BENZENE	8/21/2001 0:00	MW07-25R-NWG-082101	5	2.79	UG_L	19	11	57.89
MW07-27D	BENZENE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-28D	BENZENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-29D	BENZENE	NA	NA	NA	NA	UG_L	8	0	0.00
MW07-30D	BENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-32D	BENZENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-32R	BENZENE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-33D	BENZENE	NA	NA	NA	NA	UG_L	20	0	0.00
MW07-33S	BENZENE	NA	NA	NA	NA	UG_L	17	0	0.00
MW07-34D	BENZENE	6/26/2012 10:01	MW07-34D-062612	1.4	0.9	UG_L	20	12	60.00
MW07-35D	BENZENE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-35S	BENZENE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-37D	BENZENE	5/11/2005 0:00	MW07-37D-051105	14.8 J	5.33	UG_L	15	11	73.33
MW07-37S	BENZENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-38D	BENZENE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-38S	BENZENE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-39D	BENZENE	10/8/2008 10:15	MW07-39D-100808	0.9 J	0.67	UG_L	16	2	12.50
MW07-39I	BENZENE	10/8/2008 10:15	MW07-39I-100808	2 J	0.9	UG_L	16	5	31.25
MW07-39S	BENZENE	10/8/2008 10:10	MW07-39S-100808	4 J	1.8	UG_L	16	5	31.25
MW07-40D	BENZENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-41I	BENZENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-42I	BENZENE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-43D	BENZENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-43S	BENZENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-44D	BENZENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-45D	BENZENE	9/19/2011 15:00	MW07-45D-091911	1.1 J	0.96	UG_L	6	2	33.33
MW07-45S	BENZENE	NA	NA	NA	NA	UG_L	3	0	0.00
P07-02	BENZENE	NA	NA	NA	NA	UG_L	16	0	0.00
P07-03	BENZENE	NA	NA	NA	NA	UG_L	16	0	0.00
P07-04	BENZENE	NA	NA	NA	NA	UG_L	25	0	0.00
P07-05	BENZENE	03 12:00:00 AM5/22/2002 12:00:00	NA	0.2 JJ	0.2	UG_L	28	2	7.14
P07-06	BENZENE	NA	NA	NA	NA	UG_L	29	0	0.00
P07-07	BENZENE	12/18/2003 0:00	P07-07-NWG-121803	0.32 J	0.19	UG_L	30	4	13.33
P07-08	BENZENE	12/19/2003 0:00	P07-08-NWG-121903	0.51	0.4	UG_L	28	2	7.14
P07-09	BENZENE	5/22/2002 0:00	P07-09-NWG-052202	0.11	0.11	UG_L	30	2	6.67
P07-10	BENZENE	10/27/2004 0:00	P07-10-NWG-102704	1.1	0.75	UG_L	30	21	70.00
P07-14	BENZENE	NA	NA	NA	NA	UG_L	15	0	0.00
P07-15	BENZENE	NA	NA	NA	NA	UG_L	18	0	0.00
P07-16	BENZENE	NA	NA	NA	NA	UG_L	15	0	0.00
P07-17	BENZENE	NA	NA	NA	NA	UG_L	14	0	0.00
P07-20	BENZENE	5/24/2005 0:00	P07-20-NWG-052405	5.8	2.36	UG_L	17	11	64.71
P07-21	BENZENE	8/25/2004 0:00	P07-21-NWG-082504	0.83	0.58	UG_L	18	10	55.56
P07-22	BENZENE	5/24/2005 0:00	P07-22-NWG-052405	1.9	1.13	UG_L	17	7	41.18
P07-23	BENZENE	NA	NA	NA	NA	UG_L	19	0	0.00
P07-24	BENZENE	3/23/2005 0:00	P07-24-NWG-032305	1.4	0.845	UG_L	28	13	46.43
P07-28	BENZENE	NA	NA	NA	NA	UG_L	12	0	0.00
P07-29	BENZENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-04D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[1]	Units	Number of Samples	Number Detected	Percent Detects
MW07-09R	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	BROMODICHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-04D	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00

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Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[1]	Units	Number of Samples	Number Detected	Percent Detects
MW07-23D	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	BROMOMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	BROMOMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-09-27D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-18I	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-18S	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-24D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-29-34I	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-29-34S	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03I	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-04D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	BTEX, TOTAL	10/9/2013 13:45	MW07-09D-100913	4	4	UG_L	2	1	50.00
MW07-09R	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-11D	BTEX, TOTAL	10/8/2013 10:22	MW07-11D-100813	0.54	0.54	UG_L	2	1	50.00
MW07-12D	BTEX, TOTAL	10/2/2014 14:10	MW07-12D-100214-1	4.5	4.5	UG_L	1	1	100.00
MW07-13D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-13S	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-17D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-18D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	BTEX, TOTAL	10/8/2013 10:40	MW07-19S-100813	0.38	0.38	UG_L	2	1	50.00
MW07-20D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-20S	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-21D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-32D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-33S	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-34D	BTEX, TOTAL	10/8/2014 14:00	MW07-34D-100814-1	1.2	1.2	UG_L	2	1	50.00
MW07-37D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-39D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-39I	BTEX, TOTAL	10/8/2013 11:45	MW07-39I-100813	0.56	0.56	UG_L	2	1	50.00
MW07-39S	BTEX, TOTAL	10/8/2013 10:25	MW07-39S-100813	1.2	1.2	UG_L	2	1	50.00
MW07-40D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-41I	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-42I	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-43D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-43S	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-44D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-45D	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-06	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-07	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-08	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-09	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-10	BTEX, TOTAL	10/16/2013 11:18	P07-10-101613	0.45	0.45	UG_L	2	1	50.00
P07-15	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	BTEX, TOTAL	10/3/2014 9:05	P07-21-100314-1	0.72	0.72	UG_L	1	1	100.00
P07-22	BTEX, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-24	BTEX, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-04D	CARBON DISULFIDE	5/29/2002 0:00	MW07-04D-NWG-052902	1 J	1	UG_L	1	1	100.00
MW07-09D	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	CARBON DISULFIDE	5/21/2002 0:00	MW07-09R-NWG-052102	3.06	3.06	UG_L	2	1	50.00
MW07-10D	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	CARBON DISULFIDE	5/22/2002 0:00	MW07-11D-NWG-052202	0.12	0.12	UG_L	1	1	100.00
MW07-12D	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	CARBON DISULFIDE	5/29/2002 0:00	MW07-17D-NWG-052902	18 J	18	UG_L	1	1	100.00
MW07-19D	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	CARBON DISULFIDE	5/23/2002 0:00	MW07-21R-NWG-052302	0.89	0.89	UG_L	2	1	50.00
MW07-21S	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	CARBON DISULFIDE	5/28/2002 0:00	MW07-24DUT-NWG-052802	1	1	UG_L	1	1	100.00
MW07-24S	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	CARBON DISULFIDE	5/21/2002 0:00	MW07-25R-NWG-052102	0.55	0.55	UG_L	2	1	50.00
MW07-27D	CARBON DISULFIDE	5/23/2002 0:00	MW07-27D-NWG-052302	0.3 J	0.3	UG_L	2	1	50.00
MW07-28D	CARBON DISULFIDE	5/30/2002 0:00	MW07-28D-NWG-053002	0.4 J	0.4	UG_L	1	1	100.00
MW07-33D	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-34D	CARBON DISULFIDE	5/30/2002 0:00	MW07-34D-NWG-053002	16 J	16	UG_L	1	1	100.00
P07-02	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P07-03	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	CARBON DISULFIDE	5/22/2002 0:00	P07-04-NWG-052202	0.71	0.71	UG_L	1	1	100.00
P07-05	CARBON DISULFIDE	5/22/2002 0:00	P07-05-NWG-052202	0.25	0.25	UG_L	1	1	100.00
P07-06	CARBON DISULFIDE	5/22/2002 0:00	P07-06-NWG-052202	0.56	0.56	UG_L	1	1	100.00
P07-07	CARBON DISULFIDE	5/22/2002 0:00	P07-07-NWG-052202	1.25 J	1.25	UG_L	1	1	100.00
P07-09	CARBON DISULFIDE	5/22/2002 0:00	P07-09-NWG-052202	0.28	0.28	UG_L	1	1	100.00
P07-10	CARBON DISULFIDE	5/29/2002 0:00	P07-10-NWG-052902	1 J	1	UG_L	1	1	100.00
P07-14	CARBON DISULFIDE	5/23/2002 0:00	P07-14-NWG-052302	0.32	0.32	UG_L	2	1	50.00
P07-15	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	CARBON DISULFIDE	5/23/2002 0:00	P07-16-NWG-052302	1 J	1	UG_L	2	1	50.00
P07-17	CARBON DISULFIDE	5/29/2002 0:00	P07-17-NWG-052902	0.7 J	0.7	UG_L	2	1	50.00
P07-20	CARBON DISULFIDE	5/22/2002 0:00	P07-20-NWG-052202	0.12	0.12	UG_L	1	1	100.00
P07-21	CARBON DISULFIDE	5/22/2002 0:00	P07-21-NWG-052202	0.12	0.12	UG_L	1	1	100.00
P07-22	CARBON DISULFIDE	5/22/2002 0:00	P07-22-NWG-052202	0.17	0.17	UG_L	1	1	100.00
P07-23	CARBON DISULFIDE	5/22/2002 0:00	P07-23-NWG-052202	0.14	0.14	UG_L	1	1	100.00
P07-24	CARBON DISULFIDE	5/22/2002 0:00	P07-24-NWG-052202	0.13	0.13	UG_L	1	1	100.00
P07-28	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	CARBON DISULFIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-04D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P07-22	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	CARBON TETRACHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-04D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	CHLOROBENZENE	5/29/2002 0:00	MW07-17D-NWG-052902	0.1 J	0.1	UG_L	1	1	100.00
MW07-19D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-34D	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-10	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	CHLOROBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	CHLOROBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-04D	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-12D	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	CHLOROETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	CHLOROETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-09-27D	CHLOROFORM	6/28/2012 11:39	DPT09-27D-062812	0.82 J	0.82	UG_L	3	1	33.33
DPT07-09-28D	CHLOROFORM	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-16I	CHLOROFORM	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-16S	CHLOROFORM	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-18I	CHLOROFORM	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-18S	CHLOROFORM	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24D	CHLOROFORM	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24I	CHLOROFORM	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-29-34I	CHLOROFORM	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-29-34S	CHLOROFORM	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-30I	CHLOROFORM	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-30S	CHLOROFORM	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	CHLOROFORM	6/26/2012 10:05	DPT39-03D-062612	15	10	UG_L	4	2	50.00
DPT07-39-03I	CHLOROFORM	6/26/2012 11:20	DPT39-03I-062612	3	3	UG_L	4	1	25.00
DPT07-39-04D	CHLOROFORM	6/28/2012 16:00	DPT39-04D-062812	16	10	UG_L	3	2	66.67
MW07-03D	CHLOROFORM	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-03S	CHLOROFORM	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-04D	CHLOROFORM	5/29/2002 0:00	MW07-04D-NWG-052902	210 J	95.9	UG_L	18	15	83.33
MW07-04S	CHLOROFORM	NA	NA	NA	NA	UG_L	2	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-05D	CHLOROFORM	5/23/1996 0:00	MW07-05D-NWG-052396	240 J	32	UG_L	11	9	81.82
MW07-05S	CHLOROFORM	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-09D	CHLOROFORM	8/29/2000 0:00	MW07-09D-NWG-082900	3	1.39	UG_L	17	6	35.29
MW07-09R	CHLOROFORM	NA	NA	NA	NA	UG_L	22	0	0.00
MW07-10D	CHLOROFORM	5/30/2002 0:00	MW07-10D-NWG-053002	3 J	1	UG_L	14	9	64.29
MW07-10S	CHLOROFORM	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-11D	CHLOROFORM	8/23/2001 0:00	MW07-11D-NWG-082301	0.1 J	0.1	UG_L	21	1	4.76
MW07-12D	CHLOROFORM	NA	NA	NA	NA	UG_L	19	0	0.00
MW07-13D	CHLOROFORM	11/14/2007 0:00	MW07-13D_20071114	0.39 J	0.39	UG_L	14	1	7.14
MW07-13S	CHLOROFORM	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-15D	CHLOROFORM	9/14/2011 9:46	MW07-15D-091411	4.4 J	3.7	UG_L	4	2	50.00
MW07-16R	CHLOROFORM	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-17D	CHLOROFORM	5/22/1996 0:00	MW07-17D-NWG-052296	110 J	43	UG_L	14	7	50.00
MW07-18D	CHLOROFORM	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-19D	CHLOROFORM	NA	NA	NA	NA	UG_L	17	0	0.00
MW07-19S	CHLOROFORM	5/12/2008 14:15	MW07-19S	12	6.2	UG_L	17	10	58.82
MW07-20D	CHLOROFORM	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-20S	CHLOROFORM	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-21D	CHLOROFORM	01 12:00:00 AM8/31/2000 12:00:00	NA	2	1.27	UG_L	22	8	36.36
MW07-21R	CHLOROFORM	8/31/2000 0:00	MW07-21R-NWG-083100	8	3.55	UG_L	22	12	54.55
MW07-21S	CHLOROFORM	2/20/2003 0:00	MW07-21S-NWG-022003	1.35	0.833	UG_L	22	12	54.55
MW07-23D	CHLOROFORM	2/19/2003 0:00	MW07-23D-NWG-021903	1.28	0.855	UG_L	22	4	18.18
MW07-23S	CHLOROFORM	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-24D	CHLOROFORM	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-24DUT	CHLOROFORM	NA	NA	NA	NA	UG_L	20	0	0.00
MW07-24S	CHLOROFORM	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-25D	CHLOROFORM	5/21/2002 0:00	MW07-25D-NWG-052102	10	5.5	UG_L	19	16	84.21
MW07-25R	CHLOROFORM	5/21/2002 0:00	MW07-25R-NWG-052102	2.4	1.23	UG_L	19	6	31.58
MW07-27D	CHLOROFORM	8/31/2000 0:00	MW07-27D-NWG-083100	19	6.8	UG_L	14	10	71.43
MW07-28D	CHLOROFORM	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-29D	CHLOROFORM	NA	NA	NA	NA	UG_L	8	0	0.00
MW07-30D	CHLOROFORM	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-32D	CHLOROFORM	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-32R	CHLOROFORM	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-33D	CHLOROFORM	NA	NA	NA	NA	UG_L	20	0	0.00
MW07-33S	CHLOROFORM	NA	NA	NA	NA	UG_L	17	0	0.00
MW07-34D	CHLOROFORM	5/30/2002 0:00	MW07-34D-NWG-053002	3 J	0.93	UG_L	20	12	60.00
MW07-35D	CHLOROFORM	5/8/2008 13:00	MW07-35D	7.5	4.9	UG_L	13	9	69.23
MW07-35S	CHLOROFORM	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-37D	CHLOROFORM	NA	NA	NA	NA	UG_L	15	0	0.00
MW07-37S	CHLOROFORM	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-38D	CHLOROFORM	05 12:00:00 AM8/24/2004 12:00:00	NA	2.7 J	1.6	UG_L	13	9	69.23
MW07-38S	CHLOROFORM	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-39D	CHLOROFORM	4/8/2009 9:22	MW07-39D-040809	39 J	17.2	UG_L	16	10	62.50
MW07-39I	CHLOROFORM	5/18/2005 0:00	MW07-39I-051805	77.3 J	45.9	UG_L	16	9	56.25
MW07-39S	CHLOROFORM	11/14/2007 0:00	MW07-39S_20071114	73 J	53.8	UG_L	16	10	62.50
MW07-40D	CHLOROFORM	9/19/2011 16:30	MW07-40D-091911	6.5 J	6.5	UG_L	4	1	25.00
MW07-41I	CHLOROFORM	9/20/2011 16:45	MW07-41I-092011	2.5 J	2	UG_L	4	2	50.00
MW07-42I	CHLOROFORM	9/20/2011 14:55	MW07-42I-092011	29	25	UG_L	6	3	50.00
MW07-43D	CHLOROFORM	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-43S	CHLOROFORM	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-44D	CHLOROFORM	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-45D	CHLOROFORM	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-45S	CHLOROFORM	NA	NA	NA	NA	UG_L	3	0	0.00
P07-02	CHLOROFORM	NA	NA	NA	NA	UG_L	16	0	0.00
P07-03	CHLOROFORM	NA	NA	NA	NA	UG_L	17	0	0.00
P07-04	CHLOROFORM	NA	NA	NA	NA	UG_L	25	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P07-05	CHLOROFORM	2/27/2003 0:00	P07-05-NWG-022703	0.22	0.18	UG_L	28	2	7.14
P07-06	CHLOROFORM	11/29/2005 0:00	P07-06-NWG-112905	1.1	1.1	UG_L	29	1	3.45
P07-07	CHLOROFORM	12/18/2003 0:00	P07-07-NWG-121803	1.14 J	0.656	UG_L	30	7	23.33
P07-08	CHLOROFORM	12/19/2003 0:00	P07-08-NWG-121903	3.18	1.47	UG_L	28	9	32.14
P07-09	CHLOROFORM	5/24/2005 0:00	P07-09-NWG-052405	7.9 J	1.56	UG_L	30	16	53.33
P07-10	CHLOROFORM	2/27/2003 0:00	P07-10-NWG-022703	0.3	0.29	UG_L	29	2	6.90
P07-14	CHLOROFORM	NA	NA	NA	NA	UG_L	15	0	0.00
P07-15	CHLOROFORM	NA	NA	NA	NA	UG_L	18	0	0.00
P07-16	CHLOROFORM	NA	NA	NA	NA	UG_L	15	0	0.00
P07-17	CHLOROFORM	NA	NA	NA	NA	UG_L	14	0	0.00
P07-20	CHLOROFORM	2/27/2003 0:00	P07-20-NWG-022703	0.64	0.64	UG_L	17	1	5.88
P07-21	CHLOROFORM	5/22/2002 0:00	P07-21-NWG-052202	0.16	0.16	UG_L	18	1	5.56
P07-22	CHLOROFORM	12/17/2003 0:00	P07-22-NWG-121703	0.45 J	0.39	UG_L	17	3	17.65
P07-23	CHLOROFORM	5/22/2002 0:00	P07-23-NWG-052202	0.18	0.18	UG_L	19	1	5.26
P07-24	CHLOROFORM	2/27/2003 0:00	P07-24-NWG-022703	0.32	0.32	UG_L	28	1	3.57
P07-28	CHLOROFORM	NA	NA	NA	NA	UG_L	12	0	0.00
P07-29	CHLOROFORM	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-04D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	CHLOROMETHANE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P07-23	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	CHLOROMETHANE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-09-27D	CIS-1,2-DICHLOROETHENE	9/29/2014 15:30	DPT07-09/27D-092914-1	1900	1600	UG_L	3	3	100.00
DPT07-09-28D	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-16I	CIS-1,2-DICHLOROETHENE	9/22/2016 10:00	DPT07-16I-ME20-1	120	120	UG_L	2	1	50.00
DPT07-16S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-18I	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-18S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24D	CIS-1,2-DICHLOROETHENE	9/22/2016 12:51	DPT07-24D-ME20-1	114 J	102	UG_L	3	3	100.00
DPT07-24I	CIS-1,2-DICHLOROETHENE	9/22/2016 12:45	DPT07-24I-ME20-1	1.9	1.6	UG_L	2	2	100.00
DPT07-29-34I	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-29-34S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-30I	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-30S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	CIS-1,2-DICHLOROETHENE	9/29/2014 14:55	DPT07-39-3D-092914-1	5900	3200	UG_L	4	4	100.00
DPT07-39-03I	CIS-1,2-DICHLOROETHENE	9/29/2014 14:20	DPT07-39-3I-092914-1	2500	1680	UG_L	4	4	100.00
DPT07-39-04D	CIS-1,2-DICHLOROETHENE	6/28/2012 16:00	DPT39-04D-062812	5300	4200	UG_L	3	3	100.00
MW07-03D	CIS-1,2-DICHLOROETHENE	9/20/2016 14:50	MW07-03D-ME20-1	12	12	UG_L	1	1	100.00
MW07-03S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-04D	CIS-1,2-DICHLOROETHENE	5/29/2002 0:00	MW07-04D-NWG-052902	620 E	150	UG_L	17	15	88.24
MW07-04S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-05D	CIS-1,2-DICHLOROETHENE	10/16/2008 9:16	MW07-05D-101608	170	90.9	UG_L	10	9	90.00
MW07-05S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	9	0	0.00
MW07-09D	CIS-1,2-DICHLOROETHENE	10/9/2013 13:45	MW07-09D-100913	5700	3170	UG_L	16	16	100.00
MW07-09R	CIS-1,2-DICHLOROETHENE	4/21/2010 10:10	MW07-09R-042110	410	248	UG_L	21	21	100.00
MW07-10D	CIS-1,2-DICHLOROETHENE	8/30/2000 0:00	MW07-10D-NWG-083000	28	15.9	UG_L	13	13	100.00
MW07-10S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-11D	CIS-1,2-DICHLOROETHENE	9/17/2015 9:30	MW07-11D-091715-1	800	297	UG_L	20	20	100.00
MW07-12D	CIS-1,2-DICHLOROETHENE	11/9/2007 0:00	MW07-12D_20071109	21 J	10.4	UG_L	18	18	100.00
MW07-13D	CIS-1,2-DICHLOROETHENE	5/12/2008 16:25	MW07-13D	60	24.5	UG_L	14	14	100.00
MW07-13S	CIS-1,2-DICHLOROETHENE	11/27/2007 0:00	MW07-13S_20071127	0.4 J	0.4	UG_L	13	1	7.69
MW07-15D	CIS-1,2-DICHLOROETHENE	9/14/2011 9:46	MW07-15D-091411	110	93	UG_L	3	2	66.67
MW07-16R	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-17D	CIS-1,2-DICHLOROETHENE	5/29/2002 0:00	MW07-17D-NWG-052902	7800 E	2540	UG_L	13	13	100.00
MW07-18D	CIS-1,2-DICHLOROETHENE	6/27/2012 14:55	MW07-18D-062712	0.81 J	0.69	UG_L	6	3	50.00
MW07-19D	CIS-1,2-DICHLOROETHENE	9/30/2014 12:45	MW07-19D-093014-1	910	423	UG_L	16	16	100.00
MW07-19S	CIS-1,2-DICHLOROETHENE	008 2:15:00 PM9/30/2014 12:40:00	NA	3300	2110	UG_L	16	16	100.00
MW07-20D	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	9	0	0.00
MW07-20S	CIS-1,2-DICHLOROETHENE	9/15/2011 15:30	MW07-20S-091511	0.23 J	0.23	UG_L	11	1	9.09
MW07-21D	CIS-1,2-DICHLOROETHENE	10/1/2014 11:20	MW07-21D-100114-1	1500	675	UG_L	21	21	100.00
MW07-21R	CIS-1,2-DICHLOROETHENE	8/21/2001 0:00	MW07-21R-NWG-082101	6800 J	1940	UG_L	21	21	100.00
MW07-21S	CIS-1,2-DICHLOROETHENE	9/17/2015 9:35	MW07-21S-091715-1	1100	612	UG_L	21	21	100.00
MW07-23D	CIS-1,2-DICHLOROETHENE	10/2/2014 14:20	MW07-23D-100214-1	1300	346	UG_L	21	21	100.00
MW07-23S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	9	0	0.00
MW07-24D	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-24DUT	CIS-1,2-DICHLOROETHENE	11/13/2007 0:00	MW07-24DUT_20071113	5.9 J	3.78	UG_L	20	19	95.00
MW07-24S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-25D	CIS-1,2-DICHLOROETHENE	8/30/2000 0:00	MW07-25D-NWG-083000	690	54.6	UG_L	18	16	88.89
MW07-25R	CIS-1,2-DICHLOROETHENE	9/7/2011 10:19	MW07-25R-090711	1200	557	UG_L	18	17	94.44
MW07-27D	CIS-1,2-DICHLOROETHENE	10/8/2014 16:10	MW07-27D-100814-1	3200	1980	UG_L	13	13	100.00
MW07-28D	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-29D	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-30D	CIS-1,2-DICHLOROETHENE	9/22/2016 10:35	MW07-30D-ME20-1	1.1 J+	1.1	UG_L	1	1	100.00
MW07-32D	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-32R	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	5	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[1]	Units	Number of Samples	Number Detected	Percent Detects
MW07-33D	CIS-1,2-DICHLOROETHENE	11/8/2007 0:00	MW07-33D_20071108	20 J	13.4	UG_L	20	20	100.00
MW07-33S	CIS-1,2-DICHLOROETHENE	5/14/2008 15:50	MW07-33S	3.6	2.25	UG_L	17	6	35.29
MW07-34D	CIS-1,2-DICHLOROETHENE	5/30/2002 0:00	MW07-34D-NWG-053002	2000	1130	UG_L	20	20	100.00
MW07-35D	CIS-1,2-DICHLOROETHENE	5/8/2008 13:00	MW07-35D	24	13.9	UG_L	13	12	92.31
MW07-35S	CIS-1,2-DICHLOROETHENE	12/17/2003 0:00	MW07-35S-NWG-121703	2.83	1.91	UG_L	14	9	64.29
MW07-37D	CIS-1,2-DICHLOROETHENE	009 4:45:00 PM10/15/2008 3:15:00 F	NA	76	48.8	UG_L	15	15	100.00
MW07-37S	CIS-1,2-DICHLOROETHENE	11/16/2007 0:00	MW07-37S_20071116	1.2 J	1.2	UG_L	12	1	8.33
MW07-38D	CIS-1,2-DICHLOROETHENE	8/24/2004 0:00	MW07-38D-082404	5.6	3.1	UG_L	13	12	92.31
MW07-38S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-39D	CIS-1,2-DICHLOROETHENE	9/19/2011 10:46	MW07-39D-091911	6200	2710	UG_L	16	16	100.00
MW07-39I	CIS-1,2-DICHLOROETHENE	5/13/2008 16:49	MW07-39I	4400 J	2700	UG_L	16	16	100.00
MW07-39S	CIS-1,2-DICHLOROETHENE	9/19/2011 14:53	MW07-39S-091911	2000	1590	UG_L	16	16	100.00
MW07-40D	CIS-1,2-DICHLOROETHENE	011 4:30:00 PM6/28/2012 3:34:00 P	NA	390 J	340	UG_L	4	4	100.00
MW07-41I	CIS-1,2-DICHLOROETHENE	9/20/2011 16:45	MW07-41I-092011	6000	4400	UG_L	4	4	100.00
MW07-42I	CIS-1,2-DICHLOROETHENE	9/30/2014 12:30	MW07-42I-093014-1	9300	5800	UG_L	6	6	100.00
MW07-43D	CIS-1,2-DICHLOROETHENE	9/23/2016 11:45	MW07-43D-ME20-1	0.6 J	0.6	UG_L	4	1	25.00
MW07-43S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-44D	CIS-1,2-DICHLOROETHENE	9/21/2016 12:13	MW07-44D-ME20-1	57	46	UG_L	4	4	100.00
MW07-45D	CIS-1,2-DICHLOROETHENE	9/19/2011 15:00	MW07-45D-091911	750	340	UG_L	6	6	100.00
MW07-45S	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
P07-02	CIS-1,2-DICHLOROETHENE	11/29/2006 10:25	P07-02-20061129	3.1	3.1	UG_L	16	1	6.25
P07-03	CIS-1,2-DICHLOROETHENE	4/14/2010 15:45	P07-03-041410	7	2.2	UG_L	17	4	23.53
P07-04	CIS-1,2-DICHLOROETHENE	5/24/2005 0:00	P07-04-NWG-052405	19.7	5.14	UG_L	25	20	80.00
P07-05	CIS-1,2-DICHLOROETHENE	2/27/2003 0:00	P07-05-NWG-022703	320	98.1	UG_L	28	28	100.00
P07-06	CIS-1,2-DICHLOROETHENE	12/18/2003 0:00	P07-06-NWG-121803	490 J	233	UG_L	29	29	100.00
P07-07	CIS-1,2-DICHLOROETHENE	5/24/2005 0:00	P07-07-NWG-052405	1340	636	UG_L	30	30	100.00
P07-08	CIS-1,2-DICHLOROETHENE	12/19/2003 0:00	P07-08-NWG-121903	1400	563	UG_L	28	28	100.00
P07-09	CIS-1,2-DICHLOROETHENE	12/4/2007 0:00	P07-09_20071204	1900	1110	UG_L	30	30	100.00
P07-10	CIS-1,2-DICHLOROETHENE	3/23/2005 0:00	P07-10-NWG-032305	272	153	UG_L	30	29	96.67
P07-14	CIS-1,2-DICHLOROETHENE	009 10:15:00 AM7/2/2012 11:31:00	NA	2 J	0.93	UG_L	15	7	46.67
P07-15	CIS-1,2-DICHLOROETHENE	5/3/2007 0:00	P07-15_20070503	24.1	10.3	UG_L	18	16	88.89
P07-16	CIS-1,2-DICHLOROETHENE	10/13/2009 9:49	P07-16-101309	2	0.86	UG_L	15	9	60.00
P07-17	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	14	0	0.00
P07-20	CIS-1,2-DICHLOROETHENE	5/24/2005 0:00	P07-20-NWG-052405	804	146	UG_L	17	12	70.59
P07-21	CIS-1,2-DICHLOROETHENE	9/27/2016 12:35	P07-21-ME20-1	56.9 J-	23.1	UG_L	19	18	94.74
P07-22	CIS-1,2-DICHLOROETHENE	2/27/2003 0:00	P07-22-NWG-022703	69	27.5	UG_L	17	15	88.24
P07-23	CIS-1,2-DICHLOROETHENE	008 3:00:00 PM4/13/2009 3:18:00 P	NA	24 J	6.8	UG_L	19	17	89.47
P07-24	CIS-1,2-DICHLOROETHENE	5/8/2008 15:25	P07-24	29	11.9	UG_L	28	22	78.57
P07-28	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
P07-29	CIS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-04D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[1]	Units	Number of Samples	Number Detected	Percent Detects
MW07-24D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-17	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	CIS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-04D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	ETHYLBENZENE	5/30/2002 0:00	MW07-10D-NWG-053002	0.5 J	0.5	UG_L	2	1	50.00
MW07-10S	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-34D	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00

TABLE D-2
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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P07-05	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	ETHYLBENZENE	5/22/2002 0:00	P07-07-NWG-052202	0.24 J	0.24	UG_L	1	1	100.00
P07-09	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-10	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	ETHYLBENZENE	5/23/2002 0:00	P07-15-NWG-052302	0.13	0.13	UG_L	2	1	50.00
P07-16	ETHYLBENZENE	5/23/2002 0:00	P07-16-NWG-052302	0.9 J	0.9	UG_L	2	1	50.00
P07-17	ETHYLBENZENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	ETHYLBENZENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-04D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-09R	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-10D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-12D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-19S	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-21D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-21R	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-21S	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-23D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-23S	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-24S	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-33S	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-34D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-39D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-39I	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-39S	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-42I	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-45D	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-03	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-06	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-07	M- AND P-XYLENE	5/22/2002 0:00	P07-07-NWG-052202	1.57	1.57	UG_L	2	1	50.00
P07-08	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-10	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P07-14	M- AND P-XYLENE	5/23/2002 0:00	P07-14-NWG-052302	0.19	0.19	UG_L	1	1	100.00
P07-15	M- AND P-XYLENE	5/23/2002 0:00	P07-15-NWG-052302	0.77	0.77	UG_L	2	1	50.00
P07-16	M- AND P-XYLENE	5/23/2002 0:00	P07-16-NWG-052302	5	5	UG_L	1	1	100.00
P07-17	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-20	M- AND P-XYLENE	5/22/2002 0:00	P07-20-NWG-052202	0.1	0.1	UG_L	1	1	100.00
P07-21	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	M- AND P-XYLENE	5/22/2002 0:00	P07-22-NWG-052202	0.13	0.13	UG_L	1	1	100.00
P07-23	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-24	M- AND P-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-04D	METHYLENE CHLORIDE	5/29/2002 0:00	MW07-04D-NWG-052902	5 J	5	UG_L	1	1	100.00
MW07-09D	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	METHYLENE CHLORIDE	8/29/2000 0:00	MW07-09R-NWG-082900	27 T	27	UG_L	2	1	50.00
MW07-10D	METHYLENE CHLORIDE	8/30/2000 0:00	MW07-10D-NWG-083000	83 T	83	UG_L	2	1	50.00
MW07-10S	METHYLENE CHLORIDE	8/30/2000 0:00	MW07-10S-NWG-083000	7 T	7	UG_L	1	1	100.00
MW07-11D	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	METHYLENE CHLORIDE	8/29/2000 0:00	MW07-12D-NWG-082900	7 T	7	UG_L	2	1	50.00
MW07-13D	METHYLENE CHLORIDE	8/30/2000 0:00	MW07-13D-NWG-083000	5 T	5	UG_L	2	1	50.00
MW07-13S	METHYLENE CHLORIDE	8/30/2000 0:00	MW07-13S-NWG-083000	6 T	6	UG_L	2	1	50.00
MW07-17D	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	METHYLENE CHLORIDE	8/29/2000 0:00	MW07-19D-NWG-082900	6 T	6	UG_L	2	1	50.00
MW07-19S	METHYLENE CHLORIDE	8/30/2000 0:00	MW07-19S-NWG-083000	7	7	UG_L	2	1	50.00
MW07-21D	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	METHYLENE CHLORIDE	8/31/2000 0:00	MW07-21S-NWG-083100	5 T	5	UG_L	2	1	50.00
MW07-23D	METHYLENE CHLORIDE	8/29/2000 0:00	MW07-23D-NWG-082900	320 T	320	UG_L	2	1	50.00
MW07-23S	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	METHYLENE CHLORIDE	8/31/2000 0:00	MW07-24D-NWG-083100	40 T	40	UG_L	1	1	100.00
MW07-24DUT	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	METHYLENE CHLORIDE	8/31/2000 0:00	MW07-24S-NWG-083100	41 T	41	UG_L	1	1	100.00
MW07-25D	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	METHYLENE CHLORIDE	8/30/2000 0:00	MW07-25R-NWG-083000	82 T	82	UG_L	2	1	50.00
MW07-27D	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-10	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	METHYLENE CHLORIDE	5/23/2002 0:00	P07-16-NWG-052302	0.5 J	0.5	UG_L	2	1	50.00
P07-17	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	METHYLENE CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-04D	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	O-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-09R	O-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-10D	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-12D	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	O-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-19S	O-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-21D	O-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-21R	O-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-21S	O-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-23D	O-XYLENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-23S	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-24S	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-33S	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-34D	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-39D	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-39I	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-39S	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-42I	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-45D	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-03	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-06	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-07	O-XYLENE	5/22/2002 0:00	P07-07-NWG-052202	1.36	1.36	UG_L	2	1	50.00
P07-08	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-10	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-14	O-XYLENE	5/23/2002 0:00	P07-14-NWG-052302	0.18	0.18	UG_L	1	1	100.00
P07-15	O-XYLENE	5/23/2002 0:00	P07-15-NWG-052302	1.05	1.05	UG_L	2	1	50.00
P07-16	O-XYLENE	5/23/2002 0:00	P07-16-NWG-052302	5	5	UG_L	1	1	100.00
P07-17	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-20	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	O-XYLENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	O-XYLENE	5/22/2002 0:00	P07-22-NWG-052202	0.1	0.1	UG_L	1	1	100.00
P07-23	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-24	O-XYLENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-09-27D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-09-28D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-16I	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-16S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-18I	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-18S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24I	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-29-34I	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-29-34S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
DPT07-30I	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-30S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	TETRACHLOROETHENE	9/19/2011 15:42	DPT07-39-03D-091911	34 J	34	UG_L	4	1	25.00
DPT07-39-03I	TETRACHLOROETHENE	6/26/2012 11:20	DPT39-03I-062612	23	23	UG_L	4	1	25.00
DPT07-39-04D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-03D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-03S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-04D	TETRACHLOROETHENE	11/8/2007 0:00	MW07-04D_20071108	830 J	426	UG_L	18	17	94.44
MW07-04S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-05D	TETRACHLOROETHENE	5/23/1996 0:00	MW07-05D-NWG-052396	760 J	308	UG_L	11	10	90.91
MW07-05S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-09D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	17	0	0.00
MW07-09R	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	22	0	0.00
MW07-10D	TETRACHLOROETHENE	8/30/2000 0:00	MW07-10D-NWG-083000	19	11.8	UG_L	14	13	92.86
MW07-10S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-11D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	21	0	0.00
MW07-12D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	19	0	0.00
MW07-13D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-13S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-15D	TETRACHLOROETHENE	5/24/1996 0:00	MW07-15D-NWG-052496	1000	461	UG_L	4	4	100.00
MW07-16R	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-17D	TETRACHLOROETHENE	10/7/2008 10:10	MW07-17D-100708	1600	523	UG_L	14	13	92.86
MW07-18D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-19D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	17	0	0.00
MW07-19S	TETRACHLOROETHENE	11/13/2007 0:00	MW07-19S_20071113	4.2 J	2.6	UG_L	17	9	52.94
MW07-20D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-20S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-21D	TETRACHLOROETHENE	11/9/2007 0:00	MW07-21D_20071109	3.6 J	1.3	UG_L	22	8	36.36
MW07-21R	TETRACHLOROETHENE	9/23/2016 10:41	MW07-21R-ME20-1	29.5 J	20.3	UG_L	22	19	86.36
MW07-21S	TETRACHLOROETHENE	5/23/2002 0:00	MW07-21S-NWG-052302	0.27	0.24	UG_L	22	2	9.09
MW07-23D	TETRACHLOROETHENE	2/19/2003 0:00	MW07-23D-NWG-021903	6	3.6	UG_L	22	15	68.18
MW07-23S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-24D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-24DUT	TETRACHLOROETHENE	8/21/2001 0:00	MW07-24DUT-NWG-082101	0.1 J	0.1	UG_L	20	1	5.00
MW07-24S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-25D	TETRACHLOROETHENE	5/22/1996 0:00	MW07-25D-NWG-052296	84 J	50.5	UG_L	19	19	100.00
MW07-25R	TETRACHLOROETHENE	8/30/2000 0:00	MW07-25R-NWG-083000	60	16.3	UG_L	19	17	89.47
MW07-27D	TETRACHLOROETHENE	11/7/2007 0:00	MW07-27D_20071107	3.8 J	1.7	UG_L	14	9	64.29
MW07-28D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-29D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	8	0	0.00
MW07-30D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-32D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-32R	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-33D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	20	0	0.00
MW07-33S	TETRACHLOROETHENE	8/22/2001 0:00	MW07-33S-NWG-082201	0.6 J	0.44	UG_L	17	3	17.65
MW07-34D	TETRACHLOROETHENE	8/22/2001 0:00	MW07-34D-NWG-082201	0.3 J	0.3	UG_L	19	1	5.26
MW07-35D	TETRACHLOROETHENE	8/24/2004 0:00	MW07-35D-NWG-082404	51.4	34.5	UG_L	13	12	92.31
MW07-35S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-37D	TETRACHLOROETHENE	11/15/2006 10:20	MW07-37D-20061115	9.7	3.8	UG_L	15	14	93.33
MW07-37S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-38D	TETRACHLOROETHENE	2/14/2007 0:00	MW07-38D_20070214	79	53.3	UG_L	13	13	100.00
MW07-38S	TETRACHLOROETHENE	11/27/2007 0:00	MW07-38S_20071127	0.55 J	0.55	UG_L	13	1	7.69
MW07-39D	TETRACHLOROETHENE	10/8/2008 10:15	MW07-39D-100808	1 J	0.81	UG_L	16	3	18.75
MW07-39I	TETRACHLOROETHENE	10/8/2013 11:45	MW07-39I-100813	8.5 J	6.1	UG_L	16	6	37.50
MW07-39S	TETRACHLOROETHENE	10/8/2008 10:10	MW07-39S-100808	34 J	20.7	UG_L	16	8	50.00
MW07-40D	TETRACHLOROETHENE	9/19/2011 16:30	MW07-40D-091911	10 J	10	UG_L	4	1	25.00
MW07-41I	TETRACHLOROETHENE	011 4:45:00 PM6/25/2012 3:13:00 F	NA	3 J	3	UG_L	4	2	50.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-42I	TETRACHLOROETHENE	6/25/2012 15:13	MW07-42I-062512	6.7	6	UG_L	6	2	33.33
MW07-43D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-43S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-44D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-45D	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-45S	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
P07-02	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	16	0	0.00
P07-03	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	17	0	0.00
P07-04	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	25	0	0.00
P07-05	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	28	0	0.00
P07-06	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	29	0	0.00
P07-07	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	30	0	0.00
P07-08	TETRACHLOROETHENE	12/19/2003 0:00	P07-08-NWG-121903	1.15	0.95	UG_L	28	3	10.71
P07-09	TETRACHLOROETHENE	12/19/2003 0:00	P07-09-NWG-121903	1.19	0.649	UG_L	30	8	26.67
P07-10	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	29	0	0.00
P07-14	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	15	0	0.00
P07-15	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	18	0	0.00
P07-16	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	15	0	0.00
P07-17	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	14	0	0.00
P07-20	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	17	0	0.00
P07-21	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	18	0	0.00
P07-22	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	17	0	0.00
P07-23	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	19	0	0.00
P07-24	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	28	0	0.00
P07-28	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
P07-29	TETRACHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-04D	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	TOLUENE	5/30/2002 0:00	MW07-10D-NWG-053002	0.5 J	0.5	UG_L	2	1	50.00
MW07-10S	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-12D	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	TOLUENE	5/22/2002 0:00	MW07-13D-NWG-052202	1.41	1.41	UG_L	2	1	50.00
MW07-13S	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	TOLUENE	5/29/2002 0:00	MW07-17D-NWG-052902	1 J	1	UG_L	1	1	100.00
MW07-19D	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	TOLUENE	5/23/2002 0:00	MW07-21R-NWG-052302	0.11	0.11	UG_L	2	1	50.00
MW07-21S	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-34D	TOLUENE	5/30/2002 0:00	MW07-34D-NWG-053002	0.2 J	0.2	UG_L	1	1	100.00
P07-02	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	TOLUENE	5/22/2002 0:00	P07-05-NWG-052202	0.1 J	0.1	UG_L	1	1	100.00

TABLE D-2
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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P07-06	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-10	TOLUENE	5/29/2002 0:00	P07-10-NWG-052902	0.3 J	0.3	UG_L	1	1	100.00
P07-14	TOLUENE	5/23/2002 0:00	P07-14-NWG-052302	0.66	0.66	UG_L	2	1	50.00
P07-15	TOLUENE	5/23/2002 0:00	P07-15-NWG-052302	0.51	0.51	UG_L	2	1	50.00
P07-16	TOLUENE	5/23/2002 0:00	P07-16-NWG-052302	26 J	26	UG_L	2	1	50.00
P07-17	TOLUENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	TOLUENE	5/22/2002 0:00	P07-20-NWG-052202	1.64	1.64	UG_L	1	1	100.00
P07-21	TOLUENE	5/22/2002 0:00	P07-21-NWG-052202	0.29	0.29	UG_L	1	1	100.00
P07-22	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	TOLUENE	5/22/2002 0:00	P07-23-NWG-052202	0.62	0.62	UG_L	1	1	100.00
P07-24	TOLUENE	5/22/2002 0:00	P07-24-NWG-052202	7.23	7.23	UG_L	1	1	100.00
P07-28	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	TOLUENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-09-27D	TRANS-1,2-DICHLOROETHENE	9/29/2014 15:30	DPT07-09/27D-092914-1	870	630	UG_L	3	3	100.00
DPT07-09-28D	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-16I	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-16S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-18I	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-18S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24D	TRANS-1,2-DICHLOROETHENE	9/22/2016 12:51	DPT07-24D-ME20-1	3.5	3.1	UG_L	3	3	100.00
DPT07-24I	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-29-34I	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-29-34S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-30I	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-30S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	TRANS-1,2-DICHLOROETHENE	6/26/2012 10:05	DPT39-03D-062612	670	570	UG_L	4	4	100.00
DPT07-39-03I	TRANS-1,2-DICHLOROETHENE	9/19/2011 14:28	DPT07-39-03I-091911	460	244	UG_L	4	4	100.00
DPT07-39-04D	TRANS-1,2-DICHLOROETHENE	9/29/2014 14:05	DPT07-39-4D-092914-1	2600	2600	UG_L	3	2	66.67
MW07-03D	TRANS-1,2-DICHLOROETHENE	9/20/2016 14:50	MW07-03D-ME20-1	3.9 J	3.9	UG_L	1	1	100.00
MW07-03S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-04D	TRANS-1,2-DICHLOROETHENE	5/29/2002 0:00	MW07-04D-NWG-052902	140 E	45.3	UG_L	17	12	70.59
MW07-04S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-05D	TRANS-1,2-DICHLOROETHENE	10/16/2008 9:16	MW07-05D-101608	75 J	47	UG_L	10	8	80.00
MW07-05S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	9	0	0.00
MW07-09D	TRANS-1,2-DICHLOROETHENE	2/13/2007 0:00	MW07-09D_20070213	780	522	UG_L	16	16	100.00
MW07-09R	TRANS-1,2-DICHLOROETHENE	6/15/2012 10:35	MW07-09R-061512	28	14.2	UG_L	21	20	95.24
MW07-10D	TRANS-1,2-DICHLOROETHENE	8/30/2000 0:00	MW07-10D-NWG-083000	10	5.2	UG_L	13	11	84.62
MW07-10S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-11D	TRANS-1,2-DICHLOROETHENE	9/17/2015 9:30	MW07-11D-091715-1	47	15	UG_L	20	17	85.00
MW07-12D	TRANS-1,2-DICHLOROETHENE	10/2/2014 14:10	MW07-12D-100214-1	5.1	2.1	UG_L	18	18	100.00
MW07-13D	TRANS-1,2-DICHLOROETHENE	5/12/2008 16:25	MW07-13D	7.4	3	UG_L	13	11	84.62
MW07-13S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-15D	TRANS-1,2-DICHLOROETHENE	9/14/2011 9:46	MW07-15D-091411	66	57	UG_L	3	3	100.00
MW07-16R	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-17D	TRANS-1,2-DICHLOROETHENE	5/29/2002 0:00	MW07-17D-NWG-052902	4400 E	1330	UG_L	13	13	100.00
MW07-18D	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-19D	TRANS-1,2-DICHLOROETHENE	9/17/2015 11:35	MW07-19D-091715-1	110	52.8	UG_L	16	15	93.75
MW07-19S	TRANS-1,2-DICHLOROETHENE	008 2:15:00 PM9/30/2014 12:40:00	NA	270	174	UG_L	16	16	100.00
MW07-20D	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	9	0	0.00
MW07-20S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-21D	TRANS-1,2-DICHLOROETHENE	5/23/2002 0:00	MW07-21D-NWG-052302	210 E	129	UG_L	21	21	100.00
MW07-21R	TRANS-1,2-DICHLOROETHENE	8/31/2000 0:00	MW07-21R-NWG-083100	430	298	UG_L	21	21	100.00
MW07-21S	TRANS-1,2-DICHLOROETHENE	4/19/2010 12:30	MW07-21S-041910	120	32.2	UG_L	21	21	100.00
MW07-23D	TRANS-1,2-DICHLOROETHENE	11/9/2007 0:00	MW07-23D_20071109	83 J	42.6	UG_L	21	20	95.24
MW07-23S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	9	0	0.00

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Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-24D	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-24DUT	TRANS-1,2-DICHLOROETHENE	9/23/2016 9:50	MW07-24DUT-ME20-1	0.5 J	0.35	UG_L	20	6	30.00
MW07-24S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-25D	TRANS-1,2-DICHLOROETHENE	8/30/2000 0:00	MW07-25D-NWG-083000	200	21	UG_L	18	12	66.67
MW07-25R	TRANS-1,2-DICHLOROETHENE	02 12:00:00 AM8/21/2001 12:00:00	NA	260 EJ	113	UG_L	18	17	94.44
MW07-27D	TRANS-1,2-DICHLOROETHENE	2/16/2007 0:00	MW07-27D_20070216	522	384	UG_L	13	13	100.00
MW07-28D	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-29D	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-30D	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-32D	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-32R	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	5	0	0.00
MW07-33D	TRANS-1,2-DICHLOROETHENE	5/11/2005 0:00	MW07-33D-NWG-051105	4.5 J	3.19	UG_L	20	19	95.00
MW07-33S	TRANS-1,2-DICHLOROETHENE	5/11/2005 0:00	MW07-33S-NWG-051105	1.7 J	0.87	UG_L	17	5	29.41
MW07-34D	TRANS-1,2-DICHLOROETHENE	4/21/2010 15:05	MW07-34D-042110	96	42.8	UG_L	20	20	100.00
MW07-35D	TRANS-1,2-DICHLOROETHENE	5/8/2008 13:00	MW07-35D	6.3	4.6	UG_L	13	7	53.85
MW07-35S	TRANS-1,2-DICHLOROETHENE	2/21/2003 0:00	MW07-35S-NWG-022103	0.25 J	0.25	UG_L	14	1	7.14
MW07-37D	TRANS-1,2-DICHLOROETHENE	5/11/2005 0:00	MW07-37D-051105	29 J	20.3	UG_L	15	15	100.00
MW07-37S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-38D	TRANS-1,2-DICHLOROETHENE	8/24/2004 0:00	MW07-38D-082404	1.7 J	1.1	UG_L	13	7	53.85
MW07-38S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-39D	TRANS-1,2-DICHLOROETHENE	4/8/2009 9:22	MW07-39D-040809	750	342	UG_L	16	15	93.75
MW07-39I	TRANS-1,2-DICHLOROETHENE	5/13/2008 16:49	MW07-39I	1100 J	672	UG_L	16	16	100.00
MW07-39S	TRANS-1,2-DICHLOROETHENE	10/8/2008 10:10	MW07-39S-100808	240 J	191	UG_L	16	16	100.00
MW07-40D	TRANS-1,2-DICHLOROETHENE	6/28/2012 15:34	MW07-40D-062812	180	160	UG_L	3	2	66.67
MW07-41I	TRANS-1,2-DICHLOROETHENE	9/20/2011 16:45	MW07-41I-092011	390	330	UG_L	4	3	75.00
MW07-42I	TRANS-1,2-DICHLOROETHENE	9/20/2011 14:55	MW07-42I-092011	780	620	UG_L	6	6	100.00
MW07-43D	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-43S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-44D	TRANS-1,2-DICHLOROETHENE	9/20/2011 11:00	MW07-44D-092011	8.6 J	6.4	UG_L	4	3	75.00
MW07-45D	TRANS-1,2-DICHLOROETHENE	9/19/2011 15:00	MW07-45D-091911	240	120	UG_L	6	5	83.33
MW07-45S	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
P07-02	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	16	0	0.00
P07-03	TRANS-1,2-DICHLOROETHENE	4/14/2010 15:45	P07-03-041410	2	2	UG_L	17	1	5.88
P07-04	TRANS-1,2-DICHLOROETHENE	5/24/2005 0:00	P07-04-NWG-052405	1.5 J	0.86	UG_L	25	6	24.00
P07-05	TRANS-1,2-DICHLOROETHENE	12/19/2003 0:00	P07-05-NWG-121903	32	15.9	UG_L	28	27	96.43
P07-06	TRANS-1,2-DICHLOROETHENE	11/29/2005 0:00	P07-06-NWG-112905	87	31.9	UG_L	29	28	96.55
P07-07	TRANS-1,2-DICHLOROETHENE	9/17/2009 12:05	P07-07-091709	95 J	45.6	UG_L	30	30	100.00
P07-08	TRANS-1,2-DICHLOROETHENE	12/19/2003 0:00	P07-08-NWG-121903	120	51.6	UG_L	28	25	89.29
P07-09	TRANS-1,2-DICHLOROETHENE	12/19/2003 0:00	P07-09-NWG-121903	350	129	UG_L	30	29	96.67
P07-10	TRANS-1,2-DICHLOROETHENE	2/28/2007 0:00	P07-10_20070228	33.6	19.3	UG_L	30	29	96.67
P07-14	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	15	0	0.00
P07-15	TRANS-1,2-DICHLOROETHENE	5/24/2005 0:00	P07-15-NWG-052405	4.4	1.8	UG_L	18	15	83.33
P07-16	TRANS-1,2-DICHLOROETHENE	10/13/2009 9:49	P07-16-101309	2.1 J	1.4	UG_L	15	4	26.67
P07-17	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	14	0	0.00
P07-20	TRANS-1,2-DICHLOROETHENE	5/24/2005 0:00	P07-20-NWG-052405	55	15.3	UG_L	17	14	82.35
P07-21	TRANS-1,2-DICHLOROETHENE	4/13/2009 15:03	P07-21-041309	7	3.51	UG_L	19	18	94.74
P07-22	TRANS-1,2-DICHLOROETHENE	2/27/2007 0:00	P07-22_20070227	6	2.96	UG_L	17	13	76.47
P07-23	TRANS-1,2-DICHLOROETHENE	4/13/2009 15:18	P07-23-041309	1.9 J	0.91	UG_L	19	8	42.11
P07-24	TRANS-1,2-DICHLOROETHENE	5/8/2008 15:25	P07-24	5	1.66	UG_L	28	14	50.00
P07-28	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
P07-29	TRANS-1,2-DICHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-04D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-09R	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-10S	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-12D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-19S	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21R	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-21S	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-23S	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24S	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33S	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-06	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-07	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-14	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-15	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-16	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	3	0	0.00
P07-17	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-21	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-23	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-24	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-28	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	TRANS-1,3-DICHLOROPROPENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-09-27D	TRICHLOROETHENE	9/29/2014 15:30	DPT07-09/27D-092914-1	23000	16000	UG_L	3	3	100.00
DPT07-09-28D	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-16I	TRICHLOROETHENE	9/22/2016 10:00	DPT07-16I-ME20-1	83	42	UG_L	2	2	100.00
DPT07-16S	TRICHLOROETHENE	6/28/2012 15:02	DPT16S-062812	0.69 J	0.69	UG_L	2	1	50.00
DPT07-18I	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-18S	TRICHLOROETHENE	10/1/2014 12:10	DPT07-18S-100114-1	1.2	1.2	UG_L	3	1	33.33
DPT07-24D	TRICHLOROETHENE	9/22/2016 12:51	DPT07-24D-ME20-1	99.8	81.6	UG_L	3	3	100.00
DPT07-24I	TRICHLOROETHENE	9/22/2016 12:45	DPT07-24I-ME20-1	1.9	1.7	UG_L	2	2	100.00
DPT07-29-34I	TRICHLOROETHENE	6/28/2012 13:10	DPT29-34I-062812	0.71 J	0.71	UG_L	3	1	33.33
DPT07-29-34S	TRICHLOROETHENE	6/28/2012 14:37	DPT29-34S-062812	0.73 J	0.73	UG_L	3	1	33.33
DPT07-30I	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-30S	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	TRICHLOROETHENE	6/26/2012 10:05	DPT39-03D-062612	52000	43000	UG_L	4	4	100.00
DPT07-39-03I	TRICHLOROETHENE	9/19/2011 14:28	DPT07-39-03I-091911	8900	5930	UG_L	4	4	100.00
DPT07-39-04D	TRICHLOROETHENE	9/29/2014 14:05	DPT07-39-4D-092914-1	98000	89000	UG_L	3	3	100.00
MW07-03D	TRICHLOROETHENE	5/22/1996 0:00	MW07-03D-NWG-052296	65 J	34	UG_L	2	2	100.00
MW07-03S	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-04D	TRICHLOROETHENE	5/28/1996 0:00	MW07-04D-NWG-052896	46000	16800	UG_L	18	18	100.00
MW07-04S	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00

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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-05D	TRICHLOROETHENE	5/23/1996 0:00	MW07-05D-NWG-052396	47000 J	8120	UG_L	11	11	100.00
MW07-05S	TRICHLOROETHENE	11/15/2007 0:00	MW07-05S_20071115	4.5	2.5	UG_L	10	2	20.00
MW07-09D	TRICHLOROETHENE	5/21/2002 0:00	MW07-09D-NWG-052102	8200 J	5040	UG_L	17	17	100.00
MW07-09R	TRICHLOROETHENE	6/15/2012 10:35	MW07-09R-061512	98	38.8	UG_L	22	20	90.91
MW07-10D	TRICHLOROETHENE	8/30/2000 0:00	MW07-10D-NWG-083000	1000	449	UG_L	14	14	100.00
MW07-10S	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-11D	TRICHLOROETHENE	9/17/2015 9:30	MW07-11D-091715-1	1100	280	UG_L	21	18	85.71
MW07-12D	TRICHLOROETHENE	10/2/2014 14:10	MW07-12D-100214-1	68	16.6	UG_L	19	18	94.74
MW07-13D	TRICHLOROETHENE	11/14/2007 0:00	MW07-13D_20071114	200	83.7	UG_L	15	15	100.00
MW07-13S	TRICHLOROETHENE	11/27/2007 0:00	MW07-13S_20071127	6.9	2.8	UG_L	14	3	21.43
MW07-15D	TRICHLOROETHENE	5/24/1996 0:00	MW07-15D-NWG-052496	47000	16800	UG_L	4	4	100.00
MW07-16R	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-17D	TRICHLOROETHENE	10/7/2008 10:10	MW07-17D-100708	150000	58700	UG_L	14	14	100.00
MW07-18D	TRICHLOROETHENE	6/27/2012 14:55	MW07-18D-062712	0.85 J	0.85	UG_L	7	1	14.29
MW07-19D	TRICHLOROETHENE	9/17/2015 11:35	MW07-19D-091715-1	2400	1010	UG_L	17	16	94.12
MW07-19S	TRICHLOROETHENE	9/30/2014 12:40	MW07-19S-093014-1	8700	5810	UG_L	17	17	100.00
MW07-20D	TRICHLOROETHENE	11/14/2007 0:00	MW07-20D_20071114	1.8	1.8	UG_L	10	1	10.00
MW07-20S	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-21D	TRICHLOROETHENE	10/1/2014 11:20	MW07-21D-100114-1	6400	3830	UG_L	22	22	100.00
MW07-21R	TRICHLOROETHENE	AM10/1/2014 4:15:00 PM6/14/2012	NA	11000	8630	UG_L	22	22	100.00
MW07-21S	TRICHLOROETHENE	4/19/2010 12:30	MW07-21S-041910	4100	772	UG_L	22	22	100.00
MW07-23D	TRICHLOROETHENE	11/9/2007 0:00	MW07-23D_20071109	920 J	470	UG_L	22	22	100.00
MW07-23S	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-24D	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-24DUT	TRICHLOROETHENE	10/11/2013 11:50	MW07-24DUT-101113	23 J	13.2	UG_L	20	20	100.00
MW07-24S	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-25D	TRICHLOROETHENE	5/22/1996 0:00	MW07-25D-NWG-052296	3000	1130	UG_L	19	19	100.00
MW07-25R	TRICHLOROETHENE	8/21/2001 0:00	MW07-25R-NWG-082101	3100 J	1450	UG_L	19	19	100.00
MW07-27D	TRICHLOROETHENE	5/13/2008 10:18	MW07-27D	15000	9890	UG_L	14	14	100.00
MW07-28D	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-29D	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	8	0	0.00
MW07-30D	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-32D	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-32R	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-33D	TRICHLOROETHENE	12/12/2003 0:00	MW07-33D-NWG-121203	34	18.8	UG_L	20	19	95.00
MW07-33S	TRICHLOROETHENE	8/22/2001 0:00	MW07-33S-NWG-082201	30 J	4.63	UG_L	17	10	58.82
MW07-34D	TRICHLOROETHENE	9/17/2015 10:00	MW07-34D-091715-1	1700	506	UG_L	20	19	95.00
MW07-35D	TRICHLOROETHENE	11/10/2006 11:15	MW07-35D-20061110	1210	814	UG_L	13	13	100.00
MW07-35S	TRICHLOROETHENE	9/30/2009 13:45	MW07-35S-093009	0.72 J	0.61	UG_L	14	3	21.43
MW07-37D	TRICHLOROETHENE	2/21/2007 0:00	MW07-37D_20070221	911	643	UG_L	15	15	100.00
MW07-37S	TRICHLOROETHENE	11/16/2007 0:00	MW07-37S_20071116	5 J	3.8	UG_L	12	2	16.67
MW07-38D	TRICHLOROETHENE	5/18/2005 0:00	MW07-38D-051805	685 J	394	UG_L	13	13	100.00
MW07-38S	TRICHLOROETHENE	11/27/2007 0:00	MW07-38S_20071127	1.6	1.1	UG_L	13	7	53.85
MW07-39D	TRICHLOROETHENE	11/15/2006 11:30	MW07-39D-20061115	29000	12200	UG_L	16	16	100.00
MW07-39I	TRICHLOROETHENE	2/20/2007 0:00	MW07-39I_20070220	31800	23600	UG_L	16	16	100.00
MW07-39S	TRICHLOROETHENE	10/8/2008 10:10	MW07-39S-100808	23000	16600	UG_L	16	16	100.00
MW07-40D	TRICHLOROETHENE	011 4:30:00 PM6/28/2012 3:34:00 P	NA	9800	8100	UG_L	4	4	100.00
MW07-41I	TRICHLOROETHENE	9/20/2011 16:45	MW07-41I-092011	3500	3000	UG_L	4	4	100.00
MW07-42I	TRICHLOROETHENE	9/20/2011 14:55	MW07-42I-092011	20000	14000	UG_L	6	6	100.00
MW07-43D	TRICHLOROETHENE	10/8/2014 15:10	MW07-43D-100814-1	0.63 J	0.52	UG_L	4	2	50.00
MW07-43S	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-44D	TRICHLOROETHENE	11 11:00:00 AM9/21/2016 12:13:00	NA	240	210	UG_L	4	4	100.00
MW07-45D	TRICHLOROETHENE	9/19/2011 15:00	MW07-45D-091911	4600	2000	UG_L	6	6	100.00
MW07-45S	TRICHLOROETHENE	NA	NA	NA	NA	UG_L	3	0	0.00
P07-02	TRICHLOROETHENE	11/29/2006 10:25	P07-02-20061129	3.6	2	UG_L	16	2	12.50
P07-03	TRICHLOROETHENE	4/14/2010 15:45	P07-03-041410	7	3.3	UG_L	17	4	23.53
P07-04	TRICHLOROETHENE	11/27/2007 0:00	P07-04_20071127	2.4	1.9	UG_L	25	2	8.00

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Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P07-05	TRICHLOROETHENE	2/27/2003 0:00	P07-05-NWG-022703	54 J	9.1	UG_L	28	11	39.29
P07-06	TRICHLOROETHENE	11/29/2005 0:00	P07-06-NWG-112905	374	35.7	UG_L	29	11	37.93
P07-07	TRICHLOROETHENE	11/29/2005 0:00	P07-07-NWG-112905	664 J	238	UG_L	30	30	100.00
P07-08	TRICHLOROETHENE	12/19/2003 0:00	P07-08-NWG-121903	2700	852	UG_L	28	26	92.86
P07-09	TRICHLOROETHENE	12/19/2003 0:00	P07-09-NWG-121903	3900	1360	UG_L	30	28	93.33
P07-10	TRICHLOROETHENE	10/27/2004 0:00	P07-10-NWG-102704	370	187	UG_L	30	29	96.67
P07-14	TRICHLOROETHENE	7/2/2012 11:31	P07-14-070212	1.1 J	0.64	UG_L	15	2	13.33
P07-15	TRICHLOROETHENE	5/24/2005 0:00	P07-15-NWG-052405	5.5 J	2.52	UG_L	18	13	72.22
P07-16	TRICHLOROETHENE	5/24/2005 0:00	P07-16-NWG-052405	8	5.5	UG_L	15	14	93.33
P07-17	TRICHLOROETHENE	2/27/2003 0:00	P07-17-NWG-022703	0.1 J	0.1	UG_L	14	1	7.14
P07-20	TRICHLOROETHENE	2/27/2003 0:00	P07-20-NWG-022703	84 J	13.8	UG_L	17	8	47.06
P07-21	TRICHLOROETHENE	2/27/2007 0:00	P07-21_20070227	67.5	20.8	UG_L	19	19	100.00
P07-22	TRICHLOROETHENE	5/24/2005 0:00	P07-22-NWG-052405	129	37.2	UG_L	17	10	58.82
P07-23	TRICHLOROETHENE	5/8/2008 15:00	P07-23	56 J	22	UG_L	19	17	89.47
P07-24	TRICHLOROETHENE	5/24/2005 0:00	P07-24-NWG-052405	88.8	32.9	UG_L	28	25	89.29
P07-28	TRICHLOROETHENE	2/27/2003 0:00	P07-28-NWG-022703	0.16 J	0.16	UG_L	12	1	8.33
P07-29	TRICHLOROETHENE	11/14/2007 0:00	P07-29_20071114	1	1	UG_L	12	1	8.33
DPT07-09-27D	VINYL CHLORIDE	6/28/2012 11:39	DPT09-27D-062812	44	44	UG_L	3	1	33.33
DPT07-09-28D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-16I	VINYL CHLORIDE	9/22/2016 10:00	DPT07-16I-ME20-1	5.2	5.2	UG_L	2	1	50.00
DPT07-16S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-18I	VINYL CHLORIDE	9/22/2016 11:50	DPT07-18I-ME20-1	0.8 J	0.8	UG_L	3	1	33.33
DPT07-18S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-24D	VINYL CHLORIDE	9/22/2016 12:51	DPT07-24D-ME20-1	6.5	4.7	UG_L	3	3	100.00
DPT07-24I	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
DPT07-29-34I	VINYL CHLORIDE	6/28/2012 13:10	DPT29-34I-062812	0.54 J	0.54	UG_L	3	1	33.33
DPT07-29-34S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	3	0	0.00
DPT07-30I	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-30S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	1	0	0.00
DPT07-39-03D	VINYL CHLORIDE	9/19/2011 15:42	DPT07-39-03D-091911	87	68	UG_L	4	3	75.00
DPT07-39-03I	VINYL CHLORIDE	9/29/2014 14:20	DPT07-39-3I-092914-1	170	80	UG_L	4	4	100.00
DPT07-39-04D	VINYL CHLORIDE	6/28/2012 16:00	DPT39-04D-062812	69	61	UG_L	3	2	66.67
MW07-03D	VINYL CHLORIDE	5/22/1996 0:00	MW07-03D-NWG-052296	31 J	17	UG_L	2	2	100.00
MW07-03S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-04D	VINYL CHLORIDE	11/8/2007 0:00	MW07-04D_20071108	12 J	5.92	UG_L	18	12	66.67
MW07-04S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-05D	VINYL CHLORIDE	4/2/2009 15:01	MW07-05D-040209	14	8.3	UG_L	11	7	63.64
MW07-05S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-09D	VINYL CHLORIDE	5/7/2008 10:20	MW07-09D	170	106	UG_L	17	15	88.24
MW07-09R	VINYL CHLORIDE	6/15/2012 10:35	MW07-09R-061512	29	10.9	UG_L	22	20	90.91
MW07-10D	VINYL CHLORIDE	07 12:00:00 AM11/7/2007 12:00:00	NA	1.9	1.4	UG_L	14	8	57.14
MW07-10S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-11D	VINYL CHLORIDE	9/17/2015 9:30	MW07-11D-091715-1	18	7.63	UG_L	21	18	85.71
MW07-12D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	19	0	0.00
MW07-13D	VINYL CHLORIDE	5/22/2002 0:00	MW07-13D-NWG-052202	2	1.1	UG_L	14	7	50.00
MW07-13S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	14	0	0.00
MW07-15D	VINYL CHLORIDE	9/14/2011 9:46	MW07-15D-091411	2.9 J	2.4	UG_L	4	2	50.00
MW07-16R	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-17D	VINYL CHLORIDE	11/7/2007 0:00	MW07-17D_20071107	140 J	67.4	UG_L	14	9	64.29
MW07-18D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-19D	VINYL CHLORIDE	9/17/2015 11:35	MW07-19D-091715-1	220	35.9	UG_L	17	16	94.12
MW07-19S	VINYL CHLORIDE	11/13/2007 0:00	MW07-19S_20071113	56 J	25	UG_L	17	11	64.71
MW07-20D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-20S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-21D	VINYL CHLORIDE	10/11/2013 12:15	MW07-21D-101113	22 J	12.4	UG_L	22	18	81.82
MW07-21R	VINYL CHLORIDE	9/23/2016 10:41	MW07-21R-ME20-1	150	28	UG_L	22	18	81.82
MW07-21S	VINYL CHLORIDE	9/23/2016 9:00	MW07-21S-ME20-1	14.2	3.75	UG_L	22	17	77.27

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-23D	VINYL CHLORIDE	11/9/2007 0:00	MW07-23D_20071109	7 J	4.21	UG_L	22	16	72.73
MW07-23S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	10	0	0.00
MW07-24D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-24DUT	VINYL CHLORIDE	11/13/2007 0:00	MW07-24DUT_20071113	0.39 J	0.27	UG_L	20	3	15.00
MW07-24S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-25D	VINYL CHLORIDE	8/30/2000 0:00	MW07-25D-NWG-083000	19	9.6	UG_L	19	2	10.53
MW07-25R	VINYL CHLORIDE	8/21/2001 0:00	MW07-25R-NWG-082101	22	10.7	UG_L	19	14	73.68
MW07-27D	VINYL CHLORIDE	10/8/2014 16:10	MW07-27D-100814-1	140	86	UG_L	14	13	92.86
MW07-28D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	11	0	0.00
MW07-29D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	8	0	0.00
MW07-30D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-32D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	7	0	0.00
MW07-32R	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	6	0	0.00
MW07-33D	VINYL CHLORIDE	2/24/2003 0:00	MW07-33D-NWG-022403	0.13 J	0.13	UG_L	20	2	10.00
MW07-33S	VINYL CHLORIDE	4/14/2009 10:30	MW07-33S-041409	15 J	6.04	UG_L	17	9	52.94
MW07-34D	VINYL CHLORIDE	9/17/2015 10:00	MW07-34D-091715-1	38	21.1	UG_L	20	19	95.00
MW07-35D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-35S	VINYL CHLORIDE	2/21/2003 0:00	MW07-35S-NWG-022103	0.48 J	0.48	UG_L	14	1	7.14
MW07-37D	VINYL CHLORIDE	9/20/2011 9:39	MW07-37D-092011	0.42 J	0.37	UG_L	15	4	26.67
MW07-37S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-38D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-38S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	13	0	0.00
MW07-39D	VINYL CHLORIDE	4/8/2009 9:22	MW07-39D-040809	190	87.1	UG_L	16	14	87.50
MW07-39I	VINYL CHLORIDE	9/19/2011 15:58	MW07-39I-091911	230	135	UG_L	16	10	62.50
MW07-39S	VINYL CHLORIDE	9/19/2011 14:53	MW07-39S-091911	82	47.4	UG_L	16	7	43.75
MW07-40D	VINYL CHLORIDE	9/19/2011 16:30	MW07-40D-091911	28 J	28	UG_L	4	1	25.00
MW07-41I	VINYL CHLORIDE	011 4:45:00 PM6/25/2012 3:13:00 F	NA	130	110	UG_L	4	4	100.00
MW07-42I	VINYL CHLORIDE	6/25/2012 15:13	MW07-42I-062512	180	150	UG_L	6	6	100.00
MW07-43D	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-43S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	4	0	0.00
MW07-44D	VINYL CHLORIDE	9/20/2011 11:00	MW07-44D-092011	1.2 J	1.2	UG_L	4	1	25.00
MW07-45D	VINYL CHLORIDE	9/19/2011 15:00	MW07-45D-091911	27	15	UG_L	6	3	50.00
MW07-45S	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	3	0	0.00
P07-02	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	16	0	0.00
P07-03	VINYL CHLORIDE	4/14/2010 15:45	P07-03-041410	0.4 J	0.4	UG_L	17	1	5.88
P07-04	VINYL CHLORIDE	5/24/2005 0:00	P07-04-NWG-052405	4.5	2.3	UG_L	25	10	40.00
P07-05	VINYL CHLORIDE	6/28/2012 9:23	P07-05-062812	74	27.5	UG_L	28	26	92.86
P07-06	VINYL CHLORIDE	10/14/2008 15:15	P07-06-101408	71	30.5	UG_L	29	27	93.10
P07-07	VINYL CHLORIDE	10/27/2004 0:00	P07-07-NWG-102704	243	52.8	UG_L	30	28	93.33
P07-08	VINYL CHLORIDE	2/28/2007 0:00	P07-08_20070228	165	34.7	UG_L	28	20	71.43
P07-09	VINYL CHLORIDE	12/4/2007 0:00	P07-09_20071204	390	49.8	UG_L	30	28	93.33
P07-10	VINYL CHLORIDE	5/8/2008 15:15	P07-10	34	7.95	UG_L	30	23	76.67
P07-14	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	15	0	0.00
P07-15	VINYL CHLORIDE	5/14/2008 10:20	P07-15	2.2 J	1	UG_L	18	5	27.78
P07-16	VINYL CHLORIDE	10/13/2009 9:49	P07-16-101309	0.88 J	0.64	UG_L	15	2	13.33
P07-17	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	14	0	0.00
P07-20	VINYL CHLORIDE	4/13/2009 15:06	P07-20-041309	110	28.9	UG_L	17	10	58.82
P07-21	VINYL CHLORIDE	2/27/2007 0:00	P07-21_20070227	2.3	1.1	UG_L	18	10	55.56
P07-22	VINYL CHLORIDE	2/27/2007 0:00	P07-22_20070227	1.6	0.77	UG_L	17	4	23.53
P07-23	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	19	0	0.00
P07-24	VINYL CHLORIDE	2/27/2007 0:00	P07-24_20070227	1.4	0.87	UG_L	28	4	14.29
P07-28	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	12	0	0.00
P07-29	VINYL CHLORIDE	NA	NA	NA	NA	UG_L	12	0	0.00
MW07-04D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-09D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-09R	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-10D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00

TABLE D-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Parameter	Collection Date(s) of Sample Highest Concentration	Sample ID with Highest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
MW07-10S	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-11D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-12D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-13S	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-17D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-19D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-19S	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-21D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-21R	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-21S	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-23D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	3	0	0.00
MW07-23S	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-24DUT	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-24S	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-25D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-25R	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-27D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-28D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-33D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-33S	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-34D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
MW07-39D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-39I	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-39S	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-42I	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
MW07-45D	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
P07-02	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-03	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
P07-04	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
P07-05	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-06	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-07	XYLENES, TOTAL	5/22/2002 0:00	P07-07-NWG-052202	2.93	2.93	UG_L	2	1	50.00
P07-08	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
P07-09	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-10	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-14	XYLENES, TOTAL	5/23/2002 0:00	P07-14-NWG-052302	0.37	0.37	UG_L	2	1	50.00
P07-15	XYLENES, TOTAL	5/23/2002 0:00	P07-15-NWG-052302	1.82	1.82	UG_L	3	1	33.33
P07-16	XYLENES, TOTAL	5/23/2002 0:00	P07-16-NWG-052302	10	10	UG_L	2	1	50.00
P07-17	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-20	XYLENES, TOTAL	5/22/2002 0:00	P07-20-NWG-052202	0.1	0.1	UG_L	1	1	100.00
P07-21	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
P07-22	XYLENES, TOTAL	5/22/2002 0:00	P07-22-NWG-052202	0.23	0.23	UG_L	1	1	100.00
P07-23	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-24	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	2	0	0.00
P07-28	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00
P07-29	XYLENES, TOTAL	NA	NA	NA	NA	UG_L	1	0	0.00

Notes:
U = Not Detected; UJ = Detection Limit Approximate; J = Quantitation Approximate; R = Rejected
(1) If sample was not detected, one half of detection limit was used in calculation of average concentration.
Maximum value presented when original and duplicate samples were analyzed

Mann Kendall Tables

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TABLE D-3
MANN KENDALL TREND TESTS FOR SEDIMENT LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED07-05	1,1,2,2-TETRACHLOROETHANE	4	2	2	6	Not Significant
SED07-05	TRICHLOROETHENE	4	2	2	6	Not Significant
SED07-05	CIS-1,2-DICHLOROETHENE	4	0	0	NA	No Trend
SED07-05	TRANS-1,2-DICHLOROETHENE	4	2	2	6	Not Significant
SED07-05	VINYL CHLORIDE	4	2	2	6	Not Significant
SED07-05	TETRACHLOROETHENE	4	2	2	6	Not Significant
SED07-06	1,1,2,2-TETRACHLOROETHANE	6	6	6	11	Not Significant
SED07-06	TRICHLOROETHENE	6	6	6	11	Not Significant
SED07-06	CIS-1,2-DICHLOROETHENE	6	4	4	11	Not Significant
SED07-06	TRANS-1,2-DICHLOROETHENE	6	4	4	11	Not Significant
SED07-06	VINYL CHLORIDE	6	4	4	11	Not Significant
SED07-06	TETRACHLOROETHENE	6	6	6	11	Not Significant
SED07-07	1,1,2,2-TETRACHLOROETHANE	10	11	11	21	Not Significant
SED07-07	TRICHLOROETHENE	10	12	12	21	Not Significant
SED07-07	CIS-1,2-DICHLOROETHENE	10	14	14	21	Not Significant
SED07-07	TRANS-1,2-DICHLOROETHENE	10	10	10	21	Not Significant
SED07-07	VINYL CHLORIDE	10	11	11	21	Not Significant
SED07-07	TETRACHLOROETHENE	10	11	11	21	Not Significant
SED07-08	1,1,2,2-TETRACHLOROETHANE	8	13	13	16	Not Significant
SED07-08	TRICHLOROETHENE	8	13	13	16	Not Significant
SED07-08	CIS-1,2-DICHLOROETHENE	8	9	9	16	Not Significant
SED07-08	TRANS-1,2-DICHLOROETHENE	8	9	9	16	Not Significant
SED07-08	VINYL CHLORIDE	8	6	6	16	Not Significant
SED07-08	TETRACHLOROETHENE	8	11	11	16	Not Significant
SED07-09	1,1,2,2-TETRACHLOROETHANE	11	23	1.713	1.645	Upward Trend
SED07-09	TRICHLOROETHENE	11	14	1.015	1.645	Not Significant
SED07-09	CIS-1,2-DICHLOROETHENE	11	15	1.090	1.645	Not Significant
SED07-09	TRANS-1,2-DICHLOROETHENE	11	20	1.484	1.645	Not Significant
SED07-09	VINYL CHLORIDE	11	5	0.3114	1.645	Not Significant
SED07-09	TETRACHLOROETHENE	11	17	1.246	1.645	Not Significant
SED07-10	1,1,2,2-TETRACHLOROETHANE	6	3	3	11	Not Significant
SED07-10	TRICHLOROETHENE	6	5	5	11	Not Significant
SED07-10	CIS-1,2-DICHLOROETHENE	6	3	3	11	Not Significant
SED07-10	TRANS-1,2-DICHLOROETHENE	6	3	3	11	Not Significant
SED07-10	VINYL CHLORIDE	6	3	3	11	Not Significant
SED07-10	TETRACHLOROETHENE	6	3	3	11	Not Significant

Notes:

Datasets presented for all analytes detected in at least one location since ME-01.

Field duplicates assigned the maximum value.

A significance level of 95% was used to interpret results.

* - When N > 10, the Normal approximation is used and calculated per box 4-9 in Data Quality Assessment: Statistical Methods for Practitioners.

EPA QA/G-9S. When the normal approximation is used, the critical value is the standard normal distribution.

When S is 0, no critical value is calculated and a conclusion of no trend is made.

NA = The Mann-Kendall Trend Test was not computed because there were not at least 4 samples, or there were less than 3 detected concentrations.

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TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
DPT07-09-27D	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
DPT07-09-27D	TRICHLOROETHENE	3	---	---	NA	NA
DPT07-09-27D	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-09-27D	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-09-27D	VINYL CHLORIDE	3	---	---	NA	NA
DPT07-09-27D	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
DPT07-09-27D	1,1-DICHLOROETHENE	3	---	---	NA	NA
DPT07-09-27D	1,2-DICHLOROETHANE	3	---	---	NA	NA
DPT07-09-27D	BENZENE	3	---	---	NA	NA
DPT07-09-27D	CHLOROFORM	3	---	---	NA	NA
DPT07-09-27D	TETRACHLOROETHENE	3	---	---	NA	NA
DPT07-09-28D	1,1,2,2-TETRACHLOROETHANE	1	---	---	NA	NA
DPT07-09-28D	TRICHLOROETHENE	1	---	---	NA	NA
DPT07-09-28D	CIS-1,2-DICHLOROETHENE	1	---	---	NA	NA
DPT07-09-28D	TRANS-1,2-DICHLOROETHENE	1	---	---	NA	NA
DPT07-09-28D	VINYL CHLORIDE	1	---	---	NA	NA
DPT07-09-28D	1,1,2-TRICHLOROETHANE	1	---	---	NA	NA
DPT07-09-28D	1,1-DICHLOROETHENE	1	---	---	NA	NA
DPT07-09-28D	1,2-DICHLOROETHANE	1	---	---	NA	NA
DPT07-09-28D	BENZENE	1	---	---	NA	NA
DPT07-09-28D	CHLOROFORM	1	---	---	NA	NA
DPT07-09-28D	TETRACHLOROETHENE	1	---	---	NA	NA
DPT07-16I	1,1,2,2-TETRACHLOROETHANE	2	---	---	NA	NA
DPT07-16I	TRICHLOROETHENE	2	---	---	NA	NA
DPT07-16I	CIS-1,2-DICHLOROETHENE	2	---	---	NA	NA
DPT07-16I	TRANS-1,2-DICHLOROETHENE	2	---	---	NA	NA
DPT07-16I	VINYL CHLORIDE	2	---	---	NA	NA
DPT07-16I	1,1,2-TRICHLOROETHANE	2	---	---	NA	NA
DPT07-16I	1,1-DICHLOROETHENE	2	---	---	NA	NA
DPT07-16I	1,2-DICHLOROETHANE	2	---	---	NA	NA
DPT07-16I	BENZENE	2	---	---	NA	NA
DPT07-16I	CHLOROFORM	2	---	---	NA	NA
DPT07-16I	TETRACHLOROETHENE	2	---	---	NA	NA
DPT07-16S	1,1,2,2-TETRACHLOROETHANE	2	---	---	NA	NA
DPT07-16S	TRICHLOROETHENE	2	---	---	NA	NA
DPT07-16S	CIS-1,2-DICHLOROETHENE	2	---	---	NA	NA
DPT07-16S	TRANS-1,2-DICHLOROETHENE	2	---	---	NA	NA
DPT07-16S	VINYL CHLORIDE	2	---	---	NA	NA
DPT07-16S	1,1,2-TRICHLOROETHANE	2	---	---	NA	NA
DPT07-16S	1,1-DICHLOROETHENE	2	---	---	NA	NA
DPT07-16S	1,2-DICHLOROETHANE	2	---	---	NA	NA
DPT07-16S	BENZENE	2	---	---	NA	NA
DPT07-16S	CHLOROFORM	2	---	---	NA	NA
DPT07-16S	TETRACHLOROETHENE	2	---	---	NA	NA
DPT07-18I	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
DPT07-18I	TRICHLOROETHENE	3	---	---	NA	NA
DPT07-18I	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-18I	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-18I	VINYL CHLORIDE	3	---	---	NA	NA
DPT07-18I	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
DPT07-18I	1,1-DICHLOROETHENE	3	---	---	NA	NA
DPT07-18I	1,2-DICHLOROETHANE	3	---	---	NA	NA
DPT07-18I	BENZENE	3	---	---	NA	NA
DPT07-18I	CHLOROFORM	3	---	---	NA	NA
DPT07-18I	TETRACHLOROETHENE	3	---	---	NA	NA
DPT07-18S	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
DPT07-18S	TRICHLOROETHENE	3	---	---	NA	NA
DPT07-18S	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-18S	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-18S	VINYL CHLORIDE	3	---	---	NA	NA
DPT07-18S	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
DPT07-18S	1,1-DICHLOROETHENE	3	---	---	NA	NA
DPT07-18S	1,2-DICHLOROETHANE	3	---	---	NA	NA
DPT07-18S	BENZENE	3	---	---	NA	NA
DPT07-18S	CHLOROFORM	3	---	---	NA	NA
DPT07-18S	TETRACHLOROETHENE	3	---	---	NA	NA
DPT07-24D	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
DPT07-24D	TRICHLOROETHENE	3	---	---	NA	NA
DPT07-24D	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-24D	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-24D	VINYL CHLORIDE	3	---	---	NA	NA
DPT07-24D	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
DPT07-24D	1,1-DICHLOROETHENE	3	---	---	NA	NA
DPT07-24D	1,2-DICHLOROETHANE	3	---	---	NA	NA
DPT07-24D	BENZENE	3	---	---	NA	NA
DPT07-24D	CHLOROFORM	3	---	---	NA	NA
DPT07-24D	TETRACHLOROETHENE	3	---	---	NA	NA
DPT07-24I	1,1,2,2-TETRACHLOROETHANE	2	---	---	NA	NA
DPT07-24I	TRICHLOROETHENE	2	---	---	NA	NA
DPT07-24I	CIS-1,2-DICHLOROETHENE	2	---	---	NA	NA
DPT07-24I	TRANS-1,2-DICHLOROETHENE	2	---	---	NA	NA
DPT07-24I	VINYL CHLORIDE	2	---	---	NA	NA
DPT07-24I	1,1,2-TRICHLOROETHANE	2	---	---	NA	NA
DPT07-24I	1,1-DICHLOROETHENE	2	---	---	NA	NA

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
DPT07-24I	1,2-DICHLOROETHANE	2	---	---	NA	NA
DPT07-24I	BENZENE	2	---	---	NA	NA
DPT07-24I	CHLOROFORM	2	---	---	NA	NA
DPT07-24I	TETRACHLOROETHENE	2	---	---	NA	NA
DPT07-29-34I	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
DPT07-29-34I	TRICHLOROETHENE	3	---	---	NA	NA
DPT07-29-34I	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-29-34I	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-29-34I	VINYL CHLORIDE	3	---	---	NA	NA
DPT07-29-34I	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
DPT07-29-34I	1,1-DICHLOROETHENE	3	---	---	NA	NA
DPT07-29-34I	1,2-DICHLOROETHANE	3	---	---	NA	NA
DPT07-29-34I	BENZENE	3	---	---	NA	NA
DPT07-29-34I	CHLOROFORM	3	---	---	NA	NA
DPT07-29-34I	TETRACHLOROETHENE	3	---	---	NA	NA
DPT07-29-34S	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
DPT07-29-34S	TRICHLOROETHENE	3	---	---	NA	NA
DPT07-29-34S	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-29-34S	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-29-34S	VINYL CHLORIDE	3	---	---	NA	NA
DPT07-29-34S	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
DPT07-29-34S	1,1-DICHLOROETHENE	3	---	---	NA	NA
DPT07-29-34S	1,2-DICHLOROETHANE	3	---	---	NA	NA
DPT07-29-34S	BENZENE	3	---	---	NA	NA
DPT07-29-34S	CHLOROFORM	3	---	---	NA	NA
DPT07-29-34S	TETRACHLOROETHENE	3	---	---	NA	NA
DPT07-30I	1,1,2,2-TETRACHLOROETHANE	1	---	---	NA	NA
DPT07-30I	TRICHLOROETHENE	1	---	---	NA	NA
DPT07-30I	CIS-1,2-DICHLOROETHENE	1	---	---	NA	NA
DPT07-30I	TRANS-1,2-DICHLOROETHENE	1	---	---	NA	NA
DPT07-30I	VINYL CHLORIDE	1	---	---	NA	NA
DPT07-30I	1,1,2-TRICHLOROETHANE	1	---	---	NA	NA
DPT07-30I	1,1-DICHLOROETHENE	1	---	---	NA	NA
DPT07-30I	1,2-DICHLOROETHANE	1	---	---	NA	NA
DPT07-30I	BENZENE	1	---	---	NA	NA
DPT07-30I	CHLOROFORM	1	---	---	NA	NA
DPT07-30I	TETRACHLOROETHENE	1	---	---	NA	NA
DPT07-30S	1,1,2,2-TETRACHLOROETHANE	1	---	---	NA	NA
DPT07-30S	TRICHLOROETHENE	1	---	---	NA	NA
DPT07-30S	CIS-1,2-DICHLOROETHENE	1	---	---	NA	NA
DPT07-30S	TRANS-1,2-DICHLOROETHENE	1	---	---	NA	NA
DPT07-30S	VINYL CHLORIDE	1	---	---	NA	NA
DPT07-30S	1,1,2-TRICHLOROETHANE	1	---	---	NA	NA
DPT07-30S	1,1-DICHLOROETHENE	1	---	---	NA	NA
DPT07-30S	1,2-DICHLOROETHANE	1	---	---	NA	NA
DPT07-30S	BENZENE	1	---	---	NA	NA
DPT07-30S	CHLOROFORM	1	---	---	NA	NA
DPT07-30S	TETRACHLOROETHENE	1	---	---	NA	NA
DPT07-39-03D	1,1,2,2-TETRACHLOROETHANE	4	2	2	6	Not Significant
DPT07-39-03D	TRICHLOROETHENE	4	-2	-2	6	Not Significant
DPT07-39-03D	CIS-1,2-DICHLOROETHENE	4	0	0	NA	No Trend
DPT07-39-03D	TRANS-1,2-DICHLOROETHENE	4	0	0	NA	No Trend
DPT07-39-03D	VINYL CHLORIDE	4	-2	-2	6	Not Significant
DPT07-39-03D	1,1,2-TRICHLOROETHANE	4	0	0	NA	No Trend
DPT07-39-03D	1,1-DICHLOROETHENE	4	-2	-2	6	Not Significant
DPT07-39-03D	1,2-DICHLOROETHANE	4	-2	-2	6	Not Significant
DPT07-39-03D	BENZENE	4	-2	-2	6	Not Significant
DPT07-39-03D	CHLOROFORM	4	-2	-2	6	Not Significant
DPT07-39-03D	TETRACHLOROETHENE	4	0	0	NA	No Trend
DPT07-39-03I	1,1,2,2-TETRACHLOROETHANE	4	-5	-5	6	Not Significant
DPT07-39-03I	TRICHLOROETHENE	4	-6	-6	6	Downward Trend
DPT07-39-03I	CIS-1,2-DICHLOROETHENE	4	2	2	6	Not Significant
DPT07-39-03I	TRANS-1,2-DICHLOROETHENE	4	-6	-6	6	Downward Trend
DPT07-39-03I	VINYL CHLORIDE	4	4	4	6	Not Significant
DPT07-39-03I	1,1,2-TRICHLOROETHANE	4	-6	-6	6	Downward Trend
DPT07-39-03I	1,1-DICHLOROETHENE	4	4	4	6	Not Significant
DPT07-39-03I	1,2-DICHLOROETHANE	4	2	2	6	Not Significant
DPT07-39-03I	BENZENE	4	2	2	6	Not Significant
DPT07-39-03I	CHLOROFORM	4	2	2	6	Not Significant
DPT07-39-03I	TETRACHLOROETHENE	4	4	4	6	Not Significant
DPT07-39-04D	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
DPT07-39-04D	TRICHLOROETHENE	3	---	---	NA	NA
DPT07-39-04D	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-39-04D	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
DPT07-39-04D	VINYL CHLORIDE	3	---	---	NA	NA
DPT07-39-04D	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
DPT07-39-04D	1,1-DICHLOROETHENE	3	---	---	NA	NA
DPT07-39-04D	1,2-DICHLOROETHANE	3	---	---	NA	NA
DPT07-39-04D	BENZENE	3	---	---	NA	NA
DPT07-39-04D	CHLOROFORM	3	---	---	NA	NA
DPT07-39-04D	TETRACHLOROETHENE	3	---	---	NA	NA
MW07-03D	1,1,2,2-TETRACHLOROETHANE	2	---	---	NA	NA
MW07-03D	TRICHLOROETHENE	2	---	---	NA	NA
MW07-03D	CIS-1,2-DICHLOROETHENE	1	---	---	NA	NA

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
MW07-03D	TRANS-1,2-DICHLOROETHENE	1	---	---	NA	NA
MW07-03D	VINYL CHLORIDE	2	---	---	NA	NA
MW07-03D	1,1,2-TRICHLOROETHANE	2	---	---	NA	NA
MW07-03D	1,1-DICHLOROETHENE	2	---	---	NA	NA
MW07-03D	1,2-DICHLOROETHANE	2	---	---	NA	NA
MW07-03D	BENZENE	2	---	---	NA	NA
MW07-03D	CHLOROFORM	2	---	---	NA	NA
MW07-03D	TETRACHLOROETHENE	2	---	---	NA	NA
MW07-03S	1,1,2,2-TETRACHLOROETHANE	2	---	---	NA	NA
MW07-03S	TRICHLOROETHENE	2	---	---	NA	NA
MW07-03S	CIS-1,2-DICHLOROETHENE	1	---	---	NA	NA
MW07-03S	TRANS-1,2-DICHLOROETHENE	1	---	---	NA	NA
MW07-03S	VINYL CHLORIDE	2	---	---	NA	NA
MW07-03S	1,1,2-TRICHLOROETHANE	2	---	---	NA	NA
MW07-03S	1,1-DICHLOROETHENE	2	---	---	NA	NA
MW07-03S	1,2-DICHLOROETHANE	2	---	---	NA	NA
MW07-03S	BENZENE	2	---	---	NA	NA
MW07-03S	CHLOROFORM	2	---	---	NA	NA
MW07-03S	TETRACHLOROETHENE	2	---	---	NA	NA
MW07-04D	1,1,2,2-TETRACHLOROETHANE	18	-138	-5.193	1.645	Downward Trend
MW07-04D	TRICHLOROETHENE	18	-81	-3.040	1.645	Downward Trend
MW07-04D	CIS-1,2-DICHLOROETHENE	17	-90	-3.672	1.645	Downward Trend
MW07-04D	TRANS-1,2-DICHLOROETHENE	17	-59	-2.409	1.645	Downward Trend
MW07-04D	VINYL CHLORIDE	18	26	0.9508	1.645	Not Significant
MW07-04D	1,1,2-TRICHLOROETHANE	18	-114	-4.283	1.645	Downward Trend
MW07-04D	1,1-DICHLOROETHENE	18	-13	-0.4561	1.645	Not Significant
MW07-04D	1,2-DICHLOROETHANE	17	-34	-1.362	1.645	Not Significant
MW07-04D	BENZENE	18	56	2.105	1.645	Upward Trend
MW07-04D	CHLOROFORM	18	-113	-4.248	1.645	Downward Trend
MW07-04D	TETRACHLOROETHENE	18	-34	-1.251	1.645	Not Significant
MW07-04S	1,1,2,2-TETRACHLOROETHANE	2	---	---	NA	NA
MW07-04S	TRICHLOROETHENE	2	---	---	NA	NA
MW07-04S	CIS-1,2-DICHLOROETHENE	1	---	---	NA	NA
MW07-04S	TRANS-1,2-DICHLOROETHENE	1	---	---	NA	NA
MW07-04S	VINYL CHLORIDE	2	---	---	NA	NA
MW07-04S	1,1,2-TRICHLOROETHANE	2	---	---	NA	NA
MW07-04S	1,1-DICHLOROETHENE	2	---	---	NA	NA
MW07-04S	1,2-DICHLOROETHANE	2	---	---	NA	NA
MW07-04S	BENZENE	2	---	---	NA	NA
MW07-04S	CHLOROFORM	2	---	---	NA	NA
MW07-04S	TETRACHLOROETHENE	2	---	---	NA	NA
MW07-05D	1,1,2,2-TETRACHLOROETHANE	11	-31	-2.350	1.645	Downward Trend
MW07-05D	TRICHLOROETHENE	11	-43	-3.270	1.645	Downward Trend
MW07-05D	CIS-1,2-DICHLOROETHENE	10	-27	-27	21	Downward Trend
MW07-05D	TRANS-1,2-DICHLOROETHENE	10	-12	-12	21	Not Significant
MW07-05D	VINYL CHLORIDE	11	-4	-0.2343	1.645	Not Significant
MW07-05D	1,1,2-TRICHLOROETHANE	11	-25	-1.868	1.645	Downward Trend
MW07-05D	1,1-DICHLOROETHENE	11	-9	-0.6266	1.645	Not Significant
MW07-05D	1,2-DICHLOROETHANE	10	2	2	21	Not Significant
MW07-05D	BENZENE	11	-3	-0.1653	1.645	Not Significant
MW07-05D	CHLOROFORM	11	-12	-0.8590	1.645	Not Significant
MW07-05D	TETRACHLOROETHENE	11	-20	-1.484	1.645	Not Significant
MW07-05S	1,1,2,2-TETRACHLOROETHANE	10	-19	-19	21	Not Significant
MW07-05S	TRICHLOROETHENE	10	-20	-20	21	Not Significant
MW07-05S	CIS-1,2-DICHLOROETHENE	9	-10	-10	18	Not Significant
MW07-05S	TRANS-1,2-DICHLOROETHENE	9	3	3	18	Not Significant
MW07-05S	VINYL CHLORIDE	10	-15	-15	21	Not Significant
MW07-05S	1,1,2-TRICHLOROETHANE	10	-13	-13	21	Not Significant
MW07-05S	1,1-DICHLOROETHENE	10	-19	-19	21	Not Significant
MW07-05S	1,2-DICHLOROETHANE	9	-16	-16	18	Not Significant
MW07-05S	BENZENE	10	-11	-11	21	Not Significant
MW07-05S	CHLOROFORM	10	-19	-19	21	Not Significant
MW07-05S	TETRACHLOROETHENE	10	-6	-6	21	Not Significant
MW07-09D	1,1,2,2-TETRACHLOROETHANE	17	-107	-4.370	1.645	Downward Trend
MW07-09D	TRICHLOROETHENE	17	-70	-2.842	1.645	Downward Trend
MW07-09D	CIS-1,2-DICHLOROETHENE	16	35	1.532	1.645	Not Significant
MW07-09D	TRANS-1,2-DICHLOROETHENE	16	-30	-1.308	1.645	Not Significant
MW07-09D	VINYL CHLORIDE	17	-37	-1.484	1.645	Not Significant
MW07-09D	1,1,2-TRICHLOROETHANE	17	-75	-3.074	1.645	Downward Trend
MW07-09D	1,1-DICHLOROETHENE	17	-7	-0.2474	1.645	Not Significant
MW07-09D	1,2-DICHLOROETHANE	16	1	0	1.645	Not Significant
MW07-09D	BENZENE	17	-13	-0.4956	1.645	Not Significant
MW07-09D	CHLOROFORM	17	5	0.1652	1.645	Not Significant
MW07-09D	TETRACHLOROETHENE	17	32	1.296	1.645	Not Significant
MW07-09R	1,1,2,2-TETRACHLOROETHANE	22	-82	-2.294	1.645	Downward Trend
MW07-09R	TRICHLOROETHENE	22	171	4.794	1.645	Upward Trend
MW07-09R	CIS-1,2-DICHLOROETHENE	21	123	3.689	1.645	Upward Trend
MW07-09R	TRANS-1,2-DICHLOROETHENE	21	131	3.931	1.645	Upward Trend
MW07-09R	VINYL CHLORIDE	22	125	3.502	1.645	Upward Trend
MW07-09R	1,1,2-TRICHLOROETHANE	22	-13	-0.3393	1.645	Not Significant
MW07-09R	1,1-DICHLOROETHENE	22	66	1.869	1.645	Upward Trend
MW07-09R	1,2-DICHLOROETHANE	21	-20	-0.5743	1.645	Not Significant
MW07-09R	BENZENE	22	3	0.05861	1.645	Not Significant
MW07-09R	CHLOROFORM	22	-35	-0.9999	1.645	Not Significant

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
MW07-09R	TETRACHLOROETHENE	22	-13	-0.3529	1.645	Not Significant
MW07-10D	1,1,2,2-TETRACHLOROETHANE	14	-85	-4.599	1.645	Downward Trend
MW07-10D	TRICHLOROETHENE	14	-77	-4.173	1.645	Downward Trend
MW07-10D	CIS-1,2-DICHLOROETHENE	13	-66	-4.000	1.645	Downward Trend
MW07-10D	TRANS-1,2-DICHLOROETHENE	13	-44	-2.633	1.645	Downward Trend
MW07-10D	VINYL CHLORIDE	14	-21	-1.111	1.645	Not Significant
MW07-10D	1,1,2-TRICHLOROETHANE	14	-78	-4.222	1.645	Downward Trend
MW07-10D	1,1-DICHLOROETHENE	14	-24	-1.274	1.645	Not Significant
MW07-10D	1,2-DICHLOROETHANE	13	-13	-0.7400	1.645	Not Significant
MW07-10D	BENZENE	14	-44	-2.358	1.645	Downward Trend
MW07-10D	CHLOROFORM	14	-33	-1.757	1.645	Downward Trend
MW07-10D	TETRACHLOROETHENE	14	-40	-2.138	1.645	Downward Trend
MW07-10S	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
MW07-10S	TRICHLOROETHENE	3	---	---	NA	NA
MW07-10S	CIS-1,2-DICHLOROETHENE	2	---	---	NA	NA
MW07-10S	TRANS-1,2-DICHLOROETHENE	2	---	---	NA	NA
MW07-10S	VINYL CHLORIDE	3	---	---	NA	NA
MW07-10S	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
MW07-10S	1,1-DICHLOROETHENE	3	---	---	NA	NA
MW07-10S	1,2-DICHLOROETHANE	3	---	---	NA	NA
MW07-10S	BENZENE	3	---	---	NA	NA
MW07-10S	CHLOROFORM	3	---	---	NA	NA
MW07-10S	TETRACHLOROETHENE	3	---	---	NA	NA
MW07-11D	1,1,2,2-TETRACHLOROETHANE	20	130	4.185	1.645	Upward Trend
MW07-11D	TRICHLOROETHENE	21	184	5.526	1.645	Upward Trend
MW07-11D	CIS-1,2-DICHLOROETHENE	20	163	5.259	1.645	Upward Trend
MW07-11D	TRANS-1,2-DICHLOROETHENE	20	152	4.899	1.645	Upward Trend
MW07-11D	VINYL CHLORIDE	21	137	4.112	1.645	Upward Trend
MW07-11D	1,1,2-TRICHLOROETHANE	21	183	5.498	1.645	Upward Trend
MW07-11D	1,1-DICHLOROETHENE	21	131	3.959	1.645	Upward Trend
MW07-11D	1,2-DICHLOROETHANE	20	91	2.939	1.645	Upward Trend
MW07-11D	BENZENE	21	29	0.8766	1.645	Not Significant
MW07-11D	CHLOROFORM	21	13	0.3723	1.645	Not Significant
MW07-11D	TETRACHLOROETHENE	21	8	0.2255	1.645	Not Significant
MW07-12D	1,1,2,2-TETRACHLOROETHANE	19	-50	-1.718	1.645	Downward Trend
MW07-12D	TRICHLOROETHENE	19	130	4.516	1.645	Upward Trend
MW07-12D	CIS-1,2-DICHLOROETHENE	18	-3	-0.07576	1.645	Not Significant
MW07-12D	TRANS-1,2-DICHLOROETHENE	18	20	0.7202	1.645	Not Significant
MW07-12D	VINYL CHLORIDE	19	-71	-2.748	1.645	Downward Trend
MW07-12D	1,1,2-TRICHLOROETHANE	19	-44	-1.549	1.645	Not Significant
MW07-12D	1,1-DICHLOROETHENE	19	-67	-2.695	1.645	Downward Trend
MW07-12D	1,2-DICHLOROETHANE	18	-54	-2.129	1.645	Downward Trend
MW07-12D	BENZENE	19	47	1.611	1.645	Not Significant
MW07-12D	CHLOROFORM	19	-71	-2.672	1.645	Downward Trend
MW07-12D	TETRACHLOROETHENE	19	-54	-2.161	1.645	Downward Trend
MW07-13D	1,1,2,2-TETRACHLOROETHANE	14	-47	-2.536	1.645	Downward Trend
MW07-13D	TRICHLOROETHENE	15	-38	-1.833	1.645	Downward Trend
MW07-13D	CIS-1,2-DICHLOROETHENE	14	-41	-2.190	1.645	Downward Trend
MW07-13D	TRANS-1,2-DICHLOROETHENE	13	-14	-0.8001	1.645	Not Significant
MW07-13D	VINYL CHLORIDE	14	-70	-3.806	1.645	Downward Trend
MW07-13D	1,1,2-TRICHLOROETHANE	14	-62	-3.344	1.645	Downward Trend
MW07-13D	1,1-DICHLOROETHENE	14	-44	-2.421	1.645	Downward Trend
MW07-13D	1,2-DICHLOROETHANE	13	-44	-2.691	1.645	Downward Trend
MW07-13D	BENZENE	14	-22	-1.214	1.645	Not Significant
MW07-13D	CHLOROFORM	14	-50	-2.826	1.645	Downward Trend
MW07-13D	TETRACHLOROETHENE	14	-42	-2.643	1.645	Downward Trend
MW07-13S	1,1,2,2-TETRACHLOROETHANE	14	-56	-3.172	1.645	Downward Trend
MW07-13S	TRICHLOROETHENE	14	-58	-3.273	1.645	Downward Trend
MW07-13S	CIS-1,2-DICHLOROETHENE	13	-38	-2.405	1.645	Downward Trend
MW07-13S	TRANS-1,2-DICHLOROETHENE	13	-30	-2.182	1.645	Downward Trend
MW07-13S	VINYL CHLORIDE	14	-53	-3.186	1.645	Downward Trend
MW07-13S	1,1,2-TRICHLOROETHANE	14	-42	-2.643	1.645	Downward Trend
MW07-13S	1,1-DICHLOROETHENE	14	-53	-3.202	1.645	Downward Trend
MW07-13S	1,2-DICHLOROETHANE	13	-51	-3.257	1.645	Downward Trend
MW07-13S	BENZENE	14	-39	-2.240	1.645	Downward Trend
MW07-13S	CHLOROFORM	14	-58	-3.378	1.645	Downward Trend
MW07-13S	TETRACHLOROETHENE	14	-42	-2.643	1.645	Downward Trend
MW07-15D	1,1,2,2-TETRACHLOROETHANE	4	-6	-6	6	Downward Trend
MW07-15D	TRICHLOROETHENE	4	-4	-4	6	Not Significant
MW07-15D	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
MW07-15D	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
MW07-15D	VINYL CHLORIDE	4	-2	-2	6	Not Significant
MW07-15D	1,1,2-TRICHLOROETHANE	4	-2	-2	6	Not Significant
MW07-15D	1,1-DICHLOROETHENE	4	-2	-2	6	Not Significant
MW07-15D	1,2-DICHLOROETHANE	4	-2	-2	6	Not Significant
MW07-15D	BENZENE	4	-2	-2	6	Not Significant
MW07-15D	CHLOROFORM	4	-2	-2	6	Not Significant
MW07-15D	TETRACHLOROETHENE	4	-4	-4	6	Not Significant
MW07-16R	1,1,2,2-TETRACHLOROETHANE	7	-14	-14	13	Downward Trend
MW07-16R	TRICHLOROETHENE	7	-9	-9	13	Not Significant
MW07-16R	CIS-1,2-DICHLOROETHENE	6	-8	-8	11	Not Significant
MW07-16R	TRANS-1,2-DICHLOROETHENE	6	0	0		No Trend
MW07-16R	VINYL CHLORIDE	7	-9	-9	13	Not Significant
MW07-16R	1,1,2-TRICHLOROETHANE	7	-11	-11	13	Not Significant

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
MW07-16R	1,1-DICHLOROETHENE	7	-9	-9	13	Not Significant
MW07-16R	1,2-DICHLOROETHANE	6	-7	-7	11	Not Significant
MW07-16R	BENZENE	7	-14	-14	13	Downward Trend
MW07-16R	CHLOROFORM	7	-9	-9	13	Not Significant
MW07-16R	TETRACHLOROETHENE	7	-6	-6	13	Not Significant
MW07-17D	1,1,2,2-TETRACHLOROETHANE	14	-65	-3.504	1.645	Downward Trend
MW07-17D	TRICHLOROETHENE	14	-37	-1.971	1.645	Downward Trend
MW07-17D	CIS-1,2-DICHLOROETHENE	13	-46	-2.756	1.645	Downward Trend
MW07-17D	TRANS-1,2-DICHLOROETHENE	13	-44	-2.633	1.645	Downward Trend
MW07-17D	VINYL CHLORIDE	14	-17	-0.8759	1.645	Not Significant
MW07-17D	1,1,2-TRICHLOROETHANE	14	-31	-1.647	1.645	Downward Trend
MW07-17D	1,1-DICHLOROETHENE	14	-20	-1.042	1.645	Not Significant
MW07-17D	1,2-DICHLOROETHANE	13	-3	-0.1222	1.645	Not Significant
MW07-17D	BENZENE	14	9	0.4451	1.645	Not Significant
MW07-17D	CHLOROFORM	14	-14	-0.7128	1.645	Not Significant
MW07-17D	TETRACHLOROETHENE	14	-10	-0.4934	1.645	Not Significant
MW07-18D	1,1,2,2-TETRACHLOROETHANE	7	-9	-9	13	Not Significant
MW07-18D	TRICHLOROETHENE	7	-9	-9	13	Not Significant
MW07-18D	CIS-1,2-DICHLOROETHENE	6	-8	-8	11	Not Significant
MW07-18D	TRANS-1,2-DICHLOROETHENE	6	5	5	11	Not Significant
MW07-18D	VINYL CHLORIDE	7	-10	-10	13	Not Significant
MW07-18D	1,1,2-TRICHLOROETHANE	7	-5	-5	13	Not Significant
MW07-18D	1,1-DICHLOROETHENE	7	-9	-9	13	Not Significant
MW07-18D	1,2-DICHLOROETHANE	7	-9	-9	13	Not Significant
MW07-18D	BENZENE	7	-4	-4	13	Not Significant
MW07-18D	CHLOROFORM	7	-9	-9	13	Not Significant
MW07-18D	TETRACHLOROETHENE	7	-1	-1	13	Not Significant
MW07-19D	1,1,2,2-TETRACHLOROETHANE	17	23	0.9086	1.645	Not Significant
MW07-19D	TRICHLOROETHENE	17	109	4.453	1.645	Upward Trend
MW07-19D	CIS-1,2-DICHLOROETHENE	16	85	3.786	1.645	Upward Trend
MW07-19D	TRANS-1,2-DICHLOROETHENE	16	68	3.017	1.645	Upward Trend
MW07-19D	VINYL CHLORIDE	17	80	3.260	1.645	Upward Trend
MW07-19D	1,1,2-TRICHLOROETHANE	17	72	2.936	1.645	Upward Trend
MW07-19D	1,1-DICHLOROETHENE	17	47	1.924	1.645	Upward Trend
MW07-19D	1,2-DICHLOROETHANE	16	-1	0	1.645	Not Significant
MW07-19D	BENZENE	17	8	0.2988	1.645	Not Significant
MW07-19D	CHLOROFORM	17	2	0.04243	1.645	Not Significant
MW07-19D	TETRACHLOROETHENE	17	22	0.8911	1.645	Not Significant
MW07-19S	1,1,2,2-TETRACHLOROETHANE	17	-97	-3.965	1.645	Downward Trend
MW07-19S	TRICHLOROETHENE	17	6	0.2060	1.645	Not Significant
MW07-19S	CIS-1,2-DICHLOROETHENE	16	25	1.089	1.645	Not Significant
MW07-19S	TRANS-1,2-DICHLOROETHENE	16	-32	-1.405	1.645	Not Significant
MW07-19S	VINYL CHLORIDE	17	-2	-0.04126	1.645	Not Significant
MW07-19S	1,1,2-TRICHLOROETHANE	17	-75	-3.074	1.645	Downward Trend
MW07-19S	1,1-DICHLOROETHENE	17	4	0.1238	1.645	Not Significant
MW07-19S	1,2-DICHLOROETHANE	16	16	0.6786	1.645	Not Significant
MW07-19S	BENZENE	17	14	0.5364	1.645	Not Significant
MW07-19S	CHLOROFORM	17	-16	-0.6189	1.645	Not Significant
MW07-19S	TETRACHLOROETHENE	17	31	1.242	1.645	Not Significant
MW07-20D	1,1,2,2-TETRACHLOROETHANE	10	-19	-19	21	Not Significant
MW07-20D	TRICHLOROETHENE	10	-23	-23	21	Downward Trend
MW07-20D	CIS-1,2-DICHLOROETHENE	9	-10	-10	18	Not Significant
MW07-20D	TRANS-1,2-DICHLOROETHENE	9	8	8	18	Not Significant
MW07-20D	VINYL CHLORIDE	10	-19	-19	21	Not Significant
MW07-20D	1,1,2-TRICHLOROETHANE	10	-9	-9	21	Not Significant
MW07-20D	1,1-DICHLOROETHENE	10	-19	-19	21	Not Significant
MW07-20D	1,2-DICHLOROETHANE	9	-16	-16	18	Not Significant
MW07-20D	BENZENE	10	-11	-11	21	Not Significant
MW07-20D	CHLOROFORM	10	-19	-19	21	Not Significant
MW07-20D	TETRACHLOROETHENE	10	-1	-1	21	Not Significant
MW07-20S	1,1,2,2-TETRACHLOROETHANE	12	-37	-2.716	1.645	Downward Trend
MW07-20S	TRICHLOROETHENE	12	-28	-2.104	1.645	Downward Trend
MW07-20S	CIS-1,2-DICHLOROETHENE	11	-23	-1.908	1.645	Downward Trend
MW07-20S	TRANS-1,2-DICHLOROETHENE	11	-5	-0.4682	1.645	Not Significant
MW07-20S	VINYL CHLORIDE	12	-25	-1.984	1.645	Downward Trend
MW07-20S	1,1,2-TRICHLOROETHANE	12	-25	-1.984	1.645	Downward Trend
MW07-20S	1,1-DICHLOROETHENE	12	-28	-2.104	1.645	Downward Trend
MW07-20S	1,2-DICHLOROETHANE	11	-23	-1.908	1.645	Downward Trend
MW07-20S	BENZENE	12	-28	-2.016	1.645	Downward Trend
MW07-20S	CHLOROFORM	12	-28	-2.104	1.645	Downward Trend
MW07-20S	TETRACHLOROETHENE	12	-16	-1.366	1.645	Not Significant
MW07-21D	1,1,2,2-TETRACHLOROETHANE	22	-133	-3.728	1.645	Downward Trend
MW07-21D	TRICHLOROETHENE	22	86	2.400	1.645	Upward Trend
MW07-21D	CIS-1,2-DICHLOROETHENE	21	127	3.807	1.645	Upward Trend
MW07-21D	TRANS-1,2-DICHLOROETHENE	21	1	0	1.645	Not Significant
MW07-21D	VINYL CHLORIDE	22	142	3.984	1.645	Upward Trend
MW07-21D	1,1,2-TRICHLOROETHANE	22	133	3.722	1.645	Upward Trend
MW07-21D	1,1-DICHLOROETHENE	22	78	2.180	1.645	Upward Trend
MW07-21D	1,2-DICHLOROETHANE	21	66	1.972	1.645	Upward Trend
MW07-21D	BENZENE	22	76	2.151	1.645	Upward Trend
MW07-21D	CHLOROFORM	22	36	0.9913	1.645	Not Significant
MW07-21D	TETRACHLOROETHENE	22	76	2.123	1.645	Upward Trend
MW07-21R	1,1,2,2-TETRACHLOROETHANE	22	-182	-5.106	1.645	Downward Trend
MW07-21R	TRICHLOROETHENE	22	68	1.896	1.645	Upward Trend

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
MW07-21R	CIS-1,2-DICHLOROETHENE	21	-15	-0.4237	1.645	Not Significant
MW07-21R	TRANS-1,2-DICHLOROETHENE	21	-76	-2.272	1.645	Downward Trend
MW07-21R	VINYL CHLORIDE	22	24	0.6498	1.645	Not Significant
MW07-21R	1,1,2-TRICHLOROETHANE	22	-69	-1.923	1.645	Downward Trend
MW07-21R	1,1-DICHLOROETHENE	22	3	0.05661	1.645	Not Significant
MW07-21R	1,2-DICHLOROETHANE	21	36	1.066	1.645	Not Significant
MW07-21R	BENZENE	22	84	2.362	1.645	Upward Trend
MW07-21R	CHLOROFORM	22	-9	-0.2261	1.645	Not Significant
MW07-21R	TETRACHLOROETHENE	22	32	0.8761	1.645	Not Significant
MW07-21S	1,1,2,2-TETRACHLOROETHANE	22	-91	-2.543	1.645	Downward Trend
MW07-21S	TRICHLOROETHENE	22	19	0.5076	1.645	Not Significant
MW07-21S	CIS-1,2-DICHLOROETHENE	21	18	0.5133	1.645	Not Significant
MW07-21S	TRANS-1,2-DICHLOROETHENE	21	-8	-0.2116	1.645	Not Significant
MW07-21S	VINYL CHLORIDE	22	-7	-0.1695	1.645	Not Significant
MW07-21S	1,1,2-TRICHLOROETHANE	22	-47	-1.298	1.645	Not Significant
MW07-21S	1,1-DICHLOROETHENE	22	39	1.076	1.645	Not Significant
MW07-21S	1,2-DICHLOROETHANE	21	14	0.3953	1.645	Not Significant
MW07-21S	BENZENE	22	77	2.188	1.645	Upward Trend
MW07-21S	CHLOROFORM	22	-4	-0.08488	1.645	Not Significant
MW07-21S	TETRACHLOROETHENE	22	40	1.146	1.645	Not Significant
MW07-23D	1,1,2,2-TETRACHLOROETHANE	22	-183	-5.136	1.645	Downward Trend
MW07-23D	TRICHLOROETHENE	22	-99	-2.763	1.645	Downward Trend
MW07-23D	CIS-1,2-DICHLOROETHENE	21	119	3.568	1.645	Upward Trend
MW07-23D	TRANS-1,2-DICHLOROETHENE	21	39	1.148	1.645	Not Significant
MW07-23D	VINYL CHLORIDE	22	25	0.6791	1.645	Not Significant
MW07-23D	1,1,2-TRICHLOROETHANE	22	-30	-0.8205	1.645	Not Significant
MW07-23D	1,1-DICHLOROETHENE	22	67	1.885	1.645	Upward Trend
MW07-23D	1,2-DICHLOROETHANE	21	30	0.8844	1.645	Not Significant
MW07-23D	BENZENE	22	67	1.904	1.645	Upward Trend
MW07-23D	CHLOROFORM	22	13	0.3450	1.645	Not Significant
MW07-23D	TETRACHLOROETHENE	22	-7	-0.1696	1.645	Not Significant
MW07-23S	1,1,2,2-TETRACHLOROETHANE	10	-24	-24	21	Downward Trend
MW07-23S	TRICHLOROETHENE	10	-24	-24	21	Downward Trend
MW07-23S	CIS-1,2-DICHLOROETHENE	9	-16	-16	18	Not Significant
MW07-23S	TRANS-1,2-DICHLOROETHENE	9	-5	-5	18	Not Significant
MW07-23S	VINYL CHLORIDE	10	-21	-21	21	Downward Trend
MW07-23S	1,1,2-TRICHLOROETHANE	10	-19	-19	21	Not Significant
MW07-23S	1,1-DICHLOROETHENE	10	-24	-24	21	Downward Trend
MW07-23S	1,2-DICHLOROETHANE	9	-20	-20	18	Downward Trend
MW07-23S	BENZENE	10	-17	-17	21	Not Significant
MW07-23S	CHLOROFORM	10	-24	-24	21	Downward Trend
MW07-23S	TETRACHLOROETHENE	10	-13	-13	21	Not Significant
MW07-24D	1,1,2,2-TETRACHLOROETHANE	11	-39	-3.170	1.645	Downward Trend
MW07-24D	TRICHLOROETHENE	11	-32	-2.671	1.645	Downward Trend
MW07-24D	CIS-1,2-DICHLOROETHENE	10	-27	-27	21	Downward Trend
MW07-24D	TRANS-1,2-DICHLOROETHENE	10	-13	-13	21	Not Significant
MW07-24D	VINYL CHLORIDE	11	-24	-2.315	1.645	Downward Trend
MW07-24D	1,1,2-TRICHLOROETHANE	11	-30	-2.662	1.645	Downward Trend
MW07-24D	1,1-DICHLOROETHENE	11	-28	-2.479	1.645	Downward Trend
MW07-24D	1,2-DICHLOROETHANE	10	-24	-24	21	Downward Trend
MW07-24D	BENZENE	11	-28	-2.293	1.645	Downward Trend
MW07-24D	CHLOROFORM	11	-28	-2.479	1.645	Downward Trend
MW07-24D	TETRACHLOROETHENE	11	-22	-2.114	1.645	Downward Trend
MW07-24DUT	1,1,2,2-TETRACHLOROETHANE	20	-7	-0.2037	1.645	Not Significant
MW07-24DUT	TRICHLOROETHENE	20	133	4.295	1.645	Upward Trend
MW07-24DUT	CIS-1,2-DICHLOROETHENE	20	115	3.706	1.645	Upward Trend
MW07-24DUT	TRANS-1,2-DICHLOROETHENE	20	-3	-0.06983	1.645	Not Significant
MW07-24DUT	VINYL CHLORIDE	20	-8	-0.2446	1.645	Not Significant
MW07-24DUT	1,1,2-TRICHLOROETHANE	20	30	0.9455	1.645	Not Significant
MW07-24DUT	1,1-DICHLOROETHENE	20	-51	-1.864	1.645	Downward Trend
MW07-24DUT	1,2-DICHLOROETHANE	19	-45	-1.576	1.645	Not Significant
MW07-24DUT	BENZENE	20	-9	-0.2870	1.645	Not Significant
MW07-24DUT	CHLOROFORM	20	-39	-1.338	1.645	Not Significant
MW07-24DUT	TETRACHLOROETHENE	20	9	0.2958	1.645	Not Significant
MW07-24S	1,1,2,2-TETRACHLOROETHANE	11	-35	-2.837	1.645	Downward Trend
MW07-24S	TRICHLOROETHENE	11	-28	-2.327	1.645	Downward Trend
MW07-24S	CIS-1,2-DICHLOROETHENE	10	-26	-26	21	Downward Trend
MW07-24S	TRANS-1,2-DICHLOROETHENE	10	-14	-14	21	Not Significant
MW07-24S	VINYL CHLORIDE	11	-25	-2.194	1.645	Downward Trend
MW07-24S	1,1,2-TRICHLOROETHANE	11	-30	-2.499	1.645	Downward Trend
MW07-24S	1,1-DICHLOROETHENE	11	-28	-2.327	1.645	Downward Trend
MW07-24S	1,2-DICHLOROETHANE	10	-23	-23	21	Downward Trend
MW07-24S	BENZENE	11	-35	-2.837	1.645	Downward Trend
MW07-24S	CHLOROFORM	11	-28	-2.327	1.645	Downward Trend
MW07-24S	TETRACHLOROETHENE	11	-23	-2.011	1.645	Downward Trend
MW07-25D	1,1,2,2-TETRACHLOROETHANE	19	-107	-3.719	1.645	Downward Trend
MW07-25D	TRICHLOROETHENE	19	-136	-4.726	1.645	Downward Trend
MW07-25D	CIS-1,2-DICHLOROETHENE	18	-72	-2.691	1.645	Downward Trend
MW07-25D	TRANS-1,2-DICHLOROETHENE	18	-73	-2.744	1.645	Downward Trend
MW07-25D	VINYL CHLORIDE	19	-5	-0.1429	1.645	Not Significant
MW07-25D	1,1,2-TRICHLOROETHANE	19	-129	-4.478	1.645	Downward Trend
MW07-25D	1,1-DICHLOROETHENE	19	-15	-0.4951	1.645	Not Significant
MW07-25D	1,2-DICHLOROETHANE	18	-11	-0.3838	1.645	Not Significant
MW07-25D	BENZENE	19	-55	-1.899	1.645	Downward Trend

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
MW07-25D	CHLOROFORM	19	-87	-3.012	1.645	Downward Trend
MW07-25D	TETRACHLOROETHENE	19	-81	-2.799	1.645	Downward Trend
MW07-25R	1,1,2,2-TETRACHLOROETHANE	19	-126	-4.376	1.645	Downward Trend
MW07-25R	TRICHLOROETHENE	19	-88	-3.049	1.645	Downward Trend
MW07-25R	CIS-1,2-DICHLOROETHENE	18	11	0.3788	1.645	Not Significant
MW07-25R	TRANS-1,2-DICHLOROETHENE	18	-112	-4.207	1.645	Downward Trend
MW07-25R	VINYL CHLORIDE	19	-95	-3.293	1.645	Downward Trend
MW07-25R	1,1,2-TRICHLOROETHANE	19	-119	-4.133	1.645	Downward Trend
MW07-25R	1,1-DICHLOROETHENE	19	-28	-0.9479	1.645	Not Significant
MW07-25R	1,2-DICHLOROETHANE	18	-31	-1.144	1.645	Not Significant
MW07-25R	BENZENE	19	-62	-2.145	1.645	Downward Trend
MW07-25R	CHLOROFORM	19	-40	-1.369	1.645	Not Significant
MW07-25R	TETRACHLOROETHENE	19	-114	-3.956	1.645	Downward Trend
MW07-27D	1,1,2,2-TETRACHLOROETHANE	14	-72	-3.893	1.645	Downward Trend
MW07-27D	TRICHLOROETHENE	14	-47	-2.518	1.645	Downward Trend
MW07-27D	CIS-1,2-DICHLOROETHENE	13	32	1.898	1.645	Upward Trend
MW07-27D	TRANS-1,2-DICHLOROETHENE	13	-45	-2.689	1.645	Downward Trend
MW07-27D	VINYL CHLORIDE	14	42	2.248	1.645	Upward Trend
MW07-27D	1,1,2-TRICHLOROETHANE	14	-63	-3.404	1.645	Downward Trend
MW07-27D	1,1-DICHLOROETHENE	14	18	0.9349	1.645	Not Significant
MW07-27D	1,2-DICHLOROETHANE	13	12	0.6770	1.645	Not Significant
MW07-27D	BENZENE	14	3	0.1117	1.645	Not Significant
MW07-27D	CHLOROFORM	14	-18	-0.9321	1.645	Not Significant
MW07-27D	TETRACHLOROETHENE	14	19	0.9924	1.645	Not Significant
MW07-28D	1,1,2,2-TETRACHLOROETHANE	11	-32	-2.822	1.645	Downward Trend
MW07-28D	TRICHLOROETHENE	11	-32	-2.822	1.645	Downward Trend
MW07-28D	CIS-1,2-DICHLOROETHENE	10	-22	-22	21	Downward Trend
MW07-28D	TRANS-1,2-DICHLOROETHENE	10	-15	-15	21	Not Significant
MW07-28D	VINYL CHLORIDE	11	-31	-2.742	1.645	Downward Trend
MW07-28D	1,1,2-TRICHLOROETHANE	11	-25	-2.404	1.645	Downward Trend
MW07-28D	1,1-DICHLOROETHENE	11	-25	-2.404	1.645	Downward Trend
MW07-28D	1,2-DICHLOROETHANE	10	-28	-28	21	Downward Trend
MW07-28D	BENZENE	11	-17	-1.387	1.645	Not Significant
MW07-28D	CHLOROFORM	11	-32	-2.822	1.645	Downward Trend
MW07-28D	TETRACHLOROETHENE	11	-25	-2.404	1.645	Downward Trend
MW07-29D	1,1,2,2-TETRACHLOROETHANE	8	-13	-13	16	Not Significant
MW07-29D	TRICHLOROETHENE	8	-7	-7	16	Not Significant
MW07-29D	CIS-1,2-DICHLOROETHENE	7	-6	-6	13	Not Significant
MW07-29D	TRANS-1,2-DICHLOROETHENE	7	0	0	NA	No Trend
MW07-29D	VINYL CHLORIDE	8	-7	-7	16	Not Significant
MW07-29D	1,1,2-TRICHLOROETHANE	8	-13	-13	16	Not Significant
MW07-29D	1,1-DICHLOROETHENE	8	-7	-7	16	Not Significant
MW07-29D	1,2-DICHLOROETHANE	7	-6	-6	13	Not Significant
MW07-29D	BENZENE	8	-7	-7	16	Not Significant
MW07-29D	CHLOROFORM	8	-7	-7	16	Not Significant
MW07-29D	TETRACHLOROETHENE	8	-7	-7	16	Not Significant
MW07-30D	1,1,2,2-TETRACHLOROETHANE	2	---	---	NA	NA
MW07-30D	TRICHLOROETHENE	2	---	---	NA	NA
MW07-30D	CIS-1,2-DICHLOROETHENE	1	---	---	NA	NA
MW07-30D	TRANS-1,2-DICHLOROETHENE	1	---	---	NA	NA
MW07-30D	VINYL CHLORIDE	2	---	---	NA	NA
MW07-30D	1,1,2-TRICHLOROETHANE	2	---	---	NA	NA
MW07-30D	1,1-DICHLOROETHENE	2	---	---	NA	NA
MW07-30D	1,2-DICHLOROETHANE	2	---	---	NA	NA
MW07-30D	BENZENE	2	---	---	NA	NA
MW07-30D	CHLOROFORM	2	---	---	NA	NA
MW07-30D	TETRACHLOROETHENE	2	---	---	NA	NA
MW07-32D	1,1,2,2-TETRACHLOROETHANE	7	-11	-11	13	Not Significant
MW07-32D	TRICHLOROETHENE	7	-15	-15	13	Downward Trend
MW07-32D	CIS-1,2-DICHLOROETHENE	6	-9	-9	11	Not Significant
MW07-32D	TRANS-1,2-DICHLOROETHENE	6	-5	-5	11	Not Significant
MW07-32D	VINYL CHLORIDE	7	-14	-14	13	Downward Trend
MW07-32D	1,1,2-TRICHLOROETHANE	7	-11	-11	13	Not Significant
MW07-32D	1,1-DICHLOROETHENE	7	-13	-13	13	Downward Trend
MW07-32D	1,2-DICHLOROETHANE	6	-12	-12	11	Downward Trend
MW07-32D	BENZENE	7	-15	-15	13	Downward Trend
MW07-32D	CHLOROFORM	7	-11	-11	13	Not Significant
MW07-32D	TETRACHLOROETHENE	7	-11	-11	13	Not Significant
MW07-32R	1,1,2,2-TETRACHLOROETHANE	6	-5	-5	11	Not Significant
MW07-32R	TRICHLOROETHENE	6	-9	-9	11	Not Significant
MW07-32R	CIS-1,2-DICHLOROETHENE	5	-4	-4	8	Not Significant
MW07-32R	TRANS-1,2-DICHLOROETHENE	5	-4	-4	8	Not Significant
MW07-32R	VINYL CHLORIDE	6	-9	-9	11	Not Significant
MW07-32R	1,1,2-TRICHLOROETHANE	6	-9	-9	11	Not Significant
MW07-32R	1,1-DICHLOROETHENE	6	-9	-9	11	Not Significant
MW07-32R	1,2-DICHLOROETHANE	5	-7	-7	8	Not Significant
MW07-32R	BENZENE	6	-9	-9	11	Not Significant
MW07-32R	CHLOROFORM	6	-5	-5	11	Not Significant
MW07-32R	TETRACHLOROETHENE	6	-9	-9	11	Not Significant
MW07-33D	1,1,2,2-TETRACHLOROETHANE	20	-130	-4.215	1.645	Downward Trend
MW07-33D	TRICHLOROETHENE	20	-75	-2.405	1.645	Downward Trend
MW07-33D	CIS-1,2-DICHLOROETHENE	20	-57	-1.833	1.645	Downward Trend
MW07-33D	TRANS-1,2-DICHLOROETHENE	20	-94	-3.028	1.645	Downward Trend
MW07-33D	VINYL CHLORIDE	20	-28	-0.9456	1.645	Not Significant

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
MW07-33D	1,1,2-TRICHLOROETHANE	20	5	0.1398	1.645	Not Significant
MW07-33D	1,1-DICHLOROETHENE	20	-62	-2.202	1.645	Downward Trend
MW07-33D	1,2-DICHLOROETHANE	19	-53	-1.924	1.645	Downward Trend
MW07-33D	BENZENE	20	-21	-0.7049	1.645	Not Significant
MW07-33D	CHLOROFORM	20	-58	-1.967	1.645	Downward Trend
MW07-33D	TETRACHLOROETHENE	20	-25	-0.8873	1.645	Not Significant
MW07-33S	1,1,2,2-TETRACHLOROETHANE	17	-80	-3.364	1.645	Downward Trend
MW07-33S	TRICHLOROETHENE	17	-70	-2.854	1.645	Downward Trend
MW07-33S	CIS-1,2-DICHLOROETHENE	17	-32	-1.305	1.645	Not Significant
MW07-33S	TRANS-1,2-DICHLOROETHENE	17	4	0.1313	1.645	Not Significant
MW07-33S	VINYL CHLORIDE	17	-35	-1.415	1.645	Not Significant
MW07-33S	1,1,2-TRICHLOROETHANE	17	1	0	1.645	Not Significant
MW07-33S	1,1-DICHLOROETHENE	17	-40	-1.829	1.645	Downward Trend
MW07-33S	1,2-DICHLOROETHANE	16	-19	-0.8470	1.645	Not Significant
MW07-33S	BENZENE	17	-10	-0.4058	1.645	Not Significant
MW07-33S	CHLOROFORM	17	-40	-1.721	1.645	Downward Trend
MW07-33S	TETRACHLOROETHENE	17	12	0.4942	1.645	Not Significant
MW07-34D	1,1,2,2-TETRACHLOROETHANE	20	4	0.09778	1.645	Not Significant
MW07-34D	TRICHLOROETHENE	20	146	4.704	1.645	Upward Trend
MW07-34D	CIS-1,2-DICHLOROETHENE	20	78	2.507	1.645	Upward Trend
MW07-34D	TRANS-1,2-DICHLOROETHENE	20	133	4.285	1.645	Upward Trend
MW07-34D	VINYL CHLORIDE	20	102	3.280	1.645	Upward Trend
MW07-34D	1,1,2-TRICHLOROETHANE	20	75	2.405	1.645	Upward Trend
MW07-34D	1,1-DICHLOROETHENE	20	108	3.475	1.645	Upward Trend
MW07-34D	1,2-DICHLOROETHANE	19	64	2.212	1.645	Upward Trend
MW07-34D	BENZENE	20	121	3.899	1.645	Upward Trend
MW07-34D	CHLOROFORM	20	42	1.332	1.645	Not Significant
MW07-34D	TETRACHLOROETHENE	19	67	2.459	1.645	Upward Trend
MW07-35D	1,1,2,2-TETRACHLOROETHANE	13	-74	-4.454	1.645	Downward Trend
MW07-35D	TRICHLOROETHENE	13	-54	-3.233	1.645	Downward Trend
MW07-35D	CIS-1,2-DICHLOROETHENE	13	-14	-0.7961	1.645	Not Significant
MW07-35D	TRANS-1,2-DICHLOROETHENE	13	4	0.1868	1.645	Not Significant
MW07-35D	VINYL CHLORIDE	13	-2	-0.06226	1.645	Not Significant
MW07-35D	1,1,2-TRICHLOROETHANE	13	-39	-2.334	1.645	Downward Trend
MW07-35D	1,1-DICHLOROETHENE	13	-2	-0.06155	1.645	Not Significant
MW07-35D	1,2-DICHLOROETHANE	12	-8	-0.4854	1.645	Not Significant
MW07-35D	BENZENE	13	10	0.5632	1.645	Not Significant
MW07-35D	CHLOROFORM	13	-7	-0.3667	1.645	Not Significant
MW07-35D	TETRACHLOROETHENE	13	-13	-0.7372	1.645	Not Significant
MW07-35S	1,1,2,2-TETRACHLOROETHANE	14	-7	-0.3677	1.645	Not Significant
MW07-35S	TRICHLOROETHENE	14	-17	-0.9172	1.645	Not Significant
MW07-35S	CIS-1,2-DICHLOROETHENE	14	-46	-2.500	1.645	Downward Trend
MW07-35S	TRANS-1,2-DICHLOROETHENE	14	-2	-0.05927	1.645	Not Significant
MW07-35S	VINYL CHLORIDE	14	-4	-0.1934	1.645	Not Significant
MW07-35S	1,1,2-TRICHLOROETHANE	14	-11	-0.6128	1.645	Not Significant
MW07-35S	1,1-DICHLOROETHENE	14	1	0	1.645	Not Significant
MW07-35S	1,2-DICHLOROETHANE	13	-7	-0.4048	1.645	Not Significant
MW07-35S	BENZENE	14	35	2.014	1.645	Upward Trend
MW07-35S	CHLOROFORM	14	-7	-0.3677	1.645	Not Significant
MW07-35S	TETRACHLOROETHENE	14	0	0	NA	No Trend
MW07-37D	1,1,2,2-TETRACHLOROETHANE	15	-76	-3.716	1.645	Downward Trend
MW07-37D	TRICHLOROETHENE	15	-82	-4.013	1.645	Downward Trend
MW07-37D	CIS-1,2-DICHLOROETHENE	15	-43	-2.084	1.645	Downward Trend
MW07-37D	TRANS-1,2-DICHLOROETHENE	15	-75	-3.683	1.645	Downward Trend
MW07-37D	VINYL CHLORIDE	15	-2	-0.05000	1.645	Not Significant
MW07-37D	1,1,2-TRICHLOROETHANE	15	-74	-3.629	1.645	Downward Trend
MW07-37D	1,1-DICHLOROETHENE	15	0	0	NA	No Trend
MW07-37D	1,2-DICHLOROETHANE	14	-19	-0.9884	1.645	Not Significant
MW07-37D	BENZENE	15	-57	-2.787	1.645	Downward Trend
MW07-37D	CHLOROFORM	15	-10	-0.4581	1.645	Not Significant
MW07-37D	TETRACHLOROETHENE	15	3	0.09922	1.645	Not Significant
MW07-37S	1,1,2,2-TETRACHLOROETHANE	12	-36	-2.903	1.645	Downward Trend
MW07-37S	TRICHLOROETHENE	12	-24	-1.778	1.645	Downward Trend
MW07-37S	CIS-1,2-DICHLOROETHENE	12	-39	-2.946	1.645	Downward Trend
MW07-37S	TRANS-1,2-DICHLOROETHENE	12	-27	-2.377	1.645	Downward Trend
MW07-37S	VINYL CHLORIDE	12	-20	-2.041	1.645	Downward Trend
MW07-37S	1,1,2-TRICHLOROETHANE	12	-36	-2.903	1.645	Downward Trend
MW07-37S	1,1-DICHLOROETHENE	12	-9	-1.159	1.645	Not Significant
MW07-37S	1,2-DICHLOROETHANE	11	-24	-2.315	1.645	Downward Trend
MW07-37S	BENZENE	12	12	0.8807	1.645	Not Significant
MW07-37S	CHLOROFORM	12	-27	-2.377	1.645	Downward Trend
MW07-37S	TETRACHLOROETHENE	12	-27	-2.377	1.645	Downward Trend
MW07-38D	1,1,2,2-TETRACHLOROETHANE	13	-50	-2.989	1.645	Downward Trend
MW07-38D	TRICHLOROETHENE	13	-54	-3.258	1.645	Downward Trend
MW07-38D	CIS-1,2-DICHLOROETHENE	13	-30	-1.776	1.645	Downward Trend
MW07-38D	TRANS-1,2-DICHLOROETHENE	13	-22	-1.292	1.645	Not Significant
MW07-38D	VINYL CHLORIDE	13	-20	-1.235	1.645	Not Significant
MW07-38D	1,1,2-TRICHLOROETHANE	13	-38	-2.277	1.645	Downward Trend
MW07-38D	1,1-DICHLOROETHENE	13	-15	-0.9120	1.645	Not Significant
MW07-38D	1,2-DICHLOROETHANE	12	-20	-1.346	1.645	Not Significant
MW07-38D	BENZENE	13	7	0.3942	1.645	Not Significant
MW07-38D	CHLOROFORM	13	-39	-2.331	1.645	Downward Trend
MW07-38D	TETRACHLOROETHENE	13	-33	-1.956	1.645	Downward Trend
MW07-38S	1,1,2,2-TETRACHLOROETHANE	13	-38	-2.608	1.645	Downward Trend

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
MW07-38S	TRICHLOROETHENE	13	-32	-2.004	1.645	Downward Trend
MW07-38S	CIS-1,2-DICHLOROETHENE	13	-38	-2.608	1.645	Downward Trend
MW07-38S	TRANS-1,2-DICHLOROETHENE	13	-21	-1.415	1.645	Not Significant
MW07-38S	VINYL CHLORIDE	13	-33	-2.414	1.645	Downward Trend
MW07-38S	1,1,2-TRICHLOROETHANE	13	-31	-2.263	1.645	Downward Trend
MW07-38S	1,1-DICHLOROETHENE	13	-22	-1.758	1.645	Downward Trend
MW07-38S	1,2-DICHLOROETHANE	12	-33	-2.481	1.645	Downward Trend
MW07-38S	BENZENE	13	10	0.6181	1.645	Not Significant
MW07-38S	CHLOROFORM	13	-38	-2.608	1.645	Downward Trend
MW07-38S	TETRACHLOROETHENE	13	-18	-1.144	1.645	Not Significant
MW07-39D	1,1,2,2-TETRACHLOROETHANE	16	-33	-1.442	1.645	Not Significant
MW07-39D	TRICHLOROETHENE	16	-4	-0.1351	1.645	Not Significant
MW07-39D	CIS-1,2-DICHLOROETHENE	16	30	1.308	1.645	Not Significant
MW07-39D	TRANS-1,2-DICHLOROETHENE	16	10	0.4052	1.645	Not Significant
MW07-39D	VINYL CHLORIDE	16	22	0.9455	1.645	Not Significant
MW07-39D	1,1,2-TRICHLOROETHANE	16	-46	-2.030	1.645	Downward Trend
MW07-39D	1,1-DICHLOROETHENE	16	48	2.120	1.645	Upward Trend
MW07-39D	1,2-DICHLOROETHANE	15	35	1.687	1.645	Upward Trend
MW07-39D	BENZENE	16	39	1.721	1.645	Upward Trend
MW07-39D	CHLOROFORM	16	26	1.128	1.645	Not Significant
MW07-39D	TETRACHLOROETHENE	16	33	1.452	1.645	Not Significant
MW07-39I	1,1,2,2-TETRACHLOROETHANE	16	-69	-3.065	1.645	Downward Trend
MW07-39I	TRICHLOROETHENE	16	-59	-2.621	1.645	Downward Trend
MW07-39I	CIS-1,2-DICHLOROETHENE	16	11	0.4516	1.645	Not Significant
MW07-39I	TRANS-1,2-DICHLOROETHENE	16	-14	-0.5853	1.645	Not Significant
MW07-39I	VINYL CHLORIDE	16	14	0.5865	1.645	Not Significant
MW07-39I	1,1,2-TRICHLOROETHANE	16	-82	-3.664	1.645	Downward Trend
MW07-39I	1,1-DICHLOROETHENE	16	24	1.040	1.645	Not Significant
MW07-39I	1,2-DICHLOROETHANE	15	12	0.5464	1.645	Not Significant
MW07-39I	BENZENE	16	33	1.449	1.645	Not Significant
MW07-39I	CHLOROFORM	16	8	0.3158	1.645	Not Significant
MW07-39I	TETRACHLOROETHENE	16	36	1.583	1.645	Not Significant
MW07-39S	1,1,2,2-TETRACHLOROETHANE	16	-78	-3.474	1.645	Downward Trend
MW07-39S	TRICHLOROETHENE	16	-27	-1.181	1.645	Not Significant
MW07-39S	CIS-1,2-DICHLOROETHENE	16	-21	-0.9032	1.645	Not Significant
MW07-39S	TRANS-1,2-DICHLOROETHENE	16	-15	-0.6419	1.645	Not Significant
MW07-39S	VINYL CHLORIDE	16	51	2.274	1.645	Upward Trend
MW07-39S	1,1,2-TRICHLOROETHANE	16	-76	-3.384	1.645	Downward Trend
MW07-39S	1,1-DICHLOROETHENE	16	29	1.273	1.645	Not Significant
MW07-39S	1,2-DICHLOROETHANE	15	29	1.401	1.645	Not Significant
MW07-39S	BENZENE	16	42	1.850	1.645	Upward Trend
MW07-39S	CHLOROFORM	16	-12	-0.4963	1.645	Not Significant
MW07-39S	TETRACHLOROETHENE	16	51	2.269	1.645	Upward Trend
MW07-40D	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
MW07-40D	TRICHLOROETHENE	4	-5	-5	6	Not Significant
MW07-40D	CIS-1,2-DICHLOROETHENE	4	-4	-4	6	Not Significant
MW07-40D	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
MW07-40D	VINYL CHLORIDE	4	1	1	6	Not Significant
MW07-40D	1,1,2-TRICHLOROETHANE	4	1	1	6	Not Significant
MW07-40D	1,1-DICHLOROETHENE	4	3	3	6	Not Significant
MW07-40D	1,2-DICHLOROETHANE	4	3	3	6	Not Significant
MW07-40D	BENZENE	4	3	3	6	Not Significant
MW07-40D	CHLOROFORM	4	3	3	6	Not Significant
MW07-40D	TETRACHLOROETHENE	4	3	3	6	Not Significant
MW07-41I	1,1,2,2-TETRACHLOROETHANE	4	-6	-6	6	Downward Trend
MW07-41I	TRICHLOROETHENE	4	-3	-3	6	Not Significant
MW07-41I	CIS-1,2-DICHLOROETHENE	4	-6	-6	6	Downward Trend
MW07-41I	TRANS-1,2-DICHLOROETHENE	4	-6	-6	6	Downward Trend
MW07-41I	VINYL CHLORIDE	4	-3	-3	6	Not Significant
MW07-41I	1,1,2-TRICHLOROETHANE	4	-6	-6	6	Downward Trend
MW07-41I	1,1-DICHLOROETHENE	4	4	4	6	Not Significant
MW07-41I	1,2-DICHLOROETHANE	4	6	6	6	Upward Trend
MW07-41I	BENZENE	4	4	4	6	Not Significant
MW07-41I	CHLOROFORM	4	4	4	6	Not Significant
MW07-41I	TETRACHLOROETHENE	4	5	5	6	Not Significant
MW07-42I	1,1,2,2-TETRACHLOROETHANE	6	-13	-13	11	Downward Trend
MW07-42I	TRICHLOROETHENE	6	-11	-11	11	Downward Trend
MW07-42I	CIS-1,2-DICHLOROETHENE	6	7	7	11	Not Significant
MW07-42I	TRANS-1,2-DICHLOROETHENE	6	-1	-1	11	Not Significant
MW07-42I	VINYL CHLORIDE	6	-4	-4	11	Not Significant
MW07-42I	1,1,2-TRICHLOROETHANE	6	-14	-14	11	Downward Trend
MW07-42I	1,1-DICHLOROETHENE	6	10	10	11	Not Significant
MW07-42I	1,2-DICHLOROETHANE	6	12	12	11	Upward Trend
MW07-42I	BENZENE	6	10	10	11	Not Significant
MW07-42I	CHLOROFORM	6	6	6	11	Not Significant
MW07-42I	TETRACHLOROETHENE	6	12	12	11	Upward Trend
MW07-43D	1,1,2,2-TETRACHLOROETHANE	4	0	0	NA	No Trend
MW07-43D	TRICHLOROETHENE	4	-1	-1	6	Not Significant
MW07-43D	CIS-1,2-DICHLOROETHENE	4	3	3	6	Not Significant
MW07-43D	TRANS-1,2-DICHLOROETHENE	4	3	3	6	Not Significant
MW07-43D	VINYL CHLORIDE	4	0	0	NA	No Trend
MW07-43D	1,1,2-TRICHLOROETHANE	4	0	0	NA	No Trend
MW07-43D	1,1-DICHLOROETHENE	4	3	3	6	Not Significant
MW07-43D	1,2-DICHLOROETHANE	4	3	3	6	Not Significant

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
MW07-43D	BENZENE	4	0	0	NA	No Trend
MW07-43D	CHLOROFORM	4	3	3	6	Not Significant
MW07-43D	TETRACHLOROETHENE	4	3	3	6	Not Significant
MW07-43S	1,1,2,2-TETRACHLOROETHANE	4	0	0	NA	No Trend
MW07-43S	TRICHLOROETHENE	4	3	3	6	Not Significant
MW07-43S	CIS-1,2-DICHLOROETHENE	4	0	0	NA	No Trend
MW07-43S	TRANS-1,2-DICHLOROETHENE	4	3	3	6	Not Significant
MW07-43S	VINYL CHLORIDE	4	0	0	NA	No Trend
MW07-43S	1,1,2-TRICHLOROETHANE	4	0	0	NA	No Trend
MW07-43S	1,1-DICHLOROETHENE	4	3	3	6	Not Significant
MW07-43S	1,2-DICHLOROETHANE	4	3	3	6	Not Significant
MW07-43S	BENZENE	4	0	0	NA	No Trend
MW07-43S	CHLOROFORM	4	3	3	6	Not Significant
MW07-43S	TETRACHLOROETHENE	4	3	3	6	Not Significant
MW07-44D	1,1,2,2-TETRACHLOROETHANE	4	0	0	NA	No Trend
MW07-44D	TRICHLOROETHENE	4	0	0	NA	No Trend
MW07-44D	CIS-1,2-DICHLOROETHENE	4	0	0	NA	No Trend
MW07-44D	TRANS-1,2-DICHLOROETHENE	4	0	0	NA	No Trend
MW07-44D	VINYL CHLORIDE	4	1	1	6	Not Significant
MW07-44D	1,1,2-TRICHLOROETHANE	4	0	0	NA	No Trend
MW07-44D	1,1-DICHLOROETHENE	4	5	5	6	Not Significant
MW07-44D	1,2-DICHLOROETHANE	4	3	3	6	Not Significant
MW07-44D	BENZENE	4	3	3	6	Not Significant
MW07-44D	CHLOROFORM	4	3	3	6	Not Significant
MW07-44D	TETRACHLOROETHENE	4	5	5	6	Not Significant
MW07-45D	1,1,2,2-TETRACHLOROETHANE	6	-9	-9	11	Not Significant
MW07-45D	TRICHLOROETHENE	6	-6	-6	11	Not Significant
MW07-45D	CIS-1,2-DICHLOROETHENE	6	-9	-9	11	Not Significant
MW07-45D	TRANS-1,2-DICHLOROETHENE	6	-8	-8	11	Not Significant
MW07-45D	VINYL CHLORIDE	6	-3	-3	11	Not Significant
MW07-45D	1,1,2-TRICHLOROETHANE	6	-1	-1	11	Not Significant
MW07-45D	1,1-DICHLOROETHENE	6	7	7	11	Not Significant
MW07-45D	1,2-DICHLOROETHANE	6	9	9	11	Not Significant
MW07-45D	BENZENE	6	9	9	11	Not Significant
MW07-45D	CHLOROFORM	6	9	9	11	Not Significant
MW07-45D	TETRACHLOROETHENE	6	8	8	11	Not Significant
MW07-45S	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
MW07-45S	TRICHLOROETHENE	3	---	---	NA	NA
MW07-45S	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
MW07-45S	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
MW07-45S	VINYL CHLORIDE	3	---	---	NA	NA
MW07-45S	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
MW07-45S	1,1-DICHLOROETHENE	3	---	---	NA	NA
MW07-45S	1,2-DICHLOROETHANE	3	---	---	NA	NA
MW07-45S	BENZENE	3	---	---	NA	NA
MW07-45S	CHLOROFORM	3	---	---	NA	NA
MW07-45S	TETRACHLOROETHENE	3	---	---	NA	NA
P07-02	1,1,2,2-TETRACHLOROETHANE	16	-21	-0.9701	1.645	Not Significant
P07-02	TRICHLOROETHENE	16	-19	-0.8996	1.645	Not Significant
P07-02	CIS-1,2-DICHLOROETHENE	16	-29	-1.369	1.645	Not Significant
P07-02	TRANS-1,2-DICHLOROETHENE	16	-17	-0.8390	1.645	Not Significant
P07-02	VINYL CHLORIDE	16	-7	-0.3321	1.645	Not Significant
P07-02	1,1,2-TRICHLOROETHANE	16	-25	-1.164	1.645	Not Significant
P07-02	1,1-DICHLOROETHENE	16	-7	-0.3588	1.645	Not Significant
P07-02	1,2-DICHLOROETHANE	15	-15	-0.7611	1.645	Not Significant
P07-02	BENZENE	16	7	0.2938	1.645	Not Significant
P07-02	CHLOROFORM	16	-11	-0.5225	1.645	Not Significant
P07-02	TETRACHLOROETHENE	16	-13	-0.6293	1.645	Not Significant
P07-03	1,1,2,2-TETRACHLOROETHANE	17	-13	-0.5412	1.645	Not Significant
P07-03	TRICHLOROETHENE	17	20	0.8537	1.645	Not Significant
P07-03	CIS-1,2-DICHLOROETHENE	17	-24	-0.9795	1.645	Not Significant
P07-03	TRANS-1,2-DICHLOROETHENE	17	3	0.09794	1.645	Not Significant
P07-03	VINYL CHLORIDE	17	-19	-0.8759	1.645	Not Significant
P07-03	1,1,2-TRICHLOROETHANE	17	-22	-0.9806	1.645	Not Significant
P07-03	1,1-DICHLOROETHENE	17	-18	-0.8783	1.645	Not Significant
P07-03	1,2-DICHLOROETHANE	16	-17	-0.8044	1.645	Not Significant
P07-03	BENZENE	16	-1	0	1.645	Not Significant
P07-03	CHLOROFORM	17	-18	-0.7915	1.645	Not Significant
P07-03	TETRACHLOROETHENE	17	-11	-0.4881	1.645	Not Significant
P07-04	1,1,2,2-TETRACHLOROETHANE	25	-66	-1.653	1.645	Downward Trend
P07-04	TRICHLOROETHENE	25	-40	-0.9953	1.645	Not Significant
P07-04	CIS-1,2-DICHLOROETHENE	25	-43	-0.9857	1.645	Not Significant
P07-04	TRANS-1,2-DICHLOROETHENE	25	-78	-1.897	1.645	Downward Trend
P07-04	VINYL CHLORIDE	25	-100	-2.459	1.645	Downward Trend
P07-04	1,1,2-TRICHLOROETHANE	25	-80	-2.061	1.645	Downward Trend
P07-04	1,1-DICHLOROETHENE	25	-26	-0.8421	1.645	Not Significant
P07-04	1,2-DICHLOROETHANE	24	-54	-1.403	1.645	Not Significant
P07-04	BENZENE	25	35	0.9162	1.645	Not Significant
P07-04	CHLOROFORM	25	-74	-1.904	1.645	Downward Trend
P07-04	TETRACHLOROETHENE	25	-63	-1.661	1.645	Downward Trend
P07-05	1,1,2,2-TETRACHLOROETHANE	28	-169	-3.394	1.645	Downward Trend
P07-05	TRICHLOROETHENE	28	-149	-3.005	1.645	Downward Trend
P07-05	CIS-1,2-DICHLOROETHENE	28	-105	-2.055	1.645	Downward Trend
P07-05	TRANS-1,2-DICHLOROETHENE	28	-6	-0.09911	1.645	Not Significant

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
P07-05	VINYL CHLORIDE	28	91	1.780	1.645	Upward Trend
P07-05	1,1,2-TRICHLOROETHANE	28	-167	-3.368	1.645	Downward Trend
P07-05	1,1-DICHLOROETHENE	28	-119	-2.663	1.645	Downward Trend
P07-05	1,2-DICHLOROETHANE	27	-96	-2.005	1.645	Downward Trend
P07-05	BENZENE	28	70	1.611	1.645	Not Significant
P07-05	CHLOROFORM	28	-93	-1.940	1.645	Downward Trend
P07-05	TETRACHLOROETHENE	28	-81	-1.816	1.645	Downward Trend
P07-06	1,1,2,2-TETRACHLOROETHANE	29	-76	-1.455	1.645	Not Significant
P07-06	TRICHLOROETHENE	29	-29	-0.5343	1.645	Not Significant
P07-06	CIS-1,2-DICHLOROETHENE	29	-140	-2.608	1.645	Downward Trend
P07-06	TRANS-1,2-DICHLOROETHENE	29	-49	-0.9019	1.645	Not Significant
P07-06	VINYL CHLORIDE	29	188	3.509	1.645	Upward Trend
P07-06	1,1,2-TRICHLOROETHANE	29	-25	-0.4604	1.645	Not Significant
P07-06	1,1-DICHLOROETHENE	29	-75	-1.484	1.645	Not Significant
P07-06	1,2-DICHLOROETHANE	28	4	0.05986	1.645	Not Significant
P07-06	BENZENE	29	54	1.151	1.645	Not Significant
P07-06	CHLOROFORM	29	-68	-1.316	1.645	Not Significant
P07-06	TETRACHLOROETHENE	29	-34	-0.6795	1.645	Not Significant
P07-07	1,1,2,2-TETRACHLOROETHANE	30	-96	-1.695	1.645	Downward Trend
P07-07	TRICHLOROETHENE	30	11	0.1785	1.645	Not Significant
P07-07	CIS-1,2-DICHLOROETHENE	30	-59	-1.035	1.645	Not Significant
P07-07	TRANS-1,2-DICHLOROETHENE	30	-82	-1.445	1.645	Not Significant
P07-07	VINYL CHLORIDE	30	-98	-1.731	1.645	Downward Trend
P07-07	1,1,2-TRICHLOROETHANE	30	-70	-1.232	1.645	Not Significant
P07-07	1,1-DICHLOROETHENE	30	5	0.07154	1.645	Not Significant
P07-07	1,2-DICHLOROETHANE	29	-60	-1.111	1.645	Not Significant
P07-07	BENZENE	30	101	1.830	1.645	Upward Trend
P07-07	CHLOROFORM	30	-35	-0.6116	1.645	Not Significant
P07-07	TETRACHLOROETHENE	30	-41	-0.7288	1.645	Not Significant
P07-08	1,1,2,2-TETRACHLOROETHANE	28	-148	-2.904	1.645	Downward Trend
P07-08	TRICHLOROETHENE	28	-96	-1.877	1.645	Downward Trend
P07-08	CIS-1,2-DICHLOROETHENE	28	-82	-1.600	1.645	Not Significant
P07-08	TRANS-1,2-DICHLOROETHENE	28	-123	-2.411	1.645	Downward Trend
P07-08	VINYL CHLORIDE	28	-100	-1.958	1.645	Downward Trend
P07-08	1,1,2-TRICHLOROETHANE	28	-94	-1.839	1.645	Downward Trend
P07-08	1,1-DICHLOROETHENE	28	-103	-2.023	1.645	Downward Trend
P07-08	1,2-DICHLOROETHANE	27	-75	-1.555	1.645	Not Significant
P07-08	BENZENE	28	-1	0	1.645	Not Significant
P07-08	CHLOROFORM	28	-62	-1.218	1.645	Not Significant
P07-08	TETRACHLOROETHENE	28	-47	-0.9259	1.645	Not Significant
P07-09	1,1,2,2-TETRACHLOROETHANE	30	-118	-2.088	1.645	Downward Trend
P07-09	TRICHLOROETHENE	30	-74	-1.303	1.645	Not Significant
P07-09	CIS-1,2-DICHLOROETHENE	30	102	1.803	1.645	Upward Trend
P07-09	TRANS-1,2-DICHLOROETHENE	30	-3	-0.03573	1.645	Not Significant
P07-09	VINYL CHLORIDE	30	-38	-0.6602	1.645	Not Significant
P07-09	1,1,2-TRICHLOROETHANE	30	-65	-1.142	1.645	Not Significant
P07-09	1,1-DICHLOROETHENE	30	46	0.8055	1.645	Not Significant
P07-09	1,2-DICHLOROETHANE	29	13	0.2258	1.645	Not Significant
P07-09	BENZENE	30	128	2.340	1.645	Upward Trend
P07-09	CHLOROFORM	30	-54	-0.9493	1.645	Not Significant
P07-09	TETRACHLOROETHENE	30	-6	-0.09139	1.645	Not Significant
P07-10	1,1,2,2-TETRACHLOROETHANE	30	-178	-3.158	1.645	Downward Trend
P07-10	TRICHLOROETHENE	30	-124	-2.195	1.645	Downward Trend
P07-10	CIS-1,2-DICHLOROETHENE	30	-125	-2.215	1.645	Downward Trend
P07-10	TRANS-1,2-DICHLOROETHENE	30	-151	-2.677	1.645	Downward Trend
P07-10	VINYL CHLORIDE	30	-54	-0.9485	1.645	Not Significant
P07-10	1,1,2-TRICHLOROETHANE	30	-149	-2.642	1.645	Downward Trend
P07-10	1,1-DICHLOROETHENE	30	-64	-1.190	1.645	Not Significant
P07-10	1,2-DICHLOROETHANE	28	-151	-3.030	1.645	Downward Trend
P07-10	BENZENE	30	-63	-1.112	1.645	Not Significant
P07-10	CHLOROFORM	29	-112	-2.215	1.645	Downward Trend
P07-10	TETRACHLOROETHENE	29	-99	-2.016	1.645	Downward Trend
P07-14	1,1,2,2-TETRACHLOROETHANE	15	-18	-0.9220	1.645	Not Significant
P07-14	TRICHLOROETHENE	15	4	0.1689	1.645	Not Significant
P07-14	CIS-1,2-DICHLOROETHENE	15	26	1.279	1.645	Not Significant
P07-14	TRANS-1,2-DICHLOROETHENE	15	-6	-0.2981	1.645	Not Significant
P07-14	VINYL CHLORIDE	15	-17	-0.9025	1.645	Not Significant
P07-14	1,1,2-TRICHLOROETHANE	15	-15	-0.7896	1.645	Not Significant
P07-14	1,1-DICHLOROETHENE	15	-3	-0.1285	1.645	Not Significant
P07-14	1,2-DICHLOROETHANE	14	-9	-0.4927	1.645	Not Significant
P07-14	BENZENE	15	16	0.8041	1.645	Not Significant
P07-14	CHLOROFORM	15	-9	-0.4512	1.645	Not Significant

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
P07-14	TETRACHLOROETHENE	15	-4	-0.1797	1.645	Not Significant
P07-15	1,1,2,2-TETRACHLOROETHANE	18	-83	-3.183	1.645	Downward Trend
P07-15	TRICHLOROETHENE	18	-81	-3.060	1.645	Downward Trend
P07-15	CIS-1,2-DICHLOROETHENE	18	-47	-1.745	1.645	Downward Trend
P07-15	TRANS-1,2-DICHLOROETHENE	18	-31	-1.140	1.645	Not Significant
P07-15	VINYL CHLORIDE	18	-24	-0.8926	1.645	Not Significant
P07-15	1,1,2-TRICHLOROETHANE	18	-66	-2.548	1.645	Downward Trend
P07-15	1,1-DICHLOROETHENE	18	-33	-1.400	1.645	Not Significant
P07-15	1,2-DICHLOROETHANE	17	-35	-1.447	1.645	Not Significant
P07-15	BENZENE	18	7	0.2507	1.645	Not Significant
P07-15	CHLOROFORM	18	-27	-1.066	1.645	Not Significant
P07-15	TETRACHLOROETHENE	18	-7	-0.2740	1.645	Not Significant
P07-16	1,1,2,2-TETRACHLOROETHANE	15	-13	-0.5988	1.645	Not Significant
P07-16	TRICHLOROETHENE	15	-12	-0.5468	1.645	Not Significant
P07-16	CIS-1,2-DICHLOROETHENE	15	11	0.5155	1.645	Not Significant
P07-16	TRANS-1,2-DICHLOROETHENE	15	5	0.2183	1.645	Not Significant
P07-16	VINYL CHLORIDE	15	-37	-1.895	1.645	Downward Trend
P07-16	1,1,2-TRICHLOROETHANE	15	-15	-0.6968	1.645	Not Significant
P07-16	1,1-DICHLOROETHENE	15	-13	-0.7142	1.645	Not Significant
P07-16	1,2-DICHLOROETHANE	14	21	1.103	1.645	Not Significant
P07-16	BENZENE	15	8	0.3717	1.645	Not Significant
P07-16	CHLOROFORM	15	-19	-0.9748	1.645	Not Significant
P07-16	TETRACHLOROETHENE	15	-13	-0.6797	1.645	Not Significant
P07-17	1,1,2,2-TETRACHLOROETHANE	14	-13	-0.7353	1.645	Not Significant
P07-17	TRICHLOROETHENE	14	-13	-0.7353	1.645	Not Significant
P07-17	CIS-1,2-DICHLOROETHENE	14	-19	-1.103	1.645	Not Significant
P07-17	TRANS-1,2-DICHLOROETHENE	14	-19	-1.103	1.645	Not Significant
P07-17	VINYL CHLORIDE	14	-19	-1.103	1.645	Not Significant
P07-17	1,1,2-TRICHLOROETHANE	14	-17	-0.9854	1.645	Not Significant
P07-17	1,1-DICHLOROETHENE	14	-3	-0.1388	1.645	Not Significant
P07-17	1,2-DICHLOROETHANE	13	-11	-0.6747	1.645	Not Significant
P07-17	BENZENE	14	12	0.6482	1.645	Not Significant
P07-17	CHLOROFORM	14	-11	-0.6128	1.645	Not Significant
P07-17	TETRACHLOROETHENE	14	-13	-0.7390	1.645	Not Significant
P07-20	1,1,2,2-TETRACHLOROETHANE	17	-47	-1.915	1.645	Downward Trend
P07-20	TRICHLOROETHENE	17	-37	-1.510	1.645	Not Significant
P07-20	CIS-1,2-DICHLOROETHENE	17	-38	-1.530	1.645	Not Significant
P07-20	TRANS-1,2-DICHLOROETHENE	17	-25	-0.9895	1.645	Not Significant
P07-20	VINYL CHLORIDE	17	-9	-0.3311	1.645	Not Significant
P07-20	1,1,2-TRICHLOROETHANE	17	-36	-1.501	1.645	Not Significant
P07-20	1,1-DICHLOROETHENE	17	-35	-1.491	1.645	Not Significant
P07-20	1,2-DICHLOROETHANE	16	-42	-1.895	1.645	Downward Trend
P07-20	BENZENE	17	11	0.4139	1.645	Not Significant
P07-20	CHLOROFORM	17	-46	-1.975	1.645	Downward Trend
P07-20	TETRACHLOROETHENE	17	-17	-0.7463	1.645	Not Significant
P07-21	1,1,2,2-TETRACHLOROETHANE	19	-80	-2.780	1.645	Downward Trend
P07-21	TRICHLOROETHENE	19	-67	-2.309	1.645	Downward Trend
P07-21	CIS-1,2-DICHLOROETHENE	19	16	0.5251	1.645	Not Significant
P07-21	TRANS-1,2-DICHLOROETHENE	19	6	0.1752	1.645	Not Significant
P07-21	VINYL CHLORIDE	18	1	0	1.645	Not Significant
P07-21	1,1,2-TRICHLOROETHANE	19	-74	-2.603	1.645	Downward Trend
P07-21	1,1-DICHLOROETHENE	18	0	0	NA	No Trend
P07-21	1,2-DICHLOROETHANE	17	-12	-0.4665	1.645	Not Significant
P07-21	BENZENE	18	4	0.1143	1.645	Not Significant
P07-21	CHLOROFORM	18	-5	-0.1605	1.645	Not Significant
P07-21	TETRACHLOROETHENE	18	-5	-0.1826	1.645	Not Significant
P07-22	1,1,2,2-TETRACHLOROETHANE	17	-76	-3.169	1.645	Downward Trend
P07-22	TRICHLOROETHENE	17	-54	-2.219	1.645	Downward Trend
P07-22	CIS-1,2-DICHLOROETHENE	17	-66	-2.682	1.645	Downward Trend
P07-22	TRANS-1,2-DICHLOROETHENE	17	-50	-2.037	1.645	Downward Trend
P07-22	VINYL CHLORIDE	17	-16	-0.6565	1.645	Not Significant
P07-22	1,1,2-TRICHLOROETHANE	17	-64	-2.662	1.645	Downward Trend
P07-22	1,1-DICHLOROETHENE	17	-32	-1.511	1.645	Not Significant
P07-22	1,2-DICHLOROETHANE	16	-11	-0.4855	1.645	Not Significant
P07-22	BENZENE	17	-58	-2.417	1.645	Downward Trend
P07-22	CHLOROFORM	17	-6	-0.2194	1.645	Not Significant
P07-22	TETRACHLOROETHENE	17	-29	-1.367	1.645	Not Significant
P07-23	1,1,2,2-TETRACHLOROETHANE	19	-96	-3.330	1.645	Downward Trend
P07-23	TRICHLOROETHENE	19	-59	-2.032	1.645	Downward Trend
P07-23	CIS-1,2-DICHLOROETHENE	19	-30	-1.016	1.645	Not Significant
P07-23	TRANS-1,2-DICHLOROETHENE	19	-10	-0.3242	1.645	Not Significant
P07-23	VINYL CHLORIDE	19	-56	-2.107	1.645	Downward Trend
P07-23	1,1,2-TRICHLOROETHANE	19	-62	-2.158	1.645	Downward Trend
P07-23	1,1-DICHLOROETHENE	19	-53	-2.002	1.645	Downward Trend
P07-23	1,2-DICHLOROETHANE	18	-46	-1.791	1.645	Downward Trend
P07-23	BENZENE	19	-8	-0.2669	1.645	Not Significant
P07-23	CHLOROFORM	19	-26	-0.9104	1.645	Not Significant
P07-23	TETRACHLOROETHENE	19	-21	-0.7867	1.645	Not Significant
P07-24	1,1,2,2-TETRACHLOROETHANE	28	-173	-3.401	1.645	Downward Trend
P07-24	TRICHLOROETHENE	28	-141	-2.766	1.645	Downward Trend
P07-24	CIS-1,2-DICHLOROETHENE	28	-173	-3.420	1.645	Downward Trend
P07-24	TRANS-1,2-DICHLOROETHENE	28	-58	-1.146	1.645	Not Significant
P07-24	VINYL CHLORIDE	28	-110	-2.275	1.645	Downward Trend

TABLE D-4
MANN KENDALL TREND TESTS FOR GROUNDWATER LOCATIONS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
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Location	Analyte	N	S-Statistics	Test Statistic*	Critical Value	Trend
P07-24	1,1,2-TRICHLOROETHANE	28	-151	-2.981	1.645	Downward Trend
P07-24	1,1-DICHLOROETHENE	28	-79	-1.953	1.645	Downward Trend
P07-24	1,2-DICHLOROETHANE	27	-123	-2.661	1.645	Downward Trend
P07-24	BENZENE	28	-74	-1.474	1.645	Not Significant
P07-24	CHLOROFORM	28	-135	-2.836	1.645	Downward Trend
P07-24	TETRACHLOROETHENE	28	-75	-1.621	1.645	Not Significant
P07-28	1,1,2,2-TETRACHLOROETHANE	12	-3	-0.1551	1.645	Not Significant
P07-28	TRICHLOROETHENE	12	5	0.3307	1.645	Not Significant
P07-28	CIS-1,2-DICHLOROETHENE	12	-5	-0.3127	1.645	Not Significant
P07-28	TRANS-1,2-DICHLOROETHENE	12	4	0.2489	1.645	Not Significant
P07-28	VINYL CHLORIDE	12	4	0.2489	1.645	Not Significant
P07-28	1,1,2-TRICHLOROETHANE	12	-3	-0.1551	1.645	Not Significant
P07-28	1,1-DICHLOROETHENE	12	20	2.041	1.645	Upward Trend
P07-28	1,2-DICHLOROETHANE	11	4	0.2754	1.645	Not Significant
P07-28	BENZENE	12	35	2.546	1.645	Upward Trend
P07-28	CHLOROFORM	12	4	0.2489	1.645	Not Significant
P07-28	TETRACHLOROETHENE	12	4	0.2489	1.645	Not Significant
P07-29	1,1,2,2-TETRACHLOROETHANE	12	-3	-0.1551	1.645	Not Significant
P07-29	TRICHLOROETHENE	12	-5	-0.3127	1.645	Not Significant
P07-29	CIS-1,2-DICHLOROETHENE	12	-7	-0.4652	1.645	Not Significant
P07-29	TRANS-1,2-DICHLOROETHENE	12	-7	-0.4652	1.645	Not Significant
P07-29	VINYL CHLORIDE	12	-7	-0.4652	1.645	Not Significant
P07-29	1,1,2-TRICHLOROETHANE	12	-5	-0.3127	1.645	Not Significant
P07-29	1,1-DICHLOROETHENE	12	11	0.9141	1.645	Not Significant
P07-29	1,2-DICHLOROETHANE	11	-2	-0.08617	1.645	Not Significant
P07-29	BENZENE	12	29	2.066	1.645	Upward Trend
P07-29	CHLOROFORM	12	-3	-0.1551	1.645	Not Significant
P07-29	TETRACHLOROETHENE	12	-3	-0.1551	1.645	Not Significant

Notes:

Datasets presented for all analytes detected in at least one location since ME-01.

Field duplicates assigned the maximum value.

A significance level of 95% was used to interpret results.

* - When N > 10, the Normal approximation is used and calculated per box 4-9 in Data Quality Assessment: Statistical Methods for Practitioners.

EPA QA/G-9S. When the normal approximation is used, the critical value is the standard normal distribution.

When S is 0, no critical value is calculated and a conclusion of no trend is made.

NA = The Mann-Kendall Trend Test was not computed because there were not at least 4 samples, or there were less than 3 detected concentrations.

Summary Tables

TABLE D-5
SUMMARY OF DETECTED ANALYTES IN PIEZOMETERS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-PAL Piezo-Site9	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 07 Nov 2006	ME 08 Feb/May 2007	ME 09 Nov 2007	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep 2009	ME 14 Apr 2010	ME 15 Sep 2011	ME 16 Jun 2012	ME 17 Jul 2012	ME 17 Oct 2013	ME 18 Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
1,1,2,2-TETRACHLOROETHANE																					
P07-02	13.9	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 2 U	4.4	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 0.4 U	< 0.5 U						< 0.5 U
P07-03	13.9	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	3	< 0.5 U				< 0.50 U		< 0.5 U
P07-04	13.9	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U				1.6		< 0.5 UJ
P07-05	**13.9**	< 1 U	**25 J**	**31**	< 0.2 U	< 2 U	< 1 U	1.8	< 1 U	< 1 U	< 1 U	2.2	< 1 U	< 0.4 U	< 0.5 U	< 0.5 U		< 0.50 U	0.74 J	< 0.50 U	< 0.5 U
P07-06	**13.9**	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 2 U	< 2 U	< 0.4 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 0.5 UJ
P07-07	**13.9**	5	**80 J**	**63**	**520 J**	**254**	**221**	**293**	**130**	**66**	**68**	**180**	**150 J**	**180**	**110**	**100**		**99**	**77**	**17**	**44.6 J-**
P07-08	**13.9**	< 1 U		**120**	**1200**	**550**	4.7	**82.6 J**		**360 J**	**260**	**320 J**	**90**	**410**	**77**	**97**		**70**	2.3	8.2	**75**
P07-09	**13.9**	< 1 U	**33**	**110**	**1100**	**466**	**275 J**	**311 J**	**150**	**420**	**270**	**240**	**280 J**	**430**	**220**	**190**		**180**	**170**	**47**	**110**
P07-10	**13.9**	**14**	**17 J**	**130**	**98 J**	**86.1**	**66.2**	**78 J**	**32 J**	**32**	**66**	**33**	4.3	2	**22**	**16**		**18**	8.5	5.9	**15**
P07-14	13.9		< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U			< 0.5 U				< 0.5 UJ
P07-15	**13.9**		< 1 U	4.01	4.85	3.1 J	**22.0**	**14.9**	7.4	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U		< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 0.5 UJ
P07-16	13.9		0.2 J	< 0.2 U	1.97	0.93 J	1.1	< 1 U	2.5 J	1.3 J	< 1 U	1.3	< 1 U	0.6 J		< 0.5 U					< 0.3 UJ
P07-17	13.9		< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U							< 0.3 UJ
P07-20	**13.9**		6.88	**88**	< 0.2 UJ	5	< 1 U	**19.3**	< 1 UJ	< 1 U	< 1 U	**44**	1.5	3	< 0.5 U	< 0.5 U			< 0.50 U		0.7 J-
P07-21	**13.9**		**36**	**14 J**	< 0.2 UJ	**35.6**	< 1 U	**26.4**	< 1 UJ	11	4	**17**	2.7	5	0.64 J	< 0.5 U		4.2 J	< 0.50 U	< 0.50 U	< 0.5 UJ
P07-22	**13.9**		**63**	**62**	**100**	**37.4**	< 1 U	**18.4**	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	7	< 0.5 U	< 0.5 U			3.5		0.8 J
P07-23	**13.9**		**36**	10	**32**	**14**	< 1 U	**17.7 J**	< 1 UJ	**33**	7	**14 J**	2.3	0.6 J	< 0.5 U	< 0.5 U		5.2	0.55 J	1.2	< 0.3 UJ
P07-24	**13.9**		7.73	**41**	**29**	**32.4**	**34.8**	**35.8**	12 J	**36**	**19**	**21 J**	10	6 J	3.8	< 0.5 U		1.2	< 0.50 U	< 0.50 U	< 1.0 U
P07-28	13.9			< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U								< 0.5 UJ
P07-29	13.9			< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U								< 0.3 UJ
1,1,2-TRICHLOROETHANE																					
P07-02	60.2	< 1 U	< 1 U	< 0.4 U	< 0.4 U	< 2 U	2.5	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U						< 0.5 U
P07-03	60.2	< 1 U	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.5 J	< 0.5 U				< 1.0 U		< 0.5 U
P07-04	60.2	< 1 U	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U				< 1.0 U		< 0.5 UJ
P07-05	60.2	0.1	8.00 J	12	3.08	< 2 U	< 1 U	2.5	< 1 U	1.3	< 1 U	2.6	< 1 U	< 0.3 U	< 0.5 U	< 1 U		< 0.50 U	< 1.0 U	< 1.0 U	< 0.5 U
P07-06	60.2	< 1 U	0.36	0.86	0.43	< 2 U	< 1 U	< 1 U	< 1 UJ	4.1	0.3 J	2.8	< 2 U	< 0.3 U	< 0.5 U	< 1 U		< 0.50 U	< 1.0 U	< 1.0 U	< 0.5 UJ
P07-07	60.2	5	9.87 J	5.19	42 J	24.0	22.7	29.5	13	6.4	10	18	22 J	26	15	14		14	10	2.5	7.8 J-
P07-08	**60.2**	0.2		14	**94**	55.1	< 1 U	6.5		36	40	43 J	13	44	10	16		11	< 1.0 U	2.1	13
P07-09	**60.2**	0.7	4.01	19	**150**	**69.8**	32.1 J	35.8 J	17	**64**	34	35	**62**	56	32	43		49	38	9.7	19
P07-10	60.2	5	7 J	15	10 J	13.4	12.3	12	6.3 J	8.6	6	10	1.8	0.6 J	7.2	5.6		6.0	4.5	3.1 J	2.9 J
P07-14	60.2		< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U			< 1 U				< 0.5 UJ
P07-15	60.2		0.41	2.61	2.37	2.2 J	4.8	4.2	2.2	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U		< 1 U		< 0.50 U	< 1.0 U	< 1.0 U	< 0.5 UJ
P07-16	60.2		0.3 J	0.15 J	2.21	2	3	2.7	1.4 J	2.0	1	2.2	2.1	2		< 1 U					< 0.4 UJ
P07-17	60.2		< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U							< 0.4 UJ
P07-20	60.2		0.75	23	< 0.4 UJ	3.6	< 1 U	4	< 1 U	< 1 U	< 1 U	15	< 1 U	0.7 J	< 0.5 U	< 1 U			< 1.0 U		0.4 J-
P07-21	60.2		5.6	4.39 J	< 0.4 UJ	6.2	< 1 U	5.3	4 J	2.1	1 J	3.7	0.96 J	1	< 0.5 U	< 1 U		1.8 J	< 1.0 U	< 1.0 UJ	< 0.5 UJ
P07-22	60.2		6.84	8.79	10 J	6.5	< 1 U	2.9	0.89 J	< 1 U	< 1 U	< 1 U	< 1 U	2	< 0.5 U	< 1 U			1.8		< 0.5 UJ
P07-23	60.2		2.54	0.95	3.14	1.7 J	< 1 U	1.4	0.69 J	2.9	0.9 J	1.6 J	< 1 U	< 0.3 U	< 0.5 U	< 1 U		1.4	< 1.0 U	< 1.0 UJ	< 0.4 UJ
P07-24	60.2		1.45	6.47	3.93	4.4	5.2	5.4	2.2 J	5.3	4	4.4 J	2.5	1	1.4	< 1 U		0.46 J	< 1.0 U	< 1.0 U	< 1.0 U

TABLE D-5
SUMMARY OF DETECTED ANALYTES IN PIEZOMETERS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-PAL Piezo-Site9	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 07 Nov 2006	ME 08 Feb/May 2007	ME 09 Nov 2007	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep 2009	ME 14 Apr 2010	ME 15 Sep 2011	ME 16 Jun 2012	ME 17 Jul 2012	ME 17 Oct 2013	ME 18 Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
P07-28	60.2			< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U								< 0.5 UJ
P07-29	60.2			< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U								< 0.4 UJ
1,1-DICHLOROETHENE																					
P07-02	4.29	< 1 U	< 1 U	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U						< 1.0 U
P07-03	4.29	< 1 U	< 1 U	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U				< 0.50 U		< 1.0 U
P07-04	4.29	< 1 U	< 1 U	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U				< 0.50 U		< 1.0 UJ
P07-05	4.29	< 1 U	0.87 J	1.04	0.79	< 1 U	< 1 U	< 1 UJ	< 1 U	0.77 J	0.4 J	< 1 U	< 1 U	< 0.4 U	0.39 J	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-06	4.29	< 1 U	< 1 U	0.6	1.17	< 1 U	< 1 U	< 1 UJ	< 1 UJ	1.4	0.7 J	< 2 U	< 2 U	0.6 J	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
P07-07	**4.29**	< 1 U	0.76 J	0.52 J	**4.57 J**	2.7	1.5	4.2 J	1.8	1.9	1	< 4 U	**6.8 J**	4	1.7	2.8 J		1.8	1.4	< 0.50 U	< 3.5 UJ
P07-08	**4.29**	< 1 U		2.25	**7.06**	2.5	< 1 U	1.9		**6.9**	3	< 10 U	< 4 U	4	0.39 J	< 1 U		0.53 J	< 0.50 U	< 0.50 U	0.90 J
P07-09	**4.29**	< 1 U	0.75	3.05	**9.77**	**6.1**	< 1 U	**5.6 J**	**5.3**	**4.9**	4	< 10 U	< 10 U	**6**	**4.4**	**6.3 J**		**6.7**	**4.7**	1.7	3.3 J
P07-10	4.29	< 1 U	0.4 J	0.61	1.15 J	< 1 U	< 1 U	< 1 U	0.96 J	1.7	0.6 J	1.4	< 1 U	0.4 J	0.87 J	< 0.5 U		0.96 J	0.69 J	< 0.50 U	< 1.0 U
P07-14	4.29		< 1 U	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U			< 0.5 U				< 1.0 UJ
P07-15	4.29		< 1 U	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U		< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
P07-16	4.29		< 1 UJ	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U		< 0.5 U					< 0.7 UJ
P07-17	4.29		< 1 U	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U							< 0.7 UJ
P07-20	4.29		< 1 U	0.72	< 0.6 UJ	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	1.4	< 1 U	< 0.4 U	< 0.5 U	< 0.5 U			< 0.50 U		< 0.7 UJ
P07-21	4.29		0.24	0.1 J	< 0.6 UJ	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U	< 0.5 U		R	< 0.50 U	< 0.50 U	< 1.0 UJ
P07-22	4.29		< 1 U	0.37 J	< 3 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U	< 0.5 U			< 0.50 U		< 1.0 UJ
P07-23	4.29		< 1 U	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 0.7 UJ
P07-24	4.29		< 1 U	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-28	4.29			< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U								< 1.0 UJ
P07-29	4.29			< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U								< 0.7 UJ
1,2-DICHLOROETHANE																					
P07-02	84.3	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 2 U	1.6	< 1 U	< 1 U	< 1 U	< 1 U		< 1 U	< 0.2 U	< 0.5 U						< 1.0 U
P07-03	84.3	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U		< 1 U	< 0.2 U	< 0.5 U				< 0.50 U		< 1.0 U
P07-04	84.3	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U		< 1 U	< 0.2 U	< 0.5 U				< 0.50 U		< 1.0 UJ
P07-05	84.3	0.5	0.60 J	0.67	2.3	1.2 J	1.4 J	< 1 U	0.56 J	< 1 U	2		< 1 U	0.4 J	0.76 J	< 0.5 U		< 0.50 U	0.83 J	< 0.50 U	1.2
P07-06	84.3	0.1	1.87	3.66	5.33 J	< 2 U	2.7	1.7	2.4 J	2.6	4		< 2 U	2	2.6	< 0.5 U		2.2	1.9	< 0.50 U	1.8 J-
P07-07	84.3	0.8	0.54 J	0.44	1.24 J	< 2 U	0.76 J	< 5 U	0.61 J	< 1 U	0.6 J		< 1 U	0.9 J	< 0.5 U	< 2.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.4 UJ
P07-08	84.3	0.9		1.54	< 0.2 U	1.5 J	0.97 J	1.4		2.1 J	1		< 4 UJ	1	< 0.5 U	< 1 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-09	84.3	0.4	0.8	0.89	4.18	1.9 J	1.3 J	< 5 U	1.8	1.9	0.8 J		< 10 U	2	< 0.5 U	< 5 U		2.0	1.6	< 0.50 U	< 1.0 U
P07-10	84.3	0.5	R	1.27	< 2 U	1.1 J	1.3 J	1.2	1.2 J	1.2	< 1 U		< 1 UJ	0.9 J	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 UJ	< 0.50 U	< 1.0 U
P07-14	84.3		< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U		< 1 U	< 0.2 U			< 0.5 U				< 1.0 UJ
P07-15	84.3		0.24	1.4	1.31 J	1 J	< 1 U	< 1 U	0.44 J	< 1 U	0.4 J		< 1 U	< 0.2 U		< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
P07-16	84.3		< 1 UJ	< 0.2 U	1.73 J	2	2.9	2	3.3 J	2.3	2		< 1 U	3		< 0.5 U					2.5 J-
P07-17	84.3		< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U		< 1 U	< 0.2 U							< 0.3 UJ
P07-20	84.3		< 1 U	2.31	< 0.2 UJ	< 2 U	< 1 UJ	< 1 U	0.35 J	< 1 U	0.7 J		< 1 U	0.5 J	< 0.5 U	< 0.5 U			< 0.50 UJ		0.6 J-
P07-21	84.3		0.72	0.92 J	< 0.2 UJ	0.5 J	< 1 U	< 1 U	0.67 J	< 1 U	0.4 J		< 1 U	0.5 J	0.42 J	< 0.5 U		R	< 0.50 UJ	< 0.50 U	< 1.0 UJ
P07-22	84.3		0.46	0.78	< 1 U	< 2 U	< 1 UJ	< 1 U	< 1 UJ	< 1 UJ	< 1 U		< 1 U	< 0.2 U	< 0.5 U	< 0.5 U			< 0.50 UJ		< 1.0 UJ

TABLE D-5
SUMMARY OF DETECTED ANALYTES IN PIEZOMETERS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17	ME 17	ME 18	ME 19	ME20
	DV-PAL Piezo-Site9	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	Nov 2006	Feb/May 2007	Nov 2007	May 2008	Oct 2008	Apr 2009	Sep 2009	Apr 2010	Sep 2011	Jun 2012	Jul 2012	Oct 2013	Oct 2014	Sept 2015	Sept 2016
P07-23	84.3		< 1 U	< 0.2 U	< 0.2 UJ	< 2 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1 U		< 1 U	< 0.2 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 0.3 UJ
P07-24	84.3		< 1 U	0.45	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	0.5 J		< 1 U	0.2 J	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-28	84.3			< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U		< 1 U								< 1.0 UJ
P07-29	84.3			< 0.2 U	< 0.2 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ		< 1 U								< 0.3 UJ
BENZENE																					
P07-02	77.4	< 1 U	< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U						< 0.5 U
P07-03	77.4	< 1 UJ	< 1 U	< 0.3 U	< 0.3 U	R	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U				< 0.50 U		< 0.5 U
P07-04	77.4	< 1 U	< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U				< 0.50 U		< 0.5 UJ
P07-05	77.4	< 1 U	0.20 J	0.2 J	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 0.5 U
P07-06	77.4	< 1 U	< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 2 UJ	< 2 U	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 0.5 UJ
P07-07	77.4	0.2	0.12 J	0.12 J	0.32 J	< 0.5 U	< 0.5 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 4 UJ	< 1 U	< 0.3 U	< 0.5 U	< 2.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.4 UJ
P07-08	77.4	< 1 U		0.29 J	0.51	< 0.5 U	< 0.5 U	< 0.5 U		< 1 U	< 1 U	< 10 U	< 4 U	< 0.3 U	< 0.5 U	< 1 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-09	77.4	0.1	0.11	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 2.5 U	< 1 U	< 1 U	< 1 U	< 10 U	< 10 U	< 0.3 U	< 0.5 U	< 5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-10	77.4	0.5	0.6 J	0.81	0.97 J	0.8	0.75	0.87	0.86 J	0.88 J	0.3 J	< 1 U	0.56 J	< 0.3 U	0.53 J	< 0.5 U		0.45 J	< 0.50 U	< 0.50 U	< 1.0 U
P07-14	77.4		< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U			< 0.5 U				< 0.5 UJ
P07-15	77.4		< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U		< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 0.5 UJ
P07-16	77.4		< 1 UJ	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U		< 0.5 U					< 0.3 UJ
P07-17	77.4		< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U							< 0.3 UJ
P07-20	77.4		0.23	4.38	< 0.3 UJ	0.46 J	0.58	1.3	1.6 J	< 1 U	3	5	< 1 UJ	2	< 0.5 U	< 0.5 U			< 0.50 U		1.6 J-
P07-21	77.4		0.57	0.34 J	< 0.3 UJ	0.83	0.48 J	0.82	0.58 J	0.37 J	< 1 UJ	< 1 U	< 1 UJ	< 0.3 U	0.33 J	< 0.5 U		R	0.72 J	< 0.50 U	< 0.5 UJ
P07-22	77.4		0.8	1.31	1.24 J	1.6	< 0.5 U	0.78	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	0.3 J	< 0.5 U	< 0.5 U			< 0.50 U		< 0.5 UJ
P07-23	77.4		< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 0.3 UJ
P07-24	77.4		0.48	1.29	0.92	0.87	< 0.5 U	0.48 J	< 1 UJ	0.53 J	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-28	77.4			< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U								< 0.5 UJ
P07-29	77.4			< 0.3 U	< 0.3 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1 U								< 0.3 UJ
CHLOROFORM																					
P07-02	646	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U						< 1.0 U
P07-03	646	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U				< 0.50 U		< 1.0 U
P07-04	646	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U				< 0.50 U		< 1.0 UJ
P07-05	646	< 1 U	0.14 J	0.22	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-06	646	< 1 U	< 1 U	< 0.2 U	< 0.2 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 2 U	< 2 U	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
P07-07	646	0.2 E	0.3 J	0.29	1.14 J	< 2 U	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 4 U	0.96 J	0.7 J	< 0.5 U	< 2.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 2.0 UJ
P07-08	646	0.1 E		0.75	3.18	1.5 J	< 1 U	< 1 U		2.5	< 1 U	< 10 U	< 4 U	1	< 0.5 U	< 1 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-09	646	< 1 U	0.62	1.08	2.94	1.2 J	0.91 J	< 5 U	0.66 J	0.6 J	< 1 U	< 10 U	< 10 U	1	0.76 J	< 5 U		0.66 J	< 0.50 U	< 0.50 U	< 1.0 U
P07-10	646	< 1 U	R	0.3	0.27 J	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-14	646		< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U			< 0.5 U				< 1.0 UJ
P07-15	646		< 1 U	< 0.2 U	< 0.2 UJ	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U		< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
P07-16	646		< 1 UJ	< 0.2 U	< 0.2 UJ	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U		< 0.5 U					< 0.4 UJ
P07-17	646		< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U							< 0.4 UJ
P07-20	646		< 1 U	0.64	< 0.2 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U	< 0.5 U			< 0.50 U		< 0.4 UJ

TABLE D-5
SUMMARY OF DETECTED ANALYTES IN PIEZOMETERS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17	ME 17	ME 18	ME 19	ME20
	DV-PAL Piezo-Site9	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	Nov 2006	Feb/May 2007	Nov 2007	May 2008	Oct 2008	Apr 2009	Sep 2009	Apr 2010	Sep 2011	Jun 2012	Jul 2012	Oct 2013	Oct 2014	Sept 2015	Sept 2016
P07-21	646		0.16	< 0.2 UJ	< 0.2 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U	< 0.5 U		R	< 0.50 U	< 0.50 U	< 1.0 UJ
P07-22	646		0.34	0.39	0.45 J	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U	< 0.5 U			< 0.50 U		< 1.0 UJ
P07-23	646		0.18	< 0.2 U	< 0.2 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 0.4 UJ
P07-24	646		< 1 U	0.32	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-28	646			< 0.2 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U								< 1.0 UJ
P07-29	646			< 0.2 U	< 0.2 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U								< 0.4 UJ
CIS-1,2-DICHLOROETHENE																					
P07-02	NE	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 2 U	3.1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.5 UJ						< 0.5 U
P07-03	NE	< 1 UJ	< 1 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	0.76 J	0.52 J	0.4 J	< 1 U	< 1 U	7	< 0.62 UJ				< 0.50 U		< 0.5 U
P07-04	NE	< 1 U	0.81	1.56	3.12	3.7	3	1.6	2.3 J	2.1	1 J	6	1.6 J	4	< 1 U				1.2		< 0.5 UJ
P07-05	NE	0.2	300	320	260 J	50	51.8	150	90	190	48 J	150	36	10	59	98		0.64 J	32	5.0	68.9
P07-06	NE	3	140 E	290	490 J	323	274	258	210 J	370	200	410	140	190	94	13		120	93 J	47	87.2 J-
P07-07	NE	8	340	210	1000 J	597	553	1190	630	370	290	530	750 J	870	450	520		440	330	140	260 J-
P07-08	NE	0.6		400	1400	634	82.2	489		1200	520	1300 J	210	780	60 J	140		93	5.8	1.6	160
P07-09	NE	0.6	210 E	310	1700	1180	648 J	1440 J	1900	1000	720	1300	1800 J	1800	1100	1500		1700	1400	440	1000
P07-10	NE	54	230 E	220	180	156	151	221	160 J	200	200	180 J	93	50	120	110		120	110	90	91
P07-14	NE		0.29	0.3 J	< 0.5 U	< 2 U	< 1 U	< 1 U	0.46 J	0.45 J	< 1 U	< 1 U	2	1 J			2 J				< 0.5 UJ
P07-15	NE		0.89	5.56	5.31	5.4	18.1	24.1	17	17	14	9.4	13 J	6		< 0.5 U		2.0	< 0.50 U	2.1	1.3 J-
P07-16	NE		0.2 J	0.15 J	0.58	< 2 U	< 1 U	< 1 U	1.2 J	0.57 J	1	< 1 U	2.0	1		< 0.5 U					1.0 J-
P07-17	NE		< 1 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1 U	< 0.2 U							< 0.3 UJ
P07-20	NE		34	130	1.39 J	67.4	< 1 U	33.3	0.81 J	< 1 U	2	610	5.2	35	< 0.5 UJ	< 0.5 U			< 0.50 U		34.4 J-
P07-21	NE		20	15 J	2.14 J	19.1	1.1	27.4	27 J	26	23	44	23	30	5.4	8.3		14 J	< 0.50 U	35	56.9 J-
P07-22	NE		39	69	17 J	57.2	7.9	56.8	19 J	5.8	3 J	2.5	< 1 U	43	4	< 0.5 U			43		2.5 J-
P07-23	NE		4.73	2.3	6.06	3.7	< 1 U	7.3	3.5 J	24	11	24 J	6.6	2	< 0.5 UJ	3.7		7.6	0.77 J	2.1	0.5 J-
P07-24	NE		26	15	14	9.5	1.6	16.7	1 J	29	0.5 J	26 J	0.66 J	10 J	< 0.5 UJ	< 0.5 U		< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-28	NE			< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U								< 0.5 UJ
P07-29	NE			< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U								< 0.3 UJ
TETRACHLOROETHENE																					
P07-02	10.2	< 1 U	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U						< 1.0 U
P07-03	10.2	< 1 U	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U				< 1.0 U		< 1.0 U
P07-04	10.2	< 1 U	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U				< 1.0 U		< 1.0 UJ
P07-05	10.2	< 1 U	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U	< 1 U		< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
P07-06	10.2	< 1 U	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 2 U	< 2 U	< 0.4 U	< 0.5 U	< 1 U		< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 UJ
P07-07	10.2	< 1 U	< 1 U	< 0.4 U	< 4 U	< 2 U	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 4 U	< 1 U	< 0.4 U	< 0.5 U	< 5 U		< 0.50 U	< 1.0 U	< 1.0 U	< 2.8 UJ
P07-08	10.2	< 1 U		< 0.4 U	1.15	< 2 U	< 1 U	< 1 U		< 1 U	< 1 U	< 10 U	< 4 U	0.6 J	< 0.5 U	< 2 U		< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P07-09	10.2	< 1 U	< 1 U	0.13 J	1.19	< 2 U	< 1 U	< 5 U	< 1 UJ	< 1 UJ	0.4 J	< 10 U	< 10 U	0.5 J	0.44 J	< 10 U		0.43 J	< 1.0 U	< 1.0 U	< 2.0 U
P07-10	10.2	< 1 U	R	< 0.4 U	< 4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 UJ	< 1 U		< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P07-14	10.2		< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U			< 1 U				< 1.0 UJ
P07-15	10.2		< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U		< 1 U		< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 UJ
P07-16	10.2		< 1 UJ	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U		< 1 U					< 0.6 UJ

TABLE D-5
SUMMARY OF DETECTED ANALYTES IN PIEZOMETERS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17	ME 17	ME 18	ME 19	ME20
	DV-PAL Piezo-Site9	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	Nov 2006	Feb/May 2007	Nov 2007	May 2008	Oct 2008	Apr 2009	Sep 2009	Apr 2010	Sep 2011	Jun 2012	Jul 2012	Oct 2013	Oct 2014	Sept 2015	Sept 2016
P07-17	10.2		< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U							< 0.6 UJ
P07-20	10.2		< 1 U	< 0.4 U	< 0.4 UJ	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 UJ	< 1 U			< 1.0 U		< 0.6 UJ
P07-21	10.2		< 1 U	< 0.4 UJ	< 0.4 UJ	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 0.4 U	< 0.5 U	< 1 U		R	< 1.0 U	< 1.0 U	< 1.0 UJ
P07-22	10.2		< 1 U	< 0.4 U	< 2 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U	< 1 U			< 1.0 U		< 1.0 UJ
P07-23	10.2		< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U	< 1 U		< 0.50 U	< 1.0 U	< 1.0 U	< 0.6 UJ
P07-24	10.2		< 1 U	< 0.4 U	< 0.4 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U	< 0.5 U	< 1 U		< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P07-28	10.2			< 0.4 U	< 0.4 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U								< 1.0 UJ
P07-29	10.2			< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U								< 0.6 UJ
TRANS-1,2-DICHLOROETHENE																					
P07-02	NE	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.5 U						< 1.0 U
P07-03	NE	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	2	< 0.5 U				< 1.0 U		< 1.0 U
P07-04	NE	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	0.7 J	0.63 J	< 1 U	0.6 J	< 1 U	0.8 J	< 0.5 U				< 1.0 U		< 1.0 UJ
P07-05	NE	0.6	27	19	32	10.2	14.5	19.4	18	18	18	14	11	5	18	21		< 0.50 U	16	15	21.5
P07-06	NE	< 1 U	7.42	21	48	34.3	26	29.2	34 J	50	39	40	32	26	26	11		26	20	14	21.6 J-
P07-07	NE	29	30	16	64 J	54.7	40.2	80.6	56	40	34	25	95 J	54	26	27		26	21	8.4	19.8 J-
P07-08	NE	0.6		37	120	58.6	34.8	66.4		59	38	72 J	12	53	2.2	3.8		2.1	< 1.0 U	< 1.0 U	7.1
P07-09	NE	0.1	16	41	350	155	61.8 J	136 J	160	150	71	90	170	160	92	130		160	120	36	69
P07-10	NE	4	21	24	31 J	23.9	17.1	33.6	19 J	28	13	22	11	5	15	13		16	11	9.4	6.5
P07-14	NE		< 1 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U			< 1 U				< 1.0 UJ
P07-15	NE		0.19	0.84	1.11	1.3 J	2.7	4.1	2.1	2.3	2	1.3	2.6 J	0.9 J		< 1 U		0.58 J	< 1.0 U	< 1.0 U	0.6 J-
P07-16	NE		< 1 UJ	< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	2	< 1 U	2.1 J	1 J		< 1 U					0.5 J-
P07-17	NE		< 1 U	< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U							< 0.3 UJ
P07-20	NE		2.24	49	< 0.5 UJ	4.5	2.5	13.1	10 J	2	6	52	2.1	9	0.32 J	< 1 U			< 1.0 U		6.9 J-
P07-21	NE		2.85	2.15 J	< 0.5 UJ	2.1	2.8	3.8	4.3 J	5.2	6	7	6.5	6	2.4	1.9		1.3 J	1.9	1.3	3.4 J-
P07-22	NE		3.29	4.09	1.09 J	5.8	1.5	6	2 J	< 1 U	2 J	< 1 U	< 1 U	3	0.74 J	< 1 U			4.3		0.4 J-
P07-23	NE		0.28	0.14 J	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 UJ	1.4	1 J	1.9 J	1.3	0.7 J	< 0.5 U	< 1 U		0.56 J	< 1.0 U	< 1.0 U	< 0.3 UJ
P07-24	NE		0.57	0.5	2.14 J	1.4 J	< 1 U	1.5	0.59 J	5	0.6 J	1.9 J	< 1 U	2 J	< 0.5 U	< 1 U		< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P07-28	NE			< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U								< 1.0 UJ
P07-29	NE			< 0.5 U	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U								< 0.3 UJ
TRICHLOROETHENE																					
P07-02	184	< 1 U	< 1 U	< 0.4 U	< 0.41 U	< 2 U	3.6	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	0.34 J						< 1.0 U
P07-03	184	< 1 U	< 1 U	0.4	< 0.4 U	< 2 U	< 1 U	< 1 U	3.2	< 1 UJ	< 1 U	< 1 U	< 1 U	7	< 0.5 U				2.5		< 1.0 U
P07-04	184	< 1 U	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 1 U	< 1 U	2.4	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.3 U	< 0.5 U				1.3		< 1.0 UJ
P07-05	184	< 1 U	23 J	54 J	0.56	< 2 U	< 1 U	3.6	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U	0.53 J	0.82 J		< 0.50 U	2.7	< 0.50 U	< 1.0 U
P07-06	**184**	< 1 U	0.26	< 0.9 U	0.69 J	< 2 U	< 1 U	< 1 U	< 3.5 UJ	3.8 J	< 1 U	< 2 U	< 2 U	0.3 J	1	< 0.5 U		0.90 J	0.85 J	< 0.50 U	< 1.0 UJ
P07-07	**184**	0.5	47 J	18	**400 J**	162	110	**410**	61	19	64	**390**	**310 J**	**390**	**190**	**290**		**200**	**190**	31	151 J-
P07-08	**184**	< 1 U		120 J	**2700**	**1050**	3.3	74.8		**960**	**970**	**1400 J**	**350**	**1600**	110	**200**		69	14	2.0	**250**
P07-09	**184**	< 1 U	9.55	**270 J**	**3900**	**1780**	**542 J**	**1190 J**	180	**1500**	**990**	**930**	**1600 J**	**1400**	**1100**	**1200**		**1200**	**880**	**200**	**490**
P07-10	**184**	10	13 J	**280 J**	**190**	**302**	**284**	175	160 J	160 J	180	170 J	51	16	**200**	150		**200**	110	87	78
P07-14	184		< 1 U	0.18 J	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U			1.1 J				< 1.0 UJ

TABLE D-5
SUMMARY OF DETECTED ANALYTES IN PIEZOMETERS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17	ME 17	ME 18	ME 19	ME20
	DV-PAL Piezo-Site9	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	Nov 2006	Feb/May 2007	Nov 2007	May 2008	Oct 2008	Apr 2009	Sep 2009	Apr 2010	Sep 2011	Jun 2012	Jul 2012	Oct 2013	Oct 2014	Sept 2015	Sept 2016
P07-15	184		< 1 U	2.32 J	3.43 J	3.5	5.1	4.5	2.8	< 1.8 U	1	1	0.85 J	0.4 J		< 0.5 U		1.8	< 0.50 U	< 0.50 U	0.5 J-
P07-16	184		2 J	0.69 J	5.94 J	7.6	6.1	7.8	6.9 J	6.7	3	6.7	6.7	4		< 0.5 U					4.8 J-
P07-17	184		< 1 UJ	0.1 J	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.3 U							< 0.4 UJ
P07-20	184		0.25	84 J	< 0.4 UJ	4.2	< 1 U	< 1 U	0.8 J	< 1 UJ	0.4 J	2.8	< 1 U	0.4 J	< 0.5 U	< 0.5 U			< 0.50 U		< 0.4 UJ
P07-21	184		58 J	24 J	1.81 J	52.3	7.9	67.5	43 J	21 J	15	47	4.3	5	1.9	0.66 J		23 J	0.70 J	2.5	5.2 J-
P07-22	184		53	22 J	75	7.6	< 1 U	18.5	4 J	< 1 U	< 1 U	< 1 U	< 1 U	5	< 0.5 U	< 0.5 U			53		4.4 J-
P07-23	184		47	13 J	34 J	21	< 1 U	25.9	13	56 J	19	39 J	4.7	1	< 0.5 U	7.2		29	3.2	9.4	1.8 J-
P07-24	184		0.95	42	43 J	51.2	9.0	61.3	5.7 J	65 J	2	67 J	0.89 J	18 J	0.8 J	< 0.5 U		1.2	0.81	< 0.50 U	< 1.0 U
P07-28	184			0.16 J	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U								< 1.0 UJ
P07-29	184			< 0.4 U	< 0.4 UJ	< 2 U	< 1 U	< 1 U	1	< 1 U	< 1 U	< 1 U	< 1 U								< 0.4 UJ
VINYL CHLORIDE																					
P07-02	3.78	< 1 U	< 1 U	< 0.6 U	< 0.6 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 1 U						< 1.0 U
P07-03	3.78	< 1 UJ	< 1 U	< 0.6 U	< 0.6 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	0.4 J	< 1 U				< 0.50 U		< 1.0 U
P07-04	**3.78**	< 1 U	< 1 U	< 0.6 U	2.99	2.6	< 1 U	1.4	1.5 J	< 1 U	< 1 U	< 1 U	< 1 U	0.7 J	< 1 U				< 0.50 U		< 1.0 UJ
P07-05	**3.78**	< 1 U	**4.52 J**	3.35	**42**	**19.3**	**36.4 J**	**19.8**	**38**	**37**	**38**	**20**	**27**	**7**	**43**	**74**		< 1.0 U	**27**	**12**	**49.7**
P07-06	**3.78**	< 1 U	1.46	**5.42**	**12 J**	**12.2**	**16.9**	**11.1**	**61 J**	**51**	**71**	**64**	**56**	**49**	**48**	**12**		**48**	**35**	**32**	**45.8 J-**
P07-07	**3.78**	0.6	**4.63 J**	**3.94**	**72 J**	**204**	**89.2**	**26.4**	**53**	**22**	**8**	**6.9**	**40 J**	**15**	**18**	**16**		**12**	3.2	2.1	< 2.6 UJ
P07-08	**3.78**	< 1 U		**7.56**	**76**	**9.9**	**70.5**	**165**		**8.5**	**11**	**19 J**	< 4 U	**5**	< 1 U	< 1 U		0.73 J	< 0.50 U	< 0.50 U	2.5 J
P07-09	**3.78**	< 1 U	2.18	**13**	**48**	**44.3**	**63.0**	**103 J**	**390**	**26**	**9**	**14**	**24**	**26**	**17**	**12**		**27**	**29**	**7.2**	**11 J**
P07-10	**3.78**	< 1 U	1 J	**13**	**11 J**	**4.2**	**4**	**15.3**	**6 J**	**34**	3	**11**	**9.2**	**6**	< 1 U	2.1		1.4 J	0.93 J	0.76 J	< 1.0 U
P07-14	3.78		< 1 U	< 0.6 U	< 0.6 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 0.2 U			< 0.5 U				< 1.0 UJ
P07-15	3.78		< 1 U	0.24 J	< 0.6 UJ	< 2 U	< 1 U	1.7 J	0.61 J	2.2 J	0.4 J	< 1 U	< 1 U	< 0.2 U		< 0.5 U		< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 UJ
P07-16	3.78		< 1 UJ	< 0.6 U	< 0.6 UJ	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.88 J	0.4 J		< 0.5 U					< 0.5 UJ
P07-17	3.78		< 1 U	< 0.6 U	< 0.6 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.2 U							< 0.5 UJ
P07-20	**3.78**		0.52	1.85	< 0.6 UJ	< 2 U	**31.5**	**96.4**	**38 J**	< 1 U	2	**110**	< 1 U	0.3 J	< 1 U	< 0.5 U			< 0.50 U		**5.6 J-**
P07-21	3.78		0.47	< 0.6 UJ	< 0.6 UJ	< 2 U	1	2.3	0.76 J	0.8 J	< 1 U	1.3	< 1 U	1 J	< 1 U	< 0.5 U		R	1.2	< 0.50 U	0.7 J-
P07-22	3.78		0.36	0.70 J	< 0.6 UJ	< 2 U	< 1 U	1.6	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	0.4 J	< 1 U	< 0.5 U			< 0.50 U		< 1.0 UJ
P07-23	3.78		< 1 U	< 0.6 U	< 0.6 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U		< 1.0 U	< 0.50 U	< 0.50 U	< 0.5 UJ
P07-24	3.78		0.39	< 0.6 U	< 0.6 U	< 2 U	< 1 U	1.4	< 1 UJ	1.2	< 1 U	< 1 U	< 1 U	0.5 J	< 1 U	< 0.5 U		< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U
P07-28	3.78			< 0.6 U	< 0.6 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ								< 1.0 UJ
P07-29	3.78			< 0.6 U	< 0.6 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ								< 0.5 UJ

Notes:
1) U or < = Non-detect at laboratory detection limit
2) J = Estimated Value, J+ = biased high, J- = biased low, R = rejected
3) All units are in micrograms per liter (ug/l)
4) NE = not established
5) Criteria exceedances are bolded and highlighted

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
1,1,2,2-TETRACHLOROETHANE																		
DPT07-09-27D	NE																	
DPT07-09-28D	NE																	
DPT07-16I	NE																	
DPT07-16S	NE																	
DPT07-18I	NE																	
DPT07-18S	NE																	
DPT07-24D	NE																	
DPT07-24I	NE																	
DPT07-29-34I	NE																	
DPT07-29-34S	NE																	
DPT07-30I	NE																	
DPT07-30S	NE																	
DPT07-39-03D	NE																	
DPT07-39-03I	NE																	
DPT07-39-04D	NE																	
MW07-03D	NE		8 J															
MW07-03S	NE	< 10 U																
MW07-04D	NE		77000			24000 J	22000 J	9300	15000	9300	4800 J	3850	2840	3200 J	3000	2000	2200	1300
MW07-04S	NE	< 10 U																
MW07-05D	NE		48000 J										3440	< 1 UJ	2500	2300	1600 J	1300
MW07-05S	NE	< 10 U											< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-09D	NE		2100 J		1300		1200 J			1100			568	440 J	500	420	450	250 J
MW07-09R	NE	< 10 U			3	2 J	1.9 J	2.98	0.63	3.1	5 J	2.6	3.7	5.5 J	2.4 J	1.8	3.5 J	< 1 U
MW07-10D	NE		1500		630		650 J			373			182	150 J	180	110	120	100
MW07-10S	NE	< 10 U			< 10 U													
MW07-11D	NE	< 10 U				6 J	R	7.67	15	15.9	25.7 J	30.7	29.6	< 1 UJ	36	34	33	27
MW07-12D	NE		61		31	48 J	11 J		28	41.3	21.5 J	12.9	13	30 J	13	9	9.4	16 J
MW07-13D	NE	< 10 U			4		< 4 U			4.2			6.8	< 1 UJ	5.9 J	6	5.4	2.2
MW07-13S	NE	< 10 U			< 10 U		< 1 U			< 2 U			< 1 U	0.75 J	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-15D	NE		45000															
MW07-16R	NE	< 10 U													< 1 U	< 1 U	< 1 U	< 1 U
MW07-17D	NE		66000 J				30000 J			17400			12400	8800 J	8500	48000	11000	7000
MW07-18D	NE	< 10 U											< 1 UJ	< 1 U				
MW07-19D	NE	< 10 U			10		< 6 UJ			19.9			41.0	18 J	29 J	18	21	17 J
MW07-19S	NE		1500		2000		2100 J			2200			2200	1800 J	2000 J	1900	1700	1500 J
MW07-20D	NE	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-20S	NE	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-21D	NE		22		480	580 J	400 J	460	570	338	325 J	278	325	640 J	330	180	180	240

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

		Pre-ROD	Pre-ROD	Pre-ROD	Pre-ROD	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
	DV-Calf Pasture PAL-MW-Site7	Dec 1995	May 1996	Jan/Feb 1998	Aug 2000	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	May 2005	Nov 2006	Feb/Mar 2007	Nov/Dec 2007/Feb 2008	May 2008	Oct 2008	Apr 2009	Sep/Oct 2009
MW07-21R	NE		1700		2400	1800 J	1500 J	1400	1700	1410	1370 J	1180	1250	< 1 UJ	940	740	980	910
MW07-21S	NE	310			190	250 J	280 J	330	470	241	390	167	276	< 1 UJ	340	110	280	160
MW07-23D	NE		370		210	200 J	95 J	200	140 J	123	57.3 J	39.6	53.5	84 J	67 J	32	42	48 J
MW07-23S	NE	< 10 U			< 10 U								< 1 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-24D	NE	< 10 U			< 10 U								< 1 U	2.7 J	< 1 U	< 1 U	< 1 UJ	< 1 U
MW07-24DUT	NE					0.2 J	0.2 J	< 0.2 U	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U
MW07-24S	NE	< 10 U			< 10 U									< 1 UJ	< 1 UJ	< 1 U	< 1 UJ	< 1 U
MW07-25D	NE		3600 J		160	1100 J	1300 J	810	960	573	< 10 U	416	353	380 J	280 J	170	190	190
MW07-25R	NE		510 J		1300	270 J	120 J	140	230 J	129	< 10 U	77.6	105	34 J	58 J	32	36	21 J
MW07-27D	NE	2600			5500		3900 J			3830			3220	2200 J	3700	3000	2100	1700
MW07-28D	NE	< 10 U					< 1 UJ			< 2 U			< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-29D	NE	< 10 U											< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-30D	NE	< 50 U																
MW07-32D	NE			< 1 U											< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-32R	NE			< 1 U											< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-33D	NE					2 J	5.9	3.08	5.55	< 2 U	3 J	< 1 U	1.6	3.6 J	2 J	1	1.3 J	< 1 U
MW07-33S	NE					26 J	1.73	1.15	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-34D	NE					5 J	99 J	69	110 J	97.8	183 J	151	146	68 J	< 170 UJ	160	150	79
MW07-35D	NE									528	476	349	378	330 J	270 J	240	210	180
MW07-35S	NE							< 0.2 U	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-37D	NE									461	379 J	312	325	270	250	210	150	140
MW07-37S	NE									< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-38D	NE									423	< 4 U	229	195	140 J	180	130	100	74 J
MW07-38S	NE									< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-39D	NE									416	1740 J	2760	1670	< 1 UJ	4600	3000	5000	690
MW07-39I	NE									4870	6050	5650	6410	3500 J	7900	5200	5400	3600
MW07-39S	NE									7430	6740	7040	6690	< 1 UJ	7600 J	6200	5600	4000
MW07-40D	NE																	
MW07-41I	NE																	
MW07-42I	NE																	
MW07-43D	NE																	
MW07-43S	NE																	
MW07-44D	NE																	
MW07-45D	NE																	
MW07-45S	NE																	
1,1,2-TRICHLOROETHANE																		
DPT07-09-27D	**5**																	
DPT07-09-28D	5																	
DPT07-16I	5																	

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD	Pre-ROD	Pre-ROD	Pre-ROD	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 1995	May 1996	Jan/Feb 1998	Aug 2000	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	May 2005	Nov 2006	Feb/Mar 2007	Nov/Dec 2007/Feb 2008	May 2008	Oct 2008	Apr 2009	Sep/Oct 2009
DPT07-16S	5																	
DPT07-18I	5																	
DPT07-18S	5																	
DPT07-24D	**5**																	
DPT07-24I	5																	
DPT07-29-34I	**5**																	
DPT07-29-34S	5																	
DPT07-30I	5																	
DPT07-30S	5																	
DPT07-39-03D	**5**																	
DPT07-39-03I	**5**																	
DPT07-39-04D	**5**																	
MW07-03D	5		5 J															
MW07-03S	5	< 10 U																
MW07-04D	**5**		< 5000 U			**220 J**	**190 J**	**84**	**220**	**163**	**142 J**	**113**	**77.7**	**62 J**	**77**	**120 J**	**72 J**	< 10 U
MW07-04S	5	< 10 U																
MW07-05D	**5**		**390 J**										**31.9**	**25**	**30**	**27**	**28**	**19**
MW07-05S	5	< 10 U											< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-09D	**5**		**320 J**		**240**		**170 J**			**194**			**154**	**78 J**	**130**	**140**	**110**	**95 J**
MW07-09R	**5**	< 10 U			**6**	5 J	4.65	**7.11**	3.03	**9**	**13 J**	**12.6**	**13**	3.1 J	**9 J**	**8**	**13**	**8.3 J**
MW07-10D	**5**		**40 J**		**24**		**27 J**			**19.9**			**13.4**	**16**	**15**	**14**	**11**	**12**
MW07-10S	5	< 10 U			< 10 U													
MW07-11D	**5**	2 J				**15 J**	**24 J**	**18**	**30**	**37.9**	**41.5 J**	**57**	**53.2**	**39**	**59**	**63**	**68**	**60**
MW07-12D	5		< 10 U		2	3	0.5 J		0.82	2.5	< 2 U	< 1 U	< 1 U	1.8 J	< 1 U	0.4 J	< 1 U	< 1 U
MW07-13D	**5**	< 10 U			**8**		5			**7.3**			**5.7**	**15**	4.8 J	**8.5**	4.5	2.5
MW07-13S	5	< 10 U			< 10 U		< 1 U			< 2 U			< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-15D	**5**		< 1000 U															
MW07-16R	5	< 10 U													< 1 U	< 1 U	< 1 U	< 1 U
MW07-17D	**5**		**1200**				**490 J**			**371**			**354**	**210 J**	< 400 U	**780 J**	**350 J**	< 500 U
MW07-18D	5	< 10 U											< 1 U	< 1 U				
MW07-19D	**5**	< 10 U			5		3 J			**9.0**			**22.3**	**16 J**	**23 J**	**20**	**17**	**18 J**
MW07-19S	**5**		**130 J**		**180**		**120 J**			**168**			**142**	**160 J**	**120 J**	**150**	**110**	**130 J**
MW07-20D	5	< 10 U											< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-20S	5	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-21D	**5**		< 10 U		**50**	**73**	**23 J**	**47**	**75 J**	**47.7**	**51.1 J**	**57.9**	**59.7**	**66 J**	**79**	**67**	**70**	**74**
MW07-21R	**5**		< 500 U		**130**	**130**	**77 J**	**77**	**140 J**	**86.3**	**101**	**102**	**92.9**	**94**	**100**	**91**	**110**	**100**
MW07-21S	**5**	**41**			**19**	**29**	**40**	**42**	**33**	**24.7**	**31.9**	**18.1**	**26.3**	**12**	**45**	**13**	**25**	**22**
MW07-23D	**5**		**22 J**		**17**	**20 J**	**9 J**	**21**	**11**	**16.8**	**7.9 J**	**9.8**	**9.3**	**15 J**	**11**	**8**	**10**	**11 J**
MW07-23S	5	< 10 U			< 10 U								< 1 U		< 1 U	< 1 U	< 1 U	< 1 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD	Pre-ROD	Pre-ROD	Pre-ROD	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 1995	May 1996	Jan/Feb 1998	Aug 2000	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	May 2005	Nov 2006	Feb/Mar 2007	Nov/Dec 2007/Feb 2008	May 2008	Oct 2008	Apr 2009	Sep/Oct 2009
MW07-24D	5	< 10 U			< 10 U								< 1 U	< 1 U UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24DUT	5					1 J	0.8 J	1.65 J	1.59	1.1 J	1.2 J	< 1 U	0.71 J	0.71 J	0.47 J	0.8 J	0.78 J	0.73 J
MW07-24S	5	< 10 U			< 10 U									< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-25D	**5**		< 500 U		**66**	**16**	**17**	**20**	**18**	**10.8**	**10.7 J**	**8.4**	**8**	**6.2 J**	**6.4**	**6**	**5.7**	4.6 J
MW07-25R	**5**		< 250 U		**20**	**46**	**37**	**26**	**25**	< 2 U	**24.2 J**	**12.9**	**11.2**	**9.3 J**	**11 J**	**10**	< 20 U	< 10 U
MW07-27D	**5**	**240 J**			**260**		**140 J**			**211**			**199**	**130 J**	**190**	**180**	**150**	**140**
MW07-28D	5	< 10 U					< 1 U			< 2 U			< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-29D	5	< 10 U											< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-30D	5	< 50 U																
MW07-32D	5			< 2 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-32R	5			< 2 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-33D	5					0.3 J	0.45	0.3 J	< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-33S	5					< 1 U	0.19	0.27 J	< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-34D	**5**					**41 J**	**98 J**	**74**	**90 J**	**123**	**168 J**	**190**	**177**	**120 J**	**190**	**180**	**200**	**130**
MW07-35D	**5**									**13.1**	**11.3**	**8.7**	**8**	**7.6 J**	**7.5**	**8**	**5.8 J**	< 8 U
MW07-35S	5							< 0.4 U	< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-37D	**5**									**11.4**	**10.2 J**	**12.8**	**7.2**	**6.5**	**7.1**	**9**	**6.7**	< 5 U
MW07-37S	5									< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-38D	5									4.8	3.4 J	2.8	2.8	1.9 J	2.4	2	1.7	< 2 U
MW07-38S	5									< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-39D	**5**									**180**	**376 J**	**535**	**329**	**180**	**410**	**410**	**500**	**250**
MW07-39I	**5**									**483**	**497**	**402**	**439**	**410**	**380 J**	**420 J**	**320**	**310**
MW07-39S	**5**									**320**	**355**	**365**	**304**	**290**	**330**	**420**	**300**	**240**
MW07-40D	**5**																	
MW07-41I	**5**																	
MW07-42I	**5**																	
MW07-43D	5																	
MW07-43S	5																	
MW07-44D	**5**																	
MW07-45D	**5**																	
MW07-45S	5																	
1,1-DICHLOROETHENE																		
DPT07-09-27D	7																	
DPT07-09-28D	7																	
DPT07-16I	7																	
DPT07-16S	7																	
DPT07-18I	7																	
DPT07-18S	7																	
DPT07-24D	7																	

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD	Pre-ROD	Pre-ROD	Pre-ROD	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 1995	May 1996	Jan/Feb 1998	Aug 2000	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	May 2005	Nov 2006	Feb/Mar 2007	Nov/Dec 2007/Feb 2008	May 2008	Oct 2008	Apr 2009	Sep/Oct 2009
DPT07-24I	7																	
DPT07-29-34I	7																	
DPT07-29-34S	7																	
DPT07-30I	7																	
DPT07-30S	7																	
DPT07-39-03D	**7**																	
DPT07-39-03I	**7**																	
DPT07-39-04D	**7**																	
MW07-03D	7		< 10 U															
MW07-03S	7	< 10 U																
MW07-04D	**7**		< 5000 U			7 J	**21 J**	3.28	**12**	**8.8**	< 50 U	**9.7 J**	< 50 U	**13 J**	**11**	**8 J**	< 100 U	< 100 U
MW07-04S	7	< 10 U																
MW07-05D	7		< 1000 U										< 10 U	3.1 J	1.9	2	2.3 J	0.67 J
MW07-05S	7	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-09D	**7**		< 500 U		**9**		**15**			**12**			< 20 U	7 J	**13**	**10**	< 80 U	< 5 U
MW07-09R	7	< 10 U			< 10 U	0.2 J	0.45	< 0.6 U	< 0.6 U	< 1 U	1 J	< 1 U	< 1 U	0.61 J	1.4 J	1.2	< 5 U	< 1 U
MW07-10D	7		< 100 U		< 100 U		0.9 J			< 1 U			< 1 U	0.79 J	0.79 J	0.6 J	< 5 U	< 1 U
MW07-10S	7	< 10 U			< 10 U													
MW07-11D	7	< 10 U				< 1 UJ	0.26 J	0.13 J	< 0.6 U	< 1 U	< 1 U	1.6 J	< 1 U	0.75 J	1.3	2	1.6	< 2 U
MW07-12D	7		< 10 U		< 10 U	< 1 U	< 1 U		< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-13D	7	< 10 U			< 10 U		0.5 J			< 1 U			< 1 U	0.92 J	1.2	0.68 J	< 1 U	< 1 U
MW07-13S	7	< 10 U			< 10 U		< 1 U			< 1 U			< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-15D	7		< 1000 U															
MW07-16R	7	< 10 U													< 1 U	< 1 U	< 1 U	< 1 U
MW07-17D	**7**		< 1000 U				**79 J**			**21.8**			< 50 U	**28 J**	**27**	**35**	< 400 U	< 500 U
MW07-18D	7	< 10 U											< 1 U	< 1 U				
MW07-19D	7	< 10 U			< 10 U		0.5 J			< 1 U			2.9	4	5.3	3	< 10 U	< 10 U
MW07-19S	**7**		< 500 U		**8**		**11 J**			**9.4**			**13**	**23 J**	**18**	**11**	< 100 U	< 5 U
MW07-20D	7	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-20S	7	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-21D	**7**		< 10 U		3	2	5.44	4.94	4.71	4	< 10 U	< 10 U	< 10 U	4.3 J	7	5	4.6	5.5
MW07-21R	**7**		< 500 U		**11**	**18**	**15**	**16**	**8.67**	**8.4**	**10.1**	< 20 U	< 25 U	**13 J**	**12**	**9 J**	**11**	**12**
MW07-21S	7	< 10 U			1	1	3.51	2.71	2.06	1.9	3.3	1.4	< 1 U	1.6 J	3.7	1	< 5 U	1.7
MW07-23D	7		< 50 U		< 100 U	< 1 UJ	1 J	1.95	0.84	1.4	< 1 U	< 1 UJ	< 2 U	3.1 J	1.4	1	1.4	< 5 U
MW07-23S	7	< 10 U			< 10 U								< 1 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-24D	7	< 10 U			< 10 U								< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24DUT	7					< 1 UJ	< 1 U	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24S	7	< 10 U			< 10 U									< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-25D	7		< 500 U		4	< 1 U	0.74	0.61	0.83 J	< 1 U	< 5 U	< 5 U	< 5 U	< 1 UJ	0.64 J	0.3 J	< 1 U	< 5 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
MW07-25R	7		< 250 U		< 200 U	< 1 U	5.05	3.18	2.65	3.7	< 5 U	< 5 U	< 10 U	3.3 J	4.4	2	< 20 U	< 10 U
MW07-27D	**7**	**16**			**11**		**14 J**			**10.7**			**10.7**	**14 J**	**13**	**17**	< 100 U	< 80 U
MW07-28D	7	< 10 U					< 1 U			< 1 U			< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-29D	7	< 10 U											< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-30D	7	< 50 U																
MW07-32D	7			< 3 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-32R	7			< 3 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-33D	7					< 1 UJ	< 1 U	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-33S	7					< 1 U	< 1 U	< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-34D	7					0.9 J	6 J	1.61	1.47	2.3	4.5 J	4.1	4	6.2 J	5.1	6	6.9	< 10 U
MW07-35D	7									< 1 U	< 5 U	< 5 U	< 5 U	0.72 J	< 1 U	0.6 J	< 10 U	< 8 U
MW07-35S	7							< 0.6 U	< 0.6 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-37D	7									< 1 U	< 1 U	< 2 UJ	< 1 U	0.61 J	0.53 J	0.7 J	< 5 U	< 5 U
MW07-37S	7									< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-38D	7									< 1 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 2 U
MW07-38S	7									< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-39D	**7**									5	**12.7 J**	< 20 UJ	< 10 U	6.4 J	**21**	**19 J**	< 300 U	< 50 U
MW07-39I	**7**									< 1 U	< 100 U	< 100 U	< 50 U	**18**	**24 J**	**19 J**	< 250 U	< 200 U
MW07-39S	**7**									**11.8**	< 20 U	< 50 U	< 50 U	**14 J**	**15**	**16 J**	< 160 U	< 100 U
MW07-40D	7																	
MW07-41I	**7**																	
MW07-42I	**7**																	
MW07-43D	7																	
MW07-43S	7																	
MW07-44D	7																	
MW07-45D	7																	
MW07-45S	7																	
1,2-DICHLOROETHANE																		
DPT07-09-27D	5																	
DPT07-09-28D	5																	
DPT07-16I	5																	
DPT07-16S	5																	
DPT07-18I	**5**																	
DPT07-18S	**5**																	
DPT07-24D	5																	
DPT07-24I	5																	
DPT07-29-34I	5																	
DPT07-29-34S	5																	
DPT07-30I	5																	

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD	Pre-ROD	Pre-ROD	Pre-ROD	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 1995	May 1996	Jan/Feb 1998	Aug 2000	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	May 2005	Nov 2006	Feb/Mar 2007	Nov/Dec 2007/Feb 2008	May 2008	Oct 2008	Apr 2009	Sep/Oct 2009
DPT07-30S	5																	
DPT07-39-03D	5																	
DPT07-39-03I	5																	
DPT07-39-04D	5																	
MW07-03D	5		< 10 U															
MW07-03S	5	< 10 U																
MW07-04D	**5**		< 5000 U			**6 J**	**12 J**	3.94	**5.16**	3.2	< 100 U	3.3 J	< 50 U	3.7 J	2.9	4 J		< 100 UJ
MW07-04S	5	< 10 U																
MW07-05D	**5**		**120 J**										< 10 U	0.31 J	< 1 U	< 5 U		< 1 UJ
MW07-05S	5	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U		< 1 U
MW07-09D	**5**		< 500 U		< 10 U		**6.54**			**8.1**			< 20 U	**5.7 J**	**6.3**	**6**		< 50 UJ
MW07-09R	**5**	< 10 U			< 10 U	4 J	**8.00**	**5.59**	**15**	< 2 U	**7.8 J**	**6**	3.8	**6.1 J**	**7.1 J**	**8.4**		< 1 U
MW07-10D	5		< 100 U		< 100 U		< 1 U			1.6 J			1.5	2	1.7	2		< 1 UJ
MW07-10S	5	< 10 U			< 10 U													
MW07-11D	5	< 10 U				0.9 J	0.96	0.91	1.25	1.5 J	1.5 J	2.1	1.5	1.2 J	1.3	2		< 2 UJ
MW07-12D	5		< 10 U		< 10 U	0.5	< 1 U		< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U		< 1 UJ
MW07-13D	5	< 10 U			< 10 U		0.7 J			< 2 U			< 1 U	0.83 J	< 1 UJ	< 1 U		< 1 U
MW07-13S	5	< 10 U			< 10 U		< 1 U			< 2 U			< 1 U	< 1 U	< 1 UJ	< 1 U		< 1 UJ
MW07-15D	5		< 1000 U															
MW07-16R	5	< 10 U													< 1 U	< 1 U		< 1 UJ
MW07-17D	5		< 1000 U				3 J			< 2 U			< 50 U	1 J	0.4 J	0.99 J		< 500 U
MW07-18D	5	< 10 U											< 1 U	< 1 U				
MW07-19D	5	< 10 U			< 10 U		< 1 UJ			< 2 U			< 2 U	1.4 J	< 1 UJ	0.9 J		< 10 UJ
MW07-19S	5		< 500 U		4		2 J			2.3			< 10 U	4.4 J	2.2 J	2		< 50 U
MW07-20D	5	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U		< 1 UJ
MW07-20S	5	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U		< 1 UJ
MW07-21D	5		< 10 U		< 10 U	1	1.17	1.35	1.57	< 2 U	< 20 U	< 10 U	< 10 U	2.6 J	2.6	2		1.6 J
MW07-21R	5		< 500 U		< 10 U	2	< 1 U	0.73	0.48	< 2 U	< 2 U	< 20 U	< 25 U	0.52 J	< 1 U	< 10 U		< 1 UJ
MW07-21S	5	< 10 U			< 10 U	0.9	0.9	1.13	< 0.2 U	< 2 U	< 2 U	< 1 U	0.76 J	0.41 J	0.92 J	< 1 U		< 1 UJ
MW07-23D	5		< 50 U		< 100 U	0.4 J	< 1 UJ	0.44	< 0.2 U	< 2 U	< 2 U	< 1 U	< 2 U	0.41 J	< 1 U	< 1 U		< 5 UJ
MW07-23S	5	< 10 U			< 10 U								< 1 U		< 1 U	< 1 U		< 1 UJ
MW07-24D	5	< 10 U			< 10 U								< 1 U	< 1 UJ	< 1 U	< 1 UJ		< 1 U
MW07-24DUT	5					0.5 J	< 1 U	0.63 J	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	1.4 J	0.58 J	0.9 J		< 1 U
MW07-24S	5	< 10 U			< 10 U									< 1 U	< 1 U	< 1 U		< 1 U
MW07-25D	5		< 500 U		< 10 U	0.5	< 1 U	0.42	< 0.2 U	< 2 U	< 10 U	< 5 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U		< 5 U
MW07-25R	5		< 250 U		< 200 U	2	< 1 U	1.68	< 0.2 U	< 2 U	< 10 U	< 5 U	< 10 U	0.74 J	< 1 UJ	< 1 U		< 10 UJ
MW07-27D	**5**	4 J			**6**		4 J			5			**5.8**	4.8 J	**5.8**	**5.4**		< 80 U
MW07-28D	5	< 10 U					< 1 U			< 2 U			< 1 U	< 1 U	< 1 U	< 1 U		< 1 U
MW07-29D	5	< 10 U											< 1 U	< 1 U	< 1 U	< 1 U		< 1 UJ

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD	Pre-ROD	Pre-ROD	Pre-ROD	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 1995	May 1996	Jan/Feb 1998	Aug 2000	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	May 2005	Nov 2006	Feb/Mar 2007	Nov/Dec 2007/Feb 2008	May 2008	Oct 2008	Apr 2009	Sep/Oct 2009
MW07-30D	5	< 50 U																
MW07-32D	5			< 2 U											< 1 U	< 1 U		< 1 UJ
MW07-32R	5			< 2 U											< 1 U	< 1 U		< 1 UJ
MW07-33D	5					< 1 UJ	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ		< 1 U
MW07-33S	5					< 1 U	0.2	< 0.2 U	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U		< 1 U	< 1 UJ		< 1 UJ
MW07-34D	**5**					3 J	**33 J**	**5.43**	**5.74**	**6.2**	**8.1 J**	< 1 U	**7.6**	**9.2 J**	**7.2**	**8**		< 10 U
MW07-35D	5									< 2 U	< 10 U	< 5 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U		< 8 UJ
MW07-35S	5							< 0.2 U	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U		< 1 UJ
MW07-37D	5									1.4 J	< 2 U	< 2 U	1.2	1.1	0.76 J	< 1 U		< 5 UJ
MW07-37S	5									< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U		< 1 U
MW07-38D	5									< 2 U	< 4 U	< 2 U	< 1 U	< 1 UJ	< 1 U	< 1 U		< 2 U
MW07-38S	5									< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U		< 1 UJ
MW07-39D	**5**									4.9	**10.3 J**	< 20 U	< 10 U	4.4 J	**7.2**	**13 J**		< 50 U
MW07-39I	**5**									**6.3**	< 200 U	< 100 U	< 50 U	**6**	4.8 J	**13 J**		< 200 U
MW07-39S	**5**									2.2	< 40 U	< 50 U	< 50 U	2.5 J	2.1	**6 J**		< 100 U
MW07-40D	5																	
MW07-41I	5																	
MW07-42I	5																	
MW07-43D	5																	
MW07-43S	5																	
MW07-44D	5																	
MW07-45D	5																	
MW07-45S	5																	
BENZENE																		
DPT07-09-27D	5																	
DPT07-09-28D	5																	
DPT07-16I	5																	
DPT07-16S	5																	
DPT07-18I	5																	
DPT07-18S	5																	
DPT07-24D	5																	
DPT07-24I	5																	
DPT07-29-34I	5																	
DPT07-29-34S	5																	
DPT07-30I	5																	
DPT07-30S	5																	
DPT07-39-03D	**5**																	
DPT07-39-03I	5																	
DPT07-39-04D	5																	

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD	Pre-ROD	Pre-ROD	Pre-ROD	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 1995	May 1996	Jan/Feb 1998	Aug 2000	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	May 2005	Nov 2006	Feb/Mar 2007	Nov/Dec 2007/Feb 2008	May 2008	Oct 2008	Apr 2009	Sep/Oct 2009
MW07-03D	5		< 10 U															
MW07-03S	5	< 10 U																
MW07-04D	5		< 5000 U			< 1 U	0.2 J	< 0.3 U	< 0.3 U	< 0.5 U	< 25 U	< 25 U	< 25 U	< 1 U	< 1 U	< 1 U	< 100 U	< 100 U
MW07-04S	5	< 10 U																
MW07-05D	**5**		**550**										< 5 U	< 1 UJ	< 1 U	< 5 U	< 50 U	< 1 U
MW07-05S	5	< 10 U											< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-09D	**5**		< 500 U		4		**6.48**			**5.6**			< 10 U	3 J	**5.5**	**6**	< 80 U	< 50 U
MW07-09R	5	< 10 U			< 10 U	< 1 UJ	< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 5 U	< 1 U
MW07-10D	**5**		< 100 U		**12**		**13 J**			**6.2**			**6**	4.1	**7.5**	**8**	**7.2**	4.4
MW07-10S	5	< 10 U			< 10 U													
MW07-11D	5	< 10 U				< 1 UJ	< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 2 U
MW07-12D	5		< 10 U		< 10 U	0.4	0.2 J		0.45	1.2	0.86 J	0.78	0.86	1.6 J	0.6 J	0.7 J	1	2 J
MW07-13D	5	< 10 U			< 10 U		0.1 J			< 0.5 U			< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-13S	5	< 10 U			< 10 U		< 1 U			< 0.5 U			< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-15D	5		< 1000 U															
MW07-16R	5	< 10 U													< 1 U	< 1 U	< 1 U	< 1 U
MW07-17D	5		< 1000 U				1 J			< 0.5 U			< 25 U	< 1 UJ	< 1 U	< 1 U	< 400 U	< 500 U
MW07-18D	5	< 10 U											< 0.5 U	< 1 U				
MW07-19D	5	< 10 U			< 10 U		< 1 UJ			< 0.5 U			< 1 U	< 10 U	< 1 U	< 1 U	< 10 U	< 10 U
MW07-19S	5		< 500 U		< 10 U		0.6 J			0.51			< 5 U	0.76 J	0.46 J	0.5 J	< 100 U	< 50 U
MW07-20D	5	< 10 U											< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-20S	5	< 10 U											< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-21D	5		< 10 U		< 10 U	0.1	< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 5 U	< 5 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-21R	5		< 500 U		< 10 U	0.2	0.13	0.13 J	< 0.3 U	< 0.5 U	< 0.5 U	< 10 U	< 13 U	< 1 UJ	< 1 U	< 10 U	< 1 U	< 1 U
MW07-21S	5	< 10 U			< 10 U	0.3	0.3	0.38	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	0.37 J	< 1 U	< 5 U	< 1 U
MW07-23D	5		< 50 U		< 100 U	0.2 J	< 1 UJ	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 5 U
MW07-23S	5	< 10 U			< 10 U								< 0.5 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-24D	5	< 10 U			< 10 U								< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24DUT	5					< 1 UJ	< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24S	5	< 10 U			< 10 U									< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ
MW07-25D	5		< 500 U		4	3	3.08	2.43	2.82	1.5	< 2.5 U	< 2.5 U	< 2.5 U	0.57 J	0.64 J	1	1.1	< 5 U
MW07-25R	5		< 250 U		< 200 U	5	3.98	2.99	2.8	3.5	2.3 J	< 2.5 U	< 5 U	2.6 J	2.5	2	< 20 U	< 10 U
MW07-27D	5	< 10 U			< 10 U		< 1 UJ			< 0.5 U			< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 100 U	< 80 U
MW07-28D	5	< 10 U					< 1 U			< 0.5 U			< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-29D	5	< 10 U											< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-30D	5	< 50 U																
MW07-32D	5			< 2 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-32R	5			< 2 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-33D	5					< 1 UJ	< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
MW07-33S	5					< 1 U	< 1 U	< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-34D	5					< 1 UJ	0.8 J	< 0.3 U	< 0.3 U	< 0.5 U	0.69 J	0.54	0.51	0.74 J	0.7 J	1 J	1.2	< 10 U
MW07-35D	5									< 0.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 1 UJ	< 1 U	< 1 U	< 10 U	< 8 U
MW07-35S	5							< 0.3 U	< 0.3 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-37D	**5**									**14.1**	**14.8 J**	**7.8**	4.6	**5.1**	3.0	3	< 5 U	< 5 U
MW07-37S	5									< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-38D	5									< 0.5 U	< 1 U	< 1 U	< 0.5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 2 U
MW07-38S	5									< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-39D	5									< 0.5 U	< 2.5 U	< 10 U	< 5 U	< 1 UJ	0.44 J	0.9 J	< 300 U	< 50 U
MW07-39I	5									0.69	< 50 U	< 50 U	< 25 U	0.57 J	0.68 J	2 J	< 250 U	< 200 U
MW07-39S	5									1.1	< 10 U	< 25 U	< 25 U	1.3 J	1.5	4 J	< 160 U	< 100 U
MW07-40D	5																	
MW07-41I	5																	
MW07-42I	5																	
MW07-43D	5																	
MW07-43S	5																	
MW07-44D	5																	
MW07-45D	5																	
MW07-45S	5																	
CHLOROFORM																		
DPT07-09-27D	NE																	
DPT07-09-28D	NE																	
DPT07-16I	NE																	
DPT07-16S	NE																	
DPT07-18I	NE																	
DPT07-18S	NE																	
DPT07-24D	NE																	
DPT07-24I	NE																	
DPT07-29-34I	NE																	
DPT07-29-34S	NE																	
DPT07-30I	NE																	
DPT07-30S	NE																	
DPT07-39-03D	NE																	
DPT07-39-03I	NE																	
DPT07-39-04D	NE																	
MW07-03D	NE		< 10 U															
MW07-03S	NE	< 10 U																
MW07-04D	NE		< 5000 U			190 J	210 J	66	180	118	118 J	95.5	57.7	100 J	66	56 J	60 J	< 10 U
MW07-04S	NE	< 10 U																

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD	Pre-ROD	Pre-ROD	Pre-ROD	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 1995	May 1996	Jan/Feb 1998	Aug 2000	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	May 2005	Nov 2006	Feb/Mar 2007	Nov/Dec 2007/Feb 2008	May 2008	Oct 2008	Apr 2009	Sep/Oct 2009
MW07-05D	NE		240 J										8.7 J	5.9 J	6.2	5 J	6.7	4.8
MW07-05S	NE	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-09D	NE		< 500 U		3		2.12			1.2 J			< 20 U	< 1 UJ	0.95 J	0.4 J	< 80 U	< 50 U
MW07-09R	NE	< 10 U			< 10 U	< 1 UJ	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 5 U	< 1 U
MW07-10D	NE		< 100 U		< 100 U		3 J			1.5 J			0.96 J	0.89 J	0.58 J	0.5 J	< 5 U	0.9 J
MW07-10S	NE	< 10 U			< 10 U													
MW07-11D	NE	< 10 U				0.1 J	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 2 U
MW07-12D	NE		< 10 U		< 10 U	< 1 U	< 1 U		< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-13D	NE	< 10 U			< 10 U		< 1 U			< 2 U			< 1 U	0.39 J	< 1 U	< 1 U	< 1 U	< 1 U
MW07-13S	NE	< 10 U			< 10 U		< 1 U			< 2 U			< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-15D	NE		< 1000 U															
MW07-16R	NE	< 10 U													< 1 U	< 1 U	< 1 U	< 1 U
MW07-17D	NE		110 J				100 J			21.9			< 50 U	19 J	26	18	< 400 U	< 500 U
MW07-18D	NE	< 10 U											< 1 U	< 1 U				
MW07-19D	NE	< 10 U			< 10 U		< 1 UJ			< 2 U			< 2 U	< 10 U	< 1 U	< 1 U	< 10 U	< 10 U
MW07-19S	NE		< 500 U		10		6 J			8.5			< 10 U	7.4 J	12	5	< 100 U	< 50 U
MW07-20D	NE	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-20S	NE	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-21D	NE		< 10 U		2	2	1.58	1.46	1.57	< 2 U	< 20 U	< 10 U	< 10 U	< 1 UJ	0.48 J	0.5 J	< 1 U	< 1 U
MW07-21R	NE		< 500 U		8	5	5.43	4.2	4.11	3.2	3.9	< 20 U	< 25 U	2 J	1.7	< 10 U	2	1.5
MW07-21S	NE	< 10 U			< 10 U	0.7	1.25	1.35	0.92	< 2 U	1 J	< 1 U	0.67 J	< 1 UJ	1.2	0.3 J	< 5 U	0.59 J
MW07-23D	NE		< 50 U		< 100 U	1 J	0.7 J	1.28	0.44	< 2 U	< 2 U	< 1 UJ	< 2 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 5 U
MW07-23S	NE	< 10 U			< 10 U								< 1 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-24D	NE	< 10 U			< 10 U								< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24DUT	NE					< 1 UJ	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24S	NE	< 10 U			< 10 U									< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-25D	NE		< 500 U		2	9	10	8.35	8.57	5.5	8.2 J	4.9 J	4.3 J	3.9 J	7.9	3	3.8	2.9 J
MW07-25R	NE		< 250 U		< 200 U	2	2.4	1.16	1.06	< 2 U	< 10 U	< 5 U	< 10 U	< 1 UJ	0.54 J	0.2 J	< 20 U	< 10 U
MW07-27D	NE	17			19		14 J			5			3.1	3 J	2.4	2.4	< 100 U	< 80 U
MW07-28D	NE	< 10 U					< 1 U			< 2 U			< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-29D	NE	< 10 U											< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-30D	NE	< 50 U																
MW07-32D	NE			< 1 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-32R	NE			< 1 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-33D	NE					< 1 UJ	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-33S	NE					< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-34D	NE					0.2 J	3 J	0.47	0.54	< 2 U	1.1 J	0.92 J	0.89 J	0.76 J	0.58 J	0.7 J	1.2	< 10 U
MW07-35D	NE									5.8	6 J	4.9 J	5.1	5.2 J	7.5	4	< 10 U	< 8 U
MW07-35S	NE							< 0.2 U	< 0.2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
MW07-37D	NE									< 2 U	< 2 U	< 2 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U
MW07-37S	NE									< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-38D	NE									2.7	2.7 J	2	1.9	1.2 J	1.5	< 1 U	< 1 U	< 2 U
MW07-38S	NE									< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-39D	NE									2	15.2 J	26.8 J	10.1	0.68 J	34	25 J	39 J	< 50 U
MW07-39I	NE									49.6	77.3 J	< 100 U	48.2 J	50	54 J	41 J	< 250 U	< 200 U
MW07-39S	NE									59.4	62.8	71.9	59	73 J	58	58 J	< 160 U	< 100 U
MW07-40D	NE																	
MW07-41I	NE																	
MW07-42I	NE																	
MW07-43D	NE																	
MW07-43S	NE																	
MW07-44D	NE																	
MW07-45D	NE																	
MW07-45S	NE																	
CIS-1,2-DICHLOROETHENE																		
DPT07-09-27D	**70**																	
DPT07-09-28D	70																	
DPT07-16I	**70**																	
DPT07-16S	70																	
DPT07-18I	70																	
DPT07-18S	70																	
DPT07-24D	**70**																	
DPT07-24I	70																	
DPT07-29-34I	70																	
DPT07-29-34S	70																	
DPT07-30I	70																	
DPT07-30S	70																	
DPT07-39-03D	**70**																	
DPT07-39-03I	**70**																	
DPT07-39-04D	**70**																	
MW07-03D	70																	
MW07-03S	70																	
MW07-04D	**70**					**170 J**	**620 E**	**150**	**170**	**151**	**96.5 J**	**138**	< 50 U	**120 J**	**140**	**110 J**	**72 J**	**71 J**
MW07-04S	70																	
MW07-05D	**70**												65.1	**130 J**	**110**	**170**	**120**	**77**
MW07-05S	70												< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-09D	**70**				**2900**		**960 E**			**3420**			**2950**	**1600 J**	**2800**	**2700**	**2500**	**2000 J**
MW07-09R	**70**				56	**71 J**	**160**	**91**	**210**	**115**	**241 J**	**214**	**238**	**190 J**	**390**	**250**	**360**	**190 J**

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
MW07-10D	70				28		26			18.7			14.2	20	16	14	13	14
MW07-10S	70				< 10 U													
MW07-11D	**70**					13 J	47	35	41	**84.6**	**146 J**	**244**	**228**	**160 J**	**220**	**240**	**290**	**290**
MW07-12D	70				15	17 J	6		5.72	20.2	7.4 J	5.5	4.4	21 J	4.5	4	5.4	11 J
MW07-13D	70				19		22			28.8			37.6	49 J	60	43	41	20
MW07-13S	70				< 10 U		< 1 U			< 2 U			< 1 U	0.4 J	< 1 U	< 1 U	< 1 U	< 1 U
MW07-15D	**70**																	
MW07-16R	70														< 1 U	< 1 U	< 1 U	< 1 U
MW07-17D	**70**						**7800 E**			**2090**			**1610**	**1900 J**	**2200**	**7300**	**1600**	**1400**
MW07-18D	70												< 1 U	< 1 U				
MW07-19D	**70**				47		54 E			**110**			**274**	**510 J**	**460**	**280**	**340**	**380 J**
MW07-19S	**70**				**1400**		**1600 E**			**1410**			**2100**	**2100 J**	**3300**	**2300**	**2300**	**2300 J**
MW07-20D	70												< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-20S	70												< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-21D	**70**				**450**	**490 J**	**620 E**	**490**	**410**	**380**	**337 J**	**415**	**436**	**480**	**510**	**500**	**560**	**890**
MW07-21R	**70**				**2100**	**6800 J**	**1100 E**	**4000**	**1200**	**1290**	**1360 J**	**1300**	**799**	**2100 J**	**1100**	**2300**	**1900**	**2000**
MW07-21S	**70**				**460**	**470 J**	**830 E**	**640**	**540**	**522**	**798 J**	**356**	**660 J**	**370 J**	**760**	**440**	**740**	**710**
MW07-23D	**70**				**120**	**180 J**	**140 E**	**150**	**120 J**	**161**	**92.7 J**	**104 J**	**118**	**230**	**130**	**140**	**180**	**200 J**
MW07-23S	70				< 10 U								< 1 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-24D	70				< 10 U								< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24DUT	70					2 J	2	3.58	2.45	< 2 U	3.2 J	3.7	1.4	5.9 J	2.4	3	2.9	3.5
MW07-24S	70				< 10 U									< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-25D	**70**				**690**	17	20	18	19	12.4	10.9 J	8.6	< 5 U	9.9 J	15	8	9	8.1
MW07-25R	**70**				< 200 U	**880 J**	**650 E**	**400**	**570 J**	**483**	**477 J**	**418**	**432**	**370 J**	**560**	**250 J**	**420**	**290 J**
MW07-27D	**70**				**1900**		**1500 E**			**1520**			**1890**	**1900 J**	**1700**	**2000**	**1700**	**1600**
MW07-28D	70						< 1 U			< 2 U			< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-29D	70												< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-30D	70																	
MW07-32D	70														< 1 U	< 1 U	< 1 U	< 1 U
MW07-32R	70														< 1 U	< 1 U	< 1 U	< 1 U
MW07-33D	70					12 J	17	15	19	11.7	13.6 J	13.4	10.1	20 J	14	14	11 J	12
MW07-33S	70					0.8 J	0.35	1.97	< 0.5 U	< 2 U	3.5	< 1 U	< 1 U		3.6	< 1 U	3.3 J	< 1 U
MW07-34D	**70**					50 J	**2000**	**240**	**340 J**	**404**	**944 J**	**1020**	**1020**	**1600 J**	**1100**	**1200**	**1600**	**910**
MW07-35D	70									18.6	15.1	13.4	8.2	20 J	24	16	11	10
MW07-35S	70							2.4	2.83	< 2 U	2.8	2.1	< 1 U	< 1 UJ	1.9	2	0.79 J	1.4
MW07-37D	**70**									57.5	54.1 J	48.6 J	45.6	52	45	**76**	**76**	46
MW07-37S	70									< 2 U	< 2 U	< 1 U	< 1 U	1.2 J	< 1 U	< 1 U	< 1 U	< 1 U
MW07-38D	70									5.6	4 J	3.8	2.4	3.1 J	4	3	2.7	1.8 J
MW07-38S	70									< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
MW07-39D	**70**									**489**	**1880 J**	**2830 J**	**2060**	**1100 J**	**3000**	**3000**	**3900**	**1400**
MW07-39I	**70**									**2450**	**2720**	**2360**	**2410**	**2900 J**	**4400 J**	**2600**	**2100**	**2600**
MW07-39S	**70**									**1490**	**1430**	**1790**	**1530**	**1500 J**	**1800**	**1800**	**1900**	**1700**
MW07-40D	**70**																	
MW07-41I	**70**																	
MW07-42I	**70**																	
MW07-43D	70																	
MW07-43S	70																	
MW07-44D	70																	
MW07-45D	**70**																	
MW07-45S	70																	
TETRACHLOROETHENE																		
DPT07-09-27D	5																	
DPT07-09-28D	5																	
DPT07-16I	5																	
DPT07-16S	5																	
DPT07-18I	5																	
DPT07-18S	5																	
DPT07-24D	5																	
DPT07-24I	5																	
DPT07-29-34I	5																	
DPT07-29-34S	5																	
DPT07-30I	5																	
DPT07-30S	5																	
DPT07-39-03D	**5**																	
DPT07-39-03I	**5**																	
DPT07-39-04D	5																	
MW07-03D	5		< 10 U															
MW07-03S	5	< 10 U																
MW07-04D	**5**		< 5000 U			**400 J**	**370 J**	**340**	**530**	**475**	**325 J**	**469**	**515**	**830 J**	**190 J**	**430**	**330**	**390**
MW07-04S	5	< 10 U																
MW07-05D	**5**		**760 J**										**331**	**230 J**	**190 J**	**240**	**320 J**	**220**
MW07-05S	5	< 10 U											< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-09D	5		< 500 U		< 10 U		< 1 U			< 2 U			< 20 U	< 1 UJ	< 1 U	< 1 U	< 80 U	< 5 U
MW07-09R	5	< 10 U			< 10 U	< 1 UJ	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 5 U	< 1 U
MW07-10D	**5**		< 100 U		**19**		**16 J**			**15.9**			**16.6**	**8.4**	**7 J**	**9 J**	**8.1**	**12**
MW07-10S	5	< 10 U			< 10 U													
MW07-11D	5	< 10 U				< 1 UJ	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 2 U
MW07-12D	5		< 10 U		< 10 U	< 1 U	< 1 U		< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
MW07-13D	5	< 10 U			< 10 U		< 1 U			< 2 U			< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U
MW07-13S	5	< 10 U			< 10 U		< 1 U			< 2 U			< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1 U
MW07-15D	**5**		**1000**															
MW07-16R	5	< 10 U													< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-17D	**5**		**670 J**				**1400 J**			**457 J**			**317**	**140 J**	**300 J**	**1600**	**300 J**	**260 J**
MW07-18D	5	< 10 U											< 1 U	< 1 UJ				
MW07-19D	5	< 10 U			< 10 U		< 1 UJ			< 2 U			< 2 U	< 10 U	< 1 UJ	< 1 U	< 10 U	< 10 U
MW07-19S	5		< 500 U		2		2 J			2.2			< 10 U	4.2 J	2.1 J	3	< 100 U	< 5 U
MW07-20D	5	< 10 U											< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-20S	5	< 10 U											< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-21D	5		< 10 U		< 10 U	0.5	0.68	0.7	0.98	< 2 U	< 20 U	< 10 U	< 10 U	3.6 J	< 1 UJ	1	1.7	1.6
MW07-21R	**5**		< 500 U		**20**	**9**	**27**	**11**	**27**	**22.3**	**27.1**	**22.1**	**16.4 J**	**13 J**	**14 J**	**20**	**24**	**23**
MW07-21S	5	< 10 U			< 10 U	< 1 U	0.27	0.21 J	< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 5 U	< 1 U
MW07-23D	**5**		< 50 U		< 100 U	5 J	3 J	**6**	2.4	3.4	2 J	4.9	3.5	5 J	2 J	4 J	3.9	**5.1 J**
MW07-23S	5	< 10 U			< 10 U								< 1 U		< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-24D	5	< 10 U			< 10 U								< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-24DUT	5					0.1 J	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-24S	5	< 10 U			< 10 U									< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-25D	**5**		**84 J**		**13**	**78**	**80 J**	**54**	**81 J**	**62.8**	**46.5 J**	**49.9**	**54.5**	**22 J**	**40 J**	**48 J**	**49**	**45**
MW07-25R	**5**		< 250 U		**60**	**24**	**29**	**15**	**13**	**20.2**	**11 J**	**14.7**	**22.7**	**7.6 J**	**12 J**	**15 J**	< 20 U	**10 J**
MW07-27D	5	< 10 U			1		1 J			2.2			2.1	3.8 J	0.85 J	1.2 J	< 100 U	< 80 U
MW07-28D	5	< 10 U					< 1 U			< 2 U			< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-29D	5	< 10 U											< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-30D	5	< 50 U																
MW07-32D	5			< 2 U											< 1 UJ	< 1 UJ	< 1 U	< 1 U
MW07-32R	5			< 2 U											< 1 UJ	< 1 UJ	< 1 U	< 1 U
MW07-33D	5					< 1 UJ	< 1 U	< 0.4 U	< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-33S	5					0.6 J	0.29	0.42	< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U		< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-34D	5					0.3 J	R	< 0.4 U	< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 10 U
MW07-35D	**5**									**51.4**	**40.7**	**44**	**34.6**	**20 J**	**32 J**	**32**	**26**	**37**
MW07-35S	5							< 0.4 U	< 0.4 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-37D	**5**									4.5	4.3 J	**9.7**	3.6	2.2 J	2 J	3	3.9 J	3.7 J
MW07-37S	5									< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-38D	**5**									**78.7**	**59.2 J**	**71.6**	**79**	**28 J**	**31 J**	**60**	**62**	**49 J**
MW07-38S	5									< 2 U	< 2 U	< 1 U	< 1 U	0.55 J	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-39D	5									< 2 U	< 10 U	< 20 U	< 10 U	< 1 U	0.82 J	1 J	< 300 U	< 50 U
MW07-39I	**5**									4.4	< 200 U	< 100 U	< 50 U	**5.6 J**	4.0 J	**8 J**	< 250 U	< 200 U
MW07-39S	**5**									**17**	**17.8 J**	< 50 U	< 50 U	**13**	**13 J**	**34 J**	< 160 U	< 100 U
MW07-40D	**5**																	

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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
MW07-41I	5																	
MW07-42I	**5**																	
MW07-43D	5																	
MW07-43S	5																	
MW07-44D	5																	
MW07-45D	5																	
MW07-45S	5																	
TRANS-1,2-DICHLOROETHENE																		
DPT07-09-27D	**100**																	
DPT07-09-28D	100																	
DPT07-16I	100																	
DPT07-16S	100																	
DPT07-18I	100																	
DPT07-18S	100																	
DPT07-24D	100																	
DPT07-24I	100																	
DPT07-29-34I	100																	
DPT07-29-34S	100																	
DPT07-30I	100																	
DPT07-30S	100																	
DPT07-39-03D	**100**																	
DPT07-39-03I	**100**																	
DPT07-39-04D	**100**																	
MW07-03D	100																	
MW07-03S	100																	
MW07-04D	**100**					100 J	**140 E**	38	63 J	36.4	< 100 U	26.3 J	< 50 U	42 J	27	23 J	< 100 U	< 10 U
MW07-04S	100																	
MW07-05D	100												29.9	60 J	44	75 J	66	41
MW07-05S	100												< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-09D	**100**				**330**		**390 E**			**719**			**780**	**400 J**	**610**	**690**	**580**	**540 J**
MW07-09R	100				< 10 U	2 J	2.50	3.46	4.18	3.7	10.8 J	18.3	13.5	7.5 J	18 J	13	18	9.5 J
MW07-10D	100				10		7			6			5.3	5.8	4.5	4	< 5 U	3.9
MW07-10S	100				< 10 U													
MW07-11D	100					< 1 UJ	0.26	0.23 J	< 0.5 U	1.6 J	4 J	20	3.8	2.4 J	8.3	8	11	8.8
MW07-12D	100				2	3	1		0.67	3.5	1.7 J	2.2	1.3	3.1 J	0.72 J	0.7 J	1	2.1 J
MW07-13D	100				1		2			2.2			3.8	3.2 J	7.4	4	4.8	1.7
MW07-13S	100				< 10 U		< 1 U			< 2 U			< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-15D	100																	
MW07-16R	100														< 1 U	< 1 U	< 1 U	< 1 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
MW07-17D	**100**						**4400 E**			**1000**			**832**	**1000 J**	**1300**	**3200**	**940**	**810**
MW07-18D	100												< 1 U	< 1 U				
MW07-19D	**100**				3		5			16.4			48.9	51 J	69	37	42	45 J
MW07-19S	**100**				**160**		**190 E**			**200**			**189**	**160 J**	**270**	**190**	**140**	**150 J**
MW07-20D	100												< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-20S	100												< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-21D	**100**				**120**	**170**	**210 E**	**130**	**110**	**130**	**114 J**	**103**	98.8	**120 J**	**140**	**120**	**120**	**140**
MW07-21R	**100**				**430**	**370 J**	**420 E**	**330**	**220**	**294**	**368**	**270**	**220**	**270**	**250**	**310**	**300**	**360**
MW07-21S	**100**				18	28	51 E	24	28	32.6	48.8	18.4	26.8	14 J	39	19	26	27
MW07-23D	100				38	71 J	44	36	34	39.6	25.3 J	27.3 J	27.8	83 J	29	35	40	48 J
MW07-23S	100				< 10 U								< 1 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-24D	100				< 10 U								< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24DUT	100					< 1 UJ	0.2 J	0.22 J	< 0.5 U	< 2 U	< 2 U	< 1 U	< 1 U	0.45 J	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24S	100				< 10 U									< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-25D	**100**				**200**	7	7.08	6	6.84	5.1	< 10 U	< 5 U	< 5 U	3.5 J	5.2	3	3.1	< 5 U
MW07-25R	**100**				< 200 U	**260 J**	**260 E**	92	**150 J**	**149**	**117 J**	85.3	**131**	**110 J**	**120**	71	87	57 J
MW07-27D	**100**				**490**		**510 E**			**383**			**522**	**390 J**	**420**	**410**	**330**	**320**
MW07-28D	100						< 1 U			< 2 U			< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-29D	100												< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-30D	100																	
MW07-32D	100														< 1 U	< 1 U	< 1 U	< 1 U
MW07-32R	100														< 1 U	< 1 U	< 1 U	< 1 U
MW07-33D	100					4 J	4.43	3.49	3.98	3.1	4.5 J	< 1 U	2.4	3.2 J	3.8	3	3.2 J	2.7
MW07-33S	100					0.3 J	0.27	0.86 J	< 0.5 U	< 2 U	1.7 J	< 1 U	< 1 U		1.2	< 1 U	< 1 U	< 1 U
MW07-34D	100					1 J	12	3.27	4.17	7.2	28.4 J	28.7	28.2	30 J	48	49	74	31
MW07-35D	100									5.1	5 J	< 5 U	< 5 U	5.1 J	6.3	4	< 10 U	< 8 U
MW07-35S	100							0.25 J	< 0.5 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-37D	100									27.5	29 J	27 J	20.6	26	17	20	22	17
MW07-37S	100									< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-38D	100									1.7 J	< 4 U	< 2 U	1.5	0.96 J	1.2	1	< 1 U	< 2 U
MW07-38S	100									< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-39D	**100**									< 2 U	**161 J**	**479 J**	**180**	**120 J**	**570**	**520**	**750**	**140**
MW07-39I	**100**									**613**	**729**	**556**	**521**	**820**	**1100 J**	**790**	**510**	**710**
MW07-39S	**100**									**212**	**193**	**190**	**134**	**200 J**	**180**	**240 J**	**190**	**180**
MW07-40D	**100**																	
MW07-41I	**100**																	
MW07-42I	**100**																	
MW07-43D	100																	
MW07-43S	100																	

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
MW07-44D	100																	
MW07-45D	**100**																	
MW07-45S	100																	
TRICHLOROETHENE																		
DPT07-09-27D	**5**																	
DPT07-09-28D	5																	
DPT07-16I	**5**																	
DPT07-16S	5																	
DPT07-18I	5																	
DPT07-18S	5																	
DPT07-24D	**5**																	
DPT07-24I	5																	
DPT07-29-34I	5																	
DPT07-29-34S	5																	
DPT07-30I	5																	
DPT07-30S	5																	
DPT07-39-03D	**5**																	
DPT07-39-03I	**5**																	
DPT07-39-04D	**5**																	
MW07-03D	**5**		**65 J**															
MW07-03S	5	< 10 U																
MW07-04D	**5**		**46000**			**29000 J**	**27000 J**	**7200**	**30000**	**17500**	**13600 J**	**15500**	**12600**	**12000 J**	**11000 J**	**13000**	**13000**	**10000**
MW07-04S	5	< 10 U																
MW07-05D	**5**		**47000 J**										**7540**	**5100**	**4100**	**5800**	**5400 J**	**3700**
MW07-05S	5	< 10 U											< 1 U	4.5	< 1 U	0.5 J	< 1 U	< 1 U
MW07-09D	**5**		**5500**		**5300**		**8200 J**			**8030**			**7790**	**3100 J**	**5200 J**	**6800**	**6200**	**5400 J**
MW07-09R	**5**	< 10 U			3	4 T	**5.28**	**14**	**9.46**	**9.2**	**21.3 J**	**21.1**	**31.7**	< 20 UJ	**30 J**	**28**	**47**	**27 J**
MW07-10D	**5**		**860 J**		**1000**		**630 J**			**519**			**513**	**380 J**	**360**	**360**	**310**	**320**
MW07-10S	5	< 10 U			< 10 U													
MW07-11D	**5**	< 10 U				< 1 UJ	< 2.62 U	2.39	4.39	**9.2**	**30.2 J**	**90.5**	**73.5**	**38**	**97**	**120**	**160**	**150**
MW07-12D	**5**		2 J		4	4	3		4.26	**10.3**	**6.9 J**	**8.2**	**8.7**	< 13 UJ	**7.4**	**7**	**14**	**20 J**
MW07-13D	**5**	**26**			**63**		**88**			**101**			**156**	**200**	**160**	**140**	**160**	**73**
MW07-13S	**5**	< 10 U			< 10 U		< 1 U			< 2 U			1	**6.9**	< 1 U	< 1 U	< 1 U	< 1 U
MW07-15D	**5**		**47000**															
MW07-16R	5	< 10 U													< 1 U	< 1 U	< 1 U	< 1 U
MW07-17D	**5**		**120000**				**62000 J**			**45700**			**58500**	**37000 J**	**41000**	**150000**	**52000**	**46000**
MW07-18D	5	< 10 U											< 1 U	< 1 U				
MW07-19D	**5**	< 10 U			**34**		**56 J**			**264**			**1110 J**	**400 J**	**810**	**660**	**800**	**940 J**
MW07-19S	**5**		**3400**		**5500**		**7200 J**			**4430**			**7970**	**5800**	**6400**	**7400**	**5200**	**6700 J**

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
MW07-20D	5	< 10 U											< 1 U	1.8	< 1 U	< 1 U	< 1 U	< 1 U
MW07-20S	5	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-21D	**5**		**82**		**2800**	**3600 J**	**4400 J**	**3200**	**4900**	**3530**	**2670 J**	**4180**	**4500**	**3700 J**	**3500**	**4400**	**3900**	**5400**
MW07-21R	**5**		**5800**		**10000**	**4200 J**	**9900 J**	**4200**	**8500**	**6950**	**8490 J**	**9780**	**10000**	**6100**	**7300**	**9600**	**10000**	**11000**
MW07-21S	**5**	**590**			**480**	**310 J**	**770 J**	**540**	**560**	**397**	**769 J**	**305**	**715 J**	**200**	**880**	**280**	**630**	**610**
MW07-23D	**5**		**460**		**690**	**870 J**	**580 J**	**610**	**710 J**	**621**	**349 J**	**434**	**534**	**920 J**	**530**	**470**	**760 J**	**910 J**
MW07-23S	5	< 10 U			< 10 U								< 1 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-24D	5	< 10 U			< 10 U								< 1 U	< 5.9 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24DUT	**5**					**7 J**	**9**	**9.49**	**11**	**9**	**10.5 J**	**14**	**8.7**	**11 J**	**9.2**	**13**	**11**	**12**
MW07-24S	5	< 10 U			< 10 U									< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-25D	**5**		**3000**		**1800**	**1600 J**	**2000 J**	**970**	**1400**	**923**	**1180 J**	**1120**	**1000**	**1000 J**	**850**	**700**	**860 J**	**770**
MW07-25R	**5**		**2900**		**1400**	**3100 J**	**1000 J**	**1000**	**2200 J**	**1860**	**1950 J**	**1950**	**2150**	**1200 J**	**1500**	**1110 J**	**1500**	**1100 J**
MW07-27D	**5**	**10000**			**12000**		**13000 J**			**9920**			**12400**	**8400 J**	**15000**	**11000**	**8900**	**9000**
MW07-28D	5	< 10 U					< 1 UJ			< 2 U			< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-29D	5	< 10 U											< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-30D	5	< 50 U																
MW07-32D	5			< 2 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-32R	5			< 2 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-33D	**5**					**14 J**	**31**	**18 J**	**34**	**17.4**	**22.2 J**	**24.1**	**16.7**	< 11 UJ	**20**	**19**	**26 J**	**16**
MW07-33S	**5**					**30 J**	3.1	4.94	< 0.4 U	< 2 U	2.1	0.83 J	< 1 U		< 3.2 U	< 1 U	1.9 J	< 1 U
MW07-34D	**5**					< 2 UJ	**19 J**	**22**	**49**	**47.3**	**198 J**	**355**	**337 J**	**140 J**	**400**	**530**	**780**	**370**
MW07-35D	**5**									**1010**	**982**	**1210**	**1080**	**910 J**	**830**	**860**	**630**	**920**
MW07-35S	5							< 0.48 U	0.41 J	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	0.7 J	< 1 U	0.72 J
MW07-37D	**5**									**908**	**749 J**	**800**	**911**	**680**	**570**	**630**	**650**	**640**
MW07-37S	5									< 2 U	< 2 U	< 1 U	< 1 U	5.0 J	2.5	< 1 U	< 1 U	< 1 U
MW07-38D	**5**									**628**	**685 J**	**628**	**366**	**330 J**	**320 J**	**400**	**390**	**320 J**
MW07-38S	5									1.4 J	< 2 U	< 1 U	1.2	1.6	< 1 UJ	< 1 UJ	< 1 U	0.68 J
MW07-39D	**5**									**1350**	**8050 J**	**29000**	**9340**	**3000**	**22000**	**20000**	**23000**	**7400**
MW07-39I	**5**									**19800**	**25000**	**28200**	**31800**	**24000**	**30000**	**28000**	**23000**	**26000**
MW07-39S	**5**									**14700**	**17000**	**20600**	**17100**	**18000**	**15000**	**23000**	**17000**	**16000**
MW07-40D	**5**																	
MW07-41I	**5**																	
MW07-42I	**5**																	
MW07-43D	5																	
MW07-43S	5																	
MW07-44D	**5**																	
MW07-45D	**5**																	
MW07-45S	5																	
VINYL CHLORIDE																		

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD Dec 1995	Pre-ROD May 1996	Pre-ROD Jan/Feb 1998	Pre-ROD Aug 2000	ME 01 Aug 2001	ME 02 May 2002	ME 03 Feb 2003	ME 04 Dec 2003/Jan 2004	ME 05 Aug 2004	ME 06 May 2005	ME 07 Nov 2006	ME 08 Feb/Mar 2007	ME 09 Nov/Dec 2007/Feb 2008	ME 10 May 2008	ME 11 Oct 2008	ME 12 Apr 2009	ME 13 Sep/Oct 2009
DPT07-09-27D	2																	
DPT07-09-28D	2																	
DPT07-16I	2																	
DPT07-16S	2																	
DPT07-18I	2																	
DPT07-18S	2																	
DPT07-24D	2																	
DPT07-24I	2																	
DPT07-29-34I	2																	
DPT07-29-34S	2																	
DPT07-30I	2																	
DPT07-30S	2																	
DPT07-39-03D	2																	
DPT07-39-03I	2																	
DPT07-39-04D	2																	
MW07-03D	2		31 J															
MW07-03S	2	< 10 U																
MW07-04D	2		< 5000 U			2 J	5 J	3.14	4.27	3.7	< 100 U	6.9 J	< 50 U	12 J	9.6	8 J	< 100 U	< 100 U
MW07-04S	2	< 10 U																
MW07-05D	2		< 1000 U										< 10 U	11 J	8.2 J	12	14	6.1
MW07-05S	2	< 10 U											< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-09D	2		< 500 U		26		58 J			104			169	99 J	170	140	160	95 J
MW07-09R	2	< 10 U			< 10 UJ	3 J	4.38	4.49	6.4	3.5	7.3 J	5.3	9.5	6 J	13 J	8.6	16	6.4 J
MW07-10D	2		< 100 U		< 100 U		1 J			1.8 J			1.9	1.9	1.3	1	< 5 U	1.1
MW07-10S	2	< 10 U			< 10 U													
MW07-11D	2	< 10 U				1 J	2.97 J	1.73	3.75	4.8	4.7 J	< 1 U	7.7	3.8 J	6 J	6	10	5.3
MW07-12D	2		< 10 U		< 10 U	< 1 U	< 1 U		< 0.6 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-13D	2	< 10 U			< 10 UJ		2			< 2 U			1.3	1.2 J	1.3	0.93 J	0.75 J	< 1 U
MW07-13S	2	< 10 U			< 10 UJ		< 1 U			< 2 U			< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-15D	2		< 1000 U															
MW07-16R	2	< 10 U													< 1 U	< 1 U	< 1 U	< 1 U
MW07-17D	2		< 1000 U				120 J			61.5			69.7	140 J	41	28	< 400 U	< 500 U
MW07-18D	2	< 10 U											< 1 U	< 1 U				
MW07-19D	2	< 10 U			3		5 J			7.1			12.2	26 J	18	13	15	9.8 J
MW07-19S	2		< 500 U		12 J		20 J			23.8			24.6	56 J	29	23	< 100 U	< 50 U
MW07-20D	2	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-20S	2	< 10 U											< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-21D	2		1 J		9	9	11	9.63	13	9.7	< 20 U	10.8	11.3	17 J	14 J	14	18	17
MW07-21R	2		< 500 U		14	23	22	15	15	13.1	14.1	< 20 U	< 25 U	14 J	16 J	12	18	16

TABLE D-6
SUMMARY OF DETECTED ANALYTES IN MONITORING WELLS AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	DV-Calf Pasture PAL-MW-Site7	Pre-ROD	Pre-ROD	Pre-ROD	Pre-ROD	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 1995	May 1996	Jan/Feb 1998	Aug 2000	Aug 2001	May 2002	Feb 2003	Dec 2003/Jan 2004	Aug 2004	May 2005	Nov 2006	Feb/Mar 2007	Nov/Dec 2007/Feb 2008	May 2008	Oct 2008	Apr 2009	Sep/Oct 2009
MW07-21S	**2**	< 10 U			< 10 UJ	2	**5.94**	**2.14**	**2.97**	**3.2**	**3.8**	1.8	**3**	1 J	**3.8 J**	1	< 5 U	1.6
MW07-23D	**2**		< 50 U		< 100 UJ	**4 J**	**4 J**	**5.07**	**3.13**	**3.8**	**2.3 J**	**3.3 J**	**3.9**	**7 J**	**3.1**	**4**	**4.8**	< 5 U
MW07-23S	2	< 10 U			< 10 U								< 1 U		< 1 U	< 1 U	< 1 U	< 1 U
MW07-24D	2	< 10 U			< 10 UJ								< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-24DUT	2					< 1 UJ	0.2 J	0.22 J	< 0.6 U	< 2 U	< 2 U	< 1 U	< 1 U	0.39 J	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-24S	2	< 10 U			< 10 UJ									< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-25D	**2**		< 500 U		**19**	< 1 U	0.12	< 0.6 U	< 0.6 U	< 2 U	< 10 U	< 5 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 5 U
MW07-25R	**2**		< 250 U		< 200 UJ	**22**	**18**	**9.62**	**11**	**13.8**	**10.1 J**	**7.9**	**14.7**	**8.6 J**	**9.5**	**5**	< 20 U	< 10 U
MW07-27D	**2**	**13**			**50**		**81 J**			**82.7**			**105**	**93 J**	**84**	**82**	**98 J**	< 80 U
MW07-28D	2	< 10 U					< 1 U			< 2 U			< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-29D	2	< 10 U											< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-30D	2	< 50 U																
MW07-32D	2			< 3 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-32R	2			< 3 U											< 1 U	< 1 U	< 1 U	< 1 U
MW07-33D	2					< 1 UJ	0.12	0.13 J	< 0.6 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U
MW07-33S	**2**					< 1 U	0.73	**4.74**	**6.21**	< 2 U	**5.3**	**8.1**	1.4		**8 J**	< 1 U	**15 J**	< 1 U
MW07-34D	**2**					**3 J**	**33 J**	**8.15**	**8.68**	**10.3**	**16.4 J**	**19.4**	**19.9**	**29 J**	**18**	**21**	**32**	**11**
MW07-35D	2									< 2 U	< 10 U	< 5 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 10 U	< 8 U
MW07-35S	2							0.48 J	< 0.6 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-37D	2									< 2 U	< 2 U	< 2 UJ	< 1 U	0.35 J	< 1 U	0.3 J	< 5 U	< 5 U
MW07-37S	2									< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW07-38D	2									< 2 U	< 4 U	< 2 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 2 U
MW07-38S	2									< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW07-39D	**2**									**16**	**50.8 J**	**87.2 J**	**57.7**	**27 J**	**120**	**110 J**	**190**	< 50 U
MW07-39I	**2**									**142**	**87.6 J**	< 100 U	**118**	**150 J**	**130 J**	**140 J**	< 250 U	< 200 U
MW07-39S	**2**									**31.6**	< 40 U	< 50 U	< 50 U	**40 J**	**43**	**47 J**	< 160 U	< 100 U
MW07-40D	**2**																	
MW07-41I	**2**																	
MW07-42I	**2**																	
MW07-43D	2																	
MW07-43S	2																	
MW07-44D	2																	
MW07-45D	**2**																	
MW07-45S	2																	

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
1,1,2,2-TETRACHLOROETHANE								
DPT07-09-27D	NE			1400		1700		680 J
DPT07-09-28D	NE							< 0.3 UJ
DPT07-16I	NE			< 0.5 U				9.5
DPT07-16S	NE			< 0.5 U				< 0.5 UJ
DPT07-18I	NE			< 0.5 U		< 0.50 U		< 0.5 U
DPT07-18S	NE			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-24D	NE			8.4		11		9.9 J
DPT07-24I	NE			< 0.5 U				< 0.5 UJ
DPT07-29-34I	NE			6.3		7.0		3.8 J
DPT07-29-34S	NE			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-30I	NE							< 1.0 U
DPT07-30S	NE							< 0.5 U
DPT07-39-03D	NE		2200	11000		7700		8200
DPT07-39-03I	NE		1100	1100		710		288 J-
DPT07-39-04D	NE			18000		13000		10000
MW07-03D	NE							< 1.0 U
MW07-03S	NE							< 1.0 U
MW07-04D	NE	1700	1200	1400 J				230 J
MW07-04S	NE							< 1.0 U
MW07-05D	NE	2000	1600	1300				41 J
MW07-05S	NE		< 0.5 U	< 0.5 U				< 1.0 U
MW07-09D	NE	520	400	440	360	130	210	< 50 U
MW07-09R	NE	1	1.8	2	1.8 J	< 2.0 U	< 1.3 U	< 1.0 U
MW07-10D	NE	96	81	60				52
MW07-10S	NE							< 1.0 U
MW07-11D	NE	40	30	42	60	57	56	44 J
MW07-12D	NE	12 J	22	13		23		15.7
MW07-13D	NE	2	< 0.5 U	< 0.5 U		< 0.50 U		R
MW07-13S	NE	< 0.4 U	< 0.5 U	< 0.5 U		< 0.50 U		R
MW07-15D	NE		2500	2100				1320
MW07-16R	NE			< 0.5 U				< 0.5 UJ
MW07-17D	NE	8100	9100	6600		5500		5600
MW07-18D	NE		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-19D	NE	23	25	14	24	< 8.0 U	24	< 20 U
MW07-19S	NE	1300	1400	870	1200	1100	690	490 J
MW07-20D	NE			< 0.5 U		< 0.50 U		< 1.0 U
MW07-20S	NE	< 0.4 U	< 0.5 U	< 0.5 U		< 0.50 U		< 0.5 UJ
MW07-21D	NE	260	150	160	150 J	160	120	114 J

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

		ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME20
	DV-Calf Pasture PAL-MW-Site7	Apr 2010	Sept 2011	Jun/Jul 2012	Oct 2013	Sept/Oct 2014	Sept 2015	Sept 2016
MW07-21R	NE	960	670	730	610 J	490	430	386 J
MW07-21S	NE	270	120	160	160 J	87	210	74.2 J
MW07-23D	NE	42	37	22	27 J	26	24	< 25 U
MW07-23S	NE		< 0.5 U			< 0.50 U		< 1.0 U
MW07-24D	NE		< 0.5 U	< 0.5 U				< 0.5 UJ
MW07-24DUT	NE	< 0.4 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.5 U
MW07-24S	NE	< 0.4 U	< 0.5 U	< 0.5 U				< 0.5 U
MW07-25D	NE	170	170	120				67
MW07-25R	NE	36	17	14				< 5.0 U
MW07-27D	NE	1400		1100		1100		792 J-
MW07-28D	NE			< 0.5 U				< 0.3 UJ
MW07-29D	NE							< 0.5 UJ
MW07-30D	NE							< 0.5 UJ
MW07-32D	NE					< 0.50 U		< 0.3 U
MW07-32R	NE							< 0.3 U
MW07-33D	NE	2	0.9 J	0.96 J	0.47 J	< 0.50 U	< 0.50 U	< 0.3 U
MW07-33S	NE			< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.3 UJ
MW07-34D	NE	180	110	110	110 J	97	100	82 J
MW07-35D	NE	190	140	130				< 100 U
MW07-35S	NE	< 0.4 U	< 0.5 U					< 1.0 U
MW07-37D	NE	170	150	83		61		58.6 J-
MW07-37S	NE		< 0.5 U					< 0.5 U
MW07-38D	NE	92	77	50				30
MW07-38S	NE	< 0.4 U	< 0.5 U	< 0.5 U				< 1.0 U
MW07-39D	NE	3200	1600	1600	470 J	210	330	300 J
MW07-39I	NE	4900	4000	3300	3000 J	2100	3600	1270
MW07-39S	NE	4400	4400	3100	2700 J	3100	2900	1650 J+
MW07-40D	NE			3200		1800		1100 J
MW07-41I	NE		1800	1100		1000		720
MW07-42I	NE		2400	1600	1800 J	1500	1400	860
MW07-43D	NE		< 0.5 U	< 0.5 U		< 0.50 U		< 0.5 UJ
MW07-43S	NE		< 0.5 U	< 0.5 U		< 0.50 U		< 0.5 U
MW07-44D	NE		4.5 J	2.2		1.3		< 5.0 U
MW07-45D	NE		300	110	49 J	74	42	< 50 U
MW07-45S	NE		0.41 J	< 0.5 U				< 1.0 U
1,1,2-TRICHLOROETHANE								
DPT07-09-27D	**5**			**97**		< 160 U		< 200 U
DPT07-09-28D	5							< 0.4 UJ
DPT07-16I	5			< 1 U				< 1.0 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
DPT07-16S	5			< 1 U				< 0.5 U
DPT07-18I	5			< 1 U		< 1.0 U		< 0.5 U
DPT07-18S	5			< 1 U		< 1.0 U		< 1.0 U
DPT07-24D	**5**			**21**		**32**		**36.0 J+**
DPT07-24I	5			0.63 J				0.9 J
DPT07-29-34I	**5**			**18**		**22**		**11**
DPT07-29-34S	5			< 1 U		< 1.0 U		< 1.0 U
DPT07-30I	5							< 1.0 U
DPT07-30S	5							< 0.5 U
DPT07-39-03D	**5**		**150**	**250 J**		**220**		**170**
DPT07-39-03I	**5**		**130**	**67**		< 50 U		**22.5 J-**
DPT07-39-04D	**5**			**630**		< 1000 U		< 500 U
MW07-03D	5							< 1.0 U
MW07-03S	5							< 1.0 U
MW07-04D	**5**	**61**	**76**	**51**				< 50 U
MW07-04S	5							< 1.0 U
MW07-05D	**5**	**17**	**16**	< 40 U				< 20 U
MW07-05S	5		< 0.5 U	< 1 U				< 1.0 U
MW07-09D	**5**	**140**	**120**	**140**	**140**	**76**	**120 J**	< 50 U
MW07-09R	**5**	**8**	3.8	**11**	**11 J**	**7.7**	< 2.5 UJ	4.5 J
MW07-10D	**5**	**11**	**7.7**	**7.8**				**6.9 J**
MW07-10S	5							< 1.0 U
MW07-11D	**5**	**70**	**60**	**83**	**110**	**92**	**120 J**	**100 J**
MW07-12D	5	0.5 J	1.1	< 1 U		1.3		1.0 J+
MW07-13D	**5**	2	0.46 J	< 1 U		< 1.0 U		R
MW07-13S	5	< 0.3 U	< 0.5 U	< 1 U		< 1.0 U		R
MW07-15D	**5**		**43 J**	**33**				< 50.0 U
MW07-16R	5			< 1 U				< 0.5 U
MW07-17D	**5**	**310**	**390**	< 400 U		**270 J**		**270**
MW07-18D	5		< 0.5 U	< 1 U		< 1.0 U		< 1.0 U
MW07-19D	**5**	**21**	**25**	**21**	**29**	**21**	**39 J**	< 20 U
MW07-19S	**5**	**86**	**90**	**48**	**120**	**120**	**59 J**	**71 J**
MW07-20D	5			< 1 U		< 1.0 U		< 1.0 U
MW07-20S	5	< 0.3 U	< 0.5 U	< 1 U		< 1.0 U		< 0.5 U
MW07-21D	**5**	**28**	**71**	**61**	**83 J**	**92**	**97 J**	**94.0 J**
MW07-21R	**5**	**96**	**84**	**120**	**78 J**	< 100 U	**84 J**	**61.0**
MW07-21S	**5**	**68**	**15**	**19**	**32 J**	**15**	**54 J**	**11.7**
MW07-23D	**5**	**9**	**10**	**8.6**	**10 J**	< 16 U	**14 J**	< 25 U
MW07-23S	5		< 0.5 U			< 1.0 U		< 1.0 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

		ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME20
	DV-Calf Pasture PAL-MW-Site7	Apr 2010	Sept 2011	Jun/Jul 2012	Oct 2013	Sept/Oct 2014	Sept 2015	Sept 2016
MW07-24D	5		< 0.5 U	< 1 U				< 0.5 UJ
MW07-24DUT	5	0.9 J	1.2	1.2	1.0 J	1.3	1.5 J	1.7 J
MW07-24S	5	< 0.3 U	< 0.5 U	< 1 U				< 0.5 U
MW07-25D	**5**	5	4.8	**5.2**				< 10 U
MW07-25R	**5**	**9**	**6.5**	**6**				< 5.0 U
MW07-27D	**5**	**150**		**120**		**110**		**95.0 J-**
MW07-28D	5			< 1 U				< 0.4 UJ
MW07-29D	5							< 0.5 U
MW07-30D	5							< 0.5 U
MW07-32D	5					< 1.0 U		< 0.4 U
MW07-32R	5							< 0.4 U
MW07-33D	5	< 0.3 U	< 0.5 U	< 1 U	< 0.50 U	< 1.0 U	< 1.0 UJ	< 0.4 U
MW07-33S	5			< 1 U	< 0.50 U	< 1.0 U	< 1.0 UJ	< 0.4 UJ
MW07-34D	**5**	**200**	**170**	**180**	**160 J**	**150**	**210 J**	**140 J**
MW07-35D	**5**	**6**	5	3.9 J				< 100 U
MW07-35S	5	< 0.3 U	< 0.5 U					< 1.0 U
MW07-37D	**5**	5	4.8	3.5		2.7		< 5.0 UJ
MW07-37S	5		< 0.5 U					< 0.5 U
MW07-38D	5	2	1.4	1.3				< 5.0 U
MW07-38S	5	< 0.3 U	< 0.5 U	< 1 U				< 1.0 U
MW07-39D	**5**	**310**	**290**	**220**	**200 J**	**110**	**190 J**	**186**
MW07-39I	**5**	**320**	**250**	**180**	**220 J**	**210**	**320 J**	< 250 U
MW07-39S	**5**	**260**	**250**	**160**	**160 J**	**220**	**250 J**	**140 J+**
MW07-40D	**5**		**28 J**	< 100 U		< 50 U		< 50 U
MW07-41I	**5**		**94**	**78**		**58**		< 50 U
MW07-42I	**5**		**300**	**230**	**220 J**	**210**	**210 J**	< 50 U
MW07-43D	5		< 0.5 U	< 1 U		< 1.0 U		< 0.5 U
MW07-43S	5		< 0.5 U	< 1 U		< 1.0 U		< 0.5 U
MW07-44D	**5**		**8.1 J**	**6.2**		**5.2**		**8.4 J**
MW07-45D	**5**		**45**	**26**	**11 J**	< 20 U	**13 J**	< 50 U
MW07-45S	5		< 0.5 U	< 1 U				< 1.0 U
1,1-DICHLOROETHENE								
DPT07-09-27D	7			6.9		< 80 U		< 200 U
DPT07-09-28D	7							< 0.7 UJ
DPT07-16I	7			< 0.5 U				1.2 J
DPT07-16S	7			< 0.5 U				< 1.0 U
DPT07-18I	7			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-18S	7			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-24D	7			0.53 J		0.79 J		1.3

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME20
		Apr 2010	Sept 2011	Jun/Jul 2012	Oct 2013	Sept/Oct 2014	Sept 2015	Sept 2016
DPT07-24I	7			< 0.5 U				< 1.0 U
DPT07-29-34I	7			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-29-34S	7			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-30I	7							< 1.0 U
DPT07-30S	7							< 1.0 U
DPT07-39-03D	**7**		< 20 U	**15**		< 50 U		**12**
DPT07-39-03I	**7**		**11 J**	4.6		< 25 U		< 34.6 UJ
DPT07-39-04D	**7**			**31**		< 500 U		**22**
MW07-03D	7							< 1.0 U
MW07-03S	7							< 1.0 U
MW07-04D	**7**	6 J	6.4 J	4.8				< 50 U
MW07-04S	7							< 1.0 U
MW07-05D	7	< 2 U	1.5 J	< 20 U				< 20 U
MW07-05S	7		< 0.5 U	< 0.5 U				< 1.0 U
MW07-09D	**7**	**8 J**	**7.6 J**	**8.4**	**12**	< 25 U	**9.8**	< 50 U
MW07-09R	7	1	1.1 J	1.3	1.4 J	< 2.0 U	< 1.3 U	< 1.0 U
MW07-10D	7	0.6 J	< 2.5 U	< 0.5 U				< 5.0 U
MW07-10S	7							< 1.0 U
MW07-11D	7	2	2	2.7	4.1	3.1	< 4.0 U	< 25 U
MW07-12D	7	< 0.4 U	< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-13D	7	< 0.4 U	< 0.5 U	< 0.5 U		< 0.50 U		R
MW07-13S	7	< 0.4 U	< 0.5 U	< 0.5 U		< 0.50 U		R
MW07-15D	7		4.6 J	3.2				< 100 U
MW07-16R	7			< 0.5 U				< 1.0 U
MW07-17D	**7**	**20 J**	**21 J**	< 200 U		**18**		< 50 U
MW07-18D	7		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-19D	7	3	3.8 J	< 5 U	5.7 J	< 8.0 U	< 10 U	< 20 U
MW07-19S	**7**	**9 J**	**10 J**	< 13 U	**12**	< 40 U	**7.6**	< 50 U
MW07-20D	7			< 0.5 U		< 0.50 U		< 1.0 U
MW07-20S	7	< 0.4 U	< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-21D	**7**	2	4.8 J	< 13 U	**7.5 J**	< 40 U	< 16 U	< 100 U
MW07-21R	**7**	**12**	**9.8 J**	**11**	< 10 U	< 50 U	< 25 U	< 50.0 U
MW07-21S	7	6	0.9 J	1.9	2.8 J	< 2.5 U	< 8.0 U	< 10.0 U
MW07-23D	7	1	3	3.5 J	3.4 J	< 8.0 U	< 4.0 U	< 25 U
MW07-23S	7		< 0.5 U			< 0.50 U		< 1.0 U
MW07-24D	7		< 0.5 U	< 0.5 U				< 1.0 UJ
MW07-24DUT	7	< 0.4 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW07-24S	7	< 0.4 U	< 0.5 U	< 0.5 U				< 1.0 U
MW07-25D	7	< 0.4 U	0.36 J	< 2.5 U				< 10 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

		ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME20
	DV-Calf Pasture PAL-MW-Site7	Apr 2010	Sept 2011	Jun/Jul 2012	Oct 2013	Sept/Oct 2014	Sept 2015	Sept 2016
MW07-25R	7	2	3	< 2.5 U				< 5.0 U
MW07-27D	**7**	**9**		< 50 U		**11**		< 69.3 UJ
MW07-28D	7			< 0.5 U				< 0.7 UJ
MW07-29D	7							< 1.0 U
MW07-30D	7							< 1.0 U
MW07-32D	7					< 0.50 U		< 0.7 UJ
MW07-32R	7							< 0.7 U
MW07-33D	7	< 0.4 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.7 U
MW07-33S	7			< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.7 UJ
MW07-34D	7	5	5.4	6.6	5.5 J	5.4	< 8.0 U	< 25 U
MW07-35D	7	0.5 J	0.38 J	< 2.5 U				< 100 U
MW07-35S	7	< 0.4 U	< 0.5 U					< 1.0 U
MW07-37D	7	0.5 J	0.66 J	< 0.5 U		< 1.3 U		< 10.0 UJ
MW07-37S	7		< 0.5 U					< 1.0 U
MW07-38D	7	< 0.4 U	< 0.5 U	< 0.5 U				< 5.0 U
MW07-38S	7	< 0.4 U	< 0.5 U	< 0.5 U				< 1.0 U
MW07-39D	**7**	**13 J**	**20 J**	< 50 U	**16 J**	**17 J**	< 25 U	< 100 U
MW07-39I	**7**	**15**	< 25 U	< 50 U	**17 J**	< 80 U	< 100 U	< 500 U
MW07-39S	**7**	**10 J**	**15 J**	< 50 U	**12 J**	< 80 U	< 50 U	< 250 U
MW07-40D	7		< 10 UJ	< 50 U		< 25 U		< 50 U
MW07-41I	**7**		**10**	**8.7**		< 20 U		< 50 U
MW07-42I	**7**		**18**	**17**	< 20 U	< 50 U	< 50 U	< 50 U
MW07-43D	7		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-43S	7		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-44D	7		0.45 J	< 0.5 U		< 0.50 U		< 5.0 U
MW07-45D	7		3.4 J	1.6	1.1 J	< 10 U	< 4.0 U	< 50 U
MW07-45S	7		< 0.5 U	< 0.5 U				< 1.0 U
1,2-DICHLOROETHANE								
DPT07-09-27D	5			1.4		< 80 U		< 200 U
DPT07-09-28D	5							< 0.3 UJ
DPT07-16I	5			< 0.5 U				< 1.0 U
DPT07-16S	5			< 0.5 U				< 1.0 U
DPT07-18I	**5**			< 0.5 U		**9.3**		**8.0**
DPT07-18S	**5**			< 0.5 U		< 0.50 U		**6.5**
DPT07-24D	5			< 0.5 U		< 0.50 UJ		1.0
DPT07-24I	5			< 0.5 U				< 1.0 U
DPT07-29-34I	5			< 0.5 U		1.4		1.6 J
DPT07-29-34S	5			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-30I	5							< 1.0 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

		ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME20
	DV-Calf Pasture PAL-MW-Site7	Apr 2010	Sept 2011	Jun/Jul 2012	Oct 2013	Sept/Oct 2014	Sept 2015	Sept 2016
DPT07-30S	5							< 1.0 U
DPT07-39-03D	5		< 20 U	1.7		< 50 U		< 1.0 U
DPT07-39-03I	5		< 10 U	1.1		< 25 U		< 14.4 UJ
DPT07-39-04D	5			1.6		< 500 U		< 1.0 U
MW07-03D	5							< 1.0 U
MW07-03S	5							< 1.0 U
MW07-04D	**5**	2 J	< 5 U	1.4				< 50 U
MW07-04S	5							< 1.0 U
MW07-05D	**5**	< 1 U	< 1 U	< 20 U				< 20 U
MW07-05S	5		< 0.5 U	< 0.5 U				< 1.0 U
MW07-09D	**5**	**6 J**	< 5 U	**6**	**8.2 J**	< 25 U	< 20 U	< 50 U
MW07-09R	**5**	**16**	**11**	**9.6**	**6.1 J**	**5.3**	**7.7**	2.2 J
MW07-10D	5	1	< 2.5 U	0.99 J				< 5.0 U
MW07-10S	5							< 1.0 U
MW07-11D	5	2	1.5	1.8	2.3	1.9	< 4.0 U	< 25 U
MW07-12D	5	< 0.2 U	< 0.5 U	< 0.5 U		< 0.50 UJ		< 1.0 U
MW07-13D	5	< 0.2 U	< 0.5 U	< 0.5 U		< 0.50 UJ		R
MW07-13S	5	< 0.2 U	< 0.5 U	< 0.5 U		< 0.50 UJ		R
MW07-15D	5		< 2.5 U	< 0.5 U				< 100 U
MW07-16R	5			< 0.5 U				< 1.0 U
MW07-17D	5	< 10 U	< 25 U	< 200 U		< 0.50 U		< 50 U
MW07-18D	5		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-19D	5	1 J	< 0.5 U	< 5 U	< 0.50 U	< 8.0 U	< 10 U	< 20 U
MW07-19S	5	2	< 5 U	< 13 U	1.9	< 40 U	< 16 U	< 50 U
MW07-20D	5			< 0.5 U		< 0.50 U		< 1.0 U
MW07-20S	5	< 0.2 U	< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-21D	5	0.6 J	< 2.5 UJ	< 13 U	< 5.0 U	< 40 U	< 16 U	< 100 U
MW07-21R	5	< 2 U	< 5 U	< 0.5 U	< 10 U	< 50 U	< 25 U	< 50.0 U
MW07-21S	5	3 J	< 0.5 U	< 0.5 U	< 1.0 U	< 2.5 U	< 8.0 U	< 10.0 U
MW07-23D	5	< 0.2 U	< 0.5 U	< 2.5 U	< 1.0 U	< 8.0 U	< 4.0 U	< 25 U
MW07-23S	5		< 0.5 U			< 0.50 U		< 1.0 U
MW07-24D	5		< 0.5 U	< 0.5 U				< 1.0 UJ
MW07-24DUT	5	0.7 J	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	0.8 J
MW07-24S	5	< 0.2 U	< 0.5 U	< 0.5 U				< 1.0 U
MW07-25D	5	< 0.2 U	< 0.5 U	< 2.5 U				< 10 U
MW07-25R	5	0.7 J	< 0.5 U	< 2.5 U				< 5.0 U
MW07-27D	**5**	4		< 50 U		2.8		< 28.7 UJ
MW07-28D	5			< 0.5 U				< 0.3 UJ
MW07-29D	5							< 1.0 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
MW07-30D	5							< 1.0 U
MW07-32D	5					< 0.50 U		< 0.3 U
MW07-32R	5							< 0.3 U
MW07-33D	5	< 0.2 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 UJ	< 0.50 U	< 0.3 U
MW07-33S	5			< 0.5 U	< 0.50 U	< 0.50 UJ	< 0.50 U	< 0.3 UJ
MW07-34D	**5**	**8**	**10**	**9**	**9.0 J**	**7.7**	< 8.0 U	< 25 U
MW07-35D	5	< 0.2 U	< 0.5 U	< 2.5 U				< 100 U
MW07-35S	5	< 0.2 U	< 0.5 U					< 1.0 U
MW07-37D	5	0.9 J	< 0.5 U	0.69 J		< 1.3 U		< 10.0 UJ
MW07-37S	5		< 0.5 U					< 1.0 U
MW07-38D	5	< 0.2 U	< 0.5 U	< 0.5 U				< 5.0 U
MW07-38S	5	< 0.2 U	< 0.5 U	< 0.5 U				< 1.0 U
MW07-39D	**5**	< 5 U	< 12 U	< 50 U	**9.8 J**	< 10 U	< 25 U	< 100 U
MW07-39I	**5**	3 J	< 25 U	< 50 U	3.4 J	< 80 U	< 100 U	< 500 U
MW07-39S	**5**	< 5 U	< 12 U	< 50 U	1.5 J	< 80 U	< 50 U	< 250 U
MW07-40D	5		< 10 UJ	< 50 U		< 25 U		< 50 U
MW07-41I	5		< 2 U	2.6		< 20 U		< 50 U
MW07-42I	5		< 2 U	4.1	< 20 U	< 50 U	< 50 U	< 50 U
MW07-43D	5		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-43S	5		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-44D	5		< 0.5 U	< 0.5 U		< 0.50 U		< 5.0 U
MW07-45D	5		< 2 U	< 0.5 U	< 1.0 U	< 10 U	< 4.0 U	< 50 U
MW07-45S	5		< 0.5 U	< 0.5 U				< 1.0 U
BENZENE								
DPT07-09-27D	5			4.1		< 80 U		< 200 U
DPT07-09-28D	5							< 0.3 UJ
DPT07-16I	5			< 0.5 U				< 1.0 U
DPT07-16S	5			< 0.5 U				< 0.5 U
DPT07-18I	5			< 0.5 U		< 0.50 U		< 0.5 U
DPT07-18S	5			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-24D	5			< 0.5 U		< 0.50 U		< 0.5 U
DPT07-24I	5			< 0.5 U				< 0.5 U
DPT07-29-34I	5			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-29-34S	5			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-30I	5							< 1.0 U
DPT07-30S	5							< 0.5 U
DPT07-39-03D	**5**		**11 J**	**6**		< 50 U		**5.2**
DPT07-39-03I	5		< 10 U	4.9		< 25 U		< 14.2 UJ
DPT07-39-04D	5			2.6		< 500 U		1.3 J

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
MW07-03D	5							< 1.0 U
MW07-03S	5							< 1.0 U
MW07-04D	5	< 3 U	< 5 U	< 200 U				< 50 U
MW07-04S	5							< 1.0 U
MW07-05D	**5**	< 1 U	< 1 U	< 20 U				< 20 U
MW07-05S	5		< 0.5 U	< 0.5 U				< 1.0 U
MW07-09D	**5**	3 J	3.6 J	3.8 J	4.0 J	< 25 U	3.1	< 50 U
MW07-09R	5	< 0.3 U	< 0.5 U	< 0.5 U	< 0.50 U	< 2.0 U	< 1.3 U	< 1.0 U
MW07-10D	**5**	**6**	**5.6**	**6.1**				< 5.0 U
MW07-10S	5							< 1.0 U
MW07-11D	5	< 0.3 U	< 0.5 U	< 0.5 U	0.54 J	< 0.50 U	< 4.0 U	< 25 U
MW07-12D	5	0.8 J	2.8	1.4		4.5		3.9
MW07-13D	5	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U		R
MW07-13S	5	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U		R
MW07-15D	5		< 2.5 U	< 0.5 U				< 50.0 U
MW07-16R	5			< 0.5 U				< 0.5 U
MW07-17D	5	< 13 U	< 25 U	< 200 U		< 0.50 U		< 50 U
MW07-18D	5		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-19D	5	< 0.3 U	< 0.5 U	< 5 U	< 0.50 U	< 8.0 U	< 10 U	< 20 U
MW07-19S	5	< 3 U	< 5 U	< 13 U	0.38 J	< 40 U	< 16 U	< 50 U
MW07-20D	5			< 0.5 U		< 0.50 U		< 1.0 U
MW07-20S	5	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U		< 0.5 U
MW07-21D	5	0.3 J	< 2.5 U	< 13 U	< 5.0 U	< 40 U	< 16 U	< 50.0 U
MW07-21R	5	< 3 U	< 5 U	< 0.5 U	< 10 U	< 50 U	< 25 U	< 25.0 U
MW07-21S	5	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	< 2.5 U	< 8.0 U	< 5.0 U
MW07-23D	5	< 0.3 U	< 0.5 U	< 2.5 U	< 1.0 U	< 8.0 U	< 4.0 U	< 25 U
MW07-23S	5		< 0.5 U			< 0.50 U		< 1.0 U
MW07-24D	5		< 0.5 U	< 0.5 U				< 0.5 UJ
MW07-24DUT	5	< 0.3 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.5 U
MW07-24S	5	< 0.3 U	< 0.5 U	< 0.5 U				< 0.5 U
MW07-25D	5	0.6 J	0.63 J	< 2.5 U				< 10 U
MW07-25R	5	1	2	< 2.5 U				< 5.0 U
MW07-27D	5	< 0.3 U		< 50 U		< 0.50 U		< 28.4 UJ
MW07-28D	5			< 0.5 U				< 0.3 UJ
MW07-29D	5							< 0.5 U
MW07-30D	5							< 0.5 U
MW07-32D	5					< 0.50 U		< 0.3 U
MW07-32R	5							< 0.3 U
MW07-33D	5	< 0.3 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.3 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
MW07-33S	5			< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.3 UJ
MW07-34D	5	0.9 J	1.1 J	1.4	< 2.0 U	1.2	< 8.0 U	< 25 U
MW07-35D	5	< 0.3 U	< 0.5 U	< 2.5 U				< 100 U
MW07-35S	5	< 0.3 U	< 0.5 U					< 1.0 U
MW07-37D	**5**	0.7 J	0.69 J	0.53 J		< 1.3 U		< 5.0 UJ
MW07-37S	5		< 0.5 U					< 0.5 U
MW07-38D	5	< 0.3 U	< 0.5 U	< 0.5 U				< 5.0 U
MW07-38S	5	< 0.3 U	< 0.5 U	< 0.5 U				< 1.0 U
MW07-39D	5	< 6 U	< 12 U	< 50 U	< 0.50 U	< 10 U	< 25 U	< 50.0 U
MW07-39I	5	< 13 U	< 25 U	< 50 U	0.56 J	< 80 U	< 100 U	< 250 U
MW07-39S	5	< 6 U	< 12 U	< 50 U	1.2 J	< 80 U	< 50 U	< 125 U
MW07-40D	5		< 10 UJ	< 50 U		< 25 U		< 50 U
MW07-41I	5		< 2 U	< 0.5 U		< 20 U		< 50 U
MW07-42I	5		< 2 U	< 0.5 U	< 20 U	< 50 U	< 50 U	< 50 U
MW07-43D	5		< 0.5 U	< 0.5 U		< 0.50 U		< 0.5 U
MW07-43S	5		< 0.5 U	< 0.5 U		< 0.50 U		< 0.5 U
MW07-44D	5		< 0.5 U	< 0.5 U		< 0.50 U		< 5.0 U
MW07-45D	5		1.1 J	0.82 J	< 1.0 U	< 10 U	< 4.0 U	< 50 U
MW07-45S	5		< 0.5 U	< 0.5 U				< 1.0 U
CHLOROFORM								
DPT07-09-27D	NE			0.82 J		< 80 U		< 200 U
DPT07-09-28D	NE							< 0.4 UJ
DPT07-16I	NE			< 0.5 U				< 1.0 U
DPT07-16S	NE			< 0.5 U				< 1.0 U
DPT07-18I	NE			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-18S	NE			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-24D	NE			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-24I	NE			< 0.5 U				< 1.0 U
DPT07-29-34I	NE			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-29-34S	NE			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-30I	NE							< 1.0 U
DPT07-30S	NE							< 1.0 U
DPT07-39-03D	NE		< 20 U	15		< 50 U		5.5
DPT07-39-03I	NE		< 10 U	3		< 25 U		< 20.4 UJ
DPT07-39-04D	NE			16		< 500 U		4.9 J
MW07-03D	NE							< 1.0 U
MW07-03S	NE							< 1.0 U
MW07-04D	NE	43	47	31				< 50 U
MW07-04S	NE							< 1.0 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

		ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME20
	DV-Calf Pasture PAL-MW-Site7	Apr 2010	Sept 2011	Jun/Jul 2012	Oct 2013	Sept/Oct 2014	Sept 2015	Sept 2016
MW07-05D	NE	3 J	3.3	< 20 U				< 20 U
MW07-05S	NE		< 0.5 U	< 0.5 U				< 1.0 U
MW07-09D	NE	< 3 U	< 5 UJ	< 2.5 U	0.64 J	< 25 U	< 20 U	< 50 U
MW07-09R	NE	< 0.3 U	< 0.5 UJ	< 0.5 U	< 0.50 U	< 2.0 U	< 1.3 U	< 1.0 U
MW07-10D	NE	0.4 J	< 2.5 U	0.55 J				< 5.0 U
MW07-10S	NE							< 1.0 U
MW07-11D	NE	< 0.3 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 4.0 U	< 25 U
MW07-12D	NE	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-13D	NE	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U		R
MW07-13S	NE	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U		R
MW07-15D	NE		4.4 J	3				< 100 U
MW07-16R	NE			< 0.5 U				< 1.0 U
MW07-17D	NE	< 16 U	< 25 U	< 200 U		6.3		< 50 U
MW07-18D	NE		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-19D	NE	< 0.3 U	< 0.5 U	< 5 U	< 0.50 U	< 8.0 U	< 10 U	< 20 U
MW07-19S	NE	3	3.4 J	< 13 U	4.7	< 40 U	2.0	< 50 U
MW07-20D	NE			< 0.5 U		< 0.50 U		< 1.0 U
MW07-20S	NE	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-21D	NE	0.6 J	< 2.5 U	< 13 U	< 5.0 U	< 40 U	< 16 U	< 100 U
MW07-21R	NE	< 3 U	< 5 U	1.5	< 10 U	< 50 U	< 25 U	< 50.0 U
MW07-21S	NE	< 2 U	0.36 J	0.55 J	1.1 J	< 2.5 U	< 8.0 U	< 10.0 U
MW07-23D	NE	< 0.3 U	< 0.5 U	< 2.5 U	< 1.0 U	< 8.0 U	< 4.0 U	< 25 U
MW07-23S	NE		< 0.5 U			< 0.50 U		< 1.0 U
MW07-24D	NE		< 0.5 U	< 0.5 U				< 1.0 UJ
MW07-24DUT	NE	< 0.3 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW07-24S	NE	< 0.3 U	< 0.5 U	< 0.5 U				< 1.0 U
MW07-25D	NE	3	2.6	< 2.5 U				< 10 U
MW07-25R	NE	< 0.3 U	< 0.5 U	< 2.5 U				< 5.0 U
MW07-27D	NE	1		< 50 U		0.64 J		< 40.7 UJ
MW07-28D	NE			< 0.5 U				< 0.4 UJ
MW07-29D	NE							< 1.0 U
MW07-30D	NE							< 1.0 U
MW07-32D	NE					< 0.50 U		< 0.4 U
MW07-32R	NE							< 0.4 U
MW07-33D	NE	< 0.3 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.4 U
MW07-33S	NE			< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.4 UJ
MW07-34D	NE	0.8 J	< 1 U	< 0.5 U	< 2.0 U	< 0.50 U	< 8.0 U	< 25 U
MW07-35D	NE	3	2.5	< 2.5 U				< 100 U
MW07-35S	NE	< 0.3 U	< 0.5 U					< 1.0 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

		ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME20
	DV-Calf Pasture PAL-MW-Site7	Apr 2010	Sept 2011	Jun/Jul 2012	Oct 2013	Sept/Oct 2014	Sept 2015	Sept 2016
MW07-37D	NE	< 0.3 U	< 0.5 U	< 0.5 U		< 1.3 U		< 10.0 UJ
MW07-37S	NE		< 0.5 U					< 1.0 U
MW07-38D	NE	0.8 J	0.78 J	0.77 J				< 5.0 U
MW07-38S	NE	< 0.3 U	< 0.5 U	< 0.5 U				< 1.0 U
MW07-39D	NE	18 J	< 12 U	< 50 U	1.2 J	< 10 U	< 25 U	< 100 U
MW07-39I	NE	40 J	30 J	< 50 U	23 J	< 80 U	< 100 U	< 500 U
MW07-39S	NE	38	41	< 50 U	17 J	< 80 U	< 50 U	< 250 U
MW07-40D	NE		6.5 J	< 50 U		< 25 U		< 50 U
MW07-41I	NE		2.5 J	1.4		< 20 U		< 50 U
MW07-42I	NE		29	27	18 J	< 50 U	< 50 U	< 50 U
MW07-43D	NE		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-43S	NE		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-44D	NE		< 0.5 U	< 0.5 U		< 0.50 U		< 5.0 U
MW07-45D	NE		< 2 U	< 0.5 U	< 1.0 U	< 10 U	< 4.0 U	< 50 U
MW07-45S	NE		< 0.5 U	< 0.5 U				< 1.0 U
CIS-1,2-DICHLOROETHENE								
DPT07-09-27D	**70**			**1300**		**1900**		**1600**
DPT07-09-28D	70							< 0.3 UJ
DPT07-16I	**70**			< 0.5 U				**120**
DPT07-16S	70			< 0.5 U				< 0.5 U
DPT07-18I	70			< 0.5 U		< 0.50 U		< 0.5 U
DPT07-18S	70			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-24D	**70**			**91**		**100**		**114 J**
DPT07-24I	70			1.2				1.9
DPT07-29-34I	70			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-29-34S	70			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-30I	70							< 1.0 U
DPT07-30S	70							< 0.5 U
DPT07-39-03D	**70**		**2300**	**2700**		**5900**		**2000 J**
DPT07-39-03I	**70**		**1600**	**950**		**2500**		**1670 J-**
DPT07-39-04D	**70**			**5300**		**4800**		**2500**
MW07-03D	70							12
MW07-03S	70							< 1.0 U
MW07-04D	**70**	**100**	**78**	62				< 50 U
MW07-04S	70							< 1.0 U
MW07-05D	**70**	54	58	34 J				< 20 U
MW07-05S	70		< 0.5 U	< 0.5 U				< 1.0 U
MW07-09D	**70**	**2600**	**3400**	**2400**	**5700**	**5400**	**5400**	**4000 J**
MW07-09R	**70**	**410**	**280**	**400**	**380 J**	**380**	**340**	**250**

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
MW07-10D	70	12	12	12				7.2 J
MW07-10S	70							< 1.0 U
MW07-11D	**70**	**390**	**260**	**510**	**660**	**610**	**800**	**670**
MW07-12D	70	5	13	6.1		19		16.3
MW07-13D	70	15	4.1	2.9		0.59 J		0.7 J
MW07-13S	70	< 0.2 U	< 0.5 U	< 0.5 U		< 0.50 U		R
MW07-15D	**70**		**110**	**75**				< 50.0 U
MW07-16R	70			< 0.5 U				< 0.5 U
MW07-17D	**70**	**1400**	**1900**	**1500**		**1100**		**1200**
MW07-18D	70		0.53 J	0.81 J		< 0.50 U		0.72 J
MW07-19D	**70**	**310**	**530**	**530**	**500**	**910**	**780**	**760**
MW07-19S	**70**	**2200**	**2200**	**1200**	**2700**	**3300**	**1600**	**1700 J**
MW07-20D	70			< 0.5 U		< 0.50 U		< 1.0 U
MW07-20S	70	< 0.2 U	0.23 J	< 0.5 U		< 0.50 U		< 0.5 U
MW07-21D	**70**	**770**	**1200**	**660**	**910 J**	**1500**	**1100**	**1070**
MW07-21R	**70**	**1800**	**1800**	**1000**	**2300 J**	**1200**	**1600**	**1700**
MW07-21S	**70**	**720**	**430**	**530**	**600 J**	**590**	**1100**	**579**
MW07-23D	**70**	**160**	**610**	**630**	**780**	**1300**	**1000**	**730**
MW07-23S	70		< 0.5 U			< 0.50 U		< 1.0 U
MW07-24D	70		< 0.5 U	< 0.5 U				< 0.5 UJ
MW07-24DUT	70	4	4.4	4.8	5.6 J	5.4	5.7	5.8
MW07-24S	70	< 0.2 U	< 0.5 U	< 0.5 U				< 0.5 U
MW07-25D	**70**	6	11	10				< 10 U
MW07-25R	**70**	**640**	**1200**	**910**				**520**
MW07-27D	**70**	**1800**		**2700**		**3200**		**2340 J-**
MW07-28D	70			< 0.5 U				< 0.3 UJ
MW07-29D	70							< 0.5 U
MW07-30D	70							1.1 J+
MW07-32D	70					< 0.50 U		< 0.3 U
MW07-32R	70							< 0.3 U
MW07-33D	70	14	15	11	12	11	11	11.2 J
MW07-33S	70			< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.3 UJ
MW07-34D	**70**	**1600**	**1800**	**1500**	**1200**	**1400**	**1800**	**960**
MW07-35D	70	10	11	9.8				< 100 U
MW07-35S	70	1	< 1.7 U					< 1.0 U
MW07-37D	**70**	47	47	36		30		30.9 J-
MW07-37S	70		< 0.5 U					< 0.5 U
MW07-38D	70	2	2.3	2.4				< 5.0 U
MW07-38S	70	< 0.2 U	< 0.5 U	< 0.5 U				< 1.0 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
MW07-39D	**70**	**2600**	**6200**	**3600**	**2200 J**	**5000**	**2200**	**1830**
MW07-39I	**70**	**2700**	**3200**	**1900**	**2100 J**	**2500**	**3200**	**2990**
MW07-39S	**70**	**1600**	**2000**	**1400**	**1300 J**	**1300**	**1500**	**1370 J+**
MW07-40D	**70**		**390 J**	**390**		**290**		**290 J**
MW07-41I	**70**		**6000**	**4600**		**3800**		**3300**
MW07-42I	**70**		**4600**	**3600**	**4800 J**	**9300**	**6200**	**6100**
MW07-43D	70		< 0.5 U	< 0.5 U		< 0.50 U		0.6 J
MW07-43S	70		< 0.5 U	< 0.5 U		< 0.50 U		< 0.5 U
MW07-44D	70		55 J	36		34		57
MW07-45D	**70**		**750**	**400**	**190 J**	**310**	**160**	**200 J**
MW07-45S	70		< 0.5 U	< 0.5 U				< 1.0 U
TETRACHLOROETHENE								
DPT07-09-27D	5			< 1 UJ		< 160 U		< 400 U
DPT07-09-28D	5							< 0.6 UJ
DPT07-16I	5			< 1 U				< 2.0 U
DPT07-16S	5			< 1 U				< 1.0 U
DPT07-18I	5			< 1 U		< 1.0 U		< 1.0 U
DPT07-18S	5			< 1 U		< 1.0 U		< 2.0 U
DPT07-24D	5			< 1 UJ		< 1.0 U		< 1.0 U
DPT07-24I	5			< 1 UJ				< 1.0 U
DPT07-29-34I	5			< 1 U		< 1.0 U		< 2.0 U
DPT07-29-34S	5			< 1 U		< 1.0 U		< 2.0 U
DPT07-30I	5							< 2.0 U
DPT07-30S	5							< 1.0 U
DPT07-39-03D	**5**		**34 J**	< 1 U		< 100 U		< 2.0 U
DPT07-39-03I	**5**		< 10 U	**23**		< 50 U		< 28.5 UJ
DPT07-39-04D	5			< 1 UJ		< 1000 U		< 2.0 U
MW07-03D	5							< 2.0 U
MW07-03S	5							< 2.0 U
MW07-04D	**5**	**360**	**260**	**680 J**				**340**
MW07-04S	5							< 2.0 U
MW07-05D	**5**	**220**	**300**	**270**				< 40 U
MW07-05S	5		< 0.5 U	< 1 U				< 2.0 U
MW07-09D	5	< 4 U	< 5 U	< 5 U	< 5.0 U	< 50 U	< 40 U	< 100 U
MW07-09R	5	< 0.4 U	< 0.5 U	< 1 U	< 0.50 U	< 4.0 U	< 2.5 U	< 2.0 U
MW07-10D	**5**	**9**	**13**	**14**				**5.4 J**
MW07-10S	5							< 2.0 U
MW07-11D	5	< 0.4 U	< 0.5 U	< 1 U	< 0.50 U	< 1.0 U	< 8.0 U	< 50 U
MW07-12D	5	< 0.4 U	< 0.5 U	< 1 U		< 1.0 U		< 1.0 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

		ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME20
	DV-Calf Pasture PAL-MW-Site7	Apr 2010	Sept 2011	Jun/Jul 2012	Oct 2013	Sept/Oct 2014	Sept 2015	Sept 2016
MW07-13D	5	< 0.4 U	< 0.5 U	< 1 U		< 1.0 U		R
MW07-13S	5	< 0.4 U	< 0.5 U	< 1 U		< 1.0 U		R
MW07-15D	**5**		**310**	**260**				**273**
MW07-16R	5			< 1 U				< 1.0 U
MW07-17D	**5**	**280**	**370**	**380 J**		< 500 U		**330**
MW07-18D	5		< 0.5 U	< 1 U		< 1.0 U		< 2.0 U
MW07-19D	5	< 0.4 U	< 0.5 U	< 10 UJ	< 0.50 U	< 16 U	< 20 U	< 40 U
MW07-19S	5	2 J	< 5 U	< 25 U	3.4	< 80 U	2.7	< 100 U
MW07-20D	5			< 1 U		< 1.0 U		< 2.0 U
MW07-20S	5	< 0.4 U	< 0.5 U	< 1 U		< 1.0 UJ		< 1.0 U
MW07-21D	5	< 0.4 U	< 2.5 U	< 25 U	< 5.0 U	< 80 U	< 32 U	< 100 U
MW07-21R	**5**	**19**	**19**	**27**	**15 J**	< 100 U	< 50 U	**29.5 J**
MW07-21S	5	< 2 U	< 0.5 U	< 1 U	< 1.0 U	< 5.0 U	< 16 U	< 10.0 U
MW07-23D	**5**	3	1.4	< 5 U	< 1.0 U	< 16 U	< 8.0 U	< 50 U
MW07-23S	5		< 0.5 U			< 1.0 U		< 2.0 U
MW07-24D	5		< 0.5 U	< 1 U				< 1.0 UJ
MW07-24DUT	5	< 0.4 U	< 0.5 U	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
MW07-24S	5	< 0.4 U	< 0.5 U	< 1 U				< 1.0 U
MW07-25D	**5**	**33**	**46**	**41**				**32 J**
MW07-25R	**5**	**7**	2.7	**7.1**				**6.7 J**
MW07-27D	5	1		< 100 UJ		1.8		< 57.0 UJ
MW07-28D	5			< 1 U				< 0.6 UJ
MW07-29D	5							< 1.0 U
MW07-30D	5							< 1.0 U
MW07-32D	5					< 1.0 U		< 0.6 U
MW07-32R	5							< 0.6 U
MW07-33D	5	< 0.4 U	< 0.5 U	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 0.6 U
MW07-33S	5			< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 0.6 UJ
MW07-34D	5	< 0.8 U	< 1 U	< 1 U	< 2.0 U	< 1.0 U	< 16 U	< 50 U
MW07-35D	**5**	**32**	**31**	**33**				< 200 U
MW07-35S	5	< 0.4 U	< 0.5 U					< 2.0 U
MW07-37D	**5**	3	4.2	3.9		3.2		< 10.0 UJ
MW07-37S	5		< 0.5 U					< 1.0 U
MW07-38D	**5**	**46**	**56**	**46**				**26**
MW07-38S	5	< 0.4 U	< 0.5 U	< 1 U				< 2.0 U
MW07-39D	5	< 10 U	< 12 U	< 100 U	0.62 J	< 20 U	< 50 U	< 100 U
MW07-39I	**5**	**6**	< 25 U	< 100 U	**8.5 J**	< 160 U	< 200 U	< 500 U
MW07-39S	**5**	**22 J**	**27**	< 100 U	**22 J**	< 160 U	< 100 U	< 250 U
MW07-40D	**5**		**10 J**	< 100 UJ		< 50 U		< 100 U

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SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
MW07-41I	5		3 J	3		< 40 U		< 100 U
MW07-42I	**5**		**5.2**	**6.7**	< 20 U	< 100 U	< 100 U	< 100 U
MW07-43D	5		< 0.5 U	< 1 U		< 1.0 U		< 1.0 U
MW07-43S	5		< 0.5 U	< 1 U		< 1.0 U		< 1.0 U
MW07-44D	5		< 0.5 U	< 1 U		< 1.0 U		< 10 U
MW07-45D	5		< 2 U	< 1 U	< 1.0 U	< 20 U	< 8.0 U	< 100 U
MW07-45S	5		< 0.5 U	< 1 U				< 2.0 U
TRANS-1,2-DICHLOROETHENE								
DPT07-09-27D	**100**			**590**		**870**		**440 J**
DPT07-09-28D	100							< 0.3 UJ
DPT07-16I	100			< 1 U				< 2.0 U
DPT07-16S	100			< 1 U				< 1.0 U
DPT07-18I	100			< 1 U		< 1.0 U		< 1.0 U
DPT07-18S	100			< 1 U		< 1.0 U		< 2.0 U
DPT07-24D	100			2.7		3.0		3.5
DPT07-24I	100			< 1 U				< 1.0 U
DPT07-29-34I	100			< 1 U		< 1.0 U		< 2.0 U
DPT07-29-34S	100			< 1 U		< 1.0 U		< 2.0 U
DPT07-30I	100							< 2.0 U
DPT07-30S	100							< 1.0 U
DPT07-39-03D	**100**		**500**	**670**		**560**		**550 J**
DPT07-39-03I	**100**		**460**	**190**		**180**		**147 J-**
DPT07-39-04D	**100**			**2500**		**2600**		< 1000 U
MW07-03D	100							3.9 J
MW07-03S	100							< 2.0 U
MW07-04D	**100**	20	14	14				< 100 U
MW07-04S	100							< 2.0 U
MW07-05D	100	34	26	< 40 U				< 40 U
MW07-05S	100		< 0.5 U	< 1 U				< 2.0 U
MW07-09D	**100**	**560**	**560 J**	**590**	**490**	**390**	**420**	**300 J**
MW07-09R	100	22	19 J	28	26 J	26	22	16 J+
MW07-10D	100	4	3.3 J	3.5				< 10 U
MW07-10S	100							< 2.0 U
MW07-11D	100	17	13	29	38	36	47	< 50 UJ
MW07-12D	100	0.9 J	2.9	1.4		5.1		4.5
MW07-13D	100	2	0.5 J	< 1 U		< 1.0 U		R
MW07-13S	100	< 0.2 U	< 0.5 U	< 1 U		< 1.0 U		R
MW07-15D	100		66	46				60.0 J
MW07-16R	100			< 1 U				< 1.0 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
MW07-17D	**100**	**820**	**1100**	**680**		**630**		**630**
MW07-18D	100		< 0.5 U	< 1 U		< 1.0 U		< 2.0 U
MW07-19D	**100**	50	67	59	100	89	**110**	< 40 UJ
MW07-19S	**100**	**150**	**150**	85	**240**	**270**	**110**	**130 J**
MW07-20D	100			< 1 U		< 1.0 U		< 2.0 U
MW07-20S	100	< 0.2 U	< 0.5 U	< 1 U		< 1.0 U		< 1.0 U
MW07-21D	**100**	37	**110**	100	**120 J**	**190**	**160**	**164**
MW07-21R	**100**	**280**	**250**	**260**	**240 J**	**270**	**240**	**298**
MW07-21S	**100**	**120**	12	24	29 J	21	46	23.8
MW07-23D	100	24	44	31	47 J	74	54	< 50 UJ
MW07-23S	100		< 0.5 U			< 1.0 U		< 2.0 U
MW07-24D	100		< 0.5 U	< 1 U				< 1.0 UJ
MW07-24DUT	100	0.3 J	< 0.5 U	< 1 U	0.44 J	< 1.0 U	< 1.0 U	0.5 J
MW07-24S	100	< 0.2 U	< 0.5 U	< 1 U				< 1.0 U
MW07-25D	**100**	2	2.9	< 5 U				< 20 U
MW07-25R	**100**	66	63	65				35
MW07-27D	**100**	**270**		**320**		**280**		**343 J-**
MW07-28D	100			< 1 U				< 0.3 UJ
MW07-29D	100							< 1.0 U
MW07-30D	100							< 1.0 U
MW07-32D	100					< 1.0 U		< 0.3 U
MW07-32R	100							< 0.3 U
MW07-33D	100	3	3.5	2.6	2.4	2.7	2.4	2.2 J
MW07-33S	100			< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 0.3 UJ
MW07-34D	100	96	74	83	64 J	65	91	39 J
MW07-35D	100	4	2.9	< 5 U				< 200 UJ
MW07-35S	100	< 0.2 U	< 0.5 U					< 2.0 U
MW07-37D	100	15	20	16		13		14.6 J-
MW07-37S	100		< 0.5 U					< 1.0 U
MW07-38D	100	0.8 J	0.79 J	< 1 U				< 10 U
MW07-38S	100	< 0.2 U	< 0.5 U	< 1 U				< 2.0 U
MW07-39D	**100**	**480**	**360**	**350**	**270 J**	**210**	**260**	**279**
MW07-39I	**100**	**660**	**800**	**430**	**570 J**	**670**	**640**	**635**
MW07-39S	**100**	**190**	**230**	**150**	**190 J**	**220**	**190**	**170 J+**
MW07-40D	**100**			**180**		**140**		< 100 U
MW07-41I	**100**		**390**	**330**		**260**		< 100 UJ
MW07-42I	**100**		**780**	**460**	**590 J**	**660**	**570**	**630 J**
MW07-43D	100		< 0.5 U	< 1 U		< 1.0 U		< 1.0 U
MW07-43S	100		< 0.5 U	< 1 U		< 1.0 U		< 1.0 U

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
MW07-44D	100		8.6 J	5.7		5.0		< 10 UJ
MW07-45D	**100**		**240**	**130**	62 J	100	54	< 100 U
MW07-45S	100		< 0.5 U	< 1 U				< 2.0 U
TRICHLOROETHENE								
DPT07-09-27D	**5**			**15000**		**23000**		**9000**
DPT07-09-28D	5							< 0.4 UJ
DPT07-16I	**5**			0.7 J				**83**
DPT07-16S	5			0.69 J				< 1.0 U
DPT07-18I	5			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-18S	5			< 0.5 U		1.2		< 1.0 U
DPT07-24D	**5**			**67**		**78**		**99.8**
DPT07-24I	5			1.5				1.9
DPT07-29-34I	5			0.71 J		< 0.50 U		< 1.0 U
DPT07-29-34S	5			0.73 J		< 0.50 U		< 1.0 U
DPT07-30I	5							< 1.0 U
DPT07-30S	5							< 1.0 U
DPT07-39-03D	**5**		**45000 J**	**52000**		**37000 J**		**38000**
DPT07-39-03I	**5**		**8900**	**8700**		**4200**		**1920 J-**
DPT07-39-04D	**5**			**96000**		**98000**		**73000**
MW07-03D	**5**							2.2 J
MW07-03S	5							< 1.0 U
MW07-04D	**5**	**11000**	**11000**	**17000 J**				**6100**
MW07-04S	5							< 1.0 U
MW07-05D	**5**	**4300**	**3300**	**2800**				**230**
MW07-05S	5		< 0.5 U	< 0.5 U				< 1.0 U
MW07-09D	**5**	**6300**	**5800**	**5000**	**3900**	**420**	**1800**	**1000 J**
MW07-09R	**5**	**58**	**49**	**98**	**91 J**	**85**	**81**	**62 J+**
MW07-10D	**5**	**310**	**220**	**330**				**170**
MW07-10S	5							< 1.0 U
MW07-11D	**5**	**240**	**180**	**490**	**680**	**640**	**1100**	**940**
MW07-12D	**5**	**12**	**37**	**18**		**68**		**64.8**
MW07-13D	**5**	**60**	**15**	**11**		1.6		1.3 J
MW07-13S	**5**	< 0.3 U	< 0.5 U	0.52 J		< 0.50 U		R
MW07-15D	**5**		**7900 J**	**6100**				**6180**
MW07-16R	5			< 0.5 U				< 1.0 U
MW07-17D	**5**	**43000**	**53000**	**49000**		**36000**		**29000**
MW07-18D	5		< 0.5 U	0.85 J		< 0.50 U		< 1.0 U
MW07-19D	**5**	**830**	**1400**	**1200**	**1800**	**1800**	**2400**	**1700**
MW07-19S	**5**	**3800**	**6300**	**3300**	**8000**	**8700**	**4200**	**4500 J**

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME20
		Apr 2010	Sept 2011	Jun/Jul 2012	Oct 2013	Sept/Oct 2014	Sept 2015	Sept 2016
MW07-20D	5			< 0.5 U		< 0.50 U		< 1.0 U
MW07-20S	5	< 0.3 U	< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-21D	**5**	**800**	**3900 J**	**3200**	**4800 J**	**6400**	**5200**	**5140**
MW07-21R	**5**	**9300**	**9800**	**11000**	**9400 J**	**11000**	**8700**	**8930**
MW07-21S	**5**	**4100**	**330**	**500**	**1200 J**	**470**	**2000**	**351 J-**
MW07-23D	**5**	**490**	**180**	**44**	**41 J**	**36**	**57**	**42 J**
MW07-23S	5		< 0.5 U			< 0.50 U		< 1.0 U
MW07-24D	5		< 0.5 U	< 0.5 U				< 1.0 UJ
MW07-24DUT	**5**	**13**	**16**	**18**	**23 J**	**20**	**21**	**18.7**
MW07-24S	5	< 0.3 U	< 0.5 U	< 0.5 U				< 1.0 U
MW07-25D	**5**	**580**	**630**	**660**				**470**
MW07-25R	**5**	**510**	**190**	**600**				**400**
MW07-27D	**5**	**7200**		**7400**		**6100**		**8200 J-**
MW07-28D	5			< 0.5 U				< 0.4 UJ
MW07-29D	5							< 1.0 U
MW07-30D	5							< 1.0 U
MW07-32D	5					< 0.50 U		< 0.4 U
MW07-32R	5							< 0.4 U
MW07-33D	**5**	**21**	**17**	**17**	**12**	**12**	**14**	**6.1 J**
MW07-33S	**5**			1.2	0.94 J	0.86 J	< 0.50 U	0.4 J-
MW07-34D	**5**	**790**	**310**	**970**	**900**	**1000**	**1700**	**690**
MW07-35D	**5**	**670**	**740**	**590**				**150 J**
MW07-35S	5	< 0.3 U	< 0.5 U					< 1.0 U
MW07-37D	**5**	**530**	**550**	**460**		**450**		**460 J-**
MW07-37S	5		< 0.5 U					< 1.0 U
MW07-38D	**5**	**280**	**330**	**280**				**170**
MW07-38S	5	0.6 J	1.2	1				< 1.0 U
MW07-39D	**5**	**19000**	**11000**	**9800**	**9500 J**	**3900**	**9100**	**9980**
MW07-39I	**5**	**24000**	**24000**	**15000**	**21000 J**	**20000**	**19000**	**18000**
MW07-39S	**5**	**16000**	**18000**	**11000**	**14000 J**	**18000**	**16000**	**13800 J+**
MW07-40D	**5**		**9800**	**9800**		**7400**		**5200 J**
MW07-41I	**5**		**3500**	**2500**		**3300**		**2500**
MW07-42I	**5**		**20000**	**13000**	**17000 J**	**11000**	**12000**	**9000**
MW07-43D	5		< 0.5 U	< 0.5 U		0.63 J		0.4 J
MW07-43S	5		< 0.5 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-44D	**5**		**240**	**180**		**180**		**240**
MW07-45D	**5**		**4600**	**1900**	**1100 J**	**2100**	**1100**	**1200 J**
MW07-45S	5		< 0.5 UJ	< 0.5 U				< 1.0 U
VINYL CHLORIDE								

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
DPT07-09-27D	**2**			**44**		< 80 U		< 200 U
DPT07-09-28D	2							< 0.5 UJ
DPT07-16I	**2**			< 0.5 U				**5.2**
DPT07-16S	2			< 0.5 U				< 1.0 U
DPT07-18I	2			< 0.5 U		< 0.50 U		0.8 J
DPT07-18S	2			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-24D	**2**			**2.9**		**4.7**		**6.5**
DPT07-24I	2			< 0.5 U				< 1.0 U
DPT07-29-34I	2			0.54 J		< 0.50 U		< 1.0 U
DPT07-29-34S	2			< 0.5 U		< 0.50 U		< 1.0 U
DPT07-30I	2							< 1.0 U
DPT07-30S	2							< 1.0 U
DPT07-39-03D	**2**		**87**	**57**		< 50 U		**61 J**
DPT07-39-03I	**2**		**31 J**	**41**		**170**		**77.0 J-**
DPT07-39-04D	**2**			**69**		< 500 U		**53 J**
MW07-03D	**2**							**2.5 J**
MW07-03S	2							< 1.0 U
MW07-04D	**2**	**6 J**	**5 J**	**5.4**				< 50 U
MW07-04S	2							< 1.0 U
MW07-05D	**2**	**3 J**	**3.6 J**	< 20 U				< 20 U
MW07-05S	2		< 1 U	< 0.5 U				< 1.0 U
MW07-09D	**2**	**100**	**110 J**	**140**	**88**	**65**	**70**	< 50 U
MW07-09R	**2**	**12**	**17 J**	**29**	**19 J**	**16**	**17**	**15 J**
MW07-10D	2	1 J	< 5 U	< 0.5 U				< 5.0 U
MW07-10S	2							< 1.0 U
MW07-11D	**2**	**8**	**7.6**	**14**	**17**	**15**	**18**	< 25 U
MW07-12D	2	< 0.2 U	< 1 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-13D	2	0.3 J	< 1 U	< 0.5 U		< 0.50 U		R
MW07-13S	2	< 0.2 U	< 1 U	< 0.5 U		< 0.50 U		R
MW07-15D	**2**		**2.9 J**	1.8				< 100 U
MW07-16R	2			< 0.5 U				< 1.0 U
MW07-17D	**2**	**19 J**	**62 J**	< 200 UJ		**65**		< 50 U
MW07-18D	2		< 1 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-19D	**2**	**11**	**18 J**	**15**	**22**	**20**	**220**	**160**
MW07-19S	**2**	**17 J**	**19 J**	< 13 U	**34**	< 40 U	**17**	< 50 U
MW07-20D	2			< 0.5 U		< 0.50 U		< 1.0 U
MW07-20S	2	< 0.2 U	< 1 U	< 0.5 U		< 0.50 U		< 1.0 U
MW07-21D	**2**	2	**16**	**18 J**	**22 J**	< 40 U	< 16 U	< 100 U
MW07-21R	**2**	**11 J**	**11 J**	**21**	**22 J**	< 50 U	**96**	**150**

TABLE D-6
SUMMARY OF DETECTED ANALYTES II
FORMER NCBC DAVISVILLE, NORTH KI

	DV-Calf Pasture PAL-MW-Site7	ME 14 Apr 2010	ME 15 Sept 2011	ME 16 Jun/Jul 2012	ME 17 Oct 2013	ME 18 Sept/Oct 2014	ME 19 Sept 2015	ME20 Sept 2016
MW07-21S	**2**	**12**	0.76 J	**2.3**	**2.3 J**	< 2.5 U	< 8.0 U	**14.2**
MW07-23D	**2**	2	**5.6**	**6.5 J**	**4.9 J**	< 8.0 U	< 4.0 U	< 25 U
MW07-23S	2		< 1 U			< 0.50 U		< 1.0 U
MW07-24D	2		< 1 U	< 0.5 U				< 1.0 UJ
MW07-24DUT	2	< 0.2 U	< 1 U	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U
MW07-24S	2	< 0.2 U	< 1 U	< 0.5 U				< 1.0 U
MW07-25D	**2**	< 0.2 U	< 1 U	< 2.5 UJ				< 10 U
MW07-25R	**2**	**3**	**7.2**	**10 J**				< 5.0 U
MW07-27D	**2**	**82**		**85 J**		**140**		**122 J-**
MW07-28D	2			< 0.5 U				< 0.5 UJ
MW07-29D	2							< 1.0 U
MW07-30D	2							< 1.0 U
MW07-32D	2					< 0.50 U		< 0.5 UJ
MW07-32R	2							< 0.5 U
MW07-33D	2	< 0.2 U	< 1 U	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 U	< 0.5 U
MW07-33S	**2**			**4.9**	< 1.0 U	< 0.50 U	< 0.50 U	< 0.5 UJ
MW07-34D	**2**	**22**	**21**	**33**	**26 J**	**31**	**38**	< 25 U
MW07-35D	2	< 0.2 U	< 1 UJ	< 2.5 U				< 100 U
MW07-35S	2	< 0.2 U	< 1 U					< 1.0 U
MW07-37D	2	0.4 J	0.42 J	< 0.5 U		< 1.3 U		< 10.0 UJ
MW07-37S	2		< 1 U					< 1.0 U
MW07-38D	2	< 0.2 U	< 1 U	< 0.5 U				< 5.0 U
MW07-38S	2	< 0.2 U	< 1 U	< 0.5 U				< 1.0 U
MW07-39D	**2**	**79**	**87**	**80 J**	< 1.0 U	**140**	**77**	**98.0 J**
MW07-39I	**2**	**110**	**230**	**93 J**	**150 J**	< 80 U	< 100 U	< 500 U
MW07-39S	**2**	**37 J**	**82**	< 50 U	**51 J**	< 80 U	< 50 U	< 250 U
MW07-40D	**2**		**28 J**	< 50 U		< 25 U		< 50 U
MW07-41I	**2**		**130**	**130**		**85**		**88 J**
MW07-42I	**2**		**170**	**180**	**130 J**	**120**	**130**	**140 J**
MW07-43D	2		< 1 U	< 0.5 UJ		< 0.50 U		< 1.0 U
MW07-43S	2		< 1 U	< 0.5 UJ		< 0.50 U		< 1.0 U
MW07-44D	2		1.2 J	< 0.5 U		< 0.50 U		< 5.0 U
MW07-45D	**2**		**27**	**13**	**6.0 J**	< 10 U	< 4.0 U	< 50 U
MW07-45S	2		< 1 U	< 0.5 U				< 1.0 U

Notes:
1) U or < = Non-detect at laboratory detection limit
2) J = Estimated Value, J+ = biased high, J- = biased low, R =
3) All units are in micrograms per liter (ug/l)
4) NE = not established
5) Criteria exceedances are bolded and highlighted

TABLE D-7
SUMMARY OF DETECTED ANALYTES IN SURFACE WATER AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Date	Sample	1,1,2,2-TETRACHLOROETHANE		1,2-DICHLOROETHANE		CIS-1,2-DICHLOROETHENE		TRANS-1,2-DICHLOROETHENE	
			Result (ug/L)	Detect Flag	Result (ug/L)	Detect Flag	Result (ug/L)	Detect Flag	Result (ug/L)	Detect Flag
P07-02	7/2/2012	P07-02-L-1-0712	0.5	N	0.5	N	0.5	N	1	N
P07-02	7/2/2012	P07-02-L-2-0712	0.5	N	0.5	N	0.5	N	1	N
P07-02	7/2/2012	P07-02-L-3-0712	0.5	N	0.5	N	0.5	N	1	N
P07-04	7/2/2012	P07-04-L-1-0712	0.5	N	0.5	N	0.5	N	1	N
P07-04	7/2/2012	P07-04-L-2-0712	0.5	N	0.5	N	0.5	N	1	N
P07-04	7/2/2012	P07-04-L-3-0712	0.5	N	0.5	N	0.5	N	1	N
P07-06	7/2/2012	P07-06-L-1-0712	0.5	N	0.5	N	0.5	N	1	N
P07-06	7/2/2012	P07-06-L-2-0712	0.5	N	0.5	N	0.5	N	1	N
P07-06	7/2/2012	P07-06-L-3-0712	0.5	N	0.5	N	0.5	N	1	N
P07-07	7/2/2012	P07-07-L-1-0712	0.5	N	0.5	N	0.5	N	1	N
P07-07	7/2/2012	P07-07-L-2-0712	0.5	N	0.5	N	0.5	N	1	N
P07-07	7/2/2012	P07-07-L-3-0712	0.5	N	0.5	N	0.5	N	1	N
P07-08	7/2/2012	P07-08-L-1-0712	0.5	N	0.5	N	0.5	N	1	N
P07-08	7/2/2012	P07-08-L-2-0712	0.5	N	0.5	N	0.5	N	1	N
P07-08	7/2/2012	P07-08-L-3-0712	0.5	N	0.5	N	0.5	N	1	N
P07-09	7/2/2012	P07-09-L-1-0712	0.5	N	0.5	N	6.9	Y	1	N
P07-09	7/2/2012	P07-09-L-2-0712	0.5	N	0.5	N	0.5	N	1	N
P07-09	7/2/2012	P07-09-L-3-0712	0.5	N	0.5	N	0.5	N	1	N
P07-10	7/2/2012	P07-10-L-1-0712	0.5	N	0.5	N	3.6	Y	1	N
P07-10	7/2/2012	P07-10-L-2-0712	0.5	N	0.5	N	0.5	N	1	N
P07-10	7/2/2012	P07-10-L-3-0712	0.5	N	0.5	N	0.5	N	1	N
P07-20	7/2/2012	P07-20-L-1-0712	0.5	N	0.5	N	0.5	N	1	N
P07-20	7/2/2012	P07-20-L-2-0712	0.5	N	0.5	N	0.5	N	1	N
P07-20	7/2/2012	P07-20-L-3-0712	0.5	N	0.5	N	0.5	N	1	N
P07-24	7/2/2012	P07-24-L-1-0712	0.5	N	0.5	N	7.9	Y	0.73	Y
P07-24	7/2/2012	P07-24-L-2-0712	0.5	N	0.5	N	0.5	N	1	N
P07-24	7/2/2012	P07-24-L-3-0712	0.5	N	0.5	N	0.5	N	1	N
P07-34	7/2/2012	P07-34-L-1-0712	0.5	N	0.5	N	0.5	N	1	N
P07-34	7/2/2012	P07-34-L-2-0712	0.5	N	0.5	N	0.5	N	1	N
P07-34	7/2/2012	P07-34-L-3-0712	0.5	N	0.5	N	0.5	N	1	N
P07-02	8/16/2016	SW07-02-FLOOR01-ME20-1	1	N	1	N	1	N	2	N
P07-02	8/16/2016	SW07-02-FLOOR02-ME20-1	1	N	1	N	1	N	2	N
P07-02	8/16/2016	SW07-02-MID01-ME20-1	1	N	1	N	1	N	2	N
P07-04	8/16/2016	SW07-04-FLOOR01-ME20-1	1	N	1	N	1	N	2	N
P07-04	8/16/2016	SW07-04-FLOOR02-ME20-1	1	N	1	N	1	N	2	N
P07-04	8/16/2016	SW07-04-MID01-ME20-1	1	N	1	N	1	N	2	N
P07-06	8/16/2016	SW07-06-FLOOR01-ME20-1	1	N	1	N	1	N	2	N
P07-06	8/16/2016	SW07-06-FLOOR02-ME20-1	1	N	1	N	1	N	2	N
P07-06	8/16/2016	SW07-06-MID01-ME20-1	1	N	1	N	1	N	2	N
P07-07	8/16/2016	SW07-07-FLOOR01-ME20-1	1	N	1	N	1	N	2	N
P07-07	8/16/2016	SW07-07-FLOOR02-ME20-1	1	N	1	N	1	N	2	N

TABLE D-7
SUMMARY OF DETECTED ANALYTES IN SURFACE WATER AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Date	Sample	1,1,2,2-TETRACHLOROETHANE		1,2-DICHLOROETHANE		CIS-1,2-DICHLOROETHENE		TRANS-1,2-DICHLOROETHENE	
			Result (ug/L)	Detect Flag	Result (ug/L)	Detect Flag	Result (ug/L)	Detect Flag	Result (ug/L)	Detect Flag
P07-07	8/16/2016	SW07-07-MID01-ME20-1	1	N	1	N	1	N	2	N
P07-08	8/16/2016	SW07-08-FLOOR01-ME20-1	1	N	1	N	1.5	Y	2	N
P07-08	8/16/2016	SW07-08-FLOOR02-ME20-1	1	N	1	N	1	N	2	N
P07-08	8/16/2016	SW07-08-MID01-ME20-1	1	N	1	N	1	N	2	N
P07-09	8/16/2016	SW07-09-FLOOR01-ME20-1	1	N	1	N	1	N	2	N
P07-09	8/16/2016	SW07-09-FLOOR02-ME20-1	1	N	1	N	1	N	2	N
P07-09	8/16/2016	SW07-09-MID01-ME20-1	1	N	1	N	1	N	2	N
P07-10	8/16/2016	SW07-10-FLOOR01-ME20-1	1	N	1	N	1	N	2	N
P07-10	8/16/2016	SW07-10-FLOOR02-ME20-1	1	N	1	N	1	N	2	N
P07-10	8/16/2016	SW07-10-MID01-ME20-1	1	N	1	N	1	N	2	N
P07-20	8/16/2016	SW07-20-FLOOR01-ME20-1	1	N	1	N	1	N	2	N
P07-20	8/16/2016	SW07-20-FLOOR02-ME20-1	1	N	1	N	1	N	2	N
P07-20	8/16/2016	SW07-20-MID01-ME20-1	1	N	1	N	1	N	2	N
P07-24	8/16/2016	SW07-24-FLOOR01-ME20-1	1	N	1	N	6.4	Y	2	N
P07-24	8/16/2016	SW07-24-FLOOR02-ME20-1	1	N	1	N	1	N	2	N
P07-24	8/16/2016	SW07-24-MID01-ME20-1	1	N	1	Y	1	N	2	N
P07-34	8/16/2016	SW07-43S/D-FLOOR01-ME20-1	1	N	1	N	1	N	2	N
P07-34	8/16/2016	SW07-43S/D-FLOOR02-ME20-1	1	N	1	N	1	N	2	N
P07-34	8/16/2016	SW07-43S/D-MID01-ME20-1	1	N	1	N	1	N	2	N

Notes:
Maximum value presented when original
and duplicate samples were analyzed

TABLE D-7
SUMMARY OF DETECTED ANALYTES IN SURFACE WATER AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Date	Sample	TRICHLOROETHENE		VINYL CHLORIDE	
			Result (ug/L)	Detect Flag	Result (ug/L)	Detect Flag
P07-02	7/2/2012	P07-02-L-1-0712	0.5	N	0.5	N
P07-02	7/2/2012	P07-02-L-2-0712	0.5	N	0.5	N
P07-02	7/2/2012	P07-02-L-3-0712	0.5	N	0.5	N
P07-04	7/2/2012	P07-04-L-1-0712	0.5	N	0.5	N
P07-04	7/2/2012	P07-04-L-2-0712	0.5	N	0.5	N
P07-04	7/2/2012	P07-04-L-3-0712	0.5	N	0.5	N
P07-06	7/2/2012	P07-06-L-1-0712	0.5	N	0.5	N
P07-06	7/2/2012	P07-06-L-2-0712	0.5	N	0.5	N
P07-06	7/2/2012	P07-06-L-3-0712	0.5	N	0.5	N
P07-07	7/2/2012	P07-07-L-1-0712	0.5	N	0.5	N
P07-07	7/2/2012	P07-07-L-2-0712	0.5	N	0.5	N
P07-07	7/2/2012	P07-07-L-3-0712	0.5	N	0.5	N
P07-08	7/2/2012	P07-08-L-1-0712	0.5	N	0.5	N
P07-08	7/2/2012	P07-08-L-2-0712	0.5	N	0.5	N
P07-08	7/2/2012	P07-08-L-3-0712	0.5	N	0.5	N
P07-09	7/2/2012	P07-09-L-1-0712	7.7	Y	1.3	Y
P07-09	7/2/2012	P07-09-L-2-0712	0.51	Y	0.5	N
P07-09	7/2/2012	P07-09-L-3-0712	0.58	Y	0.5	N
P07-10	7/2/2012	P07-10-L-1-0712	3	Y	0.5	N
P07-10	7/2/2012	P07-10-L-2-0712	0.6	Y	0.5	N
P07-10	7/2/2012	P07-10-L-3-0712	0.5	N	0.5	N
P07-20	7/2/2012	P07-20-L-1-0712	0.5	N	0.5	N
P07-20	7/2/2012	P07-20-L-2-0712	0.5	N	0.5	N
P07-20	7/2/2012	P07-20-L-3-0712	0.5	N	0.5	N
P07-24	7/2/2012	P07-24-L-1-0712	7.8	Y	1.6	Y
P07-24	7/2/2012	P07-24-L-2-0712	0.5	N	0.5	N
P07-24	7/2/2012	P07-24-L-3-0712	0.5	N	0.5	N
P07-34	7/2/2012	P07-34-L-1-0712	0.5	N	0.5	N
P07-34	7/2/2012	P07-34-L-2-0712	0.5	N	0.5	N
P07-34	7/2/2012	P07-34-L-3-0712	0.5	N	0.5	N
P07-02	8/16/2016	SW07-02-FLOOR01-ME20-1	1	N	1	N
P07-02	8/16/2016	SW07-02-FLOOR02-ME20-1	1	N	1	N
P07-02	8/16/2016	SW07-02-MID01-ME20-1	1	N	1	N
P07-04	8/16/2016	SW07-04-FLOOR01-ME20-1	1	N	1	N
P07-04	8/16/2016	SW07-04-FLOOR02-ME20-1	1	N	1	N
P07-04	8/16/2016	SW07-04-MID01-ME20-1	1	N	1	N
P07-06	8/16/2016	SW07-06-FLOOR01-ME20-1	1	N	1	N
P07-06	8/16/2016	SW07-06-FLOOR02-ME20-1	1	N	1	N
P07-06	8/16/2016	SW07-06-MID01-ME20-1	1	N	1	N
P07-07	8/16/2016	SW07-07-FLOOR01-ME20-1	1	N	1	N
P07-07	8/16/2016	SW07-07-FLOOR02-ME20-1	1	N	1	N

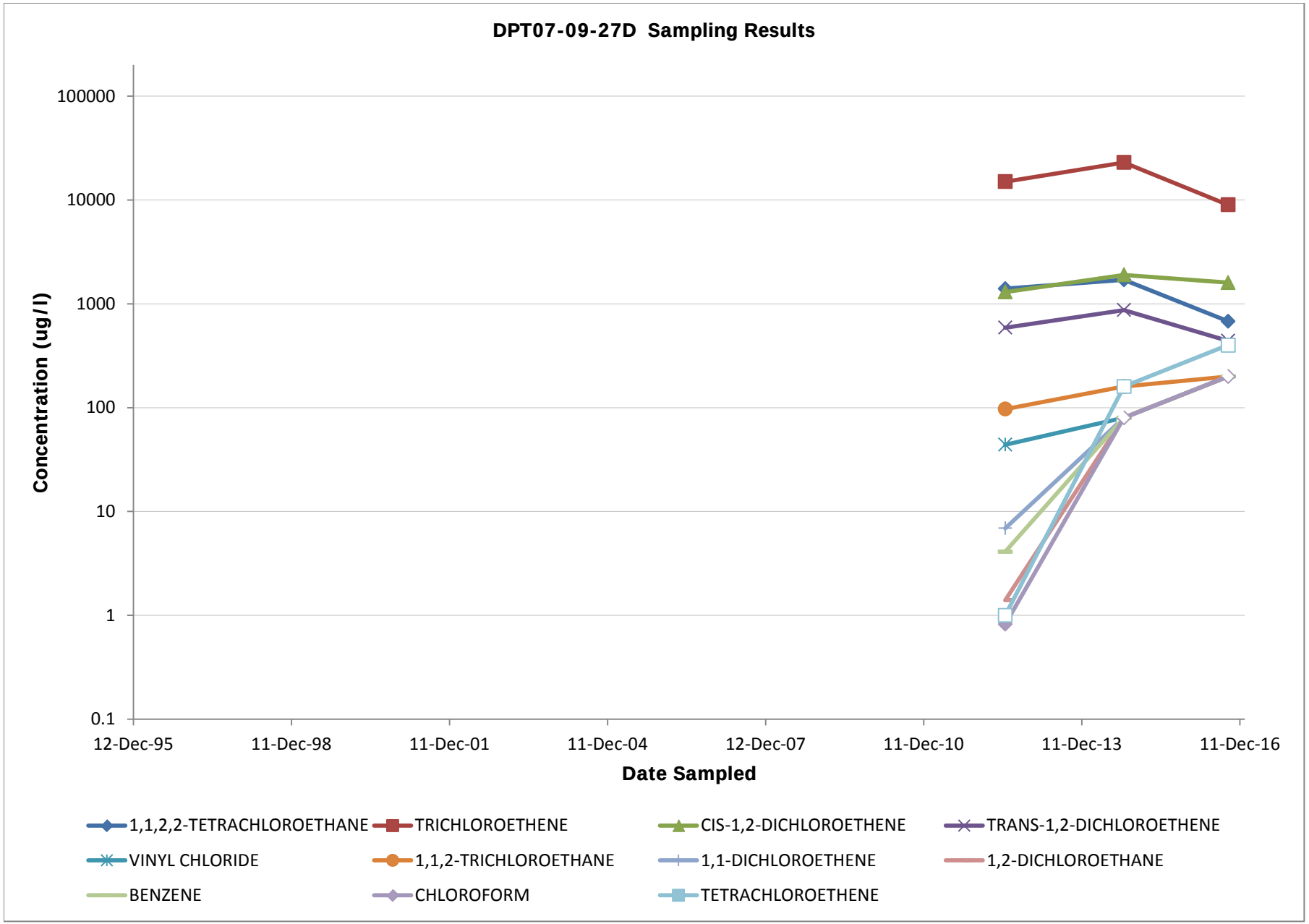
TABLE D-7
SUMMARY OF DETECTED ANALYTES IN SURFACE WATER AT SITE 07 CALF PASTURE POINT
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

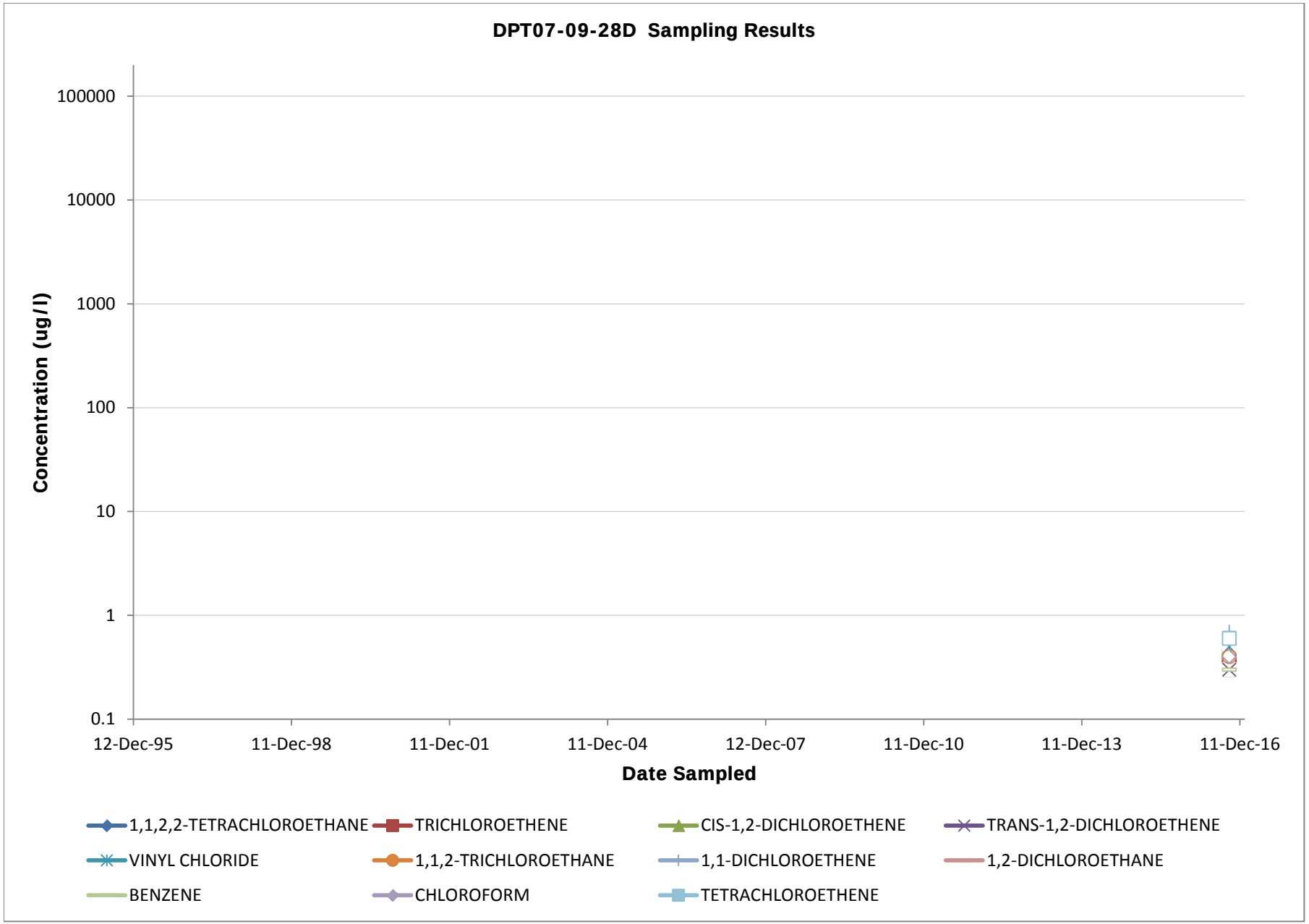
Location	Date	Sample	TRICHLOROETHENE		VINYL CHLORIDE	
			Result (ug/L)	Detect Flag	Result (ug/L)	Detect Flag
P07-07	8/16/2016	SW07-07-MID01-ME20-1	1	N	1	N
P07-08	8/16/2016	SW07-08-FLOOR01-ME20-1	1	N	1	N
P07-08	8/16/2016	SW07-08-FLOOR02-ME20-1	1	N	1	N
P07-08	8/16/2016	SW07-08-MID01-ME20-1	1	N	1	N
P07-09	8/16/2016	SW07-09-FLOOR01-ME20-1	1	N	1	N
P07-09	8/16/2016	SW07-09-FLOOR02-ME20-1	1	N	1	N
P07-09	8/16/2016	SW07-09-MID01-ME20-1	1	N	1	N
P07-10	8/16/2016	SW07-10-FLOOR01-ME20-1	1	N	1	N
P07-10	8/16/2016	SW07-10-FLOOR02-ME20-1	1	N	1	N
P07-10	8/16/2016	SW07-10-MID01-ME20-1	1	N	1	N
P07-20	8/16/2016	SW07-20-FLOOR01-ME20-1	1	N	1	N
P07-20	8/16/2016	SW07-20-FLOOR02-ME20-1	1	N	1	N
P07-20	8/16/2016	SW07-20-MID01-ME20-1	1	N	1	N
P07-24	8/16/2016	SW07-24-FLOOR01-ME20-1	5.9	Y	3.7	Y
P07-24	8/16/2016	SW07-24-FLOOR02-ME20-1	1	N	1	N
P07-24	8/16/2016	SW07-24-MID01-ME20-1	1	N	1	N
P07-34	8/16/2016	SW07-43S/D-FLOOR01-ME20-1	1	N	1	N
P07-34	8/16/2016	SW07-43S/D-FLOOR02-ME20-1	1	N	1	N
P07-34	8/16/2016	SW07-43S/D-MID01-ME20-1	1	N	1	N

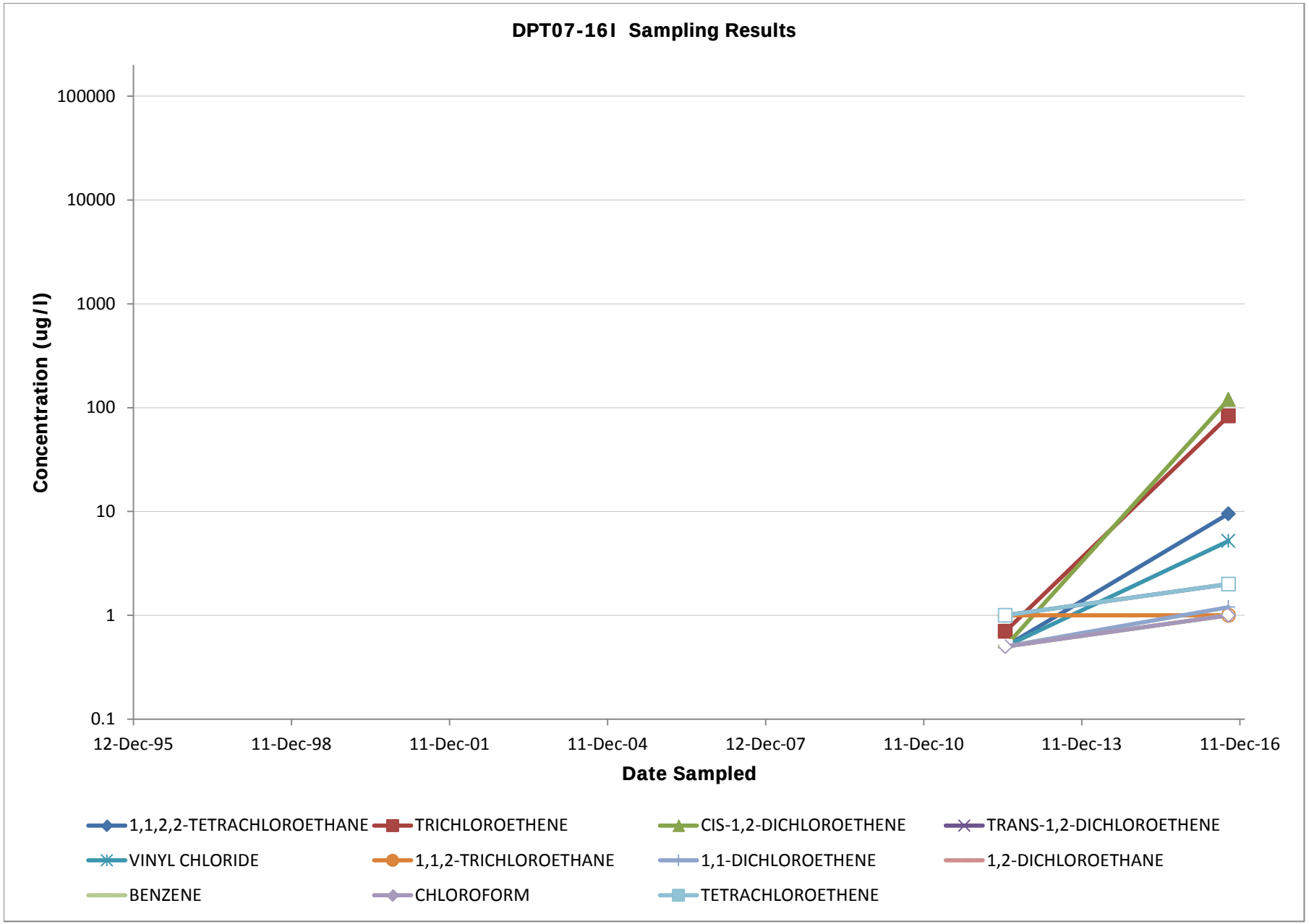
Notes:
Maximum value presented when original
and duplicate samples were analyzed

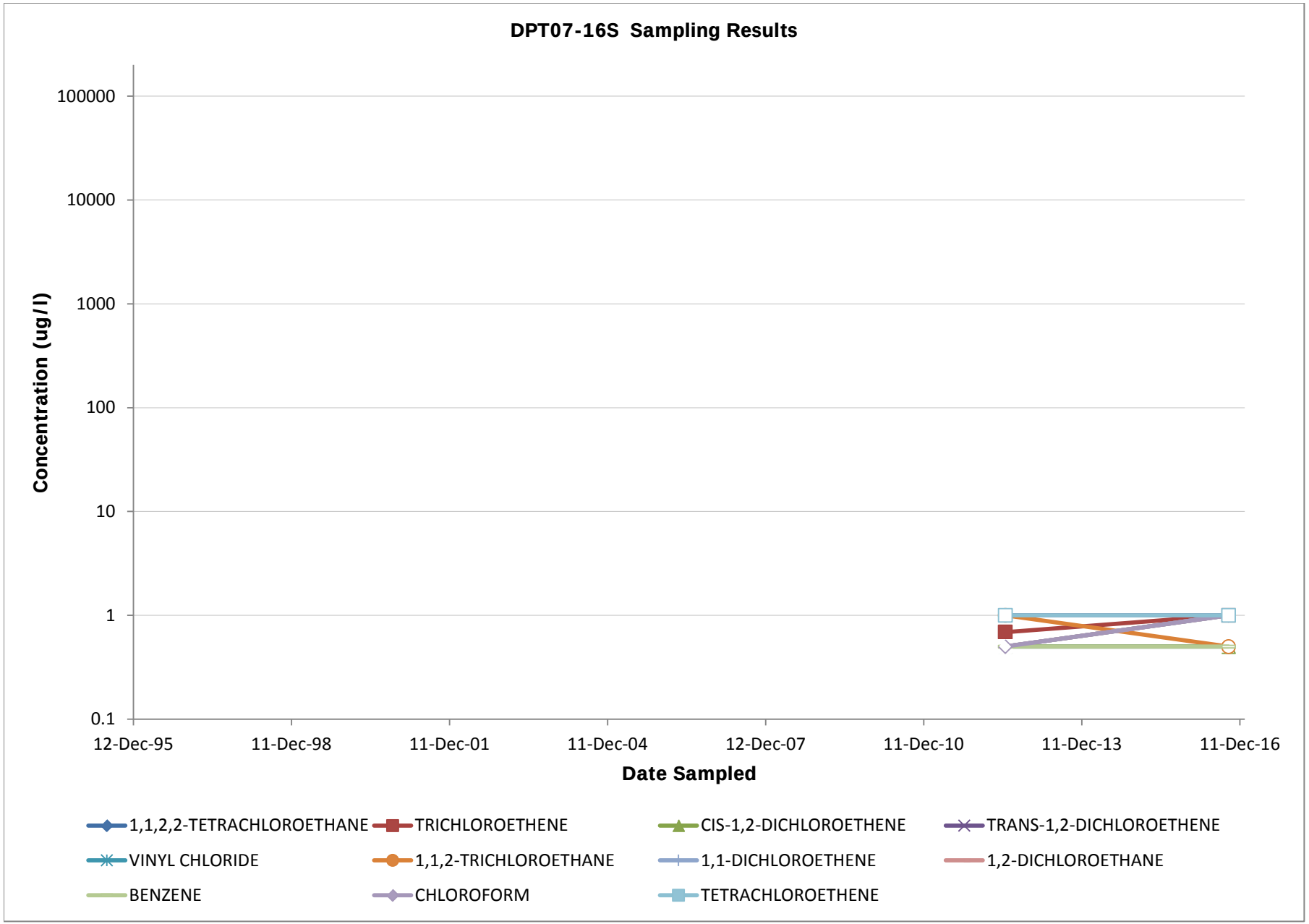
Trend Plots

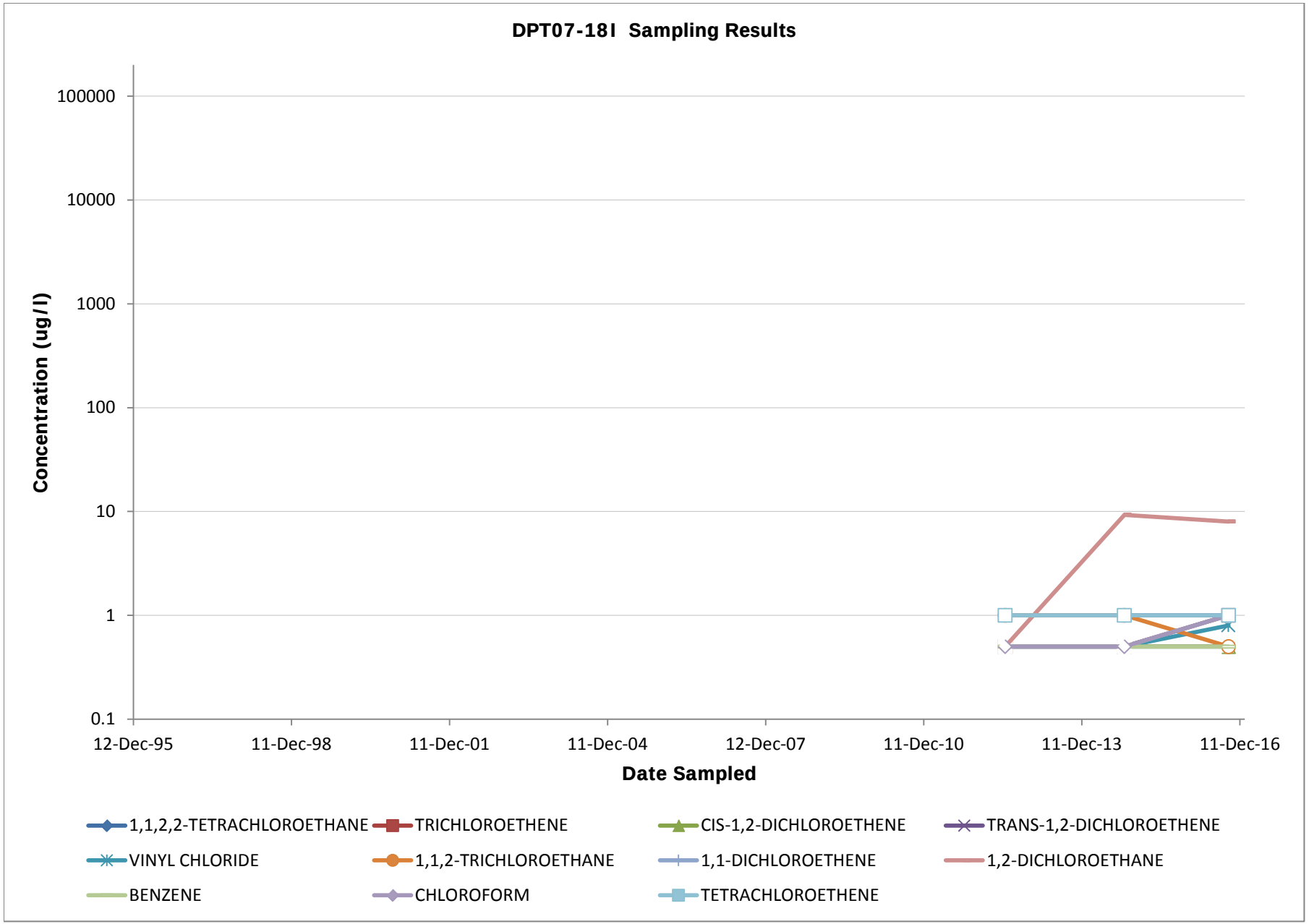
Groundwater Trend Plots

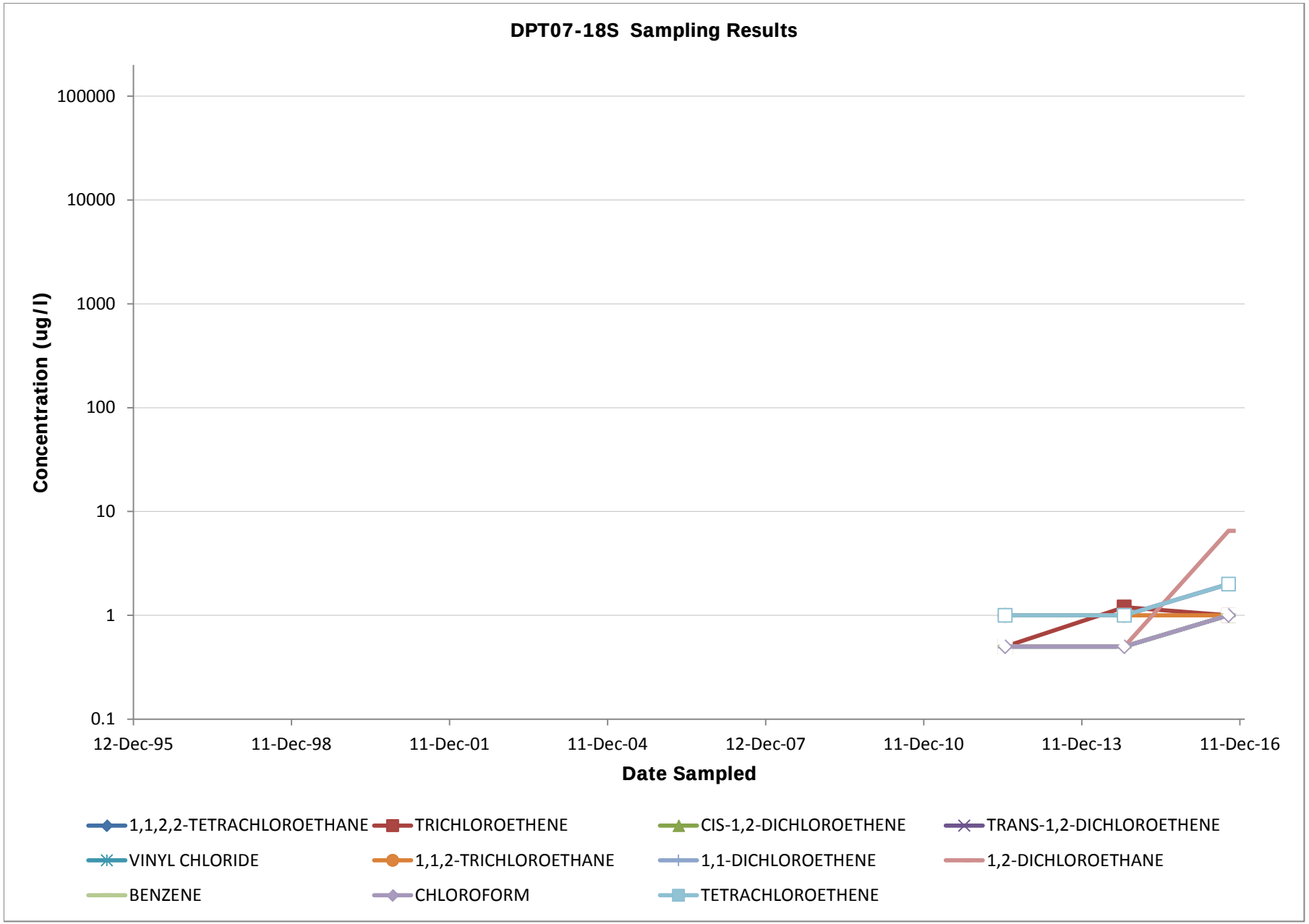

DPT07-09-27D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

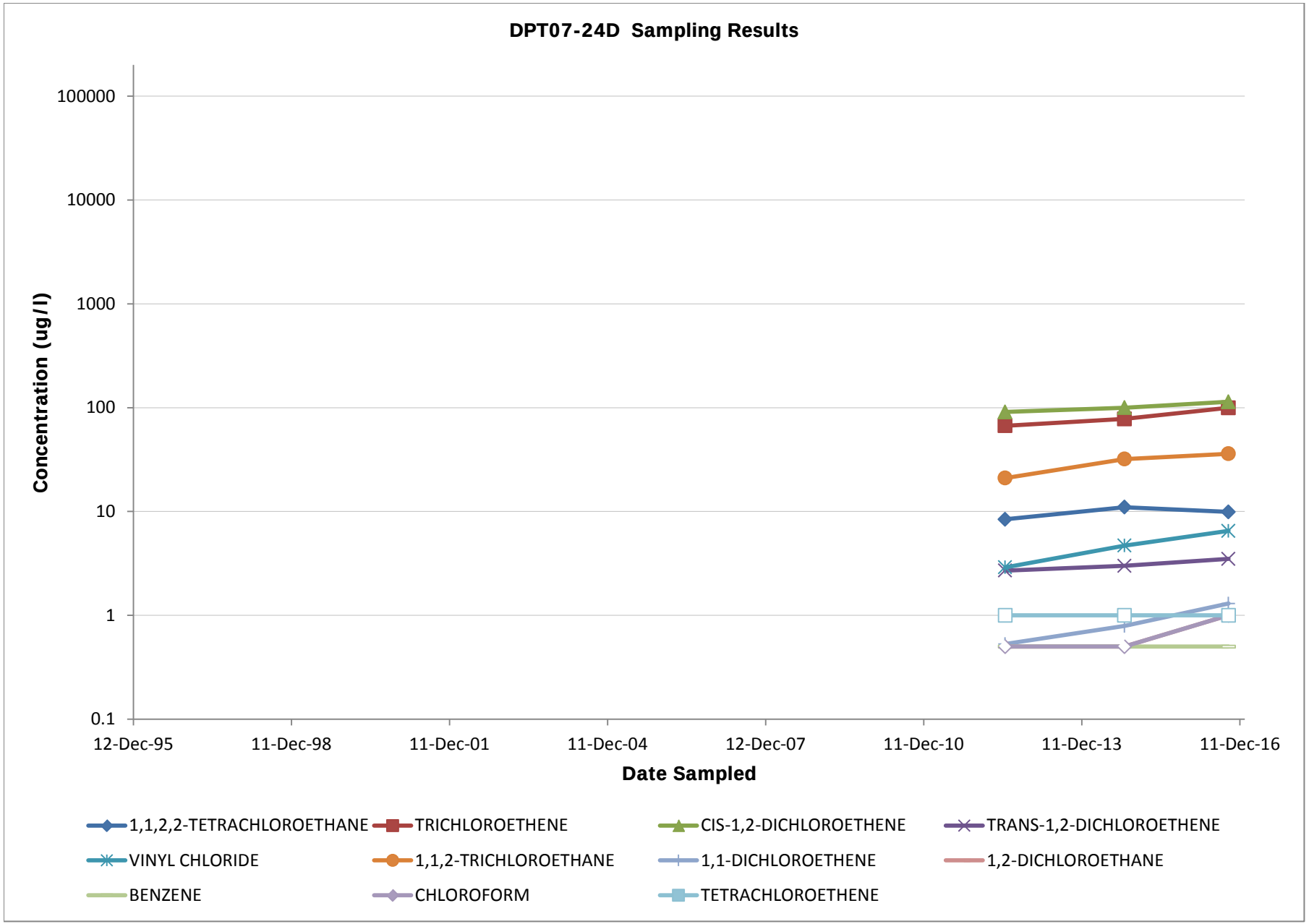

DPT07-09-28D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

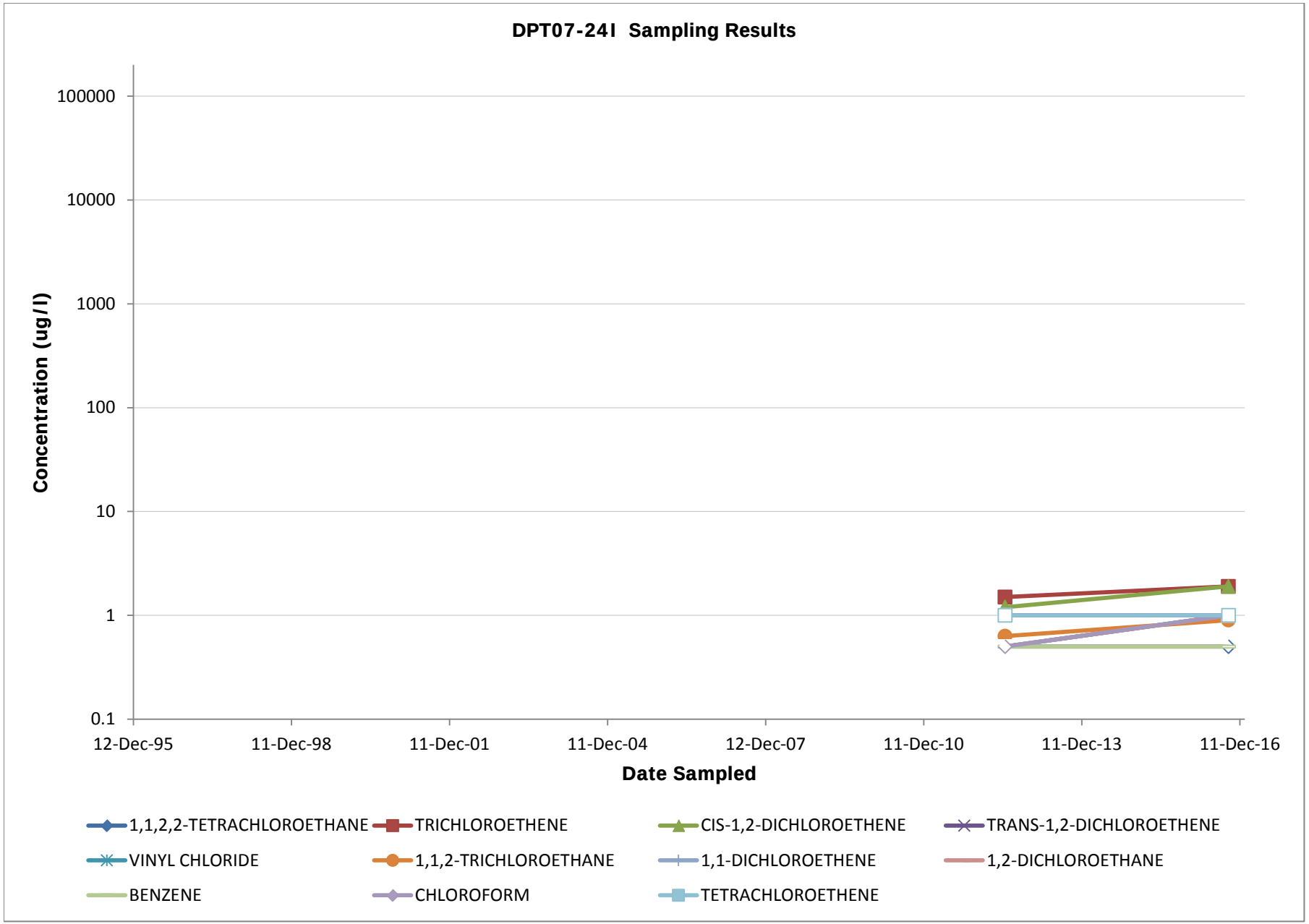

DPT07-16I Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

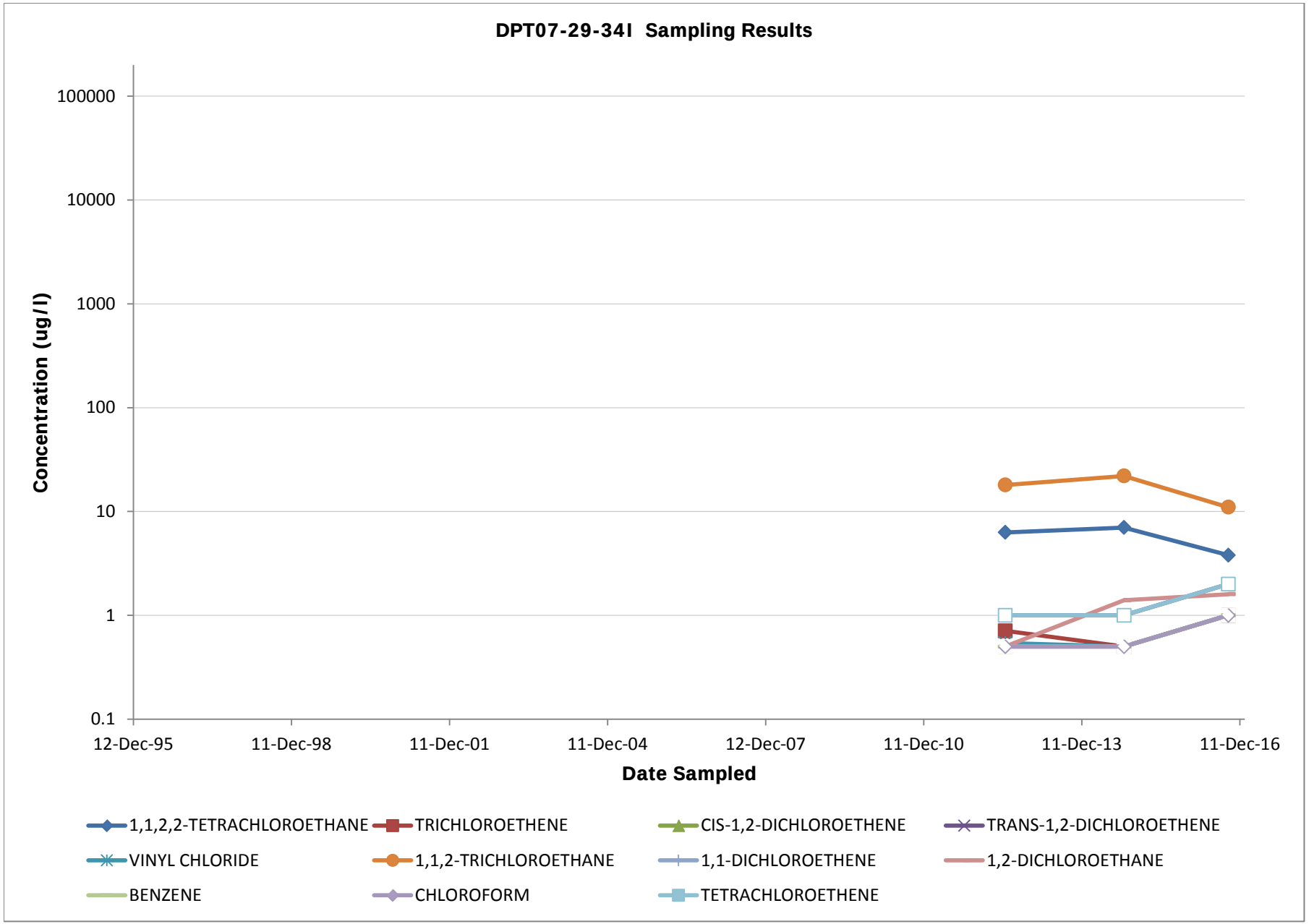

DPT07-16S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

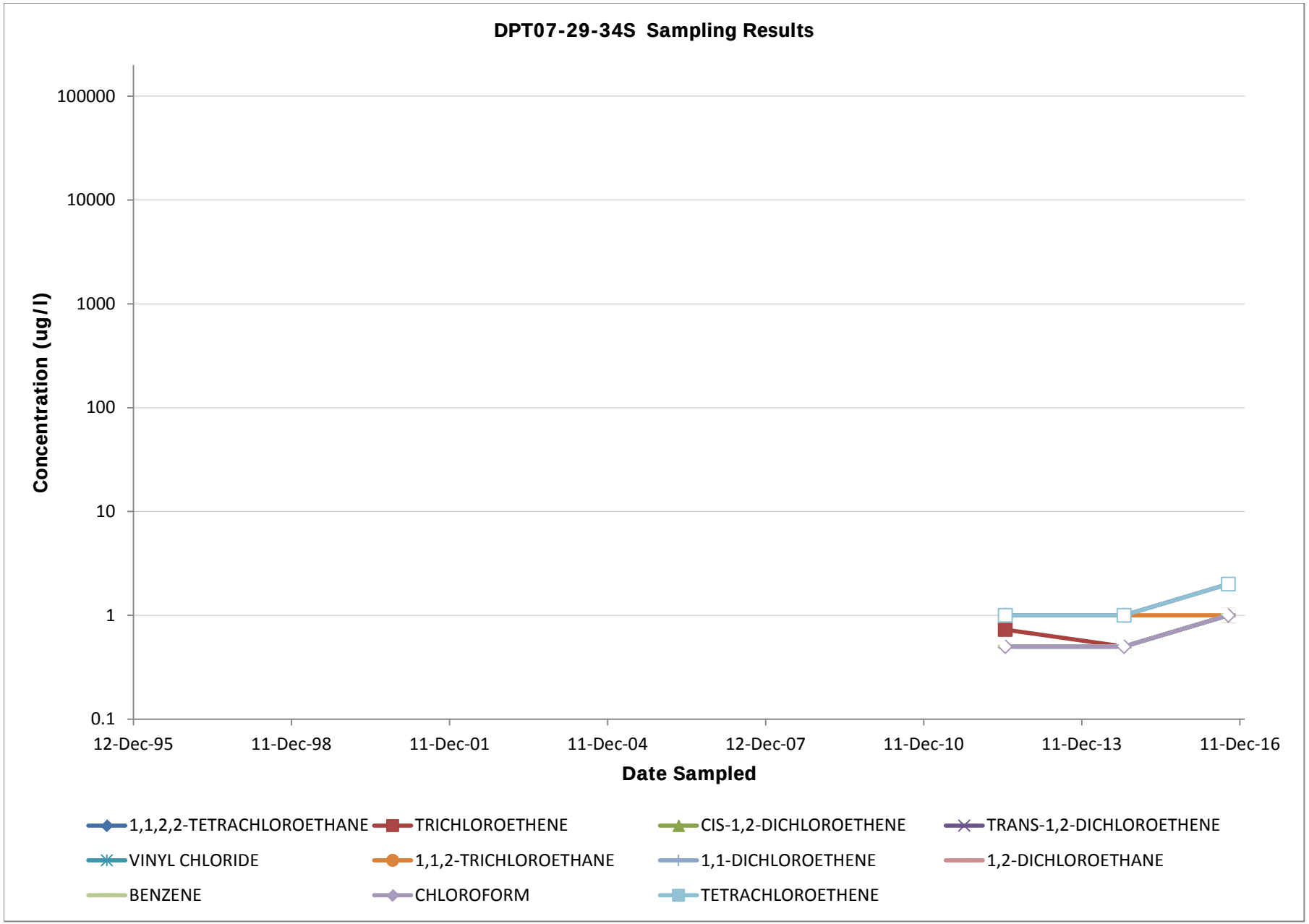

DPT07-18I Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

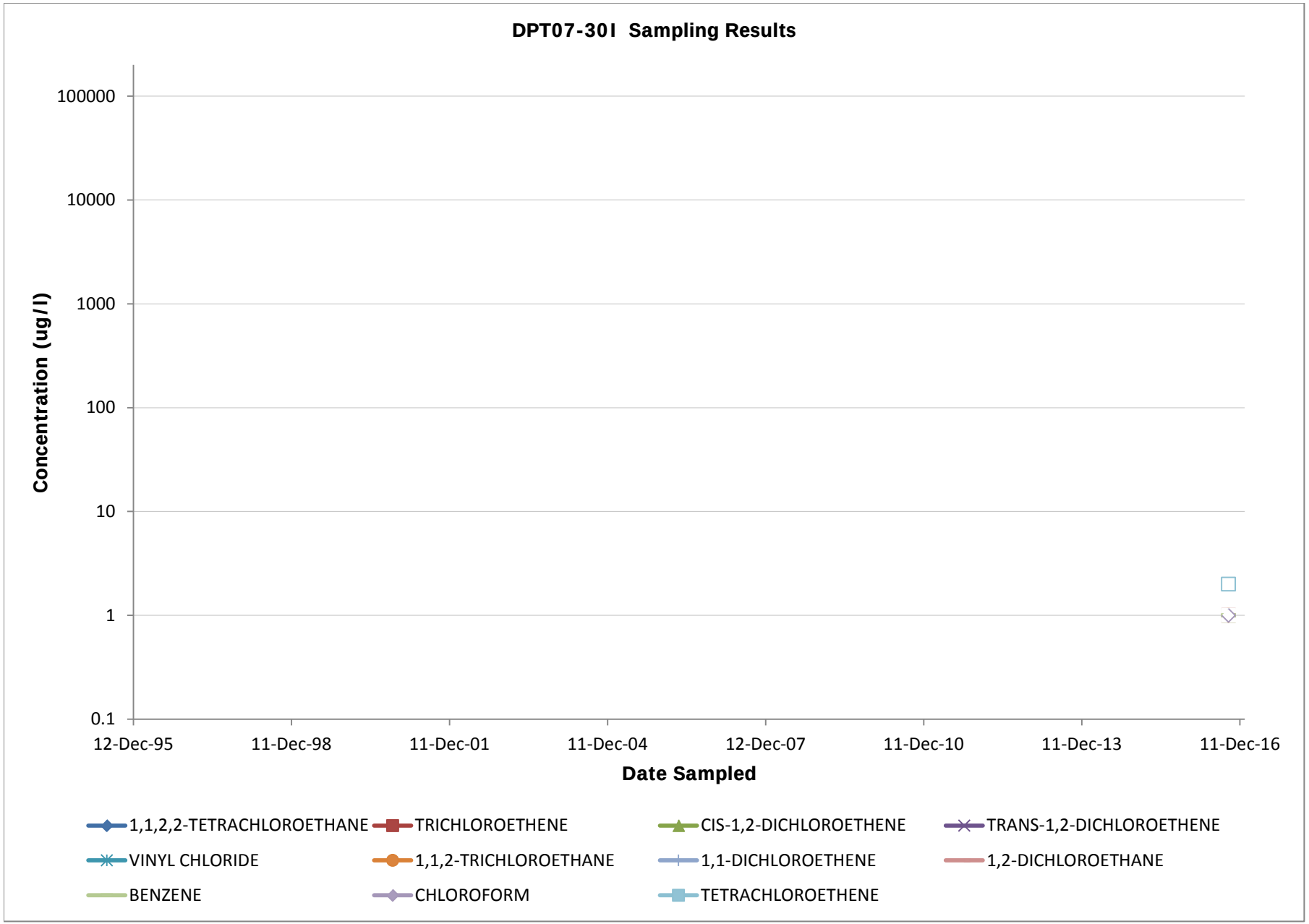

DPT07-18S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

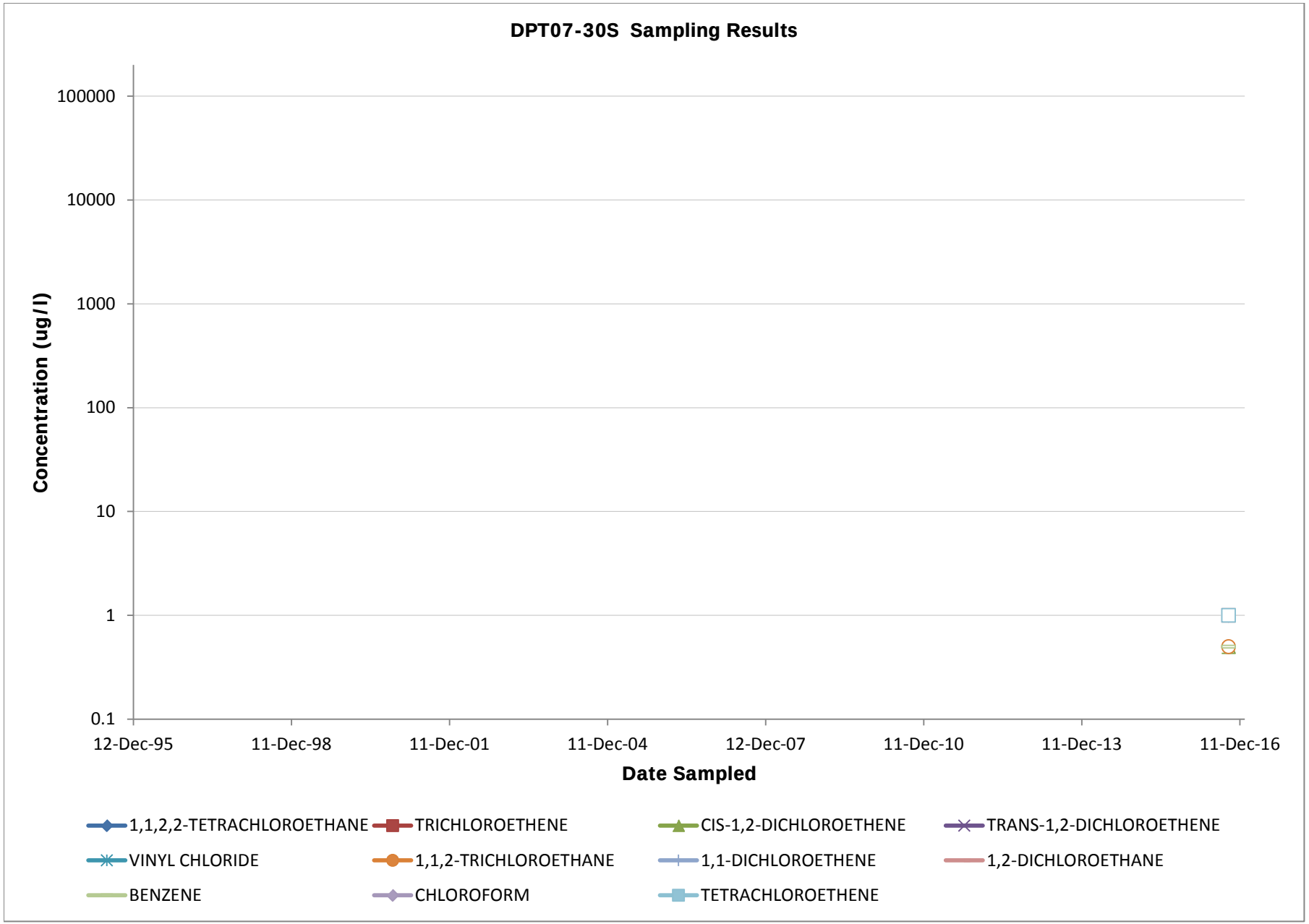

DPT07-24D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

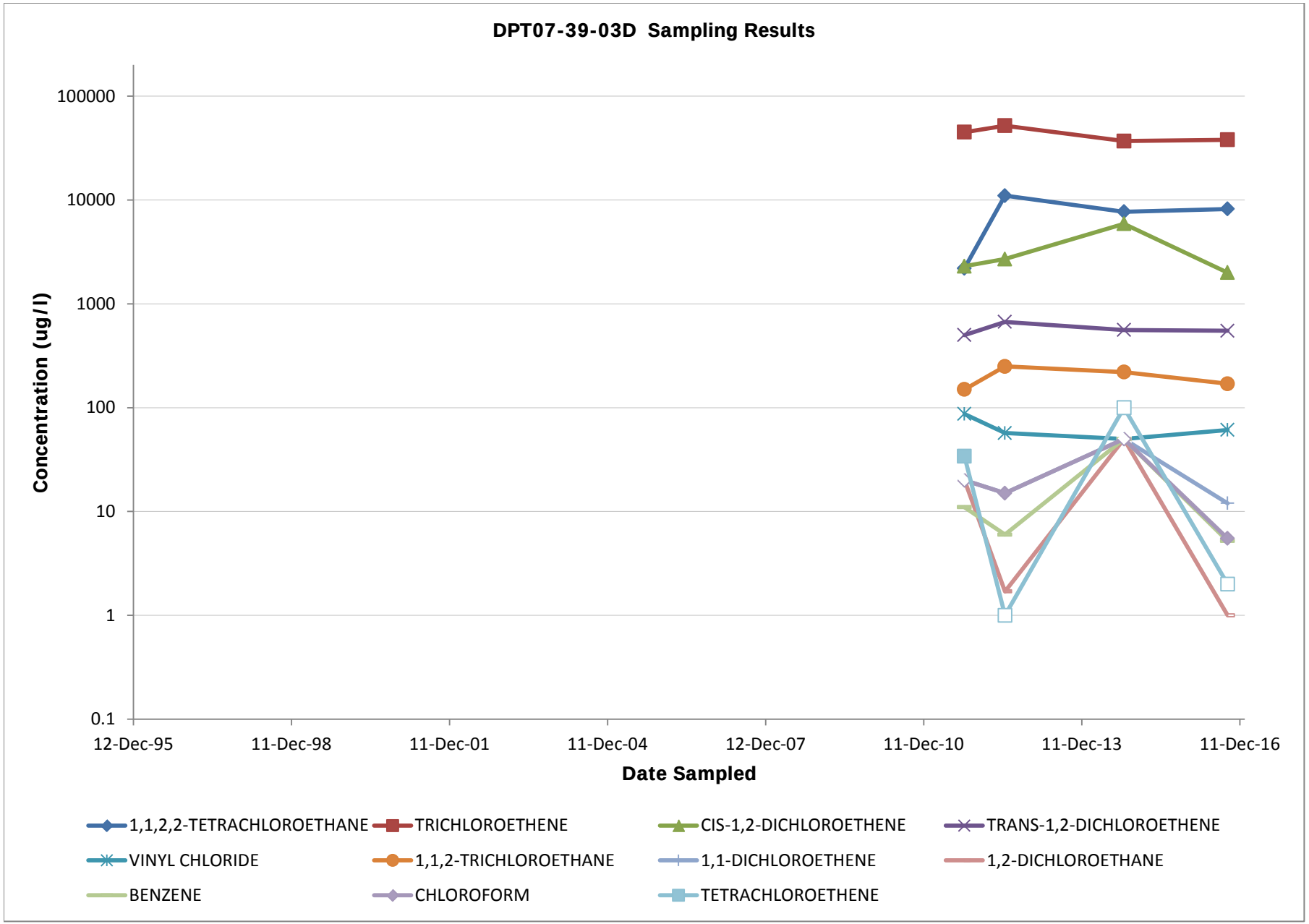

DPT07-24I Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

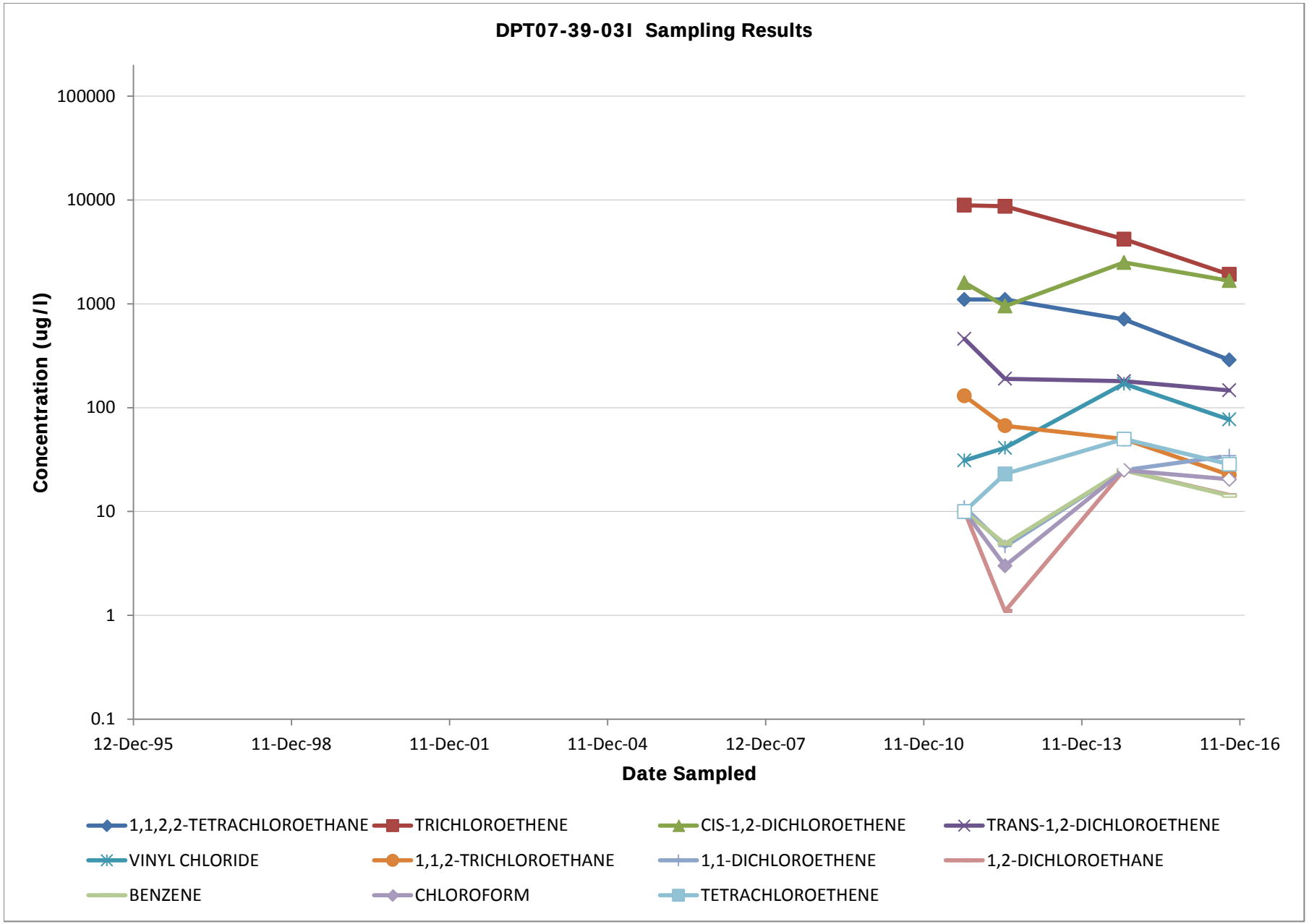

DPT07-29-34I Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

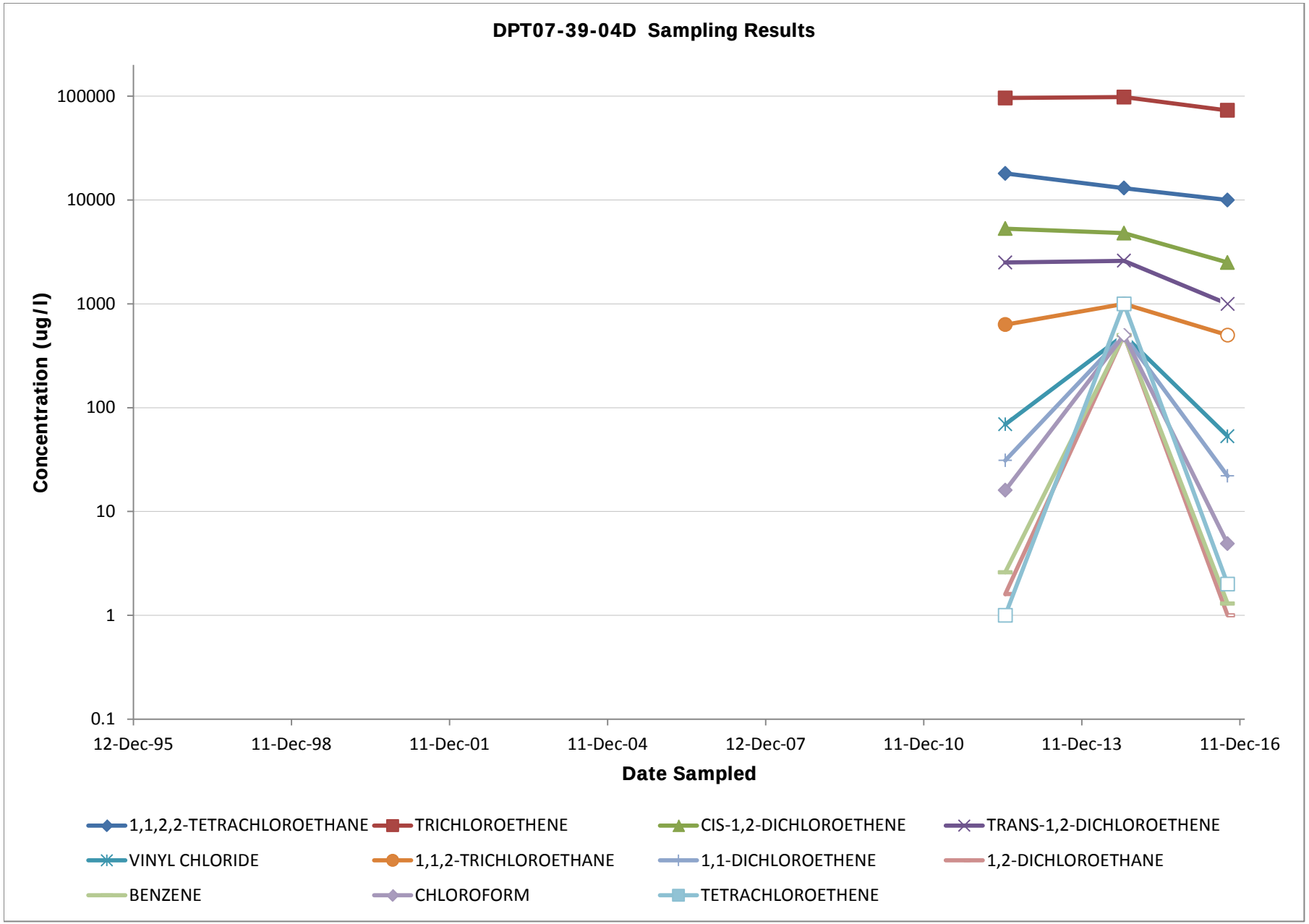

DPT07-29-34S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE


DPT07-30I Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE


DPT07-30S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE


DPT07-39-03D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE


DPT07-39-03I Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE


DPT07-39-04D Sampling Results
Concentration (ug/l)
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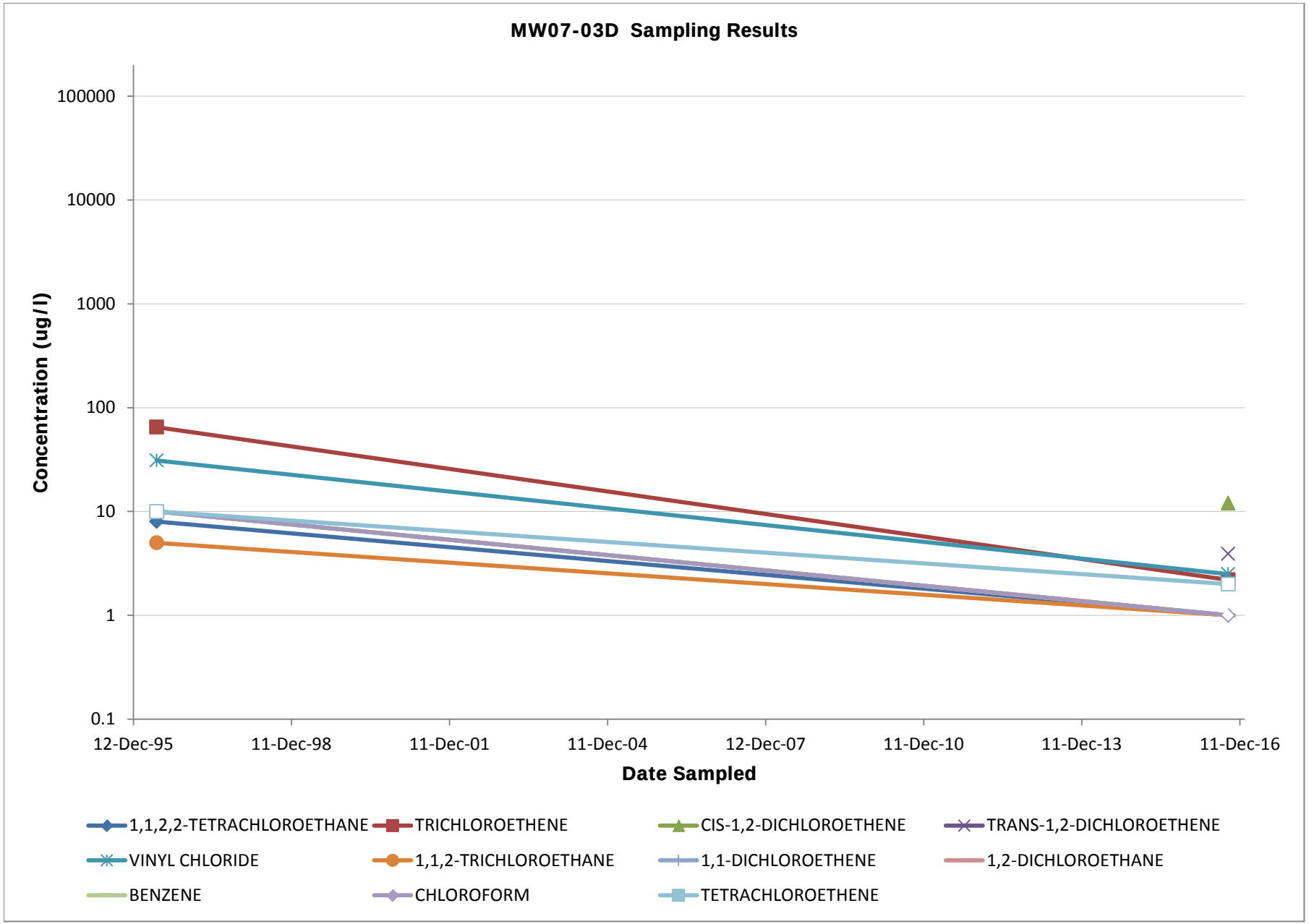
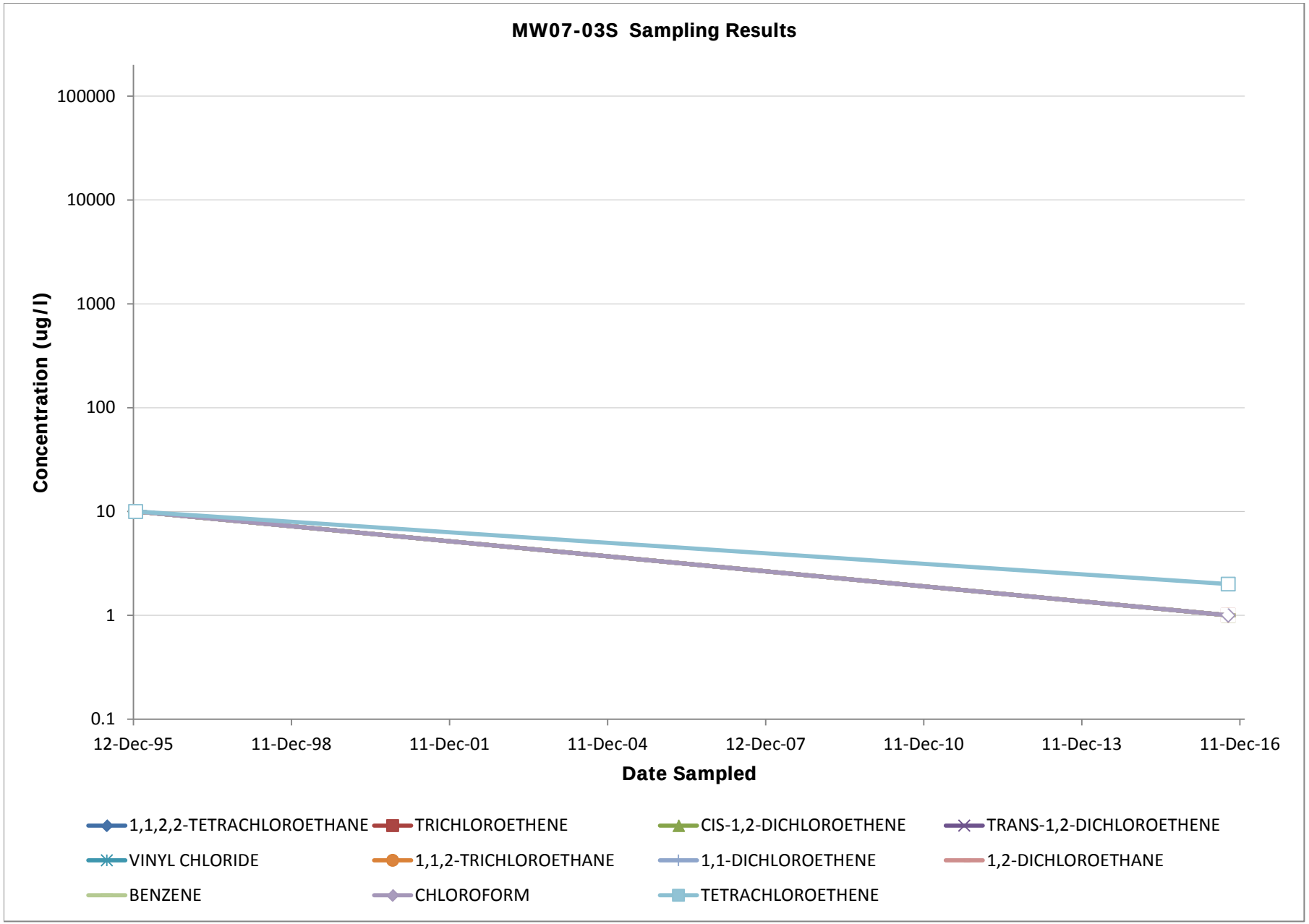
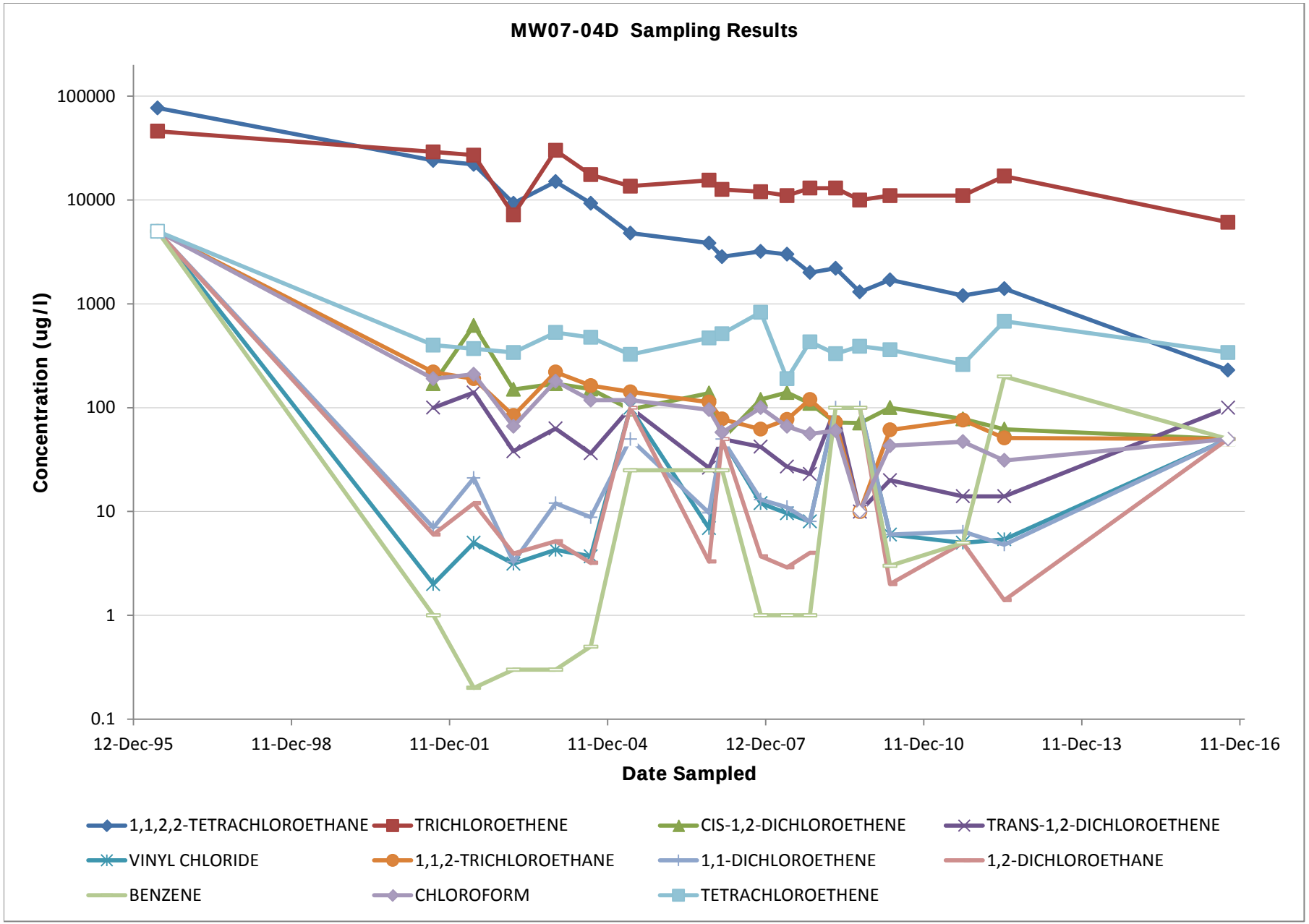
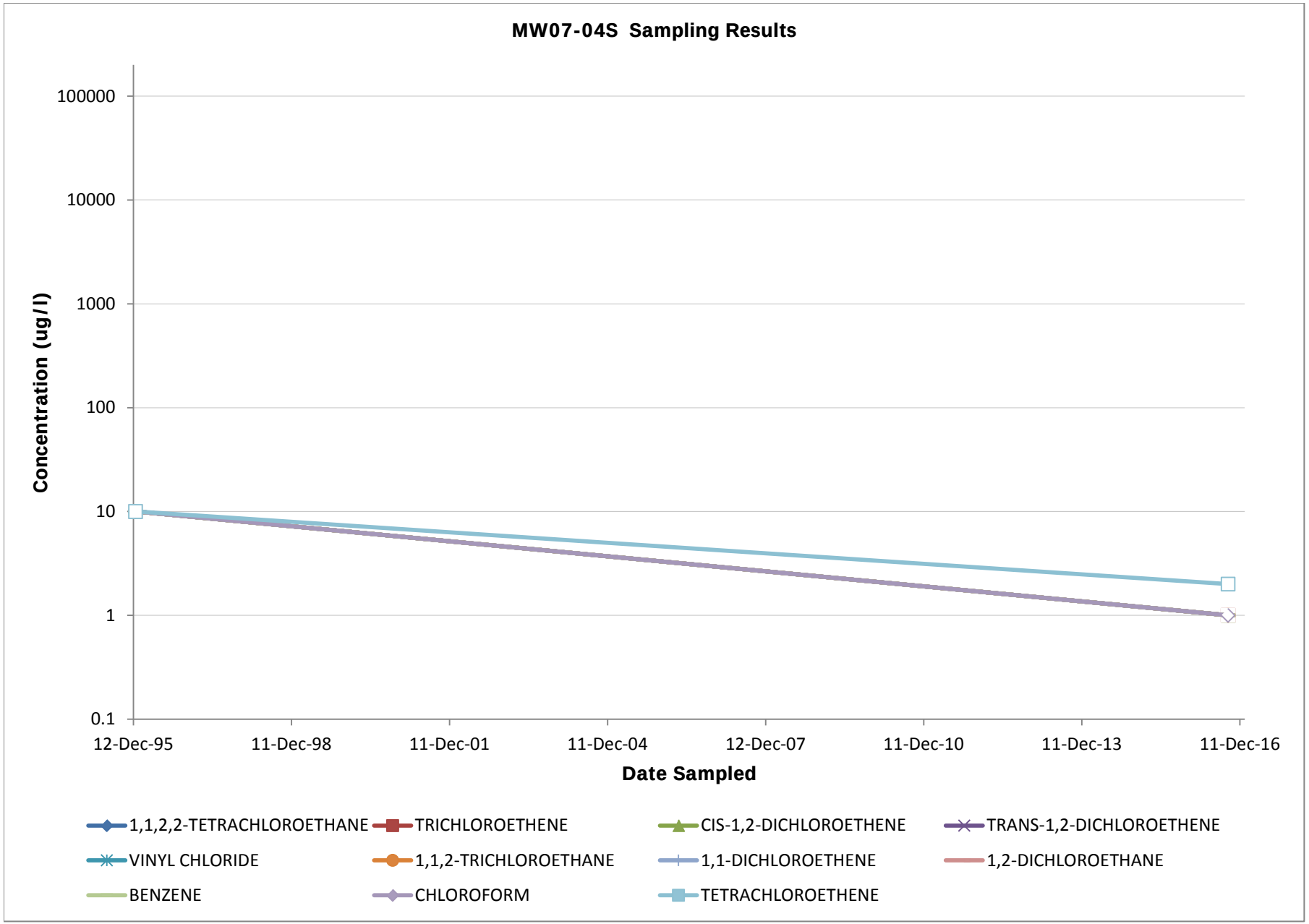
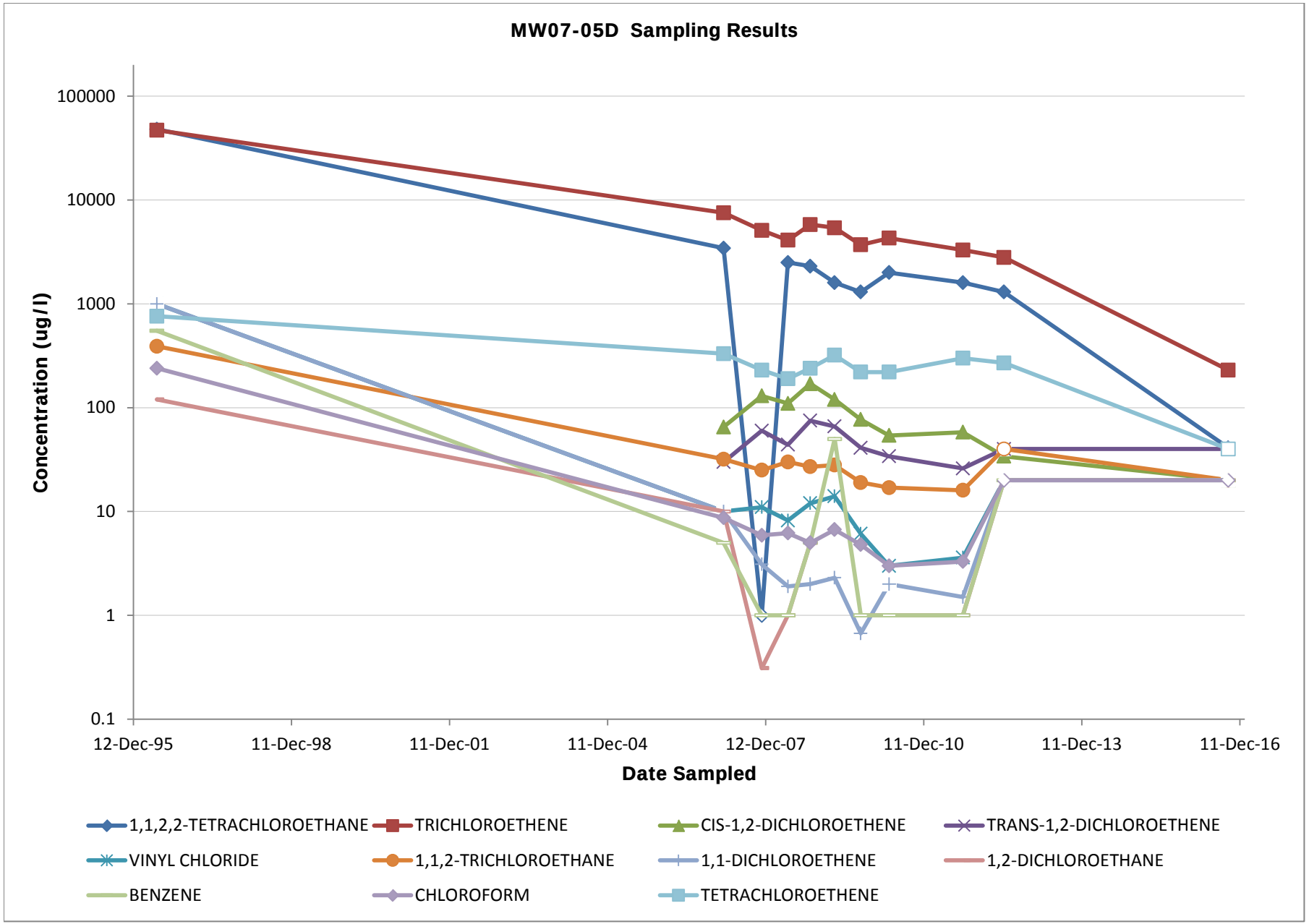
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

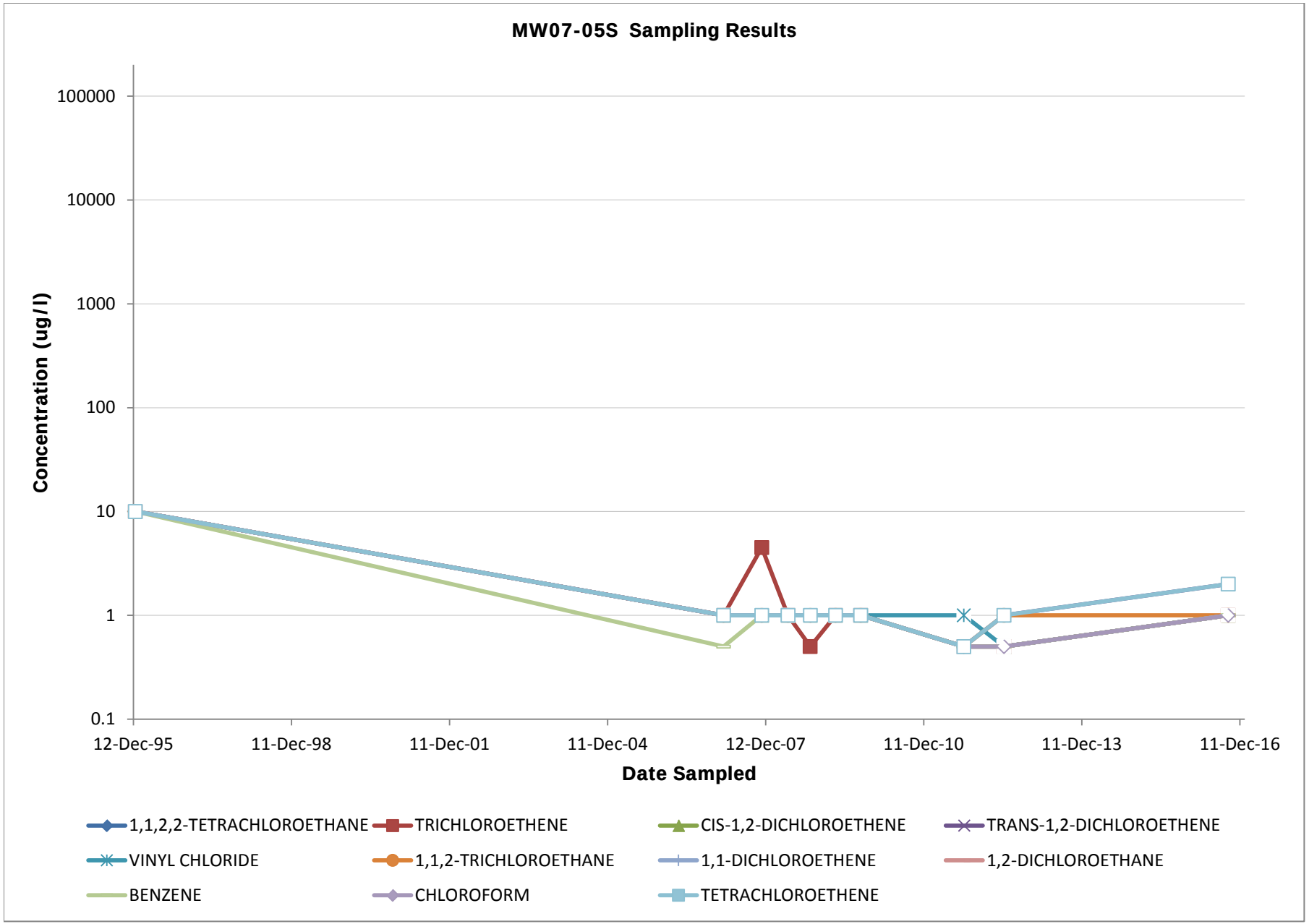

MW07-03D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

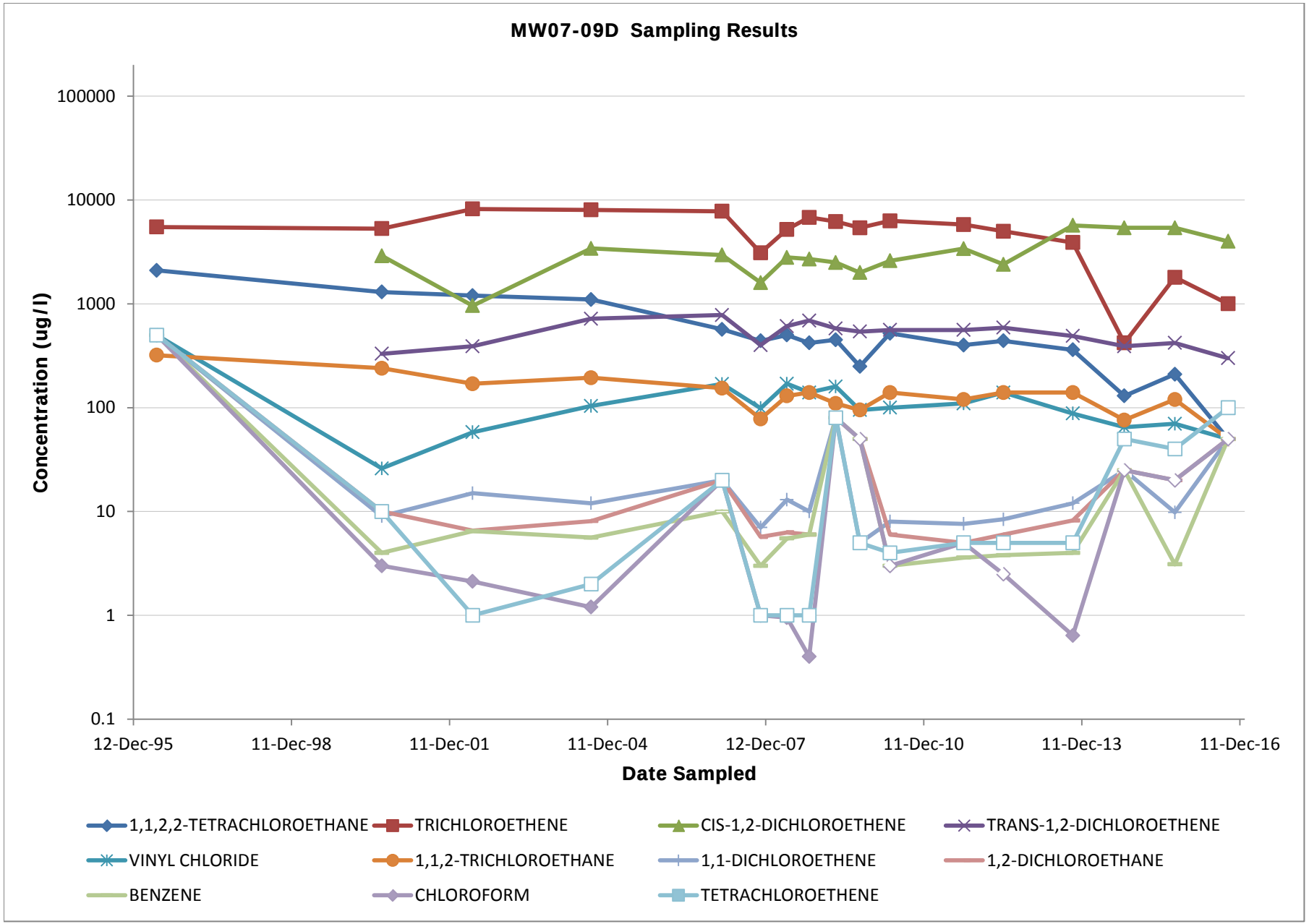

MW07-03S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

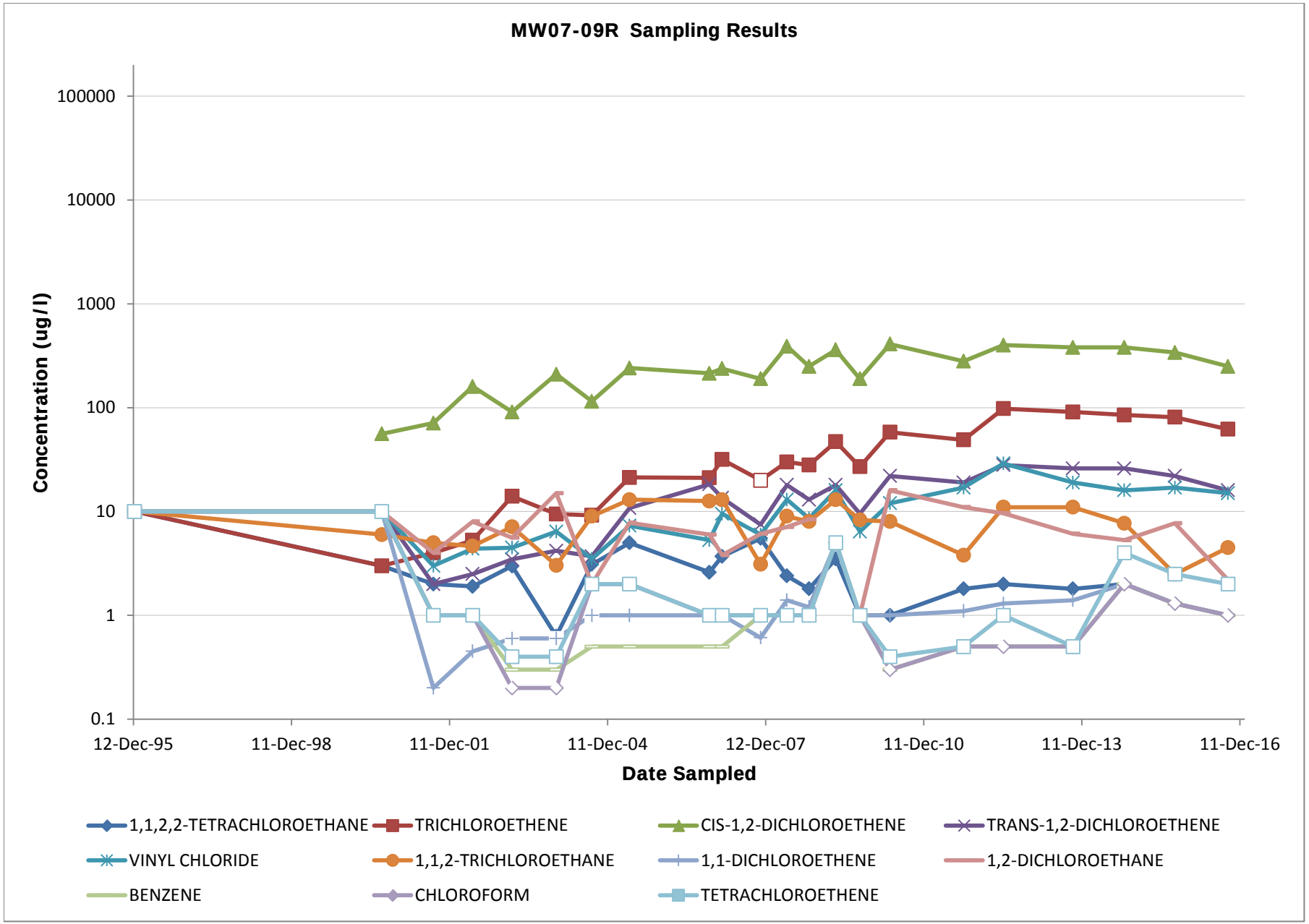

MW07-04D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

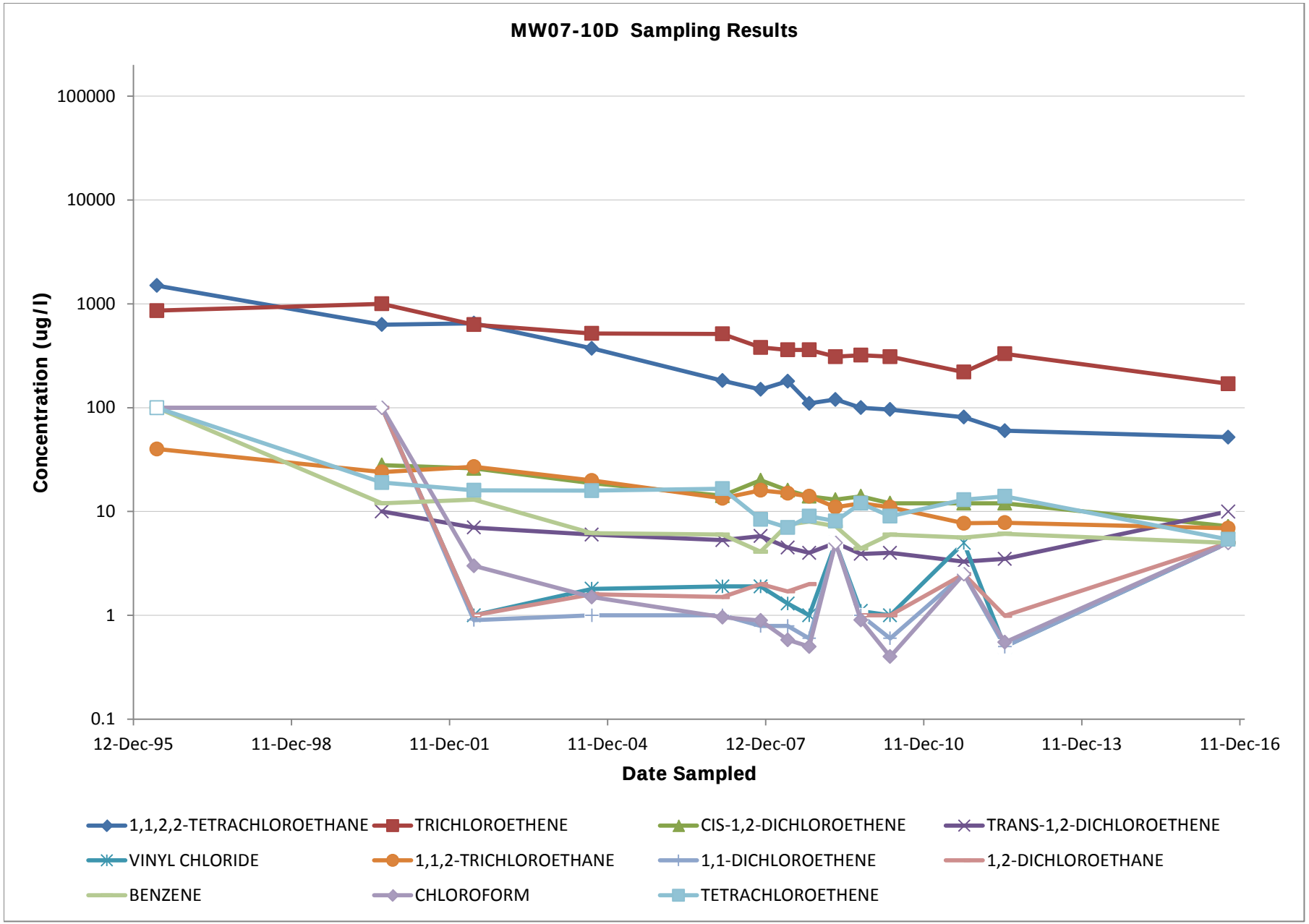

MW07-04S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

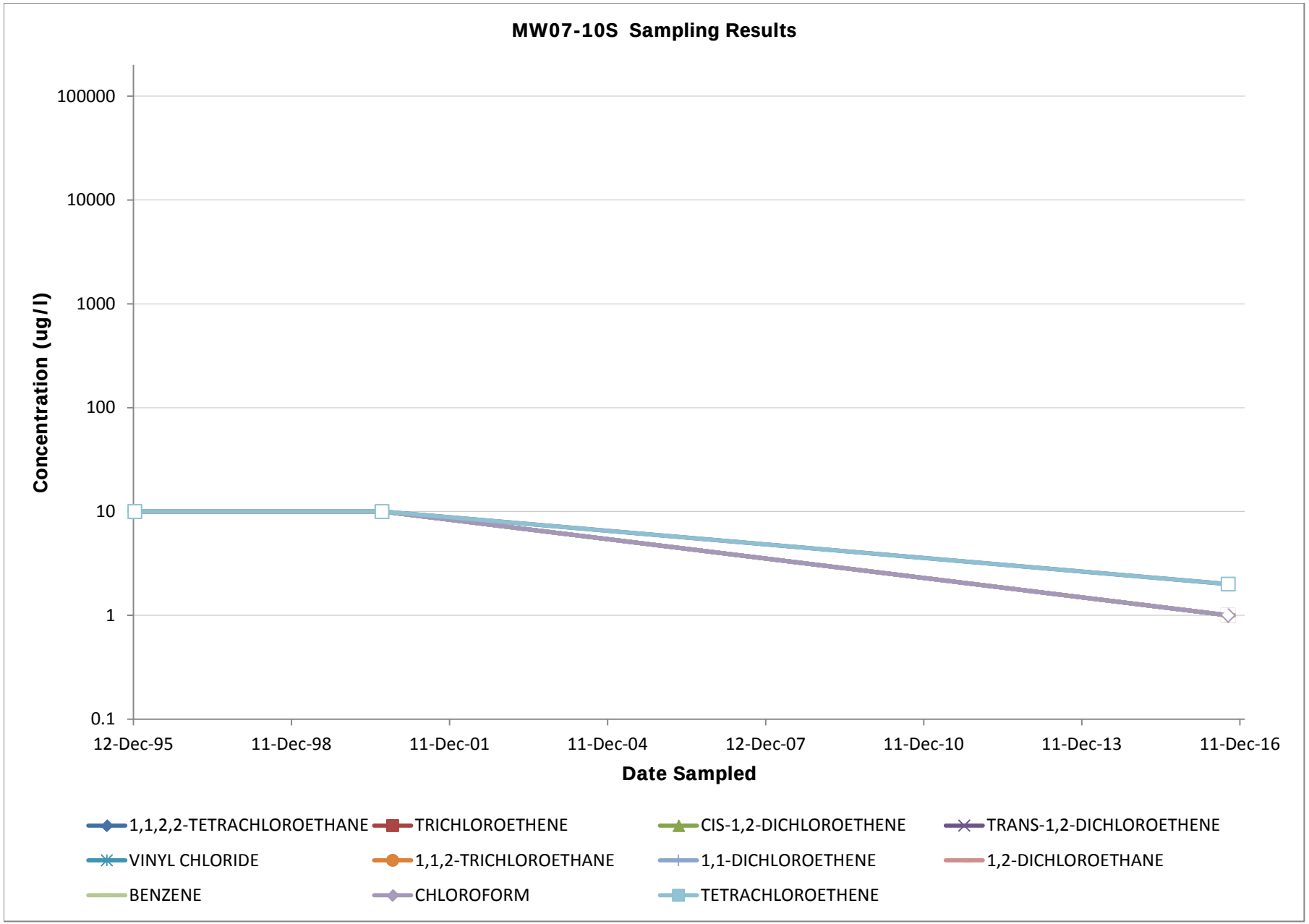

MW07-05D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

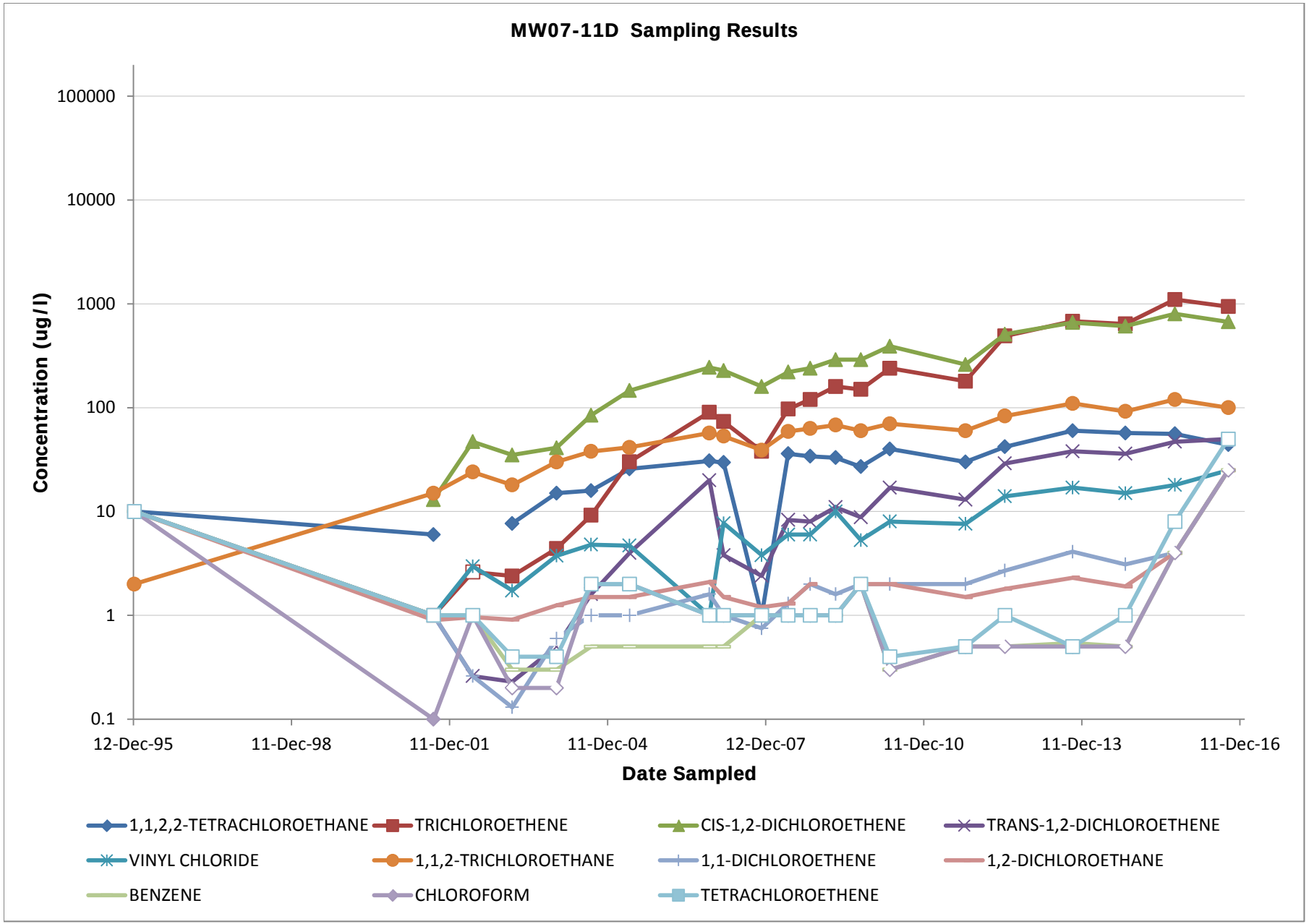

MW07-05S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

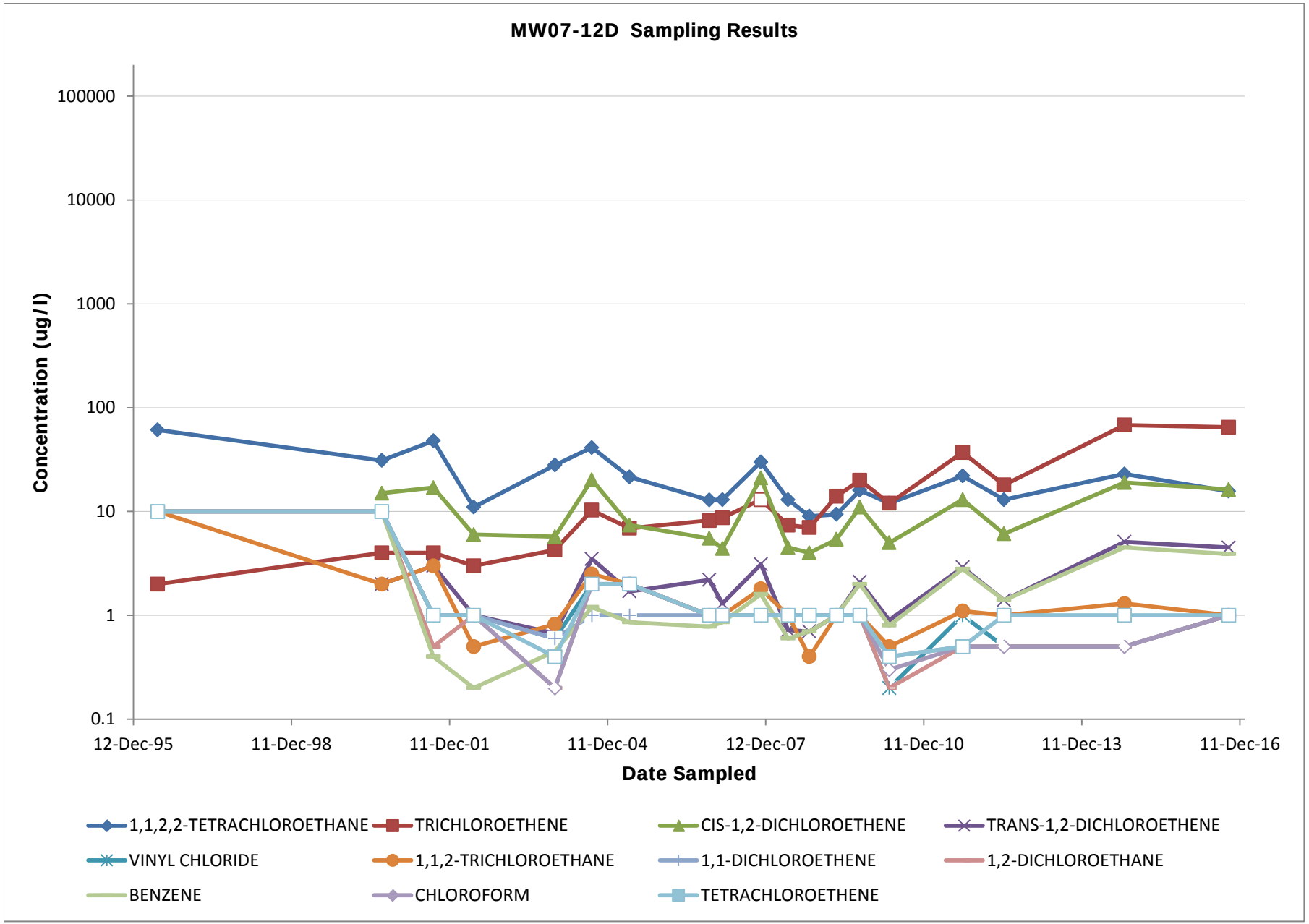

MW07-09D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

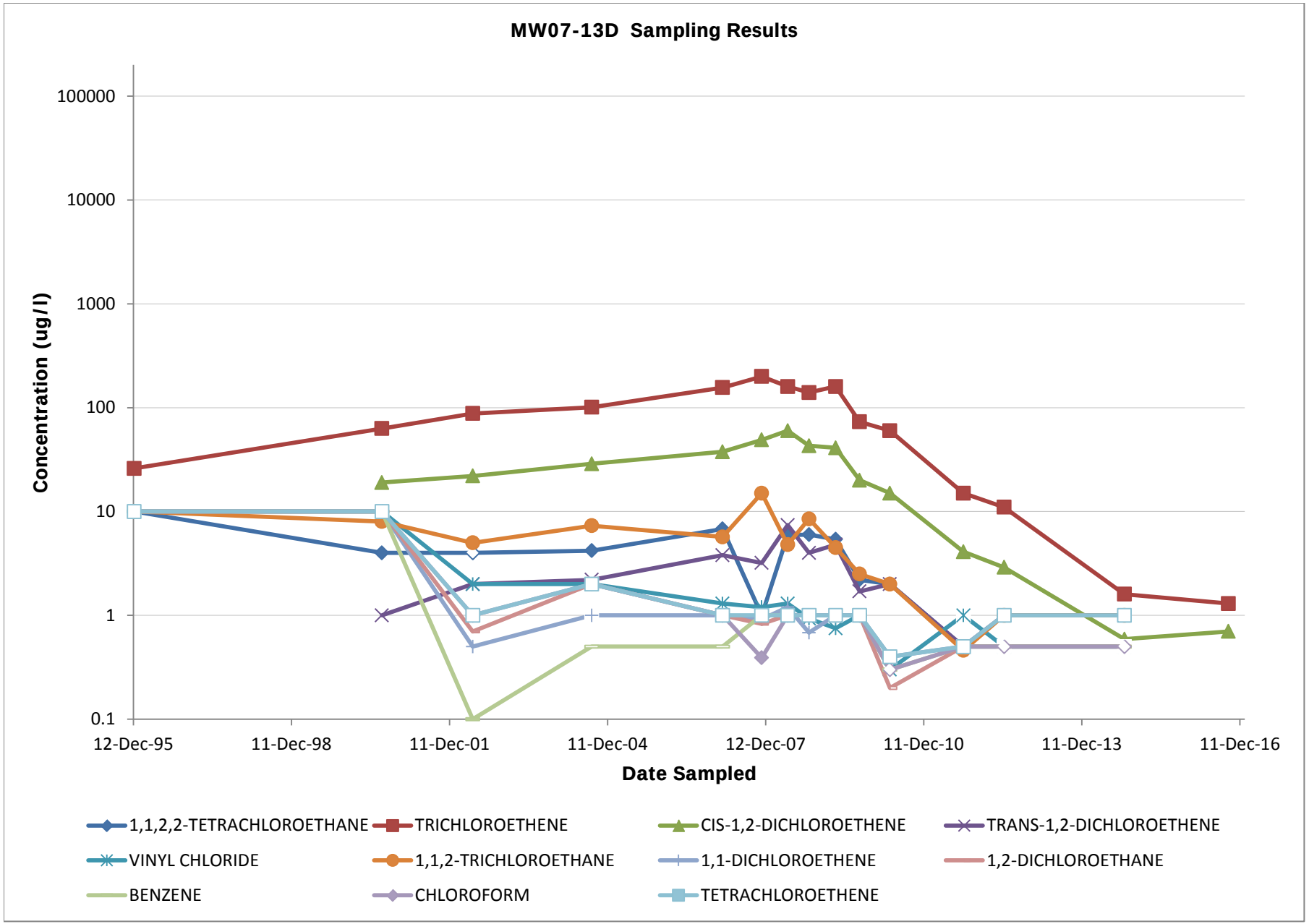

MW07-09R Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

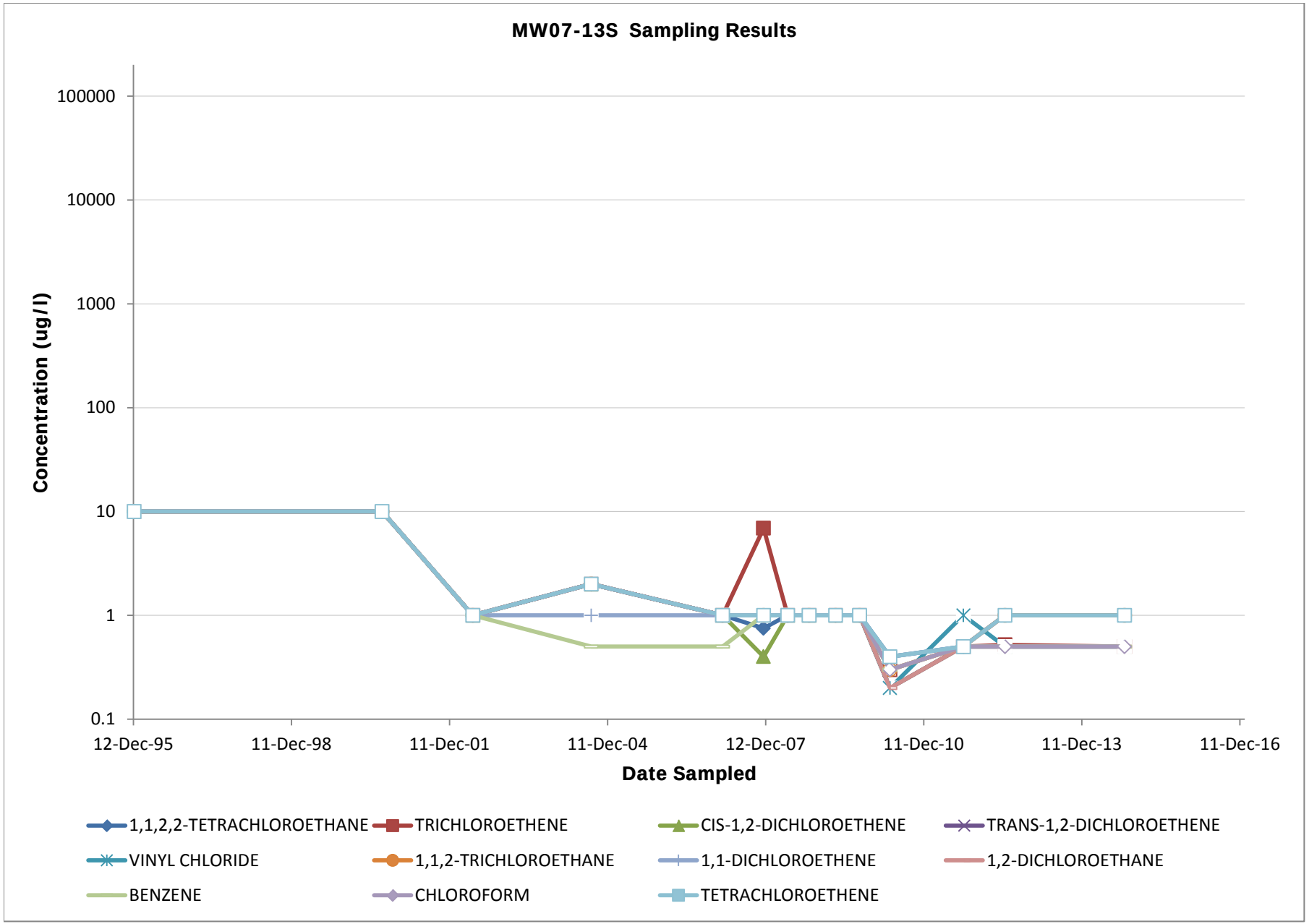

MW07-10D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

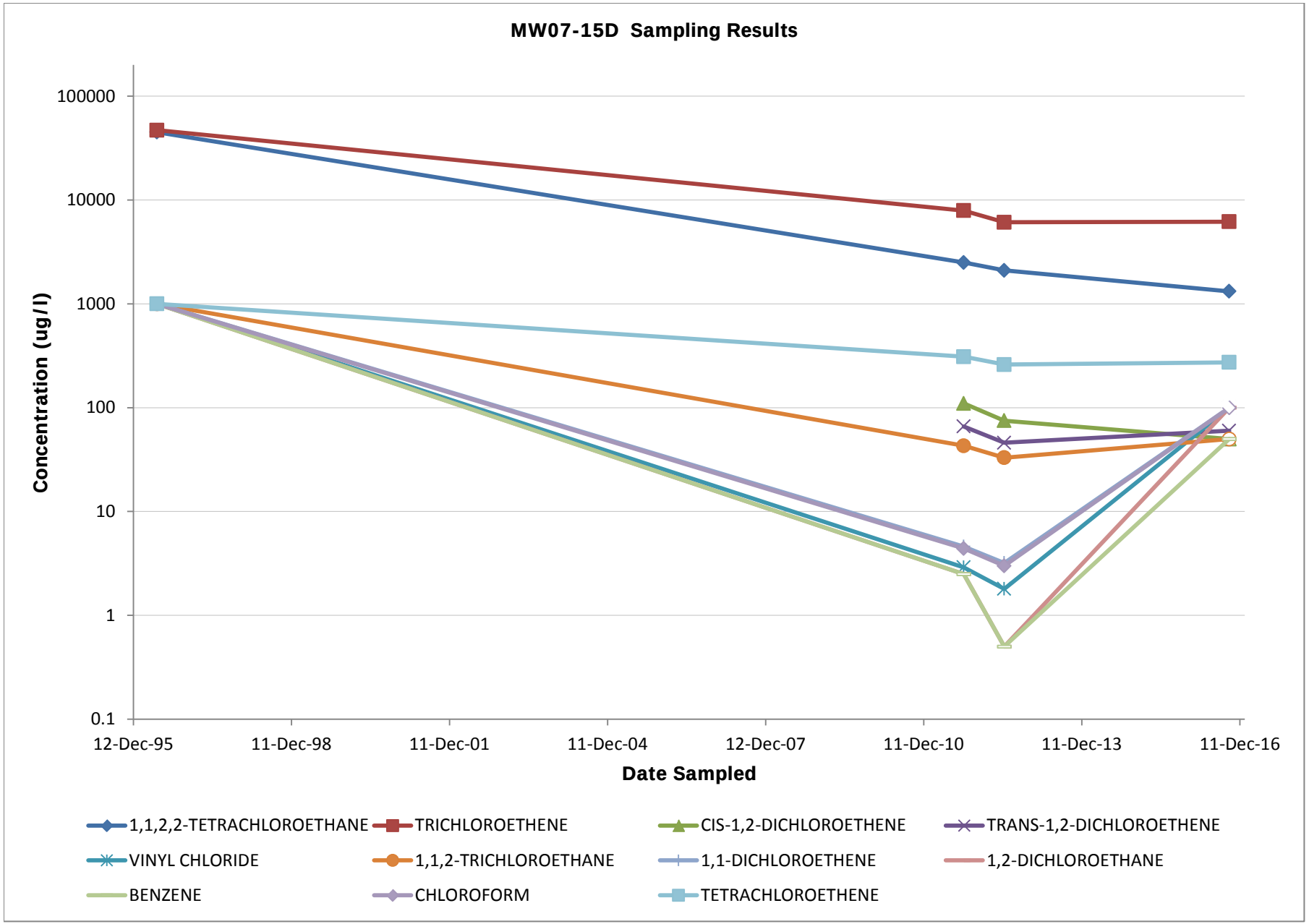

MW07-10S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

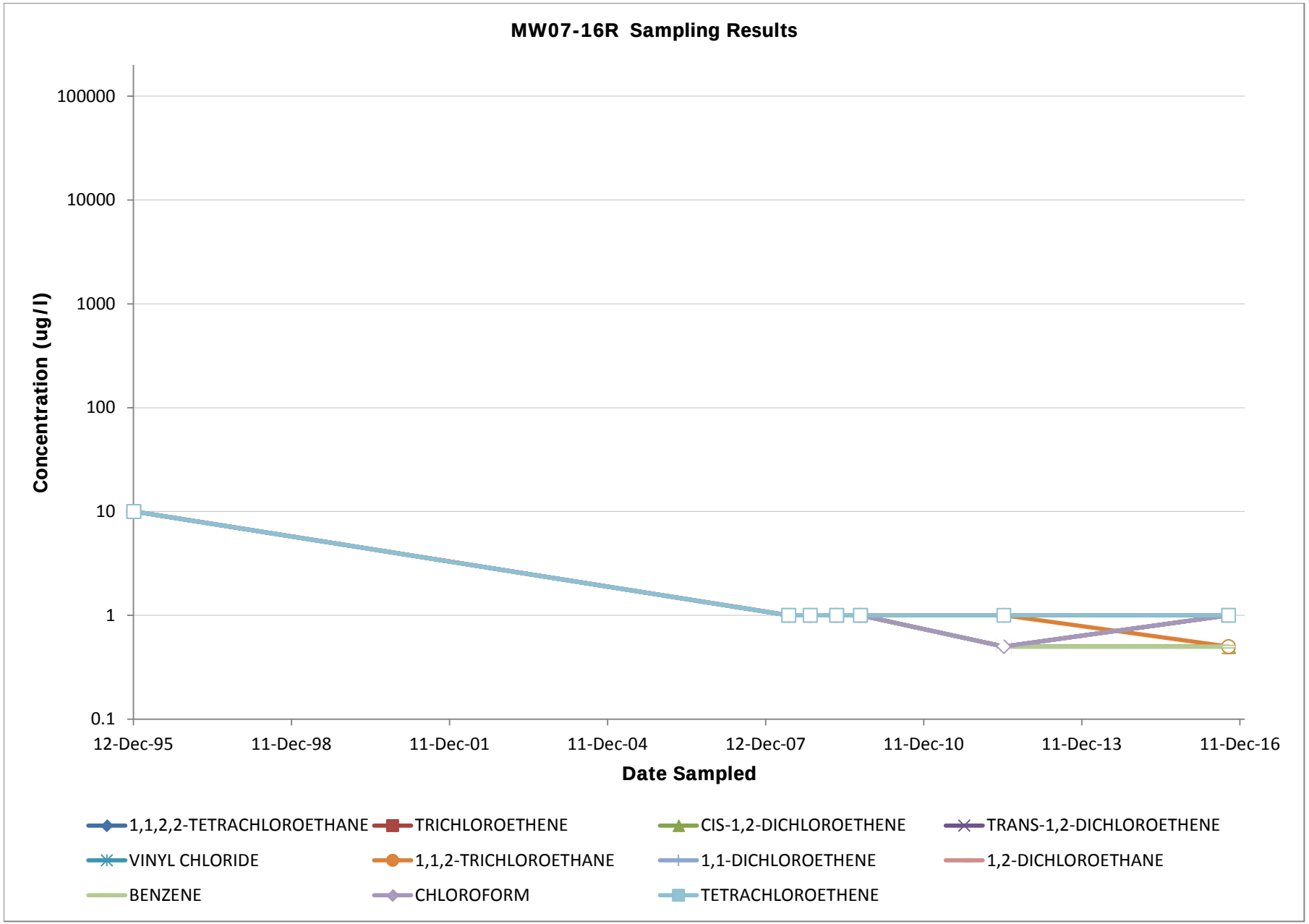

MW07-11D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

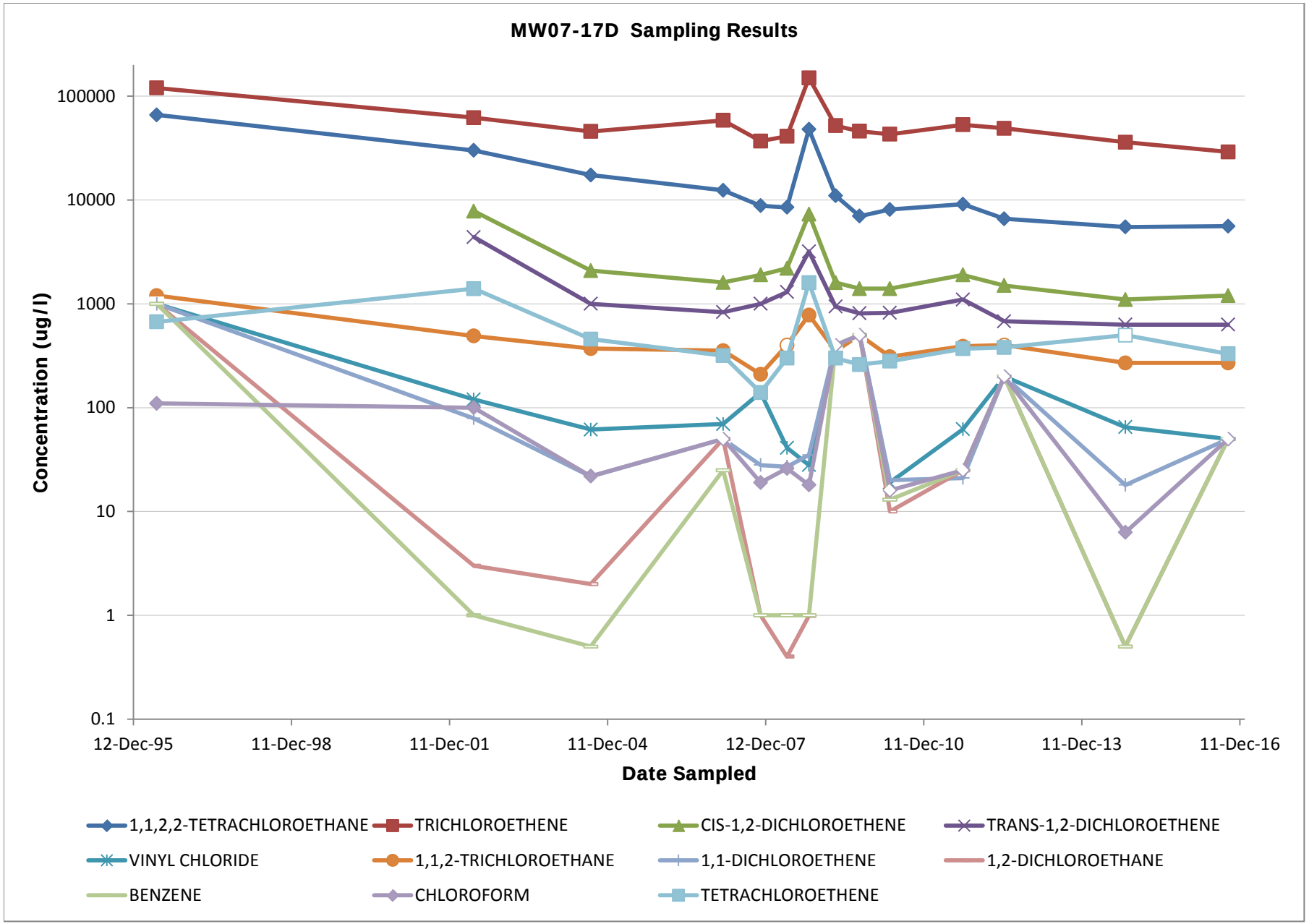

MW07-12D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

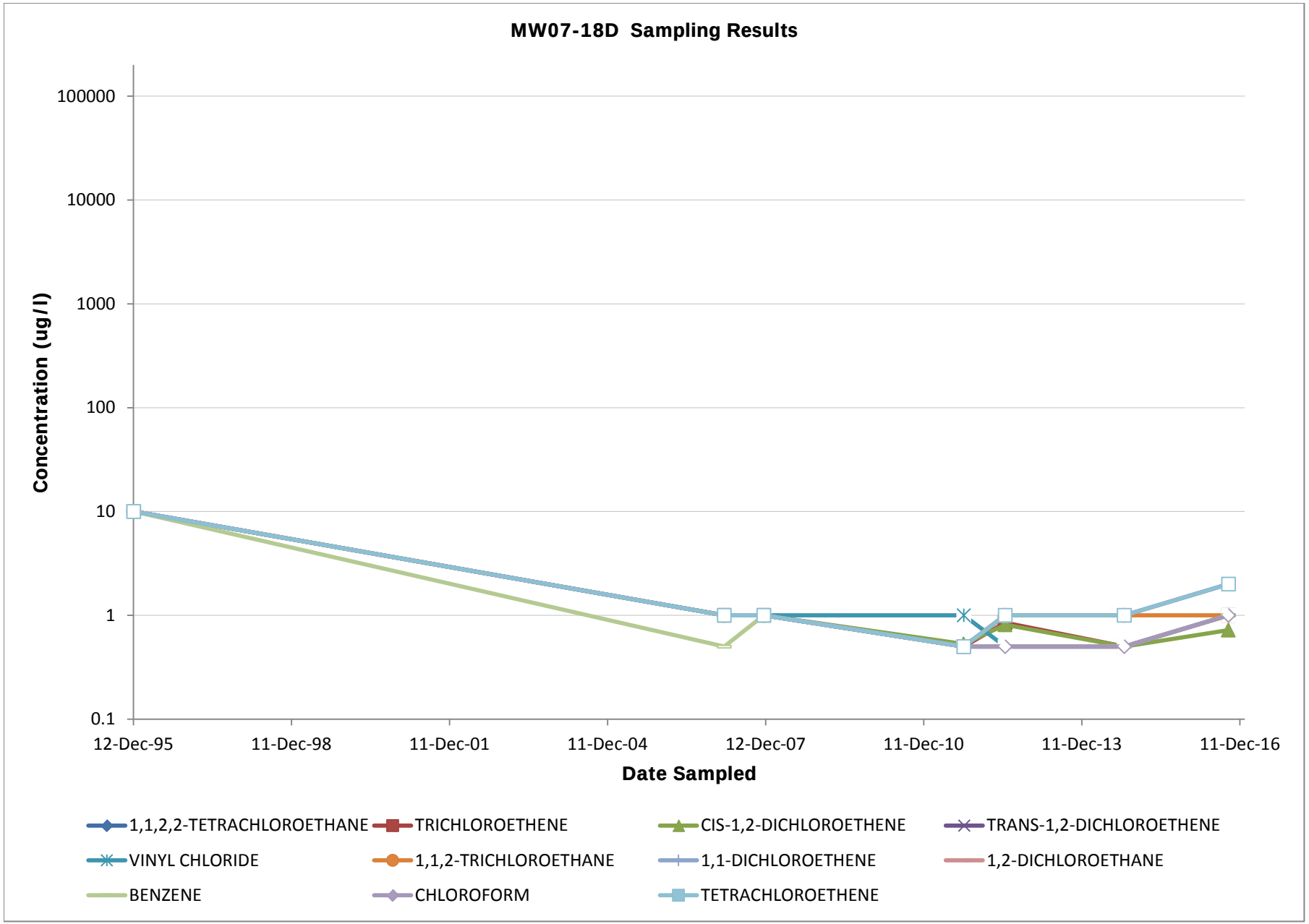

MW07-13D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

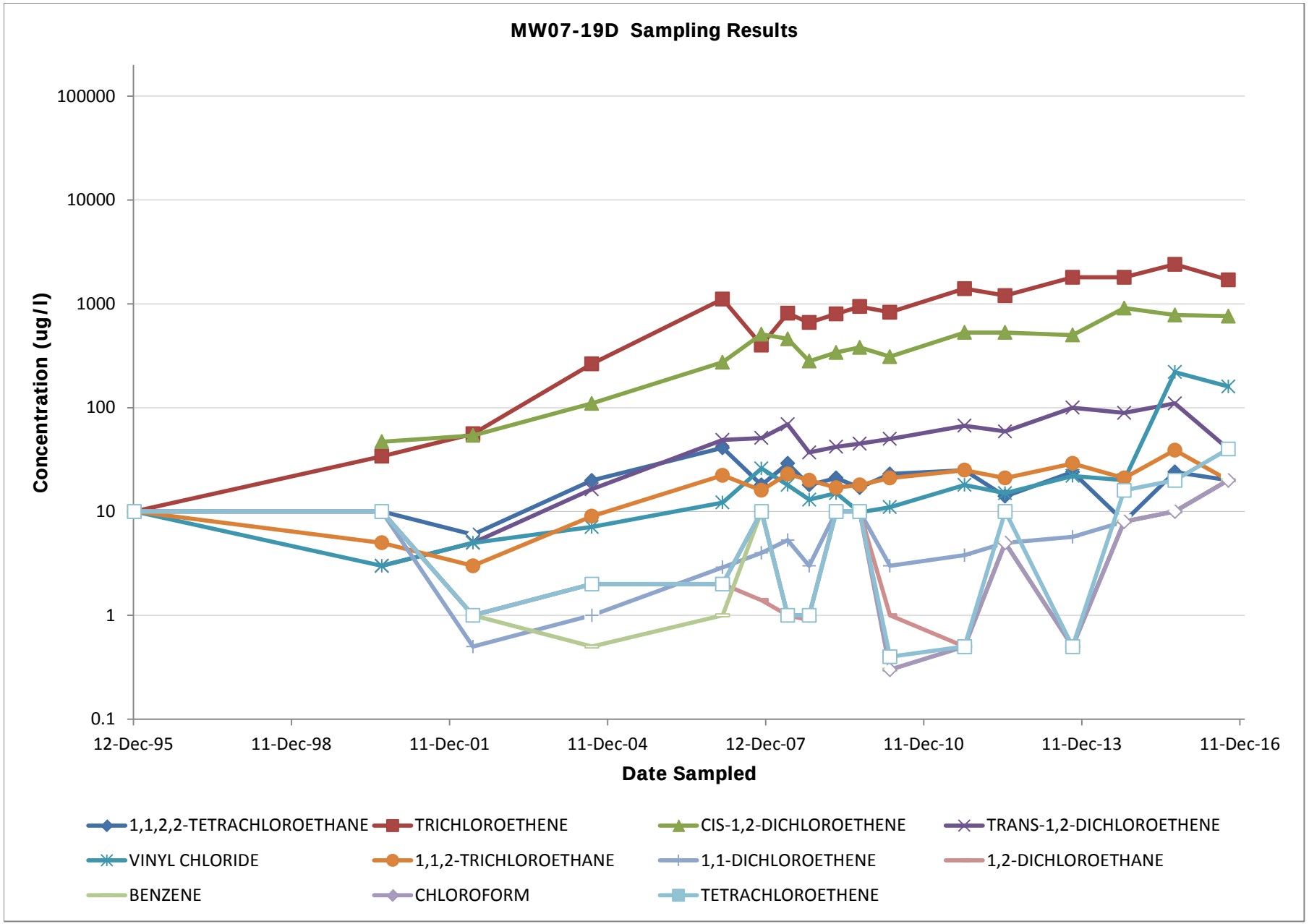

MW07-13S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

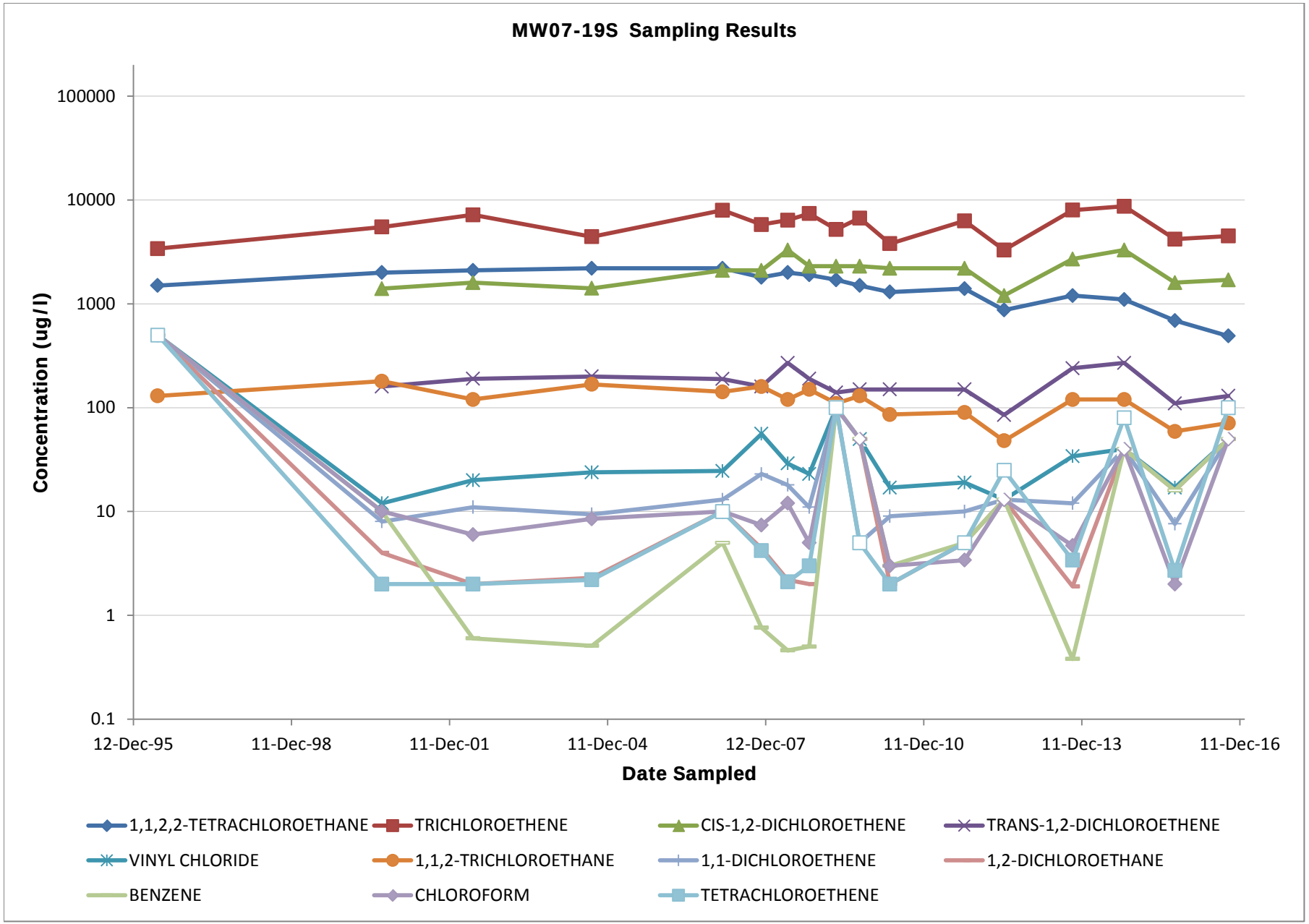

MW07-15D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

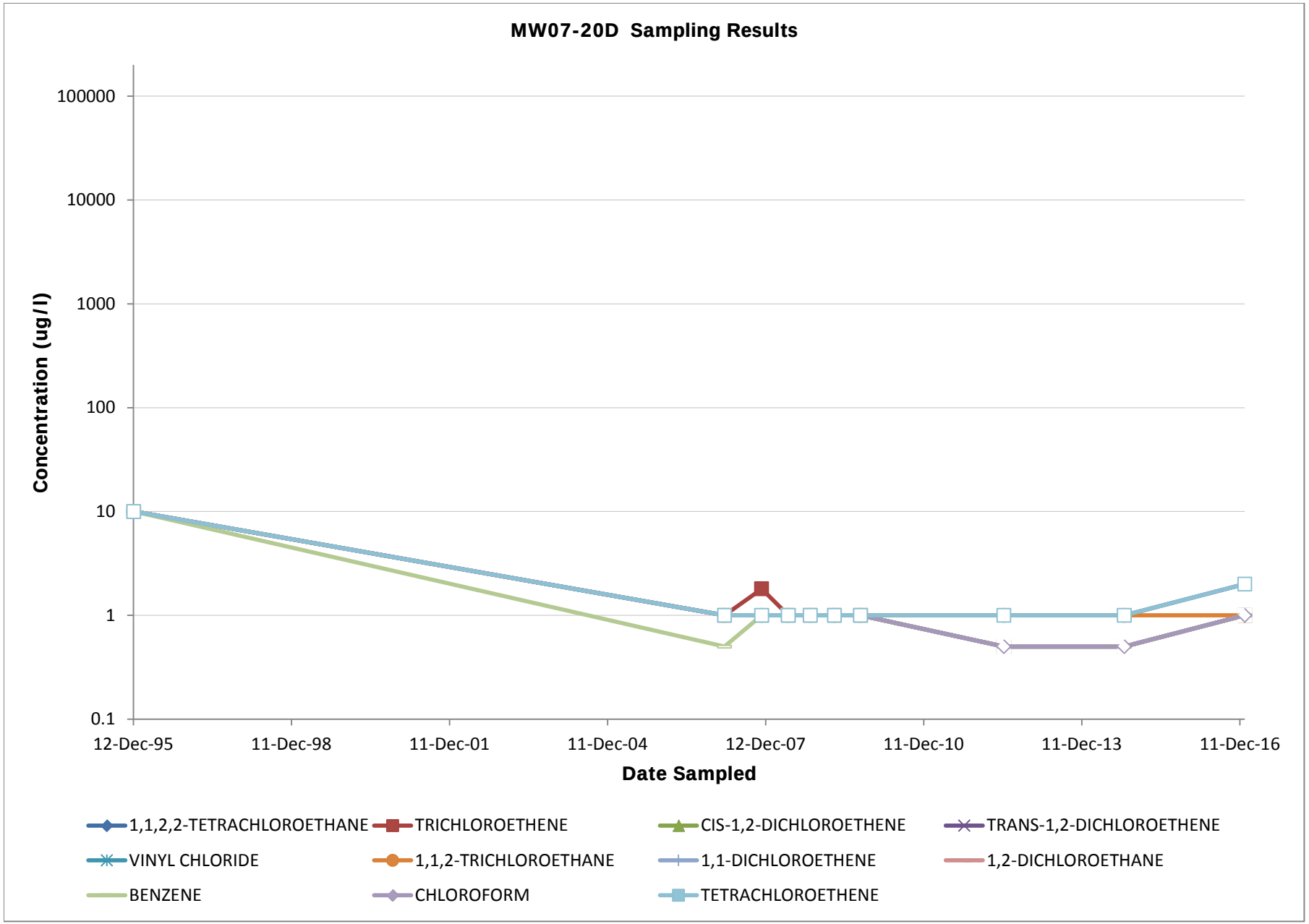

MW07-16R Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

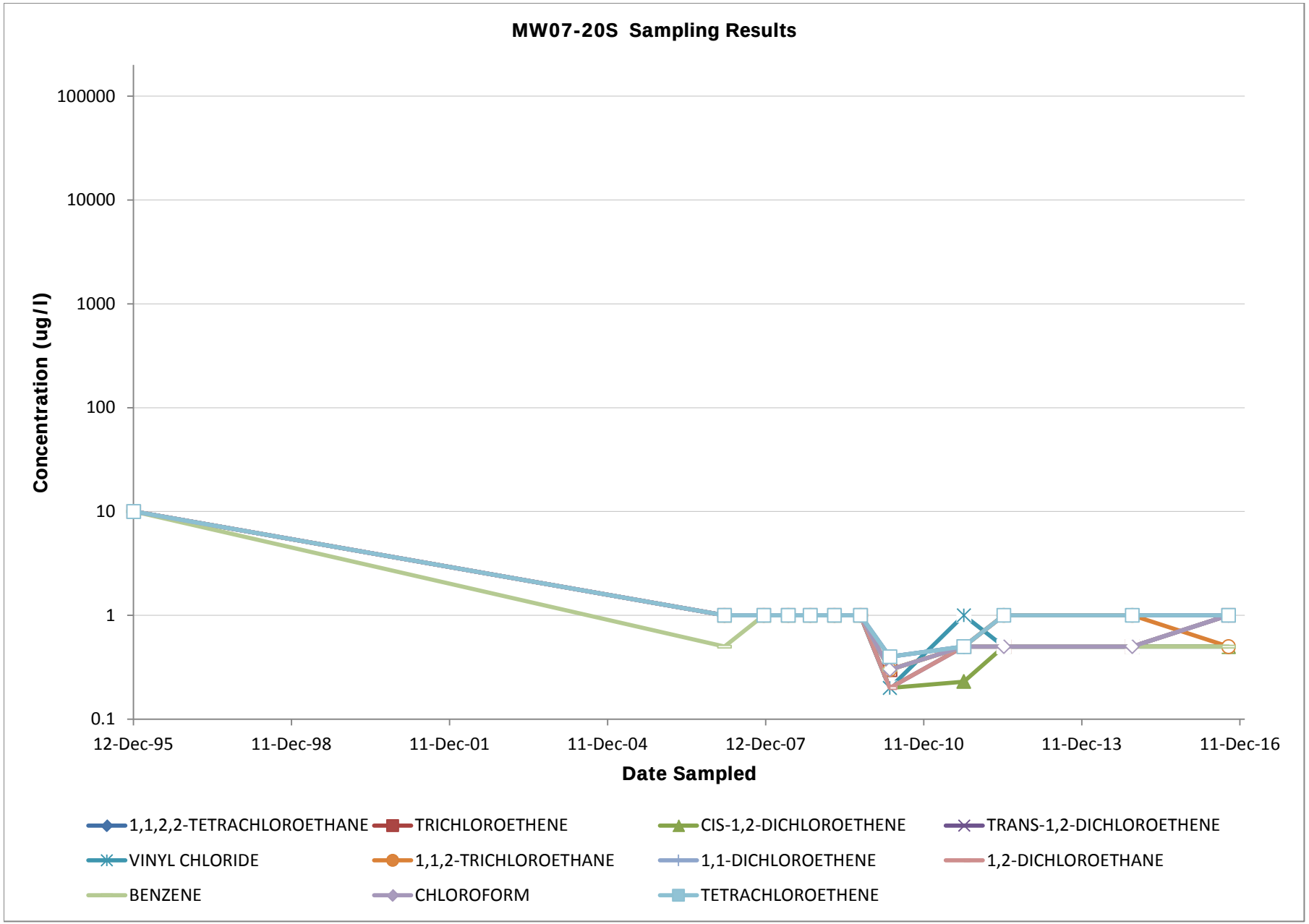

MW07-17D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

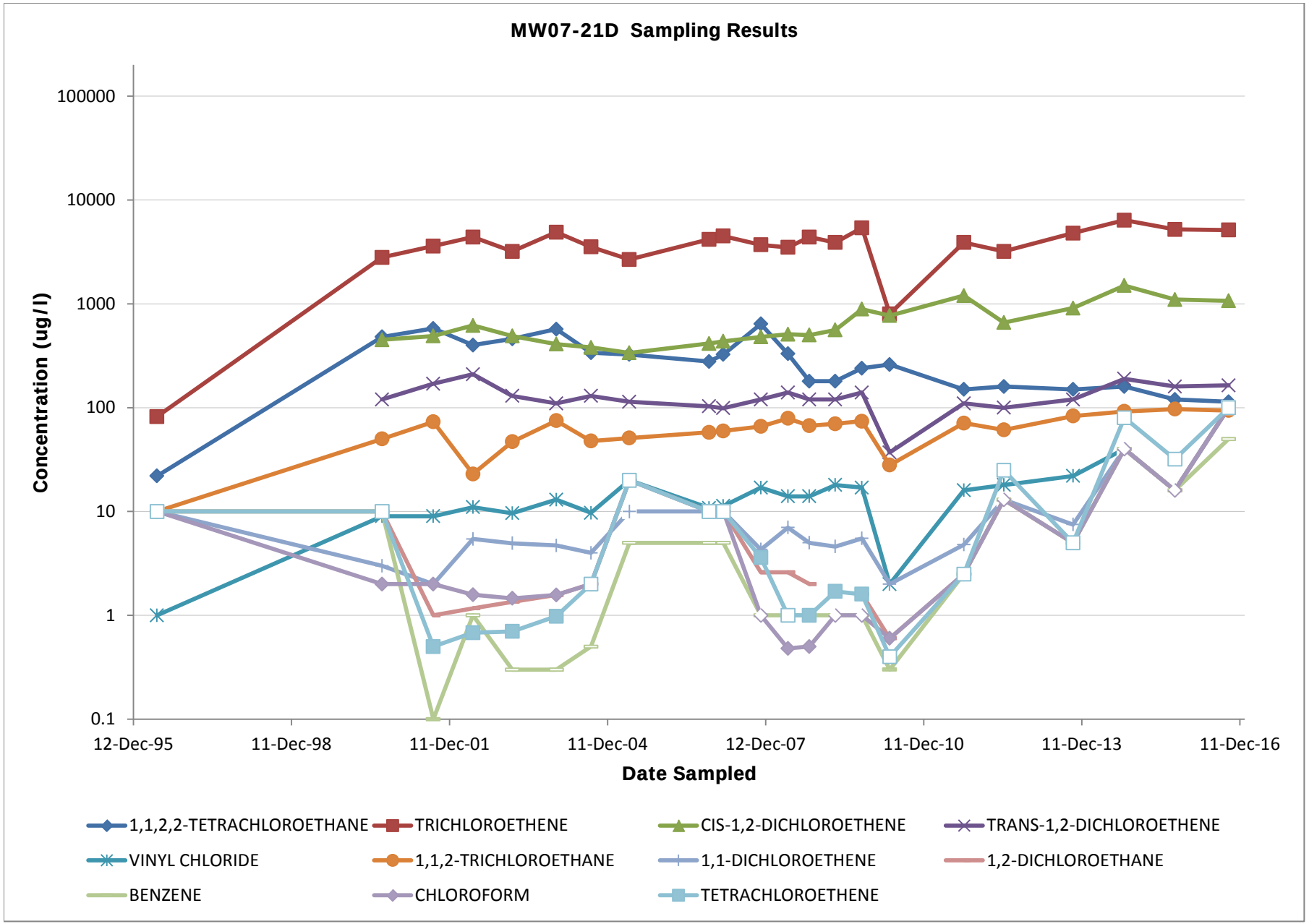

MW07-18D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

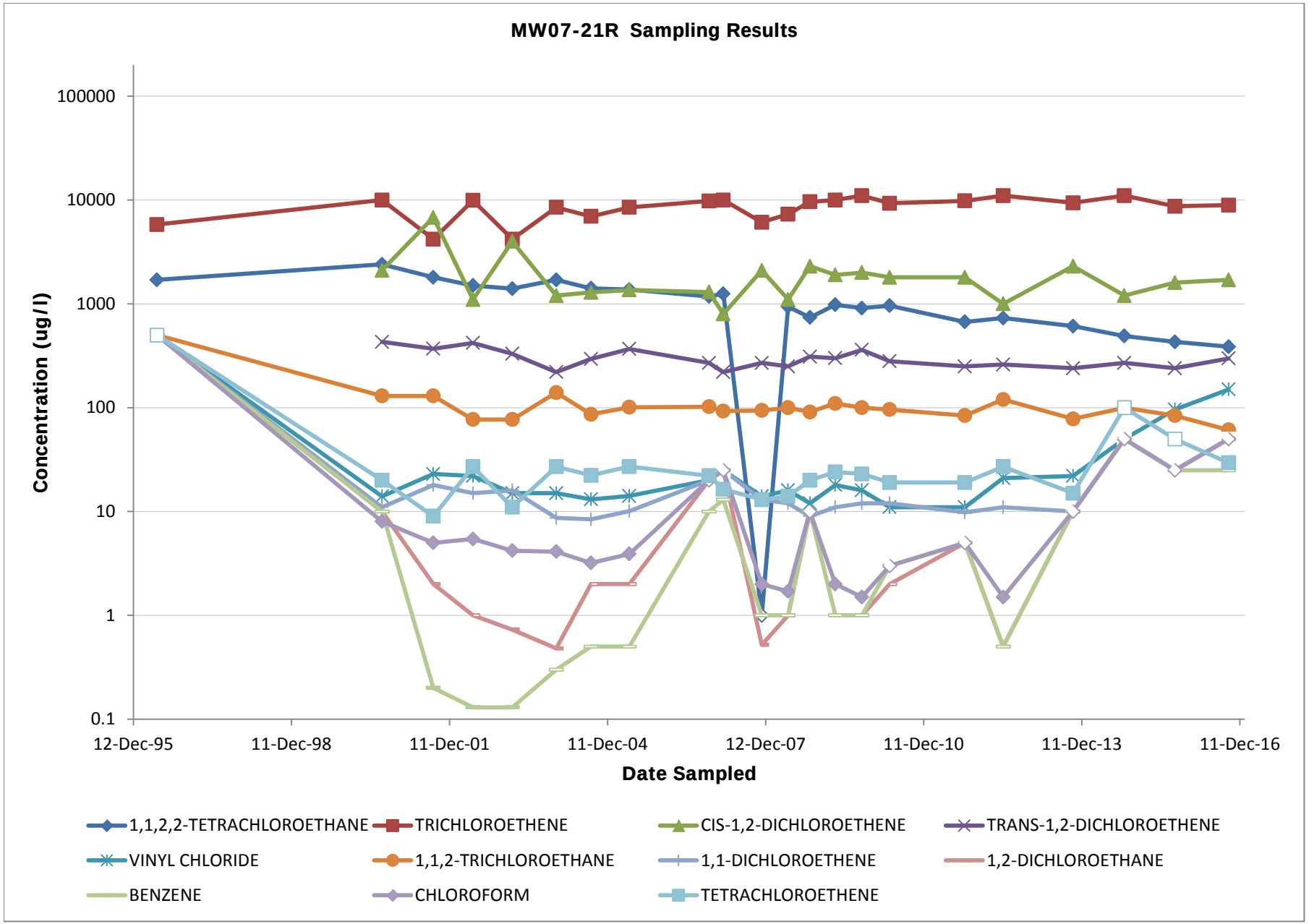

MW07-19D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

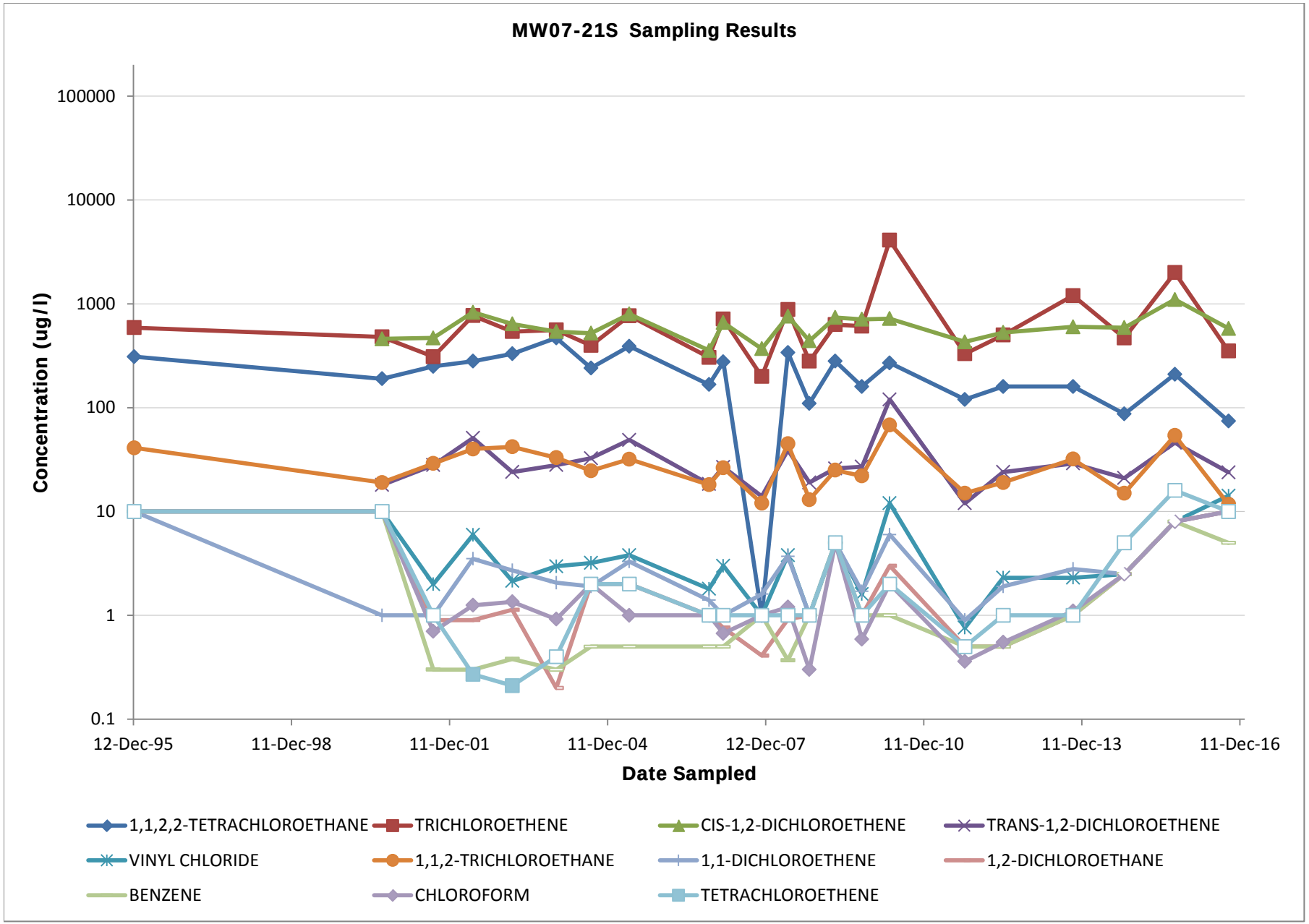

MW07-19S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

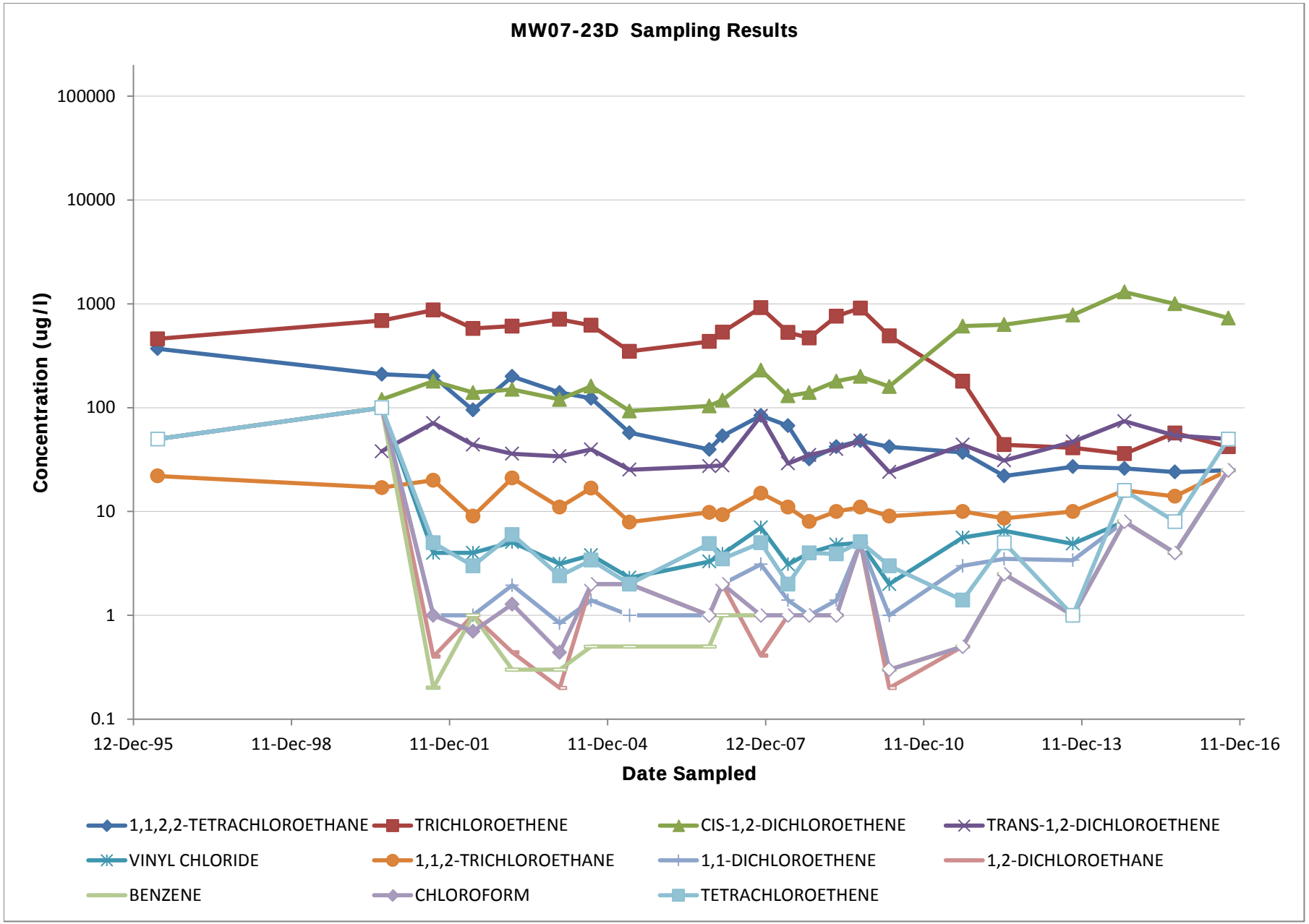

MW07-20D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

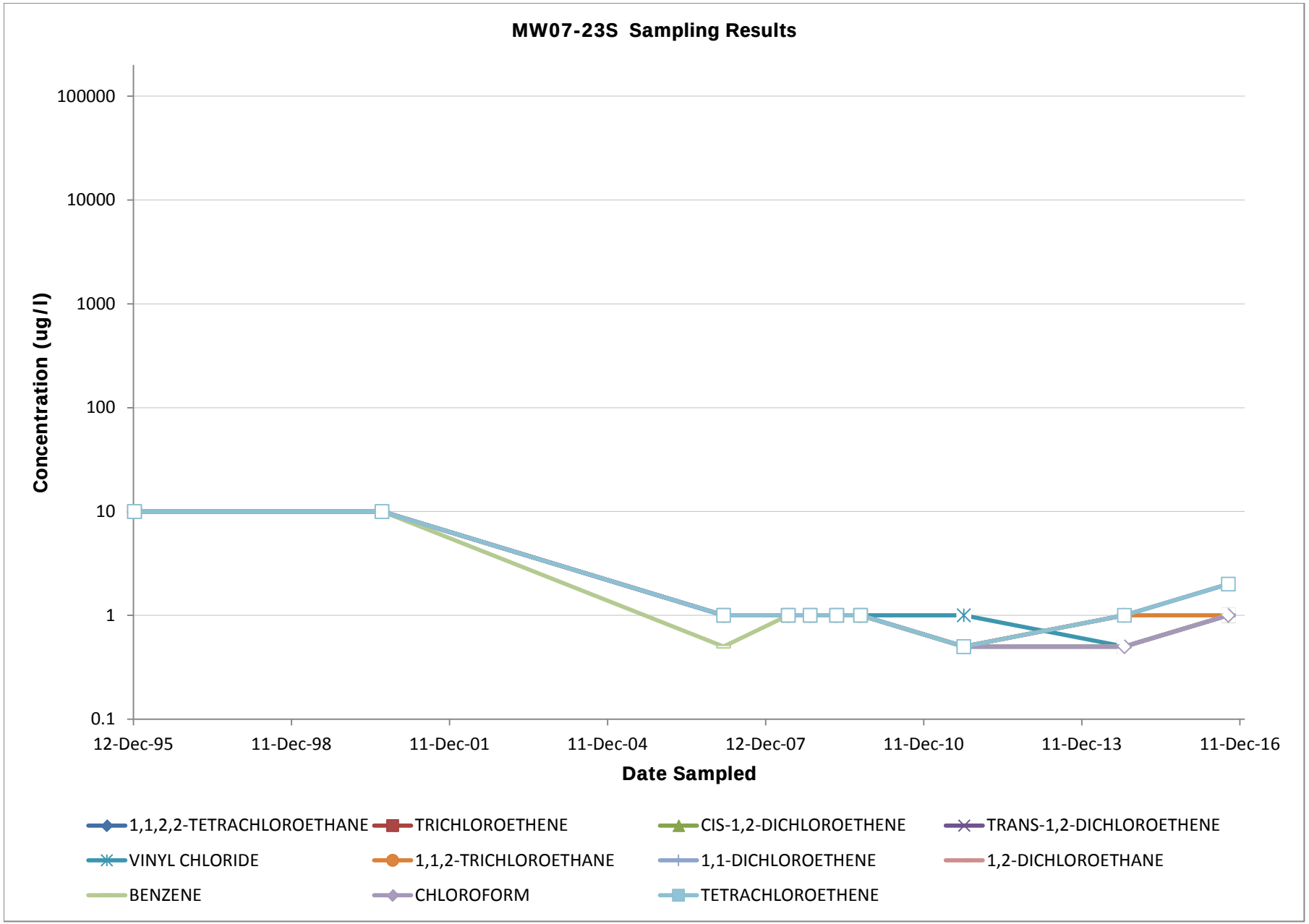

MW07-20S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

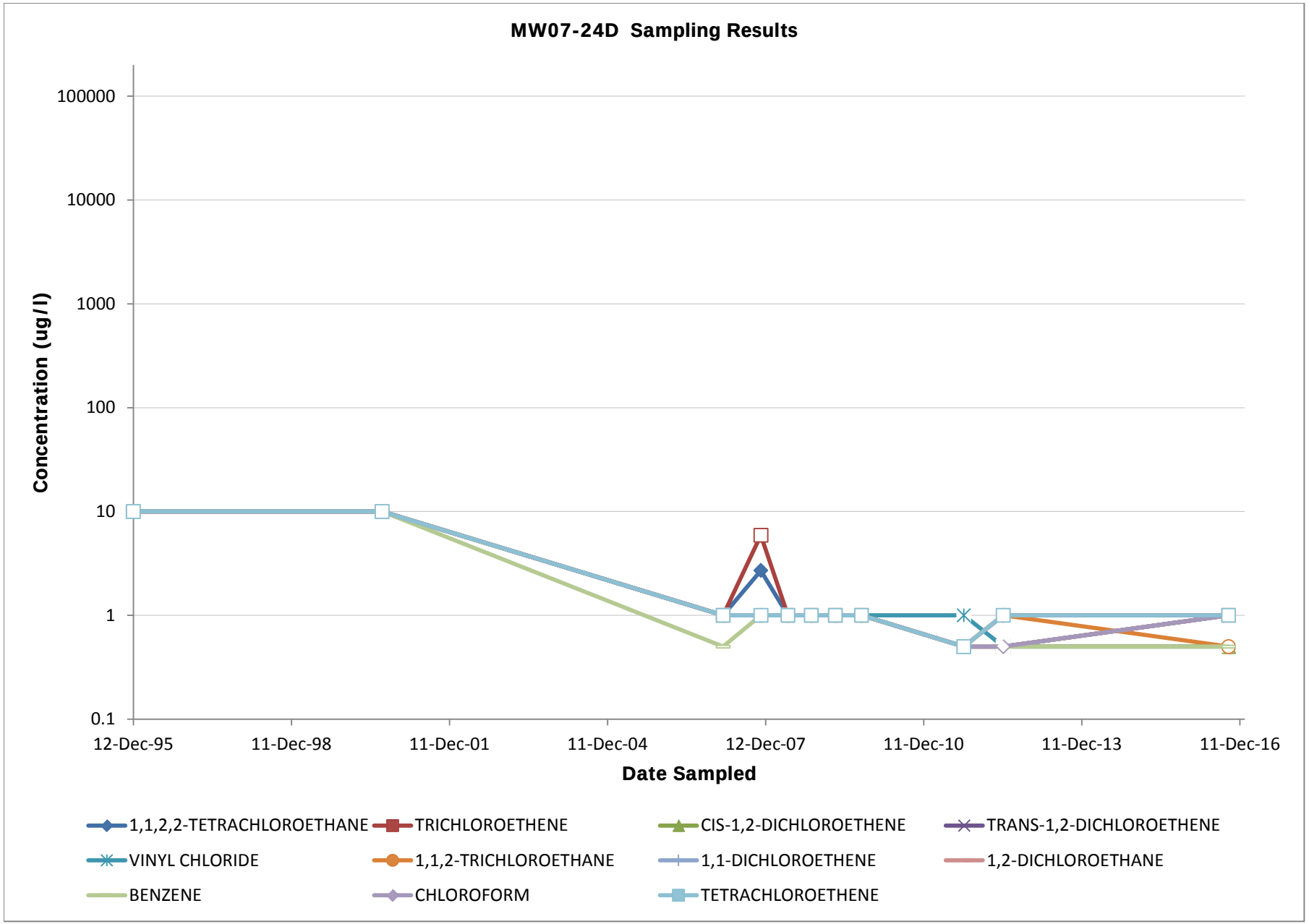

MW07-21D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

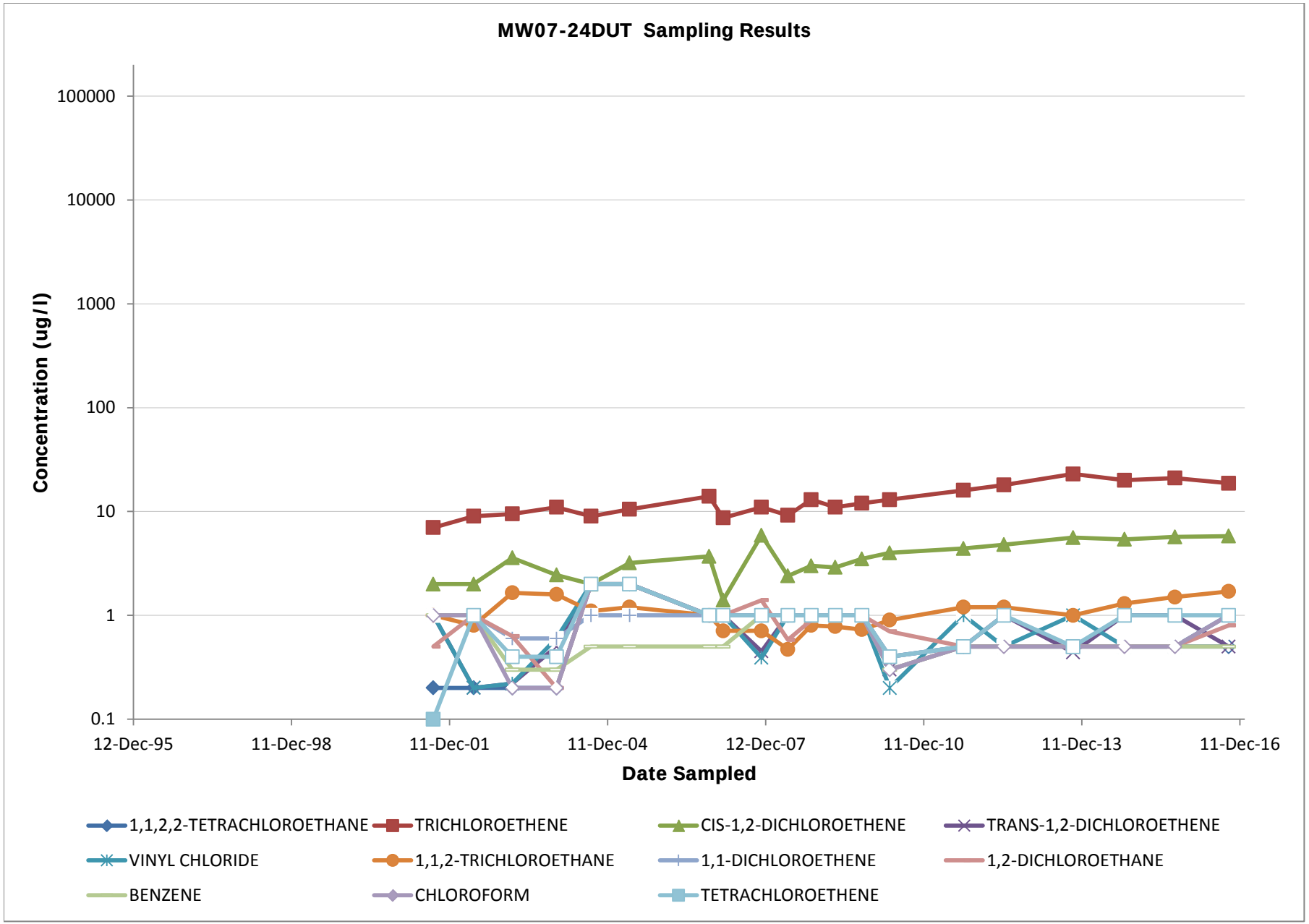

MW07-21R Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

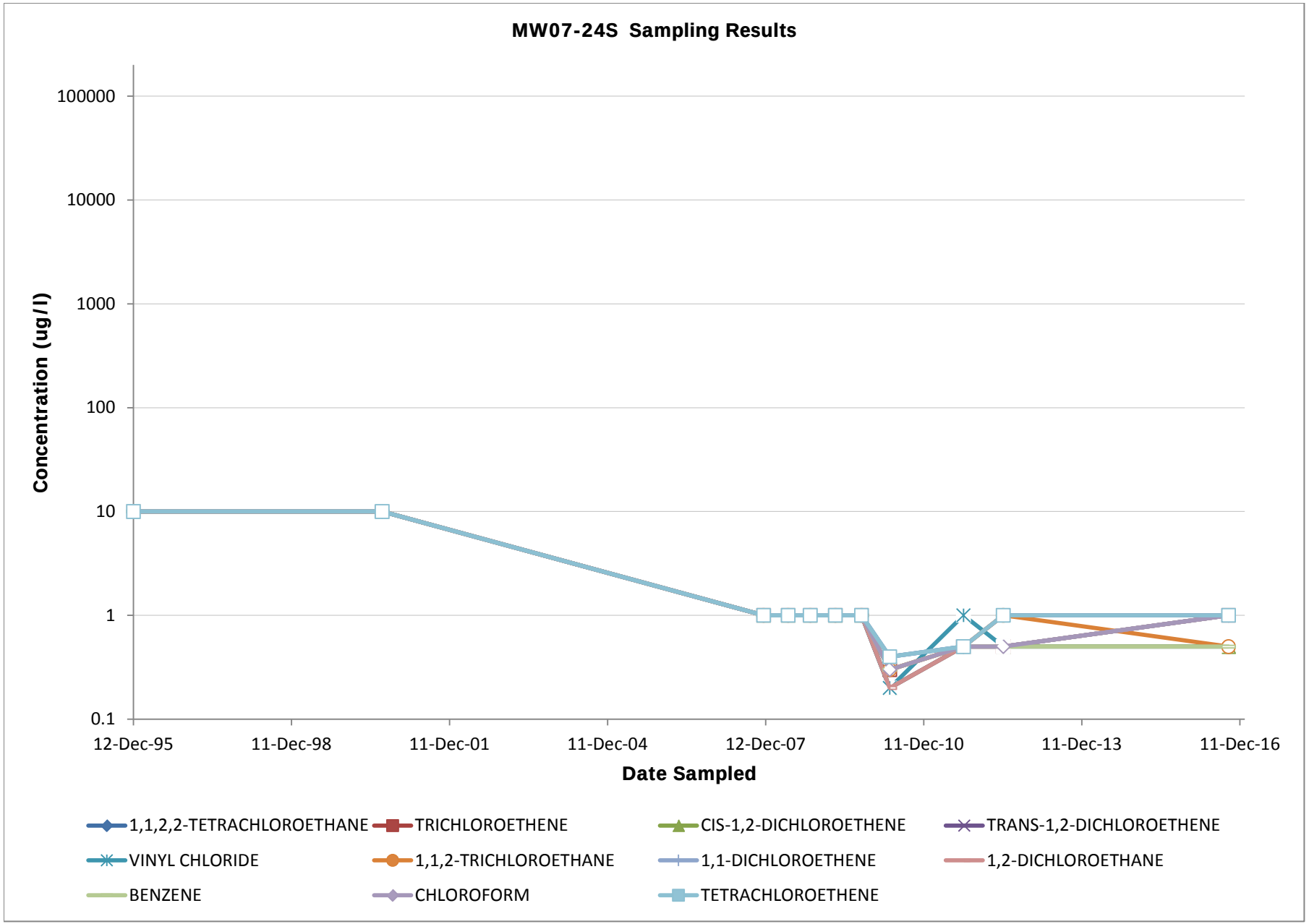

MW07-21S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

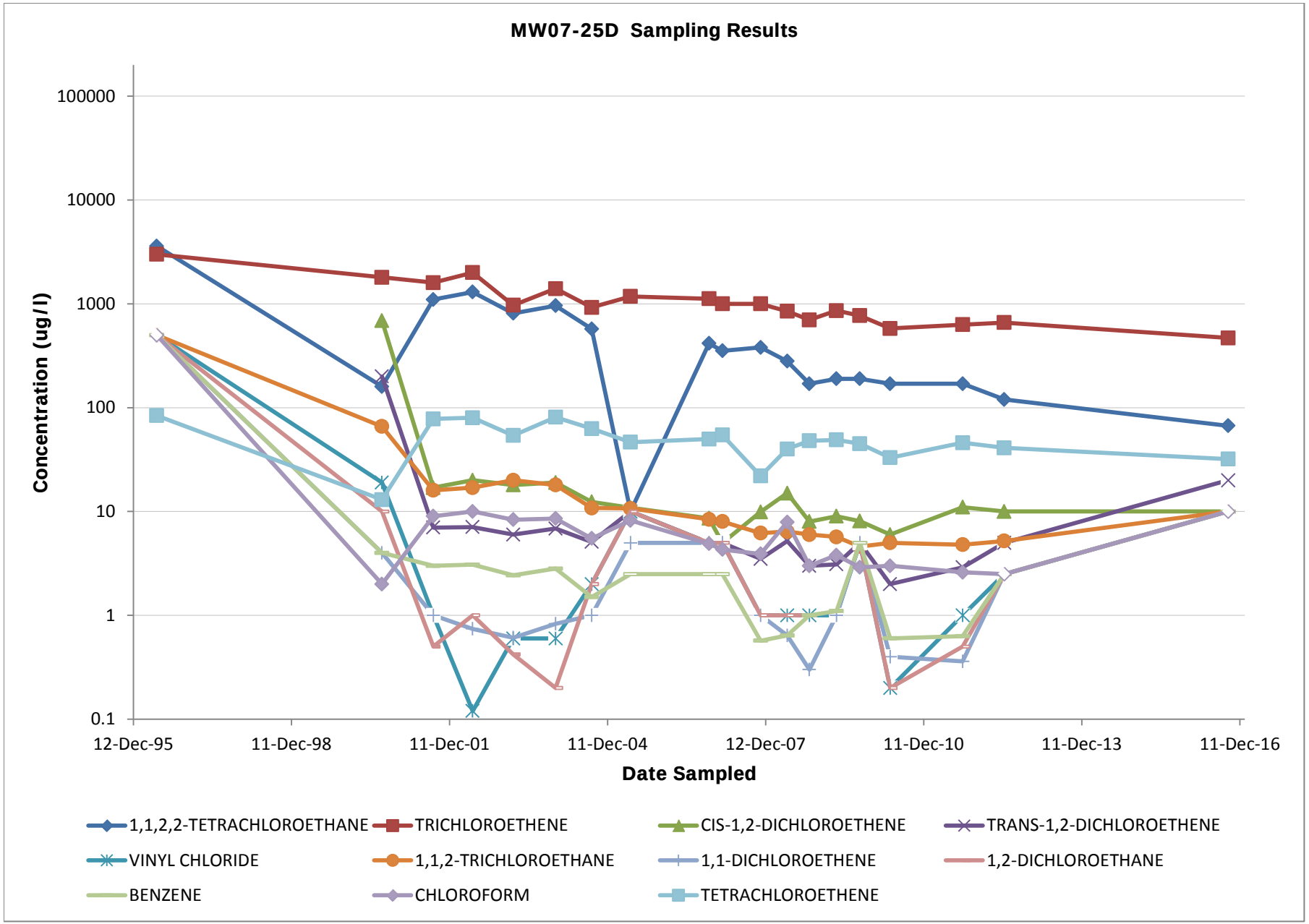

MW07-23D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

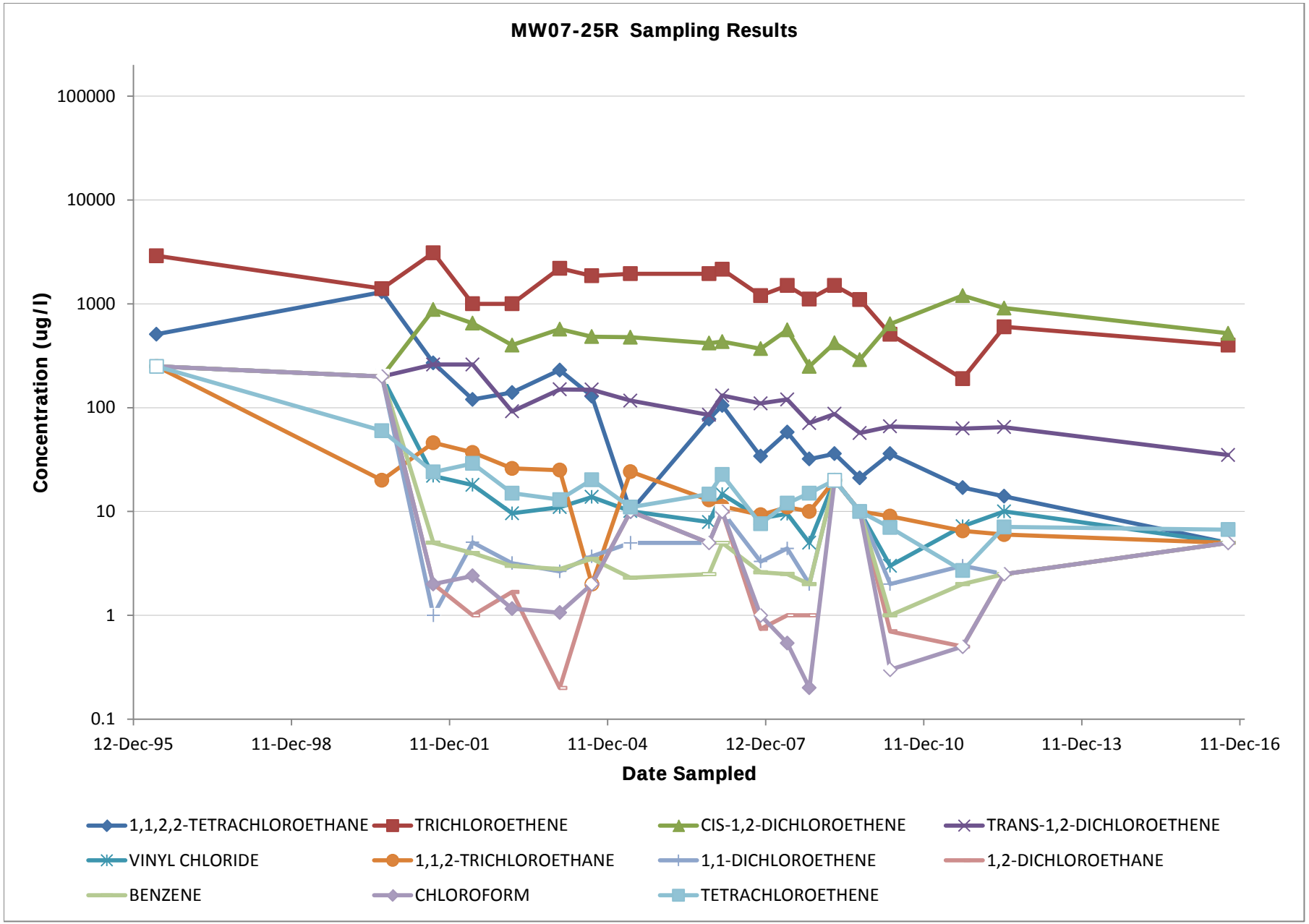

MW07-23S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

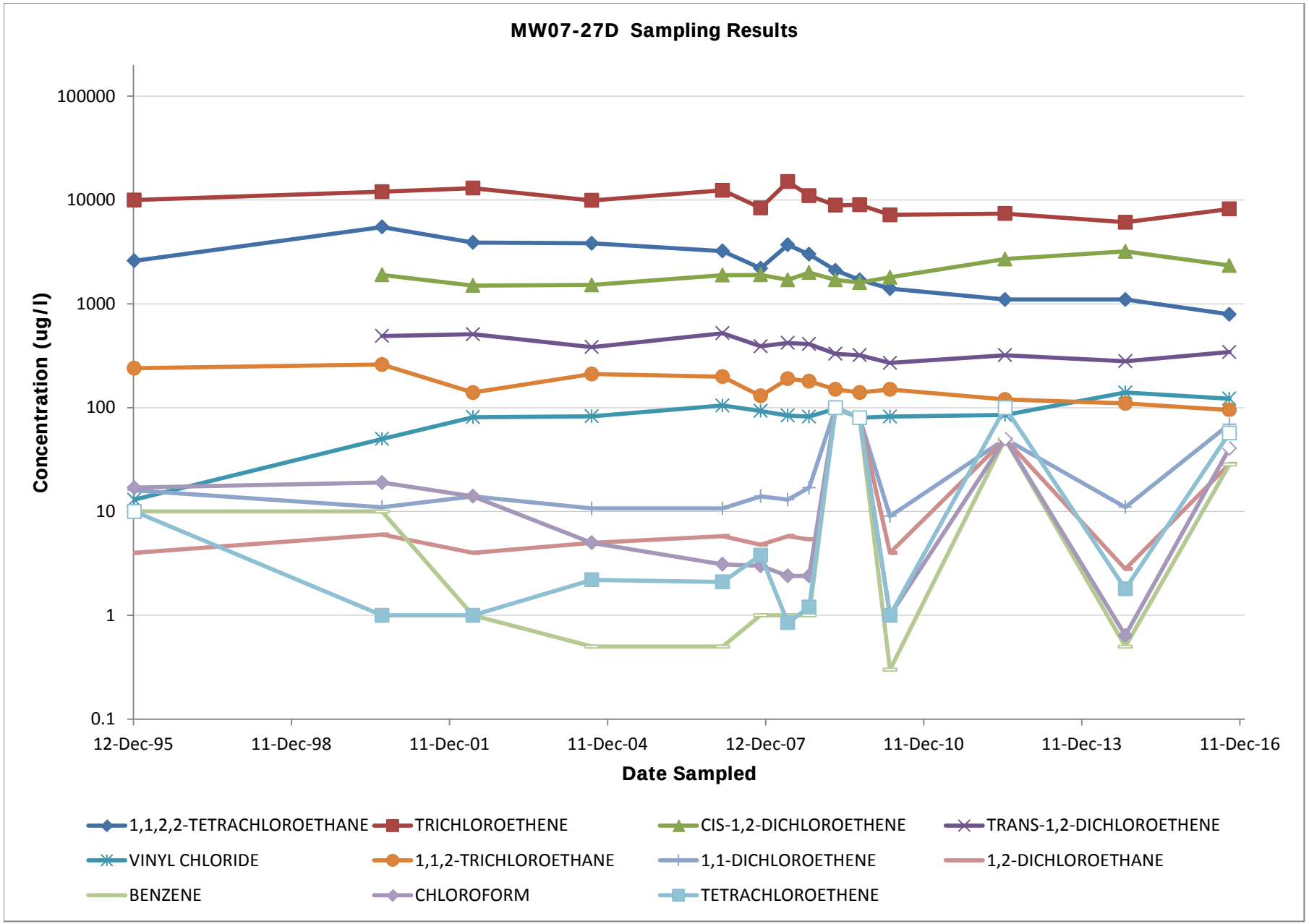

MW07-24D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

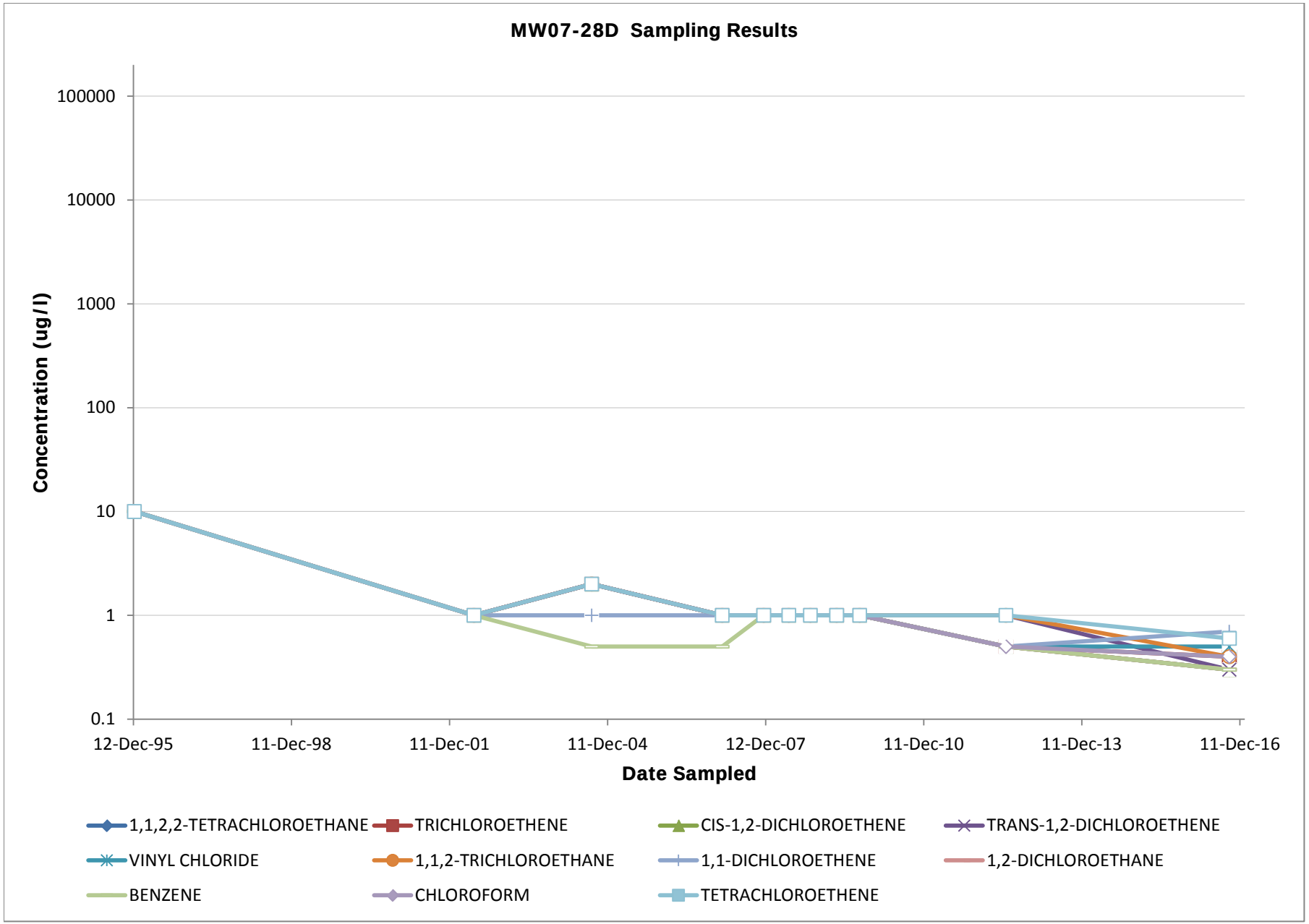

MW07-24DUT Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

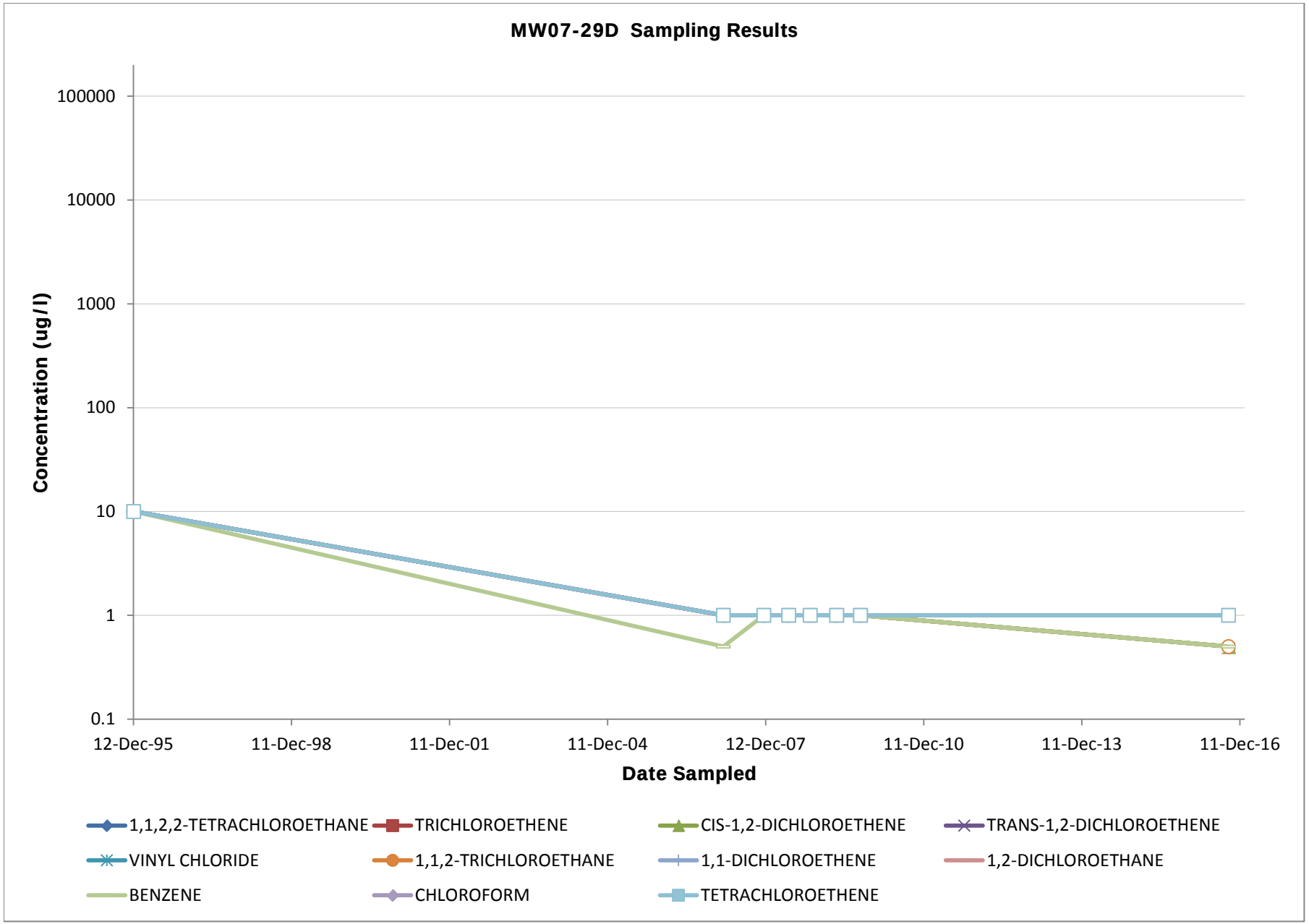

MW07-24S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

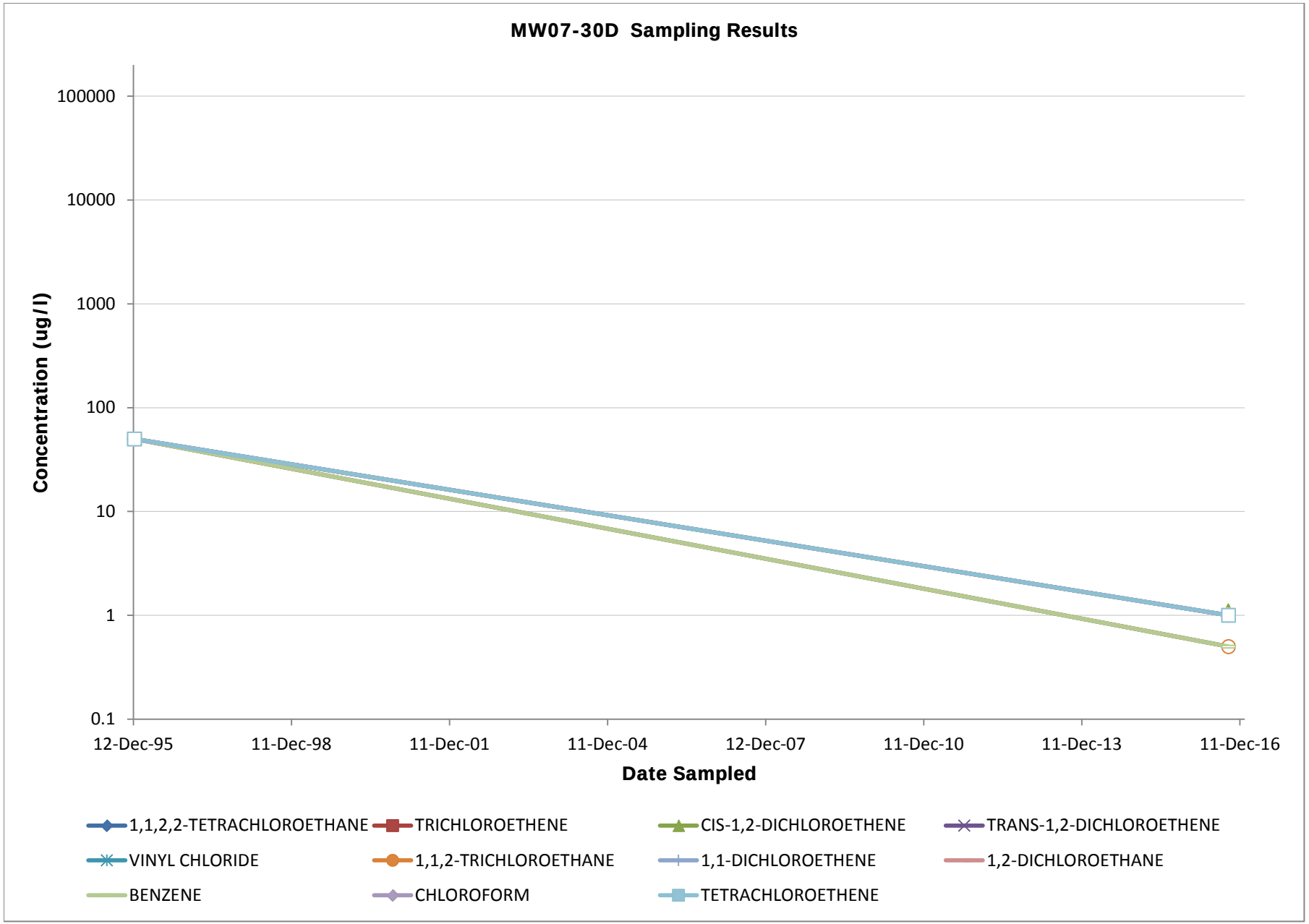

MW07-25D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

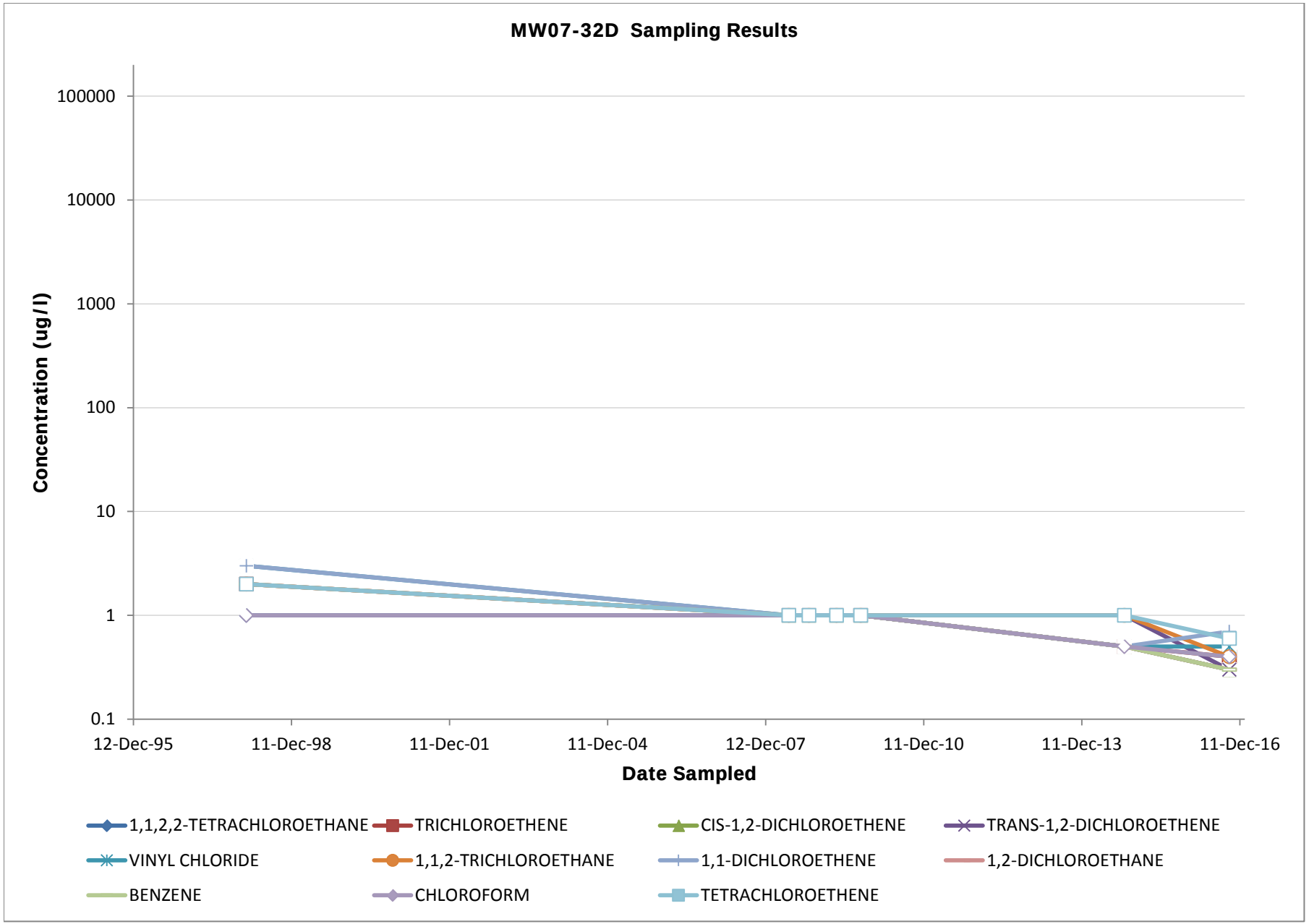

MW07-25R Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

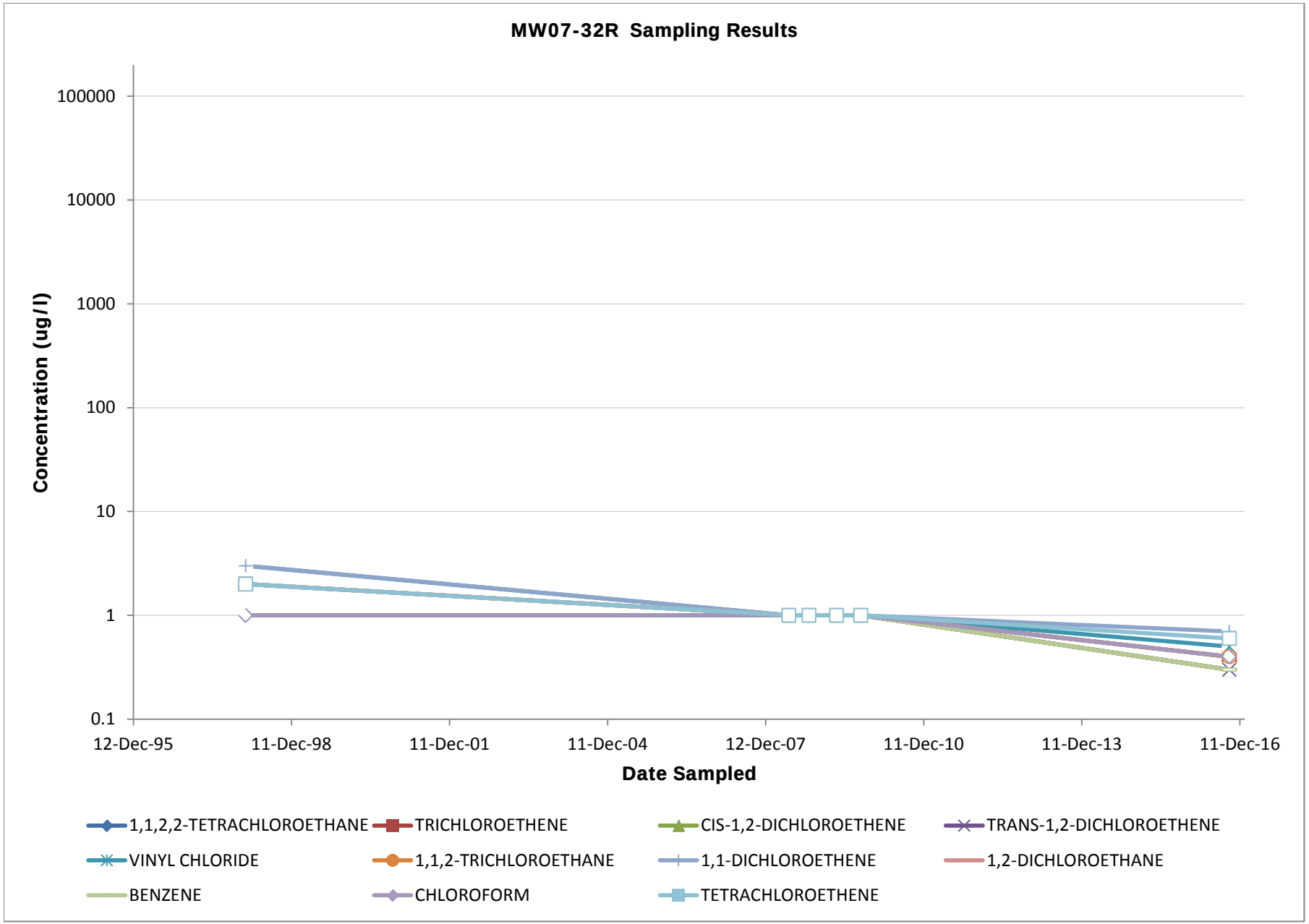

MW07-27D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

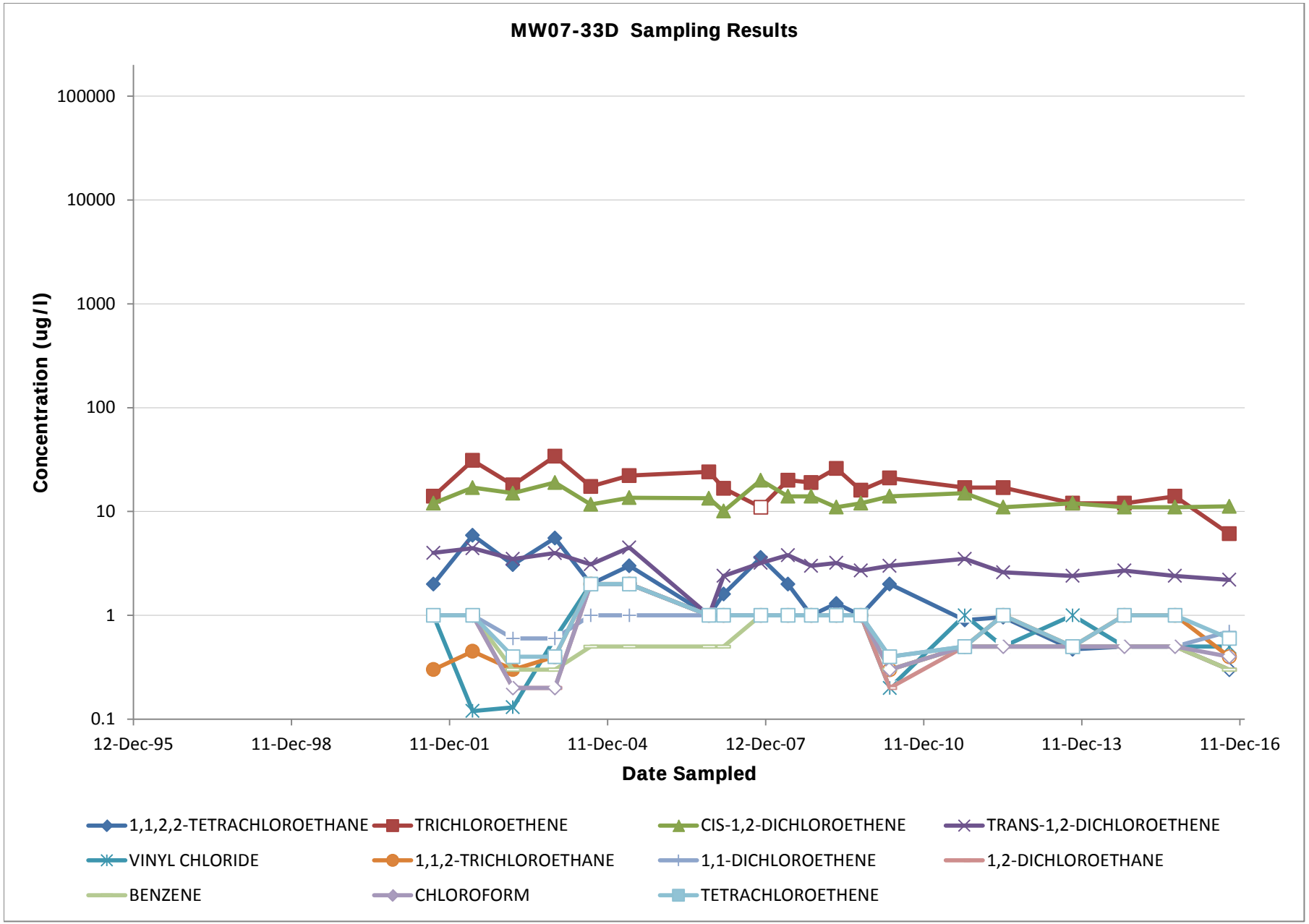

MW07-28D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

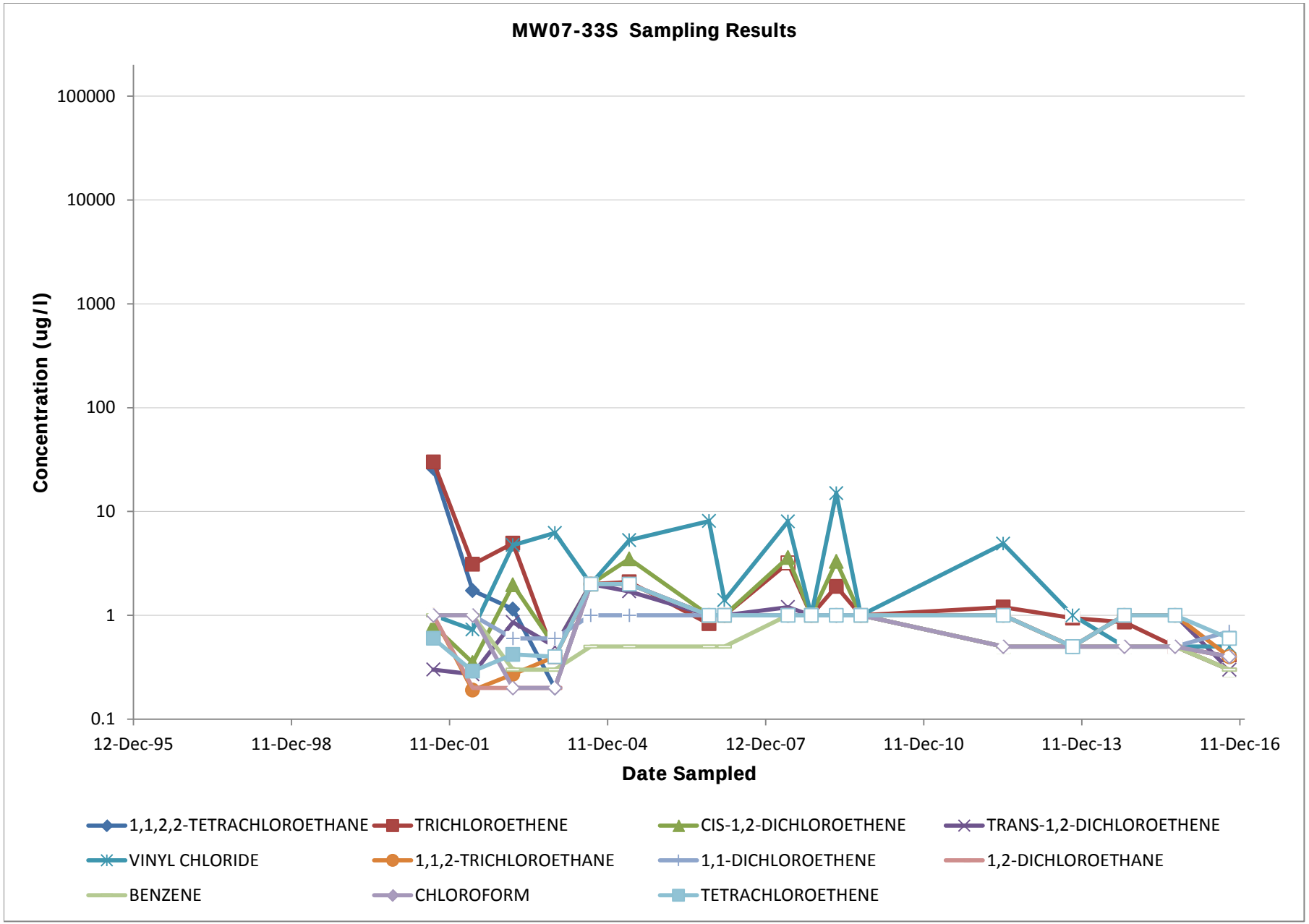

MW07-29D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

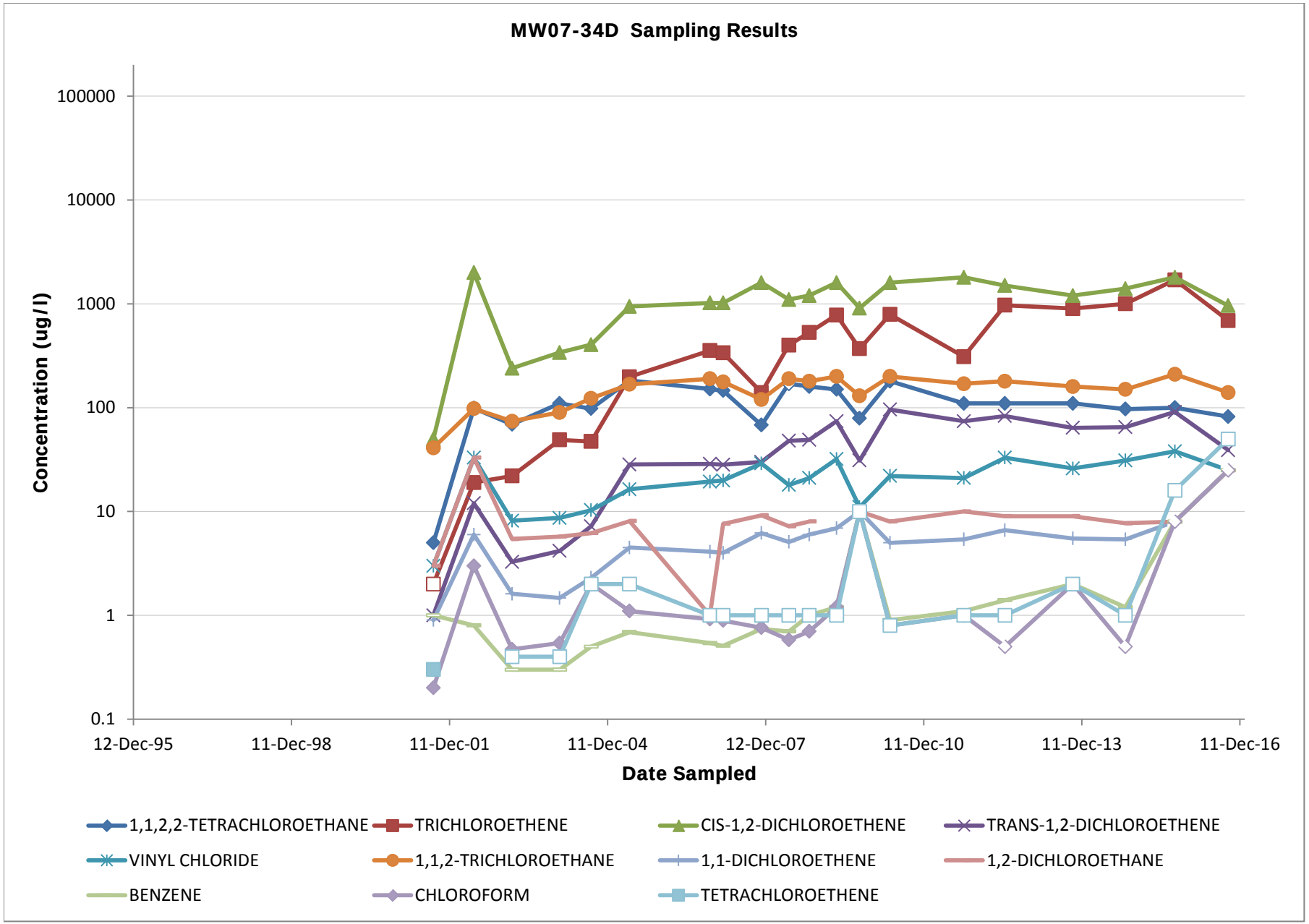

MW07-30D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

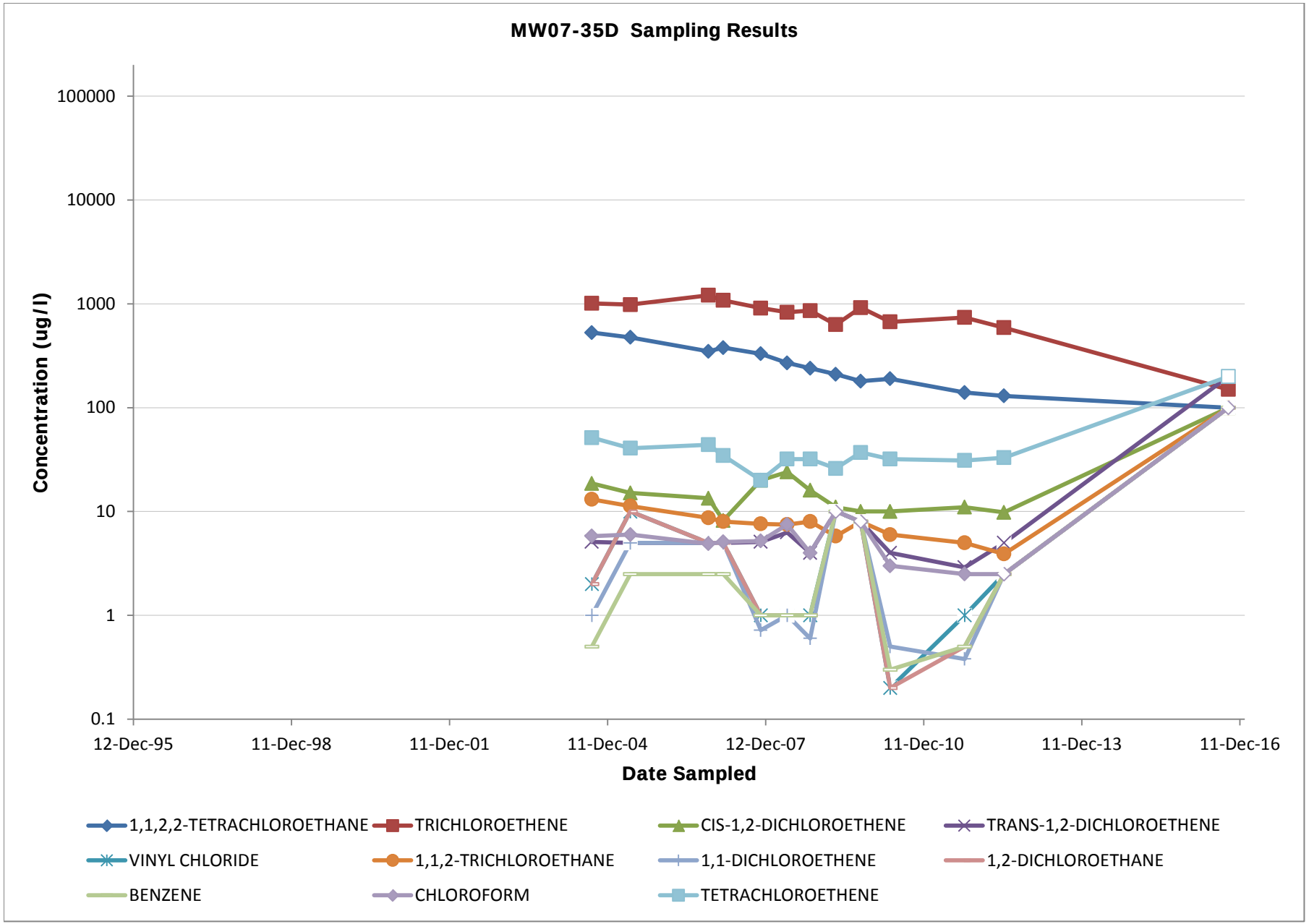

MW07-32D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

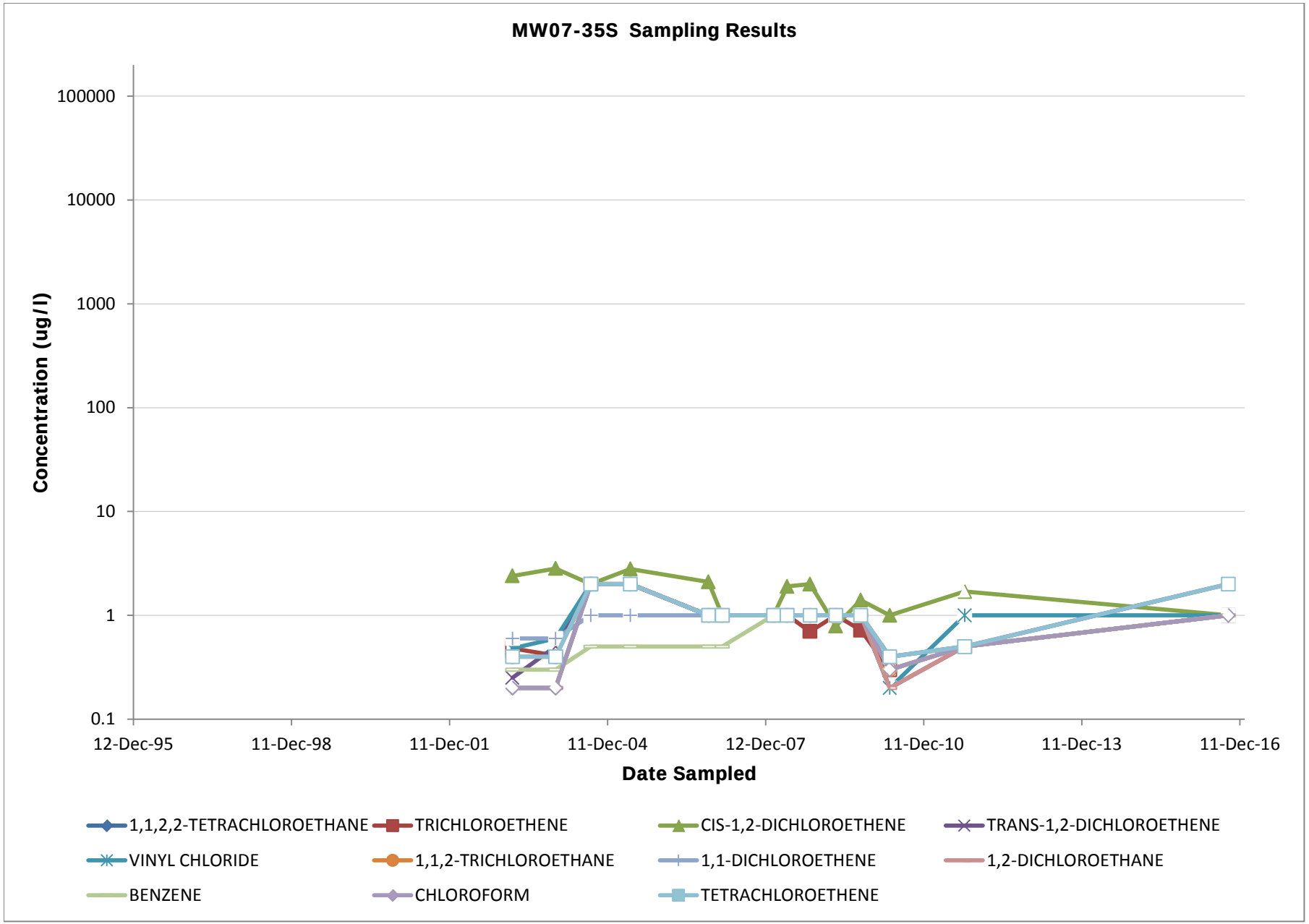

MW07-32R Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

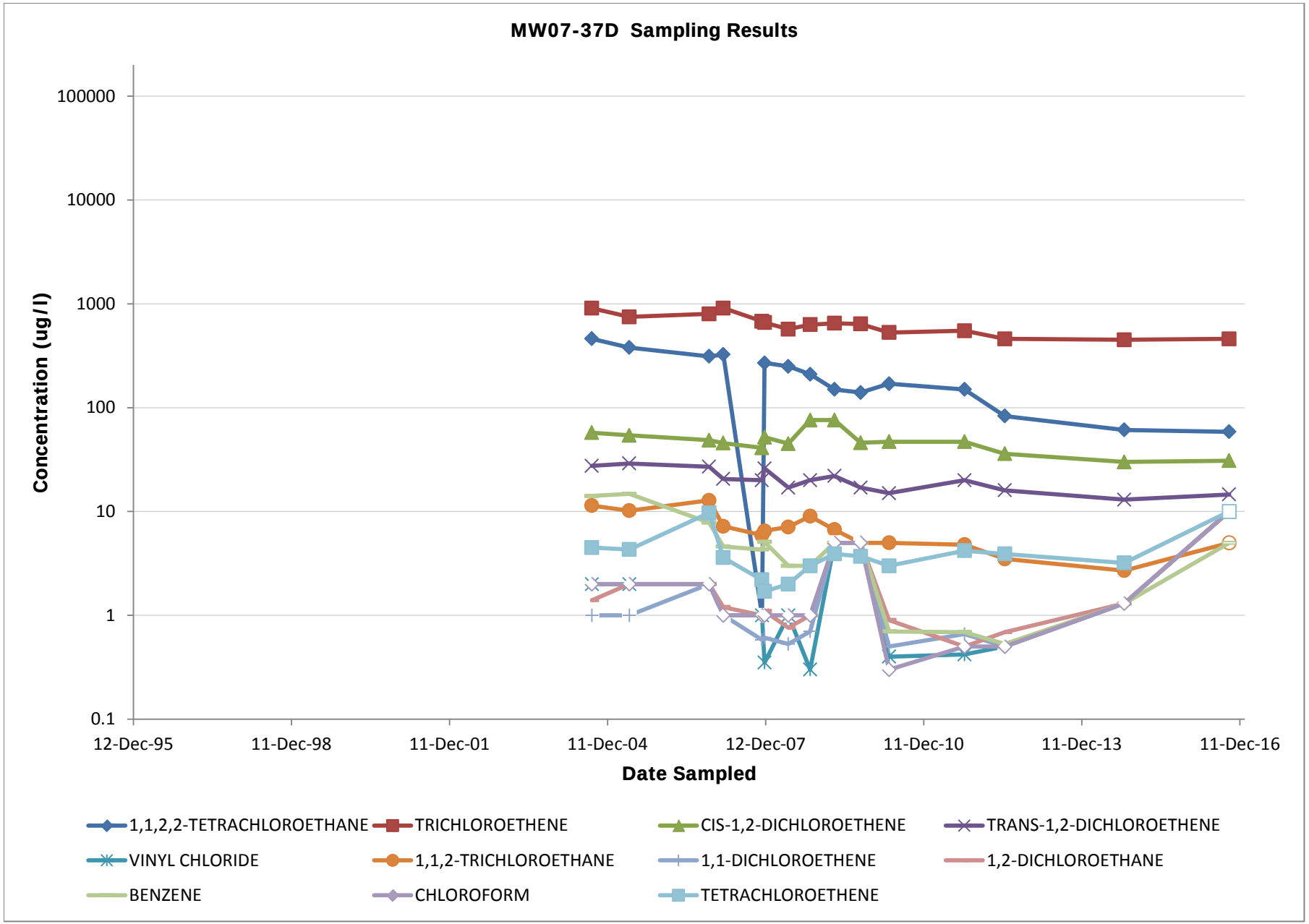

MW07-33D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

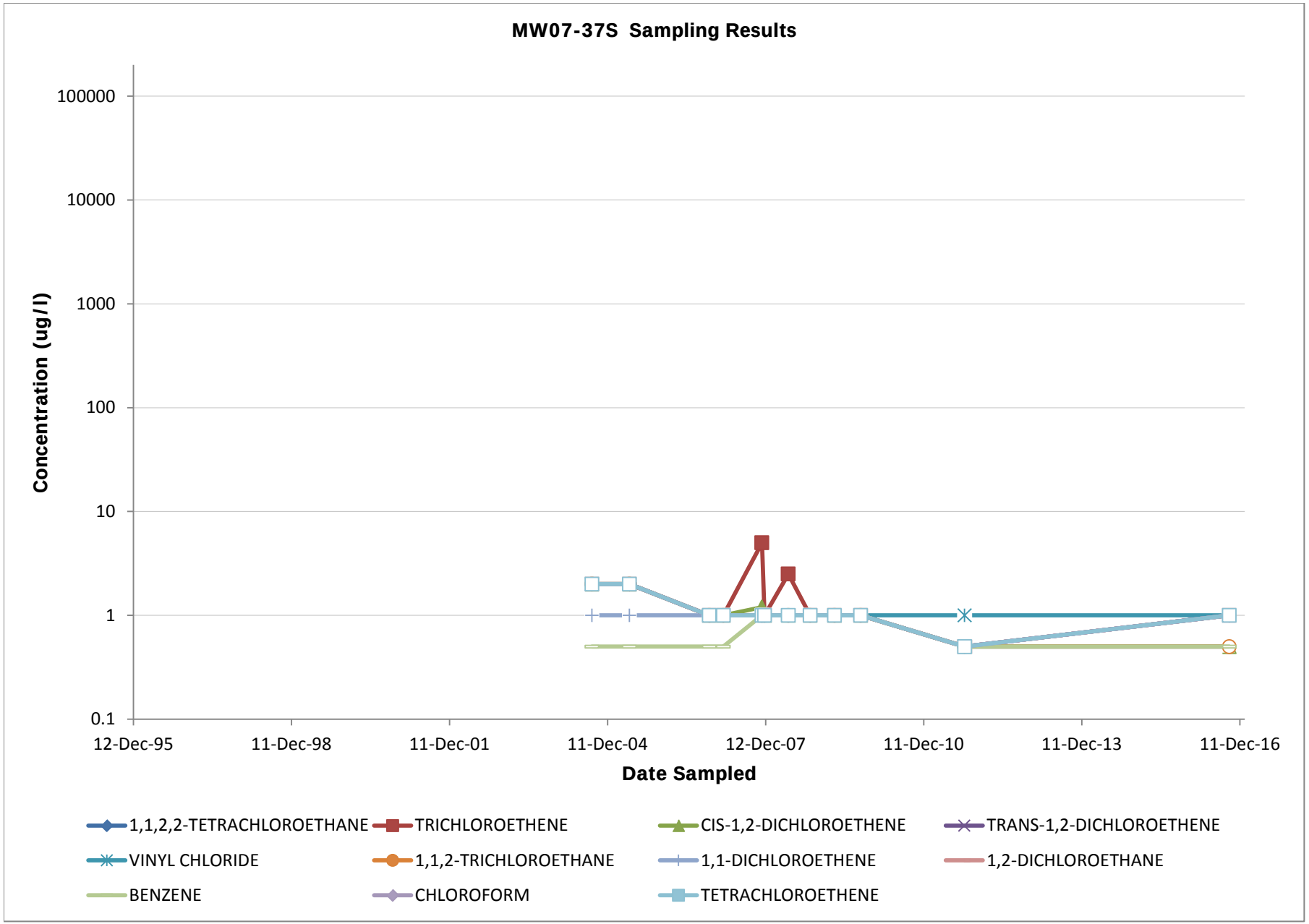

MW07-33S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

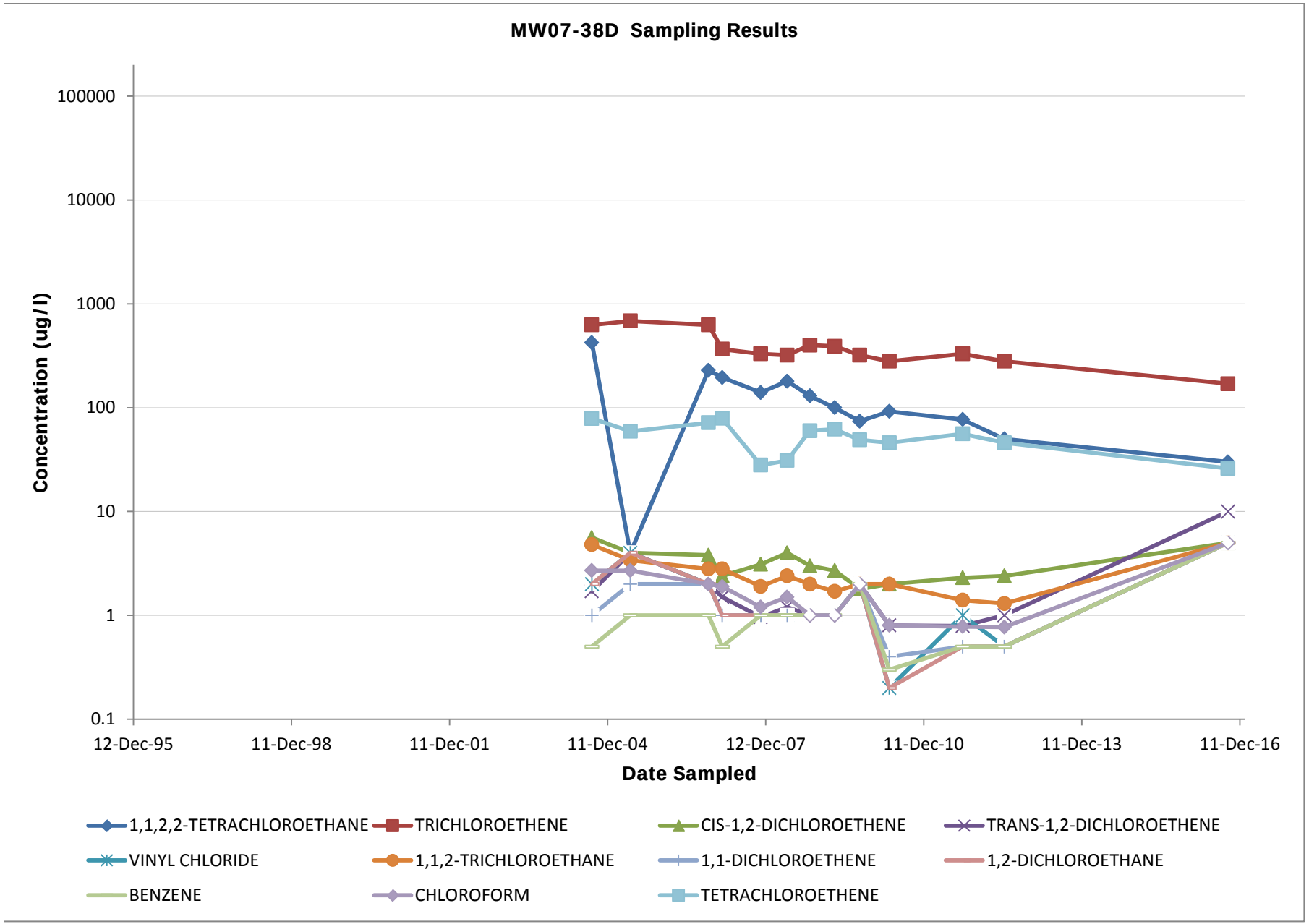

MW07-34D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

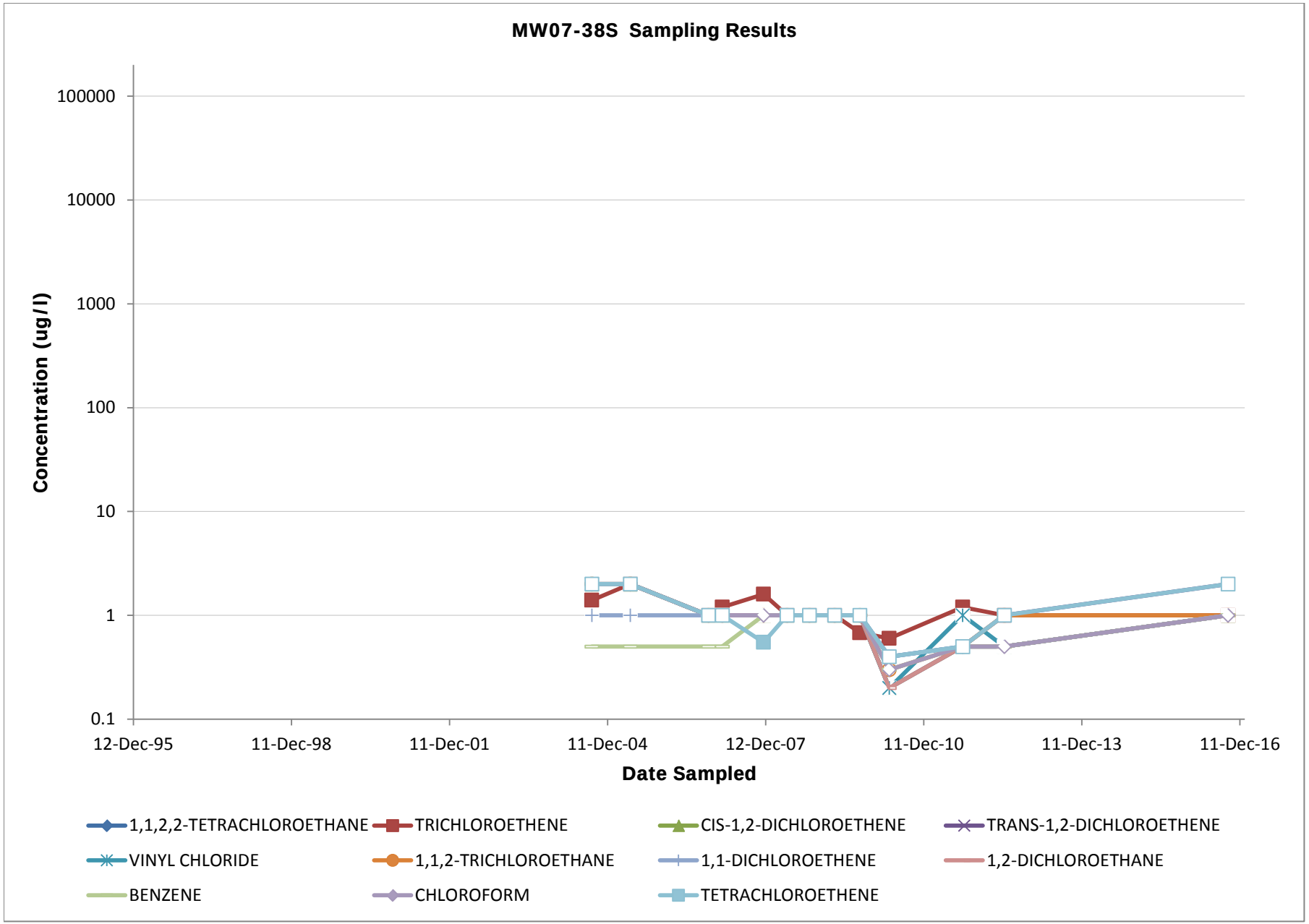

MW07-35D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

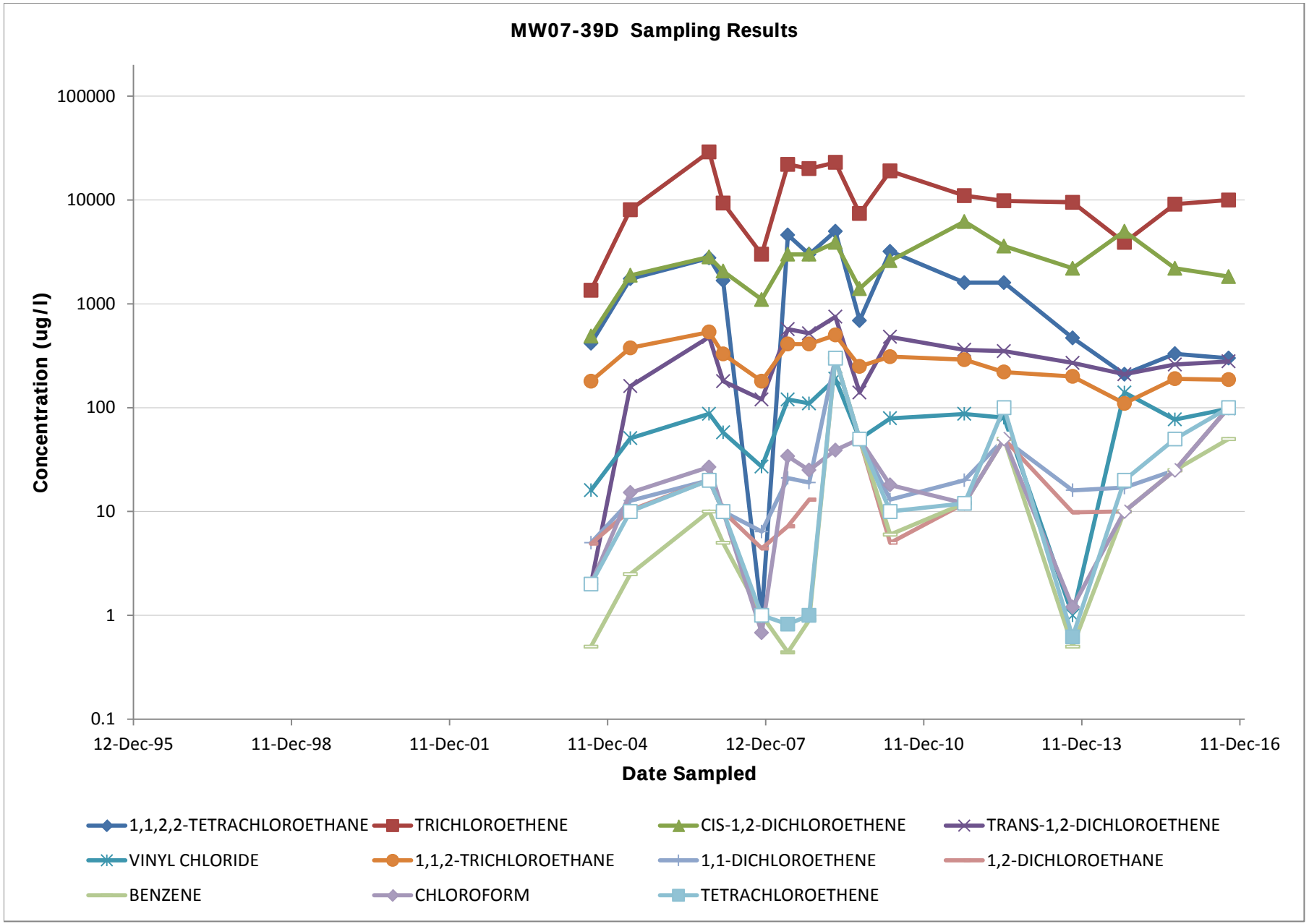

MW07-35S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

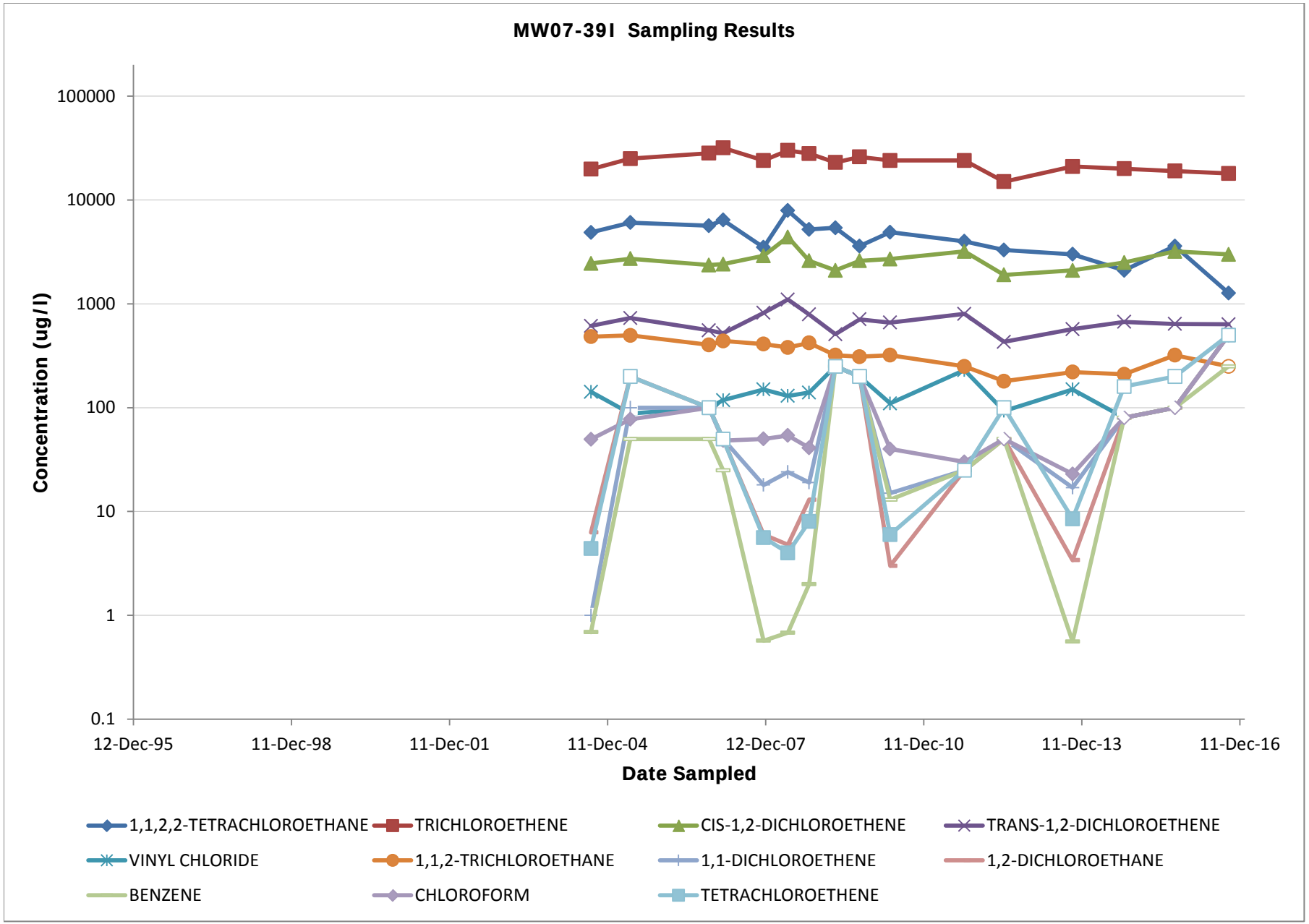

MW07-37D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

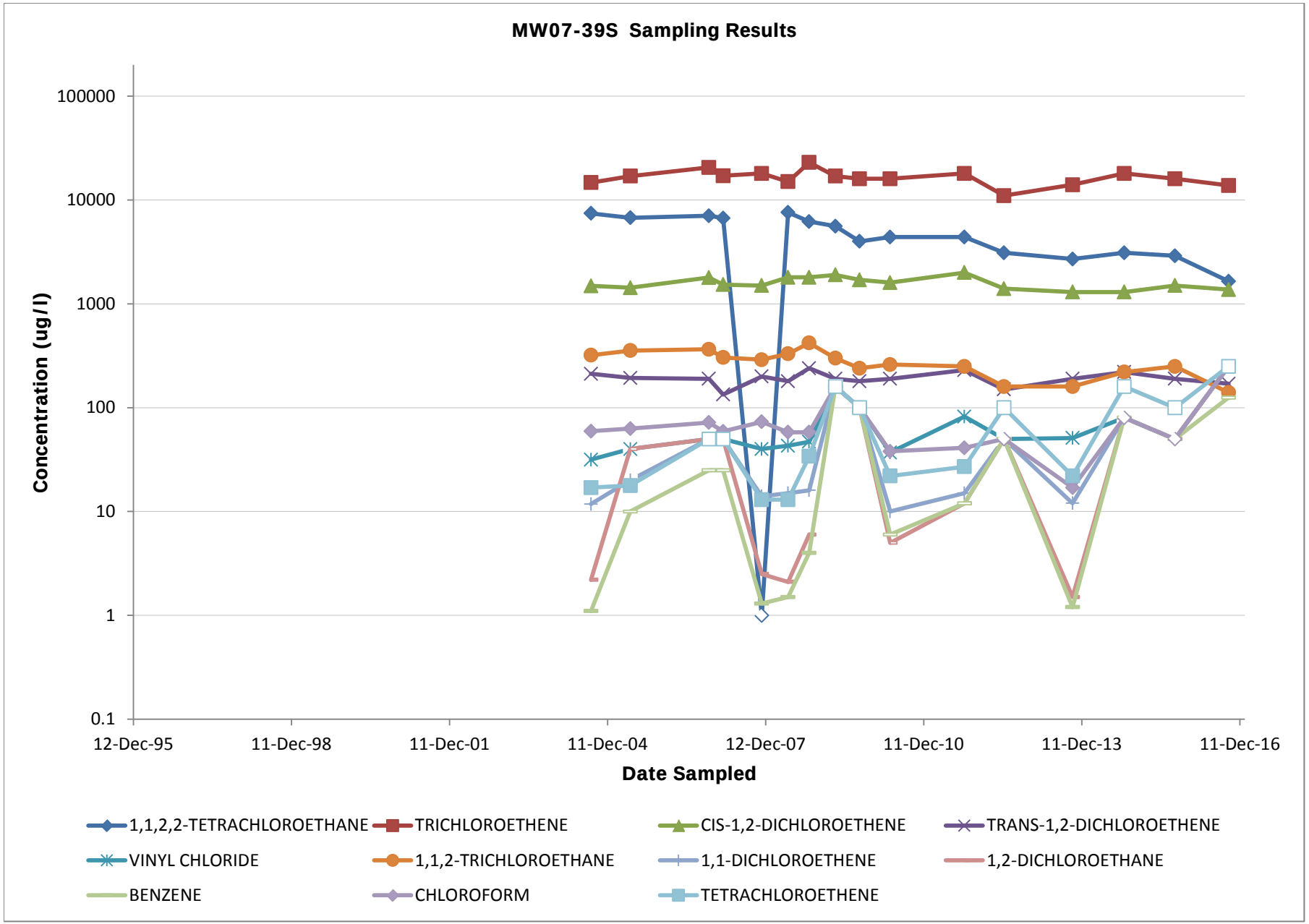

MW07-37S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

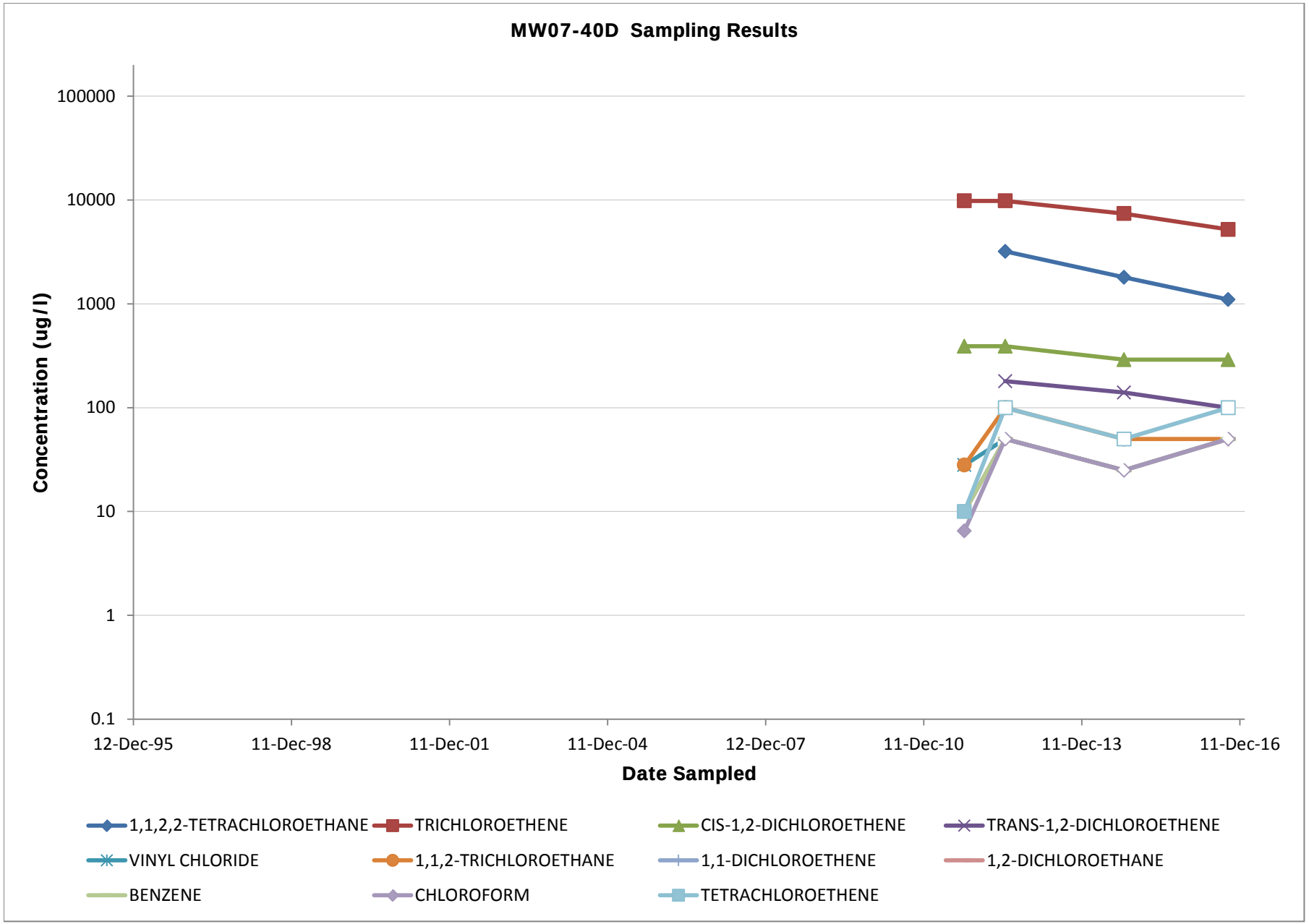

MW07-38D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

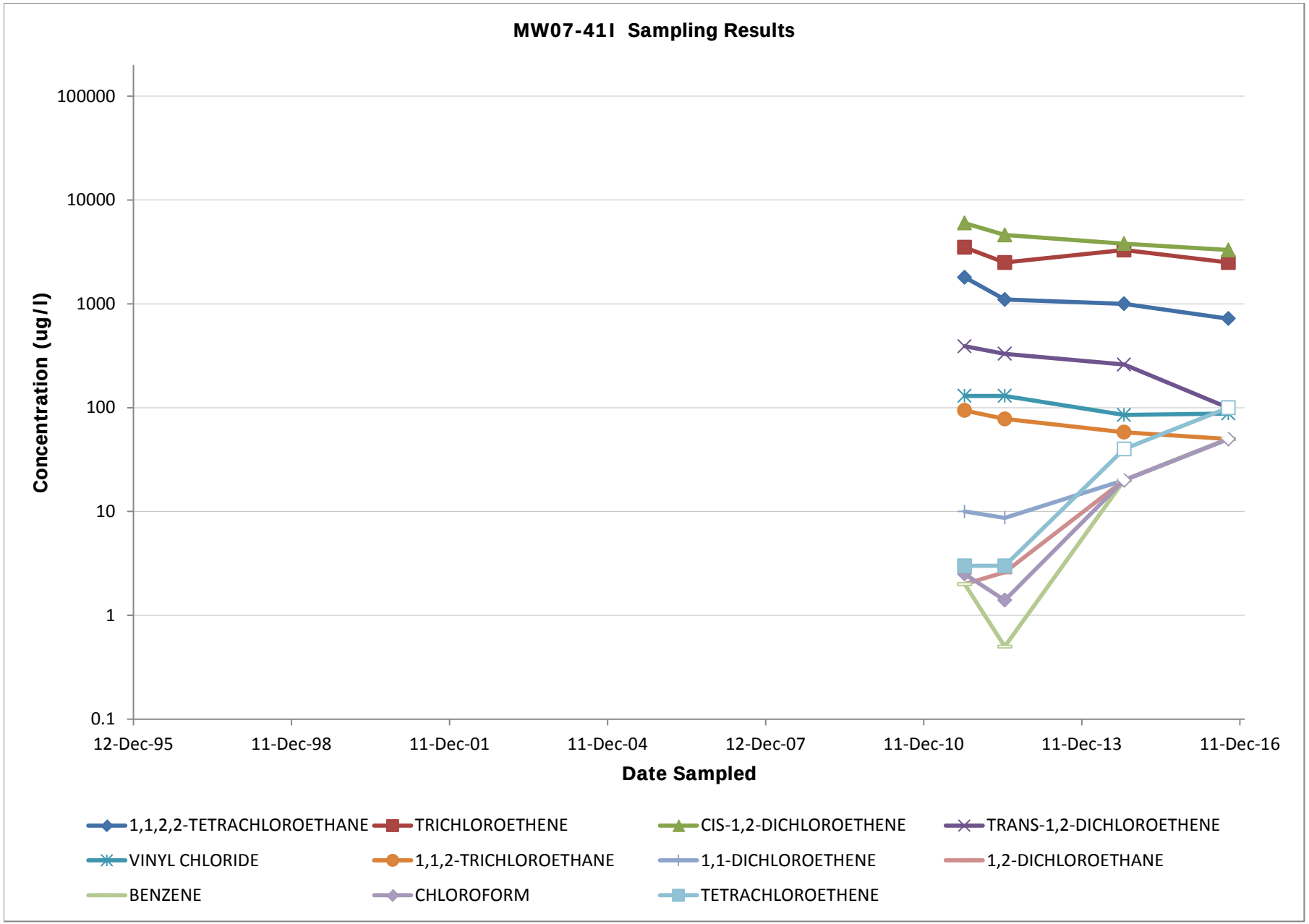

MW07-38S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

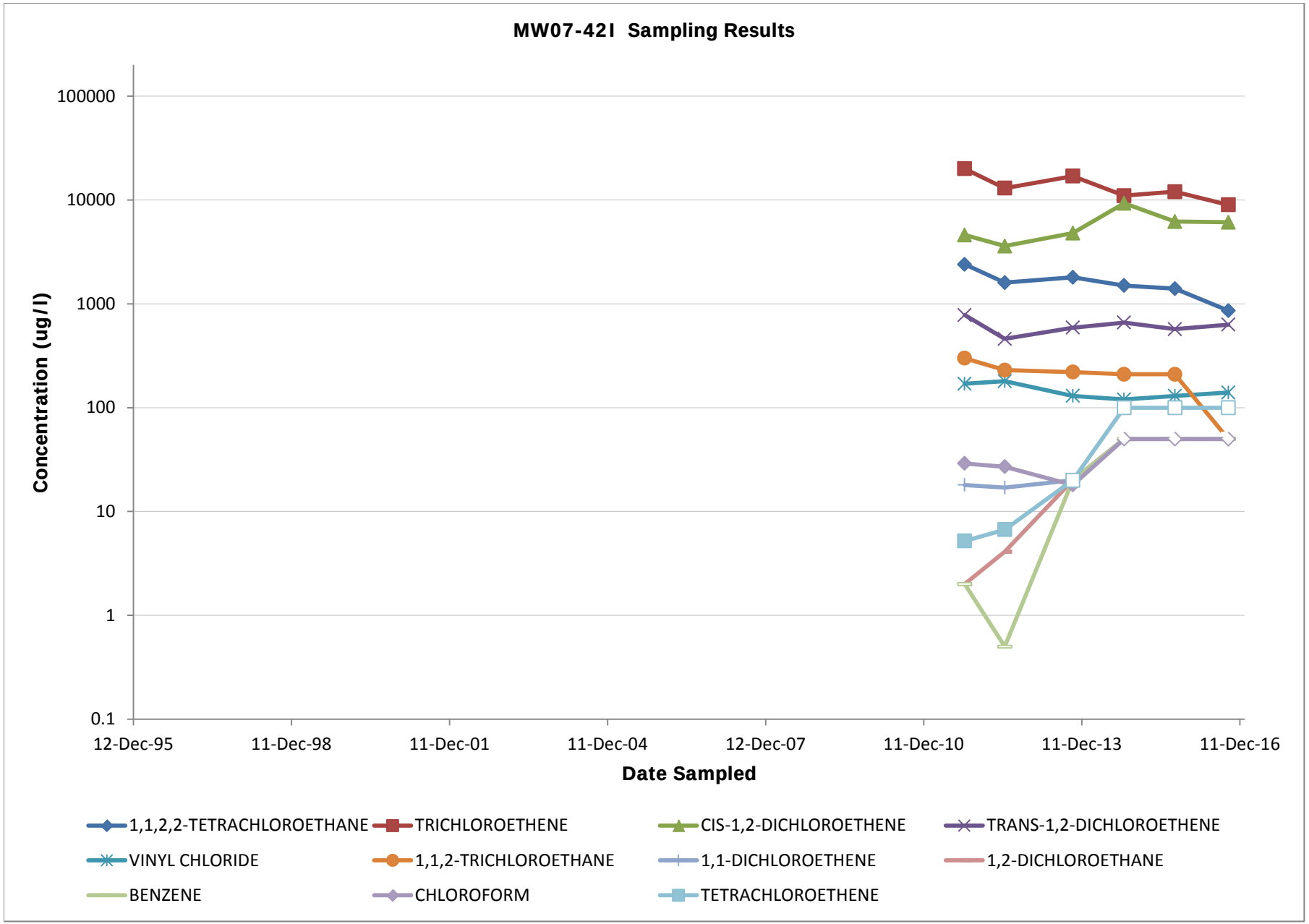

MW07-39D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

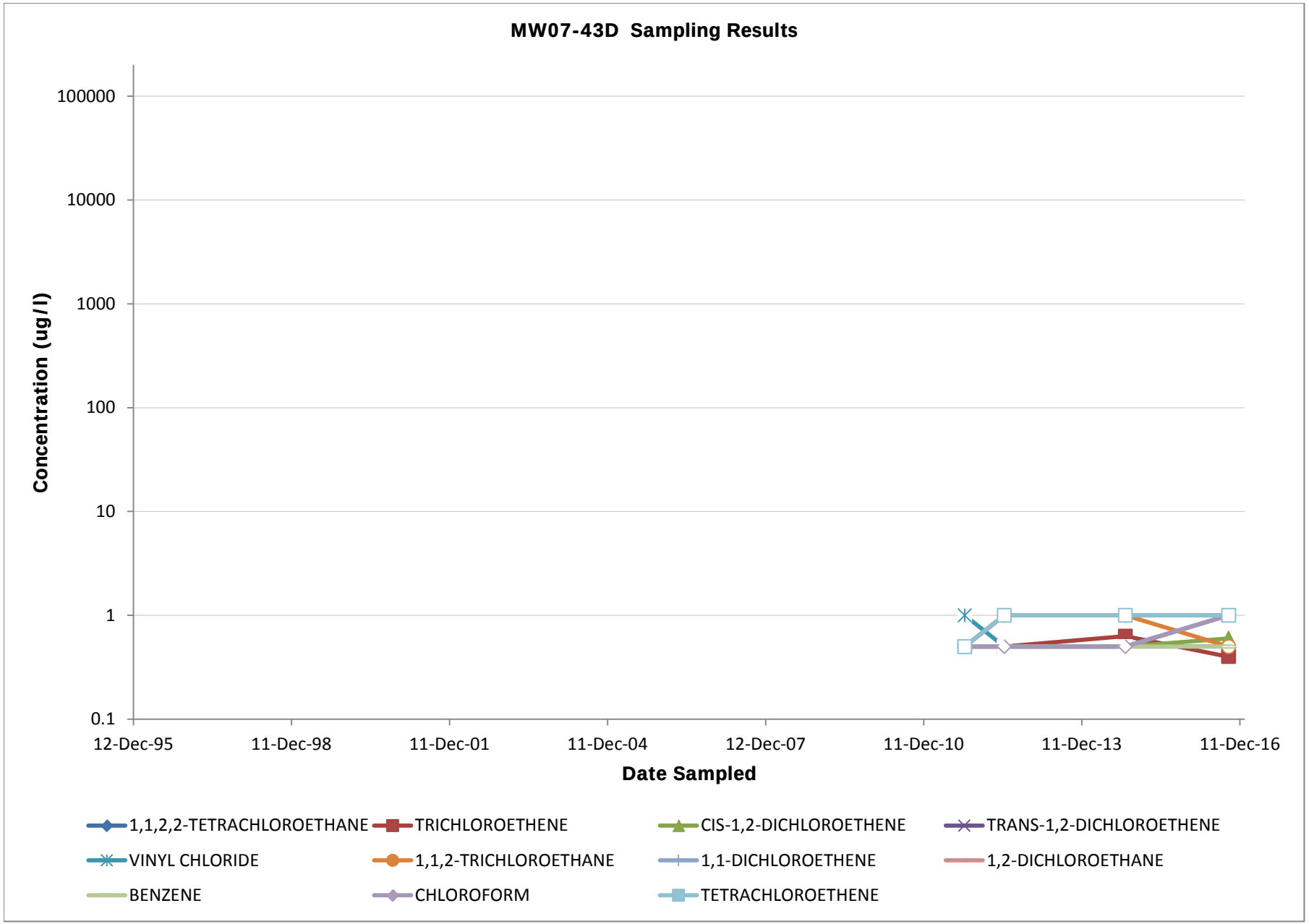

MW07-39I Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

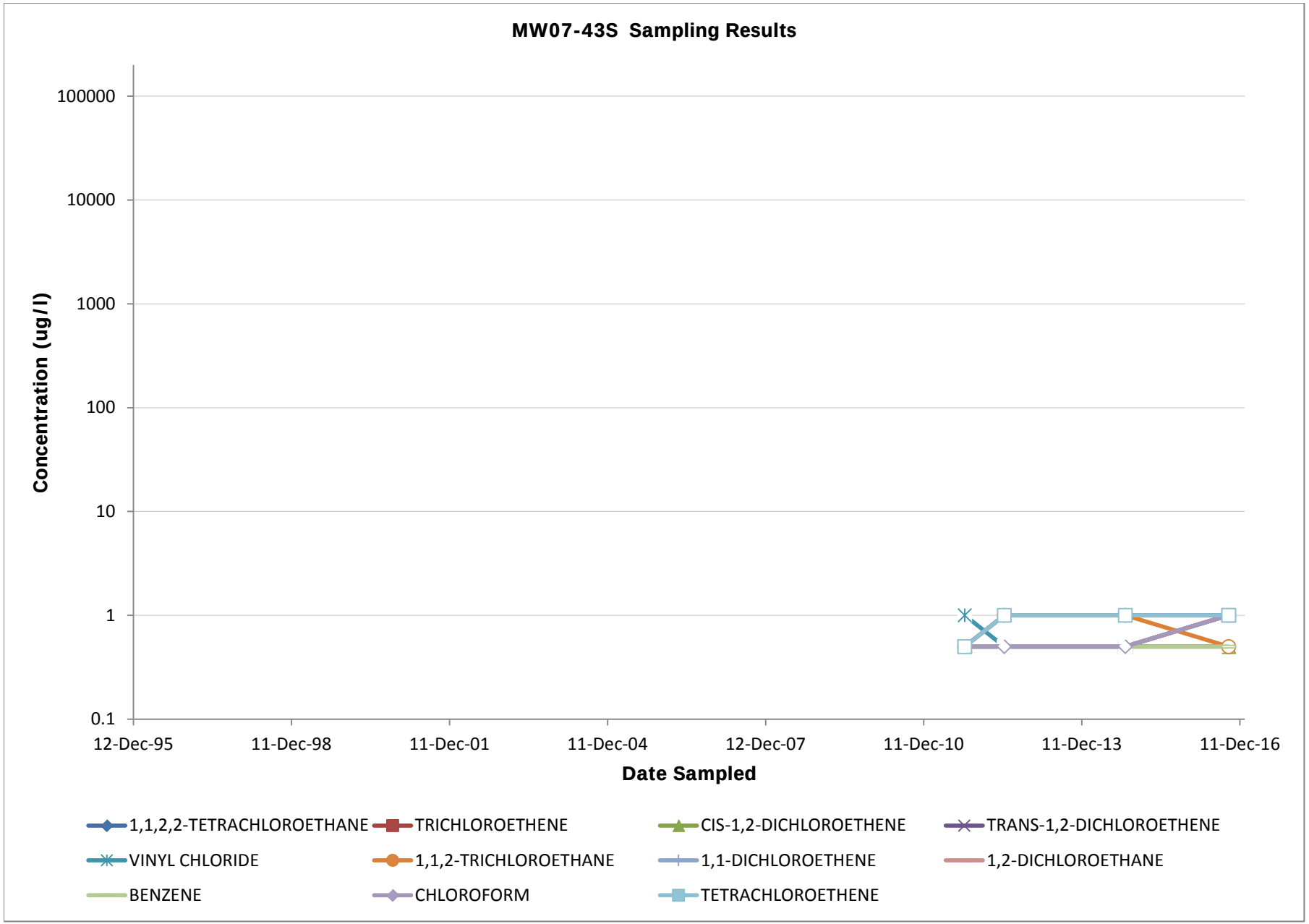

MW07-39S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

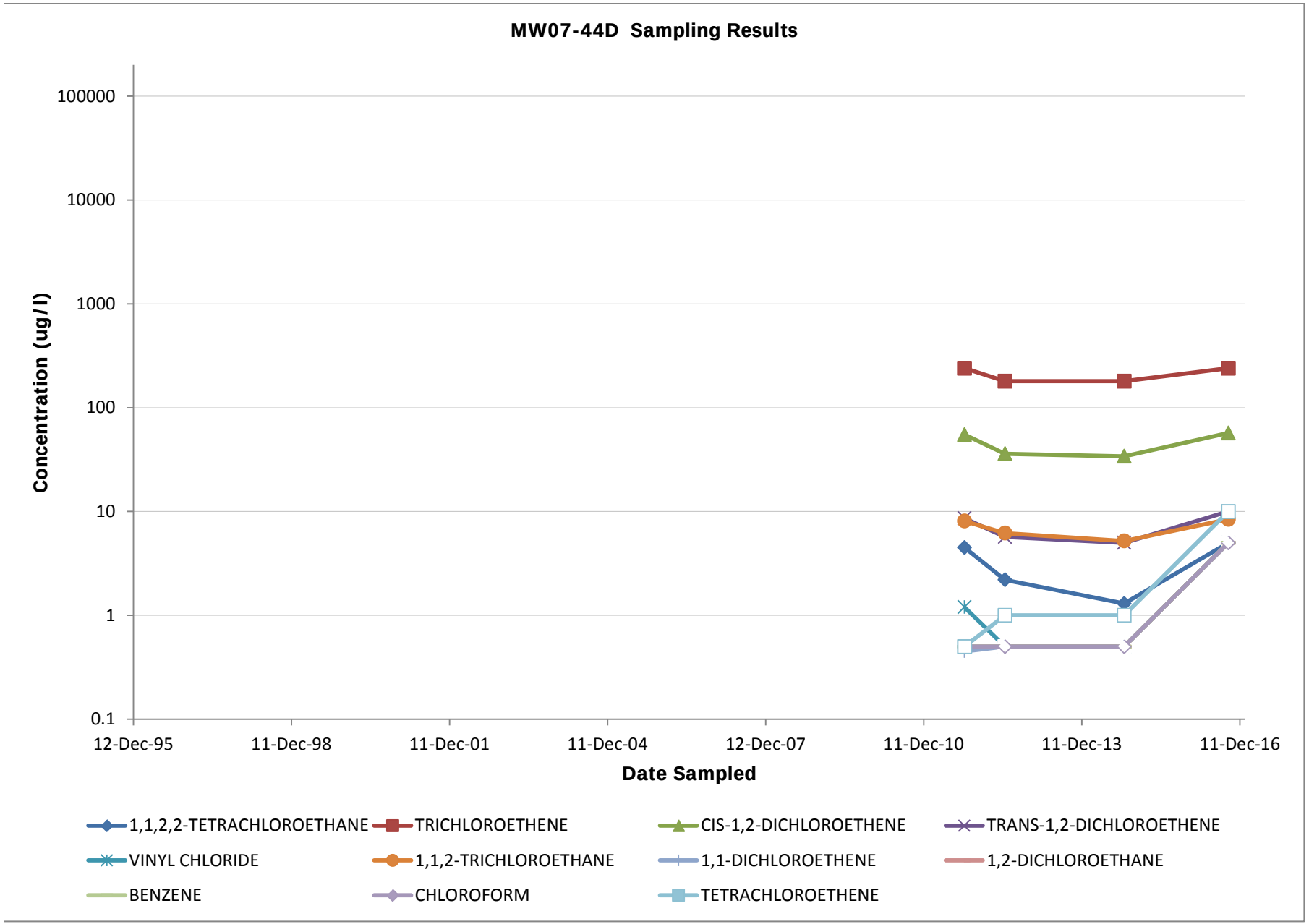

MW07-40D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

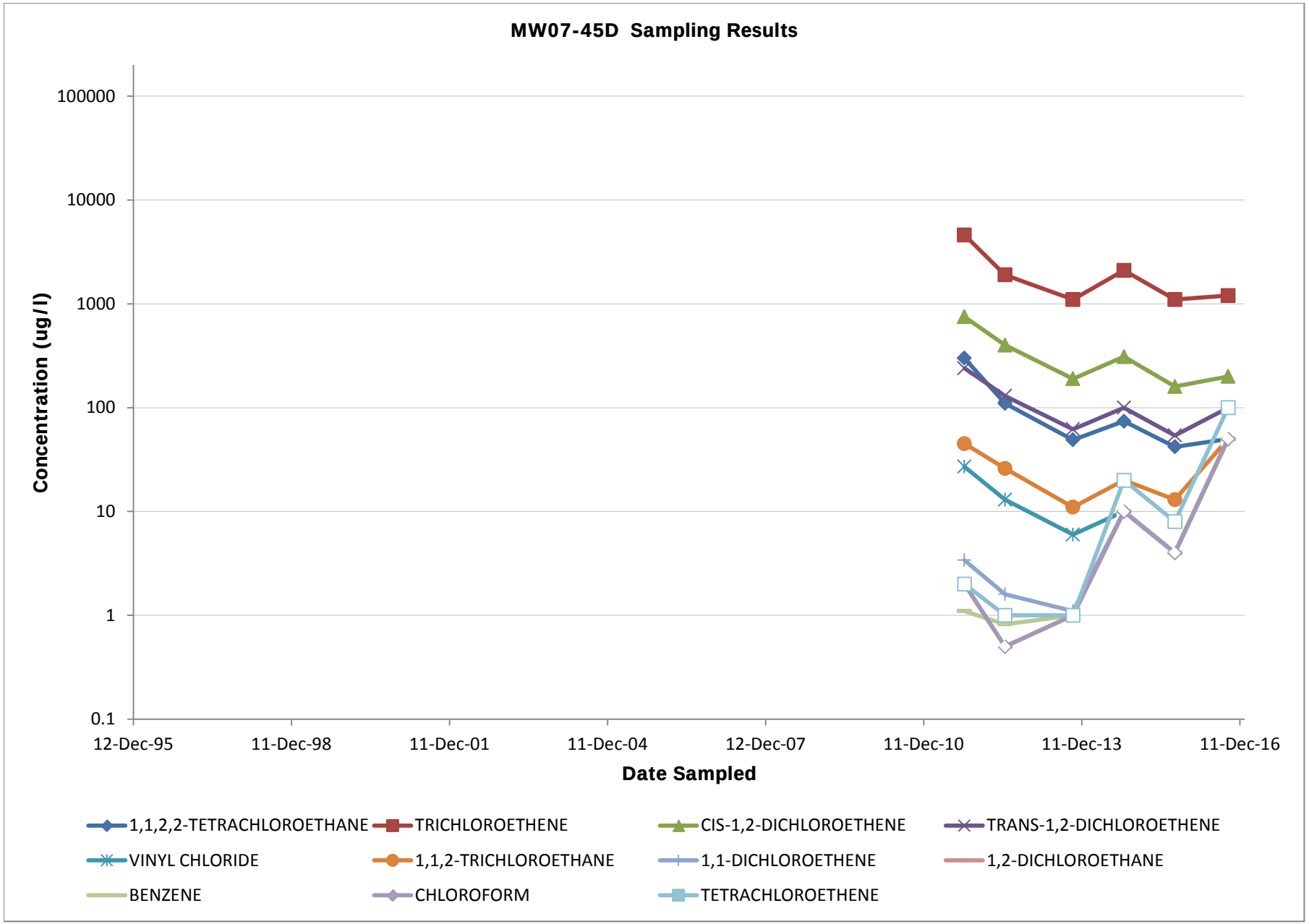

MW07-41I Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

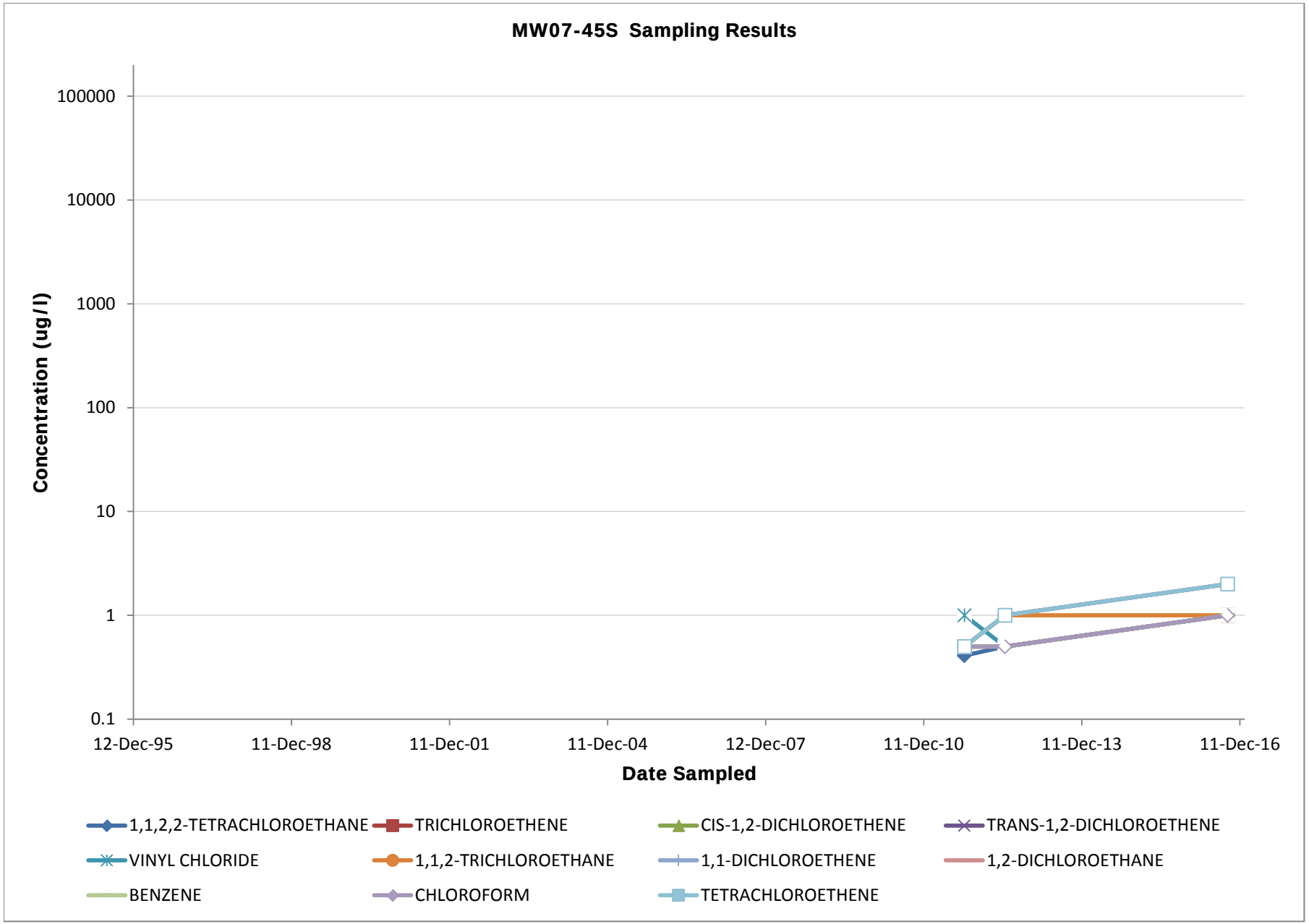

MW07-42I Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

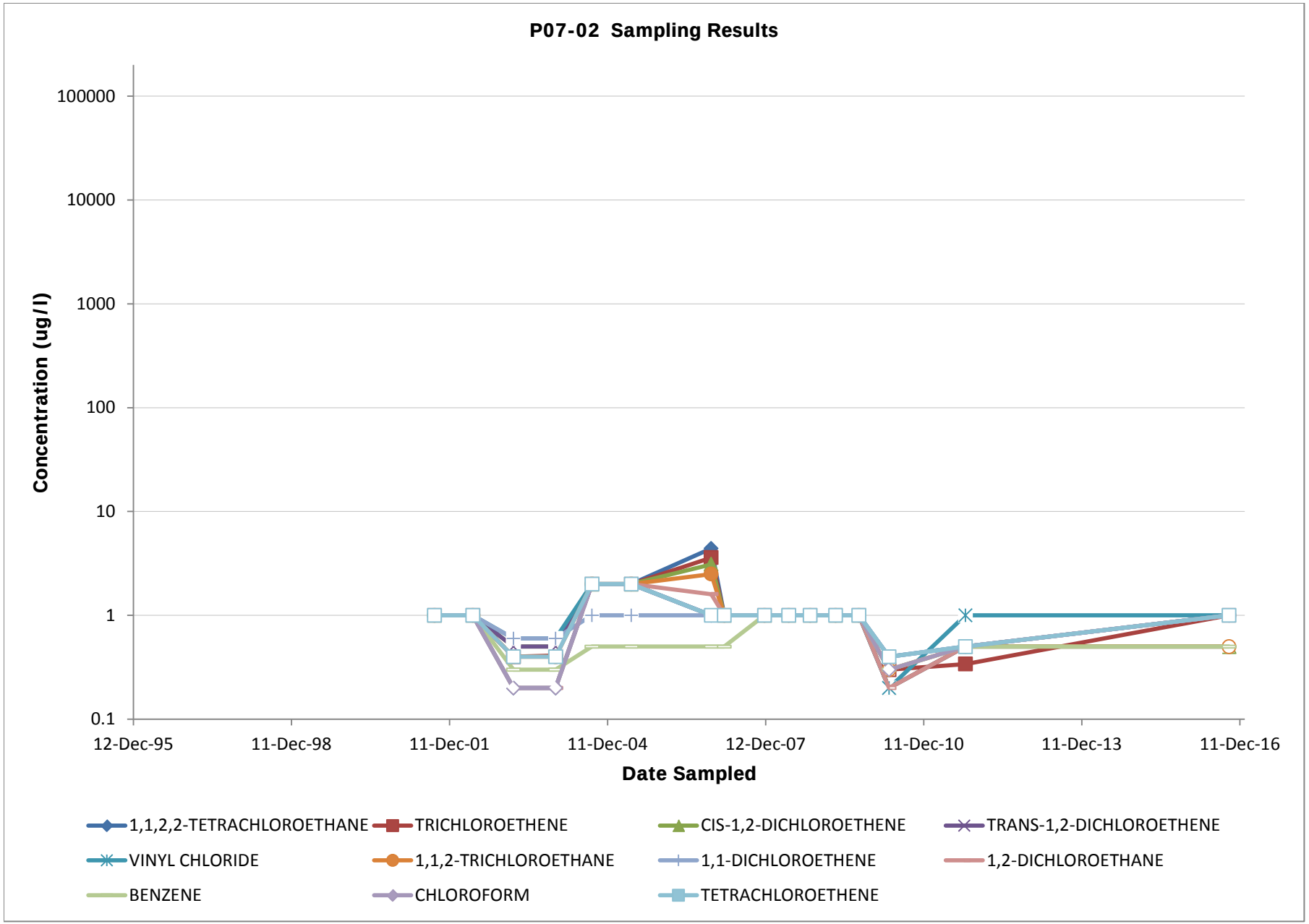

MW07-43D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

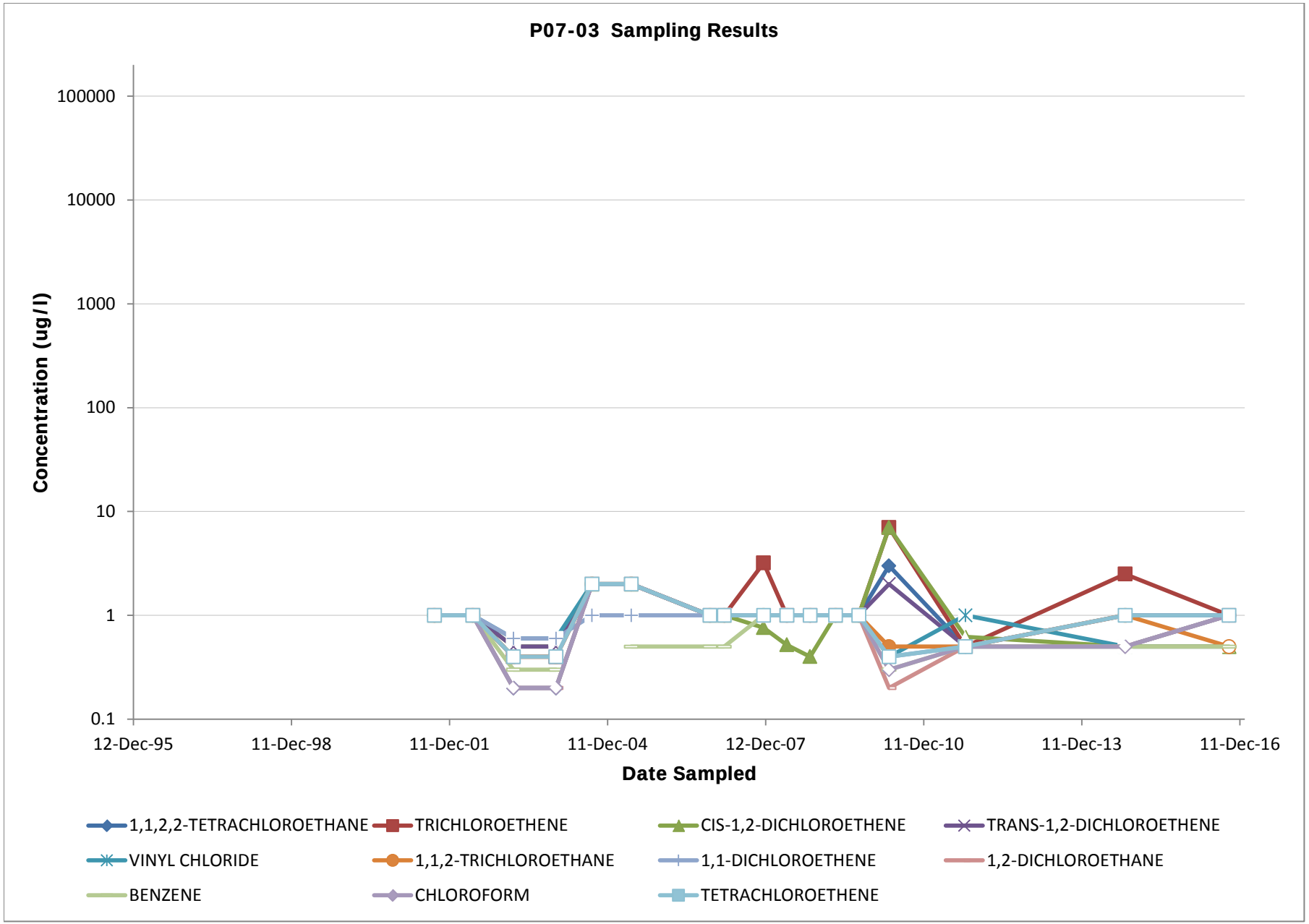

MW07-43S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

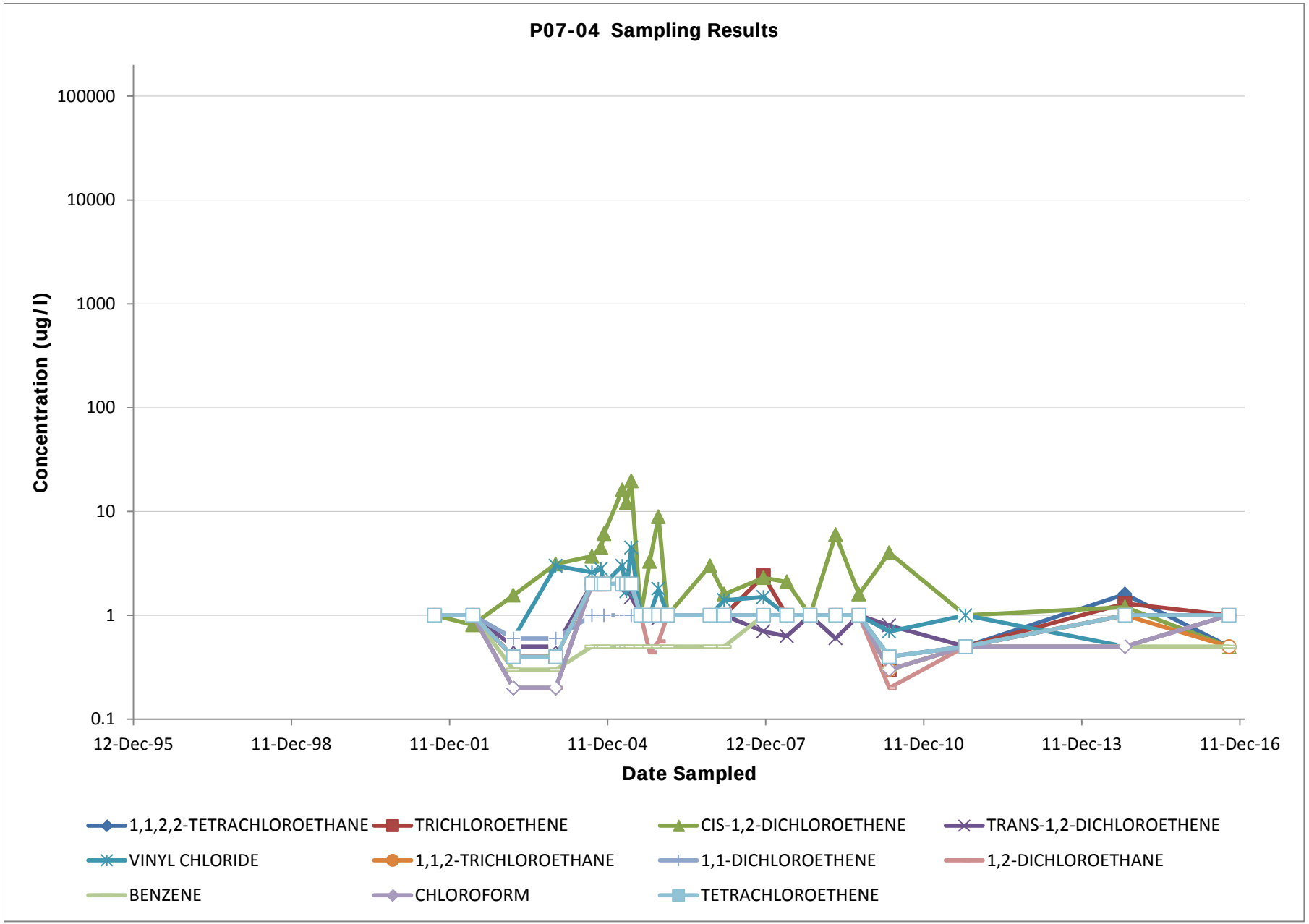

MW07-44D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

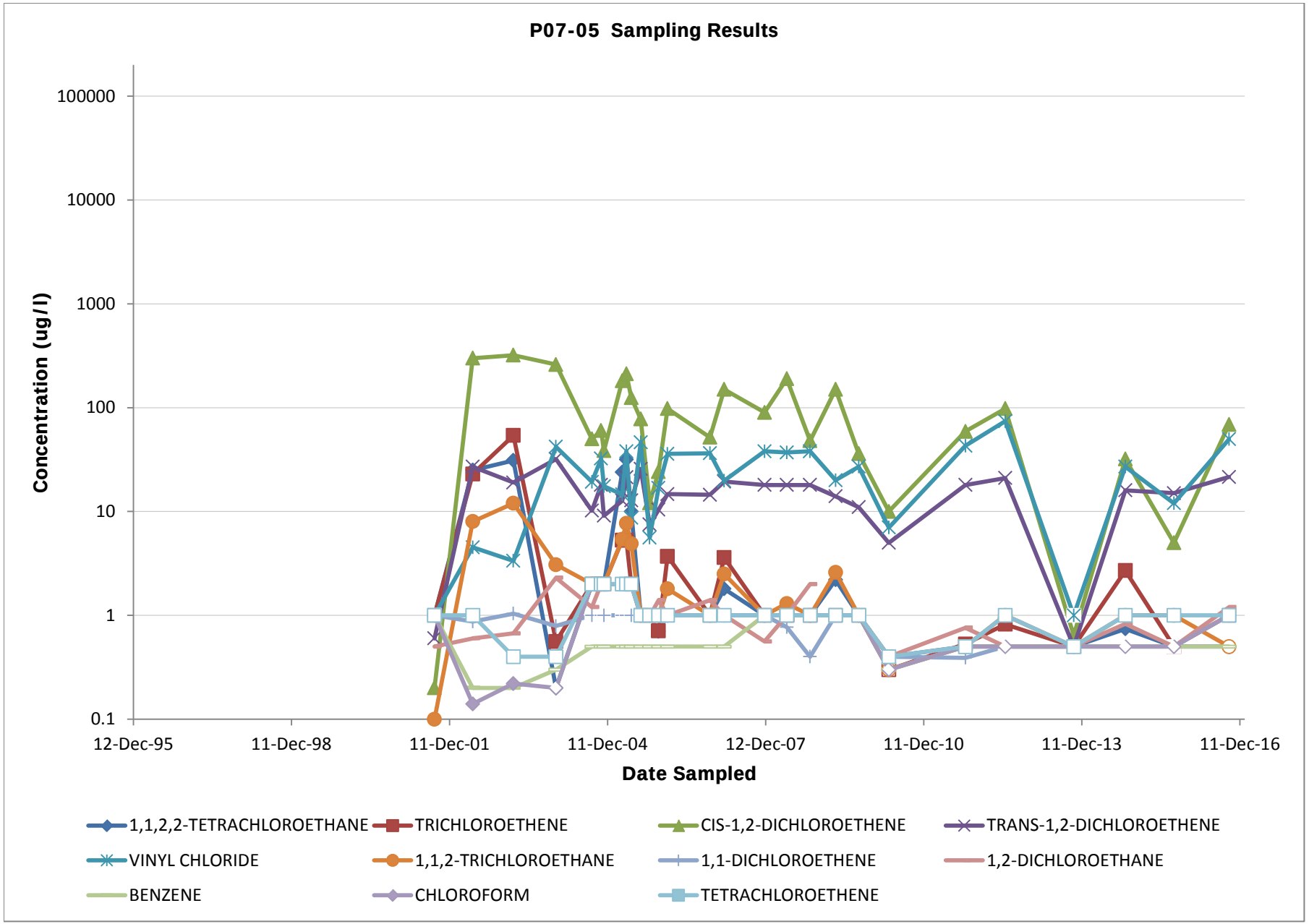

MW07-45D Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

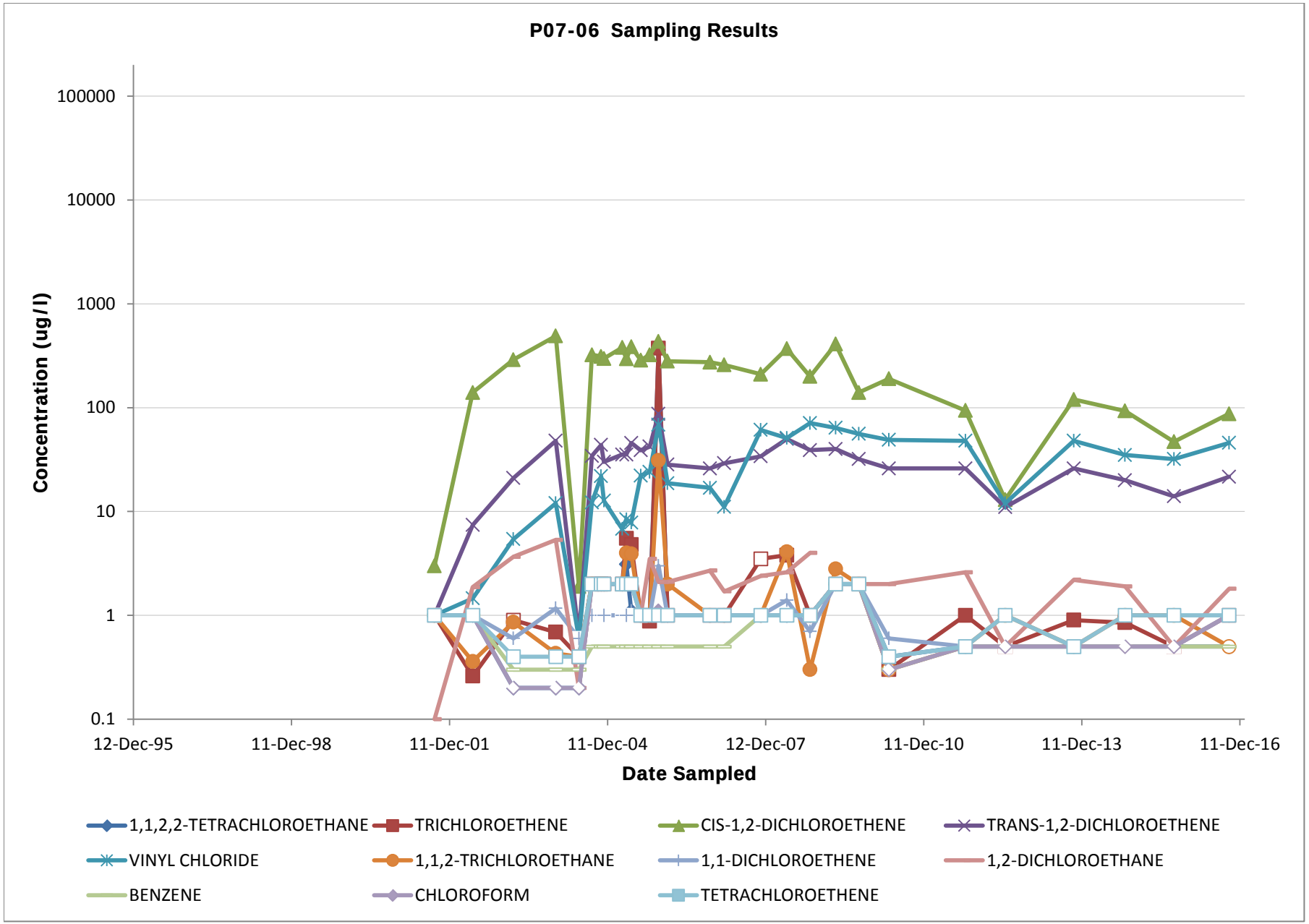

MW07-45S Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

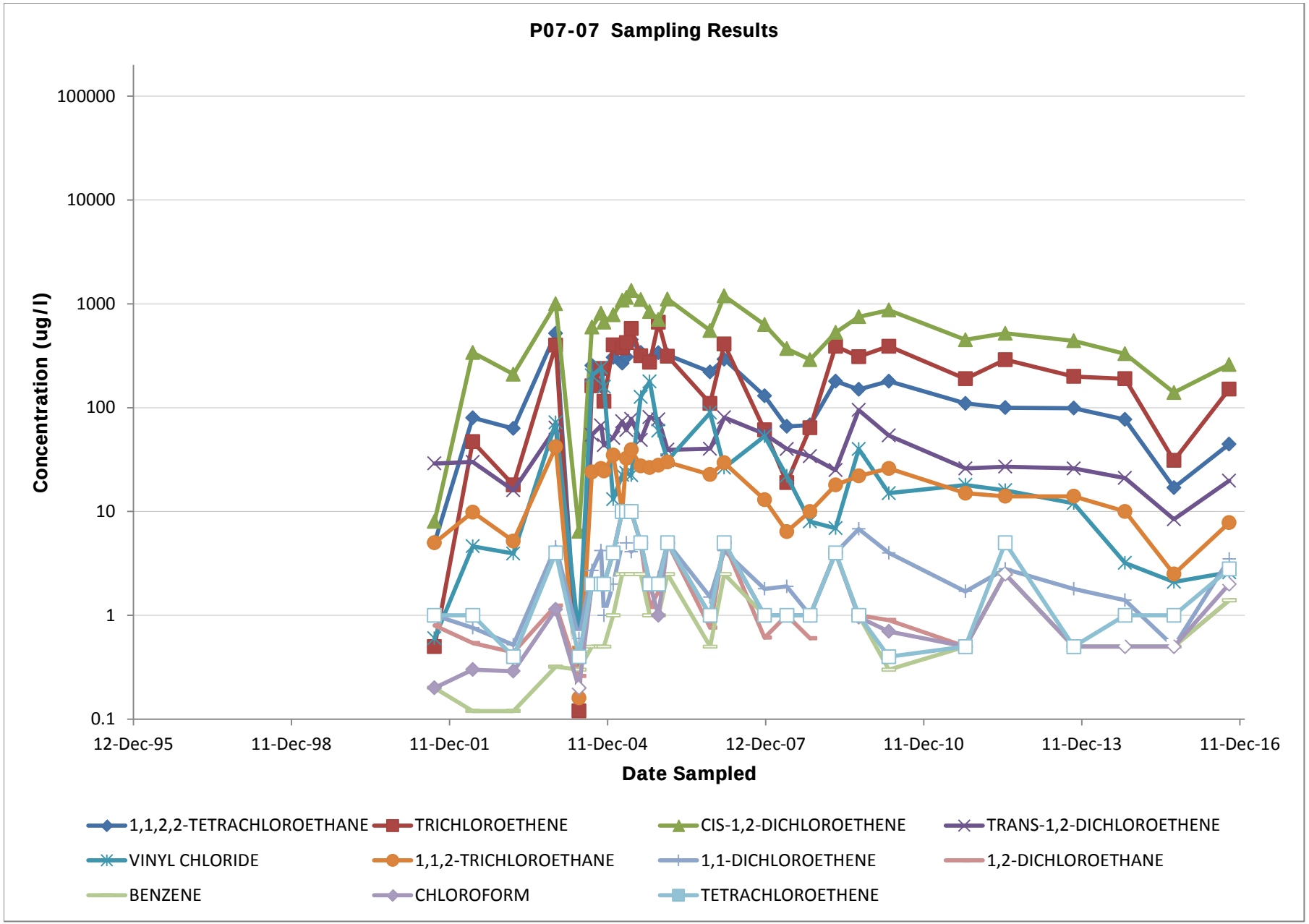

P07-02 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

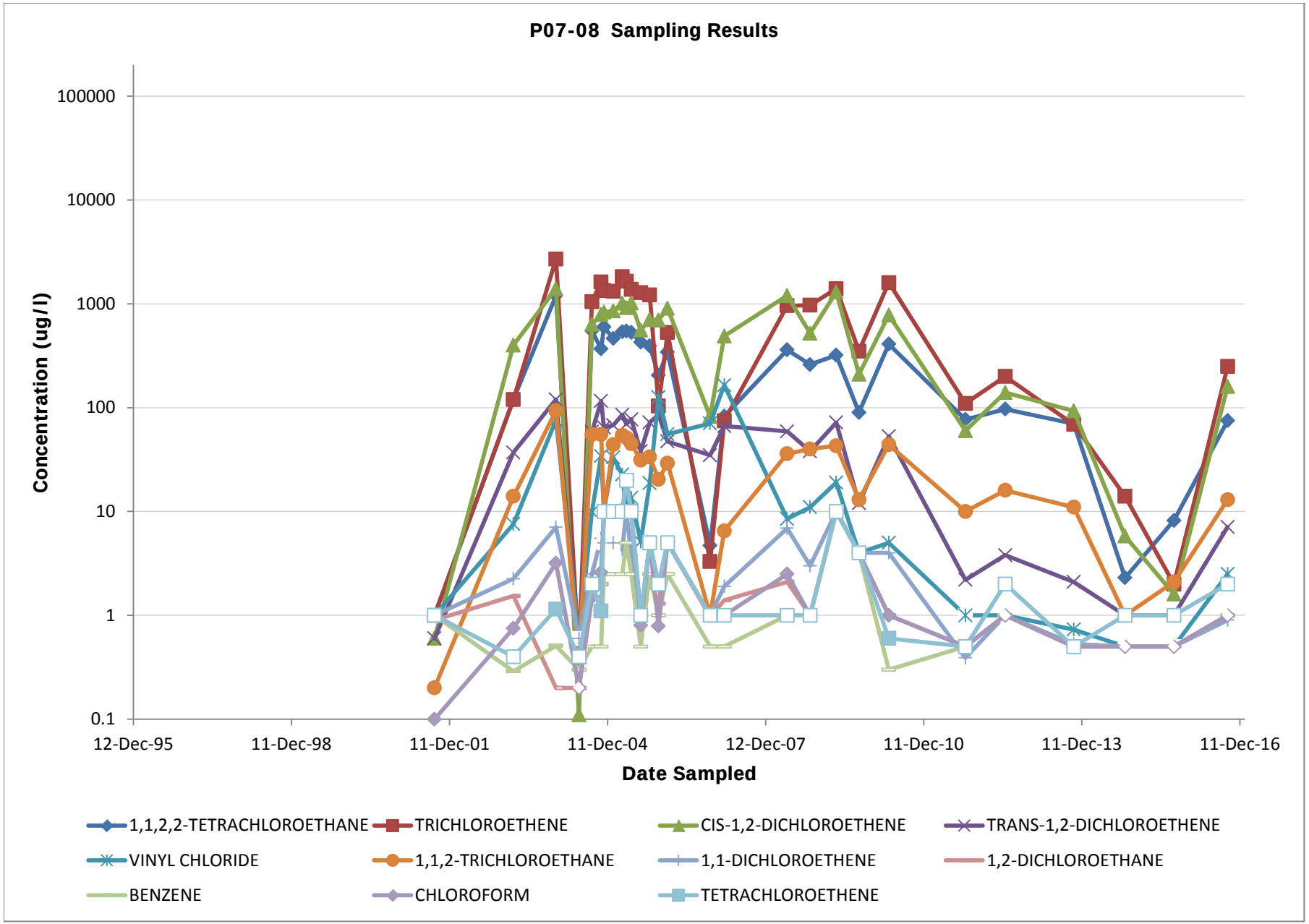

P07-03 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

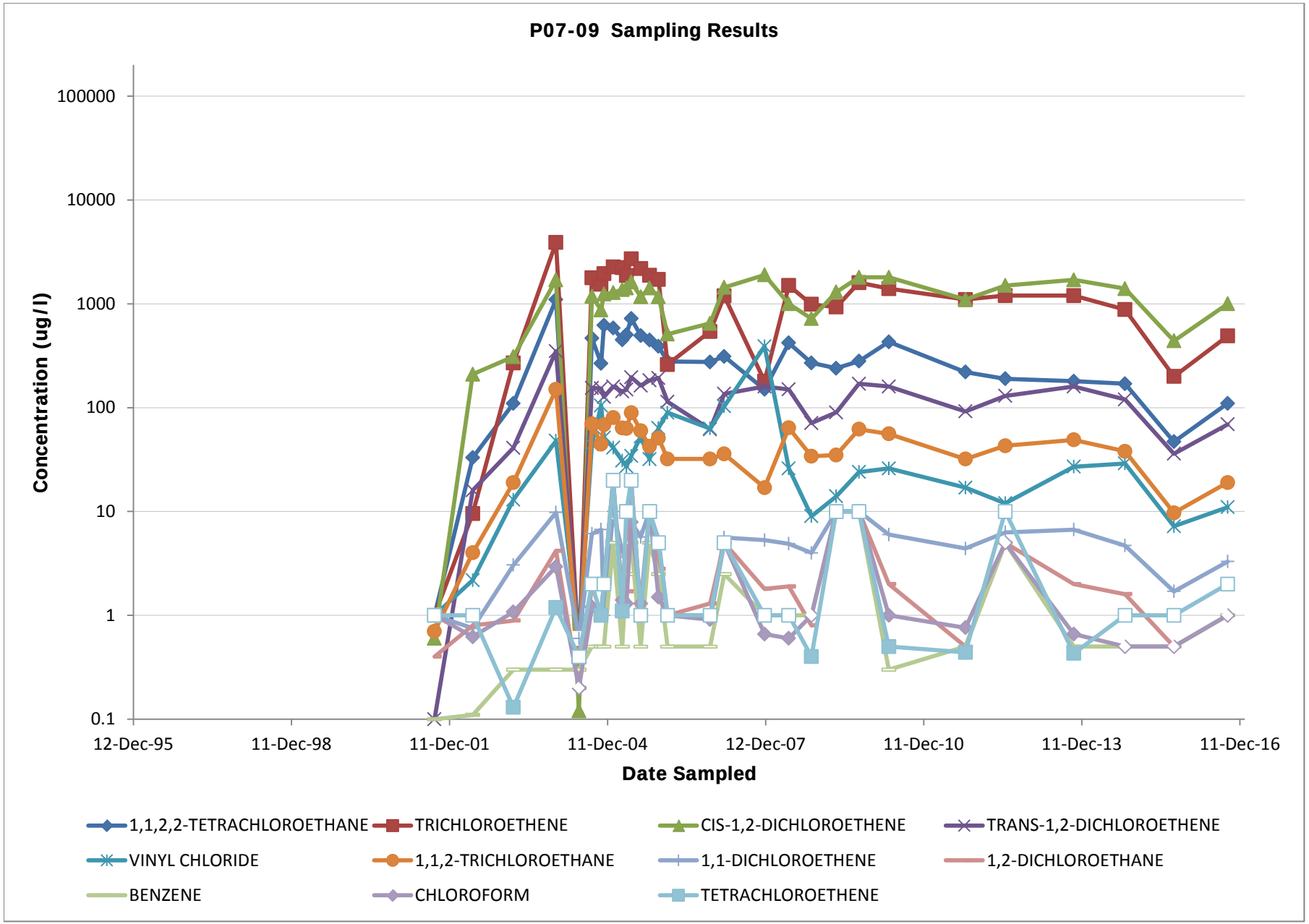

P07-04 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

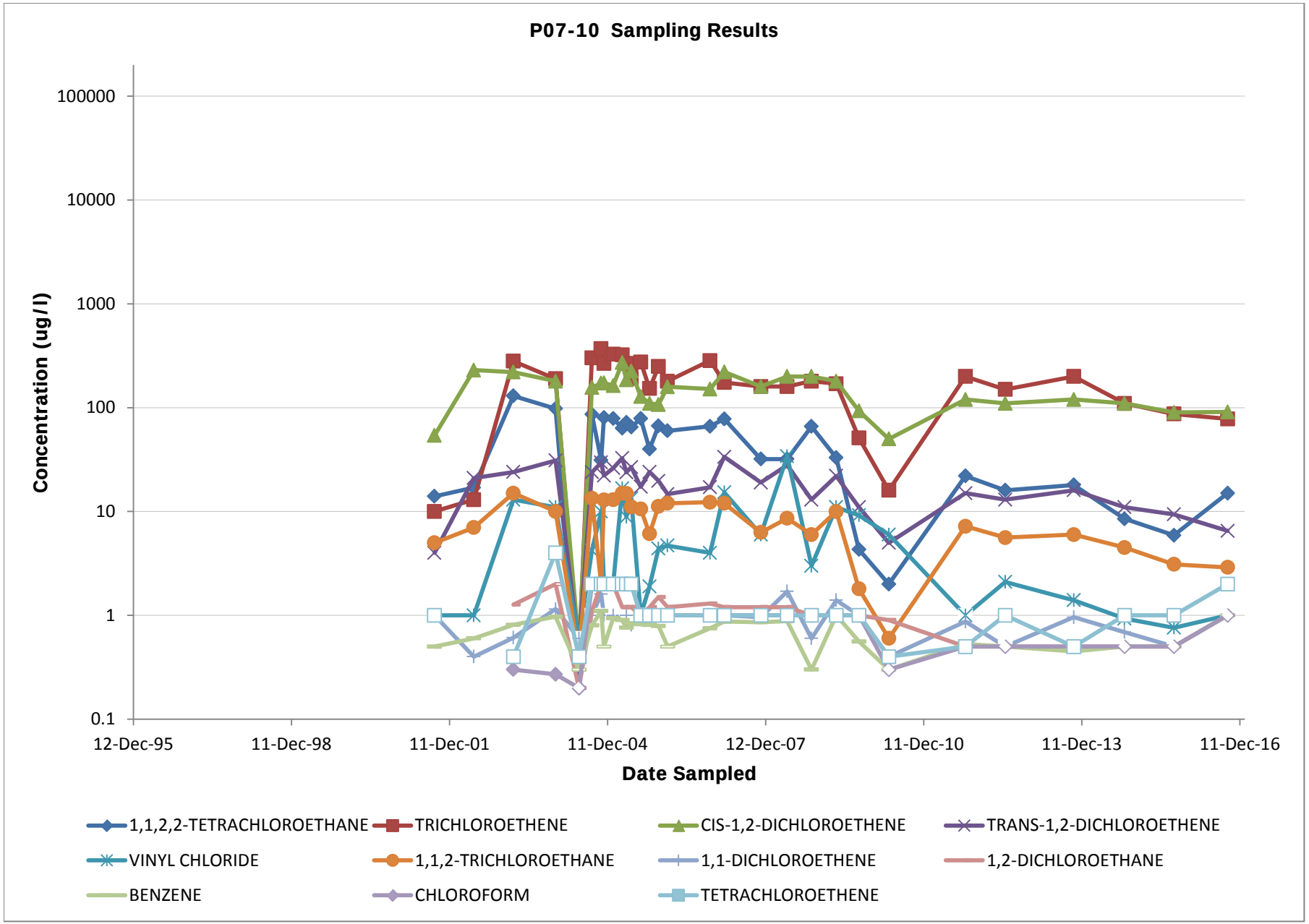

P07-05 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

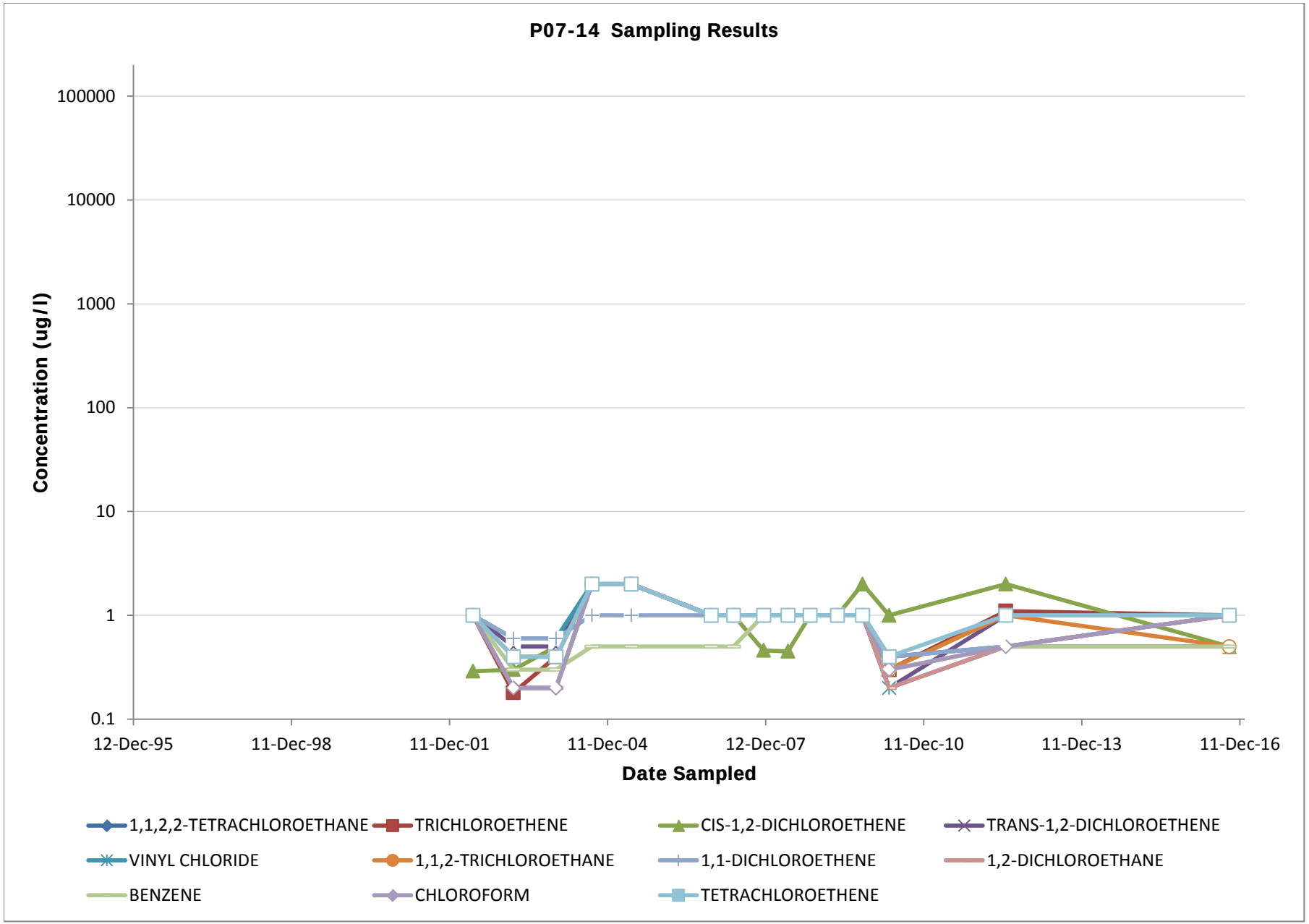

P07-06 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

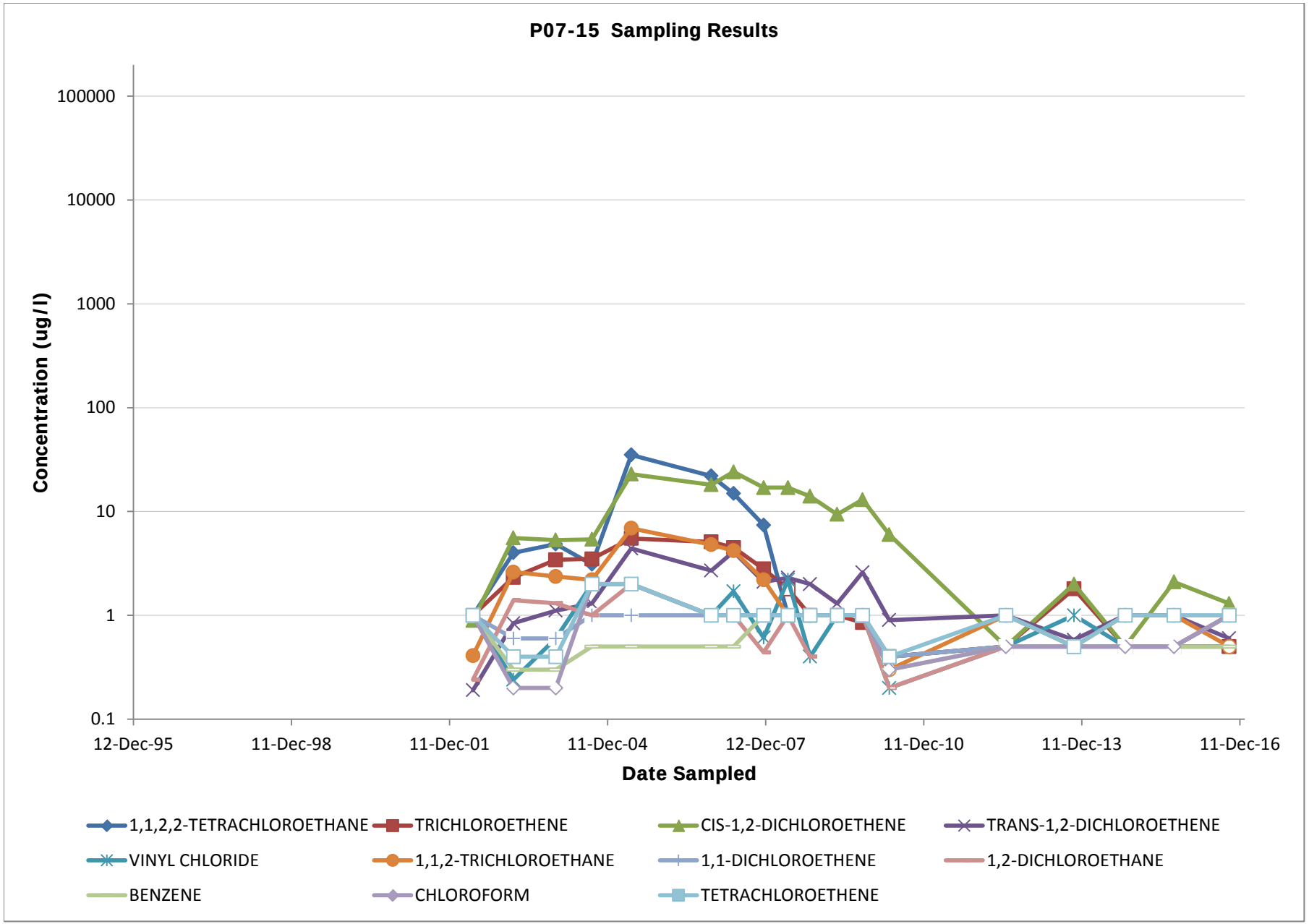

P07-07 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

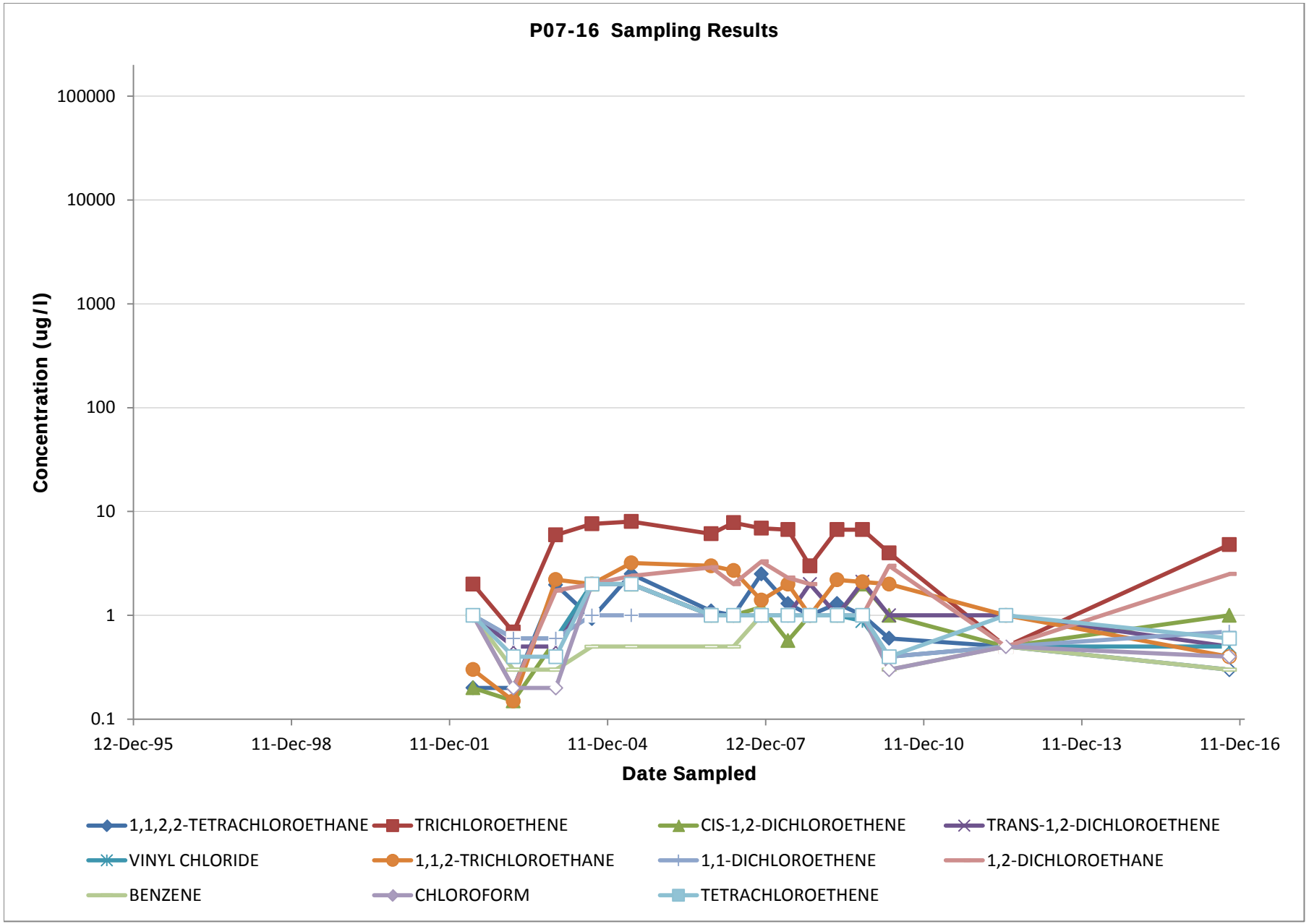

P07-08 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

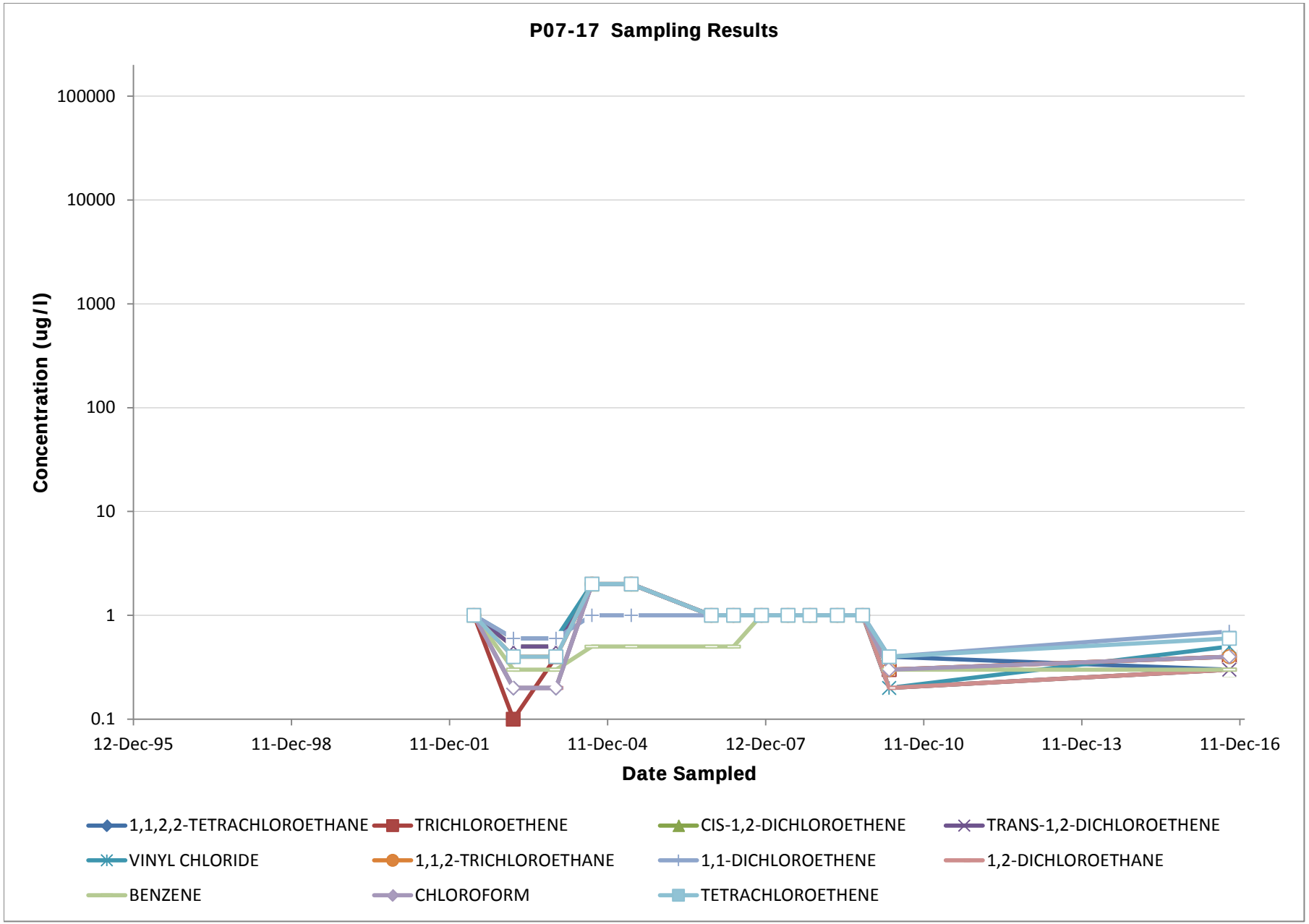

P07-09 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

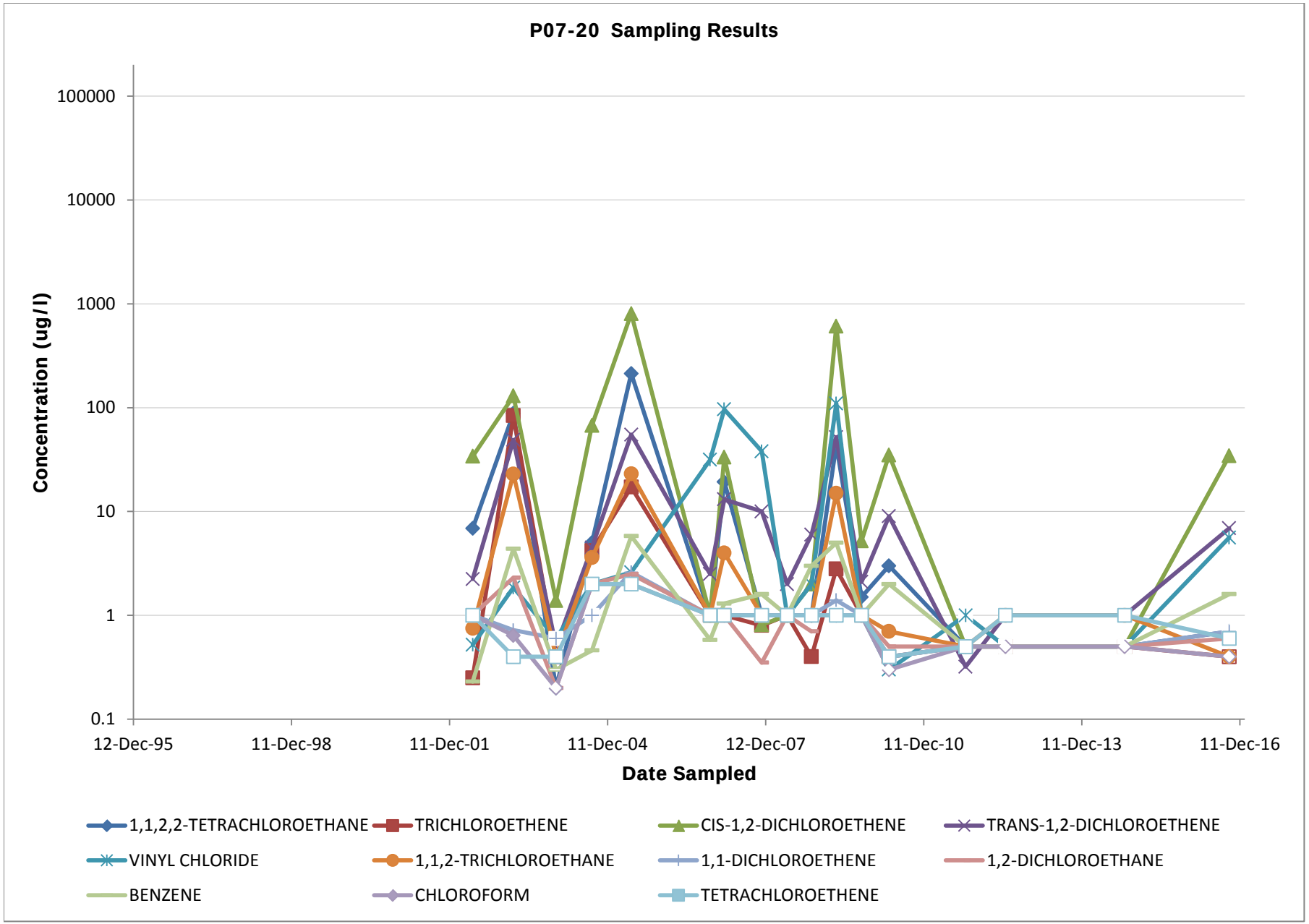

P07-10 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

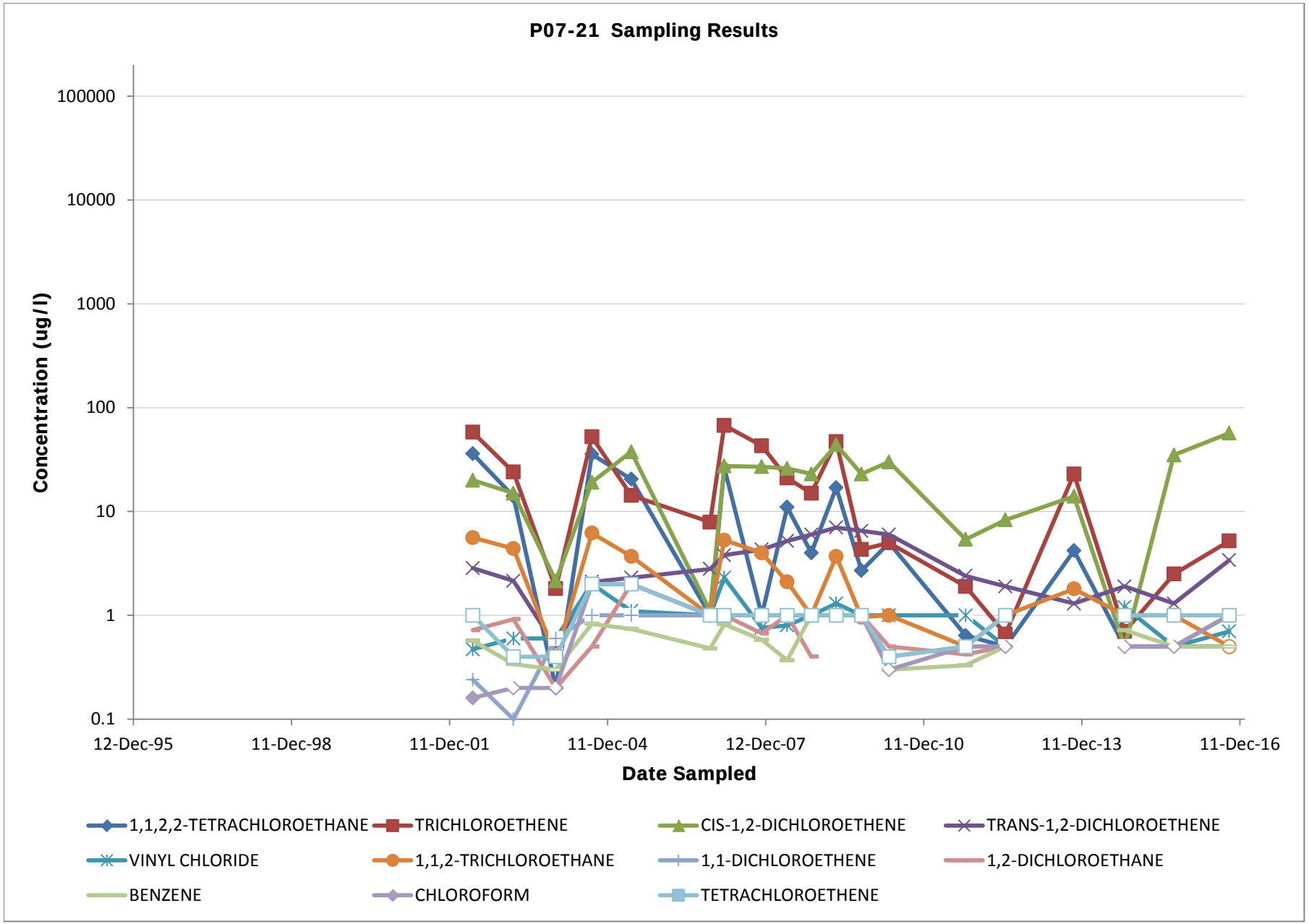

P07-14 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

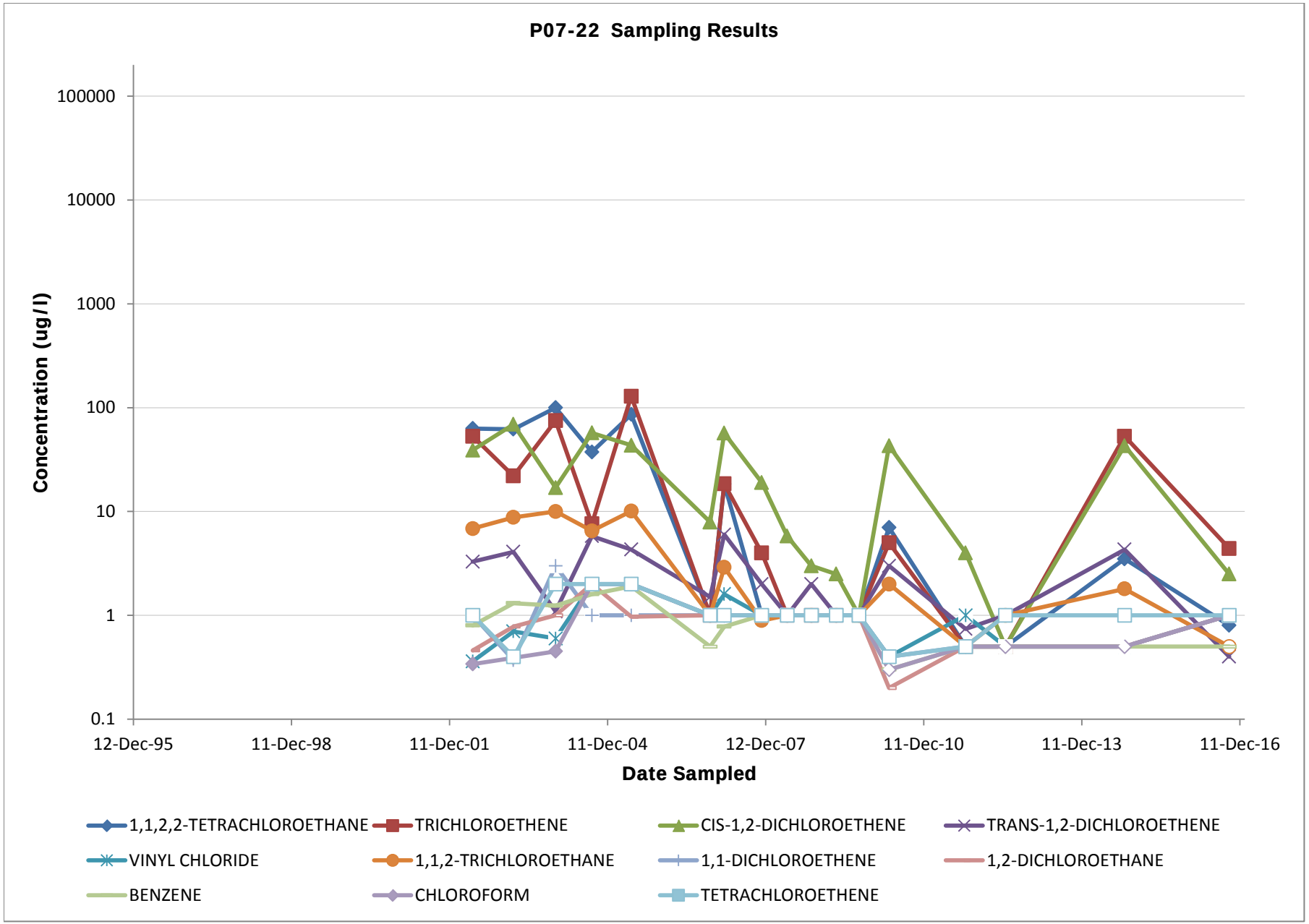

P07-15 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

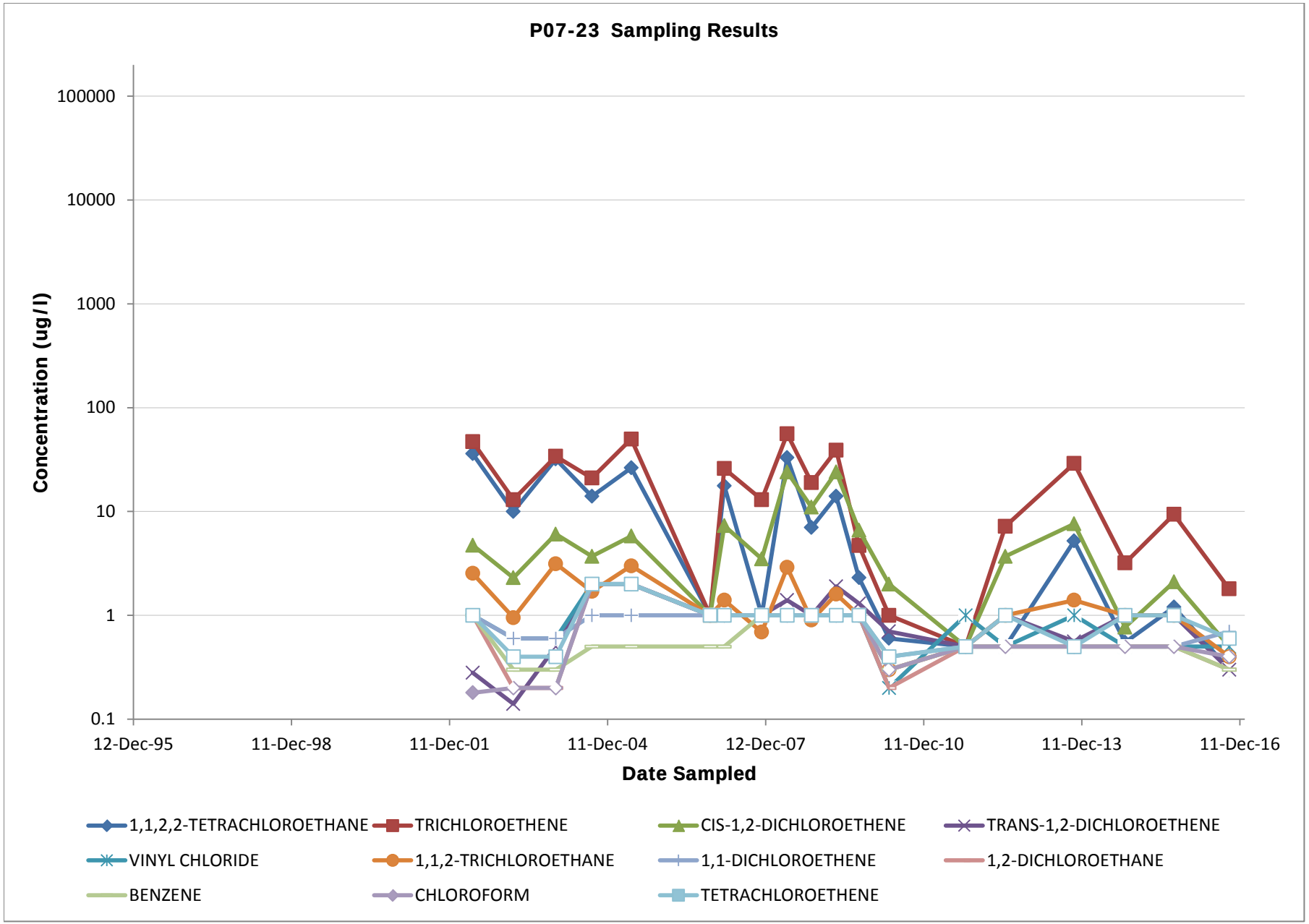

P07-16 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

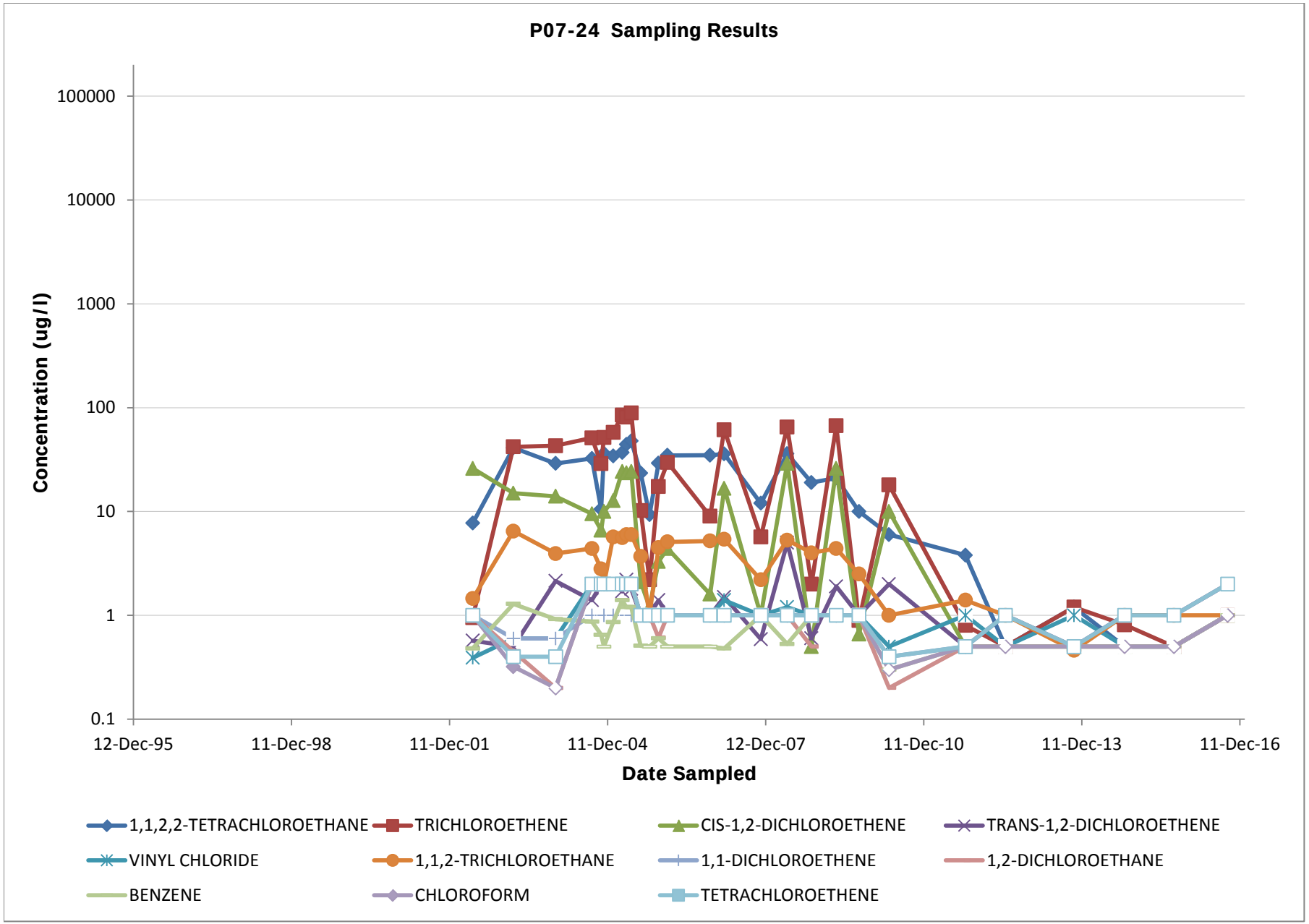

P07-17 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

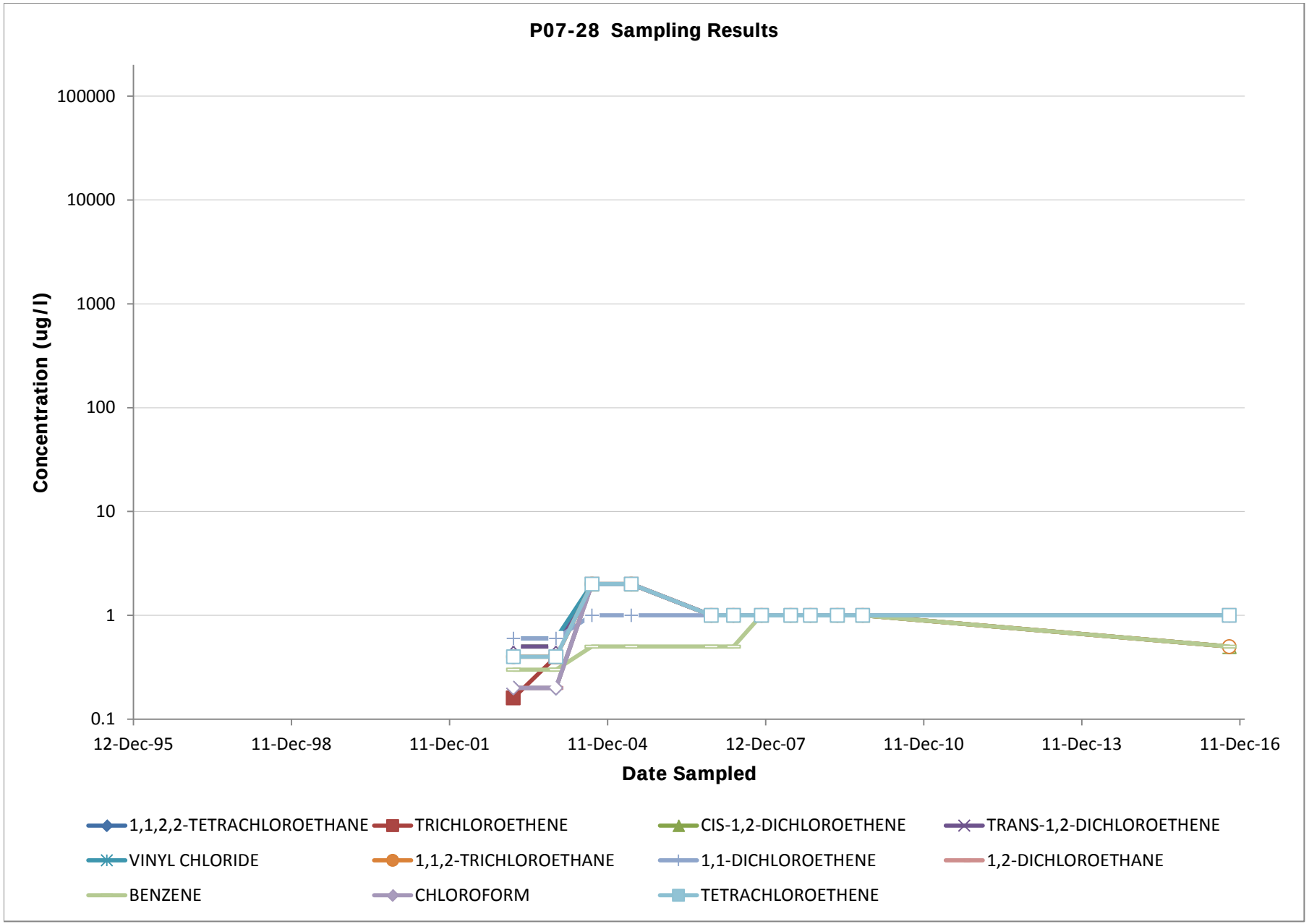

P07-20 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

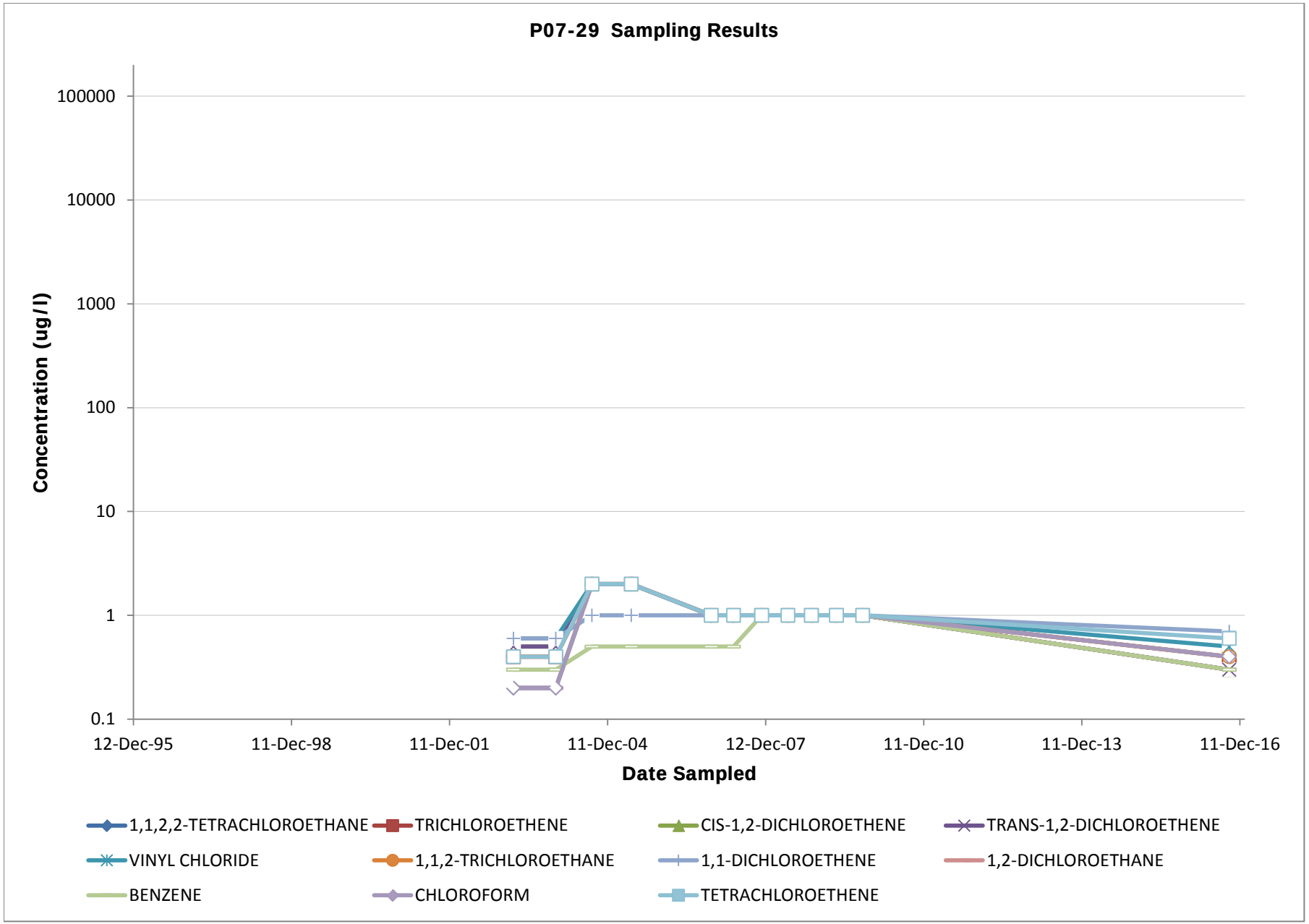

P07-21 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE


P07-22 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE


P07-23 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE


P07-24 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

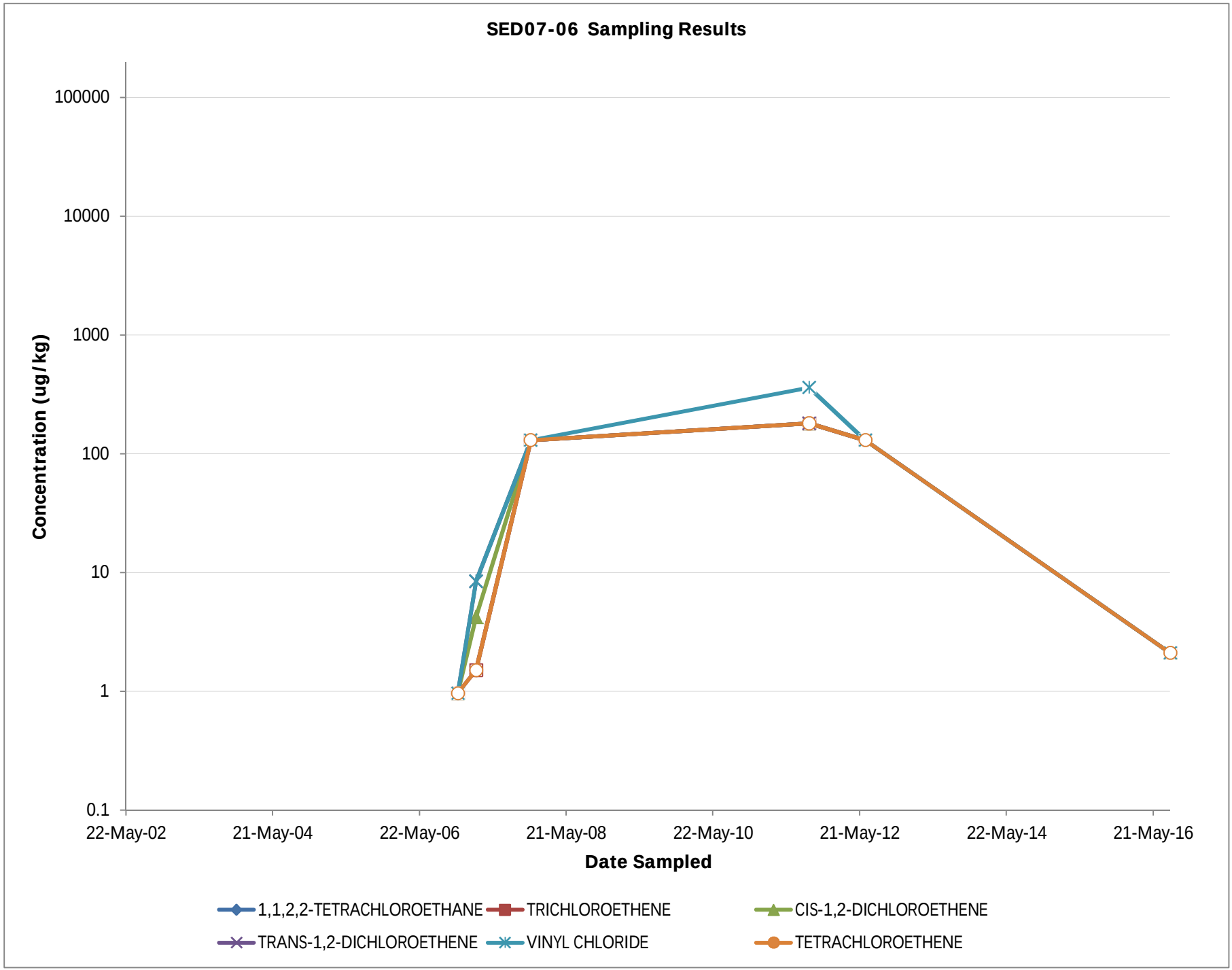

P07-28 Sampling Results
Concentration (ug/l)
100000
10000
1000
100
10
1
0.1
12-Dec-95
11-Dec-98
11-Dec-01
11-Dec-04
12-Dec-07
11-Dec-10
11-Dec-13
11-Dec-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
1,1,2-TRICHLOROETHANE
1,1-DICHLOROETHENE
1,2-DICHLOROETHANE
BENZENE
CHLOROFORM
TETRACHLOROETHENE

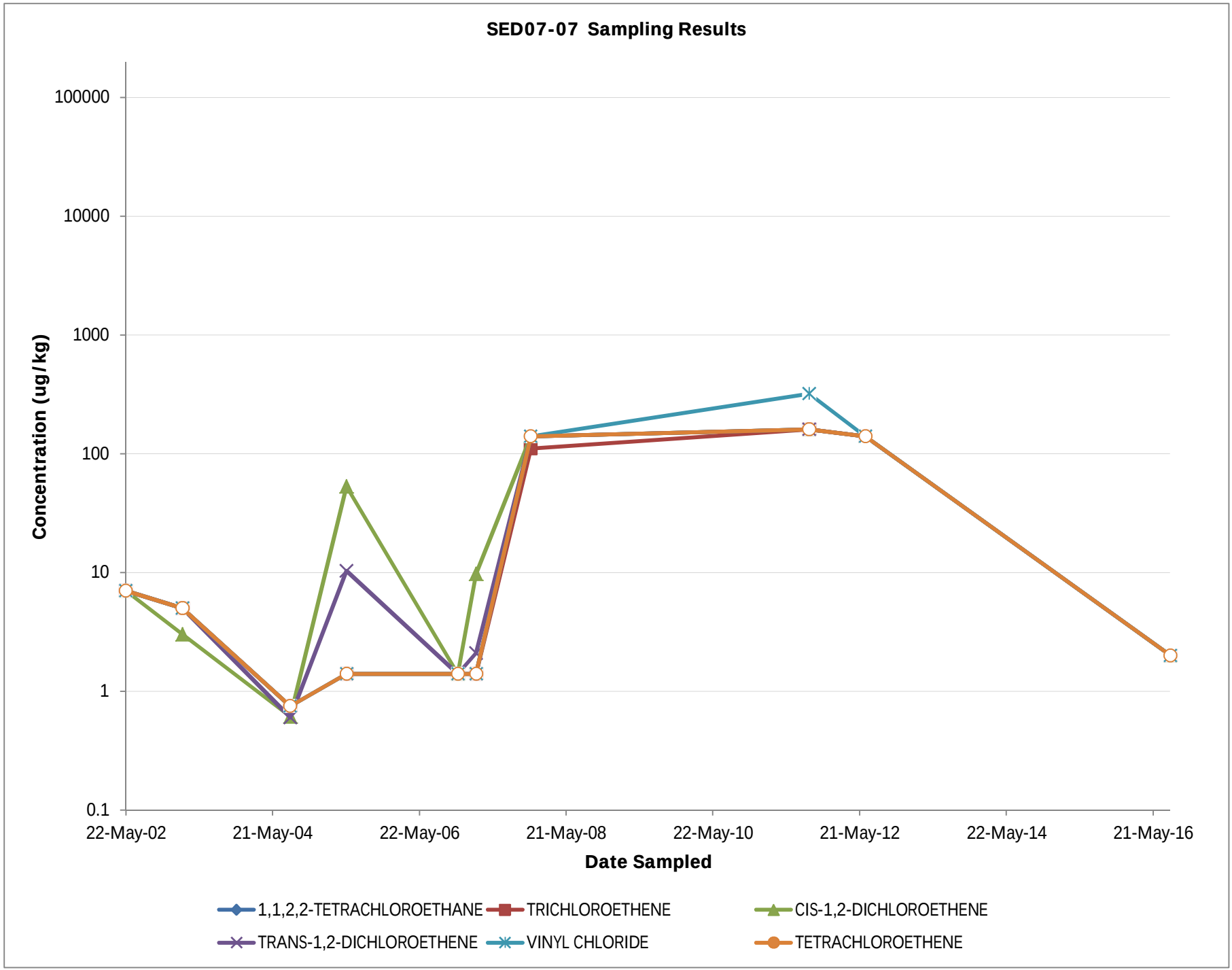


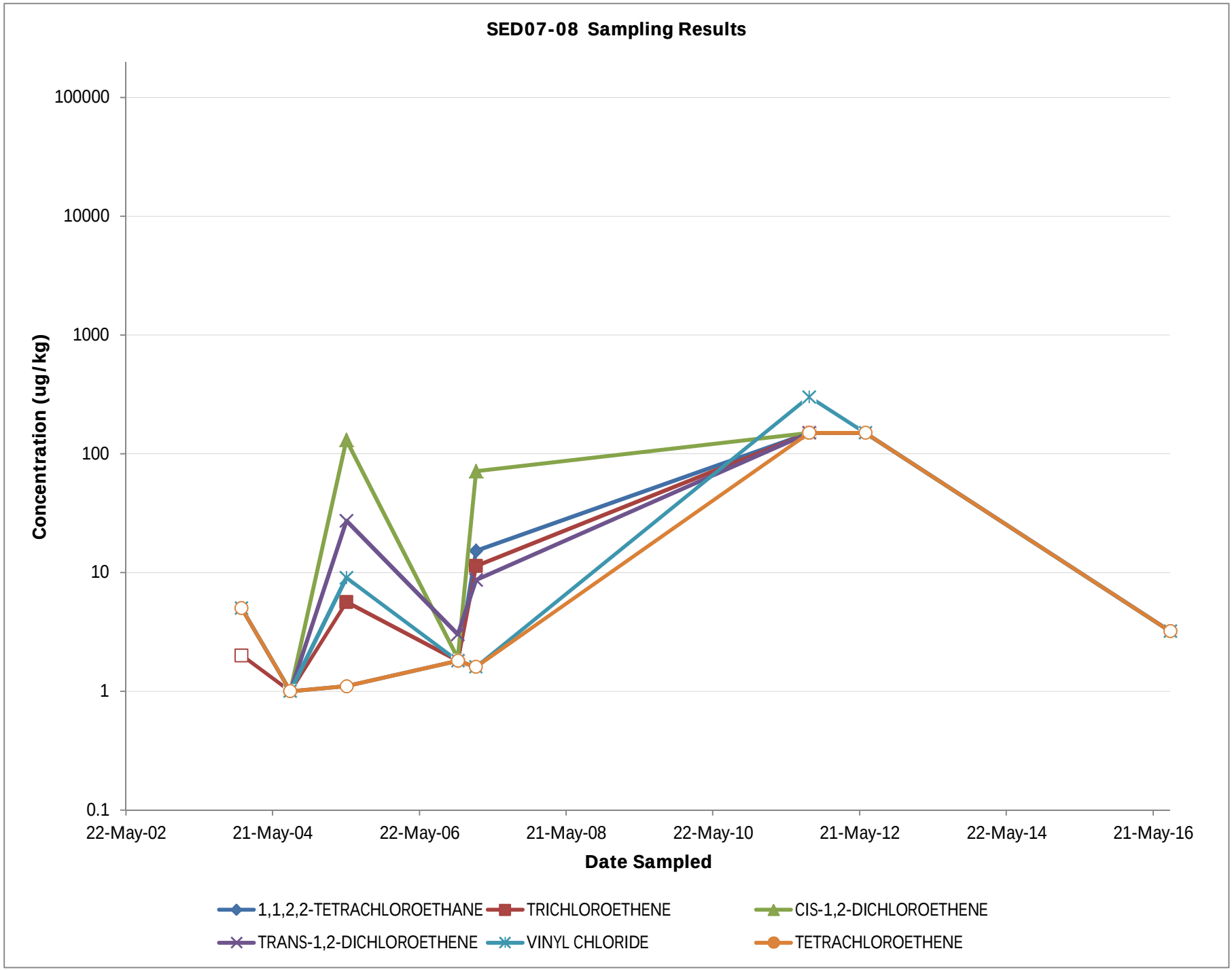
Notes:
Maximum of Field Duplicate and Parent Sample used
Hollow points = Non detect data, filled points = detected value

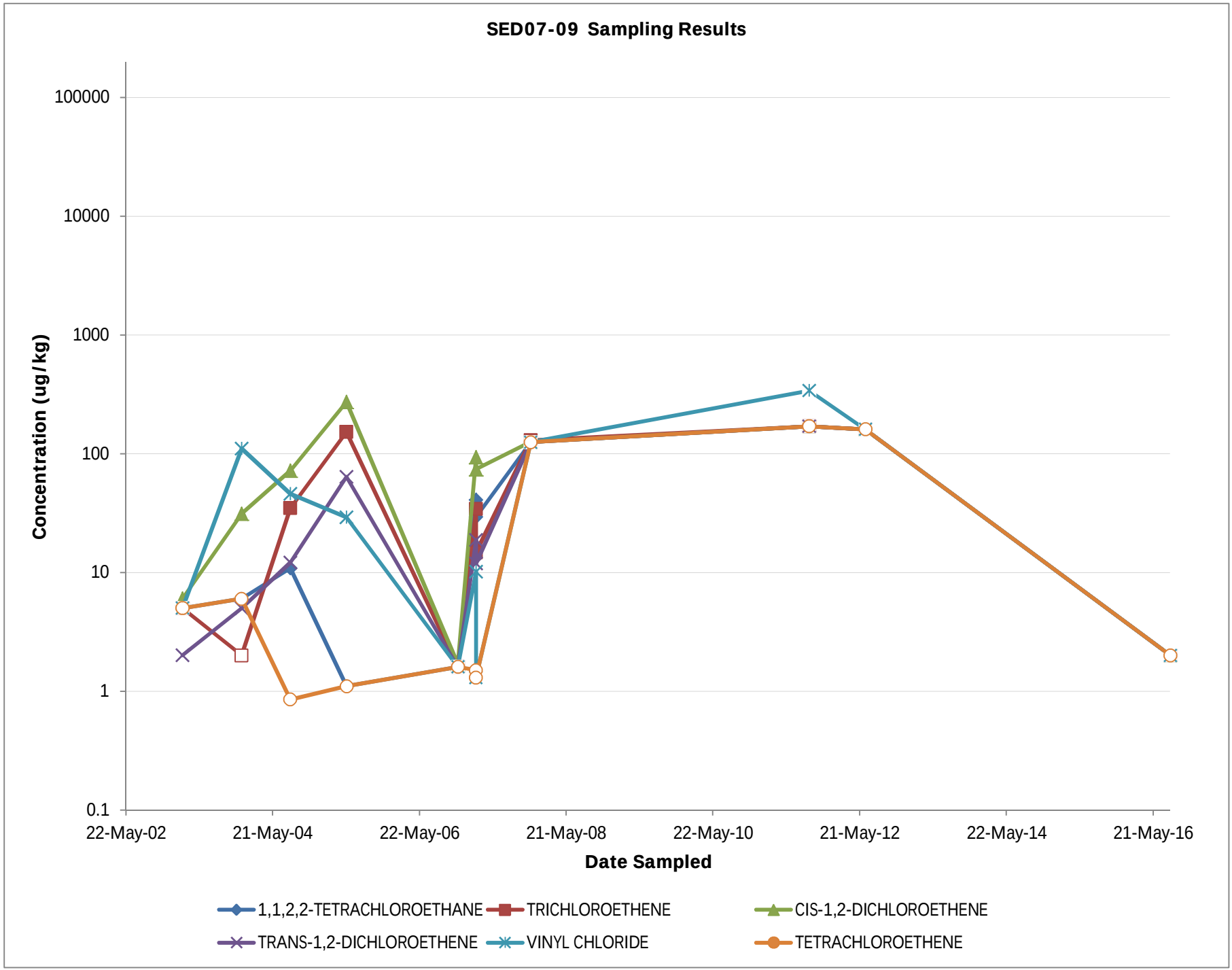
Sediment Trend Plots

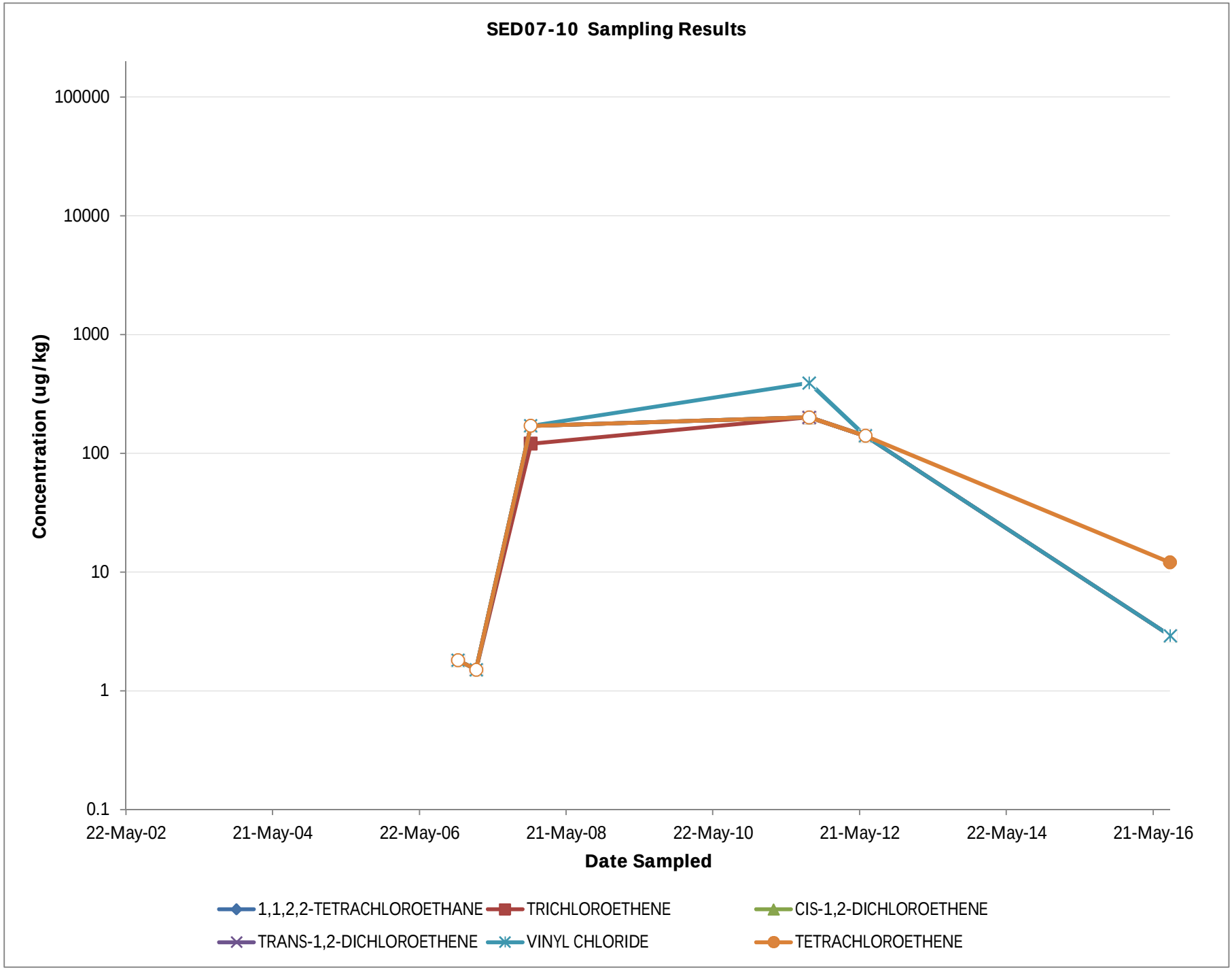
SED07-05 Sampling Results
100000
10000
1000
100
10
1
0.1
Concentration (ug/kg)
22-May-02
21-May-04
22-May-06
21-May-08
22-May-10
21-May-12
22-May-14
21-May-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
TETRACHLOROETHENE


SED07-06 Sampling Results
100000
10000
1000
100
10
1
0.1
Concentration (ug/kg)
22-May-02
21-May-04
22-May-06
21-May-08
22-May-10
21-May-12
22-May-14
21-May-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
TETRACHLOROETHENE


SED07-07 Sampling Results
Concentration (ug/kg)
100000
10000
1000
100
10
1
0.1
22-May-02
21-May-04
22-May-06
21-May-08
22-May-10
21-May-12
22-May-14
21-May-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
TETRACHLOROETHENE

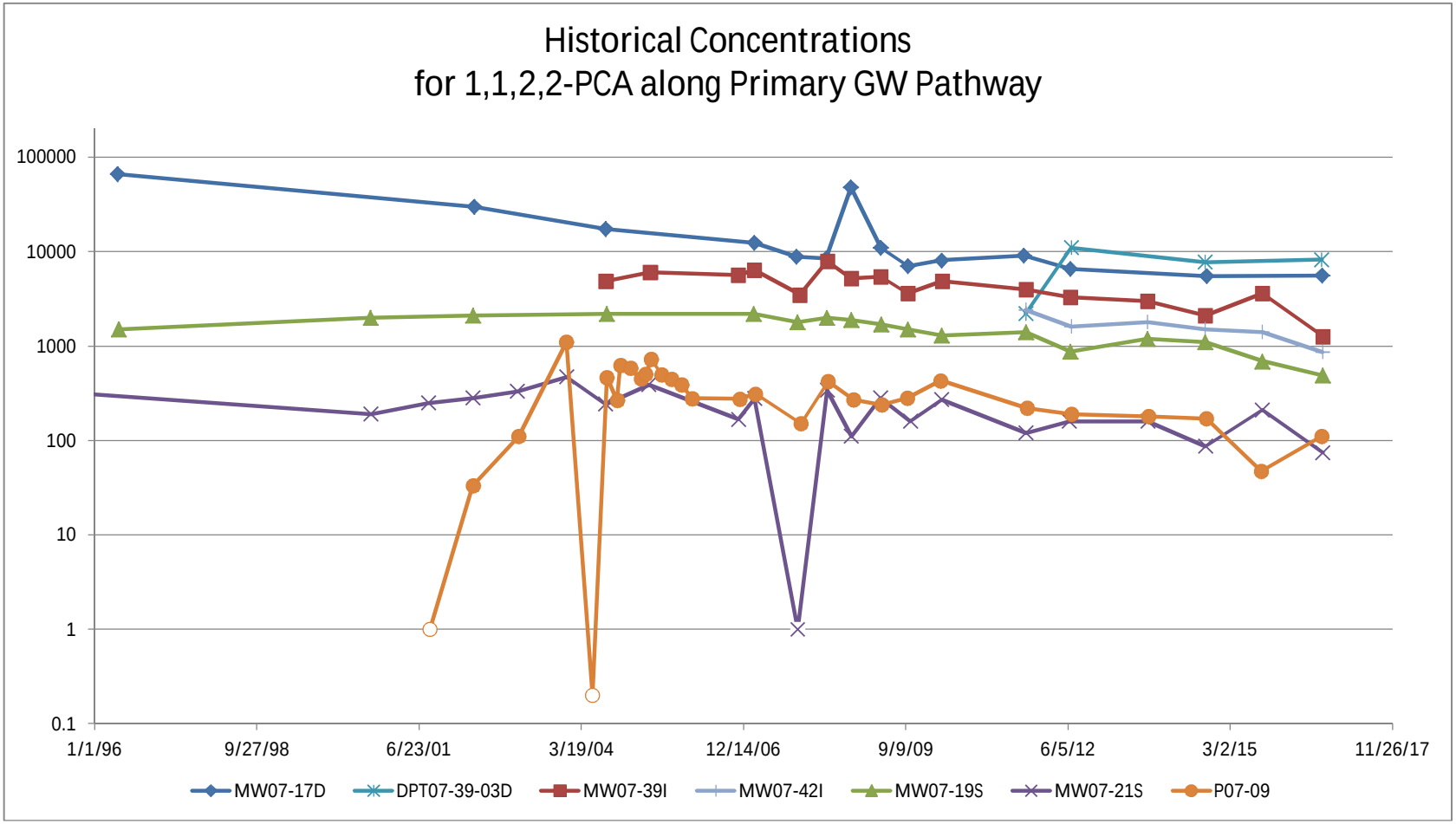

SED07-08 Sampling Results
Concentration (ug/kg)
100000
10000
1000
100
10
1
0.1
22-May-02
21-May-04
22-May-06
21-May-08
22-May-10
21-May-12
22-May-14
21-May-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
TETRACHLOROETHENE

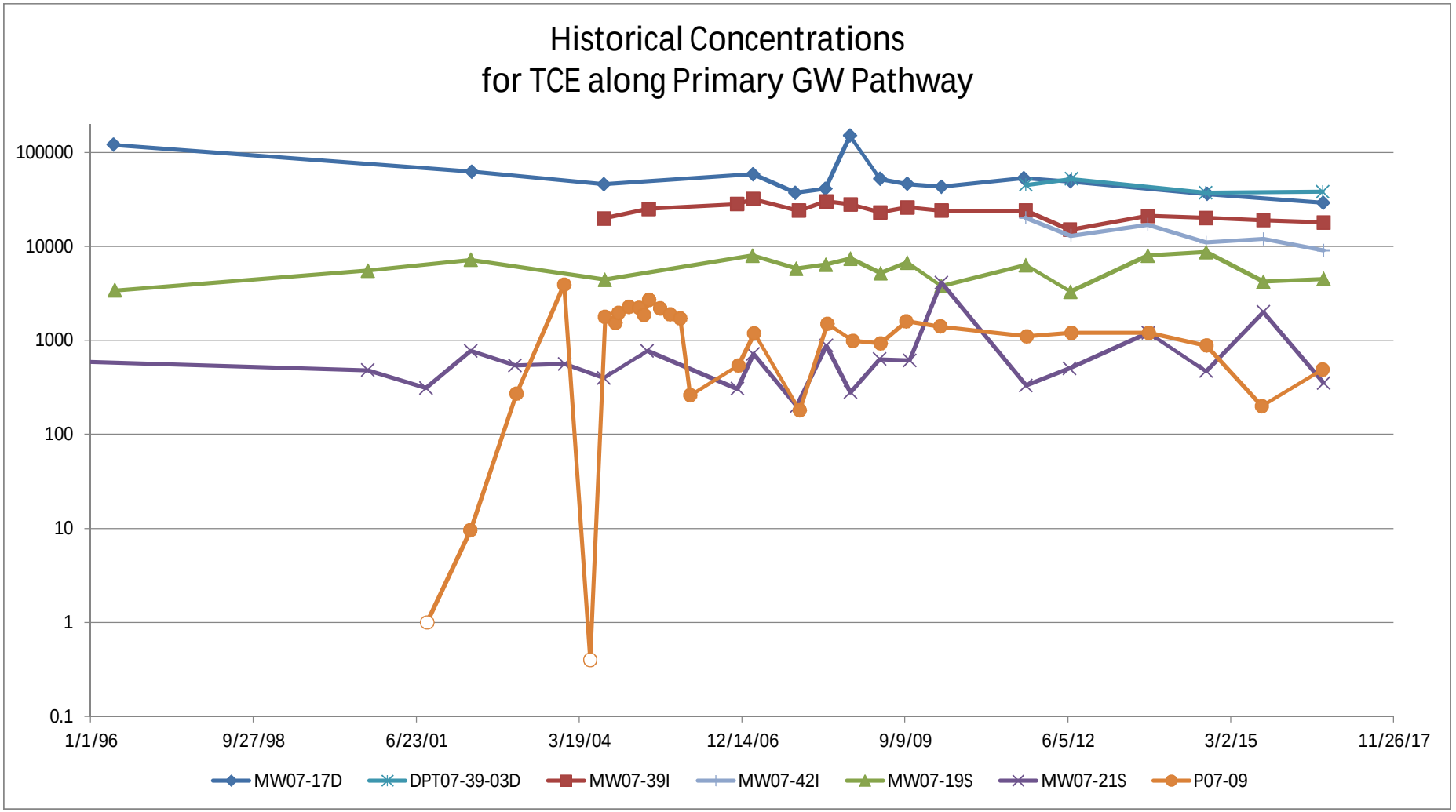

SED07-09 Sampling Results
Concentration (ug/kg)
100000
10000
1000
100
10
1
0.1
22-May-02
21-May-04
22-May-06
21-May-08
22-May-10
21-May-12
22-May-14
21-May-16
Date Sampled
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
CIS-1,2-DICHLOROETHENE
TRANS-1,2-DICHLOROETHENE
VINYL CHLORIDE
TETRACHLOROETHENE

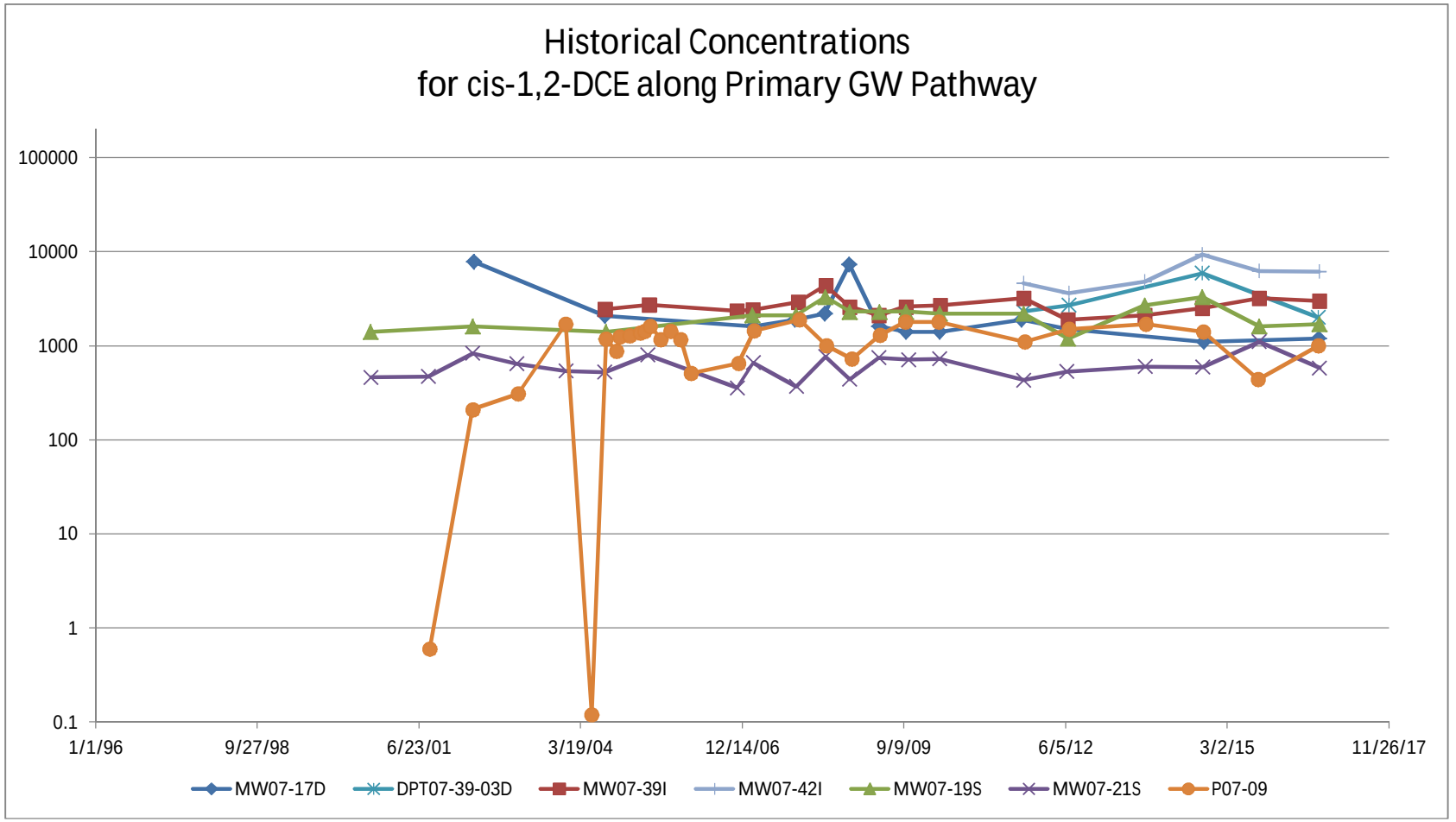


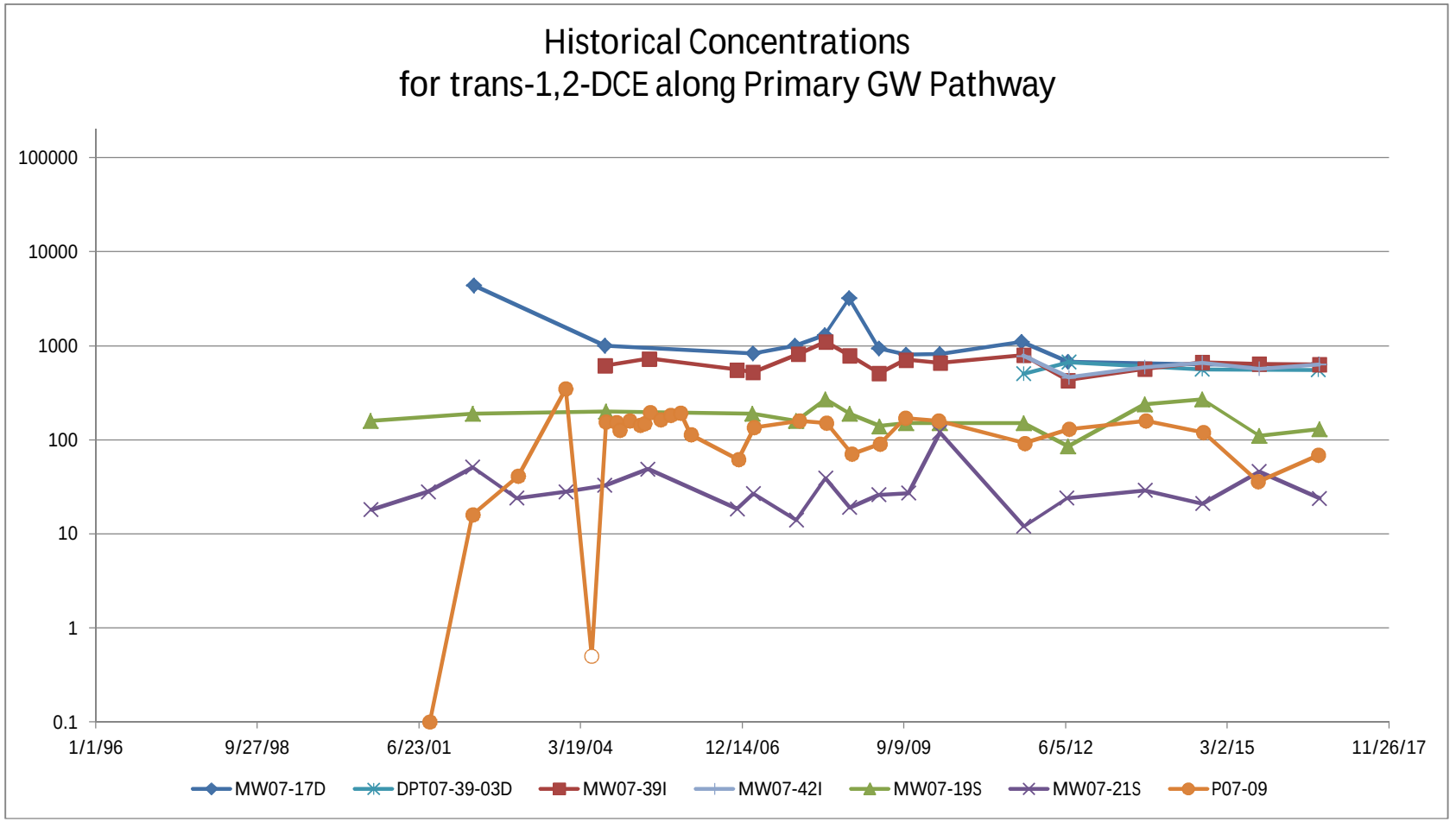
Notes:
Maximum of Field Duplicate and Parent Sample used
Hollow points = Non detect data, filled points = detected value

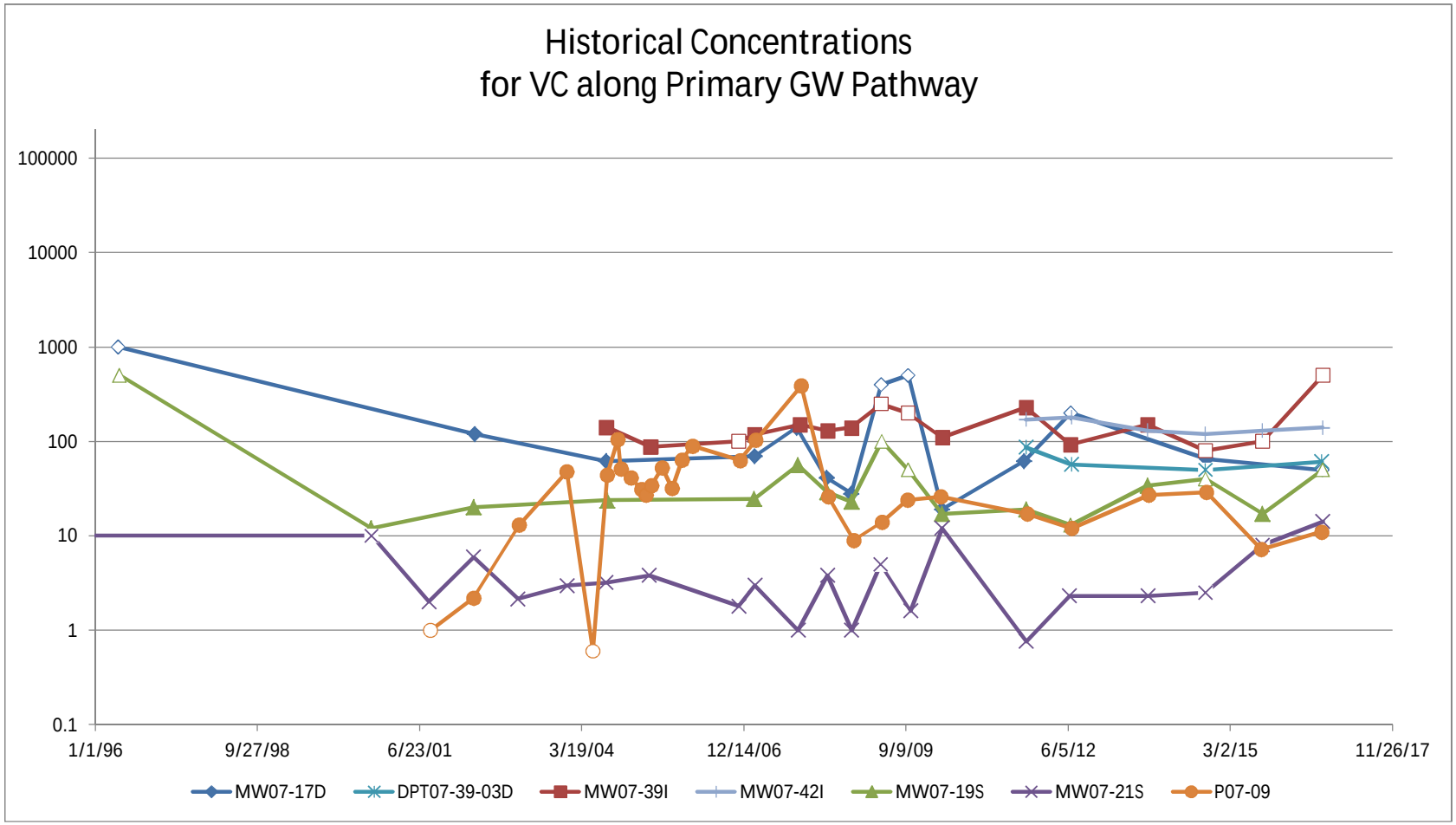
Primary Pathway Plots


Historical Concentrations
for 1,1,2,2-PCA along Primary GW Pathway
100000
10000
1000
100
10
1
0.1
1/1/96
9/27/98
6/23/01
3/19/04
12/14/06
9/9/09
6/5/12
3/2/15
11/26/17
MW07-17D
DPT07-39-03D
MW07-39I
MW07-42I
MW07-19S
MW07-21S
P07-09

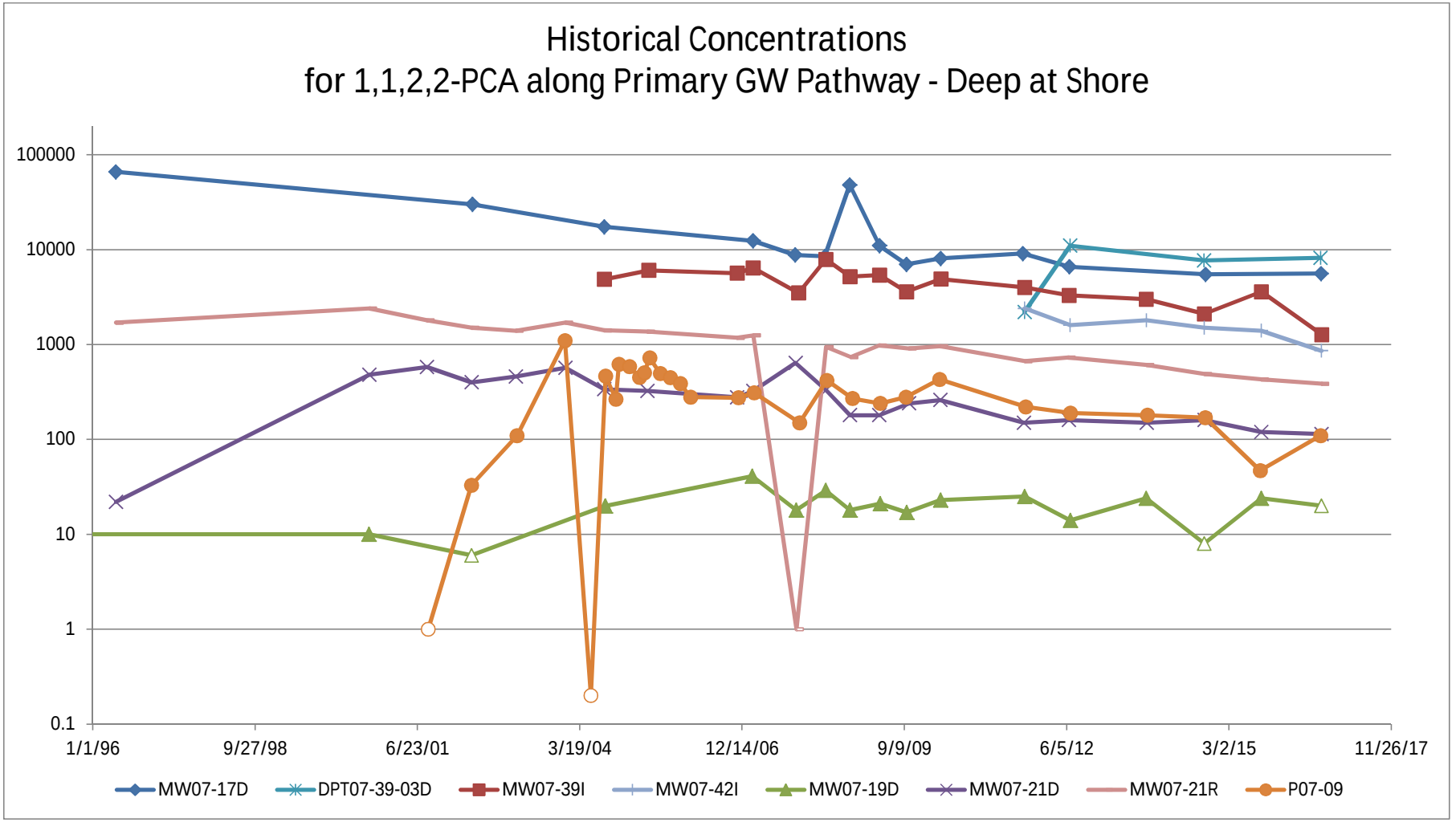

Historical Concentrations
for TCE along Primary GW Pathway
100000
10000
1000
100
10
1
0.1
1/1/96
9/27/98
6/23/01
3/19/04
12/14/06
9/9/09
6/5/12
3/2/15
11/26/17
MW07-17D
DPT07-39-03D
MW07-39I
MW07-42I
MW07-19S
MW07-21S
P07-09

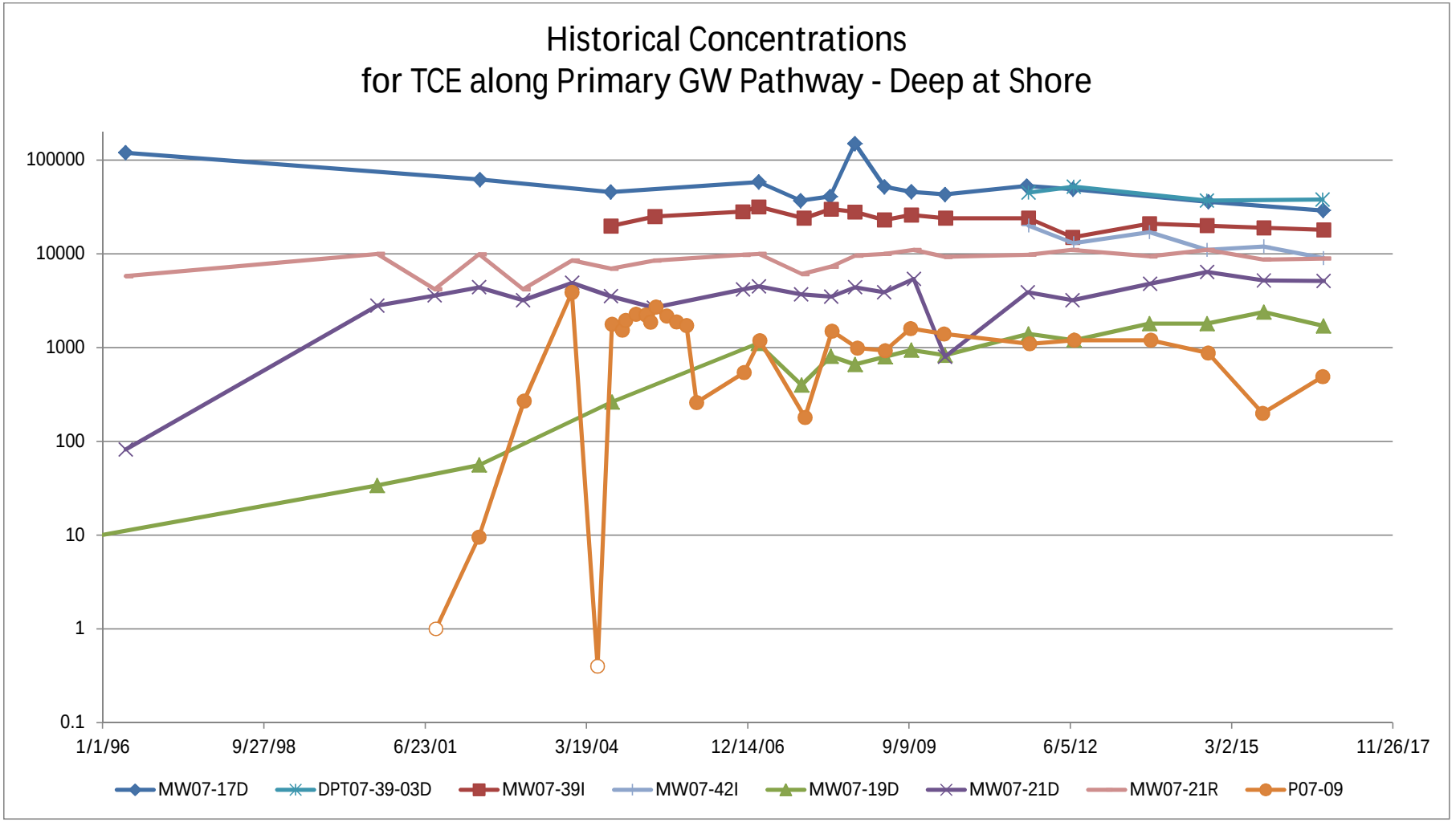

Historical Concentrations
for cis-1,2-DCE along Primary GW Pathway
100000
10000
1000
100
10
1
0.1
1/1/96
9/27/98
6/23/01
3/19/04
12/14/06
9/9/09
6/5/12
3/2/15
11/26/17
MW07-17D
DPT07-39-03D
MW07-39I
MW07-42I
MW07-19S
MW07-21S
P07-09

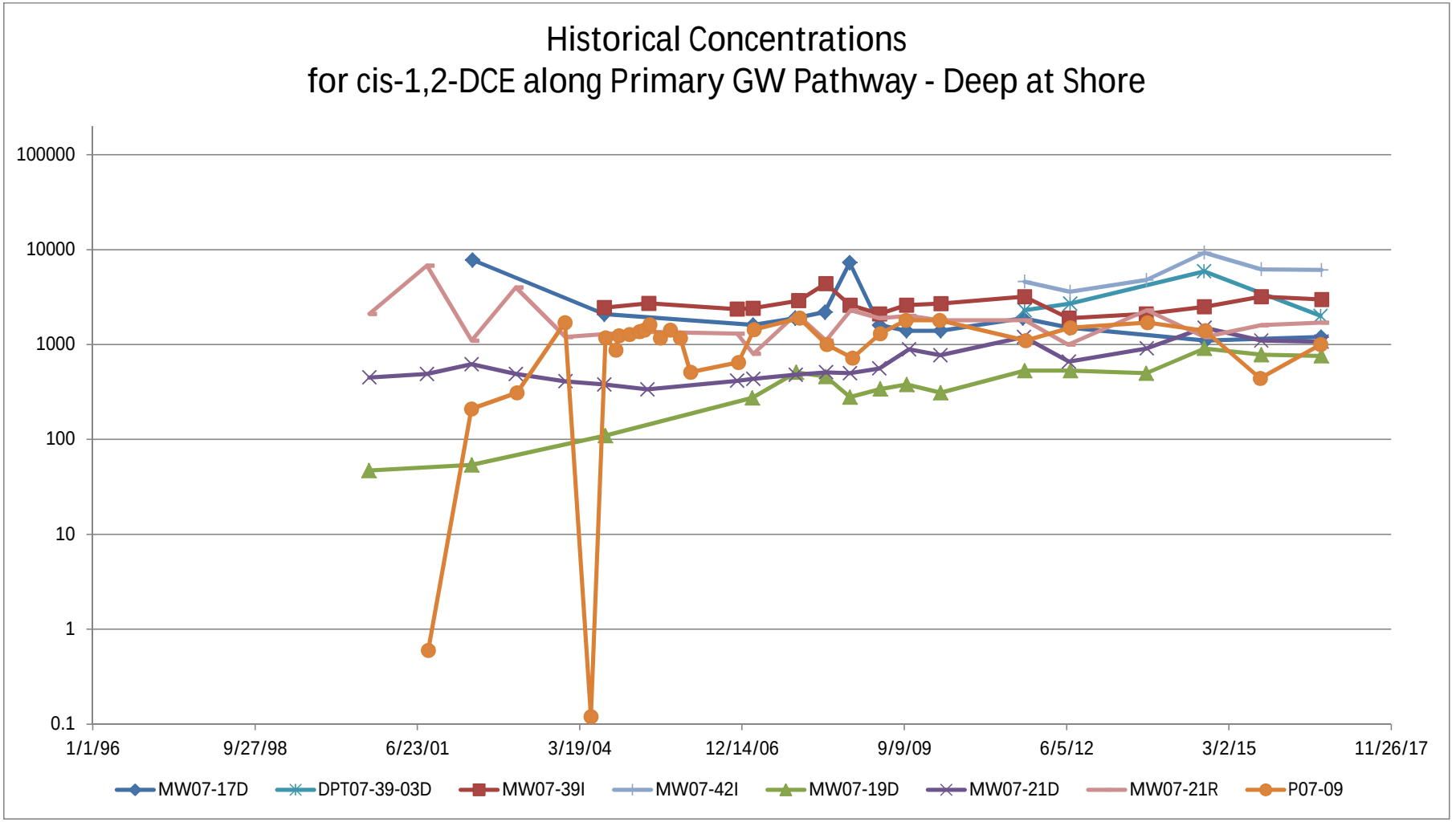

Historical Concentrations
for trans-1,2-DCE along Primary GW Pathway
100000
10000
1000
100
10
1
0.1
1/1/96
9/27/98
6/23/01
3/19/04
12/14/06
9/9/09
6/5/12
3/2/15
11/26/17
MW07-17D
DPT07-39-03D
MW07-39I
MW07-42I
MW07-19S
MW07-21S
P07-09

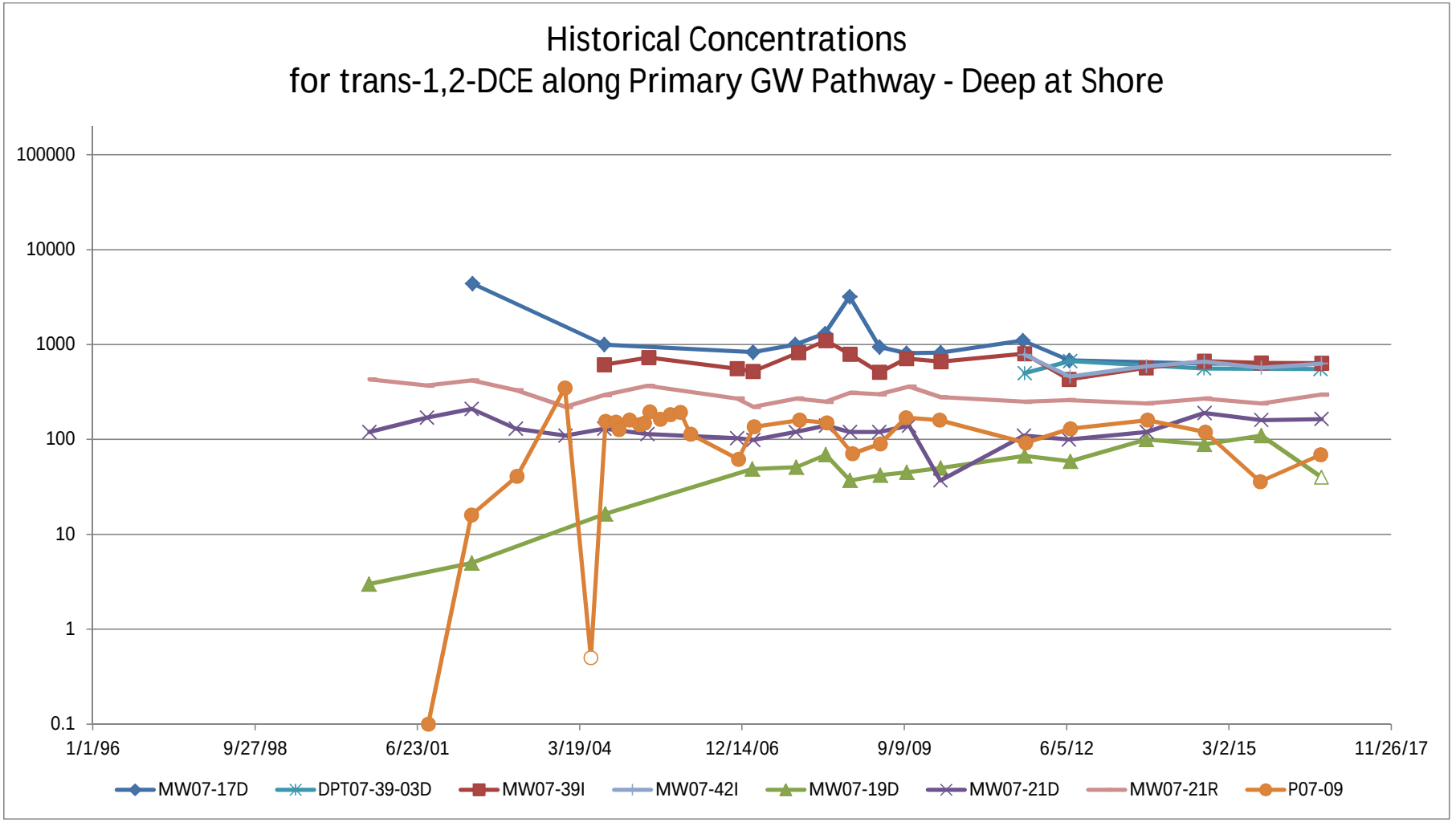


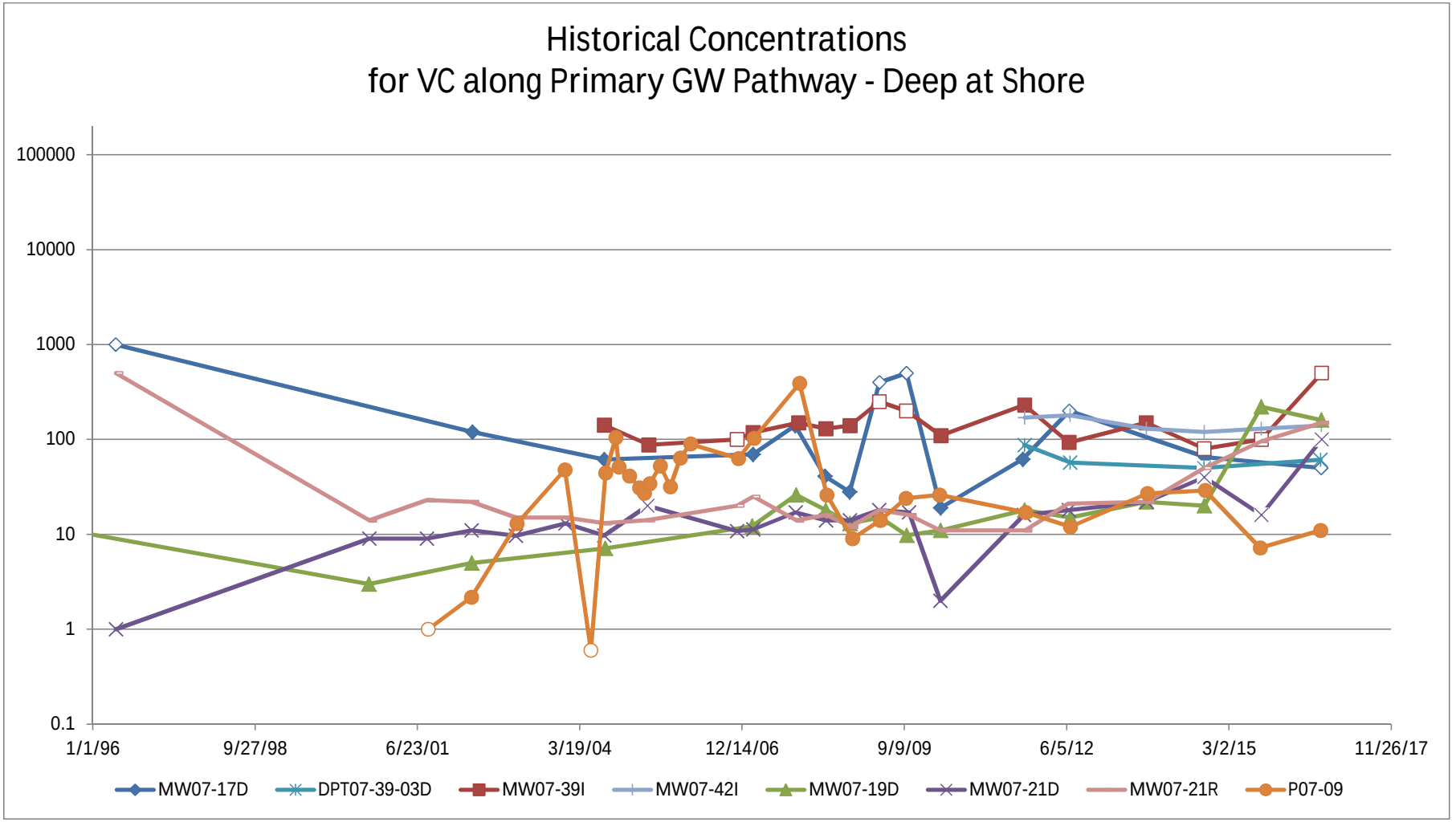
Notes:
Maximum of Field Duplicate and Parent Sample used
Hollow points = Non detect data, filled points = detected value


Historical Concentrations
for 1,1,2,2-PCA along Primary GW Pathway - Deep at Shore
100000
10000
1000
100
10
1
0.1
1/1/96
9/27/98
6/23/01
3/19/04
12/14/06
9/9/09
6/5/12
3/2/15
11/26/17
MW07-17D
DPT07-39-03D
MW07-39I
MW07-42I
MW07-19D
MW07-21D
MW07-21R
P07-09


Historical Concentrations
for TCE along Primary GW Pathway - Deep at Shore
100000
10000
1000
100
10
1
0.1
1/1/96
9/27/98
6/23/01
3/19/04
12/14/06
9/9/09
6/5/12
3/2/15
11/26/17
MW07-17D
DPT07-39-03D
MW07-39I
MW07-42I
MW07-19D
MW07-21D
MW07-21R
P07-09

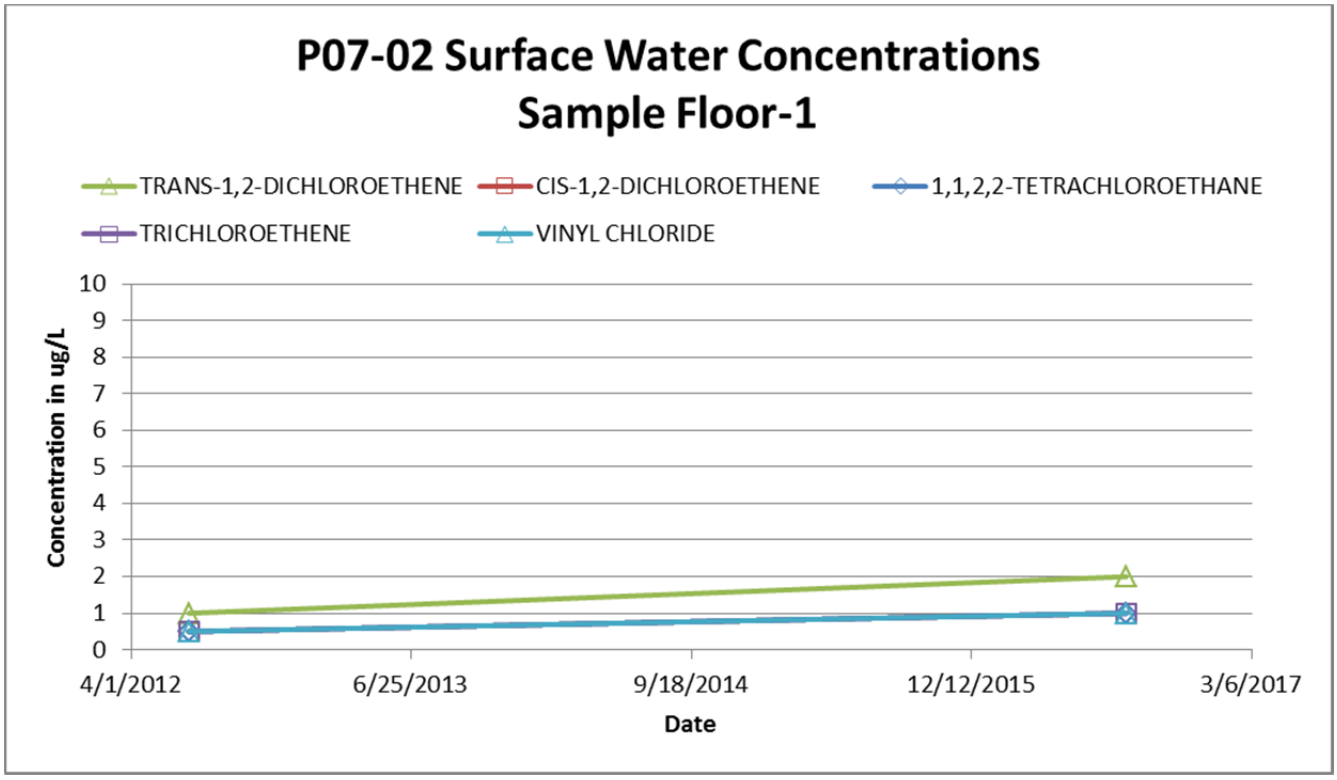

Historical Concentrations
for cis-1,2-DCE along Primary GW Pathway - Deep at Shore
100000
10000
1000
100
10
1
0.1
1/1/96
9/27/98
6/23/01
3/19/04
12/14/06
9/9/09
6/5/12
3/2/15
11/26/17
MW07-17D
DPT07-39-03D
MW07-39I
MW07-42I
MW07-19D
MW07-21D
MW07-21R
P07-09

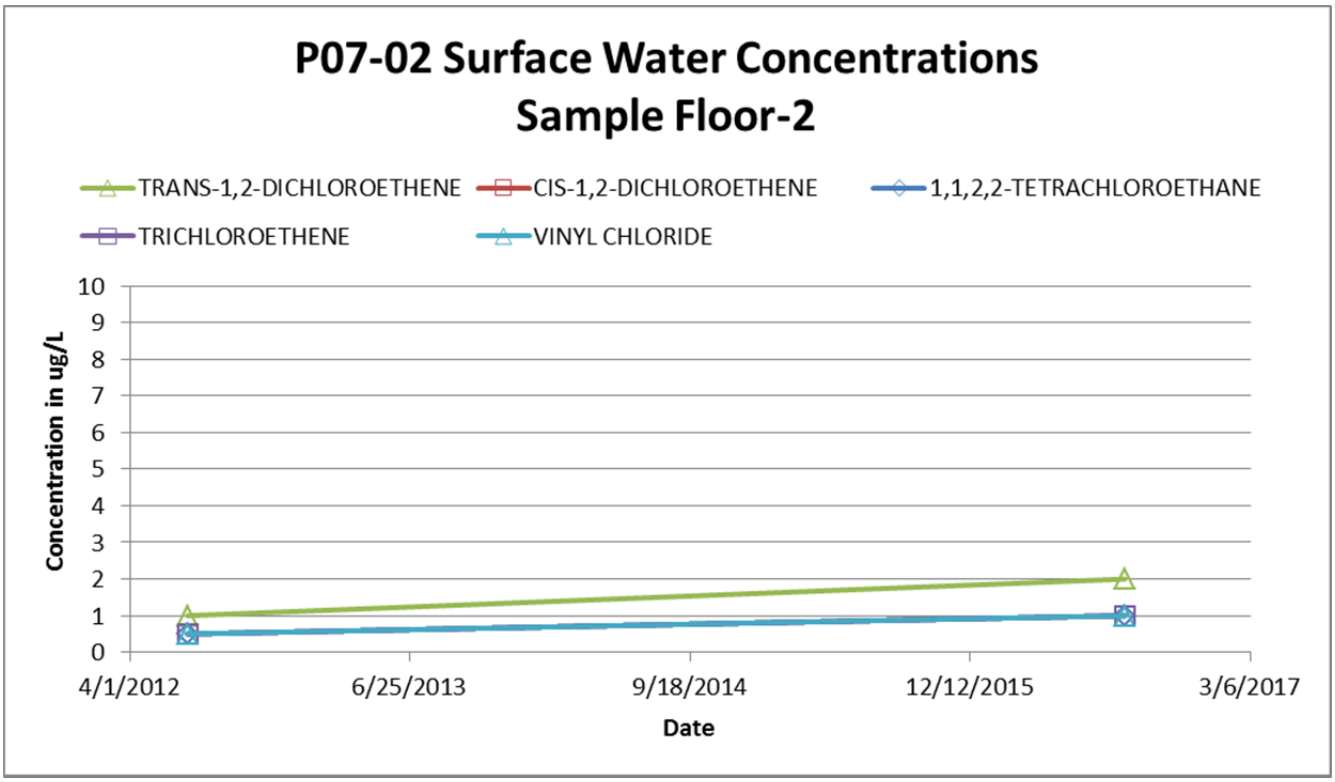

Historical Concentrations
for trans-1,2-DCE along Primary GW Pathway - Deep at Shore
100000
10000
1000
100
10
1
0.1
1/1/96
9/27/98
6/23/01
3/19/04
12/14/06
9/9/09
6/5/12
3/2/15
11/26/17
MW07-17D
DPT07-39-03D
MW07-39I
MW07-42I
MW07-19D
MW07-21D
MW07-21R
P07-09

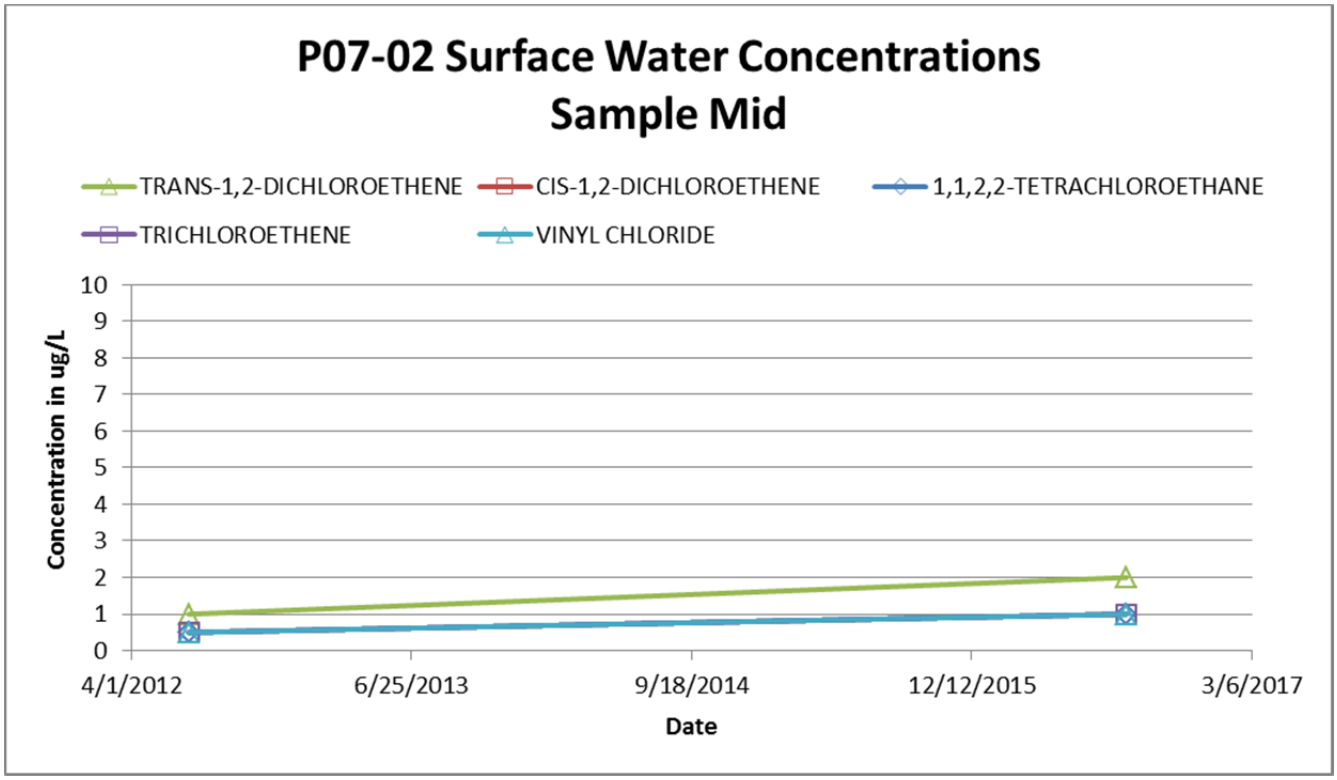


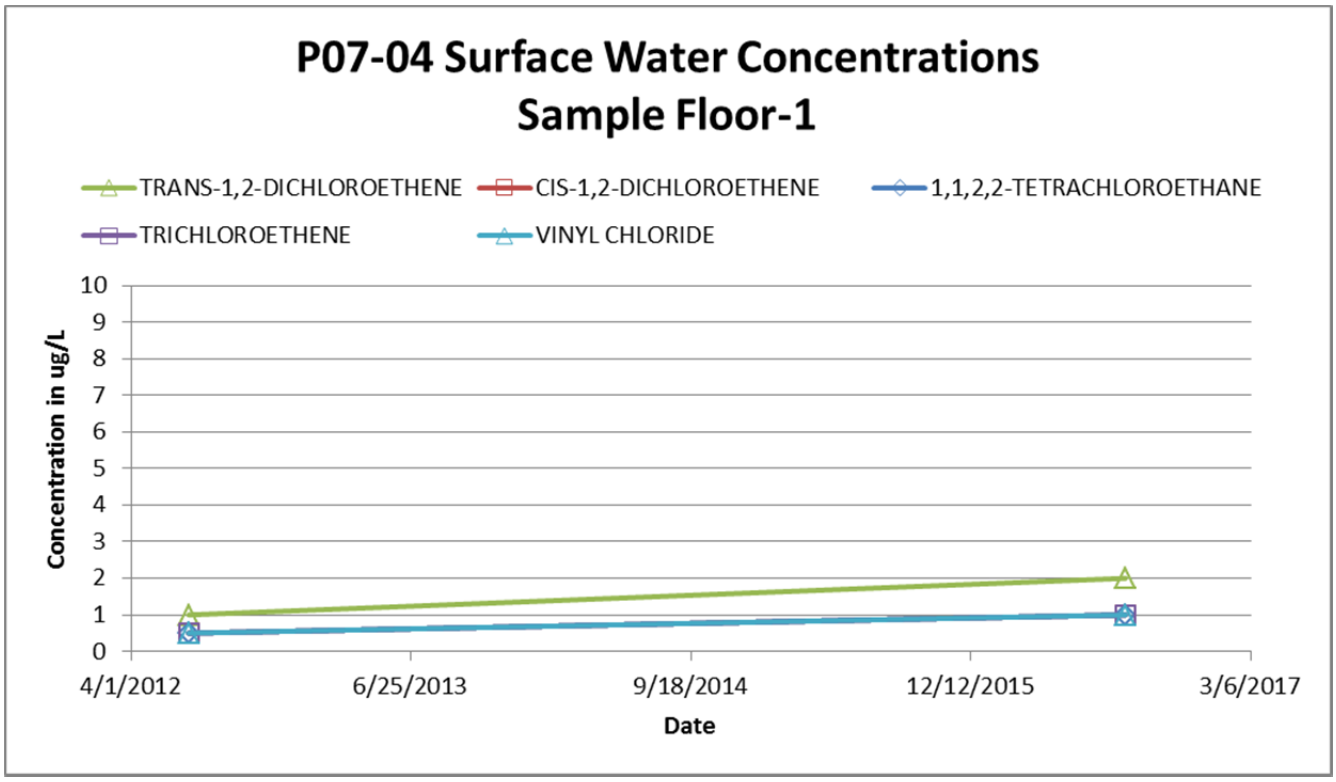
Notes:
Maximum of Field Duplicate and Parent Sample used
Hollow points = Non detect data, filled points = detected value

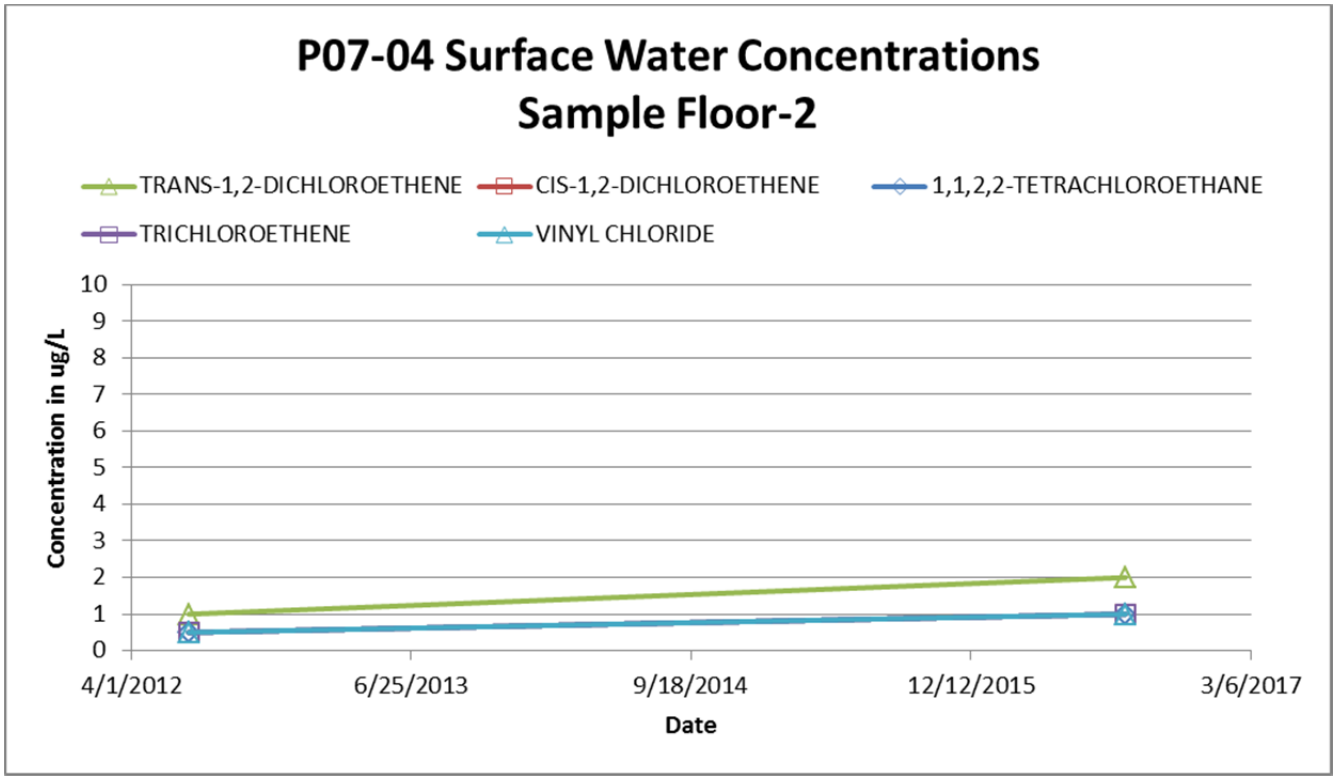
Surface Water Plots

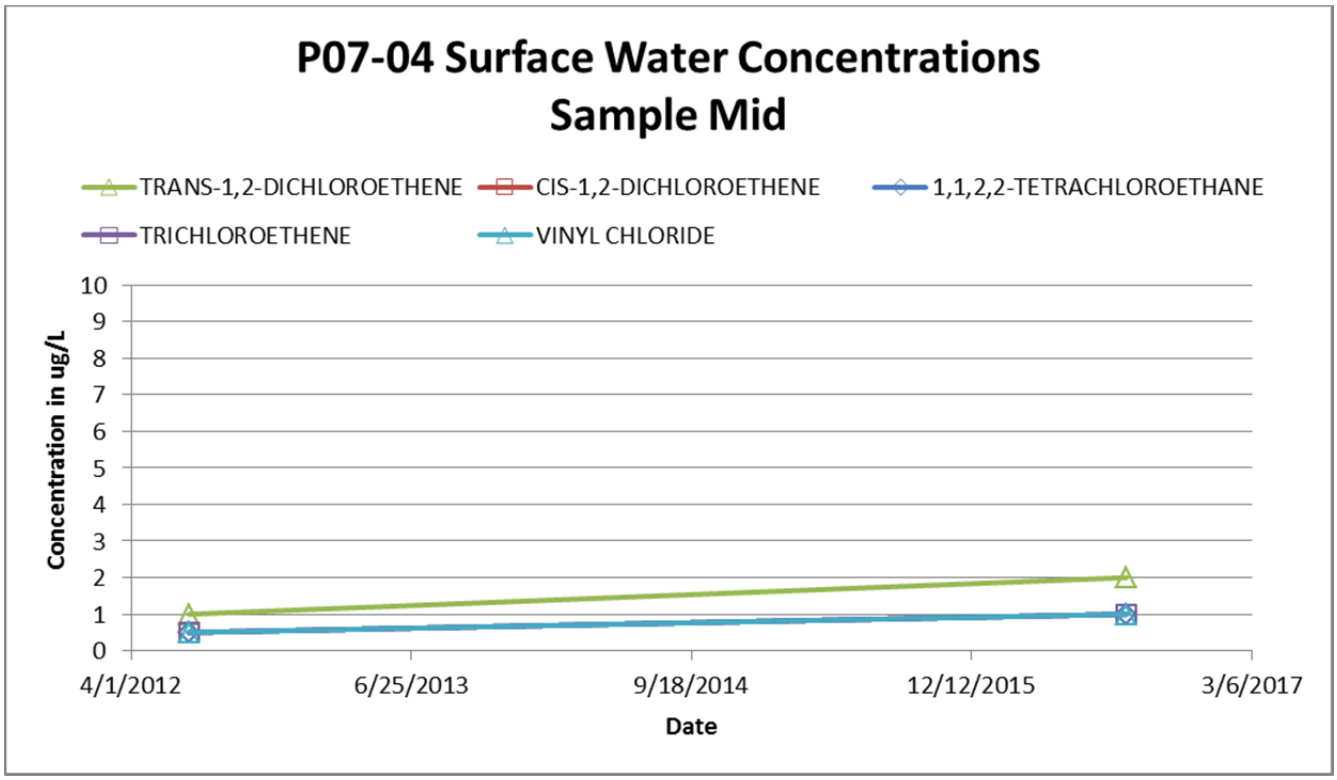

P07-02 Surface Water Concentrations
Sample Floor-1
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

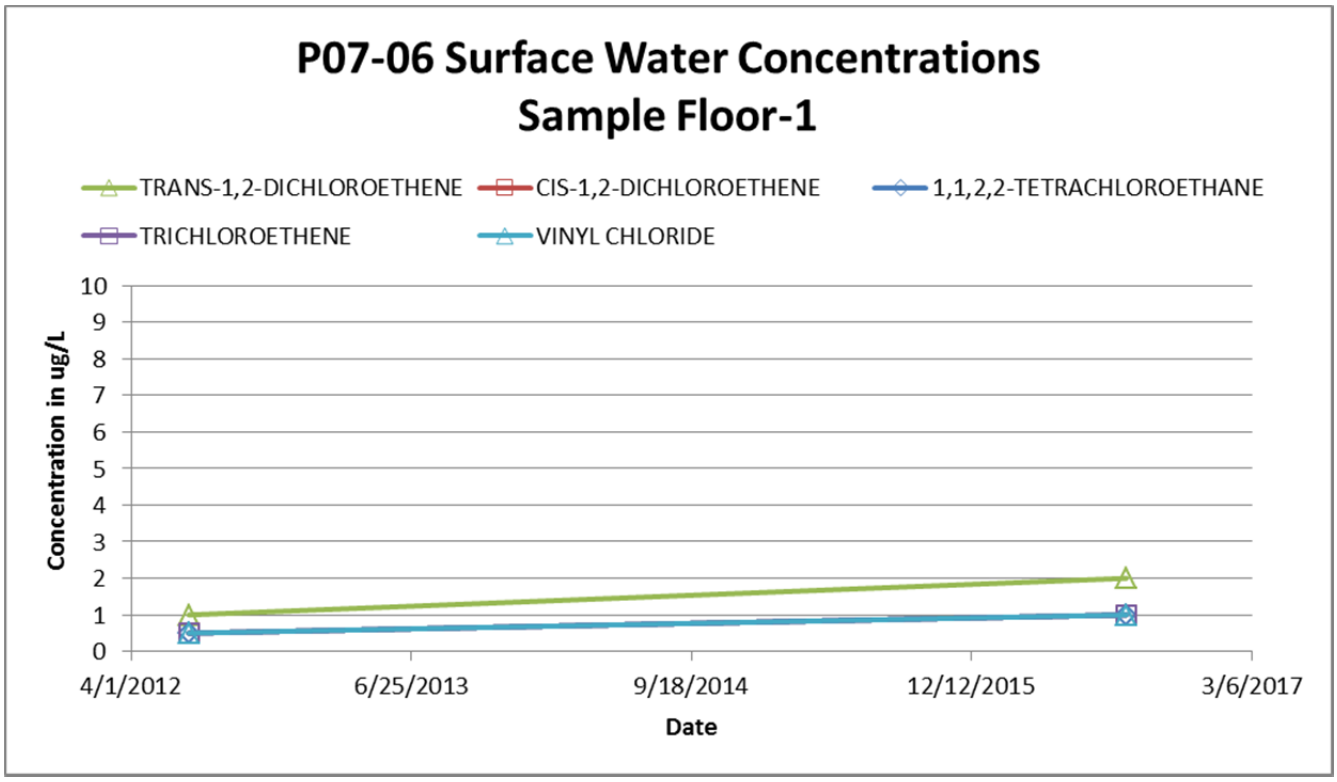

P07-02 Surface Water Concentrations
Sample Floor-2
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

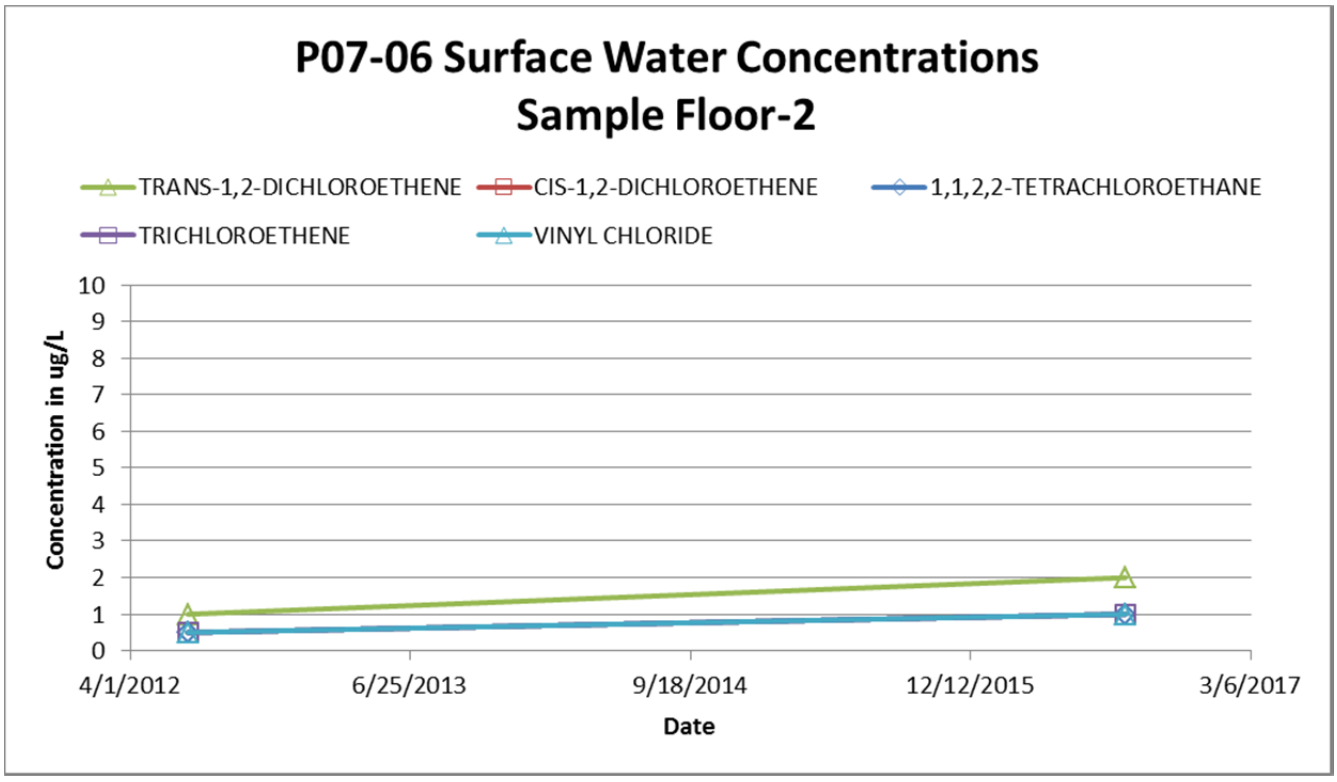

P07-02 Surface Water Concentrations
Sample Mid
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

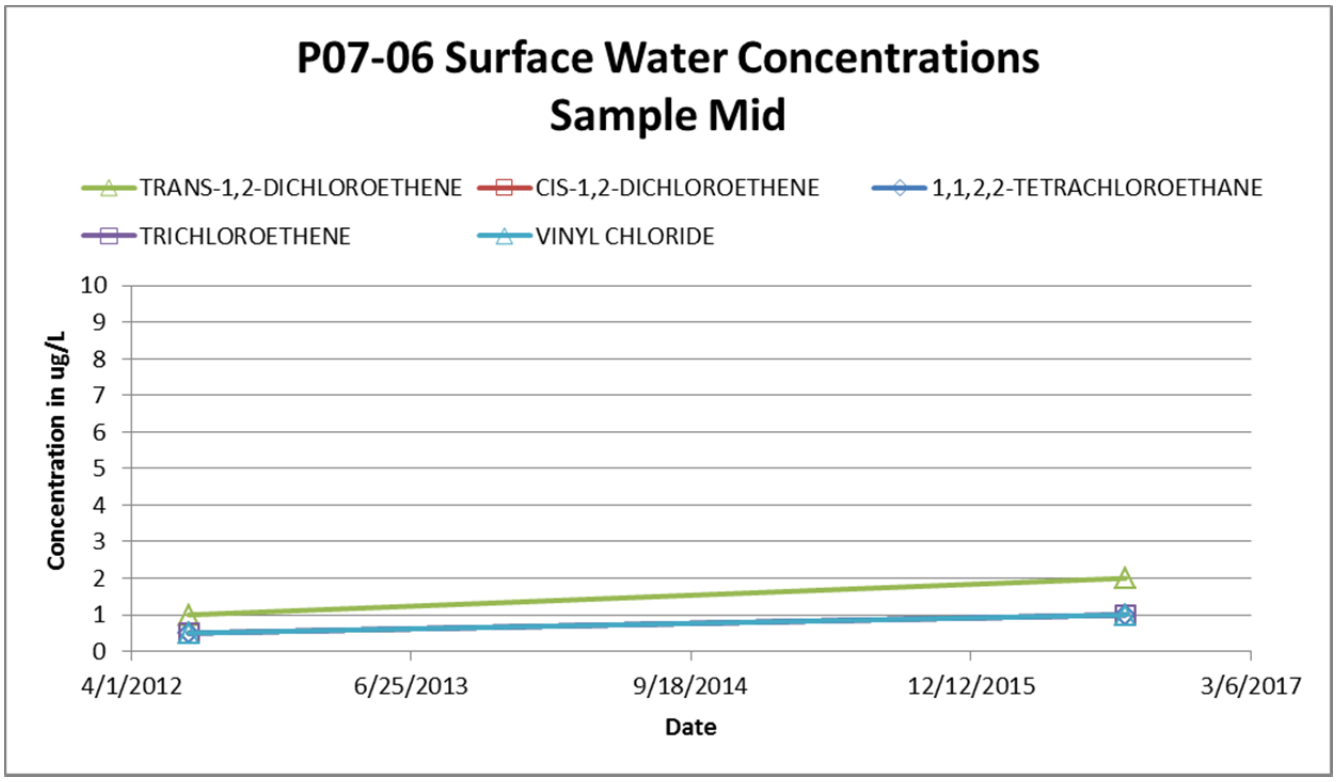

P07-04 Surface Water Concentrations
Sample Floor-1
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

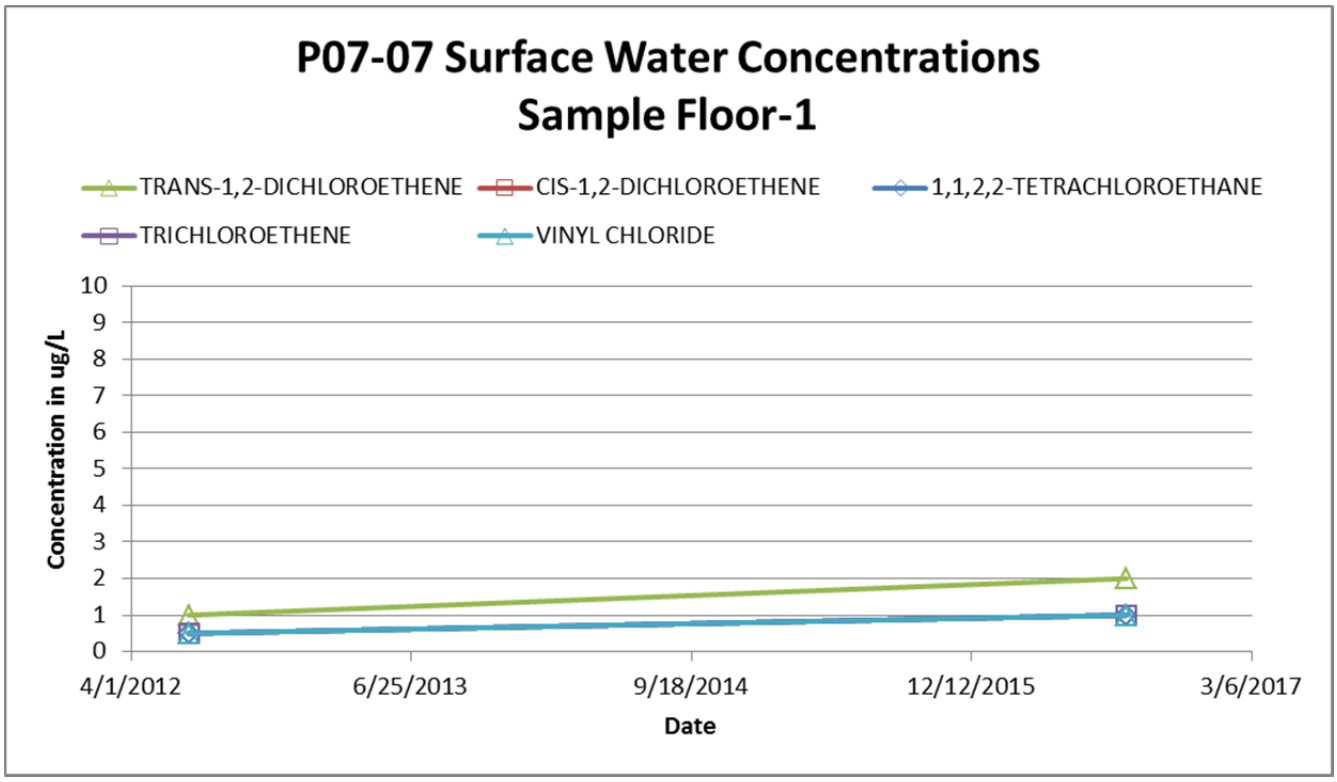

P07-04 Surface Water Concentrations
Sample Floor-2
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

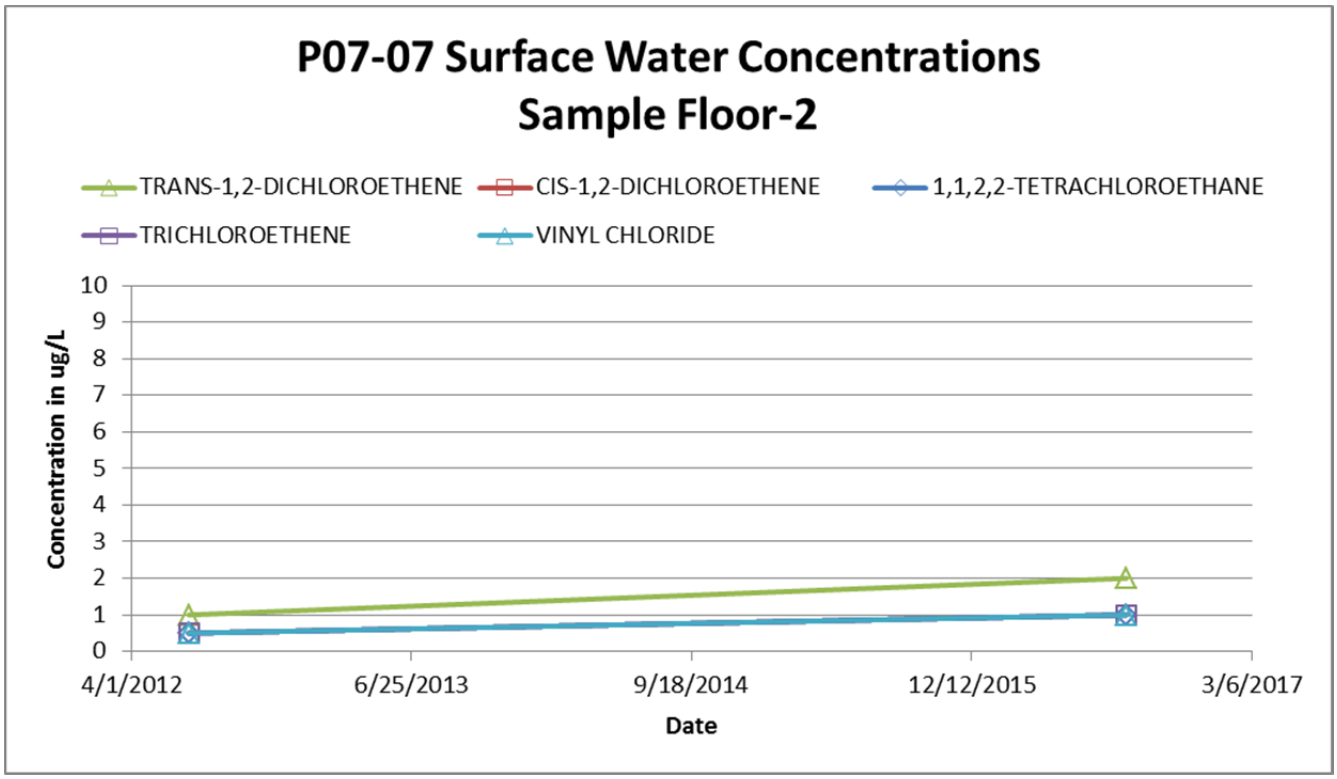

P07-04 Surface Water Concentrations
Sample Mid
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

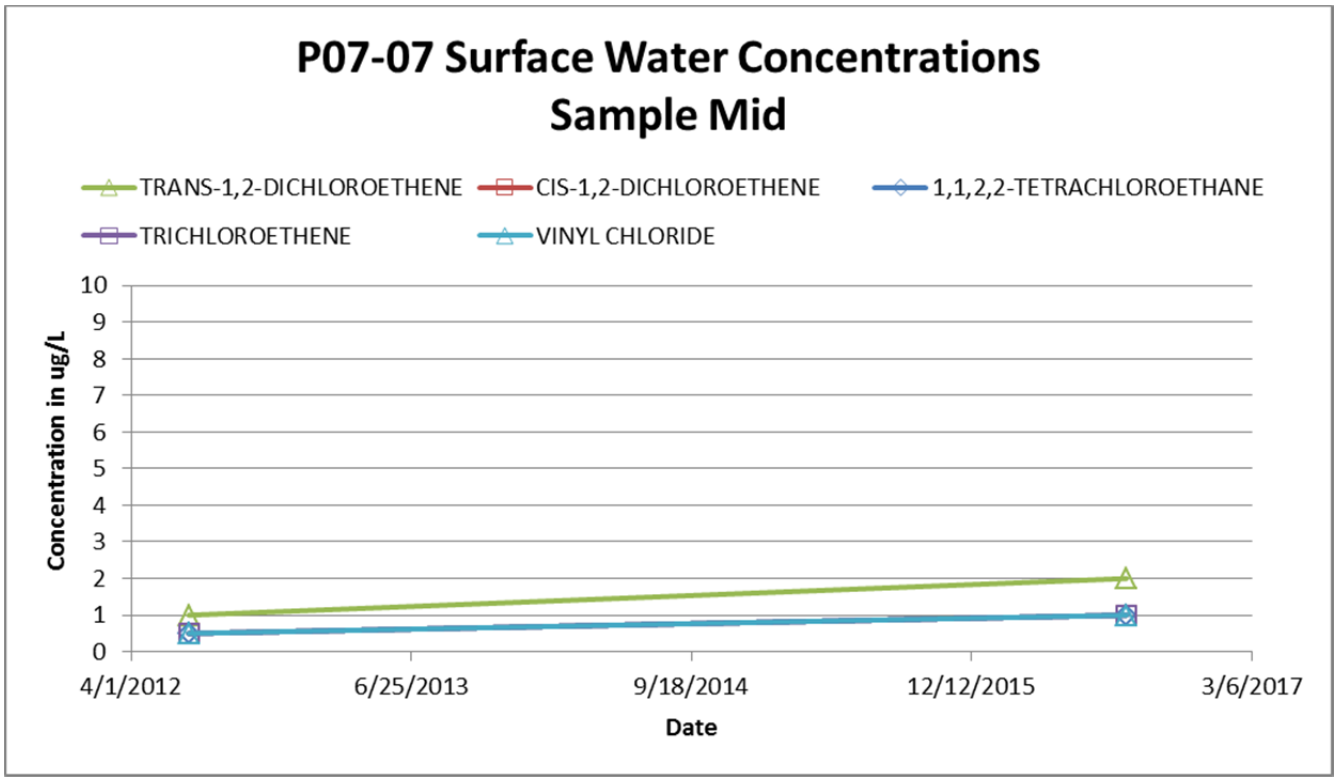

P07-06 Surface Water Concentrations
Sample Floor-1
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date


P07-06 Surface Water Concentrations
Sample Floor-2
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date


P07-06 Surface Water Concentrations
Sample Mid
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date


P07-07 Surface Water Concentrations
Sample Floor-1
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date


P07-07 Surface Water Concentrations
Sample Floor-2
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date


P07-07 Surface Water Concentrations
Sample Mid
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
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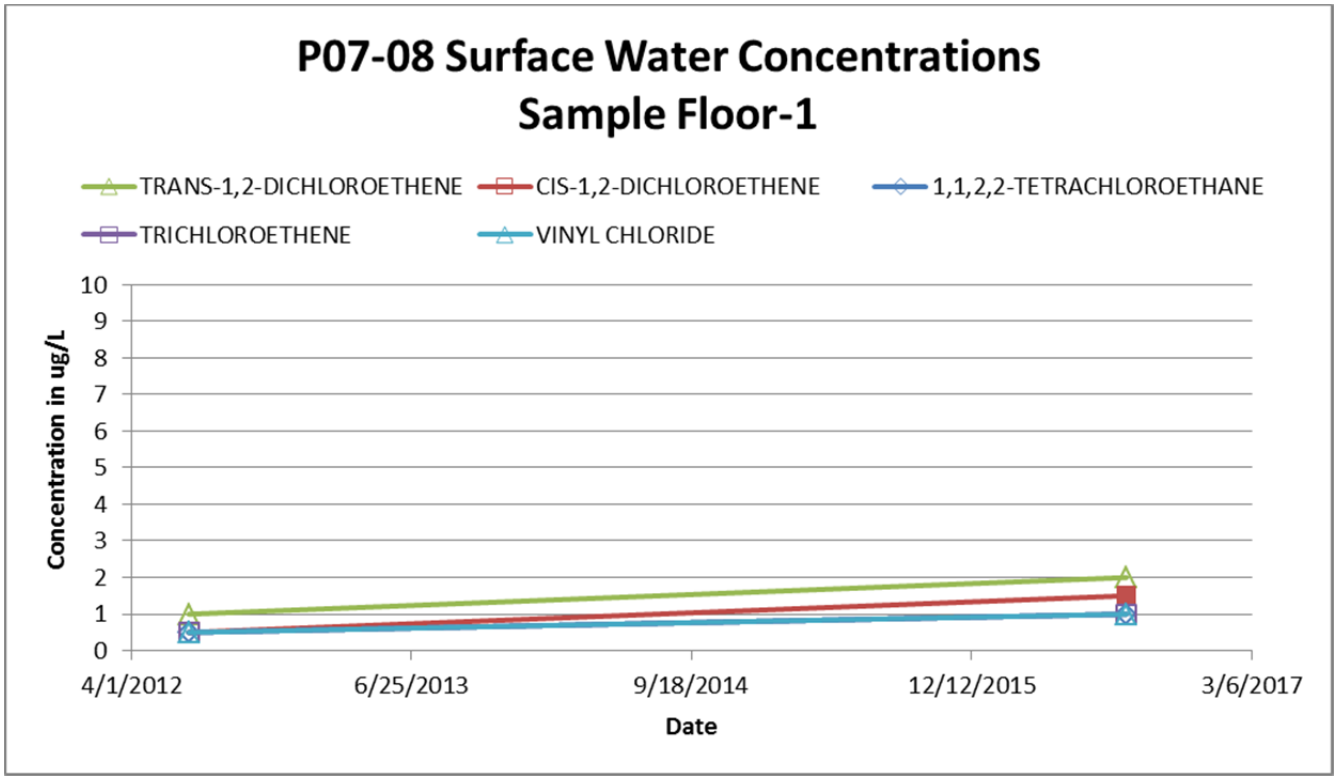
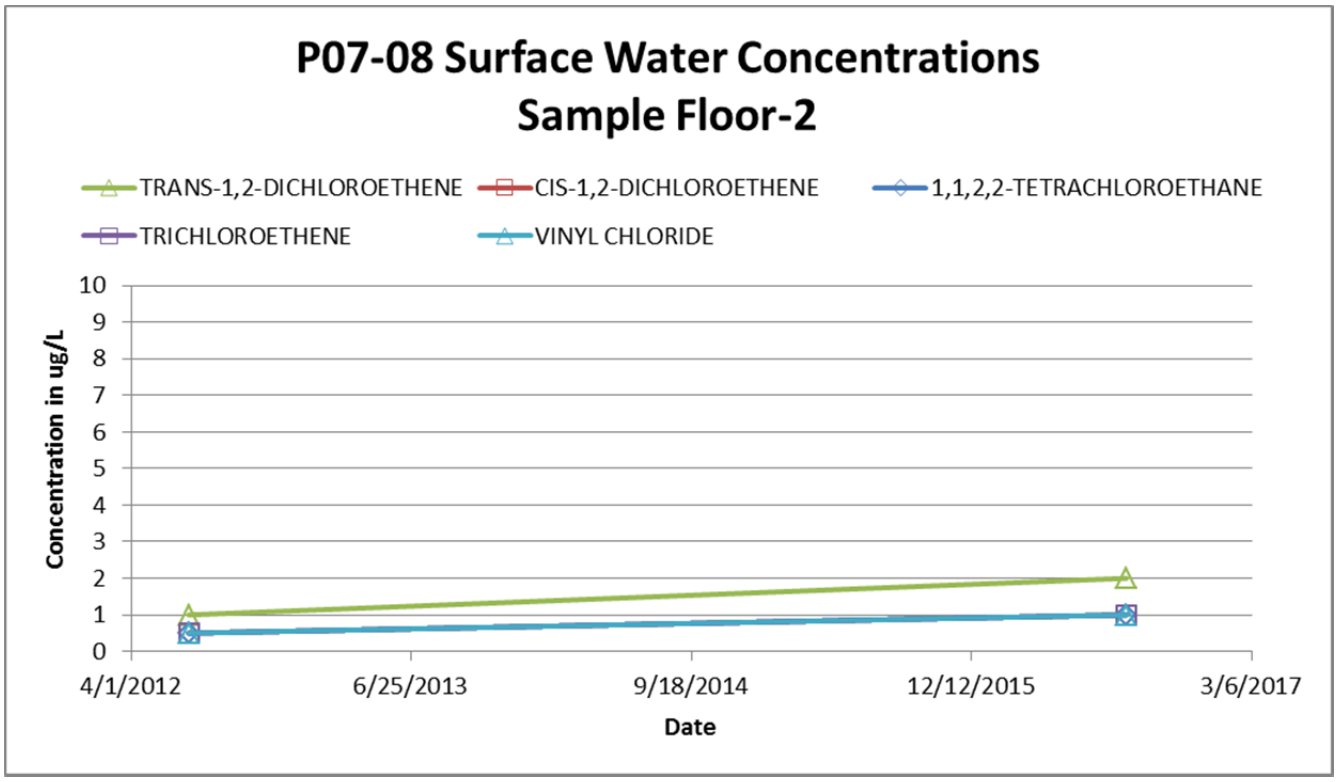
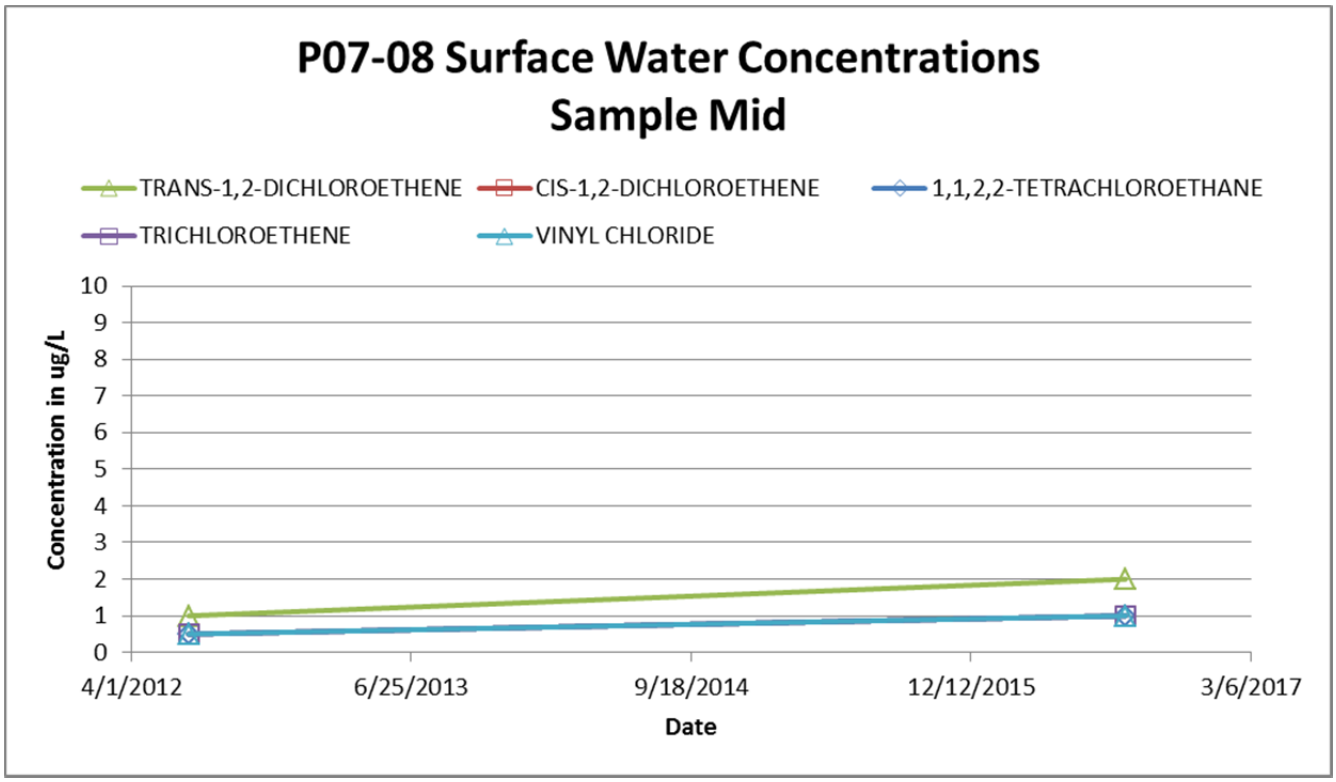
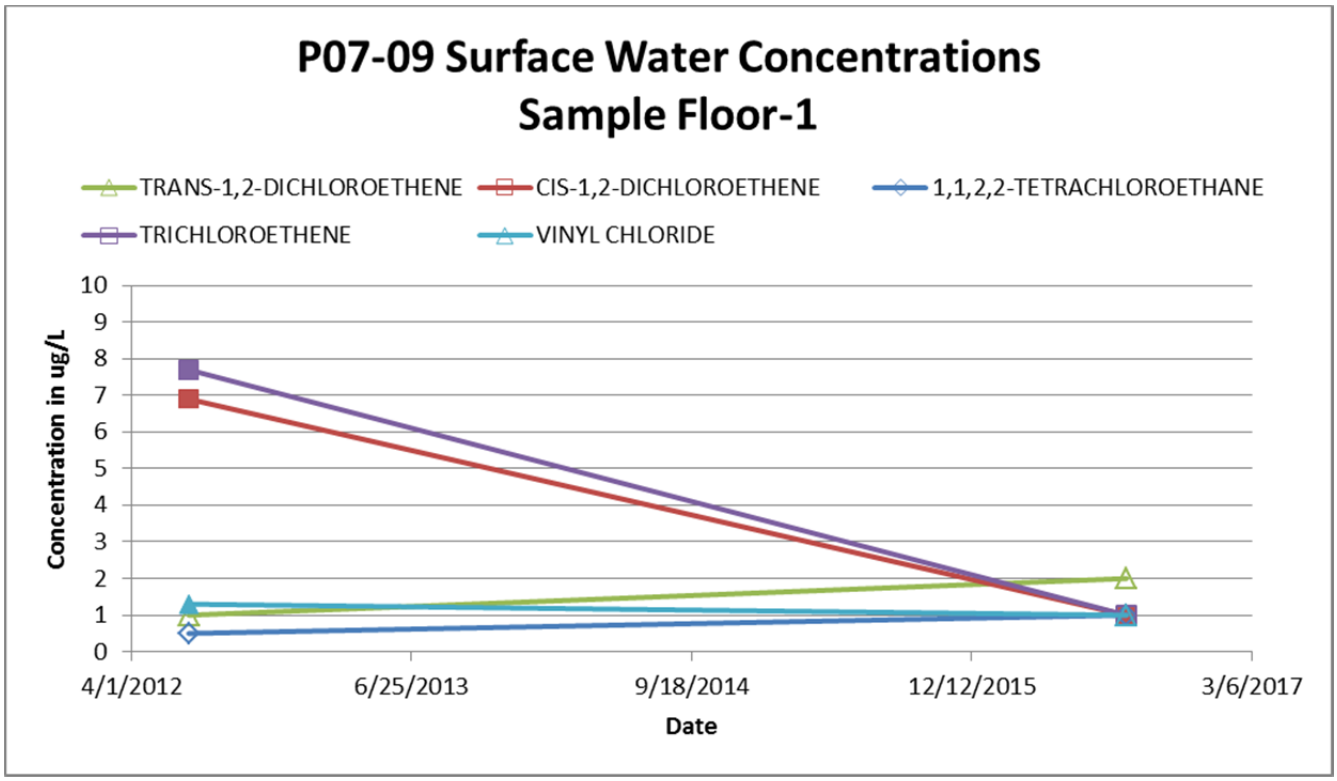
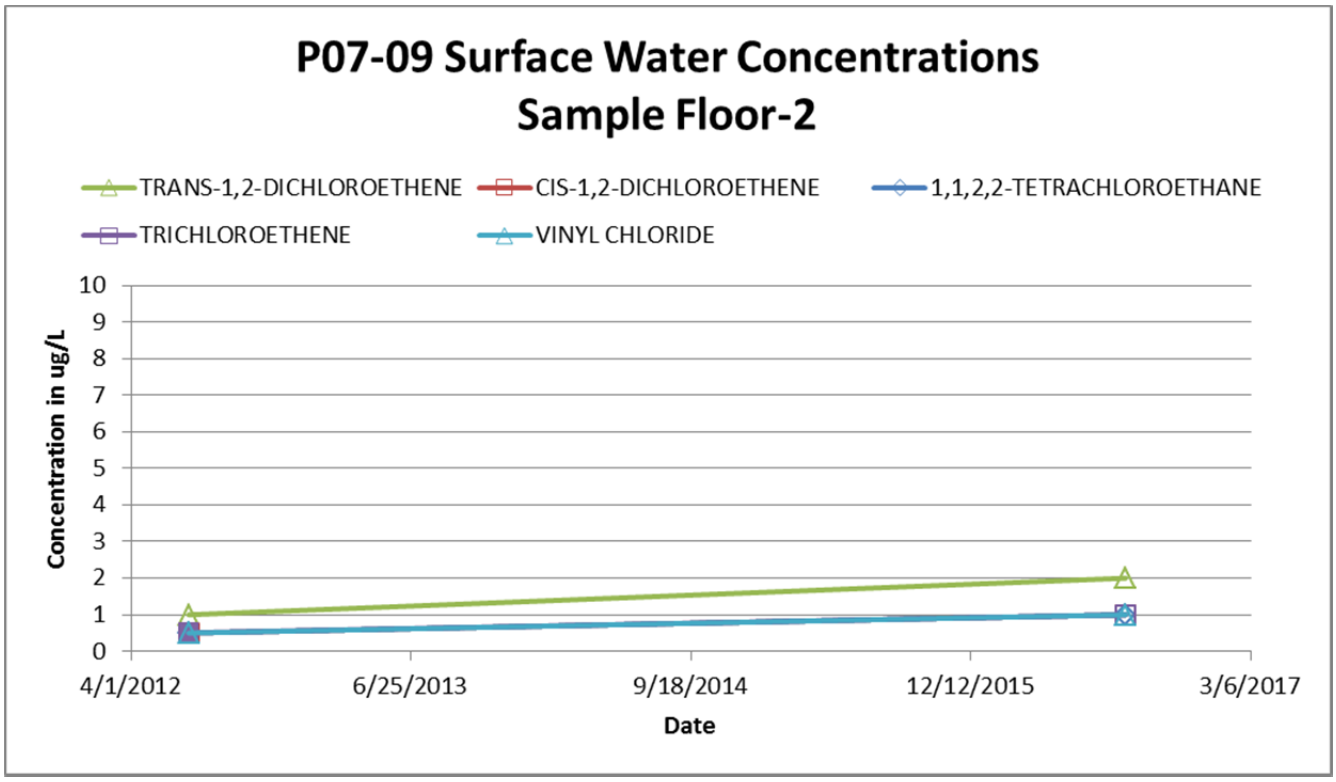
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

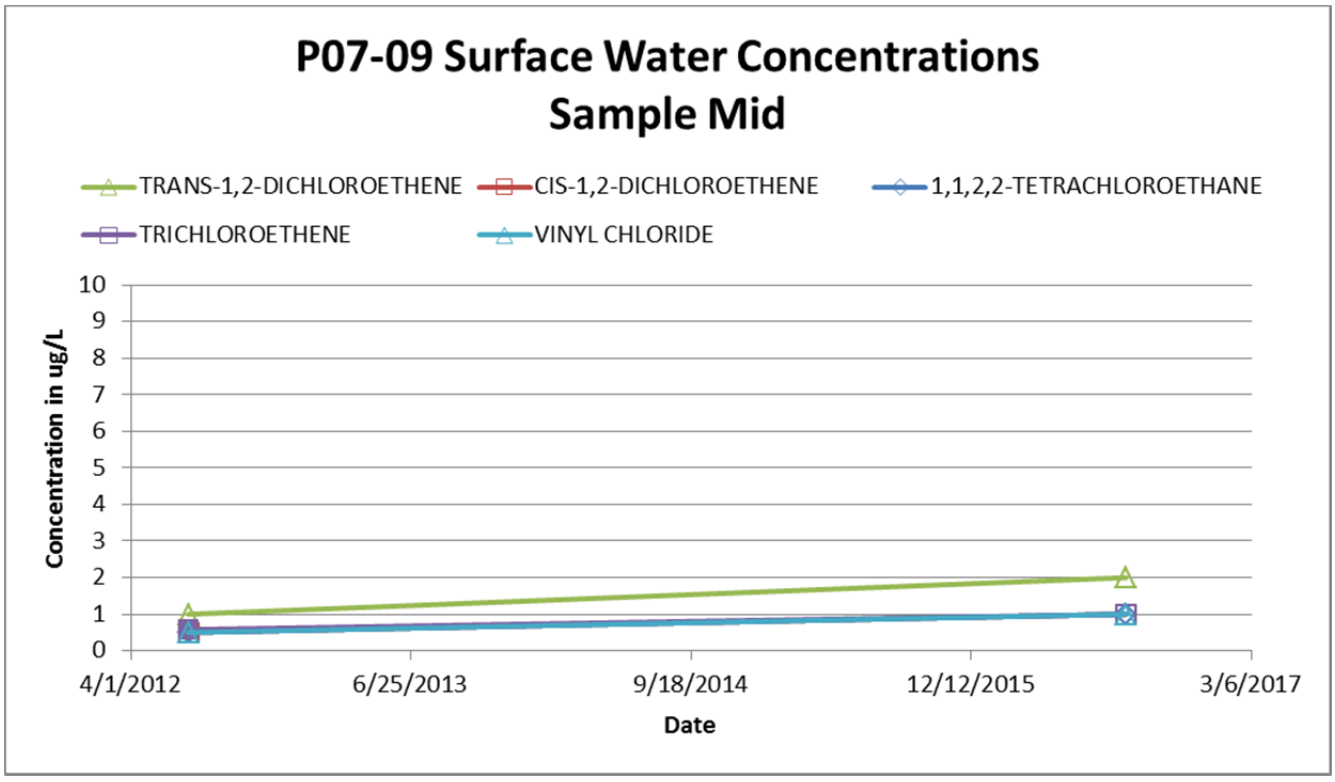

P07-08 Surface Water Concentrations
Sample Floor-1
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

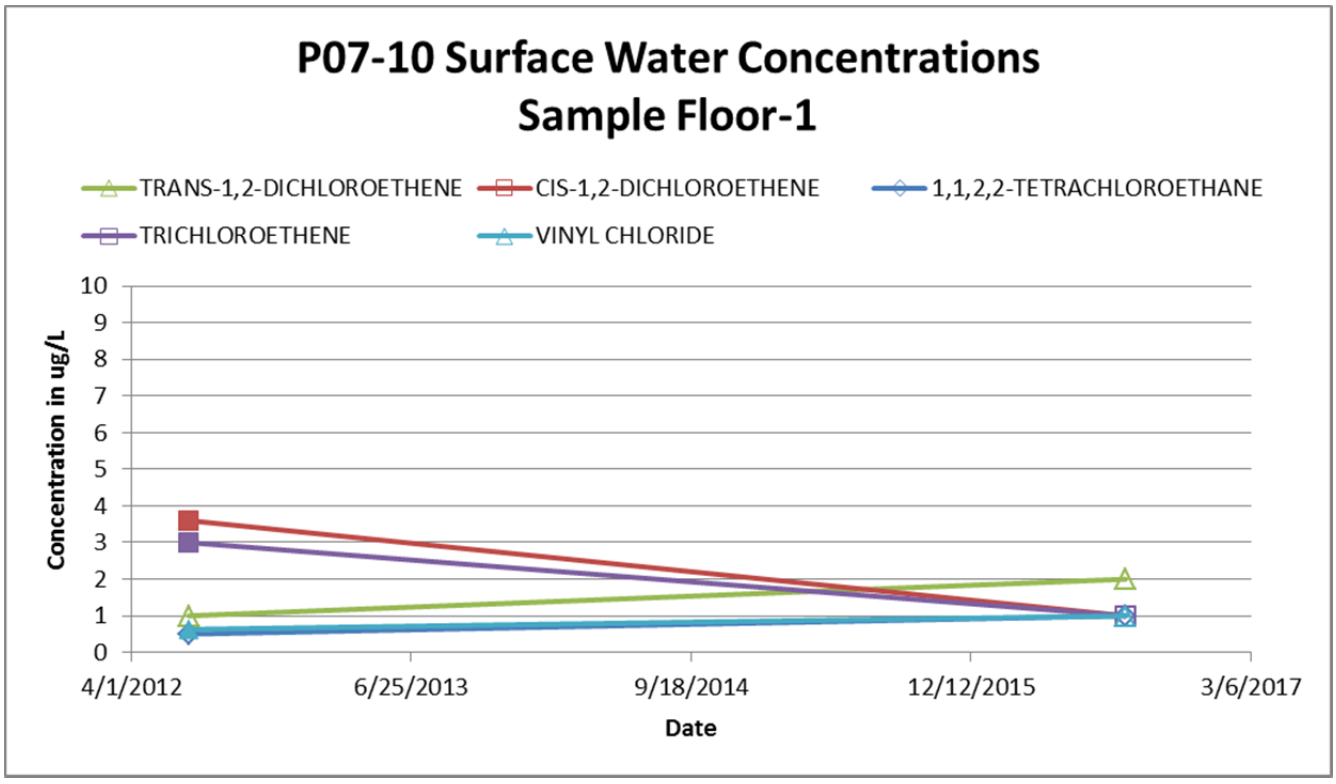

P07-08 Surface Water Concentrations
Sample Floor-2
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

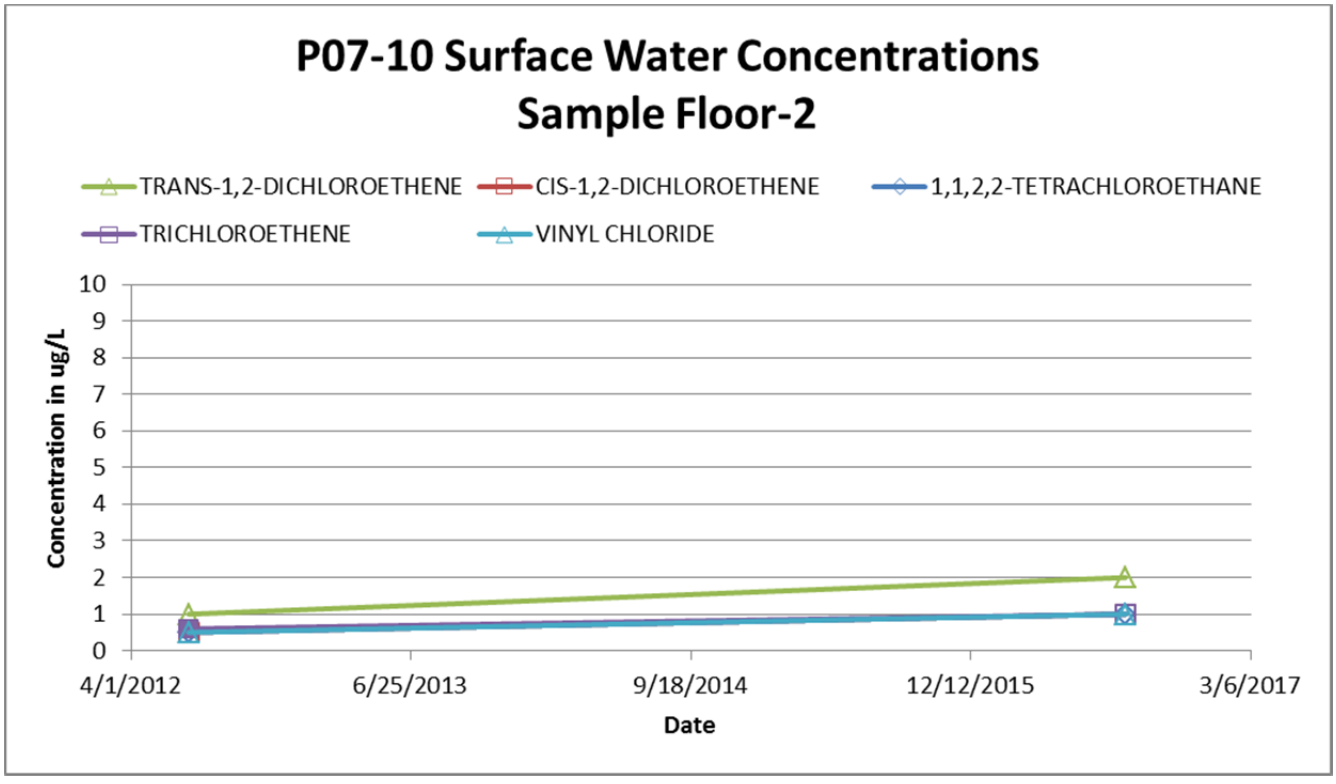

P07-08 Surface Water Concentrations
Sample Mid
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

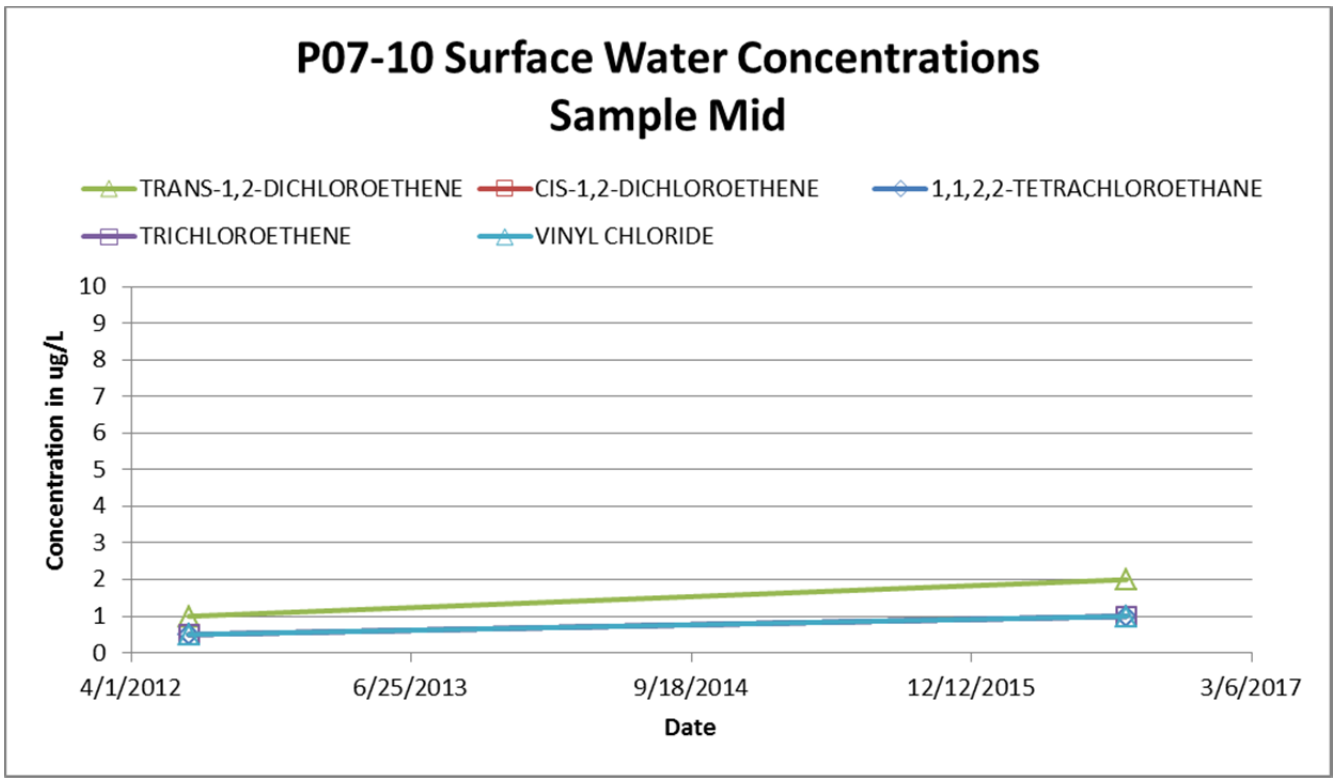

P07-09 Surface Water Concentrations
Sample Floor-1
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

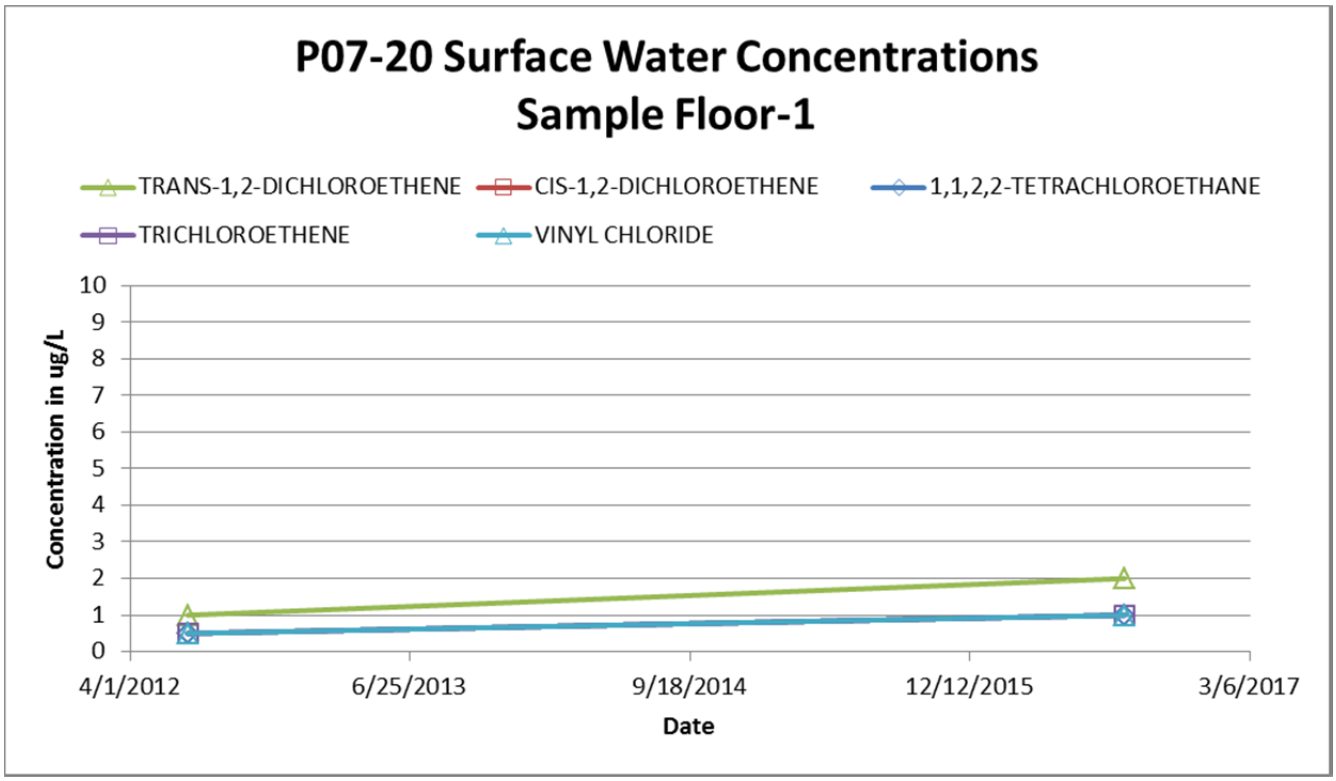

P07-09 Surface Water Concentrations
Sample Floor-2
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

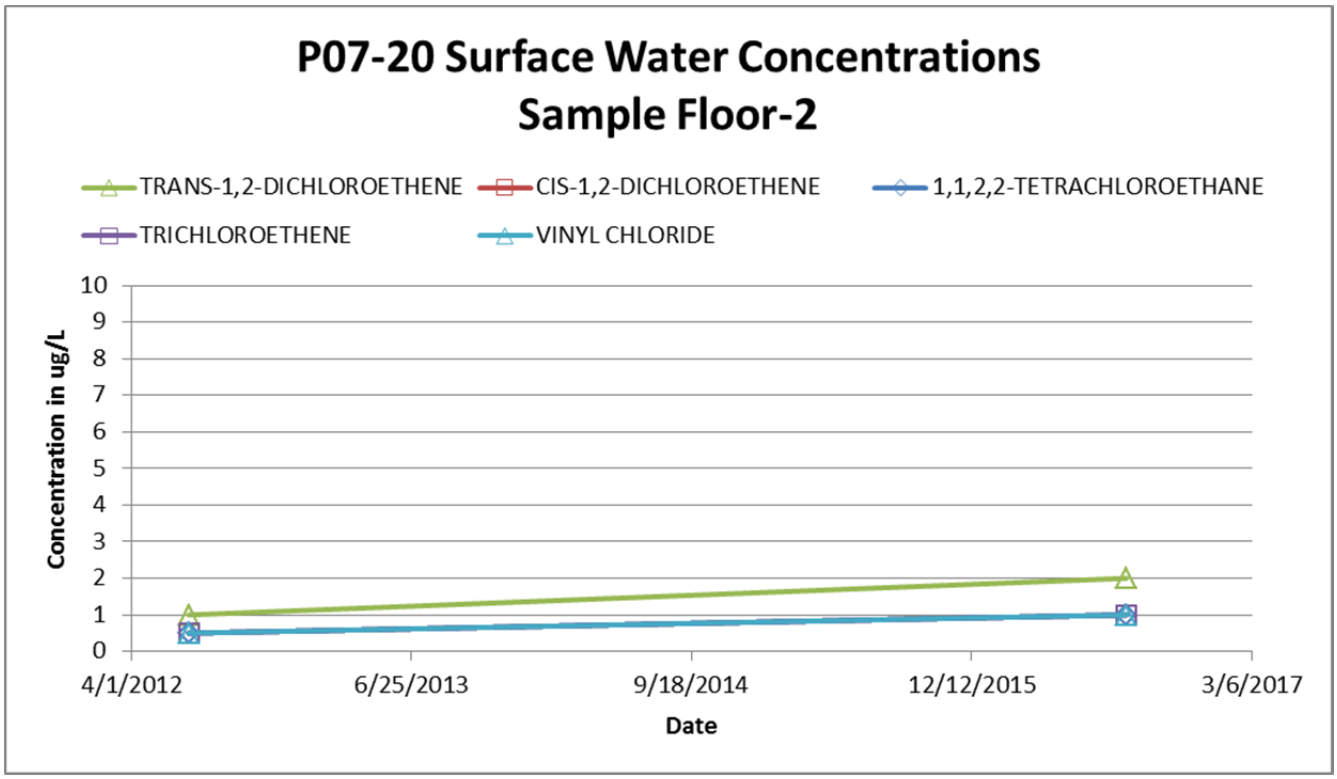

P07-09 Surface Water Concentrations
Sample Mid
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

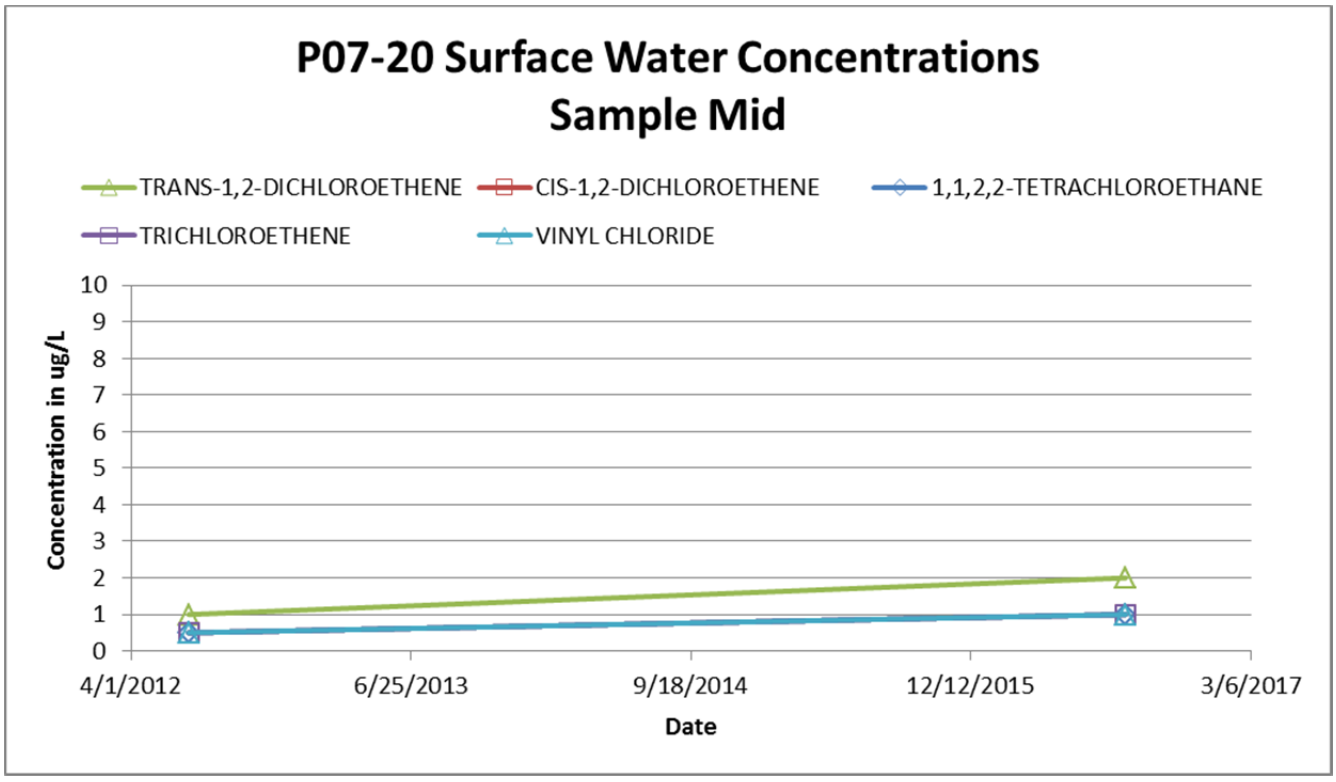

P07-10 Surface Water Concentrations
Sample Floor-1
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

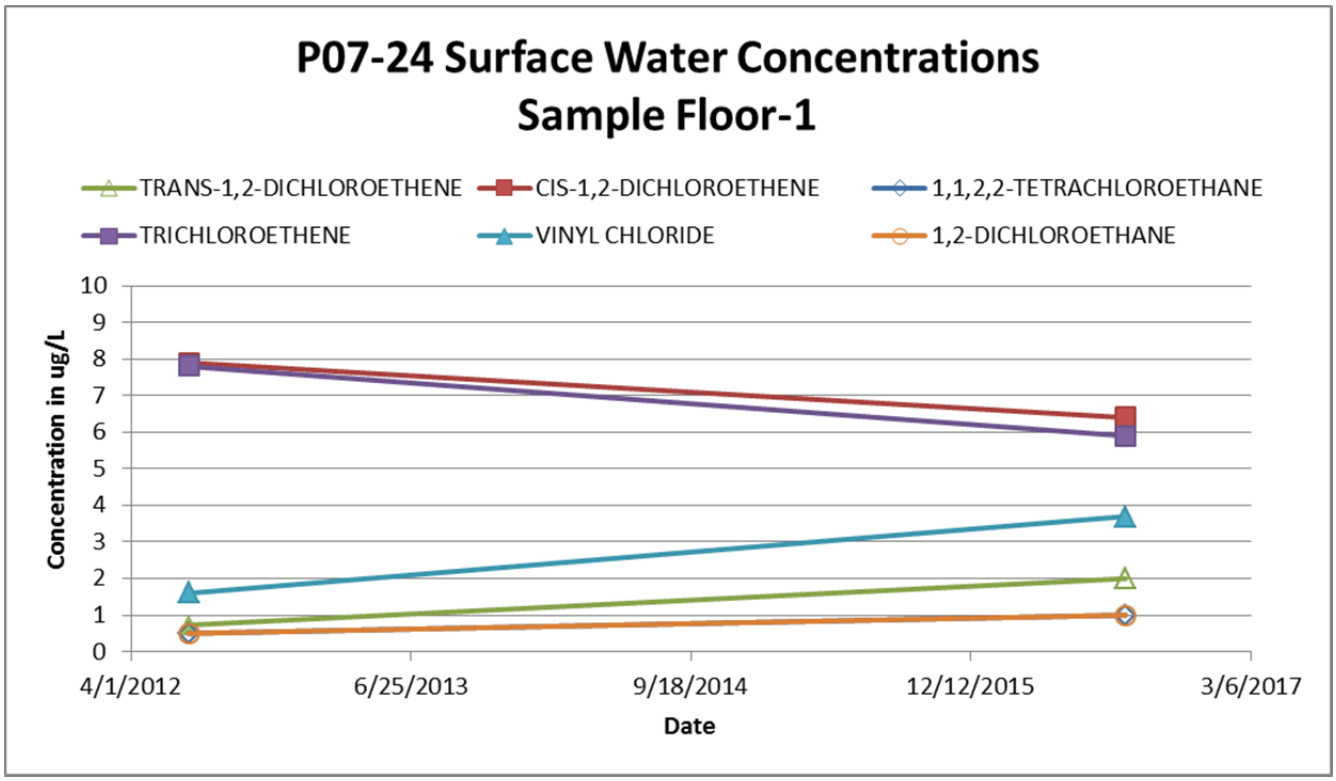

P07-10 Surface Water Concentrations
Sample Floor-2
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

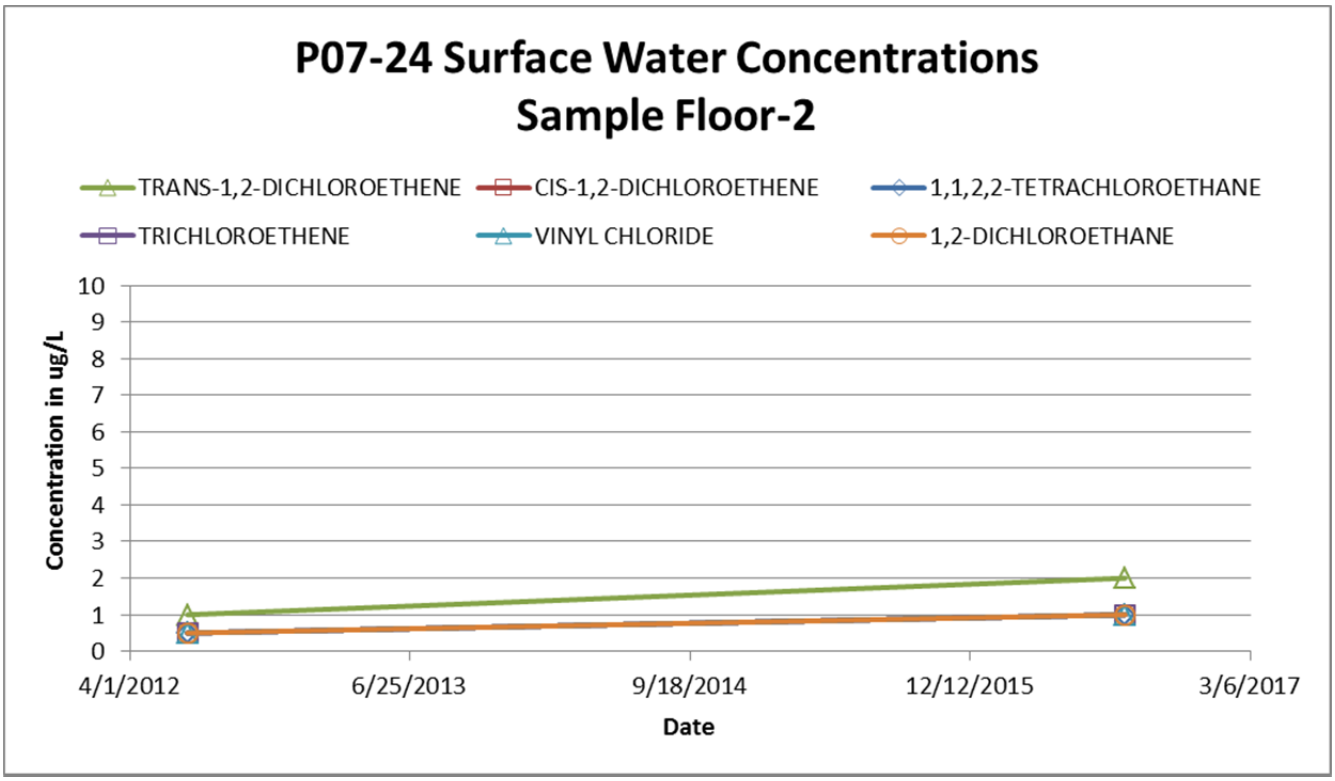

P07-10 Surface Water Concentrations
Sample Mid
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

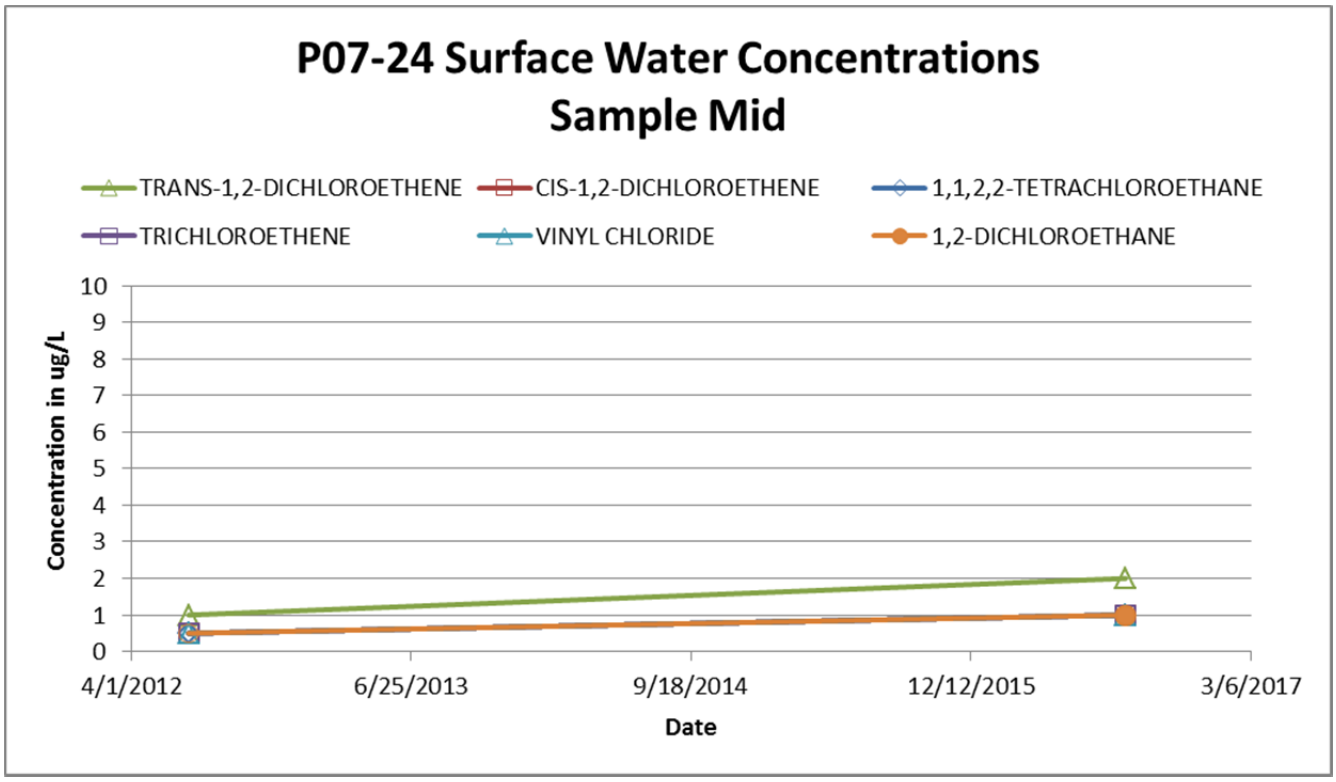

P07-20 Surface Water Concentrations
Sample Floor-1
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

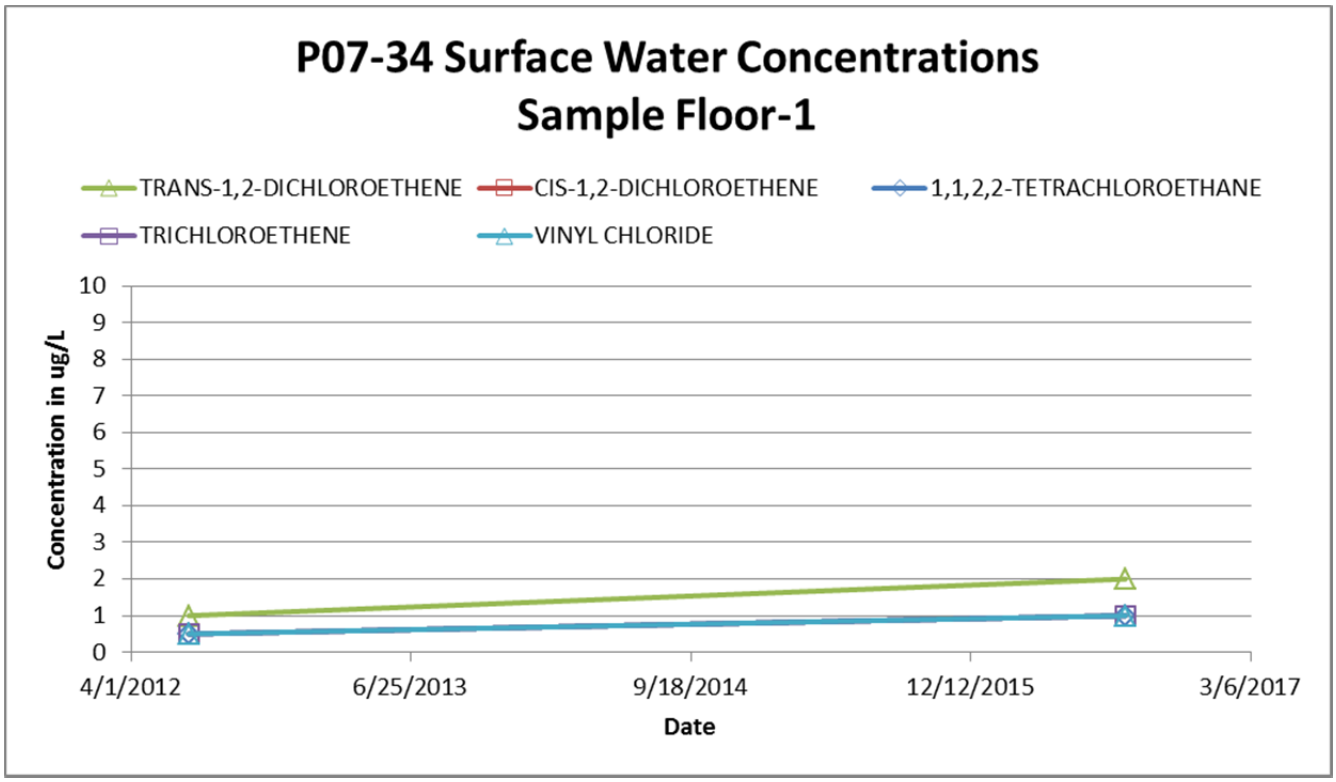

P07-20 Surface Water Concentrations
Sample Floor-2
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

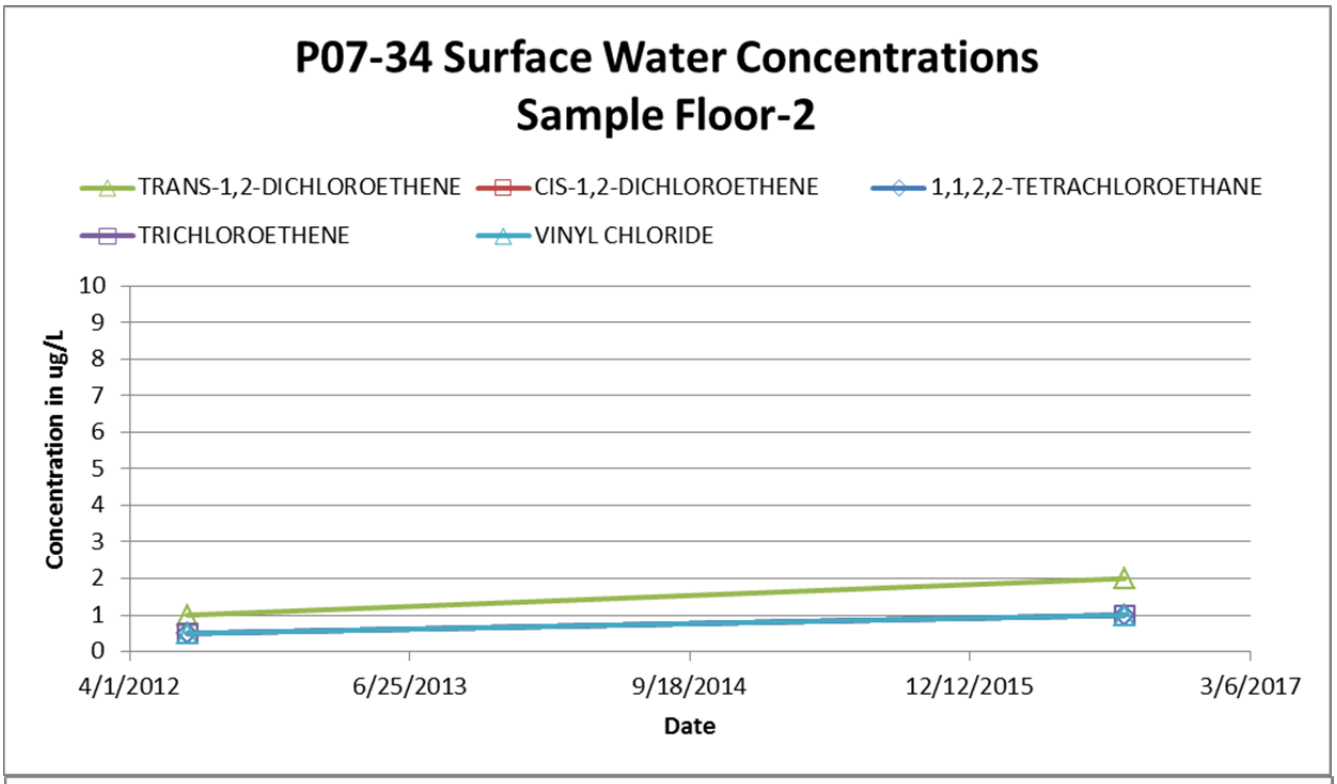

P07-20 Surface Water Concentrations
Sample Mid
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date

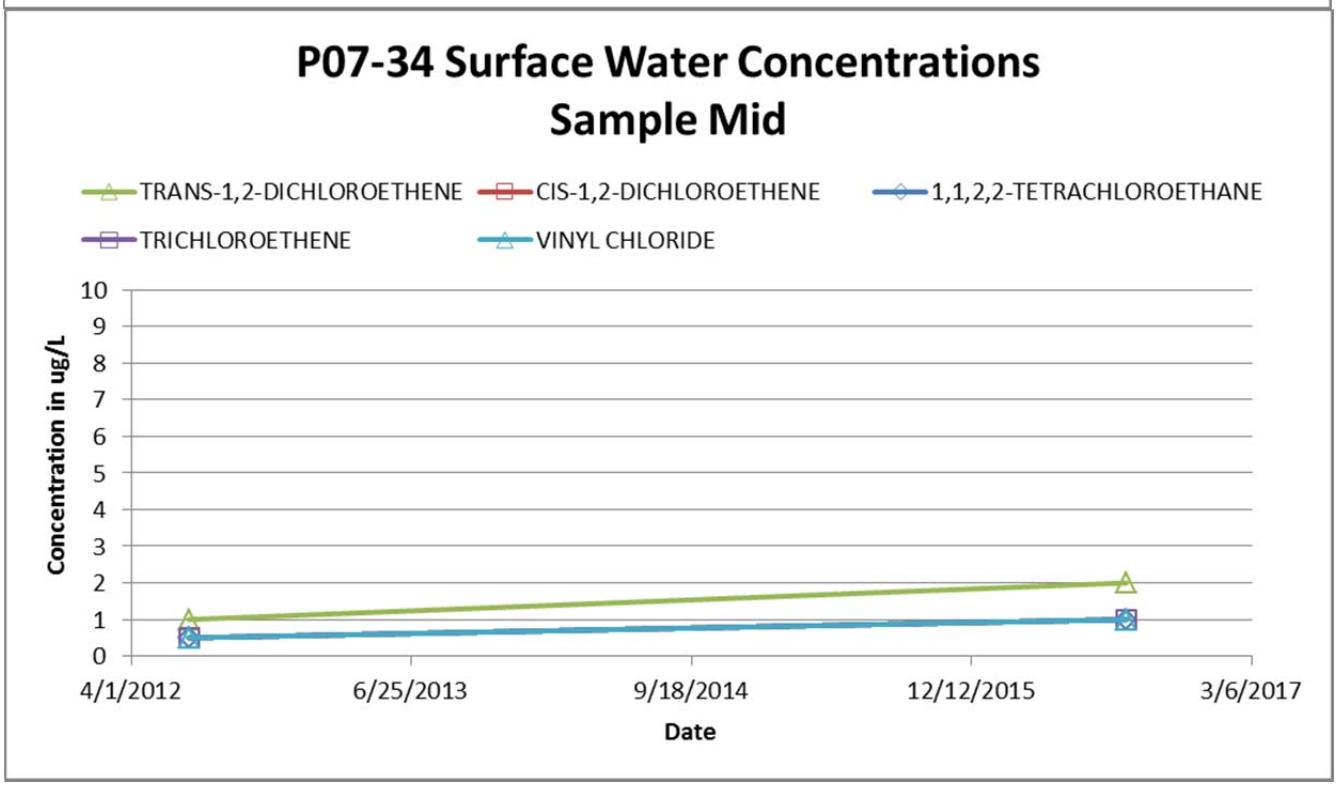

P07-24 Surface Water Concentrations
Sample Floor-1
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
1,2-DICHLOROETHANE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date


P07-24 Surface Water Concentrations
Sample Floor-2
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
1,2-DICHLOROETHANE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date


P07-24 Surface Water Concentrations
Sample Mid
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
1,2-DICHLOROETHANE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date


P07-34 Surface Water Concentrations
Sample Floor-1
TRANS-1,2-DICHLOROETHENE
CIS-1,2-DICHLOROETHENE
1,1,2,2-TETRACHLOROETHANE
TRICHLOROETHENE
VINYL CHLORIDE
Concentration in ug/L
10
9
8
7
6
5
4
3
2
1
0
4/1/2012
6/25/2013
9/18/2014
12/12/2015
3/6/2017
Date





Notes:
Maximum of Field Duplicate and Parent Sample used
Hollow points = Non detect data, filled points = detected value

Attachment E

Tabular Evaluation of Long Term Trends

TABLE E-1
LONG TERM TRENDS IN DETECTED PIEZOMETERS
1995 THROUGH 2016
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Maximum	Minimum	Average	September 2016
1,1,2,2-TETRACHLOROETHANE				
P07-02	4.4	4.4	4.40	< 0.5 U
P07-03	3	3	3.00	< 0.5 U
P07-04	1.6	1.6	1.60	< 0.5 U
P07-05	31	0.74	12.15	< 0.5 U
P07-07	520	5	139.87	44.6
P07-08	1200	2.3	232.93	75
P07-09	1100	33	277.89	110
P07-10	130	2	39.16	15
P07-15	22	3.1	9.38	< 0.5 U
P07-16	2.5	0.2	1.24	< 0.3 U
P07-20	88	0.7	21.05	0.7
P07-21	36	0.64	14.23	< 0.5 U
P07-22	100	0.8	36.51	0.8
P07-23	36	0.55	13.35	< 0.3 U
P07-24	41	1.2	20.70	< 1.0 U
CIS-1,2-DICHLOROETHENE				
P07-02	3.1	3.1	3.10	< 0.5 U
P07-03	7	0.4	2.17	< 0.5 U
P07-04	6	0.81	2.46	< 0.5 U
P07-05	320	0.2	101.03	68.9
P07-06	490	3	200.68	87.2
P07-07	1190	8	498.84	260
P07-08	1400	0.6	439.78	160
P07-09	1900	0.6	1163.26	1000
P07-10	221	50	139.22	91
P07-14	2	0.29	0.93	< 0.5 U
P07-15	24.1	0.89	9.41	1.3
P07-16	2	0.15	0.86	1
P07-20	610	0.81	86.68	34.4
P07-21	56.9	1.1	22.20	56.9
P07-22	69	2.5	26.41	2.5
P07-23	24	0.5	6.87	0.5
P07-24	29	0.5	12.50	< 1.0 U
TRANS-1,2-DICHLOROETHENE				
P07-03	2	2	2.00	< 1.0 U
P07-04	0.8	0.6	0.68	< 1.0 U
P07-05	32	0.6	16.57	21.5
P07-06	50	7.42	28.08	21.6
P07-07	95	8.4	39.30	19.8
P07-08	120	0.6	37.77	7.1
P07-09	350	0.1	114.10	69
P07-10	33.6	4	17.03	6.5
P07-15	4.1	0.19	1.62	0.6
P07-16	2.1	0.5	1.40	0.5
P07-20	52	0.32	12.28	6.9
P07-21	7	1.3	3.58	3.4
P07-22	6	0.4	2.85	0.4
P07-23	1.9	0.14	0.91	< 0.3 U
P07-24	5	0.5	1.62	< 2.0 U
TRICHLOROETHENE				
P07-02	3.6	0.34	1.97	< 1.0 U
P07-03	7	0.4	3.28	< 1.0 U
P07-04	2.4	1.3	1.85	< 1.0 U
P07-05	54	0.53	12.17	< 1.0 U
P07-06	3.8	0.26	1.11	< 1.0 U
P07-07	410	0.5	180.71	151
P07-08	2700	2	617.07	250
P07-09	3900	9.55	1075.64	490
P07-10	302	10	148.21	78
P07-14	1.1	0.18	0.64	< 1.0 U
P07-15	5.1	0.4	2.27	0.5
P07-16	7.8	0.69	5.30	4.8
P07-17	0.1	0.1	0.10	< 0.4 U
P07-20	84	0.25	13.26	< 0.4 U
P07-21	67.5	0.66	21.15	5.2
P07-22	75	4	26.94	4.4
P07-23	56	1	20.26	1.8
P07-24	67	0.8	24.59	< 1.0 U
P07-28	0.16	0.16	0.16	< 1.0 U
P07-29	1	1	1.00	< 0.4 U
VINYL CHLORIDE				
P07-03	0.4	0.4	0.40	< 1.0 U
P07-04	2.99	0.7	1.84	< 1.0 U
P07-05	74	3.35	29.30	49.7
P07-06	71	1.46	35.10	45.8
P07-07	204	0.6	33.17	< 2.6 U

TABLE E-1
LONG TERM TRENDS IN DETECTED PIEZOMETERS
1995 THROUGH 2016
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Maximum	Minimum	Average	September 2016
P07-08	165	0.73	34.15	2.5
P07-09	390	2.18	48.09	11
P07-10	34	0.76	7.68	< 1.0 U
P07-15	2.2	0.24	1.03	< 1.0 U
P07-16	0.88	0.4	0.64	< 0.5 U
P07-20	110	0.3	31.80	5.6
P07-21	2.3	0.47	1.06	0.7
P07-22	1.6	0.36	0.77	< 1.0 U
P07-24	1.4	0.39	0.87	< 1.0 U

Notes:
1) U or < = Non-detect at laboratory detection limit
2) R = Result was rejected during data validation
3) All units are in micrograms per liter (ug/l)
4) Red shading indicates September 2016 results are higher than the averge value
5) For field duplicate results in 2016, the higher of the two results was chosen

TABLE E-2
LONG TERM TRENDS IN DETECTED MONITORING WELLS 1995 THROUGH 2016
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Maximum	Minimum	Average	September 2016
1,1,2,2-TETRACHLOROETHANE				
DPT07-09-27D	1700	680	1260.00	680
DPT07-16I	9.5	9.5	9.50	9.5
DPT07-24D	11	8.4	9.77	9.9
DPT07-29-34I	7	3.8	5.70	3.8
DPT07-39-03D	11000	2200	7275.00	8200
DPT07-39-03I	1100	288	799.50	288
DPT07-39-04D	18000	10000	13666.67	10000
MW07-03D	8	8	8.00	< 1.0 U
MW07-04D	77000	230	10240.00	230
MW07-05D	48000	41	6408.10	41
MW07-09D	2100	130	649.25	< 50 U
MW07-09R	5.5	0.63	2.63	< 1.0 U
MW07-10D	1500	52	306.00	52
MW07-11D	60	6	32.75	44
MW07-12D	61	9	22.67	15.7
MW07-13D	6.8	2	4.56	R
MW07-13S	0.75	0.75	0.75	R
MW07-15D	45000	1320	12730.00	1320
MW07-17D	66000	5500	17428.57	5600
MW07-19D	41	10	21.84	< 20 U
MW07-19S	2200	490	1526.47	490
MW07-21D	640	22	293.73	114
MW07-21R	2400	386	1121.71	386
MW07-21S	470	74.2	232.15	74.2
MW07-23D	370	22	92.35	< 25 U
MW07-24D	2.7	2.7	2.70	< 0.5 U
MW07-24DUT	0.2	0.2	0.20	< 0.5 U
MW07-25D	3600	67	611.61	67
MW07-25R	1300	14	184.09	< 5.0 U
MW07-27D	5500	792	2581.57	792
MW07-33D	5.9	0.47	2.38	< 0.3 U
MW07-33S	26	1.15	9.63	< 0.3 U
MW07-34D	183	5	110.88	82
MW07-35D	528	130	285.08	< 100 U
MW07-37D	461	58.6	215.69	58.6
MW07-38D	423	30	143.33	30
MW07-39D	5000	210	1839.07	300
MW07-39I	7900	1270	4421.88	1270
MW07-39S	7600	1650	4903.33	1650
MW07-40D	3200	1100	2033.33	1100
MW07-41I	1800	720	1155.00	720
MW07-42I	2400	860	1593.33	860
MW07-44D	4.5	1.3	2.67	< 5.0 U
MW07-45D	300	42	115.00	< 50 U
MW07-45S	0.41	0.41	0.41	< 1.0 U
CIS-1,2-DICHLOROETHENE				
DPT07-09-27D	1900	1300	1600.00	1600
DPT07-16I	120	120	120.00	120
DPT07-24D	114	91	101.67	114
DPT07-24I	1.9	1.2	1.55	1.9
DPT07-39-03D	5900	2000	3225.00	2000
DPT07-39-03I	2500	950	1680.00	1670
DPT07-39-04D	5300	2500	4200.00	2500
MW07-03D	12	12	12.00	12
MW07-04D	170	62	116.32	< 50 U
MW07-05D	170	34	90.90	< 20 U
MW07-09D	5700	1600	3318.00	4000
MW07-09R	410	56	248.38	250
MW07-10D	28	7.2	15.93	7.2
MW07-11D	800	13	296.93	670
MW07-12D	21	4	10.36	16.3
MW07-13D	60	0.59	24.55	0.7
MW07-13S	0.4	0.4	0.40	R
MW07-15D	110	75	92.50	< 50.0 U
MW07-17D	7300	1100	2100.00	1200
MW07-18D	0.81	0.53	0.69	0.72
MW07-19D	910	47	448.07	760
MW07-19S	3300	1200	2140.67	1700
MW07-20S	0.23	0.23	0.23	< 0.5 U
MW07-21D	1500	337	677.90	1070
MW07-21R	6800	799	1982.45	1700
MW07-21S	1100	356	600.75	579
MW07-23D	1300	92.7	356.79	730
MW07-24DUT	5.9	1.4	3.78	5.8
MW07-25D	690	6	54.56	< 10 U
MW07-25R	1200	250	551.25	520

TABLE E-2
LONG TERM TRENDS IN DETECTED MONITORING WELLS 1995 THROUGH 2016
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Maximum	Minimum	Average	September 2016
MW07-27D	3200	1520	2020.83	2340
MW07-30D	1.1	1.1	1.10	1.1
MW07-33D	20	10.1	13.40	11.2
MW07-33S	3.6	0.35	2.25	< 0.3 U
MW07-34D	2000	50	1134.40	960
MW07-35D	24	8.2	13.93	< 100 U
MW07-35S	2.83	0.79	1.91	< 1.0 U
MW07-37D	76	30	49.41	30.9
MW07-37S	1.2	1.2	1.20	< 0.5 U
MW07-38D	5.6	1.8	3.09	< 5.0 U
MW07-39D	6200	489	2705.56	1830
MW07-39I	4400	1900	2695.63	2990
MW07-39S	2000	1300	1588.13	1370
MW07-40D	390	290	340.00	290
MW07-41I	6000	3300	4425.00	3300
MW07-42I	9300	3600	5766.67	6100
MW07-43D	0.6	0.6	0.60	0.6
MW07-44D	57	34	45.50	57
MW07-45D	750	160	335.00	200
TRANS-1,2-DICHLOROETHENE				
DPT07-09-27D	870	440	633.33	440
DPT07-24D	3.5	2.7	3.07	3.5
DPT07-39-03D	670	500	570.00	550
DPT07-39-03I	460	147	244.25	147
DPT07-39-04D	2600	2500	2550.00	< 1000 U
MW07-03D	3.9	3.9	3.90	3.9
MW07-04D	100	14	36.70	< 100 U
MW07-05D	75	26	46.99	< 40 U
MW07-09D	780	300	530.60	300
MW07-09R	28	2	14.17	16
MW07-10D	10	3.3	5.21	< 10 U
MW07-11D	47	0.23	14.61	< 50 U
MW07-12D	5.1	0.67	2.10	4.5
MW07-13D	7.4	0.5	2.96	R
MW07-15D	66	46	57.33	60
MW07-17D	3200	630	1078.50	630
MW07-19D	110	3	52.82	< 40 U
MW07-19S	270	85	172.93	130
MW07-21D	190	37	124.84	164
MW07-21R	430	220	291.50	298
MW07-21S	120	12	31.27	23.8
MW07-23D	83	24	42.60	< 50 U
MW07-24DUT	0.5	0.2	0.35	0.5
MW07-25D	200	2	20.98	< 20 U
MW07-25R	260	35	103.64	35
MW07-27D	522	270	373.17	343
MW07-33D	4.5	2.2	3.19	2.2
MW07-33S	1.7	0.27	0.87	< 0.3 U
MW07-34D	96	1	42.85	39
MW07-35D	6.3	2.9	4.63	< 200 U
MW07-35S	0.25	0.25	0.25	< 2.0 U
MW07-37D	29	13	20.34	14.6
MW07-38D	1.7	0.79	1.14	< 10 U
MW07-39D	750	120	341.93	279
MW07-39I	1100	430	672.13	635
MW07-39S	240	134	191.19	170
MW07-40D	180	140	160.00	< 100 U
MW07-41I	390	260	326.67	< 100 U
MW07-42I	780	460	615.00	630
MW07-44D	8.6	5	6.43	< 10 U
MW07-45D	240	54	117.20	< 100 U
TRICHLOROETHENE				
DPT07-09-27D	23000	9000	15666.67	9000
DPT07-16I	83	0.7	41.85	83
DPT07-16S	0.69	0.69	0.69	< 1.0 U
DPT07-18S	1.2	1.2	1.20	< 1.0 U
DPT07-24D	99.8	67	81.60	99.8
DPT07-24I	1.9	1.5	1.70	1.9
DPT07-29-34I	0.71	0.71	0.71	< 1.0 U
DPT07-29-34S	0.73	0.73	0.73	< 1.0 U
DPT07-39-03D	52000	37000	43000.00	38000
DPT07-39-03I	8900	1920	5930.00	1920
DPT07-39-04D	98000	73000	89000.00	73000
MW07-03D	65	2.2	33.60	2.2
MW07-04D	46000	6100	16805.56	6100
MW07-05D	47000	230	8115.45	230
MW07-05S	4.5	0.5	2.50	< 1.0 U

TABLE E-2
LONG TERM TRENDS IN DETECTED MONITORING WELLS 1995 THROUGH 2016
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Maximum	Minimum	Average	September 2016
MW07-09D	8200	420	5043.53	1000
MW07-09R	98	3	40.58	62
MW07-10D	1000	170	448.71	170
MW07-11D	1100	2.39	280.29	940
MW07-12D	68	2	16.64	64.8
MW07-13D	200	1.3	83.73	1.3
MW07-13S	6.9	0.52	2.81	R
MW07-15D	47000	6100	16795.00	6180
MW07-17D	150000	29000	58728.57	29000
MW07-18D	0.85	0.85	0.85	< 1.0 U
MW07-19D	2400	34	1012.75	1700
MW07-19S	8700	3300	5811.76	4500
MW07-20D	1.8	1.8	1.80	< 1.0 U
MW07-21D	6400	82	3827.36	5140
MW07-21R	11000	4200	8634.09	8930
MW07-21S	4100	200	772.14	351
MW07-23D	920	36	469.91	42
MW07-24DUT	23	7	13.23	18.7
MW07-25D	3000	470	1132.26	470
MW07-25R	3100	190	1453.68	400
MW07-27D	15000	6100	9894.29	8200
MW07-33D	34	6.1	18.82	6.1
MW07-33S	30	0.4	4.63	0.4
MW07-34D	1700	19	505.65	690
MW07-35D	1210	150	814.00	150
MW07-35S	0.72	0.41	0.61	< 1.0 U
MW07-37D	911	450	642.00	460
MW07-37S	5	2.5	3.75	< 1.0 U
MW07-38D	685	170	394.38	170
MW07-38S	1.6	0.6	1.10	< 1.0 U
MW07-39D	29000	1350	12213.75	9980
MW07-39I	31800	15000	23550.00	18000
MW07-39S	23000	11000	16575.00	13800
MW07-40D	9800	5200	8050.00	5200
MW07-41I	3500	2500	2950.00	2500
MW07-42I	20000	9000	13666.67	9000
MW07-43D	0.63	0.4	0.52	0.4
MW07-44D	240	180	210.00	240
MW07-45D	4600	1100	2000.00	1200
VINYL CHLORIDE				
DPT07-09-27D	44	44	44.00	< 200 U
DPT07-16I	5.2	5.2	5.20	5.2
DPT07-18I	0.8	0.8	0.80	0.8
DPT07-24D	6.5	2.9	4.70	6.5
DPT07-29-34I	0.54	0.54	0.54	< 1.0 U
DPT07-39-03D	87	57	68.33	61
DPT07-39-03I	170	31	79.75	77
DPT07-39-04D	69	53	61.00	53
MW07-03D	31	2.5	16.75	2.5
MW07-04D	12	2	5.92	< 50 U
MW07-05D	14	3	8.27	< 20 U
MW07-09D	170	26	106.27	< 50 U
MW07-09R	29	3	10.94	15
MW07-10D	1.9	1	1.38	< 5.0 U
MW07-11D	18	1	7.63	< 25 U
MW07-13D	2	0.3	1.11	R
MW07-15D	2.9	1.8	2.35	< 100 U
MW07-17D	140	19	67.36	< 50 U
MW07-19D	220	3	35.94	160
MW07-19S	56	12	25.04	< 50 U
MW07-21D	22	1	12.36	< 100 U
MW07-21R	150	11	27.96	150
MW07-21S	14.2	0.76	3.75	14.2
MW07-23D	7	2	4.21	< 25 U
MW07-24DUT	0.39	0.2	0.27	< 1.0 U
MW07-25D	19	0.12	9.56	< 10 U
MW07-25R	22	3	10.74	< 5.0 U
MW07-27D	140	13	82.98	122
MW07-33D	0.13	0.12	0.13	< 0.5 U
MW07-33S	15	0.73	6.04	< 0.5 U
MW07-34D	38	3	21.10	< 25 U
MW07-35S	0.48	0.48	0.48	< 1.0 U
MW07-37D	0.42	0.3	0.37	< 10.0 U
MW07-39D	190	16	87.12	98
MW07-39I	230	87.6	135.06	< 500 U
MW07-39S	82	31.6	47.37	< 250 U
MW07-40D	28	28	28.00	< 50 U

TABLE E-2
LONG TERM TRENDS IN DETECTED MONITORING WELLS 1995 THROUGH 2016
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Maximum	Minimum	Average	September 2016
MW07-41I	130	85	108.25	88
MW07-42I	180	120	145.00	140
MW07-44D	1.2	1.2	1.20	< 5.0 U
MW07-45D	27	6	15.33	< 50 U

Notes:
1) U or < = Non-detect at laboratory detection limit
2) R = Result was rejected during data validation
3) All units are in micrograms per liter (ug/l)
4) Red shading indicates September 2016 results are higher than the averge value
5) For field duplicate results in 2016, the higher of the two results was chosen

TABLE E-3
LONG TERM TRENDS IN DETECTED SEDIMENT 1995 THROUGH 2016
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location	Analyte	Maximum	Minimum	Average	August 2016
SED07-08	1,1,2,2-TETRACHLOROETHANE	15.2	15.2	15.2	< 3.2
SED07-09	1,1,2,2-TETRACHLOROETHANE	40.7	10.8	27	< 2.0
SED07-05	CIS-1,2-DICHLOROETHENE	4.9	4.9	4.9	< 2.7
SED07-06	CIS-1,2-DICHLOROETHENE	4.2	4.2	4.2	< 2.1
SED07-07	CIS-1,2-DICHLOROETHENE	53	0.61	17	< 2.0
SED07-08	CIS-1,2-DICHLOROETHENE	131	1.9	68	< 3.2
SED07-09	CIS-1,2-DICHLOROETHENE	271	1.7	78.3	< 2.0
SED07-06	TRANS-1,2-DICHLOROETHENE	8.4	8.4	8.4	< 2.1
SED07-07	TRANS-1,2-DICHLOROETHENE	10.3	0.6	4.5	< 2.0
SED07-08	TRANS-1,2-DICHLOROETHENE	27.1	3	12.9	< 3.2
SED07-09	TRANS-1,2-DICHLOROETHENE	63.5	2	18.9	< 2.0
SED07-05	TRICHLOROETHENE	220	220	220	< 2.7
SED07-07	TRICHLOROETHENE	110	110	110	< 2.0
SED07-08	TRICHLOROETHENE	11.3	5.6	8.45	< 3.2
SED07-09	TRICHLOROETHENE	152	14.7	73.1	< 2.0
SED07-10	TRICHLOROETHENE	120	120	120	< 2.9
SED07-06	VINYL CHLORIDE	8.4	8.4	8.4	< 2.1
SED07-08	VINYL CHLORIDE	9	9	9	< 3.2
SED07-09	VINYL CHLORIDE	110	10.1	48.8	< 2.0

Notes:

1. For field duplicate results in 2016, the higher of the two results was chosen
2. Red shading indicates September 2016 results are higher than the averge value
3. U - Not Detected
4. All results in ug/kg

Attachment F

Updated Human Health Risk Assessment

HUMAN HEALTH RISK ASSESSMENT UPDATE
Long Term Monitoring
Site 07 Calf Pasture Point
Former Naval Construction Battalion Center
Davisville
North Kingstown, Rhode Island

INTERNAL DRAFT

Prepared for:

Department of the Navy
Naval Facilities Engineering Command
BRAC Program Management Office, East
4911 South Broad Street
Philadelphia, Pennsylvania 19112

Contract Number N62470-11-D-8013

CTO WE23

Prepared by:

Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, VA 23510

March 2017

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ACRONYMS AND ABBREVIATIONS

>	greater than
%	percent
ug/L	microgram per liter
ADAF	age-dependent adjustment factor
ADD	average daily dose
bgs	below ground surface
BCT	Base Realignment and Closure Cleanup Team
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cm	centimeter
cm^2	square centimeter
COC	chemical of concern
COPC	chemical of potential concern
CSGWPP	Comprehensive State Groundwater Protection Program
CSF	cancer slope factor
CSM	conceptual site model
ELCR	excess lifetime cancer risk
EPC	exposure point concentration
HHRA	human health risk assessment
HI	hazard index
HQ	hazard quotient
IRIS	Integrated Risk Information System
kg	kilogram
L	liter
LADD	lifetime average daily dose
LOD	limit of detection
LTM	long-term monitoring

mg	milligram
mg/kg-day	milligram of chemical per kilogram of body weight per day
NCBC	Naval Construction Battalion Center
NHL	non-Hodgkin's lymphoma
PCBs	polychlorinated biphenyls
RAGS	Risk Assessment Guidance for Superfund
RAO	Remedial Action Objective
RfD	reference dose
RIDEM	Rhode Island Department of Environmental Management
RME	reasonable maximum exposure
ROD	Record of Decision
RSL	regional screening level
SAP	Sampling and Analysis Plan
TCE	trichloroethene
ug	microgram
UCL	upper confidence limit
U.S.	United States
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

1.0 INTRODUCTION

This report presents a human health risk assessment (HHRA) update conducted for the shoreline surface water, sediment, and groundwater in shallow piezometers at Site 07 (Calf Pasture Point) (site), located at the Former Naval Construction Battalion Center (NCBC) Davisville, in North Kingstown, Rhode Island. This HHRA update was performed in support of the Site 07 Five Year Event Long-Term Monitoring (LTM) Report and will ultimately be used as part of the evaluation of compliance with the Remedial Action Objectives (RAOs) identified in the Record of Decision (ROD) (EA, 1999) in the Fourth Five Year Review Report. The RAOs for Site 07 are to prevent human exposure to chemicals of concern (COCs) in deep and bedrock groundwater and to ensure that the discharge of groundwater to wetlands and offshore areas continue to pose no unacceptable risk from COCs. Therefore, the selected remedial alternatives included: (1) a deed restriction on groundwater and land use; (2) LTM of the groundwater plume (as well as sampling of other media such as shoreline sediment, as warranted based upon trends identified from the groundwater data) to ensure that the site continues to pose no unacceptable risks to human health and the environment.; and (3) Five-year reviews.

A summary of the Site 07 history is provided in the main text of the LTM Report and is, therefore, not included in this HHRA update. However, the previously conducted HHRAs are briefly summarized in the following section.

1.1 Previous HHRAs

In 2007, an HHRA was conducted to evaluate the shoreline surface water, sediment, and piezometer groundwater data collected during the LTM and other sampling performed to date. The objective of the HHRA was to evaluate the human health risks associated with potential human exposure to surface water, sediment, and shallow groundwater located along the Site 07 (Calf Pasture Point) shoreline (Tetra Tech, 2007). The 2007 HHRA concluded that the potential risks associated with potential human exposure to surface water, sediment, and shallow groundwater did not exceed United States Environmental Protection Agency (USEPA) or Rhode Island Department of Environmental Management (RIDEM) target levels. Potential risk associated with the consumption of shellfish obtained off the shoreline of Allen Harbor was identified above USEPA and RIDEM target levels for arsenic, mercury, and polychlorinated biphenyls (PCBs), however, these chemicals were determined not to be related to Site 07 activities.

In 2012, the 2007 shoreline HHRA was updated in support of the Third Five-Year Review Report for Site 07 (Tetra Tech, 2013) using newer surface water, sediment, and shallow groundwater data collected since the 2007 HHRA was conducted. The 2012 HHRA conclusions indicated that the conclusions of the 2007 HHRA (i.e., potential risk/hazard associated with potential human exposure

to surface water, sediment, and shallow groundwater did not exceed USEPA or RIDEM target levels) remained valid.

1.2 Objectives

The objective of this HHRA update (referred to herein as the 2017 HHRA update) is to determine whether there have been any changes and/or updates to USEPA HHRA guidance or site-specific conditions since the 2012 HHRA was conducted that would result in a change of the conclusions of the 2012 HHRA. The 2017 HHRA update includes the following:

- Calculation of summary statistics for analytical sediment, surface water, and shallow groundwater data collected along the Site 07 shoreline as part of the LTM, which are considered representative of current conditions (i.e., 2017 HHRA update dataset);
- Update of screening levels and chemical of potential concern (COPC) selection for shoreline sediment, surface water, and shallow groundwater;
- Update of human receptor exposure assumptions/parameters;
- Calculation of exposure point concentrations (EPCs) for COPCs within each medium based on the 2017 HHRA update dataset;
- Update of toxicity values for COPCs identified based on the 2017 HHRA update dataset.

In accordance with the approach discussed and agreed upon by the Davisville Base Realignment and Closure (BRAC) Cleanup Team (BCT) during the January 12, 2017 teleconference, revised formal risk/hazard calculations were not performed as part of this 2017 HHRA update. However, a quantitative evaluation was performed to determine whether updates to the 2012 HHRA would result in cumulative potential cancer risk and/or noncancer hazard estimates above USEPA and RIDEM target risk/hazard levels, changing the overall conclusions of the 2012 HHRA, or whether the conclusions of the 2012 HHRA remain valid.

The following USEPA risk assessment guidance was utilized in this 2017 HHRA update. Guidance documentation includes, but is not limited to, the following:

- *Navy Policy for Conducting Human Health Risk Assessments Under the Environmental Restoration Program* (DON, 2001)
- *U.S. Navy Human Health Risk Assessment Guidance* (DON, 2008)
- *Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual* (Parts A, B, E) (USEPA, 1989; 1991; 2004)
- *Human Health Toxicity Values in Superfund Risk Assessments* (USEPA, 2003)
- *Guidelines for Carcinogenic Risk Assessment* (USEPA, 2005a and b)

- *Exposure Factors Handbook* (USEPA, 2011)
- *Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors* (USEPA, 2014a)

The remainder of this report is organized into the following sections, consistent with USEPA's four-step paradigm for HHRA (USEPA, 1989):

- Data Evaluation/Hazard Identification
- Exposure Assessment
- Toxicity Assessment
- Risk Characterization

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2.0 CONCEPTUAL SITE MODEL

A detailed conceptual site model (CSM) is presented in Worksheet 10-1 of LTM Sampling and Analysis Plan (SAP) (Resolution, 2016). A brief summary of the CSM related to the HHRA is included in this section. Calf Pasture Point is a peninsula located on the northeastern portion of the Former NCBC Davisville facility. Site 07 is located on the southern portion of Calf Pasture Point. Site 07 is forested and grass covered and extends to the Allen Harbor and Narragansett Bay shorelines. Narragansett Bay, the Allen Harbor entrance channel, and Allen Harbor itself form the eastern, southern, and western shorelines of Site 07, respectively (**Figure 1**).

Current Site Use

Calf Pasture Point, including Site 07, was transferred to the Town of North Kingstown, Rhode Island for use as an open space/conservation area in November 2001. The acquisition restricts the transferee to use the property as a park and for recreational purposes, in perpetuity, with no opportunity for residential or commercial development. Additionally, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), land use restrictions with compliance monitoring have been placed on the property to ensure that future use will not conflict with the remedy. As a result, Calf Pasture Point is currently used for passive recreational purposes only and installation of water supply wells and/or use of Site 07 groundwater for any purpose (other than sampling or other remedial purposes), including drinking, showering, and irrigation, is prohibited. In addition, any structure constructed on Site 07 must have adequate ventilation to mitigate any potential vapor intrusion pathway.

This HHRA update evaluates potential exposure to shoreline groundwater, surface water, and sediment based on recreational use of the Site 07 shoreline.

Target Chemicals

Historical investigations and risk assessments identified chlorinated volatile organic compounds (VOCs) in groundwater as the primary COCs for Site 07, with some metals also contributing potential risk/hazard. The list of target chemicals selected for analysis during the LTM has since been reduced to only the site-specific list of VOCs (i.e., benzene, chloroform, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,2,2-tetrachloroethane, tetrachloroethane, 1,1,2-trichloroethene, trichloroethene [TCE], and vinyl chloride). This is because Site 07 is a VOC release site only; metals present in Site 07 media are considered to be representative of natural conditions, due to the hydraulic fill, or have mobilized by reducing conditions caused by the chlorinated VOC plume. In addition, metals in sediment did not contribute significantly to risk in the 2012 shoreline HHRA. Furthermore, the ROD does not address sediment

beyond to state that they will be sampled as part of the LTM program. Therefore, this HHRA update evaluates potential exposure to the target VOCs only.

The potentially exposed receptors and exposure pathways for the Site 07 shoreline are summarized in **Table 1**.

3.0 DATA EVALUATION

This section summarizes the shoreline groundwater, surface water, and sediment data evaluated in the HHRA update, and also provides a revised COPC selection to identify chemicals for further evaluation. A discussion of the sampling details associated with collection of the shoreline groundwater, surface water, and sediment data is provided in the LTM Report, and is not included in this HHRA update.

3.1 Summary of the Shoreline Dataset

The datasets for evaluation in the HHRA update are discussed by media in this section. **Figure 2** identifies the shoreline sample locations.

3.1.1 Groundwater

Shallow groundwater samples were collected during multiple sampling events conducted between October 2013 and September 2016 from twenty piezometers located along the northern bank of the entrance channel separating Narragansett Bay from Allen Harbor (i.e., the southern boundary of Site 07) and along the Allen Harbor shoreline on the western boundary of Site 07. The screened interval for the groundwater piezometers is approximately two to three feet below ground surface (bgs). Shallow (unfiltered) groundwater samples were analyzed for the target VOCs identified in Section 2. **Appendix A** presents a summary of shallow groundwater samples and individual analytical groundwater sample results.

3.1.2 Surface Water

Surface water samples were collected during one sampling event in August 2016 from three depths along ten transects along the northern bank of the entrance channel separating Narragansett Bay from Allen Harbor (i.e., the southern boundary of Site 07). Samples were collected from three different depths at low tide, as follows:

- Depth 1: At the harbor floor where water is approximately six inches deep (for evaluation of a recreational wading scenario);
- Depth 2: At the harbor floor where water is approximately three feet deep (for evaluation of a recreational swimming scenario); and
- Depth 3: At the mid-point of the water column where the water is approximately three feet deep (for evaluation of a recreational swimming scenario).

Surface water samples were analyzed for the target VOCs identified in Section 2. **Appendix A** presents a summary of surface water samples and individual analytical surface water sample results.

3.1.3 Sediment

Sediment samples were collected during one sampling event in August 2016 from six locations along the northern bank of the entrance channel separating Narragansett Bay from Allen Harbor (i.e., the southern boundary of Site 07). Sediment samples were analyzed for the target VOCs identified in Section 2. **Appendix A** presents a summary of sediment samples and individual analytical sediment sample results.

3.2 Data Treatment

Analytical data were evaluated, validated, and qualified prior to use in the HHRA update. Data evaluation and validation included a comparison of the site data to corresponding blank (laboratory, field, equipment, and trip) concentration data. Data validation reports are presented as Attachment B of the LTM report. Data rejected by the evaluation ("R" qualified) were not used in the HHRA. Estimated values ("J" qualified) were used in the HHRA without modification. If the value was flagged with "U" or "UJ," the result was considered a non-detect value.

For each medium, data were compiled into summary statistics. For each chemical detected at least once within a medium, the summary statistics include frequency of detection, range of detection limits, range of detected concentrations, and location of maximum detected result. Note that due to the exclusion of "R" qualified groundwater results for certain analytes, the frequency of detection may vary within a medium.

For sample locations in which a duplicate sample was also collected, the duplicate sample results for each chemical/medium combination were processed for use in the calculation of summary statistics. Duplicates were resolved as follows: (1) where both the sample and the duplicate results are not detected, the resulting value is the average of the limits of detection; (2) where both the sample and the duplicate results are detected, the resulting value is the average of the detected results; and (3) where one of the pair is reported as not detected and the other is detected, the detected concentration is used.

Appendix B presents comparisons of the summary statistics for target VOCs detected in the 2017 HHRA shoreline dataset to the summary statistics for COPCs identified in the 2012 HHRA. The summary statistics comparisons indicate that the maximum detected concentrations of all target VOCs identified as COPCs in shallow groundwater and sediment in the 2012 HHRA have decreased. With the exception of vinyl chloride, the maximum detected concentrations of all target VOCs identified as COPCs in surface water in the 2012 HHRA have also decreased. Vinyl chloride was detected in one out of thirty surface water samples in the updated dataset. However, the detected value is J-flagged, so it is considered an estimated value.

3.3 Identification of COPCs

The identification of COPCs was performed per medium based on a comparison of the maximum detected concentrations of detected chemicals to the screening or regulatory values discussed below. Chemicals detected at concentrations above the screening or regulatory values were identified as COPCs for further evaluation in the HHRA update. Chemicals that were not detected in a particular medium or were detected at concentrations below the screening or regulatory values were eliminated from being COPCs and were not evaluated further.

The COPC selection for groundwater, surface water, and sediment are presented in **Tables 2.1 through 2.3**, respectively. For analytes lacking a chemical-specific screening level, a conservative surrogate chemical was selected and its screening level was used for COPC screening. Specific instances where surrogate assignments were made are identified in footnotes in the COPC selection tables.

Screening levels and regulatory criteria were used to select COPCs as discussed per media below.

3.3.1 Groundwater

Groundwater screening levels include the USEPA tapwater Regional Screening Levels (RSLs) (USEPA, 2016a) based on a target excess lifetime cancer risk (ELCR) of 10^{-6} and a target hazard quotient (HQ) of 0.1 (to account for potential cumulative effects of multiple chemicals acting on the same target organ) and RIDEM GA Groundwater Objectives (RIDEM, 2011). A chemical was selected as a groundwater COPC if the maximum detected concentration exceeded either of the groundwater screening levels.

RIDEM GA Groundwater Objectives have not changed since the 2012 HHRA was performed. However, the USEPA RSLs are updated approximately twice per year. Changes to the RSLs associated with each update are documented on USEPA's RSL website (https://www.epa.gov/risk/regional-screening-levels-rsls-whats-new-may-2016).

Table 2.1 presents the COPC selection for groundwater. **Table 2.4** presents a comparison of the COPCs identified in the 2012 HHRA and those identified as a result of the updated COPC selection performed in this 2017 HHRA update. This comparison shows that the list of groundwater COPCs has not changed.

3.3.2 Surface Water

Consistent with the 2012 HHRA, surface water COPCs were conservatively selected using groundwater screening levels. Therefore, the surface water screening levels used in this 2017 HHRA update include the USEPA tapwater RSLs (USEPA, 2016a) based on a target ELCR of 10^{-6} and a target HQ of 0.1 (to account for potential cumulative effects of multiple chemicals acting on the

same target organ) and RIDEM GA Groundwater Objectives (RIDEM, 2011). A chemical was selected as a surface water COPC if the maximum detected concentration exceeded either of the surface water screening levels.

As discussed above, RIDEM GA Groundwater Objectives have not changed since the 2012 HHRA was performed. However, the USEPA RSLs are updated approximately twice per year. Changes to the RSLs associated with each update are documented on USEPA's RSL website (https://www.epa.gov/risk/regional-screening-levels-rsls-whats-new-may-2016).

Table 2.2 presents the COPC selection for surface water. **Table 2.4** presents a comparison of the COPCs identified in the 2012 HHRA and those identified as a result of the updated COPC selection performed in this 2017 HHRA update. This comparison shows that 1,2-dichloroethane is added as a surface water COPC based on one J-flagged detection equal to the limit of detection (LOD). The use of groundwater screening levels (which are protective of a drinking water ingestion scenario) to select surface water COPCs is conservative. The 1,2-dichloroethane detection of 1.0 J ug/L is less than the risk-based screening level derived based on a recreational surface water exposure scenario.

3.3.3 Sediment

Sediment COPCs were conservatively selected using the USEPA residential soil RSLs (USEPA, 2016a) based on a target ELCR of 10^{-6} and a target HQ of 0.1 (to account for potential cumulative effects of multiple chemicals acting on the same target organ) and the RIDEM Method 1 Direct Contact Exposure Criteria for soil (RIDEM, 2011). A chemical was selected as a sediment COPC if the maximum detected concentration exceeded either of the screening levels.

RIDEM soil criteria have not changed since the 2012 HHRA was performed. However, the USEPA RSLs are updated approximately twice per year. Changes to the RSLs associated with each update are documented on USEPA's RSL website (https://www.epa.gov/risk/regional-screening-levels-rsls-whats-new-may-2016).

As shown in **Table 2.4**, one sediment COPC was identified in the 2012 HHRA. No sediment COPCs were identified based on the updated screening level comparison. Therefore, exposure to sediment is not evaluated further in this HHRA update.

4.0 EXPOSURE ASSESSMENT

The purpose of the exposure assessment is the quantification of the extent, frequency, and duration of actual or potential exposure to chemicals by pathways relevant to the site and activities of the potential receptors.

4.1 Determination of Exposure Point Concentrations

Exposure points are the locations where potential receptors may contact COPCs at or from a site. The exposure points (or exposure areas) were defined based on the anticipated receptor activity and the spatial distribution of COPC concentrations. EPCs (exposure point concentrations) are the concentrations of COPCs in the environmental medium that receptors may contact, which are estimated in order to determine the magnitude of potential exposure. EPCs for evaluation of the reasonable maximum exposure (RME) scenario were calculated as described below.

The following exposure points were evaluated within the Site 07 shoreline:

Shallow groundwater

- *Southern Boundary* – includes shallow groundwater locations P07-02 through P07-10, and P07-20 through P07-24. The 2012 HHRA evaluated two data sets within the Southern Boundary Area due to a change in concentration over the LTM data evaluated in the 2012 HHRA. These datasets were referred to as "Case 1" and "Case 2". This 2017 HHRA update evaluated the combined 2013 through 2016 dataset as one exposure point because no discernable concentration pattern was identified within this timeframe.
- *Shoreline* – includes all shallow groundwater locations. This scenario is referred to as "Case 3" in the 2012 HHRA.
- *Western Boundary* – includes shallow groundwater locations P07-14 through P07-17, P07-28, and P07-29. This scenario is referred to as "Case 4" in the 2012 HHRA.
- *Mid-Southern Boundary* – includes shallow groundwater locations P07-05 through P07-10. USEPA guidance indicates that groundwater EPCs should be derived based on monitoring wells within the center or core of the plume (USEPA, 2014b). Therefore, shallow groundwater piezometers located within the center of the Southern Boundary, in which detected concentrations of COPCs are higher in comparison with other areas, were evaluated as a separate exposure point to evaluate a worst-case exposure scenario. This exposure point was not evaluated in the 2012 HHRA.

Surface Water

- Depth 1: At the harbor floor where water is approximately six inches deep (for evaluation of a recreational wading scenario). This scenario corresponds to "Case 3" (low tide) and "Case 4" (low/mid/high tide) evaluated in the 2012 HHRA.

- Depths 2 and 3: Includes surface water samples collected at the harbor floor (Depth 2) and at the mid-point of the water column (Depth 3) where water is approximately three feet deep (for evaluation of a recreational swimming scenario). This scenario corresponds to "Case 1" (low tide) and "Case 2" (low/mid/high tide) evaluated in the 2012 HHRA.

Groundwater EPCs are equal to the upper confidence limit (UCL) or the maximum concentration, whichever is lower (USEPA, 2002b). USEPA's ProUCL Version 5.1 software (USEPA, 2016h) was used to calculate the ProUCL recommended UCL. Based on information presented in the ProUCL guidance (USEPA, 2015) regarding minimum sample size and frequency detection, UCLs were calculated where at least 10 samples and at least 6 detects are available. **Appendix C** presents the ProUCL input and output sheets.

When the minimum sample size and number of detects were not met for a dataset, or if the UCL was greater than the maximum detected concentration, the maximum detected concentration was used as the EPC. Due to the low frequency of detection of surface water COPCs, surface water EPCs are equal to the maximum detected concentration.

The EPCs for COPCs in shallow groundwater and surface water evaluated in the 2017 HHRA update are presented in **Tables 3.1 and 3.2**, respectively. Tables 3.1 and 3.2 also show a comparison of the updated EPCs to those evaluated in the 2012 HHRA. The results of the comparison are discussed by media as follows.

The majority of the updated shallow groundwater EPCs are between one and three times higher than the EPCs calculated in the 2012 HHRA. However, the majority of the maximum detected concentrations in the updated dataset are lower than those calculated in the 2012 HHRA. Several of the shallow groundwater COPCs evaluated along the western boundary in the 2012 HHRA were not detected in the updated dataset, therefore, the COPC list for the western boundary has decreased.

The updated surface water EPCs associated with the low tide wading scenario (Depth 1) increased in comparison to the associated EPCs evaluated in the 2012 HHRA (Case 3). However, the Kaplan Meier mean and maximum detected concentrations have decreased. The increase in EPCs for this scenario is due to the smaller sample sizes available for EPC calculations in the 2017 HHRA update, resulting in use of the maximum detected concentration as the EPC, instead of the 95% UCL used in the 2012 HHRA.

The surface water COPCs identified for the low tide swimming scenario in the 2012 HHRA (Case 1) (i.e., cis-1,2-dichloroethene, TCE, and vinyl chloride) were not detected in the associated dataset in the 2017 HHRA update (Depths 2 and 3). However, one additional COPC (1,2-dichloroethane) was identified in the 2017 HHRA update.

4.2 Receptors and Exposure Pathways

The receptors and exposure pathways evaluated in the 2012 HHRA based on current and potential future land use remain appropriate and are summarized in **Table 1** and as follows:

- *Current/Future Recreational User – Swimmer/Wader (child, adolescent, adult)* - Exposure to shoreline surface water and sediment via incidental ingestion and dermal contact while swimming or wading;
- *Current/Future Recreational User* – Shell Fisherman (adolescent, adult) – Exposure to shallow groundwater along the shoreline via dermal contact; and exposure to shoreline surface water and sediment via incidental ingestion and dermal contact while clamming/harvesting shellfish.

As indicated in Section 3.3.3, no sediment COPCs were identified based on the updated screening level comparison. Therefore, exposure to sediment was not evaluated further beyond screening.

Young child (age 2 through 6 years), adolescent (age 7 through 16 years), and adult recreational users were evaluated for swimming and wading scenarios. Young children are not likely to harvest shellfish, therefore, adolescent and adult recreational users were evaluated for the clamming/shellfish harvesting scenario.

There are no formal recreational facilities (e.g., public swimming areas) currently located along the Site 07 shoreline and there are no known plans for development of formal recreational facilities in the future. Therefore, it is unlikely that a young child would be routinely exposed to the environmental media along this shoreline. However, exposures by a young child were conservatively evaluated. The recreational user exposure scenarios are also protective of occasional trespassers to the shoreline.

The quantitative exposure assumptions used for evaluation in the 2012 HHRA were updated based on current USEPA guidance (USEPA, 2011, 2014a, and 2014c) and an RME scenario. Table 4 presents a comparison of the exposure assumptions utilized in the 2012 HHRA in comparison to the updated exposure assumptions. Parameters that have changed based on the update are highlighted. Several exposure parameters were updated based on revisions to USEPA's recommended default exposure assumptions, including body weight, exposure duration, noncancer averaging time (resulting from revised exposure duration), skin surface area, and surface water ingestion rate. Site-specific assumptions used in the 2012 HHRA based on professional judgment were not changed, including the assumed exposure time of 2 hours per event and exposure frequency of 80 events per year. The exposure frequency for recreational users is based on exposure to shoreline shallow groundwater and surface water for three days a week over the course of the warmer weather months (April through October). Assumptions based on the percentages of the total body surface area exposed to shallow groundwater and surface water used

in the 2012 HHRA were also not changed. However, the total skin surface area values were revised based on application of the percentages to the revised total body surface areas identified based on USEPA guidance (2011 and 2014a).

4.3 Calculation of Unit Intakes

In the 2012 HHRA, chronic daily intake values for the incidental ingestion and dermal contact pathways of exposure were calculated in accordance with USEPA guidance (1989 and 2004). Equations in these documents are used for calculating a lifetime average daily dose (LADD) relevant to cancer risk (i.e., cancer intake) or for calculating an average daily dose (ADD) relevant to noncancer hazard (i.e., noncancer intake). The medium-specific equations used for the calculation of cancer and noncancer intakes of the COPCs (presented in the 2012 HHRA Table 4s) are still valid and appropriate for use. Absorption factors and other parameters used in the calculation of oral and dermal dose in the 2012 HHRA are also still valid.

Unit intake estimates were calculated based on the updated exposure assumptions discussed in Section 4.2, consistent with the equations utilized in the 2012 HHRA Table 4s. The equations for calculation of unit intake are as follows:

- Incidental ingestion Intake [(mg/kg-day)(L/ug)]= [Ingestion Rate (L/hour) x conversion factor (0.001 mg/ug) x exposure time (hours/event) x exposure frequency (events/year) x exposure duration (years)] / [body weight (kg) x averaging time (days)]

- Dermal Intake [(cm^2-event)/(kg-day)]= [surface area (cm^2) x event frequency (events/day) x exposure frequency (days/year) x exposure duration (years)] / [body weight (kg) x averaging time (days)]

Chemical-specific parameters, including concentration, are not included in the unit intakes.

5.0 TOXICITY ASSESSMENT

The toxicity assessment was conducted in accordance with USEPA guidance and considers chronic (long-term) exposures for carcinogenic and noncarcinogenic COPCs. The USEPA's guidance regarding the hierarchy of sources of human health dose-response values in risk assessment was followed (USEPA, 2003) and is presented below:

- *Tier 1*: USEPA's Integrated Risk Information System (IRIS) (USEPA, 2017a)
- *Tier 2*: Provisional Peer-Reviewed Toxicity Values obtained from USEPA via the USEPA National Center for Environmental Assessment in Cincinnati, Ohio (USEPA, 2017b)
- *Tier 3*: Other sources of dose-response values including, but not limited to, California EPA's Office of Environmental Health and Hazard Assessment Toxicity Criteria Database (CalEPA, 2016), minimal risk levels published by the Agency for Toxic Substances and Disease Registry (ATSDR, 2016), and the Health Effects Assessment Summary Tables (USEPA, 1997)

Where published dose-response values were not available for a chemical, dose-response values based on surrogate chemicals (i.e., chemicals with structural similarities) were identified. The chosen surrogate is referenced in the summary table(s) of dose-response values.

No noncancer reference doses (RfDs) or cancer slope factors (CSFs) are available for evaluating dermal exposure. Therefore, cancer risks and noncancer hazards associated with dermal exposure may be evaluated using an oral CSF or RfD adjusted such that the toxicity value is appropriate for the dermal pathway. As detailed by USEPA (2004), for purposes of evaluating dermal exposure, it is generally necessary to adjust an oral toxicity factor (i.e., RfD or CSF) from an administered (i.e., applied) dose to an absorbed (i.e., internal) dose. Because the toxicity values for the COPCs at the site are expressed as orally administered doses (i.e., applied or intake-based), it is necessary to adjust both the RfDs and CSFs for these substances in estimating exposure on an absorbed-dose basis when assessing dermal exposure. For the Site 07 COPCs, no adjustment was necessary. Therefore, the dermal RfD and CSF are equal to the oral RfD and CSF, respectively.

Table 5 summarizes the oral and dermal noncancer toxicity values (i.e., RfDs) and the corresponding critical effects for Site 07 COPCs. **Table 6** summarizes the oral and dermal CSFs and the corresponding weight-of-evidence classifications.

In the 2012 HHRA, the quantitative evaluation of potential risks for carcinogenic COPCs with a mutagenic mode of action followed the USEPA guidance titled *Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens* (USEPA, 2005a). Specifically, the quantification of cancer risks for child receptors involves the use of age-dependent adjustment factors (ADAFs), as follows:

- an ADAF of 10 was used for exposures occurring less than 2 years of age
- an ADAF of 3 was used for exposures occurring between 2 and less than 16 years of age
- an ADAF of 1 was used for exposures occurring after 16 years of age

Application of the ADAFs was performed using the same method used in the development of the USEPA RSLs (USEPA, 2016a). The only Site 07 COPC considered to be mutagenic, for which application of ADAFs is necessary, is TCE. The USEPA characterizes TCE as "carcinogenic to humans" based on human epidemiological studies on kidney and liver tumors and non-Hodgkin's lymphoma (NHL). USEPA classifies TCE as "carcinogenic by a mutagenic mode of action" for the induction of kidney tumors only. Therefore, ADAFs are applied to the TCE CSF associated with kidney tumors. No ADAFs are applies to the TCE CSF associated with liver tumors and NHL (USEPA, 2017a).

Vinyl chloride is a mutagenic COPC. However, cancer toxicity values for vinyl chloride account for mutagenic action, such that ADAFs are not applied to the cancer risks for vinyl chloride. Toxicological studies in animals have shown an increased sensitivity to vinyl chloride induced carcinogenesis in early-life and prenatal exposure. The effects of early-life exposure are qualitatively and quantitatively different from those of later exposures. Therefore, it would not be appropriate to prorate early-life exposures as if they were received at a proportionately lesser rate over a full lifetime. Therefore, estimating risks from birth (e.g., child from ages 0 to 6), requires summing a non-prorated "early-life risk" and a prorated "later-life risk" over a life span of 70 years. In cases where the receptor is not being exposed from birth, there is no early-life component. The later-life component is prorated as the defined exposure duration over an assumed life span of 70 years. Therefore, in the 2012 HHRA, potential cancer risks to vinyl chloride were calculated in a chemical-specific manner, consistent with the approach used in the development of the USEPA RSLs (USEPA, 2016a).

No changes to the approaches for evaluation of TCE and vinyl chloride used in the 2012 HHRA were made in the 2017 HHRA update.

6.0 RISK CHARACTERIZATION

Risk characterization combines estimates of exposure with toxicity data to develop estimates of the probability that an adverse effect will occur under the specified conditions of exposure. The risk characterization was divided into three phases: (1) risk estimation, (2) risk description, and (3) uncertainty analysis.

Risk estimation is undertaken by combining the toxicity factors and exposure assessment equations to calculate estimates of risks. Noncancer hazards are reported as pathway-specific hazard indices (HIs), which are the sum of individual COPC HQs for that pathway. A total HI is calculated, as well as HQs from COPCs that affect the same target organ. Estimates of cancer risks are reported as ELCRs. Current practice considers cancer risks to be additive when assessing exposure to a mixture of hazardous substances. The significance of the risk estimates are relative to risk management criteria set forth in USEPA policy. The uncertainty analysis describes the impact of data uncertainty and variability, exposure assumptions, and toxicity values on estimates of potential risk.

The methods for estimating cancer risks and noncancer HIs in the 2012 HHRA are consistent with current USEPA guidance (1989, 2001, 2004, 2005a and b). Therefore, revised formal risk/hazard calculations were not performed as part of this 2017 HHRA update. However, a quantitative evaluation was performed to determine whether updates to the 2012 HHRA would result in cumulative potential risk and/or noncancer hazard estimates above USEPA and/or RIDEM target risk/hazard levels, changing the overall conclusions of the 2012 HHRA, or whether the conclusions of the 2012 HHRA remain valid. Potential cancer risk and noncancer HIs were calculated by scaling the 2012 HHRA ELCR and HQ results per medium, exposure point, exposure route/pathway, and COPC based on the revised EPCs, pathway-specific unit intakes, and chemical-specific toxicity values, using the following equations:

- Updated potential ELCR = 2012 HHRA risk estimate x (current EPC / 2012 EPC) x (current unit intake / 2012 unit intake) x (current CSF / 2012 CSF)
- Updated potential HQ = 2012 HHRA HQ estimate x (current EPC / 2012 EPC) x (current unit intake / 2012 unit intake) x (2012 RfD / current RfD)

The sum of the HQs for all chemicals within an exposure point and pathway that have the same target organ or type of toxicity is termed the pathway HI. The HI is useful as a reference point for gauging potential effects of environmental exposures to complex mixtures. In general, HIs that are less than 1 are not of regulatory concern; however, a HI of greater than 1 does not automatically indicate that an adverse effect will occur and should not automatically be interpreted as posing an unacceptable risk to the exposed population. The magnitude of the HQ cannot be directly equated to a probability or effect level.

The total pathway HI for each exposure point was calculated by summing the HQs for all COPCs. Total HIs for each receptor by medium were calculated by summing the total HIs across pathways within the media (e.g., summing dermal and incidental ingestion surface water risk estimates). As a first approximation, all COPCs are assumed to have additive effects. If the total HI for all COPCs does not exceed USEPA or RIDEM's target HI, then the total HI per target organ would also not exceed USEPA/RIDEM's target HI. Therefore, calculation of target HIs per target endpoint is not performed. Both USEPA and RIDEM use a target HI per target organ of 1 (USEPA, 1991; RIDEM, 2011).

The potential cancer risk for each receptor is estimated for each medium by means of an ELCR. The ELCR represents the incremental upper-bound probability that an individual could develop cancer over his or her lifetime due to exposure to potential carcinogens under the conditions specified in the exposure scenario. For example, cancer risk levels of 10^{-6} and 10^{-4} represent an incremental chance of one-in-one-million and one-in-ten-thousand, respectively, that an individual could contract cancer over a lifetime.

USEPA (1991) states that where the cumulative incremental current or future potential ELCR to an individual is less than 10^{-4}, action generally is not warranted unless there are adverse environmental impacts. RIDEM uses a target ELCR of 10^{-5} (RIDEM, 2011). The potential ELCR for each pathway (e.g., the surface water incidental ingestion pathway) was calculated by summing the potential ELCRs from each COPC at each exposure point within the pathway, while receptor risks for each medium were calculated by summing ELCRs for each pathway within the medium (e.g., the surface water incidental ingestion and dermal contact pathways).

Potential ELCR and HI estimates were calculated individually for the child, adolescent, and adult recreational users. Potential ELCR estimates were also calculated for a "Lifelong" scenario by summing the associated estimates for the child, adolescent, and adult age groups, as applicable. A lifelong scenario is not appropriate for evaluating noncancer HI.

For each associated exposure scenario with a potential cumulative ELCR/HI above USEPA or RIDEM target levels, COCs were defined as COPCs with an individual ELCR > 10^{-6} or target organ HI > 1, at one significant figure.

6.1 Risk Characterization Results

The potential cancer risk and noncancer hazard results are discussed in this section for each of the receptors evaluated.

6.1.1 Current/Future Recreational Users – Wading Scenario

Child, adolescent, and adult recreational users were evaluated for exposure to shoreline surface water and sediment via incidental ingestion and dermal contact while wading. No sediment COPCs were identified (i.e., sediment concentrations are less than risk-based screening levels). This exposure scenario was evaluated based on surface water samples collected at low tide at the harbor floor where water is approximately six inches deep (i.e., Depth 1/Case 3).

Table 7.1 presents the scaling table in which potential ELCRs and HIs were calculated for the Recreational User wading scenario. Potential ELCR estimates for the lifelong scenario were calculated by summing the associated estimates for the child, adolescent, and adult age groups.

As shown in Table 7.1, the potential ELCRs associated with the adolescent and adult recreational user wading scenario are less than USEPA's target risk range of 10^{-6} to 10^{-4}, and less than RIDEM's target risk level of 10^{-5}. The potential ELCRs associated with the child and lifelong recreational user wading scenario is 2×10^{-5}, which is at the low end of USEPA's target risk range of 10^{-6} to 10^{-4}, and slightly higher than RIDEM's target risk level of 10^{-5}. The risk driver causing the cumulative potential ELCR to exceed RIDEM's target risk level is vinyl chloride in surface water (incidental ingestion exposure route). The surface water EPC for vinyl chloride of 3.7 J ug/L is the maximum detected concentration based on one detected concentration out of 30 samples. Due to the low frequency of detection (approximately 0.03 percent), vinyl chloride is not identified as a surface water COC. The total potential cumulative ELCRs for the child and lifelong recreational user wading scenario are less than 10^{-5} if vinyl chloride is excluded as a COPC.

The potential HIs associated with the child, adolescent, and adult recreational user wading scenario are less than USEPA/RIDEM's target HI of 1.

These results indicate that the conclusions of the 2012 HHRA, which indicated that potential exposures to sediment and surface water along the Site 07 shoreline by recreational users while wading do not pose a cancer risk or noncancer hazard above USEPA target levels, remain valid. As a result, adverse health effects are not anticipated for this receptor.

6.1.2 Current/Future Recreational Users – Swimming Scenario

Child, adolescent, and adult recreational users were evaluated for exposure to shoreline surface water and sediment via incidental ingestion and dermal contact while swimming. No sediment COPCs were identified (i.e., sediment concentrations are less than risk-based screening levels). This exposure scenario was evaluated based on surface water samples collected at low tide at the harbor floor and at the mid-point of the water column where water is approximately three feet deep (i.e., Depths 2 and 3/Case 1).

1,2-Dichloroethane is the only surface water COPC identified for further evaluation of a swimming scenario based on the Depths 2 and 3/Case 1 surface water dataset. However, 1,2-dichloroethane was not a COPC evaluated in the 2012 HHRA, so a potential noncancer HQ could not be scaled based on the 2012 HHRA results. The EPC for 1,2-dichloroethane is 1 ug/L (Table 3.2). The tapwater RSL for 1,2-dichloroethane is 0.17 ug/L based on a target risk level of 10^{-6}, and 13 ug/L based on target HQ of 1. Therefore, 1 ug/L of 1,2-dichloroethane corresponds to a risk level of 6×10^{-6} and a HQ of 0.08, which are within USEPA's target risk range of 10^{-6} to 10^{-4}, below RIDEM's target risk level of 10^{-5}, and below USEPA/RIDEM's target HI of 1.

These results indicate that the conclusions of the 2012 HHRA, which indicated that potential exposures to sediment and surface water along the Site 07 shoreline by recreational users while swimming do not pose a cancer risk or noncancer hazard above USEPA or RIDEM target levels, remain valid. As a result, adverse health effects are not anticipated for this receptor.

6.1.3 Current/Future Recreational Users – Shell Fisherman

Adolescent and adult recreational users were evaluated for exposure to shallow groundwater along the shoreline via dermal contact; and exposure to shoreline surface water and sediment via incidental ingestion and dermal contact while clamming/harvesting shellfish. No sediment COPCs were identified (i.e., sediment concentrations are less than risk-based screening levels).

This exposure scenario was evaluated based on surface water samples collected at low tide at the harbor floor where water is approximately six inches deep (i.e., Depth 1/Case 3), and shallow groundwater samples within each of the groundwater exposure points (Southern Boundary, Shoreline, Western Boundary, Mid-Southern Boundary).

Tables 7.2 and 7.3 presents the scaling tables in which potential ELCRs and HIs were calculated for the Shell Fisherman scenario within the Southern Boundary and Mid-Southern Boundary, respectively. Total potential ELCRs and HIs were calculated by summing the potential ELCRs/HIs associated with surface water exposure to the potential ELCRs/HIs associated with shallow groundwater exposure. Potential ELCR estimates for the lifelong scenario were calculated by summing the associated estimates for the adolescent and adult age groups. The child receptor is not considered to perform shellfishing.

One shallow groundwater COPC, 1,2-dichloroethane, did not have an available noncancer toxicity value (i.e., RfD) when evaluated in the 2012 HHRA, so a potential noncancer HQ could not be scaled based on the 2012 HHRA results. Therefore, a potential noncancer HQ value equal to that for 1,1,2-trichloroethane was used. 1,1,2-Trichloroethane has a slightly higher (less toxic) reference dose as compared to 1,2-dichloroethane, making the use of this potential HQ conservative for application to 1,2-dichloroethane.

As shown in Tables 7.2 and 7.3, the potential ELCRs associated with the adolescent, adult, and lifelong shell fisherman scenario are less than or at the low end of USEPA's target risk range of 10^{-6} to 10^{-4}, and less than RIDEM's target risk level of 10^{-5}. The potential HIs associated with the adolescent and adult shell fisherman scenario are less than USEPA/RIDEM's target HI of 1.

The highest concentrations of shallow groundwater COPCs are within the Southern Boundary, specifically in the Mid-Southern boundary, resulting in the shallow groundwater EPCs being higher in these areas in comparison with the EPCs associated with the Western Boundary (Case 4) and the EPCs associated with the Shoreline (combined Southern and Western Boundaries) (Case 3). Therefore, the potential ELCRs and HIs associated with the Shoreline and Western Boundary exposure points are less than those estimated for the Southern Boundary.

These results indicate that the conclusions of the 2012 HHRA, which indicated that potential exposures to shallow groundwater, sediment, and surface water along the Site 07 shoreline do not pose a cancer risk or noncancer hazard above USEPA or RIDEM target levels, remain valid. As a result, adverse health effects are not anticipated for this receptor.

6.2 Description of Uncertainties

Estimation of potential risks to human health that may result from exposure to chemicals in the environment is a complex process that often requires the combined efforts of multiple disciplines. Each assumption, whether regarding the toxicity value to use for a particular chemical or the value of a parameter in an exposure equation, has a degree of variability and uncertainty associated with it. In each step of the HHRA process, beginning with the data collection and analysis and continuing through the toxicity assessment, exposure assessment, and risk characterization, conservative assumptions are made that are intended to be protective of human health and to ensure that risks are not underestimated. There is a probability of overestimating health risks or hazards for a number of reasons. The following subsections provide a discussion of the key uncertainties that may affect the final estimates of human health risk in this HHRA. Uncertainties are arranged by topic.

6.2.1 Environmental Sampling and Analysis

The process of environmental sampling and analysis results in uncertainties from several sources, including errors inherent in sampling procedures or analytical methods. One area of uncertainty is sampling procedures. Since it is not possible to sample the entire area of interest at a given site, several samples are taken from each medium within a site, and the results are considered representative of the chemicals present throughout the site. This assumption may overestimate or underestimate risk.

Analytical methods also involved uncertainties. Due to uncertainty of quantification, individual chemicals were sometimes listed as detected but with the value qualified as estimated by laboratory qualification or validation procedures. The estimated value was used in the HHRA. This uncertainty may either overestimate or underestimate risk depending on how close the estimated value is to the true value.

Shallow groundwater (piezometer) data from all LTM sampling events conducted following the 2012 HHRA, occurring between 2013 and 2016, were included in the HHRA update. None of the sampling events were excluded from the HHRA due to their not being any discernable concentration pattern indicating a consistent increase or decrease in concentration over time. This assumption may result in an over-estimate of potential risk associated with exposure to shallow groundwater given that it is likely that concentrations of certain chemicals may have decreased over time.

The HHRA utilizes the total (unfiltered) groundwater and surface water data for oral exposure pathways, consistent with the recommendation in USEPA (2004). However, as indicated in USEPA (2014a):

> "....particulate-bound chemicals in an aqueous medium (e.g., suspended sediment particles) would be considered to be much less bioavailable for dermal absorption, due to inefficient adsorption of suspended particles onto the skin surface and a slower rate of absorption into the skin. The uncertainty in the estimation of the dermal dose from a water sample with high turbidity is directly proportional to the magnitude of the difference in the concentration between an unfiltered and filtered sample. The actual bioavailable concentration is likely to lie somewhere between the unfiltered and filtered sample concentrations."

Therefore, the use of the unfiltered groundwater and surface water data for the dermal contact pathway is conservative.

6.2.2 COPC Selection

A comparison of maximum detected chemical concentrations to USEPA RSLs and RIDEM criteria was conducted as part of the COPC selection process. RSLs are conservative risk-based values that are used when selecting COPCs so as not to omit a chemical that might contribute significantly to risk. Chemicals whose maximum concentrations were below their respective screening value were not identified as COPCs or further evaluated to quantify potential risk/hazard. It is unlikely that this risk-based screening excluded chemicals that would be of concern, based on the conservative exposure assumptions and conservatively derived toxicity criteria that are the basis of the screening level. Although following this methodology does not provide a quantitative risk estimate for all chemicals, it focuses the assessment on the chemicals accounting for the greatest risks (i.e., chemicals whose maximum concentrations exceeded their respective screening level).

Although the overall potential risk estimates are uncertain, it is not expected that actual risks will be significantly greater than estimated risks given that a reasonable effort was made to characterize current and future potential health risks given current knowledge.

The shallow groundwater and surface water datasets contain non-detect results with LODs greater than USEPA tapwater RSLs (2016a) for several target VOCs. These elevated LODs introduce some level of uncertainty into the COPC selection and calculation of EPCs. The use of USEPA tapwater RSLs (which are protective of a drinking water ingestion scenario) to select surface water COPCs is conservative. The LODs associated with all surface water results are less than the associated risk-based screening level derived using the USEPA RSL calculator (2016a) based on a recreational surface water exposure scenario (using the exposure assumptions presented in Table 4). Therefore, although the LODs for surface water are greater than the tapwater RSLs used for selecting surface water COPCs in this HHRA update, the COPC selection results in this HHRA update are conservative and the conclusions of the HHRA update would not change if surface water LODs were less than the tapwater RSLs.

The LODs associated with the majority of the groundwater results are less than RIDEM GA groundwater objectives (RIDEM, 2011). Additionally, groundwater COPCs identified in the HHRA update are the same as those identified in the 2012 HHRA. Therefore, the presence of LODs above the tapwater RSLs are not considered to result in the exclusion of any target VOCs that would alter the conclusions of the HHRA update.

6.2.3 Toxicological Data

Uncertainty is associated with the toxicity values and toxicity information available to assess potential adverse effects.

One of the major contributors to uncertainty is the accuracy of the toxicity values used. A cancer potency value is a mathematical extrapolation of the slope of the dose-response curve from high doses administered to animals (or the exposures observed in epidemiological studies) to the low doses commonly experienced in the environment. The USEPA has developed potency values for chemicals classified as carcinogens, based on the premise that there is no threshold (i.e., there is no level of exposure below which there is no risk of a carcinogenic effect). USEPA's *Guidelines for Carcinogen Risk Assessment* (USEPA, 2005b) acknowledges that the mode of action of a carcinogen may involve both threshold and non-threshold mechanisms. To the extent that the approach used to develop the potency estimate is incorrect, the extrapolated risks may be overestimations or underestimations. However, in the derivation of toxicity values, conservative assumptions are employed. Therefore, toxicity values tend to be biased toward overestimating potential risk.

For dermal exposure pathways, the absence of dermal toxicity criteria necessitated the use of oral toxicity data. To calculate potential risk estimates for the dermal pathway, absolute oral bioavailability factors that reflect the toxicity study conditions were used to modify the oral toxicity criteria. For the chemicals with oral absorption exceeding 50%, a default oral absorption factor of 100% was used. The potential risk estimates for the dermal pathways may be overestimated or underestimated depending on how closely these values reflect the difference between the oral and dermal routes. These estimates are uncertain and may result in either an overestimation or underestimation of risk.

6.2.4 Exposure Assessment

The primary areas of uncertainty affecting exposure parameter estimation involve the assumptions regarding exposure pathways, the estimation of EPCs, and the parameters used to estimate chemical doses. The uncertainties associated with these various sources are discussed below.

6.2.4.1 EPCs

With respect to determining EPCs for this evaluation, one assumption was that the concentrations of chemicals in the medium evaluated would remain constant over the exposure time. Depending on the properties of the chemical and the medium in which it was detected, this assumption may overestimate risks, depending on the degree of chemical degradation to less toxic species or transport to other media. Conversely, environmental bioactivation of chemicals to more toxic chemicals was also not considered. Therefore, this assumption may underestimate risk if bioactivation mechanisms are significant.

The majority of the maximum detected concentrations in the updated dataset are lower than those calculated in the 2012 HHRA. However, the majority of the updated shallow groundwater EPCs are between one and three times higher than the EPCs calculated in the 2012 HHRA. The increase in EPCs, despite the decrease in overall concentrations, is due in part to a smaller sample size, resulting in the selection of the maximum detected concentration as the EPC for some scenarios.

6.2.4.2 Exposure Assumptions

The parameter values used to describe the extent, frequency, and duration of exposure are associated with some uncertainty. Actual risks for some individuals within an exposed population may vary from those predicted depending on the actual exposure durations, intake rates (e.g., surface water ingestion rates), or body weights.

There are no formal recreational facilities (e.g., public swimming areas) currently located along the Site 07 shoreline and there are no known plans for development of formal recreational facilities in the future. Therefore, it is unlikely that a young child would be routinely exposed to the

environmental media along this shoreline. However, exposures by a young child were conservatively evaluated.

The exposure assumptions were generally selected to produce a reasonable upper-bound estimate of exposure in accordance with USEPA guidelines, although in some cases the combination of the various assumptions may lead to greater than an upper bound estimate. Therefore, exposures and estimated potential risks for the evaluated receptors are likely to be representative of reasonable upper-bound exposures, but in some cases may exceed reasonable upper-bound exposures.

7.0 SUMMARY AND CONCLUSIONS

This HHRA update was performed in support of the Site 07 Five Year Event LTM Report and will ultimately be used as part of the evaluation to confirm compliance with the RAOs identified in the ROD (EA, 1999) in the Fourth Five Year Review Report. The objective of this HHRA update is to determine whether there have been any changes and/or updates to USEPA HHRA guidance or site-specific conditions since the 2012 HHRA was conducted that would result in a change of the conclusions of the 2012 HHRA or whether the conclusions of the 2012 HHRA remain valid. Revised formal risk/hazard calculations were not performed as part of this 2017 HHRA update. However, a quantitative evaluation of the potential exposure to Site 07 shoreline shallow groundwater, surface water, and/or sediment by recreational users was conducted to determine whether updates to the 2012 HHRA would result in cumulative potential cancer risk and/or noncancer hazard above USEPA and RIDEM target risk/hazard levels.

The receptors and exposure pathways evaluated in the HHRA update are consistent with those evaluated in the 2012 HHRA based on current and potential future land use, including recreational users exposed to shoreline media while swimming, wading, or clamming/harvesting shellfish.

The overall conclusion of this HHRA update is that the conclusions of the 2012 HHRA remain valid and exposure to shallow groundwater, surface water, and sediment along the Site 07 shoreline by recreational users does not result in a potential cancer risk or noncancer hazard above USEPA or RIDEM target levels. The potential cancer risk and noncancer HI results are summarized by receptor, as follows:

7.1 Current/Future Recreational Users – Swimming and Wading Scenarios

Child, adolescent, adult, and lifelong recreational users were evaluated for exposure to shoreline surface water and sediment via incidental ingestion and dermal contact while swimming or wading. No sediment COPCs were identified (i.e., sediment concentrations are less than risk-based screening levels). This exposure scenario was evaluated based on surface water samples collected at low tide at the harbor floor and mid-point of the water column. Samples collected in surface water approximately three feet deep (i.e., Depths 2 and 3/Case 1) were utilized for evaluation of the swimming scenario. Samples collected in surface water approximately six inches deep (i.e., Depth 1/Case 3) were utilized for evaluation of the wading scenario.

The potential cumulative ELCRs associated with a recreational user wading scenario are less than USEPA's target risk range of 10^{-6} to 10^{-4} and RIDEM's target risk level of 10^{-5}. The total HI is less than USEPA/RIDEM's target HI of 1.

The potential cumulative ELCRs and HI associated with a recreational user wading scenario are less than or within USEPA's target risk range of 10^{-6} to 10^{-4}, and less than USEPA/RIDEM's target HI of

1, respectively. However, the potential cumulative ELCR associated with the child and lifelong recreational user wading scenario is slightly higher than RIDEM's target risk level of 10^{-5}. Vinyl chloride in surface water (incidental ingestion exposure route) was identified as the risk driver causing the exceedance of RIDEM's target risk level based on the EPC equal to the one detected concentration. Due to the low frequency of detection (approximately 0.03 percent), vinyl chloride is not identified as a surface water COC. The total potential cumulative ELCRs for the child and lifelong recreational user wading scenario are less than 10^{-5} if vinyl chloride is excluded as a COPC.

These results indicate that the conclusions of the 2012 HHRA, which indicated that potential exposures to sediment and surface water along the Site 07 shoreline by recreational users while swimming or wading do not pose a cancer risk or noncancer hazard above USEPA or RIDEM target levels. As a result, adverse health effects are not anticipated for this receptor.

7.2 Current/Future Recreational Users – Shell Fisherman

Adolescent and adult recreational users were evaluated for exposure to shallow groundwater along the shoreline via dermal contact; and exposure to shoreline surface water and sediment via incidental ingestion and dermal contact while clamming/harvesting shellfish. No sediment COPCs were identified (i.e., sediment concentrations are less than risk-based screening levels). This exposure scenario was evaluated based on surface water samples collected at low tide at the harbor floor and mid-point of the water column where water is approximately six inches deep (i.e., Depths 1 and 2/Case 3), and shallow groundwater samples within each of the groundwater exposure points (Southern Boundary, Shoreline, Western Boundary, Mid-Southern Boundary).

The potential cumulative ELCRs associated with a recreational user – shell fisherman scenario are less than USEPA's target risk range of 10^{-6} to 10^{-4} and RIDEM's target risk level of 10^{-5}. The total HI is less than USEPA/RIDEM's target HI of 1. These results indicate that the conclusions of the 2012 HHRA, which indicated that potential exposures to shallow groundwater, sediment, and surface water along the Site 07 shoreline by recreational users while clamming/harvesting shellfish do not pose a cancer risk or noncancer hazard above USEPA or RIDEM target levels, remain valid. As a result, adverse health effects are not anticipated for this receptor.

8.0 REFERENCES

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TABLES

TABLE 1

SUMMARY OF RECEPTORS, EXPOSURE POINTS, MEDIA, AND EXPOSURE PATHWAYS FOR EVALUATION

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 07 - CALF PASTURE POINT

FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE

NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current/ Future	Groundwater	Shallow Groundwater	Site 7 - Shoreline	Recreational User	Adult	Dermal	Quant	Recreational users may have dermal contact with shallow groundwater while clamming.
						Ingestion	None	
					Adolescent	Dermal	Quant	Recreational users may have dermal contact with shallow groundwater while clamming.
						Ingestion	None	
					Child	Dermal	None	Child recreational users do not contact groundwater at the site.
						Ingestion	None	
	Surface Water	Surface Water	Site 7 - Shoreline	Recreational User	Adult	Dermal	Quant	Recreational users may be exposed to surface water while swimming, wading, and/or clamming.
						Ingestion	Quant	
					Adolescent	Dermal	Quant	Recreational users may be exposed to surface water while swimming, wading, and/or clamming.
						Ingestion	Quant	
					Child	Dermal	Quant	Recreational users may be exposed to surface water while swimming and/or wading.
						Ingestion	Quant	
	Sediment	Sediment	Site 7 - Shoreline	Recreational User	Adult	Dermal	Quant	Recreational users may exposed to sediment while swimming and/or clamming.
						Ingestion	Quant	
					Adolescent	Dermal	Quant	Recreational users may exposed to sediment while swimming and/or clamming.
						Ingestion	Quant	
					Child	Dermal	Quant	Recreational users may exposed to sediment while swimming.
						Ingestion	Quant	

TABLE 2.1
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - SHORELINE GROUNDWATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Shallow Groundwater

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (2)	Concentration Used for Screening (3)	Background Value (4)	Screening Toxicity Values (5) RSL (NC/C)	Screening Toxicity Values (5) RIDEM GA Groundwater Objectives	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (6)
Site 07 - Shoreline		**VOCs**														
	79-34-5	1,1,2,2-TETRACHLOROETHANE	5.50E-01 J	1.80E+02	ug/L	P07-09	26 / 54	0.3 - 1	1.80E+02	N/A	7.60E-02 C	N/A	N/A	N/A	Y	ASL
	79-00-5	1,1,2-TRICHLOROETHANE	4.00E-01 J-	4.90E+01	ug/L	P07-09	20 / 54	0.4 - 1	4.90E+01	N/A	4.10E-02 NC	5.00E+00	N/A	N/A	Y	ASL
	75-35-4	1,1-DICHLOROETHENE	5.30E-01 J	6.70E+00	ug/L	P07-09	10 / 53	0.5 - 3.5	6.70E+00	N/A	2.80E+01 NC	7.00E+00	N/A	N/A	N	BSL
	107-06-2	1,2-DICHLOROETHANE	6.00E-01 J-	2.50E+00 J-	ug/L	P07-16	9 / 53	0.3 - 1.4	2.50E+00	N/A	1.70E-01 C	5.00E+00	N/A	N/A	Y	ASL
	71-43-2	BENZENE	4.50E-01 J	1.60E+00 J-	ug/L	P07-20	3 / 53	0.3 - 1.4	1.60E+00	N/A	4.60E-01 C	5.00E+00	N/A	N/A	Y	ASL
	67-66-3	CHLOROFORM	6.60E-01 J	6.60E-01 J	ug/L	P07-09	1 / 53	0.4 - 2	6.60E-01	N/A	2.20E-01 C	N/A	N/A	N/A	Y	ASL
	156-59-2	CIS-1,2-DICHLOROETHENE	5.00E-01 J-	1.70E+03	ug/L	P07-09	39 / 54	0.3 - 1	1.70E+03	N/A	3.60E+00 NC	7.00E+01	N/A	N/A	Y	ASL
	127-18-4	TETRACHLOROETHENE	4.30E-01 J	4.30E-01 J	ug/L	P07-09	1 / 53	0.5 - 2.8	4.30E-01	N/A	4.10E+00 NC	5.00E+00	N/A	N/A	N	BSL
	156-60-5	TRANS-1,2-DICHLOROETHENE	4.00E-01 J-	1.60E+02	ug/L	P07-09	32 / 54	0.3 - 2	1.60E+02	N/A	3.60E+01 NC	1.00E+02	N/A	N/A	Y	ASL
	79-01-6	TRICHLOROETHENE	5.00E-01 J-	1.20E+03	ug/L	P07-09	36 / 54	0.4 - 1	1.20E+03	N/A	2.80E-01 NC	5.00E+00	N/A	N/A	Y	ASL
	75-01-4	VINYL CHLORIDE	7.00E-01 J-	4.97E+01	ug/L	P07-05	22 / 53	0.5 - 2.6	4.97E+01	N/A	1.90E-02 C	2.00E+00	N/A	N/A	Y	ASL

Notes:

Refer to Appendix A for samples included in data set.

ARAR/TBC = Applicable or Relevant and Appropriate Requirements/To be Considered.

C = Cancer. Screening value is based on the screening level protective of carcinogenic effects.

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

ug/L = micrograms per liter.

N/A = Not Applicable or Not Available.

NC = Noncancer. Screening value is based on the screening level protective of noncarcinogenic effects.

RIDEM = Rhode Island Department of Environmental Management.

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

(1) Minimum/maximum detected concentration and associated data flags.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

(2) Range of Reporting Detection Limits (RDLs).

(3) Maximum detected concentration used for screening.

(4) Background values were not used for COPC screening purposes, although applicable background values may be considered in the risk characterization portion of the risk assessment, if available.

(5) Groundwater screening levels include the following:

- USEPA Regional Screening Level (RSL) for tapwater based on a target risk level of 1E-6 for carcinogens and a target hazard quotient of 0.1 for noncarcinogens (May 2016).

- RIDEM GA Groundwater Objectives - RIDEM Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, DEM-DSR-01-93. November 2011.

The following surrogates were used for chemicals without available screening levels:

The value for 1,1-Dichloroethene was used for cis-1,2-Dichloroethene and trans-1,2-Dichloroethene.

(6) Rationale Codes:

Selection Reason: Above Screening Level (ASL)

Deletion Reason: Below Screening Levels (BSL); Essential Nutrient (NUT)

TABLE 2.2
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - SHORELINE SURFACE WATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Medium: Surface Water
Exposure Medium: Surface Water

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (2)	Concentration Used for Screening (3)	Background Value (4)	Screening Toxicity Values (5)		Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (6)
											RSL (NC/C)	RIDEM GA Groundwater Objectives				
Site 07 - Shoreline		**VOCs**														
	107-06-2	1,2-DICHLOROETHANE	1.00E+00 J	1.00E+00 J	ug/L	SW07-24-FLOOR02	1 / 30	1 - 1	1.00E+00	N/A	1.70E-01 C	5.00E+00	N/A	N/A	Y	ASL
	156-59-2	CIS-1,2-DICHLOROETHENE	1.50E+00 J	6.40E+00	ug/L	SW07-24-FLOOR01	2 / 30	1 - 1	6.40E+00	N/A	3.60E+00 NC	7.00E+01	N/A	N/A	Y	ASL
	79-01-6	TRICHLOROETHENE	5.90E+00	5.90E+00	ug/L	SW07-24-FLOOR01	1 / 30	1 - 1	5.90E+00	N/A	2.80E-01 NC	5.00E+00	N/A	N/A	Y	ASL
	75-01-4	VINYL CHLORIDE	3.70E+00 J	3.70E+00 J	ug/L	SW07-24-FLOOR01	1 / 30	1 - 1	3.70E+00	N/A	1.90E-02 C	2.00E+00	N/A	N/A	Y	ASL

Notes:

Refer to Appendix A for samples included in data set.

ARAR/TBC = Applicable or Relevant and Appropriate Requirements/To be Considered.

C = Cancer. Screening value is based on the screening level protective of carcinogenic effects.

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

ug/L = micrograms per liter.

N/A = Not Applicable or Not Available.

NC = Noncancer. Screening value is based on the screening level protective of noncarcinogenic effects.

RIDEM = Rhode Island Department of Environmental Management.

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

(1) Minimum/maximum detected concentration and associated data flags.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration.

(2) Range of Reporting Detection Limits (RDLs).

(3) Maximum detected concentration used for screening.

(4) Background values were not used for COPC screening purposes, although applicable background values may be considered in the risk characterization portion of the risk assessment, if available.

(5) Surface water screening levels include the following:

- USEPA Regional Screening Level (RSL) for tapwater based on a target risk level of 1E-6 for carcinogens and a target hazard quotient of 0.1 for noncarcinogens (May 2016).
- RIDEM GA Groundwater Objectives - RIDEM Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, DEM-DSR-01-93. November 2011.

(6) Rationale Codes:

Selection Reason: Above Screening Level (ASL)

Deletion Reason: Below Screening Level (BSL); Essential Nutrient (NUT)

TABLE 2.3
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - SHORELINE SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (2)	Concentration Used for Screening (3)	Background Value (4)	Screening Toxicity Values (5)		Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (6)
											RSL (NC/C)	RIDEM Residential Direct Exposure Criteria				
Site 07 - Shoreline		**VOCs**														
	127-18-4	TETRACHLOROETHENE	1.20E-02 J,J+	1.20E-02 J,J+	mg/kg	SED07-05 (0 - 6 in) SED07-10 (0 - 6 in)	2 / 6	0.002 - 0.0032	1.20E-02	N/A	8.10E+00 NC	1.20E+01	N/A	N/A	N	BSL

Notes:

Refer to Appendix A for samples included in data set.

ARAR/TBC = Applicable or Relevant and Appropriate Requirements/To be Considered.

C = Cancer. Screening value is based on the screening level protective of carcinogenic effects.

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

in = Inches.

mg/kg = milligrams per kilogram.

N/A = Not Applicable or Not Available.

NC = Noncancer. Screening value is based on the screening level protective of noncarcinogenic effects.

ND = Not detected.

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

(1) Minimum/maximum detected concentration and associated data flags.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

(2) Range of Reporting Detection Limits (RDLs).

(3) Maximum detected concentration used for screening.

(4) Background values were not used for COPC screening purposes, although applicable background values may be considered in the risk characterization portion of the risk assessment, if available.

(5) Sediment screening levels include the following:

- USEPA Regional Screening Level (RSL) for residential soil based on a target risk level of 1E-6 for carcinogens and a target hazard quotient of 0.1 for noncarcinogens (May 2016).
- RIDEM Residential Direct Exposure Criteria - RIDEM Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, DEM-DSR-01-93. November 2011.

(6) Rationale Codes:

Selection Reason: Above Screening Level (ASL)

Deletion Reason: Below Screening Level (BSL); Essential Nutrient (NUT)

TABLE 2.4
COMPARISON OF CHEMICALS OF POTENTIAL CONCERN (COPCs)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Exposure Point	Media/Chemical	CAS Number	Identified as a COPC in the 2012 HHRA? (a)	Identified as a COPC in the current / 2017 HHRA? (b)
Site 07 - Shoreline	**Groundwater**			
	1,1,2,2-TETRACHLOROETHANE	79-34-5	Yes	Yes
	1,1,2-TRICHLOROETHANE	79-00-5	Yes	Yes
	1,1-DICHLOROETHENE	75-35-4	No	No
	1,2-DICHLOROETHANE	107-06-2	Yes	Yes
	BENZENE	71-43-2	Yes	Yes
	CHLOROFORM	67-66-3	Yes	Yes
	CIS-1,2-DICHLOROETHENE	156-59-2	Yes	Yes
	TETRACHLOROETHENE	127-18-4	No	No
	TRANS-1,2-DICHLOROETHENE	156-60-5	Yes	Yes
	TRICHLOROETHENE	79-01-6	Yes	Yes
	VINYL CHLORIDE	75-01-4	Yes	Yes
	Surface Water			
	1,2-DICHLOROETHANE	107-06-2	No	Yes
	CIS-1,2-DICHLOROETHENE	156-59-2	Yes	Yes
	TRICHLOROETHENE	79-01-6	Yes	Yes
	VINYL CHLORIDE	75-01-4	Yes	Yes
	Sediment			
	VINYL CHLORIDE	75-01-4	Yes	No

Notes:

Shading indicates a difference between the COPC lists identified in the 2012 HHRA (a) and based on the current dataset (as defined in the text).

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

HHRA = Human Health Risk Assessment.

(a) 2012 HHRA presented as Attachment F of the Third Five-Year Review Report (Tetra Tech; March 2013).

(b) Selected in Tables 2.1 through 2.3 based on data set described in the text and as presented in Appendix A.

TABLE 3.1
EXPOSURE POINT CONCENTRATION SUMMARY AND COMPARISON
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Shallow Groundwater

Exposure Point (1)	Chemical of Potential Concern	CAS Number	Units	KM Mean (2)	UCL (Distribution) (3)	Maximum Concentration (Qualifier) (4)	Exposure Point Concentration - 2017 HHRA Update				Exposure Point Concentration - 2012 HHRA	
							Value	Units	Statistic (5)	Rationale (6)	Value	
Site 07 – Southern Boundary (Cases 1/2)	**VOCs**											
	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	2.16E+01	3.91E+01 (G)	1.80E+02	3.91E+01	ug/L	95% Gamma Adjusted KM-UCL		2.00E+01	(7)
	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	4.64E+00	8.54E+00 (G)	4.90E+01	8.54E+00	ug/L	95% Gamma Adjusted KM-UCL		3.70E+00	(7)
	1,2-DICHLOROETHANE	107-06-2	ug/L	5.28E-01	6.71E-01 (N)	2.20E+00	6.71E-01	ug/L	95% KM (t) UCL		5.20E-01	(7)
	BENZENE	71-43-2	ug/L	4.12E-01	NC	1.60E+00 J-	1.60E+00	ug/L	Maximum	(a)	3.60E-01	(7)
	CHLOROFORM	67-66-3	ug/L	4.08E-01	NC	6.60E-01 J	6.60E-01	ug/L	Maximum	(a)	7.00E-01	(7)
	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	1.56E+02	3.05E+02 (G)	1.70E+03	3.05E+02	ug/L	95% Gamma Adjusted KM-UCL		1.05E+02	(7)
	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	1.50E+01	2.72E+01 (G)	1.60E+02	2.72E+01	ug/L	95% Gamma Adjusted KM-UCL		9.40E+00	(7)
	TRICHLOROETHENE	79-01-6	ug/L	9.56E+01	3.10E+02 (NP)	1.20E+03	3.10E+02	ug/L	97.5% KM (Chebyshev) UCL		1.69E+02	(7)
	VINYL CHLORIDE	75-01-4	ug/L	8.33E+00	1.38E+01 (G)	4.97E+01	1.38E+01	ug/L	95% Gamma Adjusted KM-UCL		6.20E+00	(7)
Site 07 – Shoreline (Case 3)	**VOCs**											
	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	1.81E+01	3.23E+01 (G)	1.80E+02	3.23E+01	ug/L	95% KM Approx. Gamma UCL		2.20E+01	(8)
	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	3.93E+00	7.06E+00 (G)	4.90E+01	7.06E+00	ug/L	95% KM Approx. Gamma UCL		3.90E+00	(8)
	1,2-DICHLOROETHANE	107-06-2	ug/L	5.32E-01	6.68E-01 (N)	2.50E+00 J-	6.68E-01	ug/L	95% KM (t) UCL		5.30E-01	(8)
	BENZENE	71-43-2	ug/L	3.62E-01	NC	1.60E+00 J-	1.60E+00	ug/L	Maximum	(a)	9.30E-01	(8)
	CHLOROFORM	67-66-3	ug/L	4.07E-01	NC	6.60E-01 J	6.60E-01	ug/L	Maximum	(a)	6.20E-01	(8)
	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	1.30E+02	2.50E+02 (G)	1.70E+03	2.50E+02	ug/L	95% KM Approx. Gamma UCL		1.67E+02	(8)
	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	1.25E+01	2.25E+01 (G)	1.60E+02	2.25E+01	ug/L	95% KM Approx. Gamma UCL		1.34E+01	(8)
	TRICHLOROETHENE	79-01-6	ug/L	7.98E+01	2.06E+02 (NP)	1.20E+03	2.06E+02	ug/L	95% KM (Chebyshev) UCL		1.22E+02	(8)
	VINYL CHLORIDE	75-01-4	ug/L	7.00E+00	1.15E+01 (G)	4.97E+01	1.15E+01	ug/L	95% KM Approx. Gamma UCL		1.40E+01	(8)
Site 07 – Western Boundary (Case 4)	**VOCs**											
	1,2-DICHLOROETHANE	107-06-2	ug/L	5.44E-01	NC	2.50E+00 J-	2.50E+00	ug/L	Maximum	(a)	4.80E-01	(9)
	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	8.78E-01	NC	2.10E+00	2.10E+00	ug/L	Maximum	(a)	1.80E+00	(9)
	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	4.56E-01	NC	6.00E-01 J-	6.00E-01	ug/L	Maximum	(a)	5.00E-01	(9)
	TRICHLOROETHENE	79-01-6	ug/L	1.06E+00	NC	4.80E+00 J-	4.80E+00	ug/L	Maximum	(a)	1.10E+00	(9)
Site 07 – Mid-Southern Boundary	**VOCs**											
	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	3.97E+01	7.06E+01 (G)	1.80E+02	7.06E+01	ug/L	95% Gamma Adjusted KM-UCL		N/A	
	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	8.21E+00	1.87E+01 (G)	4.90E+01	1.87E+01	ug/L	95% Gamma Adjusted UCL		N/A	
	1,2-DICHLOROETHANE	107-06-2	ug/L	8.40E-01	1.06E+00 (N)	2.20E+00	1.06E+00	ug/L	95% KM (t) UCL		N/A	
	BENZENE	71-43-2	ug/L	4.50E-01	NC	4.50E-01 J	4.50E-01	ug/L	Maximum	(a)	N/A	
	CHLOROFORM	67-66-3	ug/L	5.09E-01	NC	6.60E-01 J	6.60E-01	ug/L	Maximum	(a)	N/A	
	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	2.85E+02 (b)	5.18E+02 (G)	1.70E+03	5.18E+02	ug/L	95% Gamma Adjusted UCL		N/A	
	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	2.70E+01	1.00E+02 (LN)	1.60E+02	1.00E+02	ug/L	95% KM H-UCL		N/A	
	TRICHLOROETHENE	79-01-6	ug/L	1.73E+02	3.62E+02 (G)	1.20E+03	3.62E+02	ug/L	95% Gamma Adjusted KM-UCL		N/A	
	VINYL CHLORIDE	75-01-4	ug/L	1.46E+01	2.39E+01 (G)	4.97E+01	2.39E+01	ug/L	95% Gamma Adjusted KM-UCL		N/A	

TABLE 3.1
EXPOSURE POINT CONCENTRATION SUMMARY AND COMPARISON
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Shallow Groundwater

Notes:

CAS = Chemical Abstracts Service.

EPC = Exposure point concentration.

HHRA = Human health risk assessment.

N/A = Not applicable.

RME = Reasonable Maximum Exposure.

ug/L = micrograms per liter.

UCL = Upper confidence limit.

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

(1) Site 07 – Southern Boundary (corresponds to the 2012 HHRA Cases 1 and 2) includes groundwater locations P07-02, P07-03, P07-04, P07-05, P07-06, P07-07, P07-08, P07-09, P07-10, P07-20, P07-21, P07-22, P07-23, and P07-24 sampled between 2013 and 2016 as part of the long-term monitoring program.

Site 07 – Shoreline (corresponds to the 2012 HHRA Case 3) includes groundwater locations in both the Southern Boundary and the Western Boundary sampled between 2013 and 2016 as part of the long-term monitoring program.

Site 07 – Western Boundary (corresponds to the 2012 HHRA Case 4) includes groundwater locations P07-14, P07-15, P07-16, P07-17, P07-28, and P07-29 located outside of the Southern Boundary sampled between 2013 and 2016 as part of the long-term monitoring program.

Site 07 - Mid-southern Boundary includes locations P07-05, P07-06, P07-07, P07-08, P07-09, and P07-10 sampled between 2013 and 2016 as part of the long-term monitoring program, which represent an area of higher concentrations within the Southern Boundary.

(2) Kaplan-Meier (KM) mean calculated using USEPA's ProUCL software version 5.1.002 (May 2016).

(b) Arithmetic means of detected concentrations used since KM mean was not calculated.

(3) UCL calculations were performed using USEPA's ProUCL software version 5.1.002. For data sets with multiple detection limits for non-detects, the use of the Kaplan Meier non-parametric test procedure is recommended and used to calculate an appropriate UCL. For the Kaplan Meier test procedure, the type of data distribution was determined using a series of tests (Shapiro-Wilk, Kolmogorov-Smirnov, Anderson-Darling) for normal, lognormal, or gamma data distributions. The results of these distribution tests determined which UCL calculation was performed.
The UCL suggested by ProUCL is used, unless otherwise noted. In cases where more than one UCL is suggested, the higher UCL is used, unless otherwise noted.
NP = Non-parametric; N = Normal; LN = Lognormal; G = Gamma; NC = Not calculated.

(4) Equal to the maximum detected concentration.
J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

(5) Indicates the statistic on which the exposure point concentration is based.
Maximum = Maximum detected concentration.
95% Approx. Gamma UCL = Calculated using an Approximate Gamma distribution procedure.
95% Gamma Adjusted UCL = Calculated using Adjusted Gamma distribution procedure.
95% Gamma Adjusted KM-UCL = Calculated using Kaplan Meier Adjusted Gamma distribution procedure.
95% KM (t) UCL = Calculated using 95% Kaplan Meier (Student's t approximation) non-parametric procedure.
95% KM H-UCL = Calculated using 95% Kaplan Meier (Land's H-stat) lognormal procedure.
95% KM (Chebyshev) UCL = Calculated using 95% Kaplan Meier (Chebyshev inequality) non-parametric procedure.
97.5% KM (Chebyshev) UCL = Calculated using 97.5% Kaplan Meier (Chebyshev inequality) non-parametric procedure.

(6) The UCL recommended by ProUCL is used (where multiple values are recommended, the higher is used).
(a) Maximum detected concentration used for EPC due to the low number of detections or small sample size.

(7) EPCs presented in Table 3.2.RME of the 2012 HHRA for Site 7 Case 2 Post-2010 South Boundary.

(8) EPCs presented in Table 3.3.RME of the 2012 HHRA for Site 7 Case 3.

(9) EPCs presented in Table 3.4.RME of the 2012 HHRA for Site 7 Case 4.

TABLE 3.2
EXPOSURE POINT CONCENTRATION SUMMARY AND COMPARISON
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe:	Current/Future
Medium:	Surface Water
Exposure Medium:	Surface Water

Exposure Point (1)	Chemical of Potential Concern	CAS Number	Units	KM Mean (2)	UCL (Distribution)	Maximum Concentration (Qualifier) (3)	Exposure Point Concentration - 2017 HHRA Update				Exposure Point Concentration - 2012 HHRA	
							Value	Units	Statistic (4)	Rationale	Value	
Site 07 – Low Tide – Depths 2/3 (Case 1)	**VOCs**											
	1,2-DICHLOROETHANE	107-06-2	ug/L	1.00E+00	NC	1.00E+00 J	1.00E+00	ug/L	Maximum	(5)	N/A	
Site 07 – Low Tide – Depth 1 (Case 3)	**VOCs**											
	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	1.59E+00	NC	6.40E+00	6.40E+00	ug/L	Maximum	(5)	5.00E+00	(6)
	TRICHLOROETHENE	79-01-6	ug/L	1.49E+00	NC	5.90E+00	5.90E+00	ug/L	Maximum	(5)	4.90E+00	(6)
	VINYL CHLORIDE	75-01-4	ug/L	1.27E+00	NC	3.70E+00 J	3.70E+00	ug/L	Maximum	(5)	1.40E+00	(6)

Notes:

CAS = Chemical Abstracts Service.

EPC = Exposure point concentration.

HHRA = Human health risk assessment.

N/A = Not available.

RME = Reasonable Maximum Exposure.

ug/L = micrograms per liter.

UCL = Upper confidence limit.

VOCs = Volatile organic compounds.

(1) Site 07 – Low Tide – Depth 1 (corresponds to the 2012 HHRA Case 3) includes all surface water locations sampled in 2016 as part of the long-term monitoring program; including samples collected at the harbor floor where surface water is 6 inches deep. Utilized in evaluation of a wading and clamming scenario.

Site 07 – Low Tide – Depth 2 (corresponds to the 2012 HHRA Case 1) includes all surface water locations sampled in 2016 as part of the long-term monitoring program; including samples collected at the harbor floor where surface water is 3 feet deep. Utilized in evaluation of a swimming scenario.

Site 07 – Low Tide – Depth 3 (corresponds to the 2012 HHRA Case 1) includes all surface water locations sampled in 2016 as part of the long-term monitoring program; including samples collected at the mid-point of the water column where surface water is 3 feet deep. Utilized in evaluation of a swimming scenario.

(2) Kaplan-Meier (KM) mean calculated using USEPA's ProUCL software version 5.1.002 (May 2016).

(3) Equal to the maximum detected concentration.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.

(4) Indicates the statistic on which the exposure point concentration is based.

Maximum = Maximum detected concentration.

(5) Maximum detected concentration used for EPC due to the low number of detections or small sample size.

(6) EPCs presented in Table 3.7.RME of the 2012 HHRA for the Site 7 - Location 1 - Low Tide scenario (Case 3). These EPCs for the low tide scenario are higher than those for the low, middle & high tide scenario (Case 4).

TABLE 4

COMPARISON OF EXPOSURE ASSUMPTIONS

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 07 - CALF PASTURE POINT

FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE

NORTH KINGSTOWN, RHODE ISLAND

				Child Recreator			Adolescent Recreator			Adult Recreator		
Exposure Media/ Scenario	Exposure Route(s)	Parameter	Units	2012 HHRA	Current Value	Current Source	2012 HHRA	Current Value	Current Source	2012 HHRA	Current Value	Source
Surface Water and Groundwater	Ingestion/Dermal	Body Weight	kg	15	15	USEPA, 2014a	45	44	USEPA, 2011 (8)	70	80	USEPA, 2014a
		Averaging Time - Cancer	days	25,550	25,550	USEPA, 2014a	25,550	25,550	USEPA, 2014a	25,550	25,550	USEPA, 2014a
Surface Water - Swimming	Ingestion	Ingestion Rate	L/hour	0.05	0.05	USEPA, 2014b	0.05	0.05	USEPA, 2014b	0.05	0.05	USEPA, 2014b
		Exposure Time	hours/event	2	2	BPJ (1)	2	2	BPJ (1)	2	2	BPJ (1)
	Ingestion/Dermal	Exposure Frequency	events/year	80	80	BPJ (2)	80	80	BPJ (2)	80	80	BPJ (2)
		Exposure Duration	years	6	6	USEPA, 2014a	9	10	(5)	15	10	USEPA, 2014a
		Averaging Time - Noncancer	days	2,190	2,190	USEPA, 2014a	3,285	3,650	USEPA, 2014a	5,475	7,300	USEPA, 2014a
	Dermal	Skin Surface Area	cm^2	7,300	6,365	USEPA, 2014a	13,000	13,350	USEPA, 2011 (9)	18,000	19,652	USEPA, 2014a
		Event Frequency	events/day	1	1	BPJ	1	1	BPJ	1	1	BPJ
	Unit Intakes (10):		Ingestion - Cancer	1.25E-07	1.25E-07		6.26E-08	7.12E-08		6.71E-08	3.91E-08	
			Ingestion - Noncancer	1.46E-06	1.46E-06		4.87E-07	4.98E-07		3.13E-07	1.37E-07	
			Dermal - Cancer	9.14E+00	7.97E+00		8.14E+00	9.50E+00		1.21E+01	7.69E+00	
			Dermal - Noncancer	1.07E+02	9.30E+01		6.33E+01	6.65E+01		5.64E+01	2.69E+01	
Surface Water - Wading	Ingestion	Ingestion Rate	L/hour	0.01	0.05	USEPA, 2014b	0.01	0.01	USEPA, 2014b	0.01	0.01	USEPA, 2014b
		Exposure Time	hours/event	2	2	BPJ (1)	2	2	BPJ (1)	2	2	BPJ (1)
	Ingestion/Dermal	Exposure Frequency	events/year	80	80	BPJ (2)	80	80	BPJ (2)	80	80	BPJ (2)
		Exposure Duration	years	4	4	(3)	10	10	(5)	16	10	USEPA, 2014a
		Averaging Time - Noncancer	days	1,460	1,460	USEPA, 2014a	3,650	3,650	USEPA, 2014a	5,840	7,300	USEPA, 2014a
	Dermal	Skin Surface Area	cm^2	1,825	1,717	USEPA, 2011 (4)	3,250	3,338	(4)	4,500	4,913	(4)
		Event Frequency	events/day	1	1	BPJ	1	1	BPJ	1	1	BPJ
	Unit Intakes (10):		Ingestion - Cancer	1.67E-08	8.35E-08		1.39E-08	1.42E-08		1.43E-08	7.83E-09	
			Ingestion - Noncancer	2.92E-07	1.46E-06		9.74E-08	9.96E-08		6.26E-08	2.74E-08	
			Dermal - Cancer	1.52E+00	1.43E+00		2.26E+00	2.38E+00		3.22E+00	1.92E+00	
			Dermal - Noncancer	2.67E+01	2.51E+01		1.58E+01	1.66E+01		1.41E+01	6.73E+00	

TABLE 4

COMPARISON OF EXPOSURE ASSUMPTIONS

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 07 - CALF PASTURE POINT

FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE

NORTH KINGSTOWN, RHODE ISLAND

				Child Recreator			Adolescent Recreator			Adult Recreator		
Exposure Media/ Scenario	Exposure Route(s)	Parameter	Units	2012 HHRA	Current Value	Current Source	2012 HHRA	Current Value	Current Source	2012 HHRA	Current Value	Source
Surface Water - Clamming	Ingestion	Ingestion Rate	L/hour	N/A	N/A		0.01	0.01	USEPA, 2014b	0.01	0.01	USEPA, 2014b
		Exposure Time	hours/event	N/A	N/A		2	2	BPJ (1)	2	2	BPJ (1)
	Ingestion/Dermal	Exposure Frequency	events/year	N/A	N/A		80	80	BPJ (2)	80	80	BPJ (2)
		Exposure Duration	years	N/A	N/A		9	10	(5)	15	10	USEPA, 2014
		Averaging Time - Noncancer	days	N/A	N/A		3,285	3,650	USEPA, 2014a	5,475	7,300	USEPA, 2014
	Dermal	Skin Surface Area	cm^2	N/A	N/A		4,300	4,406	(6)	5,940	6,485	(6)
		Event Frequency	events/day	N/A	N/A		1	1	BPJ	1	1	BPJ
	Unit Intakes (10):		Ingestion - Cancer	N/A	N/A		1.25E-08	1.42E-08		1.34E-08	7.83E-09	
			Ingestion - Noncancer	N/A	N/A		9.74E-08	9.96E-08		6.26E-08	2.74E-08	
			Dermal - Cancer	N/A	N/A		2.69E+00	3.14E+00		3.99E+00	2.54E+00	
			Dermal - Noncancer	N/A	N/A		2.09E+01	2.19E+01		1.86E+01	8.88E+00	
Groundwater - Clamming	Dermal	Skin Surface Area	cm^2	N/A	N/A		1,300	1,335	(7)	1,800	1,965	(7)
		Event Frequency	events/day	N/A	N/A		1	1	BPJ	1	1	BPJ
		Exposure Time	hours/event	N/A	N/A		2	2	BPJ	2	2	BPJ
		Exposure Duration	years	N/A	N/A		9	10	(5)	15	10	USEPA, 2014a
		Exposure Frequency	days/year	N/A	N/A		80	80	BPJ (2)	80	80	BPJ
		Averaging Time - Noncancer	days	N/A	N/A		3,285	3,650	USEPA, 2014a	5,475	7,300	USEPA, 2014
	Unit Intakes (10):		Dermal - Cancer	N/A	N/A		8.14E-01	9.50E-01		1.21E+00	7.69E-01	
			Dermal - Noncancer	N/A	N/A		6.33E+00	6.65E+00		5.64E+00	2.69E+00	

TABLE 4

COMPARISON OF EXPOSURE ASSUMPTIONS

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 07 - CALF PASTURE POINT

FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE

NORTH KINGSTOWN, RHODE ISLAND

				Child Recreator			Adolescent Recreator			Adult Recreator		
Exposure Media/ Scenario	Exposure Route(s)	Parameter	Units	2012 HHRA	Current Value	Current Source	2012 HHRA	Current Value	Current Source	2012 HHRA	Current Value	Source

Notes:

Shading indicates a difference between exposure assumptions/unit intakes utilized in the 2012 HHRA in comparison to current exposure assumptions/unit intakes.

BPJ = best professional judgement.

cm^2 = square centimeters.

HHRA = Human Health Risk Assessment.

kg = kilograms.

L/hour = liters per hour.

N/A = Not applicable/available.

USEPA = United States Environmental Protection Agency.

(1) Assumes 2 hours per event based on best professional judgement.

(2) Assumes three days a week from April through October based on best professional judgement.

(3) Assumes exposure occurs from ages 2 to 6 years old.

(4) Assumes 25 percent of total body skin surface area (evaluated in the swimming scenario) is exposed.

(5) The exposure duration for an adolescent reflects the 10 years from ages 7 to 16 years old.

(6) Assumes 33 percent of total body skin surface area (evaluated in the swimming scenario) is exposed.

(7) Assumes 10 percent of total body skin surface area (evaluated in the swimming scenario) is exposed.

(8) Recommended mean body weight. Weighted average of recommended mean body weight for the associated age range (USEPA, 2011; Table 8-3).

(9) Recommended total body surface area. Weighted average of recommended mean body weight for the associated age range (USEPA, 2011; Table 7-1).

(10) Unit Intakes were calculated as follows, consistent with the equations utilized in the 2012 HHRA, Risk Assessment Guidance for Superfund (RAGS) Part D Table 4s:

Ingestion Intake = (Ingestion Rate x conversion factor (0.001 mg/ug) x exposure time x exposure frequency x exposure duration)/(body weight x averaging time)

Dermal Intake = (surface area x event frequency x exposure frequency x exposure duration)/(body weight x averaging time)

Sources:

USEPA, 2011. Exposure Factors Handbook: 2011 Edition. EPA/600/R-090/052F, September 2011.

USEPA, 2014a. Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors. February 6, 2014. Corrected September 2015.

USEPA, 2014b. Region 4 Human Health Risk Assessment Supplemental Guidance. January 2014.

TABLE 5

COMPARISON OF NON-CANCER TOXICITY DATA -- ORAL/DERMAL

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 07 - CALF PASTURE POINT

FORMER NCBC DAVISVILLE

NORTH KINGSTOWN, RHODE ISLAND

Chemical of Potential Concern	CAS Number	Chronic/ Subchronic (1)	Oral RfD			Oral Absorption Efficiency For Dermal (2)	Absorbed RfD for Dermal (3)			Primary Target Organ(s)		Combined Uncertainty/Modifying Factors (Current)	RfD:Target Organ(s) (4)			
			Value		Units		Value		Units				2012 HHRA		Current	
			2012 HHRA	Current			2012 HHRA	Current		2012 HHRA	Current		Source(s)	Date(s) (MM/YYYY)	Source(s)	Date(s) (MM/YYYY)
VOCs																
1,1,2,2-TETRACHLOROETHANE	79-34-5	Chronic	2.0E-02	2.0E-02	mg/kg-day	(1)	2.0E-02	2.0E-02	mg/kg-day	Liver	Liver	1,000	I	10/2012	I	2/2017
1,1,2-TRICHLOROETHANE	79-00-5	Chronic	4.0E-03	4.0E-03	mg/kg-day	(1)	4.0E-03	4.0E-03	mg/kg-day	Liver	Immune, Blood	1,000	I	10/2012	I	2/2017
1,2-DICHLOROETHANE	107-06-2	Chronic	N/A	6.0E-03	mg/kg-day	(1)	N/A	6.0E-03	mg/kg-day	N/A	Kidney	10,000			P	10/2010
BENZENE	71-43-2	Chronic	4.0E-03	4.0E-03	mg/kg-day	(1)	4.0E-03	4.0E-03	mg/kg-day	Blood	Immune, Blood	300	I	10/2012	I	2/2017
CHLOROFORM	67-66-3	Chronic	1.0E-02	1.0E-02	mg/kg-day	(1)	1.0E-02	1.0E-02	mg/kg-day	Liver	Liver	100	I	10/2012	I	2/2017
CIS-1,2-DICHLOROETHENE	156-59-2	Chronic	2.0E-03	2.0E-03	mg/kg-day	(1)	2.0E-03	2.0E-03	mg/kg-day	Kidney	Kidney	3,000	I	10/2012	I	2/2017
TRANS-1,2-DICHLOROETHENE	156-60-5	Chronic	2.0E-02	2.0E-02	mg/kg-day	(1)	2.0E-02	2.0E-02	mg/kg-day	Blood	Immune	3,000	I	10/2012	I	2/2017
TRICHLOROETHENE	79-01-6	Chronic	5.0E-04	5.0E-04	mg/kg-day	(1)	5.0E-04	5.0E-04	mg/kg-day	Immune System, Developmental	Immune System, Developmental	1,000	I	10/2012	I	2/2017
VINYL CHLORIDE	75-01-4	Chronic	3.0E-03	3.0E-03	mg/kg-day	(1)	3.0E-03	3.0E-03	mg/kg-day	Liver	Liver	30	I	10/2012	I	2/2017

Notes:

CAS = Chemical Abstracts Service.

HHRA = Human Health Risk Assessment.

N/A = Not Applicable/Not Available.

N/E = Not evaluated.

mg/kg=day = milligrams per kilogram per day.

RfD = Reference Dose.

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

Shading indicates a difference between toxicity information utilized in the 2012 HHRA in comparison to current toxicity information obtained in accordance with USEPA's recommended hierarchy discussed in the report text.

(1) Oral absorption efficiency exceeds 50%. Therefore, no adjustment of the oral slope factor is necessary (USEPA, 2004. Exhibit 4-1).

(2) Oral Absorption Efficiencies from Exhibit 4-1 (USEPA, 2004. Risk Assessment Guidance for Superfund, Part E).

(3) Calculated as: (oral RfD) x (oral to dermal adjustment factor).

(4) Toxicity data obtained from the following sources:

I - USEPA Integrated Risk Information System [https://www.epa.gov/iris].

P - USEPA Provisional Peer Reviewed Toxicity Values Appendix [https://hhpprtv.ornl.gov/].

TABLE 6

COMPARISON OF CANCER TOXICITY DATA -- ORAL/DERMAL

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 07 - CALF PASTURE POINT

FORMER NCBC DAVISVILLE

Chemical of Potential Concern	CAS Number	Oral Cancer Slope Factor			Oral Absorption Efficiency for Dermal	Absorbed Cancer Slope Factor for Dermal (2)			Weight of Evidence/ Cancer Guideline Description	Oral CSF (3)				Mutagen?
		Value		Units		Value		Units		Source(s)	Date(s)	Source(s)	Date(s)	
		2012 HHRA	Current			2012 HHRA	Current		(USEPA Group)	2012 HHRA	(MM/YYYY)	Current	(MM/YYYY)	
VOCs														
1,1,2,2-TETRACHLOROETHANE	79-34-5	2.0E-01	2.0E-01	$(mg/kg\text{-}day)^{-1}$	(1)	2.0E-01	2.0E-01	$(mg/kg\text{-}day)^{-1}$	LIKELY	I	10/2012	I	2/2017	No
1,1,2-TRICHLOROETHANE	79-00-5	5.7E-02	5.7E-02	$(mg/kg\text{-}day)^{-1}$	(1)	5.7E-02	5.7E-02	$(mg/kg\text{-}day)^{-1}$	C	I	10/2012	I	2/2017	No
1,2-DICHLOROETHANE	107-06-2	9.1E-02	9.1E-02	$(mg/kg\text{-}day)^{-1}$	(1)	9.1E-02	9.1E-02	$(mg/kg\text{-}day)^{-1}$	B2	I	10/2012	I	2/2017	No
BENZENE	71-43-2	5.5E-02	5.5E-02	$(mg/kg\text{-}day)^{-1}$	(1)	5.5E-02	5.5E-02	$(mg/kg\text{-}day)^{-1}$	A	I	10/2012	I	2/2017	No
CHLOROFORM	67-66-3	3.1E-02	3.1E-02	$(mg/kg\text{-}day)^{-1}$	(1)	3.1E-02	3.1E-02	$(mg/kg\text{-}day)^{-1}$	B2; LIKELY	C	9/2009	C	2/2017	No
CIS-1,2-DICHLOROETHENE	156-59-2	N/A	N/A			N/A	N/A		INADEQUATE					
TRANS-1,2-DICHLOROETHENE	156-60-5	N/A	N/A			N/A	N/A		INADEQUATE					
TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	9.3E-03	9.3E-03	$(mg/kg\text{-}day)^{-1}$	(1)	9.3E-03	9.3E-03	$(mg/kg\text{-}day)^{-1}$	CARC	I	10/2012	I	2/2017	Yes (5)
TRICHLOROETHENE - NON-MUTAGENI	79-01-6	3.7E-02	3.7E-02	$(mg/kg\text{-}day)^{-1}$	(1)	3.7E-02	3.7E-02	$(mg/kg\text{-}day)^{-1}$	CARC	I	10/2012	I	2/2017	No (4)
VINYL CHLORIDE	75-01-4	7.2E-01	7.2E-01	$(mg/kg\text{-}day)^{-1}$	(1)	7.2E-01	7.2E-01	$(mg/kg\text{-}day)^{-1}$	A	I	10/2012	I	2/2017	Yes (6)

Notes:

CAS = Chemical Abstracts Service.

CSF = Cancer Slope Factor.

HHRA = Human Health Risk Assessment.

N/A = Not Applicable/Not Available.

N/E = Not evaluated.

mg/kg=day = milligrams per kilogram per day.

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

Shading indicates a difference between toxicity information utilized in the 2012 HHRA in comparison to current toxicity information obtained in accordance with USEPA's recommended hierarchy discussed in the report text.

(1) Oral absorption efficiency exceeds 50%. Therefore, no adjustment of the oral slope factor is necessary (USEPA, 2004. Exhibit 4-1).

(2) Calculated as: (oral slope factor) / (oral to dermal adjustment factor)

(3) Toxicity data obtained from the following sources:

I - USEPA Integrated Risk Information System [https://www.epa.gov/iris].

C - California Environmental Protection Agency Office of Environmental Health Hazard Assessment Toxicity Criteria Database [https://oehha.ca.gov/chemicals]

(4) CSF associated with Non-Hodgkins Lymphona and liver effects.

(5) CSF associated with kidney effects.

(6) Cancer toxicity values for vinyl chloride account for mutagenic action, such that age-dependent adjustment factors (ADAFs) are not applied for vinyl chloride.

Weight of Evidence Characterization/USEPA Group:

A - Human carcinogen

B1 - Probable human carcinogen - indicates that limited human data are available

B2 - Probable human carcinogen - indicates sufficient evidence in animals and inadequate or no evidence in humans

C - Possible human carcinogen

D - Not classifiable as a human carcinogen (by the oral route)

CARC - Carcinogenic to humans.

LIKELY - Likely to be carcinogenic to humans.

INADEQUATE - Inadequate information to assess carcinogenic potential.

TABLE 7.1
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - SCALING TABLES - RECREATIONAL USER - WADER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Wader
Exposure Point: Site 07 - Low Tide (Case 3)

Medium	Receptor Age	Exposure Route	COPC	CAS	EPC (ug/L) (a)			Unit Intake - Cancer (b)			Unit Intake - Noncancer (b)			Cancer Toxicity Value - Cancer Slope Factor (c)			Noncancer Toxicity Value - Reference Dose (c)			Potential Cancer Risk (d)		Potential Noncancer Hazard Quotient (e)	
					2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	2012 HHRA	Current
Surface Water	Child	Ingestion	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	1.67E-08	8.35E-08	5.00	2.92E-07	1.46E-06	5.00	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.0007	0.005
			TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	1.67E-08	8.35E-08	5.00	2.92E-07	1.46E-06	5.00	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	2E-09	1E-08	N/A	N/A
			TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	1.67E-08	8.35E-08	5.00	2.92E-07	1.46E-06	5.00	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	3E-09	2E-08	0.003	0.02
			VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	1.67E-08	8.35E-08	5.00	2.92E-07	1.46E-06	5.00	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	1E-06	**2E-05**	0.0001	0.002
		Exposure Route Total																		1E-06	**2E-05**	0.004	0.02
		Dermal	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	1.52E+00	1.43E+00	0.94	2.67E+01	2.51E+01	0.94	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.002	0.002
			TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	1.52E+00	1.43E+00	0.94	2.67E+01	2.51E+01	0.94	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	8E-09	9E-09	N/A	N/A
			TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	1.52E+00	1.43E+00	0.94	2.67E+01	2.51E+01	0.94	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	1E-08	1E-08	0.01	0.01
			VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	1.52E+00	1.43E+00	0.94	2.67E+01	2.51E+01	0.94	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	2E-06	4E-06	0.0002	0.0004
		Exposure Route Total																		2E-06	4E-06	0.01	0.01
	Child Total																			3E-06	**2E-05**	0.02	0.04
	Adolescent	Ingestion	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	1.39E-08	1.42E-08	1.02	9.74E-08	9.96E-08	1.02	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.0002	0.0003
			TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	1.39E-08	1.42E-08	1.02	9.74E-08	9.96E-08	1.02	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	2E-09	2E-09	N/A	N/A
			TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	1.39E-08	1.42E-08	1.02	9.74E-08	9.96E-08	1.02	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	3E-09	3E-09	0.001	0.001
			VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	1.39E-08	1.42E-08	1.02	9.74E-08	9.96E-08	1.02	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	1E-08	4E-08	0.00005	0.0001
		Exposure Route Total																		2E-08	4E-08	0.001	0.002
		Dermal	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	2.26E+00	2.38E+00	1.05	1.58E+01	1.66E+01	1.05	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.001	0.002
			TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	2.26E+00	2.38E+00	1.05	1.58E+01	1.66E+01	1.05	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	1E-08	1E-08	N/A	N/A
			TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	2.26E+00	2.38E+00	1.05	1.58E+01	1.66E+01	1.05	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	1E-08	2E-08	0.006	0.007
			VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	2.26E+00	2.38E+00	1.05	1.58E+01	1.66E+01	1.05	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	3E-08	9E-08	0.0001	0.0003
		Exposure Route Total																		6E-08	1E-07	0.007	0.009
	Adolescent Total																			8E-08	2E-07	0.008	0.01
	Adult	Ingestion	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	1.43E-08	7.83E-09	0.55	6.26E-08	2.74E-08	0.44	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.0002	0.00009
			TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	1.43E-08	7.83E-09	0.55	6.26E-08	2.74E-08	0.44	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	7E-10	4E-10	N/A	N/A
			TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	1.43E-08	7.83E-09	0.55	6.26E-08	2.74E-08	0.44	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	3E-09	2E-09	0.0006	0.0003
			VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	1.43E-08	7.83E-09	0.55	6.26E-08	2.74E-08	0.44	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	1E-08	2E-08	0.00003	0.00003
		Exposure Route Total																		2E-08	2E-08	0.0008	0.0004
		Dermal	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	3.22E+00	1.92E+00	0.60	1.41E+01	6.73E+00	0.48	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.001	0.0006
			TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	3.22E+00	1.92E+00	0.60	1.41E+01	6.73E+00	0.48	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	5E-09	4E-09	N/A	N/A
			TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	3.22E+00	1.92E+00	0.60	1.41E+01	6.73E+00	0.48	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	2E-08	2E-08	0.005	0.003
			VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	3.22E+00	1.92E+00	0.60	1.41E+01	6.73E+00	0.48	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	4E-08	7E-08	0.00009	0.0001
		Exposure Route Total																		7E-08	9E-08	0.006	0.004
	Adult Total																			9E-08	1E-07	0.007	0.004
	Lifelong (e)	Ingestion	CIS-1,2-DICHLOROETHENE	156-59-2																N/A	N/A		
			TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)																5E-09	2E-08		
			TRICHLOROETHENE - NON-MUTAGENIC	79-01-6																8E-09	2E-08		
			VINYL CHLORIDE	75-01-4																1E-06	**2E-05**		
		Exposure Route Total																		1E-06	**2E-05**		
		Dermal	CIS-1,2-DICHLOROETHENE	156-59-2																N/A	N/A		
			TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)																2E-08	3E-08		
			TRICHLOROETHENE - NON-MUTAGENIC	79-01-6																5E-08	5E-08		
			VINYL CHLORIDE	75-01-4																2E-06	4E-06		
		Exposure Route Total																		2E-06	4E-06		
	Lifelong (Child, Adolescent, Adult) Total																			3E-06	**2E-05**		

TABLE 7.1
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - SCALING TABLES - RECREATIONAL USER - WADER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Wader
Exposure Point: Site 07 - Low Tide (Case 3)

Medium	Receptor Age	Exposure Route	COPC	CAS	EPC (ug/L) (a)			Unit Intake - Cancer (b)			Unit Intake - Noncancer (b)			Cancer Toxicity Value - Cancer Slope Factor (c)			Noncancer Toxicity Value - Reference Dose (c)			Potential Cancer Risk (d)		Potential Noncancer Hazard Quotient (e)	
					2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	2012 HHRA	Current

Notes:
CAS = Chemical Abstracts Service.
COPC = Chemical of potential concern.
EPC = Exposure point concentration.
HHRA = Human Health Risk Assessment.
N/A = Not applicable/available.
Ratio = Equals the associated current value divided by the associated 2012 value, with the exception of the noncancer toxicity value, which is the associated 2012 value divided by the associated current value.
(a) Presented on EPC comparison Table 3.2.
(b) Calculated on Table 4.
(c) Noncancer and cancer toxicity values are presented on Tables 5 and 6, respectively.
(d) Potential cancer risks and noncancer hazard quotients for the 2012 HHRA presented in Risk Assessment Guidance for Superfund (RAGS) Part D Table 9s in the 2012 HHRA report. Updated potential cancer risks and noncancer hazard quotients estimated by scaling the risk and hazard quotient estimates calculated in the 2012 HHRA based on the changes in EPCs, exposure assumptions (used to calculate the unit intake), and toxicity values using the following equations:
Updated potential risk = 2012 HHRA risk estimate x (current EPC / 2012 EPC) x (current unit intake / 2012 unit intake) x (current cancer slope factor [CSF] / 2012 CSF)
Updated potential hazard quotient [HQ] = 2012 HHRA HQ estimate x (current EPC / 2012 EPC) x (current unit intake / 2012 unit intake) x (2012 reference dose [RfD] / current RfD)
(e) Potential cancer risk estimates for the lifelong scenario were calculated by summing the associated estimates for the child, adolescent, and adult age groups.
Shading indicates an exceedance of Rhode Island Department of Environmental Management's (RIDEM) target cumulative cancer risk level of 1E-5 due to incidental ingestion of vinyl chloride in surface water. The maximum detected concentration of vinyl chloride in surface water was selected as the surface water EPC because only one of the 30 vinyl chloride surface water results were detected. Due to the low frequency of detection (approximately 0.03 percent), vinyl chloride is not identified as a surface water chemical of concern. The total potential cumulative cancer risk estimate is less than 1E-5 when vinyl chloride is excluded.

TABLE 7.2
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - SCALING TABLES - RECREATIONAL USER - SHELL FISHERMAN
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Shell Fisherman
Exposure Point: Site 07 Surface Water + Groundwater (Southern Boundary)

Medium	Exposure Point	Receptor Age	Exposure Route	COPC	CAS	EPC (ug/L) (a)			Unit Intake - Cancer (b)			Unit Intake - Noncancer (b)			Cancer Toxicity Value - Cancer Slope Factor (c)			Noncancer Toxicity Value - Reference Dose (c)			Potential Cancer Risk (d)		Potential Noncancer Hazard Quotient (e)	
						2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	2012 HHRA	Current
Surface Water	Site 07 - Low Tide (Case 3)	Adolescent	Ingestion	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	1.25E-08	1.42E-08	1.14	9.74E-08	9.96E-08	1.02	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.0002	0.0003
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	1.25E-08	1.42E-08	1.14	9.74E-08	9.96E-08	1.02	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	2E-09	3E-09	N/A	N/A
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	1.25E-08	1.42E-08	1.14	9.74E-08	9.96E-08	1.02	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	3E-09	3E-09	0.001	0.001
				VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	1.25E-08	1.42E-08	1.14	9.74E-08	9.96E-08	1.02	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	1E-08	4E-08	0.00005	0.0001
			Exposure Route Total																		2E-08	5E-08	0.001	0.002
			Dermal	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	2.69E+00	3.14E+00	1.16	2.09E+01	2.19E+01	1.05	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.002	0.002
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	2.69E+00	3.14E+00	1.16	2.09E+01	2.19E+01	1.05	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	1E-08	2E-08	N/A	N/A
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	2.69E+00	3.14E+00	1.16	2.09E+01	2.19E+01	1.05	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	2E-08	3E-08	0.007	0.009
				VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	2.69E+00	3.14E+00	1.16	2.09E+01	2.19E+01	1.05	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	4E-08	1E-07	0.0001	0.0004
			Exposure Route Total																		8E-08	2E-07	0.009	0.01
		Adolescent Total																			9E-08	2E-07	0.01	0.01
		Adult	Ingestion	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	1.34E-08	7.83E-09	0.58	6.26E-08	2.74E-08	0.44	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.0002	0.00009
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	1.34E-08	7.83E-09	0.58	6.26E-08	2.74E-08	0.44	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	7E-10	5E-10	N/A	N/A
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	1.34E-08	7.83E-09	0.58	6.26E-08	2.74E-08	0.44	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	3E-09	2E-09	0.0006	0.0003
				VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	1.34E-08	7.83E-09	0.58	6.26E-08	2.74E-08	0.44	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	1E-08	2E-08	0.00003	0.00003
			Exposure Route Total																		2E-08	2E-08	0.0008	0.0004
			Dermal	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	3.99E+00	2.54E+00	0.64	1.86E+01	8.88E+00	0.48	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.001	0.0008
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	3.99E+00	2.54E+00	0.64	1.86E+01	8.88E+00	0.48	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	7E-09	5E-09	N/A	N/A
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	3.99E+00	2.54E+00	0.64	1.86E+01	8.88E+00	0.48	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	3E-08	2E-08	0.007	0.004
				VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	3.99E+00	2.54E+00	0.64	1.86E+01	8.88E+00	0.48	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	6E-08	1E-07	0.0001	0.0002
			Exposure Route Total																		9E-08	1E-07	0.008	0.005
		Adult Total																			1E-07	2E-07	0.009	0.005
		Lifelong (e)	Ingestion	CIS-1,2-DICHLOROETHENE	156-59-2																N/A	N/A		
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)																3E-09	3E-09		
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6																5E-09	5E-09		
				VINYL CHLORIDE	75-01-4																3E-08	6E-08		
			Exposure Route Total																		4E-08	7E-08		
			Dermal	CIS-1,2-DICHLOROETHENE	156-59-2																N/A	N/A		
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)																2E-08	3E-08		
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6																5E-08	5E-08		
				VINYL CHLORIDE	75-01-4																1E-07	2E-07		
			Exposure Route Total																		2E-07	3E-07		
		Lifelong (Child, Adolescent, Adult) Total - Surface Water																			2E-07	4E-07		

TABLE 7.2
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - SCALING TABLES - RECREATIONAL USER - SHELL FISHERMAN
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Shell Fisherman
Exposure Point: Site 07 Surface Water + Groundwater (Southern Boundary)

Medium	Exposure Point	Receptor Age	Exposure Route	COPC	CAS	EPC (ug/L) (a)			Unit Intake - Cancer (b)			Unit Intake - Noncancer (b)			Cancer Toxicity Value - Cancer Slope Factor (c)			Noncancer Toxicity Value - Reference Dose (c)			Potential Cancer Risk (d)		Potential Noncancer Hazard Quotient (e)	
						2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	2012 HHRA	Current
Groundwater	Site 07 - Southern Boundary (Cases 1/2)	Adolescent	Dermal	1,1,2,2-TETRACHLOROETHANE	79-34-5	2.00E+01	3.91E+01	1.95	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	2.00E-01	2.00E-01	1.00	2.00E-02	2.00E-02	1.00	9E-08	2E-07	0.0002	0.0004
				1,1,2-TRICHLOROETHANE	79-00-5	3.70E+00	8.54E+00	2.31	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	5.70E-02	5.70E-02	1.00	4.00E-03	4.00E-03	1.00	4E-09	1E-08	0.0001	0.0002
				1,2-DICHLOROETHANE	107-06-2	5.20E-01	6.71E-01	1.29	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	9.10E-02	9.10E-02	1.00	N/A	6.00E-03	N/A	5E-10	8E-10	N/A	0.0002 (f)
				BENZENE	71-43-2	3.60E-01	1.60E+00	4.44	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	5.50E-02	5.50E-02	1.00	4.00E-03	4.00E-03	1.00	7E-10	4E-09	0.00002	0.0001
				CHLOROFORM	67-66-3	7.00E-01	6.60E-01	0.94	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	3.10E-02	3.10E-02	1.00	1.00E-02	1.00E-02	1.00	4E-10	4E-10	0.000009	0.000009
				CIS-1,2-DICHLOROETHENE	156-59-2	1.05E+02	3.05E+02	2.90	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.01	0.03
				TRANS-1,2-DICHLOROETHENE	156-60-5	9.40E+00	2.72E+01	2.89	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	N/A	N/A	N/A	2.00E-02	2.00E-02	1.00	N/A	N/A	0.0001	0.0003
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	1.69E+02	3.10E+02	1.84	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	2E-07	4E-07	N/A	N/A
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	1.69E+02	3.10E+02	1.84	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	2E-07	4E-07	0.08	0.2
				VINYL CHLORIDE	75-01-4	6.20E+00	1.38E+01	2.23	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	6E-08	2E-07	0.0002	0.0005
			Exposure Route Total																		6E-07	1E-06	0.09	0.2
		Adolescent Total																			6E-07	1E-06	0.09	0.2
		Adult	Dermal	1,1,2,2-TETRACHLOROETHANE	79-34-5	2.00E+01	3.91E+01	1.95	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	2.00E-01	2.00E-01	1.00	2.00E-02	2.00E-02	1.00	1E-07	1E-07	0.0001	0.00009
				1,1,2-TRICHLOROETHANE	79-00-5	3.70E+00	8.54E+00	2.31	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	5.70E-02	5.70E-02	1.00	4.00E-03	4.00E-03	1.00	6E-09	9E-09	0.0001	0.0001
				1,2-DICHLOROETHANE	107-06-2	5.20E-01	6.71E-01	1.29	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	9.10E-02	9.10E-02	1.00	N/A	6.00E-03	N/A	7E-10	6E-10	N/A	0.0001 (f)
				BENZENE	71-43-2	3.60E-01	1.60E+00	4.44	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	5.50E-02	5.50E-02	1.00	4.00E-03	4.00E-03	1.00	1E-09	3E-09	0.00002	0.00004
				CHLOROFORM	67-66-3	7.00E-01	6.60E-01	0.94	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	3.10E-02	3.10E-02	1.00	1.00E-02	1.00E-02	1.00	6E-10	4E-10	0.000008	0.000004
				CIS-1,2-DICHLOROETHENE	156-59-2	1.05E+02	3.05E+02	2.90	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.009	0.01
				TRANS-1,2-DICHLOROETHENE	156-60-5	9.40E+00	2.72E+01	2.89	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	N/A	N/A	N/A	2.00E-02	2.00E-02	1.00	N/A	N/A	0.00008	0.0001
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	1.69E+02	3.10E+02	1.84	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	7E-08	8E-08	N/A	N/A
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	1.69E+02	3.10E+02	1.84	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	3E-07	4E-07	0.07	0.06
				VINYL CHLORIDE	75-01-4	6.20E+00	1.38E+01	2.23	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	8E-08	1E-07	0.0002	0.0002
			Exposure Route Total																		6E-07	7E-07	0.08	0.07
		Adult Total																			6E-07	7E-07	0.08	0.07
		Lifelong (e)	Dermal	1,1,2,2-TETRACHLOROETHANE	79-34-5																2E-07	3E-07		
				1,1,2-TRICHLOROETHANE	79-00-5																1E-08	2E-08		
				1,2-DICHLOROETHANE	107-06-2																1E-09	1E-09		
				BENZENE	71-43-2																2E-09	6E-09		
				CHLOROFORM	67-66-3																1E-09	8E-10		
				CIS-1,2-DICHLOROETHENE	156-59-2																N/A	N/A		
				TRANS-1,2-DICHLOROETHENE	156-60-5																N/A	N/A		
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)																3E-07	5E-07		
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6																5E-07	8E-07		
				VINYL CHLORIDE	75-01-4																1E-07	3E-07		
			Exposure Route Total																		1E-06	2E-06		
		Lifelong (Child, Adolescent, Adult) Total - Groundwater																			1E-06	2E-06		
Receptor Total - Adolescent - Surface Water + Groundwater																					6E-07	1E-06	0.1	0.2
Receptor Total - Adult - Surface Water + Groundwater																					7E-07	8E-07	0.09	0.08
Receptor Total - Lifelong (e) - Surface Water + Groundwater																					1E-06	2E-06	N/A (e)	N/A (e)

TABLE 7.2
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - SCALING TABLES - RECREATIONAL USER - SHELL FISHERMAN
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Shell Fisherman
Exposure Point: Site 07 Surface Water + Groundwater (Southern Boundary)

Medium	Exposure Point	Receptor Age	Exposure Route	COPC	CAS	EPC (ug/L) (a)			Unit Intake - Cancer (b)			Unit Intake - Noncancer (b)			Cancer Toxicity Value - Cancer Slope Factor (c)			Noncancer Toxicity Value - Reference Dose (c)			Potential Cancer Risk (d)		Potential Noncancer Hazard Quotient (e)	
						2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	2012 HHRA	Current

Notes:
CAS = Chemical Abstracts Service.
COPC = Chemical of potential concern.
EPC = Exposure point concentration.
HHRA = Human Health Risk Assessment.
N/A = Not applicable/available.
Ratio = Equals the associated current value divided by the associated 2012 value, with the exception of the noncancer toxicity value, which is the associated 2012 value divided by the associated current value.
(a) Presented on groundwater and surface water EPC comparison Tables 3.1 and 3.2, respectively.
(b) Calculated on Table 4.
(c) Noncancer and cancer toxicity values are presented on Tables 5 and 6, respectively.
(d) Potential cancer risks and noncancer hazard quotients for the 2012 HHRA presented in Risk Assessment Guidance for Superfund (RAGS) Part D Table 9s in the 2012 HHRA report. Updated potential cancer risks and noncancer hazard quotients estimated by scaling the risk and hazard quotient estimates calculated in the 2012 HHRA based on the changes in EPCs, exposure assumptions (used to calculate the unit intake), and toxicity values using the following equations:
Updated potential risk = 2012 HHRA risk estimate x (current EPC / 2012 EPC) x (current unit intake / 2012 unit intake) x (current cancer slope factor [CSF] / 2012 CSF)
Updated potential hazard quotient [HQ] = 2012 HHRA HQ estimate x (current EPC / 2012 EPC) x (current unit intake / 2012 unit intake) x (2012 reference dose [RfD] / current RfD)
(e) Potential cancer risk estimates for the lifelong scenario were calculated by summing the associated estimates for the adolescent and adult age groups. The child receptor is not considered to perform shellfishing.
(f) A RfD was not available for 1,2-dichloroethane when evaluated in the 2012 HHRA, therefore, a potential noncancer hazard quotient could not be scaled based on the 2012 HHRA results. Therefore, a potential noncancer hazard quotient value equal to that for 1,1,2-trichloroethane was used. 1,1,2-Trichloroethane has a slightly higher (less toxic) reference dose as compared to 1,2-dichloroethane, making the use of this potential hazard quotient conservative for application to 1,2-dichloroethane.

TABLE 7.3
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - SCALING TABLES - RECREATIONAL USER - SHELL FISHERMAN
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Shell Fisherman
Exposure Point: Site 07 Surface Water + Groundwater (Mid-Southern Boundary)

Medium	Exposure Point	Receptor Age	Exposure Route	COPC	CAS	EPC (ug/L) (a)			Unit Intake - Cancer (b)			Unit Intake - Noncancer (b)			Cancer Toxicity Value - Cancer Slope Factor (c)			Noncancer Toxicity Value - Reference Dose (c)			Potential Cancer Risk (d)		Potential Noncancer Hazard Quotient (e)	
						2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	2012 HHRA	Current
Surface Water	Site 07 - Low Tide (Case 3)	Adolescent	Ingestion	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	1.25E-08	1.42E-08	1.14	9.74E-08	9.96E-08	1.02	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.0002	0.0003
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	1.25E-08	1.42E-08	1.14	9.74E-08	9.96E-08	1.02	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	2E-09	3E-09	N/A	N/A
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	1.25E-08	1.42E-08	1.14	9.74E-08	9.96E-08	1.02	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	3E-09	3E-09	0.001	0.001
				VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	1.25E-08	1.42E-08	1.14	9.74E-08	9.96E-08	1.02	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	1E-08	4E-08	0.00005	0.0001
			Exposure Route Total																		2E-08	5E-08	0.001	0.002
			Dermal	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	2.69E+00	3.14E+00	1.16	2.09E+01	2.19E+01	1.05	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.002	0.002
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	2.69E+00	3.14E+00	1.16	2.09E+01	2.19E+01	1.05	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	1E-08	2E-08	N/A	N/A
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	2.69E+00	3.14E+00	1.16	2.09E+01	2.19E+01	1.05	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	2E-08	3E-08	0.007	0.009
				VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	2.69E+00	3.14E+00	1.16	2.09E+01	2.19E+01	1.05	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	4E-08	1E-07	0.0001	0.0004
			Exposure Route Total																		8E-08	2E-07	0.009	0.01
		Adolescent Total																			9E-08	2E-07	0.01	0.01
		Adult	Ingestion	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	1.34E-08	7.83E-09	0.58	6.26E-08	2.74E-08	0.44	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.0002	0.00009
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	1.34E-08	7.83E-09	0.58	6.26E-08	2.74E-08	0.44	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	7E-10	5E-10	N/A	N/A
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	1.34E-08	7.83E-09	0.58	6.26E-08	2.74E-08	0.44	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	3E-09	2E-09	0.0006	0.0003
				VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	1.34E-08	7.83E-09	0.58	6.26E-08	2.74E-08	0.44	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	1E-08	2E-08	0.00003	0.00003
			Exposure Route Total																		2E-08	2E-08	0.0008	0.0004
			Dermal	CIS-1,2-DICHLOROETHENE	156-59-2	5.00E+00	6.40E+00	1.28	3.99E+00	2.54E+00	0.64	1.86E+01	8.88E+00	0.48	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.001	0.0008
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	4.90E+00	5.90E+00	1.20	3.99E+00	2.54E+00	0.64	1.86E+01	8.88E+00	0.48	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	7E-09	5E-09	N/A	N/A
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	4.90E+00	5.90E+00	1.20	3.99E+00	2.54E+00	0.64	1.86E+01	8.88E+00	0.48	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	3E-08	2E-08	0.007	0.004
				VINYL CHLORIDE	75-01-4	1.40E+00	3.70E+00	2.64	3.99E+00	2.54E+00	0.64	1.86E+01	8.88E+00	0.48	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	6E-08	1E-07	0.0001	0.0002
			Exposure Route Total																		9E-08	1E-07	0.008	0.005
		Adult Total																			1E-07	2E-07	0.009	0.005
		Lifelong (e)	Ingestion	CIS-1,2-DICHLOROETHENE	156-59-2																N/A	N/A		
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)																3E-09	3E-09		
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6																5E-09	5E-09		
				VINYL CHLORIDE	75-01-4																3E-08	6E-08		
			Exposure Route Total																		4E-08	7E-08		
			Dermal	CIS-1,2-DICHLOROETHENE	156-59-2																N/A	N/A		
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)																2E-08	3E-08		
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6																5E-08	5E-08		
				VINYL CHLORIDE	75-01-4																1E-07	2E-07		
			Exposure Route Total																		2E-07	3E-07		
		Lifelong (Child, Adolescent, Adult) Total - Surface Water																			2E-07	4E-07		

TABLE 7.3
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - SCALING TABLES - RECREATIONAL USER - SHELL FISHERMAN
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Shell Fisherman
Exposure Point: Site 07 Surface Water + Groundwater (Mid-Southern Boundary)

Medium	Exposure Point	Receptor Age	Exposure Route	COPC	CAS	EPC (ug/L) (a)			Unit Intake - Cancer (b)			Unit Intake - Noncancer (b)			Cancer Toxicity Value - Cancer Slope Factor (c)			Noncancer Toxicity Value - Reference Dose (c)			Potential Cancer Risk (d)		Potential Noncancer Hazard Quotient (e)		
						2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	2012 HHRA	Current	
Groundwater	Site 07 - Mid-Southern Boundary (Cases 1/2)	Adolescent	Dermal	1,1,2,2-TETRACHLOROETHANE	79-34-5	2.00E+01	7.06E+01	3.53	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	2.00E-01	2.00E-01	1.00	2.00E-02	2.00E-02	1.00	9E-08	4E-07	0.0002	0.0007	
				1,1,2-TRICHLOROETHANE	79-00-5	3.70E+00	1.87E+01	5.05	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	5.70E-02	5.70E-02	1.00	4.00E-03	4.00E-03	1.00	4E-09	2E-08	0.0001	0.0005	
				1,2-DICHLOROETHANE	107-06-2	5.20E-01	1.06E+00	2.03	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	9.10E-02	9.10E-02	1.00	N/A	6.00E-03	N/A	5E-10	1E-09	0.0001	0.0005	(f)
				BENZENE	71-43-2	3.60E-01	4.50E-01	1.25	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	5.50E-02	5.50E-02	1.00	4.00E-03	4.00E-03	1.00	7E-10	1E-09	0.00002	0.00003	
				CHLOROFORM	67-66-3	7.00E-01	6.60E-01	0.94	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	3.10E-02	3.10E-02	1.00	1.00E-02	1.00E-02	1.00	4E-10	4E-10	0.000009	0.000009	
				CIS-1,2-DICHLOROETHENE	156-59-2	1.05E+02	5.18E+02	4.93	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.01	0.05	
				TRANS-1,2-DICHLOROETHENE	156-60-5	9.40E+00	1.00E+02	10.66	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	N/A	N/A	N/A	2.00E-02	2.00E-02	1.00	N/A	N/A	0.0001	0.001	
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	1.69E+02	3.62E+02	2.14	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	2E-07	5E-07	N/A	N/A	
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	1.69E+02	3.62E+02	2.14	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	2E-07	5E-07	0.08	0.2	
				VINYL CHLORIDE	75-01-4	6.20E+00	2.39E+01	3.85	8.14E-01	9.50E-01	1.17	6.33E+00	6.65E+00	1.05	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	6E-08	3E-07	0.0002	0.0008	
			Exposure Route Total																		6E-07	2E-06	0.09	0.2	
		Adolescent Total																			6E-07	2E-06	0.09	0.2	
		Adult	Dermal	1,1,2,2-TETRACHLOROETHANE	79-34-5	2.00E+01	7.06E+01	3.53	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	2.00E-01	2.00E-01	1.00	2.00E-02	2.00E-02	1.00	1E-07	2E-07	0.0001	0.0002	
				1,1,2-TRICHLOROETHANE	79-00-5	3.70E+00	1.87E+01	5.05	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	5.70E-02	5.70E-02	1.00	4.00E-03	4.00E-03	1.00	6E-09	2E-08	0.0001	0.0002	
				1,2-DICHLOROETHANE	107-06-2	5.20E-01	1.06E+00	2.03	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	9.10E-02	9.10E-02	1.00	N/A	6.00E-03	N/A	7E-10	9E-10	0.0001	0.0002	(f)
				BENZENE	71-43-2	3.60E-01	4.50E-01	1.25	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	5.50E-02	5.50E-02	1.00	4.00E-03	4.00E-03	1.00	1E-09	8E-10	0.00002	0.00001	
				CHLOROFORM	67-66-3	7.00E-01	6.60E-01	0.94	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	3.10E-02	3.10E-02	1.00	1.00E-02	1.00E-02	1.00	6E-10	4E-10	0.000008	0.000004	
				CIS-1,2-DICHLOROETHENE	156-59-2	1.05E+02	5.18E+02	4.93	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	N/A	N/A	N/A	2.00E-03	2.00E-03	1.00	N/A	N/A	0.009	0.02	
				TRANS-1,2-DICHLOROETHENE	156-60-5	9.40E+00	1.00E+02	10.66	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	N/A	N/A	N/A	2.00E-02	2.00E-02	1.00	N/A	N/A	0.00008	0.0004	
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)	1.69E+02	3.62E+02	2.14	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	9.30E-03	9.30E-03	1.00	N/A	N/A	N/A	7E-08	1E-07	N/A	N/A	
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6	1.69E+02	3.62E+02	2.14	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	3.70E-02	3.70E-02	1.00	5.00E-04	5.00E-04	1.00	3E-07	4E-07	0.07	0.07	
				VINYL CHLORIDE	75-01-4	6.20E+00	2.39E+01	3.85	1.21E+00	7.69E-01	0.64	5.64E+00	2.69E+00	0.48	7.20E-01	7.20E-01	1.00	3.00E-03	3.00E-03	1.00	8E-08	2E-07	0.0002	0.0004	
			Exposure Route Total																		6E-07	9E-07	0.08	0.09	
		Adult Total																			6E-07	9E-07	0.08	0.09	
		Lifelong (e)	Dermal	1,1,2,2-TETRACHLOROETHANE	79-34-5																2E-07	6E-07			
				1,1,2-TRICHLOROETHANE	79-00-5																1E-08	4E-08			
				1,2-DICHLOROETHANE	107-06-2																1E-09	2E-09			
				BENZENE	71-43-2																2E-09	2E-09			
				CHLOROFORM	67-66-3																1E-09	8E-10			
				CIS-1,2-DICHLOROETHENE	156-59-2																N/A	N/A			
				TRANS-1,2-DICHLOROETHENE	156-60-5																N/A	N/A			
				TRICHLOROETHENE - MUTAGENIC	79-01-6 (M)																3E-07	6E-07			
				TRICHLOROETHENE - NON-MUTAGENIC	79-01-6																5E-07	9E-07			
				VINYL CHLORIDE	75-01-4																1E-07	5E-07			
			Exposure Route Total																		1E-06	3E-06			
		Lifelong (Child, Adolescent, Adult) Total - Groundwater																			1E-06	3E-06			
Receptor Total - Adolescent - Surface Water + Groundwater																					6E-07	2E-06	0.1	0.2	
Receptor Total - Adult - Surface Water + Groundwater																					7E-07	1E-06	0.09	0.1	
Receptor Total - Lifelong (e) - Surface Water + Groundwater																					1E-06	3E-06	N/A (e)	N/A (e)	

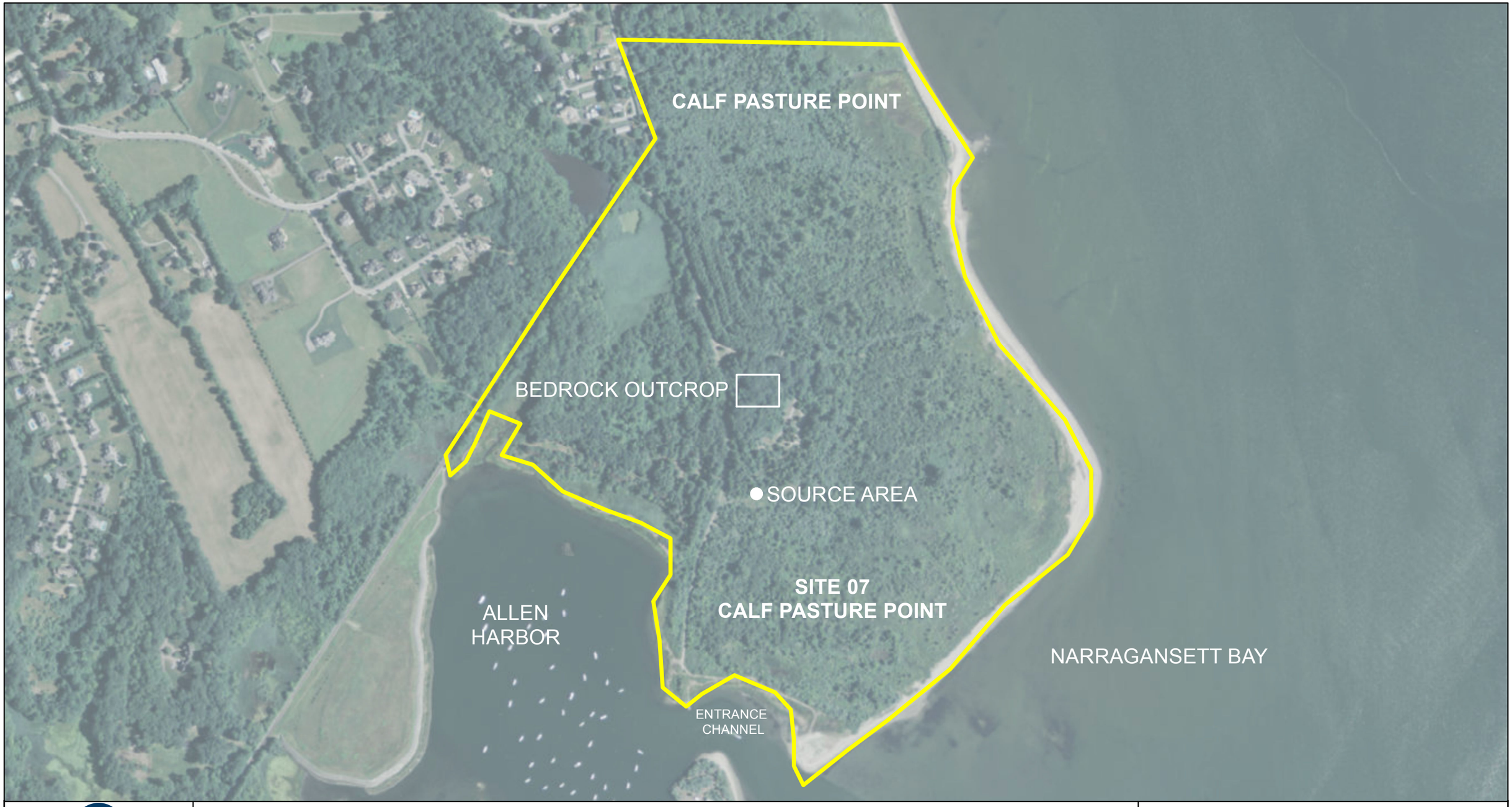
TABLE 7.3
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - SCALING TABLES - RECREATIONAL USER - SHELL FISHERMAN
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Shell Fisherman
Exposure Point: Site 07 Surface Water + Groundwater (Mid-Southern Boundary)

Medium	Exposure Point	Receptor Age	Exposure Route	COPC	CAS	EPC (ug/L) (a)			Unit Intake - Cancer (b)			Unit Intake - Noncancer (b)			Cancer Toxicity Value - Cancer Slope Factor (c)			Noncancer Toxicity Value - Reference Dose (c)			Potential Cancer Risk (d)		Potential Noncancer Hazard Quotient (e)	
						2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	Ratio	2012 HHRA	Current	2012 HHRA	Current

Notes:
CAS = Chemical Abstracts Service.
COPC = Chemical of potential concern.
EPC = Exposure point concentration.
HHRA = Human Health Risk Assessment.
N/A = Not applicable/available.
Ratio = Equals the associated current value divided by the associated 2012 value, with the exception of the noncancer toxicity value, which is the associated 2012 value divided by the associated current value.
(a) Presented on groundwater and surface water EPC comparison Tables 3.1 and 3.2, respectively.
(b) Calculated on Table 4.
(c) Noncancer and cancer toxicity values are presented on Tables 5 and 6, respectively.
(d) Potential cancer risks and noncancer hazard quotients for the 2012 HHRA presented in Risk Assessment Guidance for Superfund (RAGS) Part D Table 9s in the 2012 HHRA report. Updated potential cancer risks and noncancer hazard quotients estimated by scaling the risk and hazard quotient estimates calculated in the 2012 HHRA based on the changes in EPCs, exposure assumptions (used to calculate the unit intake), and toxicity values using the following equations:
Updated potential risk = 2012 HHRA risk estimate x (current EPC / 2012 EPC) x (current unit intake / 2012 unit intake) x (current cancer slope factor [CSF] / 2012 CSF)
Updated potential hazard quotient [HQ] = 2012 HHRA HQ estimate x (current EPC / 2012 EPC) x (current unit intake / 2012 unit intake) x (2012 reference dose [RfD] / current RfD)
(e) Potential cancer risk estimates for the lifelong scenario were calculated by summing the associated estimates for the adolescent and adult age groups. The child receptor is not considered to perform shellfishing.
(f) A RfD was not available for 1,2-dichloroethane when evaluated in the 2012 HHRA, therefore, a potential noncancer hazard quotient could not be scaled based on the 2012 HHRA results. Therefore, a potential noncancer hazard quotient value equal to that for 1,1,2-trichloroethane was used. 1,1,2-Trichloroethane has a slightly higher (less toxic) reference dose as compared to 1,2-dichloroethane, making the use of this potential hazard quotient conservative for application to 1,2-dichloroethane.

FIGURES



RESOLUTION CONSULTANTS

Drawn:	RM	02/25/2016
Approved:	BS	02/25/2016
Project #:	60273164	

Legend

Parcel 10 Property Boundary

N

0 330 660

Scale in Feet

FIGURE 1
SITE 07 SITE LAYOUT

FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\Site 7_9 SAP\MXD\Fig_10_2_Site_Layout.mxd - edited figure #

RESOLUTION CONSULTANTS

Drawn: CCP 03/23/2017

Project #: 60273164

Legend

- Surface Water Sampling Transect
- Piezometer and Sediment Sample Locations
- Piezometer Sample Locations
- MW07-43 well cluster. The groundwater data from these wells were not used in the HHRA update; the well cluster is only being shown because it is the origin of the eastern most surface water transect.

N

0 100 200

Scale in Feet

FIGURE 2
SHORELINE SAMPLE LOCATIONS

IRP SITE 07, FORMER NCBC DAVISVILLE NORTH KINGSTOWN, RHODE ISLAND

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APPENDIX A

SAMPLE LISTS AND ANALYTICAL DATA SUMMARY TABLES

APPENDIX A TABLE 1
SAMPLE SUMMARY TABLE - GROUNDWATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
DAVISVILLE, RHODE ISLAND

Location ID	Sample Date	Sample ID	Sample Type Code	Parent Sample ID	Site 07 EPC Cases (a)			
					Southern Boundary	Shoreline	Western Boundary	Mid-Southern Boundary
P07-02	9/26/2016	P07-02-ME20-1	N		X	X		
P07-03	10/7/2014	P07-03-100714-1	N		X	X		
P07-03	9/26/2016	P07-03-ME20-1	N		X	X		
P07-04	10/6/2014	P07-04-100614-1	N		X	X		
P07-04	10/6/2014	P07-04-100614-2	FD	P07-04-100614-1	X	X		
P07-04	9/26/2016	P07-04-ME20-1	N		X	X		
P07-05	10/16/2013	P07-05-101613	N		X	X		X
P07-05	10/8/2014	P07-05-100814-1	N		X	X		X
P07-05	9/10/2015	P07-05-091015-1	N		X	X		X
P07-05	9/26/2016	P07-05-ME20-1	N		X	X		X
P07-06	10/16/2013	P07-06-101613	N		X	X		X
P07-06	10/6/2014	P07-06-100614-1	N		X	X		X
P07-06	9/10/2015	P07-06-091015-1	N		X	X		X
P07-06	9/26/2016	P07-06-ME20-1	N		X	X		X
P07-07	10/16/2013	P07-07-101613	N		X	X		X
P07-07	10/6/2014	P07-07-100614-1	N		X	X		X
P07-07	9/10/2015	P07-07-091015-1	N		X	X		X
P07-07	9/27/2016	P07-07-ME20-1	N		X	X		X
P07-08	10/16/2013	P07-08-101613	N		X	X		X
P07-08	10/6/2014	P07-08-100614-1	N		X	X		X
P07-08	9/10/2015	P07-08-091015-1	N		X	X		X
P07-08	9/16/2016	P07-08-ME20-1	N		X	X		X
P07-09	10/16/2013	P07-09-101613	N		X	X		X
P07-09	10/6/2014	P07-09-100614-1	N		X	X		X
P07-09	9/10/2015	P07-09-091015-1	N		X	X		X
P07-09	9/16/2016	P07-09-ME20-1	N		X	X		X
P07-10	10/16/2013	P07-10-101613	N		X	X		X
P07-10	10/3/2014	P07-10-100314-1	N		X	X		X
P07-10	9/10/2015	P07-10-091015-1	N		X	X		X
P07-10	9/16/2016	P07-10-ME20-1	N		X	X		X
P07-14	9/27/2016	P07-14-ME20-1	N			X	X	
P07-15	10/17/2013	P07-15-101713	N			X	X	
P07-15	10/7/2014	P07-15_100714-1	N			X	X	
P07-15	10/7/2014	P07-15-100714-1	N			X	X	
P07-15	9/10/2015	P07-15-091015-1	N			X	X	
P07-15	9/27/2016	P07-15-ME20-1	N			X	X	
P07-16	9/28/2016	P07-16-ME20-1	N			X	X	
P07-17	9/28/2016	P07-17-ME20-1	N			X	X	
P07-20	10/3/2014	P07-20-100314-1	N		X	X		
P07-20	9/27/2016	P07-20-ME20-1	N		X	X		
P07-21	10/17/2013	P07-21-101713	N		X	X		
P07-21	10/3/2014	P07-21-100314-1	N		X	X		
P07-21	9/10/2015	P07-21-091015-1	N		X	X		
P07-21	9/27/2016	P07-21-ME20-1	N		X	X		
P07-22	10/3/2014	P07-22-100314-1	N		X	X		
P07-22	9/27/2016	P07-22-ME20-1	N		X	X		
P07-23	10/18/2013	P07-23-101813	N		X	X		
P07-23	10/6/2014	P07-23-100614-1	N		X	X		
P07-23	9/10/2015	P07-23-091015-1	N		X	X		
P07-23	9/27/2016	P07-23-ME20-1	N		X	X		
P07-24	10/17/2013	P07-24-101713	N		X	X		
P07-24	10/3/2014	P07-24-100314-1	N		X	X		
P07-24	10/3/2014	P07-24-100314-2	FD	P07-24-100314-1	X	X		
P07-24	9/10/2015	P07-24-091015-1	N		X	X		
P07-24	9/16/2016	P07-24-ME20-1	N		X	X		
P07-28	9/27/2016	P07-28-ME20-1	N			X	X	
P07-29	9/27/2016	P07-29-ME20-1	N			X	X	

Notes:

EPC = Exposure point concentration.

FD = Field duplicate.

HHRA = Human health risk assessment.

N = Normal sample.

(a) Southern Boundary (corresponds to the 2012 HHRA Cases 1 and 2) includes groundwater locations along the southern boundary sampled between 2013 and 2016 as part of the long-term monitoring program.

Shoreline (corresponds to the 2012 HHRA Case 3) includes groundwater locations in both the Southern Boundary and the Western Boundary sampled between 2013 and 2016 as part of the long-term monitoring program.

Western Boundary (corresponds to the 2012 HHRA Case 4) includes groundwater locations along the western boundary sampled between 2013 and 2016 as part of the long-term monitoring program.

Mid-Southern Boundary includes groundwater locations along the southern boundary sampled between 2013 and 2016 as part of the long-term monitoring program, which represents an area of higher concentrations within the Southern Boundary.

APPENDIX A TABLE 2
ANALYTICAL DATA SUMMARY TABLES - GROUNDWATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
		Location ID	P07-02	P07-03	P07-03	P07-04	P07-04	P07-04	P07-05	P07-05	P07-05
		Sample Date	9/26/2016	10/7/2014	9/26/2016	10/6/2014	10/6/2014	9/26/2016	10/16/2013	10/8/2014	9/10/2015
		Sample ID	P07-02-ME20-1	P07-03-100714-1	P07-03-ME20-1	P07-04-100614-1	P07-04-100614-2	P07-04-ME20-1	P07-05-101613	P07-05-100814-1	P07-05-091015-1
		Sample Type Code	N	N	N	N	FD	N	N	N	N
Compound	CAS	Units									
VOCs											
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.5 U	< 0.50 U	< 0.5 U	1.6	< 0.50 U	< 0.5 UJ	< 0.50 U	0.74 J	< 0.50 U
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 0.5 U	< 1.0 U	< 0.5 U	< 1.0 U	< 1.0 U	< 0.5 UJ	< 0.50 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	75-35-4	ug/L	< 1.0 U	< 0.50 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 UJ	< 0.50 U	< 0.50 U	< 0.50 U
1,2-DICHLOROETHANE	107-06-2	ug/L	< 1.0 U	< 0.50 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 UJ	< 0.50 U	0.83 J	< 0.50 U
BENZENE	71-43-2	ug/L	< 0.5 U	< 0.50 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U
CHLOROFORM	67-66-3	ug/L	< 1.0 U	< 0.50 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 UJ	< 0.50 U	< 0.50 U	< 0.50 U
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 0.5 U	< 0.50 U	< 0.5 U	1.2	< 0.50 U	< 0.5 UJ	0.64 J	32	5.0
M- AND P-XYLENE	108-38-3/106-42	ug/L							< 1.0 U		
O-XYLENE	95-47-6	ug/L							< 0.50 U		
TETRACHLOROETHENE	127-18-4	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 0.50 U	< 1.0 U	< 1.0 U
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 0.50 U	16	15
TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U	2.5	< 1.0 U	1.3	< 0.50 U	< 1.0 UJ	< 0.50 U	2.7	< 0.50 U
VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U	< 0.50 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 UJ	< 1.0 U	27	12
XYLENES, TOTAL	1330-20-7	ug/L							< 1.5 U		

Notes:
The groundwater samples presented in this table are unfiltered/total samples.
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
FD = Field duplicate.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
J = Estimated value.
N = Normal sample.
ug/L = microgram per liter.
R = Rejected.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.

APPENDIX A TABLE 2
ANALYTICAL DATA SUMMARY TABLES - GROUNDWATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
		Location ID	P07-05	P07-06	P07-06	P07-06	P07-06	P07-07	P07-07	P07-07	P07-07
		Sample Date	9/26/2016	10/16/2013	10/6/2014	9/10/2015	9/26/2016	10/16/2013	10/6/2014	9/10/2015	9/27/2016
		Sample ID	P07-05-ME20-1	P07-06-101613	P07-06-100614-1	P07-06-091015-1	P07-06-ME20-1	P07-07-101613	P07-07-100614-1	P07-07-091015-1	P07-07-ME20-1
		Sample Type Code	N	N	N	N	N	N	N	N	N
Compound	CAS	Units									
VOCs											
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.5 UJ	99	77	17	44.6 J-
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 0.5 U	< 0.50 U	< 1.0 U	< 1.0 U	< 0.5 UJ	14	10	2.5	7.8 J-
1,1-DICHLOROETHENE	75-35-4	ug/L	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ	1.8	1.4	< 0.50 U	< 3.5 UJ
1,2-DICHLOROETHANE	107-06-2	ug/L	1.2	2.2	1.9	< 0.50 U	1.8 J-	< 0.50 U	< 0.50 U	< 0.50 U	< 1.4 UJ
BENZENE	71-43-2	ug/L	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.4 UJ
CHLOROFORM	67-66-3	ug/L	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 2.0 UJ
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	68.9	120	93 J	47	87.2 J-	440	330	140	260 J-
M- AND P-XYLENE	108-38-3/106-42	ug/L		< 1.0 U				< 1.0 U			
O-XYLENE	95-47-6	ug/L		< 0.50 U				< 0.50 U			
TETRACHLOROETHENE	127-18-4	ug/L	< 1.0 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.8 UJ
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	21.5	26	20	14	21.6 J-	26	21	8.4	19.8 J-
TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U	0.90 J	0.85 J	< 0.50 U	< 1.0 UJ	200	190	31	151 J-
VINYL CHLORIDE	75-01-4	ug/L	49.7	48	35	32	45.8 J-	12	3.2	2.1	< 2.6 UJ
XYLENES, TOTAL	1330-20-7	ug/L		< 1.5 U				< 1.5 U			

Notes:
The groundwater samples presented in this table are unfiltered/total samples.
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
FD = Field duplicate.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
J = Estimated value.
N = Normal sample.
ug/L = microgram per liter.
R = Rejected.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.

APPENDIX A TABLE 2
ANALYTICAL DATA SUMMARY TABLES - GROUNDWATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
		Location ID	P07-08	P07-08	P07-08	P07-08	P07-09	P07-09	P07-09	P07-09	P07-10
		Sample Date	10/16/2013	10/6/2014	9/10/2015	9/16/2016	10/16/2013	10/6/2014	9/10/2015	9/16/2016	10/16/2013
		Sample ID	P07-08-101613	P07-08-100614-1	P07-08-091015-1	P07-08-ME20-1	P07-09-101613	P07-09-100614-1	P07-09-091015-1	P07-09-ME20-1	P07-10-101613
		Sample Type Code	N	N	N	N	N	N	N	N	N
Compound	CAS	Units									
VOCs											
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	70	2.3	8.2	75	180	170	47	110	18
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	11	< 1.0 U	2.1	13	49	38	9.7	19	6.0
1,1-DICHLOROETHENE	75-35-4	ug/L	0.53 J	< 0.50 U	< 0.50 U	0.90 J	6.7	4.7	1.7	3.3 J	0.96 J
1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U	2.0	1.6	< 0.50 U	< 1.0 U	< 0.50 U
BENZENE	71-43-2	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U	0.45 J
CHLOROFORM	67-66-3	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U	0.66 J	< 0.50 U	< 0.50 U	< 1.0 U	< 0.50 U
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	93	5.8	1.6	160	1700	1400	440	1000	120
M- AND P-XYLENE	108-38-3/106-42	ug/L	< 1.0 U				< 1.0 U				< 1.0 U
O-XYLENE	95-47-6	ug/L	< 0.50 U				< 0.50 U				< 0.50 U
TETRACHLOROETHENE	127-18-4	ug/L	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U	0.43 J	< 1.0 U	< 1.0 U	< 2.0 U	< 0.50 U
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	2.1	< 1.0 U	< 1.0 U	7.1	160	120	36	69	16
TRICHLOROETHENE	79-01-6	ug/L	69	14	2.0	250	1200	880	200	490	200
VINYL CHLORIDE	75-01-4	ug/L	0.73 J	< 0.50 U	< 0.50 U	2.5 J	27	29	7.2	11 J	1.4 J
XYLENES, TOTAL	1330-20-7	ug/L	< 1.5 U				< 1.5 U				< 1.5 U

Notes:
The groundwater samples presented in this table are unfiltered/total samples.
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
FD = Field duplicate.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
J = Estimated value.
N = Normal sample.
ug/L = microgram per liter.
R = Rejected.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.

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HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
		Location ID	P07-10	P07-10	P07-10	P07-14	P07-15	P07-15	P07-15	P07-15	P07-16
		Sample Date	10/3/2014	9/10/2015	9/16/2016	9/27/2016	10/17/2013	10/7/2014	9/10/2015	9/27/2016	9/28/2016
		Sample ID	P07-10-100314-1	P07-10-091015-1	P07-10-ME20-1	P07-14-ME20-1	P07-15-101713	P07-15-100714-1	P07-15-091015-1	P07-15-ME20-1	P07-16-ME20-1
		Sample Type Code	N	N	N	N	N	N	N	N	N
Compound	CAS	Units									
VOCs											
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	8.5	5.9	15	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.5 UJ	< 0.3 UJ
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	4.5	3.1 J	2.9 J	< 0.5 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 0.5 UJ	< 0.4 UJ
1,1-DICHLOROETHENE	75-35-4	ug/L	0.69 J	< 0.50 U	< 1.0 U	< 1.0 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ	< 0.7 UJ
1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.50 UJ	< 0.50 U	< 1.0 U	< 1.0 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ	2.5 J-
BENZENE	71-43-2	ug/L	< 0.50 U	< 0.50 U	< 1.0 U	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.5 UJ	< 0.3 UJ
CHLOROFORM	67-66-3	ug/L	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ	< 0.4 UJ
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	110	90	91	< 0.5 UJ	2.0	< 0.50 U	2.1	1.3 J-	1.0 J-
M- AND P-XYLENE	108-38-3/106-42	ug/L					< 1.0 U				
O-XYLENE	95-47-6	ug/L					< 0.50 U				
TETRACHLOROETHENE	127-18-4	ug/L	< 1.0 U	< 1.0 U	< 2.0 U	< 1.0 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 0.6 UJ
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	11	9.4	6.5	< 1.0 UJ	0.58 J	< 1.0 U	< 1.0 U	0.6 J-	0.5 J-
TRICHLOROETHENE	79-01-6	ug/L	110	87	78	< 1.0 UJ	1.8	< 0.50 U	< 0.50 U	0.5 J-	4.8 J-
VINYL CHLORIDE	75-01-4	ug/L	0.93 J	0.76 J	< 1.0 U	< 1.0 UJ	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 UJ	< 0.5 UJ
XYLENES, TOTAL	1330-20-7	ug/L					< 1.5 U				

Notes:
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J = Estimated value.
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ug/L = microgram per liter.
R = Rejected.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
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ANALYTICAL DATA SUMMARY TABLES - GROUNDWATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
		Location ID	P07-17	P07-20	P07-20	P07-21	P07-21	P07-21	P07-21	P07-22	P07-22
		Sample Date	9/28/2016	10/3/2014	9/27/2016	10/17/2013	10/3/2014	9/10/2015	9/27/2016	10/3/2014	9/27/2016
		Sample ID	P07-17-ME20-1	P07-20-100314-1	P07-20-ME20-1	P07-21-101713	P07-21-100314-1	P07-21-091015-1	P07-21-ME20-1	P07-22-100314-1	P07-22-ME20-1
		Sample Type Code	N	N	N	N	N	N	N	N	N
Compound	CAS	Units									
VOCs											
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.3 UJ	< 0.50 U	0.7 J-	4.2 J	< 0.50 U	< 0.50 U	< 0.5 UJ	3.5	0.8 J
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 0.4 UJ	< 1.0 U	0.4 J-	1.8 J	< 1.0 U	< 1.0 UJ	< 0.5 UJ	1.8	< 0.5 UJ
1,1-DICHLOROETHENE	75-35-4	ug/L	< 0.7 UJ	< 0.50 U	< 0.7 UJ	R	< 0.50 U	< 0.50 U	< 1.0 UJ	< 0.50 U	< 1.0 UJ
1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.3 UJ	< 0.50 UJ	0.6 J-	R	< 0.50 UJ	< 0.50 U	< 1.0 UJ	< 0.50 UJ	< 1.0 UJ
BENZENE	71-43-2	ug/L	< 0.3 UJ	< 0.50 U	1.6 J-	R	0.72 J	< 0.50 U	< 0.5 UJ	< 0.50 U	< 0.5 UJ
CHLOROFORM	67-66-3	ug/L	< 0.4 UJ	< 0.50 U	< 0.4 UJ	R	< 0.50 U	< 0.50 U	< 1.0 UJ	< 0.50 U	< 1.0 UJ
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 0.3 UJ	< 0.50 U	34.4 J-	14 J	< 0.50 U	35	56.9 J-	43	2.5 J-
M- AND P-XYLENE	108-38-3/106-42	ug/L				R					
O-XYLENE	95-47-6	ug/L				R					
TETRACHLOROETHENE	127-18-4	ug/L	< 0.6 UJ	< 1.0 U	< 0.6 UJ	R	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 0.3 UJ	< 1.0 U	6.9 J-	1.3 J	1.9	1.3	3.4 J-	4.3	0.4 J-
TRICHLOROETHENE	79-01-6	ug/L	< 0.4 UJ	< 0.50 U	< 0.4 UJ	23 J	0.70 J	2.5	5.2 J-	53	4.4 J-
VINYL CHLORIDE	75-01-4	ug/L	< 0.5 UJ	< 0.50 U	5.6 J-	R	1.2	< 0.50 U	0.7 J-	< 0.50 U	< 1.0 UJ
XYLENES, TOTAL	1330-20-7	ug/L				R					

Notes:
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J = Estimated value.
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UJ = The analyte was not detected; and the reporting limit is approximate.
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ANALYTICAL DATA SUMMARY TABLES - GROUNDWATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
		Location ID	P07-23	P07-23	P07-23	P07-23	P07-24	P07-24	P07-24	P07-24	P07-24
		Sample Date	10/18/2013	10/6/2014	9/10/2015	9/27/2016	10/17/2013	10/3/2014	10/3/2014	9/10/2015	9/16/2016
		Sample ID	P07-23-101813	P07-23-100614-1	P07-23-091015-1	P07-23-ME20-1	P07-24-101713	P07-24-100314-1	P07-24-100314-2	P07-24-091015-1	P07-24-ME20-1
		Sample Type Code	N	N	N	N	N	N	FD	N	N
Compound	CAS	Units									
VOCs											
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	5.2	0.55 J	1.2	< 0.3 UJ	1.2	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	1.4	< 1.0 U	< 1.0 UJ	< 0.4 UJ	0.46 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	75-35-4	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.7 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.3 UJ	< 0.50 U	< 0.50 UJ	< 0.50 UJ	< 0.50 U	< 1.0 U
BENZENE	71-43-2	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.3 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
CHLOROFORM	67-66-3	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 0.4 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	7.6	0.77 J	2.1	0.5 J-	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
M- AND P-XYLENE	108-38-3/106-42	ug/L	< 1.0 U				< 1.0 U				
O-XYLENE	95-47-6	ug/L	< 0.50 U				< 0.50 U				
TETRACHLOROETHENE	127-18-4	ug/L	< 0.50 U	< 1.0 U	< 1.0 U	< 0.6 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	0.56 J	< 1.0 U	< 1.0 U	< 0.3 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U
TRICHLOROETHENE	79-01-6	ug/L	29	3.2	9.4	1.8 J-	1.2	0.81	< 0.50 U	< 0.50 U	< 1.0 U
VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U	< 0.50 U	< 0.50 U	< 0.5 UJ	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
XYLENES, TOTAL	1330-20-7	ug/L	< 1.5 U				< 1.5 U				

Notes:
The groundwater samples presented in this table are unfiltered/total samples.
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FD = Field duplicate.
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APPENDIX A TABLE 2
ANALYTICAL DATA SUMMARY TABLES - GROUNDWATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		Location Group	SITE 00007	SITE 00007
		Location ID	P07-28	P07-29
		Sample Date	9/27/2016	9/27/2016
		Sample ID	P07-28-ME20-1	P07-29-ME20-1
		Sample Type Code	N	N
Compound	CAS	Units		
VOCs				
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.5 UJ	< 0.3 UJ
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 0.5 UJ	< 0.4 UJ
1,1-DICHLOROETHENE	75-35-4	ug/L	< 1.0 UJ	< 0.7 UJ
1,2-DICHLOROETHANE	107-06-2	ug/L	< 1.0 UJ	< 0.3 UJ
BENZENE	71-43-2	ug/L	< 0.5 UJ	< 0.3 UJ
CHLOROFORM	67-66-3	ug/L	< 1.0 UJ	< 0.4 UJ
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 0.5 UJ	< 0.3 UJ
M- AND P-XYLENE	108-38-3/106-42	ug/L		
O-XYLENE	95-47-6	ug/L		
TETRACHLOROETHENE	127-18-4	ug/L	< 1.0 UJ	< 0.6 UJ
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 1.0 UJ	< 0.3 UJ
TRICHLOROETHENE	79-01-6	ug/L	< 1.0 UJ	< 0.4 UJ
VINYL CHLORIDE	75-01-4	ug/L	< 1.0 UJ	< 0.5 UJ
XYLENES, TOTAL	1330-20-7	ug/L		

Notes:
The groundwater samples presented in this table are unfiltered/total samples.
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
FD = Field duplicate.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
J = Estimated value.
N = Normal sample.
ug/L = microgram per liter.
R = Rejected.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.

APPENDIX A TABLE 3
SAMPLE SUMMARY TABLE - SURFACE WATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
DAVISVILLE, RHODE ISLAND

Location ID	Sample Date	Sample ID	Sample Type Code	Parent Sample ID	Site 07 EPC Cases (a)		
					Low Tide – Depth 1	Low Tide – Depth 2	Low Tide – Depth 3
SW07-02	8/16/2016	SW07-02-FLOOR01-ME20-1	N		X		
SW07-02	8/16/2016	SW07-02-FLOOR01-ME20-2	FD	SW07-02-FLOOR01-ME20-1	X		
SW07-02	8/16/2016	SW07-02-FLOOR02-ME20-1	N			X	
SW07-02	8/16/2016	SW07-02-MID01-ME20-1	N				X
SW07-04	8/16/2016	SW07-04-FLOOR01-ME20-1	N		X		
SW07-04	8/16/2016	SW07-04-MID01-ME20-1	N				X
SW07-04	8/16/2016	SW07-04-FLOOR02-ME20-1	N			X	
SW07-04	8/16/2016	SW07-04-FLOOR02-ME20-2	FD	SW07-04-FLOOR02-ME20-1		X	
SW07-06	8/16/2016	SW07-06-FLOOR01-ME20-1	N		X		
SW07-06	8/16/2016	SW07-06-FLOOR02-ME20-1	N			X	
SW07-06	8/16/2016	SW07-06-MID01-ME20-1	N				X
SW07-07	8/16/2016	SW07-07-FLOOR01-ME20-1	N		X		
SW07-07	8/16/2016	SW07-07-FLOOR02-ME20-1	N			X	
SW07-07	8/16/2016	SW07-07-MID01-ME20-1	N				X
SW07-08	8/16/2016	SW07-08-FLOOR01-ME20-1	N		X		
SW07-08	8/16/2016	SW07-08-MID01-ME20-1	N				X
SW07-08	8/16/2016	SW07-08-FLOOR02-ME20-1	N			X	
SW07-09	8/16/2016	SW07-09-FLOOR01-ME20-1	N		X		
SW07-09	8/16/2016	SW07-09-FLOOR02-ME20-1	N			X	
SW07-09	8/16/2016	SW07-09-MID01-ME20-1	N				X
SW07-10	8/16/2016	SW07-10-FLOOR01-ME20-1	N		X		
SW07-10	8/16/2016	SW07-10-FLOOR02-ME20-1	N			X	
SW07-10	8/16/2016	SW07-10-MID01-ME20-1	N				X
SW07-20	8/16/2016	SW07-20-FLOOR01-ME20-1	N		X		
SW07-20	8/16/2016	SW07-20-FLOOR02-ME20-1	N			X	
SW07-20	8/16/2016	SW07-20-FLOOR02-ME20-2	FD	SW07-20-FLOOR02-ME20-1		X	
SW07-20	8/16/2016	SW07-20-MID01-ME20-1	N				X
SW07-24	8/16/2016	SW07-24-FLOOR01-ME20-1	N		X		
SW07-24	8/16/2016	SW07-24-FLOOR02-ME20-1	N			X	
SW07-24	8/16/2016	SW07-24-MID01-ME20-1	N				X
SW07-43S/D	8/16/2016	SW07-43S/D-FLOOR01-ME20-1	N		X		
SW07-43S/D	8/16/2016	SW07-43S/D-FLOOR02-ME20-1	N			X	
SW07-43S/D	8/16/2016	SW07-43S/D-MID01-ME20-1	N				X

Notes:

EPC = Exposure point concentration.

FD = Field duplicate.

HHRA = Human health risk assessment.

N = Normal sample.

(a) Low Tide – Depth 1 (corresponds to the 2012 HHRA Case 3) includes all surface water locations sampled in 2016 as part of the long-term monitoring program; including samples collected at the harbor floor where surface water is 6 inches deep. Utilized in evaluation of a wading and clamming scenario.

Low Tide – Depth 2 (corresponds to the 2012 HHRA Case 1) includes all surface water locations sampled in 2016 as part of the long-term monitoring program; including samples collected at the harbor floor where surface water is 3 feet deep. Utilized in evaluation of a swimming scenario.

Low Tide – Depth 3 (corresponds to the 2012 HHRA Case 1) includes all surface water locations sampled in 2016 as part of the long-term monitoring program; including samples collected at the mid-point of the water column where surface water is 3 feet deep. Utilized in evaluation of a swimming scenario.

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLES - SURFACE WATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
		Location ID	SW07-02	SW07-02	SW07-02	SW07-02	SW07-04	SW07-04	SW07-04
		Sample Date	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016
		Sample ID	SW07-02-FLOOR01-ME20-1	SW07-02-FLOOR01-ME20-2	SW07-02-FLOOR02-ME20-1	SW07-02-MID01-ME20-1	SW07-04-FLOOR01-ME20-1	SW07-04-MID01-ME20-1	SW07-04-FLOOR02-ME20-1
		Sample Type Code	N	FD	N	N	N	N	N
Chemical	CAS	Units							
VOCs									
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	75-35-4	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	107-06-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BENZENE	71-43-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	67-66-3	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	127-18-4	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	75-01-4	ug/L	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:
The surface water samples presented in this table are unfiltered/total samples.
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
FD = Field duplicate.
J = Estimated value.
N = Normal sample.
ug/L = microgram per liter.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLES - SURFACE WATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
			Location ID	SW07-04	SW07-06	SW07-06	SW07-06	SW07-07	SW07-07	SW07-07
			Sample Date	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016
			Sample ID	SW07-04-FLOOR02-ME20-2	SW07-06-FLOOR01-ME20-1	SW07-06-FLOOR02-ME20-1	SW07-06-MID01-ME20-1	SW07-07-FLOOR01-ME20-1	SW07-07-FLOOR02-ME20-1	SW07-07-MID01-ME20-1
			Sample Type Code	FD	N	N	N	N	N	N
Chemical	CAS	Units								
VOCs										
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	75-35-4	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	107-06-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BENZENE	71-43-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	67-66-3	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	127-18-4	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

The surface water samples presented in this table are unfiltered/total samples.

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

FD = Field duplicate.

J = Estimated value.

N = Normal sample.

ug/L = microgram per liter.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLES - SURFACE WATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
		Location ID	SW07-08	SW07-08	SW07-08	SW07-09	SW07-09	SW07-09	SW07-10
		Sample Date	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016
		Sample ID	SW07-08-FLOOR01-ME20-1	SW07-08-MID01-ME20-1	SW07-08-FLOOR02-ME20-1	SW07-09-FLOOR01-ME20-1	SW07-09-FLOOR02-ME20-1	SW07-09-MID01-ME20-1	SW07-10-FLOOR01-ME20-1
		Sample Type Code	N	N	N	N	N	N	N
Chemical	CAS	Units							
VOCs									
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	75-35-4	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	107-06-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BENZENE	71-43-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	67-66-3	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	1.5 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	127-18-4	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:

The surface water samples presented in this table are unfiltered/total samples.

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

FD = Field duplicate.

J = Estimated value.

N = Normal sample.

ug/L = microgram per liter.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLES - SURFACE WATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
		Location ID	SW07-10	SW07-10	SW07-20	SW07-20	SW07-20	SW07-20	SW07-24
		Sample Date	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016
		Sample ID	SW07-10-FLOOR02-ME20-1	SW07-10-MID01-ME20-1	SW07-20-FLOOR01-ME20-1	SW07-20-FLOOR02-ME20-1	SW07-20-FLOOR02-ME20-2	SW07-20-MID01-ME20-1	SW07-24-FLOOR01-ME20-1
		Sample Type Code	N	N	N	N	FD	N	N
Chemical	CAS	Units							
VOCs									
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	75-35-4	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	107-06-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BENZENE	71-43-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	67-66-3	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	6.4
TETRACHLOROETHENE	127-18-4	ug/L	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	5.9
VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	3.7 J

Notes:
The surface water samples presented in this table are unfiltered/total samples.
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
FD = Field duplicate.
J = Estimated value.
N = Normal sample.
ug/L = microgram per liter.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLES - SURFACE WATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
			Location ID	SW07-24	SW07-24	SW07-43S/D	SW07-43S/D	SW07-43S/D
			Sample Date	8/16/2016	8/16/2016	8/16/2016	8/16/2016	8/16/2016
			Sample ID	SW07-24-FLOOR02-ME20-1	SW07-24-MID01-ME20-1	SW07-43S/D-FLOOR01-ME20-1	SW07-43S/D-FLOOR02-ME20-1	SW07-43S/D-MID01-ME20-1
			Sample Type Code	N	N	N	N	N
Chemical	CAS	Units						
VOCs								
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 UJ	
1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	
1,1-DICHLOROETHENE	75-35-4	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	
1,2-DICHLOROETHANE	107-06-2	ug/L	< 1.0 U	1.0 J	< 1.0 U	< 1.0 U	< 1.0 U	
BENZENE	71-43-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	
CHLOROFORM	67-66-3	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	
CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	
TETRACHLOROETHENE	127-18-4	ug/L	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	
TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	
VINYL CHLORIDE	75-01-4	ug/L	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 UJ	

Notes:

The surface water samples presented in this table are unfiltered/total samples.

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

FD = Field duplicate.

J = Estimated value.

N = Normal sample.

ug/L = microgram per liter.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

APPENDIX A TABLE 5
SAMPLE SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
DAVISVILLE, RHODE ISLAND

Location ID	Sample Date	Sample ID	Sample Type Code	Parent Sample ID
SED07-05	8/15/2016	SED07-05-ME20-1	N	
SED07-06	8/15/2016	SED07-06-ME20-1	N	
SED07-07	8/15/2016	SED07-07-ME20-1	N	
SED07-08	8/15/2016	SED07-08-ME20-1	N	
SED07-09	8/15/2016	SED07-09-ME20-1	N	
SED07-10	8/15/2016	SED07-10-ME20-1	N	
SED07-10	8/15/2016	SED07-10-ME20-2	FD	SED07-10-ME20-1

Notes:

FD = Field duplicate.

N = Normal sample.

APPENDIX A TABLE 6
ANALYTICAL DATA SUMMARY TABLES - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		Location Group	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007	SITE 00007
		Location ID	SED07-05	SED07-06	SED07-07	SED07-08	SED07-09	SED07-10	SED07-10
		Sample ID	SED07-05-ME20-1	SED07-06-ME20-1	SED07-07-ME20-1	SED07-08-ME20-1	SED07-09-ME20-1	SED07-10-ME20-1	SED07-10-ME20-2
		Sample Date	8/15/2016	8/15/2016	8/15/2016	8/15/2016	8/15/2016	8/15/2016	8/15/2016
		Sample Type Code	N	N	N	N	N	N	FD
		Depth Interval	0 - 6 in	0 - 6 in	0 - 6 in	0 - 6 in	0 - 6 in	0 - 6 in	0 - 6 in
Compound	CAS	Units							
VOCs									
1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg	< 0.0027 UJ	< 0.0021 U	< 0.0020 U	< 0.0032 U	< 0.0020 U	R	< 0.0029 U
1,1,2-TRICHLOROETHANE	79-00-5	mg/kg	< 0.0027 UJ	< 0.0021 U	< 0.0020 U	< 0.0032 U	< 0.0020 U	< 0.0025 UJ	< 0.0029 U
1,1-DICHLOROETHENE	75-35-4	mg/kg	< 0.0027 UJ	< 0.0021 U	< 0.0020 U	< 0.0032 U	< 0.0020 U	< 0.0025 UJ	< 0.0029 U
1,2-DICHLOROETHANE	107-06-2	mg/kg	< 0.0027 UJ	< 0.0021 U	< 0.0020 U	< 0.0032 U	< 0.0020 U	< 0.0025 UJ	< 0.0029 U
BENZENE	71-43-2	mg/kg	< 0.0027 UJ	< 0.0021 U	< 0.0020 U	< 0.0032 U	< 0.0020 U	< 0.0025 UJ	< 0.0029 U
CHLOROFORM	67-66-3	mg/kg	< 0.0027 UJ	< 0.0021 U	< 0.0020 U	< 0.0032 U	< 0.0020 U	< 0.0025 UJ	< 0.0029 U
CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg	< 0.0027 UJ	< 0.0021 U	< 0.0020 U	< 0.0032 U	< 0.0020 U	< 0.0025 UJ	< 0.0029 U
TETRACHLOROETHENE	127-18-4	mg/kg	0.012 J+	< 0.0021 U	< 0.0020 U	< 0.0032 U	< 0.0020 U	0.012 J+	< 0.0029 U
TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg	< 0.0027 UJ	< 0.0021 U	< 0.0020 U	< 0.0032 U	< 0.0020 U	< 0.0025 UJ	< 0.0029 U
TRICHLOROETHENE	79-01-6	mg/kg	< 0.0027 UJ	< 0.0021 U	< 0.0020 U	< 0.0032 U	< 0.0020 U	< 0.0025 UJ	< 0.0029 U
VINYL CHLORIDE	75-01-4	mg/kg	< 0.0027 UJ	< 0.0021 U	< 0.0020 U	< 0.0032 U	< 0.0020 U	< 0.0025 UJ	< 0.0029 U

Notes:
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
FD = Field duplicate.
in = Inches.
J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
mg/kg = milligram per kilogram.
N = Normal sample.
R = Rejected.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.

APPENDIX B

SUMMARY STATISTICS COMPARISON TABLES

APPENDIX B, TABLE 1
SUMMARY STATISTICS COMPARISON - SHORELINE GROUNDWATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Exposure Point	CAS Number	Chemical (3)	Units	2012 HHRA							2017 HHRA Update						
				Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	HHRA COPC (Y/N)	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	HHRA COPC (Y/N)
Site 07 - Shoreline		**VOCs**															
	79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/L	6.00E-01 J	4.30E+02	P07-09	79 / 328	24%	0.22 - 3.5	Y	5.50E-01 J	1.80E+02	P07-09	26 / 54	48%	0.3 - 1	Y
	79-00-5	1,1,2-TRICHLOROETHANE	ug/L	3.00E-01 J	6.40E+01	P07-09	83 / 328	25%	0.3 - 3.3	Y	4.00E-01 J-	4.90E+01	P07-09	20 / 54	37%	0.4 - 1	Y
	75-35-4	1,1-DICHLOROETHENE	ug/L	3.90E-01 J	6.90E+00	P07-08	32 / 328	10%	0.3 - 10	N	5.30E-01 J	6.70E+00	P07-09	10 / 53	19%	0.5 - 3.5	N
	107-06-2	1,2-DICHLOROETHANE	ug/L	2.00E-01 J	4.00E+00	P07-06	48 / 295	16%	0.2 - 10	Y	6.00E-01 J-	2.50E+00 J-	P07-16	9 / 53	17%	0.3 - 1.4	Y
	71-43-2	BENZENE	ug/L	3.00E-01 J	5.00E+00	P07-20	22 / 328	7%	0.23 - 10	Y	4.50E-01 J	1.60E+00 J-	P07-20	3 / 53	6%	0.3 - 1.4	Y
	67-66-3	CHLOROFORM	ug/L	6.00E-01 J	2.50E+00	P07-08	7 / 328	2%	0.18 - 10	Y	6.60E-01 J	6.60E-01 J	P07-09	1 / 53	2%	0.4 - 2	Y
	156-59-2	CIS-1,2-DICHLOROETHENE	ug/L	3.00E-01 J	1.90E+03	P07-09	137 / 328	42%	0.2 - 1	Y	5.00E-01 J-	1.70E+03	P07-09	39 / 54	72%	0.3 - 1	Y
	127-18-4	TETRACHLOROETHENE	ug/L	4.00E-01 J	6.00E-01 J	P07-08	2 / 328	0.6%	0.34 - 10	N	4.30E-01 J	4.30E-01 J	P07-09	1 / 53	2%	0.5 - 2.8	N
	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/L	2.90E-01 J	1.70E+02	P07-09	110 / 328	34%	0.2 - 1	Y	4.00E-01 J-	1.60E+02	P07-09	32 / 54	59%	0.3 - 2	Y
	79-01-6	TRICHLOROETHENE	ug/L	3.00E-01 J	1.60E+03 J	P07-08, P07-09	106 / 328	32%	0.3 - 3.5	Y	5.00E-01 J-	1.20E+03	P07-09	36 / 54	67%	0.4 - 1	Y
	75-01-4	VINYL CHLORIDE	ug/L	3.00E-01 J	3.90E+02	P07-09	81 / 328	25%	0.2 - 4	Y	7.00E-01 J-	4.97E+01	P07-05	22 / 53	42%	0.5 - 2.6	Y

Notes:

Refer to the 2012 HHRA presented as Appendix F of the Third Five-Year Review Report (Tetra Tech; March 2013) for samples included in 2012 HHRA data set. Refer to Appendix A for samples included in the 2017 HHRA Update data set.

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

HHRA = Human Health Risk Assessment.

ug/L = micrograms per liter.

VOCs = Volatile organic compounds.

(1) Minimum/maximum detected concentration and associated data flags.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

(2) Range of Reporting Detection Limits (RDLs).

(3) Chemicals presented on this table include the shoreline groundwater COPCs identified in the 2012 HHRA and chemicals detected in the 2017 HHRA shoreline groundwater dataset (as defined in the text and Appendix A). Chemicals not identified as COPCs in the 2012 HHRA that were also not detected in the 2017 HHRA dataset are not included.

APPENDIX B, TABLE 2
SUMMARY STATISTICS COMPARISON - SHORELINE SURFACE WATER
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Exposure Point	CAS Number	Chemical (3)	Units	2012 HHRA							2017 HHRA Update						
				Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	HHRA COPC (Y/N)	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	HHRA COPC (Y/N)
Site 07 - Shoreline		**VOCs**															
	107-06-2	1,2-DICHLOROETHANE	ug/L	ND					0.5 - 0.5	N	1.00E+00 J	1.00E+00 J	SW07-24-FLOOR02	1 / 30	3%	1 - 1	Y
	156-59-2	CIS-1,2-DICHLOROETHENE	ug/L	5.10E-01 J	7.90E+00	P07-24	13 / 90	14%	0.5 - 0.5	Y	1.50E+00 J	6.40E+00	SW07-24-FLOOR01	2 / 30	7%	1 - 1	Y
	79-01-6	TRICHLOROETHENE	ug/L	5.10E-01 J	7.80E+00	P07-24	9 / 90	10%	0.5 - 0.5	Y	5.90E+00	5.90E+00	SW07-24-FLOOR01	1 / 30	3%	1 - 1	Y
	75-01-4	VINYL CHLORIDE	ug/L	5.20E-01 J	1.60E+00 J	P07-24	4 / 90	4%	0.5 - 0.5	Y	3.70E+00 J	3.70E+00 J	SW07-24-FLOOR01	1 / 30	3%	1 - 1	Y

Notes:

Refer to the 2012 HHRA presented as Appendix F of the Third Five-Year Review Report (Tetra Tech; March 2013) for samples included in 2012 HHRA data set. Refer to Appendix A for samples included in the 2017 HHRA Update data set.

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

HHRA = Human Health Risk Assessment.

ND = Not detected.

ug/L = micrograms per liter.

VOCs = Volatile organic compounds.

(1) Minimum/maximum detected concentration and associated data flags.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration.

(2) Range of Reporting Detection Limits (RDLs).

(3) Chemicals presented on this table include the shoreline surface water COPCs identified in the 2012 HHRA and chemicals detected in the 2017 HHRA shoreline surface water dataset (as defined in the text and Appendix A). Chemicals not identified as COPCs in the 2012 HHRA that were also not detected in the 2017 HHRA dataset are not included.

APPENDIX B, TABLE 3
SUMMARY STATISTICS COMPARISON - SHORELINE SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 07 - CALF PASTURE POINT
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Exposure Point	CAS Number	Chemical (3)	Units	2012 HHRA							2017 HHRA Update						
				Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	HHRA COPC (Y/N)	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	HHRA COPC (Y/N)
Site 07 - Shoreline		**VOCs**															
	127-18-4	TETRACHLOROETHENE	mg/kg	N/A						N	1.20E-02 J,J+	1.20E-02 J,J+	SED07-05 (0 - 6 in) SED07-10 (0 - 6 in)	2 / 6	33%	0.002 - 0.0032	N
	75-01-4	VINYL CHLORIDE	mg/kg	8.40E-03 J	4.30E-02	SED07-09	3 / 62	5%	0.00042 - 0.41	Y	ND					0.002 - 0.0032	N

Notes:

Refer to the 2012 HHRA presented as Appendix F of the Third Five-Year Review Report (Tetra Tech; March 2013) for samples included in 2012 HHRA data set. Refer to Appendix A for samples included in the 2017 HHRA Update data set.

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

HHRA = Human Health Risk Assessment.

in = Inches.

mg/kg = milligrams per kilogram.

N/A = Not Applicable or Not Available.

ND = Not detected.

VOCs = Volatile organic compounds.

(1) Minimum/maximum detected concentration and associated data flags.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

(2) Range of Reporting Detection Limits (RDLs).

(3) Chemicals presented on this table include the shoreline sediment COPCs identified in the 2012 HHRA and chemicals detected in the 2017 HHRA shoreline sediment dataset (as defined in the text and Appendix A). Chemicals not identified as COPCs in the 2012 HHRA that were also not detected in the 2017 HHRA dataset are not included. In addition, metals identified as sediment COPCs in the 2012 HHRA are not included because they were concluded not to be site-related, as discussed in the text.

APPENDIX C

PROUCL INPUT AND OUTPUT

GROUNDWATER

Matrix	Fraction	Units	Group-ID	Location	Collected	Depth	1,1,2,2-TETRACHLOROETHANE	D_1,1,2,2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	D_1,1,2-TRICHLOROETHANE	1,2-DICHLOROETHANE	D_1,2-DICHLOROETHANE
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-02	9/26/2016		0.5	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-03	10/7/2014		0.5	0	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-03	9/26/2016		0.5	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-04	10/6/2014		1.6	1	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-04	9/26/2016		0.5	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	10/16/2013		0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	10/8/2014		0.74	1	1	0	0.83	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	9/10/2015		0.5	0	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	9/26/2016		0.5	0	0.5	0	1.2	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	10/16/2013		0.5	0	0.5	0	2.2	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	10/6/2014		0.5	0	1	0	1.9	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	9/10/2015		0.5	0	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	9/26/2016		0.5	0	0.5	0	1.8	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	10/16/2013		99	1	14	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	10/6/2014		77	1	10	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	9/10/2015		17	1	2.5	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	9/27/2016		44.6	1	7.8	1	1.4	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	10/16/2013		70	1	11	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	10/6/2014		2.3	1	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	9/10/2015		8.2	1	2.1	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	9/16/2016		75	1	13	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	10/16/2013		180	1	49	1	2	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	10/6/2014		170	1	38	1	1.6	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	9/10/2015		47	1	9.7	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	9/16/2016		110	1	19	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	10/16/2013		18	1	6	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	10/3/2014		8.5	1	4.5	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	9/10/2015		5.9	1	3.1	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	9/16/2016		15	1	2.9	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-20	10/3/2014		0.5	0	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-20	9/27/2016		0.7	1	0.4	1	0.6	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	10/17/2013		4.2	1	1.8	1		
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	10/3/2014		0.5	0	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	9/10/2015		0.5	0	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	9/27/2016		0.5	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-22	10/3/2014		3.5	1	1.8	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-22	9/27/2016		0.8	1	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	10/18/2013		5.2	1	1.4	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	10/6/2014		0.55	1	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	9/10/2015		1.2	1	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	9/27/2016		0.3	0	0.4	0	0.3	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	10/17/2013		1.2	1	0.46	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	10/3/2014		0.5	0	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	9/10/2015		0.5	0	1	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	9/16/2016		1	0	1	0	1	0

Matrix	Fraction	Units	Group-ID	Location	Collected	BENZENE	D_BENZENE	CHLOROFORM	D_CHLOROFORM	CIS-1,2-DICHLOROETHENE	D_CIS-1,2-DICHLOROETHENE	TRANS-1,2-DICHLOROETHENE	D_TRANS-1,2-DICHLOROETHENE
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-02	9/26/2016	0.5	0	1	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-03	10/7/2014	0.5	0	0.5	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-03	9/26/2016	0.5	0	1	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-04	10/6/2014	0.5	0	0.5	0	1.2	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-04	9/26/2016	0.5	0	1	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	10/16/2013	0.5	0	0.5	0	0.64	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	10/8/2014	0.5	0	0.5	0	32	1	16	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	9/10/2015	0.5	0	0.5	0	5	1	15	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	9/26/2016	0.5	0	1	0	68.9	1	21.5	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	10/16/2013	0.5	0	0.5	0	120	1	26	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	10/6/2014	0.5	0	0.5	0	93	1	20	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	9/10/2015	0.5	0	0.5	0	47	1	14	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	9/26/2016	0.5	0	1	0	87.2	1	21.6	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	10/16/2013	0.5	0	0.5	0	440	1	26	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	10/6/2014	0.5	0	0.5	0	330	1	21	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	9/10/2015	0.5	0	0.5	0	140	1	8.4	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	9/27/2016	1.4	0	2	0	260	1	19.8	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	10/16/2013	0.5	0	0.5	0	93	1	2.1	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	10/6/2014	0.5	0	0.5	0	5.8	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	9/10/2015	0.5	0	0.5	0	1.6	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	9/16/2016	1	0	1	0	160	1	7.1	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	10/16/2013	0.5	0	0.66	1	1700	1	160	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	10/6/2014	0.5	0	0.5	0	1400	1	120	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	9/10/2015	0.5	0	0.5	0	440	1	36	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	9/16/2016	1	0	1	0	1000	1	69	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	10/16/2013	0.45	1	0.5	0	120	1	16	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	10/3/2014	0.5	0	0.5	0	110	1	11	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	9/10/2015	0.5	0	0.5	0	90	1	9.4	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	9/16/2016	1	0	1	0	91	1	6.5	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-20	10/3/2014	0.5	0	0.5	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-20	9/27/2016	1.6	1	0.4	0	34.4	1	6.9	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	10/17/2013					14	1	1.3	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	10/3/2014	0.72	1	0.5	0	0.5	0	1.9	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	9/10/2015	0.5	0	0.5	0	35	1	1.3	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	9/27/2016	0.5	0	1	0	56.9	1	3.4	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-22	10/3/2014	0.5	0	0.5	0	43	1	4.3	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-22	9/27/2016	0.5	0	1	0	2.5	1	0.4	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	10/18/2013	0.5	0	0.5	0	7.6	1	0.56	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	10/6/2014	0.5	0	0.5	0	0.77	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	9/10/2015	0.5	0	0.5	0	2.1	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	9/27/2016	0.3	0	0.4	0	0.5	1	0.3	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	10/17/2013	0.5	0	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	10/3/2014	0.5	0	0.5	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	9/10/2015	0.5	0	0.5	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	9/16/2016	1	0	1	0	1	0	2	0

Matrix	Fraction	Units	Group-ID	Location	Collected	TRICHLOROETHENE	D_TRICHLOROETHENE	VINYL CHLORIDE	D_VINYL CHLORIDE
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-02	9/26/2016	1	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-03	10/7/2014	2.5	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-03	9/26/2016	1	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-04	10/6/2014	1.3	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-04	9/26/2016	1	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	10/16/2013	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	10/8/2014	2.7	1	27	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	9/10/2015	0.5	0	12	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-05	9/26/2016	1	0	49.7	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	10/16/2013	0.9	1	48	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	10/6/2014	0.85	1	35	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	9/10/2015	0.5	0	32	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-06	9/26/2016	1	0	45.8	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	10/16/2013	200	1	12	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	10/6/2014	190	1	3.2	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	9/10/2015	31	1	2.1	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-07	9/27/2016	151	1	2.6	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	10/16/2013	69	1	0.73	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	10/6/2014	14	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	9/10/2015	2	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-08	9/16/2016	250	1	2.5	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	10/16/2013	1200	1	27	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	10/6/2014	880	1	29	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	9/10/2015	200	1	7.2	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-09	9/16/2016	490	1	11	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	10/16/2013	200	1	1.4	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	10/3/2014	110	1	0.93	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	9/10/2015	87	1	0.76	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-10	9/16/2016	78	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-20	10/3/2014	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-20	9/27/2016	0.4	0	5.6	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	10/17/2013	23	1		
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	10/3/2014	0.7	1	1.2	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	9/10/2015	2.5	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-21	9/27/2016	5.2	1	0.7	1
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-22	10/3/2014	53	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-22	9/27/2016	4.4	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	10/18/2013	29	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	10/6/2014	3.2	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	9/10/2015	9.4	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-23	9/27/2016	1.8	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	10/17/2013	1.2	1	1	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	10/3/2014	0.81	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	9/10/2015	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_SouthernBoundary	P07-24	9/16/2016	1	0	1	0

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.13/7/2017 1:09:03 PM
From File	ProUCL GW South_West Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

1,1,2,2-TETRACHLOROETHANE

General Statistics

Total Number of Observations	45	Number of Distinct Observations	28
Number of Detects	26	Number of Non-Detects	19
Number of Distinct Detects	25	Number of Distinct Non-Detects	3
Minimum Detect	0.55	Minimum Non-Detect	0.3
Maximum Detect	180	Maximum Non-Detect	1
Variance Detects	2758	Percent Non-Detects	42.22%
Mean Detects	37.2	SD Detects	52.52
Median Detects	8.35	CV Detects	1.412
Skewness Detects	1.628	Kurtosis Detects	1.92
Mean of Logged Detects	2.275	SD of Logged Detects	1.903

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.728	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.92	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.297	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.17	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	21.62	KM Standard Error of Mean	6.564
KM SD	43.18	95% KM (BCA) UCL	34.04
95% KM (t) UCL	32.65	95% KM (Percentile Bootstrap) UCL	32.83
95% KM (z) UCL	32.42	95% KM Bootstrap t UCL	37.66
90% KM Chebyshev UCL	41.31	95% KM Chebyshev UCL	50.23
97.5% KM Chebyshev UCL	62.62	99% KM Chebyshev UCL	86.93

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.819	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.813	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.16	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.182	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.477	k star (bias corrected MLE)	0.448
Theta hat (MLE)	77.96	Theta star (bias corrected MLE)	83.09
nu hat (MLE)	24.81	nu star (bias corrected)	23.28
Mean (detects)	37.2		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	21.5
Maximum	180	Median	0.8
SD	43.73	CV	2.034
k hat (MLE)	0.199	k star (bias corrected MLE)	0.201
Theta hat (MLE)	107.9	Theta star (bias corrected MLE)	107.1
nu hat (MLE)	17.92	nu star (bias corrected)	18.06
Adjusted Level of Significance (β)	0.0447		
Approximate Chi Square Value (18.06, α)	9.436	Adjusted Chi Square Value (18.06, β)	9.229
95% Gamma Approximate UCL (use when n>=50)	41.15	95% Gamma Adjusted UCL (use when n<50)	42.07

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	21.62	SD (KM)	43.18
Variance (KM)	1864	SE of Mean (KM)	6.564
k hat (KM)	0.251	k star (KM)	0.249
nu hat (KM)	22.57	nu star (KM)	22.4
theta hat (KM)	86.23	theta star (KM)	86.89
80% gamma percentile (KM)	31.35	90% gamma percentile (KM)	64.92
95% gamma percentile (KM)	104.8	99% gamma percentile (KM)	211

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (22.40, α)	12.63	Adjusted Chi Square Value (22.40, β)	12.39
95% Gamma Approximate KM-UCL (use when n>=50)	38.32	95% Gamma Adjusted KM-UCL (use when n<50)	39.08

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.928	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.92	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.134	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.17	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	21.56	Mean in Log Scale	0.244
SD in Original Scale	43.7	SD in Log Scale	2.954
95% t UCL (assumes normality of ROS data)	32.51	95% Percentile Bootstrap UCL	32.43
95% BCA Bootstrap UCL	35.73	95% Bootstrap t UCL	37.53
95% H-UCL (Log ROS)	979.9		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	0.81	KM Geo Mean	2.247
KM SD (logged)	2.226	95% Critical H Value (KM-Log)	4.016
KM Standard Error of Mean (logged)	0.338	95% H-UCL (KM -Log)	103
KM SD (logged)	2.226	95% Critical H Value (KM-Log)	4.016
KM Standard Error of Mean (logged)	0.338		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	21.6	Mean in Log Scale	0.733
SD in Original Scale	43.68	SD in Log Scale	2.324
95% t UCL (Assumes normality)	32.54	95% H-Stat UCL	133.4

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

a Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1) 39.08

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

1,1,2-TRICHLOROETHANE

General Statistics

Total Number of Observations	45	Number of Distinct Observations	21
Number of Detects	20	Number of Non-Detects	25
Number of Distinct Detects	19	Number of Distinct Non-Detects	3
Minimum Detect	0.4	Minimum Non-Detect	0.4
Maximum Detect	49	Maximum Non-Detect	1
Variance Detects	161.7	Percent Non-Detects	55.56%
Mean Detects	9.923	SD Detects	12.71
Median Detects	5.25	CV Detects	1.281
Skewness Detects	2.204	Kurtosis Detects	4.763
Mean of Logged Detects	1.584	SD of Logged Detects	1.306

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.709	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.905	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.227	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.192	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	4.643	KM Standard Error of Mean	1.455
KM SD	9.516	95% KM (BCA) UCL	7.281
95% KM (t) UCL	7.089	95% KM (Percentile Bootstrap) UCL	7.111
95% KM (z) UCL	7.037	95% KM Bootstrap t UCL	9.347
90% KM Chebyshev UCL	9.009	95% KM Chebyshev UCL	10.99
97.5% KM Chebyshev UCL	13.73	99% KM Chebyshev UCL	19.12

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.37	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.776	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.141	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.201	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.83	k star (bias corrected MLE)	0.739
Theta hat (MLE)	11.95	Theta star (bias corrected MLE)	13.42
nu hat (MLE)	33.22	nu star (bias corrected)	29.57
Mean (detects)	9.923		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	4.416
Maximum	49	Median	0.01
SD	9.727	CV	2.203
k hat (MLE)	0.217	k star (bias corrected MLE)	0.218
Theta hat (MLE)	20.31	Theta star (bias corrected MLE)	20.28
nu hat (MLE)	19.57	nu star (bias corrected)	19.6
Adjusted Level of Significance (β)	0.0447		
Approximate Chi Square Value (19.60, α)	10.56	Adjusted Chi Square Value (19.60, β)	10.34
95% Gamma Approximate UCL (use when n>=50)	8.198	95% Gamma Adjusted UCL (use when n<50)	8.373

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	4.643	SD (KM)	9.516
Variance (KM)	90.55	SE of Mean (KM)	1.455
k hat (KM)	0.238	k star (KM)	0.237
nu hat (KM)	21.43	nu star (KM)	21.33
theta hat (KM)	19.5	theta star (KM)	19.59
80% gamma percentile (KM)	6.611	90% gamma percentile (KM)	13.98
95% gamma percentile (KM)	22.83	99% gamma percentile (KM)	46.56

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (21.33, α)	11.84	Adjusted Chi Square Value (21.33, β)	11.6
95% Gamma Approximate KM-UCL (use when n>=50)	8.366	95% Gamma Adjusted KM-UCL (use when n<50)	8.536

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.973	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.905	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.101	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.192	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	4.614	Mean in Log Scale	-0.159
SD in Original Scale	9.64	SD in Log Scale	2.001
95% t UCL (assumes normality of ROS data)	7.029	95% Percentile Bootstrap UCL	7.237
95% BCA Bootstrap UCL	7.907	95% Bootstrap t UCL	9.297
95% H-UCL (Log ROS)	19.24		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	0.22	KM Geo Mean	1.246
KM SD (logged)	1.487	95% Critical H Value (KM-Log)	2.971
KM Standard Error of Mean (logged)	0.228	95% H-UCL (KM -Log)	7.322
KM SD (logged)	1.487	95% Critical H Value (KM-Log)	2.971
KM Standard Error of Mean (logged)	0.228		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	4.631	Mean in Log Scale	0.16
SD in Original Scale	9.629	SD in Log Scale	1.57
95% t UCL (Assumes normality)	7.043	95% H-Stat UCL	8.352

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

a Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1) 8.536

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

1,2-DICHLOROETHANE

General Statistics

Total Number of Observations	44	Number of Distinct Observations	12
		Number of Missing Observations	1
Number of Detects	8	Number of Non-Detects	36
Number of Distinct Detects	8	Number of Distinct Non-Detects	4
Minimum Detect	0.6	Minimum Non-Detect	0.3
Maximum Detect	2.2	Maximum Non-Detect	1.4
Variance Detects	0.335	Percent Non-Detects	81.82%
Mean Detects	1.516	SD Detects	0.579
Median Detects	1.7	CV Detects	0.382
Skewness Detects	-0.6	Kurtosis Detects	-1.123
Mean of Logged Detects	0.333	SD of Logged Detects	0.466

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.923	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.188	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.528	KM Standard Error of Mean	0.085
KM SD	0.523	95% KM (BCA) UCL	0.818
95% KM (t) UCL	0.671	95% KM (Percentile Bootstrap) UCL	0.774
95% KM (z) UCL	0.668	95% KM Bootstrap t UCL	0.655
90% KM Chebyshev UCL	0.783	95% KM Chebyshev UCL	0.899
97.5% KM Chebyshev UCL	1.059	99% KM Chebyshev UCL	1.374

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.472	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.718	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.231	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.295	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	6.19	k star (bias corrected MLE)	3.952
Theta hat (MLE)	0.245	Theta star (bias corrected MLE)	0.384
nu hat (MLE)	99.05	nu star (bias corrected)	63.24
Mean (detects)	1.516		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.369
Maximum	2.2	Median	0.01
SD	0.622	CV	1.686
k hat (MLE)	0.353	k star (bias corrected MLE)	0.344
Theta hat (MLE)	1.044	Theta star (bias corrected MLE)	1.071
nu hat (MLE)	31.09	nu star (bias corrected)	30.3
Adjusted Level of Significance (β)	0.0445		
Approximate Chi Square Value (30.30, α)	18.73	Adjusted Chi Square Value (30.30, β)	18.42
95% Gamma Approximate UCL (use when n>=50)	0.596	95% Gamma Adjusted UCL (use when n<50)	0.607

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.528	SD (KM)	0.523
Variance (KM)	0.274	SE of Mean (KM)	0.085
k hat (KM)	1.02	k star (KM)	0.966
nu hat (KM)	89.8	nu star (KM)	85.01
theta hat (KM)	0.518	theta star (KM)	0.547
80% gamma percentile (KM)	0.853	90% gamma percentile (KM)	1.227
95% gamma percentile (KM)	1.602	99% gamma percentile (KM)	2.476

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (85.01, α)	64.76	Adjusted Chi Square Value (85.01, β)	64.16
95% Gamma Approximate KM-UCL (use when n>=50)	0.694	95% Gamma Adjusted KM-UCL (use when n<50)	0.7

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.872	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.24	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.514	Mean in Log Scale	-1.128
SD in Original Scale	0.557	SD in Log Scale	0.964
95% t UCL (assumes normality of ROS data)	0.655	95% Percentile Bootstrap UCL	0.654
95% BCA Bootstrap UCL	0.671	95% Bootstrap t UCL	0.69
95% H-UCL (Log ROS)	0.726		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-0.91	KM Geo Mean	0.403
KM SD (logged)	0.625	95% Critical H Value (KM-Log)	2.001
KM Standard Error of Mean (logged)	0.103	95% H-UCL (KM -Log)	0.592
KM SD (logged)	0.625	95% Critical H Value (KM-Log)	2.001
KM Standard Error of Mean (logged)	0.103		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.539	Mean in Log Scale	-0.92
SD in Original Scale	0.534	SD in Log Scale	0.703
95% t UCL (Assumes normality)	0.675	95% H-Stat UCL	0.637

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.671

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

BENZENE

General Statistics

Total Number of Observations	44	Number of Distinct Observations	7
		Number of Missing Observations	1
Number of Detects	3	Number of Non-Detects	41
Number of Distinct Detects	3	Number of Distinct Non-Detects	4
Minimum Detect	0.45	Minimum Non-Detect	0.3
Maximum Detect	1.6	Maximum Non-Detect	1.4
Variance Detects	0.362	Percent Non-Detects	93.18%
Mean Detects	0.923	SD Detects	0.601
Median Detects	0.72	CV Detects	0.651
Skewness Detects	1.348	Kurtosis Detects	N/A
Mean of Logged Detects	-0.219	SD of Logged Detects	0.641

Warning: Data set has only 3 Detected Values.
This is not enough to compute meaningful or reliable statistics and estimates.

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.914	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.767	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.299	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.425	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.412	KM Standard Error of Mean	0.0711
KM SD	0.203	95% KM (BCA) UCL	N/A
95% KM (t) UCL	0.531	95% KM (Percentile Bootstrap) UCL	N/A
95% KM (z) UCL	0.529	95% KM Bootstrap t UCL	N/A
90% KM Chebyshev UCL	0.625	95% KM Chebyshev UCL	0.722
97.5% KM Chebyshev UCL	0.856	99% KM Chebyshev UCL	1.119

Gamma GOF Tests on Detected Observations Only

Not Enough Data to Perform GOF Test

Gamma Statistics on Detected Data Only

k hat (MLE)	3.75	k star (bias corrected MLE)	N/A
Theta hat (MLE)	0.246	Theta star (bias corrected MLE)	N/A
nu hat (MLE)	22.5	nu star (bias corrected)	N/A
Mean (detects)	0.923		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.235
Maximum	1.6	Median	0.0996
SD	0.317	CV	1.345
k hat (MLE)	0.527	k star (bias corrected MLE)	0.506
Theta hat (MLE)	0.447	Theta star (bias corrected MLE)	0.465
nu hat (MLE)	46.35	nu star (bias corrected)	44.52
Adjusted Level of Significance (β)	0.0445		
Approximate Chi Square Value (44.52, α)	30.22	Adjusted Chi Square Value (44.52, β)	29.82
95% Gamma Approximate UCL (use when n>=50)	0.347	95% Gamma Adjusted UCL (use when n<50)	N/A

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.412	SD (KM)	0.203
Variance (KM)	0.0412	SE of Mean (KM)	0.0711
k hat (KM)	4.117	k star (KM)	3.852
nu hat (KM)	362.3	nu star (KM)	338.9
theta hat (KM)	0.1	theta star (KM)	0.107
80% gamma percentile (KM)	0.57	90% gamma percentile (KM)	0.693
95% gamma percentile (KM)	0.806	99% gamma percentile (KM)	1.048

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (338.94, α)	297.3	Adjusted Chi Square Value (338.94, β)	296
95% Gamma Approximate KM-UCL (use when n>=50)	0.469	95% Gamma Adjusted KM-UCL (use when n<50)	0.471

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.978	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.767	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.234	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.425	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.349	Mean in Log Scale	-1.245
SD in Original Scale	0.257	SD in Log Scale	0.61
95% t UCL (assumes normality of ROS data)	0.414	95% Percentile Bootstrap UCL	0.416
95% BCA Bootstrap UCL	0.436	95% Bootstrap t UCL	0.446
95% H-UCL (Log ROS)	0.417		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-0.951	KM Geo Mean	0.387
KM SD (logged)	0.312	95% Critical H Value (KM-Log)	1.785
KM Standard Error of Mean (logged)	0.173	95% H-UCL (KM -Log)	0.442
KM SD (logged)	0.312	95% Critical H Value (KM-Log)	1.785
KM Standard Error of Mean (logged)	0.173		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.327	Mean in Log Scale	-1.232
SD in Original Scale	0.231	SD in Log Scale	0.406
95% t UCL (Assumes normality)	0.385	95% H-Stat UCL	0.355

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.531

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

CIS-1,2-DICHLOROETHENE

General Statistics

Total Number of Observations	45	Number of Distinct Observations	33
Number of Detects	35	Number of Non-Detects	10
Number of Distinct Detects	32	Number of Distinct Non-Detects	2
Minimum Detect	0.5	Minimum Non-Detect	0.5
Maximum Detect	1700	Maximum Non-Detect	1
Variance Detects	151283	Percent Non-Detects	22.22%
Mean Detects	200.9	SD Detects	389
Median Detects	68.9	CV Detects	1.936
Skewness Detects	2.922	Kurtosis Detects	8.298
Mean of Logged Detects	3.639	SD of Logged Detects	2.237

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.546	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.934	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.342	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.148	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	156.4	KM Standard Error of Mean	52.67
KM SD	348.2	95% KM (BCA) UCL	246.6
95% KM (t) UCL	244.9	95% KM (Percentile Bootstrap) UCL	247
95% KM (z) UCL	243	95% KM Bootstrap t UCL	312.2
90% KM Chebyshev UCL	314.4	95% KM Chebyshev UCL	386
97.5% KM Chebyshev UCL	485.3	99% KM Chebyshev UCL	680.4

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.726	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.835	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.146	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.159	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.396	k star (bias corrected MLE)	0.381
Theta hat (MLE)	507.5	Theta star (bias corrected MLE)	527.3
nu hat (MLE)	27.72	nu star (bias corrected)	26.68
Mean (detects)	200.9		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	156.3
Maximum	1700	Median	34.4
SD	352.2	CV	2.253
k hat (MLE)	0.223	k star (bias corrected MLE)	0.223
Theta hat (MLE)	701.1	Theta star (bias corrected MLE)	701.2
nu hat (MLE)	20.06	nu star (bias corrected)	20.06
Adjusted Level of Significance (β)	0.0447		
Approximate Chi Square Value (20.06, α)	10.9	Adjusted Chi Square Value (20.06, β)	10.67
95% Gamma Approximate UCL (use when n>=50)	287.8	95% Gamma Adjusted UCL (use when n<50)	293.8

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	156.4	SD (KM)	348.2
Variance (KM)	121247	SE of Mean (KM)	52.67
k hat (KM)	0.202	k star (KM)	0.203
nu hat (KM)	18.16	nu star (KM)	18.28
theta hat (KM)	775.2	theta star (KM)	770
80% gamma percentile (KM)	207.8	90% gamma percentile (KM)	473.1
95% gamma percentile (KM)	802.6	99% gamma percentile (KM)	1708

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (18.28, α)	9.594	Adjusted Chi Square Value (18.28, β)	9.385
95% Gamma Approximate KM-UCL (use when n>=50)	298	95% Gamma Adjusted KM-UCL (use when n<50)	304.7

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.939	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.934	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.155	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.148	Detected Data Not Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	156.4	Mean in Log Scale	2.532
SD in Original Scale	352.2	SD in Log Scale	2.916
95% t UCL (assumes normality of ROS data)	244.6	95% Percentile Bootstrap UCL	252.4
95% BCA Bootstrap UCL	269.8	95% Bootstrap t UCL	322.2
95% H-UCL (Log ROS)	8190		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	2.677	KM Geo Mean	14.54
KM SD (logged)	2.649	95% Critical H Value (KM-Log)	4.653
KM Standard Error of Mean (logged)	0.401	95% H-UCL (KM -Log)	3112
KM SD (logged)	2.649	95% Critical H Value (KM-Log)	4.653
KM Standard Error of Mean (logged)	0.401		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	156.4	Mean in Log Scale	2.537
SD in Original Scale	352.2	SD in Log Scale	2.867
95% t UCL (Assumes normality)	244.6	95% H-Stat UCL	6638

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

a Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1) 304.7

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

TRANS-1,2-DICHLOROETHENE

General Statistics

Total Number of Observations	45	Number of Distinct Observations	30
Number of Detects	29	Number of Non-Detects	16
Number of Distinct Detects	26	Number of Distinct Non-Detects	4
Minimum Detect	0.4	Minimum Non-Detect	0.3
Maximum Detect	160	Maximum Non-Detect	2
Variance Detects	1273	Percent Non-Detects	35.56%
Mean Detects	22.98	SD Detects	35.68
Median Detects	14	CV Detects	1.553
Skewness Detects	2.945	Kurtosis Detects	8.868
Mean of Logged Detects	2.272	SD of Logged Detects	1.451

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.592	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.926	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.328	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.161	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	14.95	KM Standard Error of Mean	4.574
KM SD	30.15	95% KM (BCA) UCL	23.67
95% KM (t) UCL	22.64	95% KM (Percentile Bootstrap) UCL	22.75
95% KM (z) UCL	22.47	95% KM Bootstrap t UCL	32.43
90% KM Chebyshev UCL	28.67	95% KM Chebyshev UCL	34.89
97.5% KM Chebyshev UCL	43.52	99% KM Chebyshev UCL	60.46

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.642	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.789	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.169	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.17	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.7	k star (bias corrected MLE)	0.651
Theta hat (MLE)	32.82	Theta star (bias corrected MLE)	35.31
nu hat (MLE)	40.62	nu star (bias corrected)	37.75
Mean (detects)	22.98		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	14.81
Maximum	160	Median	3.4
SD	30.56	CV	2.063
k hat (MLE)	0.248	k star (bias corrected MLE)	0.246
Theta hat (MLE)	59.75	Theta star (bias corrected MLE)	60.17
nu hat (MLE)	22.31	nu star (bias corrected)	22.16
Adjusted Level of Significance (β)	0.0447		
Approximate Chi Square Value (22.16, α)	12.46	Adjusted Chi Square Value (22.16, β)	12.22
95% Gamma Approximate UCL (use when n>=50)	26.35	95% Gamma Adjusted UCL (use when n<50)	26.87

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	14.95	SD (KM)	30.15
Variance (KM)	909.2	SE of Mean (KM)	4.574
k hat (KM)	0.246	k star (KM)	0.244
nu hat (KM)	22.12	nu star (KM)	21.98
theta hat (KM)	60.82	theta star (KM)	61.21
80% gamma percentile (KM)	21.53	90% gamma percentile (KM)	44.94
95% gamma percentile (KM)	72.86	99% gamma percentile (KM)	147.4

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (21.98, α)	12.32	Adjusted Chi Square Value (21.98, β)	12.08
95% Gamma Approximate KM-UCL (use when n>=50)	26.66	95% Gamma Adjusted KM-UCL (use when n<50)	27.19

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.964	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.926	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.117	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.161	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	15	Mean in Log Scale	1.128
SD in Original Scale	30.47	SD in Log Scale	2.014
95% t UCL (assumes normality of ROS data)	22.64	95% Percentile Bootstrap UCL	23.35
95% BCA Bootstrap UCL	26.09	95% Bootstrap t UCL	30.87
95% H-UCL (Log ROS)	72.44		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	1.116	KM Geo Mean	3.053
KM SD (logged)	1.938	95% Critical H Value (KM-Log)	3.598
KM Standard Error of Mean (logged)	0.297	95% H-UCL (KM -Log)	57.09
KM SD (logged)	1.938	95% Critical H Value (KM-Log)	3.598
KM Standard Error of Mean (logged)	0.297		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	14.98	Mean in Log Scale	1.175
SD in Original Scale	30.48	SD in Log Scale	1.905
95% t UCL (Assumes normality)	22.61	95% H-Stat UCL	55.13

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

a Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1) 27.19

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

TRICHLOROETHENE

General Statistics

Total Number of Observations	45	Number of Distinct Observations	33
Number of Detects	33	Number of Non-Detects	12
Number of Distinct Detects	30	Number of Distinct Non-Detects	3
Minimum Detect	0.7	Minimum Non-Detect	0.4
Maximum Detect	1200	Maximum Non-Detect	1
Variance Detects	67908	Percent Non-Detects	26.67%
Mean Detects	130.1	SD Detects	260.6
Median Detects	23	CV Detects	2.002
Skewness Detects	3.119	Kurtosis Detects	10.17
Mean of Logged Detects	2.918	SD of Logged Detects	2.31

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.549	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.931	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.31	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.152	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	95.56	KM Standard Error of Mean	34.38
KM SD	227.1	95% KM (BCA) UCL	154.3
95% KM (t) UCL	153.3	95% KM (Percentile Bootstrap) UCL	155.4
95% KM (z) UCL	152.1	95% KM Bootstrap t UCL	225.9
90% KM Chebyshev UCL	198.7	95% KM Chebyshev UCL	245.4
97.5% KM Chebyshev UCL	310.3	99% KM Chebyshev UCL	437.6

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.149	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.845	Detected Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.17	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.165	Detected Data Not Gamma Distributed at 5% Significance Level	

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.345	k star (bias corrected MLE)	0.334
Theta hat (MLE)	376.7	Theta star (bias corrected MLE)	389.3
nu hat (MLE)	22.8	nu star (bias corrected)	22.06
Mean (detects)	130.1		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	95.44
Maximum	1200	Median	2.7
SD	229.7	CV	2.407
k hat (MLE)	0.202	k star (bias corrected MLE)	0.203
Theta hat (MLE)	473.5	Theta star (bias corrected MLE)	470.3
nu hat (MLE)	18.14	nu star (bias corrected)	18.27
Adjusted Level of Significance (β)	0.0447		
Approximate Chi Square Value (18.27, α)	9.583	Adjusted Chi Square Value (18.27, β)	9.374
95% Gamma Approximate UCL (use when n>=50)	181.9	95% Gamma Adjusted UCL (use when n<50)	186

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	95.56	SD (KM)	227.1
Variance (KM)	51578	SE of Mean (KM)	34.38
k hat (KM)	0.177	k star (KM)	0.18
nu hat (KM)	15.93	nu star (KM)	16.21
theta hat (KM)	539.7	theta star (KM)	530.7
80% gamma percentile (KM)	118.6	90% gamma percentile (KM)	288.2
95% gamma percentile (KM)	505.5	99% gamma percentile (KM)	1114

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (16.21, α)	8.108	Adjusted Chi Square Value (16.21, β)	7.917
95% Gamma Approximate KM-UCL (use when n>=50)	191	95% Gamma Adjusted KM-UCL (use when n<50)	195.6

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.92	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.931	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.14	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.152	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	95.49	Mean in Log Scale	1.562
SD in Original Scale	229.7	SD in Log Scale	3.074
95% t UCL (assumes normality of ROS data)	153	95% Percentile Bootstrap UCL	157.3
95% BCA Bootstrap UCL	178.7	95% Bootstrap t UCL	231.1
95% H-UCL (Log ROS)	6269		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	1.933	KM Geo Mean	6.913
KM SD (logged)	2.546	95% Critical H Value (KM-Log)	4.498
KM Standard Error of Mean (logged)	0.386	95% H-UCL (KM -Log)	993.6
KM SD (logged)	2.546	95% Critical H Value (KM-Log)	4.498
KM Standard Error of Mean (logged)	0.386		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	95.53	Mean in Log Scale	1.858
SD in Original Scale	229.7	SD in Log Scale	2.661
95% t UCL (Assumes normality)	153.1	95% H-Stat UCL	1439

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

97.5% KM (Chebyshev) UCL	310.3

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

VINYL CHLORIDE

General Statistics

Total Number of Observations	44	Number of Distinct Observations	23
		Number of Missing Observations	1
Number of Detects	22	Number of Non-Detects	22
Number of Distinct Detects	20	Number of Distinct Non-Detects	3
Minimum Detect	0.7	Minimum Non-Detect	0.5
Maximum Detect	49.7	Maximum Non-Detect	2.6
Variance Detects	296	Percent Non-Detects	50%
Mean Detects	16.13	SD Detects	17.2
Median Detects	9.1	CV Detects	1.067
Skewness Detects	0.835	Kurtosis Detects	-0.759
Mean of Logged Detects	1.908	SD of Logged Detects	1.554

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.823	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.911	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.231	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.184	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	8.334	KM Standard Error of Mean	2.193
KM SD	14.21	95% KM (BCA) UCL	12.06
95% KM (t) UCL	12.02	95% KM (Percentile Bootstrap) UCL	11.98
95% KM (z) UCL	11.94	95% KM Bootstrap t UCL	13.09
90% KM Chebyshev UCL	14.91	95% KM Chebyshev UCL	17.89
97.5% KM Chebyshev UCL	22.03	99% KM Chebyshev UCL	30.16

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.766	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.788	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.168	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.193	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.693	k star (bias corrected MLE)	0.629
Theta hat (MLE)	23.26	Theta star (bias corrected MLE)	25.64
nu hat (MLE)	30.5	nu star (bias corrected)	27.68
Mean (detects)	16.13		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	8.069
Maximum	49.7	Median	0.355
SD	14.53	CV	1.8
k hat (MLE)	0.212	k star (bias corrected MLE)	0.213
Theta hat (MLE)	38.03	Theta star (bias corrected MLE)	37.91
nu hat (MLE)	18.67	nu star (bias corrected)	18.73
Adjusted Level of Significance (β)	0.0445		
Approximate Chi Square Value (18.73, α)	9.921	Adjusted Chi Square Value (18.73, β)	9.702
95% Gamma Approximate UCL (use when n>=50)	15.23	95% Gamma Adjusted UCL (use when n<50)	15.58

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	8.334	SD (KM)	14.21
Variance (KM)	202	SE of Mean (KM)	2.193
k hat (KM)	0.344	k star (KM)	0.335
nu hat (KM)	30.25	nu star (KM)	29.52
theta hat (KM)	24.24	theta star (KM)	24.84
80% gamma percentile (KM)	13.1	90% gamma percentile (KM)	24.22
95% gamma percentile (KM)	36.76	99% gamma percentile (KM)	68.91

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (29.52, α)	18.12	Adjusted Chi Square Value (29.52, β)	17.81
95% Gamma Approximate KM-UCL (use when n>=50)	13.58	95% Gamma Adjusted KM-UCL (use when n<50)	13.81

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.896	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.911	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.178	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.184	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	8.199	Mean in Log Scale	-0.0154
SD in Original Scale	14.45	SD in Log Scale	2.405
95% t UCL (assumes normality of ROS data)	11.86	95% Percentile Bootstrap UCL	11.68
95% BCA Bootstrap UCL	12.38	95% Bootstrap t UCL	12.69
95% H-UCL (Log ROS)	85.11		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	0.636	KM Geo Mean	1.888
KM SD (logged)	1.669	95% Critical H Value (KM-Log)	3.209
KM Standard Error of Mean (logged)	0.258	95% H-UCL (KM -Log)	17.2
KM SD (logged)	1.669	95% Critical H Value (KM-Log)	3.209
KM Standard Error of Mean (logged)	0.258		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	8.264	Mean in Log Scale	0.44
SD in Original Scale	14.42	SD in Log Scale	1.866
95% t UCL (Assumes normality)	11.92	95% H-Stat UCL	23.85

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

a Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1) 13.81

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.13/7/2017 1:37:15 PM

User Selected Options

From File ProUCL GW South_West Input.xls

Full Precision OFF

From File: ProUCL GW South_West Input.xls

General Statistics for Censored Datasets (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
CHLOROFORM	44	1	1	43	97.73%	0.4	2	0.408	0.00205	0.0452	0.111

General Statistics for Raw Dataset using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
CHLOROFORM	1	1	0.66	0.66	0.66	0.66	N/A	N/A	0	N/A	N/A

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
CHLOROFORM	44	1	0.5	0.5	0.5	0.5	1	1	1	1	1.57

Matrix	Fraction	Units	Location	Collected	1,1,2,2-TETRACHLOROETHANE	D_1,1,2,2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	D_1,1,2-TRICHLOROETHANE	1,2-DICHLOROETHANE	D_1,2-DICHLOROETHANE
WG	T	UG_L	P07-02	9/26/2016	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-03	10/7/2014	0.5	0	1	0	0.5	0
WG	T	UG_L	P07-03	9/26/2016	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-04	10/6/2014	1.6	1	1	0	0.5	0
WG	T	UG_L	P07-04	9/26/2016	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-05	10/16/2013	0.5	0	0.5	0	0.5	0
WG	T	UG_L	P07-05	10/8/2014	0.74	1	1	0	0.83	1
WG	T	UG_L	P07-05	9/10/2015	0.5	0	1	0	0.5	0
WG	T	UG_L	P07-05	9/26/2016	0.5	0	0.5	0	1.2	1
WG	T	UG_L	P07-06	10/16/2013	0.5	0	0.5	0	2.2	1
WG	T	UG_L	P07-06	10/6/2014	0.5	0	1	0	1.9	1
WG	T	UG_L	P07-06	9/10/2015	0.5	0	1	0	0.5	0
WG	T	UG_L	P07-06	9/26/2016	0.5	0	0.5	0	1.8	1
WG	T	UG_L	P07-07	10/16/2013	99	1	14	1	0.5	0
WG	T	UG_L	P07-07	10/6/2014	77	1	10	1	0.5	0
WG	T	UG_L	P07-07	9/10/2015	17	1	2.5	1	0.5	0
WG	T	UG_L	P07-07	9/27/2016	44.6	1	7.8	1	1.4	0
WG	T	UG_L	P07-08	10/16/2013	70	1	11	1	0.5	0
WG	T	UG_L	P07-08	10/6/2014	2.3	1	1	0	0.5	0
WG	T	UG_L	P07-08	9/10/2015	8.2	1	2.1	1	0.5	0
WG	T	UG_L	P07-08	9/16/2016	75	1	13	1	1	0
WG	T	UG_L	P07-09	10/16/2013	180	1	49	1	2	1
WG	T	UG_L	P07-09	10/6/2014	170	1	38	1	1.6	1
WG	T	UG_L	P07-09	9/10/2015	47	1	9.7	1	0.5	0
WG	T	UG_L	P07-09	9/16/2016	110	1	19	1	1	0
WG	T	UG_L	P07-10	10/16/2013	18	1	6	1	0.5	0
WG	T	UG_L	P07-10	10/3/2014	8.5	1	4.5	1	0.5	0
WG	T	UG_L	P07-10	9/10/2015	5.9	1	3.1	1	0.5	0
WG	T	UG_L	P07-10	9/16/2016	15	1	2.9	1	1	0
WG	T	UG_L	P07-14	9/27/2016	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-15	10/17/2013	0.5	0	0.5	0	0.5	0
WG	T	UG_L	P07-15	10/7/2014	0.5	0	1	0	0.5	0
WG	T	UG_L	P07-15	9/10/2015	0.5	0	1	0	0.5	0
WG	T	UG_L	P07-15	9/27/2016	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-16	9/28/2016	0.3	0	0.4	0	2.5	1
WG	T	UG_L	P07-17	9/28/2016	0.3	0	0.4	0	0.3	0
WG	T	UG_L	P07-20	10/3/2014	0.5	0	1	0	0.5	0
WG	T	UG_L	P07-20	9/27/2016	0.7	1	0.4	1	0.6	1
WG	T	UG_L	P07-21	10/17/2013	4.2	1	1.8	1		
WG	T	UG_L	P07-21	10/3/2014	0.5	0	1	0	0.5	0
WG	T	UG_L	P07-21	9/10/2015	0.5	0	1	0	0.5	0
WG	T	UG_L	P07-21	9/27/2016	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-22	10/3/2014	3.5	1	1.8	1	0.5	0
WG	T	UG_L	P07-22	9/27/2016	0.8	1	0.5	0	1	0
WG	T	UG_L	P07-23	10/18/2013	5.2	1	1.4	1	0.5	0
WG	T	UG_L	P07-23	10/6/2014	0.55	1	1	0	0.5	0
WG	T	UG_L	P07-23	9/10/2015	1.2	1	1	0	0.5	0
WG	T	UG_L	P07-23	9/27/2016	0.3	0	0.4	0	0.3	0
WG	T	UG_L	P07-24	10/17/2013	1.2	1	0.46	1	0.5	0
WG	T	UG_L	P07-24	10/3/2014	0.5	0	1	0	0.5	0
WG	T	UG_L	P07-24	9/10/2015	0.5	0	1	0	0.5	0
WG	T	UG_L	P07-24	9/16/2016	1	0	1	0	1	0
WG	T	UG_L	P07-28	9/27/2016	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-29	9/27/2016	0.3	0	0.4	0	0.3	0

Matrix	Fraction	Units	Location	Collected	BENZENE	D_BENZENE	CHLOROFORM	D_CHLOROFORM	CIS-1,2-DICHLOROETHENE	D_CIS-1,2-DICHLOROETHENE	TRANS-1,2-DICHLOROETHENE	D_TRANS-1,2-DICHLOROETHENE
WG	T	UG_L	P07-02	9/26/2016	0.5	0	1	0	0.5	0	1	0
WG	T	UG_L	P07-03	10/7/2014	0.5	0	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-03	9/26/2016	0.5	0	1	0	0.5	0	1	0
WG	T	UG_L	P07-04	10/6/2014	0.5	0	0.5	0	1.2	1	1	0
WG	T	UG_L	P07-04	9/26/2016	0.5	0	1	0	0.5	0	1	0
WG	T	UG_L	P07-05	10/16/2013	0.5	0	0.5	0	0.64	1	0.5	0
WG	T	UG_L	P07-05	10/8/2014	0.5	0	0.5	0	32	1	16	1
WG	T	UG_L	P07-05	9/10/2015	0.5	0	0.5	0	5	1	15	1
WG	T	UG_L	P07-05	9/26/2016	0.5	0	1	0	68.9	1	21.5	1
WG	T	UG_L	P07-06	10/16/2013	0.5	0	0.5	0	120	1	26	1
WG	T	UG_L	P07-06	10/6/2014	0.5	0	0.5	0	93	1	20	1
WG	T	UG_L	P07-06	9/10/2015	0.5	0	0.5	0	47	1	14	1
WG	T	UG_L	P07-06	9/26/2016	0.5	0	1	0	87.2	1	21.6	1
WG	T	UG_L	P07-07	10/16/2013	0.5	0	0.5	0	440	1	26	1
WG	T	UG_L	P07-07	10/6/2014	0.5	0	0.5	0	330	1	21	1
WG	T	UG_L	P07-07	9/10/2015	0.5	0	0.5	0	140	1	8.4	1
WG	T	UG_L	P07-07	9/27/2016	1.4	0	2	0	260	1	19.8	1
WG	T	UG_L	P07-08	10/16/2013	0.5	0	0.5	0	93	1	2.1	1
WG	T	UG_L	P07-08	10/6/2014	0.5	0	0.5	0	5.8	1	1	0
WG	T	UG_L	P07-08	9/10/2015	0.5	0	0.5	0	1.6	1	1	0
WG	T	UG_L	P07-08	9/16/2016	1	0	1	0	160	1	7.1	1
WG	T	UG_L	P07-09	10/16/2013	0.5	0	0.66	1	1700	1	160	1
WG	T	UG_L	P07-09	10/6/2014	0.5	0	0.5	0	1400	1	120	1
WG	T	UG_L	P07-09	9/10/2015	0.5	0	0.5	0	440	1	36	1
WG	T	UG_L	P07-09	9/16/2016	1	0	1	0	1000	1	69	1
WG	T	UG_L	P07-10	10/16/2013	0.45	1	0.5	0	120	1	16	1
WG	T	UG_L	P07-10	10/3/2014	0.5	0	0.5	0	110	1	11	1
WG	T	UG_L	P07-10	9/10/2015	0.5	0	0.5	0	90	1	9.4	1
WG	T	UG_L	P07-10	9/16/2016	1	0	1	0	91	1	6.5	1
WG	T	UG_L	P07-14	9/27/2016	0.5	0	1	0	0.5	0	1	0
WG	T	UG_L	P07-15	10/17/2013	0.5	0	0.5	0	2	1	0.58	1
WG	T	UG_L	P07-15	10/7/2014	0.5	0	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-15	9/10/2015	0.5	0	0.5	0	2.1	1	1	0
WG	T	UG_L	P07-15	9/27/2016	0.5	0	1	0	1.3	1	0.6	1
WG	T	UG_L	P07-16	9/28/2016	0.3	0	0.4	0	1	1	0.5	1
WG	T	UG_L	P07-17	9/28/2016	0.3	0	0.4	0	0.3	0	0.3	0
WG	T	UG_L	P07-20	10/3/2014	0.5	0	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-20	9/27/2016	1.6	1	0.4	0	34.4	1	6.9	1
WG	T	UG_L	P07-21	10/17/2013					14	1	1.3	1
WG	T	UG_L	P07-21	10/3/2014	0.72	1	0.5	0	0.5	0	1.9	1
WG	T	UG_L	P07-21	9/10/2015	0.5	0	0.5	0	35	1	1.3	1
WG	T	UG_L	P07-21	9/27/2016	0.5	0	1	0	56.9	1	3.4	1
WG	T	UG_L	P07-22	10/3/2014	0.5	0	0.5	0	43	1	4.3	1
WG	T	UG_L	P07-22	9/27/2016	0.5	0	1	0	2.5	1	0.4	1
WG	T	UG_L	P07-23	10/18/2013	0.5	0	0.5	0	7.6	1	0.56	1
WG	T	UG_L	P07-23	10/6/2014	0.5	0	0.5	0	0.77	1	1	0
WG	T	UG_L	P07-23	9/10/2015	0.5	0	0.5	0	2.1	1	1	0
WG	T	UG_L	P07-23	9/27/2016	0.3	0	0.4	0	0.5	1	0.3	0
WG	T	UG_L	P07-24	10/17/2013	0.5	0	0.5	0	0.5	0	0.5	0
WG	T	UG_L	P07-24	10/3/2014	0.5	0	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-24	9/10/2015	0.5	0	0.5	0	0.5	0	1	0
WG	T	UG_L	P07-24	9/16/2016	1	0	1	0	1	0	2	0
WG	T	UG_L	P07-28	9/27/2016	0.5	0	1	0	0.5	0	1	0
WG	T	UG_L	P07-29	9/27/2016	0.3	0	0.4	0	0.3	0	0.3	0

Matrix	Fraction	Units	Location	Collected	TRICHLOROETHENE	D_TRICHLOROETHENE	VINYL CHLORIDE	D_VINYL CHLORIDE
WG	T	UG_L	P07-02	9/26/2016	1	0	1	0
WG	T	UG_L	P07-03	10/7/2014	2.5	1	0.5	0
WG	T	UG_L	P07-03	9/26/2016	1	0	1	0
WG	T	UG_L	P07-04	10/6/2014	1.3	1	0.5	0
WG	T	UG_L	P07-04	9/26/2016	1	0	1	0
WG	T	UG_L	P07-05	10/16/2013	0.5	0	1	0
WG	T	UG_L	P07-05	10/8/2014	2.7	1	27	1
WG	T	UG_L	P07-05	9/10/2015	0.5	0	12	1
WG	T	UG_L	P07-05	9/26/2016	1	0	49.7	1
WG	T	UG_L	P07-06	10/16/2013	0.9	1	48	1
WG	T	UG_L	P07-06	10/6/2014	0.85	1	35	1
WG	T	UG_L	P07-06	9/10/2015	0.5	0	32	1
WG	T	UG_L	P07-06	9/26/2016	1	0	45.8	1
WG	T	UG_L	P07-07	10/16/2013	200	1	12	1
WG	T	UG_L	P07-07	10/6/2014	190	1	3.2	1
WG	T	UG_L	P07-07	9/10/2015	31	1	2.1	1
WG	T	UG_L	P07-07	9/27/2016	151	1	2.6	0
WG	T	UG_L	P07-08	10/16/2013	69	1	0.73	1
WG	T	UG_L	P07-08	10/6/2014	14	1	0.5	0
WG	T	UG_L	P07-08	9/10/2015	2	1	0.5	0
WG	T	UG_L	P07-08	9/16/2016	250	1	2.5	1
WG	T	UG_L	P07-09	10/16/2013	1200	1	27	1
WG	T	UG_L	P07-09	10/6/2014	880	1	29	1
WG	T	UG_L	P07-09	9/10/2015	200	1	7.2	1
WG	T	UG_L	P07-09	9/16/2016	490	1	11	1
WG	T	UG_L	P07-10	10/16/2013	200	1	1.4	1
WG	T	UG_L	P07-10	10/3/2014	110	1	0.93	1
WG	T	UG_L	P07-10	9/10/2015	87	1	0.76	1
WG	T	UG_L	P07-10	9/16/2016	78	1	1	0
WG	T	UG_L	P07-14	9/27/2016	1	0	1	0
WG	T	UG_L	P07-15	10/17/2013	1.8	1	1	0
WG	T	UG_L	P07-15	10/7/2014	0.5	0	0.5	0
WG	T	UG_L	P07-15	9/10/2015	0.5	0	0.5	0
WG	T	UG_L	P07-15	9/27/2016	0.5	1	1	0
WG	T	UG_L	P07-16	9/28/2016	4.8	1	0.5	0
WG	T	UG_L	P07-17	9/28/2016	0.4	0	0.5	0
WG	T	UG_L	P07-20	10/3/2014	0.5	0	0.5	0
WG	T	UG_L	P07-20	9/27/2016	0.4	0	5.6	1
WG	T	UG_L	P07-21	10/17/2013	23	1		
WG	T	UG_L	P07-21	10/3/2014	0.7	1	1.2	1
WG	T	UG_L	P07-21	9/10/2015	2.5	1	0.5	0
WG	T	UG_L	P07-21	9/27/2016	5.2	1	0.7	1
WG	T	UG_L	P07-22	10/3/2014	53	1	0.5	0
WG	T	UG_L	P07-22	9/27/2016	4.4	1	1	0
WG	T	UG_L	P07-23	10/18/2013	29	1	1	0
WG	T	UG_L	P07-23	10/6/2014	3.2	1	0.5	0
WG	T	UG_L	P07-23	9/10/2015	9.4	1	0.5	0
WG	T	UG_L	P07-23	9/27/2016	1.8	1	0.5	0
WG	T	UG_L	P07-24	10/17/2013	1.2	1	1	0
WG	T	UG_L	P07-24	10/3/2014	0.81	1	0.5	0
WG	T	UG_L	P07-24	9/10/2015	0.5	0	0.5	0
WG	T	UG_L	P07-24	9/16/2016	1	0	1	0
WG	T	UG_L	P07-28	9/27/2016	1	0	1	0
WG	T	UG_L	P07-29	9/27/2016	0.4	0	0.5	0

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.13/7/2017 12:46:08 PM
From File	ProUCL GW SiteWide Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

1,1,2,2-TETRACHLOROETHANE

General Statistics

Total Number of Observations	54	Number of Distinct Observations	28
		Number of Missing Observations	333
Number of Detects	26	Number of Non-Detects	28
Number of Distinct Detects	25	Number of Distinct Non-Detects	3
Minimum Detect	0.55	Minimum Non-Detect	0.3
Maximum Detect	180	Maximum Non-Detect	1
Variance Detects	2758	Percent Non-Detects	51.85%
Mean Detects	37.2	SD Detects	52.52
Median Detects	8.35	CV Detects	1.412
Skewness Detects	1.628	Kurtosis Detects	1.92
Mean of Logged Detects	2.275	SD of Logged Detects	1.903

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.728	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.92	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.297	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.17	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	18.07	KM Standard Error of Mean	5.58
KM SD	40.21	95% KM (BCA) UCL	27.61
95% KM (t) UCL	27.41	95% KM (Percentile Bootstrap) UCL	27.75
95% KM (z) UCL	27.25	95% KM Bootstrap t UCL	31.41
90% KM Chebyshev UCL	34.81	95% KM Chebyshev UCL	42.39
97.5% KM Chebyshev UCL	52.92	99% KM Chebyshev UCL	73.59

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.819	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.813	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.16	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.182	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.477	k star (bias corrected MLE)	0.448
Theta hat (MLE)	77.96	Theta star (bias corrected MLE)	83.09
nu hat (MLE)	24.81	nu star (bias corrected)	23.28
Mean (detects)	37.2		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	17.92
Maximum	180	Median	0.01
SD	40.66	CV	2.269
k hat (MLE)	0.179	k star (bias corrected MLE)	0.182
Theta hat (MLE)	100	Theta star (bias corrected MLE)	98.69
nu hat (MLE)	19.35	nu star (bias corrected)	19.61
Adjusted Level of Significance (β)	0.0456		
Approximate Chi Square Value (19.61, α)	10.56	Adjusted Chi Square Value (19.61, β)	10.38
95% Gamma Approximate UCL (use when n>=50)	33.26	95% Gamma Adjusted UCL (use when n<50)	33.84

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	18.07	SD (KM)	40.21
Variance (KM)	1617	SE of Mean (KM)	5.58
k hat (KM)	0.202	k star (KM)	0.203
nu hat (KM)	21.8	nu star (KM)	21.93
theta hat (KM)	89.49	theta star (KM)	88.99
80% gamma percentile (KM)	23.99	90% gamma percentile (KM)	54.65
95% gamma percentile (KM)	92.73	99% gamma percentile (KM)	197.3

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (21.93, α)	12.28	Adjusted Chi Square Value (21.93, β)	12.08
95% Gamma Approximate KM-UCL (use when n>=50)	32.25	95% Gamma Adjusted KM-UCL (use when n<50)	32.78

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.928	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.92	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.134	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.17	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	17.99	Mean in Log Scale	-0.408
SD in Original Scale	40.62	SD in Log Scale	3.177
95% t UCL (assumes normality of ROS data)	27.24	95% Percentile Bootstrap UCL	27.45
95% BCA Bootstrap UCL	30.53	95% Bootstrap t UCL	31.47
95% H-UCL (Log ROS)	1118		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	0.473	KM Geo Mean	1.605
KM SD (logged)	2.167	95% Critical H Value (KM-Log)	3.902
KM Standard Error of Mean (logged)	0.301	95% H-UCL (KM -Log)	53.63
KM SD (logged)	2.167	95% Critical H Value (KM-Log)	3.902
KM Standard Error of Mean (logged)	0.301		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	18.04	Mean in Log Scale	0.352
SD in Original Scale	40.6	SD in Log Scale	2.289
95% t UCL (Assumes normality)	27.29	95% H-Stat UCL	70.7

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL	32.25

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

1,1,2-TRICHLOROETHANE

General Statistics

Total Number of Observations	54	Number of Distinct Observations	21
		Number of Missing Observations	333
Number of Detects	20	Number of Non-Detects	34
Number of Distinct Detects	19	Number of Distinct Non-Detects	3
Minimum Detect	0.4	Minimum Non-Detect	0.4
Maximum Detect	49	Maximum Non-Detect	1
Variance Detects	161.7	Percent Non-Detects	62.96%
Mean Detects	9.923	SD Detects	12.71
Median Detects	5.25	CV Detects	1.281
Skewness Detects	2.204	Kurtosis Detects	4.763
Mean of Logged Detects	1.584	SD of Logged Detects	1.306

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.709	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.905	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.227	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.192	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	3.933	KM Standard Error of Mean	1.233
KM SD	8.831	95% KM (BCA) UCL	6.202
95% KM (t) UCL	5.997	95% KM (Percentile Bootstrap) UCL	6.181
95% KM (z) UCL	5.961	95% KM Bootstrap t UCL	7.582
90% KM Chebyshev UCL	7.632	95% KM Chebyshev UCL	9.307
97.5% KM Chebyshev UCL	11.63	99% KM Chebyshev UCL	16.2

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.37	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.776	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.141	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.201	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.83	k star (bias corrected MLE)	0.739
Theta hat (MLE)	11.95	Theta star (bias corrected MLE)	13.42
nu hat (MLE)	33.22	nu star (bias corrected)	29.57
Mean (detects)	9.923		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	3.681
Maximum	49	Median	0.01
SD	9.017	CV	2.449
k hat (MLE)	0.203	k star (bias corrected MLE)	0.204
Theta hat (MLE)	18.13	Theta star (bias corrected MLE)	18.04
nu hat (MLE)	21.93	nu star (bias corrected)	22.04
Adjusted Level of Significance (β)	0.0456		
Approximate Chi Square Value (22.04, α)	12.37	Adjusted Chi Square Value (22.04, β)	12.17
95% Gamma Approximate UCL (use when n>=50)	6.56	95% Gamma Adjusted UCL (use when n<50)	6.668

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	3.933	SD (KM)	8.831
Variance (KM)	77.99	SE of Mean (KM)	1.233
k hat (KM)	0.198	k star (KM)	0.2
nu hat (KM)	21.42	nu star (KM)	21.56
theta hat (KM)	19.83	theta star (KM)	19.7
80% gamma percentile (KM)	5.177	90% gamma percentile (KM)	11.89
95% gamma percentile (KM)	20.27	99% gamma percentile (KM)	43.35

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (21.56, α)	12.01	Adjusted Chi Square Value (21.56, β)	11.81
95% Gamma Approximate KM-UCL (use when n>=50)	7.06	95% Gamma Adjusted KM-UCL (use when n<50)	7.177

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.973	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.905	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.101	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.192	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	3.835	Mean in Log Scale	-0.754
SD in Original Scale	8.956	SD in Log Scale	2.267
95% t UCL (assumes normality of ROS data)	5.876	95% Percentile Bootstrap UCL	5.863
95% BCA Bootstrap UCL	6.667	95% Bootstrap t UCL	7.987
95% H-UCL (Log ROS)	21.8		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	0.0226	KM Geo Mean	1.023
KM SD (logged)	1.426	95% Critical H Value (KM-Log)	2.896
KM Standard Error of Mean (logged)	0.2	95% H-UCL (KM -Log)	4.99
KM SD (logged)	1.426	95% Critical H Value (KM-Log)	2.896
KM Standard Error of Mean (logged)	0.2		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	3.908	Mean in Log Scale	-0.0846
SD in Original Scale	8.925	SD in Log Scale	1.54
95% t UCL (Assumes normality)	5.941	95% H-Stat UCL	5.714

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL	7.06

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

1,2-DICHLOROETHANE

General Statistics

Total Number of Observations	53	Number of Distinct Observations	13
		Number of Missing Observations	334
Number of Detects	9	Number of Non-Detects	44
Number of Distinct Detects	9	Number of Distinct Non-Detects	4
Minimum Detect	0.6	Minimum Non-Detect	0.3
Maximum Detect	2.5	Maximum Non-Detect	1.4
Variance Detects	0.401	Percent Non-Detects	83.02%
Mean Detects	1.626	SD Detects	0.633
Median Detects	1.8	CV Detects	0.389
Skewness Detects	-0.458	Kurtosis Detects	-0.805
Mean of Logged Detects	0.398	SD of Logged Detects	0.477

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.955	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.829	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.164	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.274	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.532	KM Standard Error of Mean	0.0814
KM SD	0.555	95% KM (BCA) UCL	0.7
95% KM (t) UCL	0.668	95% KM (Percentile Bootstrap) UCL	0.69
95% KM (z) UCL	0.666	95% KM Bootstrap t UCL	0.683
90% KM Chebyshev UCL	0.776	95% KM Chebyshev UCL	0.886
97.5% KM Chebyshev UCL	1.04	99% KM Chebyshev UCL	1.342

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.417	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.723	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.207	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.28	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	5.858	k star (bias corrected MLE)	3.98
Theta hat (MLE)	0.277	Theta star (bias corrected MLE)	0.408
nu hat (MLE)	105.4	nu star (bias corrected)	71.63
Mean (detects)	1.626		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.36
Maximum	2.5	Median	0.01
SD	0.653	CV	1.815
k hat (MLE)	0.336	k star (bias corrected MLE)	0.33
Theta hat (MLE)	1.071	Theta star (bias corrected MLE)	1.092
nu hat (MLE)	35.62	nu star (bias corrected)	34.94
Adjusted Level of Significance (β)	0.0455		
Approximate Chi Square Value (34.94, α)	22.42	Adjusted Chi Square Value (34.94, β)	22.14
95% Gamma Approximate UCL (use when n>=50)	0.561	95% Gamma Adjusted UCL (use when n<50)	0.568

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.532	SD (KM)	0.555
Variance (KM)	0.308	SE of Mean (KM)	0.0814
k hat (KM)	0.917	k star (KM)	0.877
nu hat (KM)	97.17	nu star (KM)	93
theta hat (KM)	0.58	theta star (KM)	0.606
80% gamma percentile (KM)	0.864	90% gamma percentile (KM)	1.264
95% gamma percentile (KM)	1.668	99% gamma percentile (KM)	2.617

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (93.00, α)	71.76	Adjusted Chi Square Value (93.00, β)	71.24
95% Gamma Approximate KM-UCL (use when n>=50)	0.689	95% Gamma Adjusted KM-UCL (use when n<50)	0.694

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.89	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.227	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.515	Mean in Log Scale	-1.173
SD in Original Scale	0.591	SD in Log Scale	1.011
95% t UCL (assumes normality of ROS data)	0.651	95% Percentile Bootstrap UCL	0.65
95% BCA Bootstrap UCL	0.67	95% Bootstrap t UCL	0.683
95% H-UCL (Log ROS)	0.715		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-0.919	KM Geo Mean	0.399
KM SD (logged)	0.633	95% Critical H Value (KM-Log)	1.975
KM Standard Error of Mean (logged)	0.094	95% H-UCL (KM -Log)	0.58
KM SD (logged)	0.633	95% Critical H Value (KM-Log)	1.975
KM Standard Error of Mean (logged)	0.094		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.543	Mean in Log Scale	-0.936
SD in Original Scale	0.566	SD in Log Scale	0.725
95% t UCL (Assumes normality)	0.673	95% H-Stat UCL	0.627

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.668

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

BENZENE

General Statistics

Total Number of Observations	53	Number of Distinct Observations	7
		Number of Missing Observations	334
Number of Detects	3	Number of Non-Detects	50
Number of Distinct Detects	3	Number of Distinct Non-Detects	4
Minimum Detect	0.45	Minimum Non-Detect	0.3
Maximum Detect	1.6	Maximum Non-Detect	1.4
Variance Detects	0.362	Percent Non-Detects	94.34%
Mean Detects	0.923	SD Detects	0.601
Median Detects	0.72	CV Detects	0.651
Skewness Detects	1.348	Kurtosis Detects	N/A
Mean of Logged Detects	-0.219	SD of Logged Detects	0.641

Warning: Data set has only 3 Detected Values.
This is not enough to compute meaningful or reliable statistics and estimates.

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.914	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.767	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.299	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.425	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.362	KM Standard Error of Mean	0.0439
KM SD	0.19	95% KM (BCA) UCL	N/A
95% KM (t) UCL	0.436	95% KM (Percentile Bootstrap) UCL	N/A
95% KM (z) UCL	0.434	95% KM Bootstrap t UCL	N/A
90% KM Chebyshev UCL	0.494	95% KM Chebyshev UCL	0.553
97.5% KM Chebyshev UCL	0.636	99% KM Chebyshev UCL	0.799

Gamma GOF Tests on Detected Observations Only

Not Enough Data to Perform GOF Test

Gamma Statistics on Detected Data Only

k hat (MLE)	3.75	k star (bias corrected MLE)	N/A
Theta hat (MLE)	0.246	Theta star (bias corrected MLE)	N/A
nu hat (MLE)	22.5	nu star (bias corrected)	N/A
Mean (detects)	0.923		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.115
Maximum	1.6	Median	0.01
SD	0.272	CV	2.353
k hat (MLE)	0.408	k star (bias corrected MLE)	0.397
Theta hat (MLE)	0.283	Theta star (bias corrected MLE)	0.291
nu hat (MLE)	43.2	nu star (bias corrected)	42.09
Adjusted Level of Significance (β)	0.0455		
Approximate Chi Square Value (42.09, α)	28.22	Adjusted Chi Square Value (42.09, β)	27.9
95% Gamma Approximate UCL (use when n>=50)	0.172	95% Gamma Adjusted UCL (use when n<50)	N/A

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.362	SD (KM)	0.19
Variance (KM)	0.036	SE of Mean (KM)	0.0439
k hat (KM)	3.639	k star (KM)	3.445
nu hat (KM)	385.7	nu star (KM)	365.2
theta hat (KM)	0.0995	theta star (KM)	0.105
80% gamma percentile (KM)	0.508	90% gamma percentile (KM)	0.624
95% gamma percentile (KM)	0.731	99% gamma percentile (KM)	0.961

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (365.21, α)	321.9	Adjusted Chi Square Value (365.21, β)	320.8
95% Gamma Approximate KM-UCL (use when n>=50)	0.411	95% Gamma Adjusted KM-UCL (use when n<50)	0.412

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.978	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.767	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.234	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.425	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.217	Mean in Log Scale	-1.933
SD in Original Scale	0.249	SD in Log Scale	0.887
95% t UCL (assumes normality of ROS data)	0.274	95% Percentile Bootstrap UCL	0.276
95% BCA Bootstrap UCL	0.295	95% Bootstrap t UCL	0.31
95% H-UCL (Log ROS)	0.281		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-1.076	KM Geo Mean	0.341
KM SD (logged)	0.29	95% Critical H Value (KM-Log)	1.712
KM Standard Error of Mean (logged)	0.0948	95% H-UCL (KM -Log)	0.381
KM SD (logged)	0.29	95% Critical H Value (KM-Log)	1.712
KM Standard Error of Mean (logged)	0.0948		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.308	Mean in Log Scale	-1.287
SD in Original Scale	0.215	SD in Log Scale	0.402
95% t UCL (Assumes normality)	0.357	95% H-Stat UCL	0.331

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.436

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

CIS-1,2-DICHLOROETHENE

General Statistics

Total Number of Observations	54	Number of Distinct Observations	36
		Number of Missing Observations	333
Number of Detects	39	Number of Non-Detects	15
Number of Distinct Detects	35	Number of Distinct Non-Detects	3
Minimum Detect	0.5	Minimum Non-Detect	0.3
Maximum Detect	1700	Maximum Non-Detect	1
Variance Detects	139112	Percent Non-Detects	27.78%
Mean Detects	180.5	SD Detects	373
Median Detects	47	CV Detects	2.066
Skewness Detects	3.103	Kurtosis Detects	9.522
Mean of Logged Detects	3.309	SD of Logged Detects	2.337

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.523	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.939	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.342	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.14	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	130.4	KM Standard Error of Mean	44.55
KM SD	323.1	95% KM (BCA) UCL	208.9
95% KM (t) UCL	205	95% KM (Percentile Bootstrap) UCL	207.5
95% KM (z) UCL	203.7	95% KM Bootstrap t UCL	274.5
90% KM Chebyshev UCL	264.1	95% KM Chebyshev UCL	324.6
97.5% KM Chebyshev UCL	408.6	99% KM Chebyshev UCL	573.7

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.018	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.845	Detected Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.136	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.152	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.355	k star (bias corrected MLE)	0.345
Theta hat (MLE)	507.8	Theta star (bias corrected MLE)	522.8
nu hat (MLE)	27.73	nu star (bias corrected)	26.93
Mean (detects)	180.5		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	130.4
Maximum	1700	Median	5.4
SD	326.2	CV	2.502
k hat (MLE)	0.196	k star (bias corrected MLE)	0.198
Theta hat (MLE)	664.1	Theta star (bias corrected MLE)	659.3
nu hat (MLE)	21.2	nu star (bias corrected)	21.36
Adjusted Level of Significance (β)	0.0456		
Approximate Chi Square Value (21.36, α)	11.86	Adjusted Chi Square Value (21.36, β)	11.66
95% Gamma Approximate UCL (use when n>=50)	234.8	95% Gamma Adjusted UCL (use when n<50)	238.7

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	130.4	SD (KM)	323.1
Variance (KM)	104408	SE of Mean (KM)	44.55
k hat (KM)	0.163	k star (KM)	0.166
nu hat (KM)	17.6	nu star (KM)	17.96
theta hat (KM)	800.4	theta star (KM)	784.5
80% gamma percentile (KM)	153.6	90% gamma percentile (KM)	391.3
95% gamma percentile (KM)	702.8	99% gamma percentile (KM)	1589

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (17.96, α)	9.36	Adjusted Chi Square Value (17.96, β)	9.189
95% Gamma Approximate KM-UCL (use when n>=50)	250.3	95% Gamma Adjusted KM-UCL (use when n<50)	254.9

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.931	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.939	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.142	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.14	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	130.4	Mean in Log Scale	1.827
SD in Original Scale	326.2	SD in Log Scale	3.189
95% t UCL (assumes normality of ROS data)	204.7	95% Percentile Bootstrap UCL	209.6
95% BCA Bootstrap UCL	223.2	95% Bootstrap t UCL	265.7
95% H-UCL (Log ROS)	11055		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	2.058	KM Geo Mean	7.828
KM SD (logged)	2.814	95% Critical H Value (KM-Log)	4.927
KM Standard Error of Mean (logged)	0.388	95% H-UCL (KM -Log)	2751
KM SD (logged)	2.814	95% Critical H Value (KM-Log)	4.927
KM Standard Error of Mean (logged)	0.388		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	130.4	Mean in Log Scale	1.999
SD in Original Scale	326.2	SD in Log Scale	2.913
95% t UCL (Assumes normality)	204.7	95% H-Stat UCL	3898

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL	250.3

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

TRANS-1,2-DICHLOROETHENE

General Statistics

Total Number of Observations	54	Number of Distinct Observations	32
		Number of Missing Observations	333
Number of Detects	32	Number of Non-Detects	22
Number of Distinct Detects	29	Number of Distinct Non-Detects	4
Minimum Detect	0.4	Minimum Non-Detect	0.3
Maximum Detect	160	Maximum Non-Detect	2
Variance Detects	1194	Percent Non-Detects	40.74%
Mean Detects	20.88	SD Detects	34.56
Median Detects	10.2	CV Detects	1.655
Skewness Detects	3.075	Kurtosis Detects	9.82
Mean of Logged Detects	2.004	SD of Logged Detects	1.618

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.579	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.93	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.316	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.154	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	12.54	KM Standard Error of Mean	3.878
KM SD	28.05	95% KM (BCA) UCL	20
95% KM (t) UCL	19.03	95% KM (Percentile Bootstrap) UCL	19.21
95% KM (z) UCL	18.91	95% KM Bootstrap t UCL	26.02
90% KM Chebyshev UCL	24.17	95% KM Chebyshev UCL	29.44
97.5% KM Chebyshev UCL	36.75	99% KM Chebyshev UCL	51.12

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.661	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.802	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.147	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.163	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.598	k star (bias corrected MLE)	0.562
Theta hat (MLE)	34.94	Theta star (bias corrected MLE)	37.13
nu hat (MLE)	38.24	nu star (bias corrected)	35.99
Mean (detects)	20.88		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	12.38
Maximum	160	Median	0.95
SD	28.38	CV	2.293
k hat (MLE)	0.225	k star (bias corrected MLE)	0.225
Theta hat (MLE)	54.92	Theta star (bias corrected MLE)	54.96
nu hat (MLE)	24.34	nu star (bias corrected)	24.32
Adjusted Level of Significance (β)	0.0456		
Approximate Chi Square Value (24.32, α)	14.09	Adjusted Chi Square Value (24.32, β)	13.88
95% Gamma Approximate UCL (use when n>=50)	21.36	95% Gamma Adjusted UCL (use when n<50)	21.69

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	12.54	SD (KM)	28.05
Variance (KM)	786.8	SE of Mean (KM)	3.878
k hat (KM)	0.2	k star (KM)	0.201
nu hat (KM)	21.57	nu star (KM)	21.71
theta hat (KM)	62.76	theta star (KM)	62.37
80% gamma percentile (KM)	16.56	90% gamma percentile (KM)	37.92
95% gamma percentile (KM)	64.51	99% gamma percentile (KM)	137.7

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (21.71, α)	12.12	Adjusted Chi Square Value (21.71, β)	11.92
95% Gamma Approximate KM-UCL (use when n>=50)	22.45	95% Gamma Adjusted KM-UCL (use when n<50)	22.83

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.944	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.93	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.124	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.154	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	12.54	Mean in Log Scale	0.589
SD in Original Scale	28.31	SD in Log Scale	2.25
95% t UCL (assumes normality of ROS data)	18.99	95% Percentile Bootstrap UCL	19.46
95% BCA Bootstrap UCL	21.68	95% Bootstrap t UCL	26.62
95% H-UCL (Log ROS)	78.82		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	0.794	KM Geo Mean	2.213
KM SD (logged)	1.915	95% Critical H Value (KM-Log)	3.535
KM Standard Error of Mean (logged)	0.268	95% H-UCL (KM -Log)	35.09
KM SD (logged)	1.915	95% Critical H Value (KM-Log)	3.535
KM Standard Error of Mean (logged)	0.268		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	12.56	Mean in Log Scale	0.826
SD in Original Scale	28.3	SD in Log Scale	1.919
95% t UCL (Assumes normality)	19.01	95% H-Stat UCL	36.61

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL	22.45

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

TRICHLOROETHENE

General Statistics

Total Number of Observations	54	Number of Distinct Observations	34
		Number of Missing Observations	333
Number of Detects	36	Number of Non-Detects	18
Number of Distinct Detects	32	Number of Distinct Non-Detects	3
Minimum Detect	0.5	Minimum Non-Detect	0.4
Maximum Detect	1200	Maximum Non-Detect	1
Variance Detects	63371	Percent Non-Detects	33.33%
Mean Detects	119.5	SD Detects	251.7
Median Detects	11.7	CV Detects	2.107
Skewness Detects	3.269	Kurtosis Detects	11.26
Mean of Logged Detects	2.716	SD of Logged Detects	2.327

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.529	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.935	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.318	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.145	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	79.81	KM Standard Error of Mean	29.02
KM SD	210.3	95% KM (BCA) UCL	139.3
95% KM (t) UCL	128.4	95% KM (Percentile Bootstrap) UCL	130.5
95% KM (z) UCL	127.5	95% KM Bootstrap t UCL	177.1
90% KM Chebyshev UCL	166.9	95% KM Chebyshev UCL	206.3
97.5% KM Chebyshev UCL	261.1	99% KM Chebyshev UCL	368.6

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.517	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.85	Detected Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.196	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.159	Detected Data Not Gamma Distributed at 5% Significance Level	

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.329	k star (bias corrected MLE)	0.32
Theta hat (MLE)	363.6	Theta star (bias corrected MLE)	373.7
nu hat (MLE)	23.66	nu star (bias corrected)	23.02
Mean (detects)	119.5		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	79.66
Maximum	1200	Median	1.9
SD	212.3	CV	2.665
k hat (MLE)	0.182	k star (bias corrected MLE)	0.184
Theta hat (MLE)	437.7	Theta star (bias corrected MLE)	432.4
nu hat (MLE)	19.66	nu star (bias corrected)	19.9
Adjusted Level of Significance (β)	0.0456		
Approximate Chi Square Value (19.90, α)	10.78	Adjusted Chi Square Value (19.90, β)	10.59
95% Gamma Approximate UCL (use when n>=50)	147.1	95% Gamma Adjusted UCL (use when n<50)	149.7

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	79.81	SD (KM)	210.3
Variance (KM)	44222	SE of Mean (KM)	29.02
k hat (KM)	0.144	k star (KM)	0.148
nu hat (KM)	15.56	nu star (KM)	16.02
theta hat (KM)	554.1	theta star (KM)	537.9
80% gamma percentile (KM)	86.1	90% gamma percentile (KM)	236.3
95% gamma percentile (KM)	440.2	99% gamma percentile (KM)	1033

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (16.02, α)	7.98	Adjusted Chi Square Value (16.02, β)	7.823
95% Gamma Approximate KM-UCL (use when n>=50)	160.3	95% Gamma Adjusted KM-UCL (use when n<50)	163.5

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.921	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.935	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.149	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.145	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	79.71	Mean in Log Scale	0.94
SD in Original Scale	212.3	SD in Log Scale	3.268
95% t UCL (assumes normality of ROS data)	128.1	95% Percentile Bootstrap UCL	129.6
95% BCA Bootstrap UCL	143.5	95% Bootstrap t UCL	184.1
95% H-UCL (Log ROS)	6553		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	1.535	KM Geo Mean	4.642
KM SD (logged)	2.513	95% Critical H Value (KM-Log)	4.479
KM Standard Error of Mean (logged)	0.347	95% H-UCL (KM -Log)	512.2
KM SD (logged)	2.513	95% Critical H Value (KM-Log)	4.479
KM Standard Error of Mean (logged)	0.347		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	79.78	Mean in Log Scale	1.439
SD in Original Scale	212.3	SD in Log Scale	2.636
95% t UCL (Assumes normality)	128.1	95% H-Stat UCL	737.4

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 206.3

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

VINYL CHLORIDE

General Statistics

Total Number of Observations	53	Number of Distinct Observations	23
		Number of Missing Observations	334
Number of Detects	22	Number of Non-Detects	31
Number of Distinct Detects	20	Number of Distinct Non-Detects	3
Minimum Detect	0.7	Minimum Non-Detect	0.5
Maximum Detect	49.7	Maximum Non-Detect	2.6
Variance Detects	296	Percent Non-Detects	58.49%
Mean Detects	16.13	SD Detects	17.2
Median Detects	9.1	CV Detects	1.067
Skewness Detects	0.835	Kurtosis Detects	-0.759
Mean of Logged Detects	1.908	SD of Logged Detects	1.554

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.823	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.911	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.231	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.184	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	7.004	KM Standard Error of Mean	1.867
KM SD	13.28	95% KM (BCA) UCL	10.22
95% KM (t) UCL	10.13	95% KM (Percentile Bootstrap) UCL	10.24
95% KM (z) UCL	10.08	95% KM Bootstrap t UCL	10.89
90% KM Chebyshev UCL	12.61	95% KM Chebyshev UCL	15.14
97.5% KM Chebyshev UCL	18.66	99% KM Chebyshev UCL	25.58

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.766	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.788	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.168	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.193	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.693	k star (bias corrected MLE)	0.629
Theta hat (MLE)	23.26	Theta star (bias corrected MLE)	25.64
nu hat (MLE)	30.5	nu star (bias corrected)	27.68
Mean (detects)	16.13		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	6.701
Maximum	49.7	Median	0.01
SD	13.56	CV	2.023
k hat (MLE)	0.194	k star (bias corrected MLE)	0.196
Theta hat (MLE)	34.48	Theta star (bias corrected MLE)	34.2
nu hat (MLE)	20.6	nu star (bias corrected)	20.77
Adjusted Level of Significance (β)	0.0455		
Approximate Chi Square Value (20.77, α)	11.42	Adjusted Chi Square Value (20.77, β)	11.22
95% Gamma Approximate UCL (use when n>=50)	12.19	95% Gamma Adjusted UCL (use when n<50)	12.4

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	7.004	SD (KM)	13.28
Variance (KM)	176.4	SE of Mean (KM)	1.867
k hat (KM)	0.278	k star (KM)	0.275
nu hat (KM)	29.48	nu star (KM)	29.14
theta hat (KM)	25.18	theta star (KM)	25.47
80% gamma percentile (KM)	10.49	90% gamma percentile (KM)	20.85
95% gamma percentile (KM)	32.93	99% gamma percentile (KM)	64.68

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (29.14, α)	17.82	Adjusted Chi Square Value (29.14, β)	17.57
95% Gamma Approximate KM-UCL (use when n>=50)	11.45	95% Gamma Adjusted KM-UCL (use when n<50)	11.62

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.896	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.911	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.178	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.184	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	6.832	Mean in Log Scale	-0.544
SD in Original Scale	13.49	SD in Log Scale	2.586
95% t UCL (assumes normality of ROS data)	9.936	95% Percentile Bootstrap UCL	10.13
95% BCA Bootstrap UCL	10.51	95% Bootstrap t UCL	10.98
95% H-UCL (Log ROS)	82.68		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	0.411	KM Geo Mean	1.508
KM SD (logged)	1.6	95% Critical H Value (KM-Log)	3.077
KM Standard Error of Mean (logged)	0.226	95% H-UCL (KM -Log)	10.73
KM SD (logged)	1.6	95% Critical H Value (KM-Log)	3.077
KM Standard Error of Mean (logged)	0.226		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	6.922	Mean in Log Scale	0.182
SD in Original Scale	13.45	SD in Log Scale	1.797
95% t UCL (Assumes normality)	10.02	95% H-Stat UCL	13.86

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Approximate Gamma UCL	11.45

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.13/7/2017 12:55:45 PM

User Selected Options

From File ProUCL GW SiteWide Input.xls

Full Precision OFF

From File: ProUCL GW SiteWide Input.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
ETRACHLOROETHANE	54	333	26	28	51.85%	0.3	1	18.07	1617	40.21	2.226
2-TRICHLOROETHANE	54	333	20	34	62.96%	0.4	1	3.933	77.99	8.831	2.246
I,2-DICHLOROETHANE	53	334	9	44	83.02%	0.3	1.4	0.532	0.308	0.555	1.044
BENZENE	53	334	3	50	94.34%	0.3	1.4	0.362	0.036	0.19	0.524
CHLOROFORM	53	334	1	52	98.11%	0.4	2	0.407	0.00173	0.0416	0.102
I,2-DICHLOROETHENE	54	333	39	15	27.78%	0.3	1	130.4	104408	323.1	2.477
I,2-DICHLOROETHENE	54	333	32	22	40.74%	0.3	2	12.54	786.8	28.05	2.238
TRICHLOROETHENE	54	333	36	18	33.33%	0.4	1	79.81	44222	210.3	2.635
VINYL CHLORIDE	53	334	22	31	58.49%	0.5	2.6	7.004	176.4	13.28	1.896

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
ETRACHLOROETHANE	26	333	0.55	180	37.2	8.35	2758	52.52	11.31	1.628	1.412
2-TRICHLOROETHANE	20	333	0.4	49	9.923	5.25	161.7	12.71	6.153	2.204	1.281
I,2-DICHLOROETHANE	9	334	0.6	2.5	1.626	1.8	0.401	0.633	0.593	-0.458	0.389
BENZENE	3	334	0.45	1.6	0.923	0.72	0.362	0.601	0.4	1.348	0.651
CHLOROFORM	1	334	0.66	0.66	0.66	0.66	N/A	N/A	0	N/A	N/A
I,2-DICHLOROETHENE	39	333	0.5	1700	180.5	47	139112	373	67.75	3.103	2.066
I,2-DICHLOROETHENE	32	333	0.4	160	20.88	10.2	1194	34.56	13.71	3.075	1.655
TRICHLOROETHENE	36	333	0.5	1200	119.5	11.7	63371	251.7	16.46	3.269	2.107
VINYL CHLORIDE	22	334	0.7	49.7	16.13	9.1	296	17.2	12.24	0.835	1.067

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
ETRACHLOROETHANE	54	333	0.5	0.5	0.5	0.525	7.625	15.8	73.5	102.9	174.7
2-TRICHLOROETHANE	54	333	0.472	0.5	0.5	1	2.4	3.66	10.7	15.75	43.17
I,2-DICHLOROETHANE	53	334	0.5	0.5	0.5	0.5	1	1	1.56	1.94	2.344
BENZENE	53	334	0.5	0.5	0.5	0.5	0.5	0.5	0.944	1	1.496
CHLOROFORM	53	334	0.5	0.5	0.5	0.5	1	1	1	1	1.48
I,2-DICHLOROETHENE	54	333	0.5	0.5	0.5	5.4	92.5	114	309	636	1541
I,2-DICHLOROETHENE	54	333	0.5	1	1	1.3	14.75	17.52	24.68	47.55	138.8
TRICHLOROETHENE	54	333	0.5	0.62	0.863	1.9	47.5	81.6	200	334	1030
VINYL CHLORIDE	53	334	0.5	0.5	0.5	1	3.2	9.48	28.6	39.32	48.82

Matrix	Fraction	Units	Group-ID	Location	Collected	1,2-DICHLOROETHANE	D_1,2-DICHLOROETHANE	CIS-1,2-DICHLOROETHENE	D_CIS-1,2-DICHLOROETHENE	TRANS-1,2-DICHLOROETHENE	D_TRANS-1,2-DICHLOROETHENE
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-14	9/27/2016	1	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-15	10/17/2013	0.5	0	2	1	0.58	1
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-15	10/7/2014	0.5	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-15	9/10/2015	0.5	0	2.1	1	1	0
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-15	9/27/2016	1	0	1.3	1	0.6	1
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-16	9/28/2016	2.5	1	1	1	0.5	1
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-17	9/28/2016	0.3	0	0.3	0	0.3	0
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-28	9/27/2016	1	0	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-29	9/27/2016	0.3	0	0.3	0	0.3	0

Matrix	Fraction	Units	Group-ID	Location	Collected	TRICHLOROETHENE	D_TRICHLOROETHENE
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-14	9/27/2016	1	0
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-15	10/17/2013	1.8	1
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-15	10/7/2014	0.5	0
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-15	9/10/2015	0.5	0
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-15	9/27/2016	0.5	1
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-16	9/28/2016	4.8	1
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-17	9/28/2016	0.4	0
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-28	9/27/2016	1	0
WG	T	UG_L	RA_Site7_PZs_WesternBoundary	P07-29	9/27/2016	0.4	0

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.13/7/2017 1:33:30 PM

User Selected Options

From File ProUCL GW South_West Input_a.xls

Full Precision OFF

From File: ProUCL GW South_West Input_a.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
1,2-DICHLOROETHANE	9	0	1	8	88.89%	0.3	1	0.544	0.478	0.691	1.27
CIS-1,2-DICHLOROETHENE	9	0	4	5	55.56%	0.3	0.5	0.878	0.513	0.716	0.816
TRANS-1,2-DICHLOROETHENE	9	0	3	6	66.67%	0.3	1	0.456	0.0173	0.132	0.289
TRICHLOROETHENE	9	0	3	6	66.67%	0.4	1	1.06	1.935	1.391	1.312

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
1,2-DICHLOROETHANE	1	0	2.5	2.5	2.5	2.5	N/A	N/A	0	N/A	N/A
CIS-1,2-DICHLOROETHENE	4	0	1	2.1	1.6	1.65	0.287	0.535	0.593	-0.235	0.335
TRANS-1,2-DICHLOROETHENE	3	0	0.5	0.6	0.56	0.58	0.0028	0.0529	0.0297	-1.458	0.0945
TRICHLOROETHENE	3	0	0.5	4.8	2.367	1.8	4.863	2.205	1.927	1.08	0.932

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
1,2-DICHLOROETHANE	9	0	0.3	0.42	0.5	0.5	1	1	1.3	1.9	2.38
CIS-1,2-DICHLOROETHENE	9	0	0.3	0.42	0.5	0.5	1.3	1.58	2.02	2.06	2.092
TRANS-1,2-DICHLOROETHENE	9	0	0.3	0.42	0.5	0.6	1	1	1	1	1
TRICHLOROETHENE	9	0	0.4	0.46	0.5	0.5	1	1.32	2.4	3.6	4.56

Matrix	Fraction	Units	Group-ID	Location	Collected	1,1,2,2-TETRACHLOROETHANE	D_1,1,2,2-TETRACHLOROETHANE	1,1,2-TRICHLOROETHANE	D_1,1,2-TRICHLOROETHANE	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	10/16/2013	0.5	0	0.5	0	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	10/8/2014	0.74	1	1	0	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	9/10/2015	0.5	0	1	0	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	9/26/2016	0.5	0	0.5	0	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	10/16/2013	0.5	0	0.5	0	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	10/6/2014	0.5	0	1	0	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	9/10/2015	0.5	0	1	0	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	9/26/2016	0.5	0	0.5	0	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	10/16/2013	99	1	14	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	10/6/2014	77	1	10	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	9/10/2015	17	1	2.5	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	9/27/2016	44.6	1	7.8	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	10/16/2013	70	1	11	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	10/6/2014	2.3	1	1	0	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	9/10/2015	8.2	1	2.1	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	9/16/2016	75	1	13	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	10/16/2013	180	1	49	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	10/6/2014	170	1	38	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	9/10/2015	47	1	9.7	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	9/16/2016	110	1	19	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	10/16/2013	18	1	6	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	10/3/2014	8.5	1	4.5	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	9/10/2015	5.9	1	3.1	1	
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	9/16/2016	15	1	2.9	1	

Matrix	Fraction	Units	Group-ID	Location	Collected	1,2-DICHLOROETHANE	D_1,2-DICHLOROETHANE	BENZENE	D_BENZENE	CHLOROFORM	D_CHLOROFORM
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	10/16/2013	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	10/8/2014	0.83	1	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	9/10/2015	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	9/26/2016	1.2	1	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	10/16/2013	2.2	1	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	10/6/2014	1.9	1	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	9/10/2015	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	9/26/2016	1.8	1	0.5	0	1	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	10/16/2013	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	10/6/2014	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	9/10/2015	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	9/27/2016	1.4	0	1.4	0	2	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	10/16/2013	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	10/6/2014	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	9/10/2015	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	9/16/2016	1	0	1	0	1	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	10/16/2013	2	1	0.5	0	0.66	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	10/6/2014	1.6	1	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	9/10/2015	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	9/16/2016	1	0	1	0	1	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	10/16/2013	0.5	0	0.45	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	10/3/2014	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	9/10/2015	0.5	0	0.5	0	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	9/16/2016	1	0	1	0	1	0

Matrix	Fraction	Units	Group-ID	Location	Collected	CIS-1,2-DICHLOROETHENE	D_CIS-1,2-DICHLOROETHENE	TRANS-1,2-DICHLOROETHENE	D_TRANS-1,2-DICHLOROETHENE
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	10/16/2013	0.64	1	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	10/8/2014	32	1	16	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	9/10/2015	5	1	15	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	9/26/2016	68.9	1	21.5	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	10/16/2013	120	1	26	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	10/6/2014	93	1	20	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	9/10/2015	47	1	14	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	9/26/2016	87.2	1	21.6	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	10/16/2013	440	1	26	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	10/6/2014	330	1	21	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	9/10/2015	140	1	8.4	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	9/27/2016	260	1	19.8	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	10/16/2013	93	1	2.1	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	10/6/2014	5.8	1	1	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	9/10/2015	1.6	1	1	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	9/16/2016	160	1	7.1	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	10/16/2013	1700	1	160	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	10/6/2014	1400	1	120	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	9/10/2015	440	1	36	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	9/16/2016	1000	1	69	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	10/16/2013	120	1	16	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	10/3/2014	110	1	11	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	9/10/2015	90	1	9.4	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	9/16/2016	91	1	6.5	1

Matrix	Fraction	Units	Group-ID	Location	Collected	TRICHLOROETHENE	D_TRICHLOROETHENE
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	10/16/2013	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	10/8/2014	2.7	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	9/10/2015	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-05	9/26/2016	1	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	10/16/2013	0.9	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	10/6/2014	0.85	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	9/10/2015	0.5	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-06	9/26/2016	1	0
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	10/16/2013	200	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	10/6/2014	190	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	9/10/2015	31	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-07	9/27/2016	151	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	10/16/2013	69	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	10/6/2014	14	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	9/10/2015	2	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-08	9/16/2016	250	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	10/16/2013	1200	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	10/6/2014	880	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	9/10/2015	200	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-09	9/16/2016	490	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	10/16/2013	200	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	10/3/2014	110	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	9/10/2015	87	1
WG	T	UG_L	RA_Site7_PZs_MidSouthernBoundary	P07-10	9/16/2016	78	1

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	ProUCL 5.13/8/2017 1:52:20 PM
From File	ProUCL GW MidSouth Input_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

CIS-1,2-DICHLOROETHENE

General Statistics

Total Number of Observations	24	Number of Distinct Observations	21
		Number of Missing Observations	0
Minimum	0.64	Mean	284.8
Maximum	1700	Median	101.5
SD	447.3	Std. Error of Mean	91.31
Coefficient of Variation	1.571	Skewness	2.337

Normal GOF Test

Shapiro Wilk Test Statistic	0.626	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.916	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.318	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.177	Data Not Normal at 5% Significance Level	

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	441.3	95% Adjusted-CLT UCL (Chen-1995)	481.5
		95% Modified-t UCL (Johnson-1978)	448.6

Gamma GOF Test

A-D Test Statistic	0.663	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.804	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.17	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.188	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.526	k star (bias corrected MLE)	0.488
Theta hat (MLE)	541.2	Theta star (bias corrected MLE)	583.4
nu hat (MLE)	25.26	nu star (bias corrected)	23.43
MLE Mean (bias corrected)	284.8	MLE Sd (bias corrected)	407.6
		Approximate Chi Square Value (0.05)	13.42
Adjusted Level of Significance	0.0392	Adjusted Chi Square Value	12.89

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50)	497.3	95% Adjusted Gamma UCL (use when n<50)	517.9

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.909	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.916	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.211	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.177	Data Not Lognormal at 5% Significance Level	

Data Not Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-0.446	Mean of logged Data	4.454
Maximum of Logged Data	7.438	SD of logged Data	1.963

Assuming Lognormal Distribution

95% H-UCL	3071	90% Chebyshev (MVUE) UCL	1233
95% Chebyshev (MVUE) UCL	1572	97.5% Chebyshev (MVUE) UCL	2042
99% Chebyshev (MVUE) UCL	2965		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	435	95% Jackknife UCL	441.3
95% Standard Bootstrap UCL	431.5	95% Bootstrap-t UCL	571.9
95% Hall's Bootstrap UCL	1141	95% Percentile Bootstrap UCL	446.1
95% BCA Bootstrap UCL	488.3		
90% Chebyshev(Mean, Sd) UCL	558.7	95% Chebyshev(Mean, Sd) UCL	682.8
97.5% Chebyshev(Mean, Sd) UCL	855	99% Chebyshev(Mean, Sd) UCL	1193

Suggested UCL to Use

95% Adjusted Gamma UCL 517.9

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.13/8/2017 1:35:40 PM
From File	ProUCL GW MidSouth Input_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

1,1,2,2-TETRACHLOROETHANE

General Statistics

Total Number of Observations	24	Number of Distinct Observations	18
Number of Detects	17	Number of Non-Detects	7
Number of Distinct Detects	17	Number of Distinct Non-Detects	1
Minimum Detect	0.74	Minimum Non-Detect	0.5
Maximum Detect	180	Maximum Non-Detect	0.5
Variance Detects	3249	Percent Non-Detects	29.17%
Mean Detects	55.78	SD Detects	57
Median Detects	44.6	CV Detects	1.022
Skewness Detects	1.082	Kurtosis Detects	0.326
Mean of Logged Detects	3.245	SD of Logged Detects	1.561

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.852	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.892	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.217	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.207	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	39.66	KM Standard Error of Mean	11.13
KM SD	52.89	95% KM (BCA) UCL	58.28
95% KM (t) UCL	58.73	95% KM (Percentile Bootstrap) UCL	57.79
95% KM (z) UCL	57.96	95% KM Bootstrap t UCL	63.2
90% KM Chebyshev UCL	73.04	95% KM Chebyshev UCL	88.16
97.5% KM Chebyshev UCL	109.1	99% KM Chebyshev UCL	150.4

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.283	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.776	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.137	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.217	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.768	k star (bias corrected MLE)	0.672
Theta hat (MLE)	72.58	Theta star (bias corrected MLE)	82.99
nu hat (MLE)	26.13	nu star (bias corrected)	22.85
Mean (detects)	55.78		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	39.51
Maximum	180	Median	11.75
SD	54.13	CV	1.37
k hat (MLE)	0.259	k star (bias corrected MLE)	0.255
Theta hat (MLE)	152.3	Theta star (bias corrected MLE)	155.1
nu hat (MLE)	12.45	nu star (bias corrected)	12.23
Adjusted Level of Significance (β)	0.0392		
Approximate Chi Square Value (12.23, α)	5.379	Adjusted Chi Square Value (12.23, β)	5.062
95% Gamma Approximate UCL (use when n>=50)	89.84	95% Gamma Adjusted UCL (use when n<50)	95.47

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	39.66	SD (KM)	52.89
Variance (KM)	2797	SE of Mean (KM)	11.13
k hat (KM)	0.562	k star (KM)	0.52
nu hat (KM)	26.99	nu star (KM)	24.95
theta hat (KM)	70.54	theta star (KM)	76.3
80% gamma percentile (KM)	65.23	90% gamma percentile (KM)	106.4
95% gamma percentile (KM)	150.2	99% gamma percentile (KM)	257.6

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (24.95, α)	14.57	Adjusted Chi Square Value (24.95, β)	14.01
95% Gamma Approximate KM-UCL (use when n>=50)	67.9	95% Gamma Adjusted KM-UCL (use when n<50)	70.6

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.931	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.892	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.168	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.207	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	39.78	Mean in Log Scale	2.195
SD in Original Scale	53.93	SD in Log Scale	2.17
95% t UCL (assumes normality of ROS data)	58.65	95% Percentile Bootstrap UCL	58.66
95% BCA Bootstrap UCL	62.31	95% Bootstrap t UCL	65.66
95% H-UCL (Log ROS)	683.9		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	2.096	KM Geo Mean	8.136
KM SD (logged)	2.198	95% Critical H Value (KM-Log)	4.424
KM Standard Error of Mean (logged)	0.462	95% H-UCL (KM -Log)	690.9
KM SD (logged)	2.198	95% Critical H Value (KM-Log)	4.424
KM Standard Error of Mean (logged)	0.462		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	39.58	Mean in Log Scale	1.894
SD in Original Scale	54.08	SD in Log Scale	2.514
95% t UCL (Assumes normality)	58.5	95% H-Stat UCL	2121

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

ı Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1) 70.6

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

1,1,2-TRICHLOROETHANE

General Statistics

Total Number of Observations	24	Number of Distinct Observations	17
Number of Detects	15	Number of Non-Detects	9
Number of Distinct Detects	15	Number of Distinct Non-Detects	2
Minimum Detect	2.1	Minimum Non-Detect	0.5
Maximum Detect	49	Maximum Non-Detect	1
Variance Detects	182.8	Percent Non-Detects	37.5%
Mean Detects	12.84	SD Detects	13.52
Median Detects	9.7	CV Detects	1.053
Skewness Detects	1.938	Kurtosis Detects	3.346
Mean of Logged Detects	2.124	SD of Logged Detects	0.951

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.744	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.881	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.266	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.22	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	8.213	KM Standard Error of Mean	2.521
KM SD	11.93	95% KM (BCA) UCL	13
95% KM (t) UCL	12.53	95% KM (Percentile Bootstrap) UCL	12.76
95% KM (z) UCL	12.36	95% KM Bootstrap t UCL	16.49
90% KM Chebyshev UCL	15.77	95% KM Chebyshev UCL	19.2
97.5% KM Chebyshev UCL	23.95	99% KM Chebyshev UCL	33.29

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.443	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.757	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.147	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.226	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.307	k star (bias corrected MLE)	1.09
Theta hat (MLE)	9.822	Theta star (bias corrected MLE)	11.78
nu hat (MLE)	39.22	nu star (bias corrected)	32.71
Mean (detects)	12.84		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	8.029
Maximum	49	Median	3
SD	12.31	CV	1.533
k hat (MLE)	0.281	k star (bias corrected MLE)	0.273
Theta hat (MLE)	28.6	Theta star (bias corrected MLE)	29.36
nu hat (MLE)	13.48	nu star (bias corrected)	13.13
Adjusted Level of Significance (β)	0.0392		
Approximate Chi Square Value (13.13, α)	5.977	Adjusted Chi Square Value (13.13, β)	5.64
95% Gamma Approximate UCL (use when n>=50)	17.63	95% Gamma Adjusted UCL (use when n<50)	18.69

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	8.213	SD (KM)	11.93
Variance (KM)	142.3	SE of Mean (KM)	2.521
k hat (KM)	0.474	k star (KM)	0.442
nu hat (KM)	22.75	nu star (KM)	21.24
theta hat (KM)	17.33	theta star (KM)	18.56
80% gamma percentile (KM)	13.39	90% gamma percentile (KM)	22.77
95% gamma percentile (KM)	32.94	99% gamma percentile (KM)	58.26

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (21.24, α)	11.77	Adjusted Chi Square Value (21.24, β)	11.27
95% Gamma Approximate KM-UCL (use when n>=50)	14.82	95% Gamma Adjusted KM-UCL (use when n<50)	15.47

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.958	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.881	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.118	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.22	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	8.344	Mean in Log Scale	1.212
SD in Original Scale	12.1	SD in Log Scale	1.457
95% t UCL (assumes normality of ROS data)	12.58	95% Percentile Bootstrap UCL	12.51
95% BCA Bootstrap UCL	14.25	95% Bootstrap t UCL	16.87
95% H-UCL (Log ROS)	25.75		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	1.067	KM Geo Mean	2.908
KM SD (logged)	1.545	95% Critical H Value (KM-Log)	3.345
KM Standard Error of Mean (logged)	0.326	95% H-UCL (KM -Log)	28.17
KM SD (logged)	1.545	95% Critical H Value (KM-Log)	3.345
KM Standard Error of Mean (logged)	0.326		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	8.171	Mean in Log Scale	0.952
SD in Original Scale	12.21	SD in Log Scale	1.728
95% t UCL (Assumes normality)	12.44	95% H-Stat UCL	42.73

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Adjusted Gamma UCL	15.47	95% GROS Adjusted Gamma UCL	18.69

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

1,2-DICHLOROETHANE

General Statistics

Total Number of Observations	24	Number of Distinct Observations	10
Number of Detects	7	Number of Non-Detects	17
Number of Distinct Detects	7	Number of Distinct Non-Detects	3
Minimum Detect	0.83	Minimum Non-Detect	0.5
Maximum Detect	2.2	Maximum Non-Detect	1.4
Variance Detects	0.231	Percent Non-Detects	70.83%
Mean Detects	1.647	SD Detects	0.481
Median Detects	1.8	CV Detects	0.292
Skewness Detects	-0.845	Kurtosis Detects	-0.168
Mean of Logged Detects	0.454	SD of Logged Detects	0.343

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.934	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.196	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.304	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.84	KM Standard Error of Mean	0.127
KM SD	0.573	95% KM (BCA) UCL	1.065
95% KM (t) UCL	1.057	95% KM (Percentile Bootstrap) UCL	1.042
95% KM (z) UCL	1.049	95% KM Bootstrap t UCL	1.042
90% KM Chebyshev UCL	1.221	95% KM Chebyshev UCL	1.393
97.5% KM Chebyshev UCL	1.632	99% KM Chebyshev UCL	2.102

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.42	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.708	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.227	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.312	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	11.24	k star (bias corrected MLE)	6.517
Theta hat (MLE)	0.147	Theta star (bias corrected MLE)	0.253
nu hat (MLE)	157.3	nu star (bias corrected)	91.24
Mean (detects)	1.647		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.72
Maximum	2.2	Median	0.524
SD	0.704	CV	0.978
k hat (MLE)	0.629	k star (bias corrected MLE)	0.578
Theta hat (MLE)	1.145	Theta star (bias corrected MLE)	1.245
nu hat (MLE)	30.17	nu star (bias corrected)	27.74
Adjusted Level of Significance (β)	0.0392		
Approximate Chi Square Value (27.74, α)	16.72	Adjusted Chi Square Value (27.74, β)	16.12
95% Gamma Approximate UCL (use when n>=50)	1.193	95% Gamma Adjusted UCL (use when n<50)	1.238

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.84	SD (KM)	0.573
Variance (KM)	0.328	SE of Mean (KM)	0.127
k hat (KM)	2.149	k star (KM)	1.908
nu hat (KM)	103.2	nu star (KM)	91.6
theta hat (KM)	0.391	theta star (KM)	0.44
80% gamma percentile (KM)	1.265	90% gamma percentile (KM)	1.652
95% gamma percentile (KM)	2.023	99% gamma percentile (KM)	2.847

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (91.60, α)	70.53	Adjusted Chi Square Value (91.60, β)	69.23
95% Gamma Approximate KM-UCL (use when n>=50)	1.091	95% Gamma Adjusted KM-UCL (use when n<50)	1.112

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.876	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.233	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.304	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.872	Mean in Log Scale	-0.338
SD in Original Scale	0.589	SD in Log Scale	0.643
95% t UCL (assumes normality of ROS data)	1.078	95% Percentile Bootstrap UCL	1.075
95% BCA Bootstrap UCL	1.092	95% Bootstrap t UCL	1.116
95% H-UCL (Log ROS)	1.165		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-0.351	KM Geo Mean	0.704
KM SD (logged)	0.548	95% Critical H Value (KM-Log)	2.024
KM Standard Error of Mean (logged)	0.122	95% H-UCL (KM -Log)	1.032
KM SD (logged)	0.548	95% Critical H Value (KM-Log)	2.024
KM Standard Error of Mean (logged)	0.122		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.708	Mean in Log Scale	-0.72
SD in Original Scale	0.673	SD in Log Scale	0.841
95% t UCL (Assumes normality)	0.943	95% H-Stat UCL	1.045

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL	1.057

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

TRANS-1,2-DICHLOROETHENE

General Statistics

Total Number of Observations	24	Number of Distinct Observations	21
Number of Detects	21	Number of Non-Detects	3
Number of Distinct Detects	19	Number of Distinct Non-Detects	2
Minimum Detect	2.1	Minimum Non-Detect	0.5
Maximum Detect	160	Maximum Non-Detect	1
Variance Detects	1549	Percent Non-Detects	12.5%
Mean Detects	30.78	SD Detects	39.36
Median Detects	19.8	CV Detects	1.279
Skewness Detects	2.559	Kurtosis Detects	6.244
Mean of Logged Detects	2.933	SD of Logged Detects	0.972

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.614	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.908	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.358	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.188	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	27	KM Standard Error of Mean	7.802
KM SD	37.3	95% KM (BCA) UCL	41.39
95% KM (t) UCL	40.37	95% KM (Percentile Bootstrap) UCL	40.84
95% KM (z) UCL	39.83	95% KM Bootstrap t UCL	58.42
90% KM Chebyshev UCL	50.4	95% KM Chebyshev UCL	61
97.5% KM Chebyshev UCL	75.72	99% KM Chebyshev UCL	104.6

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.22	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.766	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.253	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.194	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.151	k star (bias corrected MLE)	1.018
Theta hat (MLE)	26.75	Theta star (bias corrected MLE)	30.23
nu hat (MLE)	48.33	nu star (bias corrected)	42.76
Mean (detects)	30.78		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	26.93
Maximum	160	Median	16
SD	38.15	CV	1.416
k hat (MLE)	0.489	k star (bias corrected MLE)	0.456
Theta hat (MLE)	55.05	Theta star (bias corrected MLE)	59.08
nu hat (MLE)	23.49	nu star (bias corrected)	21.88
Adjusted Level of Significance (β)	0.0392		
Approximate Chi Square Value (21.88, α)	12.25	Adjusted Chi Square Value (21.88, β)	11.74
95% Gamma Approximate UCL (use when n>=50)	48.11	95% Gamma Adjusted UCL (use when n<50)	50.19

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	27	SD (KM)	37.3
Variance (KM)	1391	SE of Mean (KM)	7.802
k hat (KM)	0.524	k star (KM)	0.486
nu hat (KM)	25.14	nu star (KM)	23.33
theta hat (KM)	51.54	theta star (KM)	55.53
80% gamma percentile (KM)	44.28	90% gamma percentile (KM)	73.46
95% gamma percentile (KM)	104.7	99% gamma percentile (KM)	181.9

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (23.33, α)	13.34	Adjusted Chi Square Value (23.33, β)	12.81
95% Gamma Approximate KM-UCL (use when n>=50)	47.21	95% Gamma Adjusted KM-UCL (use when n<50)	49.17

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.947	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.908	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.179	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.188	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	27.2	Mean in Log Scale	2.661
SD in Original Scale	37.96	SD in Log Scale	1.169
95% t UCL (assumes normality of ROS data)	40.48	95% Percentile Bootstrap UCL	39.9
95% BCA Bootstrap UCL	45.49	95% Bootstrap t UCL	58.27
95% H-UCL (Log ROS)	55.75		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	2.48	KM Geo Mean	11.94
KM SD (logged)	1.492	95% Critical H Value (KM-Log)	3.262
KM Standard Error of Mean (logged)	0.312	95% H-UCL (KM -Log)	100.2
KM SD (logged)	1.492	95% Critical H Value (KM-Log)	3.262
KM Standard Error of Mean (logged)	0.312		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	26.99	Mean in Log Scale	2.451
SD in Original Scale	38.11	SD in Log Scale	1.592
95% t UCL (Assumes normality)	40.32	95% H-Stat UCL	128

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 100.2

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

TRICHLOROETHENE

General Statistics

Total Number of Observations	24	Number of Distinct Observations	19
Number of Detects	19	Number of Non-Detects	5
Number of Distinct Detects	17	Number of Distinct Non-Detects	2
Minimum Detect	0.85	Minimum Non-Detect	0.5
Maximum Detect	1200	Maximum Non-Detect	1
Variance Detects	101018	Percent Non-Detects	20.83%
Mean Detects	218.8	SD Detects	317.8
Median Detects	110	CV Detects	1.453
Skewness Detects	2.297	Kurtosis Detects	5.073
Mean of Logged Detects	4.052	SD of Logged Detects	2.226

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.677	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.901	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.313	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.197	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	173.3	KM Standard Error of Mean	60.64
KM SD	289.2	95% KM (BCA) UCL	284.2
95% KM (t) UCL	277.2	95% KM (Percentile Bootstrap) UCL	277.9
95% KM (z) UCL	273.1	95% KM Bootstrap t UCL	388.5
90% KM Chebyshev UCL	355.2	95% KM Chebyshev UCL	437.6
97.5% KM Chebyshev UCL	552	99% KM Chebyshev UCL	776.7

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.385	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.807	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.124	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.211	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.479	k star (bias corrected MLE)	0.438
Theta hat (MLE)	456.9	Theta star (bias corrected MLE)	499.1
nu hat (MLE)	18.19	nu star (bias corrected)	16.65
Mean (detects)	218.8		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	173.2
Maximum	1200	Median	73.5
SD	295.5	CV	1.706
k hat (MLE)	0.245	k star (bias corrected MLE)	0.242
Theta hat (MLE)	706.3	Theta star (bias corrected MLE)	714.7
nu hat (MLE)	11.77	nu star (bias corrected)	11.63
Adjusted Level of Significance (β)	0.0392		
Approximate Chi Square Value (11.63, α)	4.986	Adjusted Chi Square Value (11.63, β)	4.682
95% Gamma Approximate UCL (use when n>=50)	404.1	95% Gamma Adjusted UCL (use when n<50)	430.3

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	173.3	SD (KM)	289.2
Variance (KM)	83616	SE of Mean (KM)	60.64
k hat (KM)	0.359	k star (KM)	0.342
nu hat (KM)	17.24	nu star (KM)	16.42
theta hat (KM)	482.5	theta star (KM)	506.6
80% gamma percentile (KM)	273.3	90% gamma percentile (KM)	502.2
95% gamma percentile (KM)	759.4	99% gamma percentile (KM)	1418

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (16.42, α)	8.259	Adjusted Chi Square Value (16.42, β)	7.853
95% Gamma Approximate KM-UCL (use when n>=50)	344.5	95% Gamma Adjusted KM-UCL (use when n<50)	362.3

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.887	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.901	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.217	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.197	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	173.3	Mean in Log Scale	3.08
SD in Original Scale	295.4	SD in Log Scale	2.788
95% t UCL (assumes normality of ROS data)	276.7	95% Percentile Bootstrap UCL	275.8
95% BCA Bootstrap UCL	314.8	95% Bootstrap t UCL	424.8
95% H-UCL (Log ROS)	25174		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	3.082	KM Geo Mean	21.81
KM SD (logged)	2.702	95% Critical H Value (KM-Log)	5.299
KM Standard Error of Mean (logged)	0.567	95% H-UCL (KM -Log)	16624
KM SD (logged)	2.702	95% Critical H Value (KM-Log)	5.299
KM Standard Error of Mean (logged)	0.567		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	173.3	Mean in Log Scale	2.977
SD in Original Scale	295.4	SD in Log Scale	2.914
95% t UCL (Assumes normality)	276.6	95% H-Stat UCL	42907

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

ı Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1) 362.3

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

VINYL CHLORIDE

General Statistics

Total Number of Observations	24	Number of Distinct Observations	20
Number of Detects	19	Number of Non-Detects	5
Number of Distinct Detects	17	Number of Distinct Non-Detects	3
Minimum Detect	0.73	Minimum Non-Detect	0.5
Maximum Detect	49.7	Maximum Non-Detect	2.6
Variance Detects	308.7	Percent Non-Detects	20.83%
Mean Detects	18.28	SD Detects	17.57
Median Detects	12	CV Detects	0.961
Skewness Detects	0.61	Kurtosis Detects	-1.105
Mean of Logged Detects	2.127	SD of Logged Detects	1.521

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.856	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.901	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.219	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.197	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	14.62	KM Standard Error of Mean	3.526
KM SD	16.81	95% KM (BCA) UCL	20.65
95% KM (t) UCL	20.66	95% KM (Percentile Bootstrap) UCL	20.29
95% KM (z) UCL	20.41	95% KM Bootstrap t UCL	21.69
90% KM Chebyshev UCL	25.19	95% KM Chebyshev UCL	29.98
97.5% KM Chebyshev UCL	36.63	99% KM Chebyshev UCL	49.69

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.668	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.778	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.191	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.206	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.767	k star (bias corrected MLE)	0.681
Theta hat (MLE)	23.84	Theta star (bias corrected MLE)	26.85
nu hat (MLE)	29.13	nu star (bias corrected)	25.87
Mean (detects)	18.28		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	14.55
Maximum	49.7	Median	5.2
SD	17.23	CV	1.184
k hat (MLE)	0.415	k star (bias corrected MLE)	0.391
Theta hat (MLE)	35.04	Theta star (bias corrected MLE)	37.2
nu hat (MLE)	19.93	nu star (bias corrected)	18.77
Adjusted Level of Significance (β)	0.0392		
Approximate Chi Square Value (18.77, α)	9.953	Adjusted Chi Square Value (18.77, β)	9.502
95% Gamma Approximate UCL (use when n>=50)	27.45	95% Gamma Adjusted UCL (use when n<50)	28.75

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	14.62	SD (KM)	16.81
Variance (KM)	282.6	SE of Mean (KM)	3.526
k hat (KM)	0.756	k star (KM)	0.689
nu hat (KM)	36.28	nu star (KM)	33.08
theta hat (KM)	19.33	theta star (KM)	21.21
80% gamma percentile (KM)	24.04	90% gamma percentile (KM)	36.82
95% gamma percentile (KM)	50.03	99% gamma percentile (KM)	81.59

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (33.08, α)	20.93	Adjusted Chi Square Value (33.08, β)	20.25
95% Gamma Approximate KM-UCL (use when n>=50)	23.1	95% Gamma Adjusted KM-UCL (use when n<50)	23.87

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.885	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.901	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.2	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.197	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	14.59	Mean in Log Scale	1.526
SD in Original Scale	17.19	SD in Log Scale	1.832
95% t UCL (assumes normality of ROS data)	20.61	95% Percentile Bootstrap UCL	20.53
95% BCA Bootstrap UCL	21.29	95% Bootstrap t UCL	21.52
95% H-UCL (Log ROS)	105.5		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	1.589	KM Geo Mean	4.897
KM SD (logged)	1.693	95% Critical H Value (KM-Log)	3.582
KM Standard Error of Mean (logged)	0.356	95% H-UCL (KM -Log)	72.65
KM SD (logged)	1.693	95% Critical H Value (KM-Log)	3.582
KM Standard Error of Mean (logged)	0.356		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	14.59	Mean in Log Scale	1.522
SD in Original Scale	17.19	SD in Log Scale	1.829
95% t UCL (Assumes normality)	20.6	95% H-Stat UCL	104

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

ı Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1) 23.87

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.13/8/2017 1:55:03 PM

User Selected Options

From File ProUCL GW MidSouth Input_a.xls

Full Precision OFF

From File: ProUCL GW MidSouth Input_a.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
ETRACHLOROETHANE	24	0	17	7	29.17%	0.5	0.5	39.66	2797	52.89	1.334
2-TRICHLOROETHANE	24	0	15	9	37.50%	0.5	1	8.213	142.3	11.93	1.453
I,2-DICHLOROETHANE	24	0	7	17	70.83%	0.5	1.4	0.84	0.328	0.573	0.682
BENZENE	24	0	1	23	95.83%	0.5	1.4	0.45	0	0	N/A
CHLOROFORM	24	0	1	23	95.83%	0.5	2	0.509	0.00134	0.0366	0.072
I,2-DICHLOROETHENE	24	0	21	3	12.50%	0.5	1	27	1391	37.3	1.382
TRICHLOROETHENE	24	0	19	5	20.83%	0.5	1	173.3	83616	289.2	1.669
VINYL CHLORIDE	24	0	19	5	20.83%	0.5	2.6	14.62	282.6	16.81	1.15

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
ETRACHLOROETHANE	17	0	0.74	180	55.78	44.6	3249	57	53.52	1.082	1.022
2-TRICHLOROETHANE	15	0	2.1	49	12.84	9.7	182.8	13.52	7.709	1.938	1.053
I,2-DICHLOROETHANE	7	0	0.83	2.2	1.647	1.8	0.231	0.481	0.297	-0.845	0.292
BENZENE	1	0	0.45	0.45	0.45	0.45	N/A	N/A	0	N/A	N/A
CHLOROFORM	1	0	0.66	0.66	0.66	0.66	N/A	N/A	0	N/A	N/A
I,2-DICHLOROETHENE	21	0	2.1	160	30.78	19.8	1549	39.36	9.192	2.559	1.279
TRICHLOROETHENE	19	0	0.85	1200	218.8	110	101018	317.8	133.4	2.297	1.453
VINYL CHLORIDE	19	0	0.73	49.7	18.28	12	308.7	17.57	16.66	0.61	0.961

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
ETRACHLOROETHANE	24	0	0.5	0.5	0.5	11.75	71.25	75.8	106.7	161	177.7
2-TRICHLOROETHANE	24	0	0.5	1	1	3	10.25	11.8	17.5	35.15	46.47
I,2-DICHLOROETHANE	24	0	0.5	0.5	0.5	0.5	1.25	1.48	1.87	1.985	2.154
BENZENE	24	0	0.5	0.5	0.5	0.5	0.5	0.5	1	1	1.308
CHLOROFORM	24	0	0.5	0.5	0.5	0.5	0.745	1	1	1	1.77
I,2-DICHLOROETHENE	24	0	1.33	6.86	8.075	16	22.7	26	59.1	112.4	150.8
TRICHLOROETHENE	24	0	0.605	0.96	1	73.5	200	200	418	821.5	1126
VINYL CHLORIDE	24	0	0.739	0.972	1	5.2	27.5	30.2	42.56	47.67	49.31

SURFACE WATER

Matrix	Fraction	Units	Location	Collected	CIS-1,2-DICHLOROETHENE	D_CIS-1,2-DICHLOROETHENE	TRICHLOROETHENE	D_TRICHLOROETHENE	VINYL CHLORIDE	D_VINYL CHLORIDE
WS	T	UG_L	SW07-02-FLOOR01	8/16/2016	1	0	1	0	1	0
WS	T	UG_L	SW07-04-FLOOR01	8/16/2016	1	0	1	0	1	0
WS	T	UG_L	SW07-06-FLOOR01	8/16/2016	1	0	1	0	1	0
WS	T	UG_L	SW07-07-FLOOR01	8/16/2016	1	0	1	0	1	0
WS	T	UG_L	SW07-08-FLOOR01	8/16/2016	1.5	1	1	0	1	0
WS	T	UG_L	SW07-09-FLOOR01	8/16/2016	1	0	1	0	1	0
WS	T	UG_L	SW07-10-FLOOR01	8/16/2016	1	0	1	0	1	0
WS	T	UG_L	SW07-20-FLOOR01	8/16/2016	1	0	1	0	1	0
WS	T	UG_L	SW07-24-FLOOR01	8/16/2016	6.4	1	5.9	1	3.7	1
WS	T	UG_L	SW07-43S/D-FLOOR01	8/16/2016	1	0	1	0	1	0

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.13/7/2017 12:34:56 PM

User Selected Options

From File ProUCL SW Input_a.xls

Full Precision OFF

From File: ProUCL SW Input_a.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
I,2-DICHLOROETHENE	10	0	2	8	80.00%	1	1	1.59	2.593	1.61	1.013
TRICHLOROETHENE	10	0	1	9	90.00%	1	1	1.49	2.161	1.47	0.987
VINYL CHLORIDE	10	0	1	9	90.00%	1	1	1.27	0.656	0.81	0.638

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
I,2-DICHLOROETHENE	2	0	1.5	6.4	3.95	3.95	12.01	3.465	3.632	N/A	0.877
TRICHLOROETHENE	1	0	5.9	5.9	5.9	5.9	N/A	N/A	0	N/A	N/A
VINYL CHLORIDE	1	0	3.7	3.7	3.7	3.7	N/A	N/A	0	N/A	N/A

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
I,2-DICHLOROETHENE	10	0	1	1	1	1	1	1.1	1.99	4.195	5.959
TRICHLOROETHENE	10	0	1	1	1	1	1	1	1.49	3.695	5.459
VINYL CHLORIDE	10	0	1	1	1	1	1	1	1.27	2.485	3.457

Matrix	Fraction	Units	Location	Collected	1,2-DICHLOROETHANE	D_1,2-DICHLOROETHANE
WS	T	UG_L	SW07-02-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-02-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-04-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-04-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-06-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-06-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-07-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-07-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-08-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-08-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-09-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-09-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-10-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-10-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-20-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-20-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-24-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-24-FLOOR02	8/16/2016	1	1
WS	T	UG_L	SW07-43S/D-FLOOR02	8/16/2016	1	0
WS	T	UG_L	SW07-43S/D-FLOOR02	8/16/2016	1	0

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.13/7/2017 12:36:58 PM

User Selected Options

From File ProUCL SW Input_b.xls

Full Precision OFF

From File: ProUCL SW Input_b.xls

General Statistics for Censored Datasets (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
I,2-DICHLOROETHANE	20	0	1	19	95.00%	1	1	1	0	0	N/A

General Statistics for Raw Dataset using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
I,2-DICHLOROETHANE	1	0	1	1	1	1	N/A	N/A	0	N/A	N/A

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
I,2-DICHLOROETHANE	20	0	1	1	1	1	1	1	1	1	1

Attachment G

MW07-20 Abandonment and Reinstallation Technical Memorandum and Associated Field Forms

ABANDONMENT AND REINSTALLATION OF THE MW07-20 WELL PAIR
Site 07 Calf Pasture Point Long Term Monitoring
Former Naval Construction Battalion Center
Davisville, North Kingstown, Rhode Island

FINAL
Version: 1

Prepared for:

Department of the Navy
Naval Facilities Engineering Command, Mid-Atlantic
9742 Maryland Ave.
Norfolk, VA 23511-3095

Comprehensive Long-Term Environmental Action Navy
Contract Number N62470-11-D-8013

CTO WE23

Prepared by:

Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, VA 23510

December 5, 2016

Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, Virginia 23510

Technical Memorandum
Abandonment and Reinstallation of the MW07-20 Well Pair
Site 07 Calf Pasture Point Long Term Monitoring
Former Naval Construction Battalion Center Davisville
North Kingstown, Rhode Island
December 5, 2016

1.0 INTRODUCTION

While performing the Fall 2016 long term monitoring (LTM) at Installation Restoration Program (IRP) Site 07, Resolution Consultants (Resolution) discovered that the well casing for monitoring well MW07-20D had corroded to the point that it had become detached from the well (see Photo 1 in Attachment A), there was no longer an expansion cap on the well riser (see Photo 2 in Attachment A), and the well was obstructed at approximately 26 feet below ground surface (bgs). The obstruction appeared to be the result of the well riser being plugged with sand at that depth. The well is 74.5 feet deep and Resolution was unable to determine whether the well riser was completely full of sand from the bottom of the well to the depth of the obstruction or if there was something else obstructing the well and the sand was on top of that obstruction. Regardless, Resolution was unable to clear the obstruction and it was determined that monitoring well MW07-20D would need to be abandoned and a replacement well installed approximately 25 to 30 feet inland of the current location in order to reduce exposure to storm surge, sea spray, and accidental damage or vandalism by recreational users of the Calf Pasture Point beach (as described below).

After further discussion, the Navy is proposing to also abandon the corresponding shallow well, MW07-20S, and install a replacement adjacent to the proposed new location of monitoring well MW07-20D to maintain the shallow deep well pairing. During the Fall 2014 LTM at IRP Site 07, Resolution discovered the shallow well had been vandalized (see Photos 3 through 6 in Attachment A). Resolution was able to repair the well (see Photo 7 in Attachment A), and collect samples during subsequent monitoring events, including the Fall 2016 LTM at IRP Site 07, and no additional vandalism has been observed. Nevertheless, moving this well inland would reduce potential damage from the natural elements described above, as well as from vandalism. The location of the existing wells and proposed location of the replacement wells are shown on Figure 1.

The United States Environmental Protection Agency (EPA) and Rhode Island Department of Environmental Management provided concurrence on the new location of the MW07-20 well pair during the October 27, 2016 Base Realignment and Closure (BRAC) Cleanup Team (BCT) teleconference. At the request of EPA and RIDEM, this Technical Memorandum has been drafted to provide details on the abandonment and re-installation procedures.

2.0 ABANDONMENT OF EXISTING WELLS MW07-20S AND MW07-20D

Well construction diagrams and boring logs for monitoring wells MW07-20S and MW07-20D are provided in Attachment B. For both wells, abandonment will be performed in accordance with the RIDEM Groundwater Quality Rules, Appendix 1 (RIDEM, 2010) to the greatest extent possible.

For monitoring well MW07-20S, an attempt will be made to pull the well out since it is only 15 feet deep and only the upper 3 feet of the well was grouted when originally installed. If successfully pulled, the remaining borehole will be tremie grouted with neat cement or neat cement grout up to 4 feet bgs, and the upper 4 feet will be restored with sand. It is possible that upon pulling of the well, some or all of the remaining borehole will collapse since the upper 12 feet of the borehole is comprised of mostly sand (see Boring Log in Attachment B). If this occurs the borehole will be tremie grouted from the point of collapse up to 4 feet bgs, and the upper 4 feet will be restored with sand. If the well is not able to be pulled, the well riser will be tremie grouted from the bottom of the well to 4 feet bgs. The upper 4 feet of well material will be removed, and the upper 4 feet will be restored with sand.

Monitoring well MW07-20D is 74.5 feet deep and is grouted to 61 feet bgs. Therefore pulling the well or overdrilling is not practical. Monitoring well MW07-20D will be abandoned by tremie grouting the well riser from the depth of the obstruction (i.e., approximately 26 feet bgs) to 4 feet bgs. The upper 4 feet of well material will be removed, and the upper 4 feet will be restored with sand.

3.0 REINSTALLATION OF MONITORING WELLS MW07-20S AND MW07-20D

Prior to reinstallation, a ticket with Rhode Island Call Before You Dig will be opened and utility clearance of the well locations will be performed by a subcontractor in accordance with Standard Operating Procedure (SOP) 3-01 *Utility Clearance* (see Attachment C). Reinstallation of the MW07-20 well pair will be performed according to SOP 3-12 *Monitoring Well Installation*

(see Attachment C) and the specific details in this Technical Memorandum. The wells will be installed using a hollow stem auger (HSA) drill rig. Drilling tools and equipment will be decontaminated in accordance with SOP 3-06 *Equipment Decontamination* (see Attachment C). Soils will be logged during installation of the deep well according to SOP 3-16 *Soil and Rock Classification* and headspace screening for volatile organic compounds (VOCs) will be performed according to SOP 3-19 *Headspace Screening for Total VOCs* using a photoionization detector calibrated in accordance with SOP 3-20 *Operation and Calibration of a Photoionization Detector* (see Attachment C). If elevated headspace readings are observed (i.e., greater than 25 parts per million [PPM]), a soil sample will be collected according to the VOC sampling procedures in Section 7.6.1 of SOP 3-21 *Surface and Subsurface Soil Sampling Procedures* (see Attachment C) and submitted for laboratory analysis of site-specific list of VOCs according to SW-846 Method 8260B. The VOC analysis will be performed according to the requirements of the Draft *Tier II Sampling and Analysis Plan, Long Term Monitoring, Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill* (Resolution, 2016).

Monitoring well MW07-20D will be reinstalled with a 10 foot screened interval starting from the top of bedrock. The HSA drill rig will be used to drill through the overburden, and once refusal is encountered, a rollerbit will be advanced 1 to 3 feet to confirm the top of bedrock. After the top of bedrock has been confirmed, the portion of bedrock that was drilled with the rollerbit will be plugged with bentonite and the well will be constructed above. The existing MW07-20D well is screened with a 6-slot screen; the slot size for the replacement well will be determined in the field based on the amount of fine sediment observed in the screened interval and is expected to either be 10-slot, 6-slot, or 7-slot based on historical data. The well screen and riser will be 2 inch polyvinyl chloride (PVC). Inert silica sand will be used for the filter pack; grade 0 silica sand will be used for a 10-slot screen and grade 00 silica sand will be used for 6-slot or 7-slot screens. The well will be completed with a lockable above ground steel protective casing, and will be outfitted with a padlock that is keyed the same as the other NCBC Davisville wells. The replacement well will be identified as MW07-20DA in order to distinguish it from the original well.

Monitoring well MW07-20S will be reinstalled with a 10 foot screened interval that intercepts the water table with approximately 7 feet of screen below the water table and three feet of screen above to account for seasonal variations in water table elevation. The existing MW07-20S well is screened with a 10-slot screen; the slot size for the replacement well will be determined in the field based on the amount of fine sediment observed in the screened interval, and it is

expected to either be 10-slot, 6-slot, or 7-slot based on historical data. The well screen and riser will be 2 inch PVC. The filter pack and well completion will be the same described for MW07-20DA above. The replacement well will be identified as MW07-20SA in order to distinguish it from the original well.

A Rhode Island-licensed surveyor will be contracted to survey the horizontal location and the vertical elevation of the measuring point for each replacement well. A notch or other indelible mark will be made on the riser of each replacement well to identify the measuring point. The elevation of the measuring points will be surveyed to the North American Vertical Datum of 1988 (NAVD 88).

4.0 WELL DEVELOPMENT AND SAMPLING

Once each replacement well has been installed and allowed to set for 24 hours, the well will be developed according to the procedures in SOP 3-13 *Monitoring Well Development* (see Attachment C). After the well pair has equilibrated for a minimum of 14 days from development, monitoring well MW07-20DA will be sampled. Monitoring well MW07-20SA will not be sampled since the original MW07-20S well was successfully sampled in September 2016.

5.0 INVESTIGATION DERIVED WASTE MANAGEMENT

Investigation derived waste (IDW) will consist of soil cuttings, equipment decontamination water, and development water, and will be managed according to the procedures in SOP 3-05 *Investigation Derived Waste Management* (see Attachment C). The drilling subcontractor will setup a temporary IDW staging area on IRP Site 07. Once well installation and development is complete, the drilling subcontractor will transport the IDW to the fenced in IDW staging area next to the trailer. A skid steer or similar piece of equipment will be used for IDW transport to the temporary and fenced in IDW staging areas. The IDW will be characterized along with the existing IDW from the Fall 2016 LTM event and properly disposed of at a Navy approved disposal facility. The IDW will also be handled in accordance with RIDEM Policy Memo 95-01 *Guidelines for the Management of Investigative Derived Wastes* and all disposal facilities will be per-approved by EPA Region I in accordance with the Off-Site Rule 40 CFR 300.440. Well materials that are removed from the existing well pair (i.e., upper 4 feet of well material) will be disposed of as construction and demolition debris.

6.0 REPORTING

The details of the abandonment and reinstallation of the MW07-20 well pair, along with the sample results for MW07-20DA will be included on the Site 07 Calf Pasture Point Fall 2016 Five Year Event Monitoring Report.

7.0 REFERENCES

Resolution, 2016. Draft Tier II Sampling and Analysis Plan, Long Term Monitoring Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill, Former Naval Construction Battalion Center Davisville, North Kingstown, Rhode Island. June 24.

RIDEM, 2010. Groundwater Quality Rules. State of Rhode Island and Providence Plantations Department of Environmental Management. Office of Water Resources. June.

Figures

Drawn:	JB	11/02/2016
Approved:	BS	11/02/2016
Project #:	60273164	

Legend

- Existing Location of the MW07-20 Well Pair to be Abandoned
- Proposed New Location of the MW07-20 Well Pair

N

0 90 180

Scale in Feet

FIGURE 1
MONITORING WELL PAIR MW07-20 ABANDONMENT AND REINSTALLATION

IRP SITE 07, FORMER NCBC DAVISVILLE NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\Site_7\CZMD\MXD\Fig_1_MW_Pair_MW07_20_Abandonment_and_Reinstallation.mxd

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Attachment A

Photolog

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	**Site Location:** IRP Site 07 Calf Pasture Point, Former NCBC Davisville, North Kingstown, Rhode Island	**Project No.** 60273164

Photo No. **1**	**Date:** 8/23/16

Direction Photo Taken:

North

Description:

MW07-20D showing the well casing has corroded to the point that it is detached from well.

Photo No. **2**	**Date:** 8/23/16

Direction Photo Taken:

North, looking straight down

Description:

MW07-20D showing the detached well casing and missing expansion cap.

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	**Site Location:** IRP Site 07 Calf Pasture Point, Former NCBC Davisville, North Kingstown, Rhode Island	**Project No.** 60273164

Photo No. **3**	**Date:** 9/29/14

Direction Photo Taken:

West

Description:

MW07-20S vandalized during the Fall 2014 LTM

Photo No. **4**	**Date:** 9/29/14

Direction Photo Taken:

East

Description:

Another view of vandalized MW07-20S during the Fall 2014 LTM, showing that MW07-20D was not vandalized

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	**Site Location:** IRP Site 07 Calf Pasture Point, Former NCBC Davisville, North Kingstown, Rhode Island	**Project No.** 60273164

Photo No. 5	**Date:** 9/29/14

Direction Photo Taken:

East

Description:

MW07-20S vandalized during the Fall 2014 LTM, the well casing was removed and missing

Photo No. 6	**Date:** 9/29/14

Direction Photo Taken:

North

Description:

The MW07-20S well casing was eventually found further south at an abandoned camp fire

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	**Site Location:** IRP Site 07 Calf Pasture Point, Former NCBC Davisville, North Kingstown, Rhode Island	**Project No.** 60273164

Photo No.	**Date:**
7	11/04/14

Direction Photo Taken:

Southwest

Description:

MW07-20S after Resolution successfully repaired the well.

Attachment B

MW07-20S and MW07-20D Boring Logs and Well Construction Diagrams

EA Engineering, Science, and Technology, Inc.

LOG OF SOIL BORING

Coordinates:	N:196768.62 E:525448.01
Surface Elevation:	3.8 ft msl
Riser Elevation:	5.61 ft msl

Job. No. 29600.32	Client: NORDIV, NAVFAC NCBC Davisville	Location: IR Program Site 07
Drilling Method: Mobile B-61 rig using 4.25" HSA		Boring No. MW07-20S
Sampling Method: 2" OD split-barrel sampler, driven by 140-lb hammer falling 30" (SS)		Sheet 1 of 1
Drilling Water Level: Date: Time:	Start 07/28/95 0820 / Drilling Times / Finish 07/28/95 0950	
Surface Conditions: Grassy		

Sample Type	Feet Driven/Ft Recvrd	Dpth Csg.	Samp # / depth (ft)	PID (ppm) Above bk	Blows per 6 ".	Strat Unit	Ft bgs	USCS Log	SOIL DESCRIPTION
	2.0		S-1		1		0		Light to medium brown fine to medium SAND, trace rounded gravel up to 0.125", dry.
SS	1.0	0	0-2	0.0	2				
					3		1		
					6				
	2.0		S-2		3		2		0-0.3' As above, moist to wet.
SS	1.1	0	2-4	0.0	3				0.3-1.1' Medium gray fine to coarse SAND and rounded gravel up to 0.125", trace silt,
					3		3		saturated.
					6				
	2.0		S-3		7		4		As in 0.3'-1.1' interval above, some very fine sand, silt, and gravel up
SS	2.0	0	4-6	1.3	7				to 0.5", saturated.
					3		5		
					4				
	2.0		S-4		7		6		As above, gravel up to 1", saturated.
SS	1.8	0	6-8	0.0	8				
					7		7		
					7				
	2.0		S-5		10		8		As above, no gravel, few fine sand and silt lenses, saturated.
SS	1.8	8	8-10	0.8	12				
					20		9		
					30				
	2.0		S-6		2		10		As above, some very fine sand, trace rounded gravel up to 0.125", saturated.
SS	1.3	10	10-12	0.0	2				
					1		11		
					1	upper			
	2.0		S-7		1	Sand	12		0-0.2' As above, saturated.
SS	0.6	12	12-14	0.2	WOH	Silt			0.2-0.6' Medium gray clayey SILT, some to little very fine sand, moderate
					1		13		plasticity, sewage odor, saturated.
					WOH				
	2.0		S-8		WOH		14		As in 0.2-0.6' interval above, sewage odor, less very fine sand, saturated.
SS	0.5	14	14-16	0.0	WOH				
					WOH		15		
					1				
	2.0		S-9		1		16		As above.
SS	2.0	15	16-18	0.0	1				
					1		17		
					1				
							18		Bottom of hole = 18 ft bgs
							19		

NOTES:

Sample interval

Sample interval submitted for analysis

WOH - Weight of Hammer

Logged by: D. Street

Drilling Contractor: M&R Environmental Drilling

Driller: B. Haase

WELL SPECIFICATIONS:

Dia.Screen/Riser:	2" PVC	Screen Interval:	4.9 - 14.9 ft bgs	Sandpack:	4.5 - 15 ft bgs	Grout:	0 - 3 ft bgs
ottom of Hole:	18 ft bgs	Riser Interval:	1.8 ft ags - 4.9 ft bgs	Bentonite:	3 - 4.5 ft bgs	Cover:	6" ID steel

EA Engineering, Science, and Technology, Inc.

LOG OF SOIL BORING

Job. No. 29600.32	Client: NORDIV, NAVFAC NCBC Davisville	Location: IR Program Site 07	
Drilling Method: Mobile B-61 rig using 5" ID flush-joint casing with 4.875" rollerbit.		Boring No. **MW07-20D**	
Sampling Method: 2" OD split-barrel sampler, driven by 140-lb hammer falling 30" (SS)		Sheet 1 of 5	
Drilling Water Level: Date: Time:		Start 07/28/95 1320	Drilling Times Finish 08/01/95 0915
Surface Conditions: Sandy			

Coordinates: N:196777.12 E:525449.70
Surface Elevation: 3.7 ft msl
Riser Elevation: 5.10 ft msl

Sample Type	Feet Driven/Ft Recvrd	Dpth Csg.	Samp # / depth (ft)	PID (ppm) Above bk	Blows per 6"	Strat. Unit	Ft bgs	USCS Log	SOIL DESCRIPTION
							0		
							1		
							2		
							3		
							4		For 0-9 ft see soil log for MW07-20S
							5		
							6		
							7		
							8		
	2.0		S-1		2		9		Medium gray fine to coarse SAND, trace silt and rounded gravel up to 0.25",
SS	0.8	9	9-11	0.0	2				loose, saturated.
					3		10		
					4				
							11		
							12		
						upper	13		
						Sand			
	2.0		S-2		1	Silt	14		Medium gray clayey SILT, moderate to high plasticity, shell fragments, slight sewage
SS	1.7	14	14-16	0.0	WOH				odor, saturated.
					1		15		
					1				
	2.0		S-3		1		16		As above, clay content increasing, sewage odor, saturated.
SS	2.0	14	16-18	0.0	WOH				
					1		17		
					1				
	2.0		S-4		1		18		As above, trace platy gravel up to 1", saturated.
SS	2.0	18	18-20	0.0	1				
					1		19		
					2				

NOTES:
Sample interval
Sample interval submitted for analysis
WOH - Weight of Hammer

Logged by: D. Street
Drilling Contractor: M&R Environmental Drilling
Driller: B. Haase

WELL SPECIFICATIONS:

Screen/Riser:	2" PVC	Screen Interval:	64 - 74 ft bgs	Sandpack:	63 - 74.5 ft bgs	Grout:	0 - 61 ft bgs
Bottom of Hole:	83 ft bgs	Riser Interval:	1.4 ft ags - 64 ft bgs	Bentonite:	61 - 63 ft bgs	Cover:	6" ID steel

EA Engineering, Science, and Technology, Inc.

LOG OF SOIL BORING

Job. No. 29600.32	Client: NORDIV, NAVFAC NCBC Davisville	Location: IR Program Site 07	
Drilling Method: Mobile B-61 rig using 5" ID flush-joint casing with 4.875" rollerbit.		Boring No. **MW07-20D**	
Sampling Method: 2" OD split-barrel sampler, driven by 140-lb hammer falling 30" (SS)		Sheet 2 of 5	
Drilling Water Level: Date: Time:		Start 07/28/95 1320	Drilling Times	Finish 08/01/95 0915
Surface Conditions: Sandy			

Coordinates: N:196777.12 E:525449.70
Surface Elevation: 3.7 ft msl
Riser Elevation: 5.10 ft msl

Sample Type	Feet Driven/Ft Recvrd	Dpth Csg.	Samp # / depth (ft)	PID (ppm) Above bk	Blows per 6"	Strat. Unit	Ft bgs	USCS Log	SOIL DESCRIPTION
							20		
							21		
							22		
							23		
	2.0		S-5		5		24		As above, clay content decreasing, some very fine sand, saturated.
SS	1.3	18	24-26	0.0	10				
					12		25		
					14				
							26		
							27		
							28		
	2.0		S-6		6		29		Medium gray clayey SILT and very fine SAND, few thin tan very fine sand
SS	1.2	18	29-31	0.0	9				lenses, saturated.
					8		30		
					9				
							31		
							32		
							33		
	2.0		S-7		5		34		Medium gray clayey SILT, some very fine sand, dense, trace rounded gravel
SS	0.9	18	34-36	0.7	6				up to 0.25", saturated.
					6		35		
					6				
							36		
							37		
							38		
	2.0		S-8		WOR		39		As above, 0.2' medium gray very fine sand lens at 1.4, saturated.
SS	1.6	18	39-41	0.7	2				

NOTES:
Sample interval
Sample interval submitted for analysis
WOR - Weight of Rod

Logged by: D. Street
Drilling Contractor: M&R Environmental Drilling
Driller: B. Haase

WELL SPECIFICATIONS:

Dia.Screen/Riser:	2" PVC	Screen Interval:	64 - 74 ft bgs	Sandpack:	63 - 74.5 ft bgs	Grout:	0 - 61 ft bgs
Bottom of Hole:	83 ft bgs	Riser Interval:	1.4 ft ags - 64 ft bgs	Bentonite:	61 - 63 ft bgs	Cover:	6" ID steel

EA Engineering, Science, and Technology, Inc.

LOG OF SOIL BORING

Job. No. 29600.32	Client: NORDIV, NAVFAC NCBC Davisville	Location: IR Program Site 07	
Drilling Method: Mobile B-61 rig using 5" ID flush-joint casing with 4.875" rollerbit.		Boring No. **MW07-20D**	
Sampling Method: 2" OD split-barrel sampler, driven by 140-lb hammer falling 30" (SS)		Sheet 3 of 5	
Drilling Water Level: Date: Time:		Start 07/28/95 1320	Drilling Times	Finish 08/01/95 0915
Surface Conditions: Sandy			

Coordinates: N:196777.12 E:525449.70
Surface Elevation: 3.7 ft msl
Riser Elevation: 5.10 ft msl

Sample Type	Feet Driven/Ft Recvrd	Dpth Csg.	Samp # / depth (ft)	PID (ppm) Above bk	Blows per 6"	Strat. Unit	Ft bgs	USCS Log	SOIL DESCRIPTION
			S-8 39-41		3 3		40		
							41		
							42		
							43		
SS	2.0 0.0	18	S-9 44-46	NA	1 1 1 1		44 45		No recovery / No sample collected
							46		
							47		
							48		
SS	2.0 1.1	18	S-10 49-51	0.7	3 3 4 3	Silt lower Sand	49 50		Medium gray SILT, some very fine sand, loose, saturated.
							51		
							52		
							53		
SS	2.0 0.0	18	S-11 54-56	NA	3 4 2 2		54 55		No recovery / No sample collected
							56		
							57		
							58		
SS	2.0 1.1	18	S-12 59-61	0.7	4 6		59		0-0.5' As in 49 to 51' interval above. 0.5-1.1' Medium gray very fine to fine SAND, loose, saturated.

NOTES:
Sample interval
Sample interval submitted for analysis.
NA - Not applicable

Logged by: D. Street
Drilling Contractor: M&R Environmental Drilling
Driller: B. Haase

WELL SPECIFICATIONS:

a.Screen/Riser:	2" PVC	Screen Interval:	64 - 74 ft bgs	Sandpack:	63 - 74.5 ft bgs	Grout:	0 - 61 ft bgs
Bottom of Hole:	83 ft bgs	Riser Interval:	1.4 ft ags - 64 ft bgs	Bentonite:	61 - 63 ft bgs	Cover:	6" ID steel

EA Engineering, Science, and Technology, Inc.

LOG OF SOIL BORING

Job. No. 29600.32	Client: NORDIV, NAVFAC NCBC Davisville	Location: IR Program Site 07	
Drilling Method: Mobile B-61 rig using 5" ID flush-joint casing with 4.875" rollerbit.		Boring No. MW07-20D	
Sampling Method: 2" OD split-barrel sampler, driven by 140-lb hammer falling 30" (SS)		Sheet 4 of 5	
Drilling Water Level: Date: Time:		Start 07/28/95 1320	Drilling Times	Finish 08/01/95 0915
Surface Conditions: Sandy			

Coordinates: N:196777.12 E:525449.70
Surface Elevation: 3.7 ft msl
Riser Elevation: 5.10 ft msl

Sample Type	Feet Driven/Ft Recvrd	Dpth Csg.	Samp # / depth (ft)	PID (ppm) Above bk.	Blows per 6"	Strat. Unit	Ft bgs	USCS Log	SOIL DESCRIPTION
			S-12 59-61		7 7		60		
							61		
						lower Sand	62		Driller notes harder drilling at 63 ft bgs
						Till	63		
SS	2.0 0.6	64	S-13 64-66	0.7	18 11		64		Medium gray fine clayey SAND and angular to subangular GRAVEL up to 2", saturated.
					6 5		65		
							66		
							67		
							68		
SS	0.7 0.4	64	S-14 69-69.7	0.7	58 100/0.2		69		As above, saturated.
							70		
							71		
SS	2.0 1.1	64	S-15 72-74	0.7	4 65		72		As above, some very angular weathered rock in first 0.4, saturated.
					55 24		73		
SS	0.9 0.6	64	S-16 74-74.9	0.7	25 101/0.4	Till	74		As above, little silt, no clay, some medium sand, saturated.
						Rock	75		Driller notes harder at 75 ft bgs
									Rollerbit to 78 ft bgs
							76		NX core to 83 ft bgs (see core log description)
							77		
							78		
							79		
									Bottom of hole = 83 ft bgs

NOTES:
Sample interval
Sample interval submitted for analysis

Logged by: D. Street
Drilling Contractor: M&R Environmental Drilling
Driller: B. Haase

WELL SPECIFICATIONS:

Dia.Screen/Riser: 2" PVC
Bottom of Hole: 83 ft bgs
Screen Interval: 64 - 74 ft bgs
Riser Interval: 1.4 ft ags - 64 ft bgs
Sandpack: 63 - 74.5 ft bgs
Bentonite: 61 - 63 ft bgs
Grout: 0 - 61 ft bgs
Cover: 6" ID steel

EA Engineering, Science, and Technology, Inc.

LOG OF CORE BORING

Coordinates	N 196777 12 E 525449 70
Surface Elevation	3 7 ft msl
Well Riser Elevation	5 10 ft msl

Job No 29600 32	Client NORDIV, NAVFAC NCBC Davisville	Location IR Program Site 07
Drilling Method Mobile B-61rig		Boring No **MW07-20D**
Core Barrel used NX Core (2 98" OD)		Sheet 5 of 5

Packer Test

Tested	No
Interval	
K-Value	

Start	Drilling Times	Finish
08/01/95 1245		**08/01/95 1315**

Core Run (ft)	Strat-igraphy	Bedding / Fractures (dip & angl)	Filling	Depth in feet	Graphic Log	LITHOLOGIC LOG	DRILLING LOG
				70			
				71			
				72			
				73			
				74			
				75			
				76			
				77			Core Run Depth (ft) / Drill Time/ft (min sec) / Total Depth (ft bgs)
#1 78 0-83 0 Rec =100% = 5 0/5 0 RQD = 100% = 5 0/5 0				78		0-1 2' Dark gray quartzite GNEISS, fine to medium grained, pyrite/mica speckling with thin bands of medium grained mica High angle contact with light gray quartzite GNEISS, fine to medium grained, thin to medium bands of dark gray quartzite and mica Some dark gray angular inclusions from 1 5-2 8', speckled with mica and pyrite throughout 1 high angle fracture at 0 4-0 65'	0-1 5 00 78 0-79 0 1-2 3 12 79 0-80 0 2-3 3 00 80 0-81 0 3-4 2 18 81 0-82 0 4-5 2 48 82 0-83 0
				79			
				80			
				81			
				82			
				83			
				84			
				85			
				86			
				87			
				88			
				89			

NOTES: Core Run Interval

Logged by: D Street

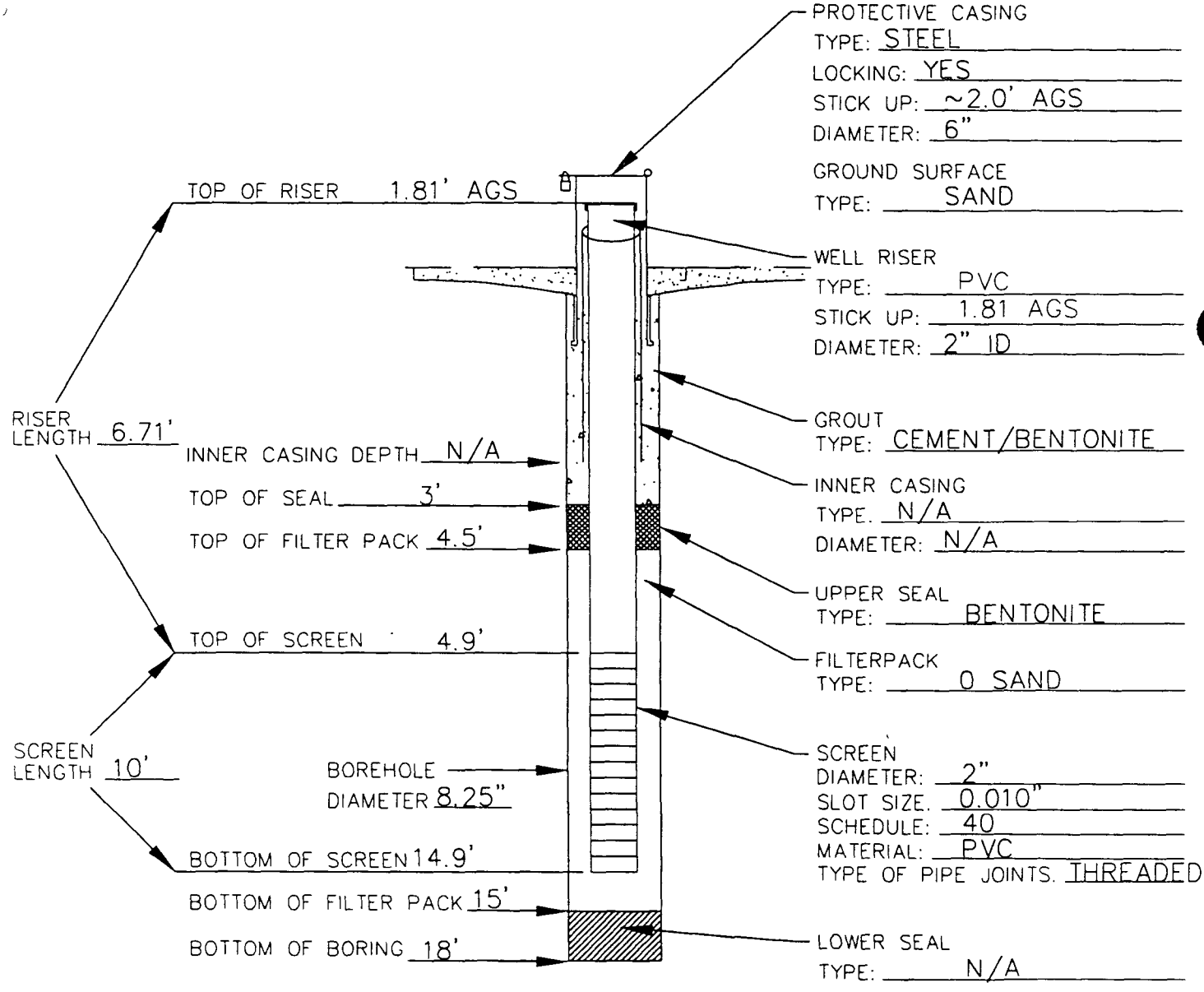
Drilling Contractor: M&R Environmental Drilling

Driller: B Haase

MONITORING WELL CONSTRUCTION

MW07-20S

CLIENT/SITE NAME: NORDIV, NAVFAC NCBC DAVISVILLE, SITE 07, PHASE III RI	
DATE INSTALLED: 7/28/95	PROJECT No.: 29600.32
ELEVATION OF GROUND SURFACE: 3.8' MSL ELEVATION TOP OF WELL RISER: 5.61' MSL	COORDINATES: N: 196768.62 E: 525448.01
DEPTH TO WATER: 3.43' (BELOW TOP OF RISER) DATE/TIME 12/1/95 1232	EA INSPECTOR: D. STREET
DRILLING METHOD & DEPTH: 4.25" HSA TO 18'	



MONITORING WELL CONSTRUCTION
(ALL DEPTH MEASURMENTS IN FT BELOW GROUND SURFACE)

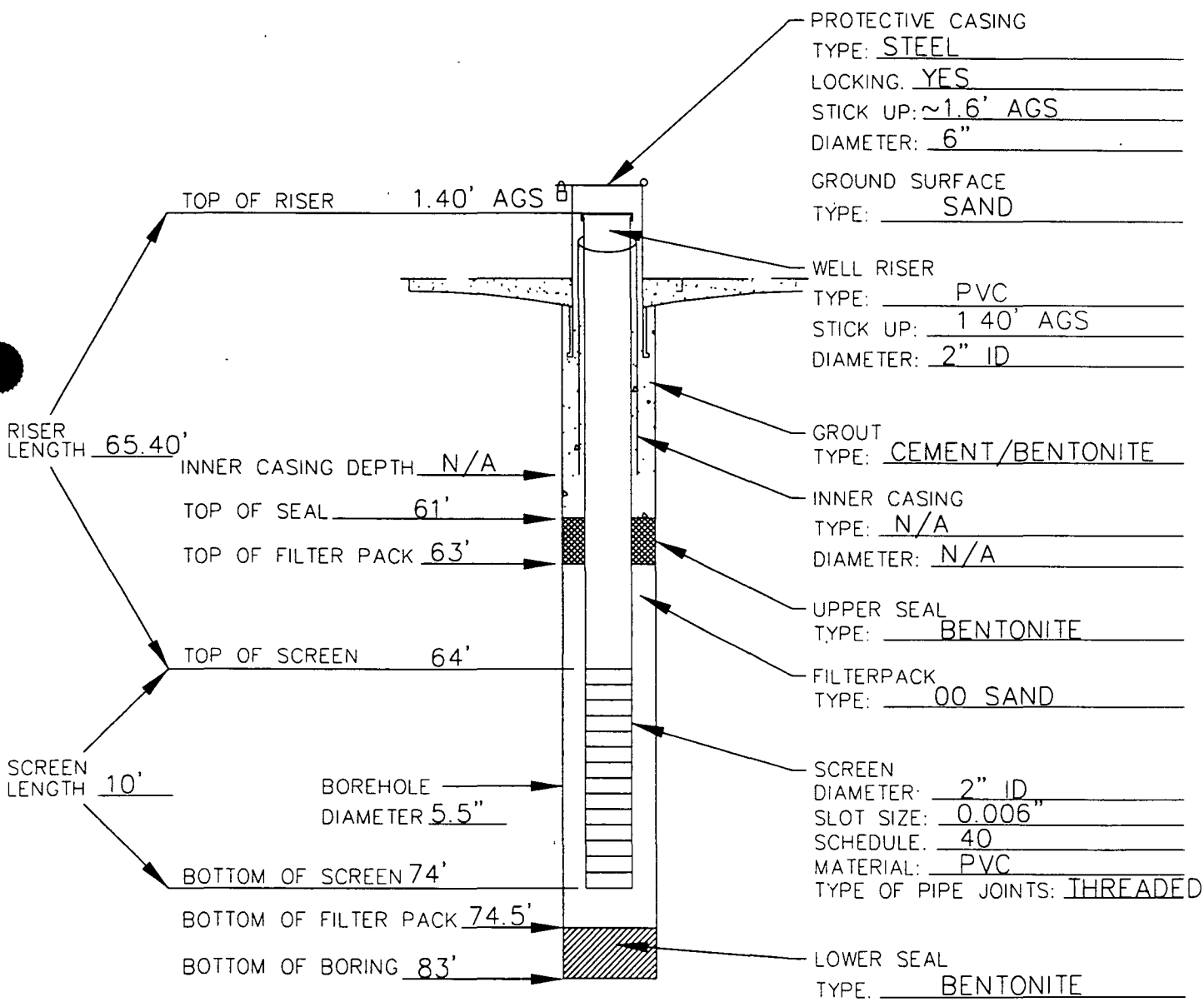
EA® EA ENGINEERING, SCIENCE, AND TECHNOLOGY

DWG FILE No F:\PROJECTS\29600.32\3247\CADD\MW07-20S.DWG

MONITORING WELL CONSTRUCTION

MW07-20D

CLIENT/SITE NAME: NORDIV, NAVFAC NCBC DAVISVILLE, SITE 07, PHASE III RI	
DATE INSTALLED: 8/2/95	PROJECT No: 29600.32
ELEVATION OF GROUND SURFACE: 3.7' MSL ELEVATION TOP OF WELL RISER: 5.10' MSL	COORDINATES: N: 196777.12 E: 525449.70
DEPTH TO WATER: 3.70' (BELOW TOP OF RISER) DATE/TIME 12/1/95 1230	EA INSPECTOR: D. STREET
DRILLING METHOD & DEPTH: 5" FLUSH-JOINT CASING WITH 4.875" ROLLERBIT TO 78'/ NX CORE 78'-83'	



MONITORING WELL CONSTRUCTION
(ALL DEPTH MEASURMENTS IN FT BELOW GROUND SURFACE)

EA® ENGINEERING, SCIENCE, AND TECHNOLOGY

DWG FILE No F:\PROJECTS\29600.32\3247\CADD\MW07-20D.DWG

Attachment C

Resolution Standard Operating Procedures

Utility Clearance

Procedure 3-01

1.0 Purpose and Scope

1.1 This standard operating procedure (SOP) describes the process for determining the presence of subsurface utilities and other cultural features at locations where planned site activities involve the physical disturbance of subsurface materials.

1.2 This procedure is the Program-approved professional guidance for work performed by Resolution Consultants under the Comprehensive Long-Term Environmental Action Navy (CLEAN) contract (Contract Number N62470-11-D-8013).

1.3 The procedure applies to the following activities: soil gas surveying, excavating, trenching, drilling of borings and installation of monitoring and extraction wells, use of soil recovery or slide-hammer hand augers, and all other intrusive sampling activities.

1.4 The primary purpose of the procedure is to minimize the potential for damage to underground utilities and other subsurface features, which could result in physical injury, disruption of utility service, or disturbance of other subsurface cultural features.

1.5 If there are procedures, whether it be from Resolution Consultants, state, and/or federal, that are not addressed in this SOP and are applicable to utility clearance, those procedures should be added as an appendix to the project specific SAP.

1.6 As guidance for specific activities, this procedure does not obviate the need for professional judgment. Deviations from this procedure while planning or executing planned activities must be approved in accordance with Program requirements for technical planning and review.

2.0 Safety

2.1 Field and subcontractor personnel shall adhere to a site-specific health and safety plan (HASP).

3.0 Terms and Definitions

3.1 **Utility**

For the proposes of this SOP, a utility is defined as a manmade underground line or conduit, cable, pipe, vault or tank that is, or was, used for the transmission of material or energy (e.g., gas, electrical, telephone, steam, water or sewage, product transfer lines, or underground storage tanks).

3.2 **As-Built Plans**

As-built plans are plans or blueprints depicting the locations of structures and associated utilities on a property.

3.3 **One-Call**

The Utility Notification Center is the one-call agency for nationwide call before you dig. The Utility Notification Center is open 24 hours a day, and accepts calls from anyone planning to dig. The phone number 811 is the designated call before you dig phone number that directly connects you to your local one-call center. Additional information can be found at www.call811.com.

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Calling before you dig ensures that any publicly owned underground lines will be marked so that you can dig around them safely. Having the utility lines marked not only prevents accidental damage to the lines, but prevents property damage and personal injuries that could result in breaking a line.

The following information will need to be provided when a call is placed to One-Call:

- Your name, phone number, company name (if applicable), and mailing address.
- What type or work is being done.
- Who the work is being done for.
- The county and city the work is taking place in.
- The address or the street where the work is taking place.
- Marking instructions, (specific instructions as to where the work is taking place).

Under normal circumstances it takes between 2 to 5 days from the time you call (not counting weekends or holidays) to have the underground lines marked. Because these laws vary from state to state, exactly how long it will take depends on where your worksite is located. You will be given an exact start time and date when your locate request is completed, which will comply with the laws in your area.

In the event of an emergency (any situation causing damage to life or property, or a service outage), lines can be marked sooner than the original given time if requested.

3.4 **Toning**

Toning is the process of surveying an area utilizing one or more surface geophysical methods to determine the presence or absence of underground utilities. Typically, toning is conducted after identifying the general location of utilities and carefully examining all available site utility plans. Each location is marked according to the type of utility being identified. In addition, areas cleared by toning are flagged or staked to indicate that all identified utilities in a given area have been toned.

4.0 Training and Qualifications

4.1 The **Contract Task Order (CTO) Manager** is responsible for verifying that these utility locating procedures are performed prior to the initiation of active subsurface exploration.

4.2 The **Program Quality Manager** is responsible for ensuring overall compliance with this procedure.

4.3 The **Field Manager** is responsible for ensuring that all utility locating activities are performed in accordance with this procedure.

4.4 All **Field Personnel** are responsible for the implementation of this procedure.

5.0 Equipment and Supplies

5.1 Equipment and supplies necessary for locating subsurface utilities will be provided by the subcontractor; however, the project **Field Manager/Field Personnel** will provide any additional equipment and supplies as needed as well as maintain information regarding the utility clearance activities in the field logbook.

6.0 Procedure

Proceed wtih the following steps where subsurface exploration will include excavations, drilling, or any other subsurface investigative method that could damage utilities at a site. In addition to the steps outlined below, always exercise caution while conducting subsurface exploratory work.

6.1 Prepare Preliminary Site Plan

- Prepare a preliminary, scaled site plan depicting the proposed exploratory locations as part of the project specific Sampling and Analysis Plan (SAP) or Work Plan. Include as many of the cultural and natural features as practical in this plan.

6.2 Review Background Information

- Search existing plan files to review the as-built plans to identify the known location of utilities at the site. Plot the locations of utilities identified onto a preliminary, scaled site plan. Inform the CTO Manager if utilities lie within close proximity to a proposed exploration or excavation location. The CTO Manager will determine if it is necessary to relocate proposed sampling or excavation locations.
- Include the utility location information gathered during previous investigations (e.g., remedial investigation or remedial site evaluation) in the project design documents for removal or remedial actions. In this manner, information regarding utility locations collected during implementation of a CTO can be shared with the subcontractor during implementation of a particular task order. In many instances, this will help to reduce the amount of additional geophysical surveying work the subcontractor may have to perform.
- Conduct interviews with onsite and facility personnel familiar with the site to obtain additional information regarding the known and suspected locations of underground utilities. In addition, if appropriate, contact shall be made with local utility companies to request their help in locating underground lines. Pencil in the dimensions, orientation, and depth of utilities, other than those identified on the as-built plans, at their approximate locations on the preliminary plans. Enter the type of utility, the personnel who provided the information, and the date the information was provided into the field log.
- During the pre-field work interviewing process, the interviewer will determine which site personnel should be notified in the event of an incident involving damage to existing utilities. Record this information in the field logbook with the corresponding telephone numbers and addresses.

6.3 Site Visit/Locate Utilities/Toning

- Prior to the initiation of field activities, the Field Task Manager or similarly qualified field personnel shall visit the site and note existing structures and evidence of associated utilities, such as fire hydrants, irrigation systems, manhole and vault box covers, standpipes, telephone switch boxes, free-standing light poles, gas or electric meters, pavement cuts, and linear depression. Compare notes of the actual site configuration to the preliminary site plan. Note deviations in the field logbook and on the preliminary site plan. Accurately locate or survey and clearly mark with stakes, pins, flags, paint, or other suitable devices all areas where subsurface exploration is proposed. These areas shall correspond with the locations drawn on the preliminary site plan.
- Following the initial site visit by the Field Task Manager, a trained utility locating subcontractor will locate, identify, and tone all utilities depicted on the preliminary site plan. The Field Task Manager or similarly qualified field personnel shall visit the site and identify the areas of subsurface disturbance with white spray paint, chalk, white pin flags or some other easily identifiable marking. The utility locator should utilize appropriate sensing equipment to attempt to locate utilities that might not have appeared on the as-built plans. At a minimum, the utility subcontractor should utilize a metal detector and/or magnetometer; however, it is important to consider the possibility that non-metallic utilities or tanks might be present at the site. Use other appropriate surface geophysical methods such as Ground Penetrating Radar, Radiodetection, etc. as appropriate. Clear proposed exploration areas of all utilities in the immediate area where subsurface exploration is proposed. Clearly tone all anomalous areas. Clearly identify all toned areas on the preliminary site plan. All utilities near the area of subsurface disturbance should also be marked out by the utility subcontractor using the universal colors for subsurface utilities (i.e., red – electric; blue – water; green – sewer; yellow – gas; etc.). After toning the site and plotting all known or suspected buried utilities on the preliminary site plan, the utility locator shall provide the Field Task Manager with a copy of the completed preliminary

site plan. Alternatively, the Field Task Manager or designee shall document the results of the survey on the preliminary site plan.

- Report to the Field Task Manager anomalous areas detected and toned that are in close proximity to the exploration or excavation areas. The Field Task Manager shall determine the safe distance to maintain from the known or suspected utility. It may be necessary to relocate the proposed exploration or excavation areas. If this is required, the Field Task Manager or designee shall relocate them and clearly mark them using the methods described above. Completely remove the markings at the prior location. Plot the new locations on the site plan and delete the prior locations from the plan. In some instances, such as in areas extremely congested with subsurface utilities, it may be necessary to dig by hand or use techniques such as air knife to determine the location of the utilities.

6.4 **Prepare Site Plan**

- Prior to the initiation of field activities, draft a final site plan that indicates the location of subsurface exploration areas and all known or suspected utilities present at the site. Provide copies of this site plan to the Navy Technical Representative (NTR), the CTO Manager, and the subcontractor who is to conduct the subsurface exploration/excavation work. Review the site plan with the NTR to verify its accuracy prior to initiating subsurface sampling activities.

7.0 Quality Control and Assurance

7.1 Utility locating must incorporate quality control measures to ensure conformance to these and the project requirements.

8.0 Records, Data Analysis, Calculations

8.1 A bound field logbook will be kept detailing all activities conducted during the utility locating procedure.

8.2 The logbook will describe any changes and modifications made to the original exploration plan. The trained utility locator shall prepare a report and keep it in the project file. Also, a copy of the final site plan will be kept in the project file.

9.0 Attachments or References

Department of Defense, United States (DoD). 2005. *Uniform Federal Policy for Quality Assurance Project Plans, Part 1: UFP-QAPP Manual.* Final Version 1. DoD: DTIC ADA 427785, EPA-505-B-04-900A. In conjunction with the U. S. Environmental Protection Agency and the Department of Energy. Washington: Intergovernmental Data Quality Task Force. March. On-line updates available at: http://www.epa.gov/fedfac/pdf/ufp_qapp_v1_0305.pdf.

Author	Reviewer	Revisions (Technical or Editorial)
Caryn DeJesus Senior Scientist	Bob Shoemaker Senior Scientist	Rev 0 – Initial Issue (June 2012)

Investigation Derived Waste Management

Procedure 3-05

1.0 Purpose and Scope

This standard operating procedure (SOP) describes activities and responsibilities of the United States (U.S.) Navy Environmental Restoration (ER) Program, Naval Facilities Engineering Command, Atlantic (NAVFAC Atlantic) with regard to management of investigation-derived waste (IDW). The purpose of this procedure is to provide guidance for the minimization, handling, labelling, temporary storage, inventory, classification, and disposal of IDW generated under the ER Program. This procedure will also apply to personal protective equipment (PPE), sampling equipment, decontamination fluids, non-IDW trash, non-indigenous IDW, and hazardous waste generated during implementation of removal or remedial actions. The information presented will be used to prepare and implement work plans (WPs) for IDW-related field activities. The results from implementation of WPs will then be used to develop and implement final IDW disposal plans.

If there are procedures whether it be from Resolution Consultants, state and/or federal that are not addressed in this SOP and are applicable to IDW then those procedures may be added as an appendix to the project specific SAP.

This procedure applies to all Navy ER projects performed in the NAVFAC Atlantic Area of Responsibility.

This procedure shall serve as management-approved professional guidance for the ER Program and is consistent with protocol in the Uniform Federal Policy-Quality Assurance Project Plan (DoD 2005). As professional guidance for specific activities, this procedure is not intended to obviate the need for professional judgment during unforeseen circumstances. Deviations from this procedure while planning or executing planned activities must be approved by both the Contract Task Order (CTO) Manager and the Quality Assurance (QA) Manager or Technical Director, and documented.

This procedure was developed to serve as management-approved professional guidance for the management of IDW generated under the ER Program. It focuses on the requirements for minimizing, segregating, handling, labeling, storing, and inventorying IDW in the field. Certain drum inventory requirements related to the screening, sampling, classification, and disposal of IDW are also noted in this procedure.

2.0 Safety

The health and safety considerations for the work associated with this SOP, including both potential physical and chemical hazards, will be addressed in the project Health and Safety Plan (HASP). In the absence of a HASP, work will be conducted according to the CTO WP and/or direction from the **Site Safety Officer (SSO)**.

All **Field Personnel** responsible for IDW management must adhere to the HASP and must wear the PPE specified in the site-specific HASP. Generally, this includes, at a minimum, steel-toed boots or steel-toed rubber boots, safety glasses, American National Standards Institute-standard hard hats, and hearing protection (if heavy equipment is in operation). If safe alternatives are not achievable, discontinue site activities immediately.

3.0 Terms and Definitions

None.

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4.0 Training and Qualifications

4.1 The **CTO Manager** is responsible for ensuring that IDW management activities comply with this procedure. The **CTO Manager** is responsible for ensuring that all personnel involved in IDW management shall have the appropriate education, experience, and training to perform their assigned tasks.

4.2 The **Program Quality Manager** is responsible for ensuring overall compliance with this procedure.

4.3 The **Field Manager** is responsible for ensuring that all IDW is managed according to this procedure.

4.4 All **Field Personnel** are responsible for the implementation of this procedure.

5.0 Equipment and Supplies

The equipment and supplies required for implementation of this SOP include the following:

- Containers for waste (e.g., [U.S. Department of Transportation] DOT approved 55-gallon open and closed top drums) and material to cover waste to protect from weather (e.g., plastic covering);
- Hazardous /non-hazardous waste drum labels (weatherproof);
- Permanent marking pens;
- Inventory forms for project file;
- Plastic garbage bags, zip lock storage bags, roll of plastic sheeting; and
- Steel-toed boots, chemical resistant gloves, coveralls, safety glasses, and any other PPE required in the HASP.

6.0 Procedure

The following procedures are used to handle the IDW.

6.1 Drum Handling

6.1.1 IDW shall be containerized using DOT approved drums. The drums shall be made of steel or plastic, have a 55-gallon capacity, be completely painted or opaque, and have removable lids (i.e., United Nations Code 1A2 or 1H2). Typically 55-gallon drums are used, however small drums may be used depending on the amount of waste generated. New steel drums are preferred over recycled drums.

6.1.2 Recycled drums should not be used for hazardous waste, PCBs or other regulated shipments. For short-term storage of liquid IDW prior to discharge, double-walled bulk steel or plastic storage tanks may be used. For this scenario, consider the scheduling and cost-effectiveness of this type of bulk storage, treatment, and discharge system versus longer-term drum storage.

6.1.3 For long-term IDW storage at other project locations, the DOT approved drums with removable lids are recommended. Verify the integrity of the foam or rubber sealing ring located on the underside of some drum lids prior to sealing drums containing IDW liquids.

6.1.4 If the ring is only partially attached to the drum lid, or if a portion of the ring is missing, select another drum lid with a sealing ring that is in sound condition.

6.1.5 To prepare IDW drums for labeling, wipe clean the outer wall surfaces and drum lids of all material that might prevent legible and permanent labeling. If potentially contaminated material adheres to the outer surface of a drum, wipe that material from the drum, and segregate the paper towel or rag used to remove the material with visibly soiled PPE and

disposable sampling equipment. Label all IDW drums and place them on pallets prior to storage.

6.2 Labelling

6.2.1 Containers used to store IDW must be properly labelled. Two general conditions exist: 1) from previous studies or on-site data, waste characteristics are known to be either hazardous or nonhazardous; or 2) waste characteristics are unknown until additional data are obtained.

6.2.2 For situations where the waste characteristics are known, the waste containers should be packaged and labelled in accordance with state regulations and any federal regulations that may govern the labelling of waste.

6.2.3 The following information shall be placed on all non-hazardous waste labels:

- Description of waste (i.e., purge water, soil cuttings);
- Contact information (i.e., contact name and telephone number);
- Date when the waste was first accumulated.

6.2.4 The following information shall be placed on all hazardous waste labels:

- Description of waste (i.e., purge water, soil cuttings);
- Generator information (i.e., name, address, contact telephone number);
- EPA identification number (supplied by on-site client representative);
- Date when the waste was first accumulated.

6.2.5 When the final characterization of a waste is unknown, a notification label should be placed on the drum with the words “waste characterization pending analysis” and the following information included on the label:

- Description of waste (i.e., purge water, soil cuttings);
- Contact information (i.e., contact name and telephone number);
- Date when the waste was first accumulated.

6.2.6 Once the waste has been characterized, the label should be changed as appropriate for a nonhazardous or hazardous waste.

6.2.7 Waste labels should be constructed of a weatherproof material and filled out with a permanent marker to prevent being washed off or becoming faded by sunlight. It is recommended that waste labels be placed on the side of the container, since the top is more subject to weathering. However, when multiple containers are accumulated together, it also may be helpful to include labels on the top of the containers to facilitate organization and disposal.

6.2.8 Each container of waste generated shall be recorded in the field notebook used by the person responsible for labelling the waste. After the waste is disposed of, either by transportation off-site or disposal on-site in an approved disposal area, an appropriate record shall be made in the same field notebook to document proper disposition of IDW.

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6.3 Types of Site Investigation Waste

Several types of waste are generated during site investigations that may require special handling. These include solid, liquid, and used PPE, as discussed further below.

Solid Waste

Soil cuttings from boreholes will typically be placed in containers unless site specific requirements allow for soil cuttings to be placed back into the borehole after drilling is complete. Drilling mud generated during investigation activities shall be collected in containers. Covers should be included on the containers and must be secured at all times and only open during filling activities. The containers shall be labelled in accordance with this SOP. An inventory containing the source, volume, and description of material put in the containers shall be logged on prescribed forms and kept in the project file.

Non-hazardous solid waste can be disposed on-site in the designated site landfill or in a designated evaporation pond if it is liquefied. Hazardous wastes must be disposed off-site at an approved hazardous waste landfill.

Liquid Waste

Groundwater generated during monitoring well development, purging, and sampling can be collected in truck-mounted containers and/or other transportable containers (i.e., 55-gallon drums). Lids or bungs on drums must be secured at all times and only open during filling or pumping activities. The containers shall be labelled in accordance with this SOP. Non-hazardous liquid waste can be disposed of in one of the designated lined evaporation ponds on-site. Hazardous wastes must be handled separately and disposed off-site at an approved hazardous waste facility.

Personal Protective Equipment

PPE that is generated throughout investigation activities shall be placed in plastic garbage bags. If the solid or liquid waste that was being handled is characterized as hazardous waste, then the corresponding PPE should also be disposed as hazardous waste. If not, all PPE should be disposed as non-hazardous waste in the designated on-site landfill. Trash that is generated as part of field activities may be disposed of in the landfill as long as the trash was not exposed to hazardous media.

6.4 Waste Accumulation On-Site

6.4.1 Solid, liquid, or PPE waste generated during investigation activities that are classified as nonhazardous or “characterization pending analysis” should be disposed of as soon as possible. Until disposal, such containers should be inventoried, stored as securely as possible, and inspected regularly, as a general good practice.

6.4.2 Solid, liquid, or PPE waste generated during investigation activities that are classified as hazardous shall not be accumulated on-site longer than 90 days. All hazardous waste containers shall be stored in a secured storage area. The following requirements for the hazardous waste storage area must be implemented:

- Proper hazardous waste signs shall be posted as required by any state or federal statutes that may govern the labelling of waste;
- Secondary containment to contain spills;
- Spill containment equipment must be available;
- Fire extinguisher;
- Adequate aisle space for unobstructed movement of personnel.

6.4.3 Weekly storage area inspections shall be performed and documented to ensure compliance with these requirements. Throughout the project, an inventory shall be maintained to itemize the type and quantity of the waste generated.

6.5 Waste Disposal

6.5.1 Solid, liquid, and PPE waste will be characterized for disposal through the use of client knowledge, laboratory analytical data created from soil or groundwater samples gathered during the field activities, and/or composite samples from individual containers.

6.5.2 All waste generated during field activities will be stored, transported, and disposed of according to applicable state, federal, and local regulations. All wastes classified as hazardous will be disposed of at a licensed treatment storage and disposal facility or managed in other approved manners.

6.5.3 In general, waste disposal should be carefully coordinated with the facility receiving the waste. Facilities receiving waste have specific requirements that vary even for non-hazardous waste, so characterization should be conducted to support both applicable regulations and facility requirements.

6.6 Regulatory Requirements

The following federal and state regulations shall be used as resources for determining waste characteristics and requirements for waste storage, transportation, and disposal:

- Code of Federal Regulations (CFR), Title 40, Part 261;
- CFR, Title 49, Parts 172, 173, 178, and 179.

6.7 Waste Transport

A state-certified hazardous waste hauler shall transport all wastes classified as hazardous. Typically, the facility receiving any waste can coordinate a hauler to transport the waste. Shipped hazardous waste shall be disposed of in accordance with all RCRA/USEPA requirements. All waste manifests or bills of lading will be signed either by the client or the client's designee.

7.0 Quality Control and Assurance

7.1 Management of IDW must incorporate quality control measures to ensure conformance to these and the project requirements.

8.0 Records, Data Analysis, Calculations

8.1 Maintain records as required by implanting the procedures in this SOP.

8.2 Deviations from this procedure or the sampling and analysis plan shall be documented in field records. Significant changes shall be approved by the **Program Quality Manager**.

9.0 Attachments or References

Department of Defense, United States (DoD). 2005. *Uniform Federal Policy for Quality Assurance Project Plans, Part 1: UFP-QAPP Manual.* Final Version 1. DoD: DTIC ADA 427785, EPA-505-B-04-900A. In conjunction with the U. S. Environmental Protection Agency and the Department of Energy. Washington: Intergovernmental Data Quality Task Force. March. On-line updates available at: http://www.epa.gov/-fedfac/pdf/ufp_qapp_v1_0305.pdf.

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NAVFAC NW Standard Operating Procedure Number I-D-1, *Drum Sampling.*

NAVFAC NW Standard Operating Procedure Number I-F, *Equipment Decontamination.*

NAVFAC NW Standard Operating Procedure Number III-D, *Logbooks.*

Author	Reviewer	Revisions (Technical or Editorial)
Mark Kromis Program Chemist	Chris Barr Program Quality Manager	Rev 0 – Initial Issue (May 2012)

Equipment Decontamination

Procedure 3-06

1.0 Purpose and Scope

1.1 This standard operating procedure (SOP) describes methods of equipment decontamination, to be used for activities where samples for chemical analysis are collected or where equipment will need to be cleaned before leaving the site or before use in subsequent activities.

1.2 As guidance for specific activities, this procedure does not obviate the need for professional judgment. Deviations from this procedure while planning or executing planned activities must be approved in accordance with Program requirements for technical planning and review.

2.0 Safety

It is the responsibility of the **Site Safety Officer (SSO)** to set up the site zones (i.e., exclusion, transition, and clean) and decontamination areas. Generally the decontamination area is located within the transition zone, upwind of intrusive activities, and serves as the washing area for both personnel and equipment to minimize the spread of contamination into the clean zone. Typically, for equipment, a series of buckets are set up on a visqueen-lined bermed area. Separate spray bottles containing cleaning solvents as described in this procedure or the Contract Task Order (CTO) Work Plan (WP) and distilled water are used for final rinsing of equipment. Depending on the nature of the hazards and the site location, decontamination of heavy equipment, such as augers, pump drop pipe, and vehicles, may be accomplished using a variety of techniques.

All **Field Personnel** responsible for equipment decontamination must adhere to the site-specific health and safety plan (HSP) and must wear the personal protective equipment (PPE) specified in the site-specific HSP. Generally this includes, at a minimum, Tyvek® coveralls, steel-toed boots with boot covers or steel-toed rubber boots, safety glasses, American National Standards Institute-standard hard hats, and hearing protection (if heavy equipment is in operation). Air monitoring by the **SSO** may result in an upgrade to the use of respirators and cartridges in the decontamination area; therefore, this equipment must be available on site. If safe alternatives are not achievable, discontinue site activities immediately.

In addition to the aforementioned precautions, the following sections describe safe work practices that will be employed.

2.1 **Chemical Hazards associated with Equipment Decontamination**

- Avoid skin contact with and/or incidental ingestion of decontamination solutions and water.
- Utilize PPE as specified in the site-specific HSP to maximize splash protection.
- Refer to material safety data sheets, safety personnel, and/or consult sampling personnel regarding appropriate safety measures (i.e., handling, PPE including skin and respiratory).
- Take the necessary precautions when handling detergents and reagents.

2.2 **Physical Hazards associated with Equipment Decontamination**

- To avoid possible back strain, it is recommended to raise the decontamination area 1 to 2 feet above ground level.
- To avoid heat stress, over exertion, and exhaustion, it is recommended to rotate equipment decontamination among all site personnel.

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- Take necessary precautions when handling field sampling equipment.

3.0 Terms and Definitions

None.

4.0 Training and Qualifications

4.1 The **CTO Manager** is responsible for ensuring that decontamination activities comply with this procedure. The **CTO Manager** is responsible for ensuring that all personnel involved in equipment decontamination shall have the appropriate education, experience, and training to perform their assigned tasks.

4.2 The **Program Quality Manager** is responsible for ensuring overall compliance with this procedure.

4.3 The **Field Manager** is responsible for ensuring that all field equipment is decontaminated according to this procedure.

4.4 All **Field Personnel** are responsible for the implementation of this procedure.

5.0 Procedure

Decontamination of equipment used in soil/sediment sampling, groundwater monitoring, well drilling and well development, as well as equipment used to sample groundwater, surface water, sediment, waste, wipe, asbestos, and unsaturated zone, is necessary to prevent cross-contamination and to maintain the highest integrity possible in collected samples. Planning a decontamination program requires consideration of the following factors:

- Location where the decontamination procedures will be conducted
- Types of equipment requiring decontamination
- Frequency of equipment decontamination
- Cleaning technique and types of cleaning solutions appropriate to the contaminants of concern
- Method for containing the residual contaminants and wash water from the decontamination process
- Use of a quality control measure to determine the effectiveness of the decontamination procedure

The following subsections describe standards for decontamination, including the frequency of decontamination, cleaning solutions and techniques, containment of residual contaminants and cleaning solutions, and effectiveness.

5.1 Decontamination Area

Select an appropriate location for the decontamination area at a site based on the ability to control access to the area, the ability to control residual material removed from equipment, the need to store clean equipment, and the ability to restrict access to the area being investigated. Locate the decontamination area an adequate distance away and upwind from potential contaminant sources to avoid contamination of clean equipment.

5.2 Types of Equipment

Drilling equipment that must be decontaminated includes drill bits, auger sections, drill-string tools, drill rods, split barrel samplers, tremie pipes, clamps, hand tools, and steel cable. Decontamination of monitoring well development and groundwater sampling equipment includes submersible pumps, bailers, interface probes, water level meters, bladder pumps, airlift pumps, peristaltic pumps, and lysimeters. Other sampling equipment that requires decontamination includes, but is not limited to, hand trowels,

hand augers, slide hammer samplers, shovels, stainless-steel spoons and bowls, soil sample liners and caps, wipe sampling templates, composite liquid waste samplers, and dippers. Equipment with a porous surface, such as rope, cloth hoses, and wooden blocks, cannot be thoroughly decontaminated and shall be properly disposed of after one use.

5.3 Frequency of Equipment Decontamination

Decontaminate down-hole drilling equipment and equipment used in monitoring well development and purging prior to initial use and between each borehole or well. Down-hole drilling equipment, however, may require more frequent cleaning to prevent cross-contamination between vertical zones within a single borehole. When drilling through a shallow contaminated zone and installing a surface casing to seal off the contaminated zone, decontaminate the drilling tools prior to drilling deeper. Initiate groundwater sampling by sampling groundwater from the monitoring well where the least contamination is suspected. Decontaminate groundwater, surface water, and soil sampling devices prior to initial use and between collection of each sample to prevent the possible introduction of contaminants into successive samples.

5.4 Cleaning Solutions and Techniques

Decontamination can be accomplished using a variety of techniques and fluids. The preferred method of decontaminating major equipment, such as drill bits, augers, drill string, and pump drop-pipe, is steam cleaning. To steam clean, use a portable, high-pressure steam cleaner equipped with a pressure hose and fittings. For this method, thoroughly steam wash equipment and rinse it with potable tap water to remove particulates and contaminants.

A rinse decontamination procedure is acceptable for equipment such as bailers, water level meters, new and re-used soil sample liners, and hand tools. The decontamination procedure shall consist of the following: (1) wash with a non-phosphate detergent (Alconox®, Liquinox®, or other suitable detergent) and potable water solution; (2) rinse with potable water; (3) spray with laboratory-grade isopropyl alcohol; (4) rinse with deionized or distilled water; and (5) spray with deionized or distilled water. If possible, disassemble equipment prior to cleaning. Add a second wash at the beginning of the process if equipment is very soiled.

Decontaminating submersible pumps requires additional effort because internal surfaces become contaminated during usage. Decontaminate these pumps by washing and rinsing the outside surfaces using the procedure described for small equipment or by steam cleaning. Decontaminate the internal surfaces by recirculating fluids through the pump while it is operating. This recirculation may be done using a relatively long (typically 4 feet) large-diameter pipe (4-inch or greater) equipped with a bottom cap. Fill the pipe with the decontamination fluids, place the pump within the capped pipe, and operate the pump while recirculating the fluids back into the pipe. The decontamination sequence shall include: (1) detergent and potable water; (2) potable water rinse; (3) potable water rinse; and (4) deionized water rinse. Change the decontamination fluids after each decontamination cycle.

Solvents other than isopropyl alcohol may be used, depending upon the contaminants involved. For example, if polychlorinated biphenyls or chlorinated pesticides are contaminants of concern, hexane may be used as the decontamination solvent; however, if samples are also to be analyzed for volatile organics, hexane shall not be used. In addition, some decontamination solvents have health effects that must be considered. Decontamination water shall consist of distilled or deionized water. Steam-distilled water shall not be used in the decontamination process as this type of water usually contains elevated concentrations of metals. Decontamination solvents to be used during field activities will be specified in the CTO WP.

Rinse equipment used for measuring field parameters, such as pH (indicates the hydrogen ion concentration – acidity or basicity), temperature, specific conductivity, and turbidity with deionized or distilled water after each measurement. Also wash new, unused soil sample liners and caps with a fresh

detergent solution and rinse them with potable water followed by distilled or deionized water to remove any dirt or cutting oils that might be on them prior to use.

5.5 **Containment of Residual Contaminants and Cleaning Solutions**

A decontamination program for equipment exposed to potentially hazardous materials requires a provision for catchment and disposal of the contaminated material, cleaning solution, and wash water.

When contaminated material and cleaning fluids must be contained from heavy equipment, such as drill rigs and support vehicles, the area must be properly floored, preferably with a concrete pad that slopes toward a sump pit. If a concrete pad is impractical, planking can be used to construct solid flooring that is then covered by a nonporous surface and sloped toward a collection sump. If the decontamination area lacks a collection sump, use plastic sheeting and blocks or other objects to create a bermed area for collection of equipment decontamination water. Situate items, such as auger flights, which can be placed on metal stands or other similar equipment, on this equipment during decontamination to prevent contact with fluids generated by previous equipment decontamination. Store clean equipment in a separate location to prevent recontamination. Collect decontamination fluids contained within the bermed area and store them in secured containers as described below.

Use wash buckets or tubs to catch fluids from the decontamination of lighter-weight drilling equipment and hand-held sampling devices. Collect the decontamination fluids and store them on site in secured containers, such as U.S. Department of Transportation-approved drums, until their disposition is determined by laboratory analytical results. Label containers in accordance with Procedure 3-05, *IDW Management*.

6.0 Quality Control and Assurance

A decontamination program must incorporate quality control measures to determine the effectiveness of cleaning methods. Quality control measures typically include collection of equipment blank samples or wipe testing. Equipment blanks consist of analyte-free water that has been poured over or through the sample collection equipment after its final decontamination rinse. Wipe testing is performed by wiping a cloth over the surface of the equipment after cleaning. These quality control measures provide "after-the fact" information that may be useful in determining whether or not cleaning methods were effective in removing the contaminants of concern.

7.0 Records, Data Analysis, Calculations

Any project where sampling and analysis is performed shall be executed in accordance with an approved sampling and analysis plan. This procedure may be incorporated by reference or may be incorporated with modifications described in the plan.

Deviations from this procedure or the sampling and analysis plan shall be documented in field records. Significant changes shall be approved by the **Program Quality Manager**.

8.0 Attachments or References

8.1 ASTM Standard D5088. 2008. *Standard Practice for Decontamination of Field Equipment Used at Waste Sites.* ASTM International, West Conshohocken, PA. 2008. DOI: 10.1520/D5088-02R08. www.astm.org.

8.2 NAVSEA T0300-AZ-PRO-010. *Navy Environmental Compliance Sampling and Field Testing Procedures Manual*. August 2009.

8.3 Procedure 3-05, *IDW Management*.

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Author	Reviewer	Revisions (Technical or Editorial)
Mark Kromis Program Chemist	Chris Barr Program Quality Manager	Rev 0 – Initial Issue

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Monitoring Well Installation

Procedure 3-12

1.0 Purpose and Scope

1.1 This standard operating procedure (SOP) describes the methods to be used during the installation of groundwater monitoring wells. It describes the components of monitoring well design and installation and sets forth the rationale for use of various well installation techniques in specific situations.

1.2 As guidance for specific activities, this procedure does not obviate the need for professional judgment. Deviations from this procedure while planning or executing planned activities must be approved in accordance with Program requirements for technical planning and review.

2.0 Safety

2.1 The health and safety considerations for the work associated with this SOP, including both potential physical and chemical hazards, will be addressed in the project Health and Safety Plan (HASP). In the absence of a HASP, work will be conducted according to the Contract Task Order (CTO) Work Plan (WP) and/or direction from the **Site Safety Officer (SSO)**.

2.2 Before well installation commences, appropriate entities (e.g. DigSafe, local public works departments, company facilities) must be contacted to assure the anticipated well locations are marked for utilities, including electrical, telecommunications, water, sewer, and gas.

2.3 Physical Hazards Associated with Well Installation

- Stay clear of all moving equipment and avoid wearing loose fitting clothing.
- When using an approved retractable-blade knife, always cut away from one self and make sure there are no other people in the cutting path or the retractable-blade knife.
- To avoid slip/trip/fall conditions during drilling activities, keep the area clear of excess soil cuttings and groundwater. Use textured boots/boot cover bottoms in muddy areas.
- To avoid heat/cold stress as a result of exposure to extreme temperatures and personal protective equipment (PPE), drink electrolyte replacement fluids (1 to 2 cups per hour is recommended) and, in cases of extreme cold, wear fitted insulating clothing.
- To avoid hazards associated with subsurface utilities, ensure all sampling locations have been properly surveyed as described in SOP 3-01, Utility Clearance.
- Be aware of restricted mobility caused by PPE.

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3.0 Terms and Definitions

3.1 **Annulus:** The annulus is the down-hole space between the borehole wall and the well casing and screen.

3.2 **Bridge:** A bridge is an obstruction in the drill hole or annulus. A bridge is usually formed by caving of the wall of the well bore, by the intrusion of a large boulder, or by the placement of filter pack materials during well completion. Bridging can also occur in the formation during well development.

3.3 **Filter Pack:** Filter pack is sand or gravel that is smooth, uniform, clean, well-rounded, and siliceous. It is placed in the annulus of the well between the borehole wall and the well screen to prevent formation materials from entering the well and to stabilize the adjacent formation.

3.4 **Grout:** Grout is a fluid mixture of cement and water that can be forced through a tremie pipe and emplaced in the annular space between the borehole and casing to form an impermeable seal. Various additives, such as sand, bentonite, and polymers, may be included in the mixture to meet certain requirements.

3.5 **Heaving (Running) Sands:** Loose sands in a confined water-bearing zone or aquifer which tend to rise up into the drill stem when the confining unit is breached by the drill bit. Heaving sands occur when the water in the aquifer has a pressure head great enough to cause upward flow into the drill stem with enough velocity to overcome the weight of the sand.

3.6 **Sieve Analysis:** Sieve analysis is the evaluation of the particle-size distribution of a soil, sediment, or rock by measuring the percentage of the particles that will pass through standard sieves of various sizes.

4.0 Interferences

4.1 Heaving sands may be problematic in unconsolidated sands encountered below the water table.

4.2 Rotary drilling methods requiring bentonite-based drilling fluids should be used with caution to drill boreholes that will be used for monitoring well installation. The bentonite mud builds up on the borehole walls as a filter cake and permeates the adjacent formation, potentially reducing the permeability of the material adjacent to the well screen.

4.3 If water or other drilling fluids have been introduced into the boring during drilling or well installation, samples of these fluids should be obtained and analyzed for chemical constituents that may be of interest at the site. In addition, an attempt should be made to recover the quantity of fluid or water that was introduced, either by flushing the borehole prior to well installation and/or by overpumping the well during development.

4.4 Track-mounted drill rigs are suitable for travelling on many types of landscapes that truck-mounted units cannot access, but may have limitations on extremely uneven or soft terrain.

4.5 Care should be taken to prevent cross-contamination between well locations. All drilling equipment coming in contact with potentially contaminated soil and/or groundwater will be decontaminated by the drilling subcontractor prior to initial drilling activities and between drilling locations in accordance with SOP 3-06, Equipment Decontamination.

5.0 Training and Qualifications

5.1 **Qualifications and Training**

The individual executing these procedures must have read, and be familiar with, the requirements of this SOP.

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5.2 **Responsibilities**

5.2.1 **Contract Task Order (CTO) Managers** are responsible for issuing sampling and analysis plans (SAPs) that reflect the procedures and specifications presented in this procedure. Individual municipalities, county agencies, and possibly state regulatory agencies enforce regulations that may include well construction and installation requirements. The **CTO Manager** shall be familiar with current local and state regulations, and ensure that these regulations are followed. The **CTO Manager** is responsible for ensuring that all personnel involved in monitoring well installation shall have the appropriate education, experience, and training to perform their assigned tasks.

5.2.2 The **Program Quality Manager** is responsible for ensuring overall compliance with this procedure.

5.2.3 The **Field Manager** is responsible for direct supervision of the installation of monitoring wells and ensuring that procedures and specifications are implemented in the field in accordance with the approved SAP and well installation permits. The qualifications for the **Field Manager** must be in accordance with local jurisdictions with authority over the operations conducted.

5.2.4 All field personnel are responsible for the implementation of this procedure.

5.2.5 The on-site hydrogeologist/engineer is expected to obtain a description of the lithologic samples obtained during the excavation and construction of a monitoring well. These data are often required to provide guidance regarding the installation of specific components of the monitoring well. Guidance for lithologic sample collection and sample description is contained within SOP 3-16, Soil and Rock Classification.

6.0 Equipment and Supplies

6.1 Materials provided by the drilling contractor may include:

- Drill rig, drill rods, hollow stem augers, etc.
- Decontamination equipment (e.g., steam cleaner, high-pressure washer, brushes, etc.)
- Decontamination pad materials
- Well screen/riser pipe with flush-threaded couplings including riser and bottom caps
- Clean, filter sand
- Bentonite chips or pellets
- Cement grout and tremie pipe
- Portland cement for well pad completion
- Steel protective riser covers and locking caps
- Weighted calibrated tape
- Split-spoon samplers
- 55-gallon drums or containers for drill cuttings, decontamination fluids, etc.

6.2 In addition to those materials provided by the drilling contractor, equipment and materials required by the project geologist/engineer may include, but is not limited to, the following:

- Photoionization Detector (PID)
- Spill kit, including at a minimum sorbent pads and shovel (if not provided by subcontractor)

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- Plastic sheeting
- Teaspoon or spatula
- Resealable plastic bags
- Boring Log Records
- Decontamination materials (per SOP No. 3-06 - Equipment Decontamination)
- Weighted measuring tape for depth measurement
- Soil logging materials (e.g. USCS classification field card, millimeter rule, hand lens, etc.)
- Survey lathes or pin flags
- Digital camera
- PPE as required by the HASP
- Planning documents including the site-specific HASP and SAP
- Large indelible ink or paint pen
- Field logbook/field forms/site maps (water proof)

7.0 Procedure

7.1 General Procedures

- Specific drilling, sampling, and installation equipment and methodology will be dictated by the type of well to be installed (e.g., single case (Type II), double case (Type III), bedrock, etc.), geologic characteristics of the site, the type of contaminants being monitored, and local and state regulations.
- For access to locations when travelling over difficult terrain, an appropriate line should be chosen before mobilizing the drill rig or other support vehicles. If clearing of trees or ground cover is required, perform these activities in advance to avoid down time. Avoid wet or soft areas where possible or use ground mats and/or timbers to aid in supporting the rig as it travels. If drilling on soft material, place geomatting and ground mats under the rig tracks or stabilizers prior to drilling.
- A utility locate must be conducted to identify all underground utilities at the site prior to drilling (refer to SOP 3-01, Utility Clearance*)*. Proper clearance procedures for aboveground/overhead utilities must also be followed as specified in the HASP.
- Although new well materials (well screen and riser pipe) generally arrive at the site boxed and sealed within plastic bags, it is sometimes necessary to decontaminate the materials prior to their use. Well materials should be inspected by the project geologist/engineer upon delivery to check for cleanliness. If the well materials appear dirty, or if local or regional regulatory guidance requires decontamination, then well material decontamination should be performed by the drilling subcontractor in accordance with SOP 3-06, Equipment Decontamination.
- The diameter of the borehole must be a minimum of 2 inches greater than the outside diameter of the well screen or riser pipe used to construct the well. This is necessary so that sufficient annular space is available to install filter packs, bentonite seals, and grout seals, and allow the passage of tremie pipe where grouting at depth is required. Bedrock wells may require reaming after coring in order to provide a large enough borehole diameter for well installation.
- When soil sampling is required (refer to the SAP), soil samples will be collected for visual logging by advancing split-spoon samplers through the augers. The soil will be visually logged by a field geologist and include lithologic characteristics (i.e., soil type, color, density, moisture content, etc.) using the the

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methods described in SOP 3-16, Soil and Rock Classification. This information will be recorded on a boring/well log form, along with well construction details.

7.2 Drilling Techniques

Drilling of monitoring well boreholes may be accomplished by a variety of methods as described below. Preferred methods include those that temporarily case the borehole during drilling (i.e., hollow stem auger and sonic methods) using an override system. Other methods can be used where specific subsurface conditions or well design criteria dictate.

- Hollow stem auger (HSA) – Borings are advanced by rotating steel hollow stem augers with an attached cutting head. Soil cuttings are displaced by the cutting head and transported to the surface via continuous spiral flights attached to each auger stem. This method is widely used for unconsolidated soils that have a tendency to collapse within the boring. A bottom plug can be placed in the bottom auger to prevent soils from entering and clogging the auger, especially in the case of heaving sands. However, a bottom plug cannot be used when soil samples are to be collected through the augers. Soil plugs that accumulate in the bottom of the auger must be removed or knocked out prior to sampling or well installation.
- Solid stem auger – This type of drilling method is similar to HSA drilling using a solid stem or sealed hollow stem auger flights to advance the boring. Solid stem, continuous flight auger use is limited to semi-consolidated sediments or to cohesive or semi-cohesive unconsolidated sediments that don't have a tendency to collapse when disturbed.
- Sonic methods – Sonic drilling consists of advancing concentric hollow drill casings (inner and outer) using rotation in conjunction with axial vibration of the drill casing. Once the casings are advanced to the appropriate depth, the inner string is removed with a core of drill cuttings while the outer casing remains in place to keep the borehole open. Cuttings are removed from the inner casing relatively intact for logging or sampling purposes. This drilling method is used for a variety of soil types, from heaving sands to consolidated or indurated formations. Smearing of the formation along the borehole walls is minimal since moderate vibration and rotation techniques are used to advance the casings. Since the total borehole diameter in sonic drilling is only incrementally larger than the inner casing diameter, care should be taken during installation of the monitoring well to ensure the well is centered and adequate space is available for annular materials.
- Rotary methods (water or mud) – Rotary drilling methods consist of drill rods coupled to a drill bit that rotates and cuts through the soils to advance the borehole. Water or drilling fluid ("mud") is forced through the hollow drill rods and drill bit as the rods are rotated. The soil cuttings are forced up the borehole with the drilling fluids to the surface and the fluids recirculated. The drilling fluid provides a hydrostatic pressure that reduces or prevents the borehole from collapsing. Clean, potable water must be used for water-rotary drilling to prevent introducing trace contaminants. A sample of the potable water should be collected during the course of well installation for analysis of the same parameters defined for the groundwater samples. If mud-rotary is used to advance boreholes, potable water and bentonite drilling mud should only be used. No chemical additives shall be mixed in the drilling fluid to alter viscosity or lubricating properties. Adequate well development is essential for removal of drilling mud and fluids from the formation materials and ensure collection of representative groundwater samples.
- Rotary methods (Air) – Air rotary methods are similar to water rotary but use high air velocities in place of drilling fluids to rotate the drill bit and carry the soil cuttings up the borehole to the surface. Care must be taken to ensure that contaminants are not introduced into the air stream from compressor oils, etc. Most compressor systems are compatible with a coalescing filter system. Cuttings exiting the borehole under pressure must be controlled, especially when drilling in a zone of potential contamination. This can be accomplished by using an air diverter with hose or pipe to carry the cuttings to a waste container. Letting the cuttings blow uncontrolled from the borehole is not acceptable.

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7.3 Well Construction and Installation

- If rotary drilling techniques are used, the borehole should be flushed or blown free of material prior to well installation. If hollow stem augers are used, the soil or bottom plug should be removed and the augers raised approximately six inches above the bottom of the borehole, while slowly rotating the augers to remove cuttings from the bottom of the boring. The depth of the borehole should be confirmed with a weighted, calibrated tape.
- The riser pipe and screen should be connected with flush-threaded joints and assembled wearing clean, disposable gloves. No solvent or anti-seize compound should be used on the connections. The full length of the slotted portion of the well screen and unslotted riser pipe should be measured and these measurements recorded on a well construction form (Attachment 1).
- If placed in an open borehole, the assembled well should be carefully lowered and centered in the borehole so that the well is true, straight, and vertical throughout. Centering can also be accomplished with the use of centralizers, if necessary. However, centralizers should be placed so that they do not inhibit the installation of filter sand, bentonite seal, and annular grout. Wells less than 50 deep generally do not require centralizers.
- If hollow stem augers are used, the well should be lowered through the augers and each auger flight removed incrementally as the filter sand, bentonite seal, and grout are tremmied or poured into the annular space of the well. The well should be temporarily capped before filter sand and other annular materials are installed.
- Clean, silica sand should be placed around the well screen to at least 1 foot above the top of the screen. The filter sand should be appropriately graded and compatible with the selected screen size and surrounding formation materials. In general, the filter pack should not extend more than 3 feet above the top of the screen to limit the thickness of the monitoring zone. As the filter pack is placed, a weighted tape should be lowered in the annular space to verify the depth to the top of the layer. This measurement will be recorded on the well construction form (Attachment 1). If necessary, to eliminate possible bridging or creation of voids, placement of the sand pack may require the use of a tremie pipe. Tremie pipe sandpack installations are generally suggested for deeper wells and for wells which are screened some distance beneath the water table.
- A minimum 2-foot thick layer of bentonite pellets or slurry seal will be installed immediately above the filter sand to prevent vertical flow within the boring from affecting the screened interval. Bentonite chips/pellets must be hydrated if place above the water table prior to grouting. If bridging is of concern as in the case of deep wells, powdered bentonite may be mixed with water into a very thick slurry and a tremie pipe used to place the seal to the desired depth. Placement of the bentonite seal in the borehole will be recorded on the well construction form (Attachment 1).
- The remaining annular space around the well will be grouted from the top of the bentonite seal to the surface with a grout composed of neat cement, a bentonite cement mixture, or high solids sodium bentonite grout.
- Each well riser will be secured with an expandable, locking cap (vented if possible). Optionally, a hole can be drilled in the upper portion of the riser to allow venting of the well.
- The well will be completed within a concrete well pad consisting of a Portland cement/sand mixture. Well pads are generally 3 feet by 3 feet square but may be larger or smaller depending on site conditions and state-specific well construction standards. Round concrete well pads are also acceptable. A minimum of 1 inch of the finished pad should be below grade to prevent washing and undermining by soil erosion.
- If completed as a flush-mount well, the well riser will be cut off approximately 4 to 6 inches below ground surface and an expandable, locking cap placed on the well riser. The area around the riser is dug out and a steel well vault or manhole cover placed over the riser and set almost flush to the ground

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to protect the well. The manhole cover should be water-tight and secured with bolts to prevent casual access. The well pad will then be constructed around the well vault and slightly mounded at the center and sloping away to prevent surface water from accumulating in the well vault.

- If completed as a stick-up well, the well riser is cut approximately 2.5 to 3 feet above the ground surface and an expandable, locking cap placed on the well riser. A steel guard pipe with hinged, locking cap is placed over the well riser as a protective casing. The bottom of the guard pipe will be set approximately 2 feet below ground surface and sealed by pouring concrete from the top of the annular grout around the pipe to grade. The concrete well pad should be completed at the same time. Weep holes will be drilled in the base of the guard pipe to facilitate draining of rainwater or purge water from inside the guard pipe.
- Bumper posts or bollards may be necessary for additional well protection, especially in high traffic areas. The bumper posts should be placed around the well pad in a configuration that provides maximum protection to the well and extend a minimum of 3 feet above the ground.

7.4 Double Cased Wells

Under certain site conditions, the use of a double-cased or telescoping (Type III) well may be necessary. Installation of double-cased wells may be required to prevent the interconnection of two separate aquifers, seal off a perched aquifer without creating a vertical hydraulic conduit, prevent cross-contamination during construction of wells in deeper aquifers hydro-stratigraphically below impacted aquifers, or case off highly impacted soils present above the aquifer to prevent potential “dragging down” of contaminants.

Similar to conventional wells, construction of double-cased wells can be accomplished using a varety of drilling methods. Well construction is initiated by “keying” a large diameter, outer casing into a stratigraphic zone of low permeability (clay layer or bedrock). The size of the outer casing should be a minimum of 2 inches greater than the outside diameter of the inner casing to allow installation of annular seal materials during well completion. A pilot borehole should be drilled through the overburden soil and/or contaminated zone into a clay confining layer or bedrock. The borehole for the outer casing should be of sufficient size to contain the outer casing with a minimum of 2 inches around the outside diameter to allow sufficient annular space for tremie or pressure grouting. The boring should extend a minimum of 2 feet into a clay layer and a minimum of 1 foot into bedrock, if possible, to ensure an adequate seal. The boring should never breach a confining layer or keyed zone under any circumstances.

Once the boring is completed, the outer casing can be set in the borehole and sealed with grout. The outer casing can be set two ways, with or without a bottom cap. If no bottom cap is applied, the casing is usually driven approximately 6 inches into the clay confining unit. A grout plug is generally placed in the bottom of the casing and once set, standing water in the casing is evacuated prior to drilling below the casing. As an alternative, a cap can be placed on the bottom of the casing and if set below the water table, the casing can be filled with clean, potable water to hold down the casing in the boring. Grouting should be conducted using tremie-grouting or pressure-grouting methods by pumping grout into the annular space between the outer casing and the borehole wall from the bottom of the casing to the ground surface. Grout around the casing should be allowed to cure at least 24 hours before attempting to drill through the bottom.

Once the grout is cured, a smaller diameter drill pipe/bit is used to bore through the grout plug or bottom cap to the desired well depth. The well is then constructed as described in Section 7.3 above.

7.5 Post Installation Procedures

- Wells should be permanently labelled or marked for identification. Well tags can be used to record the site name, well number, total depth, installation date, etc. At a minimum, the well number will be written in indelible marker or paint on both the outside of the protective casing and inside beneath the casing lid, as well as on the riser pipe.

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- A measuring point will be marked on the top of the riser pipe for taking water level measurements. The measuring point can be notched using a knife or saw or can be marked with a waterproof marker or paint. The measuring point will also be the point which will be surveyed for vertical elevation data.
- Upon completion, the following measurements will be taken by the field geologist/engineer and recorded on the well construction diagram.
    - Depth to static water level
    - Depth of non-aqueous phase liquid (NAPL), if present
    - Total depth of well measured from top of casing (TOC)
    - Height of well casing above ground surface
    - Height of protective casing above ground surface
- All monitoring wells will be surveyed for horizontal and vertical control by a licensed surveyor.
- Investigation-derived waste (IDW) including drill cuttings, spent materials (e.g., PPE), and decontamination water should be properly managed in accordance with SOP 3-05, IDW Management.

8.0 Quality Control and Assurance

8.1 Field personnel will follow specific quality assurance (QA) guidelines as outlined in the SAP. Certain quality control (QC) measures should be taken to ensure proper well installation and construction in accordance with this SOP, project specific SAP, and applicable well standards.

8.2 The borehole will be checked for total open depth, and extended by further drilling or shortened by backfilling, as required before installation of the well materials.

8.3 Water level and NAPL presence will be checked during well installation to ensure that the positions of well screen, filter sand, and seals relative to water level conform to project requirements

8.4 The depth to top of each layer of annular materials (i.e., filter sand, bentonite, grout) will be verified and adjusted as necessary for proper placement.

9.0 Records, Data Analysis, Calculations

All field information will be recorded in the field logbook and/or standardized field forms by field personnel. Field data recorded will include drilling contractor information, drilling methods, well material and construction information provided on the boring logs and well construction forms, observations or problems encountered during drilling, fluid level data, and any deviations from the procedures in this SOP and other project plans. Well Construction Forms (Attachment 1) will provide visual and descriptive information the monitoring well and are often the most critical form of documentation generated during the installation of a monitoring well. The field logbook is kept as a general log of activities and should not be used in place of the boring log.

10.0 Attachments or References

10.1 Attachment 1 – Monitoring Well Construction Form

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10.2 Environmental Protection Agency, United States (EPA). 1987. *A Compendium of Superfund Field Operations Methods*. Office of Solid Waste and Emergency Response. EPA/540/P-87/001.

10.3 EPA. 1990. *Handbook of Suggested Practices for the Design and Installation of Groundwater Monitoring Wells*. EPA/600/4-89/034. Office of Research and Development, Washington. March.

10.4 EPA. 1992. *RCRA Groundwater Monitoring Draft Technical Guidance*. EPA/530/R-93/001. Office of Solid Waste. November.

10.5 EPA, 2008. SESD Operating Procedure SESDGUID-101-R0: *Design and Installation of Monitoring Wells*. USEPA, Science and Ecosystem Support Division (SESD), Athens, Georgia. Effective Date February 18, 2008.

10.6 U.S. Army Corps of Engineers. 2008. Manual No. EM 385-1-1. *Safety and Health Requirements*. 15 November 2008. http://140.194.76.129/publications/eng-manuals/em385-1-1/2008_English/toc.html.

10.7 SOP 3-01, *Utility Clearance*.

10.8 SOP 3-05, *IDW Management*

10.9 SOP 3-06, *Equipment Decontamination*.

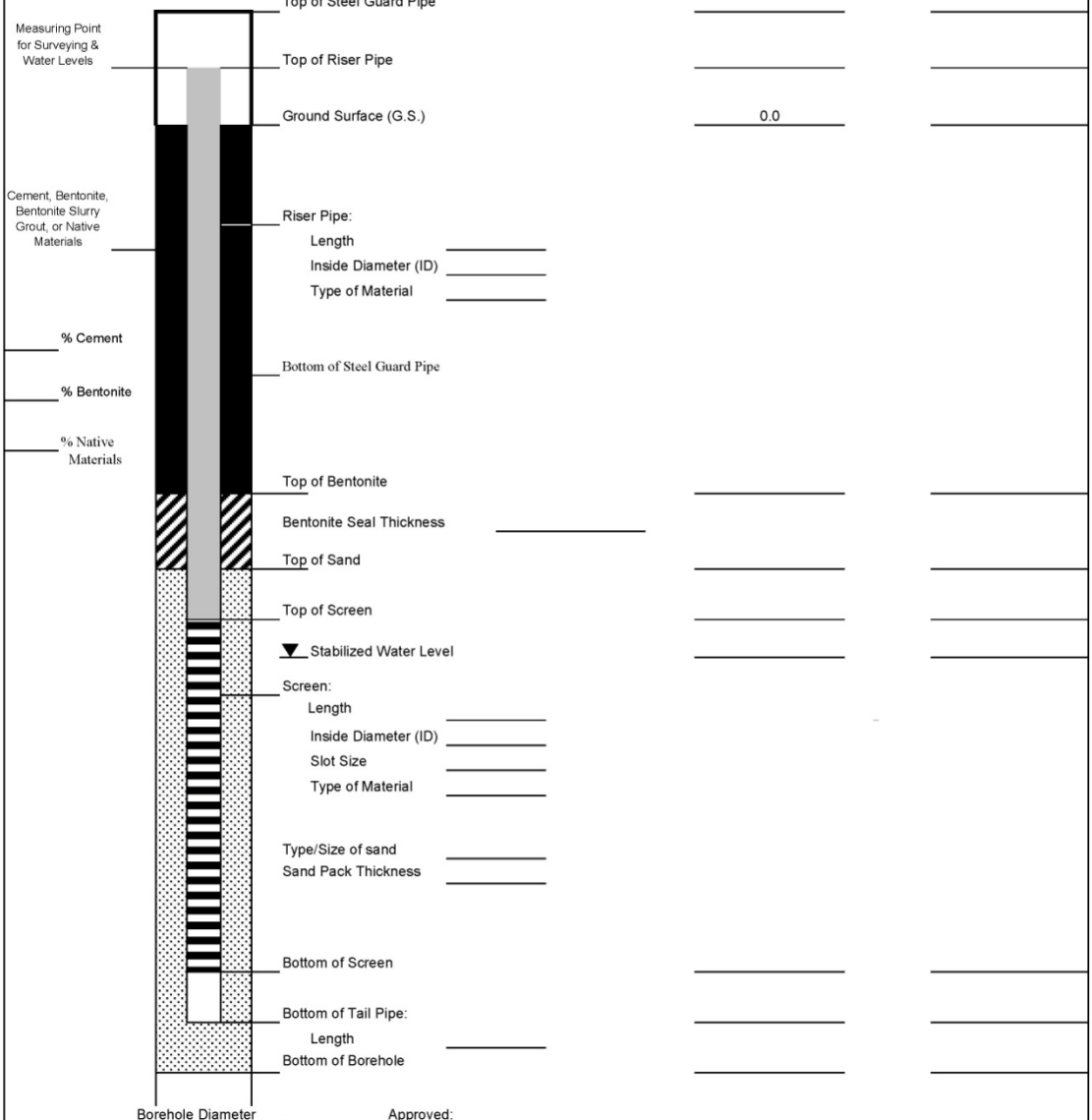
10.10 SOP 3-16, *Soil and Rock Classification.*

Author	*Reviewer*	*Revisions (Technical or Editorial)*
Mark Kromis Program Chemist	Chris Barr Program Quality Manager	Rev 0 – Initial Issue (May 2012)

Attachment 1
Monitoring Well Construction Form

RESOLUTION CONSULTANTS	*Client:*	***WELL ID:***
	Project Number:	
	Site Location:	*Date installed:*
	Well Location: *Coords:*	*Inspector:*
	Method:	*Contractor:*

MONITORING WELL CONSTRUCTION DETAIL



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Monitoring Well Development

Procedure 3-13

1.0 Purpose and Scope

1.1 This standard operating procedure (SOP) describes the procedures used for developing newly installed monitoring wells and/or redeveloping existing wells.

1.2 The purpose of well development is to remove interferences from a well to provide better connection between the well and the formation, to improve pumping performance of the well, and to be able to collect more representative information from the well (e.g., samples, test results, etc.). Proper well development will:

- Remove drilling residuals (e.g., water, mud) from the borehole and surrounding formations;
- Improve or restore hydraulic conductivity of the surrounding formations which may have been disturbed during the drilling process;
- Remove residual fines from the well screen and sand pack (filter pack) materials, thus reducing turbidity of groundwater and permitting the collection of more representative groundwater samples.

1.3 There may be circumstances where well development is not desirable, for example, in the presence of non-aqueous phase liquids (NAPL) or other significant contamination if development could worsen the contaminant impact. If NAPL begins to intrude during development, the development process will be halted. This situation will be considered a cause for sample modification requiring approval by the CTO Manager and other stakeholders, as applicable.

1.4 The applicable well development procedures for a particular site may be subject to State or local regulatory requirements. In all cases, the project team should consult their local regulatory requirements and document the selected well development procedure in the project-specific Sampling and Analysis Plan (SAP). For project-specific information refer to the SAP, which takes precedence over these procedures.

1.5 This procedure is the Program-approved professional guidance for work performed by Resolution Consultants under the Comprehensive Long-Term Environmental Action Navy (CLEAN) contract (Contract Number N62470-11-D-8013).

1.6 As guidance for specific activities, this procedure does not obviate the need for professional judgment. Deviations from this procedure while planning or executing planned activities must be approved in accordance with Program requirements for technical planning and review.

2.0 Safety

2.1 The health and safety considerations for the work associated with this SOP, including both potential physical and chemical hazards, will be addressed in the project Health and Safety Plan (HASP). In the absence of a HASP, work will be conducted according to the Contract Task Order (CTO) SAP and/or direction from the Site Safety Officer (SSO).

2.2 Monitoring well development may involve chemical hazards associated with potential contaminants in the soil or aquifer being characterized and may involve physical hazards associated with use of well development equipment.

3.0 Terms and Definitions

None.

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4.0 Interferences

4.1 Equipment/materials used for development may react with the groundwater during development. Appropriate development equipment has been selected for the anticipated condition of the groundwater.

4.2 Appropriate development methods such as using a surge-block to flush suspended fines in the groundwater in and out of the well screen can improve the yield of wells and improve their potential to be developed successfully. However, the effectiveness of development can be significantly reduced in wells that do not yield sufficient water to allow this flushing to take place.

4.3 For formations with a significant content of fine-grained materials (silts and clays), or wells with improperly sized screens, it may not be possible to reduce turbidity to commonly acceptable levels. Possible solutions may include collecting a sample even if excessively turbid, or installing a replacement well.

4.4 Development itself disturbs the surrounding formation and disrupts equilibrium conditions within the well. Groundwater samples will not be collected until a minimum of 24 hours after a well is developed to allow conditions to stabilize. For sites with fine-grained formations (silts and clays) and highly sorptive contamination, a longer time period between development and sampling should be considered.

5.0 Training and Qualifications

5.1 Qualifications and Training

The individual executing these procedures must have read, and be familiar with, the requirements of this SOP.

5.2 Responsibilities

5.2.1 The **CTO Manager** is responsible for ensuring that well development activities comply with this procedure. The **CTO Manager** is responsible for ensuring that all personnel involved in well development shall have the appropriate education, experience, and training to perform their assigned tasks.

5.2.2 The **Program Quality Manager** is responsible for ensuring overall compliance with this procedure.

5.2.3 The **Field Manager** is responsible for ensuring that all well development activities are conducted according to the either this procedure or the applicable procedure presented in the project-specific SAP.

5.2.4 **Field sampling personnel** are responsible for the implementation of this procedure.

5.2.5 The field sampler and/or task manager is responsible for directly supervising the well development procedures to ensure that they are conducted according to this procedure and for recording all pertinent data collected during sampling.

6.0 Equipment and Supplies

6.1 This equipment list was developed to aid in field organization and should be used in planning and preparation. Depending on the site-specific requirements and the development method selected, additional or alternative material and equipment may be necessary. In addition, for sites where groundwater is expected to be contaminated, the materials to be placed down the well and in contact with groundwater should be evaluated so that they are compatible with the chemical conditions expected in the well.

6.2 Equipment and materials used for well development may include, but is not limited to:

Well development equipment

- Surge block

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- Disposable Teflon bailers, appropriate to the diameter of the well(s): 1-inch to 1.5-inch for 2-inch inside diameter (ID) monitoring wells.
- Watterra® footvalve
- Electric submersible pump
- 12-volt power source for electric pump
- High density polyethylene (HDPE) tubing appropriately sized for Watterra® footvalve and/or electric submersible pump
- Drums or containers for storage of purge water
- Nephelometer to measure turbidity
- Multi-parameter water quality meter(s) to measure temperature, pH, conductivity, dissolved oxygen (DO), oxidation reduction potential (ORP)
- Instrument calibration solutions
- Water level meter
- Oil/water interface probe

General equipment

- Project-specific plans including the site-specific HASP and SAP
- Field notebook/field forms/site maps
- Indelible markers/pens
- 5-gallon buckets

Equipment decontamination supplies (refer to SOP 3-06, Equipment Decontamination)

- Health and safety supplies, including personal protective equipment (PPE)
- Appropriate hand tools
- Keys or combinations to access monitoring wells
- Distilled/deionized water supply
- Disposable bailer string (polypropylene)
- Plastic trash bags

7.0 Procedure

Development generally consists of removing water and entrained sediment from the well until the water is clear (to the extent feasible) and the turbidity is reduced, which indicates the well is in good hydraulic connection with the surrounding formation. In addition to simply removing water, development can be improved when flushing through the well screen and gravel pack takes place in both directions, that is, both into the well and into the formation. This action breaks down sediment bridges that can occur in the formation or sand pack, which reduce the connection between the well and the formation

7.1 General Preparation

- All down-well equipment should be decontaminated prior to use and between well locations in accordance with SOP 3-06, Equipment Decontamination
- Although equipment is decontaminated between well locations, if wells are known or suspected to be contaminated based on observations during well installation, it is recommended that well development be conducted in order from the least contaminated to the most contaminated well to minimize the chances of cross-contamination.
- Management of investigation-derived waste (IDW), including development purge water and miscellaneous expendable materials generated during the development process, will be conducted in accordance with SOP 3-05, IDW Management.

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- Prior to accessing the well, the wellhead should be cleared of debris and/or standing water. Nothing from the ground surface should be allowed to enter the well.
- The depth to water and total well depth should be measured with a water level meter and recorded in the field logbook or on a Well Development Record (Attachment 1). This information will be used to calculate the volume of standing water (i.e., the well volume) within the well, and plan the specific details of the well development. If wells are suspected to contain NAPL, an oil/water interface probe should be used to measure liquid levels and depth to bottom of the well.
- Permanent monitoring wells will be developed no sooner than 24 hours after well installation is completed in order to allow well completion materials to set properly.

7.2 Monitoring Well Development Procedures

Generally, development will begin by gently surging the well with a surge block or bailer as described in Sections 7.2.1 and 7.2.2, respectively. Surging can become more vigorous as development progresses but initially the well must be gently surged to allow material blocking the screen to become suspended without damaging the well. Next, a bailer can be used to remove the sediment settled at the base of the well. A bailer, Watterra® pump, or electric submersible pump will then be used to purge the well, per Sections 7.2.2, 7.2.3, or 7.2.4, respectively. The well will be purged until the removed water becomes less turbid or per the requirements of the project-specific SAP, or State or local requirements. At this point the well will be surged again with a surge block or bailer. The well can be surged more vigorously at this point. After surging, the well will be purged again until the turbidity once again decreases. The surge/purge cycle should be completed at least three times during the development process. After the last surge, the well will be purged until the development completion criteria outlined in 7.3.2 or per the project-specific SAP are met.

7.2.1 Surge Block

The default method of well development is the use of a surge block in conjunction with pumping or bailing to remove sediment-laden water.

- The construction of the surge block must be appropriate for the diameter of the well. The surge block must be mounted on rods or other stiff materials to extend it to the appropriate depths and to allow for the surge block to be moved up and down in the well.
- Insert the surge block into the well and lower it slowly to the screened or open interval below the static water level. Start the surge action by slowly and gently moving the surge block up and down in the well. A slow initial surging, using plunger strokes of approximately 1 meter or 3 feet, will allow material which is blocking the screen to separate and become suspended.
- After 5 to 10 plunger strokes, remove water from the well using a separate bailer (Section 7.2.2) or pumping techniques (Sections 7.2.3 or 7.2.4). The returned water should be heavily laden with suspended fines. The water will be discharged to 5-gallon buckets or 55-gallon drums to be managed per the requirements presented in the project-specific SAP.
- In some cases, the bailer or Watterra® foot valve can act as a surge block, flushing water in and out of the well screen as groundwater is removed.
- Repeat the process of surging and pumping/bailing. As development continues, slowly increase the depth of surging to the bottom of the well screen. Surging within the riser portion of the well is neither necessary nor effective.

7.2.2 Bailer

- Tie a string or other cable securely to the bailer. Lower it to the screened or open interval of the monitoring well below the static water level.
- The bailer may be raised and lowered repeatedly within the screened interval to attempt to simulate the action of a surge block by pulling fines through the well screen, and pushing water out into the formation to break down bridging.

- With the bailer full of water, remove it from the well and discharge the water into 5-gallon buckets or 55-gallon drums to be managed per the requirements presented in the project-specific SAP.
- The Watterra® system (Section 7.2.3) or electric submersible pump (Section 7.2.4) may be used as a complementary development method to the bailer, especially when removal of additional water at a faster rate is beneficial.
- Continue alternately surging and bailing, monitoring the purge water periodically (Section 7.3.1) until development completion criteria are met (Section 7.3.2).

7.2.3 Watterra® system

- Attach high-density polyethylene (HDPE) tubing to the decontaminated Watterra® pump foot valve
- Lower the foot valve and tubing assembly near the bottom of the well.
- Lift and lower the tubing to allow water to enter the Watterra® foot valve and travel up the tubing and discharge the water into 5-gallon buckets or 55-gallon drums to be managed per the requirements presented in the project-specific SAP.
- The lifting and lowering action of the Watterra® sysem will cause some surging action to aid in breaking up fine material in the surrounding formation.
- A bailer (Section 7.2.2) may be used as a complementary development method to the Watterra® system, especially during the initial stages of development when a high volume of sediment may be required to be removed.
- An electric submersible pump (Section 7.2.4) may also be used as a complementary development method to the Watterra® system, especially when more volume of water is desired to be pumped or the turbidity criteria cannot be met due to the surging action of the Watterra® system.
- Continue alternately surging and pumping, monitoring the purge water periodically (Section 7.3.1) until well development completion criteria are met (Section 7.3.2).

7.2.4 Electric Submersible Pump

- Attach HDPE tubing to the decontaminated electric submersible pump.
- Lower the pump and tubing assembly near the bottom of the well, at least a few inches above the well total depth.
- Begin pumping, discharging the water into 5-gallon buckets or 55-gallon drums to be managed per the requirements presented in the project-specific SAP.
- Continue alternately surging and pumping, monitoring the purge water discharge periodically (Section 7.3.1) until well development completion criteria are met (Section 7.3.2).

7.3 Discharge Monitoring

7.3.1 Monitoring the Progress of Development

The progress of the development is evaluated through visual observation of the suspended sediment load and measurement of the turbidity and other parameters in the purged diischarge water. As development progresses, the water should become clearer, measured turbidity should decrease, and specific capacity (pumping rate divided by drawdown) should stabilize. Water quality parameters, including DO, conductivity, ORP, pH, temperature, and turbidity may be measured and recorded periodically to determine the progress of development using the criteria outlined in Section 7.3.2 or per the project-specific SAP. Water quality parameters should be measured on each well volume removed.

7.3.2 Completion of Development

The well will be considered developed when the following criteria are met or per the criteria set forth in the project-specific SAP:

- A minimum of three times the standing water volume in a well (to include the well screen and casing plus saturated annulus, assuming 30 percent porosity) is removed.

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- Groundwater parameters for three consecutive standing water volumes are within the following:
    - pH – within ± 0.2 units
    - Specific conductivity – within ± 3%
    - ORP – within ± 10 mV
    - Temperature – within ±1 degree Celsius
    - Turbidity – at or below 10 nephelometric turbidity units (NTU) or within ± 10% if above 10 NTU.
- The sediment thickness remaining within the well is less than 1 percent of the screen length or less than 30 millimeters (0.1 ft) for screens equal to or less than 10 feet long.

Dissolved oxygen (DO) readings may be recorded but DO readings will not be used as development completion criteria because DO may not stabilize.

If the well has slow groundwater recharge and is purged dry, the well will be considered developed when bailed or pumped dry three times in succession and the turbidity has decreased, or per the requirements set forth in the project-specific SAP. Water quality parameters may be recorded if feasible using the flow-through cell.

If any water is added to the well's borehole during development or drilling, three times the volume of water added will also be removed during well development, or per the requirements set forth in the project-specific SAP.

7.4 Development of Wells with Low Yield

Water is the primary mechanism to remove fines and flush water through the gravel pack for effective development. Therefore, development can be a challenge in wells that do not yield sufficient water to recharge when water is removed. However, often these wells are the most in need of development to improve their performance as they are typically installed in low permeability formations with a high content of fines. Development of these wells can improve their yield.

The surging portion of the development can be successfully performed in a well with standing water regardless of its yield. It is the subsequent removal of fine materials that is hindered when insufficient water is recharged to the well. When wells go dry or drawdown significantly during development, development can be performed intermittently, allowing sufficient water to recharge prior conducting the next stage of surging. These intermittent procedures can take place hours or even days apart, depending on project-specific time constraints.

7.5 Wells containing NAPL

Additional care should be taken when planning development of wells that contain NAPL. If the NAPL is flammable, there are health and safety as well as handling issues to consider. If NAPL in excess of a persistent sheen is noted, the recharge rate will be evaluated through hand bailing. In most cases, it is generally preferable to remove NAPL by bailing to the extent practical prior to performing development. Groundwater parameters, excluding turbidity, will not be collected during well development if NAPL or excessive sheen is noticed in the purged water during development to ensure the meter probes are not fouled or destroyed. Well development will be halted.

Development by surging or pumping the well dry can result in the spreading of NAPL vertically in the soil column around the well. These methods can be used, if information exists describing the vertical thickness of the NAPL smear zone around the well, and if the methods do not result in mounding or drawdown that exceeds this thickness. Alternate methods such as bailing may also be used, but any method should not allow the well to be pumped dry or result in significant drawdown that would spread the NAPL vertically.

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7.6 Temporary Well Points

For certain projects, temporary well points (TWPs) may be installed to collect groundwater samples at a site. Since no sand pack, bentonite chips, or bentonite grout are generally used in the construction of the TWPs, development can proceed as soon as sufficient water has entered the well to static conditions. Due to the small diameter of these wells, generally ¾-inch to 1-inch ID, development will be performed using either a small diameter (0.5-inch) bailer and/or a peristaltic pump with dedicated tubing. The TWPs will have minimal water column and may purge dry during development. However, attempts will be made to remove fines from the well prior to sampling. Purging and sampling may occur as soon as approximately 80% of the static water has re-entered the TWP, or per the requirements set forth in the project-specific SAP.

8.0 Quality Control and Assurance

8.1 Field personnel will follow specific quality assurance (QA) guidelines as outlined in the project-specific SAP.

8.2 Quality control (QC) requirements are dependent on project-specific sampling objectives. The project-specific SAP will provide requirements for equipment decontamination (frequency and materials) and IDW handling.

9.0 Records, Data Analysis, Calculations

9.1 All data and information (e.g., development method used) must be documented on field data sheets (Attachment 1) or within site logbooks with permanent ink. Data recorded may include the following:

- Well Location
- Weather conditions
- Date and Time
- Purge Method
- Reading/measurements obtained

10.0 Attachments or References

Attachment 1 – Well Development Record

SOP 3-05, *IDW Management*.

SOP 3-06, *Equipment Decontamination*.

Author	*Reviewer*	*Revisions (Technical or Editorial)*
Shawn Dolan Senior Scientist	Chris Barr Program Quality Manager	Rev 0 – Initial Issue (June 2012)

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Attachment 1
Well Development Record

Well/Piezometer Development Record

Well ID:

Client: _____

Project No: _____ Date: _____ Developer: _____

Site Location: _____

Well/Piezometer Data

Well ☐ Piezometer ☐ Diameter _____ Material _____

Measuring Point Description _____ Geology at Screen Interval (if known) _____

Depth to Top of Screen (ft.) _____

Depth to Bottom of Screen (ft.) _____ Time of Water Level Measurement _____

Total Well Depth (ft.) _____ Calculate Purge Volume (gal.) _____

Depth to Static Water Level (ft.) _____ Disposal Method _____

Headspace _____

Original Well Development ☐ Redevelopment ☐ Date of Original Development _____

DEVELOPMENT METHOD _____

PURGE METHOD _____

Time	Total Volume Purged (gal.)	Flow Rate (gpm)	Turbidity (NTU)	Color	pH	Temp	Other

ACCEPTANCE CRITERIA (from workplan)

Minimum Purge Volume Required _____ gallons
Maximum Turbidity Allowed _____ NTUs
Stabilization of parameters _____%

	Yes	No	N/A
Has required volume been removed	☐	☐	☐
Has required turbidity been reached	☐	☐	☐
Has parameters stabilized	☐	☐	☐

If no or N/A explain below:

_____

_____

_____

Signature _____ Date: _____

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Soil and Rock Classification

Procedure 3-16

1.0 Purpose and Scope

1.1 The purpose of this document is to define the standard operating procedure (SOP) to thoroughly describe the physical characteristics of the sample and classify it according to the Unified Soil Classification System (USCS).

1.2 This procedure is the Program-approved professional guidance for work performed by Resolution Consultants under the Comprehensive Long-Term Environmental Action Navy (CLEAN) contract (Contract Number N62470-11-D-8013).

1.3 As guidance for specific activities, this procedure does not obviate the need for professional judgment. Deviations from this procedure while planning or executing planned activities must be approved in accordance with Program requirements for technical planning and review. If there are procedures whether it be from Resolution Consultants, state and/or federal that are not addressed in this SOP and are applicable to surface water sampling then those procedures may be added as an appendix to the project specific SAP.

1.4 It is fully expected that the procedures outlined in this SOP will be followed. Procedural modifications may be warranted depending upon field conditions, equipment limitations, or limitations imposed by the procedure. Substantive modification to this SOP will be approved in advance by the Program Quality Manager. Deviations to this SOP will be documented in the field records.

2.0 Safety

2.1 Depending upon the site-specific contaminants, various protective programs must be implemented prior to sampling. All **field sampling personnel** responsible for sampling activities must review the project-specific health and safety plan (HASP) paying particular attention to the control measures planned for the sampling tasks. Conduct preliminary area monitoring to determine the potential hazard to field sampling personnel. If significant contamination is observed, minimize contact with potential contaminants in both the vapor and liquid phase through the use of respirators and disposable clothing.

2.2 In addition, observe standard health and safety practices according to the project-specific HASP. Suggested minimum protection during well sampling activities includes inner disposable vinyl gloves, outer chemical-protective nitrile gloves, rubberized steel-toed boots, and an American National Standards Institute-standard hard hat. Half-face respirators and cartridges and Tyvek® suits may be necessary depending on the contaminant concentrations, and shall always be available on site.

2.3 Daily safety briefs will be conducted at the start of each working day before any work commences. These daily briefs will be facilitated by the **Site Safety Officer (SSO)** or designee to discuss the day's events and any potential health risk areas covering every aspect of the work to be completed. Weather conditions are often part of these discussions. As detailed in the HASP, everyone on the field team has the authority to stop work if an unsafe condition is perceived until the conditions are fully remedied to the satisfaction of the SSO.

2.4 The health and safety considerations for the work associated with soil classification include:

- At no time during classification activities are personnel to reach for debris near machinery that is in operation, place any samples in their mouth, or come in contact with the soils/rocks without the use of gloves.
- Stay clear of all moving equipment and be aware of pinch points on machinery. Avoid wearing loose fitting clothing.
- When using cutting tools, cut away from yourself. The use of appropriate, task specific cutting tools is recommended.
- To avoid heat/cold stress as a results of exposure to extreme temperatures and PPE, drink electrolyte replacement fluids (1 to 2 cups per hour is recommended) and in case of extreme cold, wear insulating clothing.

3.0 Terms and Definitions

None.

4.0 Interference

None.

5.0 Training and Qualifications

5.1 The **Contract Task Order (CTO) Manager** is responsible for ensuring that the soil and rock classification procedures comply with this procedure. The **CTO Manager** is responsible for ensuring that all personnel involved in soil and rock classification shall have the appropriate education, experience, and training to perform their assigned tasks.

5.2 The **Program Quality Manager** is responsible for ensuring overall compliance with this procedure.

5.3 The **Field Manager** is responsible for ensuring that all project **field personnel** follow these procedures.

5.4 Field personnel are responsible for the implementation of this procedure. Minimum qualifications for **field sampling personnel** require that one individual on the field team shall have a minimum of 6 months of experience with soil and rock classification.

5.5 The **project geologist** and/or **task manager** is responsible for directly supervising the soil and rock classification procedures to ensure that they are conducted according to this procedure, and for recording all pertinent data collected. If deviations from the procedure are required because of anomalous field conditions, they must first be approved by the **Program Quality Manager** and then documented in the field logbook and associated report or equivalent document.

6.0 Equipment and Supplies

6.1 The following equipment list contains materials which may be needed in carrying out the procedures outlined in this SOP. Not all equipment listed below may be necessary for a specific activity. Additional equipment may be required, pending field conditions.

- Personal protective equipment (PPE) and other safety equipment, as required by the HASP
- Field log book and pen with indelible ink
- Boring log

- Munsell Soil Color Chart
- Scoopula, spatula, and/or other small hand tools
- California Sampler
- Hand-held penetrometer

7.0 Calibration or Standardization

None.

8.0 Procedure

8.1 Soil Classification

The basic purpose of the classification of soil is to thoroughly describe the physical characteristics of the sample and to classify it according to an appropriate soil classification system. The USCS was developed so that soils could be described on a common basis by different investigators and serve as a "shorthand" description of soil. A classification of a soil in accordance with the USCS includes not only a group symbol and name, but also a complete word description.

Describing soil on a common basis is essential so that soil described by different site qualified personnel is comparable. Site individuals describing soil as part of site activities *must* use the classification system described herein to provide the most useful geologic database for all present and future subsurface investigations and remedial activities.

The site geologist or other qualified individual shall describe the soil and record the description in a boring log, logbook, and/or electronic field data collection device. The essential items in any written soil description are as follows:

- Classification group name (e.g., silty sand)
- Color, moisture, and odor
- Range of particle sizes and maximum particle size
- Approximate percentage of boulders, cobbles, gravel, sand, and fines
- Plasticity characteristics of the fines
- In-place conditions, such as consistency, density, and structure
- USCS classification symbol

The USCS serves as ”shorthand“ for classifying soil into 15 basic groups:

GW[1] Well graded (poorly sorted) gravel (>50 percent gravel, <5percent fines)

GP[1] Poorly graded (well sorted) gravel (>50percent gravel, <5percent fines)

GM[1] Silty gravel (>50 percent gravel, >15 percent silt)

GC[1] Clayey gravel (>50 percent gravel, >15 percent clay)

SW[1] Well graded (poorly sorted) sand (>50 percent sand, <5 percent fines)

SP[1] Poorly graded (well sorted) sand (>50 percent sand, <5 percent fines)

[1] If percentage of fine is 5 percent to 15 percent, a dual identification shall be given (e.g., a soil with more than 50 percent poorly sorted gravel and 10 percent clay is designated GW-GC.

SM[1] Silty sand (>50 percent sand, >15 percent silt)

SC[1] Clayey sand (>50 percent sand, >15 percent clay)

ML[2] Inorganic, low plasticity silt (slow to rapid dilatancy, low toughness, and plasticity)

CL[2] Inorganic, low plasticity (lean) clay (no or slow dilatancy, medium toughness and plasticity)

MH[2] Inorganic elastic silt (no to slow dilatancy, low to medium toughness and plasticity)

CH[2] Inorganic, high plasticity (fat) clay (no dilatancy, high toughness, and plasticity)

OL Organic low plasticity silt or organic silty clay

OH Organic high plasticity clay or silt

PT Peat and other highly organic soil

Figure8-1 defines the terminology of the USCS. Flow charts presented in Figure 8-2 and indicate the process for describing soil. The particle size distribution and the plasticity of the fines are the two properties of soil used for classification. In some cases, it may be appropriate to use a borderline classification (e.g., SC/CL) if the soil has been identified as having properties that do not distinctly place the soil into one group.

8.1.1 Estimation of Particle Size Distribution

One of the most important factors in classifying a soil is the estimated percentage of soil constituents in each particle size range. Being proficient in estimating this factor requires extensive practice and frequent checking. The steps involved in determining particle size distribution are listed below:

1. Select a representative sample (approximately 1/2 of a 6-inch long by 2.5-inch diameter sample liner).
2. Remove all particles larger than 3 inches from the sample. Estimate and record the percent by volume of these particles. Only the fraction of the sample smaller than 3 inches is classified.
3. Estimate and record the percentage of dry mass of gravel (less than 3 inches and greater than 1/4 inch).
4. Considering the rest of the sample, estimate, and record the percentage of dry mass of sand particles (about the smallest particle visible to the unaided eye).
5. Estimate and record the percentage of dry mass of fines in the sample (do not attempt to separate silts from clays).
6. Estimate percentages to the nearest 5 percent. If one of the components is present in a quantity considered less than 5 percent, indicate its presence by the term “trace”.
7. The percentages of gravel, sand, and fines must add up to 100 percent. “Trace” is not included in the 100 percent total.

8.1.2 Soil Dilatancy, Toughness, and Plasticity

8.1.2.1 Dilatancy

To evaluate dilatancy, follow these procedures:

[2] If the soil is estimated to have 15 percent to 25 percent sand or gravel, or both, the words “with sand” or “with gravel” (whichever predominates) shall be added to the group name (e.g., clay with sand, CL; or silt with gravel, ML). If the soil is estimated to have 30 percent or more sand or gravel, or both, the words “sandy” or “gravely” (whichever predominates) shall be added to the group name (e.g., sandy clay, CL). If the percentage of sand is equal to the percent gravel, use “sandy.”

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1. From the specimen, select enough material to mold into a ball about 1/2 inch (12 millimeters [mm]) in diameter. Mold the material, adding water if necessary, until it has a soft, but not sticky, consistency.
2. Smooth the soil ball in the palm of one hand with the blade of a knife or small spatula. Shake horizontally, striking the side of the hand vigorously against the other hand several times. Note the reaction of water appearing on the surface of the soil. Squeeze the sample by closing the hand or pinching the soil between the fingers, and note the reaction as none, slow, or rapid in accordance with the criteria in Table 8-1. The reaction is the speed with which water appears while shaking, and disappears while squeezing.

Table 8-1: Criteria for Describing Dilatancy

Description	Criteria
None	No visible change in specimen.
Slow	Water appears slowly on the surface of the specimen during shaking and does not disappear or disappears slowly upon squeezing.
Rapid	Water appears quickly on the surface of the specimen during shaking and disappears quickly upon squeezing.

8.1.2.2 Toughness

Following the completion of the dilatancy test, shape the test specimen into an elongated pat and roll it by hand on a smooth surface or between the palms into a thread about 1/8 inch (3 mm) in diameter. (If the sample is too wet to roll easily, spread it into a thin layer and allow it to lose some water by evaporation.) Fold the sample threads and re-roll repeatedly until the thread crumbles at a diameter of about 1/8 inch. The thread will crumble at a diameter of 1/8 inch when the soil is near the plastic limit. Note the pressure required to roll the thread near the plastic limit. Also, note the strength of the thread. After the thread crumbles, lump the pieces together and knead it until the lump crumbles. Note the toughness of the material during kneading. Describe the toughness of the thread and lump as low, medium, or high in accordance with the criteria in Table 8-2.

Table 8-2: Criteria for Describing Toughness

Description	Criteria
Low	Only slight pressure is required to roll the thread near the plastic limit. The thread and the lump are weak and soft.
Medium	Medium pressure is required to roll the thread near the plastic limit. The thread and the lump have medium stiffness.
High	Considerable pressure is required to roll the thread near the plastic limit. The thread and the lump have very high stiffness.

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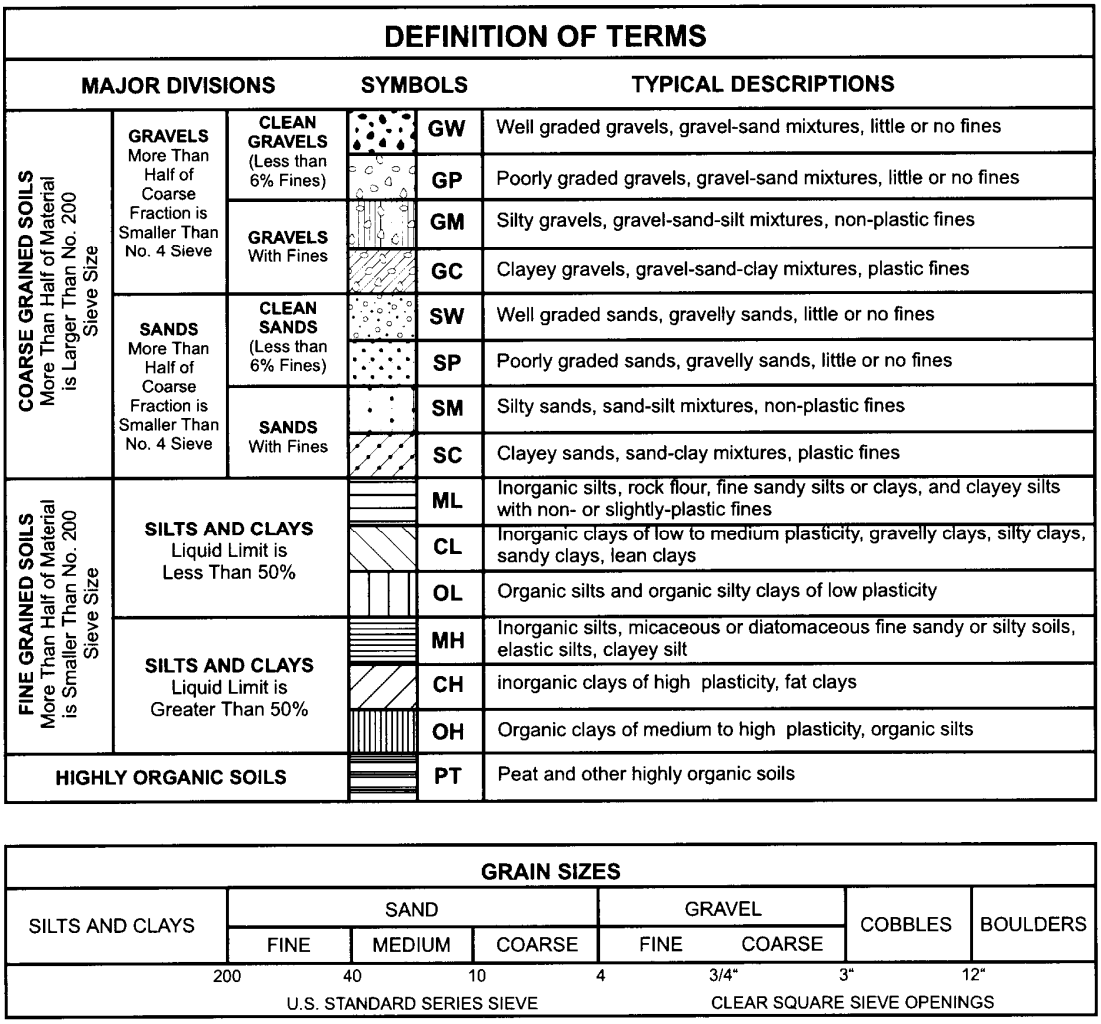

DEFINITION OF TERMS

MAJOR DIVISIONS			SYMBOLS	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS More Than Half of Material is Larger Than No. 200 Sieve Size	GRAVELS More Than Half of Coarse Fraction is Smaller Than No. 4 Sieve	CLEAN GRAVELS (Less than 6% Fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
		GRAVELS With Fines	GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines
			GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines
	SANDS More Than Half of Coarse Fraction is Smaller Than No. 4 Sieve	CLEAN SANDS (Less than 6% Fines)	SW	Well graded sands, gravelly sands, little or no fines
			SP	Poorly graded sands, gravelly sands, little or no fines
		SANDS With Fines	SM	Silty sands, sand-silt mixtures, non-plastic fines
			SC	Clayey sands, sand-clay mixtures, plastic fines
FINE GRAINED SOILS More Than Half of Material is Smaller Than No. 200 Sieve Size	SILTS AND CLAYS Liquid Limit is Less Than 50%		ML	Inorganic silts, rock flour, fine sandy silts or clays, and clayey silts with non- or slightly-plastic fines
			CL	Inorganic clays of low to medium plasticity, gravelly clays, silty clays, sandy clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS Liquid Limit is Greater Than 50%		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts, clayey silt
			CH	inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			PT	Peat and other highly organic soils

GRAIN SIZES

SILTS AND CLAYS	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

200 40 10 4 3/4" 3" 12"

U.S. STANDARD SERIES SIEVE — CLEAR SQUARE SIEVE OPENINGS

Figure8-1: Unclassified Soil Classification System (USCS)

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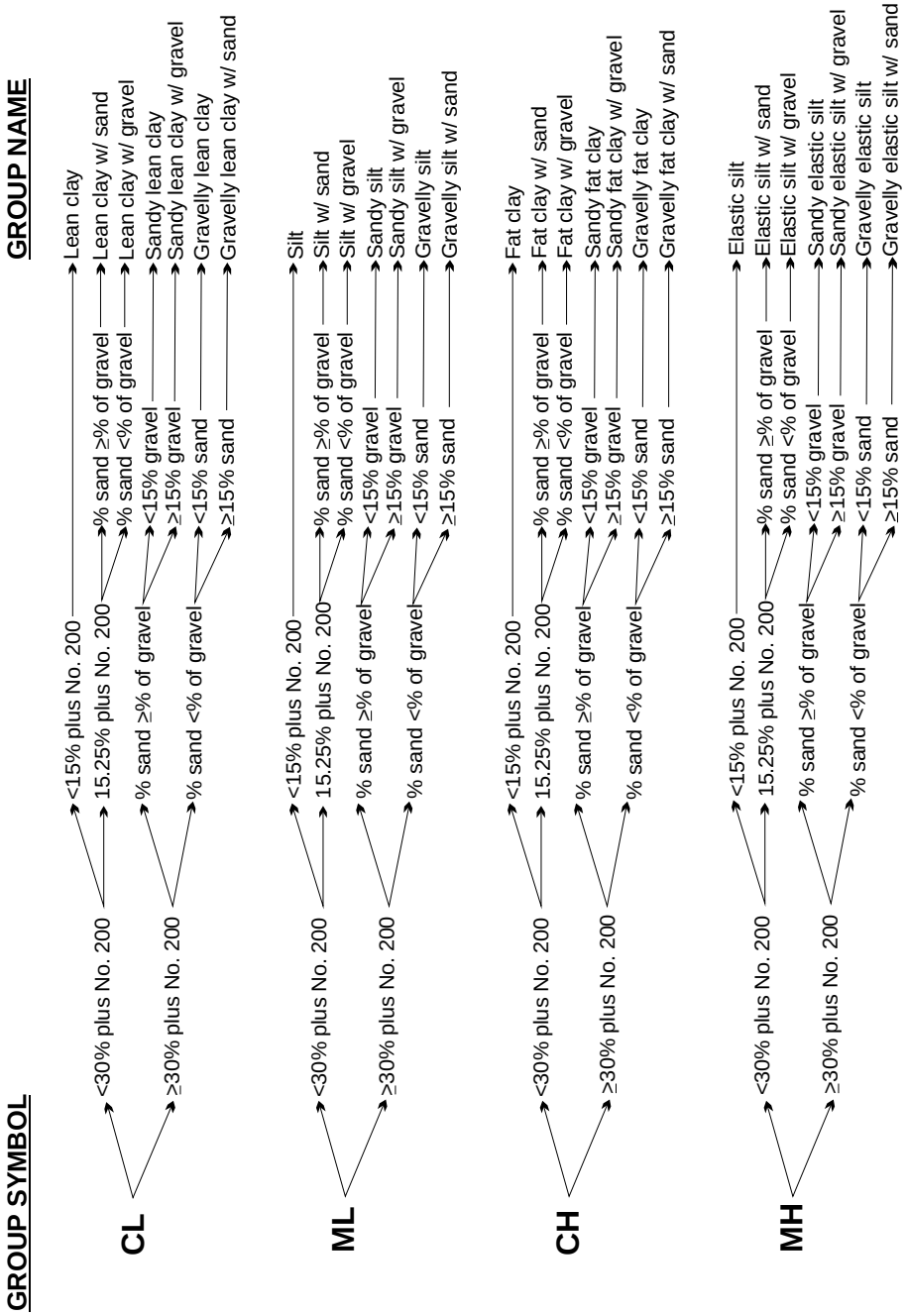

Figure 8-2: Flow Chart for Fine Grain Soil Classification

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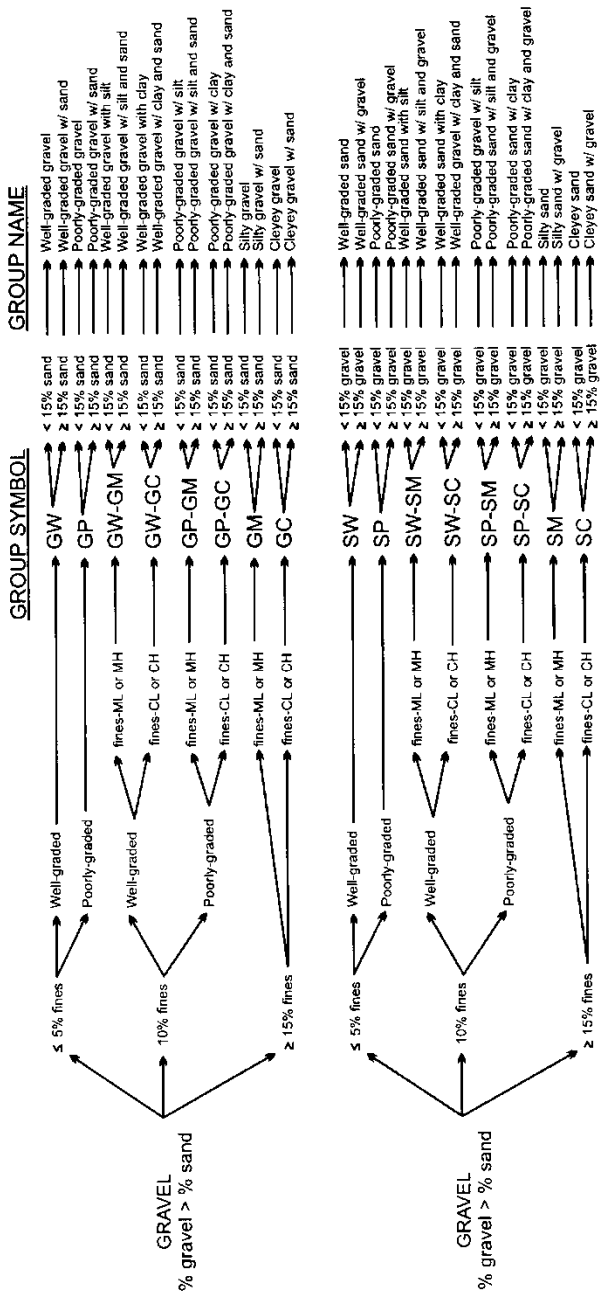

Figure 8-3: Flow Chart for Soil with Gravel

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8.1.2.3 Plasticity

The plasticity of a soil is defined by the ability of the soil to deform without cracking, the range of moisture content over which the soil remains in a plastic state, and the degree of cohesiveness at the plastic limit. The plasticity characteristic of clays and other cohesive materials is defined by the liquid limit and plastic limit. The liquid limit is defined as the soil moisture content at which soil passes from the liquid to the plastic state as moisture is removed. The test for the liquid limit is a laboratory, not a field, analysis.

The plastic limit is the soil moisture content at which a soil passes from the plastic to the semi-solid state as moisture is removed. The plastic limit test can be performed in the field and is indicated by the ability to roll a 1/8-inch (0.125-inch) diameter thread of fines, the time required to roll the thread, and the number of times the thread can be re-rolled when approaching the plastic limit.

The plasticity tests are not based on natural soil moisture content, but on soil that has been thoroughly mixed with water. If a soil sample is too dry in the field, add water prior to performing classification. If a soil sample is too sticky, spread the sample thin and allow it to lose some soil moisture.

Table 8-3 presents the criteria for describing plasticity in the field using the rolled thread method.

Table 8-3: Criteria for Describing Plasticity

Description	Criteria
Non-Plastic	A 1/8-inch thread cannot be rolled.
Low Plasticity	The thread can barely be rolled.
Medium Plasticity	The thread is easy to roll and not much time is required to reach the plastic limit.
High Plasticity	It takes considerable time rolling the thread to reach the plastic limit.

8.1.3 **Angularity**

The following criteria describe the angularity of the coarse sand and gravel particles:

- **Rounded** particles have smoothly-curved sides and no edges.
- **Subrounded** particles have nearly plane sides, but have well-rounded corners and edges.
- **Subangular** particles are similar to angular, but have somewhat rounded or smooth edges.
- **Angular** particles have sharp edges and relatively plane sides with unpolished surfaces. Freshly broken or crushed rock would be described as angular.

8.1.4 **Color, Moisture, and Odor**

The natural moisture content of soil is very important. Table **8-4** shows the terms for describing the moisture condition and the criteria for each.

Table 8-4: Soil Moisture Content Qualifiers

Qualifier	Criteria
Dry	Absence of moisture, dry to the touch
Moist	Damp but no visible water
Wet	Visible water, usually soil is below water table

Color is described by hue and chroma using the Munsell Soil Color Chart (Munsell 2000). For uniformity, all site geologists shall utilize this chart for soil classification. Doing so will facilitate correlation of geologic units between boreholes logged by different geologists. The Munsell Color Chart is a small booklet of numbered color chips with names like “5YR 5/6, yellowish-red.” Note mottling or banding of colors. It is particularly important to note and describe staining because it may indicate contamination.

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In general, wear a respirator if strong organic odors are present. If odors are noted, describe them if they are unusual or suspected to result from contamination. An organic odor may have the distinctive smell of decaying vegetation. Unusual odors may be related to hydrocarbons, solvents, or other chemicals in the subsurface. An organic vapor analyzer may be used to detect the presence of volatile organic contaminants.

8.1.5 In-Place Conditions

Describe the conditions of undisturbed soil samples in terms of their density/consistency (i.e., compactness), cementation, and structure utilizing the following guidelines:

8.1.5.1 Density/Consistency

Density and consistency describe a physical property that reflects the relative resistance of a soil to penetration. The term “density” is commonly applied to coarse to medium-grained sediments (i.e., gravels, sands), whereas the term “consistency” is normally applied to fine-grained sediments (i.e., silts, clays). There are separate standards of measure for both density and consistency that are used to describe the properties of a soil.

The density or consistency of a soil is determined by observing the number of blows required to drive a 1 3/8-inch (35 mm) diameter split barrel sampler 18 inches using a drive hammer weighing 140 lbs (63.5 kilograms [kg]) dropped over a distance of 30 inches (0.76 meters). Record the number of blows required to penetrate each 6 inches of soil in the field boring log during sampling. The first 6 inches of penetration is considered to be a seating drive; therefore, the blow count associated with this seating drive is recorded, but not used in determining the soil density/consistency. The sum of the number of blows required for the second and third 6 inches of penetration is termed the “standard penetration resistance,” or the “N-value.” The observed number of blow counts must be corrected by an appropriate factor if a different type of sampling device (e.g., Modified California Sampler with liners) is used. For a 2 3/8-inch inner diameter (I.D.) Modified California Sampler equipped with brass or stainless steel liners and penetrating a cohesionless soil (sand/gravel), the N-value from the Modified California Sampler must be divided by 1.43 to provide data that can be compared to the 1 3/8-inch diameter sampler data.

For a cohesive soil (silt/clay), the N-value for the Modified California Sampler should be divided by a factor of 1.13 for comparison with 1 3/8-inch diameter sampler data.

Drive the sampler and record blow counts for each 6-inch increment of penetration until one of the following occurs:

- A total of 50 blows have been applied during any one of the three 6-inch increments; a 50-blow count occurrence shall be termed “refusal” and noted as such on the boring log.
- A total of 150 blows have been applied.
- The sampler is advanced the complete 18 inches without the limiting blow counts occurring, as described above.

If the sampler is driven less than 18 inches, record the number of blows per partial increment on the boring log. If refusal occurs during the first 6 inches of penetration, the number of blows will represent the N-value for this sampling interval. Table 8-5 and Table 8-6 present representative descriptions of soil density/consistency vs. N-values.

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Table 8-5: Measuring Soil Density with a California Sampler – Relative Density (Sands, Gravels)

Description	Field Criteria (N-Value)	
	1 3/8 in. ID Sampler	2 in. ID Sampler using 1.43 factor
Very Loose	0–4	0–6
Loose	4–10	6–14
Medium Dense	10–30	14–43
Dense	30–50	43–71
Very Dense	> 50	> 71

Table 8-6: Measuring Soil Density with a California Sampler – Fine Grained Cohesive Soil

Description	Field Criteria (N-Value)	
	1 3/8 in. ID Sampler	2 in. ID Sampler using 1.13 factor
Very Soft	0–2	0–2
Soft	2–4	2–4
Medium Stiff	4–8	4–9
Stiff	8–16	9–18
Very Stiff	16–32	18–36
Hard	> 32	> 36

For undisturbed fine-grained soil samples, it is also possible to measure consistency with a hand-held penetrometer. The measurement is made by placing the tip of the penetrometer against the surface of the soil contained within the sampling liner or shelby tube, pushing the penetrometer into the soil a distance specified by the penetrometer manufacturer, and recording the pressure resistance reading in pounds per square foot (psf). The values are as follows (Table 8-7):

Table 8-7: Measuring Soil Consistency with a Hand-Held Penetrometer

Description	Pocket Penetrometer Reading (psf)
Very Soft	0–250
Soft	250–500
Medium Stiff	500–1000
Stiff	1000–2000
Very Stiff	2000–4000
Hard	>4000

Consistency can also be estimated using thumb pressure using Table 8-8.

Table 8-8: Measuring Soil Consistency Using Thumb Pressure

Description	Criteria
Very Soft	Thumb will penetrate soil more than 1 inch (25 mm)
Soft	Thumb will penetrate soil about 1 inch (25 mm)
Firm	Thumb will penetrate soil about 1/4 inch (6 mm)
Hard	Thumb will not indent soil but readily indented with thumbnail
Very Hard	Thumbnail will not indent soil

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8.1.5.2 *Cementation*

Cementation is used to describe the friability of a soil. Cements are chemical precipitates that provide important information as to conditions that prevailed at the time of deposition, or conversely, diagenetic effects that occurred following deposition. Seven types of chemical cements are recognized by Folk (1980). They are as follows:

- Quartz – siliceous
- Chert – chert-cemented or chalcedonic
- Opal – opaline
- Carbonate – calcitic, dolomitic, sideritic (if in doubt, calcareous should be used)
- Iron oxides – hematitic, limonitic (if in doubt, ferruginous should be used)
- Clay minerals – if the clay minerals are detrital or have formed by recrystallization of a previous clay matrix, they are not considered to be a cement. Only if they are chemical precipitates, filling previous pore space (usually in the form of accordion-like stacks or fringing radial crusts) should they be included as “kaolin-cemented,” “chlorite-cemented,” etc.
- Miscellaneous minerals – pyritic, collophane-cemented, glauconite-cemented, gypsiferous, anhydrite-cemented, baritic, feldspar-cemented, etc.

The degree of cementation of a soil is determined qualitatively by utilizing finger pressure on the soil in one of the sample liners to disrupt the gross soil fabric. The three cementation descriptors are as follows:

- Weak – friable; crumbles or breaks with handling or slight finger pressure
- Moderate – friable; crumbles or breaks with considerable finger pressure
- Strong – not friable; will not crumble or break with finger pressure

8.1.5.3 *Structure*

This variable is used to qualitatively describe physical characteristics of soil that are important to incorporate into hydrogeological and/or geotechnical descriptions of soil at a site. Appropriate soil structure descriptors are as follows:

- Granular – spherically shaped aggregates with faces that do not accommodate adjoining faces
- Stratified – alternating layers of varying material or color with layers at least 6 mm (1/4 inch) thick; note thickness
- Laminated – alternating layers of varying material or color with layers less than 6 mm (1/4 inch) thick; note thickness
- Blocky – cohesive soil that can be broken down into small angular or subangular lumps that resist further breakdown
- Lensed – inclusion of a small pocket of different soil, such as small lenses of sand, should be described as homogeneous if it is not stratified, laminated, fissured, or blocky. If lenses of different soil are present, the soil being described can be termed homogeneous if the description of the lenses is included
- Prismatic or Columnar – particles arranged about a vertical line, ped is bounded by planar, vertical faces that accommodate adjoining faces; prismatic has a flat top; columnar has a rounded top
- Platy – particles are arranged about a horizontal plane

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8.1.5.4 Other Features

- Mottled – soil that appears to consist of material of two or more colors in blotchy distribution
- Fissured – breaks along definite planes of fracture with little resistance to fracturing (determined by applying moderate pressure to sample using thumb and index finger)
- Slickensided – fracture planes appear polished or glossy, sometimes striated (parallel grooves or scratches)

8.1.6 **Development of Soil Description**

Develop standard soil descriptions according to the following examples. There are three principal categories under which all soil can be classified. They are described below.

8.1.6.1 Coarse-grained Soil

Coarse-grained soil is divided into sands and gravels. A soil is classified as a sand if over 50 percent of the coarse fraction is "sand-sized." It is classified as a gravel if over 50 percent of the coarse fraction is composed of "gravel-sized" particles.

The written description of a coarse-grained soil shall contain, in order of appearance: Typical name including the second highest percentage constituent as an adjective, if applicable (underlined); grain size of coarse fraction; Munsell color and color number; moisture content; relative density; sorting; angularity; other features, such as stratification (sedimentary structures) and cementation, possible formational name, primary USCS classification, secondary USCS classification (when necessary), and approximate percentages of minor constituents (i.e., sand, gravel, shell fragments, rip-up clasts) in parentheses.

Example: POORLY-SORTED SAND WITH SILT, medium- to coarse-grained, light olive gray, 5Y 6/2, saturated, loose, poorly sorted, subrounded clasts, SW/SM (minor silt with approximately 20 percent coarse-grained sand-sized shell fragments, and 80 percent medium-grained quartz sand, and 5 percent to 15 percent ML).

8.1.6.2 Fine-grained Soil

Fine-grained soil is further subdivided into clays and silts according to its plasticity. Clays are rather plastic, while silts have little or no plasticity.

The written description of a fine-grained soil should contain, in order of appearance: Typical name including the second highest percentage constituent as an adjective, if applicable (underlined); Munsell color; moisture content; consistency; plasticity; other features, such as stratification, possible formation name, primary USCS classification, secondary USCS classification (when necessary), and the percentage of minor constituents in parentheses.

Example: SANDY LEAN CLAY, dusky red, 2.5 YR 3/2, moist, firm, moderately plastic, thinly laminated, CL (70 percent fines, 30 percent sand, with minor amounts of disarticulated bivalves [about 5 percent]).

8.1.6.3 Organic Soil

For highly organic soil, describe the types of organic materials present as well as the type of soil constituents present using the methods described above. Identify the soil as an organic soil, OL/OH, if the soil contains enough organic particles to influence the soil properties. Organic soil usually has a dark brown to black color and may have an organic odor. Often, organic soils will change color, (e.g., from black to brown) when exposed to air. Some organic soils will lighten in color significantly when air-dried. Organic soils normally will not have a high toughness or plasticity. The thread for the toughness test will be spongy.

8.2 Example: ORGANIC CLAY, black, 2.5Y, 2.5/1, wet, soft, low plasticity, organic odor, OL (100 percent fines), weak reaction to HCl.

8.3 Rock Classification

The purpose of rock classification is to thoroughly describe the physical and mineralogical characteristics of a specimen and to classify it according to an established system. The generalized rock classification system described below was developed because, unlike the USCS for soils, there is no universally accepted rock classification system. In some instances, a more detailed and thorough rock classification system may be appropriate. Any modifications to this classification system, or the use of an alternate classification system should be considered during preparation of the site work plan. Both the CTO Manager and the QA Manager or Technical Director must approve any modifications to this classification system, or the use of another classification system.

Describing rock specimens on a common basis is essential so that rocks described by different site geologists are comparable. Site geologists describing rock specimens as a part of investigative activities must use the classification system described herein, or if necessary, another more detailed classification system. Use of a common classification system provides the most useful geologic database for all present and future subsurface investigations and remedial activities.

In order to provide a more consistent rock classification between geologists, a rock classification template has been designated as shown in **Error! Reference source not found.**. The template includes classification of rocks by origin and mineralogical composition. When classifying rocks, all site geologists shall use this template.

The site geologist shall describe the rock specimen and record the description in a boring log or logbook. The items essential for classification include (i.e., metamorphic foliated):

- Classification Name (i.e., schist)
- Color
- Mineralogical composition and percent
- Texture/Grain size (i.e., fine-grained, pegmatitic, aphlitic, glassy)
- Structure (i.e., foliated, fractured, lenticular)
- Rock Quality Designation (sum of all core pieces greater than two times the diameter of the core divided by the total length of the core run, expressed as a percentage)
- Classification symbol (i.e., MF)

Example: Metamorphic foliated schist: Olive gray, 5Y, 3/2, Garnet 25 percent, Quartz 45 percent, Chlorite 15 percent, Tourmaline 15 percent, Fine-grained with Pegmatite garnet, highly foliated, slightly wavy, MF.

9.0 Quality Control and Assurance

None

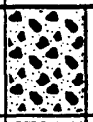
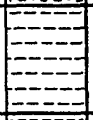
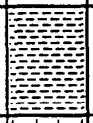
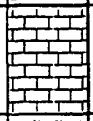
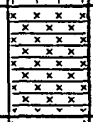
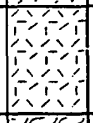
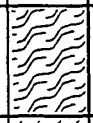
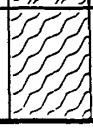
DEFINITION OF TERMS					
PRIMARY DIVISIONS			SYMBOLS		SECONDARY DIVISIONS
SEDIMENTARY ROCKS	Clastic Sediments	CONGLOMERATE		CG	Coarse-grained Clastic Sedimentary Rock types including: Conglomerates and Breccias
		SANDSTONE		SS	Clastic Sedimentary Rock types including: Sandstone, Arkose and Greywacke
		SHALE		SH	Fine-grained Clastic Sedimentary Rock types including: Shale, Siltstone, Mudstone and Claystone
	Chemical Precipitates	CARBONATES		LS	Chemical Precipitates including: Limestone, Crystalline Limestone, Fossiliferous Limestone Micrite and Dolomite
		EVAPORITES		EV	Evaporites including: Anhydrite, Gypsum, Halite, Travertine and Caliche
IGNEOUS ROCKS		EXTRUSIVE (Volcanic)		IE	Volcanic Rock types including: Basalt, Andesite, Rhyolite, Volcanic Tuff, and Volcanic Breccia
		INTRUSIVE (Plutonic)		II	Plutonic Rock types including: Granite, Diorite and Gabbro
METAMORPHIC ROCKS		FOLIATED		MF	Foliated Rock types including: Slate, Phyllite, Schist and Gneiss
		NON-FOLIATED		MN	Non-foliated Rock types including: Metaconglomerate, Quartzite and Marble

Figure 8-4: Rock Classification System

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10.0 Data and Records Management

10.1 Document soil classification information collected during soil sampling onto the field boring logs, field trench logs, and into the field notebook. Copies of this information shall be sent to the **CTO Manager** for the project files.

10.2 Field notes will be kept during coring activities in accordance with SOP 3-03 – Recordkeeping, Sample Labeling, and Chain of Custody. The information pertinent to soil classification activities includes chronology of events, sample locations (x,y,z), time/date, sampler name, methods (including type of core liner/barrel, if applicable), sampler penetration and acceptability, sample observations, and the times and type of equipment decontamination. Deviations to the procedures detailed in the SOP should be recorded in the field logbook.

11.0 Attachments or References

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Author	*Reviewer*	*Revisions (Technical or Editorial)*
Robert Shoemaker Senior Scientist	Naomi Ouellette, Project Manager	Rev 0 – Initial Issue

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Headspace Screening for Total VOCs

Procedure 3-19

1.0 Purpose and Scope

1.1 This standard operating procedure (SOP) describes the basic techniques for using headspace analysis to screen for volatile organics in contaminated soils using a portable Photo Ionization Detector (PID) or Flame Ionization Detector (FID).

1.2 As guidance for specific activities, this procedure does not obviate the need for professional judgment. Deviations from this procedure while planning or executing planned activities must be approved in accordance with Program requirements for technical planning and review.

2.0 Safety

2.1 The health and safety considerations for the work associated with this SOP will be addressed in the project Health and Safety Plan (HASP). In the absence of a HASP, work will be conducted according to the Contract Task Order (CTO) Work Plan (WP) and/or direction from the **Site Safety Officer (SSO)**. Note that headspace screening usually requires Level D personal protection unless there is a potential for airborne exposure to site contaminants. Under circumstances where potential airborne exposure is possible respiratory protective equipment may be required based on personal air monitoring results. Upgrades to Level C will be coordinated with the Site Safety Officer (SSO) or **CTO Manager**.

2.2 Health and safety hazards and corresponding precautions include, but are not limited to, the following:

2.2.1 Dermal contact with contaminated soil. Personnel should treat all soil as potentially contaminated and wear chemically impervious gloves. Minimize skin contact with soil by using sampling instruments such as stainless steel spades or spoons. Do not touch any exposed skin with contaminated gloves.

2.2.2 Inhalation hazards. Appropriate air monitoring should be conducted to ensure that organic vapor concentrations in the breathing zone do not exceed action levels as specified in the Site-Specific HASP. When ambient temperatures are low enough to require warming samples using the vehicle heater, the vehicle's windows should be opened enough to prevent the build-up of any organic vapors. Use the PID or FID to verify the airborne concentrations in the vehicle remain below applicable action levels. Note that many volatile organic compounds (VOCs) are flammable and all precautions must be observed to eliminate any potential ignition sources.

2.2.3 Shipping limitations. Follow applicable regulations when shipping FID/PID equipment. When shipping an FID by air, the hydrogen tank must be bled dry. Calibration gas canisters are considered dangerous goods and must be shipped according to IATA and DOT regulations. Consult your EHS Coordinator and check with your shipping company to determine the correct shipping procedures

3.0 Terms and Definitions

None.

4.0 Interferences

4.1 Regardless of which gas is used for calibration, the instrument will respond to all analytes present in the sample that can be detected by the type of lamp used in the PID.

4.2 Moisture will generate a positive interference in the concentration measured for a PID and is characterized by a slow increase in the reading as the measurement is made. Care must be taken to

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minimize uptake of moisture to the extent possible. Refer to the manufacturers' instructions for care, cleaning, and maintenance.

4.3 Uptake of soil into the PID must be avoided as it will compromise instrument performance by blocking the probe, causing a positive interference, or dirtying the PID lamp. Refer to the manufacturers' instructions for care, cleaning, and maintenance.

4.4 The user should listen to the pitch of the sampling pump. Any changes in pitch may indicate a blockage and corrective action should be initiated.

5.0 Training and Qualifications

5.1 **Qualifications and Training**

The individual executing these procedures must have read, and be familiar with, the requirements of this SOP.

5.2 **Responsibilities**

5.2.1 The CTO Manager is responsible for ensuring that the collection of headspace readings comply with this procedure. The CTO Manager is responsible for ensuring that all personnel involved in the collection of headspace readings shall have the appropriate education, experience, and training to perform their assigned tasks.

5.2.2 The Program Quality Manager is responsible for ensuring overall compliance with this procedure.

5.2.3 The Field Manager is responsible for ensuring that all headspace readings are conducted according to this procedure as well as verifying that the PID/FID is in proper operating condition prior to use and for implementing the calibration.

5.2.4 All Field Personnel are responsible for the implementation of this procedure.

6.0 Equipment and Supplies

6.1 The following materials must be on hand in good operating condition and/or in sufficient quantity to ensure that proper field analysis procedures may be followed:

- Calibrated PID/FID instrument;
- Top-sealing "Zip-Loc" type plastic bags – or – 16 ounces of soil or "mason-" type glass jars and aluminum foil;
- Project field book and/or boring logs;
- Personal Protective Equipment (PPE) as specified in the project HASP; and
- Material Safety Data Sheets (MSDSs) for any chemicals or site-specific contaminants.

7.0 Procedure

7.1 **Preparation**

Review available project information to determine the types of organic vapors that will likely be encountered to select the right instrument. The two basic types of instruments are FIDs and PIDs.

FIDs work well with organic compounds that have relatively lightweight molecules, but may have problems detecting halogenated compounds or heavier organic compounds; FIDs can detect methane for example. Since the FID uses a flame to measure organic compounds, ensure that work is conducted in an atmosphere, which is free of combustible vapors. If ambient temperatures are below 40°F, the flame of the FID may be difficult to light.

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When using a PID, select an instrument that can measure the ionization potential of the anticipated contaminants of concern. PIDs work well with a range of organic compounds and can detect some halogenated hydrocarbons; PIDs cannot detect methane. The correct ultraviolet (UV) light bulb must be selected according to the types of organic vapors that will likely be encountered. The energy of the UV light must equal or exceed the ionization potential of the organic molecules that the PID will measure. The NIOSH Pocket Guide to Chemical Hazards is one source for determining ionization potentials for different chemicals. Bulbs available for PIDs include 9.4 eV, 10.6 (or 10.2) eV, and 11.7 eV bulbs. The 10.6 eV bulb is most commonly used as it detects a fairly large range of organic molecules and does not burn out as easily as the 11.7 eV bulb. The 9.4 eV bulb is the most rugged, but detects only a limited range of compounds. Under very humid or very cold ambient conditions, the window covering the UV light may fog up, causing inaccurate readings. Ask the **SSO** about correction factors when high humidity conditions exist.

After selecting the correct instrument, calibrate the PID/FID according to the manufacturer's instructions. Record background/ambient levels of organic vapors measured on the PID/FID after calibration and make sure to subtract the background concentration (if any) from your readings. Check the PID/FID readings against the calibration standard every 20 readings or at any time when readings are suspected to be inaccurate, and recalibrate, if necessary. Be aware that, after measuring highly contaminated soil samples, the PID/FID may give artificially high readings for a time.

7.2 Top-Sealing Plastic Bag

Place a quantity of soil in a top-sealing plastic bag and seal the bag immediately. The volume of soil to be used should be determined by the **CTO Manager** or **Field Manager**. The volume of soil may vary between projects but should be consistent for all samples collected for one project. Ideally, the bag should be at least 1/10th-filled with soil and no more than half-filled with soil. Once the bag is sealed, shake the bag to distribute the soil evenly. If the soil is hard or clumpy, use your fingers to gently work the soil (through the bag) to break up the clumps. Do not use a sampling instrument or a rock hammer since this may create small holes in the plastic bag and allow organic vapors to escape. Alternatively, the sample may be broken up before it is placed in the bag. Use a permanent marker to record the following information on the outside of the bag:

- Site identification information (i.e., borehole number);
- Depth interval; and
- Time the sample was collected. For example: "SS-12, 2-4 ft, @1425".

Headspace should be allowed to develop before organic vapors are measured with a PID/FID. The amount of time required for sufficient headspace development will be determined by the project-specific sampling plan and the ambient temperature. Equilibration time should be the same for all samples to allow an accurate comparison of organic vapor levels between samples. However, adjustments to equilibration times may be necessary when there are large variations in ambient temperature from day to day. When ambient temperatures are below 32°F, headspace development should be within a heated building or vehicle. When heating samples, be sure there is adequate ventilation to prevent the build-up or organic vapors above action levels.

Following headspace development, open a small opening in the seal of the plastic bag. Insert the probe of a PID/FID and seal the bag back up around the probe as tightly as possible. Alternatively, the probe can be inserted through the bag to avoid loss of volatiles. Since PIDs and FIDs are sensitive to moisture, avoid touching the probe to the soil or any condensation that has accumulated inside of the bag. Since the PID/FID consumes organic vapors, gently agitate the soil sample during the reading to release fresh organic vapors from the sample. Erratic meter response may occur at high organic vapor concentrations or conditions of elevated headspace moisture, in which case, headspace data should be discounted. Record the highest reading on the field form or in the field notebook as described in Section 9.

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7.3 **Jar and Aluminum Foil (Alternate Method)**

Half-fill a clean glass jar with the soil sample to be screened. Quickly cover the jar's opening with one to two sheets of clean aluminum foil and apply the screw cap to tightly seal the jar. Allow headspace development for at least ten minutes. Vigorously shake the jar for 15 seconds, both at the beginning and at the end of the headspace development period. Where ambient temperatures are below 32°F (0°C), headspace development should be within a heated area. When heating samples, be sure there is adequate ventilation to prevent the build-up of organic vapors above action levels.

Subsequent to headspace development, remove the jar lid and expose the foil seal. Quickly puncture the foil seal with the instrument sampling probe, to a point about one-half of the headspace depth. Exercise care to avoid uptake of water droplets or soil particulates. As an alternative, use a syringe to withdraw a headspace sample, and then inject the sample into the instrument probe or septum-fitted inlet. This method is acceptable contingent upon verification of methodology accuracy using a test gas standard. Following probe insertion through the foil seal or sample injection to probe, record the highest meter response on the field form or in the field notebook. Using foil seal/probe insertion method, maximum response should occur between two and five seconds. Erratic meter response may occur at high organic vapor concentrations or conditions of elevated headspace moisture, in which case, headspace data should be discounted.

8.0 Quality Control and Assurance

Quality Assurance/Quality Control (QA/QC) will include the collection of duplicate samples. In general, one duplicate will be collected per 20 samples. Organic vapor concentrations measured in the primary and duplicate samples should be similar within plus or minus 20 percent. The frequency of headspace duplicate collection will be determined by the project manager/task manager. The PID/FID instrument must be calibrated according to the manufacturer's instructions before beginning screening, and checked or recalibrated every 20 analyses or when readings are suspected to be inaccurate. Record ambient organic vapor levels in the field notebook and on the field form. Periodically check ambient organic vapor levels. If ambient levels have changed more than 20 percent, recalibrate the PID/FID. Make sure readings are not collected near a vehicle exhaust or downwind of a drill rig exhaust. If grossly contaminated soil is encountered, decontaminate sampling instruments between samples and/or change contaminated gloves to avoid cross contaminating less contaminated samples.

9.0 Records, Data Analysis, Calculations

9.1 All data generated (results and duplicate comparisons) will be recorded in the field notebook and/or on the field form. Any deviation from the outlined procedure will also be noted. Field conditions (ambient temperature, wind, etc.) should also be recorded in the field notebook.

9.2 Readings may be recorded in a field notebook, on a boring log, or on an appropriate form specific to the project. The form should include the following information:

- When the PID/FID was calibrated (date/time) and calibration standard used;
- Background/ambient concentrations measured after PID/FID calibration;
- Location of sample (i.e., bore-hole number);
- Depth interval of sample measured;
- Lithology of material measured; and
- PID/FID reading and units of measure.

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9.3 Note that if PID/FID measurements are recorded on a boring log, it is not necessary to duplicate information in the column where the PID/FID readings are recorded (e.g., borehole number, depth interval, lithology type).

9.4 All documentation will be stored in the project files and retained following completion of the project.

10.0 Attachments or References

SOP 3-20 Operation and Calibration of a Photoionization Detector

Author	Reviewer	Revisions (Technical or Editorial)
Robert Shoemaker Senior Scientist	Chris Barr Program Quality Manager	Rev 0 – Initial Issue (May 2012)

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Operation and Calibration of a Photoionization Detector

Procedure 3-20

1.0 Purpose and Scope

1.1 Purpose and Applicability

1.1.1 This standard operating procedure (SOP) describes the procedures that will be followed by field staff for operation and calibration of a photoionization detector (PID). The PID is primarily used by AECOM personnel for safety and survey monitoring of ambient air, determining the presence of volatiles in soil and water, and detecting leakage of volatiles.

1.1.2 PIDs routinely used by field personnel include the Photovac Microtip, Thermoelectron 580EZ, and MiniRAE 2000. Personnel responsible for using the PID should first read and thoroughly familiarize themselves with the instrument instruction manual.

1.2 Principle of Operation

1.2.1 The PID is a non-specific vapor/gas detector. The unit generally consists of a hand-held probe that houses a PID, consisting of an ultraviolet (UV) lamp, two electrodes, and a small fan which pulls ambient air into the probe inlet tube. The probe is connected to a readout/control box that consists of electronic control circuits, a readout display, and the system battery. Units are available with UV lamps having an energy from 9.5 electron volts (eV) to 11.7 eV.

1.2.2 The PID analyzer measures the concentration of trace gas present in the atmosphere by photoionization. Photoionization occurs when an atom or molecule absorbs a photon of sufficient energy to release an electron and become a positive ion. This will occur when the ionization potential of the molecule (in electron volts (eV)) is less than the energy of the photon. The source of photons is an ultraviolet lamp in the probe unit. Lamps are available with energies ranging from 9.5 eV to 11.7 eV. All organic and inorganic vapor/gas compounds having ionization potentials lower than the energy output of the UV lamp are ionized and the resulting potentiometric change is seen as a positive reading on the unit. The reading is proportional to the concentration of organics and/or inorganics in the vapor.

1.2.3 Sample gases enter the probe through the inlet tube and enter the ion chamber where they are exposed to the photons emanating from the UV lamp. Ionization occurs for those molecules having ionization potentials near to or less than that of the lamp. A positive- biased polarizing electrode causes these positive ions to travel to a collector electrode in the chamber. Thus the ions create an electrical current which is amplified and displayed on the meter. This current is proportional to the concentration of trace gas present in the ion chamber and to the sensitivity of that gas to photoionization.

1.2.4 In service, the analyzer is first calibrated with a gas of known composition equal to, close to, or representative of that to be measured. Gases with ionization potentials near to or less than the energy of the lamp will be ionized. These gases will thus be detected and measured by the analyzer. Gases with ionization potentials greater than the energy of the lamp will not be detected. The ionization potentials of the major components of air, i.e., oxygen, nitrogen, and carbon dioxide, range from about 12.0 eV to 15.6 eV and are not ionized by any of the lamps available. Gases with ionization potentials near to or slightly higher than the lamp are partially ionized, with low sensitivity.

1.3 Specifications

1.3.1 Refer to the manufacturer's instructions for the technical specifications of the instrument being used. The operating concentration range is typically 0.1 to 2,000 ppm isobutylene equivalent.

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2.0 Safety

2.1 The health and safety considerations for the work associated with this SOP, including both potential physical and chemical hazards, will be addressed in the project Health and Safety Plan (HASP). In the absence of a HASP, work will be conducted according to the Contract Task Order (CTO) Work Plan (WP) and/or direction from the **Site Safety Officer (SSO)**.

2.2 Only PIDs stamped Division I Class I may be used in explosive atmospheres. Refer to the project HASP for instructions pertaining to instrument use in explosive atmospheres.

3.0 Terms and Definitions

None.

4.0 Interferences

4.1 Regardless of which gas is used for calibration, the instrument will respond to all analytes present in the sample that can be detected by the type of lamp used in the PID.

4.2 Moisture will generate a positive interference in the concentration measured for a PID and is characterized by a slow increase in the reading as the measurement is made. Care must be taken to minimize uptake of moisture to the extent possible. Refer to the manufacturers' instructions for care, cleaning, and maintenance.

4.3 Uptake of soil into the PID must be avoided as it will compromise instrument performance by blocking the probe, causing a positive interference, or dirtying the PID lamp. Refer to the manufacturers' instructions for care, cleaning, and maintenance.

4.4 The user should listen to the pitch of the sampling pump. Any changes in pitch may indicate a blockage and corrective action should be initiated.

5.0 Training and Qualifications

5.1 **Qualifications and Training**

The individual executing these procedures must have read, and be familiar with, the requirements of this SOP.

5.2 **Responsibilities**

5.2.1 The CTO Manager is responsible for ensuring that the operation and calibration activities comply with this procedure. The CTO Manager is responsible for ensuring that all personnel involved in the operation and calibration shall have the appropriate education, experience, and training to perform their assigned tasks.

5.2.2 The Program Quality Manager is responsible for ensuring overall compliance with this procedure.

5.2.3 The Field Manager is responsible for ensuring that all operation and calibration activities are conducted according to this procedure.

5.2.4 All Field Personnel are responsible for the implementation of this procedure.

6.0 Equipment and Supplies

- Calibration Gas: Compressed gas cylinder of isobutylene in air or similar stable gas mixture of known concentration. The selected gas should have an ionization potential similar to that of the vapors to be monitored, if known. The concentration should be at 50-75% of the range in which the instrument is to be calibrated;

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- Regulator for calibration gas cylinder;
- Approximately 6 inches of Teflon® tubing;
- Tedlar bag (optional);
- Commercially-supplied zero grade air (optional);
- "Magic Marker" or “Sharpie” or other waterproof marker;
- Battery charger;
- Moisture traps;
- Spare lamps;
- Manufacturer’s instructions; and
- Field data sheets or logbook/pen.

7.0 Procedure

7.1 Preliminary Steps

7.1.1 Preliminary steps (battery charging, check-out, calibration, maintenance) should be conducted in a controlled or non-hazardous environment.

7.2 Calibration

7.2.1 The PID must be calibrated in order to display concentrations in units equivalent to ppm. First a supply of zero air (ambient air or from a supplied source), containing no ionizable gases or vapors is used to set the zero point. A span gas, containing a known concentration of a photoionizable gas or vapor, is then used to set the sensitivity.

7.2.2 Calibrate the instrument according to the manufacturer’s instructions. Record the instrument model and identification number, the initial and adjusted meter readings, the calibration gas composition and concentration, and the date and the time in the field records.

7.2.3 If the calibration cannot be achieved or if the span setting resulting from calibration is 0.0, then the lamp must be cleaned (Section 7.4).

7.3 Operation

7.3.1 Turn on the unit and allow it to warm up (minimum of 5 minutes). Check to see if the intake fan is functioning; if so, the probe will vibrate slightly and a distinct sound will be audible when holding the probe casing next to the ear. Also, verify on the readout display that the UV lamp is lit.

7.3.2 Calibrate the instrument as described in Section 7.2, following the manufacturer’s instructions. Record the calibration information in the field records.

7.3.3 The instrument is now operational. Readings should be recorded in the field records.

7.3.4 When the PID is not being used or between monitoring intervals, the unit may be switched off to conserve battery power and UV lamp life; however, a “bump” test should be performed each time the unit is turned on and prior to taking additional measurements. To perform a bump test, connect the outlet tubing from a Tedlar bag containing a small amount of span gas to the inlet tubing on the unit and record the reading. If the reading is not within the tolerance specified in the project plan, the unit must be recalibrated.

7.3.5 At the end of each day, recheck the calibration. The check will follow the same procedures as the initial calibration (Section 7.2) except that no adjustment will be made to the instrument. Record the information in the field records.

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7.3.6 Recharge the battery after each use (Section 7.4).

7.3.7 When transporting, ensure that the instrument is packed in its stored condition in order to prevent damage.

7.4 **Routine Maintenance**

7.4.1 Routine maintenance associated with the use of the PID includes charging the battery, cleaning the lamp window, replacing the detector UV lamp, replacing the inlet filter, and replacing the sample pump. Refer to the manufacturer's instructions for procedures and frequency.

7.4.2 All routine maintenance should be performed in a non-hazardous environment.

7.5 **Troubleshooting Tips**

7.5.1 One convenient method for periodically confirming instrument response is to hold the sensor probe next to the tip of a magic marker. A significant reading should readily be observed.

7.5.2 Air currents or drafts in the vicinity of the probe tip may cause fluctuations in readings.

7.5.3 A fogged or dirty lamp, due to operation in a humid or dusty environment, may cause erratic or fluctuating readings. The PID should never be operated without the moisture trap in place.

7.5.4 Moving the instrument from a cool or air-conditioned area to a warmer area may cause moisture to condense on the UV lamp and produce unstable readings.

7.5.5 A zero reading on the meter should not necessarily be interpreted as an absence of air contaminants. The detection capabilities of the PID are limited to those compounds that will be ionized by the particular probe used.

7.5.6 Many volatile compounds have a low odor threshold. A lack of meter response in the presence of odors does not necessarily indicate instrument failure.

7.5.7 When high vapor concentrations enter the ionization chamber in the PID the unit can become saturated or "flooded". Remove the unit to a fresh air environment to allow the vapors to be completely ionized and purged from the unit.

8.0 Quality Control and Assurance

8.1 The end use of the data will determine the quality assurance requirements that are necessary to produce data of acceptable quality. These quality assurance requirements will be defined in the site-specific workplan or Sampling and Analysis Plan (SAP), hereafter referred to as the project plan.

8.2 Calibration of the PID will be conducted at the frequency specified in the project plan. In the absence of project-specific guidance, calibration will be performed at the beginning of each day of sampling and will be checked at the end of the sampling day or whenever instrument operation is suspect. The PID will sample a calibration gas of known concentration. The instrument must agree with the calibration gas within ±10%. If the instrument responds outside this tolerance, it must be recalibrated.

8.3 Checks of the instrument response (Section 7.5) should be conducted periodically and documented in the field records.

9.0 Records, Data Analysis, Calculations

Safety and survey monitoring with the PID will be documented in a bound field logbook, or on standardized forms, and retained in the project files. The following information is to be recorded:

- Project name and number;
- Instrument manufacturer, model, and identification number;

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- Operator's signature;
- Date and time of operation;
- Calibration gas used;
- Calibration check at beginning and end of day (meter readings before adjustment);
- Span setting after calibration adjustment;
- Meter readings (monitoring data obtained);
- Instances of erratic or questionable meter readings and corrective actions taken; and
- Instrument checks and response verifications – e.g., battery check, magic marker response (Section 7.5) or similar test.

10.0 Attachments or References

United States Environmental Protection Agency. Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EISOPQAM). USEPA, Region 4, SESD, Enforcement and Investigations Branch, Athens, GA. November 2001.

Author	Reviewer	Revisions (Technical or Editorial)
Robert Shoemaker Senior Scientist	Chris Barr Program Quality Manager	Rev 0 – Initial Issue (May 2012)

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Surface and Subsurface Soil Sampling Procedures

Procedure 3-21

1.0 Purpose and Scope

1.1 This standard operating procedure (SOP) describes the procedures for soil sampling. The procedure includes surface and subsurface sampling by various methods using hand auguring, test pit, direct-push, and split-spoon equipment.

1.2 The procedure includes soil sampling for volatile organic compounds (VOCs). For project specific information (e.g. sampling depths, equipment to be used, and frequency of sampling), refer to the Sampling and Analysis Plan (SAP), which takes precedence over these procedures. Surface soil sampling, typically considered to be up to two feet below ground surface by EPA standards, is typically accomplished using hand tools such as shovels or hand augers. Test pit samples are considered subsurface samples, although normally collected via hand tools similar to surface soil sampling or by excavation machinery. Direct-push and split-spoon sampling offer the benefit of collecting soil samples from a discrete or isolated subsurface interval, without the need of extracting excess material above the target depth. These methods dramatically reduce time and cost associated with disposal of material from soil cuttings when compared to test pit sampling. In addition, direct-push and split-spoon sampling methods can obtain samples at targeted intervals greater than 15 feet in depth, allowing for discrete depth soil sampling while speeding up the sampling process. Direct-push methods work best in medium to fine-grained cohesive materials such as medium to fine sands, silts, and silty clay soils. Split-spoon sampling works well in all types of soil, but is somewhat slower than direct-push methods. Samples are composited so that each sample contains a homogenized representative portion of the sample interval. Due to potential loss of analytes, samples for volatile analysis are not composited. Samples for chemical analysis can be collected by any of the above-mentioned sampling methods, as disturbed soil samples. Undisturbed samples are collected, sealed, and sent directly to the laboratory for analysis. For undisturbed samples, the samples are not homogenized.

2.0 Safety

2.1 The health and safety considerations for the work associated with this SOP, including both potential physical and chemical hazards, will be addressed in the project Health and Safety Plan (HASP). In the absence of a HASP, work will be conducted according to the Contract Task Order (CTO) Work Plan (WP) and/or direction from the **Site Safety Officer (SSO)**.

2.2 Before soil sampling commences, appropriate entities (e.g. DigSafe, local public works departments, company facilities) must be contacted to assure the anticipated soil sampling locations are marked for utilities, including electrical, telecommunications, water, sewer, and gas.

3.0 Terms and Definitions

None.

4.0 Interferences

4.1 Low recovery of soil from sampling equipment will prevent an adequate representation of the soil profile and sufficient amount of soil sample. If low recovery is a problem, the hole may be offset and re-advanced, terminated, or continued using a larger diameter sampler.

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4.2 Asphalt in soil samples can cause false positive results for hydrocarbons. To ensure samples are free of asphalt, do not collect samples that may contain asphalt. If the collection of samples potentially containing asphalt is unavoidable, note the sampling depths at which the presence of asphalt are suspected.

4.3 Instrumentation interferences addressed in SOPs for Calibration of the Photoionization Detector (PID), Headspace Screening for Total Volatile Organics, and Equipment Decontamination must also be considered.

4.4 Cross contamination from sampling equipment must be prevented by using sampling equipment constructed of stainless steel that is adequately decontaminated between samples.

5.0 Training and Qualifications

5.1 **Qualifications and Training**

The individual executing these procedures must have read, and be familiar with, the requirements of this SOP.

5.2 **Responsibilities**

5.2.1 The CTO Manager is responsible for ensuring that soil sampling activities comply with this procedure. The CTO Manager is responsible for ensuring that all personnel involved in soil sampling shall have the appropriate education, experience, and training to perform their assigned tasks.

5.2.2 The Program Quality Manager is responsible for ensuring overall compliance with this procedure.

5.2.3 The Field Manager is responsible for ensuring that all soil sampling activities are conducted according to this procedure.

5.2.4 All Field Personnel are responsible for the implementation of this procedure.

6.0 Equipment and Supplies

The depth at which samples will be collected and the anticipated method of sample collection (direct-push, split-spoon, hand auger, shovel, or test pits) will be presented in the SAP. The following details equipment typically needed for soil sampling, based on the various methods. See the SAP for specific detail of equipment and supply needs.

6.1 Depending on the nature of suspected contamination, field screening instrumentation may be used for direct sampling. Appropriate instrumentation and calibration standards should be available. If volatile organic contaminants are suspected and a PID will be used, refer to the equipment and instrumentation listed in SOP 3-20 Operation and Calibration of a Photoionization Detector. Equipment in this SOP includes but is not limited to:

- PID/FID;
- Calibration gas; and
- Tedlar® gas bags (for calibration).

6.2 If field screening methods include jar headspace screening for volatile organics, refer to the equipment and procedure in SOP 3-19 Headspace Screening for Total VOCs. Equipment in this SOP includes but is not limited to:

- Clean soil (“drillers jars”) jars; and
- Aluminium foil.

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6.3 Appropriate decontamination procedures must be followed for sampling equipment. Refer to SOP 3-06 Equipment Decontamination. Equipment in this SOP includes but is not limited to:

- Phosphate-free detergent;
- Isopropyl Alcohol;
- Tap water;
- Deionized Ultra-Filtered (DIUF) Water;
- Plastic buckets or washbasins;
- Brushes; and
- Polyethylene sheeting.

6.4 The following general equipment is needed for all soil sampling, regardless of method:

- Stainless steel bowls;
- Stainless steel trowels;
- Appropriate sample containers for laboratory analysis;
- Personal Protective Equipment (PPE);
- Logbook;
- Cooler and ice for preservation; and
- Stakes and flagging to document sampling location.

6.5 The following additional equipment is needed for volatile organic sampling:

- Electronic pan scale and weights for calibration; and
- Syringes or other discrete soil core samplers.

6.6 The following additional equipment may be needed for surface and test pit soil sampling:

- Hand Auger

6.7 The following additional equipment may be needed for soil sampling from direct push and/or split-spoon equipment:

- Tape measure or folding carpenter's rule for recording the length of soil recovered.

Note: All subsurface drilling equipment will be provided and maintained by the subcontractor.

7.0 Procedure

7.1 **General Soil Sampling Procedure for All Soil Sampling Methods**

7.1.1 Record the weather conditions and other relevant on-site conditions.

7.1.2 Select the soil sampling location, clear vegetation if necessary, and record the sampling location identification number and pertinent location details.

7.1.3 Verify that the sampling equipment is properly decontaminated, in working order, and situated at the intended sampling location.

7.1.4 Place polyethylene sheeting on the ground and assemble all necessary sampling equipment on top of it. Cover surfaces onto which soils or sampling equipment will be placed (i.e. tables with polyethylene sheeting).

7.1.5 Follow the appropriate procedures listed below for either surface, split-spoon, direct push, or test pit sample collection (7.2, 7.3, 7.4, and 7.5 respectively).

7.1.6 Collect soil samples according to procedures listed in Section 7.6 depending on project specific analyses.

7.1.7 Record date/time, sample ID, and sample descriptions in the field logbook or field form. A sketch or description of the location may also be recorded so the sample location can be re-constructed, especially if the location will not be recorded using global positioning satellite (GPS) equipment.

7.1.8 Immediately label the sample containers and place them on ice, if required for preservation. Complete the chain-of-custody form(s) as soon as possible.

7.1.9 Dispose of all excess excavated soil in accordance with the SAP.

7.1.10 If required, mark the sample location with a clearly labelled wooden stake or pin flag. If the location is on a paved surface, the location may be marked with spray paint.

7.1.11 Decontaminate the sampling equipment according to SOP 3-06 Equipment Decontamination.

7.2 Surface Sampling

7.2.1 The criteria used for selecting surface soil locations for sampling may include the following:

- Visual observations (soil staining, fill materials);
- Other relevant soil characteristics;
- Site features;
- Screening results;
- Predetermined sampling approach (i.e. grid or random); and
- Sampling objectives as provided in the SAP.

7.2.2 The following procedures are to be used to collect surface soil samples. Surface soils are considered to be soils that are up to two feet below ground surface, though state regulations and project objectives may define surface soils differently; therefore, the SAP should be consulted for direction on the depth from which to collect the surface soil samples. Sampling and other pertinent data and information will be recorded in the field logbook and/or on field forms. Photographs may be taken as needed or as specified in the SAP.

1. Gently scrape any vegetative covering until soil is exposed. Completely remove any pavement.
2. Remove soil from the exposed sampling area with a trowel, hand auger, or shovel. Put soils within the sampling interval in a stainless steel bowl for homogenizing. Monitor the breathing zone and sampling area as required in the HASP.
3. For VOC analyses, collect representative soil samples directly from the recently-exposed soil using a syringe or other soil coring device (e.g., TerraCore®, EnCore®). Follow procedures in Section 7.6.1 for VOC sampling.
4. Collect sufficient soil to fill all remaining sample jars into a stainless steel bowl. Homogenize the soil samples to obtain a uniform soil composition which is representative of the total soil sample collected according to the following procedure:

    a) Remove all rocks and non-soil objects using a stainless steel spoon or scoop.

b) Form a cone shaped mound with the sample material, then flatten the cone and split the sample into quarters.

c) Use the stainless steel spoon/scoop to mix the quarter samples that are opposite.

d) After mixing the opposite quarters, reform the cone shaped mound.

e) Repeat this procedure a minimum of five (5) times, removing any non-soil objects and breaking apart any clumps.

7.3 Split-Spoon Sampling

7.3.1 At each boring location, the frequency and depth of split-spoon samples will be determined from the SAP. Split-spoon samples may be collected continuously, intermittently, or from predetermined depths.

7.3.2 Split-spoon samplers shall be driven into undisturbed soil by driving the spoon ahead of the drill augers/casing. In cohesive soils, or soils where the borehole remains open (does not collapse), two split-spoon samples may be taken prior to advancing the augers/casing.

7.3.3 After split-spoons are retrieved, open the split-spoon and measure the recovery of soil. If a PID will be used for screening, immediately scan the recovered sample for VOCs using the PID. Scan the recovered soil boring by making a hole in the soil with a decontaminated trowel and placing the PID inlet very close to the hole. Be very careful not to get soil on the tip of the PID. Take PID readings every 6 inches along the split-spoon and/or in any areas of stained or disturbed soil. Record the highest PID reading and the depth at which it was observed along with all other pertinent observations. If required in the SAP, VOC and headspace samples should be collected (see Section 7.6.1) prior to logging the sample.

7.3.4 If headspace screening for VOCs is required in the SAP, collect a soil sample (as defined in the SAP) and perform headspace screening according to SOP 3-19 Headspace Screening for Total VOCs.

7.3.5 Soils collected using the split-spoon sampler will be logged by the field representative using the procedure required in the SAP.

7.3.6 Collect the remainder of the sample volume required into a stainless steel bowl. Homogenize the soil so the material is uniform in composition and representative of the total soil sample collected. Follow homogenizing techniques as described in Section 7.2.

7.3.7 The SAP may specify that intervals to be sent to the laboratory be determined by visual observation and/or highest PID screening or headspace results, which can only be determined once the boring is complete. In this instance, a VOC sample should be collected at each interval. The remainder of the soil from that interval will be set aside in a clearly labelled stainless steel bowl covered with aluminium foil. Once the boring has been completed and the sample interval has been determined, the remainder of the soil can be homogenized according to Section 7.2 and submitted for laboratory analysis.

7.3.8 Once a boring is complete and all required samples have been collected, the boring must be completed as specified in the SAP (e.g., completed as a monitoring well, backfilled with bentonite, etc).

7.4 Direct Push Sampling

At each boring location, the frequency of direct-push samples will be determined from the SAP. Typically, samples with direct-push equipment are collected in 4 foot (ft) intervals, but smaller (e.g., 2 ft) and larger (e.g., 5 ft) intervals are also possible.

1. Sample using Macro-Core samplers with acetate liners to obtain discrete soil samples at the depths specified in the SAP.

2. Cut open the acetate liner. If required in the SAP, immediately scan the recovered soil boring for VOCs using a PID by making a hole in the soil with a decontaminated trowel and placing the PID inlet very close to the hole. Be very careful not to get soil on the tip of the PID. Take PID readings every 6 inches along the split-spoon and/or in any areas of stained or disturbed soil. Record the

highest PID reading and the depth at which it was observed along with all other pertinent observations. VOC and headspace samples, if required in the SAP should be collected (see Section 7.6.1) prior to logging the sample.

3. If required in the SAP, collect a soil sample (as defined in the SAP) and perform headspace screening according to SOP 3-19 Headspace Screening for Total VOCs.

4. Soils collected using the direct-push sampler will be logged by the by the field representative using the procedure required in the SAP.

5. Collect the remainder of the sample into a stainless steel bowl. Homogenize the soil collected so that the material is uniform in composition and representative of the total soil sample collected. Follow homogenizing techniques as described in Section 7.2.

6. Once a boring is complete and all required samples have been collected, the boring must be completed as specified in the SAP (e.g., completed as a monitoring well, backfilled with bentonite, etc).

7.5 Test Pit Sampling

7.5.1 Excavate the test pit to the desired depth.

7.5.2 Using the excavator bucket, collect soil samples as specified in the SAP. Collect a sample and perform screening analyses as required by the SAP. If VOCs contamination is suspected, perform headspace screening according to SOP 3-19 Headspace Screening for Total VOCs.

7.5.3 Collect the sample from center of the bucket to avoid potential contamination from the bucket.

7.5.4 VOC samples should also be collected from an undisturbed section soil in the excavator bucket. The top layer of exposed soil should be scraped away just prior to collecting the VOC samples.

7.5.5 Collect the remainder of the sample volume required into a stainless steel bowl. Homogenize the soil so the material is uniform in composition and representative of the total soil sample collected. Follow homogenizing techniques as described in Section 7.2.

7.5.6 Dispose of all excavated soil according to the SAP.

7.6 Sample Collection Methods

7.6.1 Volatile Organics Sampling

For soils collected for analyses of volatile organics, including Volatile Petroleum Hydrocarbons (VPH) or other purgable compounds, a closed system is maintained. From collection through analysis, the sample bottles are not opened. The bottle kit for a routine field sample for these analyses will typically include three 40-mL VOA vials and one soil jar. Two 40-mL VOA vials will contain either 5 mL reagent water or 5 mL sodium bisulfate and magnetic stir bars (i.e., low level vials). The third VOA vial will contain 15 mL methanol with no magnetic stir bar (i.e., high level vial). These vials are usually provided by the laboratory and are pre-weighed, with the tare weight recorded on the affixed sample label. No additional sample labels are affixed to the VOA vials, as addition of a label would alter the vial weight. All information is recorded directly on the sample label using an indelible marker. The soil jar is provided for percent solids determination. For VOC or VPH analyses, samples are collected prior to sample homogenization. Collect the VOC sample in accordance with the procedure described below.

1. Determine the soil volume necessary for the required sample weight, typically 5 grams:

   a) Prepare a 5 mL sampling corer (e.g., Terra Core®) or cut-off plastic syringe.

   b) Tare the sampler by placing it on the scale, and zeroing the scale.

   c) Draw back the plunger to the 5 gram mark or 5mL (5cc) mark on cut-off syringe, and insert the open end of the sampler into an undisturbed area of soil with a twisting motion, filling the

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sampler with soil. Note the location of the plunger with respect to the milliliter (cc) or other graduation printed on the sampler.

d) Weigh the filled sampler, and remove or add soil until the desired weight is obtained. Note the location of the plunger which corresponds to this weight. Do not use this sample for laboratory analysis.

2. Once the required soil volume has been determined, pull the plunger back to this mark and hold it there while filling the syringe for each sample.

3. Collect 5 grams of soil using the cut-off syringe or Terra Core® sample device. Extrude the 5-grams of soil into one of the low level 40-mL VOA vials. Quickly wipe any soil from the threads of the VOA vial with a clean Kimwipe® and immediately close the vial. It is imperative that the threads be free from soil or other debris prior to replacing the cap on the vial in order to maintain the closed system necessary for the analysis.

4. Gently swirl the vial so that all of the soil is fully wetted with the preservative.

5. Fill the other low level 40 mL VOA vial in this manner.

6. Repeat the process for the high level VOA vials, only for the high level VOA vial three 5 gram aliquots (i.e., 15 grams total) should be extruded into the high level VOA vial.

   NOTE: Depending on the laboratory, some high level VOA vials only contain 5 mL or 10 mL of methanol. If this is the case, either 5 grams total or 10 grams total, respectively, should be extruded into the high level VOA vial. In other words, the mass of soil in grams should be identical to the volume of methanol in mL (i.e., 1:1 ratio of soil to methanol).

7. Collect any additional QC sample collected (e.g., field duplicate, MS, and MSD) in the same manner as above.

8. Fill the 4-oz glass jar with soil from the same area for percent moisture determination.

7.6.2 Soil Sampling Method (All other analyses except VOC/VPH)

When all the required soil for a sampling location has been obtained, the soil can be homogenized as described in section 7.2. Collect sufficient volume to fill all of the remaining sample containers at least ¾ full for all other analyses. Homogenize the soil in a decontaminated stainless steel bowl, removing rocks, sticks, or other non-soil objects and breaking apart any lumps of soil prior to filling the remaining sample containers.

NOTE: Soil samples must contain greater than 30% solids for the data to be considered valid.

8.0 Quality Control and Assurance

8.1 Sampling personnel should follow specific quality assurance guidelines as outlined in the SAP. Proper quality assurance requirements should be provided which will allow for collection of representative samples from representative sampling points. Quality assurance requirements outlined in the SAP typically suggest the collection of a sufficient quantity of field duplicate, field blank, and other samples.

8.2 Quality control requirements are dependent on project-specific sampling objectives. The SAP will provide requirements for equipment decontamination (frequency and materials), sample preservation and holding times, sample container types, sample packaging and shipment, as well as requirements for the collection of various quality assurance samples such as trip blanks, field blanks, equipment blanks, and field duplicate samples.

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9.0 Records, Data Analysis, Calculations

All data and information (e.g., sample collection method used) must be documented on field data sheets, boring logs, or within site logbooks with permanent ink. Data recorded may include the following:

- Weather conditions;
- Arrival and departure time of persons on site;
- Instrument type, lamp (PID), make, model and serial number;
- Calibration gas used;
- Date, time and results of instrument calibration and calibration checks;
- Sampling date and time;
- Sampling location;
- Samples collected;
- Sampling depth and soil type;
- Deviations from the procedure as written; and
- Readings obtained.

10.0 Attachments or References

SOP 3-06, *Equipment Decontamination*

SOP 3-19, *Headspace Screening for Total VOCs*

SOP 3-20, *Operation and Calibration of a Photoionization Detector*

Author	Reviewer	Revisions (Technical or Editorial)
Robert Shoemaker Senior Scientist	Chris Barr Program Quality Manager	Rev 0 – Initial Issue (May 2012)

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Field Forms from Installation Activities

Well Abandonment Record

MW07-20D

Date of Abandonment:	12-5-16
Abandonment Contractor Company:	CDS
Printed Name of Individual Abandoning Well:	Tony

Well Depth (ft):	26.5
Boring Diameter (in):	
Riser/Casing Diameter (in):	2
Type of Casing:	☐ steel ☒ PVC

Well Location

Address:	Site 7
County:	
Nearest Town:	North Kingstown, RI
Latitude (D,M,S or DD format):	
Longitude:	

Was any casing removed?	☒ Yes ☐ No
If yes, length removed (ft)?	5 ft
Was well abandoned in place?	☒ Yes ☐ No
If yes, was casing perforated?	☒ Yes ☐ No

Well Type: ☐ direct push ☒ drilled

Well Use: ☒ monitoring ☐ residential ☐ industrial ☐ injection ☐ recovery ☐ geotechnical

Abandonment Material: ☐ bentonite grout ☐ dry bentonite ☒ cement grout w/bentonite ☐ native soil

Quantity of Material Used
# of bags or cubic feet: 1 bag

Reason for Abandonment:

Explain Method of Material Placement:
tremie piped from bottom of well to top

Are boring logs available? ☒ Yes, attached ☐ No

Are well construction logs available? ☒ Yes, attached ☐ No

Signature of Person Abandoning Well: Tony

Well Abandonment Record

MW07-20S

Date of Abandonment:	12-15-16
Abandonment Contractor Company:	CDS
Printed Name of Individual Abandoning Well:	Tony

Well Depth (ft):	16.10
Boring Diameter (in):	
Riser/Casing Diameter (in):	2
Type of Casing:	☐ steel ☒ PVC

Well Location

Address:	Site 7
County:	
Nearest Town:	North Kingstown, RI
Latitude (D,M,S or DD format):	
Longitude:	

Was any casing removed?	☒ Yes ☐ No
If yes, length removed (ft)?	4 ft
Was well abandoned in place?	☒ Yes ☐ No
If yes, was casing perforated?	☒ Yes ☐ No

Well Type: ☐ direct push ☒ drilled

Well Use: ☒ monitoring ☐ residential ☐ industrial ☐ injection ☐ recovery ☐ geotechnical

Abandonment Material: ☐ bentonite grout ☐ dry bentonite ☒ cement grout w/ bentonite ☐ native soil

Quantity of Material Used

# of bags or cubic feet: 1 bag

Reason for Abandonment:

Explain Method of Material Placement: tremie piped from bottom to top

Are boring logs available? ☒ Yes, attached ☐ No

Are well construction logs available? ☒ Yes, attached ☐ No

Signature of Person Abandoning Well: Tony

Resolution Consultants

BORING #: MW07-20DA

Boring and Well Construction Log

Sheet 1 of 1

Client: Department of the Navy	**Location:** North Kingstown, RI	**Logged By:** Tony M.
Project: NCBC DAVISVILLE, RI	**Northing:** 196817.2 **Easting:** 353669.1	**Drilling Company:** RESCON
Project #: 60273164	**Ground Elevation:** 3.70	**Well Screen Interval (ft bgs):** 59-69
Start Date: 12/13/2016	**Drilling Method:** Drive and wash	**Depth To Bedrock (ft):** 69.3
Finish Date: 12/14/2016	**Borehole Diameter:** 2 in	**Total Depth (ft):** 73

Depth (ft bgs)	Recovery Length	PID	Blowcounts	Recovery (percent)	Graphic	USCS Code	Soil and Rock Description Classification Scheme: USCS	Well Construction	Well Construction Details
0									
2	1.4	0.0	2,3,4,1	70		SP	0.00 / 0.50 95% fine to medium sand, trace silt, SP, 5R 6/1 reddish gray, dry		
4	1.5	0.0	5,5,7,8	75		SP	85% fine to medium sand, 10% fine gravel trace silt, SP, loose, moist to wet, rounded 4.00		
6	1.0	0.0	5,5,3,5	50					
8	1.3	0.0	5,5,6,7	65		SP	75% fine to medium sand, 10% coarse sand 10% fine gravel, SP, loose, wet, subrounded		Riser
10	0.9	0.0	5,5,5,3	45					
12	1.1	0.0	3,4,3,4	55			11.50		
14	1.3	1.8	1,1,1,1	65		SPSM	12.00 85% fine sand, 10% silt trace medium sand, loose, wet		
16	0		1,0,0,0	0		SM	65% fine sand, 40% silt trace organics, SM, non plastic loose, wet moderate organic, sulfurous odor		
18	0		1,0,0,0	0			18.00		
20	1.8	21.2	1,0,0,0	90		ML	20.50 65% silt, 15% fine sand 15% clay, ML, non plastic loose, wet slight organic laminated, sulfurous odor, trace shell fragments		
22	1.2	3.4	8,4,5,5	60		PT	21.50 peat		
24	1.2	0.2	5,5,7,7	60					
26	1.4	0.2	6,6,8,9	70		ML	60% silt, 15% fine sand little clay, ML, non plastic loose, wet slight organic laminated, sulfurous odor, trace shell fragments, gray in color; mottled green from 24-24.5'		
28	0			00					
30	1.6	0.0	4,5,4,4	80			29.00		
32						ML	31.00 60% silt, some fine sand little clay, ML, non plastic, wet		
34	0			0		ML	No samples collected from 31-34 ft		
36	1.5	0.0	3,4,5,4	75			36.00		
38	0			0					
40	1.6	0.0	3,3,3,3	80		ML	No samples collected from 36-39 ft		
42									
44	0			0			44.00		
46	1.9	0.0	1,1,1,1	95					
48	0			0		ML	75% silt, some fine sand trace clay, ML, non plastic, wet		
50	1.4	0.0	3,2,1,1	70			49.00		
52									
54	0			0		ML	75% silt, some fine sand trace clay, ML, non plastic, wet		
56	1.7	0.0	2,3,4,4	85			54.00		
58	0			0		ML	75% silt, some fine sand trace clay, ML, non plastic, wet		Seal
60	0.6	0.0	11,14,31,38	30			59.00		
62	0.8	0.4	3,6,18,18	40		ML	59.00 75% silt, some fine sand trace clay, ML, non plastic, wet		Filter Pack
64	1.1	2.5	18,15,13,15	55		GW	61.00 60% well-graded gravel, some fine sand and silt, GW, non plastic loose, wet		
66	1.0	1.2	23,18,7,25	50		SP	63.00 60% fine to medium sand, some fine to medium gravel trace coarse sand, SP, non plastic, wet, subangular		Screen
68	0.9	0.6	27,67,57,62	45		SPSM	67.00 60% medium to coarse sand, 20% fine to coarse gravel 10% fine sand, SP-SM, non plastic, wet, subangular		
70	0.3	0.4	110	100		SWSM	69.00 50% well-graded sand, some fine to coarse gravel 10% silt, SW-SM, non plastic dense, wet, subangular		
72	3.7			100		SWSM	69.30 50% well-graded sand, some fine gravel little silt, SW-SM, non plastic dense, moist, angular, split spoon refusal at 69.3 ft		
						BEDROCK	3 in roller bit advanced from 69.3-73 ft. Rock chips recovered in mud tub, confirming bedrock.		

Remarks: Boring Terminated (ft): 73

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824
Phone: 978.905.2100
Fax: 978.905.2101

WELL CONSTRUCTION LOG (ABOVE GROUND COMPLETION)

Site: Site 7	LocID: MW07-20SA	Date/Time Started: 12-14-16 / 1515
Project Name: Davisville	Project Number: 60273164	Date/Time Completed: 12-15-16 / 1100
Drilling Contractor: CDS	Drilling Equipment: CME 55	Logged By: Tom Croft
Driller: Tony	Borehole Diameter (in.): 4.5	Checked By:

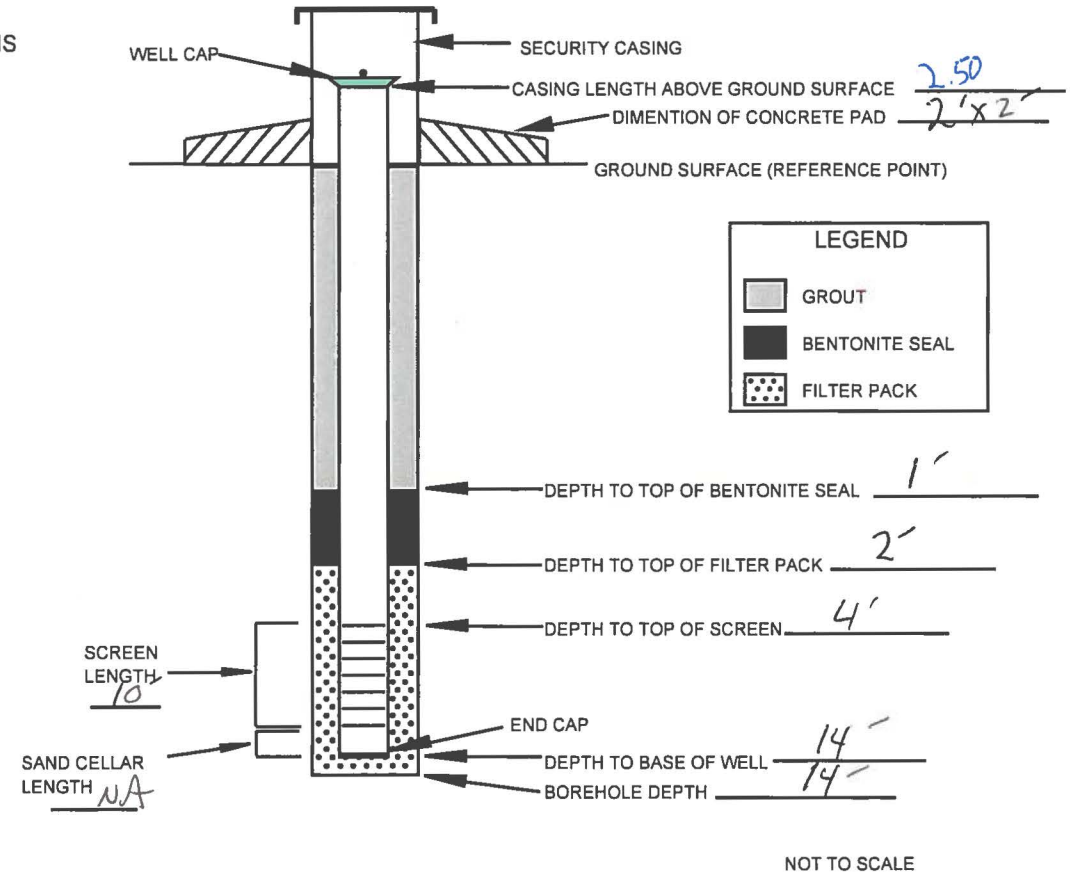
FILTER PACK
- Type & Size of Filter Pack: OS
- Amount of Filter Pack Used (lbs): 150
- Filter Pack Manufacturer: Hallistron

BENTONITE SEAL
- Type & Size of Bentonite: medium chip
- Amount of Bentonite Used (lbs): 20
- Bentonite Manufacturer: Pure Gold

GROUT
- Type of Cement: Type II Portland
- Cement Manufacturer: Portland
- Amount of Cement Used (lbs): 94
- Bentonite Powder Type: NA
- Bentonite Powder Manufacturer: NA
- Amount of Bentonite Powder Used (lbs): NA

WELL DETAILS
- Screen/Casing Diameter (in): 2 (10 slot)
- Screen Material/Manufactuer: Schedule 40 PVC / Johnson
- Screened Interval (ft): 4-14
- Depth to Water (ft): ~3
- Water Added During Construction (gal): 0
- Casing Material/Manufactuer: Schedule 40 PVC
- Type of Well Cap/Manufactuer: J-plug
- Type of End Cap/Manufactuer:
- Dimensions of Security Casing: 4" diameter x 5' long

SPECIAL CONDITIONS
(describe and draw)



NOT TO SCALE

WELL CONSTRUCTION LOG (ABOVE GROUND COMPLETION)

Site: Site 7	**LocID:** MW07-20DA	Date/Time Started: 12-14-16 / ~~16~~ 1400
Project Name: Davisville	Project Number: 60273164	Date/Time Completed: 12-14-16 / 1515
Drilling Contractor: CDS	Drilling Equipment: CME 55	Logged By: Tom Craft
Driller: Tony M.	Borehole Diameter (in.): 4.5	Checked By:

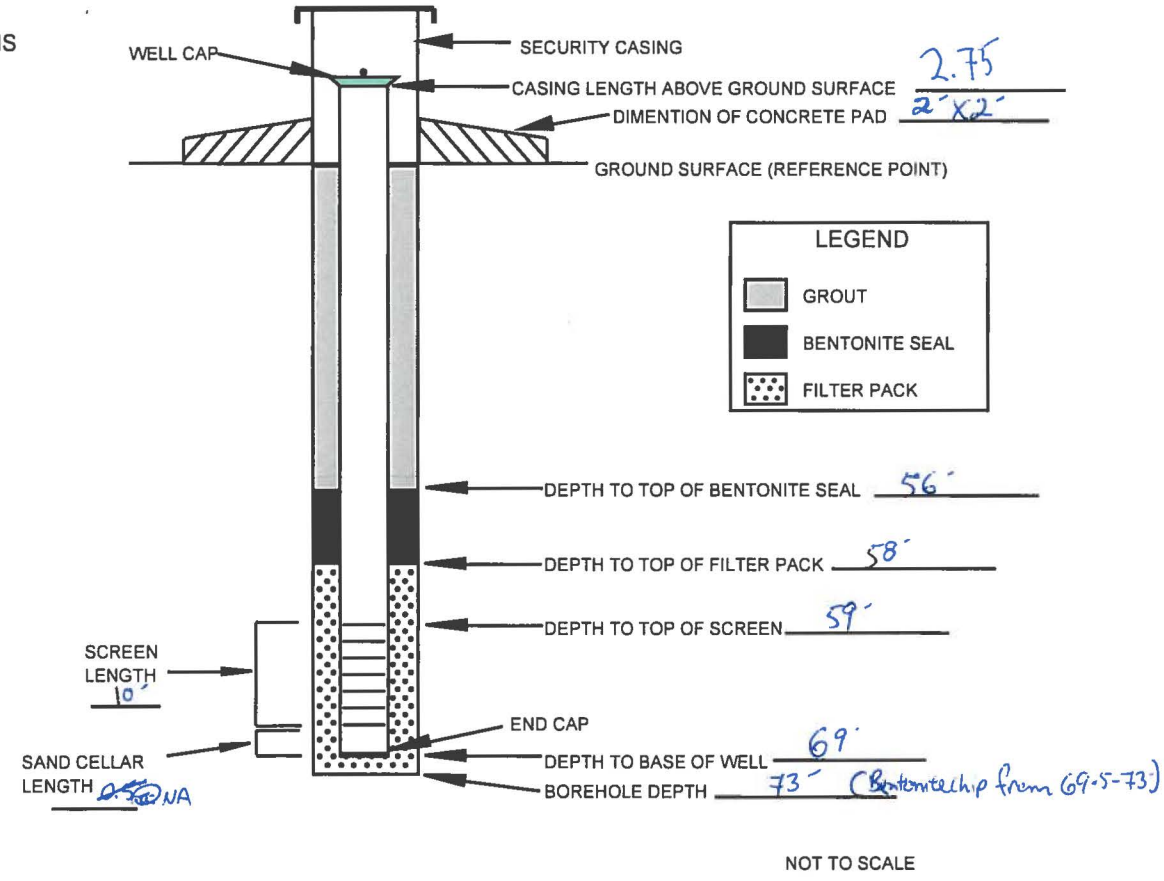
FILTER PACK
Type & Size of Filter Pack: OS
Amount of Filter Pack Used (lbs): 150
Filter Pack Manufacturer: Hollister

BENTONITE SEAL
Type & Size of Bentonite: medium chip
Amount of Bentonite Used (lbs): 30
Bentonite Manufacturer: Pure Gold

GROUT
Type of Cement: Type II
Cement Manufacturer: Portland
Amount of Cement Used (lbs): ~300
Bentonite Powder Type: NA
Bentonite Powder Manufacturer: NA
Amount of Bentonite Powder Used (lbs): NA

WELL DETAILS
Screen/Casing Diameter (in): 2 (10sbt)
Screen Material/Manufactuer: PVC - Schedule 40
Screened Interval (ft): 59-69
Depth to Water (ft): 1.0
Water Added During Construction (gal): 0
Casing Material/Manufactuer: Schedule 40 PVC
Type of Well Cap/Manufactuer: J-plug
Type of End Cap/Manufactuer:
Dimensions of Security Casing: 4" diameter x 5' long

SPECIAL CONDITIONS
(describe and draw)



NOT TO SCALE

MONITORING WELL DEVELOPMENT FORM

LOCATION	Site: Site 7		LocID: MW07-20SA		Date: 12-27-16
	Project Name: Dansville		Project #: 60273164		Recorded By: ZE Checked By:
EQUIPMENT	H2O Quality Meter Type/ID #: YSI 600 / 99K1014AC		Development Equipment: surge block / whale pump		
	Water Level Indicator Type/ID #: Solinst 101 / 32254		Equipment Decon.: alconox		
WELL INFO	Casing I.D. (in): 2		Water Column Thickness (ft): 10.38		Initial Depth to Water (ft): 6.37
	Total Well Depth (ft): 16.75 / 16.75 after		Water Volume (gal/lin ft): 3.2 gal		
	Remarks: Water volume = (10.38 ft x 0.163 gal/ft) + [10.38 ft x ([0.653 gal/ft - 0.163 gal/ft] x 0.32)] = 1.7 gal + 1.53 = 3.2 gal				

Date (mm/dd/yy)	Time (24 hr)	Water Level (FTOC)	Volume Removed (Gals)	Pumping Rate (Gpm)	Temp. (C)	Specific Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mv)	Turb. (NTU)	Notes
12-27-16	1255-	purge	using whale pump								
	1301	Hose	6.65	6	1.0	14.44	22473	3.09	7.70	-143.6	8.89
	1306	surge	well screen								
	1306-1312	6.65		12	1.0	13.54	24014	4.31	7.26	-131.6	22.9
		surge	well screen								
	1317-	312	6.65	17	1.0	13.55	24918	3.49	7.20	-142.0	49.9
		surge	well screen								
	1327-	1334	6.67	24	1.0	13.56	24580	3.90	7.14	-140.0	9.09
		1339	6.68	29	1.0	13.51	24763	3.08	7.12	+11.7	5.60

Drawdown: minimal Measurements: 3-5 min Stabilization: +/- 0.5 C, +/- 3% conductivity, +/- 10% DO, +/- 0.1 pH, +/-10 mv ORP, turb=as low as possible (<10 NTU ideal) All for 3 consecutive readings

MONITORING WELL DEVELOPMENT FORM

LOCATION	Site: Site 7		LocID: MW07-20DA		Date: 12-27-16
	Project Name: Davisville		Project #: 60273164		Recorded By: TC Checked By:
EQUIPMENT	H2O Quality Meter Type/ID #: YSI 6920 / 99K 1014AC		Development Equipment: ~~Waterra~~ Surge block / whale pump		
	Water Level Indicator Type/ID #: Solinst 101 / 32254		Equipment Decon.: alconox		
WELL INFO	Casing I.D. (in): 2		Water Column Thickness (ft): 54.43		Initial Depth to Water (ft): 6.15
	Total Well Depth (ft): 61.08' / 69.43 after		Water Volume (gal/lin ft): 17 gal.		
	Remarks: water volume = (54.93 ft x 0.163 gal/ft) + (54.43 ft x [(0.653 gal/ft - 0.163 gal/ft) x 0.38]) = 8.95 gal + 8.07 gal = 17 gal				

Date (mm/dd/yy)	Time (24 hr)	Water Level (FTOC)	Volume Removed (Gals)	Pumping Rate (Gpm)	Temp. (C)	Specific Conduct. (mS/cm)	DO (mg/L)	pH	ORP (mv)	Turb. (NTU)	Notes
12-27-16	0930	49.2	10	1.0	13.12	11754	9.89	12.74	76.2	92.3	Surge with whale pump
	→ surge with surge block										
	0937-0955	60.4	31	1.0	12.78	27125	5.12	10.92	-30.5	99.1	
	→ surge with surge block										
1005	1010	57.0	56	1.0	12.71	33351	2.91	9.98	-29.4	22.9	
	→ surge										
1030	1055	49.5	73	1.0	12.83	34583	1.55	9.33	-31.7	26.4	
1055	1114	46.7	92	1.0	12.98	35121	1.16	9.12	-33.3	33.5	
	1119	45.8	97	1.0	12.97	35305	1.53	9.09	-34.5	34.0	
	1124	44.35	102	1.0	12.94	34423	1.57	9.15	-35.2.9	36.2	
1345	1403	43.40	132	1.0	14.41	35357	3.83	8.15	-30.3.1	6.18	
	1418	43.40	135	1.0	13.86	35536	3.66	8.24	-30.91	3.81	
	1421	43.40	138	1.0	14.08	35594	3.89	8.11	-30.8	4.18	

Drawdown: minimal **Measurements:** 3-5 min **Stabilization:** +/- 0.5 C, +/- 3% conductivity, +/- 10% DO, +/- 0.1 pH, +/-10 mv ORP, turb=as low as possible (<10 NTU ideal) **All for 3 consecutive readings**

DTB = 69.62' after additional water removal

*: The depth to bottom should be 71.75'. There is likely hard-packed silt/clay/sand at the bottom that cannot be pumped out, despite agitation with a surge block.

Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, Virginia 23510

October 30, 2017

U.S. Environmental Protection Agency, Region 1
Federal Facilities Superfund Section
Attn: Ms. Christine Williams
5 Post Office Square, Suite 100
Mail Code: OSRR07-3
Boston, MA 02109-3912

Rhode Island, Department of Environmental Management
Office of Waste Management
Attn: Mr. Richard Gottlieb
235 Promenade Street
Providence, RI 02908-5767

RE: Draft Final Fall 2016 Five Year Event Monitoring Report, Site 09 Monitoring Event 45, Former NCBC Davisville, North Kingstown, Rhode Island

Dear Ms. Williams and Mr. Gottlieb:

On behalf of the Naval Facilities Engineering Command (NAVFAC), Mid-Atlantic (MIDLANT), Resolution Consultants is submitting the Draft Final Fall 2016 Five Year Event Monitoring Report for Site 09 Monitoring Event 45. If you have any questions regarding this deliverable, please contact the Navy RPM Mr. Todd Bober or myself.

Sincerely,

Resolution Consultants
Robert Shoemaker
NCBC Davisville Task Order Manager
9400 Amberlgen Boulevard
Austin, TX 78729
robert.shoemaker@aecom.com
512.419.5576

RESOLUTION CONSULTANTS

Document Distribution:
Christine Williams, USEPA (letter, 2 hard copy, 2 CD)
Richard Gottlieb, RIDEM (letter, hard copy, CD)
Todd Bober, Navy (letter, hard copy, CD)
David Barney, Navy (electronic only)
Andrew Glucksman, Mabbett & Associates, Inc. (letter, hard copy, CD)
Steven King, QDC (letter, hard copy, CD)
Susan Licardi, Town of North Kingstown (letter, CD)
Scott Anderson, Tetra Tech (letter, hard copy, CD)
Mark Kauffman, Resolution (letter)
Robert Shoemaker, Resolution (letter, hard copy, CD)

MONITORING EVENT 45
Fall 2016 Five Year Monitoring Report
Site 09: Allen Harbor Landfill
Former Naval Construction Battalion Center
Davisville
North Kingstown, Rhode Island

DRAFT FINAL
Version: 1

Prepared for:

Department of the Navy
Naval Facilities Engineering Command
BRAC Program Management Office, East
4911 South Broad Street
Philadelphia, Pennsylvania 19112

Comprehensive Long-Term Environmental Action Navy
Contract Number N62470-11-D-8013

October 30, 2017

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CTO WE23

Prepared by:

Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, VA 23510

October 30, 2017

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List of Acronyms and Abbreviations

1,1-DCE	1,1-Dichloroethene
AALs	Acceptable ambient levels
BCT	BRAC Cleanup Team
BGS	Below Ground Surface
BRAC	Base Realignment and Closure
BTEX	Benzene/Toluene/Ethylbenzene/Xylene
cis-1,2-DCE	cis-1,2-dichloroethene
CVOCs	Chlorinated Volatile Organic Compounds
COC	chemicals of concern
COPC	chemicals of potential concern
DNAPL	Dense non-aqueous-phase liquid
ELCR	excess lifetime cancer risk
EPA	Environmental Protection Agency
EPCs	Exposure Point Concentrations
ERA	Ecological Risk Assessment
ERM	Effects Range, Median
FOD	Frequency of Detection
g/s	Grams per second
HHRA	Human Health Risk Assessment
LTM	Long Term Monitoring
LUCIP	Land-Use Control Implementation Plan
ME	Monitoring Event
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NCBC	Naval Construction Battalion Center
NOAA	National Oceanic and Atmospheric Administration
PAHs	Polycyclic Aromatic Hydrocarbons

PALs	Project Action Limits
PCBs	Polychlorinated Biphenyls
PID	Photoionization Detector
PVC	Polyvinyl Chloride
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
Q-Q	Quartile-Quartile
UCL	Upper confidence limits
RAOs	Remedial Action Objectives
RIDEM	Rhode Island Department of Environmental Management
ROD	Record of decision
SAP	Sampling and Analysis Plan
SVOCs	Semivolatile Organic Compounds
TCE	Trichloroethene
trans-1,2-DCE	trans-1,2-Dichloroethene
VC	Vinyl Chloride
VOCs	Volatile Organic Compounds

1.0 PROJECT BACKGROUND

1.1 Introduction

The results from Monitoring Event (ME) 45, conducted in September and December 2016, as part of the Long-Term Monitoring (LTM) Program at Allen Harbor Landfill (Site 09, see Figure 1), Former Naval Construction Battalion Center (NCBC) Davisville, are provided in this report. ME 45 was conducted in accordance with the Draft Tier II Sampling and Analysis Plan Long Term Monitoring Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill (Tier II LTM SAP) dated June 24, 2016 (Resolution, 2016b). A detailed discussion of the site history and conceptual site model can be found in Worksheet 10-1 of the Tier II LTM SAP.

ME 45 was a Five Year Event (see Table 1). In addition to presenting the data from ME 45, comparisons to recent historical data and evaluation of long term trends are also included. The human health and ecological risk assessments for Site 09 have also been updated with data since the last risk assessments.

Field and laboratory analytical data collected during ME 45 are summarized in tables and figures attached to this report. Data and backup for the data presented in tables and figures are provided as Attachments to this report: Field sampling forms are provided in Attachment A, data validation reports are provided in Attachment B, the land-use control implementation plan (LUCIP) checklist is provided as Attachment C, the site inspection report and photographs are provided in Attachment D, summary of detected analytes tables are included in Attachment E. Statistical analysis data including frequency of detection (FOD) tables, Mann Kendall trend analyses, and trend plots are located in Attachment F. Updated Risk Assessments are provided in Attachment G. Results of a laboratory audit performed for the shellfish resampling and statistical comparisons of the September 2016 and December 2016 shellfish samples are provided in Appendix H. Appendix I contains updated allowable air toxic emission rates and comparison to the Site 09 landfill gas vent emissions.

2.0 FIVE YEAR MONITORING EVENT ACTIVITIES

The Site 09 landfill maintenance activities were conducted from August 15, 2016 through August 24, 2016. The Site 09 sampling was initially conducted from September 6, 2016 through September 30, 2016 in conjunction with the Calf Pasture Point (Site 07) ME 20. Sampling locations are presented on Figure 2 and Figure 3. The shellfish data collected during the initial sampling were not usable for project objectives (see Section 2.2 for more detail). Therefore, the shellfish samples were recollected from December 12, 2016 through December 14, 2016. A complete summary of activities performed during ME 45 is summarized below:

- Groundwater samples were collected from 26 monitoring wells
- Four shellfish tissue samples were collected from outside the created wetland breakwater structure, two were collected south of the landfill, two were collected north of the landfill, and two were collected within the created wetland. Details on the type of shellfish collected at each location are presented in Section 2.1. Shellfish samples were co-located with piezometers with the exception of the two wetland sample locations ET09-07 and ET09-08. Shellfish data collected during the September sampling event was deemed unusable during data evaluation. Therefore, a re-sampling event for all ten shellfish tissue sample locations was conducted in December 2016 (see Section 2.2).
- Piezometer samples were collected from 11 locations. P09-05A was found to be dry after several attempts to sample; therefore no samples were collected from this location (see Section 2.2). Samples were collected from beyond the breakwater in 5 locations (P09-06B, P09-07B, P09-08B, P09-11B, and P09-12B), and from inside the wetland in four locations (P09-02, P09-03, and P09-04A). One sample was collected from north of the landfill (P09-01), and two from south of the landfill (P9-09, and P09-10).
- Synoptic water level measurements were recorded during outgoing mid-tide, low tide and high tide at 27 monitoring wells and the staff gauge in Allen Harbor.
- 20 soil gas points around the perimeter of the landfill cap were screened with a photoionization detector (PID) and landfill gas meter.
- 5 gas vents were sampled with SUMMA canisters for laboratory analysis of Volatile Organic Compounds (VOCs) and methane. The gas vents were also screened with a PID and landfill gas meter.
- Three seep samples were collected.

- 12 sediment samples were collected from 0-6 inches below ground surface (bgs), co-located with the piezometers P09-01, P09-2A, P09-3A, P09-4A, P09-5A, P09-6B, P09-7B, P09-8B, P09-09, and P09-10.
- One surface water sample was collected from Allen Harbor.
- Landfill inspection and landfill maintenance activities were performed.

Groundwater samples collected from monitoring wells and piezometers were analyzed for one or more of the following parameters: VOCs, semivolatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), pesticides, sulfide, polychlorinated biphenyls (PCBs), metals (dissolved and total), and salinity. Sediment samples were analyzed for one or more of the following: VOCs, PAHs, pesticides, PCBs, and metals. Shellfish tissue samples were analyzed for SVOCs, PAHs, pesticides, PCB homologs, metals, and percent lipids. Landfill gas samples were analyzed for VOCs and methane. Sampling locations, analyses, and sampling rationale are presented on Table 1.

Field sampling forms completed during ME 45 are provided in Attachment A.

2.1 Monitoring Procedures

Synoptic groundwater measurements; sample collection; and soil gas point and gas vent screening were performed in accordance with the Draft Tier II LTM SAP (Resolution, 2016b). The land-use control inspection and site inspections were completed in accordance with the Final Quality Assurance Project Plan (QAPP) (EA, 2001) and the Final Land Use Control Implementation Plan (EA, 2002).

Groundwater samples were collected from monitoring wells and piezometers using the Environmental Protection Agency (EPA) Region I Low Stress (Low Flow) methodology (EPA, 2010). Piezometer samples were collected at low tide. In cases where a sampling point did not provide sufficient recharge to enable stabilization of the water level, the sampling point was evacuated of standing water and allowed to recharge prior to the collection of the water quality data and the piezometer sample. Consistent with EPA methodology, prior to the collection of sample aliquots for laboratory analysis, water quality parameters including temperature, pH, specific conductivity, dissolved oxygen, oxidation-reduction potential, and turbidity were measured (where sufficient water was available) and recorded with an electronic data collection device. A summary of field measurements recorded during monitoring well and piezometer groundwater sample collection activities is provided on Tables 4 and 5 of this report, respectively.

Sediment samples were collected at low tide from 0-6 inches bgs, immediately adjacent to piezometer locations, using a clean, disposable trowel for each location. A PID was used to screen the hole for any elevated readings. During ME 45, no elevated readings were observed at any of the sediment locations. Therefore, the sediment sample aliquot for VOC analysis was collected as a discreet sample using a dedicated coring device (i.e., Terra Core® Sampler) directly from the bottom of the sample hole (i.e., 6 inches bgs). For the non-VOC samples, sediments from the targeted depth interval were homogenized in a decontaminated stainless steel bowl then transferred into the appropriate containers for laboratory analysis. Sediment samples were co-located with piezometers, and where applicable, shellfish tissue sample collection locations.

Two types of shellfish were collected during ME 45 as follows: Quahogs were collected at locations ET09-05, ET09-06, ET09-09, ET09-10, and ET09-12, and Ribbed Mussels were collected at locations ET09-03, ET09-04, ET09-07, ET09-08, and ET09-11. Quahogs were collected anywhere from 0.5 – 2 feet bgs depending on where they could be located. With the exception of location ET09-07, Ribbed Mussels were collected from the surface of the breakwater structure, so the sample depth was zero feet. At wetland location ET09-07, Ribbed Mussels were collected anywhere from 0 – 0.5 feet bgs, where they were located embedded in the wetland sediment. Shellfish tissue sampling locations are shown on Figure 2. Samples were placed in Ziplock® bags and sent to the laboratory on ice whole for preparation and analysis. See Section 2.2 for details on the shellfish resampling.

Landfill Gas Vent samples were collected at five gas vent locations, GV09-01 – GV09-05. Screening parameters were collected with a PID and landfill gas meter at each gas vent prior to sample collection. The samples were collected using laboratory-provided SUMMA Canisters.

Three seep samples were collected during ME 45 from the southeastern side of the landfill where erosion channels have formed in the created wetland due to the flow of surface water from the revetment wall during receding tide. Two of the seep samples are adjacent to piezometers P09-07 and P09-08, respectively; the third is in the area south of the MW09-08 well cluster. The seep samples were collected during ebb (i.e., receding) tide when flow through the seep channels was at its low point but still high enough to collect a sample. A clean unpreserved glass bottle was dipped directly into the top 1 inch of flow and then this bottle was used to fill the sulfide and salinity samples. VOC samples were collected by directly filling the VOC vials from the seep. Seep samples were collected for VOCs, Sulfide, and Salinity analysis.

The annual landfill inspection was conducted on September 28, 2016 (Attachment D).

2.2 Deviations from Planned Monitoring Activities

On November 17, 2016, the laboratory notified Resolution that the shellfish samples collected in September 2016 had extremely low or no surrogate recoveries for the SVOC, PAH, and pesticides analyses. The Project Chemist reviewed the data and determined that the majority of the results would be rejected during data validation and any results not rejected would be estimated and biased extremely low. Resolution requested that the laboratory re-extract and re-analyze the samples for these analyses, but due to laboratory error, the shellfish samples had not be placed back in the freezer following the initial sample preparation; they were placed in the refrigerator instead. Therefore, the holding time for the analyses had been grossly exceeded and re-extraction and reanalysis was not possible. The PCB homolog and metals data were not affected by this data quality issue.

The Base Realignment and Closure (BRAC) Cleanup Team (BCT) was notified of the shellfish sample data quality issue on November 18, 2016. The data quality issue and a resampling proposal were discussed during the December 1, 2016 BCT conference call. The BCT agreed to resample the shellfish and analyze the samples for the full suite of analyses, validate the September 2016 PCB homolog and metals data, and compare these data to the validated December 2016 PCB homolog and metals data to assess whether the data can be considered to be from the same population and the same season (Resolution, 2016c). Details on the comparison of the September 2016 and December 2016 PCB homolog and metals data are discussed in Section 4.3.

Resolution recollected the shellfish samples from December 12, 2016 through December 14, 2016. Resolution sent a chemist to audit the laboratory on December 15, 2016. Details on the laboratory audit can be found in Section 4.2.

During the ME 45 piezometer sampling, several piezometers were found to have little to no recharge. These occurrences are consistent with previous monitoring events since the inception of the LTM program and reflect the very limited discharge of groundwater around the landfill shoreline. Multiple attempts were made to increase productivity in these piezometers, including removing the piezometers and cleaning the screens at location P09-05A, and installing additional new piezometers at locations P09-02, P09-03A, and P09-05A. Low recharge piezometers were also visited over multiple days to try and fill the required sample volume. Despite these efforts, the full sample set was unable to be collected at several piezometer locations during ME 45. Location P09-05A experienced zero recharge over several days and no groundwater samples were collected at this location. Locations P09-02A, P09-03A, P09-07B, and P09-08B experienced low recharge. As a result, pesticides/PCBs at P09-02A, SVOC/PAHs and total and dissolved metals at P09-03A,

SVOC/PAHs, dissolved metals, and salinity at P09-07B, and salinity at P09-08B were unable to be collected during ME 45.

During the Fall 2013 ME 42 sampling event, sediment samples were collected from seven locations (SED09-01, SED09-02A, SED09-03A, SED09-04A, SED09-05A, SED09-09, SED09-10, and SED09-11B) at a target depth of 24-36 inches bgs as specified in the Final Quality Assurance Project Plan for Long Term Monitoring of Site 09 (EA, 2001) and not from 0-6 inches bgs as had subsequently been agreed to by the BCT. Samples were not re-collected for this event. Therefore, the ME 42 sediment samples are not included in historic sediment data comparisons, statistical analyses, and trend plots. They are included in the human health risk assessment update however. Sediment samples in Monitoring Events 43 through 45 were collected from 0-6 inches bgs.

3.0 SUMMARY OF LONG TERM MONITORING RESULTS

This section presents and discusses the hydrogeology and analytical results for ME 45.

A number of figures were prepared for this report using data collected during ME 45. Data figures presented in this report include:

- Tag Maps of all positively identified VOCs, SVOCs, PAHs, Pesticides, PCBs, and Metals for all sampled media.
- Spatial Analysis Maps for trichloroethene (TCE), vinyl chloride (VC), cis-1,2-dichloroethene (cis-1,2-DCE), and trans-1,2-dichloroethene (trans-1,2-DCE) in the Shallow and Deep flow zones.
- Updated Isoconcentration Figures for TCE, cis-1,2-DCE, trans-1,2-DCE, and VC along Groundwater Cross-Sections A-A', B-B', C-C' and D-D'.
- Trend data figures presenting the Mann Kendall trend analysis results for TCE, cis-1,2-DCE, trans-1,2-DCE, VC, other VOCs, benzene/toluene/ethylbenzene/xylene (BTEX), and metals in the Shallow and Deep flow zones.

3.1 Hydrogeology

This section provides a summary of the hydrogeological interpretations based on the groundwater level measurements collected during ME 45. Three rounds of synoptic water level measurements were recorded on September 20, 2016 in 27 monitoring wells and the Allen Harbor Staff Gauge. Gauging rounds were conducted during high, outgoing mid, and low tides. Groundwater elevations were calculated based on the most current annual settlement survey results, as appropriate; by adjusting top-of-riser elevations to reflect the October 2016 landfill settlement survey. Each round of groundwater measurements were recorded within 45 minutes to minimize the transient effects tide has on groundwater levels and flow. Groundwater potentiometric contours were created for the shallow/intermediate overburden and deep overburden flow zones for each round of synoptic water level data. The contours were created using a kriging algorithm in Surfer® 9 modeling software. The potentiometric contour maps are presented for each flow zone as Figures 5 and 6 (low tide), 8 and 9 (outgoing mid tide), and 11 and 12 (high tide).

The synoptic water level data was also used to show vertical groundwater flow along Transect B-B' which extends approximately east to west across Allen Harbor Landfill. The location of this transect is presented on Figure 4, and the cross section with the groundwater contours is presented on Figures 7, 10, and 13 for low, outgoing mid, and high tide conditions respectively. The cross

section incorporates all vertical depth intervals (i.e., shallow overburden, deep overburden, bedrock) to produce vertical head distributions. A summary of vertical hydraulic gradients for all data to present is provided in Table 3.

The following sections describe groundwater flow at Site 09.

Shallow / Intermediate Overburden

During outgoing mid tide conditions, consistent with previous monitoring events, groundwater flow across the Site in the shallow/intermediate zone during ME 45 was generally southeasterly from the bike path in the northern portions of the site, becoming more easterly approaching the Allen Harbor shoreline. Components of southerly flow can be seen in the southern end of the landfill near wells MW09-05S and MW09-21S, and a small north-easterly flow component is found on the northern tip of the site near well MW09-25S. A localized high point at MW09-17I causes southeastern, eastern, and northeastern radial flow components in the east center portion of the landfill. The outgoing mid tide shallow/intermediate overburden potentiometric map is presented as Figure 8.

Low tide conditions at the landfill mirror the outgoing mid tide conditions with some minor changes due to tidal influence. Flow in the northern portion of the site remains generally southeasterly from the bike path with a minor north-easterly component near the shoreline. Along the majority of the landfill edge in the central and southern portions of the site, shallow/intermediate groundwater discharges to Allen Harbor nearly parallel to the stone revetment/landfill boundary. Due to a localized low point at MW09-27S a west/northwesterly flow component is seen in the west central portion of the site. The low tide shallow/intermediate overburden potentiometric map is presented as Figure 5.

At high tide, the groundwater flow conditions mirror conditions observed during outgoing mid tide. A localized high at MW09-17I causes radial flow to the northeast, east, and south east, the northern portion of the site experiences general southeasterly flow with a northeasterly flow component near MW09-25S, and the southern portion of the site shows general southeasterly flow towards Allen Harbor. The high tide shallow/intermediate overburden potentiometric map is presented as Figure 11.

Deep Overburden

In general, groundwater flow in the deep zone during ME 45 was similar to that in the shallow/intermediate zone at each tidal stage. All three tidal stages show southeasterly groundwater flow in the northern half of the landfill. During outgoing mid tide, southeasterly flow is

seen across the whole site in the deep overburden zone. A high point at MW09-23D causes additional minor flow paths to the south and east in the central portion of the site. At low tide, groundwater discharges to Allen Harbor nearly parallel to the stone revetment/landfill boundary along the central and southern portions of the site, with a northwest/west flow component created by a localized low point at MW09-27D. During high tide a mounding effect is seen through the central portion of the site, causing radial flow to the east, west, and south from the center of the landfill. Deep overburden maps for low, mid and high tide can be found in Figures 6, 9, and 12 respectively.

Cross Section – Vertical Flow

During outgoing mid tide, a gently sloping downward gradient is observed from the bike path to Allen Harbor in cross section B-B'. At low tide, flow is more horizontal in the western portion of the site, with a steeper downward flow component in the middle and eastern portions of the site. High tide shows upward gradients discharging to Allen Harbor on the far east end of the transect. These flow conditions are consistent with previous monitoring events. Cross section B-B' vertical flow is presented as Figure 7 (low tide), Figure 10 (mid tide) and Figure 13 (high tide).

Long-Term Groundwater Trends

A detailed analysis of long term groundwater flow conditions and vertical gradients from ME 01 through ME 40 can be found in the Site 09 LTM and Optimization Recommendations Report (Tetra Tech, 2015). No significant changes in the overall groundwater flow conditions were observed during the past five monitoring events. The hydrogeology data show that flow conditions at Site 09 are stable and consistent with previous reporting.

A summary of vertical hydraulic gradients in several well pairs across the site, updated with outgoing mid–tide synoptic water level data through ME 45, is provided in Table 3. An evaluation of long term trends in the vertical hydraulic gradient data through ME 40 can be found in the Site 09 LTM and Optimization Recommendations Report (Tetra Tech, 2015). No significant changes in vertical gradients or site-wide groundwater trends have been observed since ME 40.

3.2 Analytical Results of Monitoring Data

Data validation memoranda are provided in Attachment B. Plots depicting concentration trends are presented in Attachment F for all locations sampled during ME 45, any analyte, in all media, with at least two results. Also included in Attachment F are FOD tables and Mann Kendall trend analyses for all data to date. Mann Kendall trend analyses were performed for all media, all locations sampled during ME 45, and all detected analytes where there were at least 4 sampling rounds and

3 rounds in which concentrations were detected. Attachment E contains Summary Tables for all analytes detected since ME 01. As mentioned in Section 2.2, the ME 42 sediment samples are not included in historic sediment data comparisons, statistical analyses, and trend plots since these samples were not collected as surface sediment samples.

3.2.1 Monitoring Well Sampling Results

The project action limits (PALs) for groundwater samples collected from monitoring wells are the federal Maximum Contaminant Levels (MCLs), unless the Rhode Island Department of Environmental Management (RIDEM) GA groundwater quality objectives are more stringent. The PALs for groundwater are listed in Worksheet 15 of the Draft Tier II LTM SAP (Resolution, 2016b). Table 8 provides analytical results for groundwater samples collected from monitoring wells during ME 45 compared against the PALs for groundwater. Groundwater analytical data (detected results, with exceedances of PALs identified in red) are also presented on Figures 14 through 18.

This section discusses compounds detected in groundwater samples at concentrations exceeding the PALs established in the Draft Tier II LTM SAP (Resolution, 2016b). For select compounds without PALs, a brief discussion of detections in groundwater is also included. The discussion is presented according to analytical group (e.g., VOCs, metals, etc.). Groundwater sample locations are shown on Figure 2. Attachment E provides summary tables of all groundwater analytes, including contaminants detected and non-detected compounds and associated PALs for comparison from ME 01 to ME 45.

Volatile Organic Compounds in Groundwater Monitoring Wells

The principal VOCs that have been detected in groundwater at concentrations greater than PALs include chlorinated VOCs (CVOCs) and benzene. The primary CVOCs include the parent compound TCE and its daughter products cis-1,2-DCE and VC, and other CVOCs 1,1-DCE, trans-1,2-Dichloroethene (trans-1,2-DCE) and 1,1,2-Trichloroethane. Other CVOCs and non-CVOCs detected at concentrations exceeding PALs are also discussed in this section.

Trichloroethene. Since ME 41, TCE has been detected at concentrations exceeding the PAL of 5 µg/L in MW09-20I, MW09-21D, and MW09-03D. TCE was detected above the PAL in MW09-14IA during ME 44, but was not detected during ME 41, ME 42, ME 43, and ME 45. TCE has also been detected at MW09-08DA, MW09-09DA, MW09-14D, MW09-20D, MW09-24D, and MW09-25S but at concentrations less than the PAL, with no observable trends.

MW-09-20I has shown increasing TCE concentrations since ME 42, increasing from 140,000 ug/L during ME 42 to 490,000 µg/L during ME 45. These concentrations, while increasing, are still below

the historical high of 1,200,000 µg/L during March 2009 (ME 28). The ME 42 TCE concentration was a historic low and a decrease from the ME 41 concentration of 430,000 ug/L. Based on these concentrations, it is possible that dense non-aqueous-phase liquid (DNAPL) is present at or near this location. The Mann Kendall trend analysis indicates an overall downward trend in TCE concentrations at this location since ME 01.

For the two other wells where TCE exceeds the PAL (MW09-21D and MW09-03D), the TCE concentrations are significantly less than those at MW09-20I. At MW09-21D, TCE concentrations since ME 41 have ranged from 47 to 110 µg/L, well below the historic high concentration of 500 ug/L (ME 01) and below the average concentration of 162 ug/L. The Mann Kendall trend analysis also indicates an overall downward trend at this location. At MW09-03D, TCE concentrations have historically (since ME 01) been near the PAL, with a maximum concentration of 7.3 µg/L and an average concentration of 5.5 ug/L. Since ME 41, concentrations have barely exceeded the PAL, ranging from 0.82 to 6.3 ug/L. The Mann Kendall trend analysis also indicates an overall downward trend at this location.

Figures 57 and 58 present a spatial analysis of TCE during ME 45. For simplicity, only the PAL concentration contour is provided (i.e., the figure is not an isoconcentration map). Additionally, maximum spatial extent is assumed via linear interpolation. As observed on Figure 57, because TCE was detected only at MW09-20I, the overall extent of TCE in the shallow zone remains unchanged since observations made in the Site 09 LTM and Optimization Recommendations Report (Tetra Tech, 2015). Figure 58 presents TCE in the deep zone and, similar to the shallow zone, the extent of TCE is essentially unchanged in the vicinity of MW09-03D and MW09-21D since the last plume analysis in the Site 09 LTM and Optimization Recommendations Report (Tetra Tech, 2015). Overall, based on Figures 57 and 58, there is no evidence of spatially extensive TCE plumes in either groundwater zone at the Site. TCE is not shown to extend into Allen Harbor because there are no data to confirm its presence offshore, although it is likely that TCE may occur at depth offshore (see below).

Further spatial analysis of TCE is provided on Figures 41, 45, 49, and 53, which present ME 45 TCE isoconcentrations along cross-sections A-A', B-B', C-C', and D-D', respectively. Figures 41 and 45 present TCE isoconcentrations along cross-sections A-A' and B-B' (parallel to groundwater flow, from onshore to offshore), respectively. Because TCE has exceeded the PAL only at MW09-20I and MW09-21D, the overall size and shape of the TCE extent appear relatively consistent with previous monitoring events. Based on the isoconcentrations presented in Figure 45 and flow nets presented on Figures 7, 10, and 13, it is possible that TCE may occur at depth beyond the breakwater structure (shown in cross-section B-B'). This observation is consistent with previous monitoring

events. Figures 49 and 53 present TCE isoconcentrations along cross-sections C-C' and D-D', respectively. Consistent with previous events, only limited areas of TCE are interpolated around wells MW09-03D and MW09-24D (Figure 49), and MW09-21D, MW09-14IA, and MW09-25S (Figure 53).

Overall, the size, shape, and concentration profile of the TCE extent remain stable and are consistent with those in the Site 09 LTM and Optimization Recommendations Report (Tetra Tech, 2015).

Vinyl Chloride. VC has been frequently detected at concentrations greater than the PAL of 2 µg/L at the following wells: shallow wells MW09-08S, and MW09-09S, intermediate wells MW09-20I and MW09-14IA, and deep wells MW09-03D, MW09-08DA, MW09-09DA, and MW09-21D.

At MW09-08S, VC concentrations have exceeded the PAL but have been decreasing since the ME 41 concentration of 10 µg/L. The Mann Kendall trend analysis also indicates an overall downward trend at this location.

At MW09-09S, VC concentrations have ranged from 1,100 to 450 ug/L since ME 41. The Mann Kendall trend analysis indicates an overall upward trend at this location. The lack of significant concentrations of TCE at this location over time suggests that TCE once present has been reduced to cis-1,2-DCE and VC. Although the overall trend for VC is upward, concentrations since ME 41 have been steadily decreasing, as have concentrations of cis-1,2-DCE. This suggests that overall CVOC mass at this location may have recently begun to slowly decrease over time.

At MW09-20I, VC concentrations have ranged between 14,000 and 4,500 µg/L since ME 41. The Mann Kendall trend analysis indicates an overall upward trend at this location. The overall upward trend for VC coupled with the overall downward trend for TCE is indicative of anaerobic reductive dechlorination occurring at this location.

At MW09-14IA, the VC PAL was exceeded during ME 41 (11 ug/L), ME 43 (16 ug/L) and ME 45 (3.4 J ug/L), however, these concentrations are much lower than concentrations previously observed and the Mann Kendall trend analysis indicates an overall downward trend.

At MW09-03D, VC concentrations have ranged from 2.2 to 21 µg/L since ME 41. The Mann Kendall trend analysis indicates an overall downward trend at this location.

At MW09-08DA, VC was only detected above its PAL during ME 42 at a concentration of 27 ug/L. VC was either nondetect or detected below its PAL during the other MEs since ME 41. The Mann Kendall trend analysis indicates there is no overall trend at this location.

At MW09-09DA, VC was detected above the PAL during ME 42 (4.1 ug/L), ME 43 (4.6 ug/L), and ME 44 (2.9 ug/L). VC was not detected during ME 45. The Mann Kendall trend analysis indicates there is no overall trend at this location.

At MW09-21D, VC has been consistently detected in excess of the PAL, at concentrations ranging from 73 to 140 µg/L since ME 41. Consistent with previous monitoring events, the Mann Kendall trend analysis indicates an overall upward trend at this location. Similar to location MW09-20I, the overall upward trend for VC coupled with the overall downward trend for TCE is indicative of anaerobic reductive dechlorination occurring at this location.

At MW09-20D, VC was detected above the PAL during ME 41 (2.4 J ug/L). Concentrations during ME 42 through ME 44 ranged from 1.1 to 1.4 ug/L and the VC result during ME 45 was rejected during data validation. These concentrations are consistent with previous results and the Mann Kendall trend analysis indicates no overall trend at this location.

Figures 57 and 58 present a spatial analysis of VC during ME 45. For simplicity, only the PAL concentration contour is provided (i.e., the figure is not an isoconcentration map). Additionally, maximum spatial extent is assumed (i.e., linear distribution of concentrations are assumed). As observed on Figure 57, the overall extent of VC in the shallow and intermediate zones has remained essentially unchanged since observations made in the Site 09 LTM and Optimization Recommendations Report (Tetra Tech, 2015). VC is detected in monitoring wells MW09-08S, MW09-20I, and MW09-09S along the southeastern perimeter of the landfill. An isolated detection at MW09-14IA (3.4 ug/L) also creates a small plume in the center of the landfill. For the deep groundwater zone shown on Figure 58, the overall extent of VC is shown to mirror TCE (described above) with small plumes around MW09-03D and MW09-21D. The extent of VC in these two small plumes is essentially unchanged since observations made in the Site 09 LTM and Optimization Recommendations Report (Tetra Tech, 2015).

Further spatial analysis of VC is provided on Figures 42, 46, 50, and 54 which presents isoconcentrations along cross sections A-A', B-B', C-C', and D-D', respectively, during ME 45. Overall, plumes shown on these figures are consistent with historical figures. Along cross sections A-A' and B-B' (Figures 42 and 46), the plume is centered on high concentrations at MW09-20I. Cross sections B-B' and C-C' (Figures 46 and 50) also show a small plume centered on the detection of 21 ug/L at MW09-03D. Along cross section D-D' (Figure 54) a plume is shown originating from the detection of 73 ug/L at MW09-21D.

Similar to TCE, the overall, the size, shape, and concentration profile of the VC extent remain stable and are consistent with those in the Site 09 LTM and Optimization Recommendations Report (Tetra Tech, 2015).

cis-1,2-Dichloroethene. Since ME 41, cis-1,2-DCE has been detected at concentrations exceeding the PAL of 70 µg/L in five monitoring wells: MW09-20I, MW09-21D, MW09-03D, MW09-08DA, and MW09-09S.

At MW09-20I, cis-1,2-DCE concentrations ranged between 22,000 (ME 45) to 53,000 µg/L (ME 42) since ME 41. The Mann Kendall trend analysis indicates no overall trend at this location. The concentrations observed since ME 41 are consistent with the average concentration of 41,800 ug/L and well below the historic high of 150,000 ug/L (ME 36). The overall consistent concentrations in this well (i.e., no trend) coupled with overall downward trends for TCE and overall upward trends for VC indicate that anaerobic reductive dechlorination is occurring in this well.

At MW09-09S, concentrations of cis-1,2-DCE since ME 41 have ranged from 1,300 to 470 ug/L. The Mann Kendall trend analysis indicates an overall upward trend at this location. The lack of significant concentrations of TCE at this location over time suggests that TCE once present has been reduced to cis-1,2-DCE and VC. Although the overall trend for cis-1,2-DCE is upward, concentrations since ME 41 have been steadily decreasing, as have concentrations of VC. This suggests that overall CVOC mass at this location may have recently begun to slowly decrease over time.

At MW09-03D, cis-1,2-DCE concentrations have mostly been around the PAL of 70 ug/L since ME 41, with concentrations ranging between 65 ug/L to 80 ug/L. There was also one anomalous result of 7.7 ug/L during ME 44. The Mann Kendall trend analysis indicates an overall downward trend at this location. TCE and VC also have overall downward trends at this location indicating that anaerobic reductive dechlorination is occurring and the overall CVOC mass is decreasing at this location.

At MW09-21D, cis-1,2-DCE concentrations have ranged from 290 ug/L to 420 ug/L since ME 41. The Mann Kendall trend analysis indicates an overall downward trend is occurring at this location. TCE (downward trend) and VC (upward trend) are also present in this well indicating that anaerobic reductive dechlorination is occurring.

At MW09-08DA cis-1,2-DCE concentrations have mostly been detected below the PAL since ME 41 with concentrations ranging from nondetect (1.0 U) to 2.4 ug/L. However, there was one anomalous result above the PAL at 84 ug/L during ME 42. The Mann Kendall trend analysis

indicates no trend at this location. The ME 42 result of 84 ug/L appears to be truly an anomaly, as the average concentration prior to ME 42 was 2.2 ug/L and the concentrations after ME 42 were consistent with that average. However, with the ME 42 result included, the historic average is now 7.6 ug/L.

Cis-1,2-DCE has also been detected in wells MW09-08S, MW09-09DA, MW09-14IA and MW09-27D since ME 41, but below the PAL. The Mann Kendall trend analysis indicates overall downward or no trend at these locations.

Spatial analysis of cis-1,2-DCE in the shallow and deep groundwater during ME 45 is provided in Figures 59 and 60. Similar to the TCE and VC plume figures, only the PAL concentration contour is provided on these figures. Cis-1,2-DCE concentrations exceeding the PAL of 70 µg/L were detected in groundwater samples collected from two shallow/intermediate wells (MW09-09S and MW09-20I) and two deep wells (MW09-21D, and MW07-03D) during ME 45. Consistent with previous monitoring events, the plume remains stable with one lobe in the shallow groundwater zone around MW09-20I and MW09-09S, and two lobes in the deep groundwater zone around MW09-21D and MW09-03D. Cis-1,2,-DCE isoconcentrations during ME 45 are also presented on cross-sections A-A', B-B', C-C', and D-D' in Figures 43, 47, 51, and 55. The plumes presented in these cross section figures are consistent with previous monitoring events.

trans-1,2-Dichloroethene. Since ME 41, trans-1,2-DCE has been consistently detected at concentrations exceeding the PAL of 100 µg/L in well MW09-20I only. This is consistent with all previous MEs. Concentrations ranged from 13,000 to 21,000 ug/L. These concentrations are well below the historic high of 140,000 ug/L (ME 36) and slightly less than the historic average of 21,200 ug/L. The Mann Kendall trend analysis indicates no significant trend at this location.

Spatial analysis of trans-1,2-DCE in the shallow and deep groundwater units is provided along with cis-1,2-DCE in Figure 59 but not Figure 60 since trans-1,2-DCE was not detected above the PAL in in the deep zone during ME 45. Consistent with previous monitoring events, the plume remains stable with one lobe in the shallow groundwater zone around MW09-20I. Trans-1,2,-DCE isoconcentrations during ME 45 are presented on cross-sections A-A', B-B', C-C', and D-D' in Figures 44, 48, 52, and 56. The plumes presented in these cross sections are consistent to previous monitoring events.

Benzene. The aromatic hydrocarbon, benzene, while present within various zones, is primarily in the shallow/intermediate groundwater zone. Since ME 41 the PAL for benzene (5 µg/L) has been consistently exceeded in shallow monitoring wells MW09-21S and MW09-25S. Shallow wells MW09-07S and MW09-09S exceeded the PAL in all MEs since ME 41 with the exception of ME 45, when

the benzene was nondetect for both wells. For well MW09-09S, the nondetect reporting limit (10 ug/L) was elevated due to dilution during ME 45. Benzene also exceeded the PAL in MW09-11S during ME 44 for the second time since the inception of the LTM program. The Mann Kendall trend analysis indicates overall downward trends for MW09-07S and MW09-21S and no trend for MW09-25S. An overall upward trend is indicated in MW09-09S although concentrations since the inception of the LTM program have only ranged from 4.3 to 11 ug/L. Benzene concentrations have also exceeded the PAL in intermediate wells MW09-14IA (ranging from 25 to 34 µg/L), MW09-17I (ranging from 15 to 18 µg/L), and MW09-20I (ranging from 5.5 to 7.3 ug/L). Overall downward trends were observed at MW09-14IA and MW09-17I, and no trend was observed at MW09-20I.

At deep well, MW09-09DA, benzene slightly exceeded the PAL during ME 45 with a concentration of 5.7 ug/L. At shallow well MW09-11S the benzene concentration slightly exceeded the PAL during ME 44 (7.0 ug/L). The Mann Kendall trend analysis indicates no trend for either well.

At wells MW09-08S, MW09-10S, MW09-11S, MW09-14D, MW09-21D and MW09-24D, benzene has also been frequently detected, although concentrations have not exceeded the PAL and typically range from 1 to 3 µg/L. Overall decreasing concentration trends were observed at MW09-08S, MW09-21D and MW09-24D. No trends were observed for MW09-10S, MW09-11S, and MW09-14D.

Other VOCs. The following compounds were detected above the PAL at MW09-20I: 1,1,2-trichloroethane (PAL: 5 ug/L) and 1,1-dichloroethene (PAL: 7 ug/L) during ME 41 through ME 45; tetrachloroethene (PAL: 5 ug/L) during ME 41, ME 42, and ME 45; 1,2-dichloroethane (PAL: 5 ug/L) and methylene chloride (PAL: 5 ug/L) during ME 43 and ME 45. These occurrences are consistent with previous MEs, and the detected results during ME 41 through ME 45 were generally lower than the historic averages.

Chlorobenzene was detected above the PAL of 100 ug/L in MW09-11S (170 ug/L) during ME 44. Chlorobenzene has been periodically detected above the PAL during previous MEs and the Mann Kendall trend analysis indicates an overall downward trend.

PAHs. Benzo(a)pyrene was detected above the PAL of 0.2 ug/L in MW09-09S (0.21 ug/L) and MW09-20I (0.43 ug/L) during ME 45 for the first time since the inception of the LTM program. However, these concentrations were just slightly above the PAL.

Metals in Groundwater Monitoring Wells

Arsenic is the only metal which has been detected consistently above the PAL since ME 41. Arsenic has been consistently above the PAL of 10 µg/L at monitoring wells MW09-07S, MW09-10S, MW09-

14IA, MW09-23S, and MW09-24D. Consistent detections under the PAL have also occurred at wells MW09-08DA, MW09-08S, MW09-09DA, MW09-20D, MW09-20I, and MW09-24S. Results of the Mann Kendall trend analysis indicate overall upward trends at MW09-14IA, MW09-20D and MW09-24D, and overall downward trends at MW09-07S and MW09-20I. No trends were indicated at MW09-08DA, MW09-08S, MW09-09DA, MW09-10S, MW09-23S, and MW09-24S.

Several other metals have been detected consistently during ME 41 through ME 45, but either the concentrations have been below the PAL or no PAL is established.

3.2.2 Piezometer Sampling Results

This section discusses the analytes that exceeded PALs in piezometer samples during ME 45 along with comparison to results since ME 42 (piezometers were not sampled during ME 41) and overall trends. Piezometer samples were collected from 12 locations during ME 45 as shown on Figure 2. Sample locations and analyses along with sample rationale are presented on Table 1. Section 2.2 of this report details deviations from the planned sampling presented in Table 1.

The sampling results discussion below is organized according to analyte group (e.g., VOCs, metals, etc.). The PALs for piezometers are listed in Worksheet 15 of the Draft Tier II LTM SAP (Resolution, 2016b). Piezometer analytical results are presented on Table 9 and Figures 19 through 23. Attachment E provides summary tables of all analytes, including detected and non-detected results, and associated PALs for comparison from ME 01 to ME 45.

Volatile Organic Compounds in Piezometers

There are no PALs for VOCs in piezometers. The primary VOCs of concern at Site 09 are TCE and its daughter products (cis-1,2-DCE, trans-1,2-DCE, and VC) and benzene. Benzene and VC have been detected once each since ME 42; during ME 42 at P09-10 at concentrations of 1.3 ug/L and 1.1 ug/L, respectively. There have not been any other detections of TCE, its daughter products, or benzene in piezometers since ME 42.

Metals in Piezometers

Since ME 42, arsenic copper, nickel, mercury, lead, chromium, and zinc have been detected in piezometer samples at concentrations exceeding PALs.

Arsenic. Since ME 42, total arsenic has been detected above the PAL of 36 ug/L one or more times in P09-01, P09-07B, P09-08B, P09-09, P09-10, and P09-12B. The Mann Kendall trend analysis indicates overall upward trends at locations P09-01, P09-09, and P09-10, an overall downward

trend at P09-12B, and no trend at P09-07B and P09-08B. For all these locations, the turbidity is high during sampling due to the poor production of groundwater (i.e., samples are not able to collected via low flow). In addition, the dissolved concentrations of arsenic at these locations are much lower; the only dissolved arsenic concentration above the PAL was at P09-07B during ME 44 at a concentration of 37.6 ug/L, just above the PAL. Therefore, the elevated arsenic results appear to be related to the suspended solids present in the samples and not from impacts to groundwater beneath the landfill. Furthermore, total arsenic concentrations in landfill groundwater samples are much lower than those of the piezometers.

Copper. Since ME 42, copper has been detected above the PAL of 2.9 µg/L one or more times in P09-01, P09-02A, P09-03A, P09-04A, P09-06B, P09-07B, P09-08B, P09-09, P09-10, and P09-12B. The Mann Kendall trend analysis indicates an overall upward trend at P09-09, overall downward trend at P09-06B and P09-12B, and no trend at P09-01, P09-02A, P09-03A, P09-04A, P09-07B, P09-08B, P09-10. Similar to arsenic, the elevated copper results appear to be related to suspended solids in the samples, as the dissolved concentrations are much lower. In addition, copper concentrations in landfill groundwater are largely nondetect or low.

Nickel. Since ME 42, nickel has been detected above the PAL of 8.3 µg/L in all piezometers during all the MEs. This is consistent with previous MEs, nickel is almost always detected above the PAL. The Mann Kendall trend analysis indicated an overall upward trend at P09-09, and no trend at all the other locations. Similar to arsenic and copper, the elevated nickel results appear to be related to suspended solids in the samples, as the dissolved concentrations are much lower. The landfill groundwater nickel concentrations are also largely nondetect or low and beneath the PAL.

Mercury. Since ME 42, mercury has been detected above the PAL of 0.08 µg/L at least one time in P09-01, P09-02A, P09-06A, P09-07B, P09-09, P09-10, and P09-12. The Mann Kendall trend analysis indicates no trend at these locations. As with the other metals, dissolved concentrations are much lower. The landfill groundwater mercury results since ME42 are almost all nondetect and all detected results were below the PAL.

Lead. Since ME 42, lead has been detected above the PAL of 8.1 µg/L at least one time in P09-01, P09-02A, P09-04A, P09-06B, P09-07B, P09-08B, P09-09, P09-10, and P09-12B. The Mann Kendall trend analysis indicates an overall upward trend at P09-08 and P09-09 and no trend at the other locations. As with the other metals, dissolved concentrations are much lower. The landfill groundwater lead concentrations since ME42 are also largely nondetect or low and below the PAL.

Chromium. Since ME 42, chromium has been detected above the PAL of 50 µg/L at least one time in all piezometers, with chromium exceeding the PAL in almost all results since ME 42. The Mann

Kendall trend analysis indicates overall upward trends at P009-09 and P09-10 and no trend at the other locations. As with the other metals, the dissolved concentrations are much lower. The landfill groundwater chromium concentrations since ME42 are also largely nondetect or low and below the PAL.

Zinc. Since ME 42, zinc has been detected above the PAL of 81 µg/L at least one time in all piezometers. The Mann Kendall trend analysis indicates overall upward trends at P09-08 and P09-09, an overall downward trend at P09-12, and no trend at the other locations. As with the other metals, dissolved concentrations are much lower. Zinc is detected in landfill groundwater more frequently that the other metals discussed, however the concentrations are significantly lower than those observed in the piezometers.

Other Parameters Detected in Piezometers

Besides the metals listed above, there have been no PAL exceedances since ME 42 and the vast majority of VOC, SVOC, PAH, pesticide, and PCB results have been nondetect.

3.2.3 Surface Water Seep Results

During ME 45, surface water seeps were collected from the southeastern side of the landfill where erosion channels have formed in the created wetland due to the flow of surface water from the revetment wall during receding tide. Two of the seep samples are adjacent to piezometers P09-07 and P09-08, respectively; the third is in the area south of the MW09-08 well cluster. The seep samples were collected during ebb (i.e., receding) tide when flow through the seep channels was at its low point but still high enough to collect a sample. Seep samples were submitted for VOCs, sulfide, and salinity analysis. The VOCs and sulfide results were all nondetect, which is consistent with previous MEs. The salinity results indicate that the seeps are largely seawater.

3.2.4 Sediment Sampling Results

During ME 45, twelve locations were sampled for VOCs, PAHs, and metals, four locations were sampled for pesticides/PCBs, and five locations were sampled for sulfide as shown on Table 1 and Figure 2. A total of 3 VOCs, 17 PAHs, 11 metals, 1 PCB, and 3 pesticides were detected. No detections exceeded their PAL values. The PALs for sediment samples are the Effects Range, Median (ERM), September 1999, unless otherwise noted, as specified in Worksheet 15 of the Draft Tier II LTM SAP. Table 10 provides analytical results for sediment samples collected during ME 45. Analytical data from sediment samples (detected results) are also presented on Figures 24 through 28.

Man Kendall trend tests were performed on shallow sediment data only (i.e., only on the data for the sediment samples collected from 0-6 inches bgs). All results were either not significant or downward trending.

3.2.5 Shellfish Sampling Results

During ME 45, shellfish samples were collected from 10 locations as shown on Figure 2. All shellfish tissue samples were analyzed for metals, SVOCs/PAHs, pesticides, PCB homologs, and total lipids during ME 45. Sample locations and analyses along with sample rationale are presented on Table 1. There are no PALs established for the shellfish tissue samples. Table 11a provides the wet weight shellfish sampling results. Table 11b provides the lipid-normalized shellfish sampling results for the hydrophobic organic analyses. Metals results were not lipid-normalized and not included in Table 11b. Analytical data from shellfish tissue samples (detected results) are also presented on Figures 29 through 31. Metals and PCB homologs were detected in shellfish samples from all 10 locations. PAHs were only detected in shellfish samples ET09-03, ET09-04, and ET09-07. No pesticides were detected in the shellfish samples. A total of 6 PAHs, 18 metals, and 7 PCB homologs were detected in one or more shellfish sample. ME 45 was the tenth shellfish tissue sampling round conducted since the inception of the LTM.

Comparison of Shellfish Data to Historical Results

Shellfish samples have been collected at locations ET09-03 through ET09-08 to evaluate potential impacts of site-related contamination on the shellfish along the landfill shoreline since December 2007, after sufficient quantities and sizes of shellfish were established. Shellfish sampling was conducted at locations ET09-07 and ET09-08 in 2010; however, insufficient size and quantity shellfish were found at these locations in subsequent attempts. Shellfish of sufficient size and quantity were found in 2015 (ME 44) and 2016 (ME 45) at these two locations and were subsequently sampled. Sampling at ET09-09 through ET09-12 began in 2012 as these samples were positioned beyond the breakwater structure to further evaluate potential off-shore contaminant migration to Allen Harbor.

Reference samples ET09-01 and ET09-02 were collected from 2007 through 2011 from the Fishing Cove in Wickford, Rhode Island and from the shoreline of Prudence Island in Narragansett Bay to evaluate the anthropogenic background levels of contamination present in similar marshy areas within or adjacent to Narragansett Bay.

Results presented in the Third Five-Year Review indicated that for samples collected during 2007 through 2011, SVOCs, pesticides, and metals were present in ribbed mussels at concentrations

generally comparable to the two reference stations. Concentrations of PAHs and PCBs exceeded the levels detected in reference samples, most notably in ET09-03 and ET09-06. The 2011 samples reported concentrations of PAHs similar to reference concentrations; however, PCB concentrations were greater than reference sample concentrations (Tetra Tech, 2013). A comparison of the 2007 through 2011 PAH and PCB shellfish data to shellfish data to that of the pre-remedy marine ERA revealed that concentrations in the 2007 through 2011 shellfish were generally lower than pre-remedy concentrations.

Shellfish sample results collected from 2013 through 2016 are presented in Table 11c. No PALs have been established for shellfish tissue samples collected at Site 09; therefore, the shellfish tissue results were compared to the results from the two reference samples collected in 2007 through 2011. The maximum detected concentration or maximum reporting limit in the case of nondetect results is provided for comparison. Results of this comparison are provided in Table 11d.

For metals, PCB homologs, pesticides, and PAHs, samples from Site 09 had one or more detected concentrations greater than the maximum reference sample concentration. Therefore, metals, PCBs homologs, and PAHs were subject to additional evaluation below. No SVOCs were reported with detected concentrations greater than the maximum reference samples and the majority of the nondetect reporting limits were similar or below those of the reference samples. Therefore, SVOCs were eliminated from further evaluation. For pesticides, trans-chlordane was detected in four shellfish samples in 2013 at concentrations slightly greater than the maximum reference concentration at locations ET09-03, ET09-04, ET09-06, and ET09-11. Since the trans-chlordane detections were mostly limited to samples collected in 2013 and no subsequent concentrations were reported over the maximum reference concentration, trans-chlordane was eliminated from further evaluation. The remaining pesticide results were at concentrations below those of the reference samples or nondetect with reporting limits similar to those of the reference samples. Therefore, pesticides as a whole were eliminated from further evaluation and only metals, PCB homologs, and PAHs were subject to additional evaluation.

The 1996 Marine Ecological Risk Assessment (ERA) (EA, 1996) reported percent lipid and contaminant concentrations in shellfish samples collected at locations AHW1RMND, AHW2RMND, AHW3RMND, and AHW6RMND which correspond to current LTM locations ET09-03, ET09-04, ET09-05, and ET09-06, respectively.

Lipophilic contaminants accumulate in proportion to tissue lipids. Lipid content may vary based on seasonality as an organisms fat reserves change based on migration, hibernation, or reproduction. Lipid content also varies between species. Lipid normalization is a standard practice for many

organic contaminants and is intended to reduce observed variability in tissue contaminant concentrations. Concentrations of organic contaminants are normalized to percentages of tissue lipids to account for differences in the lipid content between species and sites, which is known to affect the partitioning and accumulation of organic constituents. Percent lipids were reported for ribbed mussel samples in Table A1-2.6 of the 1996 ERA. Total PCBs were reported for ribbed mussel samples in Table A1-2.1D of the 1996 ERA. Low- and high-molecular weight and total PAH concentrations for ribbed mussels were reported in Table A1-2.2D of the 1996 ERA. The 1996 ERA shellfish samples from locations AHW1RMND, AHW2RMND, AHW3RMND, and AHW6RMND were compared to 2013 through 2016 ribbed mussel and quahog samples from locations ET09-03, ET09-04, ET09-05, and ET09-06 in Table 11e. Comparisons were made for the mean, minimum, and maximum with both non-lipid normalized and lipid normalized data. The 1996 ERA metals shellfish data from locations AHW1RMND, AHW2RMND, AHW3RMND, and AHW6RMND located in Table A1-2.5D were also compared to the 2013 through 2016 shellfish data from locations ET09-03, ET09-04, ET09-05, and ET09-06 in Table 11e, however the metals data were not lipid normalized.

Lipid-normalized ratios were calculated for low- and high-molecular weight PAHs, total PAHs, and total PCBs using the following calculation:

Lipid-normalized concentration = laboratory reported result / percent lipids

The 2013 through 2016 PCBs and PAHs concentrations were generally significantly lower than the sample results reported in the ERA. Non-normalized concentrations of PCBs and PAHs were significantly lower than those reported in the ERA. The mean concentration of total PCBs in the 1996 ERA was 600 µg/kg with a maximum concentration of 1,267 µg/kg, while the 2013 through 2016 mean total PCB concentration was 10.23 µg/kg with a maximum concentration of 110 µg/kg. The mean total PAH concentration in the 1996 ERA was 3,772 µg/kg with a maximum concentration of 5,871 µg/kg, while the 2013 through 2016 mean total PAH concentration was 59.8 µg/kg with a maximum concentration of 260 µg/kg. The lipid-normalized PCB and PAH results display a similar trend with the 2013 through 2016 concentrations being much lower than the 1996 ERA concentrations. Though samples were collected from different species at some locations (i.e., quahogs were collected at some locations during 2013 through 2016), normalization to lipid content of the organism facilitates inter-species comparisons. The metals data, which were not normalized, displayed a similar trend with the 2013 through 2016 data being lower than the data from the 1996 ERA, although not to the extent of the PCBs and PAHs.

Shellfish data since the inception of the LTM program were evaluated to identify potential increasing or decreasing concentration trends on a location-by-location basis. Trend graphs for the contaminants are presented in Attachment F. Statistical analysis of the data was also performed

using the Mann Kendall trend analyses. A summary of the Mann Kendall trend analyses is also presented in Attachment F.

Though statistical analyses were performed on all datasets, the discussion herein is limited to contaminants reporting at least four detected values. Results are discussed on a location-by-location basis below.

ET09-03: statistically significant upward trends were reported for aluminum, arsenic, iron, and manganese. A statistically significant downward trend was reported for naphthalene.

ET09-04: statistically significant upward trends were reported for aluminum, arsenic, chromium, cobalt, copper, iron, magnesium, vanadium, zinc and anthracene. A statistically significant downward trend was reported for trichlorobiphenyl.

ET09-05: statistically significant upward trends were reported for aluminum, arsenic, calcium, copper, magnesium, and zinc. Statistically significant downward trends were reported for silver, heptachlorobiphenyl, hexachlorobiphenyl, pentachlorobiphenyl, tetrachlorobiphenyl, 2-methylnaphthalene, delta-BHC, phenanthrene, acenaphthene, fluoranthene, naphthalene, and pyrene.

ET09-06: statistically significant upward trends were reported for aluminum, arsenic, copper, and zinc. Statistically significant downward trends were reported for fluoranthene and naphthalene.

ET09-07: no statistically significant trends were reported.

ET09-08: no statistically significant trends were reported.

ET09-09: a statistically significant downward trend was reported for mercury.

ET09-10: no statistically significant trends were reported.

ET09-11: a statistically significant downward trend was reported for mercury.

ET09-12: a statistically significant downward trend was reported for potassium.

Overall, the trend analyses reported statistically significant upward trends for some metals including arsenic at ET09-03, ET09-04, ET09-05, and ET09-06 and for anthracene at ET09-04. Trends reported in the Site 09 LTM and Optimization Report included statistically significant upward trends for arsenic at ET09-01 through ET09-06, which includes reference locations ET09-01 and ET09-02 (Tetra Tech, 2015). This upward trend for reference and site samples suggests that concentrations

of arsenic in shellfish tissue may be related to background or other anthropogenic sources rather than site-related contamination.

The 2013 through 2016 shellfish samples had detected concentrations of metals, PCBs, and PAHs greater than the maximum concentrations reported in reference samples collected from 2007 through 2011. However, a comparison to pre-remedy data indicates that site concentrations are significantly lower than those collected from the same areas of the site in 1995, prior to the completion of the remedy. Statistically significant upward trends for some metals including arsenic occur at some shellfish sampling locations. However, comparison to the landfill groundwater data indicates that these are not site-related. In addition, Mann Kendall trend analysis performed on arsenic at reference locations ET09-01 and ET09-02 in the Site 09 LTM and Optimization Report indicated increasing trends for arsenic at these locations (Tetra Tech, 2015), suggesting that arsenic in shellfish may be related to background conditions or other anthropogenic sources. Overall, the comparison of the 2013 through 2016 shellfish data to the historical shellfish data indicates that the current remedy is protective of shellfish within the constructed wetland and is controlling the migration of landfill contaminants, such that there is no further degradation of the shellfish population inhabiting the landfill shoreline.

3.2.6 Harbor Sample Results

One surface water sample was collected from Allen Harbor in the area where the entrance channel meets Allen Harbor during ME 45 and analyzed for VOCs, metals, PAHs, and salinity in order to provide background information for these analytes in Allen Harbor. The sample was collected during slack tide (i.e., the period between the tides when there is no net movement of water in either direction from the tides) using a peristaltic pump and lowering tubing to the midpoint of the water column. Ethylbenzene and total chromium were the only analytes detected. Significant dilutions were necessary for the metals analyses due to the high concentrations of major cations. The laboratory results are included with groundwater samples in Table 8. The location of the harbor sample and the detected results are shown in Figure 32.

3.2.7 Gas Vent Sampling Results

Gas vent samples were collected using SUMMA canisters for laboratory analysis of VOCs and methane. Gas vent locations are shown on Figure 2 and the laboratory results are presented in Table 13a. The laboratory results were used along with air flow measurements, temperature, barometric pressure, and molecular weights to calculate emission rates for each compound in grams per second (g/s) as shown on Table 13b. The Third Five Year review (Tetra Tech, 2013) pointed out that the RIDEM air toxics regulations were updated in the RIDEM Air Pollution Control

Regulation No. 22 (RIDEM, 2008). Therefore, new allowable air toxic emission rates in g/s were calculated using the acceptable ambient levels (AALs) found in Table 1 of RIDEM Air Pollution Control Regulation No. 22 (RIDEM, 2008) and the AERSCREEN air quality modelling software. These new allowable emission rates were used for comparison to the gas vent calculated emission rates for VOCs. When comparing the gas vent emission rates to the new allowable emission rates, the gas vent emission rates were summed for each VOC and compared to the new allowable emission rates. The new allowable emission rates represent a worst case scenario at the nearest ambient boundary point of the landfill. The calculated gas vent emission rates and comparison to the new allowable emission rates is presented on Table 13b. There were no VOC exceedances of the new allowable emission rates. Specific details on the derivation of the allowable emission rates and comparison to the new allowable emission rates can be found in Attachment I.

For methane, the RIDEM maximum allowable emission from landfill gas vents of 100 pounds per day was used for comparison since methane is not an air toxic and not included in RIDEM Air Pollution Control Regulation No. 22. The maximum allowable methane emission of 100 pounds per day was converted to a calculated emission rate of 0.525 g/s and compared to the sum of the methane emission rates from all five gas vents on Table 13a. The sum of the gas vent methane emissions was below the calculated emission rate of 0.525 g/s.

3.2.8 Gas Probe Monitoring Results

Monitoring of gas probes has been performed to evaluate whether landfill gases are migrating laterally beneath the landfill cap and are present in soil gas outside of the capped area. A total of 20 perimeter gas probes were monitored annually from 2013 - 2016, located as shown on Figure 2. The gas probes consist of temporary drive points that are installed outside the limits of the landfill cap; the gas probes are screened using a LandTec GEM-2000 landfill gas screening instrument. Field measurements of percent methane, percent carbon dioxide, percent oxygen, and hydrogen sulfide are collected at gas probe locations during each LTM event. The data collected during ME 45 is presented on Table 7. No readings exceeding 0.1 percent were recorded for methane in the gas probes during ME 45, which is consistent with previous MEs.

4.0 QUALITY ASSURANCE/QUALITY CONTROL

4.1 Data Validation and Usability

The data obtained during ME 45 were determined to be of sufficient quality to be used to evaluate the long-term effectiveness of the remedial action (i.e., landfill cap with deed restrictions, long-term monitoring, and 5-year reviews). Quality assurance/quality control (QA/QC) samples collected during this sampling event included matrix spike/matrix spike duplicate (MS/MSD) samples and field duplicate samples. Other QA/QC samples included trip blanks and equipment blanks. Non-compliances with select project data quality objectives for accuracy, precision, and sensitivity are discussed in the data validation reports, but have a minor impact on the overall usability of the data. Laboratory result data (not including the original Shellfish data, see Section 2.2) was 98.2% complete, with the following exceptions:

- The non-detect VOC results in five groundwater samples (MW-09-27D-ME45-1, MW09-ME45-FD01, MW09-14D-ME45-1, MW09-20D-ME45-1, and MW09-ME45-FD03) were rejected due to holding time exceedances. The affected results are not usable for project decisions.
- Eight non-detect SVOC results in shellfish sample ET09-10-ME45R-1 were rejected due to low matrix spike recovery. The affected results are not usable for project decisions.
- Three non-detect mercury results (both filtered and unfiltered results for P09-10-ME45-1, and the total result for P09-09-ME45-1) were rejected due to holding time exceedances. The affected results are not usable for project decisions.

The analytical results from samples collected during ME 45 were subject to Tier 1 Plus validation in accordance with the draft QAPP (RC, 2016), *DoD Quality Systems Manual, version 5.0* (DoD, 2013), *EPA New England; Environmental Data Review Program Guidance* (EPA, 2013a), EPA New England; Environmental Data Review Supplement for Regional Date Review Elements and Superfund Specific Guidance/Procedures (EPA, 2013b) *National Functional Guidelines for Inorganic Data Review* (EPA, 2016a), and *National Functional Guidelines for Evaluation Organic Data Review* (EPA, 2016b). Standard EPA Region I data qualifiers were assigned to the data during validation to assess data quality. These qualifiers include “J”, “UJ”, “U”, and “R” are defined in the data validation memoranda presented in Attachment B. The analytical data are summarized in Tables 8 through 13a and shown on Figures 14 through 32 include the qualifiers added as a result of the validation process.

4.2 Laboratory Audit of Eurofins Spectrum Analytical Incorporated

As mentioned in Section 2.2, the September 2016 SVOC, PAH, and pesticide shellfish data had extremely low surrogate recoveries that would have led to rejected results. As a result, the shellfish samples were recollected analyzed for all analyses on December 12, 2016 through December 14, 2016. A Resolution chemist performed a laboratory audit at Eurofins Spectrum Analytical Incorporated in North Kingstown, Rhode Island on December 15, 2016 such that the laboratory login and preparations procedures for the December 2016 shellfish samples could be observed and audited. The laboratory audit focused on the following:

- Sample receiving and login
- Internal chain of custody/sample tracking
- Project management/communication
- Sample preparation standard operating procedures
- Personnel training/qualification
- Sample preparation documentation
- Spiking technique

No major deficiencies were found for the sample receiving and login, personnel training/ qualification, and sample preparation documentation. Suggested areas of improvement/ corrective actions were noted for internal chain of custody/sample tracking, project management/ communication, and sample preparation standard operating procedures. In addition, modifications to the spiking procedure were suggested and implemented by the laboratory. However, these modifications were subsequently found to be not totally effective. Therefore the original spiking technique was used for the December 2016 shellfish analyses. The conclusion of the audit and follow up communications with the laboratory was that the cause of the poor surrogate recoveries in the September 2016 was not related to the spiking technique and was of indeterminate cause. Deficiencies in the laboratory tracking procedures and communication resulted in the September 2016 sample aliquots not being returned to the freezer as specified in the SOP, which resulted in the gross hold time exceedance that prevented re-preparation and reanalysis of the September 2016 samples. A Technical Memorandum summarizing the laboratory audit is included in Attachment H-1.

4.3 Statistical Comparison of September 2016 and December 2016 Shellfish Data

A statistical comparison of the September 2016 and December 2016 total PCBs and metals shellfish data was performed to evaluate whether the December 2016 shellfish data can be considered to be of the same population as that of the September 2016 shellfish data. The comparison was limited to total PCBs and metals, as these were the only two analyses that were not affected by data quality issues described in Section 2.2. The September 2016 PCB homolog and metals data were validated prior to use in the statistical comparison. Physical parameters such as lipids, shell length, and width were also evaluated.

Paired-sample tests were conducted on the shellfish tissue analytical data for metals and PCBs from samples collected in September 2016 and December 2016 to determine whether there is a statistically significant difference in shellfish concentrations measured at each location between the two dates. The pairs were defined based on the ten locations (e.g., aluminum concentrations detected in tissue samples collected at location ET09-03 in September 2016 and December 2016 are considered one pair of samples). A stepwise approach was implemented for the statistical analysis. First, the distribution of each analyte/date dataset was determined. If both datasets (i.e., September 2016 and December 2016) were normally distributed per analysis (i.e., total PCBs and metals), then a paired t-test was used to determine if the mean concentrations of the two datasets were statistically different. If one or both datasets were not normal or lack a distribution, then the nonparametric Wilcoxon signed-rank (WSR) test was used to determine if the median concentrations are statistically different between the datasets. In addition, the data for each analysis were plotted into Quartile-Quartile (Q-Q) plots and boxplots to illustrate the range and distribution of the two datasets.

The results of the statistical evaluation indicated that, with the exception of four metals (calcium, mercury, potassium, and silver), the detected shellfish tissue concentrations and the physical parameters measured in the December 2016 dataset are equivalent to those in September 2016. Because the majority of analyte data are considered equivalent, the December 2016 shellfish tissue dataset is representative of Fall 2016 shellfish tissue concentrations. As a result, the December 2016 shellfish data for all analyses were used for evaluation in this Five Year Event Monitoring Report. Further details on the statistical comparison, including tables, Q-Q plots, and boxplots can be found in the Technical Memorandum included as Attachment H-2.

5.0 LANDFILL SETTLEMENT SURVEYS

From 1999 to 2011, settlement surveys were conducted annually at Allen Harbor Landfill. The frequency was decreased to biennially in 2014. As outlined in the O&M Plan (Foster Wheeler, 2001), the objectives of the survey are to evaluate the degree to which the landfill cap, revetment, constructed wetlands, and breakwater have settled since the construction of the remedy, and to maintain accurate well elevations so that groundwater elevations that support the LTM are accurate. The surveyed locations for the settlement survey conducted in October 2016 are shown on Figure 1 of the Annual Landfill Inspection Report for 2016, provided as Attachment D.

The October 2016 settlement survey was completed by Louis Federici Associates on October 31, 2016. A total of 51 locations were surveyed, including the top of each polyvinyl chloride (PVC) riser, top of each steel casing, and adjacent ground surface for the 28 on-site monitoring wells; 5 gas vent risers, and 18 survey markers located on the breakwater, revetment, and constructed wetland (six markers at each area).

A comparison of the 2016 survey results to the previous survey data (1999 to present) is provided in Table 14. Three comparisons are provided in the table for the 2016 survey: elevation change from the previous survey; elevation change between the 2016 survey and the initial (1999) survey, and maximum elevation change (maximum elevation minus minimum elevation) between the initial (1999) and the 2016 survey. Positive numbers indicate increasing elevations while negative numbers indicate decreasing elevations from the initial survey elevations (1999). All values are in feet (1 inch = 0.083 feet).

5.1 2016 Landfill Settlement Survey

Between November 2014 and October 2016, with the exception of monitoring well MW09-02S (PVC riser elevation), MW09-03D (PVC riser and steel casing elevation), MW09-10S (PVC riser elevation), MW09-27D (PVC riser elevation), Gas Vent GV09-01, revetment markers RMP-50, RMP-51, RMP-52, RMP-60 and RMP-61, wetland survey markers MMP-10, MMP-11, MMP-12, MMP-13, and MMP-15, and breakwater markers BMP-1833, and BMP-1835, elevation changes of less than 0.30 feet (approximately 3.6 inches) were observed at all surveyed points. It is of note that for all locations, with the exception of one breakwater location (BMP-1833), the changes occur as increased elevations. Three locations show increases in elevation greater than 0.5 feet, and the maximum increase is observed to be 0.70 feet (approximately 8.4 inches) at MMP-15.

Changes in elevations during the period between October 1999 and October 2016 are summarized below:

- Monitoring wells, PVC riser elevations – 12 wells had elevation changes of 0.10 feet or greater and 2 wells had elevation changes greater than 0.20 feet. The maximum elevation change was 0.22 feet (approximately 2.6 inches) at MW09-11S. Elevations were increasing or showed no change at all but 6 wells.
- Monitoring wells, top of steel casings – 8 of the 27 monitoring wells had elevations changes of 0.10 feet or greater. The greatest elevation change was 0.17 feet (approximately 2.0 inches) at MW09-27S and MW09-27D, while the least amount of change observed was 0 feet at MW09-09DA, MW09-10S, and MW09-21D. Elevations decreased at 8 wells, increased at 16 wells, and showed no change in 3 wells.
- Gas vents – All five vents had elevation changes of less than 0.10 feet. The maximum elevation change observed was 0.05 feet (approximately 0.6 inches) at GV09-05.
- Breakwater –The maximum change observed was 0.81 feet (approximately 9.7 inches) at BMP-1833. The minimum change observed was 0.02 feet (approximately 0.24 inches) at BMP-1831. All locations had decreasing elevations.
- Revetment – A 0.43 foot (approximately 5.2 inch) elevation change was observed at RMP-68, which is the highest change observed in this data set. A 0.02 (approximately 0.24 inch) elevation change was observed at RMP-51, the lowest change in the data set.
- Wetland – All six wetland locations showed changes greater than 0.2 inches. The maximum change observed was 0.42 feet (approximately 5.0 inches) at MMP-10. The minimum change observed was 0.20 feet (approximately 2.4 inch) at MMP-14. All locations had increasing elevations.

5.2 Landfill Settlement Survey Conclusions

Generally, elevation changes are not consistently either increasing or decreasing over time at any of the surveyed locations, suggesting that heaving due to long-term freeze/thaw conditions is the primary factor controlling changes in elevations. Generally, the largest changes in elevations site-wide occur at the wetland locations, and the smallest changes site-wide are observed in the monitoring wells, both the PVC monitoring points and the top of steel casing monitoring points.

In the Draft ME 44 Biennial Report (Resolution, 2016a) it was noted that that some settling may be occurring along the revetment and breakwater, due to observed changes in excess of 0.5 feet in several locations since 1999. During the 2016 survey only one location (BMP-1833) showed a change greater than 0.5 feet. It was noted in the ME 44 report that the increase in revetment and breakwater elevation changes observed between the surveys performed by Crossman Engineering

(i.e., 1999-2001) and the surveys performed by Diprete Engineering in 2013 and 2014 are likely due to Diprete Engineering using measuring points that were not in the exact same locations as those used by Crossman Engineering. The 2016 survey was performed by a different contractor, Louis Federici Associates. It is likely that the breakwater, revetment, and wetland locations surveyed by Louis Federici Associates were closer to the original locations surveyed by Crossman Engineering, and therefore the changes are significantly lower than the 2013 and 2014 surveys.

The results of the survey indicate that no action is warranted at this time to address landfill settlement at Site 09. The changes in elevation at each gas vent were evaluated to determine the extent to which settling is occurring within the capped portion of the landfill: no settlement measurements were in excess of the O&M Plan benchmark of 6 inches per 100 feet.

6.0 UPDATED RISK ASSESSMENT

6.1 Human Health Risk Assessment Update

A human health risk assessment (HHRA) update was conducted for the shoreline sediment, groundwater in shallow piezometers, and shellfish tissue at Site 09. The objective of this HHRA update (also referred to as the 2017 HHRA update) is to determine whether there have been any changes and/or updates to USEPA HHRA guidance or site-specific conditions since the 2013 HHRA, performed by Tetra Tech, Inc. in support of the August 2015 Long-Term Monitoring Data Summary and Optimization Recommendations Report (Tetra Tech, 2015), was conducted that would result in a change of the conclusions of the 2013 HHRA, or whether the conclusions of the 2013 HHRA remain valid. This section provides a summary of the HHRA update. The full HHRA update is provided as Attachment G-1.

Revised risk/hazard calculations were performed as part of this 2017 HHRA update to estimate the cumulative potential cancer risk and/or noncancer hazard associated with a recreational user exposure scenario, determine whether risk/hazard estimates exceed USEPA and/or RIDEM target risk/hazard levels, and identify whether the current institutional controls in place at Site 09 are still needed.

The 2013 HHRA conducted as part of the 2015 LTM report concluded that the potential cancer risks associated with ingestion of shellfish tissue estimated for a recreational user exceeded RIDEM's target cumulative cancer risk level of $1x10^{-5}$, but were within USEPA's target risk range of 10^{-6} to 10^{-4}. Risk drivers (i.e., chemicals that are the primary contributors to the exceedance of the target risk level) were arsenic, PCBs, and pesticides in shellfish tissue. The potential noncancer HIs for an adolescent and adult recreational user ingesting shellfish did not exceed USEPA/RIDEM's target HI of 1 per target organ. The 2013 HHRA also concluded that the range of PCB concentrations detected in the Site 09 shellfish tissue samples collected in 2012 were within the range of concentrations detected in samples collected through the National Oceanic and Atmospheric Administration (NOAA) Mussel Watch Program. This suggests that it is possible that some of the PCB contamination noted in the Site 09 samples may reflect regional conditions.

Potential risks for recreational users exceeded RIDEM's target cumulative cancer risk level of $1x10^{-5}$ in several cases evaluated in the 2013 HHRA due to exposure to shallow sediment (0 to 0.5 feet [bgs) and piezometer water. Primary risk drivers for exposure to shallow sediment were arsenic and cPAHs. Primary risk drivers for exposure to piezometer water (using maximum concentrations) were arsenic and VC. However, using refined exposure assumptions to more accurately represent Site 09-specific exposure conditions, potential cancer risks were less than RIDEM's target risk level of

$1x10^{-5}$ for exposure to shallow sediment. Potential cancer risks estimated using 95 percent (%) upper confidence limits (UCLs) on the arithmetic mean concentration as the exposure point concentrations (EPCs) instead of maximum concentrations for piezometer water were also less than RIDEM's target risk level of $1x10^{-5}$. The 95% UCLs are likely to be more representative of actual exposure conditions. The potential noncancer HIs for an adolescent and adult recreational user exposed to sediment and piezometer water did not exceed USEPA/RIDEM's target HI of 1 per target organ.

Comparison of regional cPAH sediment data to Site 09 shallow sediment data for several cPAHs suggests that concentrations of cPAHs detected in shallow sediment at location SED09-10 are elevated compared to the regional dataset as well as when compared to the other Site 09 shallow sediment samples. Site 09 shallow sediment samples for the other sampling locations are within the range of or slightly exceed (i.e., are within one order of magnitude of) detected concentrations in the regional sediment dataset.

Data evaluated in the 2017 HHRA update were selected to be representative of current conditions, and include shallow sediment samples collected between 0 to 0.5 feet bgs from twelve locations along the Site 09 shoreline during three sampling events conducted in September 2014, September 2015, and September 2016; shallow groundwater samples collected during four sampling events conducted in October 2013, September 2014, September 2015, and September 2016 from twelve piezometers located along the Site 09 shoreline (assumed to be a mixture of groundwater and surface water); and shellfish tissue samples collected during four sampling events conducted in October 2013, September 2014, September 2015, and December 2016 from ten locations along the Site 09 shoreline.

The receptors and exposure pathways evaluated in the 2017 HHRA update are consistent with those evaluated in the 2013 HHRA based on current and potential future land use, including recreational users exposed to shoreline media while swimming, wading, or clamming/harvesting shellfish.

The overall conclusion of this 2017 HHRA update is that the conclusions of the 2013 HHRA remain valid and ingestion of shellfish tissue obtained from the Site 09 shoreline by a current/future recreational user poses a potential cancer risk or noncancer hazard above RIDEM target levels due to arsenic, PCBs, and pesticides (specifically aldrin). Based on this conclusion, the current institutional control prohibiting ingestion of shellfish continues to be necessary to protect public health. However, the shellfish tissue EPCs for arsenic and aldrin are within the range of concentrations detected in reference tissue samples collected from the shoreline of Prudence Island

and from Fishing Cove in Wickford, Rhode Island between 2007 and 2011. These results indicate that concentrations of arsenic and aldrin in site shellfish tissue samples evaluated in the 2017 HHRA update may be due to background conditions, rather than Site 09. In addition, the shellfish tissue EPC for PCBs is less than the range of PCB concentrations detected in samples collected in 2011 (the most currently available dataset) through the NOAA Mussel Watch Program (https://products.coastalscience.noaa.gov/nsandt_data/data.aspx). This suggests that some of the PCB contamination noted in the Site 09 samples may reflect regional conditions.

If both arsenic and aldrin concentrations in shellfish tissue are excluded from the 2017 HHRA update, the cumulative potential ELCR associated with a lifetime recreational user exposure to shallow sediment (assuming a swimming/wading scenario), groundwater (piezometer water), and shellfish is within USEPA's target risk range of 10^{-6} to 10^{-4} and does not exceed RIDEM's target risk level of 10^{-5}. The associated total potential noncancer HI (conservatively based on all target endpoints combined) does not exceed USEPA or RIDEM's target level. Therefore, no site-related chemicals of concern (COCs) are identified as a result of the 2017 HHRA update.

6.2 Ecological Risk Assessment Update

An ERA update was conducted for shoreline exposures to sediment, sediment porewater, surface water, and shellfish at Site 09. The objective of this ERA update is to determine whether there have been any changes and/or updates to ERA guidance or site-specific conditions since the 2015 ERA was conducted by Tetra Tech, Inc. (Tetra Tech, 2015), that would result in a change of the conclusions of the 2015 ERA, or whether the conclusions of the 2015 ERA remain valid. This section provides a summary of the ERA update. The full ERA update is provided as Attachment G-2.

The 2017 ERA update includes the following:

- Calculation of summary statistics for analytical shallow sediment, piezometer water, seep water, and shellfish data collected along the Site 09 shoreline between 2013 and 2016, which are considered representative of current conditions;
- Review and update of screening levels and chemicals of potential concern (COPC) selection for shoreline shallow sediment, piezometer water (representing sediment porewater), seep water (representing surface water); and
- Review and update of food web modeling evaluating birds and mammals exposed to shoreline sediment and shellfish.

Although revised quantitative risk calculations were not required to be conducted for this ERA update per the Davisville BCT January 12, 2017 teleconference, given the relatively simple nature of the 2015 ERA and the addition of some new detected chemicals, the 2015 ERA risk screenings and food web calculations were updated to reflect the current data set. These updated evaluations and a comparison of EPCs between the 2015 ERA and the 2017 ERA update are used to assess whether the conclusions of the 2015 ERA remain valid.

The potentially exposed ecological receptors and exposure pathways for the Site 09 shoreline evaluated in the 2015 ERA remain appropriate and are summarized as follows:

- Benthic invertebrates exposed to shallow sediment;
- Aquatic organisms exposed to sediment pore water (represented by piezometer water) and surface water (represented by seep water);
- Terrestrial plants exposed to surface water (represented by seep water); and
- Birds and mammals exposed to shallow sediment and shellfish via ingestion pathways.

Toxicity values and exposure assumptions used in the 2017 ERA update are consistent with those used in the 2015 ERA. Updated analytical data from all media were used to update the benchmark screens and food web models and to qualitatively identify differences between the current data set and the data set evaluated in the 2015 ERA. Consistent with the 2015 ERA, the ERA update included two tiers of evaluation: a screening level evaluation using the maximum detected concentrations to identify COPCs and a COPC refinement evaluation using the average detected concentrations to further evaluate the potential for ecological risk.

The overall conclusion of the 2017 ERA update is that the conclusions of the 2015 ERA remain valid and exposure to shallow sediment, pore water, surface water, and shellfish along the Site 09 shoreline does not pose a site-related risk to ecological receptors. Concentrations of several metals were elevated in piezometer water, but it does not appear that these concentrations are related to groundwater at Site 09.

7.0 SITE INSPECTION ACTIVITIES

Site inspection was completed at Allen Harbor Landfill on September 28, 2016. Recreational use including walking and jogging observed. No new building or groundwater supply wells were present. The Site Inspection Report is provided as Attachment D.

8.0 CONCLUSIONS AND RECOMMENDATIONS

As required by record of decision (ROD) for Site 09, LTM was performed between 2013 (ME 41) and 2016 (ME 45) in accordance with the updated LTM scope and protocols in the Draft Tier II SAP (Resolution, 2016b). As previously mentioned, piezometers, sediment, and shellfish were not sampled during ME 41 and sediment samples were not collected as surface sediment samples during ME 42.

8.1 Conclusions

The following general conclusions are presented based on the comprehensive evaluation of site data between ME 41 and ME 45:

Hydrogeology

- The hydrogeology at Site 09 is stable, consistent, and well understood after 45 MEs. The hydrogeology data collected during ME 41 through ME 45 is consistent with previous events and the conclusions in the Site 09 LTM and Optimization Recommendations Report (Tetra Tech, 2015).

Groundwater Beneath the Landfill

- The CVOCs in groundwater beneath the landfill appear to be stable or possibly decreasing. The combined TCE, cis-1,2-DCE, trans-1,2-DCE, and VC data indicate that anaerobic reduction dechlorination is occurring. The overall size, shape, and concentration profile of the CVOCs in groundwater beneath the landfill is consistent with those in the Site 09 LTM and Optimization Recommendations Report (Tetra Tech, 2015).
- Benzene continues to be the only other VOC consistently detected above the PAL in groundwater beneath the landfill. The concentrations observed appear to be stable and limited to a few areas, consistent with previous MEs.
- Periodic PAL exceedances of other VOCs such as 1,1,2-trichloroethane, 1,1-dichloroethene, 1,2-dichloroethene, methylene chloride, and chlorobenzene were observed and these occurrences are consistent with previous MEs. The detected results during ME 41 through ME 45 were generally lower than historic averages.
- Detections of SVOCs and PAHs remain sporadic and infrequent. However, benzo(a)pyrene was detected above the PAL (0.2 ug/l) for the first time during ME 45 at MW09-09S (0.21 ug/L) and MW09-20I (0.43 ug/L).

- There was only one PCB detected between ME 41 and ME 45: Aroclor 1260 at MW09-11S (0.45 ug/L) during ME 41. There were only two pesticide detections between ME 41 and ME 45: Beta-BHC at MW09-07S (0.020 ug/L) and MW09-24S (0.016 ug/L) during ME 44.
- Arsenic continues to be the only metal consistently detected above the PAL in the groundwater beneath the landfill. It should be noted that although above the PAL, the concentrations of arsenic in groundwater beneath the landfill are significantly lower than those observed in the piezometers. It should also be noted that arsenic is naturally occurring in soil and groundwater.

Piezometers

- There was only one CVOC detected in the piezometers during ME 42 through ME 45: VC at P09-10 (1.1 ug/L) during ME 42.
- Benzene was only detected once in piezometers during ME 42 through ME 45: P09-10 (1.3 ug/L) during ME 42.
- Arsenic copper, nickel, mercury, lead, chromium, and zinc have been frequently detected above their PALs in piezometer samples during ME 42 through ME 45. However, these appear to be largely the result of suspended solids in the sample, as the dissolved results for these metals are generally much lower than the totals. The high suspended solids (i.e., turbidity) is due to the poor groundwater recharge at these locations due to groundwater not significantly discharging along the shoreline of Site 09. This results in the inability to collect the samples via low-flow sampling. Furthermore, the concentrations of these metals in the monitoring wells (i.e., groundwater beneath the landfill) are much lower, further indicating the elevated metals concentration are not due to migration of landfill groundwater to the shoreline. It is possible that the elevated arsenic results are due to isobaric interferences from the metals ICP-MS analysis (see Section 8.2 below).
- Besides the metals listed above, there have been no PAL exceedances since ME 42 and the vast majority of VOC, SVOC, PAH, pesticide, and PCB results have been nondetect.

Sediment

- VOCs, PAHs, pesticides, and PCBs have been sporadically detected during ME 43 through ME 45. Mann Kendall trend analyses indicate either no trend or downward trends. Zinc, 4,4'-DDT, phenanthrene, and pyrene were the only analytes with PAL exceedances during ME 43 through ME 45.

- Zinc was detected above its PAL (219 mg/kg) at SED09-09 (263 mg/kg) during ME 44. The zinc concentration at this location decreased to 172 mg/kg during ME 45, below the PAL.
- 4,4'-DDT was detected above its PAL (6 ug/kg) at SED09-01 (8 ug/kg) during ME 43 and SED09-09 (9.3 ug/kg) during ME 44. 4,4'-DDT was not detected at either location during the following ME, with both reporting limits being well below the PAL.
- Phenanthrene was detected above its PAL (1,500 ug/kg) at SED09-10 (3,300 ug/kg) during ME 44. The phenanthrene concentration decreased to 960 ug/kg during ME 45, below the PAL.
- Pyrene was detected above its PAL (2,600 ug/kg) at SED09-10 (2,700 ug/kg) during ME 44. The pyrene concentration decreased to 890 ug/kg during ME 45, below the PAL.

Shellfish

- The 2013 through 2016 shellfish samples had detected concentrations of metals, PCBs, and PAHs greater than the maximum concentrations reported in reference samples collected from 2007 through 2011. However, a comparison to pre-remedy data indicates that site concentrations are significantly lower than those collected from the same areas of the site in 1995, prior to the completion of the remedy.
- Overall, the trend analyses reported statistically significant upward trends for some metals including arsenic at ET09-03, ET09-04, ET09-05, and ET09-06 and for anthracene at ET09-04. However, comparison to the landfill groundwater data indicates that these are not site-related. In addition, Mann Kendall trend analysis performed on arsenic at reference locations ET09-01 and ET09-02 in the Site 09 LTM and Optimization Recommendations Report indicated increasing trends for arsenic at these reference locations (Tetra Tech, 2015), suggesting that arsenic in shellfish may be related to background conditions or other anthropogenic sources.
- The shellfish population appears to be more abundant and more diverse than observed during previous MEs. Quahogs, which were not frequently present during previous MEs, have become more common. Many parts of the stone revetment and breakwater structure have become covered with shellfish shells (see Photolog in Attachment D) from birds capturing and eating shellfish, indicating that the shellfish population is abundant enough to support the feeding habits of marine predatory birds.

Landfill Gas

- Laboratory VOC results were converted to emission rates and compared to newly calculated allowable emission rates based on the updated RIDEM air toxic regulations in RIDEM Air Pollution Control Regulation No. 22 (RIDEM, 2008). There were no VOC exceedances of the new calculated allowable emission rates. The laboratory methane result was also converted to an emission rate. The methane emission rate was below the calculated emission rate of 0.525 g/s, which is based on the RIDEM maximum allowable emission of 100 pounds per day.
- Soil gas screening results measured during ME 41 through ME 45 indicate that the landfill cap has not been compromised and is functioning as designed.

Risk Assessment Updates

- The overall conclusion of this 2017 HHRA update is that the conclusions of the 2013 HHRA remain valid and ingestion of shellfish tissue obtained from the Site 09 shoreline by a current/future recreational user poses a potential cancer risk or noncancer hazard above RIDEM target levels due to arsenic, PCBs, and pesticides (specifically aldrin). Based on this conclusion, the current institutional control prohibiting ingestion of shellfish continues to be necessary to protect public health. However, the shellfish tissue EPCs for arsenic and aldrin are within the range of concentrations detected in reference tissue samples collected from the shoreline of Prudence Island and from Fishing Cove in Wickford, Rhode Island between 2007 and 2011. These results indicate that concentrations of arsenic and aldrin in site shellfish tissue samples evaluated in the 2017 HHRA update may be due to background conditions, rather than Site 09. In addition, the shellfish tissue EPC for PCBs is less than the range of PCB concentrations detected in samples collected in 2011 (the most currently available dataset) through the NOAA Mussel Watch Program (https://products.coastalscience.noaa.gov/nsandt_data/data.aspx). This suggests that some of the PCB contamination noted in the Site 09 samples may reflect regional conditions.
- The overall conclusion of the 2017 ERA update is that the conclusions of the 2015 ERA remain valid and exposure to shallow sediment, pore water, surface water, and shellfish along the Site 09 shoreline does not pose a site-related risk to ecological receptors. Concentrations of several metals were elevated in piezometer water, but it does not appear that these concentrations are related to groundwater at Site 09.

8.2 Recommendations

Based on the evaluation of the data presented in this report and the conclusions summarized above, the following recommendations are made:

- Over the course of the LTM program at Site 09, the components and frequency of the sampling have been continually re-evaluated and optimized in order to streamline the LTM while still meeting the requirements of the remedial action objectives (RAOs) in the ROD. The following recommendations to further streamline the LTM program are presented for consideration in the Fourth Five Year Review Report:
  - Reduce the sediment sampling to just the current five year event sampling and sampling for PAHs only at locations SED09-06B, SED09-08B, SED09-09, and SED09-10 during the annual and biennial events as shown in Table 1 (i.e., SED09-10 only during the annual events; SED09-06B, SED09-08B, SED09-09, and SED09-10 during the biennial events). The data from 45 MEs has shown that groundwater beneath the landfill is not impacting the shoreline sediment overall. However, it is noted that benzo(a)pyrene was detected above the PAL in monitoring wells MW09-09S and MW09-20I during ME45 for the first time since the inception of the LTM program. Therefore continued sampling for PAHs at locations SED09-06B, SED09-08B, SED09-09, and SED09-10 during the annual and biennial events as shown in Table 1 is warranted. Sampling once every five years to support Five Year Review and risk assessment updates is adequate for the remaining locations and analyses.
  - Sample the monitoring wells for pesticides and PCBs only during the five year event sampling. The current dataset developed from 45 MEs indicates that pesticides and PCBs are not an issue in groundwater, and sampling once every five years in support of the Five Year Review Report is adequate.
  - Eliminate the surface water sample collected from Allen Harbor from the LTM program. This sample was originally added for VOCs only at a location adjacent to P09-04A, but over time has evolved into a sample collected for VOCs, metals, and PAHs from a location at the entrance of Allen Harbor. The data collected during ME 45 was largely nondetect and is of little value for the LTM program.
  - Consider some specialized analyses for arsenic (and possibly other metals) for the piezometer samples. As discussed in this report, the arsenic concentrations observed in the piezometer samples do not appear related to the landfill beneath the groundwater. The piezometer water is a mix of groundwater and seawater, and review of the salinity data indicates that it is largely seawater. It is possible that the arsenic concentrations

observed are the result isobaric interferences in the inductively coupled plasma mass spectrometry (ICP-MS) analysis. High chloride concentrations from seawater are known to produce this isobaric interference when chloride (atomic mass of 35) combines with argon (atomic mass of 40) in the plasma cloud to create false positives for arsenic (atomic mass of arsenic is 75). Review of the ME 45 arsenic results indicates that the locations with the lowest salinity (e.g., P09-06B, P09-08B, P09-12B) also have the lowest arsenic concentrations, supporting the theory that elevated results in the other locations are related to isobaric interference. Analysis by hydride generation furnace atomic absorption (SW846-7062) may eliminate this interference and help explain the arsenic concentrations in the piezometer samples. There may be other options such as analysis by ICP-MS coupled with a collision cell.

– Reduce the soil gas screening outside the capped portion of the landfill to once every five years. The data collected over 45 MEs has shown that the landfill cap is stable and functioning as designed. Screening once every five years is adequate.

9.0 SCHEDULE OF FUTURE FIELD ACTIVITIES

The Site 09 ME 46 is scheduled to occur in Fall 2017. This event will consist of the annual sampling list (see Table 1).

10.0 REFERENCES

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Tables

Table 1
Long-Term Monitoring Program
Site 09 - Allen Harbor Landfill
Former NCBC Davisville
North Kingstown, Rhode Island

Monitoring Objectives	Sampling Locations	Matrix	Annual CY 14, 17, 18	Annual Parameters	Annual Rationale	Biennial Event CY 15	Biennial Event Parameters	Biennial Event Rationale	Five Year Event CY 16	Five Year Event Parameters	Five Year Event Rationale
Groundwater Sampling:	MW09-02S	Water	---	---	No or Decreasing Trends or Infrequent Detections	X	VOC	Assess site-wide potential VOC migration	X	VOC, Metals	Support 5-Year Reviews (verify RAOs)
- Verify plume extent stability	MW09-07S	Water	X	VOC, SVOC/PAH, metals	Increasing Trends (SVOC/PAH); As above PAL	X	VOC, SVOC/PAH, PEST/PCBs; metals	Assess VOC migration and infrequent PEST/PCBs and As	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
- Warning system against potential unacceptable risk	MW09-08S	Water	X	VOC	No or Decreasing Trends or Infrequent Detections; VC above PAL, ME 42	X	VOC	Assess site-wide potential VOC migration	X	VOC, Metals	Support 5-Year Reviews (verify RAOs)
- Address concerns regarding deep migration and upwelling	MW09-09S	Water	X	VOC	Increasing Trends (VOCs)	X	VOC, SVOC/PAH	Assess VOC migration and infrequent SVOC/PAH	X	VOC, Metals, SVOC/PAH	Support 5-Year Reviews (verify RAOs)
- Evaluate plume source area condition	MW09-10S	Water	X	metals	No or Decreasing Trends or Infrequent Detections; As above PAL and increasing	X	VOC, metals	Assess site-wide potential VOC migration	X	VOC, Metals	Support 5-Year Reviews (verify RAOs)
	MW09-11S	Water	X	PEST/PCBs	incneasing PCBs & only soil cap	X	VOC, PEST/PCBs; metals	Assess VOC migration and infrequent PEST/PCBs; Ni increasing	X	VOC, Metals, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	MW09-21S	Water	X	VOC	Provide Vertical Delination to MW09-21D	X	VOC, metals	Assess site-wide potential VOC migration; As just below PAL, steady	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	MW09-23S	Water	X	metals	No or Decreasing Trends or Infrequent Detections; As incneasing and above PAL	X	VOC; metals	Assess site-wide potential VOC migration; and As	X	VOCs, Metals	Support 5-Year Reviews (verify RAOs)
	MW09-24S	Water	---	---	No or Decreasing Trends or Infrequent Detections	X	VOC, PEST/PCBs	Assess VOC migration and infrequent PEST/PCBs	X	VOCs, Metals	Support 5-Year Reviews (verify RAOs)
	MW09-25S	Water	X	SVOC/PAH, VOC	Increasing Trends (SVOC/PAH); benzene above PAL	X	VOC, SVOC/PAH	Assess VOC migration and infrequent SVOC/PAH	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	MW09-26S	Water	---	---	No or Decreasing Trends or Infrequent Detections	X	VOC	Assess site-wide potential VOC migration	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	MW09-27S	Water	---	---	No or Decreasing Trends or Infrequent Detections	X	VOC, PEST/PCBs	Assess VOC migration and infrequent PEST/PCBs	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	MW09-14IA*	Water	X	VOC, SVOC/PAH; metals	Increasing Trends (VOCs); As above PAL and increasing	X	VOC, SVOC/PAH, PEST/PCBs; metals	Assess VOC migration, infrequent SVOC/PAH/PCB; As above PAL and increasing	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	MW09-17I	Water	X	VOC, SVOC/PAH	Increasing Trends (SVOC/PAH)	X	VOC, SVOC/PAH	Assess VOC migration and infrequent SVOC/PAH	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	MW09-20I	Water	X	VOC, SVOC/PAH	Increasing Trends (VOCs, SVOC/PAH)	X	VOC, SVOC/PAH	Assess VOC migration and infrequent SVOC/PAH	X	VOC, Metals, SVOC/PAH	Support 5-Year Reviews (verify RAOs)
	MW09-03D	Water	X	VOC	No or Decreasing Trends or Infrequent Detections; Cis1,2DCE, 1,2DCE, TCE, VC above PAL	X	VOC	Assess site-wide potential VOC migration	X	VOC, Metals	Support 5-Year Reviews (verify RAOs)
	MW09-08DA*	Water	X	VOC	o or Decreasing Trends or Infrequent Detections; VC above PA	X	VOC	Assess site-wide potential VOC migration	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	MW09-09DA*	Water	X	VOC	Provide Vertical Delination to MW09-09S	X	VOC, SVOC/PAH; metals	Assess VOC migration and infrequent SVOC/PAH; As increasing	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	MW09-10D	Water	---	---	No or Decreasing Trends or Infrequent Detections	X	VOC	Assess site-wide potential VOC migration	X	VOC, Metals	Support 5-Year Reviews (verify RAOs)
	MW09-14D	Water	X	VOC	Provide Vertical Delineation to MW09-14IA	X	VOC, SVOC/PAH	Assess VOC migration and infrequent SVOC/PAH	X	VOC, Metals, SVOC/PAH	Support 5-Year Reviews (verify RAOs)
	MW09-20D	Water	X	VOC	Provide Vertical Delineation to MW09-20I	X	VOC, SVOC/PAH; metals	Assess VOC migration and infrequent SVOC/PAH; As increasing	X	VOC, Metals, SVOC/PAH	Support 5-Year Reviews (verify RAOs)
	MW09-21D	Water	X	VOC	Increasing Trends (VOCs)	X	VOC	Assess site-wide potential VOC migration	X	VOC, Metals	Support 5-Year Reviews (verify RAOs)
	MW09-23D	Water	---	---	No or Decreasing Trends or Infrequent Detections	X	VOC	Assess site-wide potential VOC migration	X	VOC, Metals	Support 5-Year Reviews (verify RAOs)
	MW09-24D	Water	X	metals	No or Decreasing Trends or Infrequent Detections' As above PAL and increasing	X	VOC, PEST/PCBs; metals	Assess VOC migration and infrequent PEST/PCBs:As above PAL and increasing	X	VOC, Metals, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	MW09-26DA**	Water	---	---	No or Decreasing Trends or Infrequent Detections	X	VOC	Assess site-wide potential VOC migration	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	MW09-27D	Water	---	---	No or Decreasing Trends or Infrequent Detections	X	VOC, PEST/PCBs; metals	Assess VOC migration and infrequent PEST/PCBs; dissolved As increasing	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
Seep Sampling	SP-01	Water	X	VOC, Sulfide, Salinity	Verify CSM/Plume migration through wall	X	VOC, Sulfide, Salinity	Verify CSM/Plume migration through wall	X	VOC, Sulfide, Salinity	Verify CSM/Plume migration through wall
	SP-02	Water	X	VOC, Sulfide, Salinity	Verify CSM/Plume migration through wall	X	VOC, Sulfide, Salinity	Verify CSM/Plume migration through wall	X	VOC, Sulfide, Salinity	Verify CSM/Plume migration through wall
- Evaluate VOC concentration of plume discharge in Seeps	SP-03	Water	X	VOC, Sulfide, Salinity	Verify CSM/Plume migration through wall	X	VOC, Sulfide, Salinity	Verify CSM/Plume migration through wall	X	VOC, Sulfide, Salinity	Verify CSM/Plume migration through wall
Harbor Sampling - Evaluate VOC, Metals and PAH concentrations of Allen Harbor	Allen Harbor 1	Water	X	VOC, Metals, PAHs, Salinity	Provide Background Information	X	VOC, Metals, PAHs, Salinity	Provide Background Information	X	VOC, Metals, PAHs, Salinity	Provide Background Information
Shoreline Piezometer Sampling:	P09-01	Water			No or Decreasing Trends or Infrequent Detections; Cr, Cu, Ni above PAL in ME 42	X	metals	No or Decreasing Trends or Infrequent Detections; Cr, Cu, Ni above PAL in ME42	X	VOC, Metals, PEST/PCBs, Salinity	Support 5-Year Reviews (verify RAOs)
- Confirm absence of unacceptable risk at potential surface	P09-02A	Water			No or Decreasing Trends or Infrequent Detections; Cu, Ni above PAL in ME 42	X	metals	No or Decreasing Trends or Infrequent Detections; Cu, Ni above PAL in ME42	X	VOC, Metals, PEST/PCBs, Salinity	Support 5-Year Reviews (verify RAOs)
discharge points/subsurface locations concurrent	P09-03A	Water			No or Decreasing Trends or Infrequent Detections; Cr, Cu, Ni, Zn above PAL in ME 42	X	metals	No or Decreasing Trends or Infrequent Detections; Cr, Cu, Ni, Zn above PAL in ME42	X	VOC, Metals, SVOC/PAH, Salinity	Support 5-Year Reviews (verify RAOs)
with risk receptors (sample are not assumed to represent	P09-04A	Water			No or Decreasing Trends or Infrequent Detections; Ni and dissolved Cu above PAL in ME 42	X	metals	No or Decreasing Trends or Infrequent Detections; Ni and dissolved Cu above PAL in ME 42	X	VOC, Metals, SVOC/PAH, Salinity	Support 5-Year Reviews (verify RAOs)
surface discharge points).	P09-05A	Water			Monitor infrequent low-level VOC detections; Ni above PAL in ME42	X	VOC, Sulfide, Salinity; metals	Monitor infrequent low-level VOC detections; Ni above PAL in ME42	X	VOC, Metals, SVOC/PAH, Salinity	Support 5-Year Reviews (verify RAOs)
- Verify plume stability	P09-06B	Water	X	VOC, Sulfide, Salinity	Monitor infrequent low-level VOC detections; Cr, Cu, Pb, Ni, Zn above PAL in ME42	X	VOC, Sulfide, Salinity; metals	Monitor infrequent low-level VOC detections; Cr, Cu, Pb, Ni, Zn above PAL in ME42	X	VOC, Metals, Sulfide, SVOC/PAH, Salinity	Support 5-Year Reviews (verify RAOs)
- Reinstall piezometers if necessary due to freeze or wave action	P09-07B	Water	X	VOC, Sulfide, Salinity	Monitor infrequent low-level VOC detections; As, Cr, Cu, Pb, Ni, Zn above PAL in ME42	X	VOC, Sulfide, Salinity; metals	Monitor infrequent low-level VOC detections; As, Cr, Cu, Pb, Ni, Zn above PAL in ME42	X	VOC, Metals, Sulfide, SVOC/PAH, Salinity	Support 5-Year Reviews (verify RAOs)
	P09-08B	Water	X	VOC, Sulfide, Salinity	Monitor locations beyond Breakwater; Cr, Cu, Ni above PAL in ME 42	X	VOC, Sulfide, Salinity; metals	Monitor locations beyond Breakwater; Cr, Cu, Ni above PAL in ME 42	X	VOC, Metals, Sulfide, SVOC/PAH, Salinity	Support 5-Year Reviews (verify RAOs)
	P09-09	Water			No or Decreasing Trends or Infrequent Detections; As, Cr, Cu, Pb, Ni, Zn above PAL in ME 42	X	metals	No or Decreasing Trends or Infrequent Detections; As, Cr, Cu, Pb, Ni, Zn above PAL in ME 42	X	VOC, Metals, SVOC/PAH, PEST/PCBs, Salinity	Support 5-Year Reviews (verify RAOs)
	P09-10	Water			No or Decreasing Trends or Infrequent Detections; Cr, Ni above PAL in ME 42	X	metals	No or Decreasing Trends or Infrequent Detections; Cr, Ni, above PAL in ME 42	X	VOC, Metals, SVOC/PAH, PEST/PCBs, Salinity	Support 5-Year Reviews (verify RAOs)
	P09-11B	Water	X	VOC, Sulfide, Salinity	Monitor locations beyond Breakwater; Ni above PAL in ME 42	X	VOC, Sulfide, Salinity; metals	Monitor locations beyond Breakwater; Ni above PAL in ME 42	X	VOC, Metals, Sulfide, SVOC/PAH, Salinity	Support 5-Year Reviews (verify RAOs)
	P09-12B	Water	X	VOC, Sulfide, Salinity	Monitor locations beyond Breakwater; As, Cr, Cu, Pb, Hg, Ni, Zn above PAL in ME 42	X	VOC, Sulfide, Salinity; metals	Monitor locations beyond Breakwater; As, Cr, Cu, Pb, Hg, Ni, Zn above PAL in ME 42	X	VOC, Metals, Sulfide, SVOC/PAH, Salinity	Support 5-Year Reviews (verify RAOs)

Monitoring Objectives	Sampling Locations	Matrix	Annual CY 14, 17, 18	Annual Parameters	Annual Rationale	Mid-Five Year Event CY 15	Mid-Five Year Event Parameters	Mid-Five Year Event Rationale	Five Year Event CY 16	Five Year Event Parameters	Five Year Event Rationale
Shoreline Sediment Sampling:	SED09-01	Sediment	X	PEST/PCBs	Data from shellfish, no or decreasing trends; Total Aroclor above PAL and increasing	X	PAH, PEST/PCBs	Update Risk for minor detections	X	VOC, Metals, PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
- Confirm absence of unacceptable risk at potential surface	SED09-02A	Sediment	---	---	Data from shellfish, no or decreasing trends	X	PAH, PEST/PCBs	Update Risk for minor detections	X	VOC, Metals, PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
discharge points.	SED09-03A	Sediment	---	---	Data from shellfish, no or decreasing trends	---	---	No or Decreasing Trends or Infrequent Detections	X	VOC, Metals, PAH	Support 5-Year Reviews (verify RAOs)
	SED09-04A	Sediment	---	---	Data from shellfish, no or decreasing trends	X	metals	No or Decreasing Trends or Infrequent Detections	X	VOC, Metals, PAH	Support 5-Year Reviews (verify RAOs)
	SED09-05A	Sediment	---	---	Data from shellfish, no or decreasing trends	X	VOC, Sulfide	Assess potential VOC migration (no Risk issues)	X	VOC, Metals, PAH	Support 5-Year Reviews (verify RAOs)
	SED09-06B	Sediment	---	---	Data from shellfish, no or decreasing trends	X	VOC, PAH, Sulfide	Assess potential VOC migration and Update Risk	X	VOC, Metals, Sulfide, PAH	Support 5-Year Reviews (verify RAOs)
	SED09-07B	Sediment	---	---	Data from shellfish, no or decreasing trends	X	VOC, Sulfide	Assess potential VOC migration (no Risk issues)	X	VOC, Metals, Sulfide, PAH	Support 5-Year Reviews (verify RAOs)
	SED09-08B	Sediment	---	---	Data from shellfish, no or decreasing trends	X	VOC, PAH, Sulfide; metals	Assess potential VOC migration and Update Risk; Zn below PAL but increasing	X	VOC, Metals, Sulfide, PAH	Support 5-Year Reviews (verify RAOs)
	SED09-09	Sediment	X	metals	Data from shellfish, no or decreasing trends; Cr, Zn increasing to near PAL	X	VOC, PAH, PEST/PCBs; metals	Assess potential VOC migration and Update Risk; Cr, Zn increasing to near PAL	X	VOC, Metals, PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	SED09-10	Sediment	X	SVOC/PAH	Data from shellfish, no or decreasing trends; in shallow sedi, benzoanthracene, benzo(A)pyrene, dibenzo(A,H)anthracene, phenanthrene above or close to PAL	X	VOC, SVOC/PAH, PEST/PCBs	Assess potential VOC migration and Update Risk	X	VOC, Metals, SVOC/PAH, PEST/PCBs	Support 5-Year Reviews (verify RAOs)
	SED09-11B	Sediment	---	---	Data from shellfish, no or decreasing trends	X	VOC, Sulfide	Assess potential VOC migration (no Risk issues)	X	VOC, Metals, Sulfide, SVOC/PAH	Support 5-Year Reviews (verify RAOs)
	SED09-12B	Sediment	---	---	Data from shellfish, no or decreasing trends	X	VOC, Sulfide	Assess potential VOC migration (no Risk issues)	X	VOC, Metals, Sulfide, SVOC/PAH	Support 5-Year Reviews (verify RAOs)

Monitoring Objectives	Sampling Locations	Matrix	Annual CY 14, 17, 18	Annual Parameters	Annual Rationale	Mid-Five Year Event CY 15	Mid-Five Year Event Parameters	Mid-Five Year Event Rationale	Five Year Event CY 16	Five Year Event Parameters	Five Year Event Rationale
Landfill Gas Sampling: - Ensure absence of unacceptable emissions - Ensure remedy safety	GV09-01 to GV09-05	Landfill Gas	X	Field - Methane, CO2, O2, H2S	Per BCT Agreements Spring/Summer 2012	X	Field - Methane, CO2, O2, H2S	Per BCT Agreements Spring/Summer 2012	X	Field - Methane, CO2, O2, H2S Fixed-Base Lab - Methane, VOCs	Per BCT Agreements Spring/Summer 2012
	GP09-02 to GP09-16, GP09-21 and GP09-25	Landfill Gas	X	Field - Methane, CO2, O2, H2S	Per BCT Agreements Spring/Summer 2012	X	Field - Methane, CO2, O2, H2S	Per BCT Agreements Spring/Summer 2012	X	Field - Methane, CO2, O2, H2S	Per BCT Agreements Spring/Summer 2012

Monitoring Objectives	Sampling Locations	Matrix	Annual CY 14, 17, 18	Annual Parameters	Annual Rationale	Mid-Five Year Event CY 15	Mid-Five Year Event Parameters	Biennial Rationale	Five Year Event CY 16	Five Year Event Parameters	Five Year Event Rationale
Shellfish Sampling:	ET09-01	Adult Shellfish	---	---	Offsite - sufficient database already obtained	---	---	Offsite - sufficient database already obtained	---	---	Offsite - sufficient database already obtained
- Verify that the remedy is controlling the migration of landfill	ET09-02	Adult Shellfish	---	---	Offsite - sufficient database already obtained	---	---	Offsite - sufficient database already obtained	---	---	Offsite - sufficient database already obtained
constituents to shoreline receptors.	ET09-03	Adult Shellfish	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Support 5-Year Reviews (verify RAOs)
	ET09-04	Adult Shellfish	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Support 5-Year Reviews (verify RAOs)
	ET09-05	Adult Shellfish	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Support 5-Year Reviews (verify RAOs)
	ET09-06	Adult Shellfish	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Support 5-Year Reviews (verify RAOs)
	ET09-07	Adult Shellfish	---	---	Within Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors inside Created Wetland near 20I	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Support 5-Year Reviews (verify RAOs)
	ET09-08	Adult Shellfish	---	---	Within Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors inside Created Wetland near 20I	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Support 5-Year Reviews (verify RAOs)
	ET09-09	Adult Shellfish	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors beyond Breakwater	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Support 5-Year Reviews (verify RAOs)
	ET09-10	Adult Shellfish	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors beyond Breakwater	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Support 5-Year Reviews (verify RAOs)
	ET09-11	Adult Shellfish	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors beyond Breakwater	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Support 5-Year Reviews (verify RAOs)
	ET09-12	Adult Shellfish	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors beyond Breakwater	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Monitor receptors outside of Created Wetland	X	Metals, SVOC/PAH, PEST/PCBs, Lipids	Support 5-Year Reviews (verify RAOs)

Notes:
1. --- = No sampling for this parameter at this location.
2. X = Environmental sampling will be conducted for this parameter at this location.

3. * = MW09-14I was added to the LTMP during ME 24. MW09-08DA, MW09-09DA, and MW09-14IA were added to the LTMP during ME29. Wells MW09-08DA, MW09-09DA, and MW09-14IA replace wells MW09-08D, MW09-09D, and MW09-14I, respectively.

4. ** = MW09-26DA was installed in September 2015 and replaces well MW09-26.
5. CY = Calendar Year - January to December
6. The Five Year Review Event List is consistent with locations and parameters where extensive sampling has been historically performed (e.g. "large events" when quarterly sampling occurred).
7. Field Methane will be determined based on field probes for gas vents and gas probe locations. No fixed-base laboratory samples will be collected.
8. Based on Section 5.1.4 of the Long Term Monitoring Data Summary and Optimizations Recommendations Report (Tetra Tech, 2015), metals do not appear to be migrating. Generally, concentrations in wells are lower than piezometers (and sediment) concentrations.
Additional metals occur in piezometers compared to wells. Therefore, metals are assumed to be a consequeunce of the geochemistry of the site and from emplacement of materials in the constructed wetland.
9. VOC = volatile organic compounds; SVOC = semivolatile organic compounds; PAH = polycyclic aromatic hydrocarbons; PCBs = polychlorinated biphenyls; TPH = total petroleum hydrocarbons

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TABLE 2
SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS AND GROUNDWATER ELEVATIONS
FALL 2016
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Number	Elevation of Measuring Point (feet MSL)	Low Tide			Mid Tide			High Tide		
		Time	Water Level Indicator Reading (feet BTOR)	GW Elevation (feet MSL)	Time	Water Level Indicator Reading (feet BTOR)	GW Elevation (feet MSL)	Time	Water Level Indicator Reading (feet BTOR)	GW Elevation (feet MSL)
MW09-02S	11.81	16:13	8.79	3.02	13:50	8.78	3.03	11:14	8.80	3.01
MW09-03D	11.81	16:14	8.06	3.75	13:51	8.77	3.04	11:15	8.94	2.87
MW09-05S	18.69	16:25	16.52	2.17	14:02	16.38	2.31	11:20	16.58	2.11
MW09-07S	24.90	16:25	22.24	2.66	14:16	22.09	2.81	11:47	22.18	2.72
MW09-08S	18.74	16:29	18.42	0.32	14:06	16.5	2.24	11:23	16.98	1.76
MW09-08DA	19.63	16:29	17.02	2.61	14:05	17.5	2.13	11:22	16.49	3.14
MW09-09DA	25.50	16:34	24.38	1.12	14:10	23.31	2.19	11:40	22.30	3.20
MW09-09S	24.19	16:34	22.57	1.62	14:09	22.52	1.67	11:39	22.58	1.61
MW09-10D	22.30	16:09	20.96	1.34	13:41	19.62	2.68	11:18	18.74	3.56
MW09-10S	22.11	19:08	20.59	1.52	13:40	20.4	1.71	11:19	20.43	1.68
MW09-11S	15.84	16:06	13.4	2.44	13:36	13.17	2.67	11:15	13.19	2.65
MW09-14D	25.73	16:23	24.19	1.54	14:15	23.31	2.42	11:46	22.27	3.46
MW09-14IA	26.88	16:22	24.24	2.64	14:14	24.21	2.67	11:45	24.18	2.70
MW09-17I	25.96	16:20	24.11	1.85	14:11	21.83	4.13	11:42	22.80	3.16
MW09-20D	21.44	16:32	20.9	0.54	14:08	19.33	2.11	11:35	18.23	3.21
MW09-20I	22.56	16:31	20.69	1.87	14:07	20.47	2.09	11:34	20.49	2.07
MW09-21D	20.16	16:26	17.41	2.75	14:03	17.33	2.83	11:30	17.37	2.79
MW09-21S	19.82	16:26	17.95	1.87	14:04	17.73	2.09	11:29	17.69	2.13
MW09-23D	24.12	16:14	22.5	1.62	13:51	21.49	2.63	11:50	21.30	2.82
MW09-23S	24.21	16:12	22.83	1.38	13:52	22.65	1.56	11:49	22.98	1.23
MW09-24D	10.45	16:23	8.11	2.34	13:58	7.91	2.54	11:25	7.87	2.58

1. Water level measurements taken on September 20, 2016
2. Measuring point elevations based on October 2016 settlement survey data
3. MSL = Mean Sea Level, BTOR = below top of riser

TABLE 2
SUMMARY OF DEPTH TO GROUNDWATER MEASUREMENTS AND GROUNDWATER ELEVATIONS
FALL 2016
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Number	Elevation of Measuring Point (feet MSL)	Low Tide			Mid Tide			High Tide		
		Time	Water Level Indicator Reading (feet BTOR)	GW Elevation (feet MSL)	Time	Water Level Indicator Reading (feet BTOR)	GW Elevation (feet MSL)	Time	Water Level Indicator Reading (feet BTOR)	GW Elevation (feet MSL)
MW09-24S	10.64	16:22	8.17	2.47	13:59	8.12	2.52	11:24	8.12	2.52
MW09-25S	10.24	16:04	8.31	1.93	13:33	8.17	2.07	11:23	8.33	1.91
MW09-26S	11.32	16:06	3.71	7.61	13:44	8.2	3.12	11:18	8.22	3.10
MW09-26D	11.53	16:10	3.03	8.50	13:43	6.87	4.66	11:19	6.88	4.65
MW09-26DA	11.46	16:07	8.43	3.03	13:43	8.3	3.16	11:17	8.29	3.17
MW09-27S	6.11	16:18	8.22	-2.11	13:53	3.42	2.69	11:11	3.47	2.64
MW09-27D	6.21	16:17	6.89	-0.68	13:53	3.02	3.19	11:10	3.28	2.93
Allen Harbor Staff Gauge	NA	16:00	--	-1.00	13:50	--	1.20	11:10	--	3.80

1. Water level measurements taken on September 20, 2016
2. Measuring point elevations based on October 2016 settlement survey data
3. MSL = Mean Sea Level, BTOR = below top of riser

TABLE 3
SUMMARY OF VERTICAL HYDRAULIC GRADIENTS
SITE 09: ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Cluster	Date	Event Name	Vertical Distance (ft)	Head Distance (ft)	Hydraulic Gradient (ft/ft)
MW09-02S/03D	4/4/1995	Pre-ROD	21.82	1.34	0.0614
	4/19/1995	Pre-ROD	21.9	1.29	0.0589
	11/30/2001	ME 01	20.76	0.44	0.0212
	2/25/2002	ME 02	20.96	0.86	0.0410
	6/3/2002	ME 03	21.16	0.96	0.0454
	9/3/2002	ME 04	20.62	0.65	0.0315
	1/13/2003	ME 05	21.35	1.09	0.0511
	4/28/2003	ME 06	21.39	1.28	0.0599
	6/23/2003	ME 07	21.7	1.48	0.0682
	9/9/2003	ME 08	21.06	0.88	0.0418
	12/1/2003	ME 09	21.13	-0.15	-0.0071
	3/17/2004	ME 10	21.11	0.83	0.0393
	6/14/2004	ME 11	21.1	0.84	0.0398
	8/10/2004	ME 12	20.82	0.08	0.0038
	10/18/2004	ME 13	21.03	0.34	0.0162
	3/16/2005	ME 14	21.6	1.14	0.0528
	6/6/2005	ME 15	21.31	0.89	0.0415
	9/26/2005	ME 16	20.77	0.51	0.0243
	12/2/2005	ME 17	21.35	1	0.0466
	2/28/2006	ME 18	21.36	0.59	0.0274
	11/17/2006	ME 19	21.14	0.25	0.0118
	3/15/2007	ME 20	21.21	0.91	0.0429
	6/25/2007	ME 21	21.01	0.81	0.0386
	11/5/2007	ME 22	20.68	0.54	0.0261
	1/29/2008	ME 23	21.01	0.6	0.0286
	4/22/2008	ME 24	21.31	0.76	0.0357
	7/14/2008	ME 25	20.82	0.63	0.0303
	9/24/2008	ME 26	20.86	0.65	0.0312
	12/8/2008	ME 27	21.16	1.03	0.0487
	5/1/2009	ME 28	21.42	1.04	0.0486
	8/5/2009	ME 29	21.19	0.45	0.0212
	10/8/2009	ME 30	21.03	0.46	0.0219
	1/5/2010	ME 31	21.36	0.54	0.0253
	3/17/2010	ME 32	21.7	0.85	0.0392
	7/15/2010	ME 33	20.93	0.71	0.0339
	9/14/2010	ME 34	20.64	0.02	0.0010
	12/14/2010	ME 35	21.26	1.02	0.0480
	3/22/2011	ME 36	21.33	0.59	0.0277
	7/12/2011	ME 37	21.07	0.35	0.0166
	10/10/2011	ME 38	21.1	0.34	0.0161
	3/26/2012	ME 39	21.21	0.52	0.0245
	9/12/2012	ME 40	20.9	0.67	0.0321
	3/25/2013	ME 41	20.9	0.67	0.0321
	9/30/2013	ME 42	20.9	0.098	0.0047
	9/29/2014	ME 43	20.9	0.54	0.0258
	9/14/2015	ME 44	20.9	0.16	0.0077
	9/20/2016	ME 45	20.9	0.01	0.0005
	Pre-ROD Average				0.0602
	Long-Term Average				0.0316

TABLE 3
SUMMARY OF VERTICAL HYDRAULIC GRADIENTS
SITE 09: ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Cluster	Date	Event Name	Vertical Distance (ft)	Head Distance (ft)	Hydraulic Gradient (ft/ft)
MW09-07S/14I(14IA)	4/4/1995	Pre-ROD	11.67	0.21	0.0180
	4/19/1995	Pre-ROD	11.45	0.08	0.0070
	4/20/1995	Pre-ROD	11.37	4.09	0.3599
	9/3/2002	ME 04	9.84	-2.46	-0.2501
	1/13/2003	ME 05	10.33	-1.44	-0.1395
	4/28/2003	ME 06	10.26	-0.17	-0.0166
	6/23/2003	ME 07	10.46	0.06	0.0057
	9/9/2003	ME 08	10.14	-0.17	-0.0168
	12/1/2003	ME 09	10.29	0.15	0.0146
	3/17/2004	ME 10	10.21	1.72	0.1685
	6/14/2004	ME 11	10.35	0.09	0.0087
	8/10/2004	ME 12	10.08	0.08	0.0079
	10/18/2004	ME 13	10.13	0.03	0.0030
	3/16/2005	ME 14	10.5	0.06	0.0057
	6/6/2005	ME 15	10.57	0.03	0.0028
	9/26/2005	ME 16	10.01	0.05	0.0050
	12/2/2005	ME 17	10.31	0.02	0.0019
	2/28/2006	ME 18	10.58	0.05	0.0047
	11/17/2006	ME 19	10.22	0.09	0.0088
	3/15/2007	ME 20	10.37	0.13	0.0125
	6/25/2007	ME 21	10.35	0.13	0.0126
	11/5/2007	ME 22	9.83	0.03	0.0031
	1/29/2008	ME 23	10.12	0.05	0.0049
	4/22/2008	ME 24	10.46	0.1	0.0096
	7/14/2008	ME 25	10.24	0.12	0.0117
	9/24/2008	ME 26	10.08	0.06	0.0060
	12/8/2008	ME 27	10.3	0.1	0.0097
	5/1/2009	ME 28	10.61	0.14	0.0132
	8/5/2009	ME 29	14.6	0.07	0.0048
	10/8/2009	ME 30	14.37	0.1	0.0070
	1/5/2010	ME 31	14.71	0.11	0.0075
	3/17/2010	ME 32	14.77	0.07	0.0047
	7/15/2010	ME 33	14.44	0.05	0.0035
	9/14/2010	ME 34	14.19	0.03	0.0021
	12/14/2010	ME 35	14.24	0.05	0.0035
	3/22/2011	ME 36	14.56	0.08	0.0055
	7/12/2011	ME 37	14.53	0.05	0.0034
	10/10/2011	ME 38	14.42	0.06	0.0042
	3/26/2012	ME 39	14.62	0.09	0.0062
	9/12/2012	ME 40	14.32	0.08	0.0056
	3/25/2013	ME 41	14.32	0.15	0.0105
	9/30/2013	ME 42	14.32	0.19	0.0135
	9/29/2014	ME 43	14.32	-0.57	-0.0398
	9/14/2015	ME 44	14.32	0.19	0.0133
	9/20/2016	ME 45	14.32	0.14	0.0098
	Pre-ROD Average				0.1283
	Long-Term Average				0.0077

TABLE 3
SUMMARY OF VERTICAL HYDRAULIC GRADIENTS
SITE 09: ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Cluster	Date	Event Name	Vertical Distance (ft)	Head Distance (ft)	Hydraulic Gradient (ft/ft)
MW09-07S/14D	4/4/1995	Pre-ROD	35.57	3.1	0.0872
	4/19/1995	Pre-ROD	35.35	2.77	0.0784
	4/20/1995	Pre-ROD	35.27	2.72	0.0771
	11/30/2001	ME 01	33.8	0.25	0.0074
	2/25/2002	ME 02	33.95	1.06	0.0312
	6/3/2002	ME 03	32.7	-2.01	-0.0615
	9/3/2002	ME 04	33.74	0.85	0.0252
	1/13/2003	ME 05	34.23	1.08	0.0316
	4/28/2003	ME 06	34.16	0.94	0.0275
	6/23/2003	ME 07	34.36	0.73	0.0212
	9/9/2003	ME 08	34.04	1.23	0.0361
	12/1/2003	ME 09	34.19	1.06	0.0310
	3/17/2004	ME 10	34.11	0.73	0.0214
	6/14/2004	ME 11	34.25	1.09	0.0318
	8/10/2004	ME 12	33.98	0.67	0.0197
	10/18/2004	ME 13	34.03	0.15	0.0044
	3/16/2005	ME 14	34.4	0.97	0.0282
	6/6/2005	ME 15	34.47	1.39	0.0403
	9/26/2005	ME 16	33.91	0.66	0.0195
	12/2/2005	ME 17	34.21	0.96	0.0281
	2/28/2006	ME 18	34.48	1	0.0290
	11/17/2006	ME 19	34.12	-0.11	-0.0032
	3/15/2007	ME 20	34.27	1.31	0.0382
	6/25/2007	ME 21	34.25	1.35	0.0394
	11/5/2007	ME 22	33.73	0.63	0.0187
	1/29/2008	ME 23	34.02	0.6	0.0176
	4/22/2008	ME 24	34.36	1.1	0.0320
	7/14/2008	ME 25	34.14	1.2	0.0352
	9/24/2008	ME 26	33.98	1.04	0.0306
	12/8/2008	ME 27	34.2	1.4	0.0409
	5/1/2009	ME 28	34.51	1.51	0.0438
	8/5/2009	ME 29	34.3	0.47	0.0137
	10/8/2009	ME 30	34.07	0.4	0.0117
	1/5/2010	ME 31	34.41	0.41	0.0119
	3/17/2010	ME 32	34.47	0.53	0.0154
	7/15/2010	ME 33	34.14	1.29	0.0378
	9/14/2010	ME34	33.89	0.37	0.0109
	12/14/2010	ME35	33.94	0.57	0.0168
	3/22/2011	ME36	34.26	0.02	0.0006
	7/12/2011	ME37	34.23	0.65	0.0190
	10/10/2011	ME38	34.12	0.18	0.0053
	3/26/2012	ME39	34.32	0.87	0.0253
	9/12/2012	ME40	34.02	1.09	0.0320
	3/25/2013	ME41	34.02	0.76	0.0223
	9/30/2013	ME42	34.02	0.50	0.0146
	9/29/2014	ME43	34.02	0.55	0.0162
	9/14/2015	ME44	34.02	0.60	0.0176
	9/20/2016	ME45	34.02	-0.39	-0.0115
	Pre-ROD Average				0.0828
	Long-Term Average				0.0243

TABLE 3
SUMMARY OF VERTICAL HYDRAULIC GRADIENTS
SITE 09: ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Cluster	Date	Event Name	Vertical Distance (ft)	Head Distance (ft)	Hydraulic Gradient (ft/ft)
MW09-08S/08DA	10/8/2009	ME 30	43.35	-0.91	-0.0210
	1/5/2010	ME 31	43.48	-1.25	-0.0288
	3/17/2010	ME 32	43.66	-0.84	-0.0192
	7/15/2010	ME 33	43.41	-0.44	-0.0101
	9/14/2010	ME34	43.53	-0.36	-0.0083
	12/14/2010	ME35	43.22	-1.08	-0.0250
	3/22/2011	ME36	43.56	-1.47	-0.0338
	7/12/2011	ME37	43.52	-0.57	-0.0131
	10/10/2011	ME38	43.44	-1.04	-0.0239
	3/26/2012	ME39	43.36	-0.92	-0.0212
	9/12/2012	ME40	43.11	-0.98	-0.0227
	3/25/2013	ME41	43.11	-0.78	-0.0181
	9/30/2013	ME42	43.11	-0.14	-0.0031
	9/29/2014	ME43	43.11	0.10	0.0023
	9/14/2015	ME44	43.11	-0.40	-0.0093
	9/20/2016	ME45	43.11	-0.11	-0.0026
	Long-Term Average				-0.0161
MW09-09S/09D(09DA)	4/19/1995	Pre-ROD	40.98	-0.18	-0.0044
	4/20/1995	Pre-ROD	42.56	3.22	0.0757
	2/25/2002	ME 02	39.83	-1.29	-0.0324
	6/3/2002	ME 03	39.92	-1.67	-0.0418
	9/3/2002	ME 04	39.88	-1.06	-0.0266
	1/13/2003	ME 05	39.95	-1.6	-0.0401
	4/28/2003	ME 06	39.8	-1.68	-0.0422
	6/23/2003	ME 07	40.14	-1.9	-0.0473
	9/9/2003	ME 08	39.93	-0.93	-0.0233
	12/1/2003	ME 09	40.17	-1.09	-0.0271
	3/17/2004	ME 10	39.99	-1.65	-0.0413
	6/14/2004	ME 11	40.1	-1.32	-0.0329
	8/10/2004	ME 12	39.88	-1.41	-0.0354
	10/18/2004	ME 13	40.34	-1.48	-0.0367
	3/16/2005	ME 14	40.17	-1.73	-0.0431
	6/6/2005	ME 15	40.35	-0.87	-0.0216
	9/26/2005	ME 16	40.19	-1.09	-0.0271
	12/2/2005	ME 17	40.09	-1.36	-0.0339
	2/28/2006	ME 18	40.14	-1.91	-0.0476
	11/17/2006	ME 19	40.38	-1.59	-0.0394
	3/15/2007	ME 20	40.01	-1.26	-0.0315
	6/25/2007	ME 21	40.33	-0.61	-0.0151
	11/5/2007	ME 22	40.17	-0.69	-0.0172
	1/29/2008	ME 23	40.14	-1.33	-0.0331
	4/22/2008	ME 24	40.14	-1.51	-0.0376
	7/14/2008	ME 25	40.22	-0.86	-0.0214
	9/24/2008	ME 26	40.21	-0.69	-0.0172
	12/8/2008	ME 27	40.11	-0.79	-0.0197
	5/1/2009	ME 28	40.22	-1.19	-0.0296
	8/5/2009	ME 29	39.65	-1.68	-0.0424
	10/8/2009	ME 30	39.74	-1.07	-0.0269
	1/5/2010	ME 31	39.74	-1.6	-0.0403
	3/17/2010	ME 32	39.89	-1.32	-0.0331
	7/15/2010	ME 33	39.86	-0.35	-0.0088
	9/14/2010	ME34	39.84	-0.7	-0.0176
	12/14/2010	ME35	39.4	-1.42	-0.0360
	3/22/2011	ME36	39.69	-2.14	-0.0539
	7/12/2011	ME37	39.75	-0.97	-0.0244
	10/10/2011	ME38	39.67	-1.63	-0.0411
	3/26/2012	ME39	39.59	-1.71	-0.0432
	9/12/2012	ME40	39.43	-1.07	-0.0271
	3/25/2013	ME41	39.43	-1.56	-0.0396
	9/30/2013	ME42	39.43	-0.72	-0.0183

TABLE 3
SUMMARY OF VERTICAL HYDRAULIC GRADIENTS
SITE 09: ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Cluster	Date	Event Name	Vertical Distance (ft)	Head Distance (ft)	Hydraulic Gradient (ft/ft)
	9/29/2014	ME43	39.43	0.07	0.0018
	9/14/2015	ME44	39.43	-0.61	-0.0155
	9/20/2016	ME45	39.43	-0.52	-0.0132
	Pre-ROD Average				0.0220
	Long-Term Average				-0.0276
MW09-10S/10D	4/4/1995	Pre-ROD	49.42	-1.27	-0.0257
	4/19/1995	Pre-ROD	49.43	-1.25	-0.0253
	4/20/1995	Pre-ROD	49.48	-1.12	-0.0226
	11/30/2001	ME 01	48.94	-1.77	-0.0362
	2/25/2002	ME 02	48.75	-1.6	-0.0328
	6/3/2002	ME 03	48.86	-2.02	-0.0413
	9/3/2002	ME 04	48.79	-1.25	-0.0256
	1/13/2003	ME 05	48.79	-2.1	-0.0430
	4/28/2003	ME 06	48.75	-2.12	-0.0435
	6/23/2003	ME 07	49.06	-2.34	-0.0477
	9/9/2003	ME 08	48.77	-1.52	-0.0312
	12/1/2003	ME 09	48.89	-1.84	-0.0376
	3/17/2004	ME 10	48.84	-2.18	-0.0446
	6/14/2004	ME 11	49.55	-0.73	-0.0147
	8/10/2004	ME 12	48.86	-1.99	-0.0407
	10/18/2004	ME 13	49.22	-1.66	-0.0337
	3/16/2005	ME 14	49	-2.13	-0.0435
	6/6/2005	ME 15	49.06	-1.6	-0.0326
	9/26/2005	ME 16	48.9	-1.66	-0.0339
	12/2/2005	ME 17	48.84	-2.09	-0.0428
	2/28/2006	ME 18	48.95	-2.28	-0.0466
	11/17/2006	ME 19	49.22	-2.23	-0.0453
	3/15/2007	ME 20	48.76	-1.98	-0.0406
	6/25/2007	ME 21	49	-1.5	-0.0306
	11/5/2007	ME 22	48.88	-1.38	-0.0282
	1/29/2008	ME 23	49.03	-1.67	-0.0341
	4/22/2008	ME 24	49.02	-1.75	-0.0357
	7/14/2008	ME 25	49.01	-1.57	-0.0320
	9/24/2008	ME 26	48.95	-1.31	-0.0268
	12/8/2008	ME 27	48.89	-1.51	-0.0309
	5/1/2009	ME 28	49.04	-1.79	-0.0365
	8/5/2009	ME 29	49.18	-2.15	-0.0437
	10/8/2009	ME 30	49.16	-1.53	-0.0311
	1/5/2010	ME 31	49.32	-2.01	-0.0408
	3/17/2010	ME 32	49.44	-1.63	-0.0330
	7/15/2010	ME 33	49.21	-1.04	-0.0211
	9/14/2010	ME34	49.36	-1.08	-0.0219
	12/14/2010	ME35	49.12	-1.38	-0.0281
	3/22/2011	ME36	49.26	-2.55	-0.0518
	7/12/2011	ME37	49.31	-1.47	-0.0298
	10/10/2011	ME38	49.18	-2.04	-0.0415
	3/26/2012	ME39	49.1	-1.68	-0.0342
	9/12/2012	ME40	49.01	-1.35	-0.0275
	3/25/2013	ME41	49.01	-1.88	-0.0384
	9/30/2013	ME42	49.01	-1.03	-0.0211
	9/29/2014	ME43	49.01	-0.70	-0.0143
	9/14/2015	ME44	49.01	-0.91	-0.0186
	9/20/2016	ME45	49.01	-0.97	-0.0198
	Pre-ROD Average				-0.0245
	Long-Term Average				-0.0334

TABLE 3
SUMMARY OF VERTICAL HYDRAULIC GRADIENTS
SITE 09: ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Cluster	Date	Event Name	Vertical Distance (ft)	Head Distance (ft)	Hydraulic Gradient (ft/ft)
MW09-14I(14IA)/14D	4/4/1995	Pre-ROD	23.9	2.89	0.1209
	4/19/1995	Pre-ROD	23.9	2.69	0.1126
	4/20/1995	Pre-ROD	23.9	-1.37	-0.0573
	9/3/2002	ME 04	23.9	3.31	0.1385
	1/13/2003	ME 05	23.9	2.52	0.1054
	4/28/2003	ME 06	23.9	1.11	0.0464
	6/23/2003	ME 07	23.9	0.67	0.0280
	9/9/2003	ME 08	23.9	1.4	0.0586
	12/1/2003	ME 09	23.9	0.91	0.0381
	3/17/2004	ME 10	23.9	-0.99	-0.0414
	6/14/2004	ME 11	23.9	1	0.0418
	8/10/2004	ME 12	23.9	0.59	0.0247
	10/18/2004	ME 13	23.9	0.12	0.0050
	3/16/2005	ME 14	23.9	0.91	0.0381
	6/6/2005	ME 15	23.9	1.36	0.0569
	9/26/2005	ME 16	23.9	0.61	0.0255
	12/2/2005	ME 17	23.9	0.94	0.0393
	2/28/2006	ME 18	23.9	0.95	0.0397
	11/17/2006	ME 19	23.9	-0.2	-0.0084
	3/15/2007	ME 20	23.9	1.18	0.0494
	6/25/2007	ME 21	23.9	1.22	0.0510
	11/5/2007	ME 22	23.9	0.6	0.0251
	1/29/2008	ME 23	23.9	0.55	0.0230
	4/22/2008	ME 24	23.9	1	0.0418
	7/14/2008	ME 25	23.9	1.08	0.0452
	9/24/2008	ME 26	23.9	0.98	0.0410
	12/8/2008	ME 27	23.9	1.3	0.0544
	5/1/2009	ME 28	23.9	1.37	0.0573
	8/5/2009	ME 29	19.7	0.4	0.0203
	10/8/2009	ME 30	19.7	0.3	0.0152
	1/5/2010	ME 31	19.7	0.3	0.0152
	3/17/2010	ME 32	19.7	0.46	0.0234
	7/15/2010	ME 33	19.7	1.24	0.0629
	9/14/2010	ME34	19.7	0.34	0.0173
	12/14/2010	ME35	19.7	0.52	0.0264
	3/22/2011	ME36	19.7	-0.06	-0.0030
	7/12/2011	ME37	19.7	0.6	0.0305
	10/10/2011	ME38	19.7	0.12	0.0061
	3/26/2012	ME39	19.7	0.78	0.0396
	9/12/2012	ME40	19.7	1.01	0.0513
	3/25/2013	ME41	19.7	0.61	0.0310
	9/30/2013	ME42	19.7	0.30	0.0153
	9/29/2014	ME43	19.7	1.12	0.0569
	9/14/2015	ME44	19.7	0.41	0.0208
	9/20/2016	ME45	19.7	-0.25	-0.0127
	Pre-ROD Average				0.0587
	Long-Term Average				0.0359

TABLE 3
SUMMARY OF VERTICAL HYDRAULIC GRADIENTS
SITE 09: ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Cluster	Date	Event Name	Vertical Distance (ft)	Head Distance (ft)	Hydraulic Gradient (ft/ft)
MW09-20I/20D	4/4/1995	Pre-ROD	29.5	0.16	0.0054
	4/19/1995	Pre-ROD	29.5	0.38	0.0129
	4/20/1995	Pre-ROD	29.5	-0.32	-0.0108
	11/30/2001	ME 01	29.5	-0.11	-0.0037
	2/25/2002	ME 02	29.5	-0.54	-0.0183
	6/3/2002	ME 03	29.5	-0.43	-0.0146
	9/3/2002	ME 04	29.5	-0.11	-0.0037
	1/13/2003	ME 05	29.5	-0.35	-0.0119
	4/28/2003	ME 06	29.5	-0.2	-0.0068
	6/23/2003	ME 07	29.5	-0.62	-0.0210
	9/9/2003	ME 08	29.5	-0.02	-0.0007
	12/1/2003	ME 09	29.5	-0.21	-0.0071
	3/17/2004	ME 10	29.5	-0.32	-0.0108
	6/14/2004	ME 11	29.5	-0.37	-0.0125
	8/10/2004	ME 12	29.5	-0.52	-0.0176
	10/18/2004	ME 13	29.5	-0.3	-0.0102
	3/16/2005	ME 14	29.5	-0.35	-0.0119
	6/6/2005	ME 15	29.5	-0.04	-0.0015
	9/26/2005	ME 16	29.5	-0.21	-0.0069
	12/2/2005	ME 17	29.5	-0.26	-0.0086
	2/28/2006	ME 18	29.5	-0.09	-0.0032
	11/17/2006	ME 19	29.5	-0.36	-0.0122
	3/15/2007	ME 20	29.5	-0.14	-0.0047
	6/25/2007	ME 21	29.5	-0.18	-0.0061
	11/5/2007	ME 22	29.5	-0.33	-0.0112
	1/29/2008	ME 23	29.5	-0.19	-0.0064
	4/22/2008	ME 24	29.5	-0.19	-0.0064
	7/14/2008	ME 25	29.5	-0.21	-0.0071
	9/24/2008	ME 26	29.5	-0.17	-0.0058
	12/8/2008	ME 27	29.5	-0.13	-0.0044
	5/1/2009	ME 28	29.5	-0.2	-0.0068
	8/5/2009	ME 29	29.5	-0.41	-0.0139
	10/8/2009	ME 30	29.5	-0.29	-0.0098
	1/5/2010	ME 31	29.5	-0.54	-0.0183
	3/17/2010	ME 32	29.5	-0.2	-0.0068
	7/15/2010	ME 33	29.5	0.01	0.0003
	9/14/2010	ME34	29.5	-0.02	-0.0007
	12/14/2010	ME35	29.5	0.26	0.0088
	3/22/2011	ME36	29.5	-1.06	-0.0359
	7/12/2011	ME37	29.5	0.01	0.0003
	10/10/2011	ME38	29.5	-0.51	-0.0173
	3/26/2012	ME39	29.5	-0.03	-0.0010
	9/12/2012	ME40	29.5	0.24	0.0081
	3/25/2013	ME41	29.5	-0.04	-0.0014
	9/30/2013	ME42	29.5	-0.16	-0.0053
	9/29/2014	ME43	29.5	0.02	0.0007
	9/14/2015	ME44	29.5	-0.32	-0.0108
	9/20/2016	ME45	29.5	-0.02	-0.0007
	Pre-ROD Average				0.0025
	Long-Term Average				-0.0070

TABLE 3
SUMMARY OF VERTICAL HYDRAULIC GRADIENTS
SITE 09: ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Cluster	Date	Event Name	Vertical Distance (ft)	Head Distance (ft)	Hydraulic Gradient (ft/ft)
MW09-21S/21D	4/4/1995	Pre-ROD	28.82	0.31	0.0108
	4/19/1995	Pre-ROD	28.77	0.15	0.0052
	4/20/1995	Pre-ROD	28.71	0.24	0.0084
	11/30/2001	ME 01	28.12	-0.96	-0.0341
	2/25/2002	ME 02	28.03	-0.98	-0.0350
	6/3/2002	ME 03	28.18	-0.75	-0.0266
	9/3/2002	ME 04	28	-0.64	-0.0229
	1/13/2003	ME 05	28.32	-0.59	-0.0208
	4/28/2003	ME 06	28.11	-1.2	-0.0427
	6/23/2003	ME 07	28.33	-0.99	-0.0349
	9/9/2003	ME 08	28.21	-1	-0.0355
	12/1/2003	ME 09	28.26	-0.81	-0.0287
	3/17/2004	ME 10	28.19	-0.63	-0.0223
	6/14/2004	ME 11	28.18	-0.86	-0.0305
	8/10/2004	ME 12	27.98	-0.5	-0.0179
	10/18/2004	ME 13	28.32	-1.09	-0.0385
	3/16/2005	ME 14	28.32	-1.09	-0.0385
	6/6/2005	ME 15	28.3	-1.17	-0.0413
	9/26/2005	ME 16	29.27	1.59	0.0543
	12/2/2005	ME 17	28.29	-1.07	-0.0378
	2/28/2006	ME 18	28.36	-1.27	-0.0448
	11/17/2006	ME 19	28.37	-1.43	-0.0504
	3/15/2007	ME 20	28.15	-1.01	-0.0359
	6/25/2007	ME 21	28.12	-0.74	-0.0263
	11/5/2007	ME 22	28.1	-0.67	-0.0238
	1/29/2008	ME 23	28.19	-1.33	-0.0472
	4/22/2008	ME 24	28.23	-1.04	-0.0368
	7/14/2008	ME 25	28.11	0.28	0.0100
	9/24/2008	ME 26	28.11	-0.95	-0.0338
	12/8/2008	ME 27	28.21	-1.1	-0.0390
	5/1/2009	ME 28	28.23	-1.33	-0.0471
	8/5/2009	ME 29	28.36	-0.92	-0.0324
	10/8/2009	ME 30	28.35	-1.25	-0.0441
	1/5/2010	ME 31	28.43	-1.12	-0.0394
	3/17/2010	ME 32	28.58	-1.44	-0.0504
	7/15/2010	ME 33	28.17	-1.49	-0.0529
	9/14/2010	ME34	28.33	-0.69	-0.0244
	12/14/2010	ME35	28.12	-0.69	-0.0245
	3/22/2011	ME36	28.42	-0.69	-0.0243
	7/12/2011	ME37	28.35	-0.69	-0.0243
	10/10/2011	ME38	28.42	-0.69	-0.0243
	3/26/2012	ME39	28.34	-0.69	-0.0243
	9/12/2012	ME40	28	-0.69	-0.0246
	3/25/2013	ME41	28	-0.97	-0.0346
	9/30/2013	ME42	28	-0.87	-0.0310
	9/29/2014	ME43	28	-0.67	-0.0239
	9/14/2015	ME44	28	-0.49	-0.0175
	9/20/2016	ME45	28	-0.74	-0.0264
	Pre-ROD Average				0.0081
	Long-Term Average				-0.0277

TABLE 3
SUMMARY OF VERTICAL HYDRAULIC GRADIENTS
SITE 09: ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Cluster	Date	Event Name	Vertical Distance (ft)	Head Distance (ft)	Hydraulic Gradient (ft/ft)
MW09-23S/23D	4/19/1995	Pre-ROD	31.97	-1.79	-0.0560
	4/20/1995	Pre-ROD	31.96	-0.99	-0.0310
	11/30/2001	ME 01	31.5	-2.12	-0.0673
	2/25/2002	ME 02	31.45	-1.28	-0.0407
	6/3/2002	ME 03	31.51	-1.65	-0.0524
	9/3/2002	ME 04	31.5	-0.97	-0.0308
	1/13/2003	ME 05	31.55	-1.57	-0.0498
	4/28/2003	ME 06	31.46	-1.51	-0.0480
	6/23/2003	ME 07	31.71	-1.82	-0.0574
	9/9/2003	ME 08	31.56	-0.98	-0.0311
	12/1/2003	ME 09	31.77	-1.04	-0.0327
	3/17/2004	ME 10	31.52	-1.75	-0.0555
	6/14/2004	ME 11	31.87	-1.91	-0.0599
	8/10/2004	ME 12	31.63	-1.3	-0.0411
	10/18/2004	ME 13	31.89	-1.72	-0.0539
	3/16/2005	ME 14	31.66	-2.02	-0.0638
	6/6/2005	ME 15	31.82	-1.23	-0.0387
	9/26/2005	ME 16	31.71	-1.13	-0.0356
	12/2/2005	ME 17	31.57	-1.59	-0.0504
	2/28/2006	ME 18	31.52	-2.6	-0.0825
	11/17/2006	ME 19	31.87	-2.23	-0.0700
	3/15/2007	ME 20	31.43	-1.68	-0.0535
	6/25/2007	ME 21	31.74	-1.05	-0.0331
	11/5/2007	ME 22	31.69	-0.83	-0.0262
	1/29/2008	ME 23	31.66	-1.57	-0.0496
	4/22/2008	ME 24	31.62	-1.92	-0.0607
	7/14/2008	ME 25	31.72	-1.1	-0.0347
	9/24/2008	ME 26	31.71	0.12	0.0038
	12/8/2008	ME 27	31.71	-0.79	-0.0249
	5/1/2009	ME 28	31.7	-1.4	-0.0442
	8/5/2009	ME 29	31.83	-1.97	-0.0619
	10/8/2009	ME 30	31.88	-1.48	-0.0464
	1/5/2010	ME 31	32.01	-1.84	-0.0575
	3/17/2010	ME 32	32.1	-1.73	-0.0539
	7/15/2010	ME 33	31.94	0.51	0.0160
	9/14/2010	ME34	31.57	-2.17	-0.0687
	12/14/2010	ME35	31.84	-1.1	-0.0345
	3/22/2011	ME36	31.84	-2.2	-0.0691
	7/12/2011	ME37	31.97	-1.54	-0.0482
	10/10/2011	ME38	31.9	-1.84	-0.0577
	3/26/2012	ME39	31.74	-1.9	-0.0599
	9/12/2012	ME40	31.79	-0.73	-0.0230
	3/25/2013	ME41	31.79	-1.80	-0.0566
	9/30/2013	ME42	31.79	-1.33	-0.0418
	9/29/2014	ME43	31.79	-0.55	-0.0173
	9/14/2015	ME44	31.79	-1.95	-0.0613
	9/20/2016	ME45	31.79	-1.07	-0.0337
	Pre-ROD Average				-0.0435
	Long-Term Average				-0.0457

TABLE 3
SUMMARY OF VERTICAL HYDRAULIC GRADIENTS
SITE 09: ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Cluster	Date	Event Name	Vertical Distance (ft)	Head Distance (ft)	Hydraulic Gradient (ft/ft)
MW09-24S/24D	4/19/1995	Pre-ROD	13.6	1	0.0735
	4/20/1995	Pre-ROD	13.6	1.27	0.0934
	11/30/2001	ME 01	13.45	0.08	0.0060
	2/25/2002	ME 02	13.48	-0.22	-0.0163
	6/3/2002	ME 03	13.58	-0.26	-0.0192
	9/3/2002	ME 04	13.27	-0.08	-0.0060
	1/13/2003	ME 05	13.6	-0.11	-0.0081
	4/28/2003	ME 06	13.6	-0.14	-0.0103
	6/23/2003	ME 07	13.6	-0.16	-0.0118
	9/9/2003	ME 08	13.53	-0.29	-0.0214
	12/1/2003	ME 09	13.6	-0.23	-0.0169
	3/17/2004	ME 10	13.59	-0.19	-0.0140
	6/14/2004	ME 11	13.57	-0.31	-0.0228
	8/10/2004	ME 12	13.29	-0.27	-0.0203
	10/18/2004	ME 13	13.56	-0.37	-0.0273
	3/16/2005	ME 14	13.6	-0.12	-0.0088
	6/6/2005	ME 15	13.6	-0.01	-0.0011
	9/26/2005	ME 16	13.47	-0.04	-0.0033
	12/2/2005	ME 17	13.6	0.18	0.0129
	2/28/2006	ME 18	13.6	0.3	0.0217
	11/17/2006	ME 19	13.6	-0.02	-0.0015
	3/15/2007	ME 20	13.6	0.2	0.0147
	6/25/2007	ME 21	13.6	0.42	0.0309
	11/5/2007	ME 22	13.42	0.09	0.0067
	1/29/2008	ME 23	13.6	0.09	0.0066
	4/22/2008	ME 24	13.6	0.27	0.0199
	7/14/2008	ME 25	13.6	-1.58	-0.1162
	9/24/2008	ME 26	13.6	0.33	0.0243
	12/8/2008	ME 27	13.6	0.26	0.0191
	5/1/2009	ME 28	13.6	0.4	0.0294
	8/5/2009	ME 29	13.6	0.23	0.0165
	10/8/2009	ME 30	13.6	0.09	0.0066
	1/5/2010	ME 31	13.6	0.12	0.0088
	3/17/2010	ME 32	13.6	0.06	0.0044
	7/15/2010	ME 33	13.6	0.26	0.0191
	9/14/2010	ME34	13.55	0.1	0.0074
	12/14/2010	ME35	13.57	0	0.0000
	3/22/2011	ME36	13.6	0.05	0.0037
	7/12/2011	ME37	13.6	0.22	0.0162
	10/10/2011	ME38	13.6	0.15	0.0110
	3/26/2012	ME39	13.6	0.23	0.0169
	9/12/2012	ME40	13.6	0.3	0.0221
	3/25/2013	ME41	13.6	0.19	0.0140
	9/30/2013	ME42	13.6	0.23	0.0168
	9/29/2014	ME43	13.6	0.38	0.0279
	9/14/2015	ME44	13.6	0.14	0.0103
	9/20/2016	ME45	13.6	-0.02	-0.0015
	Pre-ROD Average				0.0835
	Long-Term Average				0.0050

TABLE 3
SUMMARY OF VERTICAL HYDRAULIC GRADIENTS
SITE 09: ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Cluster	Date	Event Name	Vertical Distance (ft)	Head Distance (ft)	Hydraulic Gradient (ft/ft)
MW09-26S/26D	1/29/2008	ME 23	44.55	3.95	0.0887
	4/22/2008	ME 24	44.55	2.95	0.0662
	7/14/2008	ME 25	44.17	1.34	0.0303
	9/24/2008	ME 26	44.12	0.65	0.0147
	12/8/2008	ME 27	44.55	1.92	0.0431
	5/1/2009	ME 28	44.55	0.36	0.0081
	8/5/2009	ME 29	44.55	1.61	0.0361
	10/8/2009	ME 30	44.36	1.29	0.0291
	1/5/2010	ME 31	44.55	0.71	0.0159
	3/17/2010	ME 32	44.55	0.75	0.0168
	7/15/2010	ME 33	44.14	0.14	0.0032
	9/14/2010	ME34	43.2	-0.45	-0.0104
	12/14/2010	ME35	44.28	1.5	0.0339
	3/22/2011	ME36	44.55		
	7/12/2011	ME37	44.55	1.63	0.0366
	10/10/2011	ME38	44.55	2.55	0.0572
	3/26/2012	ME39	44.55	0.16	0.0036
	9/12/2012	ME40	44.02	0.61	0.0139
	3/25/2013	ME41	44.02	0.04	0.0009
	9/30/2013	ME42	44.02	-0.10	-0.0022
	9/29/2014	ME43	44.02	1.21	0.0275
	9/14/2015	ME44	44.02	-0.64	-0.0145
	9/20/2016	ME45	44.02	-1.54	-0.0350
	Long-Term Average				0.0211
MW09-27S/27D	1/29/2008	ME 23	26.94	0.57	0.0212
	4/22/2008	ME 24	26.94	0.38	0.0141
	7/14/2008	ME 25	26.4	-0.26	-0.0099
	9/24/2008	ME 26	26.79	0.67	0.0250
	12/8/2008	ME 27	26.99	0.84	0.0311
	5/1/2009	ME 28	26.99	0.63	0.0233
	8/5/2009	ME 29	26.97	0.19	0.0070
	10/8/2009	ME 30	26.99	1.46	0.0541
	1/5/2010	ME 31	26.94	-0.94	-0.0349
	3/17/2010	ME 32	26.99	1.56	0.0578
	7/15/2010	ME 33	26.99	1.28	0.0474
	9/14/2010	ME34	26.7	0.15	0.0056
	12/14/2010	ME35	26.99	1.91	0.0708
	3/22/2011	ME36	26.99	1.11	0.0411
	7/12/2011	ME37	26.99	0.63	0.0233
	10/10/2011	ME38	26.99	1.12	0.0415
	3/26/2012	ME39	26.99	0.55	0.0204
	9/12/2012	ME40	26.82	0.49	0.0183
	3/25/2013	ME41	26.82	1.17	0.0436
	9/30/2013	ME42	26.82	0.13	0.0050
	9/29/2014	ME43	26.82	-0.46	-0.0172
	9/14/2015	ME44	26.82	-1.01	-0.0377
	9/20/2016	ME45	26.82	-0.5	-0.0186
	Long-Term Average				0.0188

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TABLE 4
GROUNDWATER QUALITY PARAMETERS MEASURED PRIOR TO SAMPLING MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Number	Event	Date	Time of Reading	Depth to Water (ft BTOC)	Temperature °C	Specific Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	pH (S.U.)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	Color	Odor	Type
MW09-02S	09 ME 45	9/6/2016	14:50	10.86	20.0	184.0	0.50	5.99	141.6	1.54	0.09	CLEAR	NONE	Low-Flow
MW09-03D	09 ME 45	9/6/2016	14:30	10.61	17.2	363.6	0.06	6.87	-31.8	4.61	0.17	CLEAR	NONE	Low-Flow
MW09-07S	09 ME 45	9/7/2016	14:30	22.61	15.2	300.4	0.46	7.12	-135.0	3.46	0.14	CLEAR	NONE	Low-Flow
MW09-08DA	09 ME 45	9/7/2016	15:45	17.05	13.8	730	0.07	6.92	-78.1	8.59	0.46	CLEAR	NONE	Low-Flow
MW09-08S	09 ME 45	9/7/2016	10:50	17.60	13.2	1093	0.05	6.47	24.2	0.38	0.71	CLEAR	NONE	Low-Flow
MW09-09DA	09 ME 45	9/7/2016	14:05	23.93	16.4	808	0.37	7.49	-168.1	3.50	0.40	CLEAR	NONE	Low-Flow
MW09-09S	09 ME 45	9/7/2016	10:30	22.99	16.1	1740	0.35	6.73	-146.1	1.56	0.88	CLEAR	NONE	Low-Flow
MW09-10D	09 ME 45	9/8/2016	11:50	20.07	15.2	194.6	0.12	7.37	-133.7	0.89	0.09	CLEAR	NONE	Low-Flow
MW09-10S	09 ME 45	9/7/2016	15:25	21.2	14.1	627	0.02	6.54	-56.5	1.48	0.39	CLEAR	SLIGHT SULFUR	Low-Flow
MW09-11S	09 ME 45	9/8/2016	14:00	14.08	16.4	318.2	0.38	6.70	-59.5	5.53	0.15	CLEAR	NONE	Low-Flow
MW09-14D	09 ME 45	9/8/2016	14:10	23.29	14.6	989	0.47	6.73	-99.0	3.80	0.50	CLEAR	NONE	Low-Flow
MW09-14IA	09 ME 45	9/16/2016	10:00	24.85	13.9	807	0.46	7.51	-144.1	1.11	0.40	CLEAR	NONE	Low-Flow
MW09-17I	09 ME 45	9/7/2016	15:45	22.01	15.2	565.4	0.33	6.78	-75.4	4.82	0.28	CLEAR	NONE	Low-Flow
MW09-20D	09 ME 45	9/8/2016	10:20	21.25	15.1	1131	0.55	7.25	-125.4	0.91	0.57	CLEAR	NONE	Low-Flow
MW09-20I	09 ME 45	9/8/2016	10:10	21.78	15.7	1763	0.78	6.23	-133.6	3.76	0.90	CLEAR	EGG	Low-Flow
MW09-21D	09 ME 45	9/8/2016	14:30	22.0	13.8	268.5	0.55	8.96	-81.0	0.75	0.16	CLEAR	NONE	Low-Flow
MW09-21S	09 ME 45	9/8/2016	10:40	19.60	13.7	4440	0.01	6.84	120.5	2.10	3.07	CLEAR	ORGANIC	Low-Flow
MW09-23D	09 ME 45	9/8/2016	11:25	25.98	16.7	585.7	0.42	7.36	-182.1	0.92	0.29	CLEAR	NONE	Low-Flow
MW09-23S	09 ME 45	9/8/2016	10:10	24.26	15.5	18349	0.18	6.82	-234.7	1.41	10.91	CLEAR	NONE	Low-Flow
MW09-24D	09 ME 45	9/9/2016	9:35	13.55	15.3	1990	0.01	6.92	-148.4	4.80	1.27	CLEAR	NONE	Low-Flow
MW09-24S	09 ME 45	9/8/2016	14:15	8.19	18.0	372.8	0.05	6.65	-100.1	4.86	0.14	CLEAR	NONE	Low-Flow
MW09-25S	09 ME 45	9/9/2016	11:10	9.55	20.3	1005	0.01	7.08	-147.5	1.62	0.55	CLEAR	ORGANIC	Low-Flow
MW09-26DA	09 ME 45	9/7/2016	11:25	14.57	16.1	145.4	0.11	6.57	-47.8	4.20	0.07	CLEAR	NONE	Low-Flow
MW09-26S	09 ME 45	9/7/2016	14:30	8.20	19.8	94.0	2.11	5.46	237.9	2.09	0.04	BROWN	NONE	Low-Flow
MW09-27D	09 ME 45	9/6/2016	13:00	4.40	16.5	570.7	0.78	7.16	-107.2	5.91	0.28	CLEAR	NONE	Low-Flow
MW09-27S	09 ME 45	9/7/2016	10:15	6.12	18.8	147.4	0.37	6.09	-23.6	3.33	0.07	CLEAR	NONE	Low-Flow

uS/cm = microsiemens per centimeter
mg/L = Milligrams per liter
mV = Millivolts
°C = Degrees celsius
NM = Not measured
% = Percent
NTU = Nephelometric turbidity unit
ppt. = Part per thousand
BTOC = Below top of casing
S.U. = Standard pH units

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TABLE 5
GROUNDWATER QUALITY PARAMETERS MEASURED PRIOR TO SAMPLING PIEZOMETERS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Well Number	Event	Date	Time of Reading	Depth to Water (ft BTOC)	Temperature °C	Specific Conductivity (uS/cm)	Dissolved Oxygen (mg/L)	pH (S.U.)	ORP (mV)	Turbidity (NTU)	Salinity (ppt)	Color	Odor	Type
P09-01	09 ME 45	9/13/2016	12:00	0.2	25.3	32050	6.07	7.04	-91.7	59.5	23.75	clear	none	grab
P09-02A	09 ME 45	9/14/2016	13:35	0.3	26.8	37919	0.12	7.16	-137	over range	24.36	brown	marine	grab
P09-03A	09 ME 45	9/14/2016	13:20	1.2	28.9	38057	0.53	7.50	-101.3	over range	26.44	brown	none	grab
P09-04A	09 ME 45	9/12/2016	12:00	1.3	29.4	30616	2.05	8.12	-179.9	99.2	18.22	clear	marine	grab
P09-06B	09 ME 45	9/13/2016	10:50	1.0	23.8	30995	0.17	7.65	102.4	126	0.13	brown	marine	grab
P09-07B	09 ME 45	9/13/2016	10:40	0.3	24.1	35664	1.13	7.29	157.7	93.1	22.49	brown	marine	grab
P09-08B	09 ME 45	9/13/2016	11:00	0.2	25.7	9597	1.12	7.78	194.3	over range	5.35	brown	marine	grab
P09-09	09 ME 45	9/12/2016	10:45	0.4	20.4	41177	0.00	7.38	-165.4	643	33.54	cloudy	marine	grab
P09-10	09 ME 45	9/12/2016	11:50	0.2	21.7	25589	1.21	6.92	-59.8	185	19.67	cloudy	marine	grab
P09-11B	09 ME 45	9/16/2016	13:45	3.0	20.2	36973	0.07	7.47	-115.1	4.35	23.40	clear	none	low flow
P09-12B	09 ME 45	9/13/2016	11:10	0.8	24.7	3033	0.49	6.91	62.8	over range	1.58	brown	marine	grab

uS/cm = microsiemens per centimeter
mg/L = Milligrams per liter
mV = Millivolts
°C = Degrees celsius
NM = Not measured
% = Percent
NTU = Nephelometric turbidity unit
ppt. = Part per thousand
BTOC = Below top of casing
S.U. = Standard pH units

Table 6
LANDFILL GAS VENT MONITORING LOG
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Project Site Name:	Davisville, Allen Harbor Landfill	Date Measured:	9/26/2016
Project Number:	60273164	Measured by:	TC, DP
Weather Conditions:	60s, Sunny, Dry	Wind Direction:	NW

Location	Time	Barometric Pressure (mm Hg)	Flowrate (ft3/min)	PID (ppm)	CH4 (ppm)	CO2 (%)	O2 (%)	H2S (ppm)	Comments
Background	16:03	764.10	12.14	0.00	0.00	0.10	22.10	0.00	
GV09-01	16:05	764.10	0.20	0.00	1.40	2.60	16.10	1.00	
Background	15:52	764.00	20.24	0.00	0.00	0.10	22.00	0.00	
GV09-02	15:53	764.10	0.35	0.00	1.30	1.00	19.20	1.00	
Background	15:42	764.20	15.18	0.00	0.00	0.10	21.70	0.00	
GV09-03	15:44	764.20	0.32	0.00	0.80	0.50	20.60	1.00	
Background	15:33	764.60	14.21	0.00	0.00	0.10	19.90	0.00	
GV09-04	15:35	764.60	0.40	0.00	2.30	0.50	18.90	1.00	
Background	15:13	764.60	19.21	0.00	0.00	0.10	20.70	0.00	
GV09-05	15:20	764.50	0.23	4.00	0.00	3.20	14.40	0.00	

ft3/min = Cubic foot per minute
mm Hg = Millimeters of mercury
% = Percent
ppm = Parts per million

FIELD INSTRUMENT USED:
LandTEC GEM 5000
MiniRAE 2000 PID

Table 7
SOIL GAS POINT SCREENING LOG
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Project Site Name:	Davisville	Date Measured:	9/9/2016
Project Number:	60273164	Measured by:	DP, TC
Weather Conditions:	Overcast, 80s, Dry	Wind Direction:	E

Location	Time	Barometric Pressure (mm Hg)	PID (ppm)	CH4 (ppm)	CO2 (%)	O2 (%)	H2S (ppm)	Comments
GP09-02	12:51	29.93	0.7	0.0	0.2	21.3	0.0	
Background	12:40	29.94	0.0	0.0	0.0	21.5	0.0	
GP09-03	13:03	29.94	0.0	0.0	0.3	21.0	1.0	
Background	12:58	29.93	0.0	0.0	0.0	21.4	0.0	
GP09-04	13:33	29.96	0.0	0.0	0.3	20.8	1.0	
Background	13:30	29.96	0.0	0.0	0.0	21.1	1.0	
GP09-05	13:40	29.95	0.0	0.0	0.3	20.8	1.0	
Background	13:37	29.95	0.0	0.0	0.0	21.2	1.0	
GP09-06	13:43	29.95	0.0	0.0	0.2	20.8	2.0	
Background	13:42	29.95	0.0	0.0	0.0	21.1	1.0	
GP09-07	13:45	29.94	0.0	0.0	0.4	20.4	2.0	
Background	13:44	29.94	0.0	0.0	0.0	20.9	1.0	
GP09-08	13:52	29.95	0.0	0.0	0.3	20.4	1.0	
Background	13:50	29.95	0.0	0.0	0.0	20.8	1.0	
GP09-09	14:11	29.95	0.0	0.0	0.3	20.3	2.0	
Background	14:08	29.95	0.0	0.0	0.0	20.7	1.0	
GP09-10	14:17	29.94	0.0	0.0	0.3	20.5	3.0	
Background	14:14	29.94	0.0	0.0	0.0	20.8	2.0	
GP09-11	14:22	29.93	0.0	0.0	0.1	20.6	3.0	
Background	14:20	29.93	0.0	0.0	0.0	20.8	2.0	
GP09-12	14:28	29.93	0.0	0.0	0.1	20.6	3.0	
Background	14:26	29.93	0.0	0.0	0.0	20.8	2.0	
GP09-13	14:35	29.93	0.0	0.0	0.1	20.7	3.0	
Background	14:33	29.93	0.0	0.0	0.0	20.9	2.0	
GP09-14	14:39	29.76	0.0	0.0	0.3	20.4	4.0	
Background	14:37	29.76	0.0	0.0	0.0	20.9	2.0	
GP09-15	14:58	29.96	0.0	0.0	0.2	20.3	3.0	
Background	14:55	29.96	0.0	0.0	0.0	20.6	3.0	
GP09-16	15:02	29.96	0.0	0.0	0.1	20.7	2.0	
Background	15:00	29.96	0.0	0.0	0.0	20.9	2.0	
GP09-21	15:13	29.95	0.0	0.0	0.2	21.0	1.0	
Background	15:10	29.95	0.0	0.0	0.0	21.3	1.0	
GP09-22	15:18	29.94	0.0	0.0	0.4	20.8	2.0	
Background	15:16	29.94	0.0	0.0	0.0	21.4	2.0	
GP09-23	15:26	29.93	0.0	0.0	0.4	20.5	2.0	
Background	15:24	29.93	0.0	0.0	0.0	21.1	1.0	
GP09-24	15:32	29.93	2.7	0.0	0.5	20.0	2.0	
Background	15:29	29.93	0.0	0.0	0.0	20.8	2.0	
GP09-25	15:36	29.94	0.0	0.0	0.0	20.1	2.0	
Background	15:34	29.94	0.0	0.0	0.0	20.3	2.0	

mm Hg = Millimeters of mercury
ppm = Parts per million % = Percent

FIELD INSTRUMENT USED:
LandTEC GEM 5000
MiniRAE 2000 PID

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TABLE 8
ANALYTICAL RESULTS - MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		HARBOR SAMP	HARBOR SAMP	MW09-02S	MW09-03D	MW09-07S	MW09-08DA	MW09-08S	MW09-08S	MW09-09DA	MW09-09S	MW09-10D
	SAMPLE DATE		9/27/2016	9/27/2016	9/6/2016	9/6/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/8/2016
	QC IDENTIFIER			Duplicate						Duplicate			
PARAMETER	METHOD	PAL											
VOLATILES (UG/L)													
1,1,1-TRICHLOROETHANE	8260	200	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 10 UJ	< 1.0 U
1,1,2,2-TETRACHLOROETHANE	8260	--	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	5	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
1,1-DICHLOROETHANE	8260	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
1,1-DICHLOROETHENE	8260	7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
1,2-DICHLOROETHANE	8260	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
1,2-DICHLOROPROPANE	8260	5	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 20 U	< 2.0 U
2-BUTANONE	8260	--	< 2.0 U	< 2.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 50 UJ	< 5.0 UJ
2-HEXANONE	8260	--	< 2.0 U	< 2.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 50 UJ	< 5.0 UJ
4-METHYL-2-PENTANONE	8260	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 20 UJ	< 2.0 UJ
ACETONE	8260	--	< 5.0 U	< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 50 UJ	< 5.0 UJ
BENZENE	8260	5	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	1.2 J	5.4	< 10 U	< 1.0 U
BROMODICHLOROMETHANE	8260	80	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
BROMOFORM	8260	80	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 20 U	< 2.0 U
BROMOMETHANE	8260	--	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 20 UJ	< 2.0 UJ
CARBON DISULFIDE	8260	--	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
CARBON TETRACHLORIDE	8260	5	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 20 UJ	< 2.0 U
CHLOROBENZENE	8260	100	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
CHLOROETHANE	8260	--	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
CHLOROFORM	8260	80	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
CHLOROMETHANE	8260	--	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	70	< 0.5 U	< 0.5 U	1.2 J	78	9.6	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	580	< 1.0 U
CIS-1,3-DICHLOROPROPENE	8260	--	< 0.5 U	< 0.5 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 UJ
DIBROMOCHLOROMETHANE	8260	80	< 0.5 U	< 0.5 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 20 U	< 2.0 U
ETHYLBENZENE	8260	70	0.9 J	0.5 J	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
METHYLENE CHLORIDE	8260	5	< 2.0 U	< 2.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
STYRENE	8260	100	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 UJ
TETRACHLOROETHENE	8260	5	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 20 U	< 2.0 U
TOLUENE	8260	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
TRANS-1,2-DICHLOROETHENE	8260	100	< 1.0 U	< 1.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	18 J	< 2.0 U
TRANS-1,3-DICHLOROPROPENE	8260	--	< 0.5 U	< 0.5 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 UJ
TRICHLOROETHENE (TCE)	8260	5	< 1.0 U	< 1.0 U	< 1.0 U	5.8	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 UJ
VINYL CHLORIDE	8260	2	< 1.0 UJ	< 1.0 UJ	< 1.0 U	21	< 1.0 U	< 1.0 U	6.9	< 1.0 U	< 1.0 U	690	< 1.0 U
XYLENES, TOTAL	8260	10000	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 10 U	< 1.0 U
TOTAL CVOCs	8260	--	< 2 U	< 2 U	1.2	100	9.6	< 2 U	6.9	< 2 U	< 2 U	1300	< 2 U
SEMIVOLATILES (UG/L)													
1,2,4-TRICHLOROBENZENE	8270	70					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
1,2-DICHLOROBENZENE	8270	600					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
1,3-DICHLOROBENZENE	8270	600					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
1,4-DICHLOROBENZENE	8270	75					< 5.0 U	< 5.0 U			< 5.0 U	< 5.0 U	
2,2'-OXYBIS(1-CHLOROPROPANE)	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 UJ	

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 8
ANALYTICAL RESULTS - MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		HARBOR SAMP	HARBOR SAMP	MW09-02S	MW09-03D	MW09-07S	MW09-08DA	MW09-08S	MW09-08S	MW09-09DA	MW09-09S	MW09-10D
	SAMPLE DATE		9/27/2016	9/27/2016	9/6/2016	9/6/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/8/2016
	QC IDENTIFIER			Duplicate						Duplicate			
PARAMETER	METHOD	PAL											
2,4,6-TRICHLOROPHENOL	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
2,4-DICHLOROPHENOL	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
2,4-DIMETHYLPHENOL	8270	--					< 5.0 U	< 5.0 U			< 5.0 U	< 5.0 U	
2,4-DINITROPHENOL	8270	--					< 10 UJ	< 10 UJ			< 10 UJ	< 10 UJ	
2,4-DINITROTOLUENE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
2,6-DINITROTOLUENE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
2-CHLORONAPHTHALENE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
2-CHLOROPHENOL	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
2-METHYLPHENOL	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
2-NITROANILINE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
2-NITROPHENOL	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
3,3-DICHLOROBENZIDINE	8270	--					< 5.0 U	< 5.0 U			< 5.0 U	< 5.0 U	
3-NITROANILINE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
4,6-DINITRO-2-METHYLPHENOL	8270	--					< 2.0 UJ	< 2.0 UJ			< 2.0 UJ	< 2.0 UJ	
4-BROMOPHENYL-PHENYLETHER	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
4-CHLORO-3-METHYLPHENOL	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
4-CHLOROANILINE	8270	--					< 5.0 U	< 5.0 U			< 5.0 U	< 5.0 U	
4-CHLOROPHENYL-PHENYLETHER	8270	--					< 2.0 UJ	< 2.0 UJ			< 2.0 UJ	< 2.0 UJ	
4-METHYLPHENOL	8270	--					< 5.0 UJ	< 5.0 UJ			< 5.0 UJ	< 5.0 UJ	
4-NITROANILINE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
4-NITROPHENOL	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
4-NITROANILINE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
4-NITROPHENOL	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
BIS(2-CHLOROETHOXY)METHANE	8270	--					< 5.0 U	< 5.0 U			< 5.0 U	< 5.0 U	
BIS(2-CHLOROETHYL)ETHER	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
BUTYLBENZYLPHTHALATE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
CARBAZOLE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
DIBENZOFURAN	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
DIETHYLPHTHALATE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
DIMETHYL PHTHALATE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
DI-N-BUTYLPHTHALATE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
DI-N-OCTYLPHTHALATE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
HEXACHLOROBUTADIENE	8270	--					< 2.0 UJ	< 2.0 UJ			< 2.0 UJ	< 2.0 UJ	
HEXACHLOROCYCLOPENTADIENE	8270	50					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
HEXACHLOROETHANE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
ISOPHORONE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
NITROBENZENE	8270	--					< 5.0 U	< 5.0 U			< 5.0 U	< 5.0 U	
N-NITROSODINPROPYLAMINE	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
N-NITROSODIPHENYLAMINE	8270	--					< 5.0 U	< 5.0 U			< 5.0 U	< 5.0 U	
PAH, TOTAL	8270	--					3.4	< 2 U			< 2 U	2.3	
PHENOL	8270	--					< 2.0 U	< 2.0 U			< 2.0 U	< 2.0 U	
SEMIVOLATILES SIM (UG/L)													
2,4,5-TRICHLOROPHENOL	8270_SIM	--					< 0.10 U	< 0.10 U			0.44 J	< 0.10 U	
2-METHYLNAPHTHALENE	8270_SIM	--	< 0.10 U	< 0.10 U			3.4 J	< 0.10 UJ			< 0.10 UJ	< 0.10 UJ	
ACENAPHTHENE	8270_SIM	--	< 0.10 U	< 0.10 U			< 0.10 UJ	< 0.10 UJ			< 0.10 UJ	< 0.10 UJ	
ACENAPHTHYLENE	8270_SIM	--	< 0.10 U	< 0.10 U			< 0.10 U	< 0.10 U			< 0.10 U	< 0.10 U	
ANTHRACENE	8270_SIM	--	< 0.10 U	< 0.10 U			< 0.10 U	< 0.10 U			< 0.10 U	0.15	
BENZO[A]ANTHRACENE	8270_SIM	--	< 0.10 UJ	< 0.10 UJ			< 0.10 U	< 0.10 U			< 0.10 U	0.23	

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PARAMETER	LOCATION ID		HARBOR SAMP	HARBOR SAMP	MW09-02S	MW09-03D	MW09-07S	MW09-08DA	MW09-08S	MW09-08S	MW09-09DA	MW09-09S	MW09-10D
	SAMPLE DATE		9/27/2016	9/27/2016	9/6/2016	9/6/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/8/2016
	QC IDENTIFIER			Duplicate						Duplicate			
PARAMETER	METHOD	PAL											
BENZO[A]PYRENE	8270_SIM	0.2	< 0.10 UJ	< 0.10 UJ			< 0.10 U	< 0.10 U			< 0.10 U	0.21	
BENZO[B]FLUORANTHENE	8270_SIM	--	< 0.10 UJ	< 0.10 UJ			< 0.10 U	< 0.10 U			< 0.10 U	0.26	
BENZO[G,H,I]PERYLENE	8270_SIM	--	< 0.10 UJ	< 0.10 UJ			< 0.10 U	< 0.10 U			< 0.10 U	0.22	
BENZO[K]FLUORANTHENE	8270_SIM	--	< 0.10 UJ	< 0.10 UJ			< 0.10 U	< 0.10 U			< 0.10 U	0.22	
BIS(2-ETHYLHEXYL)PHTHALATE	8270_SIM	6					< 1.0 UJ	< 1.0 UJ			< 1.0 UJ	< 1.0 UJ	
CHRYSENE	8270_SIM	--	< 0.10 UJ	< 0.10 UJ			< 0.10 U	< 0.10 U			< 0.10 U	0.22	
DIBENZ[A,H]ANTHRACENE	8270_SIM	--	< 0.10 UJ	< 0.10 UJ			< 0.10 U	< 0.10 U			< 0.10 U	0.21	
FLUORANTHENE	8270_SIM	--	< 0.10 U	< 0.10 U			< 0.10 U	< 0.10 U			< 0.10 U	0.21	
FLUORENE	8270_SIM	--	< 0.10 U	< 0.10 U			< 0.10 U	< 0.10 U			< 0.10 U	< 0.10 U	
HEXACHLOROBENZENE	8270_SIM	1					< 0.10 U	< 0.10 U			< 0.10 U	0.19 J	
INDENO[1,2,3-CD]PYRENE	8270_SIM	--	< 0.10 UJ	< 0.10 UJ			< 0.10 U	< 0.10 U			< 0.10 U	0.19	
NAPHTHALENE	8270_SIM	20	< 0.10 UJ	< 0.10 UJ			0.50 J	< 0.10 UJ			< 0.10 UJ	< 0.10 UJ	
PENTACHLOROPHENOL	8270_SIM	1					< 1.0 UJ	< 1.0 UJ			< 1.0 UJ	< 1.0 UJ	
PHENANTHRENE	8270_SIM	--	< 0.10 U	< 0.10 U			< 0.10 UJ	< 0.10 UJ			< 0.10 UJ	< 0.10 UJ	
PYRENE	8270_SIM	--	< 0.10 U	< 0.10 U			< 0.10 UJ	< 0.10 UJ			< 0.10 UJ	0.20 J	
PAH, TOTAL	8270_SIM	--	< 0.1 U	< 0.1 U									
METALS (UG/L)													
ALUMINUM	6020	--	< 2500 U	< 2500 U	< 20.0 U	< 10.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	12.9 J	< 20.0 U
ANTIMONY	6020	6	< 40.0 U	< 40.0 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U
ARSENIC	6020	10	< 200 U	< 500 U	< 0.80 UJ	1.1 J-	21.0	4.3	9.1	9.3	4.9	0.67 J	8.4
BERYLLIUM	6020	4	< 75.0 U	< 75.0 U	< 0.30 U	< 0.30 U	< 0.30 U	0.083 J	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U
CHROMIUM, TOTAL	6020	100	40.5 J+	91.9 J+	< 0.60 UJ	0.60 J-	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	0.20 J-	< 0.60 UJ	0.83 J-	< 0.60 UJ
COPPER	6020	--	< 250 U	< 250 U	0.71 J	< 1.0 U	0.48 J	0.41 J	0.27 J	0.27 J	< 1.0 U	< 1.0 U	0.28 J
IRON	6020	--	< 13000 UJ	< 13000 UJ	249	1030	13600	10500	6660	6540	2460	427	863
LEAD	6020	15	< 15.0 UJ	< 15.0 UJ	< 0.30 U	< 0.30 U	< 0.30 U	< 1.0 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 1.0 U
MANGANESE	6020	--	< 380 U	< 380 U	271	352	135	442	845	826	577	632	405
MERCURY	7470	2	< 0.10 U	< 0.10 U	< 0.10 UJ	0.037 J	< 0.10 U	< 0.10 U	0.038 J	0.032 J	0.041 J	< 0.10 U	< 0.10 U
NICKEL	6020	100	< 150 U	< 150 U	0.61 J	0.72 J	0.44 J	0.48 J	2.1	2.1	0.46 J	1.3	0.26 J
ZINC	6020	--	< 380 U	< 380 U	46.1	2.9	2.9	1.1 J	< 1.5 U	0.91 J	1.4 J	1.3 J	2.9
DISSOLVED METALS (UG/L)		--											
ALUMINUM	6020	--	< 2500 U	< 2500 U	< 20.0 U	< 10.0 U	< 10.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	11.4 J	< 20.0 U
ANTIMONY	6020	6	< 40.0 U	< 40.0 U	0.39 J	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U
ARSENIC	6020	10	< 500 U	< 500 U	0.46 J-	1.0 J-	20.9	4.5	8.7	8.7	5.2	0.65 J	8.6
BERYLLIUM	6020	4	< 75.0 U	< 75.0 U	< 0.30 U	< 0.30 U	< 0.30 U	0.10 J	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U
CHROMIUM, TOTAL	6020	100	85.9 J	100 J	< 0.60 UJ	0.52 J-	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	0.97 J-	< 0.60 UJ
COPPER	6020	--	< 250 U	< 250 U	2.1	0.39 J	0.28 J	0.32 J	0.26 J	0.26 J	0.35 J	0.26 J	0.42 J
IRON	6020	--	< 13000 U	< 13000 U	68.2 J	746	13600	9970	6600	6500	2560	394	817
LEAD	6020	15	< 15.0 U	< 15.0 U	< 1.0 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 1.0 U
MANGANESE	6020	--	< 380 U	< 380 U	118	351	143	423	837	829	593	657	402
MERCURY	7470	2	< 0.10 UJ	< 0.10 UJ	0.040 J	0.036 J	< 0.10 U	0.039 J	0.029 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
NICKEL	6020	100	< 150 U	< 150 U	1.2	0.76 J	0.59 J	0.35 J	2.1	2.2	0.45 J	1.1	0.49 J
ZINC	6020	--	< 380 U	< 380 U	5.2	2.1	4.4	< 1.5 U	< 1.5 U	2.1	1.0 J	< 1.5 U	1.4 J
PCBS (UG/L)													
AROCLOR-1016	8082	--					< 0.20 U	< 0.20 U			< 0.20 U		
AROCLOR-1221	8082	--					< 0.10 U	< 0.10 U			< 0.10 U		

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 8
ANALYTICAL RESULTS - MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		HARBOR SAMP	HARBOR SAMP	MW09-02S	MW09-03D	MW09-07S	MW09-08DA	MW09-08S	MW09-08S	MW09-09DA	MW09-09S	MW09-10D
	SAMPLE DATE		9/27/2016	9/27/2016	9/6/2016	9/6/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/7/2016	9/8/2016
	QC IDENTIFIER			Duplicate						Duplicate			
PARAMETER	METHOD	PAL											
AROCLOR-1232	8082	--					< 0.20 U	< 0.20 U			< 0.20 U		
AROCLOR-1242	8082	--					< 0.10 U	< 0.10 U			< 0.10 U		
AROCLOR-1248	8082	--					< 0.10 U	< 0.10 U			< 0.10 U		
AROCLOR-1254	8082	--					< 0.20 U	< 0.20 U			< 0.20 U		
AROCLOR-1260	8082	--					< 0.20 U	< 0.20 U			< 0.20 U		
PCB, TOTAL	8082	0.5					< 0.2 U	< 0.2 U			< 0.2 U		
PESTICIDES (UG/L)													
4,4-DDD	8081	--					< 0.0063 U	< 0.0063 U			< 0.0063 U		
4,4-DDE	8081	--					< 0.0063 U	< 0.0063 U			< 0.0063 U		
4,4-DDT	8081	--					< 0.0063 U	< 0.0063 U			< 0.0063 U		
ALDRIN	8081	--					< 0.0031 U	< 0.0031 U			< 0.0031 U		
ALPHA-BHC	8081	--					< 0.0031 U	< 0.0031 U			< 0.0031 U		
ALPHA-CHLORDANE	8081	--					< 0.0031 U	< 0.0031 U			< 0.0031 U		
BETA-BHC	8081	--					< 0.0031 U	< 0.0031 U			< 0.0031 U		
DELTA-BHC	8081	--					< 0.0031 U	< 0.0031 U			< 0.0031 U		
DIELDRIN	8081	--					< 0.0063 U	< 0.0063 U			< 0.0063 U		
ENDOSULFAN I	8081	--					< 0.0031 U	< 0.0031 U			< 0.0031 U		
ENDOSULFAN II	8081	--					< 0.0063 U	< 0.0063 U			< 0.0063 U		
ENDOSULFAN SULFATE	8081	--					< 0.0063 U	< 0.0063 U			< 0.0063 U		
ENDRIN	8081	2					< 0.0063 U	< 0.0063 U			< 0.0063 U		
ENDRIN ALDEHYDE	8081	--					< 0.031 U	< 0.031 U			< 0.031 U		
ENDRIN KETONE	8081	2					< 0.0063 U	< 0.0063 U			< 0.0063 U		
HEPTACHLOR	8081	0.4					< 0.0031 U	< 0.0031 U			< 0.0031 U		
HEPTACHLOR EPOXIDE	8081	0.2					< 0.0031 U	< 0.0031 U			< 0.0031 U		
LINDANE	8081	--					< 0.0031 U	< 0.0031 U			< 0.0031 U		
METHOXYCHLOR	8081	40					< 0.063 U	< 0.063 U			< 0.063 U		
TOXAPHENE	8081	3					< 0.25 U	< 0.25 U			< 0.25 U		
TRANS-CHLORDANE	8081	--					< 0.0031 U	< 0.0031 U			< 0.0031 U		
MISCELLANEOUS PARAMETERS (G/L)													
SALINITY		--	29	30									

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
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TABLE 8
ANALYTICAL RESULTS - MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		MW09-10S	MW09-11S	MW09-14D	MW09-14IA	MW09-14IA	MW09-17I	MW09-20D	MW09-20D	MW09-20I	MW09-21D	MW09-21S
	SAMPLE DATE		9/7/2016	9/8/2016	9/8/2016	9/16/2016	9/16/2016	9/7/2016	9/8/2016	9/8/2016	9/8/2016	9/8/2016	9/8/2016
	QC IDENTIFIER						Duplicate			Duplicate			
PARAMETER	METHOD	PAL											
VOLATILES (UG/L)													
1,1,1-TRICHLOROETHANE	8260	200	< 1.0 UJ	< 1.0 UJ	R	< 1.0 U	< 1.0 U	< 1.0 UJ	R	R	< 1.0 U	< 5.0 UJ	< 1.0 UJ
1,1,2,2-TETRACHLOROETHANE	8260	--	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 U	< 1.0 U	R	R	95000 J	< 5.0 U	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	5	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 U	< 1.0 U	R	R	3600 J	< 5.0 U	< 1.0 U
1,1-DICHLOROETHANE	8260	5	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U	< 5.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	7	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 U	< 1.0 U	R	R	550 J	< 5.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	5	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 U	< 1.0 U	R	R	11	< 5.0 U	< 1.0 U
1,2-DICHLOROPROPANE	8260	5	< 2.0 U	< 2.0 U	R	< 2.0 U	< 2.0 U	< 2.0 U	R	R	< 2.0 U	< 10 U	< 2.0 U
2-BUTANONE	8260	--	< 5.0 UJ	< 5.0 UJ	R	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	R	R	< 5.0 UJ	< 25 UJ	< 5.0 UJ
2-HEXANONE	8260	--	< 5.0 UJ	< 5.0 UJ	R	< 5.0 U	< 5.0 UJ	< 5.0 UJ	R	R	< 5.0 UJ	< 25 UJ	< 5.0 UJ
4-METHYL-2-PENTANONE	8260	--	< 2.0 UJ	< 2.0 U	R	< 2.0 U	< 2.0 UJ	< 2.0 UJ	R	R	< 2.0 UJ	< 10 U	29
ACETONE	8260	--	< 5.0 UJ	< 5.0 UJ	R	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	R	R	< 5.0 UJ	< 25 UJ	< 5.0 UJ
BENZENE	8260	5	2.5 J	4.9 J	R	26 J	19 J	15	R	R	7.3	< 5.0 U	6.8
BROMODICHLOROMETHANE	8260	80	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U	< 5.0 U	< 1.0 U
BROMOFORM	8260	80	< 2.0 U	< 2.0 UJ	R	< 2.0 U	< 2.0 U	< 2.0 U	R	R	< 2.0 U	< 10 UJ	< 2.0 UJ
BROMOMETHANE	8260	--	< 2.0 UJ	< 2.0 U	R	< 2.0 U	< 2.0 UJ	< 2.0 UJ	R	R	< 2.0 UJ	< 10 U	< 2.0 U
CARBON DISULFIDE	8260	--	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 U	< 1.0 U	R	R	4.3 J	< 5.0 U	< 1.0 U
CARBON TETRACHLORIDE	8260	5	< 2.0 UJ	< 2.0 UJ	R	< 2.0 U	< 2.0 U	< 2.0 UJ	R	R	< 2.0 U	< 10 UJ	< 2.0 UJ
CHLOROBENZENE	8260	100	< 1.0 U	100	R	< 1.0 U	< 1.0 U	1.6 J	R	R	< 1.0 U	< 5.0 U	< 1.0 U
CHLOROETHANE	8260	--	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U	< 5.0 U	< 1.0 U
CHLOROFORM	8260	80	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 U	< 1.0 U	R	R	54 J	< 5.0 U	< 1.0 U
CHLOROMETHANE	8260	--	< 1.0 U	< 1.0 U	R	< 1.0 UJ	< 1.0 U	< 1.0 U	R	R	< 1.0 U	< 5.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	70	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 U	< 1.0 U	R	R	22000 J	300	< 1.0 U
CIS-1,3-DICHLOROPROPENE	8260	--	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 UJ	< 1.0 U	R	R	< 1.0 UJ	< 5.0 U	< 1.0 U
DIBROMOCHLOROMETHANE	8260	80	< 2.0 U	< 2.0 U	R	< 2.0 U	< 2.0 U	< 2.0 U	R	R	< 2.0 U	< 10 U	< 2.0 U
ETHYLBENZENE	8260	70	< 1.0 U	< 1.0 U	R	3.6 J	2.4 J	< 1.0 U	R	R	< 1.0 U	< 5.0 U	< 1.0 U
METHYLENE CHLORIDE	8260	5	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 U	< 1.0 U	R	R	13 J	< 5.0 U	< 1.0 U
STYRENE	8260	100	< 1.0 U	< 1.0 U	R	< 1.0 U	1.5 J	< 1.0 U	R	R	< 1.0 UJ	< 5.0 U	< 1.0 U
TETRACHLOROETHENE	8260	5	< 2.0 U	< 2.0 U	R	< 2.0 U	< 2.0 U	< 2.0 U	R	R	140	< 10 U	< 2.0 U
TOLUENE	8260	100	< 1.0 U	< 1.0 U	R	4.8 J	3.0 J	< 1.0 U	R	R	3.2 J	< 5.0 U	< 1.0 U
TRANS-1,2-DICHLOROETHENE	8260	100	< 2.0 U	< 2.0 U	R	< 2.0 U	< 2.0 U	< 2.0 U	R	R	14000 J	9.8 J	< 2.0 U
TRANS-1,3-DICHLOROPROPENE	8260	--	< 1.0 U	< 1.0 U	R	< 1.0 U	< 1.0 UJ	< 1.0 U	R	R	< 1.0 UJ	< 5.0 U	< 1.0 U
TRICHLOROETHENE (TCE)	8260	5	< 1.0 U	< 1.0 U	1.7 J	< 1.0 U	< 1.0 U	< 1.0 U	1.5 J	R	490000 J	48	< 1.0 U
VINYL CHLORIDE	8260	2	< 1.0 U	< 1.0 U	R	3.4 J	2.7 J	< 1.0 U	R	R	4500 J	73	< 1.0 U
XYLENES, TOTAL	8260	10000	< 1.0 U	< 1.0 U	R	13 J	8.7 J	< 1.0 U	R	R	< 1.0 U	< 5.0 U	< 1.0 U
TOTAL CVOCs	8260	--	< 2 U	100	1.7	3.4	2.7	1.6	1.5		630000	430	< 2 U
SEMIVOLATILES (UG/L)													
1,2,4-TRICHLOROBENZENE	8270	70			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
1,2-DICHLOROBENZENE	8270	600			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
1,3-DICHLOROBENZENE	8270	600			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
1,4-DICHLOROBENZENE	8270	75			< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U		< 5.0 U
2,2'-OXYBIS(1-CHLOROPROPANE)	8270	--			< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ		< 2.0 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
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TABLE 8
ANALYTICAL RESULTS - MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		MW09-10S	MW09-11S	MW09-14D	MW09-14IA	MW09-14IA	MW09-17I	MW09-20D	MW09-20D	MW09-20I	MW09-21D	MW09-21S
	SAMPLE DATE		9/7/2016	9/8/2016	9/8/2016	9/16/2016	9/16/2016	9/7/2016	9/8/2016	9/8/2016	9/8/2016	9/8/2016	9/8/2016
	QC IDENTIFIER						Duplicate			Duplicate			
PARAMETER	METHOD	PAL											
2,4,6-TRICHLOROPHENOL	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
2,4-DICHLOROPHENOL	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
2,4-DIMETHYLPHENOL	8270	--			< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U		< 5.0 U
2,4-DINITROPHENOL	8270	--			< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ		< 10 UJ
2,4-DINITROTOLUENE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
2,6-DINITROTOLUENE	8270	--			< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
2-CHLORONAPHTHALENE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
2-CHLOROPHENOL	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
2-METHYLPHENOL	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
2-NITROANILINE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
2-NITROPHENOL	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
3,3-DICHLOROBENZIDINE	8270	--			< 5.0 U	< 5.0 UJ	< 5.0 UJ	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U		< 5.0 U
3-NITROANILINE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
4,6-DINITRO-2-METHYLPHENOL	8270	--			< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ		< 2.0 UJ
4-BROMOPHENYL-PHENYLETHER	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
4-CHLORO-3-METHYLPHENOL	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
4-CHLOROANILINE	8270	--			< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U		< 5.0 U
4-CHLOROPHENYL-PHENYLETHER	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U		< 2.0 UJ
4-METHYLPHENOL	8270	--			< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	1.7 J		< 5.0 UJ
4-NITROANILINE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
4-NITROPHENOL	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
BIS(2-CHLOROETHOXY)METHANE	8270	--			< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U		< 5.0 U
BIS(2-CHLOROETHYL)ETHER	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		2.7 J
BUTYLBENZYLPHTHALATE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
CARBAZOLE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	6.9 J	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
DIBENZOFURAN	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
DIETHYLPHTHALATE	8270	--			< 2.0 U	< 2.0 U	1.6 J	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
DIMETHYL PHTHALATE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
DI-N-BUTYLPHTHALATE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
DI-N-OCTYLPHTHALATE	8270	--			< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ		< 2.0 U
HEXACHLOROBUTADIENE	8270	--			< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ		< 2.0 UJ
HEXACHLOROCYCLOPENTADIENE	8270	50			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
HEXACHLOROETHANE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
ISOPHORONE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
NITROBENZENE	8270	--			< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U		< 5.0 U
N-NITROSODINPROPYLAMINE	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
N-NITROSODIPHENYLAMINE	8270	--			< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U		< 5.0 U
PAH, TOTAL	8270	--			< 2 U			20	< 2 U	< 2 U	4.4		< 2 U
PHENOL	8270	--			< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U		< 2.0 U
SEMIVOLATILES SIM (UG/L)													
2,4,5-TRICHLOROPHENOL	8270_SIM	--			< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		< 0.10 U
2-METHYLNAPHTHALENE	8270_SIM	--			< 0.10 UJ	< 0.10 U	< 0.10 U	20 J	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		< 0.10 UJ
ACENAPHTHENE	8270_SIM	--			< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		< 0.10 UJ
ACENAPHTHYLENE	8270_SIM	--			< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		< 0.10 U
ANTHRACENE	8270_SIM	--			< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.23		< 0.10 U
BENZO[A]ANTHRACENE	8270_SIM	--			< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.41		< 0.10 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 8
ANALYTICAL RESULTS - MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		MW09-10S	MW09-11S	MW09-14D	MW09-14IA	MW09-14IA	MW09-17I	MW09-20D	MW09-20D	MW09-20I	MW09-21D	MW09-21S
	SAMPLE DATE		9/7/2016	9/8/2016	9/8/2016	9/16/2016	9/16/2016	9/7/2016	9/8/2016	9/8/2016	9/8/2016	9/8/2016	9/8/2016
	QC IDENTIFIER						Duplicate			Duplicate			
PARAMETER	METHOD	PAL											
BENZO[A]PYRENE	8270_SIM	0.2			< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	0.43		< 0.10 U
BENZO[B]FLUORANTHENE	8270_SIM	--			< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.50		< 0.10 U
BENZO[G,H,I]PERYLENE	8270_SIM	--			< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	0.45		< 0.10 U
BENZO[K]FLUORANTHENE	8270_SIM	--			< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.44		< 0.10 U
BIS(2-ETHYLHEXYL)PHTHALATE	8270_SIM	6			< 1.0 UJ	0.19 J	0.25 J	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ		< 1.0 UJ
CHRYSENE	8270_SIM	--			< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.42		< 0.10 U
DIBENZ[A,H]ANTHRACENE	8270_SIM	--			< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	0.42		< 0.10 U
FLUORANTHENE	8270_SIM	--			< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.37		< 0.10 U
FLUORENE	8270_SIM	--			< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U		< 0.10 U
HEXACHLOROBENZENE	8270_SIM	1			< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.36 J		< 0.10 U
INDENO[1,2,3-CD]PYRENE	8270_SIM	--			< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 U	0.40		< 0.10 U
NAPHTHALENE	8270_SIM	20			< 0.10 UJ	13 J	14 J	3.7 J	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		< 0.10 UJ
PENTACHLOROPHENOL	8270_SIM	1			< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ		< 1.0 UJ
PHENANTHRENE	8270_SIM	--			< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ		< 0.10 UJ
PYRENE	8270_SIM	--			< 0.10 UJ	< 0.10 U	< 0.10 U	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	0.35 J		< 0.10 UJ
PAH, TOTAL	8270_SIM	--				13	14						
METALS (UG/L)													
ALUMINUM	6020	--	< 20.0 U	37.8	< 10.0 U	11.0 J	9.5 J	< 20.0 U	< 20.0 U	< 20.0 U	109	28.6	< 100 U
ANTIMONY	6020	6	< 0.80 U	0.50 J	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	0.28 J	0.27 J	< 4.0 U
ARSENIC	6020	10	15.7	< 0.80 UJ	4.2	59.9	58.0	0.47 J-	5.3	5.5	3.5	1.1 J-	4.0 J
BERYLLIUM	6020	4	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 1.5 U
CHROMIUM, TOTAL	6020	100	0.72 J-	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	2.9	0.31 J-	0.93 J-
COPPER	6020	--	0.74 J	2.6	0.32 J	0.98 J	< 2.0 U	< 1.0 U	0.27 J	0.36 J	2.0 J	0.25 J	< 5.0 U
IRON	6020	--	7780	5040	28100	14000	13600	6150	3820	3830	25200	167 J	1720
LEAD	6020	15	< 1.0 U	1.1	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	0.50 J	< 1.0 U	< 1.5 U
MANGANESE	6020	--	279	245	701	120	114	668	1220	1220	960	45.9	55.9
MERCURY	7470	2	0.033 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.034 J	< 0.10 U
NICKEL	6020	100	1.8	2.3	0.83 J	2.0	1.9	0.26 J	0.75 J	0.65 J	2.1	0.66 J	2.6 J
ZINC	6020	--	2.3	136	0.86 J	5.8	5.1	< 1.5 U	0.75 J	1.5 J	5.1	1.9 J	12.6
DISSOLVED METALS (UG/L)		--											
ALUMINUM	6020	--	< 20.0 U	24.4	< 20.0 U	5.1 J	4.8 J	< 20.0 U	< 20.0 U	< 20.0 U	29.5	29.3	< 250 U
ANTIMONY	6020	6	< 0.80 U	0.31 J	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U	0.28 J	< 4.0 U
ARSENIC	6020	10	15.5	< 0.80 UJ	4.4	59.4	58.2	0.58 J-	5.3	5.6	2.7	0.75 J-	< 20.0 UJ
BERYLLIUM	6020	4	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 7.5 U
CHROMIUM, TOTAL	6020	100	0.72 J-	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	< 0.60 UJ	1.9 J	0.46 J-	< 15.0 UJ
COPPER	6020	--	0.40 J	1.3 J	0.96 J	< 1.0 U	< 1.0 U	< 1.0 U	0.63 J	2.6 J	0.35 J	< 1.0 U	< 25.0 U
IRON	6020	--	8180	4380	26800	13800	13500	6080	3820	3930	22700	34.2 J	1820 J
LEAD	6020	15	< 1.0 U	0.41 J	0.099 J	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 1.5 U
MANGANESE	6020	--	290	251	690	117	113	681	1190	1240	894	42.1	54.8
MERCURY	7470	2	0.029 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	0.043 J	< 0.10 U
NICKEL	6020	100	2.0	2.0	0.75 J	1.8	1.8	0.41 J	0.68 J	0.78 J	1.6	0.59 J	5.0 J
ZINC	6020	--	2.9	69.8	1.5 J	< 1.5 U	0.83 J	1.4 J	2.9	2.3	1.3 J	2.3	< 38.0 U
PCBS (UG/L)													
AROCLOR-1016	8082	--		< 0.20 U		< 0.20 U	< 0.20 U	< 0.20 U					< 0.20 U
AROCLOR-1221	8082	--		< 0.10 U		< 0.10 U	< 0.10 U	< 0.10 U					< 0.10 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
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TABLE 8
ANALYTICAL RESULTS - MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		MW09-10S	MW09-11S	MW09-14D	MW09-14IA	MW09-14IA	MW09-17I	MW09-20D	MW09-20D	MW09-20I	MW09-21D	MW09-21S
	SAMPLE DATE		9/7/2016	9/8/2016	9/8/2016	9/16/2016	9/16/2016	9/7/2016	9/8/2016	9/8/2016	9/8/2016	9/8/2016	9/8/2016
	QC IDENTIFIER						Duplicate			Duplicate			
PARAMETER	METHOD	PAL											
AROCLOR-1232	8082	--		< 0.20 U		< 0.20 U	< 0.20 U	< 0.20 U					< 0.20 U
AROCLOR-1242	8082	--		< 0.10 U		< 0.10 U	< 0.10 U	< 0.10 U					< 0.10 U
AROCLOR-1248	8082	--		< 0.10 U		< 0.10 U	< 0.10 U	< 0.10 U					< 0.10 U
AROCLOR-1254	8082	--		< 0.20 U		< 0.20 U	< 0.20 U	< 0.20 U					< 0.20 U
AROCLOR-1260	8082	--		< 0.20 U		< 0.20 U	< 0.20 U	< 0.20 U					< 0.20 U
PCB, TOTAL	8082	0.5		< 0.2 U		< 0.2 U	< 0.2 U	< 0.2 U					< 0.2 U
PESTICIDES (UG/L)													
4,4-DDD	8081	--		< 0.0063 U		< 0.0063 UJ	< 0.0063 U	< 0.0063 U					< 0.0063 U
4,4-DDE	8081	--		< 0.0063 U		< 0.0063 UJ	< 0.0063 U	< 0.0063 U					< 0.0063 U
4,4-DDT	8081	--		< 0.0063 U		< 0.0063 UJ	< 0.0063 U	< 0.0063 U					< 0.0063 U
ALDRIN	8081	--		< 0.0031 U		< 0.0031 UJ	< 0.0031 U	< 0.0031 U					< 0.0031 U
ALPHA-BHC	8081	--		< 0.0031 U		< 0.0031 UJ	< 0.0031 U	< 0.0031 U					< 0.0031 U
ALPHA-CHLORDANE	8081	--		< 0.0031 U		< 0.0031 UJ	< 0.0031 U	< 0.0031 U					< 0.0031 U
BETA-BHC	8081	--		< 0.0031 U		< 0.0031 UJ	< 0.0031 U	< 0.0031 U					< 0.0031 U
DELTA-BHC	8081	--		< 0.0031 U		< 0.0031 UJ	< 0.0031 U	< 0.0031 U					< 0.0031 U
DIELDRIN	8081	--		< 0.0063 U		< 0.0063 UJ	< 0.0063 U	< 0.0063 U					< 0.0063 U
ENDOSULFAN I	8081	--		< 0.0031 U		< 0.0031 UJ	< 0.0031 U	< 0.0031 U					< 0.0031 U
ENDOSULFAN II	8081	--		< 0.0063 U		< 0.0063 UJ	< 0.0063 U	< 0.0063 U					< 0.0063 U
ENDOSULFAN SULFATE	8081	--		< 0.0063 U		< 0.0063 UJ	< 0.0063 U	< 0.0063 U					< 0.0063 U
ENDRIN	8081	2		< 0.0063 U		< 0.0063 UJ	< 0.0063 U	< 0.0063 U					< 0.0063 U
ENDRIN ALDEHYDE	8081	--		< 0.031 U		< 0.031 UJ	< 0.031 U	< 0.031 U					< 0.031 U
ENDRIN KETONE	8081	2		< 0.0063 U		< 0.0063 UJ	< 0.0063 U	< 0.0063 U					< 0.0063 U
HEPTACHLOR	8081	0.4		< 0.0031 U		< 0.0031 UJ	< 0.0031 U	< 0.0031 U					< 0.0031 U
HEPTACHLOR EPOXIDE	8081	0.2		< 0.0031 U		< 0.0031 UJ	< 0.0031 U	< 0.0031 U					< 0.0031 U
LINDANE	8081	--		< 0.0031 U		< 0.0031 UJ	< 0.0031 U	< 0.0031 U					< 0.0031 U
METHOXYCHLOR	8081	40		< 0.063 U		< 0.063 UJ	< 0.063 U	< 0.063 U					< 0.063 U
TOXAPHENE	8081	3		< 0.25 U		< 0.25 UJ	< 0.25 U	< 0.25 U					< 0.25 U
TRANS-CHLORDANE	8081	--		< 0.0031 U		< 0.0031 UJ	< 0.0031 U	< 0.0031 U					< 0.0031 U
MISCELLANEOUS PARAMETERS (G/L)													
SALINITY		--											

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 8
ANALYTICAL RESULTS - MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		MW09-23D	MW09-23S	MW09-24D	MW09-24S	MW09-25S	MW09-26DA	MW09-26S	MW09-27D	MW09-27S	MW09-27S
	SAMPLE DATE		9/8/2016	9/8/2016	9/9/2016	9/8/2016	9/9/2016	9/7/2016	9/7/2016	9/6/2016	9/6/2016	9/7/2016
	QC IDENTIFIER										Duplicate	
PARAMETER	METHOD	PAL										
VOLATILES (UG/L)												
1,1,1-TRICHLOROETHANE	8260	200	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	R	R	< 1.0 UJ
1,1,2,2-TETRACHLOROETHANE	8260	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
1,1-DICHLOROETHANE	8260	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
1,1-DICHLOROETHENE	8260	7	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
1,2-DICHLOROETHANE	8260	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
1,2-DICHLOROPROPANE	8260	5	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	R	R	< 2.0 U
2-BUTANONE	8260	--	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	R	R	< 5.0 UJ
2-HEXANONE	8260	--	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	R	R	< 5.0 UJ
4-METHYL-2-PENTANONE	8260	--	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	R	R	< 2.0 UJ
ACETONE	8260	--	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	R	R	< 5.0 UJ
BENZENE	8260	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	14	< 1.0 U	< 1.0 U	R	R	< 1.0 U
BROMODICHLOROMETHANE	8260	80	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
BROMOFORM	8260	80	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U	R	R	< 2.0 U
BROMOMETHANE	8260	--	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	R	R	< 2.0 UJ
CARBON DISULFIDE	8260	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
CARBON TETRACHLORIDE	8260	5	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	R	R	< 2.0 UJ
CHLOROBENZENE	8260	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	14	< 1.0 U	< 1.0 U	R	R	< 1.0 U
CHLOROETHANE	8260	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
CHLOROFORM	8260	80	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
CHLOROMETHANE	8260	--	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
CIS-1,3-DICHLOROPROPENE	8260	--	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
DIBROMOCHLOROMETHANE	8260	80	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	R	R	< 2.0 U
ETHYLBENZENE	8260	70	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 UJ
METHYLENE CHLORIDE	8260	5	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
STYRENE	8260	100	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
TETRACHLOROETHENE	8260	5	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	R	R	< 2.0 UJ
TOLUENE	8260	100	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
TRANS-1,2-DICHLOROETHENE	8260	100	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	R	R	< 2.0 U
TRANS-1,3-DICHLOROPROPENE	8260	--	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
TRICHLOROETHENE (TCE)	8260	5	< 1.0 U	< 1.0 UJ	1.4 J	< 1.0 UJ	1.0 J	< 1.0 U	< 1.0 U	R	R	< 1.0 U
VINYL CHLORIDE	8260	2	< 1.0 U	1.1 J	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
XYLENES, TOTAL	8260	10000	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	R	R	< 1.0 U
TOTAL CVOCs	8260	--	< 2 U	1.1	1.4	< 2 U	15	< 2 U	< 2 U			< 2 U
SEMIVOLATILES (UG/L)												
1,2,4-TRICHLOROBENZENE	8270	70					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,2-DICHLOROBENZENE	8270	600					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,3-DICHLOROBENZENE	8270	600					1.7 J	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,4-DICHLOROBENZENE	8270	75					3.0 J	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
2,2'-OXYBIS(1-CHLOROPROPANE)	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U

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J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 8
ANALYTICAL RESULTS - MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		MW09-23D	MW09-23S	MW09-24D	MW09-24S	MW09-25S	MW09-26DA	MW09-26S	MW09-27D	MW09-27S	MW09-27S
	SAMPLE DATE		9/8/2016	9/8/2016	9/9/2016	9/8/2016	9/9/2016	9/7/2016	9/7/2016	9/6/2016	9/6/2016	9/7/2016
	QC IDENTIFIER										Duplicate	
PARAMETER	METHOD	PAL										
2,4,6-TRICHLOROPHENOL	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,4-DICHLOROPHENOL	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,4-DIMETHYLPHENOL	8270	--					< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
2,4-DINITROPHENOL	8270	--					< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ
2,4-DINITROTOLUENE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,6-DINITROTOLUENE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-CHLORONAPHTHALENE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-CHLOROPHENOL	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-METHYLPHENOL	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-NITROANILINE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-NITROPHENOL	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
3,3-DICHLOROBENZIDINE	8270	--					< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
3-NITROANILINE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4,6-DINITRO-2-METHYLPHENOL	8270	--					< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
4-BROMOPHENYL-PHENYLETHER	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-CHLORO-3-METHYLPHENOL	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-CHLOROANILINE	8270	--					< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
4-CHLOROPHENYL-PHENYLETHER	8270	--					< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
4-METHYLPHENOL	8270	--					< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
4-NITROANILINE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-NITROPHENOL	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
BIS(2-CHLOROETHOXY)METHANE	8270	--					< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
BIS(2-CHLOROETHYL)ETHER	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
BUTYLBENZYLPHTHALATE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
CARBAZOLE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
DIBENZOFURAN	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
DIETHYLPHTHALATE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
DIMETHYL PHTHALATE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
DI-N-BUTYLPHTHALATE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
DI-N-OCTYLPHTHALATE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
HEXACHLOROBUTADIENE	8270	--					< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
HEXACHLOROCYCLOPENTADIENE	8270	50					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
HEXACHLOROETHANE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
ISOPHORONE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
NITROBENZENE	8270	--					< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
N-NITROSODINPROPYLAMINE	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
N-NITROSODIPHENYLAMINE	8270	--					< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
PAH, TOTAL	8270	--					0.20	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
PHENOL	8270	--					< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
SEMIVOLATILES SIM (UG/L)												
2,4,5-TRICHLOROPHENOL	8270_SIM	--					< 0.10 U	< 0.10 U	0.19 J	0.51 J	0.20 J	< 0.10 U
2-METHYLNAPHTHALENE	8270_SIM	--					< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
ACENAPHTHENE	8270_SIM	--					< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
ACENAPHTHYLENE	8270_SIM	--					< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
ANTHRACENE	8270_SIM	--					0.10	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
BENZO[A]ANTHRACENE	8270_SIM	--					< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 8
ANALYTICAL RESULTS - MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		MW09-23D	MW09-23S	MW09-24D	MW09-24S	MW09-25S	MW09-26DA	MW09-26S	MW09-27D	MW09-27S	MW09-27S
	SAMPLE DATE		9/8/2016	9/8/2016	9/9/2016	9/8/2016	9/9/2016	9/7/2016	9/7/2016	9/6/2016	9/6/2016	9/7/2016
	QC IDENTIFIER										Duplicate	
PARAMETER	METHOD	PAL										
BENZO[A]PYRENE	8270_SIM	0.2					< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
BENZO[B]FLUORANTHENE	8270_SIM	--					< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
BENZO[G,H,I]PERYLENE	8270_SIM	--					< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
BENZO[K]FLUORANTHENE	8270_SIM	--					< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
BIS(2-ETHYLHEXYL)PHTHALATE	8270_SIM	6					< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
CHRYSENE	8270_SIM	--					< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
DIBENZ[A,H]ANTHRACENE	8270_SIM	--					< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
FLUORANTHENE	8270_SIM	--					0.10	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
FLUORENE	8270_SIM	--					< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
HEXACHLOROBENZENE	8270_SIM	1					< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
INDENO[1,2,3-CD]PYRENE	8270_SIM	--					< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 UJ
NAPHTHALENE	8270_SIM	20					0.18 J	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
PENTACHLOROPHENOL	8270_SIM	1					< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
PHENANTHRENE	8270_SIM	--					< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
PYRENE	8270_SIM	--					< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
PAH, TOTAL	8270_SIM	--										
METALS (UG/L)												
ALUMINUM	6020	--	63.8 J	< 10.0 U	< 20.0 U	< 20.0 U	< 20.0 U	< 20.0 U	587	35.0	35.5	32.1
ANTIMONY	6020	6	< 16.0 U	< 0.80 U	< 1.6 U	< 0.80 U	0.52 J	0.26 J	< 0.80 U	< 0.80 U	< 0.80 U	< 0.80 U
ARSENIC	6020	10	< 16.0 U	1.1 J-	25.7	4.3	0.86 J-	7.7	< 0.80 UJ	1.2 J-	1.2 J-	3.1
BERYLLIUM	6020	4	< 6.0 U	< 0.30 U	< 0.60 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U
CHROMIUM, TOTAL	6020	100	< 12.0 UJ	0.58 J-	< 1.2 UJ	< 0.60 UJ	1.3 J-	1.2 J-	0.95 J-	< 0.60 UJ	< 0.60 UJ	0.66 J-
COPPER	6020	--	< 20.0 U	< 1.0 U	< 2.0 U	< 1.0 U	0.63 J	2.2	5.5	0.73 J	0.82 J	1.3 J
IRON	6020	--	1990 J	1650	52700	32400	6750	6590	731	5250	5220	14900
LEAD	6020	15	< 6.0 U	< 0.30 U	< 0.60 U	< 0.30 U	1.1	< 1.0 U	2.1	0.20 J	0.21 J	0.17 J
MANGANESE	6020	--	225	473	449	1030	182	409	64.2	283	278	263
MERCURY	7470	2	< 0.10 U	< 0.10 U	< 0.10 U	0.037 J	< 0.10 U	< 0.10 U	< 0.10 U	0.045 J	< 0.10 U	< 0.10 U
NICKEL	6020	100	7.2 J	0.34 J	1.6 J	0.22 J	1.8	1.1	1.3	0.65 J	0.69 J	1.3
ZINC	6020	--	< 30.0 U	< 1.5 U	< 3.0 U	2.2	2.3	21.3	272	34.4	38.6	54.7
DISSOLVED METALS (UG/L)		--										
ALUMINUM	6020	--	< 200 U	< 20.0 U	< 40.0 U	< 20.0 U	< 20.0 U	< 10.0 U	22.9	< 20.0 U	< 20.0 U	< 20.0 U
ANTIMONY	6020	6	< 16.0 U	< 0.80 U	< 1.6 U	< 0.80 U	0.43 J	0.23 J	< 0.80 U	< 0.80 U	< 0.80 U	0.27 J
ARSENIC	6020	10	< 16.0 U	1.0 J-	28.5	5.3	0.43 J-	5.7	< 0.80 UJ	1.2 J-	1.4 J	1.4 J
BERYLLIUM	6020	4	< 6.0 U	< 0.30 U	< 0.60 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U
CHROMIUM, TOTAL	6020	100	< 12.0 UJ	0.63 J-	< 1.2 UJ	< 0.60 UJ	0.79 J-	1.0 J-	0.27 J-	< 0.60 UJ	< 0.60 UJ	0.74 J-
COPPER	6020	--	< 20.0 U	< 1.0 U	< 2.0 U	< 1.0 U	1.0 J	0.55 J	2.4	0.55 J	0.37 J	1.0 J
IRON	6020	--	1540 J	1570	54100	31200	6350	6340	23.4 J	5630	5530	6310
LEAD	6020	15	< 6.0 U	< 0.30 U	< 0.60 U	< 0.30 U	< 1.0 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U	< 0.30 U
MANGANESE	6020	--	227	473	465	1000	181	406	51.1	286	284	180
MERCURY	7470	2	< 0.10 U	< 0.10 U	< 0.10 U	0.037 J	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
NICKEL	6020	100	10.5 J	0.57 J	1.9 J	0.23 J	1.6	0.97 J	0.71 J	0.73 J	1.5	1.2
ZINC	6020	--	< 30.0 U	4.4	< 3.0 U	3.2	3.6	16.9	270	6.1	7.9	54.4
PCBS (UG/L)												
AROCLOR-1016	8082	--			< 0.20 U		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
AROCLOR-1221	8082	--			< 0.10 U		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 8
ANALYTICAL RESULTS - MONITORING WELLS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		MW09-23D	MW09-23S	MW09-24D	MW09-24S	MW09-25S	MW09-26DA	MW09-26S	MW09-27D	MW09-27S	MW09-27S
	SAMPLE DATE		9/8/2016	9/8/2016	9/9/2016	9/8/2016	9/9/2016	9/7/2016	9/7/2016	9/6/2016	9/6/2016	9/7/2016
	QC IDENTIFIER										Duplicate	
PARAMETER	METHOD	PAL										
AROCLOR-1232	8082	--			< 0.20 U		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
AROCLOR-1242	8082	--			< 0.10 U		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
AROCLOR-1248	8082	--			< 0.10 U		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
AROCLOR-1254	8082	--			< 0.20 U		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
AROCLOR-1260	8082	--			< 0.20 U		< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U	< 0.20 U
PCB, TOTAL	8082	0.5			< 0.2 U		< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
PESTICIDES (UG/L)												
4,4-DDD	8081	--			< 0.0063 U		< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U
4,4-DDE	8081	--			< 0.0063 U		< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U
4,4-DDT	8081	--			< 0.0063 U		< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U
ALDRIN	8081	--			< 0.0031 U		< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U
ALPHA-BHC	8081	--			< 0.0031 U		< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U
ALPHA-CHLORDANE	8081	--			< 0.0031 U		< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U
BETA-BHC	8081	--			< 0.0031 U		< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U
DELTA-BHC	8081	--			< 0.0031 U		< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U
DIELDRIN	8081	--			< 0.0063 U		< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U
ENDOSULFAN I	8081	--			< 0.0031 U		< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U
ENDOSULFAN II	8081	--			< 0.0063 U		< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U
ENDOSULFAN SULFATE	8081	--			< 0.0063 U		< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U
ENDRIN	8081	2			< 0.0063 U		< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U
ENDRIN ALDEHYDE	8081	--			< 0.031 U		< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U	< 0.031 U
ENDRIN KETONE	8081	2			< 0.0063 U		< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U	< 0.0063 U
HEPTACHLOR	8081	0.4			< 0.0031 U		< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U
HEPTACHLOR EPOXIDE	8081	0.2			< 0.0031 U		< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U
LINDANE	8081	--			< 0.0031 U		< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U
METHOXYCHLOR	8081	40			< 0.063 U		< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U	< 0.063 U
TOXAPHENE	8081	3			< 0.25 U		< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U
TRANS-CHLORDANE	8081	--			< 0.0031 U		< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U	< 0.0031 U
MISCELLANEOUS PARAMETERS (G/L)												
SALINITY		--										

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 9
ANALYTICAL RESULTS - PIEZOMETER
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		P09-01	P09-01	P09-01	P09-02A	P09-02A	P09-03A	P09-04A	P09-04A	P09-06B	P09-07B	P09-08B
	SAMPLE DATE		9/13/2016	9/14/2016	9/27/2016	9/14/2016	9/15/2016	9/14/2016	9/12/2016	9/15/2016	9/13/2016	9/13/2016	9/13/2016
	QC IDENTIFIER												
	METHOD	PAL											
VOLATILES (UG/L)													
1,1,1-TRICHLOROETHANE	8260	--	< 1.0 UJ			< 1.0 UJ		< 1.0 UJ	< 1.0 UJ		< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
1,1,2,2-TETRACHLOROETHANE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHANE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROPROPANE	8260	--	< 2.0 U			< 2.0 U		< 2.0 U	< 2.0 U		< 2.0 U	< 2.0 U	< 2.0 U
2-BUTANONE	8260	--	< 5.0 UJ			< 5.0 UJ		< 5.0 UJ	< 5.0 UJ		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
2-HEXANONE	8260	--	< 5.0 UJ			< 5.0 UJ		< 5.0 UJ	< 5.0 UJ		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
4-METHYL-2-PENTANONE	8260	--	< 2.0 U			< 2.0 U		< 2.0 U	< 2.0 U		< 2.0 U	< 2.0 U	< 2.0 U
ACETONE	8260	--	< 5.0 UJ			< 5.0 UJ		< 5.0 UJ	< 5.0 UJ		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
BENZENE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
BROMODICHLOROMETHANE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
BROMOFORM	8260	--	< 2.0 U			< 2.0 U		< 2.0 U	< 2.0 U		< 2.0 U	< 2.0 U	< 2.0 U
BROMOMETHANE	8260	--	< 2.0 UJ			< 2.0 UJ		< 2.0 UJ	< 2.0 UJ		< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
CARBON DISULFIDE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
CARBON TETRACHLORIDE	8260	--	< 2.0 UJ			< 2.0 UJ		< 2.0 UJ	< 2.0 UJ		< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
CHLOROBENZENE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
CHLOROETHANE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
CHLOROMETHANE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,3-DICHLOROPROPENE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
DIBROMOCHLOROMETHANE	8260	--	< 2.0 U			< 2.0 U		< 2.0 U	< 2.0 U		< 2.0 U	< 2.0 U	< 2.0 U
ETHYLBENZENE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
METHYLENE CHLORIDE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
STYRENE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	8260	--	< 2.0 U			< 2.0 U		< 2.0 U	< 2.0 U		< 2.0 U	< 2.0 U	< 2.0 U
TOLUENE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
TRANS-1,2-DICHLOROETHENE	8260	--	< 2.0 U			< 2.0 U		< 2.0 U	< 2.0 U		< 2.0 U	< 2.0 U	< 2.0 U
TRANS-1,3-DICHLOROPROPENE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
TRICHLOROETHENE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
XYLENES, TOTAL	8260	--	< 1.0 U			< 1.0 U		< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 U
TOTAL CVOCs	8260	--	< 2 U			< 2 U		< 2 U	< 2 U		< 2 U	< 2 U	< 2 U
SEMIVOLATILES (UG/L)													
1,2,4-TRICHLOROBENZENE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
1,2-DICHLOROBENZENE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
1,3-DICHLOROBENZENE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
1,4-DICHLOROBENZENE	8270	--							< 5.0 U		< 5.0 U		< 5.0 U
2,2'-OXYBIS(1-CHLOROPROPANE)	8270	--							< 2.0 UJ		< 2.0 UJ		< 2.0 UJ

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
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TABLE 9
ANALYTICAL RESULTS - PIEZOMETER
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		P09-01	P09-01	P09-01	P09-02A	P09-02A	P09-03A	P09-04A	P09-04A	P09-06B	P09-07B	P09-08B
	SAMPLE DATE		9/13/2016	9/14/2016	9/27/2016	9/14/2016	9/15/2016	9/14/2016	9/12/2016	9/15/2016	9/13/2016	9/13/2016	9/13/2016
	QC IDENTIFIER												
	METHOD	PAL											
2,4,6-TRICHLOROPHENOL	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
2,4-DICHLOROPHENOL	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
2,4-DIMETHYLPHENOL	8270	--							< 5.0 U		< 5.0 U		< 5.0 U
2,4-DINITROPHENOL	8270	--							< 10 UJ		< 10 UJ		< 10 UJ
2,4-DINITROTOLUENE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
2,6-DINITROTOLUENE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
2-CHLORONAPHTHALENE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
2-CHLOROPHENOL	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
2-METHYLPHENOL	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
2-NITROANILINE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
2-NITROPHENOL	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
3,3-DICHLOROBENZIDINE	8270	--							< 5.0 U		< 5.0 U		< 5.0 U
3-NITROANILINE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
4,6-DINITRO-2-METHYLPHENOL	8270	--							< 2.0 UJ		< 2.0 UJ		< 2.0 UJ
4-BROMOPHENYL-PHENYLETHER	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
4-CHLORO-3-METHYLPHENOL	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
4-CHLOROANILINE	8270	--							< 5.0 U		< 5.0 U		< 5.0 U
4-CHLOROPHENYL-PHENYLETHER	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
4-METHYLPHENOL	8270	--							< 5.0 UJ		< 5.0 UJ		< 5.0 UJ
4-NITROANILINE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
4-NITROPHENOL	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
BIS(2-CHLOROETHOXY)METHANE	8270	--							< 5.0 U		< 5.0 U		< 5.0 U
BIS(2-CHLOROETHYL)ETHER	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
BUTYLBENZYLPHTHALATE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
CARBAZOLE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
DIBENZOFURAN	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
DIETHYLPHTHALATE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
DIMETHYL PHTHALATE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
DI-N-BUTYLPHTHALATE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
DI-N-OCTYLPHTHALATE	8270	--							< 2.0 UJ		< 2.0 UJ		< 2.0 UJ
HEXACHLOROBUTADIENE	8270	--							< 2.0 UJ		< 2.0 UJ		< 2.0 UJ
HEXACHLOROCYCLOPENTADIENE	8270	--							< 2.0 U		< 2.0 U		< 2.0 UJ
HEXACHLOROETHANE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
ISOPHORONE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
NITROBENZENE	8270	--							< 5.0 U		< 5.0 U		< 5.0 U
N-NITROSODINPROPYLAMINE	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
N-NITROSODIPHENYLAMINE	8270	--							< 5.0 U		< 5.0 U		< 5.0 U
PHENOL	8270	--							< 2.0 U		< 2.0 U		< 2.0 U
2,4,5-TRICHLOROPHENOL	8270	--							< 0.10 UJ		< 0.10 UJ		< 0.10 UJ
2-METHYLNAPHTHALENE	8270	--							< 0.10 U		< 0.10 U		< 0.10 U
SEMIVOLATILES SIM (UG/L)		--											
ACENAPHTHENE	8270 SIM	--							< 0.10 U		< 0.10 U		< 0.10 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
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TABLE 9
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SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		P09-01	P09-01	P09-01	P09-02A	P09-02A	P09-03A	P09-04A	P09-04A	P09-06B	P09-07B	P09-08B
	SAMPLE DATE		9/13/2016	9/14/2016	9/27/2016	9/14/2016	9/15/2016	9/14/2016	9/12/2016	9/15/2016	9/13/2016	9/13/2016	9/13/2016
	QC IDENTIFIER												
	METHOD	PAL											
ACENAPHTHYLENE	8270 SIM	--							< 0.10 U		< 0.10 U		< 0.10 U
ANTHRACENE	8270 SIM	--							< 0.10 U		< 0.10 U		< 0.10 U
BENZO[A]ANTHRACENE	8270 SIM	--							< 0.10 U		< 0.10 U		< 0.10 U
BENZO[A]PYRENE	8270 SIM	--							< 0.10 UJ		< 0.10 UJ		< 0.10 UJ
BENZO[B]FLUORANTHENE	8270 SIM	--							< 0.10 U		< 0.10 U		< 0.10 U
BENZO[G,H,I]PERYLENE	8270 SIM	--							< 0.10 U		< 0.10 U		< 0.10 U
BENZO[K]FLUORANTHENE	8270 SIM	--							< 0.10 U		< 0.10 U		< 0.10 U
BIS(2-ETHYLHEXYL)PHTHALATE	8270 SIM	--							0.40 J		0.44 J		0.45 J
CHRYSENE	8270 SIM	--							< 0.10 U		< 0.10 U		< 0.10 U
DIBENZ[A,H]ANTHRACENE	8270 SIM	--							< 0.10 U		< 0.10 U		< 0.10 U
FLUORANTHENE	8270 SIM	--							< 0.10 U		< 0.10 U		< 0.10 U
FLUORENE	8270 SIM	--							< 0.10 U		< 0.10 U		0.11
HEXACHLOROBENZENE	8270 SIM	129							< 0.10 U		< 0.10 U		< 0.10 U
INDENO[1,2,3-CD]PYRENE	8270 SIM	--							< 0.10 UJ		< 0.10 UJ		< 0.10 UJ
NAPHTHALENE	8270 SIM	--							< 0.10 U		< 0.10 U		< 0.10 U
PENTACHLOROPHENOL	8270 SIM	7.9							< 1.0 UJ		< 1.0 UJ		< 1.0 UJ
PHENANTHRENE	8270 SIM	--							< 0.10 U		0.12		0.10
PYRENE	8270 SIM	--							< 0.10 U		0.13		< 0.10 U
PAH, TOTAL	8270 SIM	--							< 2 U		0.25		0.21
METALS (UG/L)													
ALUMINUM	6020	--	37300			99500			2030		25800	130000	129000
ANTIMONY	6020	--	10.4 J			16.6 J			< 40.0 U		20.1 J	10.7 J	< 20.0 U
ARSENIC	6020	36	62.0			24.3 J			< 40.0 U		12.4 J	113	10.0 J
BERYLLIUM	6020	--	11.5 J			20.5 J			< 15.0 U		6.6 J	20.3 J	28.9
CHROMIUM, TOTAL	6020	50	43400			4040			67.6 J		287	5570	2490
COPPER	6020	2.9	405			918			17.4 J		109	566	25.1 J
IRON	6020	--	482000			672000			4870 J		42800	271000	243000
LEAD	6020	8.1	389			712			9.5 J		394	441	321
MANGANESE	6020	--	3110			4120			65.9 J		614	4700	3060
MERCURY	7470	0.08	< 0.10 U			< 0.10 U			< 0.10 U		< 0.10 U	0.57	< 0.10 U
NICKEL	6020	8.3	3550			1130			80.6		322	3410	1830
ZINC	6020	81	2970			3550			3080		138000	42700	39800
DISSOLVED METALS (UG/L)		--											
ALUMINUM	6020	--		4050			14800			< 500 U	3960		
ANTIMONY	6020	--		10.7 J			18.6 J			< 40.0 U	18.3 J		
ARSENIC	6020	36		5.4 J			11.8 J			< 40.0 U	22.2 J		
BERYLLIUM	6020	--		< 7.5 U			< 15.0 U			< 15.0 U	< 15.0 U		
CHROMIUM, TOTAL	6020	50		1200			607			< 30.0 UJ	40.6 J		
COPPER	6020	2.9		64.8			192			< 50.0 U	< 50.0 U		
IRON	6020	--		41000			65000			< 2500 U	986 J		
LEAD	6020	8.1		16.1 J			104			< 15.0 U	< 15.0 U		
MANGANESE	6020	--		1210			625			< 75.0 U	83.6 J		

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SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		P09-01	P09-01	P09-01	P09-02A	P09-02A	P09-03A	P09-04A	P09-04A	P09-06B	P09-07B	P09-08B
	SAMPLE DATE		9/13/2016	9/14/2016	9/27/2016	9/14/2016	9/15/2016	9/14/2016	9/12/2016	9/15/2016	9/13/2016	9/13/2016	9/13/2016
	QC IDENTIFIER												
	METHOD	PAL											
MERCURY	7470	0.08		< 0.10 U			0.14 J			< 0.10 U	< 0.10 U		
NICKEL	6020	8.3		251			203			24.7 J	39.2 J		
ZINC	6020	81		173			489			240	405		
PCBS (UG/L)													
AROCLOR-1016	8082/8082B	--			< 0.20 UJ								
AROCLOR-1221	8082/8082B	--			< 0.10 UJ								
AROCLOR-1232	8082/8082B	--			< 0.20 UJ								
AROCLOR-1242	8082/8082B	--			< 0.10 UJ								
AROCLOR-1248	8082/8082B	--			< 0.10 UJ								
AROCLOR-1254	8082/8082B	--			< 0.20 UJ								
AROCLOR-1260	8082/8082B	--			< 0.20 UJ								
PCB, TOTAL	8082/8082B	--			< 0.2 U								
PESTICIDES (UG/L)		--											
4,4-DDD	8081	--			< 0.0063 U								
4,4-DDE	8081	--			< 0.0063 U								
4,4-DDT	8081	0.001			< 0.0063 UJ								
ALDRIN	8081	--			< 0.0031 U								
ALPHA-BHC	8081	--			< 0.0031 U								
ALPHA-CHLORDANE	8081	0.004			< 0.0031 U								
BETA-BHC	8081	--			< 0.0031 U								
DELTA-BHC	8081	--			< 0.0031 U								
DIELDRIN	8081	0.0019			< 0.0063 U								
ENDOSULFAN I	8081	0.0087			< 0.0031 U								
ENDOSULFAN II	8081	0.0087			< 0.0063 U								
ENDOSULFAN SULFATE	8081	--			< 0.0063 U								
ENDRIN	8081	0.0023			< 0.0063 U								
ENDRIN ALDEHYDE	8081	--			< 0.031 U								
ENDRIN KETONE	8081	--			< 0.0063 U								
HEPTACHLOR	8081	0.0036			< 0.0031 U								
HEPTACHLOR EPOXIDE	8081	0.0036			< 0.0031 U								
LINDANE	8081	--			< 0.0031 U								
METHOXYCHLOR	8081	--			< 0.063 U								
TOXAPHENE	8081	0.0002			< 0.25 U								
TRANS-CHLORDANE	8081	0.004			< 0.0031 U								
SULFIDE (MG/L)	4500_S_D	--											
SULFIDE		--									< 0.030 U	< 0.030 U	< 0.030 U
MISCELLANEOUS PARAMETERS (G/L)													
SALINITY	2520B	--	21			29		30	26		28		

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SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		P09-08B	P09-09	P09-10	P09-11B	P09-12B
	SAMPLE DATE		9/15/2016	9/12/2016	9/12/2016	9/16/2016	9/13/2016
	QC IDENTIFIER						
	METHOD	PAL					
VOLATILES (UG/L)							
1,1,1-TRICHLOROETHANE	8260	--		< 1.0 UJ	< 1.0 UJ	< 1.0 U	< 1.0 UJ
1,1,2,2-TETRACHLOROETHANE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHANE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
1,2-DICHLOROPROPANE	8260	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-BUTANONE	8260	--		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
2-HEXANONE	8260	--		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
4-METHYL-2-PENTANONE	8260	--		< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
ACETONE	8260	--		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
BENZENE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BROMODICHLOROMETHANE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
BROMOFORM	8260	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
BROMOMETHANE	8260	--		< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
CARBON DISULFIDE	8260	--		2.5 J	< 1.0 U	< 1.0 U	< 1.0 U
CARBON TETRACHLORIDE	8260	--		< 2.0 UJ	< 2.0 UJ	< 2.0 U	< 2.0 UJ
CHLOROBENZENE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROETHANE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROFORM	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CHLOROMETHANE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
CIS-1,3-DICHLOROPROPENE	8260	--		< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
DIBROMOCHLOROMETHANE	8260	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
ETHYLBENZENE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
METHYLENE CHLORIDE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
STYRENE	8260	--		< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
TETRACHLOROETHENE	8260	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TOLUENE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
TRANS-1,2-DICHLOROETHENE	8260	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
TRANS-1,3-DICHLOROPROPENE	8260	--		< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
TRICHLOROETHENE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	--		< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U
XYLENES, TOTAL	8260	--		< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U
TOTAL CVOCs	8260	--		< 2 U	< 2 U	< 2 U	< 2 U
SEMIVOLATILES (UG/L)							
1,2,4-TRICHLOROBENZENE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,2-DICHLOROBENZENE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,3-DICHLOROBENZENE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
1,4-DICHLOROBENZENE	8270	--		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
2,2'-OXYBIS(1-CHLOROPROPANE)	8270	--		< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 9
ANALYTICAL RESULTS - PIEZOMETER
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		P09-08B	P09-09	P09-10	P09-11B	P09-12B
	SAMPLE DATE		9/15/2016	9/12/2016	9/12/2016	9/16/2016	9/13/2016
	QC IDENTIFIER						
	METHOD	PAL					
2,4,6-TRICHLOROPHENOL	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,4-DICHLOROPHENOL	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,4-DIMETHYLPHENOL	8270	--		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
2,4-DINITROPHENOL	8270	--		< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ
2,4-DINITROTOLUENE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,6-DINITROTOLUENE	8270	--		< 2.0 U	< 2.0 U	< 2.0 UJ	< 2.0 U
2-CHLORONAPHTHALENE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-CHLOROPHENOL	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-METHYLPHENOL	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-NITROANILINE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2-NITROPHENOL	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
3,3-DICHLOROBENZIDINE	8270	--		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
3-NITROANILINE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4,6-DINITRO-2-METHYLPHENOL	8270	--		< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
4-BROMOPHENYL-PHENYLETHER	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-CHLORO-3-METHYLPHENOL	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-CHLOROANILINE	8270	--		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
4-CHLOROPHENYL-PHENYLETHER	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-METHYLPHENOL	8270	--		< 5.0 UJ	< 5.0 UJ	< 5.0 UJ	< 5.0 UJ
4-NITROANILINE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
4-NITROPHENOL	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
BIS(2-CHLOROETHOXY)METHANE	8270	--		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
BIS(2-CHLOROETHYL)ETHER	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
BUTYLBENZYLPHTHALATE	8270	--		< 2.0 U	1.2 J	< 2.0 U	< 2.0 U
CARBAZOLE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
DIBENZOFURAN	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
DIETHYLPHTHALATE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
DIMETHYL PHTHALATE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
DI-N-BUTYLPHTHALATE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
DI-N-OCTYLPHTHALATE	8270	--		< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
HEXACHLOROBUTADIENE	8270	--		< 2.0 UJ	< 2.0 UJ	< 2.0 UJ	< 2.0 UJ
HEXACHLOROCYCLOPENTADIENE	8270	--		< 2.0 U	< 2.0 UJ	< 2.0 U	< 2.0 U
HEXACHLOROETHANE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
ISOPHORONE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
NITROBENZENE	8270	--		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
N-NITROSODINPROPYLAMINE	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
N-NITROSODIPHENYLAMINE	8270	--		< 5.0 U	< 5.0 U	< 5.0 U	< 5.0 U
PHENOL	8270	--		< 2.0 U	< 2.0 U	< 2.0 U	< 2.0 U
2,4,5-TRICHLOROPHENOL	8270	--		< 0.10 UJ	< 0.10 UJ	< 0.10 UJ	< 0.10 UJ
2-METHYLNAPHTHALENE	8270	--		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
SEMIVOLATILES SIM (UG/L)		--					
ACENAPHTHENE	8270 SIM	--		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
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TABLE 9
ANALYTICAL RESULTS - PIEZOMETER
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		P09-08B	P09-09	P09-10	P09-11B	P09-12B
	SAMPLE DATE		9/15/2016	9/12/2016	9/12/2016	9/16/2016	9/13/2016
	QC IDENTIFIER						
	METHOD	PAL					
ACENAPHTHYLENE	8270 SIM	--		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
ANTHRACENE	8270 SIM	--		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
BENZO[A]ANTHRACENE	8270 SIM	--		< 0.10 U	0.30	< 0.10 U	< 0.10 U
BENZO[A]PYRENE	8270 SIM	--		< 0.10 UJ	0.26 J	< 0.10 UJ	< 0.10 UJ
BENZO[B]FLUORANTHENE	8270 SIM	--		< 0.10 U	0.41	< 0.10 U	< 0.10 U
BENZO[G,H,I]PERYLENE	8270 SIM	--		< 0.10 U	0.23	< 0.10 U	< 0.10 U
BENZO[K]FLUORANTHENE	8270 SIM	--		< 0.10 U	0.18	< 0.10 U	< 0.10 U
BIS(2-ETHYLHEXYL)PHTHALATE	8270 SIM	--		0.34 J	0.51 J	0.17 J	0.43 J
CHRYSENE	8270 SIM	--		< 0.10 U	0.30	< 0.10 U	0.13
DIBENZ[A,H]ANTHRACENE	8270 SIM	--		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
FLUORANTHENE	8270 SIM	--		< 0.10 U	0.64	< 0.10 U	< 0.10 U
FLUORENE	8270 SIM	--		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
HEXACHLOROBENZENE	8270 SIM	129		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
INDENO[1,2,3-CD]PYRENE	8270 SIM	--		< 0.10 UJ	0.20 J	< 0.10 UJ	< 0.10 UJ
NAPHTHALENE	8270 SIM	--		< 0.10 U	< 0.10 U	< 0.10 U	< 0.10 U
PENTACHLOROPHENOL	8270 SIM	7.9		< 1.0 UJ	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
PHENANTHRENE	8270 SIM	--		< 0.10 U	0.31	< 0.10 U	< 0.10 U
PYRENE	8270 SIM	--		< 0.10 U	0.51	< 0.10 U	< 0.10 U
PAH, TOTAL	8270 SIM	--		< 2 U	3.3	< 2 U	0.13
METALS (UG/L)							
ALUMINUM	6020	--		23300	2070	3630	332
ANTIMONY	6020	--		18.1 J	8.7 J	20.2 J	< 0.80 U
ARSENIC	6020	36		19.4 J	< 20.0 U	< 40.0 U	0.35 J-
BERYLLIUM	6020	--		4.7 J	< 7.5 U	< 15.0 U	< 0.30 U
CHROMIUM, TOTAL	6020	50		175	51.3	36.2 J	8.5
COPPER	6020	2.9		393	6.1 J	< 50.0 U	1.3 J
IRON	6020	--		321000	22300	1800 J	43300
LEAD	6020	8.1		441	3.7 J	< 15.0 U	1.6
MANGANESE	6020	--		885	607	859	1150
MERCURY	7470	0.08		R	R	< 0.10 U	< 0.10 U
NICKEL	6020	8.3		104	28.6	65.8	9.0
ZINC	6020	81		1550	94.0	160	128
DISSOLVED METALS (UG/L)		--					
ALUMINUM	6020	--	5270	3690	1800	3680	43.5
ANTIMONY	6020	--	9.4 J	16.4 J	9.0 J	18.4 J	< 0.80 U
ARSENIC	6020	36	8.6 J	< 40.0 U	< 20.0 U	< 40.0 U	0.20 J-
BERYLLIUM	6020	--	< 7.5 U	< 15.0 U	< 7.5 U	< 15.0 U	< 0.30 U
CHROMIUM, TOTAL	6020	50	305	19.9 J	19.8 J	52.8 J	1.1 J-
COPPER	6020	2.9	< 50.0 U	< 50.0 U	< 25.0 U	< 50.0 U	0.44 J
IRON	6020	--	30300	2800 J	13400	1730 J	18600
LEAD	6020	8.1	27.3	< 15.0 U	< 7.5 U	< 15.0 U	0.17 J
MANGANESE	6020	--	1130	130	554	752	1250

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
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TABLE 9
ANALYTICAL RESULTS - PIEZOMETER
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		P09-08B	P09-09	P09-10	P09-11B	P09-12B
	SAMPLE DATE		9/15/2016	9/12/2016	9/12/2016	9/16/2016	9/13/2016
	QC IDENTIFIER						
	METHOD	PAL					
MERCURY	7470	0.08	< 0.10 U	< 0.10 U	R	< 0.10 U	< 0.10 U
NICKEL	6020	8.3	342	26.5 J	28.0	55.8	1.4
ZINC	6020	81	429	154	77.1	156	16.9
PCBS (UG/L)							
AROCLOR-1016	8082/8082B	--		< 0.20 U	< 0.20 U		
AROCLOR-1221	8082/8082B	--		< 0.10 U	< 0.10 U		
AROCLOR-1232	8082/8082B	--		< 0.20 U	< 0.20 U		
AROCLOR-1242	8082/8082B	--		< 0.10 U	< 0.10 U		
AROCLOR-1248	8082/8082B	--		< 0.10 U	< 0.10 U		
AROCLOR-1254	8082/8082B	--		< 0.20 U	< 0.20 U		
AROCLOR-1260	8082/8082B	--		< 0.20 U	< 0.20 U		
PCB, TOTAL	8082/8082B	--		< 0.2 U	< 0.2 U		
PESTICIDES (UG/L)		--					
4,4-DDD	8081	--		< 0.0063 U	< 0.0063 U		
4,4-DDE	8081	--		< 0.0063 U	< 0.0063 U		
4,4-DDT	8081	0.001		< 0.0063 U	< 0.0063 U		
ALDRIN	8081	--		< 0.0031 U	< 0.0031 U		
ALPHA-BHC	8081	--		< 0.0031 U	< 0.0031 U		
ALPHA-CHLORDANE	8081	0.004		< 0.0031 U	< 0.0031 U		
BETA-BHC	8081	--		< 0.0031 U	< 0.0031 U		
DELTA-BHC	8081	--		< 0.0031 U	< 0.0031 U		
DIELDRIN	8081	0.0019		< 0.0063 U	< 0.0063 U		
ENDOSULFAN I	8081	0.0087		< 0.0031 U	< 0.0031 U		
ENDOSULFAN II	8081	0.0087		< 0.0063 U	< 0.0063 U		
ENDOSULFAN SULFATE	8081	--		< 0.0063 U	< 0.0063 U		
ENDRIN	8081	0.0023		< 0.0063 U	< 0.0063 U		
ENDRIN ALDEHYDE	8081	--		< 0.031 U	< 0.031 U		
ENDRIN KETONE	8081	--		< 0.0063 U	< 0.0063 U		
HEPTACHLOR	8081	0.0036		< 0.0031 U	< 0.0031 U		
HEPTACHLOR EPOXIDE	8081	0.0036		< 0.0031 U	< 0.0031 U		
LINDANE	8081	--		< 0.0031 U	< 0.0031 U		
METHOXYCHLOR	8081	--		< 0.063 U	< 0.063 U		
TOXAPHENE	8081	0.0002		< 0.25 U	< 0.25 U		
TRANS-CHLORDANE	8081	0.004		< 0.0031 U	< 0.0031 U		
SULFIDE (MG/L)	4500_S_D	--					
SULFIDE		--				< 0.030 U	< 0.030 U
MISCELLANEOUS PARAMETERS (G/L)							
SALINITY	2520B	--		28	8.4	30	0.60

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
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TABLE 10
ANALYTICAL RESULTS - SEDIMENTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		SED09-01	SED09-02A	SED09-02A	SED09-03A	SED09-04A	SED09-05A	SED09-06B	SED09-07B	SED09-08B	SED09-08B
	SAMPLE DATE		9/13/2016	9/12/2016	9/12/2016	9/12/2016	9/12/2016	9/13/2016	9/26/2016	9/26/2016	9/26/2016	9/26/2016
	QC IDENTIFIER				Duplicate							FD
	METHOD	PAL	R0837	R0837	R0837	R0837	R0837	R0837	R0888	R0888	R0888	R0888
VOLATILES (UG/KG)												
1,1,1-TRICHLOROETHANE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
1,1,2,2-TETRACHLOROETHANE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
1,1,2-TRICHLOROETHANE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
1,1-DICHLOROETHANE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
1,1-DICHLOROETHENE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
1,2-DICHLOROETHANE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
1,2-DICHLOROPROPANE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
2-BUTANONE	8260	--	< 5.1 UJ	< 5.4 UJ	< 5.9 UJ	< 5.0 UJ	< 5.1 UJ	< 5.9 UJ	< 8.9 UJ	< 8.2 UJ	< 7.3 UJ	< 6.6 UJ
2-HEXANONE	8260	--	< 5.1 UJ	< 5.4 UJ	< 5.9 UJ	< 5.0 UJ	< 5.1 UJ	< 5.9 UJ	< 8.9 UJ	< 8.2 UJ	< 7.3 UJ	< 6.6 UJ
4-METHYL-2-PENTANONE	8260	--	< 5.1 U	< 5.4 U	< 5.9 U	< 5.0 U	< 5.1 U	< 5.9 U	< 8.9 U	< 8.2 U	< 7.3 U	< 6.6 U
ACETONE	8260	--	< 5.1 UJ	< 5.4 UJ	< 5.9 UJ	< 5.0 UJ	< 5.1 UJ	< 5.9 UJ	< 8.9 UJ	< 8.2 UJ	< 7.3 UJ	9.9 J
BENZENE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
BROMODICHLOROMETHANE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
BROMOFORM	8260	--	< 5.1 U	< 5.4 U	< 5.9 U	< 5.0 U	< 5.1 U	< 5.9 U	< 8.9 U	< 8.2 U	< 7.3 U	< 6.6 U
BROMOMETHANE	8260	--	< 5.1 U	< 5.4 UJ	< 5.9 UJ	< 5.0 UJ	< 5.1 UJ	< 5.9 U	< 8.9 UJ	< 8.2 UJ	< 7.3 UJ	< 6.6 UJ
CARBON DISULFIDE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	16	8.7 J	< 3.7 U	14
CARBON TETRACHLORIDE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
CHLOROBENZENE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
CHLOROETHANE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
CHLOROFORM	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
CHLOROMETHANE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
CIS-1,2-DICHLOROETHENE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
CIS-1,3-DICHLOROPROPENE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
DIBROMOCHLOROMETHANE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
ETHYLBENZENE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
METHYLENE CHLORIDE	8260	--	< 5.1 U	< 5.4 U	< 5.9 U	< 5.0 U	< 5.1 U	< 5.9 U	< 8.9 U	< 8.2 U	< 7.3 U	< 6.6 U
STYRENE	8260	--	< 2.6 UJ	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
TETRACHLOROETHENE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	5.3 J	< 4.1 U	< 3.7 U	3.3 J
TOLUENE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
TRANS-1,2-DICHLOROETHENE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
TRANS-1,3-DICHLOROPROPENE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
TRICHLOROETHENE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
VINYL CHLORIDE	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
XYLENES, TOTAL	8260	--	< 2.6 U	< 2.7 U	< 3.0 U	< 2.5 U	< 2.6 U	< 2.9 U	< 4.5 U	< 4.1 U	< 3.7 U	< 3.3 U
TOTAL CVOCs	8260	--	< 5.1 U	< 5.4 U	< 5.9 U	< 5 U	< 5.1 U	< 5.9 U	5.3	< 8.2 U	< 7.3 U	3.3
SEMIVOLATILES (SIM) (UG/KG)												
2-METHYLNAPHTHALENE	8270_SIM	670	< 4.2 U	< 4.4 U	< 4.9 U	< 4.1 U	< 4.2 U	< 4.8 U	< 5.5 UJ	< 4.9 UJ	< 5.2 UJ	< 4.9 UJ
ACENAPHTHENE	8270_SIM	500	< 4.2 U	< 4.4 U	< 4.9 U	< 4.1 U	< 4.2 U	< 4.8 U	5.7	< 4.9 U	< 5.2 U	< 4.9 U
ACENAPHTHYLENE	8270_SIM	640	< 4.2 U	< 4.4 U	< 4.9 U	< 4.1 U	< 4.2 U	< 4.8 U	< 5.5 U	< 4.9 U	< 5.2 U	5.2
ANTHRACENE	8270_SIM	1100	4.8 J	< 4.4 U	< 4.9 U	< 4.1 U	< 4.2 U	< 4.8 U	11 J-	8.2 J-	5.4 J	14 J
BENZO[A]ANTHRACENE	8270_SIM	1600	18 J	12	14	6.3	4.3	9.5	62 J-	34 J-	21 J	56 J

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 10
ANALYTICAL RESULTS - SEDIMENTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		SED09-01	SED09-02A	SED09-02A	SED09-03A	SED09-04A	SED09-05A	SED09-06B	SED09-07B	SED09-08B	SED09-08B
	SAMPLE DATE		9/13/2016	9/12/2016	9/12/2016	9/12/2016	9/12/2016	9/13/2016	9/26/2016	9/26/2016	9/26/2016	9/26/2016
	QC IDENTIFIER				Duplicate							FD
	METHOD	PAL	R0837	R0837	R0837	R0837	R0837	R0837	R0888	R0888	R0888	R0888
BENZO[A]PYRENE	8270_SIM	1600	22 J	11	14	7.2	5.3	10	72	37	22 J	50 J
BENZO[B]FLUORANTHENE	8270_SIM	--	35 J	25	27	15	11	17	110	60	35 J	87 J
BENZO[G,H,I]PERYLENE	8270_SIM	--	21 J+	10	12	6.3	5.2	10	58	32	18 J	40 J
BENZO[K]FLUORANTHENE	8270_SIM	--	11 J	9.8	11	5.7	4.6	8.4	38 J	21 J	13 J	30 J
CHRYSENE	8270_SIM	2800	20 J	22	18	8.2	6.6	11	80 J-	45 J-	27 J	77 J
DIBENZ[A,H]ANTHRACENE	8270_SIM	260	5.7	< 4.4 U	< 4.9 U	< 4.1 U	< 4.2 U	5.2	13	7.3	< 5.2 U	9.6
FLUORANTHENE	8270_SIM	5100	35 J	29	28	14	9.8	14	120 J-	66 J-	44 J	110 J
FLUORENE	8270_SIM	540	< 4.2 U	< 4.4 U	< 4.9 U	< 4.1 U	< 4.2 U	< 4.8 U	< 5.5 U	< 4.9 U	< 5.2 U	< 4.9 U
INDENO[1,2,3-CD]PYRENE	8270_SIM	--	16 J+	8.9	11	5.5	4.4	8.9	67	37	22 J	50 J
NAPHTHALENE	8270_SIM	2100	< 4.2 U	< 4.4 U	< 4.9 U	< 4.1 U	< 4.2 U	< 4.8 U	< 5.5 UJ	< 4.9 UJ	< 5.2 UJ	< 4.9 UJ
PHENANTHRENE	8270_SIM	1500	17 J	8.3	8.5	4.6	< 4.2 U	5.9	55	39	24 J	43 J
PYRENE	8270_SIM	2600	30 J	25	24	13	7.9	13	130 J-	75 J-	42 J	110 J
PAH, TOTAL	8270_SIM	--	240	160	170	86	59	110	820	460	270	680
METALS (MG/KG)												
ALUMINUM	6010	--	2740	4370	5200	3830	3690	4590	5080	3810	2980	4810
ANTIMONY	6010	--	< 0.95 UJ	< 0.65 UJ	< 0.86 UJ	< 1.2 UJ	< 0.66 UJ	< 0.80 UJ	< 1.0 UJ	< 0.63 UJ	< 0.86 UJ	< 0.81 UJ
ARSENIC	6010	70	3.0 J	3.2 J	4.2 J	2.9 J	2.3 J	3.2 J	7.7	4.7	4.6	6.3
BERYLLIUM	6010	--	0.31	0.39	0.45	0.34	0.30	0.39	0.56 J	0.34 J	0.39 J	0.46 J
CHROMIUM, TOTAL	6010	70	9.0 J	14.8 J	18.1 J	12.9 J	10.0 J	15.3 J	19.1 J	11.6 J	11.1 J	14.6 J
COPPER	6010	270	14.7 J	21.2 J	30.2 J	16.9 J	11.7 J	23.7 J	77.0 J	33.4 J	62.5 J	42.1 J
IRON	6010	--	7290 J	8040 J	9360 J	8250 J	7260 J	9040 J	16500 J	9740 J	9660 J	13100 J
LEAD	6010	218	9.7 J	12.5 J	15.8 J	11.3 J	7.9 J	13.3 J	33.2 J	17.7 J	43.0 J	23.9 J
MANGANESE	6010	--	75.3	71.4	83.5	65.4	70.3	78.0	136	73.0	61.6	94.1
MERCURY	7471	0.71	0.021 J-	0.050 J-	0.072 J-	0.047 J-	0.031 J-	0.049 J-	0.10	0.064	0.063	0.077
NICKEL	6010	51.6	6.5	6.7	9.1	6.1	5.7	8.0	13.2 J	7.7 J	25.4 J	10.7 J
ZINC	6010	219	49.7 J	33.0 J	60.2 J	33.3 J	25.3 J	47.3 J	120 J	60.6 J	192 J	115 J
PCBS (UG/KG)												
AROCLOR-1016	8082	--	< 4.2 U	< 4.4 UJ	< 4.9 U							
AROCLOR-1221	8082	--	< 8.4 U	< 8.9 UJ	< 9.7 U							
AROCLOR-1232	8082	--	< 4.2 U	< 4.4 UJ	< 4.9 U							
AROCLOR-1242	8082	--	< 4.2 U	< 4.4 UJ	< 4.9 U							
AROCLOR-1248	8082	--	< 4.2 U	< 4.4 UJ	< 4.9 U							
AROCLOR-1254	8082	--	< 8.4 U	< 8.9 UJ	< 9.7 U							
AROCLOR-1260	8082	--	75	< 4.4 UJ	< 4.9 U							
PCB, TOTAL	8082	--	75	< 8.9 U	< 9.7 U							
PESTICIDES (UG/KG)												
4,4-DDD	8081	20	< 0.54 U	< 0.57 U	< 0.63 U							
4,4-DDE	8081	7.65	< 0.54 UJ	< 0.57 U	< 0.63 U							
4,4-DDT	8081	6	4.6 J	< 0.57 UJ	< 0.63 UJ							
ALDRIN	8081	--	< 0.27 U	< 0.29 U	< 0.31 U							
ALPHA-BHC	8081	--	< 0.13 U	< 0.14 U	< 0.16 U							
ALPHA-CHLORDANE	8081	6	< 0.13 UJ	< 0.14 U	< 0.16 U							

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 10
ANALYTICAL RESULTS - SEDIMENTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		SED09-01	SED09-02A	SED09-02A	SED09-03A	SED09-04A	SED09-05A	SED09-06B	SED09-07B	SED09-08B	SED09-08B
	SAMPLE DATE		9/13/2016	9/12/2016	9/12/2016	9/12/2016	9/12/2016	9/13/2016	9/26/2016	9/26/2016	9/26/2016	9/26/2016
	QC IDENTIFIER				Duplicate							FD
	METHOD	PAL	R0837	R0837	R0837	R0837	R0837	R0837	R0888	R0888	R0888	R0888
BETA-BHC	8081	--	< 0.13 U	< 0.14 U	< 0.16 U							
DELTA-BHC	8081	--	< 0.27 U	< 0.29 U	< 0.31 U							
DIELDRIN	8081	8	< 0.27 U	< 0.29 U	< 0.31 U							
ENDOSULFAN I	8081	--	< 0.13 UJ	< 0.14 U	< 0.16 U							
ENDOSULFAN II	8081	7	< 0.27 U	< 0.29 U	< 0.31 U							
ENDOSULFAN SULFATE	8081	--	< 0.27 UJ	< 0.29 U	< 0.31 U							
ENDRIN	8081	--	< 0.27 U	< 0.29 U	< 0.31 U							
ENDRIN ALDEHYDE	8081	--	< 0.54 U	< 0.57 U	< 0.63 U							
ENDRIN KETONE	8081	--	< 0.27 UJ	< 0.29 U	< 0.31 U							
HEPTACHLOR	8081	--	< 0.13 U	< 0.14 U	< 0.16 U							
HEPTACHLOR EPOXIDE	8081	--	< 0.27 U	< 0.29 U	< 0.31 U							
LINDANE	8081	--	< 0.13 U	< 0.14 U	< 0.16 U							
METHOXYCHLOR	8081	--	< 1.3 UJ	2.3 J	< 1.6 U							
TOXAPHENE	8081	--	< 11 U	< 11 U	< 13 U							
TRANS-CHLORDANE	8081	--	< 0.27 UJ	< 0.29 U	< 0.31 U							
SULFIDE (MG/KG)												
SULFIDE	4500_S_D	--							< 1.0 U	< 0.91 U	< 0.97 U	< 0.91 U
MISCELLANEOUS PARAMETERS (%)												
MOISTURE CONTENT	D2216	--	22	26	33	20	22	32	41	34	38	34

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
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TABLE 10
ANALYTICAL RESULTS - SEDIMENTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		SED09-09	SED09-10	SED09-11B	SED09-12B
	SAMPLE DATE		9/12/2016	9/12/2016	9/13/2016	9/26/2016
	QC IDENTIFIER					
	METHOD	PAL	R0837	R0837	R0837	R0888
VOLATILES (UG/KG)						
1,1,1-TRICHLOROETHANE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
1,1,2,2-TETRACHLOROETHANE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
1,1,2-TRICHLOROETHANE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
1,1-DICHLOROETHANE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
1,1-DICHLOROETHENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
1,2-DICHLOROETHANE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
1,2-DICHLOROPROPANE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
2-BUTANONE	8260	--	< 8.5 UJ	< 12 UJ	< 4.8 UJ	< 3.9 UJ
2-HEXANONE	8260	--	< 8.5 UJ	< 12 UJ	< 4.8 UJ	< 3.9 UJ
4-METHYL-2-PENTANONE	8260	--	< 8.5 U	< 12 U	< 4.8 U	< 3.9 U
ACETONE	8260	--	< 8.5 UJ	< 12 UJ	16 J	20 J
BENZENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
BROMODICHLOROMETHANE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
BROMOFORM	8260	--	< 8.5 U	< 12 U	< 4.8 U	< 3.9 U
BROMOMETHANE	8260	--	< 8.5 UJ	< 12 UJ	< 4.8 UJ	< 3.9 UJ
CARBON DISULFIDE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	11
CARBON TETRACHLORIDE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
CHLOROBENZENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
CHLOROETHANE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
CHLOROFORM	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
CHLOROMETHANE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
CIS-1,2-DICHLOROETHENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
CIS-1,3-DICHLOROPROPENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
DIBROMOCHLOROMETHANE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
ETHYLBENZENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
METHYLENE CHLORIDE	8260	--	< 8.5 U	< 12 U	< 4.8 U	< 3.9 U
STYRENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
TETRACHLOROETHENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	2.5 J
TOLUENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
TRANS-1,2-DICHLOROETHENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
TRANS-1,3-DICHLOROPROPENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
TRICHLOROETHENE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
VINYL CHLORIDE	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
XYLENES, TOTAL	8260	--	< 4.3 U	< 5.9 U	< 2.4 U	< 1.9 U
TOTAL CVOCs	8260	--	< 8.5 U	< 12 U	< 4.8 U	2.5
SEMIVOLATILES (SIM) (UG/KG)						
2-METHYLNAPHTHALENE	8270_SIM	670	8.2	34	< 4.0 U	< 4.9 UJ
ACENAPHTHENE	8270_SIM	500	28	92	6.8	5.9
ACENAPHTHYLENE	8270_SIM	640	< 7.0 U	11	< 4.0 U	< 4.9 U
ANTHRACENE	8270_SIM	1100	< 7.0 U	200	13	12 J-
BENZO[A]ANTHRACENE	8270_SIM	1600	180	480	32	45 J

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
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TABLE 10
ANALYTICAL RESULTS - SEDIMENTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		SED09-09	SED09-10	SED09-11B	SED09-12B
	SAMPLE DATE		9/12/2016	9/12/2016	9/13/2016	9/26/2016
	QC IDENTIFIER					
	METHOD	PAL	R0837	R0837	R0837	R0888
BENZO[A]PYRENE	8270_SIM	1600	170	430	33	40 J
BENZO[B]FLUORANTHENE	8270_SIM	--	240	690	48	62 J
BENZO[G,H,I]PERYLENE	8270_SIM	--	130	290	29	30 J
BENZO[K]FLUORANTHENE	8270_SIM	--	110	220	21	25 J
CHRYSENE	8270_SIM	2800	170	480	33	51 J
DIBENZ[A,H]ANTHRACENE	8270_SIM	260	36	91	7.4	7.4
FLUORANTHENE	8270_SIM	5100	400	1300	72	88 J
FLUORENE	8270_SIM	540	38	130	5.5	5.7
INDENO[1,2,3-CD]PYRENE	8270_SIM	--	110	270	24	37 J
NAPHTHALENE	8270_SIM	2100	18	85	< 4.0 U	< 4.9 UJ
PHENANTHRENE	8270_SIM	1500	280	960	45	57 J
PYRENE	8270_SIM	2600	310	890	55	73 J
PAH, TOTAL	8270_SIM	--	2200	6600	420	540
METALS (MG/KG)						
ALUMINUM	6010	--	8420	7950	3770	3890
ANTIMONY	6010	--	< 1.3 UJ	< 2.7 UJ	< 0.83 UJ	< 0.70 UJ
ARSENIC	6010	70	8.2 J	11.6 J	1.8 J	4.9
BERYLLIUM	6010	--	0.84	0.85	1.4	0.36 J
CHROMIUM, TOTAL	6010	70	32.4 J	23.7 J	12.8 J	11.3 J
COPPER	6010	270	80.5 J	65.5 J	19.3 J	27.8 J
IRON	6010	--	24100 J	22900 J	8850 J	10600 J
LEAD	6010	218	53.0 J	50.0 J	13.7 J	16.0 J
MANGANESE	6010	--	186	136	109	74.2
MERCURY	7471	0.71	0.20 J-	0.15 J-	0.021 J-	0.066
NICKEL	6010	51.6	19.0	15.5	10	8.1 J
ZINC	6010	219	172 J	158 J	76.1 J	60.6 J
PCBS (UG/KG)						
AROCLOR-1016	8082	--	< 0.070 UJ	< 9.7 UJ		
AROCLOR-1221	8082	--	< 0.14 UJ	< 19 UJ		
AROCLOR-1232	8082	--	< 0.070 UJ	< 9.7 UJ		
AROCLOR-1242	8082	--	< 0.070 UJ	< 9.7 UJ		
AROCLOR-1248	8082	--	< 0.070 UJ	< 9.7 UJ		
AROCLOR-1254	8082	--	< 0.14 UJ	< 19 UJ		
AROCLOR-1260	8082	--	0.69 J-	74 J-		
PCB, TOTAL	8082	--	0.69	74		
PESTICIDES (UG/KG)						
4,4-DDD	8081	20	< 0.90 U	< 1.2 U		
4,4-DDE	8081	7.65	< 0.90 U	< 1.2 U		
4,4-DDT	8081	6	< 0.90 UJ	< 1.2 UJ		
ALDRIN	8081	--	< 0.45 U	< 0.62 U		
ALPHA-BHC	8081	--	< 0.22 U	< 0.31 U		
ALPHA-CHLORDANE	8081	6	< 0.22 U	< 0.31 U		

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 10
ANALYTICAL RESULTS - SEDIMENTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		SED09-09	SED09-10	SED09-11B	SED09-12B
	SAMPLE DATE		9/12/2016	9/12/2016	9/13/2016	9/26/2016
	QC IDENTIFIER					
	METHOD	PAL	R0837	R0837	R0837	R0888
BETA-BHC	8081	--	< 0.22 U	< 0.31 U		
DELTA-BHC	8081	--	< 0.45 U	< 0.62 U		
DIELDRIN	8081	8	< 0.45 U	< 0.62 U		
ENDOSULFAN I	8081	--	< 0.22 U	< 0.31 U		
ENDOSULFAN II	8081	7	< 0.45 U	< 0.62 U		
ENDOSULFAN SULFATE	8081	--	< 0.45 U	< 0.62 U		
ENDRIN	8081	--	< 0.45 U	< 0.62 U		
ENDRIN ALDEHYDE	8081	--	< 0.90 U	< 1.2 U		
ENDRIN KETONE	8081	--	< 0.45 U	< 0.62 U		
HEPTACHLOR	8081	--	< 0.22 U	< 0.31 U		
HEPTACHLOR EPOXIDE	8081	--	< 0.45 U	< 0.62 U		
LINDANE	8081	--	2.1 J	3.0 J		
METHOXYCHLOR	8081	--	< 2.2 U	< 3.1 U		
TOXAPHENE	8081	--	< 18 U	< 25 U		
TRANS-CHLORDANE	8081	--	< 0.45 U	< 0.62 U		
SULFIDE (MG/KG)						
SULFIDE	4500_S_D	--			< 0.73 U	< 0.90 U
MISCELLANEOUS PARAMETERS (%)						
MOISTURE CONTENT	D2216	--	53	66	17	33

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 11a
ANALYTICAL RESULTS - SHELLFISH WET WEIGTH RESULTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

LOCATION ID	ET09-03	ET09-04	ET09-05	ET09-05	ET09-06	ET09-07	ET09-08	ET09-09	ET09-10	ET09-11	ET09-12
SAMPLE DATE	**12/14/2016**	**12/14/2016**	**12/13/2016**	**12/13/2016**	**12/13/2016**	**12/14/2016**	**12/14/2016**	**12/13/2016**	**12/13/2016**	**12/13/2016**	**12/13/2016**
QC IDENTIFIER	**N**	**N**	**N**	**FD**	**N**	**N**	**N**	**N**	**N**	**N**	**N**
Lipid (%)											
LIPIDS	0.16	0.49	0.053	0.076	0.12	0.12	0.06	0.092	0.12	0.12	0.12
Pesticides (UG/KG)											
4,4-DDD	< 0.85 U	< 0.84 U	< 0.85 U	< 0.84 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 UJ	< 0.85 UJ	< 0.85 U	< 0.85 U
4,4-DDE	< 0.85 U	< 0.84 U	< 0.85 U	< 0.84 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 UJ	< 0.85 UJ	< 0.85 U	< 0.85 U
4,4-DDT	< 0.85 U	< 0.84 U	< 0.85 U	< 0.84 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 UJ	< 0.85 UJ	< 0.85 U	< 0.85 U
ALDRIN	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
ALPHA-BHC	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
ALPHA-CHLORDANE	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
BETA-BHC	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
DELTA-BHC	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
DIELDRIN	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
ENDOSULFAN I	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
ENDOSULFAN II	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
ENDOSULFAN SULFATE	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
ENDRIN	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
ENDRIN ALDEHYDE	< 0.85 U	< 0.84 U	< 0.85 U	< 0.84 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 UJ	< 0.85 UJ	< 0.85 U	< 0.85 U
ENDRIN KETONE	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
HEPTACHLOR	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
HEPTACHLOR EPOXIDE	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
LINDANE	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
METHOXYCHLOR	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 UJ	< 2.1 UJ	< 2.1 U	< 2.1 U
TOXAPHENE	< 17 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 UJ	< 17 UJ	< 17 U	< 17 U
TRANS-CHLORDANE	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
SVOCs (UG/KG)											
1,2,4-TRICHLOROBENZENE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
1,2-DICHLOROBENZENE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
1,3-DICHLOROBENZENE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
1,4-DICHLOROBENZENE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
2,2'-OXYBIS(1-CHLOROPROPANE)	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
2,4,5-TRICHLOROPHENOL	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
2,4,6-TRICHLOROPHENOL	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
2,4-DICHLOROPHENOL	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
2,4-DIMETHYLPHENOL	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U
2,4-DINITROPHENOL	< 330 UJ	< 320 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ
2,4-DINITROTOLUENE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
2,6-DINITROTOLUENE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
2-CHLORONAPHTHALENE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
2-CHLOROPHENOL	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
2-METHYLPHENOL	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
2-NITROANILINE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
2-NITROPHENOL	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 11a
ANALYTICAL RESULTS - SHELLFISH WET WEIGTH RESULTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

LOCATION ID	ET09-03	ET09-04	ET09-05	ET09-05	ET09-06	ET09-07	ET09-08	ET09-09	ET09-10	ET09-11	ET09-12
SAMPLE DATE	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/13/2016	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/13/2016	12/13/2016
QC IDENTIFIER	N	N	N	FD	N	N	N	N	N	N	N
3,3-DICHLOROBENZIDINE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	R	< 130 UJ	< 130 UJ
3-NITROANILINE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	R	< 130 UJ	< 130 UJ
4,6-DINITRO-2-METHYLPHENOL	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ
4-BROMOPHENYL-PHENYLETHER	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
4-CHLORO-3-METHYLPHENOL	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U
4-CHLOROANILINE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	R	< 130 UJ	< 130 UJ
4-CHLOROPHENYL-PHENYLETHER	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
4-METHYLPHENOL	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U
4-NITROANILINE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	R	< 130 UJ	< 130 UJ
4-NITROPHENOL	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
BIS(2-CHLOROETHOXY)METHANE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
BIS(2-CHLOROETHYL)ETHER	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
BIS(2-ETHYLHEXYL)PHTHALATE	170 J-	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	R	< 130 UJ	< 130 UJ
BUTYLBENZYLPHTHALATE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
CARBAZOLE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
DIBENZOFURAN	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
DIETHYLPHTHALATE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
DIMETHYL PHTHALATE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
DI-N-BUTYLPHTHALATE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
DI-N-OCTYLPHTHALATE	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	R	< 130 UJ	< 130 UJ
HEXACHLOROBENZENE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
HEXACHLOROBUTADIENE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
HEXACHLOROCYCLOPENTADIENE	< 330 UJ	< 320 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	R	< 330 UJ	< 330 UJ
HEXACHLOROETHANE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
ISOPHORONE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
NITROBENZENE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
N-NITROSODINPROPYLAMINE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
N-NITROSODIPHENYLAMINE	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
PENTACHLOROPHENOL	< 330 UJ	< 320 U	< 330 UJ	< 330 UJ	< 330 U	< 330 UJ	< 330 UJ	< 330 U	R	< 330 UJ	< 330 U
PHENOL	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
SVOCs SIM (UG/KG)											
2-METHYLNAPHTHALENE	< 6.5 U	12	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
ACENAPHTHENE	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
ACENAPHTHYLENE	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
ANTHRACENE	< 6.5 UJ	< 6.5 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ
BENZO[A]ANTHRACENE	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
BENZO[A]PYRENE	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
BENZO[B]FLUORANTHENE	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
BENZO[G,H,I]PERYLENE	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
BENZO[K]FLUORANTHENE	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
CHRYSENE	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
DIBENZ[A,H]ANTHRACENE	< 6.5 UJ	< 6.5 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 11a
ANALYTICAL RESULTS - SHELLFISH WET WEIGTH RESULTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

LOCATION ID	ET09-03	ET09-04	ET09-05	ET09-05	ET09-06	ET09-07	ET09-08	ET09-09	ET09-10	ET09-11	ET09-12
SAMPLE DATE	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/13/2016	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/13/2016	12/13/2016
QC IDENTIFIER	N	N	N	FD	N	N	N	N	N	N	N
FLUORANTHENE	8.0	13	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
FLUORENE	< 6.5 U	6.9	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
INDENO[1,2,3-CD]PYRENE	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
NAPHTHALENE	10	24	< 6.6 UJ	< 6.6 UJ	< 6.6 U	8.8 J-	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PHENANTHRENE	14	25	< 6.6 UJ	< 6.6 UJ	< 6.6 U	8.8 J-	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PYRENE	7.5	11	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
Metals (MG/KG)											
ALUMINUM	52.3	128	21.5 J	6.8 J	2.1 J	38.3	144	2.6 J	7.3 J	9.3	6.2 J
ANTIMONY	< 0.82 U	< 0.80 U	< 0.55 U	< 0.70 U	< 0.59 U	< 0.72 U	< 0.52 U	< 0.65 U	< 0.87 U	< 0.82 U	< 0.51 U
ARSENIC	2.4	3.4	2.9	2.9	2.6	2.0	2.5	2.9	2.8	2.0	3.1
BARIUM	< 8.2 U	< 10.0 U	< 6.9 U	< 8.7 U	< 7.4 U	< 7.2 U	< 6.5 U	< 6.5 U	< 8.7 U	< 8.2 U	< 6.4 U
BERYLLIUM	< 0.20 U	< 0.25 U	< 0.17 U	< 0.22 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.16 U	< 0.22 U	< 0.20 U	< 0.16 U
CADMIUM	0.12 J	0.17 J	0.069 J	0.063 J	0.064 J	0.46	0.15 J	0.066 J	0.059 J	0.073 J	0.055 J
CALCIUM	662	2430	1060	1300	606	700	635	494	926	988	879
CHROMIUM, TOTAL	< 0.82 U	1.1	< 0.69 U	< 0.87 U	< 0.74 U	1.1	1.4	< 0.65 U	< 0.87 U	< 0.82 U	< 0.64 U
COBALT	0.12 J	0.26 J	0.17 J	0.18 J	0.13 J	0.057 J	0.14 J	0.14 J	0.15 J	0.059 J	0.15 J
COPPER	< 1.4 U	6.4	< 1.1 U	< 1.3 U	< 1.8 U	< 1.9 U	3.0	2.8	< 2.2 U	< 1.6 U	2.7
IRON	262	599	71.5 J	32.8 J	15.9	113	390	19.0	38	38.0	39.3
LEAD	0.53	1.2	0.14 J	< 0.22 U	0.14 J	0.26 J	0.88	0.16 J	< 0.22 U	0.14 J	0.22 J
MAGNESIUM	1010	1250	1000	1040	927	941	959	926	937	967	946
MANGANESE	22.1	41.4	2.6	< 2.2 U	3.1	1.8	6.5	3.2	4.8	11.6	4.0
MERCURY	0.0054 J	0.0068 J	0.0072 J	0.0074 J	0.0066 J	0.0096 J	0.014 J	0.0058 J	0.0080 J	0.0074 J	0.0059 J
NICKEL	0.20 J	0.70 J	0.87 J	0.88 J	0.59 J	0.45 J	0.65 J	0.61 J	0.58 J	0.14 J	0.37 J
POTASSIUM	901	1350	1120	1170	1440	865	855	1510	1360	966	1310
SELENIUM	< 0.82 U	1.2 J	0.64 J	0.57 J	0.62 J	< 0.72 U	0.71 J	< 0.65 U	0.57 J	0.54 J	0.56 J
SILVER	0.13 J	0.15 J	0.076 J	0.075 J	0.093 J	0.94 J	0.57 J	0.079 J	0.091 J	0.20 J	0.11 J
SODIUM	7570	9130	7500	7420	6620	7160	6890	6410	6630	7470	6800
THALLIUM	< 0.41 UJ	< 0.50 UJ	< 0.34 UJ	< 0.43 UJ	< 0.37 UJ	< 0.36 UJ	< 0.33 UJ	< 0.32 UJ	< 0.43 UJ	< 0.41 UJ	< 0.32 UJ
VANADIUM	< 2.0 U	< 2.5 U	< 1.7 U	< 2.2 U	< 1.8 U	< 1.8 U	< 1.6 U	< 1.6 U	< 2.2 U	< 2.0 U	< 1.6 U
ZINC	5.5	10.6	12.5	13.2	14.6	5.0	6.5	15.6	14	5.3	13.6
PCBs (UG/KG)											
DECACHLOROBIPHENYL	0.26 J	< 0.42 U	0.38 J	0.23 J	< 0.42 UJ	< 0.41 U	< 0.41 U	< 0.42 UJ	0.20 J	< 0.41 U	< 0.41 UJ
DICHLOROBIPHENYL	< 0.082 U	0.42	< 0.083 U	< 0.082 U	< 0.083 UJ	< 0.082 U	0.21 J	< 0.083 UJ	< 0.083 U	< 0.082 U	< 0.082 UJ
HEPTACHLOROBIPHENYL	5.3	3.7	0.71 J	0.21 J	0.76 J-	1.1	0.37 J	0.20 J-	0.21 J-	1.7	0.35 J-
HEXACHLOROBIPHENYL	16	15	1.5	0.96	1.3 J-	5.5	1.7	0.86 J-	0.63 J-	8.3	0.51 J-
MONOCHLOROBIPHENYL	< 0.17 U	< 0.17 U	< 0.17 U	< 0.16 U	< 0.17 UJ	< 0.16 U	< 0.16 U	< 0.17 UJ	< 0.17 U	< 0.16 U	< 0.17 UJ
NONACHLOROBIPHENYL	< 0.41 U	< 0.42 U	< 0.42 U	< 0.41 U	< 0.42 UJ	< 0.41 U	< 0.41 U	< 0.42 UJ	< 0.42 UJ	< 0.41 U	< 0.41 UJ
OCTACHLOROBIPHENYL	< 0.50 U	< 0.50 U	< 0.50 U	< 0.49 U	< 0.50 UJ	< 0.49 U	< 0.49 U	< 0.50 UJ	< 0.50 UJ	< 0.49 U	< 0.50 UJ
PENTACHLOROBIPHENYL	5.1	6.6	0.19 J	0.15 J	0.21 J-	2.7	0.99	< 0.17 UJ	0.18 J-	4.4	< 0.17 UJ
POLYCHLORINATED BIPHENYLS (PCBS)	27	28	3.0 J	1.5 J	2.2 J-	9.4	3.4	1.1 J-	1.2 J-	15	0.86 J-
TETRACHLOROBIPHENYL	0.74	1.2	< 0.17 U	< 0.16 U	< 0.17 UJ	0.17 J	0.087 J	< 0.17 UJ	< 0.17 UJ	0.66	< 0.17 UJ
TRICHLOROBIPHENYL	< 0.082 U	0.088 J	0.19 J	< 0.082 U	< 0.083 UJ	< 0.082 U	0.055 J	< 0.083 UJ	< 0.083 UJ	< 0.082 U	< 0.082 UJ

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 11b
ANALYTICAL RESULTS - SHELLFISH LIPID NORMALIZED RESULTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

LOCATION ID	ET09-03	ET09-04	ET09-05	ET09-06	ET09-07	ET09-08	ET09-09	ET09-10	ET09-11	ET09-12
SAMPLE DATE	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/13/2016	12/13/2016
QC IDENTIFIER	N	N	N	N	N	N	N	N	N	N
SDG	R1136	R1136	R1136	R1136	R1136	R1136	R1136	R1136	R1136	R1136
PCBs (UG/KG-LIPIDS)										
DECACHLOROBIPHENYL	1.6 J	0.86 U	7.2 J	3.5 UJ	3.4 U	6.8 U	4.6 UJ	1.7 J	3.4 U	3.4 UJ
DICHLOROBIPHENYL	0.51 U	0.86	1.6 U	0.69 UJ	0.68 U	3.5 J	0.9 UJ	0.69 U	0.68 U	0.68 UJ
HEPTACHLOROBIPHENYL	33	7.6	13 J	6.3 J-	9.2	6.2 J	2.2 J-	1.8 J-	14	2.9 J-
HEXACHLOROBIPHENYL	100	31	28	11 J-	46	28	9.3 J-	5.3 J-	69	4.3 J-
MONOCHLOROBIPHENYL	1.1 U	0.35 U	3.2 U	1.4 UJ	1.3 U	2.7 U	1.8 UJ	1.4 U	1.3 U	1.4 UJ
NONACHLOROBIPHENYL	2.6 U	0.86 U	7.9 U	3.5 UJ	3.4 U	6.8 U	4.6 UJ	3.5 UJ	3.4 U	3.4 UJ
OCTACHLOROBIPHENYL	3.1 U	1 U	9.4 U	4.2 UJ	4.1 U	8.2 U	5.4 UJ	4.2 UJ	4.1 U	4.2 UJ
PENTACHLOROBIPHENYL	32	13	3.6 J	1.8 J-	23	17	1.8 UJ	1.5 J-	37	1.4 UJ
POLYCHLORINATED BIPHENYLS (PCBS)	170	57	57 J	18 J-	78	57	12 J-	10 J-	130	7.2 J-
TETRACHLOROBIPHENYL	4.6	2.4	3.2 U	1.4 UJ	1.4 J	1.5 J	1.8 UJ	1.4 UJ	5.5	1.4 UJ
TRICHLOROBIPHENYL	0.51 U	0.18 J	3.6 J	0.69 UJ	0.68 U	0.92 J	0.9 UJ	0.69 UJ	0.68 U	0.68 UJ
Pesticides (UG/KG-LIPIDS)										
4,4-DDD	5.3 U	1.7 U	16 U	7.1 U	7.1 U	14 U	9.1 UJ	7.1 UJ	7.1 U	7.1 U
4,4-DDE	5.3 U	1.7 U	16 U	7.1 U	7.1 U	14 U	9.1 UJ	7.1 UJ	7.1 U	7.1 U
4,4-DDT	5.3 U	1.7 U	16 U	7.1 U	7.1 U	14 U	9.1 UJ	7.1 UJ	7.1 U	7.1 U
ALDRIN	2.6 U	0.86 U	8.1 U	3.5 U	3.6 U	7 U	4.6 UJ	3.6 UJ	3.6 U	3.5 U
ALPHA-BHC	1.3 U	0.43 U	4 U	1.8 U	1.8 U	3.5 U	2.3 UJ	1.8 UJ	1.8 U	1.8 U
ALPHA-CHLORDANE	1.3 U	0.43 U	4 U	1.8 U	1.8 U	3.5 U	2.3 UJ	1.8 UJ	1.8 U	1.8 U
BETA-BHC	1.3 U	0.43 U	4 U	1.8 U	1.8 U	3.5 U	2.3 UJ	1.8 UJ	1.8 U	1.8 U
DELTA-BHC	2.6 U	0.86 U	8.1 U	3.5 U	3.6 U	7 U	4.6 UJ	3.6 UJ	3.6 U	3.5 U
DIELDRIN	2.6 U	0.86 U	8.1 U	3.5 U	3.6 U	7 U	4.6 UJ	3.6 UJ	3.6 U	3.5 U
ENDOSULFAN I	1.3 U	0.43 U	4 U	1.8 U	1.8 U	3.5 U	2.3 UJ	1.8 UJ	1.8 U	1.8 U
ENDOSULFAN II	2.6 U	0.86 U	8.1 U	3.5 U	3.6 U	7 U	4.6 UJ	3.6 UJ	3.6 U	3.5 U
ENDOSULFAN SULFATE	2.6 U	0.86 U	8.1 U	3.5 U	3.6 U	7 U	4.6 UJ	3.6 UJ	3.6 U	3.5 U
ENDRIN	2.6 U	0.86 U	8.1 U	3.5 U	3.6 U	7 U	4.6 UJ	3.6 UJ	3.6 U	3.5 U
ENDRIN ALDEHYDE	5.3 U	1.7 U	16 U	7.1 U	7.1 U	14 U	9.1 UJ	7.1 UJ	7.1 U	7.1 U
ENDRIN KETONE	2.6 U	0.86 U	8.1 U	3.5 U	3.6 U	7 U	4.6 UJ	3.6 UJ	3.6 U	3.5 U
HEPTACHLOR	1.3 U	0.43 U	4 U	1.8 U	1.8 U	3.5 U	2.3 UJ	1.8 UJ	1.8 U	1.8 U
HEPTACHLOR EPOXIDE	2.6 U	0.86 U	8.1 U	3.5 U	3.6 U	7 U	4.6 UJ	3.6 UJ	3.6 U	3.5 U
LINDANE	1.3 U	0.43 U	4 U	1.8 U	1.8 U	3.5 U	2.3 UJ	1.8 UJ	1.8 U	1.8 U
METHOXYCHLOR	13 U	4.3 U	40 U	18 U	18 U	35 U	23 UJ	18 UJ	18 U	18 U
TOXAPHENE	110 U	35 U	320 U	140 U	140 U	280 U	180 UJ	140 UJ	140 U	140 U
TRANS-CHLORDANE	2.6 U	0.86 U	8.1 U	3.5 U	3.6 U	7 U	4.6 UJ	3.6 UJ	3.6 U	3.5 U
SVOCs (UG/KG-LIPIDS)										
1,2,4-TRICHLOROBENZENE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
1,2-DICHLOROBENZENE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
1,3-DICHLOROBENZENE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
1,4-DICHLOROBENZENE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
2,2'-OXYBIS(1-CHLOROPROPANE)	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
2,4,5-TRICHLOROPHENOL	810 U	270 U	2500 U	1100 U	1100 U	2200 U	1400 U	1100 UJ	1100 U	1100 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 11b
ANALYTICAL RESULTS - SHELLFISH LIPID NORMALIZED RESULTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

LOCATION ID	ET09-03	ET09-04	ET09-05	ET09-06	ET09-07	ET09-08	ET09-09	ET09-10	ET09-11	ET09-12
SAMPLE DATE	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/13/2016	12/13/2016
QC IDENTIFIER	N	N	N	N	N	N	N	N	N	N
SDG	R1136	R1136	R1136	R1136	R1136	R1136	R1136	R1136	R1136	R1136
2,4,6-TRICHLOROPHENOL	810 U	270 U	2500 U	1100 U	1100 U	2200 U	1400 U	1100 UJ	1100 U	1100 U
2,4-DICHLOROPHENOL	810 U	270 U	2500 U	1100 U	1100 U	2200 U	1400 U	1100 UJ	1100 U	1100 U
2,4-DIMETHYLPHENOL	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 U
2,4-DINITROPHENOL	2100 UJ	650 UJ	6200 U	2800 UJ	2800 UJ	5500 UJ	3600 UJ	2800 UJ	2800 UJ	2800 UJ
2,4-DINITROTOLUENE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
2,6-DINITROTOLUENE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
2-CHLORONAPHTHALENE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
2-CHLOROPHENOL	810 U	270 U	2500 U	1100 U	1100 U	2200 U	1400 U	1100 UJ	1100 U	1100 U
2-METHYLPHENOL	810 U	270 U	2500 U	1100 U	1100 U	2200 U	1400 U	1100 UJ	1100 U	1100 U
2-NITROANILINE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
2-NITROPHENOL	810 U	270 U	2500 U	1100 U	1100 U	2200 U	1400 U	1100 UJ	1100 U	1100 U
3,3-DICHLOROBENZIDINE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	R	1100 UJ	1100 UJ
3-NITROANILINE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	R	1100 UJ	1100 UJ
4,6-DINITRO-2-METHYLPHENOL	810 UJ	270 UJ	2500 U	1100 UJ	1100 UJ	2200 UJ	1400 UJ	1100 UJ	1100 UJ	1100 UJ
4-BROMOPHENYL-PHENYLETHER	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
4-CHLORO-3-METHYLPHENOL	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 U
4-CHLOROANILINE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	R	1100 UJ	1100 UJ
4-CHLOROPHENYL-PHENYLETHER	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
4-METHYLPHENOL	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 U
4-NITROANILINE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	R	1100 UJ	1100 UJ
4-NITROPHENOL	810 U	270 U	2500 U	1100 U	1100 U	2200 U	1400 U	1100 UJ	1100 U	1100 U
BIS(2-CHLOROETHOXY)METHANE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
BIS(2-CHLOROETHYL)ETHER	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
BIS(2-ETHYLHEXYL)PHTHALATE	1100 J-	270 UJ	2500 U	1100 UJ	1100 UJ	2200 UJ	1400 UJ	R	1100 UJ	1100 UJ
BUTYLBENZYLPHTHALATE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
CARBAZOLE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
DIBENZOFURAN	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
DIETHYLPHTHALATE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
DIMETHYL PHTHALATE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
DI-N-BUTYLPHTHALATE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
DI-N-OCTYLPHTHALATE	810 UJ	270 UJ	2500 U	1100 UJ	1100 UJ	2200 UJ	1400 UJ	R	1100 UJ	1100 UJ
HEXACHLOROBENZENE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
HEXACHLOROBUTADIENE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
HEXACHLOROCYCLOPENTADIENE	2100 UJ	650 UJ	6200 U	2800 UJ	2800 UJ	5500 UJ	3600 UJ	R	2800 UJ	2800 UJ
HEXACHLOROETHANE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
ISOPHORONE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
NITROBENZENE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
N-NITROSODINPROPYLAMINE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
N-NITROSODIPHENYLAMINE	810 UJ	270 U	2500 U	1100 U	1100 UJ	2200 UJ	1400 U	1100 UJ	1100 UJ	1100 UJ
PENTACHLOROPHENOL	2100 UJ	650 U	6200 U	2800 U	2800 UJ	5500 UJ	3600 U	R	2800 UJ	2800 U
PHENOL	810 U	270 U	2500 U	1100 U	1100 U	2200 U	1400 U	1100 UJ	1100 U	1100 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 11b
ANALYTICAL RESULTS - SHELLFISH LIPID NORMALIZED RESULTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

LOCATION ID	ET09-03	ET09-04	ET09-05	ET09-06	ET09-07	ET09-08	ET09-09	ET09-10	ET09-11	ET09-12
SAMPLE DATE	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/13/2016	12/13/2016
QC IDENTIFIER	N	N	N	N	N	N	N	N	N	N
SDG	R1136	R1136	R1136	R1136	R1136	R1136	R1136	R1136	R1136	R1136
SVOCs SIM (UG/KG-LIPIDS)										
2-METHYLNAPHTHALENE	41 U	24	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
ACENAPHTHENE	41 U	13 U	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
ACENAPHTHYLENE	41 U	13 U	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
ANTHRACENE	41 UJ	13 UJ	120 U	55 UJ	55 UJ	110 UJ	72 UJ	55 UJ	55 UJ	55 UJ
BENZO[A]ANTHRACENE	41 U	13 U	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
BENZO[A]PYRENE	41 U	13 U	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
BENZO[B]FLUORANTHENE	41 U	13 U	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
BENZO[G,H,I]PERYLENE	41 U	13 U	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
BENZO[K]FLUORANTHENE	41 U	13 U	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
CHRYSENE	41 U	13 U	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
DIBENZ[A,H]ANTHRACENE	41 UJ	13 UJ	120 U	55 UJ	55 UJ	110 UJ	72 UJ	55 UJ	55 UJ	55 UJ
FLUORANTHENE	50	27	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
FLUORENE	41 U	14	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
INDENO[1,2,3-CD]PYRENE	41 U	13 U	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U
NAPHTHALENE	60	49	120 U	55 U	73 J-	110 UJ	72 U	55 UJ	55 UJ	55 U
PHENANTHRENE	88	51	120 U	55 U	73 J-	110 UJ	72 U	55 UJ	55 UJ	55 U
PYRENE	47	22	120 U	55 U	55 UJ	110 UJ	72 U	55 UJ	55 UJ	55 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

TABLE 11c
2013 - 2016 SHELLFISH ANALYTICAL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			LOCATION ID	ET09-03	ET09-04	ET09-04	ET09-05	ET09-06	ET09-09	ET09-10	ET09-11	ET09-12	ET09-03	ET09-04	ET09-05	ET09-05	ET09-06	ET09-09	ET09-10	ET09-11	ET09-12	ET09-03	ET09-04	ET09-05
			SAMPLE DATE	10/1/2013	10/1/2013	10/1/2013	10/1/2013	10/1/2013	10/3/2013	10/3/2013	10/15/2013	10/3/2013	9/22/2014	9/22/2014	9/23/2014	9/23/2014	9/22/2014	9/23/2014	9/24/2014	9/23/2014	9/24/2014	9/14/2015	9/14/2015	9/9/2015
			QC IDENTIFIER	N	FD	N	N	N	N	N	N	N	N	N	N	FD	N	N	N	N	N	N	N	N
ANALYTE GROUP	PARAMETER	UNIT																						
Metals	ALUMINUM	MG_KG		166 J	72.3 J	133 J	15.1 J	16.9 J	7.30 J	1360 J	9.72 J	77.5 J	19.2	16.3	16.8	19.9	21.3	14.6	9.9	10.4	19.9	107	51.6	146
Metals	ANTIMONY	MG_KG		< 0.740 U	< 0.718 U	< 0.718 U	< 0.725 U	< 0.740 U	< 0.712 U	< 0.733 U	< 0.725 U	< 0.718 U	0.24 J	0.62 J	< 0.69 U	< 0.64 U	0.37 J	0.23 J	0.36 J	< 0.45 U	< 0.57 U	< 0.53 U	< 0.74 U	0.36 J
Metals	ARSENIC	MG_KG		3.52 J	4.98	5.17	3.15 J	4.73	4.56	2.71 J	3.61 J	2.56 J	3.4	4.1	1.9	3.2	4.2	3.6	3	3.5	3.4	2.7	2.1	3.3
Metals	BARIUM	MG_KG		0.608 J	0.486 J	0.737 J	0.222 J	0.131 J	0.0856 J	6.05	0.0863 J	0.476 J	< 5.1 U	< 9.6 U	< 9.3 U	< 8.5 U	< 6.8 U	< 5.5 U	< 8.1 U	< 6.0 U	< 7.6 U	< 7.1 U	< 9.8 U	< 7.5 U
Metals	BERYLLIUM	MG_KG		< 0.0670 U	< 0.0650 U	< 0.0650 U	< 0.0657 U	< 0.0670 U	< 0.0644 U	0.111 J	< 0.0657 U	< 0.0650 U	0.0026 J	0.0074 J	0.0046 J	0.0052 J	0.0057 J	0.0011 J	0.0077 J	0.0065 J	0.0024 J	0.014 J	0.0061 J	0.018 J
Metals	CADMIUM	MG_KG		0.213 J	0.202 J	0.148 J	0.0873 J	0.145 J	0.142 J	0.206 J	0.120 J	0.0845 J	0.23	0.19 J	0.063 J	0.085 J	0.12 J	0.10 J	0.093 J	0.084 J	0.10 J	0.17 J	0.10 J	0.076 J
Metals	CALCIUM	MG_KG		685 J	1910 J	2670 J	631 J	427 J	490 J	968 J	512 J	726 J	418	395	332	448	419	465	511	501	441	559	343	810
Metals	CHROMIUM, TOTAL	MG_KG		< 3 U	< 2.91 U	< 2.91 U	< 0.157 U	< 3 U	< 0.154 U	9.37	< 0.157 U	< 2.91 U	< 0.51 U	< 0.96 U	< 0.93 U	< 0.85 U	< 0.68 U	< 0.55 U	< 0.81 U	< 0.60 U	< 0.76 U	< 0.71 U	< 0.98 U	1.1
Metals	COBALT	MG_KG		< 1 U	< 0.971 U	< 0.971 U	< 0.98 U	< 0.0990 U	< 0.0952 U	1.01	< 0.0971 U	< 0.971 U	< 1.3 U	< 2.4 U	< 2.3 U	< 2.1 U	< 1.7 U	< 1.4 U	< 2.0 U	< 1.5 U	< 1.9 U	< 1.8 U	< 2.5 U	< 1.9 U
Metals	COPPER	MG_KG		3.58	2.5	2.77	1.39 J	1.68 J	1.83 J	9.48	1.60 J	3.28	1.9	1.9	1.1 J	1.7	2.4	1.9	4.1	4.2	2	3	2.4	2.8
Metals	IRON	MG_KG		542 J	261 J	616 J	43.8 J	62.6 J	30.6 J	3160 J	33.0 J	205 J	85.4	99.4	50.8	60.4	80.9	46.6	43.6	43.5	60.9	477	204	502
Metals	LEAD	MG_KG		1.19 J	0.711 J	1.15 J	< 0.490 U	< 0.500 U	< 0.481 U	6.9	< 0.490 U	0.689 J	0.21 J	0.19 J	< 0.23 U	< 0.21 U	0.16 J	0.11 J	0.24 J	0.18 J	< 0.19 U	1	0.42 J	1.2
Metals	MAGNESIUM	MG_KG		835	777	838	891	737	770	1150	778	790	858	905	640	960	890	886	896	855	920	775	761	976
Metals	MANGANESE	MG_KG		29.4 J	27.5 J	46.0 J	4.98 J	11.4 J	9.33 J	31.0 J	9.07 J	12.6 J	2.4	10.4	4.1	5.1	3.3	12.7	9.7	5.7	11.1	21.3	7.8	10.4
Metals	MERCURY	MG_KG		0.0111 J	0.0111 J	< 0.0093 U	< 0.0095 U	0.0114 J	0.0110 J	0.0197 J	0.0120 J	< 0.0093 U	0.0063 J	0.0067 J	0.0068 J	0.0059 J	0.0098 J	0.0083 J	0.011 J	0.0085 J	0.0095 J	0.0090 J	0.0072 J	0.0052 J
Metals	NICKEL	MG_KG		1.04 J	0.544 J	0.433 J	0.649 J	< 0.130 U	< 0.125 U	5.52	0.152 J	0.651 J	< 1.3 U	< 2.4 U	< 2.3 U	< 2.1 U	< 1.7 U	< 1.4 U	< 2.0 U	< 1.5 U	< 1.9 U	< 1.8 U	< 2.5 U	< 1.9 U
Metals	POTASSIUM	MG_KG		1310	1630	1540	1350	1460	1440	1090	1380	1600	1280	1400	931	1530	1600	1470	1410	1720	1420	840	913	1190
Metals	SELENIUM	MG_KG		< 0.800 U	< 0.777 U	< 0.777 U	< 0.784 U	< 0.800 U	< 0.769 U	< 0.792 U	< 0.784 U	< 0.777 U	< 0.51 U	< 0.96 U	< 0.93 U	< 0.85 U	< 0.68 U	< 0.55 U	< 0.81 U	< 0.60 U	< 0.76 U	0.61 J	< 1.5 U	< 1.1 U
Metals	SILVER	MG_KG		< 0.170 U	< 0.165 U	< 0.165 U	< 0.167 U	< 0.170 U	< 0.163 U	< 0.168 U	< 0.98 U	< 0.165 U	0.14 J	0.20 J	0.11 J	0.11 J	0.11 J	0.14 J	0.17 J	0.14 J	0.17 J	0.15 J	0.11 J	0.066 J
Metals	SODIUM	MG_KG		6330	5800	6380	6550	6090	6180	4740	6410	5420	7340	7510	4650	7140	7000	7670	6680	6250	7670	5180	5660	6260
Metals	THALLIUM	MG_KG		< 0.520 U	< 0.505 U	< 0.505 U	< 0.510 U	< 0.520 U	< 0.500 U	< 0.515 U	< 0.510 U	< 0.505 U	< 0.26 U	< 0.48 U	< 0.46 U	< 0.42 U	< 0.34 U	< 0.27 U	< 0.41 U	< 0.30 U	< 0.38 U	< 0.35 U	< 0.49 U	< 0.37 U
Metals	VANADIUM	MG_KG		< 1 U	< 0.971 U	< 0.971 U	< 0.127 U	< 1 U	< 0.125 U	4.01	< 0.127 U	< 0.971 U	< 1.3 U	< 2.4 U	< 2.3 U	< 2.1 U	< 1.7 U	< 1.4 U	< 2.0 U	< 1.5 U	< 1.9 U	0.70 J	0.35 J	0.58 J
Metals	ZINC	MG_KG		10.4 J	10.0 J	9.72 J	17.5 J	8.55 J	8.76 J	29.2 J	7.24 J	18.1 J	7.2	7.5	12.5	16.8	8.6	7.1	18.1	18.5	7.4	9.8	6.3	24.2
PCBs	DECACHLOROBIPHENYL	UG_KG		< 0.42 U	< 0.41 U	< 0.42 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.41 U	< 0.41 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.41 U
PCBs	DICHLOROBIPHENYL	UG_KG		< 0.083 U	< 0.082 U	< 0.083 U	< 0.082 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.081 U	< 0.082 U	< 0.082 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.082 U	< 0.083 U	< 0.083 U	0.39 J	< 0.082 U
PCBs	HEPTACHLOROBIPHENYL	UG_KG		8	0.50 J	1.7 J	0.75 J	4.3	1.5	< 0.25 U	1.2	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	6.5	3.1	1.8
PCBs	HEXACHLOROBIPHENYL	UG_KG		8.1 J	3.3 J	7.1 J	1.8	12	5.5	< 0.17 U	5.9	< 0.16 U	2.9	0.92	< 0.17 U	< 0.17 U	0.88	0.57 J	< 0.17 U	< 0.17 U	< 0.17 U	18	12	3.2
PCBs	MONOCHLOROBIPHENYL	UG_KG		< 0.083 U	< 0.082 U	< 0.083 U	< 0.082 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.081 U	< 0.082 U	< 0.082 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.082 U	< 0.083 U	< 0.17 U	< 0.17 U	< 0.17 U
PCBs	NONACHLOROBIPHENYL	UG_KG		< 0.42 U	< 0.41 U	< 0.42 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.41 U	< 0.41 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.41 U
PCBs	OCTACHLOROBIPHENYL	UG_KG		2.6	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.24 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.50 U	< 0.50 U	< 0.50 U
PCBs	PENTACHLOROBIPHENYL	UG_KG		1.1	1.4 J	3.0 J	< 0.16 U	5.1	2.7	< 0.17 U	3.3	< 0.16 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	5.8	4.8	0.41 J
PCBs	POLYCHLORINATED BIPHENYLS (PCBS)	UG_KG		20	5.1 J	12 J	2.6	23	10	< 0.083 U	11	< 0.082 U	2.9	0.92	< 0.083 U	< 0.083 U	0.88	0.57	< 0.083 U	< 0.082 U	< 0.083 U	31	20	5.4
PCBs	TETRACHLOROBIPHENYL	UG_KG		< 0.17 U	< 0.17 U	0.37 J	< 0.16 U	0.7	0.58 J	< 0.17 U	0.67	< 0.16 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	0.28 J	< 0.17 U
PCBs	Total PCB Homologs	UG_KG		20	5.2	12	2.6	22	10	< 0.42 U	11	< 0.41 U	2.9	0.92	< 0.42 U	< 0.42 U	0.88	0.57	< 0.42 U	< 0.41 U	< 0.42 U	30	21	5.4
PCBs	TRICHLOROBIPHENYL	UG_KG		< 0.083 U	< 0.082 U	< 0.083 U	< 0.082 U	0.16 J	< 0.083 U	< 0.083 U	0.097 J	< 0.082 U	< 0.082 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.082 U	< 0.083 U	< 0.083 U	0.15 J	< 0.082 U
Pest/PCBs	4,4-DDD	UG_KG		R	< 3.4 U	< 15 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 U	12 J	< 0.84 UJ	< 0.85 UJ
Pest/PCBs	4,4-DDE	UG_KG		3.7	2.7 J	2.7 J	< 3.4 U	1.9 J	1.7 J	0.87 J	1.6 J	0.72 J	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 U	2.7 J	< 0.84 UJ	< 0.85 UJ
Pest/PCBs	4,4-DDT	UG_KG		< 7.3 U	< 3.6 U	< 3.4 U	< 3.4 U	< 3.5 U	< 3.4 U	1.5 J	< 3.4 U	< 3.4 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 U	5.5 J	< 0.84 UJ	< 0.85 UJ
Pest/PCBs	ALDRIN	UG_KG		0.60 J	0.74 J	1.2 J	< 1.6 U	0.71 J	0.70 J	0.64 J	0.36 J	< 1.7 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	1.9 J	< 0.42 UJ	< 0.42 UJ
Pest/PCBs	ALPHA-BHC	UG_KG		1.4 J	< 1.6 U	< 1.7 U	0.76 J	0.58 J	< 1.7 U	< 1.6 U	0.69 J	0.46 J	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ
Pest/PCBs	ALPHA-CHLORDANE	UG_KG		< 1.6 U	< 1.6 U	< 1.7 U	1.1 J	< 1.7 U	< 1.7 U	1.0 J	< 1.7 U	1.2 J	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	1.0 J	< 0.42 UJ	1.5 J
Pest/PCBs	BETA-BHC	UG_KG		< 3.8 U	< 3.8 U	< 3.8 U	< 3.8 U	< 3.8 U	< 3.8 U	< 3.8 U	< 3.8 U	< 3.8 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	0.99 J	< 0.42 UJ	< 0.42 UJ
Pest/PCBs	DELTA-BHC	UG_KG		R	< 1.6 U	< 2.7 U	1.0 J	< 1.7 U	< 1.7 U	< 1.6 U	< 1.7 U	< 1.7 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ
Pest/PCBs	DIELDRIN	UG_KG		< 3.4 U	1.0 J	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 U	< 0.84 UJ	< 0.84 UJ	< 0.85 UJ
Pest/PCBs	ENDOSULFAN I	UG_KG		< 1.6 U	< 1.6 U	0.84 J	< 1.6 U	1.1 J	< 1.7 U	1.4 J	0.51 J	0.58 J	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ
Pest/PCBs	ENDOSULFAN II	UG_KG		< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	0.66 J	< 3.4 U	< 3.4 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 U	< 0.84 UJ	< 0.84 UJ	< 0.85 UJ
Pest/PCBs	ENDOSULFAN SULFATE	UG_KG		< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 U	< 0.84 UJ	< 0.84 UJ	< 0.85 UJ
Pest/PCBs	ENDRIN	UG_KG		< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 U	3.5 J	< 0.84 UJ	< 0.85 UJ
Pest/PCBs	ENDRIN ALDEHYDE	UG_KG		< 3.4 U	< 3.4 U	0.80 J	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 3.4 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 U	< 0.84 UJ	< 0.84 UJ	< 0.85 UJ
Pest/PCBs	ENDRIN KETONE	UG_KG		< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 3.6 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 U	< 0.84 UJ	< 0.84 UJ	< 0.85 UJ
Pest/PCBs	HEPTACHLOR	UG_KG		R	< 1.6 U	3.5	< 1.6 U	< 1.7 U	< 1.7 U	1.4 J	< 1.7 U	< 1.7 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ
Pest/PCBs	HEPTACHLOR EPOXIDE	UG_KG		1.1 J	< 1.6 U	1.3 J	< 1.6 U	< 1.7 U	< 1.7 U	< 1.6 U	0.51 J	0.64 J	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ
Pest/PCBs	LINDANE	UG_KG		< 1.6 U	< 1.6 U	< 1.7 U	< 1.6 U	< 1.7 U	< 1.7 U	0.65 J	< 1.7 U	< 1.7 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ
Pest/PCBs	METHOXYCHLOR	UG_KG		4.3 J	< 13 U	4.6 J	< 13 U	3.6 J	< 13 U	< 13 U	< 13 U	< 13 U	< 4.2 U	< 4.3 U	< 4.3 U	< 4.2 U	< 4.3 U	< 4.2 U	< 4.3 U	< 4.3 U	< 4.2 U	< 4.2 UJ	< 4.2 UJ	< 4.2 UJ
Pest/PCBs	TOXAPHENE	UG_KG		< 66 U	< 66 U	< 66 U	< 65 U	< 66 U	< 66 U	< 66 U	< 66 U	< 66 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 UJ	< 17 UJ	< 17 UJ
Pest/PCBs	TRANS-CHLORDANE	UG_KG		6.6 J	5.9	4.5	0.85 J	7.1	4.7	< 1.6 U	7.3	< 1.7 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.43 U	< 0.43 U	< 0.42 U	0.87 J	< 0.42 UJ	< 0.42 UJ
SVOCs	1,2,4-TRICHLOROBENZENE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	1,2-DICHLOROBENZENE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	1,3-DICHLOROBENZENE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	1,4-DICHLOROBENZENE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	2,2'-OXYBIS(1-CHLOROPROPANE)	UG_KG		NA	NA	NA	NA	NA	NA	NA	NA	NA	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	2,4,5-TRICHLOROPHENOL	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 UJ
SVOCs	2,4,6-TRICHLOROPHENOL	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	2,4-DICHLOROPHENOL	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	2,4-DIMETHYLPHENOL	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U

TABLE 11c
2013 - 2016 SHELLFISH ANALYTICAL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			LOCATION ID	ET09-03	ET09-04	ET09-04	ET09-05	ET09-06	ET09-09	ET09-10	ET09-11	ET09-12	ET09-03	ET09-04	ET09-05	ET09-05	ET09-06	ET09-09	ET09-10	ET09-11	ET09-12	ET09-03	ET09-04	ET09-05
			SAMPLE DATE	10/1/2013	10/1/2013	10/1/2013	10/1/2013	10/1/2013	10/3/2013	10/3/2013	10/15/2013	10/3/2013	9/22/2014	9/22/2014	9/23/2014	9/23/2014	9/22/2014	9/23/2014	9/24/2014	9/23/2014	9/24/2014	9/14/2015	9/14/2015	9/9/2015
			QC IDENTIFIER	N	FD	N	N	N	N	N	N	N	N	N	N	FD	N	N	N	N	N	N	N	N
ANALYTE GROUP	PARAMETER	UNIT																						
SVOCs	2,4-DINITROPHENOL	UG_KG		< 6000 U	< 3900 U	< 4000 U	< 4000 U	< 3900 U	< 4000 U	< 4000 U	< 4000 U	< 4000 U	< 170 U	< 160 U	< 170 U	< 170 U	< 170 U	< 160 U	< 170 U	< 160 U	< 170 U	< 160 UJ	< 170 UJ	< 170 UJ
SVOCs	2,4-DINITROTOLUENE	UG_KG		< 1000 U	< 660 U	< 670 U	< 660 U	< 660 U	< 660 U	< 670 U	< 660 U	< 660 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	2,6-DINITROTOLUENE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	2-CHLORONAPHTHALENE	UG_KG		< 200 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	2-CHLOROPHENOL	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	2-METHYLPHENOL	UG_KG		< 200 U	< 130 U	85 J	< 130 U	< 130 U	< 130 U	< 130 U	74 J	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	2-NITROANILINE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	2-NITROPHENOL	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	3,3-DICHLOROBENZIDINE	UG_KG		< 2000 U	< 1300 U	< 1300 U	< 1300 U	< 1300 U	< 1300 U	< 1300 U	< 1300 U	< 1300 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 UJ	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	3-NITROANILINE	UG_KG		< 1000 U	< 660 U	< 670 U	< 660 U	< 660 U	< 660 U	< 670 U	< 660 U	< 660 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 UJ	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	R
SVOCs	4,6-DINITRO-2-METHYLPHENOL	UG_KG		< 3000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 UJ	< 67 UJ	R
SVOCs	4-BROMOPHENYL-PHENYLETHER	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	4-CHLORO-3-METHYLPHENOL	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	4-CHLOROANILINE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	4-CHLOROPHENYL-PHENYLETHER	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	4-METHYLPHENOL	UG_KG		< 200 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	4-NITROANILINE	UG_KG		< 1000 U	< 660 U	< 670 U	< 660 U	< 660 U	< 660 U	< 670 U	< 660 U	< 660 U	< 67 UJ	< 66 UJ	< 67 UJ	< 67 UJ	< 67 UJ	< 66 UJ	< 67 UJ	< 66 UJ	< 67 UJ	< 66 UJ	< 67 UJ	< 67 UJ
SVOCs	4-NITROPHENOL	UG_KG		< 3000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 67 UJ	< 66 UJ	< 67 UJ	< 67 UJ	< 67 UJ	< 66 UJ	< 67 UJ	< 66 UJ	< 67 UJ	< 66 U	< 67 U	< 67 U
SVOCs	BIS(2-CHLOROETHOXY)METHANE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	BIS(2-CHLOROETHYL)ETHER	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	BIS(2-ETHYLHEXYL)PHTHALATE	UG_KG		620 J	300 J	390 J	< 680 U	450 J	< 680 U	< 680 U	< 680 U	< 680 U	< 170 U	< 66 U	< 170 U	< 170 U	< 67 U	< 160 U	< 170 U	< 160 U	< 67 U	110 J	160 J	120 J
SVOCs	BUTYLBENZYLPHTHALATE	UG_KG		< 1000 U	< 660 U	< 670 U	< 660 U	< 660 U	< 660 U	< 670 U	< 660 U	< 660 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	CARBAZOLE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	DIBENZOFURAN	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	DIETHYLPHTHALATE	UG_KG		< 1000 U	< 660 U	< 670 U	< 660 U	< 660 U	< 660 U	< 670 U	< 660 U	< 660 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	DIMETHYL PHTHALATE	UG_KG		< 1000 U	< 660 U	< 670 U	< 660 U	< 660 U	< 660 U	< 670 U	< 660 U	< 660 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	DI-N-BUTYLPHTHALATE	UG_KG		< 1000 U	< 660 U	< 670 U	< 660 U	< 660 U	< 660 U	< 670 U	< 660 U	< 660 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	48 J	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	DI-N-OCTYLPHTHALATE	UG_KG		< 1000 U	< 660 U	< 670 U	< 660 U	< 660 U	< 660 U	< 670 UJ	< 660 UJ	< 660 UJ	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	HEXACHLOROBENZENE	UG_KG		< 100 U	< 67 U	< 68 U	< 68 U	< 67 U	< 68 U	< 68 U	< 68 U	< 68 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	HEXACHLOROBUTADIENE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	HEXACHLOROCYCLOPENTADIENE	UG_KG		R	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 U	< 2000 UJ	< 2000 UJ	< 2000 UJ	< 170 U	< 160 U	< 170 U	< 170 U	< 170 UJ	< 160 U	< 170 U	< 160 U	< 170 U	< 160 U	< 170 U	R
SVOCs	HEXACHLOROETHANE	UG_KG		< 1000 U	< 660 U	< 670 U	< 660 U	< 660 U	< 660 U	< 670 U	< 660 U	< 660 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 UJ
SVOCs	ISOPHORONE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	NITROBENZENE	UG_KG		220	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	N-NITROSODIMETHYLAMINE	UG_KG		< 1000 U	< 660 U	< 670 U	< 660 U	< 660 U	< 660 U	< 670 U	< 660 U	< 660 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	N-NITROSODINPROPYLAMINE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 UJ	< 67 UJ	< 67 UJ
SVOCs	N-NITROSODIPHENYLAMINE	UG_KG		< 200 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U
SVOCs	PENTACHLOROPHENOL	UG_KG		< 1000 U	< 670 U	< 680 U	< 680 U	< 670 U	< 680 U	< 680 U	< 680 U	< 680 U	< 170 U	< 160 U	< 170 U	< 170 U	< 170 U	< 160 U	< 170 U	< 160 U	< 170 U	< 160 U	< 170 U	< 170 UJ
SVOCs	PHENOL	UG_KG		< 200 U	100 J	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 67 U	< 66 U	< 67 U	< 67 U	< 67 U	< 66 U	< 67 U	< 66 U	87 J	< 66 U	< 67 U	< 67 U
PAHs	2-METHYLNAPHTHALENE	UG_KG		37	35	39	9	32	29	11	35	17	4.4 J	7.4 J	< 3.3 UJ	< 3.3 UJ	4.5 J	5.2 J	< 3.3 UJ	4.1 J	< 3.3 UJ	< 3.3 U	8.2	< 3.3 U
PAHs	ACENAPHTHENE	UG_KG		25 J	24	28	< 6.6 U	32	20	5.1 J	16	5.2 J	6	6.6	< 3.3 U	< 3.3 U	6.1	4.2	< 3.3 U	3.6	< 3.3 U	< 3.3 U	13	< 3.3 UJ
PAHs	ACENAPHTHYLENE	UG_KG		5.6 J	6.2 J	5.0 J	< 6.6 U	5.2 J	4.0 J	< 6.7 U	7	4.4 J	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	15	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	4.3	< 3.3 UJ
PAHs	ANTHRACENE	UG_KG		5.7 J	7.7	5.3 J	< 6.6 U	5.0 J	3.0 J	3.6 J	6.0 J	< 6.6 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	21	< 3.3 UJ
PAHs	BENZO[A]ANTHRACENE	UG_KG		7.0 J	3.2 J	3.9 J	< 6.6 U	< 6.6 U	< 6.6 U	13	< 6.6 U	< 6.6 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
PAHs	BENZO[A]PYRENE	UG_KG		6.1 J	< 6.6 U	2.8 J	< 6.6 U	< 6.6 U	< 6.6 U	14	< 6.6 U	< 6.6 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 UJ
PAHs	BENZO[B]FLUORANTHENE	UG_KG		7.7 J	4.8 J	4.1 J	< 6.6 U	< 6.6 U	< 6.6 U	27	3.1 J	< 6.6 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
PAHs	BENZO[G,H,I]PERYLENE	UG_KG		< 10 UJ	< 6.6 UJ	< 6.7 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	5.4 J	< 6.6 UJ	< 6.6 UJ	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 UJ
PAHs	BENZO[K]FLUORANTHENE	UG_KG		4.3 J	< 6.6 U	2.7 J	< 6.6 U	3.5 J	2.9 J	16	3.2 J	< 6.6 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
PAHs	CHRYSENE	UG_KG		8.1 J	5.0 J	4.7 J	1.6 J	3.8 J	3.0 J	14	3.6 J	2.9 J	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
PAHs	DIBENZ[A,H]ANTHRACENE	UG_KG		< 10 U	< 6.6 U	< 6.7 U	< 6.6 U	< 6.6 U	< 6.6 U	2.8 J	< 6.6 U	< 6.6 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 UJ
PAHs	FLUORANTHENE	UG_KG		34	21	25	5.7 J	15	13	27	21	8.7	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 UJ
PAHs	FLUORENE	UG_KG		11	10	13	< 6.6 U	13	7.2	< 6.7 U	13	< 6.6 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	7	< 3.3 UJ
PAHs	HPAH, TOTAL	UG_KG		97	56	66	13	48	38	160	54	19	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
PAHs	INDENO[1,2,3-CD]PYRENE	UG_KG		< 10 U	< 6.6 U	< 6.7 U	< 6.6 U	4.3 J	3.0 J	9.5	4.0 J	< 6.6 U	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 UJ	< 3.3 U	< 3.3 U	< 3.3 UJ
PAHs	LPAH, TOTAL	UG_KG		160	160	180	9	170	130	33	150	27	29	42	< 3.3 U	< 3.3 U	46	27	< 3.3 U	24	< 3.3 U	< 3.3 U	71	< 3.3 U
PAHs	NAPHTHALENE	UG_KG		30	38	45	< 6.6 U	40	39	3.6 J	39	< 6.6 U	10	19	< 3.3 U	< 3.3 U	13	12	< 3.3 U	9.7	< 3.3 U	< 3.3 U	17	< 3.3 U
PAHs	PAH, TOTAL	UG_KG		260	220	250	22	210	170	190	210	45	29	42	< 3.3 U	< 3.3 U	46	27	< 3.3 U	24	< 3.3 U	< 3.3 U	71	< 3.3 U
PAHs	PHENANTHRENE	UG_KG		44	42	45	< 6.6 U	39	26	9.9	36	< 6.6 U	9	8.7	< 3.3 U	< 3.3 U	7.4	5.9	< 3.3 U	6.8	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 UJ
PAHs	PYRENE	UG_KG		30	22	23	6.0 J	21	16	27	19	6.9	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 UJ
Lipid	LIPIDS	PCT		0.9	1.1	0.71	0.35	0.9	0.82	0.4	0.97	0.65	0.06	0.073	0.017	0.013	0.08	0.076	0.053	0.043	0.069	0.4	0.3	0.07

Notes:
1) U = Non-detect at laboratory detection limit
2) J = Estimated Value, R = rejected
3) Type N = normal sample, FD = duplicate sample
4) NA = Not Analyzed

TABLE 11c
2013 - 2016 SHELLFISH ANALYTICAL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		LOCATION ID	ET09-06	ET09-07	ET09-08	ET09-09	ET09-10	ET09-11	ET09-12	ET09-12	ET09-03	ET09-04	ET09-05	ET09-05	ET09-06	ET09-07	ET09-08	ET09-09	ET09-10	ET09-11	ET09-12
		SAMPLE DATE	9/9/2015	9/15/2015	9/15/2015	9/9/2015	9/9/2015	9/9/2015	9/9/2015	9/9/2015	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/13/2016	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/13/2016	12/13/2016
		QC IDENTIFIER	N	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N	N	N	N	N
ANALYTE GROUP	PARAMETER	UNIT																			
Metals	ALUMINUM	MG_KG	21	54.2	6.1 J	27.2	26.2	16.5	19.1	16.5	52.3	128	21.5 J	6.8 J	2.1 J	38.3	144	2.6 J	7.3 J	9.3	6.2 J
Metals	ANTIMONY	MG_KG	0.45 J	< 0.68 U	< 0.50 U	0.48 J	0.44 J	0.42 J	0.31 J	< 0.71 U	< 0.82 U	< 0.80 U	< 0.55 U	< 0.70 U	< 0.59 U	< 0.72 U	< 0.52 U	< 0.65 U	< 0.87 U	< 0.82 U	< 0.51 U
Metals	ARSENIC	MG_KG	3	3.1	4.1	2.9	3.9	3	2.7	3	2.4	3.4	2.9	2.9	2.6	2	2.5	2.9	2.8	2	3.1
Metals	BARIUM	MG_KG	< 8.3 U	< 9.0 U	< 6.7 U	< 9.4 U	< 8.7 U	< 9.6 U	< 6.8 U	< 9.4 U	< 8.2 U	< 10.0 U	< 6.9 U	< 8.7 U	< 7.4 U	< 7.2 U	< 6.5 U	< 6.5 U	< 8.7 U	< 8.2 U	< 6.4 U
Metals	BERYLLIUM	MG_KG	0.0066 J	0.0072 J	0.0023 J	0.030 J	0.028 J	0.0049 J	0.0093 J	0.013 J	< 0.20 U	< 0.25 U	< 0.17 U	< 0.22 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.16 U	< 0.22 U	< 0.20 U	< 0.16 U
Metals	CADMIUM	MG_KG	0.089 J	0.55	0.21	0.13 J	0.18 J	0.11 J	0.14 J	0.10 J	0.12 J	0.17 J	0.069 J	0.063 J	0.064 J	0.46	0.15 J	0.066 J	0.059 J	0.073 J	0.055 J
Metals	CALCIUM	MG_KG	403	663	930	431	904	501	794	784	662	2430	1060	1300	606	700	635	494	926	988	879
Metals	CHROMIUM, TOTAL	MG_KG	< 0.83 U	< 0.90 U	< 0.67 U	< 0.94 U	< 0.87 U	< 0.96 U	< 0.68 U	< 0.94 U	< 0.82 U	1.1	< 0.69 U	< 0.87 U	< 0.74 U	1.1	1.4	< 0.65 U	< 0.87 U	< 0.82 U	< 0.64 U
Metals	COBALT	MG_KG	< 2.1 U	< 2.3 U	< 1.7 U	< 2.4 U	< 2.2 U	< 2.4 U	< 1.7 U	< 2.4 U	0.12 J	0.26 J	0.17 J	0.18 J	0.13 J	0.057 J	0.14 J	0.14 J	0.15 J	0.059 J	0.15 J
Metals	COPPER	MG_KG	4.2	6.3	6.9	2.3	9.1	3.1	5.5	7.2	< 1.4 U	6.4	< 1.1 U	< 1.3 U	< 1.8 U	< 1.9 U	3	2.8	< 2.2 U	< 1.6 U	2.7
Metals	IRON	MG_KG	108	208	21.8	94.3	95.3	64.1	88.7	72.1	262	599	71.5 J	32.8 J	15.9	113	390	19	38	38	39.3
Metals	LEAD	MG_KG	< 0.41 U	0.39 J	< 0.34 U	0.21 J	0.28 J	< 0.48 U	0.35	0.35 J	0.53	1.2	0.14 J	< 0.22 U	0.14 J	0.26 J	0.88	0.16 J	< 0.22 U	0.14 J	0.22 J
Metals	MAGNESIUM	MG_KG	881	848	1050	934	995	892	1030	904	1010	1250	1000	1040	927	941	959	926	937	967	946
Metals	MANGANESE	MG_KG	9	4.6	0.53 J	13.6	7.2	10.8	15.4	13.1	22.1	41.4	2.6	< 2.2 U	3.1	1.8	6.5	3.2	4.8	11.6	4
Metals	MERCURY	MG_KG	0.0073 J	0.0094 J	< 0.020 U	0.010 J	0.010 J	0.0079 J	0.0049 J	0.0040 J	0.0054 J	0.0068 J	0.0072 J	0.0074 J	0.0066 J	0.0096 J	0.014 J	0.0058 J	0.0080 J	0.0074 J	0.0059 J
Metals	NICKEL	MG_KG	< 2.1 U	< 2.3 U	< 1.7 U	< 2.4 U	< 2.2 U	< 2.4 U	< 1.7 U	< 2.4 U	0.20 J	0.70 J	0.87 J	0.88 J	0.59 J	0.45 J	0.65 J	0.61 J	0.58 J	0.14 J	0.37 J
Metals	POTASSIUM	MG_KG	1190	810	822	1090	1130	1160	1180	1090	901	1350	1120	1170	1440	865	855	1510	1360	966	1310
Metals	SELENIUM	MG_KG	< 1.2 U	< 1.4 U	< 1.0 U	< 1.4 U	0.70 J	< 1.4 U	< 1.0 U	< 1.4 U	< 0.82 U	1.2 J	0.64 J	0.57 J	0.62 J	< 0.72 U	0.71 J	< 0.65 U	0.57 J	0.54 J	0.56 J
Metals	SILVER	MG_KG	0.11 J	1.2 J	1.2	0.26 J	0.26 J	0.26 J	0.12 J	0.14 J	0.13 J	0.15 J	0.076 J	0.075 J	0.093 J	0.94 J	0.57 J	0.079 J	0.091 J	0.20 J	0.11 J
Metals	SODIUM	MG_KG	6470	6060	7530	7020	6170	6430	5990	5590	7570	9130	7500	7420	6620	7160	6890	6410	6630	7470	6800
Metals	THALLIUM	MG_KG	< 0.41 U	< 0.45 U	< 0.34 U	< 0.47 U	< 0.43 U	< 0.48 U	< 0.34 U	< 0.47 U	< 0.41 UJ	< 0.50 UJ	< 0.34 UJ	< 0.43 UJ	< 0.37 UJ	< 0.36 UJ	< 0.33 UJ	< 0.32 UJ	< 0.43 UJ	< 0.41 UJ	< 0.32 UJ
Metals	VANADIUM	MG_KG	0.28 J	0.49 J	0.27 J	0.52 J	0.36 J	0.30 J	0.22 J	0.21 J	< 2.0 U	< 2.5 U	< 1.7 U	< 2.2 U	< 1.8 U	< 1.8 U	< 1.6 U	< 1.6 U	< 2.2 U	< 2.0 U	< 1.6 U
Metals	ZINC	MG_KG	6	9.9	10.5	7.5	28.8	7.5	23.6	21.5	5.5	10.6	12.5	13.2	14.6	5	6.5	15.6	14	5.3	13.6
PCBs	DECACHLOROBIPHENYL	UG_KG	< 0.42 U	< 0.42 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.41 U	0.26 J	< 0.42 U	0.38 J	0.23 J	< 0.42 UJ	< 0.41 U	< 0.41 U	< 0.42 UJ	0.20 J	< 0.41 U	< 0.41 UJ
PCBs	DICHLOROBIPHENYL	UG_KG	0.9	< 0.083 U	< 0.082 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.082 U	< 0.082 U	0.42	< 0.083 U	< 0.082 U	< 0.083 UJ	< 0.082 U	0.21 J	< 0.083 UJ	< 0.083 U	< 0.082 U	< 0.082 UJ
PCBs	HEPTACHLOROBIPHENYL	UG_KG	7.8	0.24 J	< 0.25 U	1.3	< 0.25 U	44	< 0.25 U	0.26 J	5.3	3.7	0.71 J	0.21 J	0.76 J-	1.1	0.37 J	0.20 J-	0.21 J-	1.7	0.35 J-
PCBs	HEXACHLOROBIPHENYL	UG_KG	27	0.41 J	< 0.17 U	6.2	< 0.17 U	46	< 0.17 U	0.43 J	16	15	1.5	0.96	1.3 J-	5.5	1.7	0.86 J-	0.63 J-	8.3	0.51 J-
PCBs	MONOCHLOROBIPHENYL	UG_KG	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.16 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.16 U	< 0.17 UJ	< 0.16 U	< 0.16 U	< 0.17 UJ	< 0.17 U	< 0.16 U	< 0.17 UJ
PCBs	NONACHLOROBIPHENYL	UG_KG	< 0.42 U	< 0.42 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.41 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.41 U	< 0.42 UJ	< 0.41 U	< 0.41 U	< 0.42 UJ	< 0.42 UJ	< 0.41 U	< 0.41 UJ
PCBs	OCTACHLOROBIPHENYL	UG_KG	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	7.5	< 0.50 U	< 0.49 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.49 U	< 0.50 UJ	< 0.49 U	< 0.49 U	< 0.50 UJ	< 0.50 UJ	< 0.49 U	< 0.50 UJ
PCBs	PENTACHLOROBIPHENYL	UG_KG	8.5	< 0.17 U	< 0.17 U	3.9	< 0.17 U	12	< 0.17 U	< 0.16 U	5.1	6.6	0.19 J	0.15 J	0.21 J-	2.7	0.99	< 0.17 UJ	0.18 J-	4.4	< 0.17 UJ
PCBs	POLYCHLORINATED BIPHENYLS (PCBS)	UG_KG	45	0.65	< 0.082 U	12	0.044 J	110	0.050 J	0.79 J	27	28	3.0 J	1.5 J	2.2 J-	9.4	3.4	1.1 J-	1.2 J-	15	0.86 J-
PCBs	TETRACHLOROBIPHENYL	UG_KG	0.87	< 0.17 U	< 0.17 U	0.38 J	< 0.17 U	1.3	< 0.17 U	< 0.16 U	0.74	1.2	< 0.17 U	< 0.16 U	< 0.17 UJ	0.17 J	0.087 J	< 0.17 UJ	< 0.17 UJ	0.66	< 0.17 UJ
PCBs	Total PCB Homologs	UG_KG	45	0.65	< 0.5 U	12	< 0.5 U	110	< 0.5 U	0.69	27	27	3	1.6	2.3	9.5	3.4	1.1	1.2	15	0.86
PCBs	TRICHLOROBIPHENYL	UG_KG	< 0.083 U	< 0.083 U	< 0.082 U	0.26 J	< 0.083 U	0.5	< 0.083 U	< 0.082 U	< 0.082 U	0.088 J	0.19 J	< 0.082 U	< 0.083 UJ	< 0.082 U	0.055 J	< 0.083 UJ	< 0.083 UJ	< 0.082 U	< 0.082 UJ
Pest/PCBs	4,4-DDD	UG_KG	< 0.84 UJ	17 J	< 0.85 UJ	< 0.84 UJ	< 0.85 UJ	5.7 J	< 0.84 UJ	< 0.85 UJ	< 0.85 U	< 0.84 U	< 0.85 U	< 0.84 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 UJ	< 0.85 UJ	< 0.85 U	< 0.85 U
Pest/PCBs	4,4-DDE	UG_KG	< 0.84 UJ	< 0.85 UJ	< 0.85 UJ	< 0.84 UJ	< 0.85 UJ	< 0.84 UJ	< 0.84 UJ	< 0.85 UJ	< 0.85 U	< 0.84 U	< 0.85 U	< 0.84 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 UJ	< 0.85 UJ	< 0.85 U	< 0.85 U
Pest/PCBs	4,4-DDT	UG_KG	< 0.84 UJ	6.5 J	< 0.85 UJ	< 0.84 UJ	< 0.85 UJ	< 0.84 UJ	0.63 J	< 0.85 UJ	< 0.85 U	< 0.84 U	< 0.85 U	< 0.84 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 UJ	< 0.85 UJ	< 0.85 U	< 0.85 U
Pest/PCBs	ALDRIN	UG_KG	5.6 J	< 0.42 UJ	< 0.43 UJ	< 0.42 UJ	< 0.43 UJ	1.1 J	< 0.42 UJ	< 0.42 UJ	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
Pest/PCBs	ALPHA-BHC	UG_KG	< 0.42 UJ	1.1 J	< 0.43 UJ	< 0.42 UJ	< 0.43 UJ	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
Pest/PCBs	ALPHA-CHLORDANE	UG_KG	< 0.42 UJ	3.9 J	< 0.43 UJ	0.88 J	2.3 J	< 0.42 UJ	2.1 J	< 0.42 UJ	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
Pest/PCBs	BETA-BHC	UG_KG	< 0.42 UJ	< 0.42 UJ	1.4 J	< 0.42 UJ	1.4 J	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
Pest/PCBs	DELTA-BHC	UG_KG	1.8 J	1.3 J	2.1 J	1.1 J	2.6 J	< 0.42 UJ	2.3 J	< 0.42 UJ	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
Pest/PCBs	DIELDRIN	UG_KG	< 0.84 UJ	< 0.85 UJ	< 0.85 UJ	< 0.84 UJ	< 0.85 UJ	< 0.84 UJ	< 0.84 UJ	< 0.85 UJ	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
Pest/PCBs	ENDOSULFAN I	UG_KG	< 0.42 UJ	0.90 J	< 0.43 UJ	< 0.42 UJ	< 0.43 UJ	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
Pest/PCBs	ENDOSULFAN II	UG_KG	< 0.84 UJ	< 0.85 UJ	< 0.85 UJ	< 0.84 UJ	< 0.85 UJ	< 0.84 UJ	< 0.84 UJ	< 0.85 UJ	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
Pest/PCBs	ENDOSULFAN SULFATE	UG_KG	< 0.84 UJ	3.2 J	< 0.85 UJ	< 0.84 UJ	< 0.85 UJ	< 0.84 UJ	< 0.84 UJ	< 0.85 UJ	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
Pest/PCBs	ENDRIN	UG_KG	< 0.84 UJ	3.1 J	< 0.85 UJ	< 0.84 UJ	5.6 J	< 0.84 UJ	2.9 J	3.0 J	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
Pest/PCBs	ENDRIN ALDEHYDE	UG_KG	< 0.84 UJ	< 0.85 UJ	< 0.85 UJ	< 0.84 UJ	< 0.85 UJ	< 0.84 UJ	< 0.84 UJ	< 0.85 UJ	< 0.85 U	< 0.84 U	< 0.85 U	< 0.84 U	< 0.85 U	< 0.85 U	< 0.85 U	< 0.84 UJ	< 0.85 UJ	< 0.85 U	< 0.85 U
Pest/PCBs	ENDRIN KETONE	UG_KG	< 0.84 UJ	< 0.85 UJ	< 0.85 UJ	< 0.84 UJ	< 0.85 UJ	< 0.84 UJ	< 0.84 UJ	< 0.85 UJ	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
Pest/PCBs	HEPTACHLOR	UG_KG	< 0.42 UJ	1.7 J	< 0.43 UJ	< 0.42 UJ	< 0.43 UJ	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
Pest/PCBs	HEPTACHLOR EPOXIDE	UG_KG	< 0.42 UJ	< 0.42 UJ	1.3 J	< 0.42 UJ	1.2 J	< 0.42 UJ	3.4 J	2.3 J	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
Pest/PCBs	LINDANE	UG_KG	1.4 J	< 0.42 UJ	< 0.43 UJ	0.90 J	< 0.43 UJ	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 U	< 0.21 UJ	< 0.21 UJ	< 0.21 U	< 0.21 U
Pest/PCBs	METHOXYCHLOR	UG_KG	< 4.2 UJ	< 4.2 UJ	< 4.3 UJ	< 4.2 UJ	< 4.3 UJ	< 4.2 UJ	< 4.2 UJ	< 4.2 UJ	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 UJ	< 2.1 UJ	< 2.1 U	< 2.1 U
Pest/PCBs	TOXAPHENE	UG_KG	< 17 UJ	< 17 UJ	< 17 UJ	< 17 UJ	< 17 UJ	< 17 UJ	< 17 UJ	< 17 UJ	< 17 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 U	< 17 UJ	< 17 UJ	< 17 U	< 17 U
Pest/PCBs	TRANS-CHLORDANE	UG_KG	< 0.42 UJ	1.1 J	< 0.43 UJ	0.83 J	< 0.43 UJ	< 0.42 UJ	< 0.42 UJ	< 0.42 UJ	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 U	< 0.43 U	< 0.42 U	< 0.42 UJ	< 0.43 UJ	< 0.43 U	< 0.42 U
SVOCs	1,2,4-TRICHLOROBENZENE	UG_KG	< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	1,2-DICHLOROBENZENE	UG_KG	< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	1,3-DICHLOROBENZENE	UG_KG	< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	1,4-DICHLOROBENZENE	UG_KG	< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	2,2'-OXYBIS(1-CHLOROPROPANE)	UG_KG	< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	2,4,5-TRICHLOROPHENOL	UG_KG	< 66 U	< 66 U	< 67 UJ	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
SVOCs	2,4,6-TRICHLOROPHENOL	UG_KG	< 66 U	< 66 U	< 67 UJ	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
SVOCs	2,4-DICHLOROPHENOL	UG_KG	< 66 U	< 66 U	< 67 UJ	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
SVOCs	2,4-DIMETHYLPHENOL	UG_KG	< 66 U	< 66 U	< 67 UJ	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U

TABLE 11c
2013 - 2016 SHELLFISH ANALYTICAL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			LOCATION ID	ET09-06	ET09-07	ET09-08	ET09-09	ET09-10	ET09-11	ET09-12	ET09-12	ET09-03	ET09-04	ET09-05	ET09-05	ET09-06	ET09-07	ET09-08	ET09-09	ET09-10	ET09-11	ET09-12
			SAMPLE DATE	9/9/2015	9/15/2015	9/15/2015	9/9/2015	9/9/2015	9/9/2015	9/9/2015	9/9/2015	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/13/2016	12/14/2016	12/14/2016	12/13/2016	12/13/2016	12/13/2016	12/13/2016
			QC IDENTIFIER	N	N	N	N	N	N	N	FD	N	N	N	FD	N	N	N	N	N	N	N
ANALYTE GROUP	PARAMETER	UNIT																				
SVOCs	2,4-DINITROPHENOL	UG_KG		< 160 UJ	< 160 UJ	< 170 UJ	< 160 UJ	< 170 UJ	< 170 UJ	< 160 UJ	< 160 UJ	< 330 UJ	< 320 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ
SVOCs	2,4-DINITROTOLUENE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	2,6-DINITROTOLUENE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	2-CHLORONAPHTHALENE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	2-CHLOROPHENOL	UG_KG		< 66 U	< 66 U	< 67 UJ	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
SVOCs	2-METHYLPHENOL	UG_KG		< 66 U	< 66 U	< 67 UJ	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
SVOCs	2-NITROANILINE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	2-NITROPHENOL	UG_KG		< 66 U	< 66 U	< 67 UJ	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
SVOCs	3,3-DICHLOROBENZIDINE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	R	< 130 UJ	< 130 UJ
SVOCs	3-NITROANILINE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	R	< 130 UJ	< 130 UJ
SVOCs	4,6-DINITRO-2-METHYLPHENOL	UG_KG		< 66 U	< 66 U	< 67 UJ	< 66 UJ	< 67 UJ	< 67 UJ	< 66 UJ	< 66 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	4-BROMOPHENYL-PHENYLETHER	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	4-CHLORO-3-METHYLPHENOL	UG_KG		< 66 U	< 66 U	< 67 UJ	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U
SVOCs	4-CHLOROANILINE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	R	< 130 UJ	< 130 UJ
SVOCs	4-CHLOROPHENYL-PHENYLETHER	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	4-METHYLPHENOL	UG_KG		< 66 U	< 66 U	< 67 UJ	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U
SVOCs	4-NITROANILINE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 UJ	< 67 UJ	< 67 UJ	< 66 UJ	< 66 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	R	< 130 UJ	< 130 UJ
SVOCs	4-NITROPHENOL	UG_KG		< 66 U	< 66 U	< 67 UJ	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
SVOCs	BIS(2-CHLOROETHOXY)METHANE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	BIS(2-CHLOROETHYL)ETHER	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	BIS(2-ETHYLHEXYL)PHTHALATE	UG_KG		170	< 66 U	130 J	< 66 U	57 J	< 67 U	< 66 U	100 J	170 J-	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	R	< 130 UJ	< 130 UJ
SVOCs	BUTYLBENZYLPHTHALATE	UG_KG		85 J	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	CARBAZOLE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	DIBENZOFURAN	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	DIETHYLPHTHALATE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	DIMETHYL PHTHALATE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	DI-N-BUTYLPHTHALATE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	DI-N-OCTYLPHTHALATE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	< 130 UJ	R	< 130 UJ	< 130 UJ
SVOCs	HEXACHLOROBENZENE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	HEXACHLOROBUTADIENE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	HEXACHLOROCYCLOPENTADIENE	UG_KG		< 160 U	< 160 U	< 170 U	< 160 U	< 170 U	< 170 U	< 160 U	< 160 U	< 330 UJ	< 320 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	< 330 UJ	R	< 330 UJ	< 330 UJ
SVOCs	HEXACHLOROETHANE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	ISOPHORONE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	NITROBENZENE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	N-NITROSODIMETHYLAMINE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SVOCs	N-NITROSODINPROPYLAMINE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 UJ	< 67 UJ	< 67 UJ	< 66 UJ	< 66 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	N-NITROSODIPHENYLAMINE	UG_KG		< 66 U	< 66 U	< 67 U	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 U	< 130 UJ	< 130 UJ	< 130 UJ
SVOCs	PENTACHLOROPHENOL	UG_KG		< 160 U	< 160 U	< 170 UJ	< 160 U	< 170 U	< 170 U	< 160 U	< 160 U	< 330 UJ	< 320 U	< 330 UJ	< 330 UJ	< 330 U	< 330 UJ	< 330 UJ	< 330 U	R	< 330 UJ	< 330 U
SVOCs	PHENOL	UG_KG		< 66 U	< 66 U	< 67 UJ	< 66 U	< 67 U	< 67 U	< 66 U	< 66 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 U	< 130 UJ	< 130 U	< 130 U
PAHs	2-METHYLNAPHTHALENE	UG_KG		6.8	< 3.3 U	< 3.3 U	19	< 3.3 U	11	< 3.3 U	< 3.3 U	< 6.5 U	12	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	ACENAPHTHENE	UG_KG		14	< 3.3 U	5	18	< 3.3 U	11	< 3.3 U	< 3.3 U	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	ACENAPHTHYLENE	UG_KG		< 3.3 U	< 3.3 U	< 3.3 U	6	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	ANTHRACENE	UG_KG		< 3.3 U	< 3.3 U	< 3.3 UJ	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 UJ	< 6.5 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ
PAHs	BENZO[A]ANTHRACENE	UG_KG		< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	BENZO[A]PYRENE	UG_KG		< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	BENZO[B]FLUORANTHENE	UG_KG		< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	BENZO[G,H,I]PERYLENE	UG_KG		< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	BENZO[K]FLUORANTHENE	UG_KG		< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	CHRYSENE	UG_KG		< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	DIBENZ[A,H]ANTHRACENE	UG_KG		< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 UJ	< 6.5 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ	< 6.6 UJ
PAHs	FLUORANTHENE	UG_KG		< 3.3 U	< 3.3 U	< 3.3 UJ	5.9	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	8	13	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	FLUORENE	UG_KG		7.8	< 3.3 U	< 3.3 U	11	< 3.3 U	6.1	< 3.3 U	< 3.3 U	< 6.5 U	6.9	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	HPAH, TOTAL	UG_KG		< 3.3 U	< 3.3 U	58	12	< 3.3 U	< 3.3 U	14	< 3.3 U	16	24	< 6.6 U	< 6.6 U	< 6.6 U	< 6.6 U	< 6.6 U	< 6.6 U	< 6.6 U	< 6.6 U	< 6.6 U
PAHs	INDENO[1,2,3-CD]PYRENE	UG_KG		< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.5 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	LPAH, TOTAL	UG_KG		65	< 3.3 U	20	120	< 3.3 U	43	12	< 3.3 U	24	68	< 6.6 U	< 6.6 U	< 6.6 U	18	< 6.6 U	< 6.6 U	< 6.6 U	< 6.6 U	< 6.6 U
PAHs	NAPHTHALENE	UG_KG		11	< 3.3 U	< 3.3 U	30	< 3.3 U	15	< 3.3 U	< 3.3 U	10	24	< 6.6 UJ	< 6.6 UJ	< 6.6 U	8.8 J-	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	PAH, TOTAL	UG_KG		65	< 3.3 U	78	130	< 3.3 U	43	26	< 3.3 U	40	92	< 6.6 U	< 6.6 U	< 6.6 U	18	< 6.6 U	< 6.6 U	< 6.6 U	< 6.6 U	< 6.6 U
PAHs	PHENANTHRENE	UG_KG		25	< 3.3 U	15 J	37	< 3.3 U	< 3.3 U	12 J	< 3.3 UJ	14	25	< 6.6 UJ	< 6.6 UJ	< 6.6 U	8.8 J-	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
PAHs	PYRENE	UG_KG		< 3.3 U	< 3.3 U	58 J	5.7	< 3.3 U	< 3.3 U	14 J	< 3.3 UJ	7.5	11	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U	< 6.6 UJ	< 6.6 UJ	< 6.6 U
Lipid	LIPIDS	PCT		0.43	0.33	0.27	0.4	0.1	0.53	0.23	0.07	0.16	0.49	0.053	0.076	0.12	0.12	0.06	0.092	0.12	0.12	0.12

Notes:
1) U = Non-detect at laboratory detection limit
2) J = Estimated Value, R = rejected
3) Type N = normal sample, FD = duplicate sample
4) NA = Not Analyzed

TABLE 11d
CONSTITUENT SCREENING - SHELLFISH
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

SAMPLE ID	TYPE	YEAR	ALUMINUM		ANTIMONY		ARSENIC		BARIUM		BERYLLIUM		CADMIUM		CALCIUM		TOTAL CHROMIUM		COBALT		COPPER		IRON		LEAD		MAGNESIUM	MANGANESE		MERCURY		NICKEL		POTASSIUM	SELENIUM		SILVER	
ET09-01	N	2007	3.5	J	0.099	U	0.41	J	0.066	J	0.0036	UJ	0.053	J	792		0.77	J	0.057	J	1.1	U	14		0.18	UJ	887	0.61	UJ	0.005	J	0.34	J	841	0.2	J	0.19	UJ
ET09-01	N	2008	8.8	J	0.091	U	0.64		0.61	J	0.0021	UJ	0.085	J	532	J	0.42	J	0.025	UJ	1.6	U	28.3	J	0.18	UJ	825	1.3	J	0.01	UJ	0.28	J	955	0.091	J	0.28	J
ET09-01	N	2009	8		0.16	U	0.77	U	--		0.0027	U	--		--		1.1		--		1.3		32.6		0.14	J	--	1.6		0.019	U	0.7	J	--	--		--	
ET09-01	N	2010	10.2		0.29	UJ	1		0.34	U	0.0018	U	0.073	J	412		0.22	J	0.038	J	7.1		30.9		0.13	J	875	1.7	J	0.006	J	0.35	J	1030	0.69	U	0.27	UJ
ET09-01	N	2011	9.6		0.38	U	3.5		--		0.0012	J	--		--		0.16	J	--		1.4		30.2		0.11	J	--	1.5		0.0071	J	0.058	J	--	--		--	
ET09-02	N	2007	3.9	J	0.14	U	0.74	J	0.093	U	0.0034	UJ	0.025	UJ	620		2.4	J	0.073	J	1.8	U	35.4		0.23	UJ	865	0.87	UJ	0.027		1.3	J	1170	0.14	J	0.069	UJ
ET09-02	N	2008	5.4	J	0.08	U	0.8		0.053	J	0.003	UJ	0.077	J	538	J	0.29	J	0.027	UJ	1.8	U	27.5	J	0.17	UJ	748	1.5		0.019	UJ	0.17	J	1120	0.22	J	0.07	J
ET09-02	N	2009	3.7	J	0.2	U	0.95	U	--		0.0035	U	--		--		0.26	J	--		1.1		21.5		0.082	U	--	0.83	U	0.021	U	0.16	U	--	--		--	
ET09-02	N	2010	2.1	J	0.34	UJ	0.9		0.34	U	0.0017	U	0.073	J	370		0.049	J	0.029	U	1.5		14.7		0.12	U	896	1.4	J	0.013	J	0.07	UJ	988	0.65	U	0.085	UJ
ET09-02	N	2011	11.1		0.61	U	2.3		--		0.0032	J	--		--		0.12	J	--		1.4		44		0.2	U	--	1.7	J	0.027	J	0.061	J	--	--		--	
		MAX REFERENCE	**11.1**		**0.61**	**U**	**3.5**		**0.61**	**J**	**0.0032**	**J**	**0.085**	**J**	**792**		**2.4**	**J**	**0.073**	**J**	**7.1**		**44**		**0.14**	**J**	**896**	**1.7**	**J**	**0.027**		**1.3**	**J**	**1170**	**0.22**	**J**	**0.28**	**J**
ET09-03	N	2013	166	J	0.74	U	3.52	J	0.608	J	0.067	U	0.213	J	685	J	3	U	1	U	3.58		542	J	1.19	J	835	29.4	J	0.0111	J	1.04	J	1310	0.8	U	0.17	U
ET09-03	N	2014	19.2		0.24	J	3.4		5.1	U	0.0026	J	0.23		418		0.51	U	1.3	U	1.9		85.4		0.21	J	858	2.4		0.0063	J	1.3	U	1280	0.51	U	0.14	J
ET09-03	N	2015	107		0.53	U	2.7		7.1	U	0.014	J	0.17	J	559		0.71	U	1.8	U	3		477		1		775	21.3		0.009	J	1.8	U	840	0.61	J	0.15	J
ET09-03	N	2016	52.3		0.82	U	2.4		8.2	U	0.2	U	0.12	J	662		0.82	U	0.12	J	1.4	U	262		0.53		1010	22.1		0.0054	J	0.2	J	901	0.82	U	0.13	J
ET09-04	FD	2013	72.3	J	0.718	U	4.98		0.486	J	0.065	U	0.202	J	1910	J	2.91	U	0.971	U	2.5		261	J	0.711	J	777	27.5	J	0.0111	J	0.544	J	1630	0.777	U	0.165	U
ET09-04	N	2013	133	J	0.718	U	5.17		0.737	J	0.065	U	0.148	J	2670	J	2.91	U	0.971	U	2.77		616	J	1.15	J	838	46	J	0.0093	U	0.433	J	1540	0.777	U	0.165	U
ET09-04	N	2014	16.3		0.62	J	4.1		9.6	U	0.0074	J	0.19	J	395		0.96	U	2.4	U	1.9		99.4		0.19	J	905	10.4		0.0067	J	2.4	U	1400	0.96	U	0.2	J
ET09-04	N	2015	51.6		0.74	U	2.1		9.8	U	0.0061	J	0.1	J	343		0.98	U	2.5	U	2.4		204		0.42	J	761	7.8		0.0072	J	2.5	U	913	1.5	U	0.11	J
ET09-04	N	2016	128		0.8	U	3.4		10	U	0.25	U	0.17	J	2430		1.1		0.26	J	6.4		599		1.2		1250	41.4		0.0068	J	0.7	J	1350	1.2	J	0.15	J
ET09-05	N	2013	15.1	J	0.725	U	3.15	J	0.222	J	0.0657	U	0.0873	J	631	J	0.157	U	0.98	U	1.39	J	43.8	J	0.49	U	891	4.98	J	0.0095	U	0.649	J	1350	0.784	U	0.167	U
ET09-05	N	2014	16.8		0.69	U	1.9		9.3	U	0.0046	J	0.063	J	332		0.93	U	2.3	U	1.1	J	50.8		0.23	U	640	4.1		0.0068	J	2.3	U	931	0.93	U	0.11	J
ET09-05	FD	2014	19.9		0.64	U	3.2		8.5	U	0.0052	J	0.085	J	448		0.85	U	2.1	U	1.7		60.4		0.21	U	960	5.1		0.0059	J	2.1	U	1530	0.85	U	0.11	J
ET09-05	N	2015	146		0.36	J	3.3		7.5	U	0.018	J	0.076	J	810		1.1		1.9	U	2.8		502		1.2		976	10.4		0.0052	J	1.9	U	1190	1.1	U	0.066	J
ET09-05	N	2016	21.5	J	0.55	U	2.9		6.9	U	0.17	U	0.069	J	1060		0.69	U	0.17	J	1.1	U	71.5	J	0.14	J	1000	2.6		0.0072	J	0.87	J	1120	0.64	J	0.076	J
ET09-05	FD	2016	6.8	J	0.7	U	2.9		8.7	U	0.22	U	0.063	J	1300		0.87	U	0.18	J	1.3	U	32.8	J	0.22	U	1040	2.2	U	0.0074	J	0.88	J	1170	0.57	J	0.075	J
ET09-06	N	2013	16.9	J	0.74	U	4.73		0.131	J	0.067	U	0.145	J	427	J	3	U	0.099	U	1.68	J	62.6	J	0.5	U	737	11.4	J	0.0114	J	0.13	U	1460	0.8	U	0.17	U
ET09-06	N	2014	21.3		0.37	J	4.2		6.8	U	0.0057	J	0.12	J	419		0.68	U	1.7	U	2.4		80.9		0.16	J	890	3.3		0.0098	J	1.7	U	1600	0.68	U	0.11	J
ET09-06	N	2015	21		0.45	J	3		8.3	U	0.0066	J	0.089	J	403		0.83	U	2.1	U	4.2		108		0.41	U	881	9		0.0073	J	2.1	U	1190	1.2	U	0.11	J
ET09-06	N	2016	2.1	J	0.59	U	2.6		7.4	U	0.18	U	0.064	J	606		0.74	U	0.13	J	1.8	U	15.9		0.14	J	927	3.1		0.0066	J	0.59	J	1440	0.62	J	0.093	J
ET09-07	N	2015	54.2		0.68	U	3.1		9	U	0.0072	J	0.55		663		0.9	U	2.3	U	6.3		208		0.39	J	848	4.6		0.0094	J	2.3	U	810	1.4	U	1.2	J
ET09-07	N	2016	38.3		0.72	U	2		7.2	U	0.18	U	0.46		700		1.1		0.057	J	1.9	U	113		0.26	J	941	1.8		0.0096	J	0.45	J	865	0.72	U	0.94	J
ET09-08	N	2015	6.1	J	0.5	U	4.1		6.7	U	0.0023	J	0.21		930		0.67	U	1.7	U	6.9		21.8		0.34	U	1050	0.53	J	0.02	U	1.7	U	822	1	U	1.2	
ET09-08	N	2016	144		0.52	U	2.5		6.5	U	0.16	U	0.15	J	635		1.4		0.14	J	3		390		0.88		959	6.5		0.014	J	0.65	J	855	0.71	J	0.57	J
ET09-09	N	2013	7.3	J	0.712	U	4.56		0.0856	J	0.0644	U	0.142	J	490	J	0.154	U	0.0952	U	1.83	J	30.6	J	0.481	U	770	9.33	J	0.011	J	0.125	U	1440	0.769	U	0.163	U
ET09-09	N	2014	14.6		0.23	J	3.6		5.5	U	0.0011	J	0.1	J	465		0.55	U	1.4	U	1.9		46.6		0.11	J	886	12.7		0.0083	J	1.4	U	1470	0.55	U	0.14	J
ET09-09	N	2015	27.2		0.48	J	2.9		9.4	U	0.03	J	0.13	J	431		0.94	U	2.4	U	2.3		94.3		0.21	J	934	13.6		0.01	J	2.4	U	1090	1.4	U	0.26	J
ET09-09	N	2016	2.6	J	0.65	U	2.9		6.5	U	0.16	U	0.066	J	494		0.65	U	0.14	J	2.8		19		0.16	J	926	3.2		0.0058	J	0.61	J	1510	0.65	U	0.079	J
ET09-10	N	2013	1360	J	0.733	U	2.71	J	6.05		0.111	J	0.206	J	968	J	9.37		1.01		9.48		3160	J	6.9		1150	31	J	0.0197	J	5.52		1090	0.792	U	0.168	U
ET09-10	N	2014	9.9		0.36	J	3		8.1	U	0.0077	J	0.093	J	511		0.81	U	2	U	4.1		43.6		0.24	J	896	9.7		0.011	J	2	U	1410	0.81	U	0.17	J
ET09-10	N	2015	26.2		0.44	J	3.9		8.7	U	0.028	J	0.18	J	904		0.87	U	2.2	U	9.1		95.3		0.28	J	995	7.2		0.01	J	2.2	U	1130	0.7	J	0.26	J
ET09-10	N	2016	7.3	J	0.87	U	2.8		8.7	U	0.22	U	0.059	J	926		0.87	U	0.15	J	2.2	U	38		0.22	U	937	4.8		0.008	J	0.58	J	1360	0.57	J	0.091	J
ET09-11	N	2013	9.72	J	0.725	U	3.61	J	0.0863	J	0.0657	U	0.12	J	512	J	0.157	U	0.0971	U	1.6	J	33	J	0.49	U	778	9.07	J	0.012	J	0.152	J	1380	0.784	U	0.98	U
ET09-11	N	2014	10.4		0.45	U	3.5		6	U	0.0065	J	0.084	J	501		0.6	U	1.5	U	4.2		43.5		0.18	J	855	5.7		0.0085	J	1.5	U	1720	0.6	U	0.14	J
ET09-11	N	2015	16.5		0.42	J	3		9.6	U	0.0049	J	0.11	J	501		0.96	U	2.4	U	3.1		64.1		0.48	U	892	10.8		0.0079	J	2.4	U	1160	1.4	U	0.26	J
ET09-11	N	2016	9.3		0.82	U	2		8.2	U	0.2	U	0.073	J	988		0.82	U	0.059	J	1.6	U	38		0.14	J	967	11.6		0.0074	J	0.14	J	966	0.54	J	0.2	J
ET09-12	N	2013	77.5	J	0.718	U	2.56	J	0.476	J	0.065	U	0.0845	J	726	J	2.91	U	0.971	U	3.28		205	J	0.689	J	790	12.6	J	0.0093	U	0.651	J	1600	0.777	U	0.165	U
ET09-12	N	2014	19.9		0.57	U	3.4		7.6	U	0.0024	J	0.1	J	441		0.76	U	1.9	U	2		60.9		0.19	U	920	11.1		0.0095	J	1.9	U	1420	0.76	U	0.17	J
ET09-12	N	2015	19.1		0.31	J	2.7		6.8	U	0.0093	J	0.14	J	794		0.68	U	1.7	U	5.5		88.7		0.35		1030	15.4		0.0049	J	1.7	U	1180	1	U	0.12	J
ET09-12	FD	2015	16.5		0.71	U	3		9.4	U	0.013	J	0.1	J	784		0.94	U	2.4	U	7.2		72.1		0.35	J	904	13.1		0.004	J	2.4	U	1090	1.4	U	0.14	J
ET09-12	N	2016	6.2	J	0.51	U	3.1		6.4	U	0.16	U	0.055	J	879		0.64	U	0.15	J	2.7		39.3		0.22	J	946	4		0.0059	J	0.37	J	1310	0.56	J	0.11	J

Notes:
1) U = Non-detect at laboratory detection limit
2) J = Estimated Value, R = rejected
3) Type N = normal sample, FD = duplicate sample
4) NA = Not analyzed

TABLE 11d
CONSTITUENT SCREENING - SHELLFISH
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

SAMPLE ID	TYPE	YEAR	SODIUM	THALLIUM	VANADIUM	ZINC	DECACHLORO BIPHENYL	DICHLORO BIPHENYL	HEPTACHLORO BIPHENYL	HEXACHLORO BIPHENYL	MONOCHLORO BIPHENYL	NONACHLORO BIPHENYL	OCTACHLORO BIPHENYL	PENTACHLORO BIPHENYL	TETRACHLORO BIPHENYL	TRICHLORO BIPHENYL	Total PCB Homologs	4,4-DDD	4,4-DDE	4,4-DDT	ALDRIN
ET09-01	N	2007	7950	0.073 U	0.066 UJ	3.4	8.3 U	0.9 J	5 U	1.4 J	1.6J UJ	8.3 U	5 U	2.6 J	3.3 U	1.6 U	4.9 J	53 U	3.2 U	3.2 U	1.7 U
ET09-01	N	2008	7670	0.61 U	0.063 J	5.1	1 U	0.21 U	0.6 U	0.42 U	0.21 U	1 U	0.6 U	0.41 U	0.41 U	0.21 U	0.531 U	3.3 U	3.3 U	3.3 U	1.7 U
ET09-01	N	2009	--		--	4.6	1.1J UJ	0.21 U	0.6 U	1.1	0.21 U	1.1J UJ	0.6 U	1.6	0.53	0.21 U	3.23 J	3.3 U	3.3 U	3.3 U	1.7 U
ET09-01	N	2010	7730	0.88 U	0.079 UJ	7.4	4.1 U	0.83 U	2.1 U	3.5	0.83 U	4.2 U	2.4 U	3.6	2.7	0.83 U	9.8	6.6 UJ	6.6 U	6.6 U	3.4 U
ET09-01	N	2011	--		--	6	0.81 U	0.16 U	0.48 U	2.1	0.16 U	0.81 U	0.48 U	1.5 J	0.32 U	0.16 U	3.6 J	110 UJ	1.7 U	1.7 U	0.84 U
ET09-02	N	2007	7470	0.1 U	0.076 UJ	5.5	8.2 U	1.9	1 J	6.4	1.6J UJ	8.2 U	4.9 U	8.3	3.3 J	1.6 U	20.9 J	37 U	4.4	3.3 U	2.3 J
ET09-02	N	2008	7320	0.53 U	0.051 J	5.2	1 U	0.21 U	0.6 U	0.41 U	0.21 U	1 U	0.6 U	0.41 U	0.41 U	0.21 U	0.531 U	3.3 U	3.3 U	3.3 U	1.7 U
ET09-02	N	2009	--		--	4.6	1.1J UJ	0.21 U	0.6 U	1.1	0.21 U	1.1J UJ	0.6 U	1.5	0.52	0.21 U	3.12 J	3.3 U	3.3 U	3.3 U	4.1 J
ET09-02	N	2010	6650	0.83 U	0.043 UJ	7.3	4.1 U	0.83 U	2.4 U	2.9	0.83 U	4.1 U	2.4 U	2.8	1.6 U	0.83 U	5.7	6.5 UJ	6.5 U	6.5 U	3.3 U
ET09-02	N	2011	--		--	5.7	0.82 U	0.43 J	0.49 U	1.7	0.16 U	0.82 U	0.49 U	0.45 J	0.33 U	0.16 U	2.58 J	1.7 U	1.7 U	1.7 U	10 J
		MAX REFERENCE	**7950**	**0.88 U**	**0.063 J**	**7.4**	**8.3 U**	**1.9**	**1 J**	**6.4**	**0.83 U**	**8.3 U**	**5 U**	**8.3**	**3.3 J**	**1.6 U**	**20.9 J**	**110 U**	**4.4 U**	**6.6 U**	**10**
ET09-03	N	2013	6330	0.52 U	1 U	10.4 J	0.42 U	0.083 U	8	8.1 J	0.083 U	0.42 U	2.6	1.1	0.17 U	0.083 U	20	R	3.7	7.3 U	0.6 J
ET09-03	N	2014	7340	0.26 U	1.3 U	7.2	0.41 U	0.082 U	0.25 U	2.9	0.082 U	0.41 U	0.25 U	0.17 U	0.17 U	0.082 U	2.9	0.85 U	0.85 U	0.85 U	0.42 U
ET09-03	N	2015	5180	0.35 U	0.7 J	9.8	0.42 U	0.083 U	6.5	18	0.17 U	0.42 U	0.5 U	5.8	0.17 U	0.083 U	30	12 J	2.7 J	5.5 J	1.9 J
ET09-03	N	2016	7570	0.41 UJ	2 U	5.5	0.26 J	0.082 U	5.3	16	0.17 U	0.41 U	0.5 U	5.1	0.74	0.082 U	27	0.85 U	0.85 U	0.85 U	0.42 U
ET09-04	FD	2013	5800	0.505 U	0.971 U	10 J	0.41 U	0.082 U	0.5 J	3.3 J	0.082 U	0.41 U	0.25 U	1.4 J	0.17 U	0.082 U	5.2	3.4 U	2.7 J	3.6 U	0.74 J
ET09-04	N	2013	6380	0.505 U	0.971 U	9.72 J	0.42 U	0.083 U	1.7 J	7.1 J	0.083 U	0.42 U	0.25 U	3 J	0.37 J	0.083 U	12	15 U	2.7 J	3.4 U	1.2 J
ET09-04	N	2014	7510	0.48 U	2.4 U	7.5	0.42 U	0.083 U	0.25 U	0.92	0.083 U	0.42 U	0.25 U	0.17 U	0.17 U	0.083 U	0.92	0.85 U	0.85 U	0.85 U	0.43 U
ET09-04	N	2015	5660	0.49 U	0.35 J	6.3	0.42 U	0.39 J	3.1	12	0.17 U	0.42 U	0.5 U	4.8	0.28 J	0.15 J	21	0.84 UJ	0.84 UJ	0.84 UJ	0.42 UJ
ET09-04	N	2016	9130	0.5 UJ	2.5 U	10.6	0.42 U	0.42	3.7	15	0.17 U	0.42 U	0.5 U	6.6	1.2	0.088 J	27	0.84 U	0.84 U	0.84 U	0.42 U
ET09-05	N	2013	6550	0.51 U	0.127 U	17.5 J	0.41 U	0.082 U	0.75 J	1.8	0.082 U	0.41 U	0.25 U	0.16 U	0.16 U	0.082 U	2.6	3.4 U	3.4 U	3.4 U	1.6 U
ET09-05	N	2014	4650	0.46 U	2.3 U	12.5	0.42 U	0.083 U	0.25 U	0.17 U	0.083 U	0.42 U	0.25 U	0.17 U	0.17 U	0.083 U	0.42 U	0.85 U	0.85 U	0.85 U	0.43 U
ET09-05	FD	2014	7140	0.42 U	2.1 U	16.8	0.42 U	0.083 U	0.25 U	0.17 U	0.083 U	0.42 U	0.25 U	0.17 U	0.17 U	0.083 U	0.42 U	0.85 U	0.85 U	0.85 U	0.42 U
ET09-05	N	2015	6260	0.37 U	0.58 J	24.2	0.41 U	0.082 U	1.8	3.2	0.17 U	0.41 U	0.5 U	0.41 J	0.17 U	0.082 U	5.4	0.85 UJ	0.85 UJ	0.85 UJ	0.42 UJ
ET09-05	N	2016	7500	0.34 UJ	1.7 U	12.5	0.38 J	0.083 U	0.71 J	1.5	0.17 U	0.42 U	0.5 U	0.19 J	0.17 U	0.19 J	3	0.85 U	0.85 U	0.85 U	0.43 U
ET09-05	FD	2016	7420	0.43 UJ	2.2 U	13.2	0.23 J	0.082 U	0.21 J	0.96	0.16 U	0.41 U	0.49 U	0.15 J	0.16 U	0.082 U	1.6	0.84 U	0.84 U	0.84 U	0.42 U
ET09-06	N	2013	6090	0.52 U	1 U	8.55 J	0.42 U	0.083 U	4.3	12	0.083 U	0.42 U	0.25 U	5.1	0.7	0.16 J	22	3.4 U	1.9 J	3.5 U	0.71 J
ET09-06	N	2014	7000	0.34 U	1.7 U	8.6	0.42 U	0.083 U	0.25 U	0.88	0.083 U	0.42 U	0.25 U	0.17 U	0.17 U	0.083 U	0.88	0.85 U	0.85 U	0.85 U	0.43 U
ET09-06	N	2015	6470	0.41 U	0.28 J	6	0.42 U	0.9	7.8	27	0.17 U	0.42 U	0.5 U	8.5	0.87	0.083 U	45	0.84 UJ	0.84 UJ	0.84 UJ	5.6 J
ET09-06	N	2016	6620	0.37 UJ	1.8 U	14.6	0.42 UJ	0.083 UJ	0.76 J-	1.3 J-	0.17 UJ	0.42 UJ	0.5 UJ	0.21 J-	0.17 UJ	0.083 UJ	2.3	0.85 U	0.85 U	0.85 U	0.42 U
ET09-07	N	2015	6060	0.45 U	0.49 J	9.9	0.42 U	0.083 U	0.24 J	0.41 J	0.17 U	0.42 U	0.5 U	0.17 U	0.17 U	0.083 U	0.65	17 J	0.85 UJ	6.5 J	0.42 UJ
ET09-07	N	2016	7160	0.36 UJ	1.8 U	5	0.41 U	0.082 U	1.1	5.5	0.16 U	0.41 U	0.49 U	2.7	0.17 J	0.082 U	9.5	0.85 U	0.85 U	0.85 U	0.43 U
ET09-08	N	2015	7530	0.34 U	0.27 J	10.5	0.41 U	0.082 U	0.25 U	0.17 U	0.17 U	0.41 U	0.5 U	0.17 U	0.17 U	0.082 U	0.5 U	0.85 UJ	0.85 UJ	0.85 UJ	0.43 UJ
ET09-08	N	2016	6890	0.33 UJ	1.6 U	6.5	0.41 U	0.21 J	0.37 J	1.7	0.16 U	0.41 U	0.49 U	0.99	0.087 J	0.055 J	3.4	0.85 U	0.85 U	0.85 U	0.42 U
ET09-09	N	2013	6180	0.5 U	0.125 U	8.76 J	0.42 U	0.083 U	1.5	5.5	0.083 U	0.42 U	0.25 U	2.7	0.58 J	0.083 U	10	3.4 U	1.7 J	3.4 U	0.7 J
ET09-09	N	2014	7670	0.27 U	1.4 U	7.1	0.42 U	0.083 U	0.25 U	0.57 J	0.083 U	0.42 U	0.25 U	0.17 U	0.17 U	0.083 U	0.57	0.85 U	0.85 U	0.85 U	0.42 U
ET09-09	N	2015	7020	0.47 U	0.52 J	7.5	0.42 U	0.083 U	1.3	6.2	0.17 U	0.42 U	0.5 U	3.9	0.38 J	0.26 J	12	0.84 UJ	0.84 UJ	0.84 UJ	0.42 UJ
ET09-09	N	2016	6410	0.32 UJ	1.6 U	15.6	0.42 UJ	0.083 UJ	0.2 J-	0.86 J-	0.17 UJ	0.42 UJ	0.5 UJ	0.17 UJ	0.17 UJ	0.083 UJ	1.1	0.84 UJ	0.84 UJ	0.84 UJ	0.42 UJ
ET09-10	N	2013	4740	0.515 U	4.01	29.2 J	0.42 U	0.083 U	0.25 U	0.17 U	0.083 U	0.42 U	0.25 U	0.17 U	0.17 U	0.083 U	0.42 U	3.4 U	0.87 J	1.5 J	0.64 J
ET09-10	N	2014	6680	0.41 U	2 U	18.1	0.42 U	0.083 U	0.25 U	0.17 U	0.083 U	0.42 U	0.25 U	0.17 U	0.17 U	0.083 U	0.42 U	0.85 U	0.85 U	0.85 U	0.43 U
ET09-10	N	2015	6170	0.43 U	0.36 J	28.8	0.42 U	0.083 U	0.25 U	0.17 U	0.17 U	0.42 U	0.5 U	0.17 U	0.17 U	0.083 U	0.5 U	0.85 UJ	0.85 UJ	0.85 UJ	0.43 UJ
ET09-10	N	2016	6630	0.43 UJ	2.2 U	14	0.2 J	0.083 U	0.21 J-	0.63 J-	0.17 U	0.42 UJ	0.5 UJ	0.18 J-	0.17 UJ	0.083 UJ	1.2	0.85 UJ	0.85 UJ	0.85 UJ	0.43 UJ
ET09-11	N	2013	6410	0.51 U	0.127 U	7.24 J	0.41 U	0.081 U	1.2	5.9	0.081 U	0.41 U	0.24 U	3.3	0.67	0.097 J	11	3.4 U	1.6 J	3.4 U	0.36 J
ET09-11	N	2014	6250	0.3 U	1.5 U	18.5	0.41 U	0.082 U	0.25 U	0.17 U	0.082 U	0.41 U	0.25 U	0.17 U	0.17 U	0.082 U	0.41 U	0.85 U	0.85 U	0.85 U	0.43 U
ET09-11	N	2015	6430	0.48 U	0.3 J	7.5	0.42 U	0.083 U	44	46	0.17 U	0.42 U	7.5	12	1.3	0.5	110	5.7 J	0.84 UJ	0.84 UJ	1.1 J
ET09-11	N	2016	7470	0.41 UJ	2 U	5.3	0.41 U	0.082 U	1.7	8.3	0.16 U	0.41 U	0.49 U	4.4	0.66	0.082 U	15	0.85 U	0.85 U	0.85 U	0.43 U
ET09-12	N	2013	5420	0.505 U	0.971 U	18.1 J	0.41 U	0.082 U	0.25 U	0.16 U	0.082 U	0.41 U	0.25 U	0.16 U	0.16 U	0.082 U	0.41 U	3.4 U	0.72 J	3.4 U	1.7 U
ET09-12	N	2014	7670	0.38 U	1.9 U	7.4	0.42 U	0.083 U	0.25 U	0.17 U	0.083 U	0.42 U	0.25 U	0.17 U	0.17 U	0.083 U	0.42 U	0.84 U	0.84 U	0.84 U	0.42 U
ET09-12	N	2015	5990	0.34 U	0.22 J	23.6	0.42 U	0.083 U	0.25 U	0.17 U	0.17 U	0.42 U	0.5 U	0.17 U	0.17 U	0.083 U	0.5 U	0.84 UJ	0.84 UJ	0.63 J	0.42 UJ
ET09-12	FD	2015	5590	0.47 U	0.21 J	21.5 U	0.41 U	0.082 U	0.26 J	0.43 J	0.16 U	0.41 U	0.49 U	0.16 U	0.16 U	0.082 U	0.69	0.85 UJ	0.85 UJ	0.85 UJ	0.42 UJ
ET09-12	N	2016	6800	0.32 UJ	1.6 U	13.6	0.41 UJ	0.082 UJ	0.35 J-	0.51 J-	0.17 UJ	0.41 UJ	0.5 UJ	0.17 UJ	0.17 UJ	0.082 UJ	0.86	0.85 U	0.85 U	0.85 U	0.42 U

Notes:
1) U = Non-detect at laboratory detection limit
2) J = Estimated Value, R = rejected
3) Type N = normal sample, FD = duplicate sample
4) NA = Not analyzed

TABLE 11d
CONSTITUENT SCREENING - SHELLFISH
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

SAMPLE ID	TYPE	YEAR	ALPHA-BHC		ALPHA-CHLORDANE		BETA-BHC		DELTA-BHC		DIELDRIN		ENDOSULFAN I		ENDOSULFAN II		ENDOSULFAN SULFATE		ENDRIN		ENDRIN ALDEHYDE		ENDRIN KETONE		HEPTACHLOR		HEPTACHLOR EPOXIDE		LINDANE		METHOXYCHLOR		TOXAPHENE		TRANS-CHLORDANE		1,2,4-TRICHLORO BENZENE		1,2-DICHLORO BENZENE	
ET09-01	N	2007	1.7	U	1.7	U	4.2	UJ	1.7	U	3.2	U	1.7	U	53	U	53	U	53	U	3.2	U	3.2	U	1.7	U	28	U	1.7	U	280	U	2800	U	28	U	320	U	320	U
ET09-01	N	2008	1.7	U	1.7	U	1.7	U	1.7	U	3.3	U	1.7	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	1.7	U	1.7	U	1.7	U	17	U	170	U	1.7	U	330	U	330	U
ET09-01	N	2009	1.7	U	1.7	U	1.7	U	1.7	U	3.3	U	1.7	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	1.7	U	1.7	U	1.7	U	17	U	170	U	1.7	U	330	U	330	U
ET09-01	N	2010	3.4	U	71.6	UJ	50.8	UJ	4.2	J	6.6	U	3.4	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	3.4	U	3.4	U	3.4	U	34	U	340	U	5.6	J	330	U	330	U
ET09-01	N	2011	0.84	U	0.84	U	0.84	U	0.84	U	1.7	U	0.84	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	0.84	U	0.84	U	0.84	U	8.4	U	66	U	0.84	U	130	U	130	U
ET09-02	N	2007	1.7	U	1.7	U	1.7	U	1.7	U	3.3	U	1.7	U	37	U	37	U	37	U	3.3	U	3.3	U	1.7	U	19	U	1.7	U	190	U	1900	U	2	J	330	U	330	U
ET09-02	N	2008	1.7	U	1.7	U	1.7	U	1.7	U	3.3	U	1.7	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	1.7	U	1.7	U	1.7	U	17	U	170	U	1.7	U	330	U	330	U
ET09-02	N	2009	1.7	U	1.7	U	1.7	U	8.6	UJ	3.3	U	1.7	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	1.7	U	1.7	U	1.7	U	17	U	170	U	2.5		330	U	330	U
ET09-02	N	2010	3.3	U	41.3	UJ	19	J	6.3	J	6.5	U	3.3	U	6.5	U	6.5	U	6.5	U	6.5	U	6.5	U	3.3	U	3.3	U	4.7	J	33	U	330	U	4.9	J	330	U	330	U
ET09-02	N	2011	12	UJ	8.1	J	8.1		13	J	6.9	J	0.83	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	20	UJ	0.83	U	5.2	J	8.3	U	65	U	0.83	U	130	U	130	U
MAX REFERENCE			**12**	**UJ**	**8.1**	**J**	**19**	**J**	**13**		**6.9**		**3.4**	**U**	**53**	**U**	**53**	**U**	**53**	**U**	**6.6**	**U**	**6.6**	**U**	**20**	**UJ**	**28**	**U**	**5.2**	**J**	**280**	**U**	**2800**	**U**	**5.6**		**330**	**U**	**330**	**U**
ET09-03	N	2013	1.4	J	1.6	U	3.8	U		R	3.4	U	1.6	U	3.4	U	3.4	U	3.4	U	3.4	U	3.6	U		R	1.1	J	1.6	U	4.3	J	66	U	6.6	J	200	U	200	U
ET09-03	N	2014	0.42	U	0.42	U	0.42	U	0.42	U	0.85	U	0.42	U	0.85	U	0.85	U	0.85	U	0.85	U	0.85	U	0.42	U	0.42	U	0.42	U	4.2	U	17	U	0.42	U	67	U	67	U
ET09-03	N	2015	0.42	UJ	1	J	0.99	J	0.42	UJ	0.84	UJ	0.42	UJ	0.84	UJ	0.84	UJ	3.5	J	0.84	UJ	0.84	UJ	0.42	UJ	0.42	UJ	0.42	UJ	4.2	UJ	17	UJ	0.87	J	66	U	66	U
ET09-03	N	2016	0.21	U	0.21	U	0.21	U	0.42	U	0.42	U	0.21	U	0.42	U	0.42	U	0.42	U	0.85	U	0.42	U	0.21	U	0.42	U	0.21	U	2.1	U	17	U	0.42	U	130	UJ	130	UJ
ET09-04	FD	2013	1.6	U	1.6	U	3.8	U	1.6	U	1	J	1.6	U	3.4	U	3.4	U	3.4	U	3.4	U	3.6	U	1.6	U	1.6	U	1.6	U	13	U	66	U	5.9		130	U	130	U
ET09-04	N	2013	1.7	U	1.7	U	3.8	U	2.7	U	3.4	U	0.84	J	3.4	U	3.4	U	3.4	U	0.8	J	3.6	U	3.5		1.3	J	1.7	U	4.6	J	66	U	4.5		130	U	130	U
ET09-04	N	2014	0.43	U	0.43	U	0.43	U	0.43	U	0.85	U	0.43	U	0.85	U	0.85	U	0.85	U	0.85	U	0.85	U	0.43	U	0.43	U	0.43	U	4.3	U	17	U	0.43	U	66	U	66	U
ET09-04	N	2015	0.42	UJ	0.42	UJ	0.42	UJ	0.42	UJ	0.84	UJ	0.42	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.42	UJ	0.42	UJ	0.42	UJ	4.2	UJ	17	UJ	0.42	UJ	67	U	67	U
ET09-04	N	2016	0.21	U	0.21	U	0.21	U	0.42	U	0.42	U	0.21	U	0.42	U	0.42	U	0.42	U	0.84	U	0.42	U	0.21	U	0.42	U	0.21	U	2.1	U	17	U	0.42	U	130	U	130	U
ET09-05	N	2013	0.76	J	1.1	J	3.8	U	1	J	3.4	U	1.6	U	3.4	U	3.4	U	3.4	U	3.4	U	3.6	U	1.6	U	1.6	U	1.6	U	13	U	65	U	0.85	J	130	U	130	U
ET09-05	N	2014	0.43	U	0.43	U	0.43	U	0.43	U	0.85	U	0.43	U	0.85	U	0.85	U	0.85	U	0.85	U	0.85	U	0.43	U	0.43	U	0.43	U	4.3	U	17	U	0.43	U	67	U	67	U
ET09-05	FD	2014	0.42	U	0.42	U	0.42	U	0.42	U	0.85	U	0.42	U	0.85	U	0.85	U	0.85	U	0.85	U	0.85	U	0.42	U	0.42	U	0.42	U	4.2	U	17	U	0.42	U	67	U	67	U
ET09-05	N	2015	0.42	UJ	1.5	J	0.42	UJ	0.42	UJ	0.85	UJ	0.42	UJ	0.85	UJ	0.85	UJ	0.85	UJ	0.85	UJ	0.85	UJ	0.42	UJ	0.42	UJ	0.42	UJ	4.2	UJ	17	UJ	0.42	UJ	67	U	67	U
ET09-05	N	2016	0.21	U	0.21	U	0.21	U	0.43	U	0.43	U	0.21	U	0.43	U	0.43	U	0.43	U	0.85	U	0.43	U	0.21	U	0.43	U	0.21	U	2.1	U	17	U	0.43	U	130	UJ	130	UJ
ET09-05	FD	2016	0.21	U	0.21	U	0.21	U	0.42	U	0.42	U	0.21	U	0.42	U	0.42	U	0.42	U	0.84	U	0.42	U	0.21	U	0.42	U	0.21	U	2.1	U	17	U	0.42	U	130	UJ	130	UJ
ET09-06	N	2013	0.58	J	1.7	U	3.8	U	1.7	U	3.4	U	1.1	J	3.4	U	3.4	U	3.4	U	3.4	U	3.6	U	1.7	U	1.7	U	1.7	U	3.6	J	66	U	7.1		130	U	130	U
ET09-06	N	2014	0.43	U	0.43	U	0.43	U	0.43	U	0.85	U	0.43	U	0.85	U	0.85	U	0.85	U	0.85	U	0.85	U	0.43	U	0.43	U	0.43	U	4.3	U	17	U	0.43	U	67	U	67	U
ET09-06	N	2015	0.42	UJ	0.42	UJ	0.42	UJ	1.8	J	0.84	UJ	0.42	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.42	UJ	0.42	UJ	1.4	J	4.2	UJ	17	UJ	0.42	UJ	66	U	66	U
ET09-06	N	2016	0.21	U	0.21	U	0.21	U	0.42	U	0.42	U	0.21	U	0.42	U	0.42	U	0.42	U	0.85	U	0.42	U	0.21	U	0.42	U	0.21	U	2.1	U	17	U	0.42	U	130	U	130	U
ET09-07	N	2015	1.1	J	3.9	J	0.42	UJ	1.3	J	0.85	UJ	0.9	J	0.85	UJ	3.2	J	3.1	J	0.85	UJ	0.85	UJ	1.7	J	0.42	UJ	0.42	UJ	4.2	UJ	17	UJ	1.1	J	66	U	66	U
ET09-07	N	2016	0.21	U	0.21	U	0.21	U	0.43	U	0.43	U	0.21	U	0.43	U	0.43	U	0.43	U	0.85	U	0.43	U	0.21	U	0.43	U	0.21	U	2.1	U	17	U	0.43	U	130	UJ	130	UJ
ET09-08	N	2015	0.43	UJ	0.43	UJ	1.4	J	2.1	J	0.85	UJ	0.43	UJ	0.85	UJ	0.85	UJ	0.85	UJ	0.85	UJ	0.85	UJ	0.43	UJ	1.3	J	0.43	UJ	4.3	UJ	17	UJ	0.43	UJ	67	U	67	U
ET09-08	N	2016	0.21	U	0.21	U	0.21	U	0.42	U	0.42	U	0.21	U	0.42	U	0.42	U	0.42	U	0.85	U	0.42	U	0.21	U	0.42	U	0.21	U	2.1	U	17	U	0.42	U	130	UJ	130	UJ
ET09-09	N	2013	1.7	U	1.7	U	3.8	U	1.7	U	3.4	U	1.7	U	3.4	U	3.4	U	3.4	U	3.4	U	3.6	U	1.7	U	1.7	U	1.7	U	13	U	66	U	4.7		130	U	130	U
ET09-09	N	2014	0.42	U	0.42	U	0.42	U	0.42	U	0.85	U	0.42	U	0.85	U	0.85	U	0.85	U	0.85	U	0.85	U	0.42	U	0.42	U	0.42	U	4.2	U	17	U	0.42	U	66	U	66	U
ET09-09	N	2015	0.42	UJ	0.88	J	0.42	UJ	1.1	J	0.84	UJ	0.42	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.42	UJ	0.42	UJ	0.9	J	4.2	UJ	17	UJ	0.83	J	66	U	66	U
ET09-09	N	2016	0.21	UJ	0.21	UJ	0.21	UJ	0.42	UJ	0.42	UJ	0.21	UJ	0.42	UJ	0.42	UJ	0.42	UJ	0.84	UJ	0.42	UJ	0.21	UJ	0.42	UJ	0.21	UJ	2.1	UJ	17	UJ	0.42	UJ	130	U	130	U
ET09-10	N	2013	1.6	U	1	J	3.8	U	1.6	U	3.4	U	1.4	J	0.66	J	3.4	U	3.4	U	3.4	U	3.6	U	1.4	J	1.6	U	0.65	J	13	U	66	U	1.6	U	130	U	130	U
ET09-10	N	2014	0.43	U	0.43	U	0.43	U	0.43	U	0.85	U	0.43	U	0.85	U	0.85	U	0.85	U	0.85	U	0.85	U	0.43	U	0.43	U	0.43	U	4.3	U	17	U	0.43	U	67	U	67	U
ET09-10	N	2015	0.43	UJ	2.3	J	1.4	J	2.6	J	0.85	UJ	0.43	UJ	0.85	UJ	0.85	UJ	5.6	J	0.85	UJ	0.85	UJ	0.43	UJ	1.2	J	0.43	UJ	4.3	UJ	17	UJ	0.43	UJ	67	U	67	U
ET09-10	N	2016	0.21	UJ	0.21	UJ	0.21	UJ	0.43	UJ	0.43	UJ	0.21	UJ	0.43	UJ	0.43	UJ	0.43	UJ	0.85	UJ	0.43	UJ	0.21	UJ	0.43	UJ	0.21	UJ	2.1	UJ	17	UJ	0.43	UJ	130	UJ	130	UJ
ET09-11	N	2013	0.69	J	1.7	U	3.8	U	1.7	U	3.4	U	0.51	J	3.4	U	3.4	U	3.4	U	3.4	U	3.6	U	1.7	U	0.51	J	1.7	U	13	U	66	U	7.3		130	U	130	U
ET09-11	N	2014	0.43	U	0.43	U	0.43	U	0.43	U	0.85	U	0.43	U	0.85	U	0.85	U	0.85	U	0.85	U	0.85	U	0.43	U	0.43	U	0.43	U	4.3	U	17	U	0.43	U	66	U	66	U
ET09-11	N	2015	0.42	UJ	0.42	UJ	0.42	UJ	0.42	UJ	0.84	UJ	0.42	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.84	UJ	0.42	UJ	0.42	UJ	0.42	UJ	4.2	UJ	17	UJ	0.42	UJ	67	U	67	U
ET09-11	N	2016	0.21	U	0.21	U	0.21	U	0.43	U	0.43	U	0.21	U	0.43	U	0.43	U	0.43	U	0.85	U	0.43	U	0.21	U	0.43	U	0.21	U	2.1	U	17	U	0.43	U	130	UJ	130	UJ
ET09-12	N	2013	0.46	J	1.2	J	3.8	U	1.7	U	3.4	U	0.58	J	3.4	U	3.4	U	3.4	U	3.4	U	3.6	U	1.7	U	0.64	J	1.7	U	13	U	66	U	1.7	U	130	U	130	U
ET09-12	N	2014	0.42	U	0.42	U	0.42	U	0.42	U	0.84	U	0.42	U	0.84	U	0.84	U	0.84	U	0.84	U	0.84	U	0.42	U	0.42	U	0.42	U	4.2	U	17	U	0.42	U	67	U	67	U
ET09-12	N	2015	0.42	UJ	2.1	J	0.42	UJ	2.3	J	0.84	UJ	0.42	UJ	0.84	UJ	0.84	UJ	2.9	J	0.84	UJ	0.84	UJ	0.42	UJ	3.4	J	0.42	UJ	4.2	UJ	17	UJ	0.42	UJ	66	U	66	U
ET09-12	FD	2015	0.42	UJ	0.42	UJ	0.42	UJ	0.42	UJ	0.85	UJ	0.42	UJ	0.85	UJ	0.85	UJ	3	J	0.85	UJ	0.85	UJ	0.42	UJ	2.3	J	0.42	UJ	4.2	UJ	17	UJ	0.42	UJ	66	U	66	U
ET09-12	N	2016	0.21	U	0.21	U	0.21	U	0.42	U	0.42	U	0.21	U	0.42	U	0.42	U	0.42	U	0.85	U	0.42	U	0.21	U	0.42	U	0.21	U	2.1	U	17	U	0.42	U	130	UJ	130	UJ

Notes:
1) U = Non-detect at laboratory detection limit
2) J = Estimated Value, R = rejected
3) Type N = normal sample, FD = duplicate sample
4) NA = Not analyzed

TABLE 11d
CONSTITUENT SCREENING - SHELLFISH
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

SAMPLE ID	TYPE	YEAR	1,3-DICHLORO BENZENE		1,4-DICHLORO BENZENE		2,2'-OXYBIS (1-CHLORO PROPANE)		2,4,5-TRICHLORO PHENOL		2,4,6-TRICHLORO PHENOL		2,4-DICHLORO PHENOL		2,4-DIMETHYL PHENOL		2,4-DINITRO PHENOL		2,4-DINITRO TOLUENE		2,6-DINITRO TOLUENE		2-CHLORO NAPHTHALENE		2-CHLORO PHENOL		2-METHYL PHENOL		2-NITRO ANILINE		2-NITRO PHENOL		3,3-DICHLORO BENZIDINE		3-NITRO ANILINE		4,6-DINITRO-2-METHYL PHENOL		4-BROMO PHENYL-PHENYLETHER	
ET09-01	N	2007	320	U	320	U	320	U	660	U	320	U	320	U	320	U	660	UJ	320	U	320	U	320	U	320	U	320	U	660	U	320	U		UR		UR	660	U	320	U
ET09-01	N	2008	330	U	330	U	330	U	670	U	330	U	330	U	330	U	670	U	330	U	330	U	330	U	330	U	330	U	670	UJ	330	U	330	U	670	U	670	U	330	U
ET09-01	N	2009	330	U	330	U	330	U	670	U	330	U	330	UJ	330	UJ	670	U	330	U	330	U	330	U	330	U	330	U	670	U	330	UJ	330	U	670	UJ	670	U	330	U
ET09-01	N	2010	330	U	330	U	330	U	670	U	330	U	330	U	330	UJ	670	U	330	U	330	U	330	U	330	U	330	U	670	U	330	U	330	U	670	U	670	U	330	U
ET09-01	N	2011	130	U	130	U	130	U	130	U	130	U	130	U	130	U	640	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U
ET09-02	N	2007	330	U	330	U	330	U	660	U	330	U	330	U	330	U	660	UJ	330	U	330	U	330	U	330	U	330	U	660	U	330	U		UR		UR	660	U	330	U
ET09-02	N	2008	330	U	330	U	330	U	670	U	330	U	330	U	330	U	670	U	330	U	330	U	330	U	330	U	330	U	670	UJ	330	U	330	U	670	U	670	U	330	U
ET09-02	N	2009	330	U	330	U	330	U	670	U	330	U	330	UJ	330	UJ	670	U	330	U	330	U	330	U	330	U	330	U	670	U	330	UJ	330	U	670	UJ	670	U	330	U
ET09-02	N	2010	330	U	330	U	330	U	670	U	330	U	330	U	330	UJ	670	U	330	U	330	U	330	U	330	U	330	U	670	U	330	U	330	U	670	U	670	U	330	U
ET09-02	N	2011	130	U	130	U	130	U	130	U	130	U	130	U	130	U	630	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U
		MAX REFERENCE	**330**	**U**	**330**	**U**	**330**	**U**	**670**	**U**	**330**	**U**	**330**	**U**	**330**	**U**	**670**	**U**	**330**	**U**	**330**	**U**	**330**	**U**	**330**	**U**	**330**	**U**	**670**	**U**	**330**	**U**	**330**	**U**	**670**	**U**	**670**	**U**	**330**	**U**
ET09-03	N	2013	200	U	200	U	NA		200	U	200	U	200	U	200	U	6000	U	1000	U	200	U	200	UJ	200	U	200	U	200	U	200	U	2000	U	1000	U	3000	U	200	U
ET09-03	N	2014	67	U	67	U	67	U	67	U	67	U	67	U	67	U	170	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U
ET09-03	N	2015	66	U	66	U	66	U	66	U	66	U	66	U	66	U	160	UJ	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	UJ	66	U	66	U
ET09-03	N	2016	130	UJ	130	UJ	130	UJ	130	U	130	U	130	U	130	UJ	330	UJ	130	UJ	130	UJ	130	UJ	130	UJ	130	U	130	UJ	130	U	130	UJ	130	UJ	130	UJ	130	UJ
ET09-04	FD	2013	130	U	130	U	NA		130	U	130	U	130	U	130	U	3900	U	660	U	130	U	130	UJ	130	U	130	U	130	U	130	U	1300	U	660	U	2000	U	130	U
ET09-04	N	2013	130	U	130	U	NA		130	U	130	U	130	U	130	U	4000	U	670	U	130	U	130	UJ	130	U	85	J	130	U	130	U	1300	U	670	U	2000	U	130	U
ET09-04	N	2014	66	U	66	U	66	U	66	U	66	U	66	U	66	U	160	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U
ET09-04	N	2015	67	U	67	U	67	U	67	U	67	U	67	U	67	U	170	UJ	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	UJ	67	U
ET09-04	N	2016	130	U	130	U	130	U	130	U	130	U	130	U	130	U	320	UJ	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	UJ	130	U
ET09-05	N	2013	130	U	130	U	NA		130	U	130	U	130	U	130	U	4000	U	660	U	130	U	130	UJ	130	U	130	U	130	U	130	U	1300	U	660	U	2000	U	130	U
ET09-05	N	2014	67	U	67	U	67	U	67	U	67	U	67	U	67	U	170	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U
ET09-05	FD	2014	67	U	67	U	67	U	67	U	67	U	67	U	67	U	170	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U
ET09-05	N	2015	67	U	67	U	67	U	67	UJ	67	U	67	U	67	U	170	UJ	67	U	67	U	67	U	67	U	67	U	67	U	67	U		R		R	67	U	67	U
ET09-05	N	2016	130	UJ	130	UJ	130	UJ	130	U	130	U	130	U	130	UJ	330	UJ	130	UJ	130	UJ	130	UJ	130	UJ	130	U	130	UJ	130	U	130	UJ	130	UJ	130	UJ	130	UJ
ET09-05	FD	2016	130	UJ	130	UJ	130	UJ	130	U	130	U	130	U	130	UJ	330	UJ	130	UJ	130	UJ	130	UJ	130	U	130	U	130	UJ	130	U	130	UJ	130	UJ	130	UJ	130	UJ
ET09-06	N	2013	130	U	130	U	NA		130	U	130	U	130	U	130	U	3900	U	660	U	130	U	130	UJ	130	U	130	U	130	U	130	U	1300	U	660	U	2000	U	130	U
ET09-06	N	2014	67	U	67	U	67	U	67	U	67	U	67	U	67	U	170	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	UJ	67	UJ	67	U	67	U
ET09-06	N	2015	66	U	66	U	66	U	66	U	66	U	66	U	66	U	160	UJ	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U
ET09-06	N	2016	130	U	130	U	130	U	130	U	130	U	130	U	130	U	330	UJ	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	UJ	130	U	130	U
ET09-07	N	2015	66	U	66	U	66	U	66	U	66	U	66	U	66	U	160	UJ	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U
ET09-07	N	2016	130	UJ	130	UJ	130	UJ	130	U	130	U	130	U	130	UJ	330	UJ	130	UJ	130	UJ	130	UJ	130	U	130	U	130	UJ	130	U	130	UJ	130	UJ	130	UJ	130	UJ
ET09-08	N	2015	67	U	67	U	67	U	67	UJ	67	UJ	67	UJ	67	UJ	170	UJ	67	U	67	U	67	U	67	UJ	67	UJ	67	U	67	UJ	67	U	67	U	67	UJ	67	U
ET09-08	N	2016	130	UJ	130	UJ	130	UJ	130	U	130	U	130	U	130	UJ	330	UJ	130	UJ	130	UJ	130	UJ	130	U	130	U	130	UJ	130	U	130	UJ	130	UJ	130	UJ	130	UJ
ET09-09	N	2013	130	U	130	U	NA		130	U	130	U	130	U	130	U	4000	U	660	U	130	U	130	UJ	130	U	130	U	130	U	130	U	1300	U	660	U	2000	U	130	U
ET09-09	N	2014	66	U	66	U	66	U	66	U	66	U	66	U	66	U	160	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U
ET09-09	N	2015	66	U	66	U	66	U	66	U	66	U	66	U	66	U	160	UJ	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	UJ	66	U
ET09-09	N	2016	130	U	130	U	130	U	130	U	130	U	130	U	130	U	330	UJ	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	U	130	UJ	130	U
ET09-10	N	2013	130	U	130	U	NA		130	U	130	U	130	U	130	U	4000	U	670	U	130	U	130	U	130	U	130	U	130	U	130	U	1300	U	670	U	2000	U	130	U
ET09-10	N	2014	67	U	67	U	67	U	67	U	67	U	67	U	67	U	170	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U
ET09-10	N	2015	67	U	67	U	67	U	67	U	67	U	67	U	67	U	170	UJ	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	UJ	67	U
ET09-10	N	2016	130	UJ	130	UJ	130	UJ	130	UJ	130	UJ	130	UJ	130	UJ	330	UJ	130	UJ	130	UJ	130	UJ	130	UJ	130	UJ	130	UJ	130	UJ		R		R	130	UJ	130	UJ
ET09-11	N	2013	130	U	130	U	NA		130	U	130	U	130	U	130	U	4000	U	660	U	130	U	130	U	130	U	74	J	130	U	130	U	1300	U	660	U	2000	U	130	U
ET09-11	N	2014	66	U	66	U	66	U	66	U	66	U	66	U	66	U	160	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U
ET09-11	N	2015	67	U	67	U	67	U	67	U	67	U	67	U	67	U	170	UJ	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	UJ	67	U
ET09-11	N	2016	130	UJ	130	UJ	130	UJ	130	U	130	U	130	U	130	UJ	330	UJ	130	UJ	130	UJ	130	UJ	130	U	130	U	130	UJ	130	U	130	UJ	130	UJ	130	UJ	130	UJ
ET09-12	N	2013	130	U	130	U	NA		130	U	130	U	130	U	130	U	4000	U	660	U	130	U	130	U	130	U	130	U	130	U	130	U	1300	U	660	U	2000	U	130	U
ET09-12	N	2014	67	U	67	U	67	U	67	U	67	U	67	U	67	U	170	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U	67	U
ET09-12	N	2015	66	U	66	U	66	U	66	U	66	U	66	U	66	U	160	UJ	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	UJ	66	U
ET09-12	FD	2015	66	U	66	U	66	U	66	U	66	U	66	U	66	U	160	UJ	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	U	66	UJ	66	U
ET09-12	N	2016	130	UJ	130	UJ	130	UJ	130	U	130	U	130	U	130	U	330	UJ	130	UJ	130	UJ	130	UJ	130	U	130	U	130	UJ	130	U	130	UJ	130	UJ	130	UJ	130	UJ

Notes:
1) U = Non-detect at laboratory detection limit
2) J = Estimated Value, R = rejected
3) Type N = normal sample, FD = duplicate sample
4) NA = Not analyzed

TABLE 11d
CONSTITUENT SCREENING - SHELLFISH
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

SAMPLE ID	TYPE	YEAR	4-CHLORO-3-METHYL PHENOL	4-CHLORO ANILINE	4-CHLORO PHENYL-PHENYLETHER	4-METHYL PHENOL	4-NITRO ANILINE	4-NITRO PHENOL	BIS(2-CHLOROETHOXY) METHANE	BIS(2-CHLOROETHYL) ETHER	BIS(2-ETHYLHEXYL) PHTHALATE	BUTYLBENZYL PHTHALATE	CARBAZOLE	DIBENZO FURAN	DIETHYL PHTHALATE	DIMETHYL PHTHALATE	DI-N-BUTYL PHTHALATE	DI-N-OCTYL PHTHALATE	HEXACHLOROBENZENE	HEXACHLOROBUTADIENE	HEXACHLOROCYCLOPENTADIENE
ET09-01	N	2007	320 U	UR	320 U	320 U	UR	660 U	320 U	320 U	71 J	320 U	320 U	320 U	320 U	320 U	320 U	320 U	320 U	320 UJ	320 UJ
ET09-01	N	2008	330 U	330 U	330 U	330 U	670 U	670 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U
ET09-01	N	2009	330 U	330 UJ	330 U	330 U	670 UJ	670 U	330 U	330 U	330 U	330 U	330 UJ	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 UJ
ET09-01	N	2010	330 U	330 UJ	330 U	330 U	670 U	670 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 UJ
ET09-01	N	2011	130 U	130 UJ	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	640 UJ
ET09-02	N	2007	330 U	UR	330 U	330 U	UR	660 U	330 U	330 U	88 J	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 UJ	330 UJ
ET09-02	N	2008	330 U	330 U	330 U	330 U	670 U	670 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U
ET09-02	N	2009	330 U	330 UJ	330 U	330 U	670 UJ	670 U	330 U	330 U	330 U	330 U	330 UJ	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 UJ
ET09-02	N	2010	330 U	330 UJ	330 U	330 U	670 U	670 U	330 U	330 U	990	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 UJ
ET09-02	N	2011	130 U	130 UJ	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	630 UJ
		MAX REFERENCE	330 U	330 U	330 U	330 U	670 U	670 U	330 U	330 U	990	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	330 U	640 U
ET09-03	N	2013	200 U	200 U	200 U	200 UJ	1000 U	3000 U	200 U	200 U	620 J	1000 U	200 U	200 U	1000 U	1000 U	1000 U	1000 U	100 U	200 U	R
ET09-03	N	2014	67 U	67 U	67 U	67 U	67 UJ	67 UJ	67 U	67 U	170 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	170 U
ET09-03	N	2015	66 U	66 U	66 U	66 U	66 UJ	66 U	66 U	66 U	110 J	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	160 U
ET09-03	N	2016	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 U	130 UJ	130 UJ	170 J-	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	330 UJ
ET09-04	FD	2013	130 U	130 U	130 U	130 UJ	660 U	2000 U	130 U	130 U	300 J	660 U	130 U	130 U	660 U	660 U	660 U	660 U	67 U	130 U	2000 U
ET09-04	N	2013	130 U	130 U	130 U	130 UJ	670 U	2000 U	130 U	130 U	390 J	670 U	130 U	130 U	670 U	670 U	670 U	670 U	68 U	130 U	2000 U
ET09-04	N	2014	66 U	66 U	66 U	66 U	66 UJ	66 UJ	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	160 U
ET09-04	N	2015	67 U	67 U	67 U	67 U	67 UJ	67 U	67 U	67 U	160 J	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	170 U
ET09-04	N	2016	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 UJ	130 U	130 U	130 U	130 U	130 U	130 U	130 UJ	130 U	130 U	320 UJ
ET09-05	N	2013	130 U	130 U	130 U	130 UJ	660 U	2000 U	130 U	130 U	680 U	660 U	130 U	130 U	660 U	660 U	660 U	660 U	68 U	130 U	2000 U
ET09-05	N	2014	67 U	67 U	67 U	67 U	67 UJ	67 UJ	67 U	67 U	170 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	170 U
ET09-05	FD	2014	67 U	67 U	67 U	67 U	67 UJ	67 UJ	67 U	67 U	170 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	170 U
ET09-05	N	2015	67 U	67 U	67 U	67 U	67 UJ	67 U	67 U	67 U	120 J	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	R
ET09-05	N	2016	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 U	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	330 UJ
ET09-05	FD	2016	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 U	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	330 UJ
ET09-06	N	2013	130 U	130 U	130 U	130 UJ	660 U	2000 U	130 U	130 U	450 J	660 U	130 U	130 U	660 U	660 U	660 U	660 U	67 U	130 U	2000 U
ET09-06	N	2014	67 U	67 U	67 U	67 U	67 UJ	67 UJ	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	170 UJ
ET09-06	N	2015	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	170	85 J	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	160 U
ET09-06	N	2016	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 UJ	130 U	130 U	130 U	130 U	130 U	130 U	130 UJ	130 U	130 U	330 UJ
ET09-07	N	2015	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	160 U
ET09-07	N	2016	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 U	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	330 UJ
ET09-08	N	2015	67 UJ	67 U	67 U	67 UJ	67 U	67 UJ	67 U	67 U	130 J	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	170 U
ET09-08	N	2016	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 U	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	330 UJ
ET09-09	N	2013	130 U	130 U	130 U	130 UJ	660 U	2000 U	130 U	130 U	680 U	660 U	130 U	130 U	660 U	660 U	660 U	660 U	68 U	130 U	2000 U
ET09-09	N	2014	66 U	66 U	66 U	66 U	66 UJ	66 UJ	66 U	66 U	160 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	160 U
ET09-09	N	2015	66 U	66 U	66 U	66 U	66 UJ	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	160 U
ET09-09	N	2016	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 U	130 UJ	130 U	130 U	130 U	130 U	130 U	130 U	130 UJ	130 U	130 U	330 UJ
ET09-10	N	2013	130 U	130 U	130 U	130 U	670 U	2000 U	130 U	130 U	680 U	670 U	130 U	130 U	670 U	670 U	670 U	670 UJ	68 U	130 U	2000 UJ
ET09-10	N	2014	67 U	67 U	67 U	67 U	67 UJ	67 UJ	67 U	67 U	170 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	170 U
ET09-10	N	2015	67 U	67 U	67 U	67 U	67 UJ	67 U	67 U	67 U	57 J	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	170 U
ET09-10	N	2016	130 UJ	R	130 UJ	130 UJ	R	130 UJ	130 UJ	130 UJ	R	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	R	130 UJ	R
ET09-11	N	2013	130 U	130 U	130 U	130 U	660 U	2000 U	130 U	130 U	680 U	660 U	130 U	130 U	660 U	660 U	660 U	660 UJ	68 U	130 U	2000 UJ
ET09-11	N	2014	66 U	66 U	66 U	66 U	66 UJ	66 UJ	66 U	66 U	160 U	66 U	66 U	66 U	66 U	66 U	48 J	66 U	66 U	66 U	160 U
ET09-11	N	2015	67 U	67 U	67 U	67 U	67 UJ	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	170 U
ET09-11	N	2016	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 U	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	330 UJ
ET09-12	N	2013	130 U	130 U	130 U	130 U	660 U	2000 U	130 U	130 U	680 U	660 U	130 U	130 U	660 U	660 U	660 U	660 UJ	68 U	130 U	2000 UJ
ET09-12	N	2014	67 U	67 U	67 U	67 U	67 UJ	67 UJ	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	67 U	170 U
ET09-12	N	2015	66 U	66 U	66 U	66 U	66 UJ	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	160 U
ET09-12	FD	2015	66 U	66 U	66 U	66 U	66 UJ	66 U	66 U	66 U	100 J	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	66 U	160 U
ET09-12	N	2016	130 U	130 UJ	130 UJ	130 U	130 UJ	130 U	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	130 UJ	330 UJ

Notes:
1) U = Non-detect at laboratory detection limit
2) J = Estimated Value, R = rejected
3) Type N = normal sample, FD = duplicate sample
4) NA = Not analyzed

TABLE 11d
CONSTITUENT SCREENING - SHELLFISH
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

SAMPLE ID	TYPE	YEAR	HEXACHLOROETHANE		ISOPHORONE		NITROBENZENE		N-NITROSO DIMETHYL AMINE		N-NITROSO DINPROPYL AMINE		N-NITROSO DIPHENYL AMINE		PENTA CHLORO PHENOL		PHENOL		2-METHYL NAPHTHALENE		ACE NAPHTHENE		ACE NAPHTHYLENE		ANTHRACENE		BENZO[A] ANTHRACENE		BENZO[A] PYRENE		BENZO[B] FLUORANTHENE		BENZO[G,H,I] PERYLENE		BENZO[K]FLUO RANTHENE		CHRYSENE		DIBENZ[A,H] ANTHRACENE	
ET09-01	N	2007	320	U	320	U	320	U	NA		320	U	320	U	660	U	320	U	14		3		3.2	U	3.2	U	4.6		3.2	U	3	U	3	U	3	U	3.2	U	3	U
ET09-01	N	2008	330	U	330	U	330	U	NA		330	U	330	U	670	UJ	330	U	5.1		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U
ET09-01	N	2009	330	U	330	U	330	U	NA		330	U	330	UJ	670	U	330	U	3.9		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-01	N	2010	330	U	330	U	330	U	NA		330	U	330	U	670	U	330	U	8.6		5		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	UJ
ET09-01	N	2011	130	U	130	U	130	U	NA		130	U	130	U	640	U	130	U	13		6.4	U	6.4	U	6.4	U	6.4	U	12		6.4	U	6.4	U	6.4	U	6.4	U	6.4	U
ET09-02	N	2007	330	U	330	U	330	U	NA		330	U	330	U	660	U	330	U	31		3.3	U	4.5		3.3	U	3.3	U	3.3	U	3	U	3	U	3	U	4.7	J	3	U
ET09-02	N	2008	330	U	330	U	330	U	NA		330	U	330	U	670	UJ	330	U	20		3.8		3.3	U	3.3	U	3.3	U	3.3	U	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U
ET09-02	N	2009	330	U	330	U	330	U	NA		330	U	330	UJ	670	U	330	U	6.8		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-02	N	2010	330	U	330	U	330	U	NA		330	U	330	U	670	U	330	U	26		5.7		4.9		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	UJ
ET09-02	N	2011	130	U	130	U	130	U	NA		130	U	130	U	630	U	130	U	33		6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U
MAX REFERENCE			**330**	**U**	**330**	**U**	**330**	**U**	**NA**		**330**	**U**	**330**	**U**	**670**	**U**	**330**	**U**	**33**		**5.7**		**4.9**		**6.4**	**U**	**4.6**		**12**		**6.4**	**U**	**6.4**	**U**	**6.4**	**U**	**4.7**		**6.4**	**U**
ET09-03	N	2013	1000	U	200	U	220		1000	U	200	U	200	U	1000	U	200	U	37		25	J	5.6	J	5.7	J	7	J	6.1	J	7.7	J	10	UJ	4.3	J	8.1	J	10	U
ET09-03	N	2014	67	U	67	U	67	U	67	U	67	U	67	U	170	U	67	U	4.4	J	6		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-03	N	2015	66	U	66	U	66	U	66	U	66	UJ	66	U	160	U	66	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-03	N	2016	130	UJ	130	UJ	130	UJ	NA		130	UJ	130	UJ	330	UJ	130	U	6.5	U	6.5	U	6.5	U	6.5	UJ	6.5	U	6.5	U	6.5	U	6.5	U	6.5	U	6.5	U	6.5	UJ
ET09-04	FD	2013	660	U	130	U	130	U	660	U	130	U	130	U	670	U	100	J	35		24		6.2	J	7.7		3.2	J	6.6	U	4.8	J	6.6	UJ	6.6	U	5	J	6.6	U
ET09-04	N	2013	670	U	130	U	130	U	670	U	130	U	130	U	680	U	130	U	39		28		5	J	5.3	J	3.9	J	2.8	J	4.1	J	6.7	UJ	2.7	J	4.7	J	6.7	U
ET09-04	N	2014	66	U	66	U	66	U	66	U	66	U	66	U	160	U	66	U	7.4	J	6.6		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-04	N	2015	67	U	67	U	67	U	67	U	67	UJ	67	U	170	U	67	U	8.2		13		4.3		21		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-04	N	2016	130	U	130	U	130	U	NA		130	U	130	U	320	U	130	U	12		6.5	U	6.5	U	6.5	UJ	6.5	U	6.5	U	6.5	U	6.5	U	6.5	U	6.5	U	6.5	UJ
ET09-05	N	2013	660	U	130	U	130	U	660	U	130	U	130	U	680	U	130	U	9		6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	UJ	6.6	U	1.6	J	6.6	U
ET09-05	N	2014	67	U	67	U	67	U	67	U	67	U	67	U	170	U	67	U	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-05	FD	2014	67	U	67	U	67	U	67	U	67	U	67	U	170	U	67	U	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-05	N	2015	67	UJ	67	U	67	U	67	U	67	UJ	67	U	170	UJ	67	U	3.3	U	3.3	UJ	3.3	UJ	3.3	UJ	3.3	U	3.3	UJ	3.3	U	3.3	UJ	3.3	U	3.3	U	3.3	UJ
ET09-05	N	2016	130	UJ	130	UJ	130	UJ	NA		130	UJ	130	UJ	330	UJ	130	U	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ
ET09-05	FD	2016	130	UJ	130	UJ	130	UJ	NA		130	UJ	130	UJ	330	UJ	130	U	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ
ET09-06	N	2013	660	U	130	U	130	U	660	U	130	U	130	U	670	U	130	U	32		32		5.2	J	5	J	6.6	U	6.6	U	6.6	U	6.6	UJ	3.5	J	3.8	J	6.6	U
ET09-06	N	2014	67	U	67	U	67	U	67	U	67	U	67	U	170	U	67	U	4.5	J	6.1		15		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-06	N	2015	66	U	66	U	66	U	66	U	66	U	66	U	160	U	66	U	6.8		14		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-06	N	2016	130	U	130	U	130	U	NA		130	U	130	U	330	U	130	U	6.6	U	6.6	U	6.6	UJ	6.6	U	6.6	U	6.6	U	6.6	U	6.6	UJ	6.6	U	6.6	U	6.6	UJ
ET09-07	N	2015	66	U	66	U	66	U	66	U	66	U	66	U	160	U	66	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-07	N	2016	130	UJ	130	UJ	130	UJ	NA		130	UJ	130	UJ	330	UJ	130	U	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ
ET09-08	N	2015	67	U	67	U	67	U	67	U	67	U	67	U	170	UJ	67	UJ	3.3	U	5		3.3	U	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-08	N	2016	130	UJ	130	UJ	130	UJ	NA		130	UJ	130	UJ	330	UJ	130	U	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ
ET09-09	N	2013	660	U	130	U	130	U	660	U	130	U	130	U	680	U	130	U	29		20		4	J	3	J	6.6	U	6.6	U	6.6	U	6.6	UJ	2.9	J	3	J	6.6	U
ET09-09	N	2014	66	U	66	U	66	U	66	U	66	U	66	U	160	U	66	U	5.2	J	4.2		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-09	N	2015	66	U	66	U	66	U	66	U	66	UJ	66	U	160	U	66	U	19		18		6		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-09	N	2016	130	U	130	U	130	U	NA		130	U	130	U	330	U	130	U	6.6	U	6.6	U	6.6	U	6.6	UJ	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	UJ
ET09-10	N	2013	670	U	130	U	130	U	670	U	130	U	130	U	680	U	130	U	11		5.1	J	6.7	U	3.6	J	13		14		27		5.4	J	16		14		2.8	J
ET09-10	N	2014	67	U	67	U	67	U	67	U	67	U	67	U	170	U	67	U	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-10	N	2015	67	U	67	U	67	U	67	U	67	UJ	67	U	170	U	67	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-10	N	2016	130	UJ	130	UJ	130	UJ	NA		130	UJ	130	UJ		R	130	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ
ET09-11	N	2013	660	U	130	U	130	U	660	U	130	U	130	U	680	U	130	U	35		16		7		6	J	6.6	U	6.6	U	3.1	J	6.6	UJ	3.2	J	3.6	J	6.6	U
ET09-11	N	2014	66	U	66	U	66	U	66	U	66	U	66	U	160	U	66	U	4.1	J	3.6		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-11	N	2015	67	U	67	U	67	U	67	U	67	UJ	67	U	170	U	67	U	11		11		3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-11	N	2016	130	UJ	130	UJ	130	UJ	NA		130	UJ	130	UJ	330	UJ	130	U	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ
ET09-12	N	2013	660	U	130	U	130	U	660	U	130	U	130	U	680	U	130	U	17		5.2	J	4.4	J	6.6	U	6.6	U	6.6	U	6.6	U	6.6	UJ	6.6	U	2.9	J	6.6	U
ET09-12	N	2014	67	U	67	U	67	U	67	U	67	U	67	U	170	U	87	J	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-12	N	2015	66	U	66	U	66	U	66	U	66	UJ	66	U	160	U	66	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-12	FD	2015	66	U	66	U	66	U	66	U	66	UJ	66	U	160	U	66	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-12	N	2016	130	UJ	130	UJ	130	UJ	NA		130	UJ	130	UJ	330	U	130	U	6.6	U	6.6	U	6.6	U	6.6	UJ	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	UJ

Notes:
1) U = Non-detect at laboratory detection limit
2) J = Estimated Value, R = rejected
3) Type N = normal sample, FD = duplicate sample
4) NA = Not analyzed

TABLE 11d
CONSTITUENT SCREENING - SHELLFISH
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

SAMPLE ID	TYPE	YEAR	FLUORANTHENE		FLUORENE		INDENO[1,2,3-CD] PYRENE		PHENANTHRENE		PYRENE		NAPHTHALENE		TOTAL LPAH		TOTAL HPAH		TOTAL PAH	
ET09-01	N	2007	3.2	U	3.2	U	3	U	13		4.3	J	35		65		8.9	J	73.9	J
ET09-01	N	2008	3.3	U	3.3	U	3.3	U	12		3.3	U	12		29.1		3.3	UJ	29.1	J
ET09-01	N	2009	3.3	U	3.3	U	3.3	U	6.6		3.4		11		21.5		3.4		24.9	
ET09-01	N	2010	5.9		5.3		3.3	U	14		5.2		22		54.9		11.1	J	66	J
ET09-01	N	2011	14		7.6		6.4	U	28		12		37		85.6		38		123.6	
ET09-02	N	2007	12		3.3	U	3	U	10		12	J	39		84.5		28.7	J	113.2	J
ET09-02	N	2008	3.4		3.3	U	3.3	U	10		4.7		33		66.8		8.1	J	74.9	J
ET09-02	N	2009	3.3	U	3.3	U	3.3	U	4.4		3.3	U	15		26.2		3.3	UJ	26.2	
ET09-02	N	2010	7.3		7.4		3.3	U	18		15		42		104		22.3	J	126.3	J
ET09-02	N	2011	13		6.3	U	6.3	U	20		11		47		100		24		124	
MAX REFERENCE			**14**		**7.6**		**6.4**	**U**	**28**		**15**		**47**		**104**		**38**		**126.3**	
ET09-03	N	2013	34		11		10	U	44		30		30		160		97		260	
ET09-03	N	2014	3.3	U	3.3	U	3.3	UJ	9		3.3	U	10		29		3.3	U	29	
ET09-03	N	2015	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-03	N	2016	8		6.5	U	6.5	U	14		7.5		10		24		16		40	
ET09-04	FD	2013	21		10		6.6	U	42		22		38		160		56		220	
ET09-04	N	2013	25		13		6.7	U	45		23		45		180		66		250	
ET09-04	N	2014	3.3	U	3.3	U	3.3	UJ	8.7		3.3	U	19		42		3.3	U	42	
ET09-04	N	2015	3.3	U	7		3.3	U	3.3	U	3.3	U	17		71		3.3	U	71	
ET09-04	N	2016	13		6.9		6.5	U	25		11		24		68		24		92	
ET09-05	N	2013	5.7	J	6.6	U	6.6	U	6.6	U	6	J	6.6	U	9		13		22	
ET09-05	N	2014	3.3	U	3.3	U	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-05	FD	2014	3.3	U	3.3	U	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-05	N	2015	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U
ET09-05	N	2016	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	U	6.6	U	6.6	U
ET09-05	FD	2016	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	U	6.6	U	6.6	U
ET09-06	N	2013	15		13		4.3	J	39		21		40		170		48		210	
ET09-06	N	2014	3.3	U	3.3	U	3.3	UJ	7.4		3.3	U	13		46		3.3	U	46	
ET09-06	N	2015	3.3	U	7.8		3.3	U	25		3.3	U	11		65		3.3	U	65	
ET09-06	N	2016	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U
ET09-07	N	2015	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-07	N	2016	6.6	UJ	6.6	UJ	6.6	UJ	8.8	J-	6.6	UJ	8.8	J-	18		6.6	U	18	
ET09-08	N	2015	3.3	UJ	3.3	U	3.3	U	15	J	58	J	3.3	U	20		58		78	
ET09-08	N	2016	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	U	6.6	U	6.6	U
ET09-09	N	2013	13		7.2		3	J	26		16		39		130		38		170	
ET09-09	N	2014	3.3	U	3.3	U	3.3	UJ	5.9		3.3	U	12		27		3.3	U	27	
ET09-09	N	2015	5.9		11		3.3	U	37		5.7		30		120		12		130	
ET09-09	N	2016	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U
ET09-10	N	2013	27		6.7	U	9.5		9.9		27		3.6	J	33		160		190	
ET09-10	N	2014	3.3	U	3.3	U	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-10	N	2015	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-10	N	2016	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	U	6.6	U	6.6	U
ET09-11	N	2013	21		13		4	J	36		19		39		150		54		210	
ET09-11	N	2014	3.3	U	3.3	U	3.3	UJ	6.8		3.3	U	9.7		24		3.3	U	24	
ET09-11	N	2015	3.3	U	6.1		3.3	U	3.3	U	3.3	U	15		43		3.3	U	43	
ET09-11	N	2016	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	UJ	6.6	U	6.6	U	6.6	U
ET09-12	N	2013	8.7		6.6	U	6.6	U	6.6	U	6.9		6.6	U	27		19		45	
ET09-12	N	2014	3.3	U	3.3	U	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
ET09-12	N	2015	3.3	U	3.3	U	3.3	U	12	J	14	J	3.3	U	12		14		26	
ET09-12	FD	2015	3.3	U	3.3	U	3.3	U	3.3	UJ	3.3	UJ	3.3	U	3.3	U	3.3	U	3.3	U
ET09-12	N	2016	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U	6.6	U

Notes:
1) U = Non-detect at laboratory detection limit
2) J = Estimated Value, R = rejected
3) Type N = normal sample, FD = duplicate sample
4) NA = Not analyzed

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TABLE 11e
SAMPLE DATA COMPARISON - SHELLFISH
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Statistical Summary			Non-Lipid Normalized						Lipid Normalized [1]					
Chemical Group	Analyte	Units	Site Samples 1996 ERA [2]			2013 - 2016 Samples [3]			Site Samples 1996 ERA			2013 - 2016 Samples		
			Mean	Minimum	Maximum	Mean	Minimum	Maximum	Mean	Minimum	Maximum	Mean	Minimum	Maximum
PAHs	LMW PAHs	µg/kg	2,353	1,308	4,304	42.8	3.3	180.0	12,636	9,093	19,396	160.7	8.3	575.3
	HMW PAHs	µg/kg	1,419.1	961.2	1,811	19.8	3.3	160	5,983	3,848	9,286	74.7	6.2	400
	Total PAHs	µg/kg	3,772	2,425	5,871	59.8	3.3	260.0	18,618	13,267	28,681	193.8	8.3	575.3
PCBs	Total PCBs	µg/kg	600	187.84	1,267	10.23	0.41	110	18,425	11,076	23,463	36.4	0.6	208
Metals	Arsenic	mg/kg	7.58	4.9	11.64	3.21	1.9	5.17	NA	NA	NA	NA	NA	NA
	Cadmium	mg/kg	1.13	0.33	3.45	0.14	0.055	0.55	NA	NA	NA	NA	NA	NA
	Chromium, Total	mg/kg	7.31	0.09	27.31	1.26	0.154	9.37	NA	NA	NA	NA	NA	NA
	Copper	mg/kg	13.45	2.58	27.5	3.21	1.1	9.48	NA	NA	NA	NA	NA	NA
	Lead	mg/kg	1.25	0.17	6.25	0.60	0.11	6.9	NA	NA	NA	NA	NA	NA
	Mercury	mg/kg	6.76	0.04	44.2	0.01	0.004	0.02	NA	NA	NA	NA	NA	NA
	Nickel	mg/kg	16.37	0.4	66.53	1.38	0.125	5.52	NA	NA	NA	NA	NA	NA
	Silver	mg/kg	5.01	1.04	17.84	0.25	0.066	1.2	NA	NA	NA	NA	NA	NA
	Zinc	mg/kg	46.74	24.96	77.64	12.38	5.0	29.2	NA	NA	NA	NA	NA	NA

Notes:
µg/kg - micrograms per kilogram
mg/kg - milligrams per kilogram
NA - not applicable

(1) - Lipid normalized results = concentration/percent lipids
(2) - Non-lipid normalized data obtained from Appendix A1 of the 1996 Ecological Risk Assessment for samples AHW1RMND, AHW2RMND, AHW3RMND, and AHW6RMND for ribbed mussel samples
(3) - 2013 through 2016 samples reflect results from ribbed mussels and quahogs

TABLE 12
ANALYTICAL RESULTS - SEEPS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

PARAMETER	LOCATION ID		SP09-01	SP09-01	SP09-02	SP09-03
	SAMPLE DATE		9/14/2016	9/14/2016	9/14/2016	9/14/2016
	QC IDENTIFIER			Duplicate		
	METHOD	PAL	R0838	R0838	R0838	R0838
VOLATILES (UG/L)						
1,1,1-TRICHLOROETHANE	8260	200	< 1.0 UJ	NS	< 1.0 UJ	< 1.0 UJ
1,1,2,2-TETRACHLOROETHANE	8260	--	< 1.0 U	NS	< 1.0 U	< 1.0 U
1,1,2-TRICHLOROETHANE	8260	5	< 1.0 U	NS	< 1.0 U	< 1.0 U
1,1-DICHLOROETHANE	8260	5	< 1.0 U	NS	< 1.0 U	< 1.0 U
1,1-DICHLOROETHENE	8260	7	< 1.0 U	NS	< 1.0 U	< 1.0 U
1,2-DICHLOROETHANE	8260	5	< 1.0 U	NS	< 1.0 U	< 1.0 U
1,2-DICHLOROPROPANE	8260	5	< 2.0 U	NS	< 2.0 U	< 2.0 U
2-BUTANONE	8260	--	< 5.0 UJ	NS	< 5.0 UJ	< 5.0 UJ
2-HEXANONE	8260	--	< 5.0 UJ	NS	< 5.0 UJ	< 5.0 UJ
4-METHYL-2-PENTANONE	8260	--	< 2.0 U	NS	< 2.0 U	< 2.0 U
ACETONE	8260	--	< 5.0 UJ	NS	< 5.0 UJ	< 5.0 UJ
BENZENE	8260	5	< 1.0 U	NS	< 1.0 U	< 1.0 U
BROMODICHLOROMETHANE	8260	80	< 1.0 U	NS	< 1.0 U	< 1.0 U
BROMOFORM	8260	80	< 2.0 U	NS	< 2.0 U	< 2.0 U
BROMOMETHANE	8260	--	< 2.0 UJ	NS	< 2.0 UJ	< 2.0 UJ
CARBON DISULFIDE	8260	--	< 1.0 U	NS	< 1.0 U	< 1.0 U
CARBON TETRACHLORIDE	8260	5	< 2.0 UJ	NS	< 2.0 UJ	< 2.0 UJ
CHLOROBENZENE	8260	100	< 1.0 U	NS	< 1.0 U	< 1.0 U
CHLOROETHANE	8260	--	< 1.0 U	NS	< 1.0 U	< 1.0 U
CHLOROFORM	8260	80	< 1.0 U	NS	< 1.0 U	< 1.0 U
CHLOROMETHANE	8260	--	< 1.0 U	NS	< 1.0 U	< 1.0 U
CIS-1,2-DICHLOROETHENE	8260	70	< 1.0 U	NS	< 1.0 U	< 1.0 U
CIS-1,3-DICHLOROPROPENE	8260	--	< 1.0 U	NS	< 1.0 U	< 1.0 U
DIBROMOCHLOROMETHANE	8260	80	< 2.0 U	NS	< 2.0 U	< 2.0 U
ETHYLBENZENE	8260	70	< 1.0 U	NS	< 1.0 U	< 1.0 U
METHYLENE CHLORIDE	8260	5	< 1.0 U	NS	< 1.0 U	< 1.0 U
STYRENE	8260	100	< 1.0 U	NS	< 1.0 U	< 1.0 U
TETRACHLOROETHENE	8260	5	< 2.0 U	NS	< 2.0 U	< 2.0 U
TOLUENE	8260	100	< 1.0 U	NS	< 1.0 U	< 1.0 U
TRANS-1,2-DICHLOROETHENE	8260	100	< 2.0 U	NS	< 2.0 U	< 2.0 U
TRANS-1,3-DICHLOROPROPENE	8260	--	< 1.0 U	NS	< 1.0 U	< 1.0 U
TRICHLOROETHENE	8260	5	< 1.0 U	NS	< 1.0 U	< 1.0 U
VINYL CHLORIDE	8260	2	< 1.0 U	NS	< 1.0 U	< 1.0 U
XYLENES, TOTAL	8260	10000	< 1.0 U	NS	< 1.0 U	< 1.0 U
TOTAL CVOCs	8260	--	< 2.0	NS	< 2.0	< 2.0
SULFIDE (MG/L)						
SULFIDE	4500_S_D	--	< 0.030 U	< 0.030 U	< 0.030 U	< 0.030 U
MISCELLANEOUS PARAMETERS (G/L)						
SALINITY	2520B	--	30	NS	29	30

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE; NS - NOT SAMPLED

TABLE 13a
ANALYTICAL RESULTS - AIR
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

LOCATION ID		GV09-01	GV09-02	GV09-02	GV09-03	GV09-04	GV09-05
SAMPLE DATE		9/9/2016	9/9/2016	9/9/2016	9/9/2016	9/9/2016	9/9/2016
SAMPLE ID		GV09-01-ME45-1	GV09-02-ME45-1	GV09-ME45-FD01	GV09-03-ME45-1	GV09-04-ME45-1	GV09-05-ME45-1
QC IDENTIFIER		N	N	FD	N	N	N
SDG		R0832	R0832	R0832	R0832	R0832	R0832
Parameter	Units						
1,1,1,2-TETRACHLOROETHANE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
1,1,1-TRICHLOROETHANE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
1,1,2-TRICHLOROETHANE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
1,1-DICHLOROETHANE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
1,1-DICHLOROETHENE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
1,2-DICHLOROETHANE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
1,2-DICHLOROPROPANE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
2-BUTANONE	PPBV	2.64	3.15 J+	3.21 J+	5.94 J+	< 10.0 U	4.22
2-HEXANONE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	1.53
4-METHYL-2-PENTANONE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
ACETONE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	170 J+	14.1
BENZENE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
BROMODICHLOROMETHANE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
BROMOFORM	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
CARBON DISULFIDE	PPBV	1.85	4.98 J+	5.02 J+	< 1.00 U	22.0 J+	< 0.500 U
CARBON TETRACHLORIDE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
CHLOROBENZENE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
CHLOROETHANE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
CHLOROFORM	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
CHLOROMETHANE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	0.519
CIS-1,2-DICHLOROETHENE	PPBV	< 1.00 U	1.22 J+	1.28 J+	< 1.00 U	< 10.0 U	< 0.500 U
CIS-1,3-DICHLOROPROPENE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
DIBROMOCHLOROMETHANE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
ETHYLBENZENE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
METHANE	PPMV	10600	18500	21100	26500	7740	< 10.0 U
METHYLENE CHLORIDE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
O-XYLENE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
P-XYLENE	PPBV	< 2.00 U	< 2.00 U	< 2.00 U	< 2.00 U	< 20.0 U	< 1.00 U
STYRENE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
TETRACHLOROETHENE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
TOLUENE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
TRANS-1,2-DICHLOROETHENE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
TRANS-1,3-DICHLOROPROPENE	PPBV	< 1.00 U	< 1.00 U	< 1.00 U	< 1.00 U	< 10.0 U	< 0.500 U
TRICHLOROETHENE	PPBV	< 1.00 U	1.16 J+	1.17 J+	< 1.00 U	< 10.0 U	1.47
VINYL CHLORIDE	PPBV	7.58	10.6 J+	10.7 J+	< 1.00 U	< 10.0 U	< 0.500 U

DARK SHADING - CRITERIA EXCEEDED; LIGHT SHADING - DETECTED; U - NOT DETECTED;
J - QUANTITATION APPROXIMATE; R - REJECTED; NA - NOT ANALYZED OR NOT APPLICABLE

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TABLE 13b
COMPARISON OF CALCULATED EMISSION RATES TO ALLOWABLE EMISSION RATES
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Location		GV09-01			GV09-02			GV09-02 (FD)			GV09-03			GV09-04			GV09-05			Sum of emission rates from all five gas vents[1, 2]	Calculated Allowable Emission Rates[3 4]
Measured gas flow rate		9.44E-05 m3/sec			1.65E-04 m3/sec			1.65E-04 m3/sec			1.51E-04 m3/sec			1.89E-04 m3/sec			1.09E-04 m3/sec				
Recorded temperature		15.56 Deg C			15.56 Deg C			15.56 Deg C			15.56 Deg C			15.56 Deg C			15.56 Deg C				
Recorded pressure		1.005 atm			1.005 atm			1.005 atm			1.006 atm			1.006 atm			1.006 atm				
Chemical name	Mol weight	Conc. ppbv	Conc. mg/m3	Emission rate g/sec	Conc. ppbv	Conc. mg/m3	Emission rate g/sec	Conc. ppbv	Conc. mg/m3	Emission rate g/sec	Conc. ppbv	Conc. mg/m3	Emission rate g/sec	Conc. ppbv	Conc. mg/m3	Emission rate g/sec	Conc. ppbv	Conc. mg/m3	Emission rate g/sec		
1,1,1,2-TETRACHLOROETHANE	167.848	< 1.00	< 6.53E-03	< 6.16E-10	< 1.00	< 6.53E-03	< 1.08E-09	< 1.00	< 6.53E-03	< 1.08E-09	< 1.00	< 6.53E-03	< 9.86E-10	< 10.00	< 6.53E-02	< 1.23E-08	< 0.50	< 3.27E-03	< 3.55E-10	1.54E-08	1.65E-03
1,1,1-TRICHLOROETHANE	133.4	< 1.00	< 5.19E-03	< 4.90E-10	< 1.00	< 5.19E-03	< 8.57E-10	< 1.00	< 5.19E-03	< 8.57E-10	< 1.00	< 5.19E-03	< 7.84E-10	< 10.00	< 5.19E-02	< 9.80E-09	< 0.50	< 2.60E-03	< 2.82E-10	1.22E-08	8.90E-02
1,1,2-TRICHLOROETHANE	133.4	< 1.00	< 5.19E-03	< 4.90E-10	< 1.00	< 5.19E-03	< 8.57E-10	< 1.00	< 5.19E-03	< 8.57E-10	< 1.00	< 5.19E-03	< 7.84E-10	< 10.00	< 5.19E-02	< 9.80E-09	< 0.50	< 2.60E-03	< 2.82E-10	1.22E-08	1.65E-04
1,1-DICHLOROETHANE	98.96	< 1.00	< 3.85E-03	< 3.63E-10	< 1.00	< 3.85E-03	< 6.36E-10	< 1.00	< 3.85E-03	< 6.36E-10	< 1.00	< 3.85E-03	< 5.82E-10	< 10.00	< 3.85E-02	< 7.27E-09	< 0.50	< 1.93E-03	< 2.09E-10	9.06E-09	5.94E-05
1,1-DICHLOROETHENE	96.94	< 1.00	< 3.77E-03	< 3.56E-10	< 1.00	< 3.77E-03	< 6.23E-10	< 1.00	< 3.77E-03	< 6.23E-10	< 1.00	< 3.77E-03	< 5.70E-10	< 10.00	< 3.77E-02	< 7.12E-09	< 0.50	< 1.89E-03	< 2.05E-10	8.88E-09	3.30E-03
1,2-DICHLOROETHANE	98.95	< 1.00	< 3.85E-03	< 3.63E-10	< 1.00	< 3.85E-03	< 6.36E-10	< 1.00	< 3.85E-03	< 6.36E-10	< 1.00	< 3.85E-03	< 5.81E-10	< 10.00	< 3.85E-02	< 7.27E-09	< 0.50	< 1.93E-03	< 2.09E-10	9.06E-09	3.96E-06
1,2-DICHLOROPROPANE	112.98	< 1.00	< 4.40E-03	< 4.15E-10	< 1.00	< 4.40E-03	< 7.26E-10	< 1.00	< 4.40E-03	< 7.26E-10	< 1.00	< 4.40E-03	< 6.64E-10	< 10.00	< 4.40E-02	< 8.30E-09	< 0.50	< 2.20E-03	< 2.39E-10	1.03E-08	9.89E-06
2-BUTANONE	72.11	2.64	7.41E-03	6.99E-10	3.15	8.84E-03	1.46E-09	3.21	9.01E-03	1.49E-09	5.94	1.67E-02	2.52E-09	10.00	2.81E-02	5.30E-09	4.22	1.18E-02	1.29E-09	1.13E-08	8.24E-02
2-HEXANONE	100.16	< 1.00	< 3.90E-03	< 3.68E-10	< 1.00	< 3.90E-03	< 6.44E-10	< 1.00	< 3.90E-03	< 6.44E-10	< 1.00	< 3.90E-03	< 5.89E-10	< 10.00	< 3.90E-02	< 7.36E-09	1.53	5.96E-03	6.47E-10	9.61E-09	NA
4-METHYL-2-PENTANONE	100.16	< 1.00	< 3.90E-03	< 3.68E-10	< 1.00	< 3.90E-03	< 6.44E-10	< 1.00	< 3.90E-03	< 6.44E-10	< 1.00	< 3.90E-03	< 5.89E-10	< 10.00	< 3.90E-02	< 7.36E-09	< 0.50	< 1.95E-03	< 2.12E-10	9.17E-09	4.95E-02
ACETONE	58.08	< 1.00	< 2.26E-03	< 2.13E-10	< 1.00	< 2.26E-03	< 3.73E-10	< 1.00	< 2.26E-03	< 3.73E-10	< 1.00	< 2.26E-03	< 3.41E-10	170.00	3.84E-01	7.26E-08	14.10	3.19E-02	3.46E-09	7.69E-08	4.95E-01
BENZENE	78.11	< 1.00	< 3.04E-03	< 2.87E-10	< 1.00	< 3.04E-03	< 5.02E-10	< 1.00	< 3.04E-03	< 5.02E-10	< 1.00	< 3.04E-03	< 4.59E-10	< 10.00	< 3.04E-02	< 5.74E-09	< 0.50	< 1.52E-03	< 1.65E-10	7.15E-09	9.89E-06
BROMODICHLOROMETHANE	163.8	< 1.00	< 6.37E-03	< 6.01E-10	< 1.00	< 6.37E-03	< 1.05E-09	< 1.00	< 6.37E-03	< 1.05E-09	< 1.00	< 6.37E-03	< 9.63E-10	< 10.00	< 6.38E-02	< 1.20E-08	< 0.50	< 3.19E-03	< 3.46E-10	1.50E-08	2.97E-06
BROMOFORM	252.73	< 1.00	< 9.83E-03	< 9.28E-10	< 1.00	< 9.83E-03	< 1.62E-09	< 1.00	< 9.83E-03	< 1.62E-09	< 1.00	< 9.83E-03	< 1.49E-09	< 10.00	< 9.84E-02	< 1.86E-08	< 0.50	< 4.92E-03	< 5.34E-10	2.31E-08	8.90E-05
CARBON DISULFIDE	76.139	1.85	5.48E-03	5.17E-10	4.98	1.48E-02	2.44E-09	5.02	1.49E-02	2.46E-09	1.00	2.96E-03	4.47E-10	22.00	6.52E-02	1.23E-08	0.50	1.48E-03	1.61E-10	1.59E-08	5.94E-02
CARBON TETRACHLORIDE	153.82	< 1.00	< 5.98E-03	< 5.65E-10	< 1.00	< 5.98E-03	< 9.88E-10	< 1.00	< 5.98E-03	< 9.88E-10	< 1.00	< 5.98E-03	< 9.04E-10	< 10.00	< 5.99E-02	< 1.13E-08	< 0.50	< 2.99E-03	< 3.25E-10	1.41E-08	6.92E-06
CHLOROBENZENE	112.56	< 1.00	< 4.38E-03	< 4.13E-10	< 1.00	< 4.38E-03	< 7.23E-10	< 1.00	< 4.38E-03	< 7.23E-10	< 1.00	< 4.38E-03	< 6.61E-10	< 10.00	< 4.38E-02	< 8.27E-09	< 0.50	< 2.19E-03	< 2.38E-10	1.03E-08	9.89E-02
CHLOROETHANE	64.51	< 1.00	< 2.51E-03	< 2.37E-10	< 1.00	< 2.51E-03	< 4.15E-10	< 1.00	< 2.51E-03	< 4.15E-10	< 1.00	< 2.51E-03	< 3.79E-10	< 10.00	< 2.51E-02	< 4.74E-09	< 0.50	< 1.26E-03	< 1.36E-10	5.91E-09	1.65E-01
CHLOROFORM	119.38	< 1.00	< 4.64E-03	< 4.38E-10	< 1.00	< 4.64E-03	< 7.67E-10	< 1.00	< 4.64E-03	< 7.67E-10	< 1.00	< 4.64E-03	< 7.01E-10	< 10.00	< 4.65E-02	< 8.77E-09	< 0.50	< 2.32E-03	< 2.52E-10	1.09E-08	1.98E-05
CHLOROMETHANE	50.49	< 1.00	< 1.96E-03	< 1.85E-10	< 1.00	< 1.96E-03	< 3.24E-10	< 1.00	< 1.96E-03	< 3.24E-10	< 1.00	< 1.96E-03	< 2.97E-10	< 10.00	< 1.97E-02	< 3.71E-09	< 0.52	< 1.02E-03	< 1.11E-10	4.63E-09	6.59E-03
CIS-1,2-DICHLOROETHENE	96.938	< 1.00	< 3.77E-03	< 3.56E-10	< 1.22	< 4.60E-03	< 7.60E-10	< 1.28	< 4.83E-03	< 7.97E-10	< 1.00	< 3.77E-03	< 5.70E-10	< 10.00	< 3.77E-02	< 7.12E-09	< 0.50	< 1.89E-03	< 2.05E-10	9.05E-09	1.65E-02
CIS-1,3-DICHLOROPROPENE	110.97	< 1.00	< 4.32E-03	< 4.07E-10	< 1.00	< 4.32E-03	< 7.13E-10	< 1.00	< 4.32E-03	< 7.13E-10	< 1.00	< 4.32E-03	< 6.52E-10	< 10.00	< 4.32E-02	< 8.16E-09	< 0.50	< 2.16E-03	< 2.34E-10	1.02E-08	1.98E-05
DIBROMOCHLOROMETHANE	208.28	< 1.00	< 8.10E-03	< 7.65E-10	< 1.00	< 8.10E-03	< 1.34E-09	< 1.00	< 8.10E-03	< 1.34E-09	< 1.00	< 8.10E-03	< 1.22E-09	< 10.00	< 8.11E-02	< 1.53E-08	< 0.50	< 4.05E-03	< 4.40E-10	1.91E-08	1.15E-03
ETHYLBENZENE	106.17	< 1.00	< 4.13E-03	< 3.90E-10	< 1.00	< 4.13E-03	< 6.82E-10	< 1.00	< 4.13E-03	< 6.82E-10	< 1.00	< 4.13E-03	< 6.24E-10	< 10.00	< 4.13E-02	< 7.80E-09	< 0.50	< 2.07E-03	< 2.24E-10	9.72E-09	4.95E-02
METHANE	16.04	10,600,000	6.61E+03	6.24E-04	18,500,000	1.15E+04	1.91E-03	21,100,000	1.32E+04	2.17E-03	26,500,000	1.65E+04	2.50E-03	7,740,000	4.83E+03	9.12E-04	< 10000.00	< 6.24E+00	< 6.78E-07	6.21E-03	5.25E-01
METHYLENE CHLORIDE	84.93	< 1.00	< 3.30E-03	< 3.12E-10	< 1.00	< 3.30E-03	< 5.46E-10	< 1.00	< 3.30E-03	< 5.46E-10	< 1.00	< 3.30E-03	< 4.99E-10	< 10.00	< 3.31E-02	< 6.24E-09	< 0.50	< 1.65E-03	< 1.79E-10	7.78E-09	1.98E-04
O-XYLENE	106.16	< 1.00	< 4.13E-03	< 3.90E-10	< 1.00	< 4.13E-03	< 6.82E-10	< 1.00	< 4.13E-03	< 6.82E-10	< 1.00	< 4.13E-03	< 6.24E-10	< 10.00	< 4.13E-02	< 7.80E-09	< 0.50	< 2.07E-03	< 2.24E-10	9.72E-09	9.89E-03
P-XYLENE	106.16	< 2.00	< 8.26E-03	< 7.80E-10	< 2.00	< 8.26E-03	< 1.36E-09	< 2.00	< 8.26E-03	< 1.36E-09	< 2.00	< 8.26E-03	< 1.25E-09	< 20.00	< 8.27E-02	< 1.56E-08	< 1.00	< 4.13E-03	< 4.49E-10	1.94E-08	9.89E-03
STYRENE	104.15	< 1.00	< 4.05E-03	< 3.82E-10	< 1.00	< 4.05E-03	< 6.69E-10	< 1.00	< 4.05E-03	< 6.69E-10	< 1.00	< 4.05E-03	< 6.12E-10	< 10.00	< 4.05E-02	< 7.65E-09	< 0.50	< 2.03E-03	< 2.20E-10	9.54E-09	9.89E-03
TETRACHLOROETHENE	165.83	< 1.00	< 6.45E-03	< 6.09E-10	< 1.00	< 6.45E-03	< 1.07E-09	< 1.00	< 6.45E-03	< 1.07E-09	< 1.00	< 6.45E-03	< 9.74E-10	< 10.00	< 6.46E-02	< 1.22E-08	< 0.50	< 3.23E-03	< 3.50E-10	1.52E-08	1.98E-05
TOLUENE	92.14	< 1.00	< 3.58E-03	< 3.38E-10	< 1.00	< 3.58E-03	< 5.92E-10	< 1.00	< 3.58E-03	< 5.92E-10	< 1.00	< 3.59E-03	< 5.41E-10	< 10.00	< 3.59E-02	< 6.77E-09	< 0.50	< 1.79E-03	< 1.95E-10	8.44E-09	2.97E-02
TRANS-1,2-DICHLOROETHENE	96.938	< 1.00	< 3.77E-03	< 3.56E-10	< 1.00	< 3.77E-03	< 6.23E-10	< 1.00	< 3.77E-03	< 6.23E-10	< 1.00	< 3.77E-03	< 5.70E-10	< 10.00	< 3.77E-02	< 7.12E-09	< 0.50	< 1.89E-03	< 2.05E-10	8.88E-09	6.92E-03
TRANS-1,3-DICHLOROPROPENE	110.97	< 1.00	< 4.32E-03	< 4.07E-10	< 1.00	< 4.32E-03	< 7.13E-10	< 1.00	< 4.32E-03	< 7.13E-10	< 1.00	< 4.32E-03	< 6.52E-10	< 10.00	< 4.32E-02	< 8.16E-09	< 0.50	< 2.16E-03	< 2.34E-10	1.02E-08	1.98E-04
TRICHLOROETHENE	131.4	< 1.00	< 5.11E-03	< 4.83E-10	1.16	5.93E-03	9.80E-10	1.17	5.98E-03	9.88E-10	< 1.00	< 5.11E-03	< 7.72E-10	< 10.00	< 5.12E-02	< 9.66E-09	1.47	7.52E-03	8.16E-10	1.27E-08	4.95E-05
VINYL CHLORIDE	62.498	7.58	1.84E-02	1.74E-09	10.60	2.58E-02	4.26E-09	10.70	2.60E-02	4.30E-09	< 1.00	< 2.43E-03	< 3.67E-10	< 10.00	< 2.43E-02	< 4.59E-09	< 0.50	< 1.22E-03	< 1.32E-10	1.11E-08	1.98E-05

Notes
1 - When summing the results for each compound, the reporting limit for the nondetect results was used in the summation.
2 - For the field duplicate pair, the highest of the detected result or reporting limit was was chosen for the summation.
3 - See Attachment I for details on the calculation of the allowable emission rate.
4 - Methane is not an air toxic and not regulated under RIDEM Air Pollution Control Regulation 22. Therefore, the RIDEM maximum allowable methane emission from landfill gas vents of 100 pounds per day was converted to 5.25E-10 grams per second as the calculated allowable emission rate.
NA - Compound not found in RIDEM Air Pollution Control Regulation 22 Table 1
Units
m3/sec - Cubic meter per second flow rate
Deg C - Degrees Celsius temperature
atm - Atmospheres pressure
Conc. - Concentration
ppbv - Parts per billion by volume
mg/m3 - Milligrams per cubic meter
g/s - Grams per second

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TABLE 14

SUMMARY OF ANNUAL LANDFILL SETTLEMENT SURVEY RESULTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
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MONITORING WELL	PVC Elevation Oct-99	PVC Elevation Apr-00	PVC Elevation Dec-01	PVC Elevation May-03	PVC Elevation Nov-05	PVC Elevation Nov-06	PVC Elevation Jan-08	PVC Elevation Nov-08	PVC Elevation Sep-09	PVC Elevation Oct-10	PVC Elevation Oct-11	PVC Elevation Nov-13	PVC Elevation Dec-14	PVC Elevation Oct-16	PVC Elevation Change 2014-2016	PVC Elevation Change 1999-2016	Max Elevation Change 1999-2016
MW09-02S	11.67	11.72	11.70	11.57	11.68	11.67	11.71	11.70	11.74	11.72	11.73	11.66	11.48	11.81	0.33	0.14	0.33
MW09-03D	11.69	11.72	11.68	11.60	11.72	11.69	11.71	11.70	11.74	11.73	11.72	11.67	11.51	11.81	0.30	0.12	0.30
MW09-05S	18.65	18.67	18.54	18.46	18.62	18.61	18.61	18.62	18.63	18.62	18.61	18.55	18.52	18.69	0.16	0.03	0.22
MW09-07S	24.97	24.94	24.89	24.81	24.93	24.89	24.89	24.86	24.90	24.87	24.86	24.70	24.68	24.90	0.22	-0.07	0.29
MW09-08DA	NM	NM	NM	NM	NM	NM	NM	NM	19.58	19.56	19.56	19.46	19.45	19.63	0.18	0.04	0.18
MW09-08S	18.90	18.87	18.64	18.57	18.70	18.67	18.68	18.68	18.70	18.68	18.67	18.46	18.54	18.74	0.20	-0.16	0.44
MW09-09S	24.34	24.29	24.18	24.11	24.23	24.18	24.17	24.15	24.18	24.15	24.13	23.98	23.90	24.19	0.29	-0.15	0.44
MW09-09D	24.60	24.55	24.50	24.38	24.52	24.46	24.45	24.43	24.45	NM	NM	NM	NM	NM	NM	NM	0.22
MW09-09DA	NM	NM	NM	NM	NM	NM	NM	NM	25.50	25.47	25.46	25.33	25.29	25.50	0.21	0.00	0.21
MW09-10S	22.04	22.01	21.96	21.87	21.94	21.96	21.97	21.96	21.96	21.96	21.95	21.84	21.78	22.11	0.33	0.07	0.33
MW09-10D	22.28	22.26	22.22	21.85	22.22	22.23	22.23	22.22	22.24	22.23	22.22	22.09	22.06	22.30	0.24	0.02	0.45
MW09-11S	16.06	16.03	15.77	15.61	15.82	15.77	15.78	15.76	15.78	15.77	15.77	15.72	15.64	15.84	0.20	-0.22	0.45
MW09-14D	25.67	25.67	25.64	25.57	25.72	25.67	25.66	25.66	25.69	25.67	25.66	25.49	25.48	25.73	0.25	0.06	0.25
MW09-14I	25.89	25.89	25.95	25.90	26.02	25.98	25.98	25.96	26.00	NM	NM	NM	NM	NM	NM	NM	0.13
MW09-14IA	NM	NM	NM	NM	NM	NM	NM	NM	26.85	26.82	26.81	26.66	26.66	26.88	0.22	0.03	0.22
MW09-17I	25.94	25.92	25.86	25.77	25.91	25.84	25.97	25.92	25.95	25.92	25.91	25.76	25.73	25.96	0.23	0.02	0.24
MW09-20I	22.54	22.53	22.49	22.44	22.56	22.52	22.53	22.52	22.55	22.52	22.52	22.39	22.35	22.56	0.21	0.02	0.21
MW09-20D	21.42	21.42	21.33	21.28	21.40	21.37	21.40	21.38	21.40	21.38	21.38	21.23	21.25	21.44	0.19	0.02	0.21
MW09-21D	20.37	20.42	20.06	19.94	20.12	20.10	20.11	20.12	20.13	20.12	20.10	19.99	19.96	20.16	0.20	-0.21	0.48
MW09-21S	19.89	19.89	19.75	19.63	19.81	19.77	19.79	19.79	19.80	19.78	19.77	19.70	19.64	19.82	0.18	-0.07	0.26
MW09-23S	24.18	24.20	24.18	24.10	24.21	24.18	24.18	24.16	24.19	24.17	24.16	24.00	23.98	24.21	0.23	0.03	0.23
MW09-23D	24.02	24.04	24.03	23.96	24.09	24.06	24.07	24.05	24.07	24.06	24.05	23.90	23.88	24.12	0.24	0.10	0.24
MW09-24D	10.35	10.34	10.23	10.09	10.34	10.35	10.34	10.36	10.37	10.37	10.37	10.27	10.28	10.45	0.17	0.10	0.36
MW09-24S	10.57	10.55	10.39	10.27	10.55	10.55	10.55	10.56	10.58	10.57	10.57	10.47	10.48	10.64	0.16	0.07	0.37
MW09-25S	NM	NM	10.04	9.90	10.19	10.14	10.15	10.14	10.17	10.15	10.15	10.09	10.10	10.24	0.14	0.20	0.34
MW09-26D	NM	NM	NM	NM	NM	NM	11.40	11.44	11.46	11.45	11.45	11.38	11.33	11.53	0.20	0.13	0.20
MW09-26S	NM	NM	NM	NM	NM	NM	11.25	11.27	11.29	11.28	11.28	11.25	11.16	11.32	0.16	0.07	0.16
MW09-27D	NM	NM	NM	NM	NM	NM	6.03	6.11	6.13	6.13	6.12	6.05	5.91	6.21	0.30	0.18	0.30
MW09-27S	NM	NM	NM	NM	NM	NM	6.00	6.01	6.04	6.03	6.11	6.09	5.92	6.11	0.19	0.11	0.19

TABLE 14

SUMMARY OF ANNUAL LANDFILL SETTLEMENT SURVEY RESULTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
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MONITORING WELL	Steel Elevation Oct-99	Steel Elevation Apr-00	Steel Elevation Dec-01	Steel Elevation May-03	Steel Elevation Nov-05	Steel Elevation Nov-06	Steel Elevation Jan-08	Steel Elevation Nov-08	Steel Elevation Sep-09	Steel Elevation Oct-10	Steel Elevation Oct-11	Steel Elevation Nov-13	Steel Elevation Dec-14	Steel Elevation Oct-16	Steel Elevation Change 2014-2016	Steel Elevation Change 1999-2016	Max Elevation Change 1999-2016
MW09-02S	12.07	12.10	12.08	NM	12.06	12.04	12.09	12.06	12.09	12.08	12.08	11.99	11.86	12.15	0.29	0.08	0.29
MW09-03D	12.03	12.04	11.99	NM	12.01	12.00	12.03	12.02	12.03	12.03	12.04	12.03	11.84	12.14	0.30	0.11	0.30
MW09-05S	19.17	19.16	19.02	NM	19.08	19.08	19.08	19.09	19.10	19.09	19.08	19.04	18.94	19.15	0.20	-0.03	0.23
MW09-07S	25.35	25.28	25.22	NM	25.26	25.22	25.22	25.19	25.22	25.20	25.19	25.03	25.02	25.24	0.22	-0.11	0.33
MW09-08DA	NM	NM	NM	NM	NM	NM	NM	NM	19.73	19.74	19.74	19.63	19.66	19.83	0.16	0.09	0.20
MW09-08S	19.10	19.11	19.00	NM	19.06	19.03	19.05	19.04	19.05	19.04	19.03	18.94	18.91	19.09	0.18	-0.01	0.20
MW09-09S	24.82	24.77	24.66	NM	24.73	24.66	24.65	24.63	24.65	24.62	24.61	24.42	24.43	24.66	0.23	-0.16	0.40
MW09-09D	25.00	24.95	24.88	NM	24.91	24.85	24.83	24.82	24.84	NM	NM	NM	NM	NM	NM	NM	0.18
MW09-09DA	NM	NM	NM	NM	NM	NM	NM	NM	25.78	25.75	25.74	25.61	25.54	25.78	0.24	0.00	0.24
MW09-10S	22.42	22.41	22.36	NM	22.36	22.37	22.38	22.37	22.36	22.36	22.36	22.23	22.19	22.42	0.23	0.00	0.23
MW09-10D	22.58	22.58	22.53	NM	22.54	22.54	22.56	22.55	22.55	22.54	22.54	22.43	22.35	22.61	0.26	0.03	0.26
MW09-11S	16.26	16.22	16.19	NM	16.22	16.18	16.19	16.17	16.18	16.17	16.16	16.13	16.03	16.22	0.19	-0.04	0.23
MW09-14D	25.89	25.87	25.82	NM	25.91	25.86	25.86	25.85	25.87	25.85	25.84	25.69	25.67	25.92	0.25	0.03	0.25
MW09-14I	26.07	26.07	26.02	NM	26.10	26.05	26.05	26.04	26.07	NM	NM	NM	NM	NM	NM	NM	0.08
MW09-14IA	NM	NM	NM	NM	NM	NM	NM	NM	27.03	27.01	27.00	26.84	26.86	27.08	0.22	0.05	0.24
MW09-17I	26.24	26.22	26.17	NM	26.22	26.16	26.16	26.14	26.16	26.14	26.12	25.96	25.93	26.17	0.24	-0.07	0.31
MW09-20I	22.78	22.75	22.63	NM	22.70	22.65	22.67	22.66	22.67	22.65	22.64	22.55	22.51	22.70	0.19	-0.08	0.27
MW09-20D	21.74	21.75	21.66	NM	21.73	21.70	21.72	21.71	21.73	21.71	21.70	21.61	21.56	21.76	0.20	0.02	0.20
MW09-21D	20.47	20.50	20.38	NM	20.44	20.41	20.42	20.43	20.44	20.43	20.41	20.31	20.27	20.47	0.20	0.00	0.23
MW09-21S	20.25	20.24	20.09	NM	20.15	20.11	20.14	20.14	20.24	20.13	20.11	20.01	19.98	20.17	0.19	-0.08	0.27
MW09-23S	24.40	24.43	24.39	NM	24.42	24.40	24.40	24.37	24.40	24.38	24.37	24.23	24.20	24.43	0.23	0.03	0.23
MW09-23D	24.40	24.43	24.41	NM	24.46	24.44	24.45	24.42	24.46	24.44	24.43	24.29	24.26	24.50	0.24	0.10	0.24
MW09-24D	10.57	10.56	10.42	NM	10.53	10.54	10.54	10.55	10.57	10.56	10.56	10.47	10.46	10.64	0.18	0.07	0.22
MW09-24S	10.79	10.78	10.62	NM	10.77	10.78	10.78	10.79	10.81	10.80	10.79	10.69	10.71	10.87	0.16	0.08	0.25
MW09-25S	NM	NM	10.38	NM	10.52	10.48	10.48	10.47	10.49	10.47	10.46	10.41	10.40	10.52	0.12	0.14	0.14
MW09-26D	NM	NM	NM	NM	NM	NM	11.60	11.61	11.60	11.62	11.63	11.64	11.45	11.70	0.25	0.10	0.25
MW09-26S	NM	NM	NM	NM	NM	NM	11.70	11.66	11.68	11.67	11.66	11.69	11.55	11.73	0.18	0.03	0.18
MW09-27D	NM	NM	NM	NM	NM	NM	6.35	6.38	6.41	6.41	6.41	6.36	6.28	6.52	0.24	0.17	0.24
MW09-27S	NM	NM	NM	NM	NM	NM	6.36	6.37	6.41	6.40	6.41	6.40	6.34	6.53	0.19	0.17	0.19

TABLE 14

SUMMARY OF ANNUAL LANDFILL SETTLEMENT SURVEY RESULTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
PAGE 3 OF 3

GAS VENT	MP Elevation Oct-99	MP Elevation Apr-00	MP Elevation Dec-01	MP Elevation May-03	MP Elevation Aug-05	MP Elevation Nov-06	MP Elevation Jan-08	MP Elevation Nov-08	MP Elevation Sep-09	MP Elevation Oct-10	MP Elevation Oct-11	MP Elevation Nov-13	MP Elevation Dec-14	MP Elevation Oct-16	MP Elevation Change 2014-2016	MP Elevation Change 1999-2016	Max Elevation Change 1999-2016
GV09-01	26.48	26.47	26.37	26.28	26.45	26.45	26.41	26.37	26.40	26.38	26.36	26.28	26.07	26.45	0.38	-0.03	0.41
GV09-02	31.11	31.07	31.02	30.97	31.08	31.03	31.05	31.03	31.03	31.01	31.02	30.91	30.82	31.08	0.26	-0.03	0.29
GV09-03	30.12	30.06	29.87	29.90	30.03	29.98	30.00	29.99	29.99	29.98	29.98	29.88	29.82	30.10	0.28	-0.02	0.30
GV09-04	29.25	29.20	29.15	29.05	29.24	29.20	29.19	29.20	29.22	29.21	29.20	29.10	28.98	29.26	0.28	0.01	0.28
GV09-05	25.16	25.11	25.07	25.01	25.17	25.08	25.09	25.08	25.09	25.09	25.04	25.01	24.89	25.11	0.22	-0.05	0.28

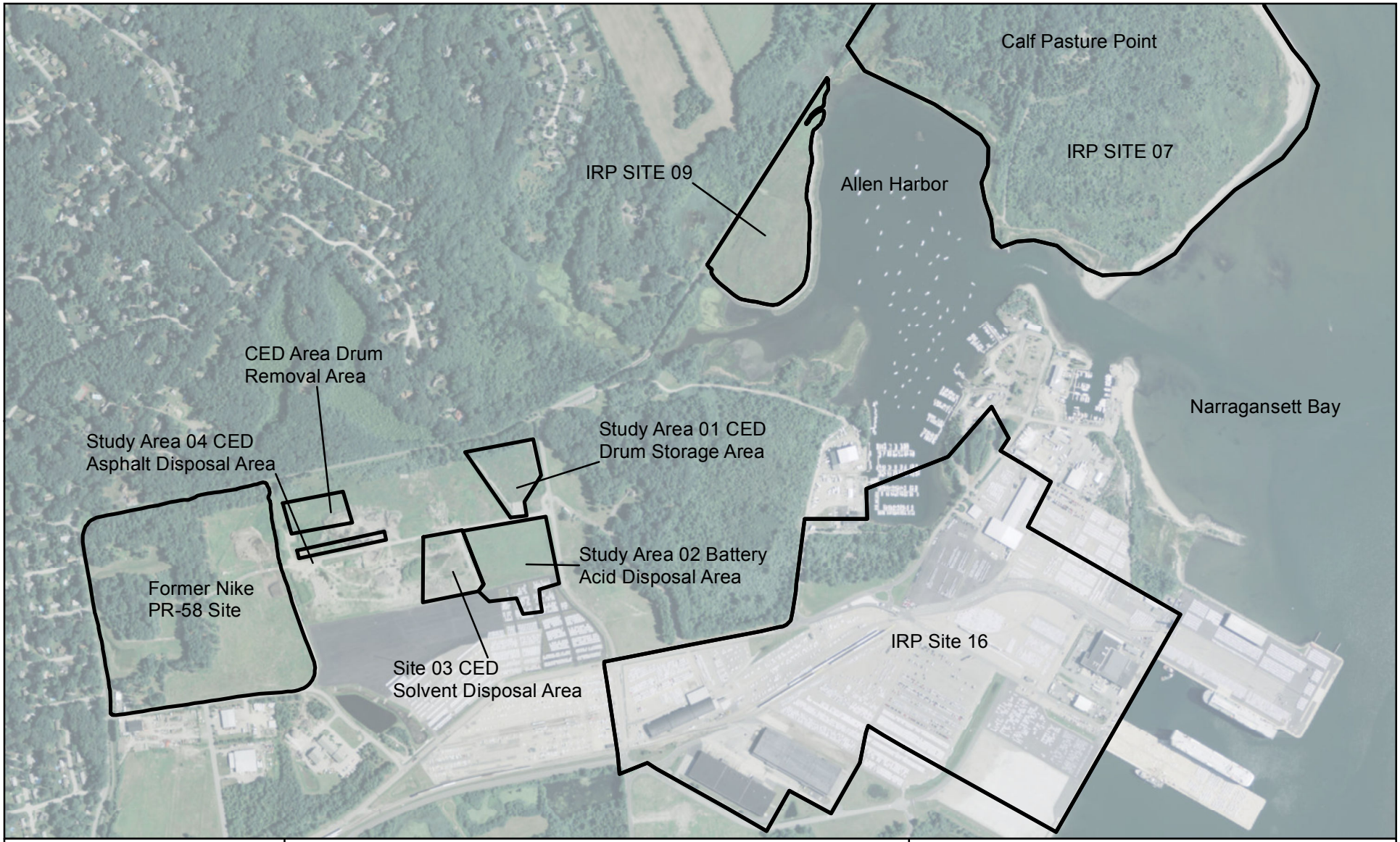
BREAKWATER	MP Elevation Oct-99	MP Elevation Apr-00	MP Elevation Dec-01	MP Elevation May-03	MP Elevation Aug-05	MP Elevation Nov-06	MP Elevation Jan-08	MP Elevation Nov-08	MP Elevation Sep-09	MP Elevation Oct-10	MP Elevation Oct-11	MP Elevation Nov-13	MP Elevation Dec-14	MP Elevation Oct-16	MP Elevation Change 2014-2016	MP Elevation Change 1999-2016	Max Elevation Change 1999-2016
BMP-1831	1.88	1.86	1.85	1.77	1.88	1.82	1.81	1.82	1.88	1.86	1.90	1.64	1.62	1.86	0.24	-0.02	0.28
BMP-1832	1.72	1.68	1.50	1.39	1.70	1.60	1.60	1.64	1.65	1.64	1.68	1.01	1.12	1.30	0.18	-0.42	0.71
BMP-1833	1.79	1.78	1.72	1.65	1.81	1.69	1.75	1.73	1.79	1.74	1.78	1.39	1.37	0.98	-0.39	-0.81	0.83
BMP-1834	2.25	2.23	2.22	2.16	2.25	2.17	2.22	2.21	2.25	2.21	2.24	1.70	1.65	1.77	0.12	-0.48	0.60
BMP-1835	1.95	1.96	1.86	1.78	1.94	1.86	1.88	1.91	1.92	1.90	1.94	1.49	1.47	1.86	0.39	-0.09	0.49
BMP-1836	1.87	1.86	1.73	1.66	1.84	1.74	1.72	1.76	1.78	1.77	1.77	1.62	1.64	1.76	0.12	-0.11	0.25

REVETMENT	MP Elevation Oct-99	MP Elevation Apr-00	MP Elevation Dec-01	MP Elevation May-03	MP Elevation Aug-05	MP Elevation Nov-06	MP Elevation Jan-08	MP Elevation Nov-08	MP Elevation Sep-09	MP Elevation Oct-10	MP Elevation Oct-11	MP Elevation Nov-13	MP Elevation Dec-14	MP Elevation Oct-16	MP Elevation Change 2014-2016	MP Elevation Change 1999-2016	Max Elevation Change 1999-2016
RMP-50	16.02	16.00	15.98	15.87	16.02	15.88	15.88	15.83	15.92	15.89	15.92	15.76	15.73	16.12	0.39	0.10	0.39
RMP-51	15.66	15.61	15.52	15.43	15.58	15.42	15.38	15.34	15.44	15.39	15.39	15.25	15.23	15.64	0.41	-0.02	0.43
RMP-52	16.01	15.99	15.85	15.77	15.89	15.82	15.82	15.84	15.85	15.83	15.86	15.68	15.73	16.04	0.31	0.03	0.36
RMP-60	11.65	11.63	11.61	11.49	NM	11.24	11.20	11.27	11.26	11.27	11.28	11.40	11.43	11.94	0.51	0.29	0.74
RMP-61	15.95	15.93	15.86	15.78	15.88	15.57	15.61	15.59	15.29	15.49	15.59	15.39	15.40	15.99	0.59	0.04	0.70
RMP-68	15.53	15.51	15.42	15.35	NM	15.13	15.05	15.14	14.99	15.15	15.27	15.04	15.02	15.10	0.08	-0.43	0.54

WETLAND	MP Elevation Oct-99	MP Elevation Apr-00	MP Elevation Dec-01	MP Elevation May-03	MP Elevation Aug-05	MP Elevation Nov-06	MP Elevation Jan-08	MP Elevation Nov-08	MP Elevation Sep-09	MP Elevation Oct-10	MP Elevation Oct-11	MP Elevation Nov-13	MP Elevation Dec-14	MP Elevation Oct-16	MP Elevation Change 2014-2016	MP Elevation Change 1999-2016	Max Elevation Change 1999-2016
MMP-10	NM	NM	NM	NM	0.90	0.93	0.90	0.98	0.95	0.97	1.04	0.87	0.87	1.32	0.45	0.42	0.45
MMP-11	NM	NM	NM	NM	0.51	0.43	0.38	0.48	0.48	0.46	0.56	0.47	0.45	0.92	0.47	0.40	0.54
MMP-12	NM	NM	NM	NM	0.78	0.66	0.64	0.74	0.75	0.69	0.82	0.80	0.74	1.12	0.38	0.35	0.48
MMP-13	NM	NM	NM	NM	0.59	0.58	0.57	0.66	0.67	0.63	0.70	0.55	0.54	0.88	0.34	0.29	0.34
MMP-14	NM	NM	NM	NM	0.50	0.51	0.46	0.47	0.55	0.54	0.63	0.44	0.56	0.71	0.15	0.20	0.27
MMP-15	NM	NM	NM	NM	0.25	0.31	0.25	0.38	0.46	0.40	0.43	-0.02	-0.13	0.57	0.70	0.32	0.70

Notes: 1. MP = Measuring Point; 2. NM = Not Measured; 3. -- = Not Calculated; 4. All measurements in feet and based on NAVD 88 datum.

Figures



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Drawn:	RNM	03/08/2016
Approved:	BS	03/08/2016
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N

0 500 1,000 Feet

FIGURE 1
SITE LOCUS MAP

IRP SITE 09, FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

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RESOLUTION CONSULTANTS

Drawn:	RM	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

Legend

- Gas Vapor Point
- Gas Vent
- Monitoring Well
- Piezometer
- Shellfish
- Sediment
- Seep

FIGURE 2
SITE 09 FIVE YEAR SAMPLING LOCATIONS

IRP SITE 09, NCBC DAVISVILLE NORTH KINGSTOWN, RHODE ISLAND

\\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Fig_2_Sampling_Loc.mxd

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Legend

- Monitoring Well Water Level Measurement and Sample Location
- Monitoring Well Water Level Measurement Location

FIGURE 3
LONG TERM MONITORING WELL LOCATIONS MONITORING EVENT 45 FALL 2016

IRP SITE 09, NCBC DAVISVILLE NORTH KINGSTOWN, RHODE ISLAND

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Legend

- Monitoring Well
- Piezometer
- Gas Vent
- Abandoned Monitoring Well

FIGURE 4
CROSS SECTION LOCATIONS

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

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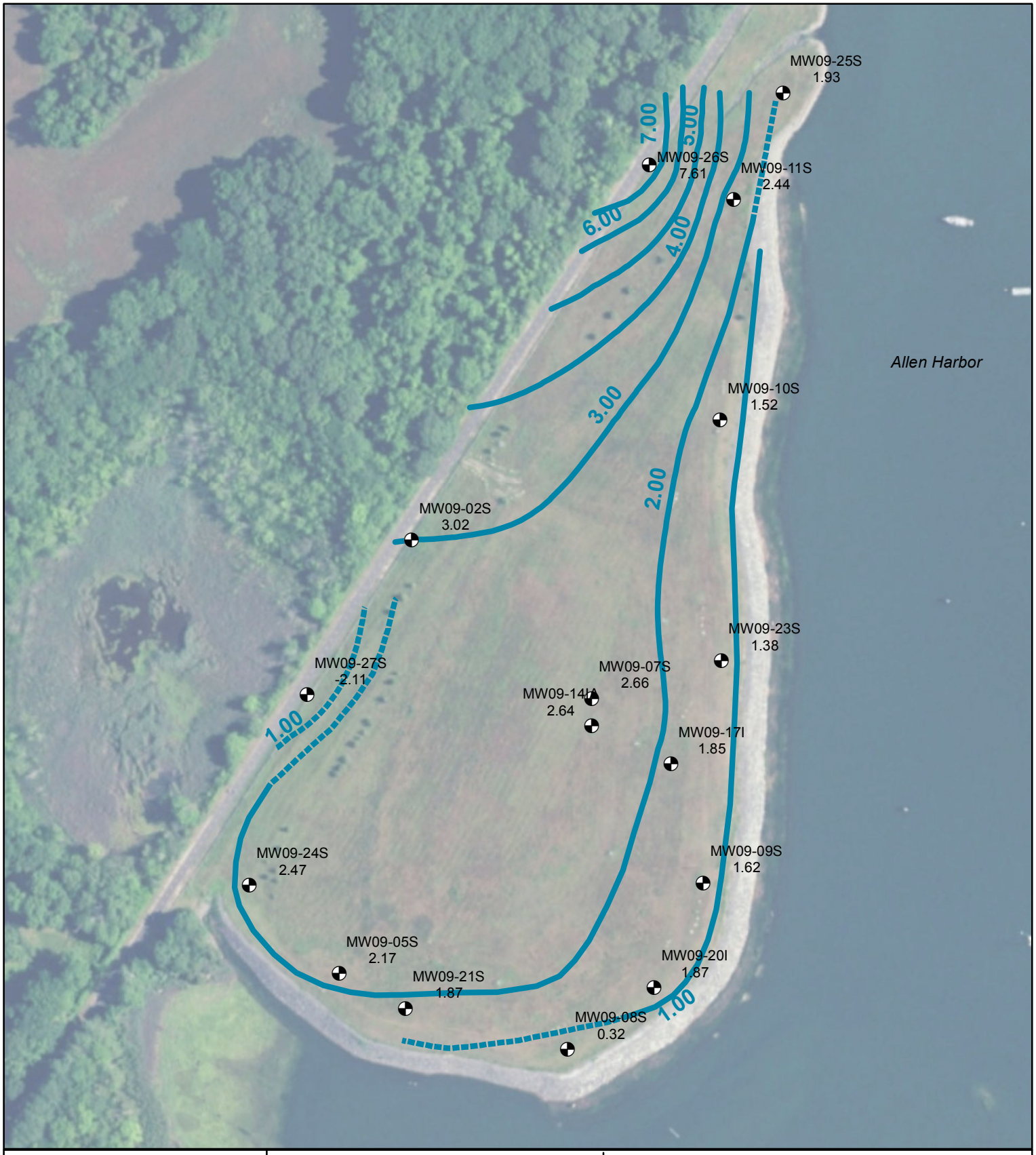

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Drawn:	RM	04/20/2017
Approved:	BS	04/20/2017
Project #:	60273164	

Legend

- Monitoring Well Location
- Groundwater Contour
- Approximate Groundwater Contour

N

0 100 200 Feet

FIGURE 5
SHALLOW/INTERMEDIATE OVERBURDEN
LOW TIDE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

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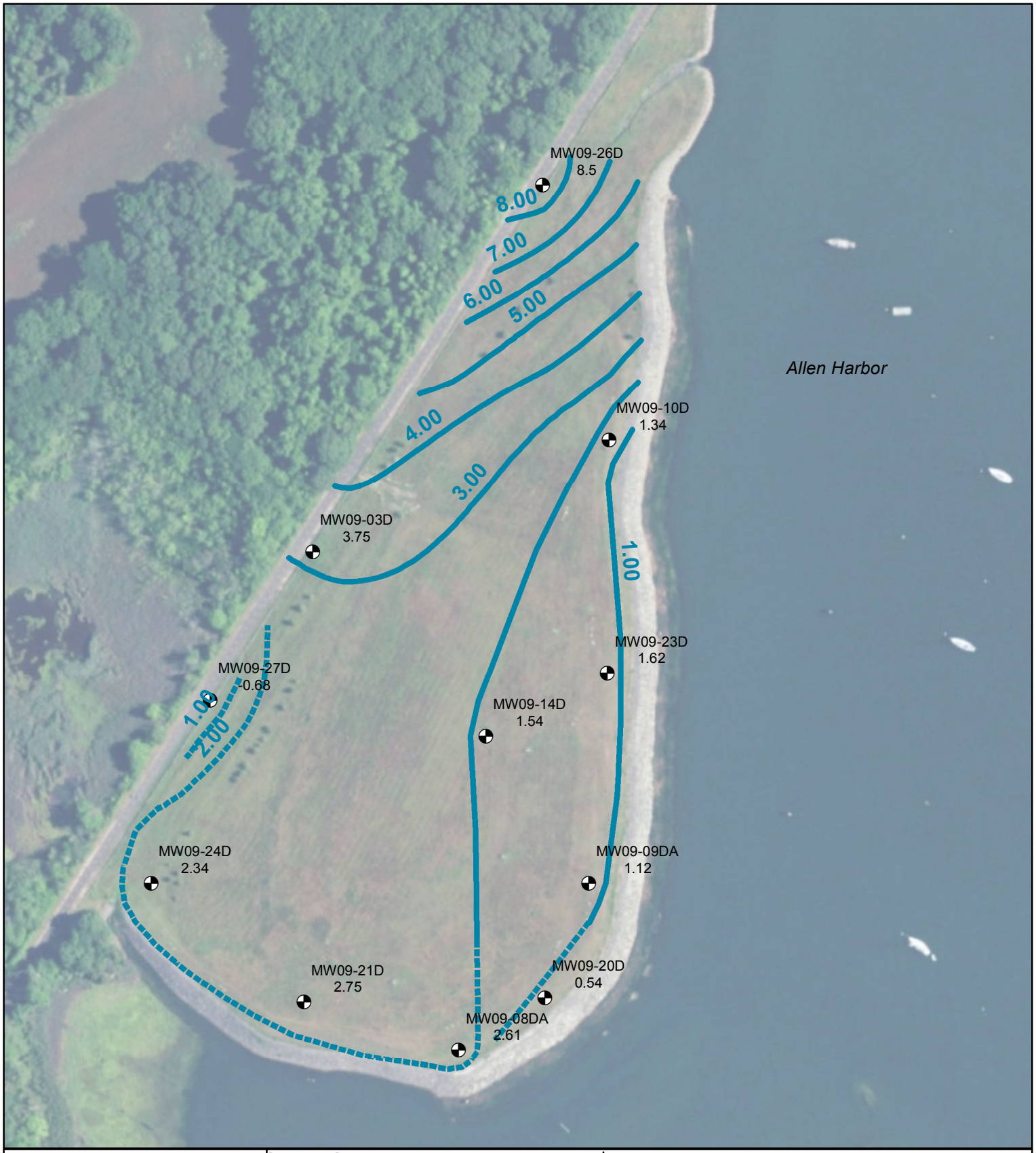

RESOLUTION CONSULTANTS

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Project #:	60273164	

Legend

- Monitoring Well Location
- Groundwater Contour
- Approximate Groundwater Contour

N

0 100 200 Feet

FIGURE 6
DEEP OVERBURDEN
POTENTIOMETRIC MAP
LOW TIDE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

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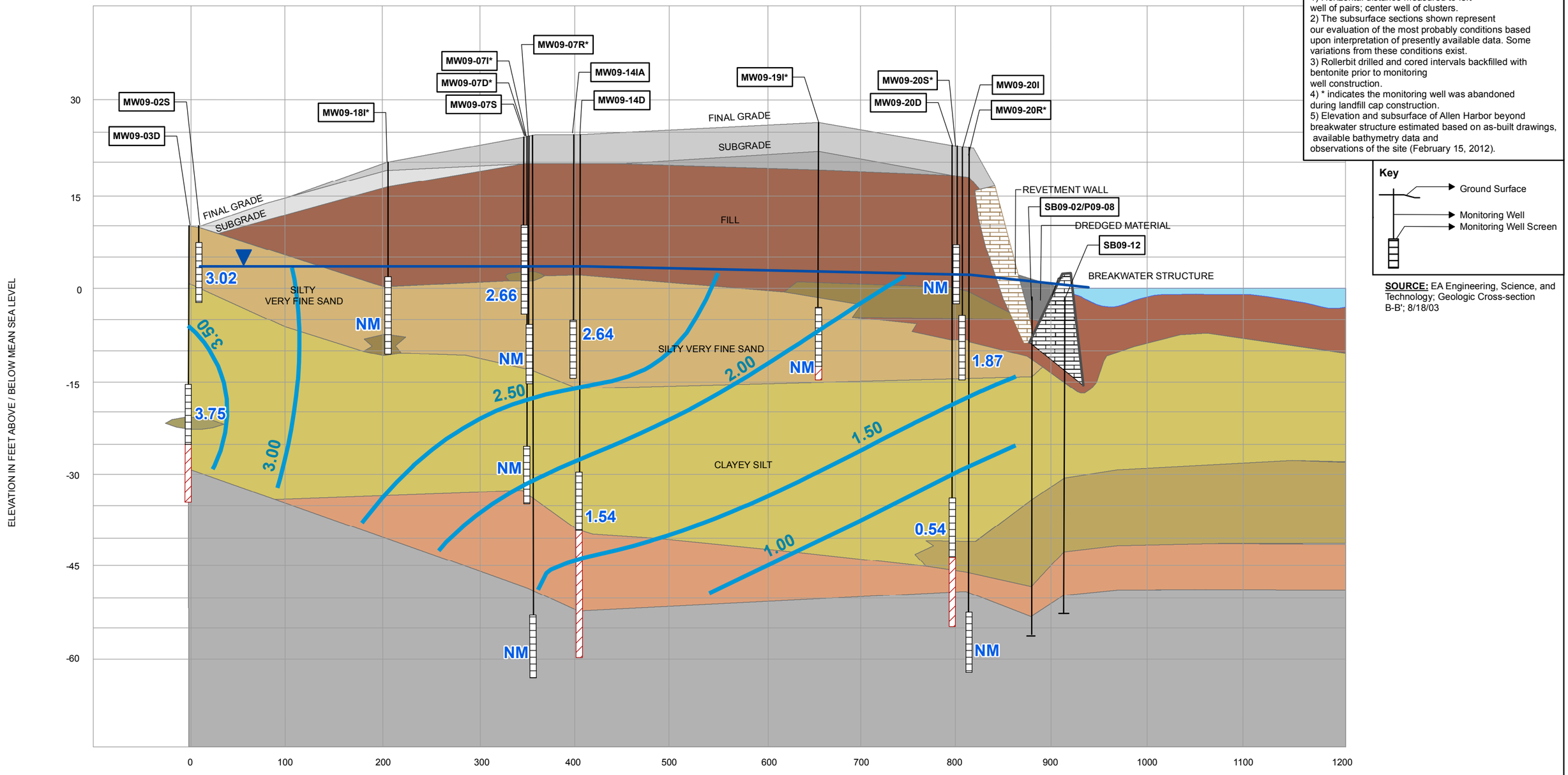

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Elevation and subsurface of Allen Harbor beyond breakwater structure estimated based on as-built drawings, available bathymetry data and observations of the site (February 15, 2012).

Key

- Ground Surface
- Monitoring Well
- Monitoring Well Screen

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section B-B'; 8/18/03

Legend

- Bentonite Sealed Borehole
- Screened Interval of MW
- BREAKWATER STRUCTURE
- REVETMENT WALL
- CLAYEY SILT
- DARK GRAY QUARTZITE
- DREDGED MATERIAL
- FILL
- FINAL GRADE
- FINE SAND
- ORIGINAL GRADE
- PEAT
- SILT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL
- VERY FINE SAND
- WATER
- Groundwater Contour ft AMSL
- NM Not Measured
- Water Table

RESOLUTION CONSULTANTS

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Project #:	60273164	

FIGURE 7
CROSS SECTION B-B'
POTENTIOMETRIC MAP
LOW TIDE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

\\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\GW FLOW MAPS\FIG_XX_BB_LOW.MXD 05/09/17 JEE

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Legend

- Monitoring Well Location
- Groundwater Contour
- Approximate Groundwater Contour

N

0 100 200 Feet

FIGURE 8
SHALLOW/INTERMEDIATE OVERBURDEN
MID TIDE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

\\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\GW flow maps\Fig_xx_Shallow-mid.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	04/20/2017
Approved:	BS	04/20/2017
Project #:	60273164	

Legend

- Monitoring Well Location
- Groundwater Contour
- Approximate Groundwater Contour

N

0 100 200 Feet

FIGURE 9
DEEP OVERBURDEN
POTENTIOMETRIC MAP
MID TIDE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

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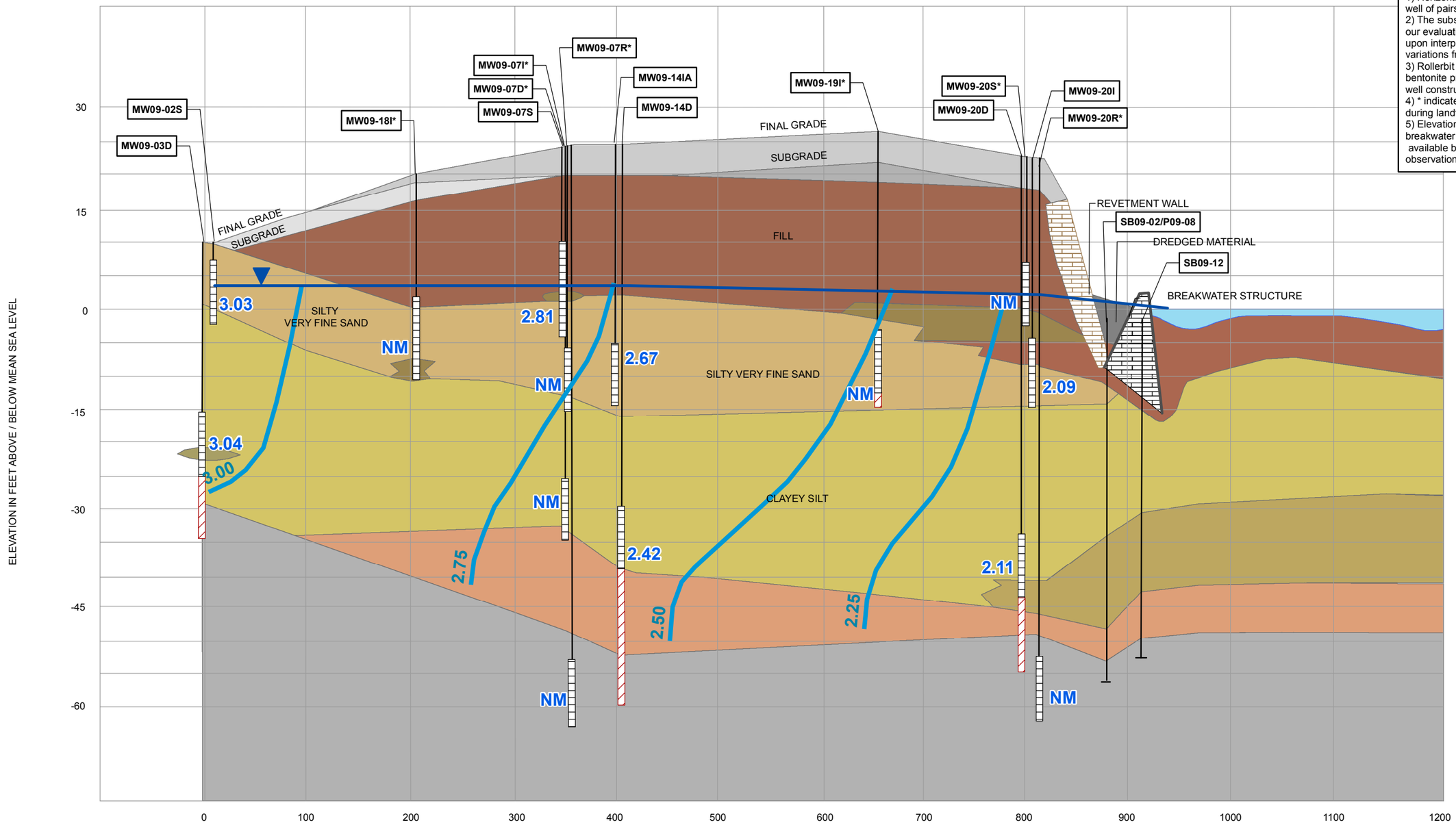
B



Notes:
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Key

- Ground Surface
- Monitoring Well
- Monitoring Well Screen

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section B-B'; 8/18/03

RESOLUTION CONSULTANTS

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Project #:	60273164	

Legend

- Bentonite Sealed Borehole
- Screened Interval of MW
- BREAKWATER STRUCTURE
- REVETMENT WALL
- CLAYEY SILT
- DARK GRAY QUARTZITE
- DREDGED MATERIAL
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- SILT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL
- VERY FINE SAND
- WATER
- Groundwater Contour ft AMSL
- NM — Not Measured
- Water Table

FIGURE 10
CROSS SECTION B-B'
POTENTIOMETRIC MAP
MID TIDE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

\\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\GW FLOW MAPS\FIG_10_BB_MID.MXD 05/09/17 JEE

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Legend

- Monitoring Well Location
- Groundwater Contour ft AMSL

N

0 100 200 Feet

FIGURE 11
SHALLOW/INTERMEDIATE OVERBURDEN
HIGH TIDE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

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RESOLUTION CONSULTANTS

Drawn:	RM	04/20/2017
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Project #:	60273164	

Legend

- Monitoring Well Location
- Groundwater Contour ft AMSL

N

0 100 200 Feet

FIGURE 12
DEEP OVERBURDEN
POTENTIOMETRIC MAP
HIGH TIDE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

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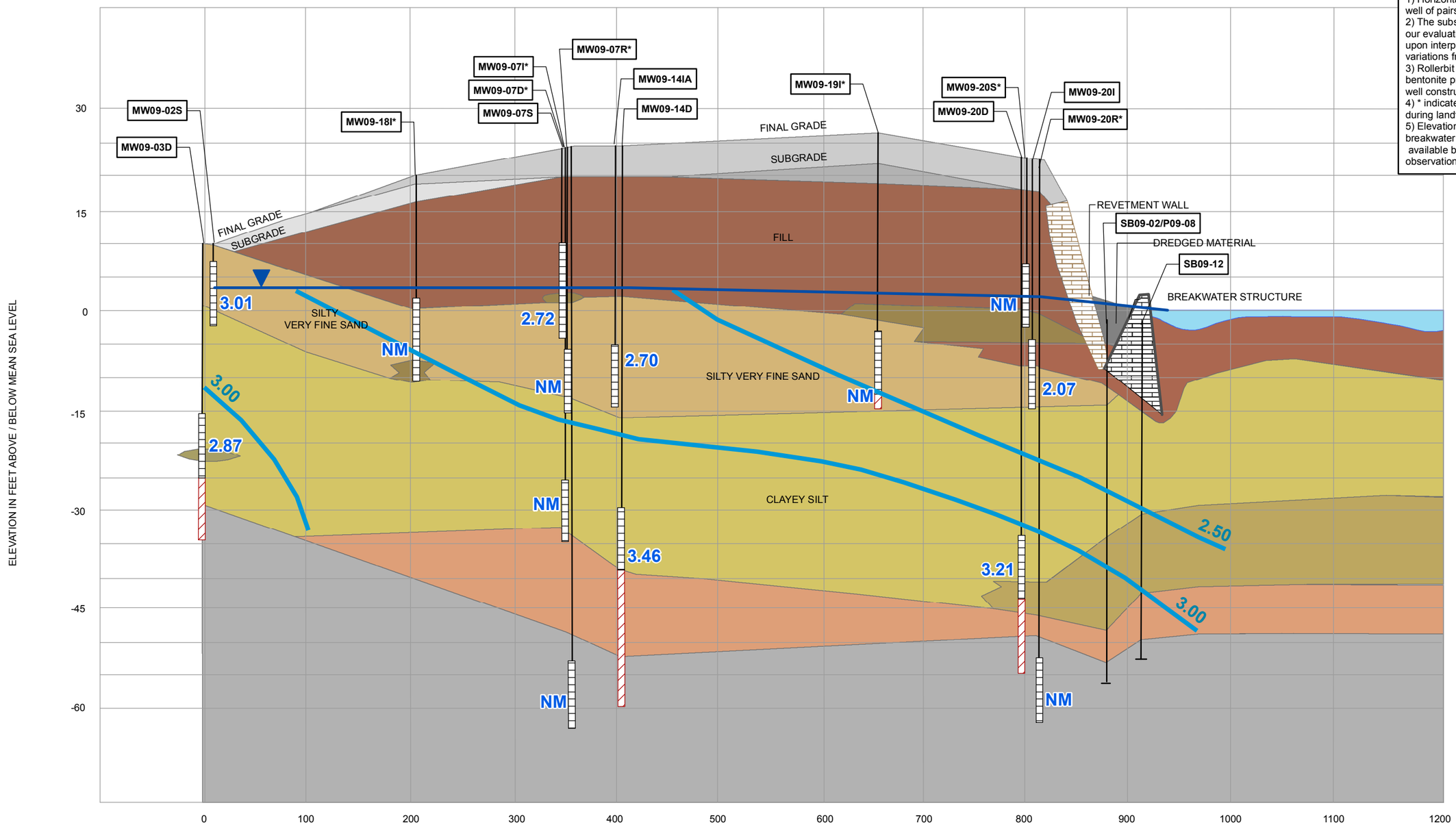

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
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Key

- Ground Surface
- Monitoring Well
- Monitoring Well Screen

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section B-B'; 8/18/03

Legend

- Bentonite Sealed Borehole
- Screened Interval of MW
- BREAKWATER STRUCTURE
- REVETMENT WALL
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- NM Not Measured
- Water Table

RESOLUTION CONSULTANTS

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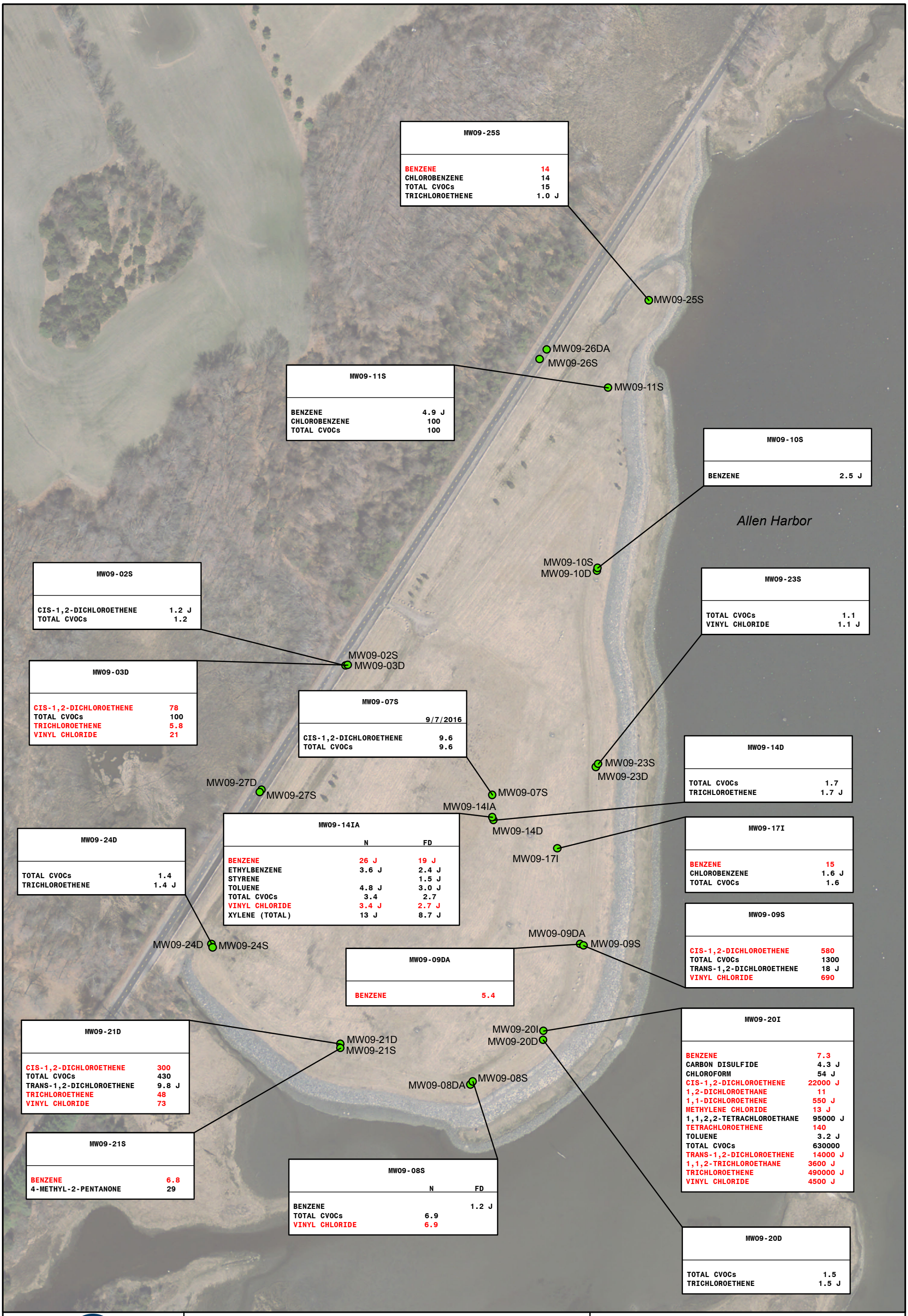
Approved:	BS	05/09/2017
Project #:	60273164	

FIGURE 13
CROSS SECTION B-B'
POTENTIOMETRIC MAP
HIGH TIDE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09. FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

\\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\GW FLOW MAPS\FIG_13_BB_HIGH.MXD 05/09/17 JEE



RESOLUTION CONSULTANTS

Drawn:	JB	04/15/2017
Approved:	BS	04/15/2017
Project #:	60273164	

Legend

ME 45 Monitoring Well

Note

Results are in units of ug/L.

Red font - above Project Action Limit

N

0 75 150 Feet

FIGURE 14
VOCs DETECTED IN MONITORING WELLS

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

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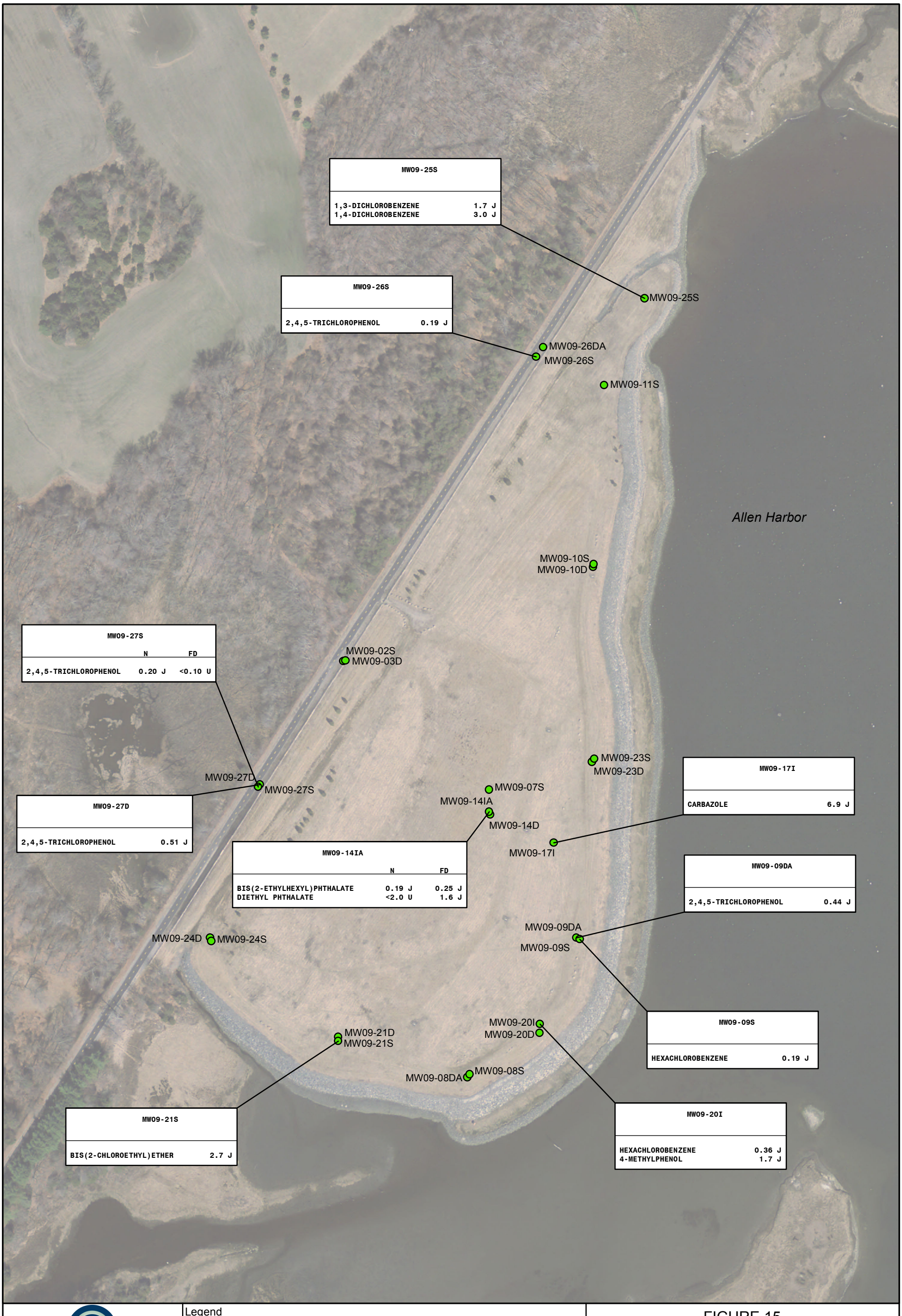


RESOLUTION CONSULTANTS

Drawn:	JB	04/15/2017
Approved:	BS	04/15/2017
Project #:	60273164	

Legend

ME 45 Monitoring Well

Note

Results are in units of ug/L.

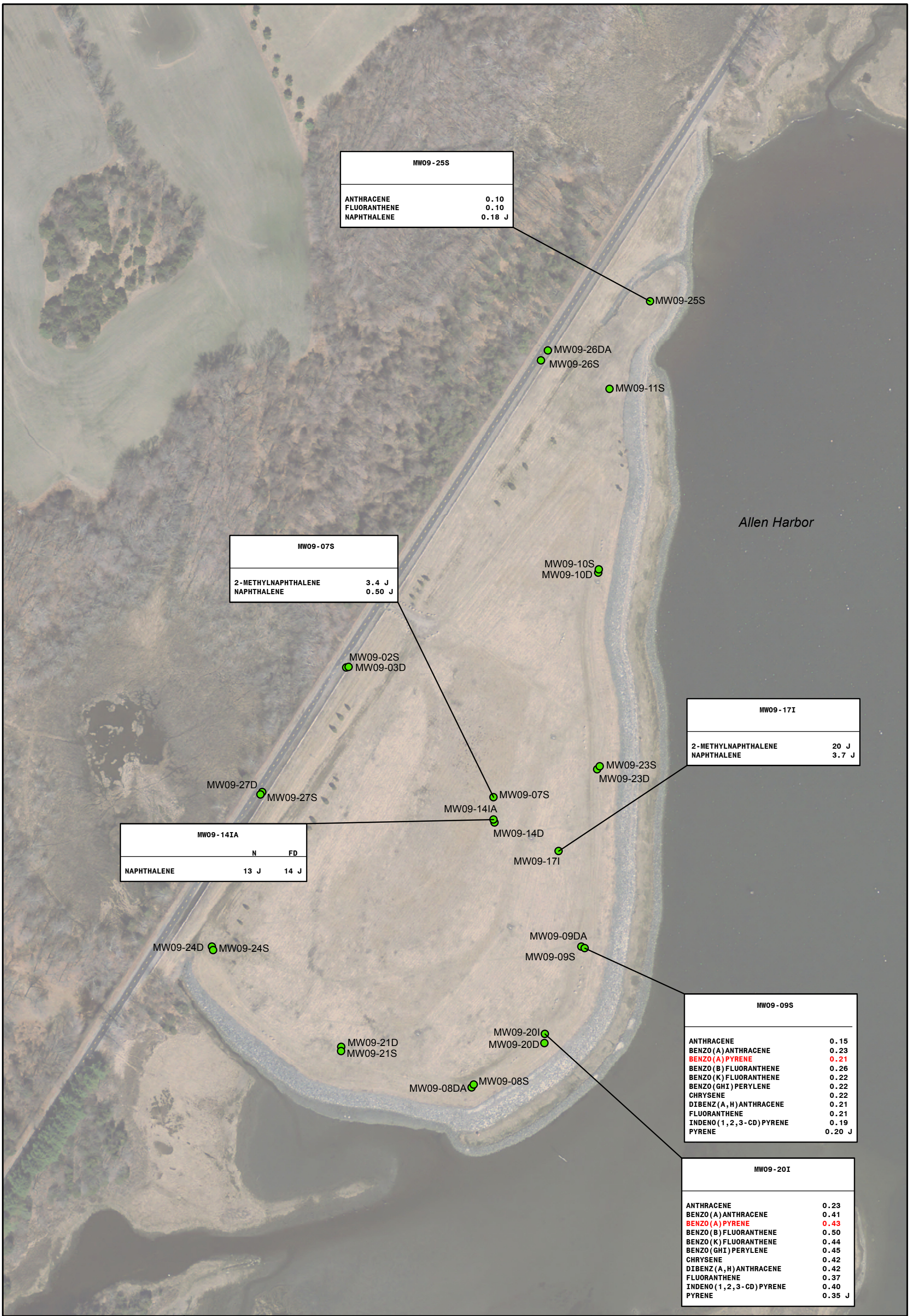
N

0 75 150 Feet

FIGURE 15
SVOCs DETECTED IN MONITORING WELLS

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: G:\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Wells\SVOCs\Fig_15_SVOCs_Detected_MW.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

Legend

ME 45 Monitoring Well

Note

Results are in units of ug/L.

Red font - above Project Action Limit

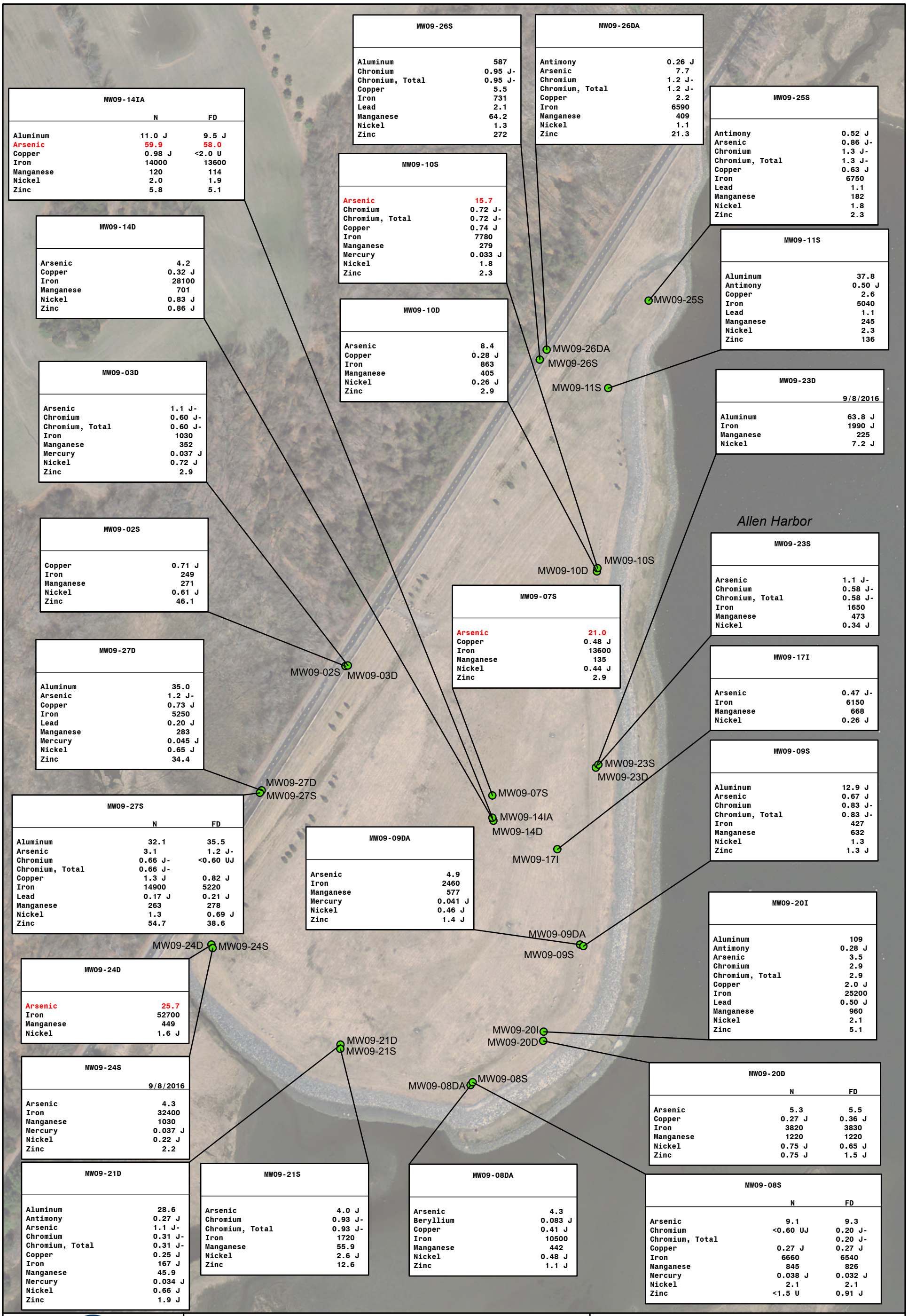
N

0 75 150 Feet

FIGURE 16
PAHs DETECTED IN MONITORING WELLS

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Wells\PAH\Fig_16_PAHs_Detected_MW.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

Legend

ME 45 Monitoring Well

Note

Results are in units of ug/L.

Red font - above Project Action Limit

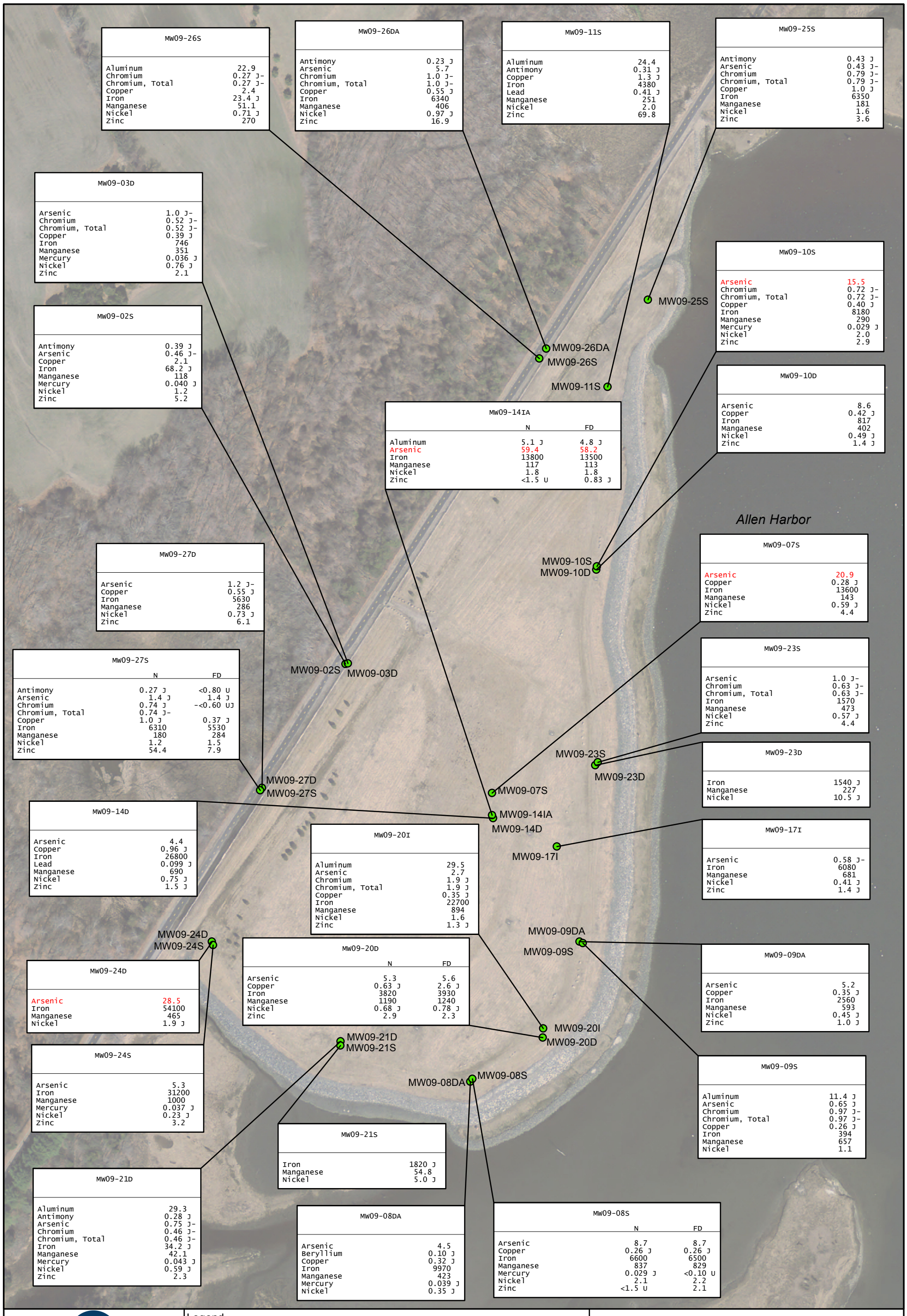
N

0 75 150 Feet

FIGURE 17
TOTAL METALS DETECTED IN MONITORING WELLS

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Wells\Total metals\Fig_17_Total_Metals_Detected_MW.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

Legend

ME 45 Monitoring Well

Note

Results are in units of ug/L.

Red font - above Project Action Limit

N

0 75 150 Feet

FIGURE 18
DISSOLOVED METALS DETECTED IN MONITORING WELLS

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Wells\Diss metals\Fig_18_Dissolved_Metals_Detected_MW.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	04/11/2017
Approved:	BS	04/11/2017
Project #:	60273164	

Legend

▲ ME 45 Piezometer Sample

Note
Results are in units of ug/L.

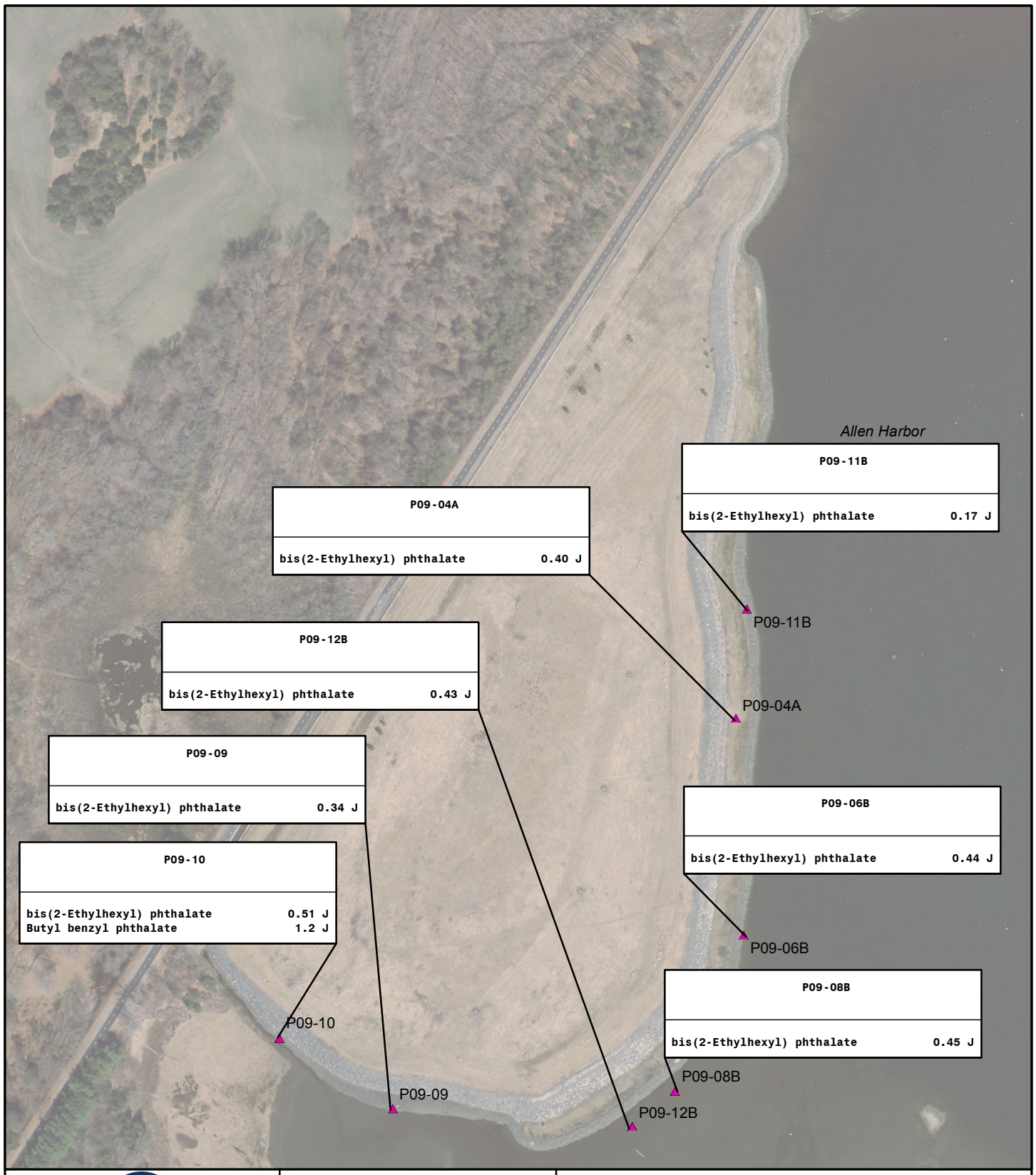
0 100 200 Feet

N

FIGURE 19
VOCs DETECTED IN PIEZOMETERS

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Piez\VOCs\Fig_19_VOCs_Detected_Piezometers.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	04/11/2017
Approved:	BS	04/11/2017
Project #:	60273164	

Legend

▲ ME 45 Piezometer Sample

Note
Results are in units of ug/L.

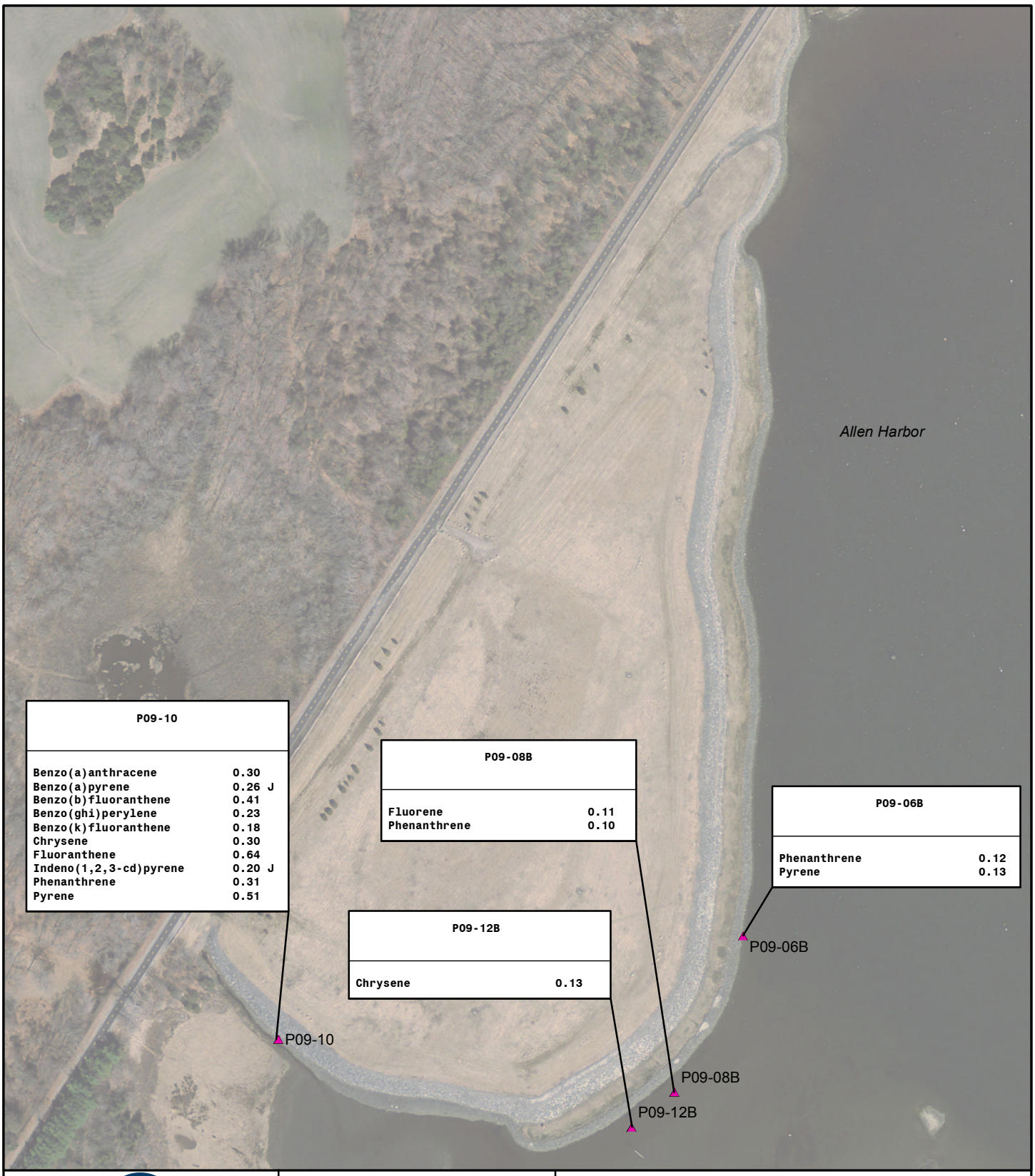
0 100 200 Feet

N

FIGURE 20
SVOCs DETECTED IN PIEZOMETERS

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Piez\SVOCs\Fig_20_SVOCs_Detected_Piezometers.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	04/11/2017
Approved:	BS	04/11/2017
Project #:	60273164	

Legend

▲ ME 45 Piezometer Sample

Note
Results are in units of ug/L.

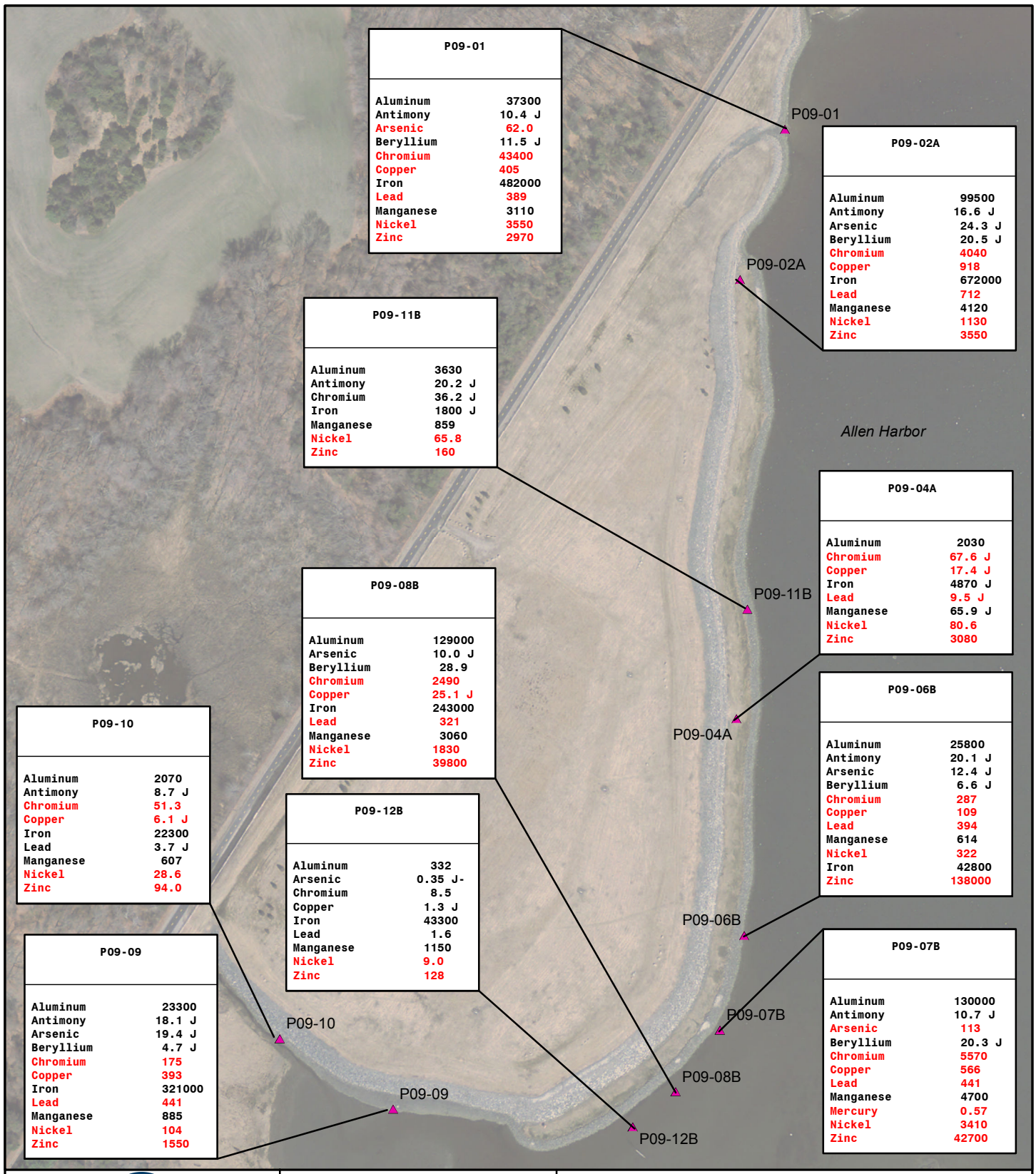
0 100 200 Feet

N

FIGURE 21
PAHs DETECTED IN PIEZOMETERS

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Piez\PAH\Fig_21_PAH_Detected_Piezometers.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	04/11/2017
Approved:	BS	04/11/2017
Project #:	60273164	

Legend

▲ ME 45 Piezometer Sample

Note
Results are in units of ug/L.
Red font - above Project Action Limit

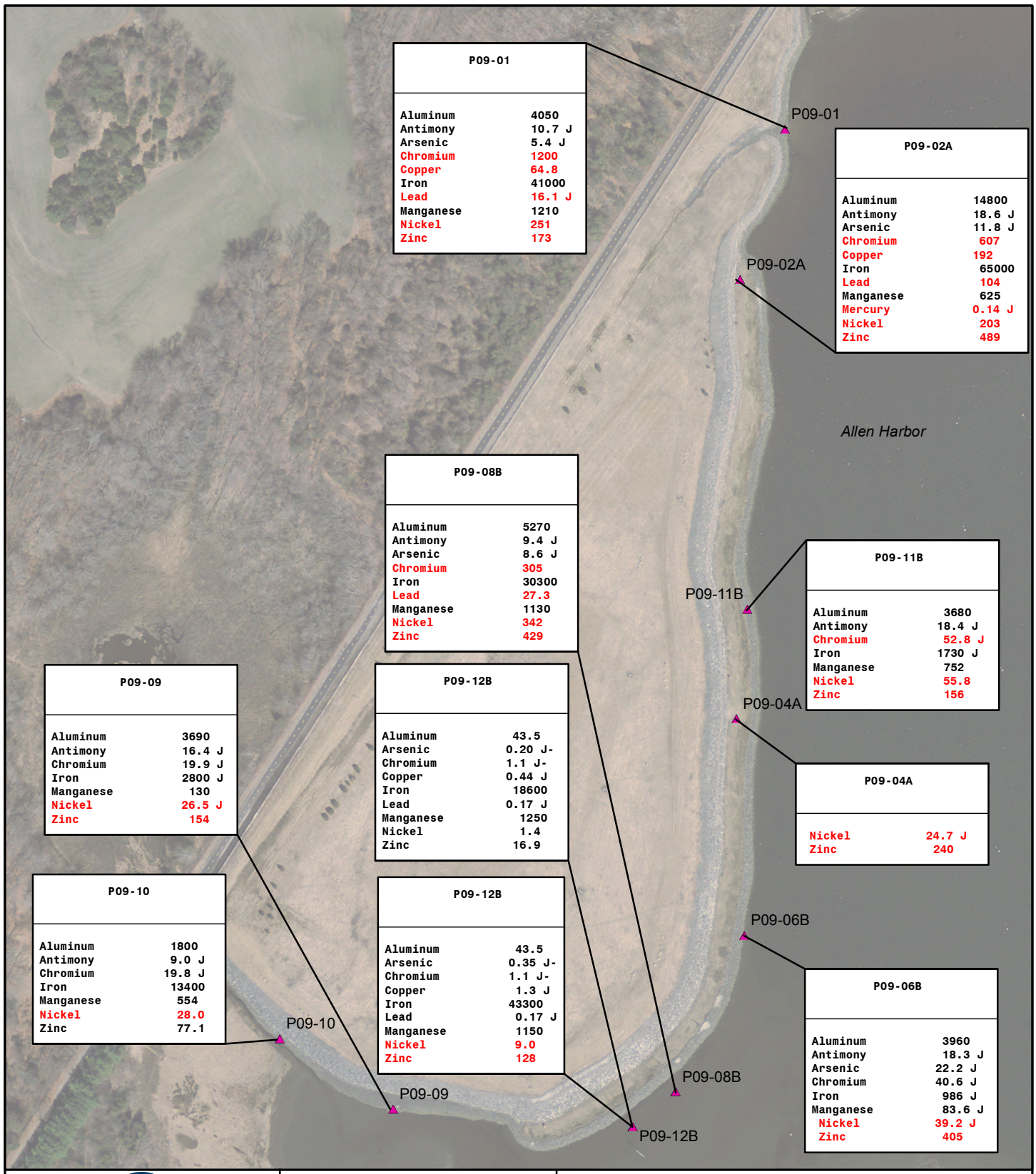
0 100 200 Feet

N

FIGURE 22
TOTAL METALS DETECTED IN PIEZOMETERS

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Piez\Total metals\Fig_22_Total_Metals_Detected_Piezometers.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	04/11/2017
Approved:	BS	04/11/2017
Project #:	60273164	

Legend

▲ ME 45 Piezometer Sample

Note
Results are in units of ug/L.
Red font - above Project Action Limit

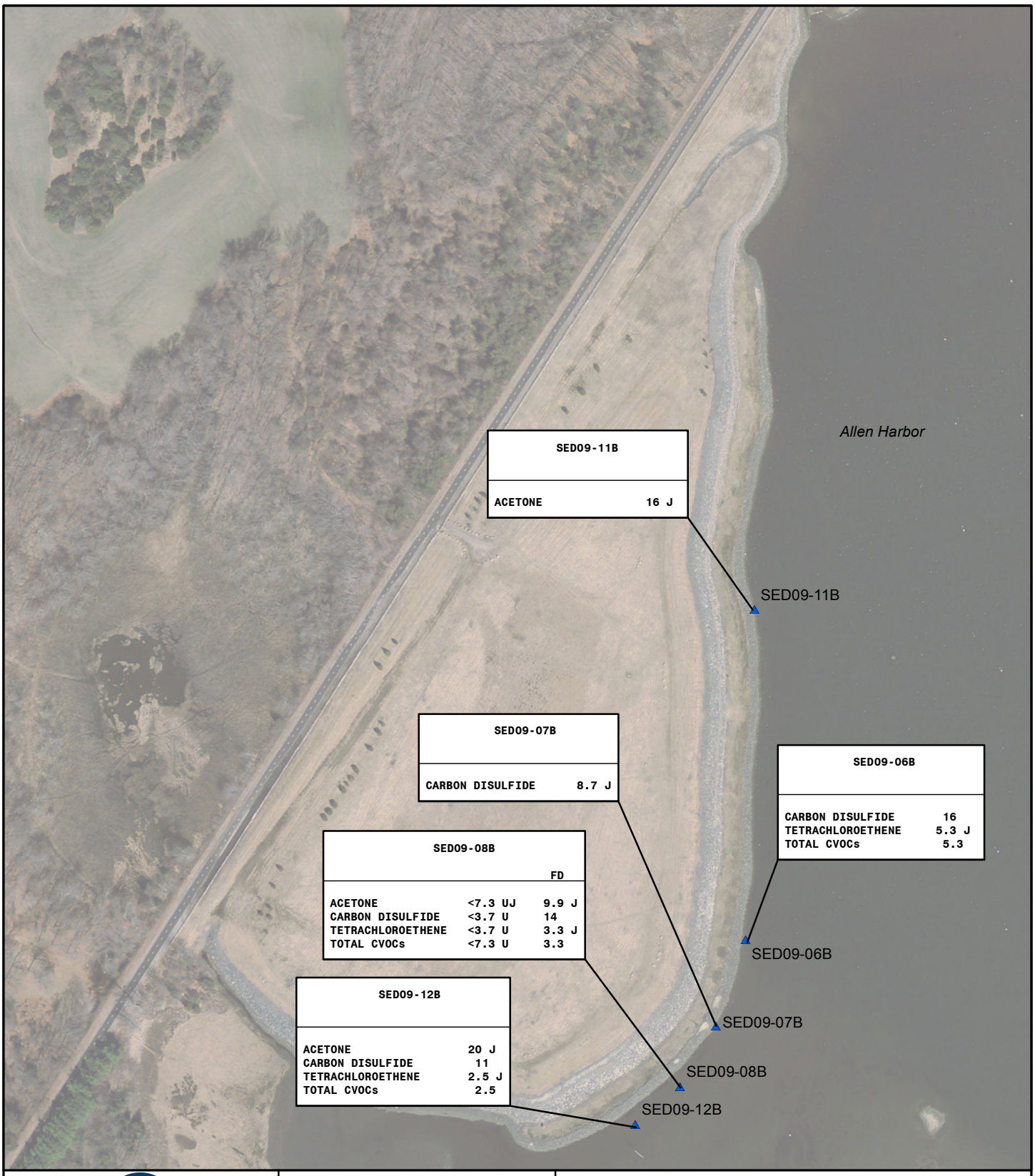
0 100 200 Feet

N

FIGURE 23
DISSOLVED METALS DETECTED IN PIEZOMETERS

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Piez\Diss metals\Fig_23_Dissolved_Metals_Detected_Piezometers.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

Legend

▲ ME 45 Sediment Sample

Note
Results are in units of ug/kg.

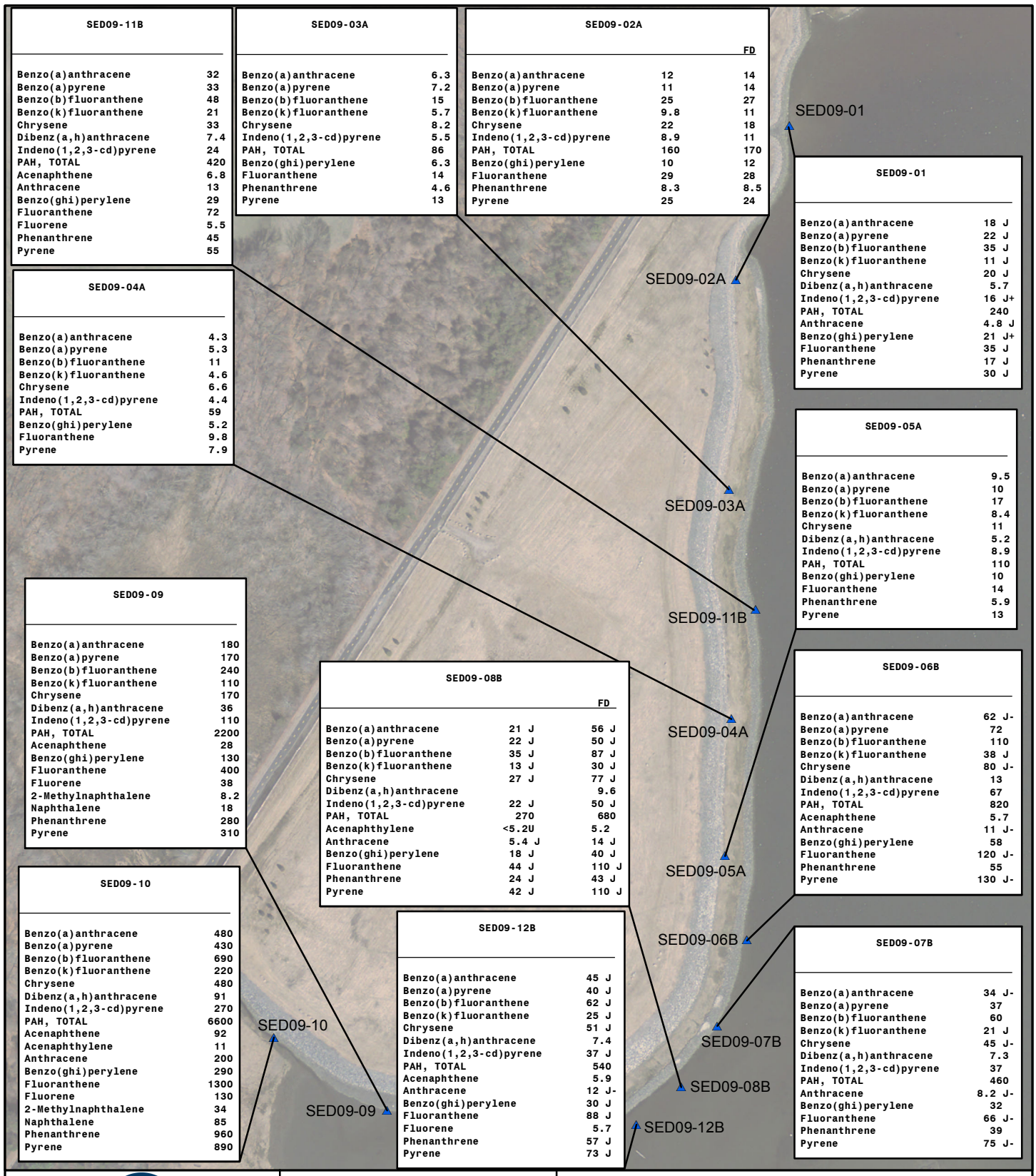
0 100 200 Feet

N

FIGURE 24
VOCs DETECTED IN SEDIMENT

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Sed\VOCs\Fig_24_VOCs_Detected_Sediment.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

Legend

▲ ME 45 Sediment Sample

Note
Results are in units of ug/kg.

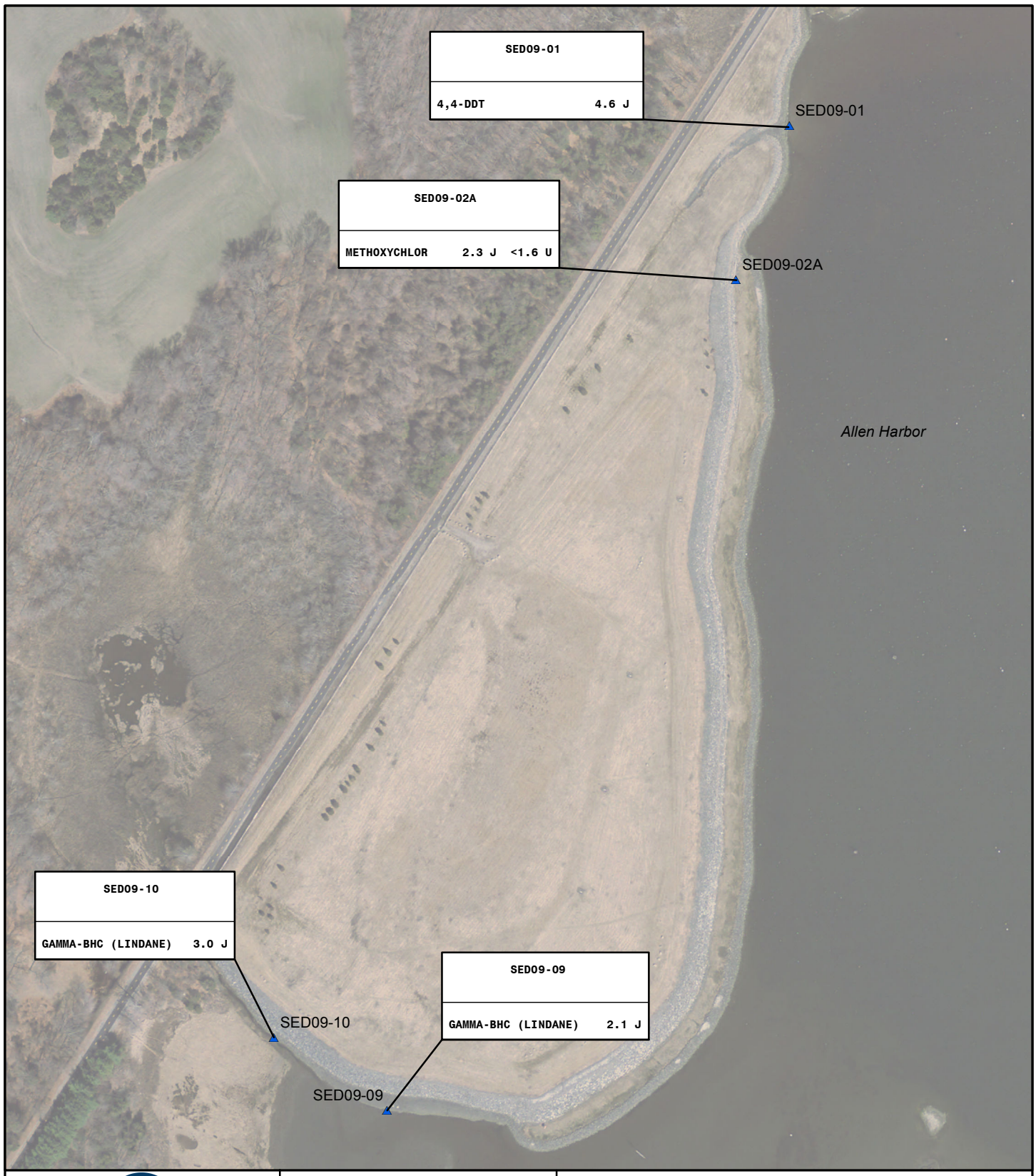
0 100 200 Feet

N

FIGURE 25
PAHs DETECTED IN SEDIMENT

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Sed\PAH\Fig_25_PAHs_Detected_Sediment.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

Legend

▲ ME 45 Sediment Sample

Note
Results are in units of ug/kg.

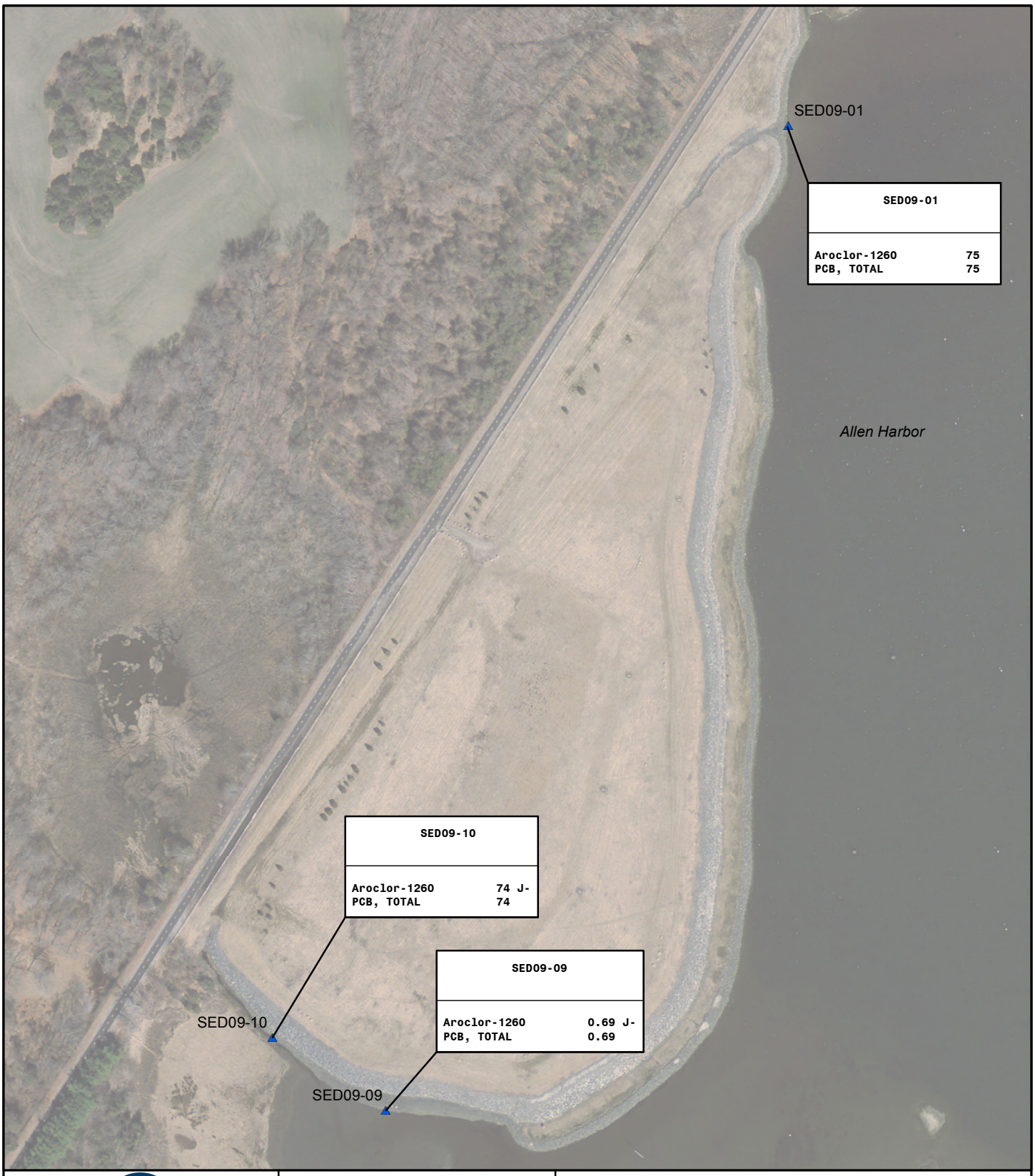
0 100 200 Feet

N

FIGURE 26
PESTICIDES DETECTED IN SEDIMENT

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Sed\Pest\Fig_26_Pesticides_Detected_Sediment.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

Legend

▲ ME 45 Sediment Sample

Note
Results are in units of ug/kg.

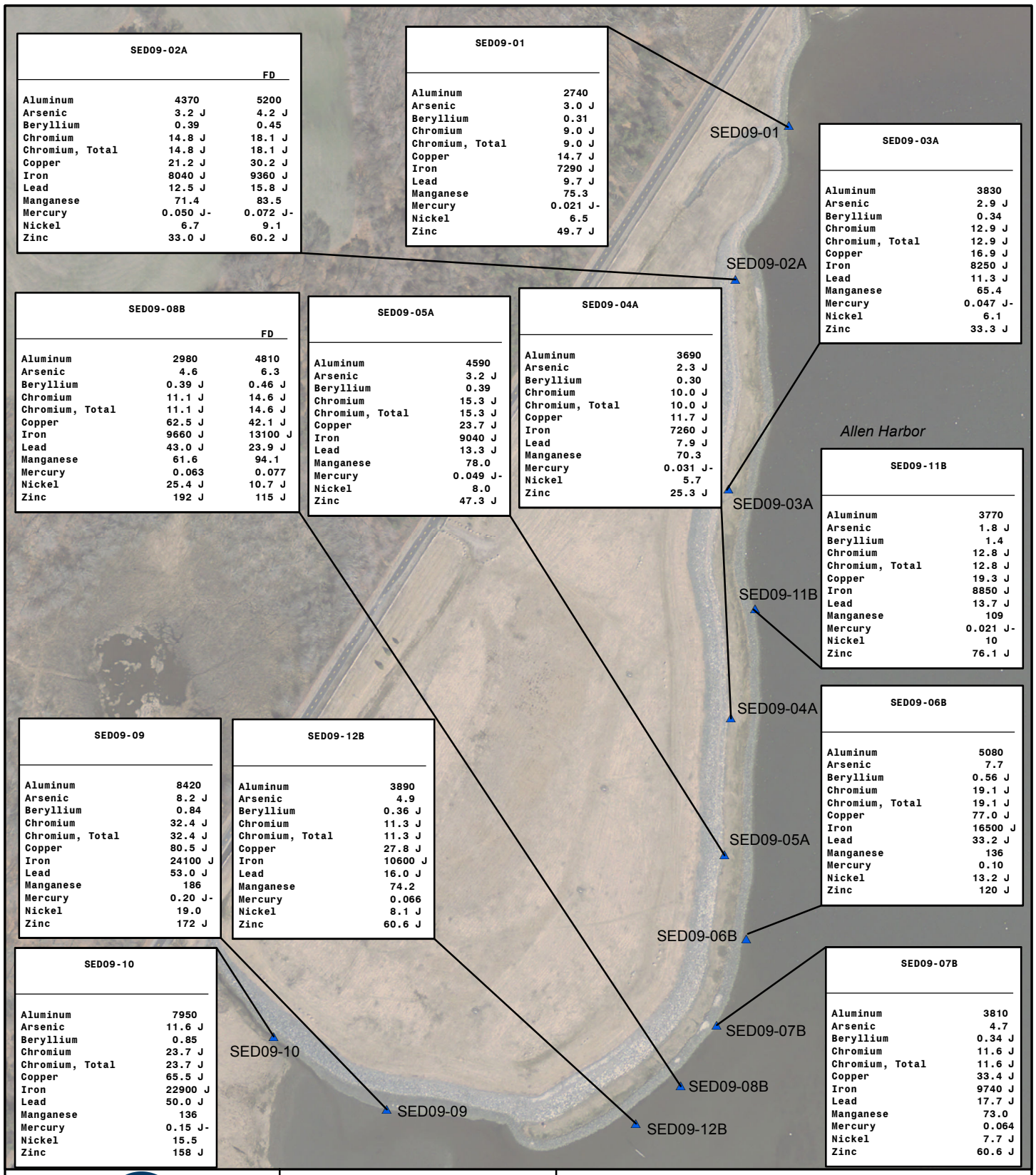
0 100 200 Feet

N

FIGURE 27
PCBs DETECTED IN SEDIMENT

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Sed\PCBs\Fig_27_PCBs_Detected_Sediment.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

Legend

▲ ME 45 Sediment Sample

Note
Results are in units of mg/kg.

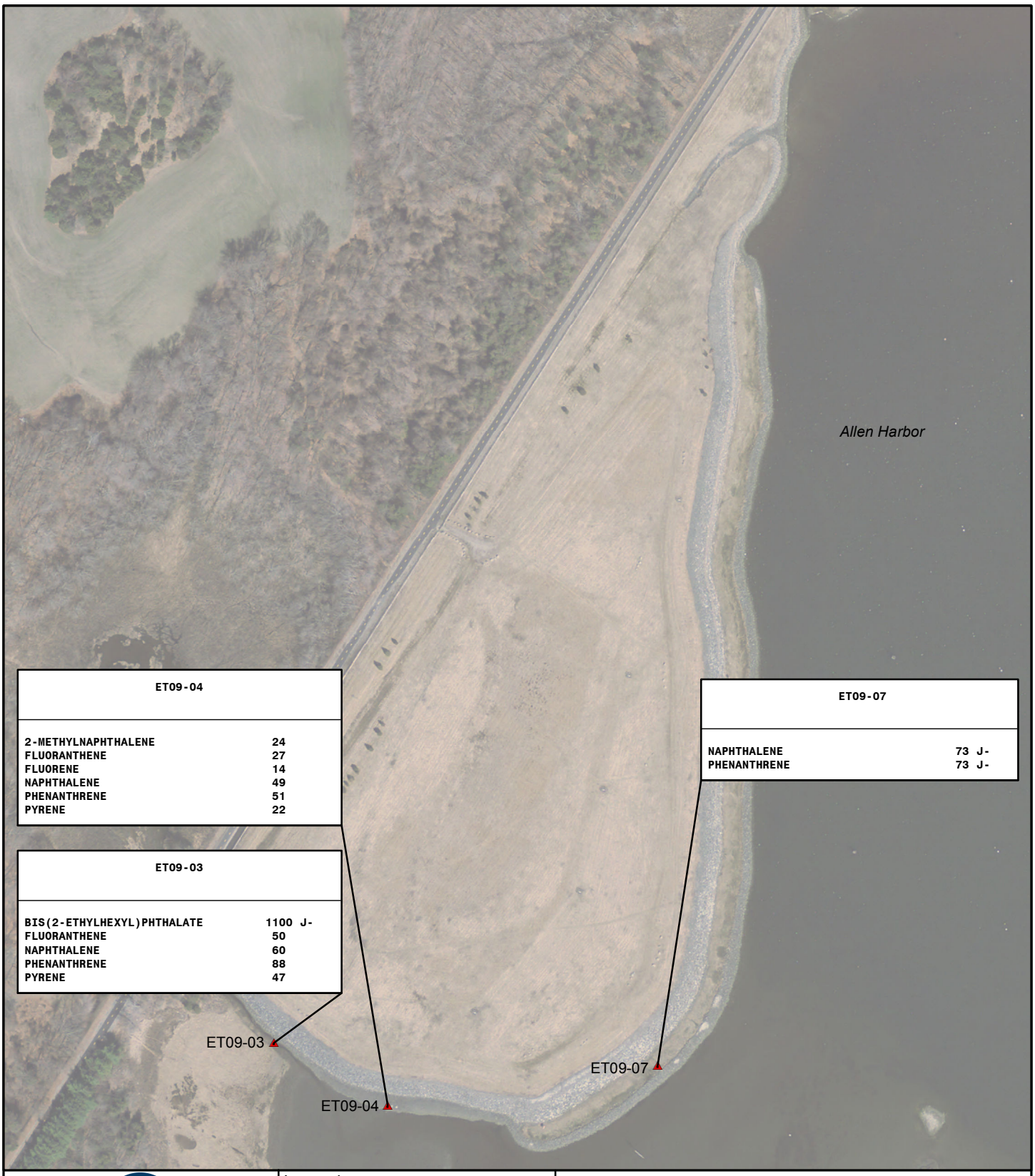
0 100 200 Feet

N

FIGURE 28
TOTAL METALS DETECTED IN SEDIMENT

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Sed\Total metals\Fig_28_Total_Metals_Detected_Sediment.mxd



RESOLUTION CONSULTANTS

Drawn:	RM	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

Legend

▲ ME 45 Shellfish Sample Location

Note
Results are in units of lipid-normalized ug/kg.

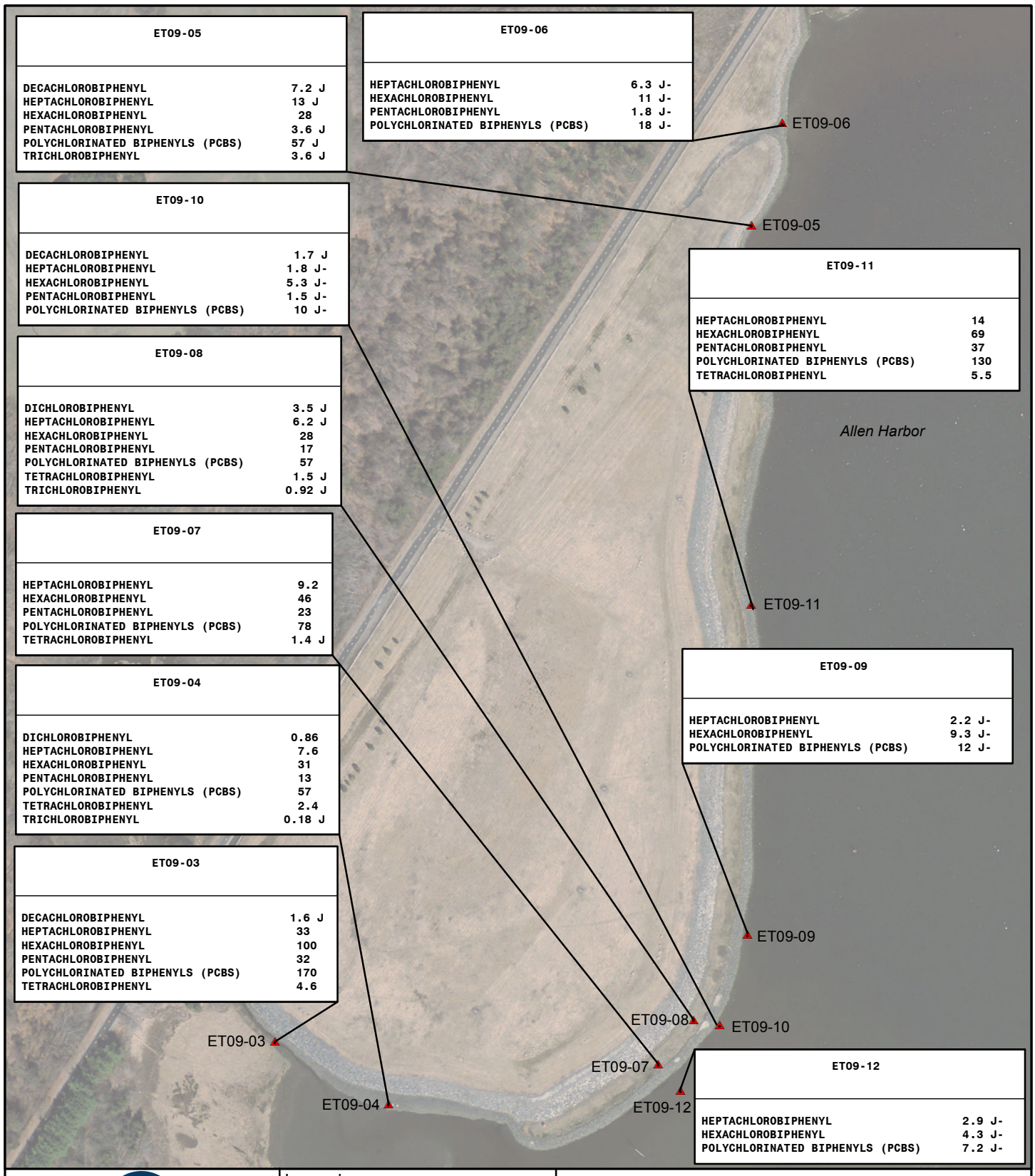
0 100 200 Feet

N

FIGURE 29
SVOCs/PAHs DETECTED IN SHELLFISH TISSUE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Shellfish\PAH-SVOCS - norm\Fig_29_SVOCs_PAHs_Detected_Shellfish_Tissue.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

Legend

▲ ME 45 Shellfish Sample Location

Note
Results are in units of lipid-normalized ug/kg.

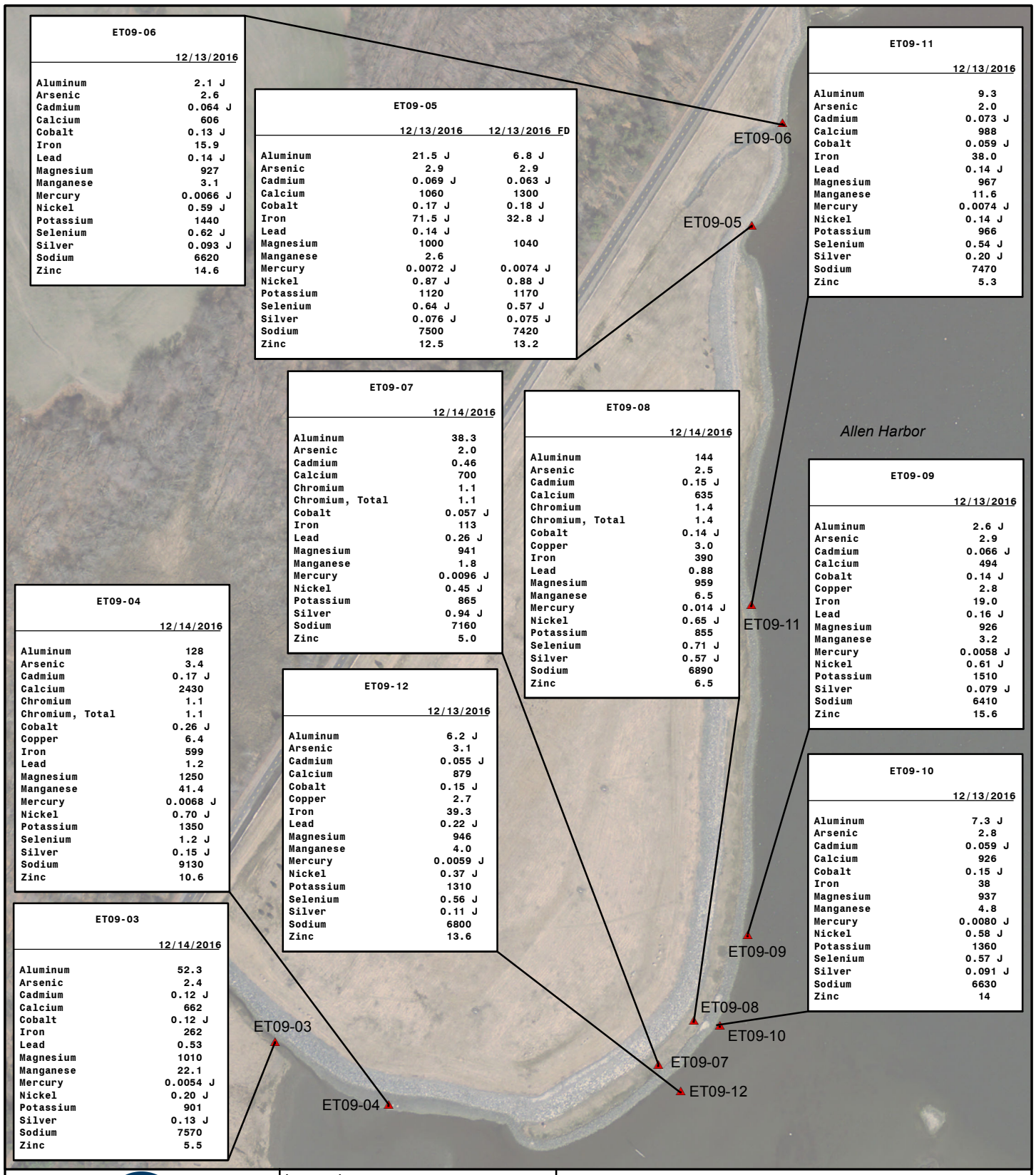
0 100 200 Feet

N

FIGURE 30
PCBs DETECTED IN SHELLFISH TISSUE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Shellfish\PCBs - norm\Fig_30_PCBs_Detected_Shellfish_Tissue.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

Legend

▲ ME 45 Shellfish Sample Location

Note

Results are in units of mg/kg.

0 100 200 Feet

N

FIGURE 31
TOTAL METALS DETECTED IN SHELLFISH TISSUE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Shellfish\Total metals - not norm\Fig_31_Total_Metals_Detected_Shellfish_Tissue.mxd

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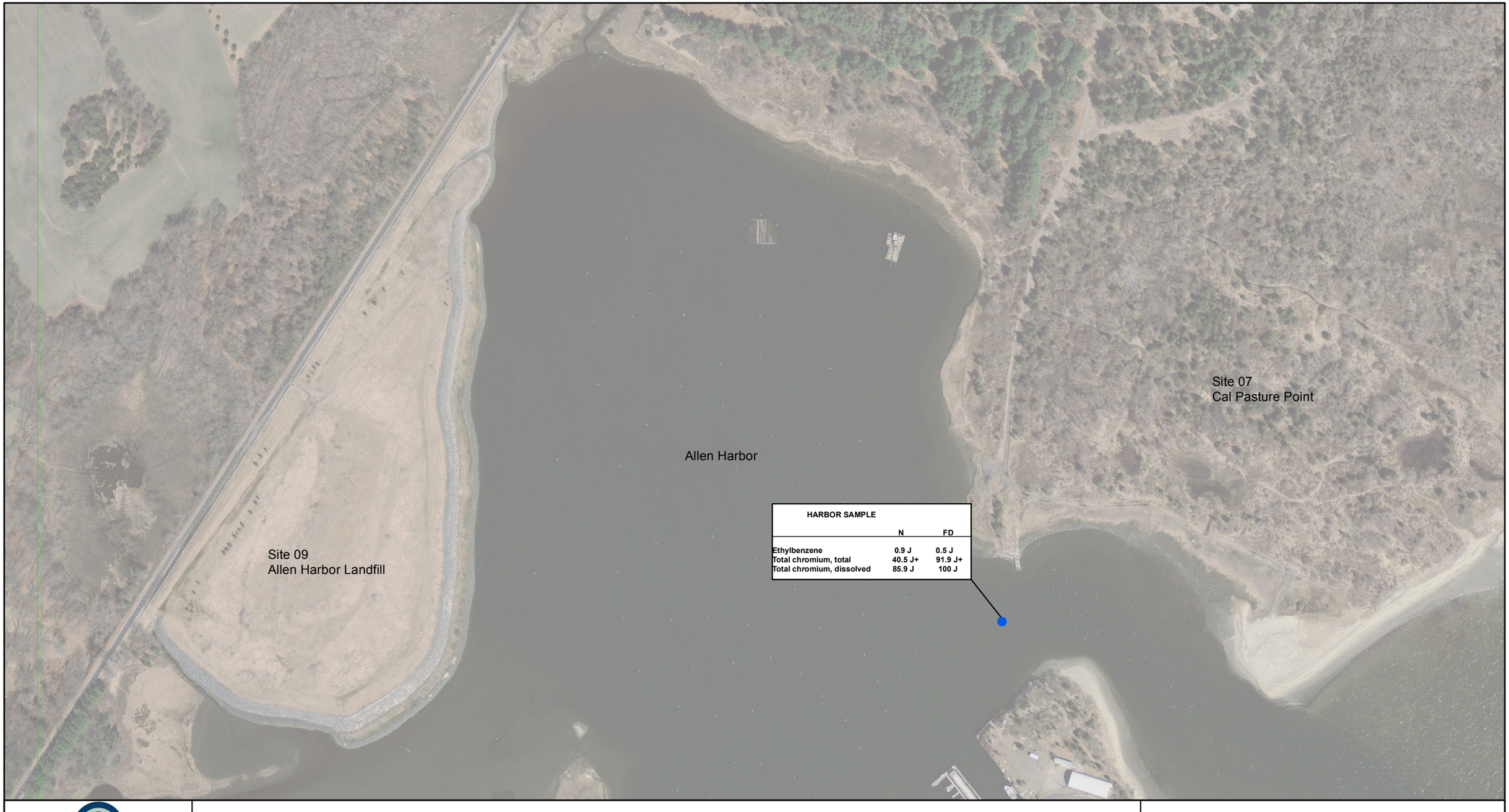

RESOLUTION CONSULTANTS

Drawn:	JB	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

Legend

- ME45 Harbor Sample

Note
Results are in units of ug/L.

N

0 100 200

Scale in Feet

FIGURE 32
DETECTED VALUES IN HARBOR SAMPLE

MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Tag maps\Harbor sample\Figure 32 harbor sample detections.mxd

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RESOLUTION CONSULTANTS

Drawn:	JB	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

N

0 100 200 Feet

FIGURE 33
SPATIAL EVALUATION OF LONG-TERM TRENDS - TCE AND VC SHALLOW ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Trend maps\MXD\Fig_33_Trends_TCE_VC_Shallow_Zone.mxd

RESOLUTION CONSULTANTS

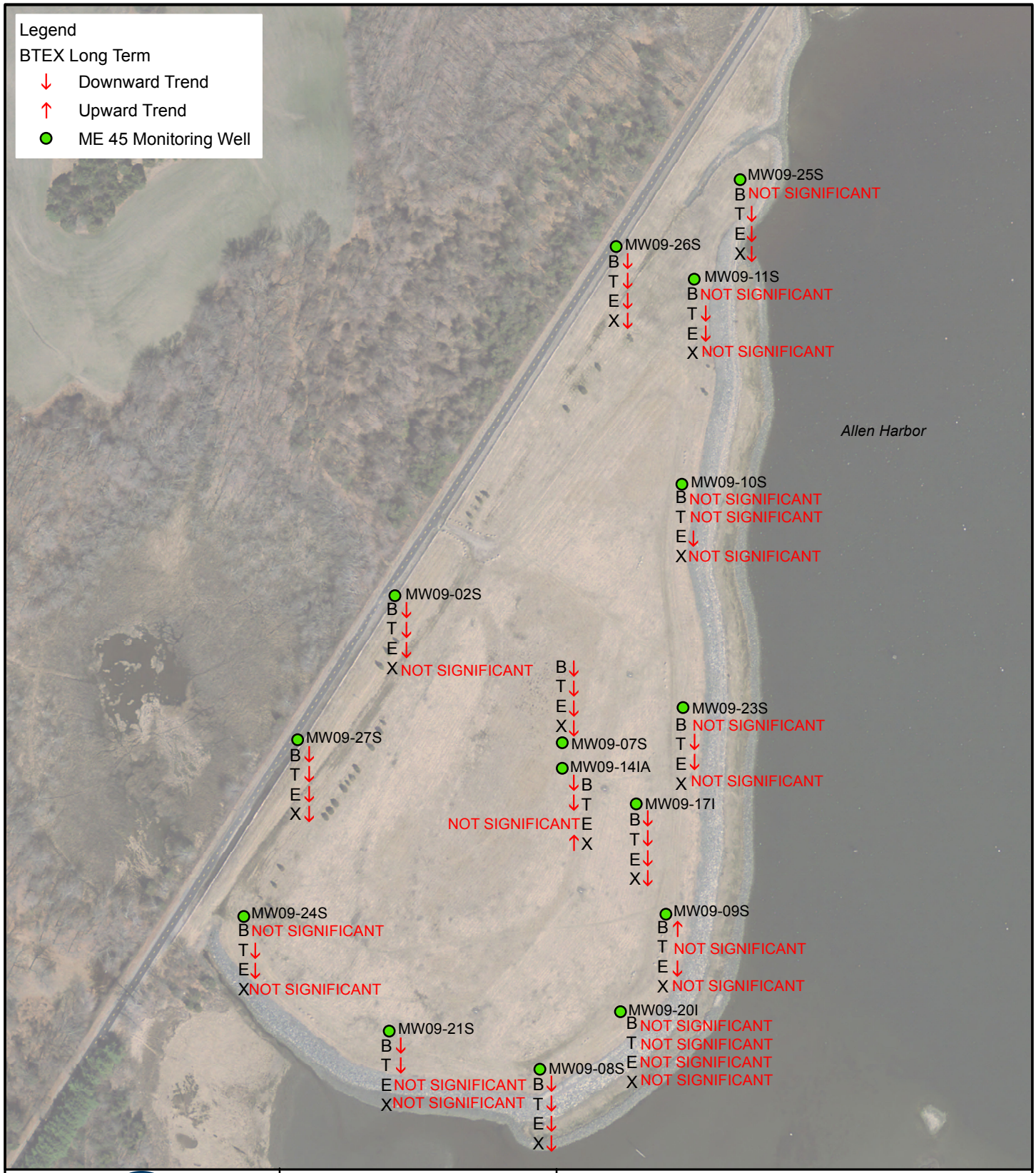
Drawn:	JB	04/18/2017
Approved:	BS	04/18/2017
Project #:	60273164	

N

0 100 200 Feet

FIGURE 34
SPATIAL EVALUATION OF LONG-TERM TRENDS - TCE AND VC
DEEP ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Trend maps\MXD\Fig_34_Trends_TCE_VC_Deep_Zone.mxd



RESOLUTION CONSULTANTS

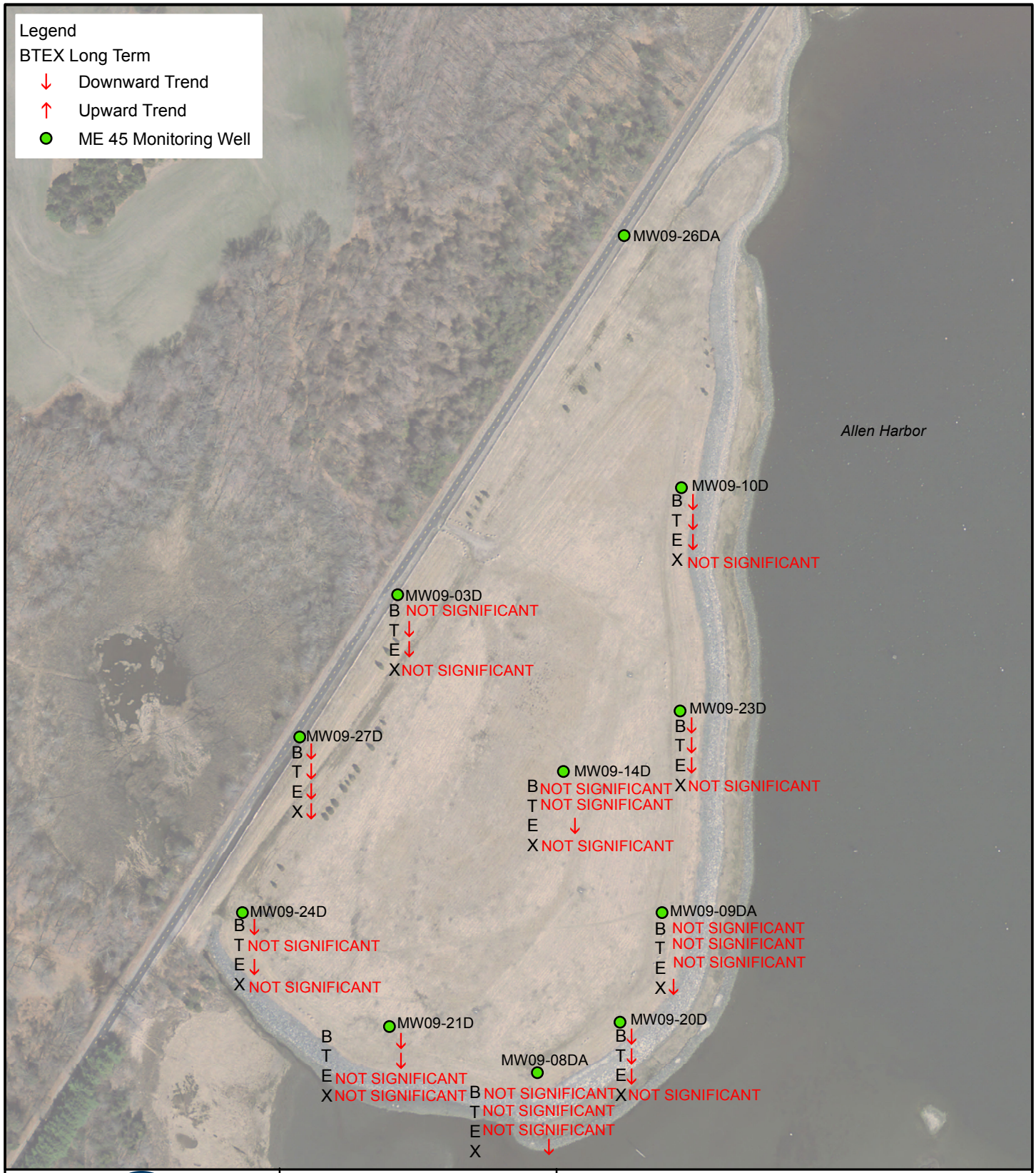
Drawn:	JB	04/18/2017
Approved:	BS	04/18/2017
Project #:	60273164	

N

0 100 200 Feet

FIGURE 35
SPATIAL EVALUATION OF LONG-TERM TRENDS - BTEX
SHALLOW ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Trend maps\MXD\Fig_35_Trends_BTEX_Shallow_Zone.mxd



RESOLUTION CONSULTANTS

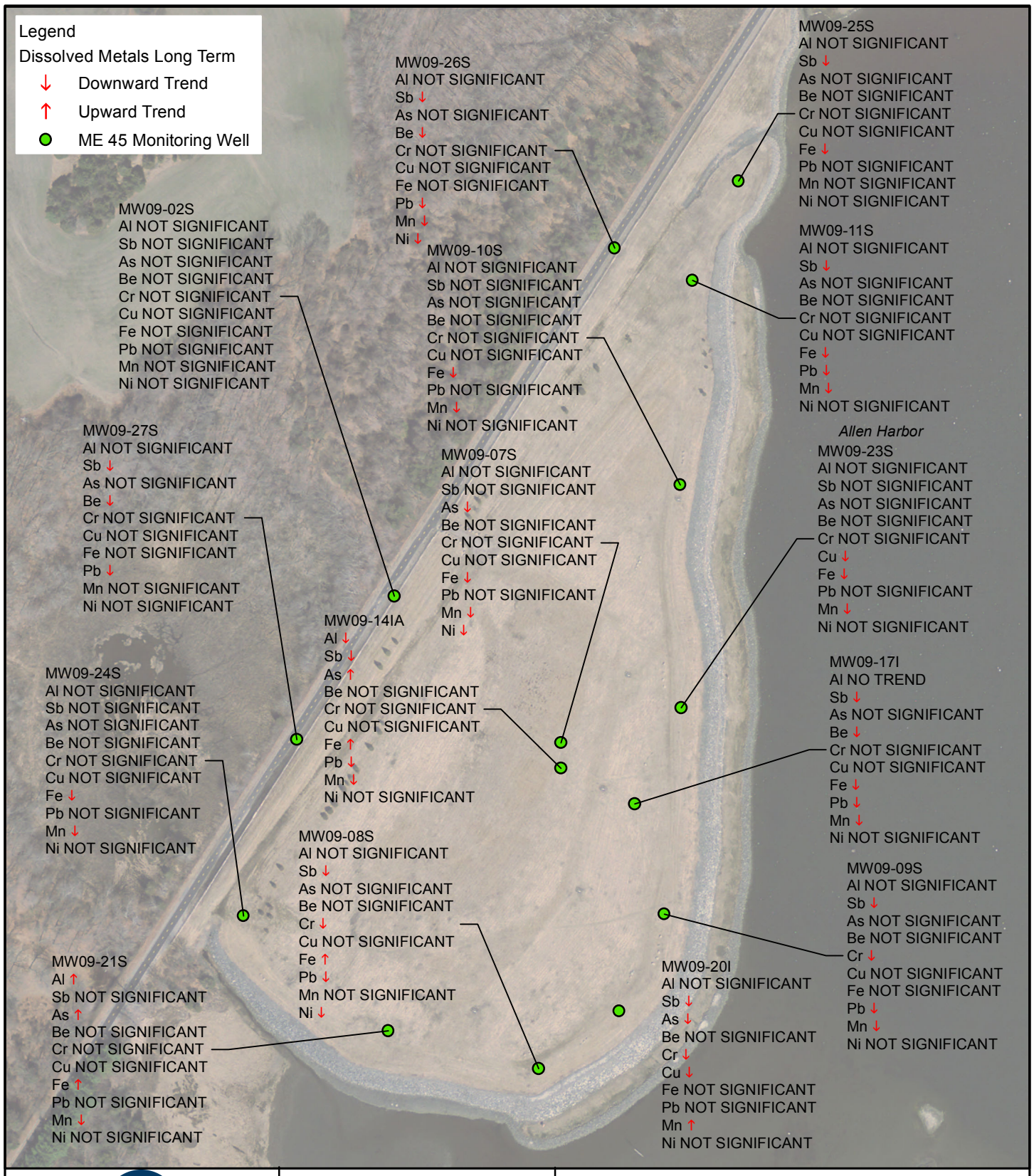
Drawn:	JB	04/18/2017
Approved:	BS	04/18/2017
Project #:	60273164	

N

0 100 200 Feet

FIGURE 36
SPATIAL EVALUATION OF LONG-TERM TRENDS - BTEX
DEEP ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Trend maps\MXD\Fig_36_Trends_BTEX_Deep_Zone.mxd



RESOLUTION CONSULTANTS

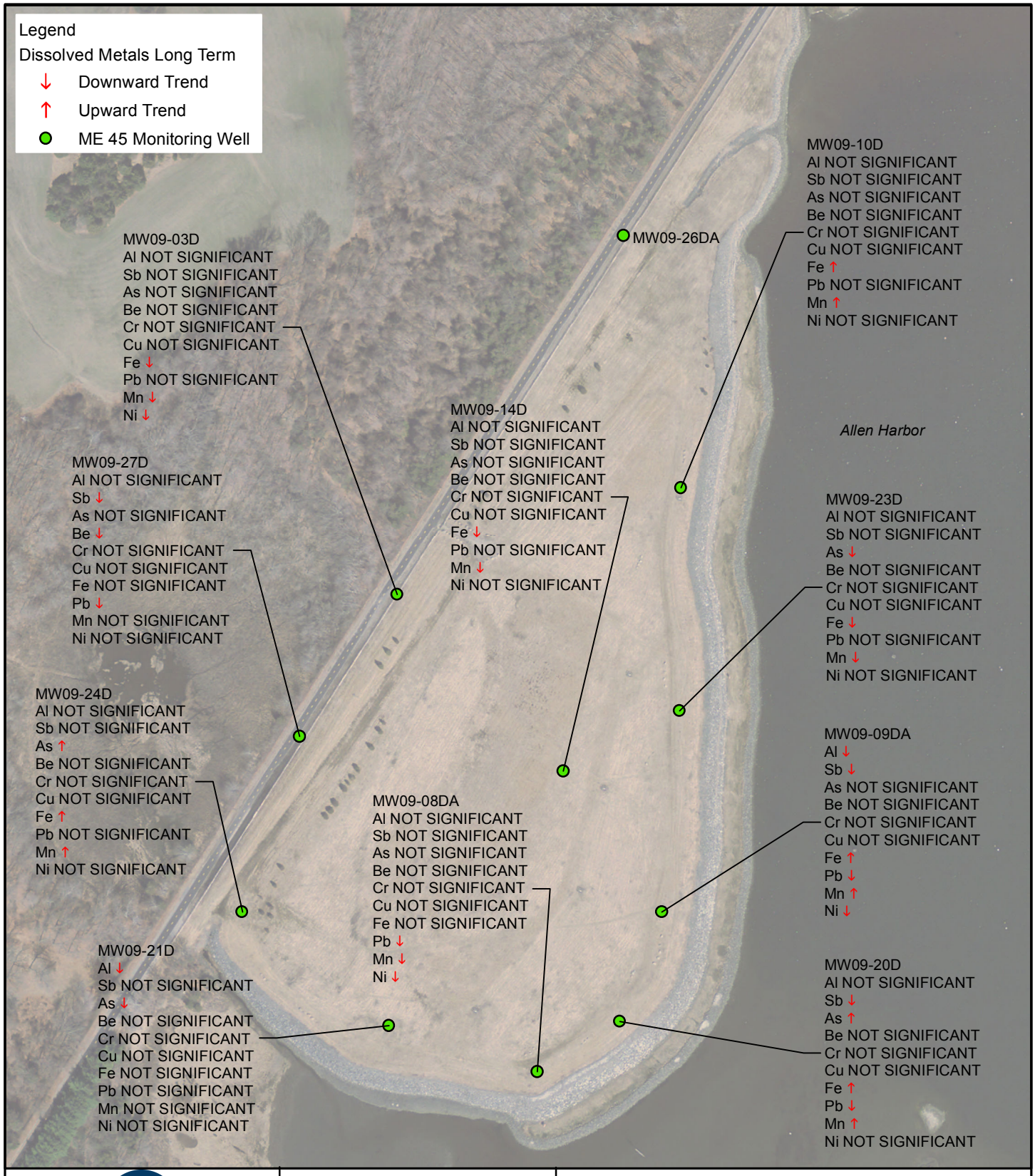
Drawn:	JB	04/21/2017
Approved:	BS	04/21/2017
Project #:	60273164	

N

0 100 200 Feet

FIGURE 37
SPATIAL EVALUATION OF LONG-TERM TRENDS - DISSOLVED METALS SHALLOW ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: G:\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Trend maps\MXD\Fig_37_Trends_Dissolved_Metals_Shallow_Zone.mxd



RESOLUTION CONSULTANTS

Drawn:	JB	04/21/2017
Approved:	BS	04/21/2017
Project #:	60273164	

N

0 100 200 Feet

FIGURE 38
SPATIAL EVALUATION OF LONG-TERM TRENDS - DISSOLVED METALS DEEP ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: G:\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Trend maps\MXD\Fig_38_Trends_Dissolved_Metals_Deep_Zone.mxd

Legend
Other VOCs Long Term
↓ Downward Trend
↑ Upward Trend
ME 45 Monitoring Well

MW09-25S
CS2 ↓
CB NOT SIGNIFICANT
CF ↓
CIS-1,2-DCE↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene ↓
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC NOT SIGNIFICANT

MW09-11S
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene ↓
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC ↓

MW09-26S
CS2 ↓
CB ↓nd
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene ↓
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC NOT SIGNIFICANT

MW09-10S
CS2 ↓
CB NOT SIGNIFICANT
CF ↓
CIS-1,2-DCE NO TREND
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE NOT SIGNIFICANT
1,1,2-TCA ↓
TCE ↓
VC ↓

MW09-02S
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene ↓
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC ↓

MW09-07S
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE NOT SIGNIFICANT
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE NOT SIGNIFICANT
1,1,2-TCA ↓
TCE ↓
VC ↓

MW09-23S
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC ↓

Allen Harbor

MW09-27S
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene ↓
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC NOT SIGNIFICANT

MW09-17I
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene ↓
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC NOT SIGNIFICANT

MW09-14IA
CS2 NOT SIGNIFICANT
CB NOT SIGNIFICANT
CF NOT SIGNIFICANT
CIS-1,2-DCE ↓
1,2-DCA NOT SIGNIFICANT
1,1-DCE NOT SIGNIFICANT
MC ↓
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA NOT SIGNIFICANT
PCE NOT SIGNIFICANT
T-1,2-DCE ↑
1,1,2-TCA NOT SIGNIFICANT
TCE NOT SIGNIFICANT
VC ↓

MW09-24S
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE NOT SIGNIFICANT
1,1,2-TCA ↓
TCE ↓
VC ↓

MW09-09S
CS2 ↓
CB NOT SIGNIFICANT
CF ↓
CIS-1,2-DCE ↑
1,2-DCA NOT SIGNIFICANT
1,1-DCE ↑
MC ↑
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↑
1,1,2-TCA NOT SIGNIFICANT
TCE NOT SIGNIFICANT
VC ↑

MW09-21S
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene ↓
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC ↓

MW09-08S
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene ↓d Trend
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE NOT SIGNIFICANT
1,1,2-TCA ↓
TCE ↓
VC Downward Trend

MW09-20I
CS2 NOT SIGNIFICANT
CB NOT SIGNIFICANT
CF NOT SIGNIFICANT
CIS-1,2-DCE NOT SIGNIFICANT
1,2-DCA ↓
1,1-DCE NOT SIGNIFICANT
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA ↓
PCE NOT SIGNIFICANT
T-1,2-DCE NOT SIGNIFICANT
1,1,2-TCA NOT SIGNIFICANT
TCE ↓
VC ↑

RESOLUTION CONSULTANTS

Drawn:	JB	04/21/2017
Approved:	BS	04/21/2017
Project #:	60273164	

N
0 100 200
Feet

FIGURE 39
SPATIAL EVALUATION OF LONG-TERM TRENDS - OTHER VOCs
SHALLOW ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: G:\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Trend maps\MXD\Fig_39_Trends_Other_VOCs_Shallow_Zone.mxd

Legend

Other VOCs Long Term

↓ Downward Trend

↑ Upward Trend

● ME 45 Monitoring Well

MW09-03D
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene ↓
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC ↓

MW09-14D
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC ↓

MW09-26DA

MW09-10D
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE NOT SIGNIFICANT
1,1,2-TCA ↓
TCE ↓
VC ↓

MW09-23D
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE NOT SIGNIFICANT
1,1,2-TCA ↓
TCE ↓
VC ↓

Allen Harbor

MW09-27D
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE NOT SIGNIFICANT
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene ↓
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC ↓

MW09-09DA
CS2 NOT SIGNIFICANT
CB NOT SIGNIFICANT
CF NOT SIGNIFICANT
CIS-1,2-DCE ↓
1,2-DCA NOT SIGNIFICANT
1,1-DCE NOT SIGNIFICANT
MC ↓
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA NOT SIGNIFICANT
PCE NOT SIGNIFICANT
T-1,2-DCE NOT SIGNIFICANT
1,1,2-TCA NOT SIGNIFICANT
TCE ↓
VC NOT SIGNIFICANT

MW09-20D
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene ↓
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE ↓
1,1,2-TCA ↓
TCE ↓
VC NOT SIGNIFICANT

MW09-24D
CS2 ↓
CB ↓
CF ↓
CIS-1,2-DCE ↓
1,2-DCA ↓
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA ↓
PCE ↓
T-1,2-DCE NOT SIGNIFICANT
1,1,2-TCA ↓
TCE ↓
VC ↓

MW09-21D
CS2 NOT SIGNIFICANT
CB NOT SIGNIFICANT
CF NOT SIGNIFICANT
CIS-1,2-DCE ↓
1,2-DCA NOT SIGNIFICANT
1,1-DCE ↓
MC NOT SIGNIFICANT
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA ↓
PCE NOT SIGNIFICANT
T-1,2-DCE ↑
1,1,2-TCA NOT SIGNIFICANT
TCE ↓
VC ↑

MW09-08DA
CS2 NOT SIGNIFICANT
CB NOT SIGNIFICANT
CF NOT SIGNIFICANT
CIS-1,2-DCE NOT SIGNIFICANT
1,2-DCA NOT SIGNIFICANT
1,1-DCE NOT SIGNIFICANT
MC ↓
4-M-2-P ↓
Styrene NOT SIGNIFICANT
1,1,2,2-TCA NOT SIGNIFICANT
PCE NOT SIGNIFICANT
T-1,2-DCE NOT SIGNIFICANT
1,1,2-TCA NOT SIGNIFICANT
TCE NOT SIGNIFICANT
VC NOT SIGNIFICANT

RESOLUTION CONSULTANTS

Drawn:	JB	04/21/2017
Approved:	BS	04/21/2017
Project #:	60273164	

N

0 100 200 Feet

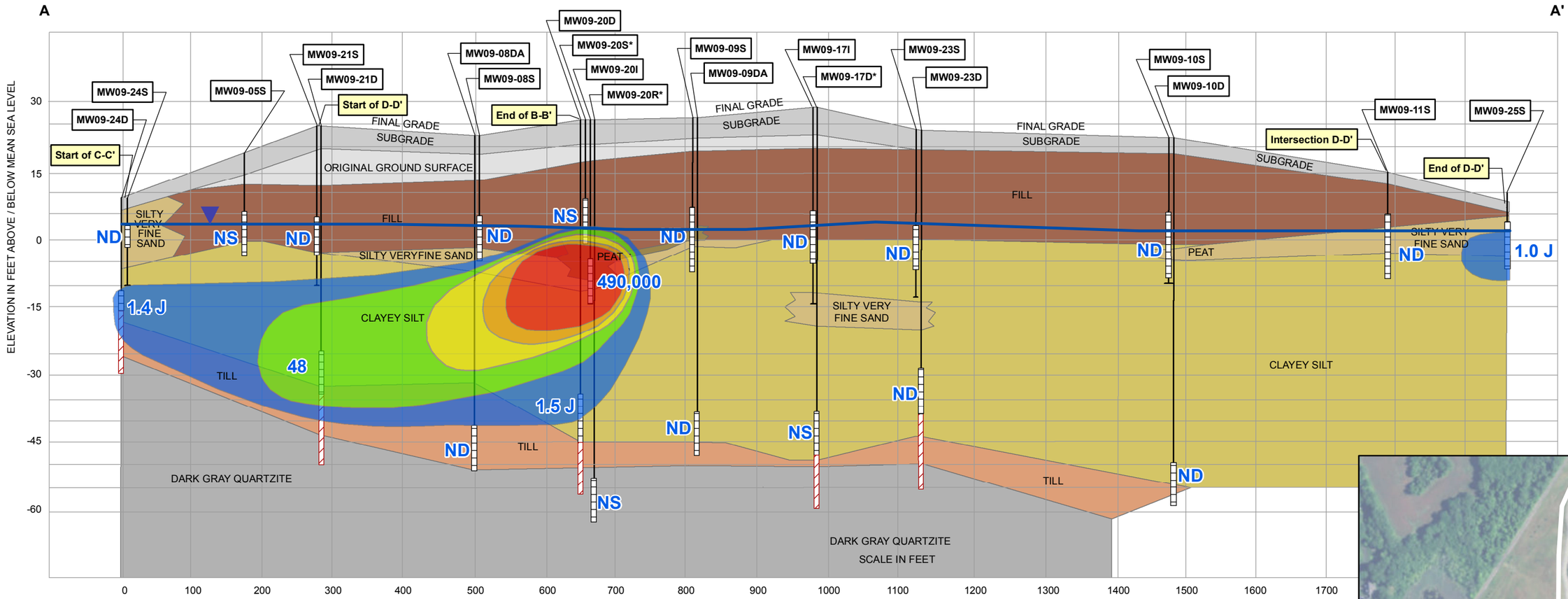
FIGURE 40
SPATIAL EVALUATION OF LONG-TERM TRENDS - OTHER VOCs
DEEP ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: G:\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Trend maps\MXD\Fig_40_Trends_Other_VOCs_Deep_Zone.mxd

Key

- Ground Surface
- Monitoring Well
- Monitoring Well Screen

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Average of duplicate and parent sample used for contouring



RESOLUTION CONSULTANTS

Drawn:	RM	02/15/2017
Approved:	BS	02/15/2017
Project #:	60273164	

Legend

- Bentonite Sealed Borehole
- Screened Interval of MW
- Monitoring Well
- Grid
- CLAYEY SILT
- DARK GRAY QUARTZITE
- FILL
- FINAL GRADE
- PEAT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled
ND Not Detected

Average of duplicate and parent sample used for contouring

Water Table

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section A-A'; 8/18/03

FIGURE 41
ISOCONCENTRATION RANGES FOR TCE
CROSS SECTION A-A', ME-45

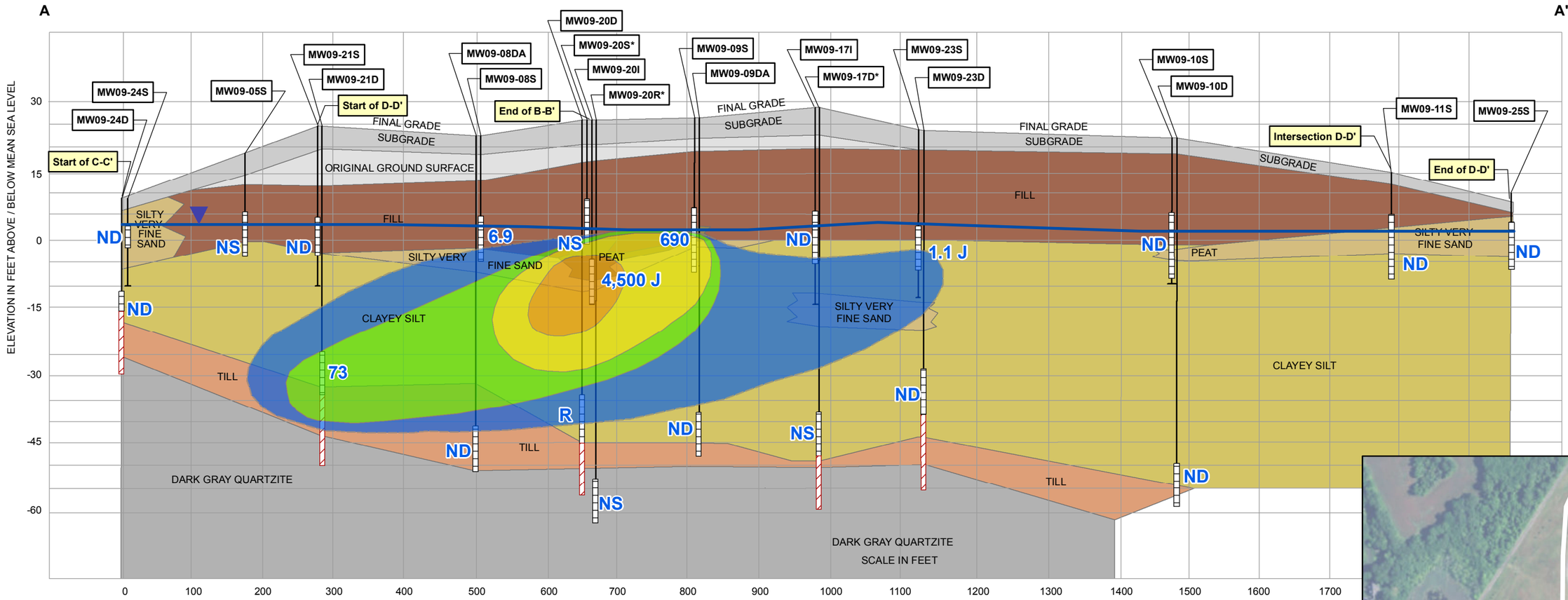
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\A-A'\FIG_8_A-A'_TCE.MXD 02/15/17 DC

Key

- Ground Surface
- Monitoring Well
- Monitoring Well Screen

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Average of duplicate and parent sample used for contouring



RESOLUTION CONSULTANTS

Drawn:	RM	02/15/2017
Approved:	BS	02/15/2017
Project #:	60273164	

Legend

- Bentonite Sealed Borehole
- Screened Interval of MW
- Monitoring Well
- Grid
- CLAYEY SILT
- DARK GRAY QUARTZITE
- FILL
- FINAL GRADE
- PEAT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled
ND Not Detected
R Rejected Data

Water Table

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section A-A'; 8/18/03

FIGURE 42
ISOCONCENTRATION RANGES FOR VC
CROSS SECTION A-A', ME-45

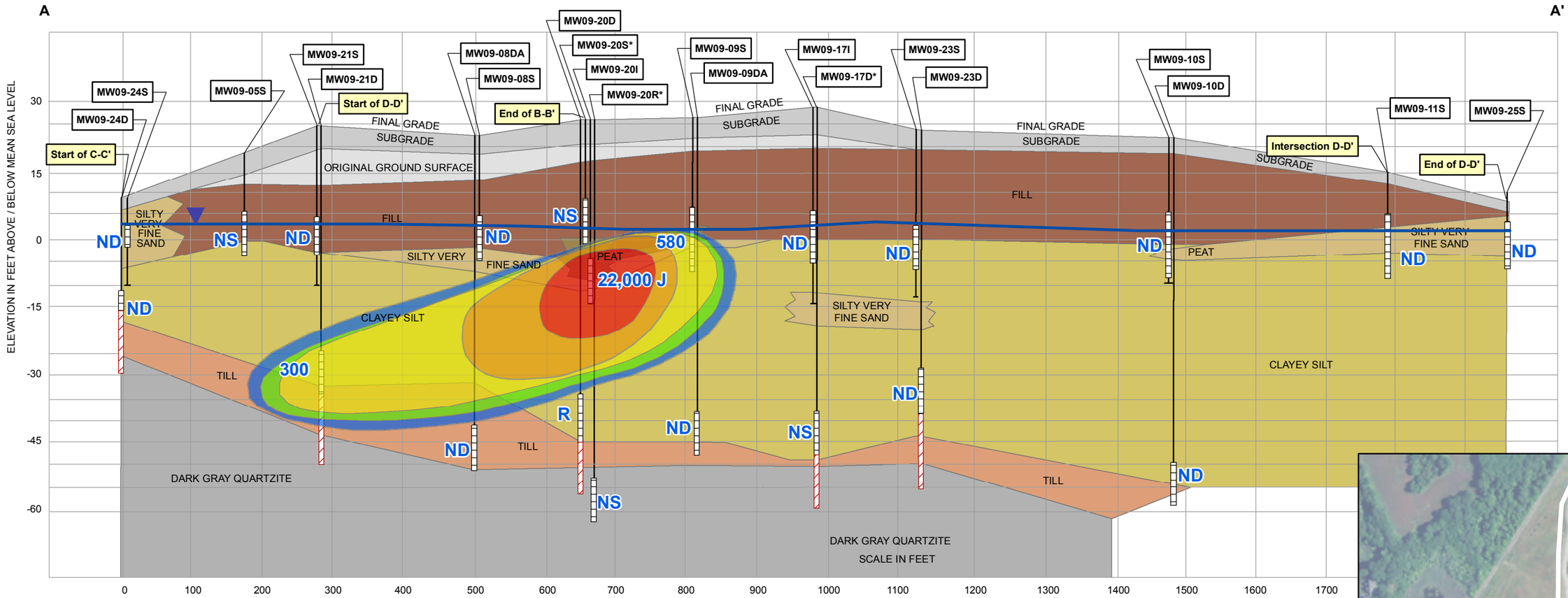
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\A-A'\FIG_9_A-A'_VC.MXD 02/15/17 DC

Key

- Ground Surface
- Monitoring Well
- Monitoring Well Screen

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Average of duplicate and parent sample used for contouring



RESOLUTION CONSULTANTS

Drawn:	RM	02/15/2017
Approved:	BS	02/15/2017
Project #:	60273164	

Legend

- Bentonite Sealed Borehole
- Screened Interval of MW
- Monitoring Well
- Grid
- CLAYEY SILT
- DARK GRAY QUARTZITE
- FILL
- FINAL GRADE
- PEAT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled
ND Not Detected
R Rejected Data

Water Table

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section A-A'; 8/18/03

FIGURE 43
ISOCONCENTRATION RANGES
FOR CIS-12-DCE
CROSS SECTION A-A', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\A-A'\FIG_10_A-A'_CIS1.MXD 02/15/17 DC

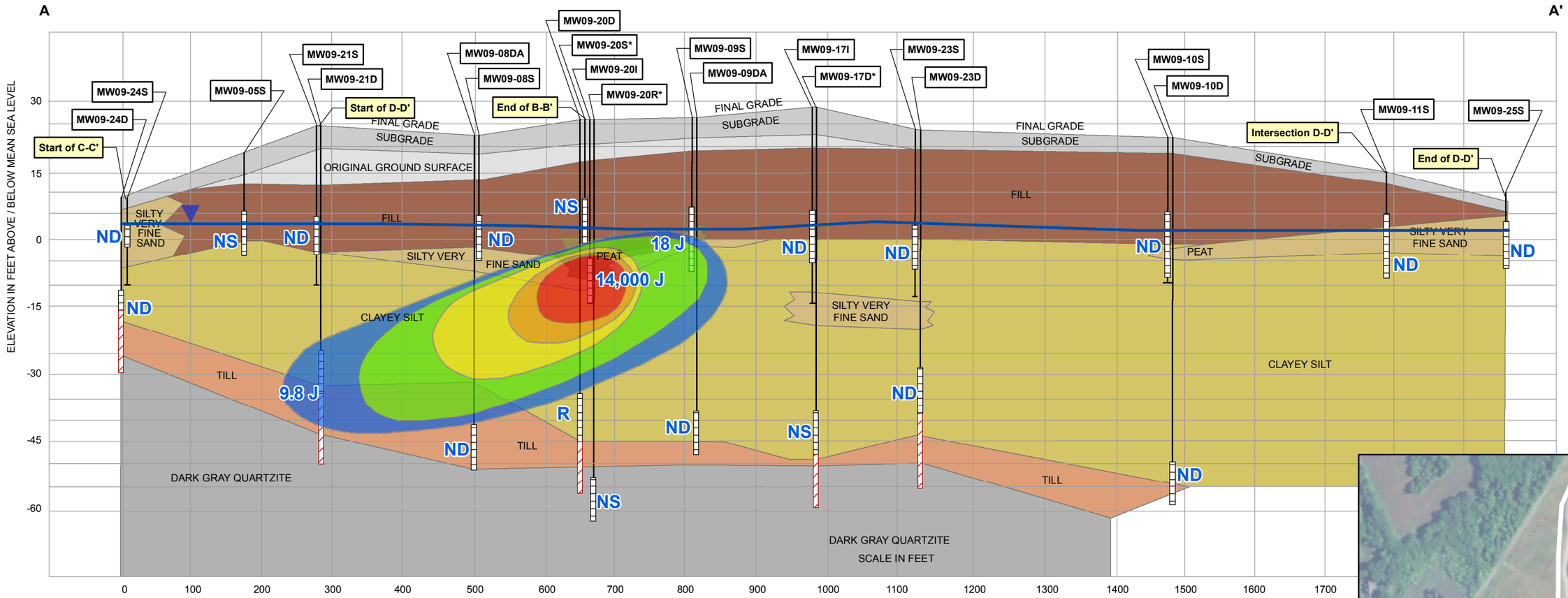
Key

Ground Surface

Monitoring Well

Monitoring Well Screen

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probable conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Average of duplicate and parent sample used for contouring



RESOLUTION CONSULTANTS

Drawn:	RM	02/15/2017
Approved:	BS	02/15/2017
Project #:	60273164	

Legend

- Bentonite Sealed Borehole
- Screened Interval of MW
- Monitoring Well
- Grid
- CLAYEY SILT
- DARK GRAY QUARTZITE
- FILL
- FINAL GRADE
- PEAT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled
ND Not Detected
R Rejected Data

Water Table

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section A-A'; 8/18/03

FIGURE 44
ISOCONCENTRATION RANGES
FOR TRANS-12-DCE
CROSS SECTION A-A', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\A-A'\FIG_11_A-A'_TRANS.MXD 02/15/17 DC

B

B'

ELEVATION IN FEET ABOVE / BELOW MEAN SEA LEVEL

30
15
0
-15
-30
-45
-60

0 100 200 300 400 500 600 700 800 900 1000 1100

MW09-02S
MW09-03D
MW09-18I*
MW09-07I*
MW09-07D*
MW09-07S
MW09-07R*
MW09-14IA
MW09-14D
Intersection D-D'
MW09-19I*
MW09-20S*
MW09-20D
MW09-20I
MW09-20R*
Intersection A-A'
Intersection C-C'
REVETMENT WALL
SB09-02/P09-08
DREDGED MATERIAL
SB09-12
BREAKWATER STRUCTURE
MSL

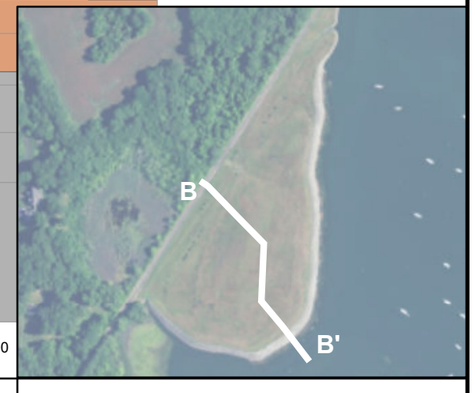
FINAL GRADE
SUBGRADE
FILL
PEAT
SILTY VERY FINE SAND
SILTY VERY FINE SAND
SILT
CLAYEY SILT
FINE SAND
TILL
TILL
VERY FINE SAND
TILL
DARK GRAY QUARTZITE

ND
ND
NS
NS
ND
NS
NS
NS
NS
NS
NS
NS
5.8
1.7 J
1.5 J
490,000 J

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Elevation and subsurface of Allen Harbor beyond breakwater structure estimated based on as-built drawings, available bathymetry data and observations of the site (February 15, 2012).
6) Average of duplicate and parent sample used for contouring

Key
- Ground Surface
- Monitoring Well
- Monitoring Well Screen

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section B-B'; 8/18/03



RESOLUTION CONSULTANTS

Drawn:	RM	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

Legend

- Bentonite Sealed Borehole
- Screened Interval of MW
- BREAKWATER STRUCTURE
- REVETMENT WALL
- CLAYEY SILT
- DARK GRAY QUARTZITE
- DREDGED MATERIAL
- FILL
- FINAL GRADE
- FINE SAND
- ORIGINAL GRADE
- PEAT
- SILT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL
- VERY FINE SAND
- WATER
- Monitoring Well
- Grid

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled

ND Not Detected

Water Table

FIGURE 45
ISOCONCENTRATION RANGES FOR TCE
CROSS SECTION B-B', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\B-B'\FIG_12_B-B'_TCE.MXD 04/17/17 JEE

B

B'

ELEVATION IN FEET ABOVE / BELOW MEAN SEA LEVEL

30
15
0
-15
-30
-45
-60

0 100 200 300 400 500 600 700 800 900 1000 1100

MW09-02S
MW09-03D
MW09-18I*
MW09-07I*
MW09-07D*
MW09-07S
MW09-07R*
MW09-14IA
MW09-14D
Intersection D-D'
MW09-19I*
MW09-20S*
MW09-20D
MW09-20I
MW09-20R*
Intersection A-A'
Intersection C-C'
REVETMENT WALL
SB09-02/P09-08
DREDGED MATERIAL
SB09-12
BREAKWATER STRUCTURE
MSL

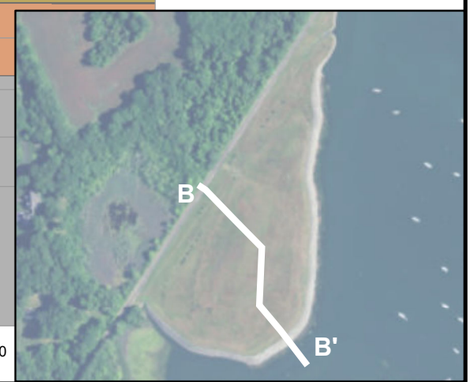
FINAL GRADE
SUBGRADE
FILL
PEAT
SILTY VERY FINE SAND
SILT
SILTY VERY FINE SAND
FINE SAND
CLAYEY SILT
TILL
VERY FINE SAND
TILL
DARK GRAY QUARTZITE
TILL

ND
ND
NS
NS
NS
NS
NS
NS
NS
NS
R
R
3.1
21
4,500 J

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Elevation and subsurface of Allen Harbor beyond breakwater structure estimated based on as-built drawings, available bathymetry data and observations of the site (February 15, 2012).
6) Average of duplicate and parent sample used for contouring

Key
- Ground Surface
- Monitoring Well
- Monitoring Well Screen

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section B-B'; 8/18/03



Legend

- Bentonite Sealed Borehole
- Screened Interval of MW
- BREAKWATER STRUCTURE
- REVETMENT WALL
- CLAYEY SILT
- DARK GRAY QUARTZITE
- DREDGED MATERIAL
- FILL
- FINAL GRADE
- FINE SAND
- ORIGINAL GRADE
- PEAT
- SILT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL
- VERY FINE SAND
- WATER
- Monitoring Well
- Grid

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled
ND Not Detected
R Rejected Data

Water Table

RESOLUTION CONSULTANTS

Drawn:	RM	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

FIGURE 46
ISOCONCENTRATION RANGES FOR VC
CROSS SECTION B-B', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\B-B'\FIG_13_B-B'_VC.MXD 04/17/17 JEE

B

B'

ELEVATION IN FEET ABOVE / BELOW MEAN SEA LEVEL

30
15
0
-15
-30
-45
-60

0 100 200 300 400 500 600 700 800 900 1000 1100

MW09-02S
MW09-03D
Intersection C-C'
MW09-18I*
MW09-07I*
MW09-07D*
MW09-07S
MW09-07R*
MW09-14IA
MW09-14D
Intersection D-D'
MW09-19I*
MW09-20S*
MW09-20D
Intersection A-A'
MW09-20I
MW09-20R*
REVETMENT WALL
SB09-02/P09-08
DREDGED MATERIAL
SB09-12
BREAKWATER STRUCTURE
MSL

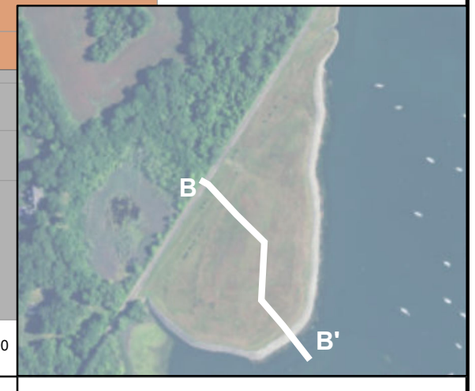
FINAL GRADE
SUBGRADE
FILL
PEAT
SILTY VERY FINE SAND
SILTY VERY FINE SAND
CLAYEY SILT
SILT
FINE SAND
TILL
TILL
TILL
VERY FINE SAND
DARK GRAY QUARTZITE

9.6
1.2 J
NS
NS
ND
NS
NS
22,000 J
78
NS
R
R
NS
NS
NS
NS

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Elevation and subsurface of Allen Harbor beyond breakwater structure estimated based on as-built drawings, available bathymetry data and observations of the site (February 15, 2012).
6) Average of duplicate and parent sample used for contouring

Key
- Ground Surface
- Monitoring Well
- Monitoring Well Screen

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section B-B'; 8/18/03



RESOLUTION CONSULTANTS

Drawn:	RM	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

Legend

- Bentonite Sealed Borehole
- Screened Interval of MW
- BREAKWATER STRUCTURE
- REVETMENT WALL
- CLAYEY SILT
- DARK GRAY QUARTZITE
- DREDGED MATERIAL
- FILL
- FINAL GRADE
- FINE SAND
- ORIGINAL GRADE
- PEAT
- SILT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL
- VERY FINE SAND
- WATER
- Monitoring Well
- Grid

Isoconcentrations in GW (ug/L)
- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled
ND Not Detected
R Rejected Data

Water Table

FIGURE 47
ISOCONCENTRATION RANGES
FOR CIS-1,2-DCE
CROSS SECTION B-B', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\B-B'\FIG_14_B-B'_CIS.MXD 04/17/17 JEE

B

B'

ELEVATION IN FEET ABOVE / BELOW MEAN SEA LEVEL

30
15
0
-15
-30
-45
-60

0 100 200 300 400 500 600 700 800 900 1000 1100

MW09-02S
MW09-03D
Intersection C-C'
MW09-18I*
MW09-07I*
MW09-07D*
MW09-07S
MW09-07R*
MW09-14IA
MW09-14D
Intersection D-D'
MW09-19I*
MW09-20S*
MW09-20D
Intersection A-A'
MW09-20I
MW09-20R*
REVETMENT WALL
SB09-02/P09-08
DREDGED MATERIAL
SB09-12
BREAKWATER STRUCTURE
MSL

FINAL GRADE
SUBGRADE
FILL
PEAT
SILTY VERY FINE SAND
SILTY VERY FINE SAND
SILT
CLAYEY SILT
FINE SAND
TILL
TILL
VERY FINE SAND
TILL
DARK GRAY QUARTZITE

ND
ND
NS
ND
NS
NS
14,000 J
ND
NS
R
NS
R
NS
NS
NS

Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Elevation and subsurface of Allen Harbor beyond breakwater structure estimated based on as-built drawings, available bathymetry data and observations of the site (February 15, 2012).
6) Average of duplicate and parent sample used for contouring

Key
Ground Surface
Monitoring Well
Monitoring Well Screen

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section B-B'; 8/18/03

RESOLUTION CONSULTANTS

Drawn:	RM	02/15/2017
Approved:	BS	02/15/2017
Project #:	60273164	

Legend

- Bentonite Sealed Borehole
- Screened Interval of MW
- BREAKWATER STRUCTURE
- REVETMENT WALL
- CLAYEY SILT
- DARK GRAY QUARTZITE
- DREDGED MATERIAL
- FILL
- FINAL GRADE
- FINE SAND
- ORIGINAL GRADE
- PEAT
- SILT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL
- VERY FINE SAND
- WATER
- Monitoring Well
- Grid

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled
ND Not Detected
R Rejected Data

Water Table

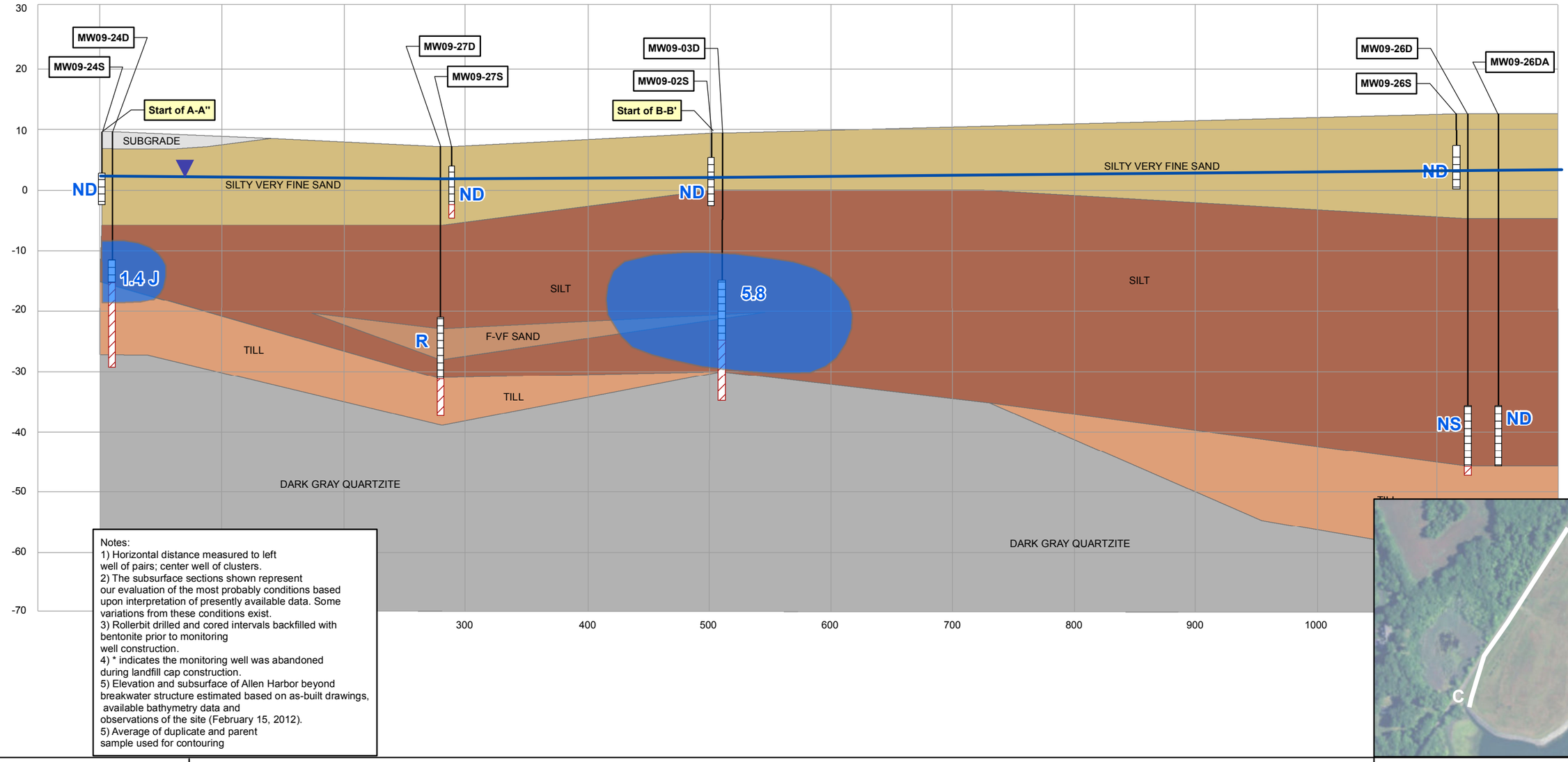
FIGURE 48
ISOCONCENTRATION RANGES
FOR TRANS-1,2-DCE
CROSS SECTION B-B', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\B-B'\FIG_15_B-B'_TRANS.MXD 02/15/17 JEE

C

C'



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Elevation and subsurface of Allen Harbor beyond breakwater structure estimated based on as-built drawings, available bathymetry data and observations of the site (February 15, 2012).
5) Average of duplicate and parent sample used for contouring

RESOLUTION CONSULTANTS

Drawn:	RM	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

Legend

- Screened Interval of MW
- Bentonite Sealed Borehole
- Monitoring Well
- Grid
- DARK GRAY QUARTZITE
- FINE-VERY FINE SAND
- SILT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

- NS Not Sampled
- ND Not Detected
- R Rejected Data

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section C-C'; 8/18/03

Water Table

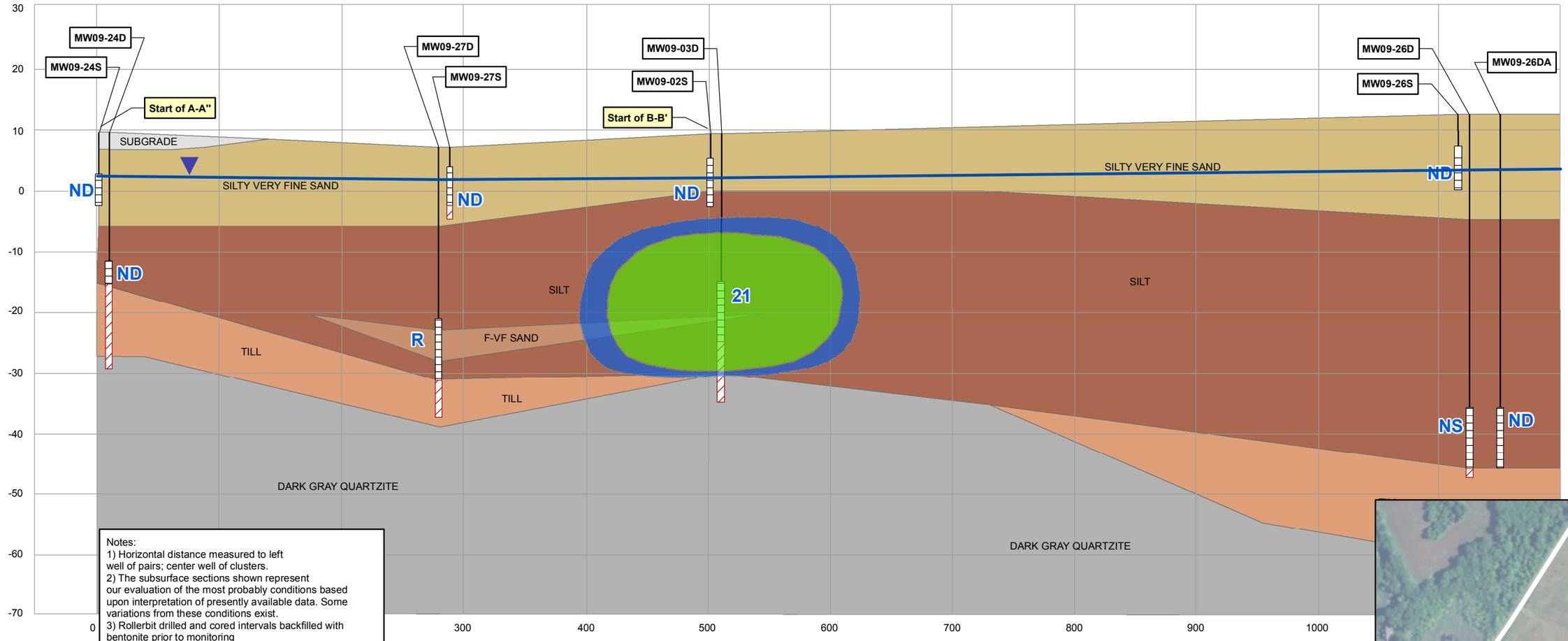
FIGURE 49
ISOCONCENTRATION RANGES FOR TCE
CROSS SECTION C-C', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\C-C'\FIG_16_C-C'_TCE.MXD 04/17/17 DC

C

C'



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Elevation and subsurface of Allen Harbor beyond breakwater structure estimated based on as-built drawings, available bathymetry data and observations of the site (February 15, 2012).
5) Average of duplicate and parent sample used for contouring

RESOLUTION CONSULTANTS

Drawn:	RM	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

Legend

- Screened Interval of MW
- Bentonite Sealed Borehole
- Monitoring Well
- Grid
- DARK GRAY QUARTZITE
- FINE-VERY FINE SAND
- SILT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

- NS Not Sampled
- ND Not Detected
- R Rejected Data

Water Table

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section C-C'; 8/18/03

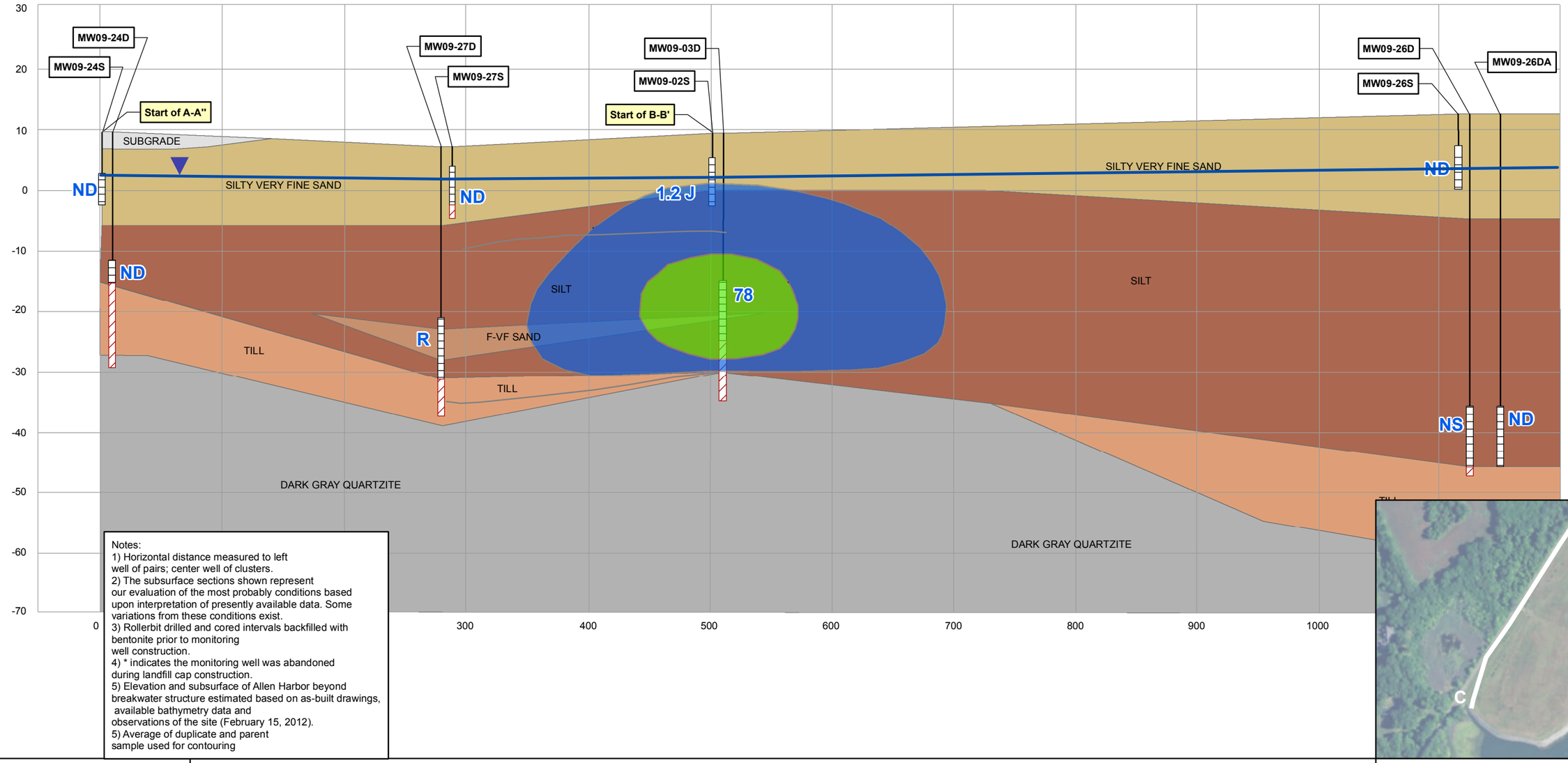
FIGURE 50
ISOCONCENTRATION RANGES FOR VC
CROSS SECTION C-C', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\C-C'\FIG_17_C-C'_VC.MXD 04/17/17 DC

C

C'



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Elevation and subsurface of Allen Harbor beyond breakwater structure estimated based on as-built drawings, available bathymetry data and observations of the site (February 15, 2012).
5) Average of duplicate and parent sample used for contouring

RESOLUTION CONSULTANTS

Drawn:	RM	02/15/2017
Approved:	BS	02/15/2017
Project #:	60273164	

Legend

- Screened Interval of MW
- Bentonite Sealed Borehole
- Monitoring Well
- Grid
- DARK GRAY QUARTZITE
- FINE-VERY FINE SAND
- SILT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled
ND Not Detected
R Rejected Data

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section C-C'; 8/18/03

Water Table

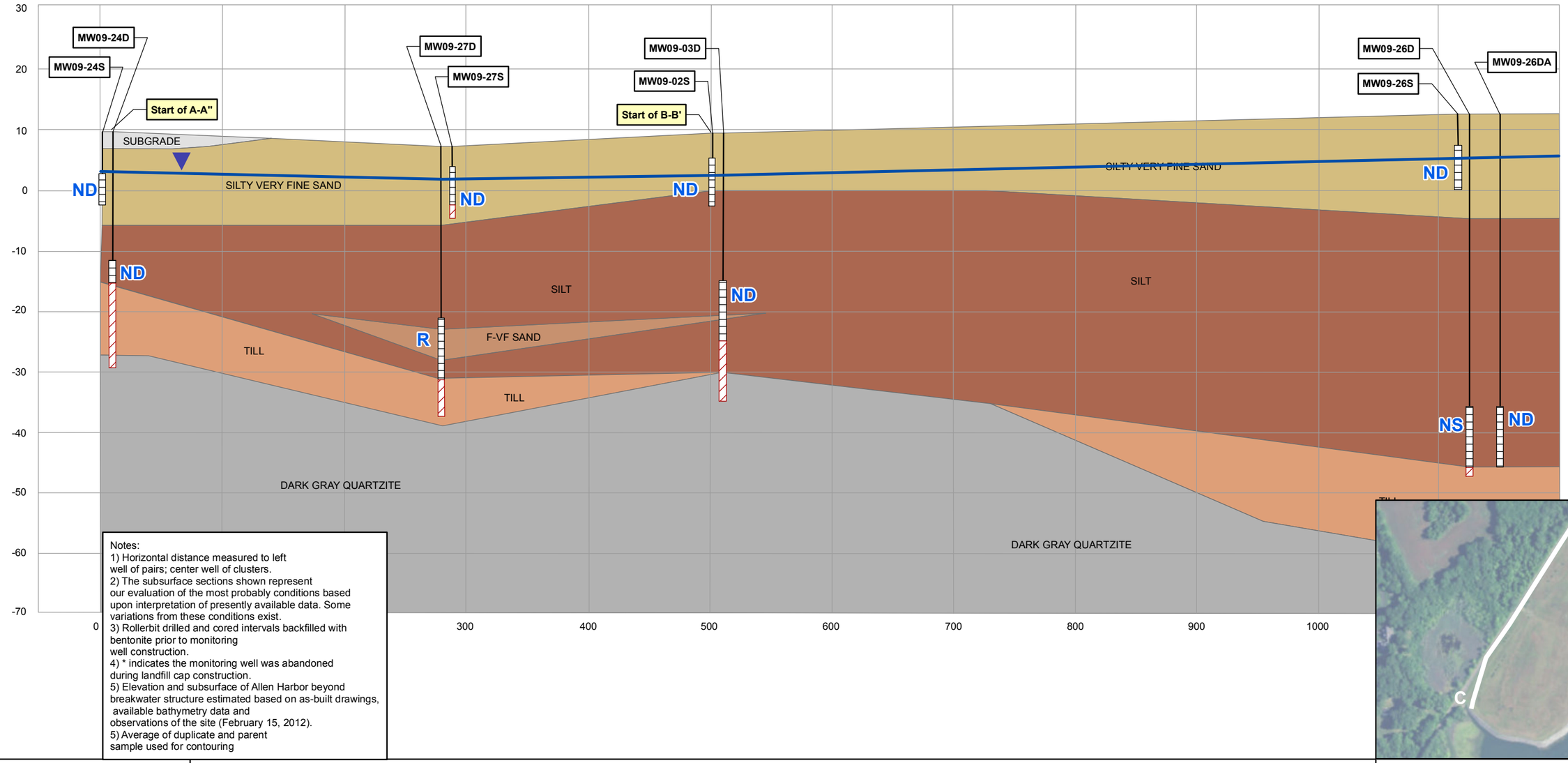
FIGURE 51
ISOCONCENTRATION RANGES
FOR CIS-12-DCE
CROSS SECTION C-C', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\C-C'\FIG_18_C-C'_CIS.MXD 02/15/17 DC

C

C'



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Elevation and subsurface of Allen Harbor beyond breakwater structure estimated based on as-built drawings, available bathymetry data and observations of the site (February 15, 2012).
5) Average of duplicate and parent sample used for contouring

RESOLUTION CONSULTANTS

Drawn:	RM	02/15/2017
Approved:	BS	02/15/2017
Project #:	60273164	

Legend

- Screened Interval of MW
- Bentonite Sealed Borehole
- Monitoring Well
- Grid
- DARK GRAY QUARTZITE
- FINE-VERY FINE SAND
- SILT
- SILTY VERY FINE SAND
- SUBGRADE
- TILL

NS Not Sampled
ND Not Detected
R Rejected Data

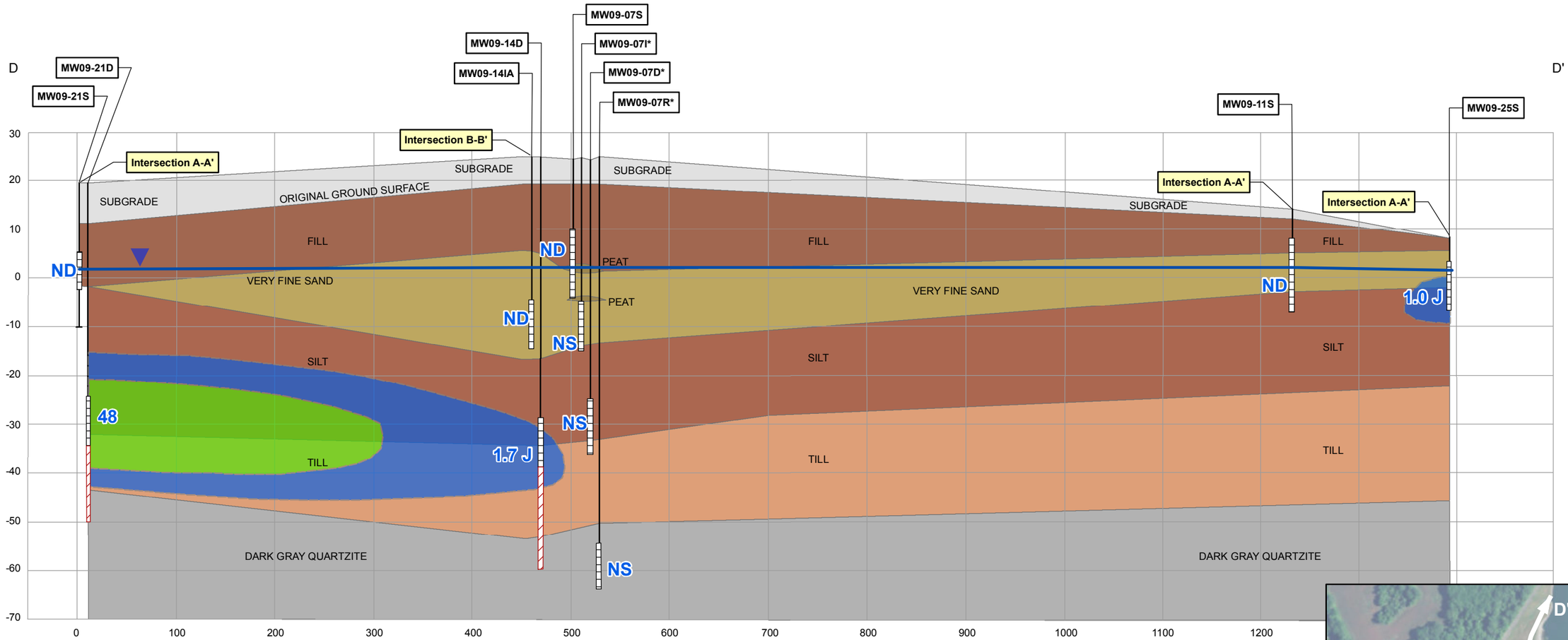
Water Table

SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section C-C'; 8/18/03

FIGURE 52
ISOCONCENTRATION RANGES
FOR TRANS-12-DCE
CROSS SECTION C-C', ME-45

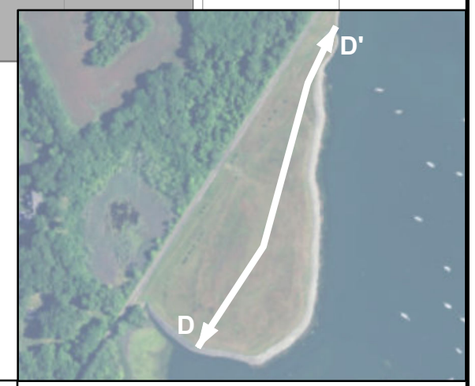
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\C-C'\FIG_19_C-C'_TRANS.MXD 02/14/17 DC



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Average of duplicate and parent sample used for contouring

Key
- Ground Surface
- Monitoring Well
- Monitoring Well Screen



RESOLUTION CONSULTANTS

Drawn:	RM	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

Legend
- Screened Interval of MW
- Bentonite Sealed Borehole
- Monitoring Well
- Grid
- DARK GRAY QUARTZITE
- FILL
- PEAT
- SILT
- SUBGRADE
- TILL
- VERY FINE SAND

Isoconcentrations in GW (ug/L)
- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled
ND Not Detected

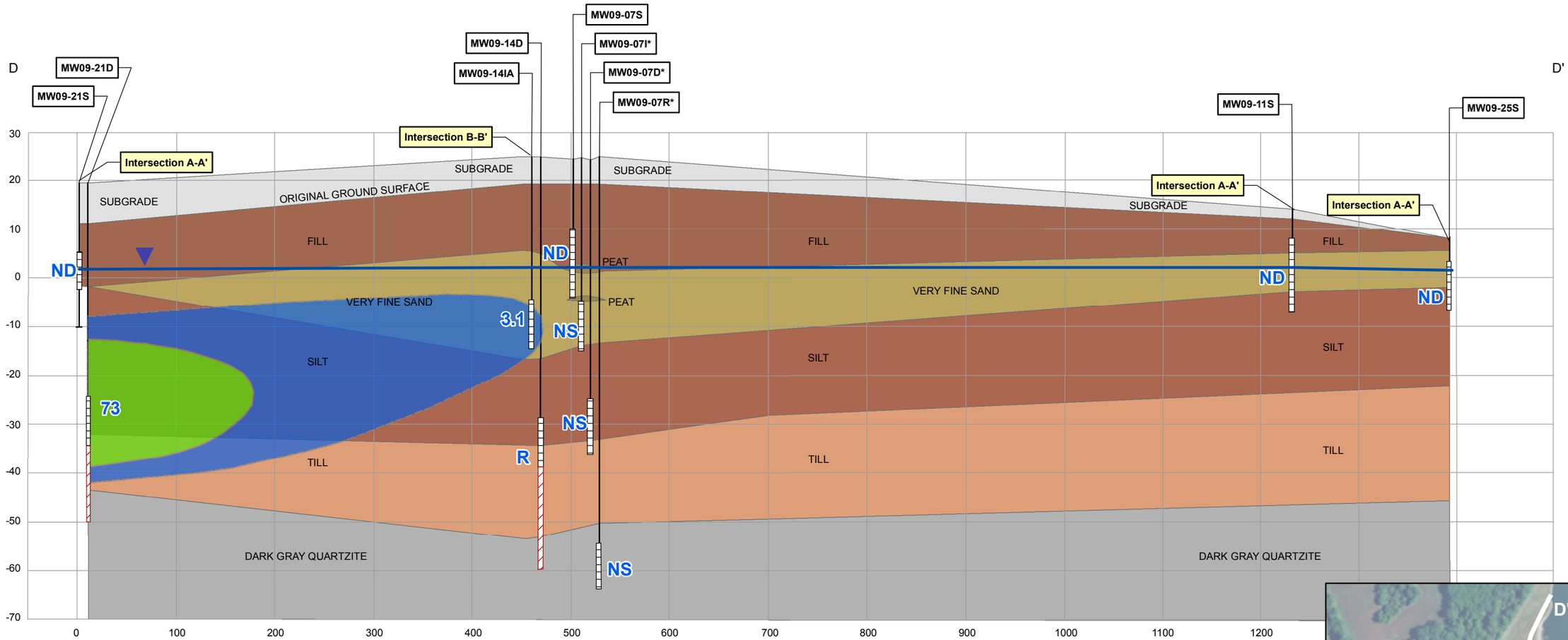
SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section D-D1'; 8/18/03

Water Table

FIGURE 53
ISOCONCENTRATION RANGES FOR TCE
CROSS SECTION D-D', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

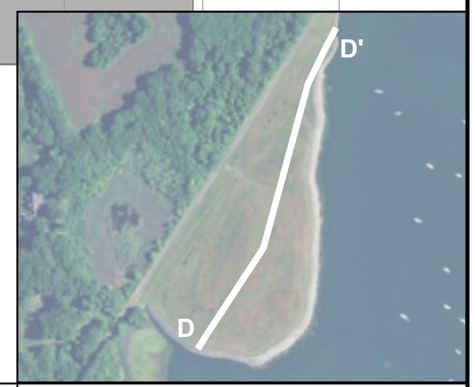
PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\D-D'\FIG_20_D-D'_TCE.MXD 04/17/17 DC



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Average of duplicate and parent sample used for contouring

Key

Ground Surface
Monitoring Well
Monitoring Well Screen



RESOLUTION CONSULTANTS

Drawn:	RM	02/16/2017
Approved:	BS	02/16/2017
Project #:	60273164	

Legend

- Screened Interval of MW
- Bentonite Sealed Borehole
- Monitoring Well
- Grid
- DARK GRAY QUARTZITE
- FILL
- PEAT
- SILT
- SUBGRADE
- TILL
- VERY FINE SAND

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled
ND Not Detected
R Rejected Data

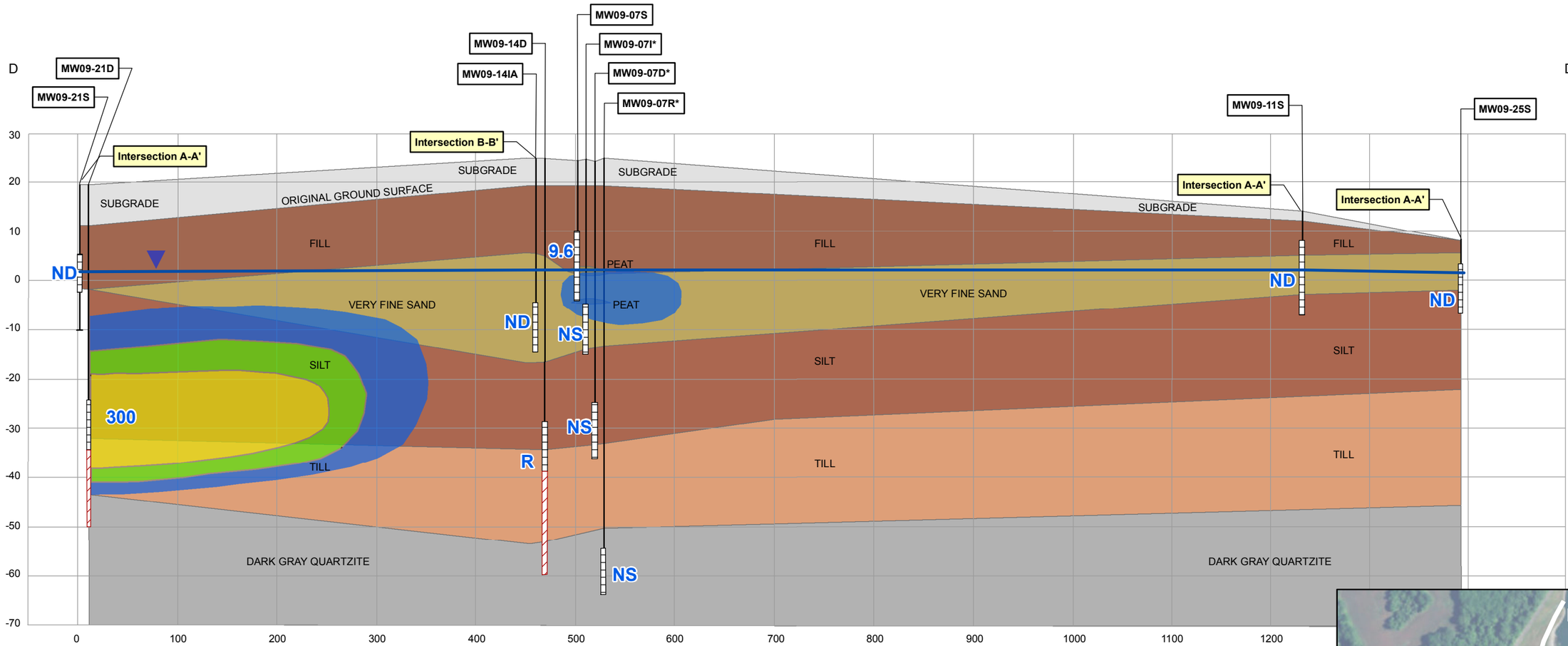
SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section D-D1': 8/18/03

Water Table

FIGURE 54
ISOCONCENTRATION RANGES FOR VC
CROSS SECTION D-D', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

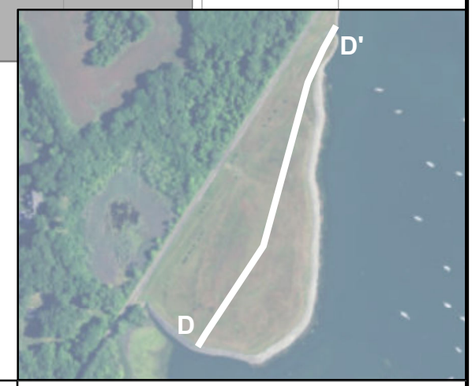
PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\D-D'\FIG_21_D-D'_VC.MXD 02/16/17 DC



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Average of duplicate and parent sample used for contouring

Key

- Ground Surface
- Monitoring Well
- Monitoring Well Screen



RESOLUTION CONSULTANTS

Drawn:	RM	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

Legend

- Screened Interval of MW
- Bentonite Sealed Borehole
- Monitoring Well
- Grid
- DARK GRAY QUARTZITE
- FILL
- PEAT
- SILT
- SUBGRADE
- TILL
- VERY FINE SAND

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

NS Not Sampled
ND Not Detected
R Rejected Data

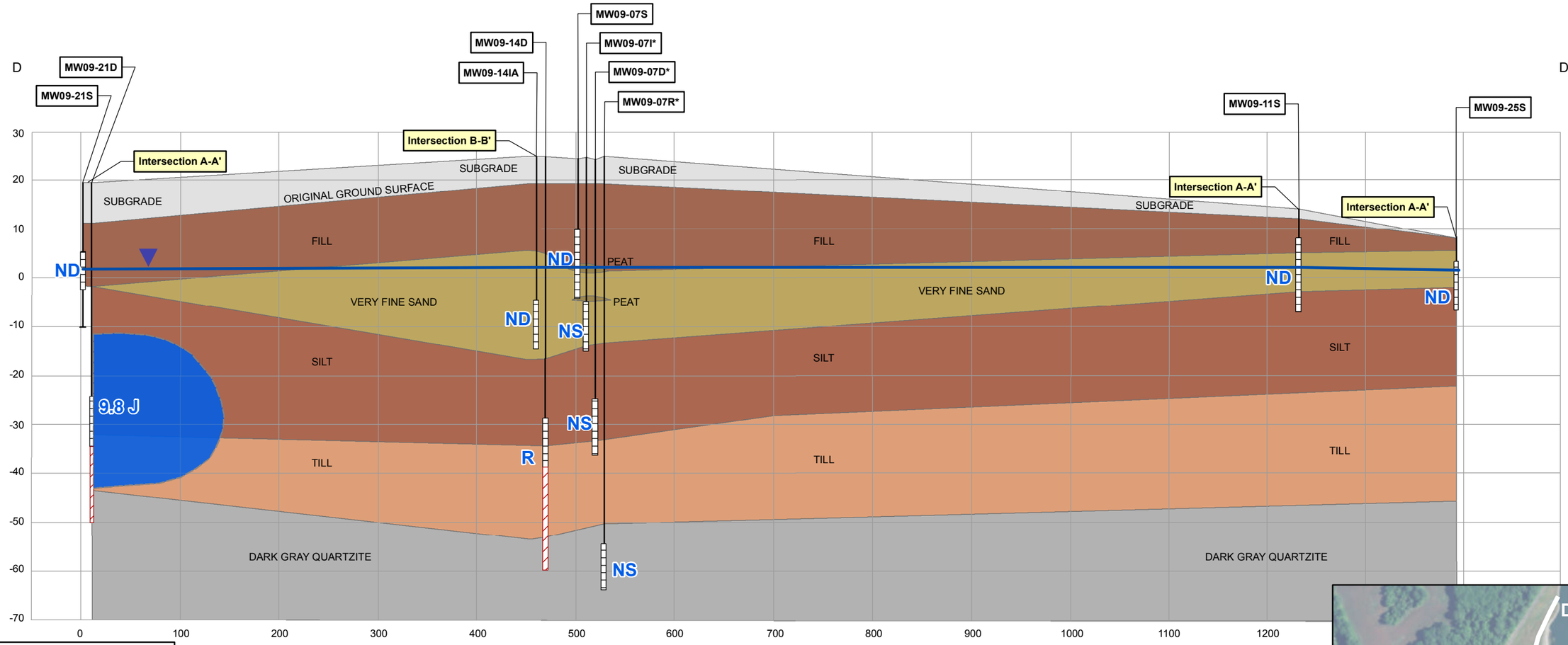
SOURCE: EA Engineering, Science, and Technology; Geologic Cross-section D-D1'; 8/18/03

Water Table

FIGURE 55
ISOCONCENTRATION RANGES
FOR CIS-12-DCE
CROSS SECTION D-D', ME-45

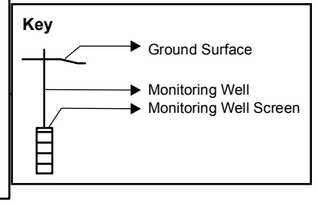
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

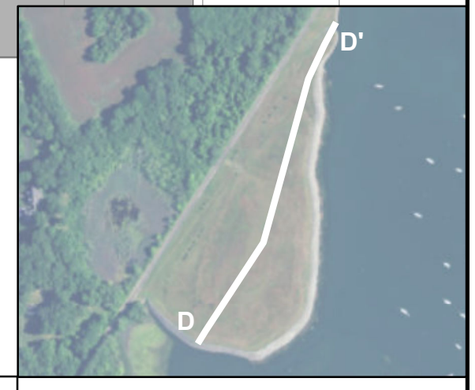
PGH \\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\D-D'\FIG_22_D-D'_CIS.MXD 04/17/17 DC



Notes:
1) Horizontal distance measured to left well of pairs; center well of clusters.
2) The subsurface sections shown represent our evaluation of the most probably conditions based upon interpretation of presently available data. Some variations from these conditions exist.
3) Rollerbit drilled and cored intervals backfilled with bentonite prior to monitoring well construction.
4) * indicates the monitoring well was abandoned during landfill cap construction.
5) Average of duplicate and parent sample used for contouring

Key





RESOLUTION CONSULTANTS

Drawn:	RM	04/17/2017
Approved:	BS	04/17/2017
Project #:	60273164	

Legend

- Screened Interval of MW
- Bentonite Sealed Borehole
- Monitoring Well
- Grid
- DARK GRAY QUARTZITE
- FILL
- PEAT
- SILT
- SUBGRADE
- TILL
- VERY FINE SAND

Isoconcentrations in GW (ug/L)

- 1-10
- 10-100
- 100-1,000
- 1,000-10,000
- >10,000

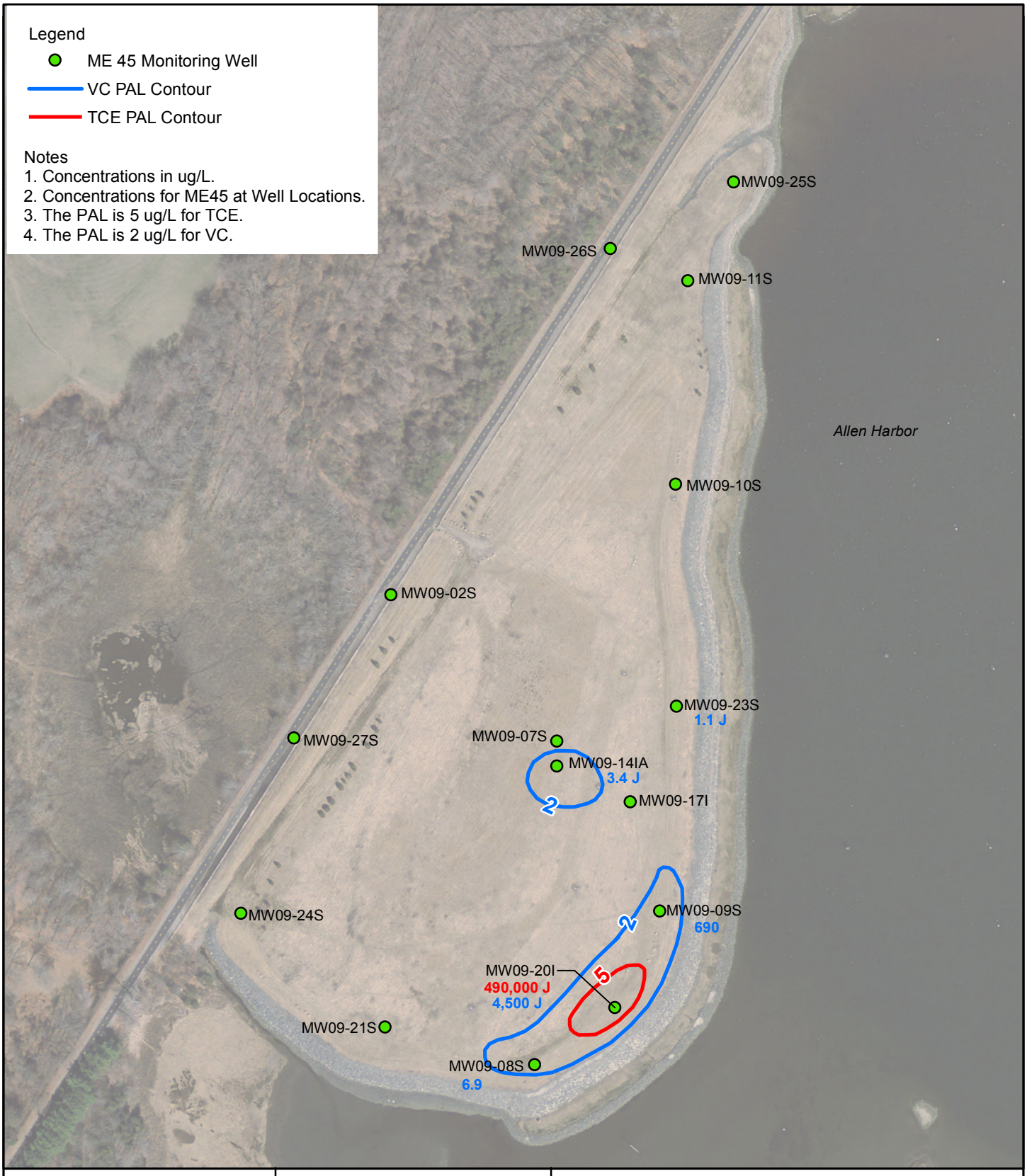
NS Not Sampled
ND Not Detected
R Rejected Data

Water Table

FIGURE 56
ISOCONCENTRATION RANGES
FOR TRANS-12-DCE
CROSS SECTION D-D', ME-45

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTON, RHODE ISLAND

\\USCHL1FP001\DATA\PROJECTS\GOVT\PROJECTS\NAVYCLEAN AECOM-ENSAFE JV\DAVISVILLE\GIS\PROJECTS\ME 45\ISOCONCENTRATION MAPS\D-D'\FIG_23_D-D'_TRANS.MXD 04/17/17 DC



RESOLUTION CONSULTANTS

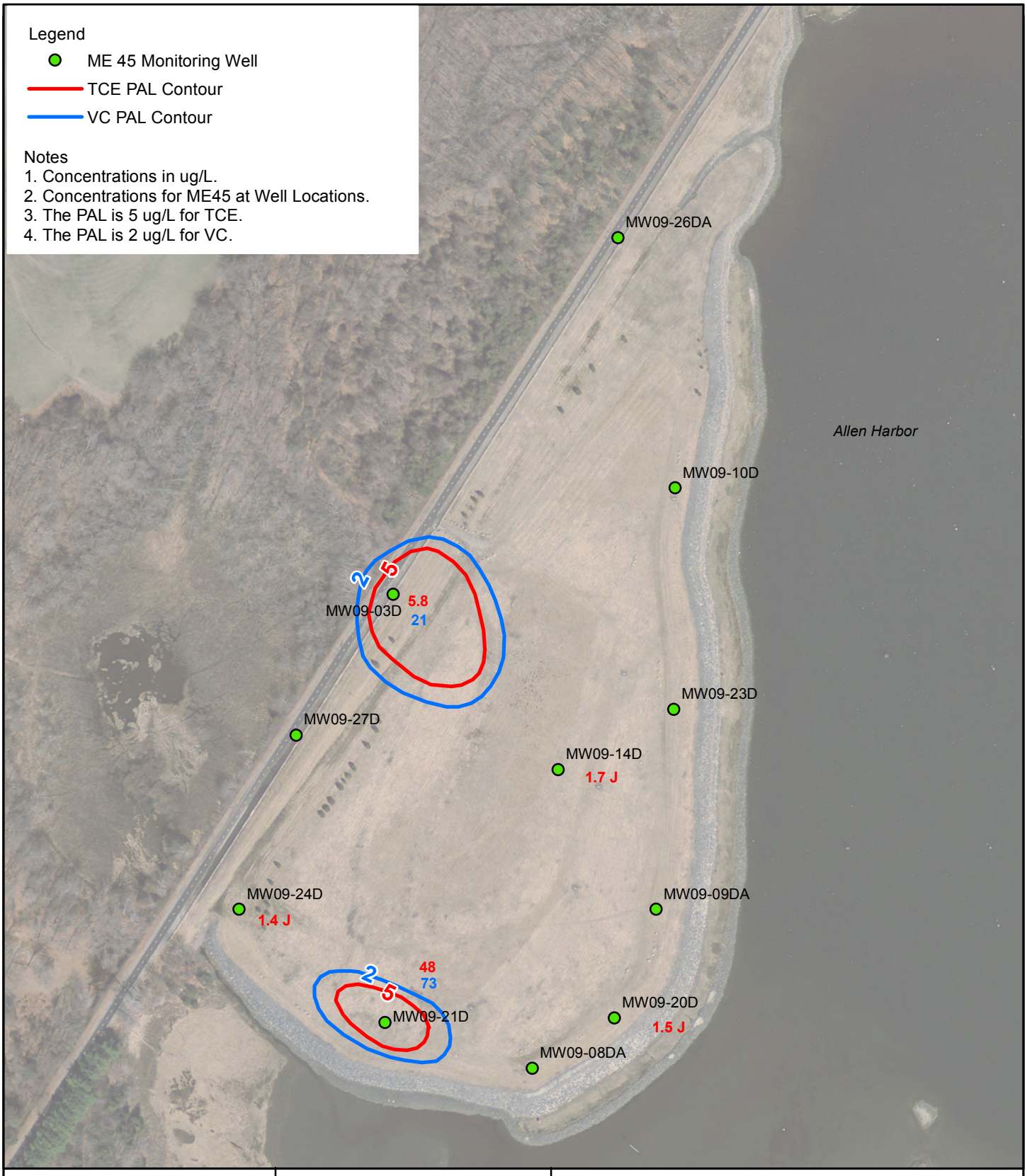
Drawn:	RM	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

N

0 100 200 Feet

FIGURE 57
SPATIAL ANALYSIS OF TCE AND VC
SHALLOW ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Plume maps\Fig_57_Shallow_TCE_VC.mxd



RESOLUTION CONSULTANTS

Drawn:	RM	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

N

0 100 200 Feet

FIGURE 58
SPATIAL ANALYSIS OF TCE AND VC
DEEP ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Plume maps\Fig_58_DEEP_VC AND TCE.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

N

0 100 200 Feet

FIGURE 59
SPATIAL ANALYSIS OF
CIS AND TRANS-DCE
SHALLOW ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Plume maps\Fig_57_Shallow_CIS_TRANS.mxd

RESOLUTION CONSULTANTS

Drawn:	RM	05/09/2017
Approved:	BS	05/09/2017
Project #:	60273164	

N

0 100 200 Feet

FIGURE 60
SPATIAL ANALYSIS OF
CIS-DCE
DEEP ZONE
MONITORING EVENT 45 - FALL 2016
IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Path: \\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Plume maps\Fig_60_DEEP_CIS_TRANS.mxd

Attachment A

Field Sampling Forms

Monitoring Well Sample Log Sheets

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-02S-ME45-1 Sampler: Dylan Potter
Well ID: MW09-02S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	8.86
Top of Screen (ft-BTOR):	2	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	12	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	14.88	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/6/2016	13:34	9.44	130	clear	none	6.00	194.4	4.61	41.0	19.0	205.1	0.09
9/6/2016	13:49	10.17	112	clear	none	5.98	182.8	2.10	21.8	19.5	158.3	0.09
9/6/2016	13:54	10.49	112	clear	none	5.98	181.5	1.60	14.0	19.7	152.8	0.09
9/6/2016	14:04	10.61	100	clear	none	5.98	180.5	1.23	8.43	19.7	150.1	0.09
9/6/2016	14:09	10.57	110	clear	none	5.97	180.9	1.42	10.8	19.6	151.9	0.09
9/6/2016	14:10	10.65	100	clear	none	5.99	180.5	1.08	6.16	19.9	147.8	0.09
9/6/2016	14:14	10.69	100	clear	none	5.99	181.3	0.92	7.38	20.1	146.1	0.09
9/6/2016	14:19	10.75	100	clear	none	6.00	181.5	0.81	4.44	20.4	145.6	0.09
9/6/2016	14:24	10.77	100	clear	none	6.00	181.2	0.72	3.65	20.3	143.8	0.09
9/6/2016	14:29	10.79	100	clear	none	6.00	182.6	0.62	4.06	20.5	143.1	0.09
9/6/2016	14:34	10.82	100	clear	none	6.00	182.7	0.55	2.91	20.4	142.3	0.09
9/6/2016	14:39	10.84	100	clear	none	6.00	183.6	0.52	2.25	20.4	141.4	0.09
9/6/2016	14:44	10.86	100	clear	none	5.99	184.0	0.50	1.54	20.0	141.6	0.09

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:34	14:44	70	7.64	clear	none	5.99	184.0	0.50	1.54	20.0	141.6	0.09

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/6/2016 2:50:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/6/2016 2:50:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-03D-ME45-1 Sampler: Joel Meunier
Well ID: MW09-03D Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	8.96
Top of Screen (ft-BTOR):	24.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	34.5	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	38.15	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/6/2016	13:28	9.67	100	clear	none	6.77	369.7	1.77	19.0	18.5	6.1	0.18
9/6/2016	13:34	9.98	100	clear	none	6.81	367.8	0.37	19.7	17.7	-23.9	0.18
9/6/2016	13:44	10.22	100	clear	none	6.88	367.0	0.13	12.3	17.5	-29.6	0.18
9/6/2016	13:52	10.36	100	clear	none	6.85	366.1	0.08	10.1	17.5	-33.1	0.18
9/6/2016	14:00	10.42	100	clear	none	6.86	364.7	0.01	15.4	17.1	-37.8	0.17
9/6/2016	14:07	10.50	100	clear	none	6.86	362.8	0.09	8.54	17.3	-37.0	0.17
9/6/2016	14:13	10.54	100	clear	none	6.87	362.7	0.08	4.92	17.5	-29.6	0.17
9/6/2016	14:18	10.58	100	clear	none	6.87	363.0	0.07	4.83	17.4	-30.9	0.17
9/6/2016	14:23	10.61	100	clear	none	6.87	363.6	0.06	4.61	17.2	-31.8	0.17

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:28	14:23	55	5.5	clear	none	6.87	363.6	0.06	4.61	17.2	-31.8	0.17

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/6/2016 2:30:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/6/2016 2:30:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-07S-ME45-1 Sampler: Tom Croft
Well ID: MW09-07S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	22.08
Top of Screen (ft-BTOR):	14.2	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	29.2	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	31.07	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/7/2016	13:45	22.38	120	clear	none	7.05	301.4	0.36	3.69	15.4	-123.5	0.14
9/7/2016	13:50	22.49	120	clear	none	7.09	297.0	0.31	3.54	15.3	-130.5	0.14
9/7/2016	13:55	22.53	120	clear	none	7.11	297.9	0.33	2.21	15.4	-133.7	0.14
9/7/2016	14:00	22.61	120	clear	none	7.12	300.4	0.46	3.46	15.2	-135.0	0.14

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:45	14:00	15	1.8	clear	none	7.12	300.4	0.46	3.46	15.2	-135.0	0.14

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/7/2016 2:30:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/7/2016 2:30:00 PM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/7/2016 2:30:00 PM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		2	1L amber
9/7/2016 2:30:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-08DA-ME45-1 Sampler: Briley Morril
Well ID: MW09-08DA Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	17
Top of Screen (ft-BTOR):	60	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	70	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	70.65	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/7/2016	12:45	17.05	120	CLEAR	NONE	6.91	736	0.24	9.90	14.2	-66.6	0.46
9/7/2016	12:50	17.05	120	CLEAR	NONE	6.91	739	0.15	7.79	14.3	-69.2	0.46
9/7/2016	12:55	17.05	120	CLEAR	NONE	6.92	737	0.10	10.5	14.3	-72.0	0.46
9/7/2016	13:00	17.05	120	CLEAR	NONE	6.93	733	0.07	10.3	14.1	-73.8	0.46
9/7/2016	13:05	17.05	120	CLEAR	NONE	6.94	730	0.10	8.2	13.9	-74.7	0.46
9/7/2016	13:10	17.05	120	CLEAR	NONE	6.93	732	0.10	7.77	14.0	-76.0	0.46
9/7/2016	13:15	17.05	120	CLEAR	NONE	6.93	733	0.08	8.42	14.0	-76.5	0.46
9/7/2016	13:20	17.05	120	CLEAR	NONE	6.91	730	0.08	8.39	13.8	-77.9	0.46
9/7/2016	13:25	17.05	120	CLEAR	NONE	6.92	730	0.07	8.59	13.8	-78.1	0.46

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:45	13:25	40	4.8	CLEAR	NONE	6.92	730	0.07	8.59	13.8	-78.1	0.46

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/7/2016 3:45:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/7/2016 3:45:00 PM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/7/2016 3:45:00 PM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		2	1L amber
9/7/2016 3:45:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-08S-ME45-1 Sampler: Briley Morril
Well ID: MW09-08S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	17.25
Top of Screen (ft-BTOR):	7.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	22.5	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	28.8	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/7/2016	10:00	17.55	140	CLEAR	NONE	6.35	1035	0.15	1.24	13.4	17.1	0.65
9/7/2016	10:05	17.60	140	CLEAR	NONE	6.35	1036	0.14	0.67	13.3	14.3	0.68
9/7/2016	10:10	17.60	140	CLEAR	NONE	6.36	1044	0.07	0.60	13.3	7.8	0.68
9/7/2016	10:15	17.60	140	CLEAT	NONE	6.37	1040	0.05	0.56	13.1	4.1	0.68
9/7/2016	10:20	17.60	140	CLEAR	NONE	6.38	1054	0.05	0.55	13.2	-1.8	0.69
9/7/2016	10:25	17.60	140	CLEAR	NONE	6.41	1065	0.05	0.53	13.3	-9.1	.69
9/7/2016	10:30	17.60	140	CLEAR	NONE	6.46	1078	0.05	0.49	13.2	-14.0	0.70
9/7/2016	10:35	17.60	140	CLEAR	NONE	6.46	1090	0.05	0.46	13.1	-18.2	0.71
9/7/2016	10:40	17.60	140	CLEAR	NONE	6.46	1090	0.05	0.43	13.2	-22.7	0.71
9/7/2016	10:45	17.60	140	CLEAR	NONE	6.47	1093	0.05	0.38	13.2	24.2	0.71

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:00	10:45	45	6.3	CLEAR	NONE	6.47	1093	0.05	0.38	13.2	24.2	0.71

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/7/2016 10:50:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	2	2	250 mL HDPE
9/7/2016 10:50:00 AM	VOCs by SW8260B			4	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-09DA-ME45-1 Sampler: Dylan Potter
Well ID: MW09-09DA Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	22.94
Top of Screen (ft-BTOR):	61	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	71	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	69.28	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/7/2016	12:47	23.51	118	AY-BLACK	NONE	7.44	825	1.06	404	18.1	-165.1	0.40
9/7/2016	12:52	23.60	118	SILTY	NONE	7.53	824	0.79	210	18.5	-172.6	0.40
9/7/2016	12:57	23.41	156	SILTY	NONE	7.51	815	0.81	154	20.1	-16.5	0.40
9/7/2016	13:02	23.72	156	SILTY	NONE	7.54	813	0.56	133	17.1	-138.6	0.40
9/7/2016	13:32	23.53	160	CLEAR	NONE	7.48	808	0.44	21.2	16.7	-172.7	0.40
9/7/2016	13:37	23.80	160	CLEAR	NONE	7.47	807	0.67	16.1	16.7	-161.6	0.40
9/7/2016	13:42	23.88	160	CLEAR	NONE	7.50	806	0.38	9.70	16.4	-171.7	0.40
9/7/2016	13:47	23.91	160	CLEAR	NONE	7.49	804	0.46	4.19	16.5	-166.4	0.40
9/7/2016	13:52	23.92	160	CLEAR	NONE	7.47	806	0.47	4.95	16.4	-165.5	0.40
9/7/2016	13:57	23.93	160	CLEAR	NONE	7.49	808	0.37	3.50	16.4	-168.1	0.40

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:47	13:57	70	19.12	CLEAR	NONE	7.49	808	0.37	3.50	16.4	-168.1	0.40

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/7/2016 2:05:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/7/2016 2:05:00 PM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/7/2016 2:05:00 PM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		2	1L amber
9/7/2016 2:05:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-09S-ME45-1
Sampler: Dylan Potter
Well ID: MW09-09S
Well Type: Monitoring Well
QC Duplicate ID: NA
MS/MSD: MW09-09S-ME45-1MS/MSD

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	22.83
Top of Screen (ft-BTOR):	10	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	25	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	32.34	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/7/2016	9:47	22.92	138	clear	none	6.83	3077	1.35	3.04	16.9	-77.4	1.57
9/7/2016	9:52	22.94	138	clear	none	6.75	2076	0.76	3.19	16.5	-110.4	1.05
9/7/2016	10:08	22.97	152	clear	none	6.72	1766	0.37	2.33	16.2	-145.4	0.90
9/7/2016	10:13	22.99	152	clear	none	6.72	1755	0.38	2.54	16.2	-144.5	0.89
9/7/2016	10:18	22.99	152	clear	none	6.73	1740	0.35	1.56	16.1	-146.1	0.88

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:47	10:18	31	4.418	clear	none	6.73	1740	0.35	1.56	16.1	-146.1	0.88

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/7/2016 10:30:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	3	3	250 mL HDPE
9/7/2016 10:30:00 AM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		2	1L amber
9/7/2016 10:30:00 AM	VOCs by SW8260B			6	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-10D-ME45-1 Sampler: Joel Meunier
Well ID: MW09-10D Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):		Static Water Level (ft-BTOR):	19.94
Top of Screen (ft-BTOR):		H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):		Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	81.08	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/8/2016	11:07	20.07	120	clear	none	7.47	201.4	1.18	7.46	16.3	-71.8	0.10
9/8/2016	11:15	20.07	120	clear	none	7.39	197.6	0.36	2.24	16.3	-116.9	0.09
9/8/2016	11:26	20.07	120	clear	none	7.39	193.6	0.15	1.11	15.9	-125.5	0.09
9/8/2016	11:34	20.07	120	clear	none	7.40	194.7	0.13	1.37	15.6	-131.4	0.09
9/8/2016	11:40	20.07	120	clear	none	7.37	194.6	0.12	0.89	15.2	-133.7	0.09

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
11:07	11:40	33	3.96	clear	none	7.37	194.6	0.12	0.89	15.2	-133.7	0.09

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/8/2016 11:50:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/8/2016 11:50:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-10S-ME45-1 Sampler: Briley Morril
Well ID: MW09-10S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):		Static Water Level (ft-BTOR):	20.6
Top of Screen (ft-BTOR):		H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):		Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	28	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/7/2016	14:45	20.95	150	CLEAR	SLIGHT SULFUR	6.55	620	0.08	5.56	13.5	-44.5	0.39
9/7/2016	14:51	21.10	150	CLEAR	SLIGHT SULFUR	6.55	618	0.12	2.51	13.4	-45.8	0.39
9/7/2016	14:55	21.2	140	CLEAR	SLIGHT SULFUR	6.54	620	0.02	2.13	13.6	-49.1	0.39
9/7/2016	15:00	21.2	120	CLEAR	SLIGHT SULFUR	6.54	623	0.02	1.80	14.1	-51.6	0.39
9/7/2016	15:05	21.2	120	CLEAR	SLUGHT SULFUR	6.54	625	0.02	1.59	14.1	-53.3	0.39
9/7/2016	15:10	21.2	120	CLEAR	SLIGHT SULFUR	6.54	626	0.02	1.53	14.1	-56.3	0.39
9/7/2016	15:20	21.2	120	CLEAR	SLIGHT SULFUR	6.54	627	0.02	1.48	14.1	-56.5	0.39

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
14:45	15:20	30	4	CLEAR	SLIGHT SULFUR	6.54	627	0.02	1.48	14.1	-56.5	0.39

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/7/2016 3:25:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/7/2016 3:25:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-11S-ME45-1 Sampler: Tom Croft
Well ID: MW09-11S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	13.26
Top of Screen (ft-BTOR):	6	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	21	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	25.54	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/8/2016	13:35	13.69	100	clear	none	6.64	330.9	0.45	6.18	16.6	-60.2	0.16
9/8/2016	13:40	13.79	100	clear	none	6.66	323.6	0.42	5.07	17.1	-64.4	0.16
9/8/2016	13:45	13.90	100	clear	none	6.70	322.1	0.52	8.19	16.7	-65.2	0.15
9/8/2016	13:50	13.98	100	clear	none	6.71	320.2	0.45	7.97	16.5	-63.0	0.15
9/8/2016	13:55	14.08	100	clear	none	6.70	318.2	0.38	5.53	16.4	-59.5	0.15

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:35	13:55	20	2	clear	none	6.70	318.2	0.38	5.53	16.4	-59.5	0.15

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/8/2016 2:00:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/8/2016 2:00:00 PM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/8/2016 2:00:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-14D-ME45-1 Sampler: Dylan Potter
Well ID: MW09-14D Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	23.26
Top of Screen (ft-BTOR):	49	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	59	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	66.83	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/8/2016	13:19	23.31	180	clear	none	6.58	1262	1.91	9.30	14.8	-84.4	0.63
9/8/2016	13:24	23.29	180	clear	none	6.64	1186	1.09	4.40	14.7	-90.9	0.59
9/8/2016	13:29	23.29	202	clear	none	6.68	1103	0.78	27.6	14.4	-94.3	0.55
9/8/2016	13:34	23.29	202	rticulates	none	6.67	1096	0.68	17.2	14.5	-95.1	0.55
9/8/2016	13:39	23.29	220	clear	none	6.68	1083	0.63	4.41	14.7	-96.4	0.54
9/8/2016	13:44	23.29	220	clear	none	6.71	1031	0.59	2.35	14.4	-98.1	0.51
9/8/2016	13:49	23.29	220	clear	none	6.71	1029	0.55	2.10	14.1	-97.2	0.51
9/8/2016	13:54	23.29	220	clear	none	6.71	1010	0.52	4.83	14.3	-98.9	0.50
9/8/2016	13:59	23.29	220	clear	none	6.71	1006	0.49	4.09	14.4	-98.5	0.50
9/8/2016	14:04	23.29	220	clear	none	6.73	989	0.47	3.80	14.6	-99.0	0.50

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:19	14:04	45	9.32	clear	none	6.73	989	0.47	3.80	14.6	-99.0	0.50

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/8/2016 2:10:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/8/2016 2:10:00 PM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		2	1L amber
9/8/2016 2:10:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-14IA-ME45-1
Sampler: Briley Morril
Well ID: MW09-14IA
Well Type: Monitoring Well
QC Duplicate ID: MW09-ME45-FD05
MS/MSD: MW09-141A-ME45-1MS/MS

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	24.2
Top of Screen (ft-BTOR):	35	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	45	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	48.2	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/16/2016	9:20	24.85	120	CLEAR	NONE	7.52	824	0.52	1.69	13.7	-141.7	0.41
9/16/2016	9:25	24.85	120	CLEAR	NONE	7.49	827	0.42	1.78	13.8	-136.2	0.41
9/16/2016	9:30	24.85	120	CLEAR	NONE	7.48	819	0.40	1.82	13.6	-140.2	0.40
9/16/2016	9:35	24.85	120	CLEAR	NONE	7.47	818	0.41	1.54	13.3	-141.5	0.40
9/16/2016	9:40	24.85	120	CLEARR	NONE	7.46	814	0.44	1.19	13.4	-141.8	0.40
9/16/2016	9:45	24.85	120	CLEAR	NONE	7.47	812	0.50	1.20	13.7	-143.5	0.40
9/16/2016	9:50	24.85	120	CLEAR	NONE	7.50	809	0.47	1.23	13.8	-143.2	0.40
9/16/2016	9:55	24.85	120	CLEAR	NONE	7.51	807	0.46	1.11	13.9	-144.1	0.40

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:20	9:55	35	4.2	CLEAR	NONE	7.51	807	0.46	1.11	13.9	-144.1	0.40

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/16/2016 10:00:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	3	3	250 mL HDPE
9/16/2016 10:00:00 AM	Pesticides/PCBs by SW8081B/8082A			6	1L amber
9/16/2016 10:00:00 AM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		6	1L amber
9/16/2016 10:00:00 AM	VOCs by SW8260B			6	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-17I-ME45-1 Sampler: Tom Croft
Well ID: MW09-17I Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	21.96
Top of Screen (ft-BTOR):	14	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	24	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	26.1	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/7/2016	15:20	22.01	120	clear	none	6.79	515.6	0.42	14.3	15.4	-69.3	0.26
9/7/2016	15:25	22.01	120	clear	none	6.78	577.3	0.69	4.02	16.2	-72.4	0.28
9/7/2016	15:30	22.01	140	clear	none	6.78	575.7	0.47	8.68	15.3	-73.1	0.28
9/7/2016	15:35	22.01	140	clear	none	6.78	569.5	0.37	3.57	15.1	-75.2	0.28
9/7/2016	15:40	22.01	140	clear	none	6.78	565.4	0.33	4.82	15.2	-75.4	0.28

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
15:20	15:40	20	2.6	clear	none	6.78	565.4	0.33	4.82	15.2	-75.4	0.28

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/7/2016 3:45:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/7/2016 3:45:00 PM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/7/2016 3:45:00 PM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		2	1L amber
9/7/2016 3:45:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-20D-ME45-1 Sampler: Dylan Potter
Well ID: MW09-20D Well Type: Monitoring Well
QC Duplicate ID: MW09-ME45-FD02 MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	19.82
Top of Screen (ft-BTOR):	51.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	61.5	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	65.73	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/8/2016	9:39	21.14	152	clear	none	7.14	1147	1.30	16.2	15.3	-123.5	0.57
9/8/2016	9:44	21.21	152	clear	none	7.18	1134	0.88	6.65	15.3	-124.5	0.57
9/8/2016	9:49	21.22	152	clear	none	7.21	1126	0.71	4.09	15.4	-126.8	0.56
9/8/2016	9:54	21.24	152	clear	none	7.23	1128	0.63	2.84	15.0	-127.9	0.56
9/8/2016	9:59	21.25	160	clear	none	7.24	1127	0.57	3.20	15.1	-128.3	0.56
9/8/2016	10:04	21.25	160	clear	none	7.25	1129	0.54	3.03	15.0	-127.7	0.56
9/8/2016	10:09	21.25	160	clear	none	7.25	1131	0.55	0.91	15.1	-125.4	0.57

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:39	10:09	30	4.64	clear	none	7.25	1131	0.55	0.91	15.1	-125.4	0.57

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/8/2016 10:20:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	2	2	250 mL HDPE
9/8/2016 10:20:00 AM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		4	1L amber
9/8/2016 10:20:00 AM	VOCs by SW8260B			4	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-20I-ME45-1 Sampler: Joel Meunier
Well ID: MW09-20I Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	20.9
Top of Screen (ft-BTOR):	22	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	32	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	36.86	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/8/2016	9:31	21.43	120	clear	egg	6.14	1743	1.53	42.0	16.1	-61.9	0.89
9/8/2016	9:37	21.57	120	clear	egg	6.23	1785	1.14	7.96	16.2	-99.7	0.91
9/8/2016	9:44	21.67	120	clear	egg	6.24	1774	0.89	6.51	16.1	-115.7	0.90
9/8/2016	9:51	21.73	120	clear	egg	6.24	1763	0.83	6.19	16.0	-124.7	0.90
9/8/2016	9:56	21.78	120	clear	egg	6.23	1763	0.78	3.76	15.7	-133.6	0.90

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:31	9:56	25	3	clear	egg	6.23	1763	0.78	3.76	15.7	-133.6	0.90

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/8/2016 10:10:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/8/2016 10:10:00 AM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		2	1L amber
9/8/2016 10:10:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-21D-ME45-1 Sampler: Briley Morril
Well ID: MW09-21D Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	17.9
Top of Screen (ft-BTOR):	35.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	45.5	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	55	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/8/2016	13:25	20.2	120	CLEAR	NONE	8.29	281.0	1.22	3.09	12.6	-28.2	0.18
9/8/2016	13:30	20.5	120	CLEAR	NONE	8.26	282.0	1.30	2.72	13.4	-29.1	0.17
9/8/2016	13:35	20.8	120	CLEAR	NONE	8.24	281.9	1.24	2.40	13.4	-49.4	0.17
9/8/2016	13:40	21.2	120	CLEAR	NONE	8.27	286.21	1.36	1.37	14.0	-62.5	0.17
9/8/2016	13:45	21.45	120	CLEAR	NONE	8.31	281.5	1.16	1.45	13.7	-85.2	0.17
9/8/2016	13:50	21.6	120	CLEAR	NONE	8.48	275.7	1.08	1.65	13.5	-112.4	0.17
9/8/2016	13:55	21.7	120	CLEAR	NONE	8.64	271.1	0.92	1.89	13.7	-99.7	0.17
9/8/2016	14:00	21.8	120	CLEAR	NONE	8.73	270.5	0.85	1.76	13.5	-90.7	0.17
9/8/2016	14:06	21.9	120	CLEAR	NONE	8.80	270.2	0.73	1.61	14.0	-112.9	0.16
9/8/2016	14:10	21.9	120	CLEAR	NONE	8.88	270.4	0.67	1.37	14.1	-90.4	0.16
9/8/2016	14:15	22.0	120	CLEAR	NONE	8.93	267.9	0.60	1.05	13.7	-83.9	0.16
9/8/2016	14:20	22.0	120	CLEAR	NONE	8.96	268.5	0.55	0.75	13.8	-81.0	0.16

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:25	14:20	55	6.6	CLEAR	NONE	8.96	268.5	0.55	0.75	13.8	-81.0	0.16

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/8/2016 2:30:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/8/2016 2:30:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-21S-ME45-1 Sampler: Briley Morril
Well ID: MW09-21S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	18.12
Top of Screen (ft-BTOR):	6	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	16	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	25.6	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/8/2016	9:25	18.90	125	CLEAR	ORGANIC	6.83	5269	0.55	2.37	13.0	-60.8	3.76
9/8/2016	9:30	19.4	120	CLEAR	ORGANIC	6.83	5258	0.41	2.23	13.1	-62.6	3.75
9/8/2016	9:35	19.4	115	CLEAR	ORGANIC	6.83	5199	0.28	2.12	13.1	-65.0	3.70
9/8/2016	9:40	19.40	115	CLEAR	ORGANIC	6.83	5114	0.12	2.09	13.3	-70.0	3.62
9/8/2016	9:45	19.40	115	CLEAR	ORGANIC	6.83	5018	0.07	2.07	13.1	-75.3	3.56
9/8/2016	9:50	19.45	115	CLEAR	ORGANIC	6.83	4902	0.01	2.33	13.0	-80.7	3.48
9/8/2016	9:55	19.50	115	CLEAR	ORGANIC	6.82	4782	0.01	2.45	12.9	-84.9	3.41
9/8/2016	10:00	19.50	115	CLEAR	ORGANIC	6.82	4662	0.01	2.76	13.1	-88.9	3.30
9/8/2016	10:05	19.50	115	CLEAR	ORGANIC	6.83	4574	0.01	3.04	13.2	-94.6	3.22
9/8/2016	10:10	19.50	115	CLEAR	ORGANIC	6.83	4532	0.01	2.99	13.3	-99.6	3.18
9/8/2016	10:15	19.55	115	CLEAR	ORGANIC	6.83	4534	0.01	2.95	13.6	-103.1	3.16
9/8/2016	10:20	19.55	115	CLEAR	ORGANIC	6.83	4472	0.01	2.78	13.6	-115.1	3.11
9/8/2016	10:25	19.55	115	CLEAR	ORGANIC	6.84	4465	0.01	2.34	13.9	-116.9	3.09
9/8/2016	10:30	19.60	115	CLEAR	ORGANIC	6.84	4440	0.01	2.10	13.7	120.5	3.07

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:25	10:30	65	7.55	CLEAR	ORGANIC	6.84	4440	0.01	2.10	13.7	120.5	3.07

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/8/2016 10:40:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/8/2016 10:40:00 AM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/8/2016 10:40:00 AM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		2	1L amber
9/8/2016 10:40:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-23D-ME45-1 Sampler: Tom Croft
Well ID: MW09-23D Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):		Static Water Level (ft-BTOR):	22.39
Top of Screen (ft-BTOR):		H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):		Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	64.5	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/8/2016	10:40	23.93	155	clear	none	7.33	1034	0.71	1.75	16.3	-203.6	0.45
9/8/2016	10:45	24.64	135	clear	none	7.33	636	0.52	2.08	16.7	-201.9	0.31
9/8/2016	10:50	24.94	135	clear	none	7.36	607	0.52	2.45	16.9	-202.2	0.29
9/8/2016	10:55	25.25	135	clear	none	7.40	595.3	0.42	2.48	16.2	-198.1	0.29
9/8/2016	11:00	25.43	100	clear	none	7.51	590.9	0.37	1.41	16.7	-196.4	0.29
9/8/2016	11:05	25.59	100	clear	none	7.45	592	0.42	1.62	16.9	-191.4	0.29
9/8/2016	11:10	25.77	100	clear	none	7.46	591.0	0.33	1.28	16.6	-183.4	0.29
9/8/2016	11:15	25.92	100	clear	none	7.43	591.1	0.37	0.88	16.4	-179.1	0.29
9/8/2016	11:20	25.98	100	clear	none	7.36	585.7	0.42	0.92	16.7	-182.1	0.29

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:40	11:20	40	4.8	clear	none	7.36	585.7	0.42	0.92	16.7	-182.1	0.29

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/8/2016 11:25:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/8/2016 11:25:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-23S-ME45-1 Sampler: Tom Croft
Well ID: MW09-23S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	23.11
Top of Screen (ft-BTOR):	15	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	25	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	31.82	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/8/2016	9:40	23.70	110	clear	none	6.83	18602	0.31	3.15	15.2	-190.1	11.01
9/8/2016	9:45	23.83	110	clear	none	6.82	18459	0.27	2.48	15.2	-208.9	10.98
9/8/2016	9:50	23.96	110	clear	none	6.81	18453	0.21	2.15	15.1	-221.8	10.96
9/8/2016	9:55	24.06	110	clear	none	6.82	18362	0.17	2.08	15.3	-231.8	10.93
9/8/2016	10:00	24.16	110	clear	none	6.82	18369	0.17	1.83	15.3	-238.2	10.90
9/8/2016	10:05	24.26	110	clear	none	6.82	18349	0.18	1.41	15.5	-234.7	10.91

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:40	10:05	25	2.75	clear	none	6.82	18349	0.18	1.41	15.5	-234.7	10.91

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/8/2016 10:10:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/8/2016 10:10:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-24D-ME45-1 Sampler: Briley Morril
Well ID: MW09-24D Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	8.3
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	26.25	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/9/2016	8:20	9.80	200	CLEAR	NONE	7.22	2083	2.9	3.12	15.8	-151.7	1.31
9/9/2016	8:25	10.33	200	CLEAR	NONE	7.07	1995	0.08	2.83	15.6	-160.9	1.26
9/9/2016	8:30	10.65	110	CLEAR	NONE	7.05	1965	0.09	2.90	15.6	-169.6	1.24
9/9/2016	8:35	11.3	110	CLEAR	NONE	7.01	1980	0.43	2.83	16.1	-164.2	1.24
9/9/2016	8:40	11.8	125	CLEAR	NONE	7.01	1945	0.20	3.23	15.3	-165.6	1.23
9/9/2016	8:45	12.3	125	CLEAR	NONE	7.00	1924	0.14	4.20	15.1	-164.7	1.22
9/9/2016	8:50	12.8	125	CLEAR	NONE	6.99	1928	0.14	5.23	14.9	-162.2	1.23
9/9/2016	8:55	13.2	125	CLEAR	NONE	6.99	1931	0.16	6.15	15.0	-160.9	1.24
9/9/2016	9:00	13.3	125	CLEAR	NONE	6.97	1970	0.16	9.17	15.0	-157.9	1.23
9/9/2016	9:05	13.4	125	CLEAR	NONE	6.96	1985	0.13	9.53	15.5	-154.0	1.26
9/9/2016	9:10	13.45	125	CLEAR	NONE	6.94	1979	0.10	8.46	15.4	-153.3	1.25
9/9/2016	9:15	13.5	125	CLEAR	NONE	6.93	1982	0.06	8.03	15.0	-150.7	1.27
9/9/2016	9:20	13.5	125	CLEAR	NONE	6.93	1985	0.03	5.05	15.1	-149.7	1.27
9/9/2016	9:22	13.55	125	CLEAR	NONE	6.92	1990	0.01	4.80	15.3	-148.4	1.27

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
8:20	9:22	62	8.35	CLEAR	NONE	6.92	1990	0.01	4.80	15.3	-148.4	1.27

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/9/2016 9:35:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/9/2016 9:35:00 AM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/9/2016 9:35:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-24S-ME45-1 Sampler: Joel Meunier
Well ID: MW09-24S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):		Static Water Level (ft-BTOR):	8.12
Top of Screen (ft-BTOR):		H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):		Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	12.75	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/8/2016	13:19	8.19	150	clear	none	6.87	376.8	0.80	29.4	18.1	-97.7	0.18
9/8/2016	13:25	8.19	150	clear	none	6.73	370.6	0.33	12.2	18.5	-100.7	0.18
9/8/2016	13:31	8.19	150	clear	none	6.70	349.8	0.11	6.12	18.2	-99.9	0.17
9/8/2016	13:38	8.19	150	clear	none	6.68	351.6	0.09	5.53	18.3	-95.8	0.16
9/8/2016	13:46	8.19	150	clear	none	6.67	355.7	0.07	5.89	18.1	-98.3	0.15
9/8/2016	13:56	8.19	150	clear	none	6.65	365.2	0.04	5.27	18.1	-97.9	0.14
9/8/2016	14:00	8.19	150	clear	none	6.65	370.4	0.03	5.15	18.1	-98.8	0.14
9/8/2016	14:04	8.19	150	clear	none	6.65	372.8	0.05	4.86	18.0	-100.1	0.14

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:19	14:04	45	6.75	clear	none	6.65	372.8	0.05	4.86	18.0	-100.1	0.14

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/8/2016 2:15:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/8/2016 2:15:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-25S-ME45-1 Sampler: Briley Morril
Well ID: MW09-25S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	8.5
Top of Screen (ft-BTOR):	3.5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	12	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	14.5	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/9/2016	10:20	8.65	160	CLEAR	ORGANIC	7.20	977	0.13	3.19	19.2	-140.4	0.55
9/9/2016	10:25	8.90	160	CLEAR	ORGANIC	7.13	918	0.26	3.09	19.6	-143.7	0.51
9/9/2016	10:30	8.98	160	CLEAR	ORGANIC	7.13	924	0.26	2.69	19.8	-143.8	0.51
9/9/2016	10:35	9.05	160	CLEAR	ORGANIC	7.09	955	0.12	2.58	19.8	-143.6	0.53
9/9/2016	10:40	9.10	160	CLEAR	ORGANIC	7.08	955	0.08	2.57	19.8	-143.5	0.53
9/9/2016	10:45	9.25	160	CLEAR	ORGANIC	7.07	975	0.03	2.68	20.2	-143.7	0.53
9/9/2016	10:50	9.35	160	CLEAR	ORGANIC	7.07	978	0.03	2.04	20.2	-142.5	0.54
9/9/2016	10:55	9.5	160	CLEAR	ORGANIC	7.08	995	0.01	1.75	20.4	-4466.1	0.54
9/9/2016	11:00	9.55	160	CLEAR	ORGANIC	7.08	996	0.01	1.78	20.4	-145.8	0.54
9/9/2016	11:05	9.55	160	CLEAR	ORGANIC	7.08	1005	0.01	1.62	20.3	-147.5	0.55

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
10:20	11:05	45	7.2	CLEAR	ORGANIC	7.08	1005	0.01	1.62	20.3	-147.5	0.55

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/9/2016 11:10:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/9/2016 11:10:00 AM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/9/2016 11:10:00 AM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		2	1L amber
9/9/2016 11:10:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-26DA-ME45-1 Sampler: Joel Meunier
Well ID: MW09-26DA Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):		Static Water Level (ft-BTOR):	8.58
Top of Screen (ft-BTOR):		H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):		Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	57.4	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/7/2016	9:55	9.87	100	clear	none	6.47	132.8	2.26	19.3	17.6	55.3	0.06
9/7/2016	10:05	10.99	100	clear	none	6.15	19.6	2.24	15.5	16.6	67.7	0.06
9/7/2016	10:10	11.85	100	clear	none	6.15	131.1	1.77	16.0	16.5	46.1	0.06
9/7/2016	10:25	13.25	100	clear	none	6.30	138.7	0.91	12.4	16.2	5.2	0.06
9/7/2016	10:35	13.69	100	clear	none	6.44	143.7	0.53	13.5	16.6	-13.6	0.07
9/7/2016	10:44	14.01	100	clear	none	6.48	144.6	0.46	10.7	16.2	-25.8	0.07
9/7/2016	10:53	14.17	100	clear	none	6.52	145.2	0.23	7.72	16.4	-36.9	0.07
9/7/2016	11:01	14.26	100	clear	none	6.55	146.2	0.19	6.50	16.4	-41.8	0.07
9/7/2016	11:08	14.41	100	clear	none	6.55	145.3	0.16	4.96	16.3	-44.7	0.07
9/7/2016	11:13	14.50	100	clear	none	6.56	145.1	0.16	4.63	16.3	-46.6	0.07
9/7/2016	11:18	14.57	100	clear	none	6.57	145.4	0.11	4.20	16.1	-47.8	0.07

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:55	11:18	83	8.3	clear	none	6.57	145.4	0.11	4.20	16.1	-47.8	0.07

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/7/2016 11:25:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/7/2016 11:25:00 AM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/7/2016 11:25:00 AM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		2	1L amber
9/7/2016 11:25:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-26S-ME45-1 Sampler: Joel Meunier
Well ID: MW09-26S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	7.91
Top of Screen (ft-BTOR):	5	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	12	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	10.25	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/7/2016	13:36	8.21	120	BROWN	none	5.77	96.9	4.31	191	20.0	206.9	0.04
9/7/2016	13:44	8.17	120	ROWNISH	none	5.59	95.1	3.02	84.7	20.0	216.9	0.04
9/7/2016	13:51	8.20	120	ROWNISH	none	5.60	94.3	3.09	230	20.2	222.4	0.04
9/7/2016	13:56	8.20	120	ROWNISH	none	5.60	95.2	2.11	12.1	20.0	227.6	0.04
9/7/2016	14:06	8.20	120	BROWN	none	5.49	93.5	1.98	4.02	20.0	238.1	0.04
9/7/2016	14:11	8.20	120	ROWNISH	none	5.46	93.4	1.80	3.38	19.9	241.6	0.04
9/7/2016	14:19	8.20	120	ROWNISH	none	5.48	94.2	2.02	2.03	20.0	236.8	0.04
9/7/2016	14:25	8.20	120	BROWN	none	5.46	94.0	2.11	2.09	19.8	237.9	0.04

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
13:36	14:25	49	5.88	BROWN	none	5.46	94.0	2.11	2.09	19.8	237.9	0.04

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/7/2016 2:30:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	1	1	250 mL HDPE
9/7/2016 2:30:00 PM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/7/2016 2:30:00 PM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		2	1L amber
9/7/2016 2:30:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-27D-ME45-1 Sampler: Tom Croft
Well ID: MW09-27D Well Type: Monitoring Well
QC Duplicate ID: MW09-ME45-FD01 MS/MSD: NA

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	3.72
Top of Screen (ft-BTOR):	28	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	38	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	37.94	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/6/2016	12:30	4.53	140	clear	none	6.96	543.6	0.62	6.15	17.0	-92.1	0.27
9/6/2016	12:35	4.50	140	clear	none	7.04	551.8	0.75	5.14	17.1	-95.7	0.27
9/6/2016	12:40	4.43	140	clear	none	7.08	561.4	0.76	5.87	16.8	-100.4	0.27
9/6/2016	12:45	4.39	140	clear	none	7.13	567.2	0.73	5.32	16.6	-105.6	0.28
9/6/2016	12:50	4.40	140	clear	none	7.16	570.7	0.78	5.91	16.5	-107.2	0.28

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
12:30	12:50	20	2.8	clear	none	7.16	570.7	0.78	5.91	16.5	-107.2	0.28

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/6/2016 1:00:00 PM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	2	2	250 mL HDPE
9/6/2016 1:00:00 PM	Pesticides/PCBs by SW8081B/8082A			4	1L amber
9/6/2016 1:00:00 PM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		4	1L amber
9/6/2016 1:00:00 PM	VOCs by SW8260B			4	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME45
Site Name NCBC DAVISVILLE IRP SITE 0
Project No: 60273164 LT.FI

Sample ID: MW09-27S-ME45-1 Sampler: Tom Croft
Well ID: MW09-27S Well Type: Monitoring Well
QC Duplicate ID: NA MS/MSD: MW09-27S-ME45-1MS/MSD

Well Information

Well Diameter (in.):	2	Static Water Level (ft-BTOR):	3.28
Top of Screen (ft-BTOR):	3	H/S PID Monitor Reading (ppm):	0.0
Bottom of Screen (ft-BTOR):	9	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	8.39	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/7/2016	9:41	5.02	190	clear	none	5.99	137.9	0.51	6.59	18.8	-33.0	0.06
9/7/2016	9:46	5.25	190	clear	none	6.02	135.3	0.37	7.87	18.9	-30.9	0.06
9/7/2016	9:51	5.48	190	clear	none	6.05	139.3	0.33	4.75	18.7	-30.2	0.07
9/7/2016	9:56	5.74	160	clear	none	6.07	143.3	0.35	6.31	18.8	-29.5	0.07
9/7/2016	10:01	5.95	160	clear	none	6.08	145.7	0.42	5.90	18.8	-27.9	0.07
9/7/2016	10:06	6.06	140	clear	none	6.08	147.0	0.40	3.02	18.7	-25.7	0.07
9/7/2016	10:11	6.12	140	clear	none	6.09	147.4	0.37	3.33	18.8	-23.6	0.07

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinity (ppt)
9:41	10:11	30	5.15	clear	none	6.09	147.4	0.37	3.33	18.8	-23.6	0.07

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
9/7/2016 10:15:00 AM	Metals by SW6010C/6020A/7470A	Adjust to pH < 2 with nitric acid	3	3	250 mL HDPE
9/7/2016 10:15:00 AM	Pesticides/PCBs by SW8081B/8082A			6	1L amber
9/7/2016 10:15:00 AM	SVOCs/PAHs by SW8270D/SIM	Cool to 4 degrees		6	1L amber
9/7/2016 10:15:00 AM	VOCs by SW8260B			6	40 mL vial

Piezometer Sample Log Sheets

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Sample ID: P09-01-ME45-1
Sampler: Joel Meunier
Well ID: P09-01
Well Type: Monitoring Well
QC Duplicate ID: N/A
MS/MSD: N/A

Well Information

Well Diameter (in.):	N/A	Static Water Level (ft-BTOR):	
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	N/A
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	N/A	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/12/2016	14:26	0.2	200	clear	none	7.04	32050	6.07	59.5	25.3	-91.7	23.75

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
14:26	14:26	NA	NA	clear	none	7.04	32050	6.07	59.5	25.3	-91.7	23.75

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/13/2016 12:00:00 PM	Metals by SW6010C/6020A/7470A		1	1	250 mL HDPE
9/13/2016 12:00:00 PM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/13/2016 12:00:00 PM	Salinity by SM2520			1	125 mL HDPE
9/13/2016 12:00:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Sample ID: P09-02A-ME45-1
Sampler: Marc Smith
Well ID: P09-02A
Well Type: Monitoring Well
QC Duplicate ID: N/A
MS/MSD: N/A

Well Information

Well Diameter (in.):	N/A	Static Water Level (ft-BTOR):	
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	N/A
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	N/A	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/15/2016	12:35	0.3	200	brown	marine	7.16	37919	0.12	ver range	26.8	-137	24.36

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
12:35	12:35	NA	NA	brown	marine	7.16	37919	0.12	over range	26.8	-137	24.36

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/14/2016 1:35:00 PM	Metals by SW6010C/6020A/7470A		1	1	250 mL HDPE
9/14/2016 1:35:00 PM	Salinity by SM2520			1	125 mL HDPE
9/14/2016 1:35:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Sample ID: P09-03A-ME45-1
Sampler: Marc Smith
Well ID: P09-03A
Well Type: Monitoring Well
QC Duplicate ID: N/A
MS/MSD: N/A

Well Information

Well Diameter (in.):	N/A	Static Water Level (ft-BTOR):	
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	N/A
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	N/A	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/15/2016	12:24	1.2	200	brown	none	7.50	38057	0.53	ver range	28.9	-101.3	26.44

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
12:24	12:24	NA	NA	brown	none	7.50	38057	0.53	over range	28.9	-101.3	26.44

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/14/2016 1:20:00 PM	Salinity by SM2520			1	125 mL HDPE
9/14/2016 1:20:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Sample ID: P09-04A-ME45-1
Sampler: Joel Meunier
Well ID: P09-04A
Well Type: Monitoring Well
QC Duplicate ID: N/A
MS/MSD: N/A

Well Information

Well Diameter (in.):	N/A	Static Water Level (ft-BTOR):	
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	N/A
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	N/A	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/12/2016	12:10	1.3	200	clear	marine	8.12	30616	2.05	99.2	29.4	-179.9	18.22

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
12:10	12:10	NA	NA	clear	marine	8.12	30616	2.05	99.2	29.4	-179.9	18.22

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/12/2016 12:00:00 PM	Metals by SW6010C/6020A/7470A		1	1	250 mL HDPE
9/12/2016 12:00:00 PM	Salinity by SM2520			1	125 mL HDPE
9/12/2016 12:00:00 PM	SVOCs/PAHs by SW8270D/SIM			2	1L amber
9/12/2016 12:00:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Sample ID: P09-06B-ME45-1
Sampler: Marc Smith
Well ID: P09-06B
Well Type: Monitoring Well
QC Duplicate ID: N/A
MS/MSD: P09-06B-ME45-1MS/MSD

Well Information

Well Diameter (in.):	N/A	Static Water Level (ft-BTOR):	
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	N/A
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	N/A	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/13/2016	10:00	1.0	200	brown	marine	7.65	30995	0.17	126	23.8	102.4	0.13

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
10:00	10:00	NA	NA	brown	marine	7.65	30995	0.17	126	23.8	102.4	0.13

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/13/2016 10:50:00 AM	Metals by SW6010C/6020A/7470A		1	1	250 mL HDPE
9/13/2016 10:50:00 AM	Salinity by SM2520			1	125 mL HDPE
9/13/2016 10:50:00 AM	Sulfide by EPA 376			1	0
9/13/2016 10:50:00 AM	SVOCs/PAHs by SW8270D/SIM			2	1L amber
9/13/2016 10:50:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Sample ID: P09-07B-ME45-1
Sampler: Joel Meunier
Well ID: P09-07B
Well Type: Monitoring Well
QC Duplicate ID: N/A
MS/MSD: N/A

Well Information

Well Diameter (in.):	N/A	Static Water Level (ft-BTOR):	
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	N/A
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	N/A	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/13/2016	10:00	0.3	200	brown	marine	7.29	35664	1.13	93.1	24.1	157.7	22.49

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
10:00	10:00	NA	NA	brown	marine	7.29	35664	1.13	93.1	24.1	157.7	22.49

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/13/2016 10:40:00 AM	Metals by SW6010C/6020A/7470A		1	1	250 mL HDPE
9/13/2016 10:40:00 AM	Salinity by SM2520		1		125 mL HDPE
9/13/2016 10:40:00 AM	Sulfide by EPA 376			1	0
9/13/2016 10:40:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Sample ID: P09-08B-ME45-1
Sampler: Joel Meunier
Well ID: P09-08B
Well Type: Monitoring Well
QC Duplicate ID: N/A
MS/MSD: N/A

Well Information

Well Diameter (in.):	N/A	Static Water Level (ft-BTOR):	
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	N/A
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	N/A	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/13/2016	10:05	0.2	200	brown	marine	7.78	9597	1.12	ver range	25.7	194.3	5.35

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
10:05	10:05	NA	NA	brown	marine	7.78	9597	1.12	over rang	25.7	194.3	5.35

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/13/2016 11:00:00 AM	Metals by SW6010C/6020A/7470A		1	1	250 mL HDPE
9/13/2016 11:00:00 AM	Sulfide by EPA 376			1	0
9/13/2016 11:00:00 AM	SVOCs/PAHs by SW8270D/SIM			2	1L amber
9/13/2016 11:00:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Sample ID: P09-09-ME45-1
Sampler: Dylan Potter
Well ID: P09-09
Well Type: Monitoring Well
QC Duplicate ID: N/A
MS/MSD: P09-09-ME45-1MS/MSD

Well Information

Well Diameter (in.):	N/A	Static Water Level (ft-BTOR):	
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	N/A
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	N/A	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/12/2016	10:37	0.4	200	cloudy	marine	7.38	41177	0	643	20.4	-165.4	33.54

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
10:37	10:37	NA	NA	cloudy	marine	7.38	41177	0	643	20.4	-165.4	33.54

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/12/2016 10:45:00 AM	Metals by SW6010C/6020A/7470A		1	1	250 mL HDPE
9/12/2016 10:45:00 AM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/12/2016 10:45:00 AM	Salinity by SM2520			1	125 mL HDPE
9/12/2016 10:45:00 AM	SVOCs/PAHs by SW8270D/SIM			2	1L amber
9/12/2016 10:45:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Sample ID: P09-10-ME45-1
Sampler: Joel Meunier
Well ID: P09-10
Well Type: Monitoring Well
QC Duplicate ID: N/A
MS/MSD: N/A

Well Information

Well Diameter (in.):	N/A	Static Water Level (ft-BTOR):	
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	N/A
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	N/A	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/12/2016	11:38	0.2	200	cloudy	marine	6.92	25589	1.21	185	21.7	-59.8	19.67

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
11:38	11:38	NA	NA	cloudy	marine	6.92	25589	1.21	185	21.7	-59.8	19.67

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/12/2016 11:50:00 AM	Metals by SW6010C/6020A/7470A		1	1	250 mL HDPE
9/12/2016 11:50:00 AM	Pesticides/PCBs by SW8081B/8082A			2	1L amber
9/12/2016 11:50:00 AM	Salinity by SM2520			1	125 mL HDPE
9/12/2016 11:50:00 AM	SVOCs/PAHs by SW8270D/SIM			2	1L amber
9/12/2016 11:50:00 AM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Sample ID: P09-11B-ME45-1
Sampler: Briley Morril
Well ID: P09-11B
Well Type: Monitoring Well
QC Duplicate ID: N/A
MS/MSD: P09-11B-ME45-1MS/MSD

Well Information

Well Diameter (in.):	N/A	Static Water Level (ft-BTOR):	2.61
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	N/A
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	N/A	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/16/2016	12:53	2.80	150	clear	none	7.16	37087	0.77	12.5	20.3	55,7	23.57
9/16/2016	12:59	2.85	150	clear	none	7.43	37161	0.26	33.2	20.2	-63.7	23.58
9/16/2016	13:12	2.99	150	clear	none	7.45	37021	0.18	4.38	20.2	-108.8	23.48
9/16/2016	13:19	3.00	150	clear	none	7.46	36997	0.09	4.71	20.2	-114.8	23.44
9/16/2016	13:29	3.01	150	clear	none	7.47	36973	0.07	4.35	20.2	-115.1	23.40

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
12:53	13:29	NA	NA	clear	none	7.47	36973	0.07	4.35	20.2	-115.1	23.40

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/16/2016 1:45:00 PM	Metals by SW6010C/6020A/7470A		1	1	250 mL HDPE
9/16/2016 1:45:00 PM	Salinity by SM2520			1	125 mL HDPE
9/16/2016 1:45:00 PM	Sulfide by EPA 376			1	0
9/16/2016 1:45:00 PM	SVOCs/PAHs by SW8270D/SIM			2	1L amber
9/16/2016 1:45:00 PM	VOCs by SW8260B			2	40 mL vial

GROUNDWATER SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Sample ID: P09-12B-ME45-1
Sampler: Marc Smith
Well ID: P09-12B
Well Type: Monitoring Well
QC Duplicate ID: N/A
MS/MSD: N/A

Well Information

Well Diameter (in.):	N/A	Static Water Level (ft-BTOR):	
Top of Screen (ft-BTOR):	N/A	H/S PID Monitor Reading (ppm):	N/A
Bottom of Screen (ft-BTOR):	N/A	Purge Method:	Low flow - peristalic
Total Depth of Well (ft-BTOR):	N/A	Sample Method:	Low flow - peristalic

Purge Information

Date	Time	Level (ft-BTOR)	Rate (ml/min)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
9/13/2016	11:00	0.8	200	brown	marine	6.91	3033	0.49	ver range	24.7	62.8	1.58

Start Purge	End Purge	Duration (min)	Total Vol (L)	Color	ODOR	pH (S.U. units)	S.C. (uS/cm)	DO (mg/l)	Turbidity (NTUs)	Temp (C)	ORP (mV)	Salinitiy (ppt)
11:00	11:00	NA	NA	brown	marine	6.91	3033	0.49	over range	24.7	62.8	1.58

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/13/2016 11:10:00 AM	Metals by SW6010C/6020A/7470A		1	1	250 mL HDPE
9/13/2016 11:10:00 AM	Salinity by SM2520			1	125 mL HDPE
9/13/2016 11:10:00 AM	Sulfide by EPA 376			1	0
9/13/2016 11:10:00 AM	SVOCs/PAHs by SW8270D/SIM			2	1L amber
9/13/2016 11:10:00 AM	VOCs by SW8260B			2	40 mL vial

Sediment Sample Log Sheets

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-01
Sample ID: SED09-01-ME45-1
QC Duplicate ID: NA

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: SED09-01-ME45-1MS/MSD

Sample Information

Date	9/13/2016 11:30:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/13/2016 11:30:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/13/2016 11:30:00 AM	PAH/Metals/Pesticides/PCBs			6	8oz jar
9/13/2016 11:30:00 AM	VOCs	Methanol preservation		9	40 mL vial

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-02A
Sample ID: SED09-02A-ME45-1
QC Duplicate ID: SD09-ME45-FD01

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: NA

Sample Information

Date	9/12/2016 10:35:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/12/2016 10:35:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/12/2016 10:35:00 AM	PAH/Metals/Pesticides/PCBs			4	8oz jar
9/12/2016 10:35:00 AM	VOCs	Methanol preservation		6	40 mL vial

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-03A
Sample ID: SED09-03A-ME45-1
QC Duplicate ID: NA

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: NA

Sample Information

Date	9/12/2016 11:15:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/12/2016 11:15:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/12/2016 11:15:00 AM	PAH/Metals			1	8oz jar
9/12/2016 11:15:00 AM	VOCs	Methanol preservation		3	40 mL vial

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-04A
Sample ID: SED09-04A-ME45-1
QC Duplicate ID: NA

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: NA

Sample Information

Date	9/12/2016 11:40:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/12/2016 11:40:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/12/2016 11:40:00 AM	PAH/Metals			1	8oz jar
9/12/2016 11:40:00 AM	VOCs	Methanol preservation		3	40 mL vial

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-05A
Sample ID: SED09-05A-ME45-1
QC Duplicate ID: NA

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: NA

Sample Information

Date	9/13/2016 10:35:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/13/2016 10:35:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/13/2016 10:35:00 AM	PAH/Metals			1	8oz jar
9/13/2016 10:35:00 AM	VOCs	Methanol preservation		3	40 mL vial

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-06B
Sample ID: SED09-06B-ME45-1
QC Duplicate ID: NA

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: NA

Sample Information

Date	9/26/2016 11:10:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/26/2016 11:10:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/26/2016 11:10:00 AM	PAH/Metals/Sulfide			1	8oz jar
9/26/2016 11:10:00 AM	VOCs	Methanol preservation		3	40 mL vial

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-07B
Sample ID: SED09-07B-ME45-1
QC Duplicate ID: NA

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: NA

Sample Information

Date	9/26/2016 11:00:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/26/2016 11:00:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/26/2016 11:00:00 AM	PAH/Metals/Sulfide			1	8oz jar
9/26/2016 11:00:00 AM	VOCs	Methanol preservation		3	40 mL vial

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-08B
Sample ID: SED09-08B-ME45-1
QC Duplicate ID: SED09-ME45-FD02

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: NA

Sample Information

Date	9/26/2016 10:40:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/26/2016 10:40:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/26/2016 10:40:00 AM	PAH/Metals/Sulfide			3	8oz jar
9/26/2016 10:40:00 AM	VOCs	Methanol preservation		6	40 mL vial

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-09
Sample ID: SED09-09-ME45-1
QC Duplicate ID: NA

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: NA

Sample Information

Date	9/12/2016 10:00:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/12/2016 10:00:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/12/2016 10:00:00 AM	PAH/Metals/Pesticides/PCBs			2	8oz jar
9/12/2016 10:00:00 AM	VOCs	Methanol preservation		3	40 mL vial

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-10
Sample ID: SED09-10-ME45-1
QC Duplicate ID: NA

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: NA

Sample Information

Date	9/12/2016 9:30:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/12/2016 9:30:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/12/2016 9:30:00 AM	PAH/Metals/Pesticides/PCBs			2	8oz jar
9/12/2016 9:30:00 AM	VOCs	Methanol preservation		3	40 mL vial

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-11B
Sample ID: SED09-11B-ME45-1
QC Duplicate ID: NA

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: NA

Sample Information

Date	9/13/2016 10:50:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/13/2016 10:50:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/13/2016 10:50:00 AM	PAH/Metals/Sulfide			5	8oz jar

SEDIMENT SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: SED09-12B
Sample ID: SED09-12B-ME45-1
QC Duplicate ID: NA

Sample Data Type: Grab
Sampler: Rachel Macphee
MS/MSD: SED09-12B-ME45-1MS/MSD

Sample Information

Date	9/26/2016 10:15:00 AM	Sample Data Type:	Composite

Sample Details

Date/Time	Method	Start Depth (IN)	End Depth (IN)	Notes
9/26/2016 10:15:00 AM	HA	0	6	

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered	No. of Unfiltered Containers	Type/Vol.
9/26/2016 10:15:00 AM	PAH/Metals/Sulfide			3	8oz jar
9/26/2016 10:15:00 AM	VOCs	Methanol preservation		9	40 mL vial

Shellfish Tissue Sample Log Sheets

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-03-ME45R-1
Sample ID: ET09-03
QC Duplicate ID: N/A

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data			
Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/15/2016	14:22	30	2.91	1.07	0.94
12/15/2016	14:08	59	3.55	1.55	1.11
12/15/2016	14:09	28	2.78	1.26	0.87
12/15/2016	14:10	51	4.50	1.31	1.13
12/15/2016	14:11	39	3.22	1.42	0.94
12/15/2016	14:12	56	3.43	1.38	1.16
12/15/2016	14:13	32	3.07	1.15	0.89
12/15/2016	14:14	38	3.06	1.30	0.99
12/15/2016	14:15	37	3.08	1.25	0.99
12/15/2016	14:16	27	2.47	1.11	0.90
12/15/2016	14:17	47	3.30	1.28	1.14
12/15/2016	14:18	31	2.91	1.11	0.96
12/15/2016	14:19	38	3.08	1.44	0.94
12/15/2016	14:07	59	3.40	1.52	1.18
12/15/2016	14:21	39	3.05	1.22	1.04
12/15/2016	14:36	43	3.29	1.33	1.07
12/15/2016	14:23	31	2.83	1.10	0.92
12/15/2016	14:24	45	3.17	1.15	1.12
12/15/2016	14:25	37	3.00	1.19	0.95
12/15/2016	14:26	61	3.39	2.30	1.25
12/15/2016	14:27	80	4.10	1.80	1.40
12/15/2016	14:28	31	2.85	1.20	0.89

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-03-ME45R-1
Sample ID: ET09-03
QC Duplicate ID: N/A
Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data

Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/15/2016	14:29	43	3.05	1.22	1.09
12/15/2016	14:30	37	2.80	1.20	1.05
12/15/2016	14:31	54	3.21	1.29	1.12
12/15/2016	14:32	47	3.18	1.28	1.11
12/15/2016	14:33	42	3.15	1.22	1.0
12/15/2016	14:34	47	3.21	1.36	1.05
12/15/2016	14:35	37	3.00	1.10	1.05
12/15/2016	14:20	28	2.76	1.07	0.89

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
12/14/2016 12:30:00 PM	Metals;PestSW8081B;SVOCs/PAHs 270D/SIM;%L;PCB homologs by EPA 680	Store cool at 4°C, HCl		1	1 gal ZipLoc

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-04-ME45R-1
Sample ID: ET09-04
QC Duplicate ID: N/A

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data			
Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	16:00	72	3.75	1.38	1.30
12/14/2016	16:08	26	2.64	1.07	0.85
12/14/2016	16:07	51	3.40	1.36	1.16
12/14/2016	16:06	23	2.54	1.07	0.86
12/14/2016	16:05	47	3.0	1.30	1.14
12/14/2016	16:04	34	2.63	1.22	1.05
12/14/2016	16:03	60	3.64	1.36	1.17
12/14/2016	15:53	47	2.87	1.23	0.99
12/14/2016	16:01	32	2.56	1.20	0.98
12/14/2016	16:11	33	2.97	1.16	0.97
12/14/2016	15:59	42	2.91	1.44	1.0
12/14/2016	15:58	87	4.01	1.75	1.54
12/14/2016	15:57	31	2.68	1.21	0.92
12/14/2016	15:56	16	2.64	1.06	0.92
12/14/2016	15:55	53	3.35	1.54	1.21
12/14/2016	15:54	55	3.04	2.20	2.46
12/14/2016	16:02	35	2.81	1.23	0.95
12/14/2016	16:18	52	3.31	1.44	1.13
12/14/2016	16:26	21	2.28	0.92	0.84
12/14/2016	16:25	22	2.47	1.09	0.85
12/14/2016	16:24	27	2.68	1.68	0.88
12/14/2016	16:23	26	2.77	1.12	0.88

SHELLFISH SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-04-ME45R-1
Sample ID: ET09-04
QC Duplicate ID: N/A

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data

Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	16:22	24	2.49	1.08	0.88
12/14/2016	16:21	21	2.42	1.12	0.82
12/14/2016	16:09	35	2.82	1.18	1.01
12/14/2016	16:19	40	3.10	1.35	1.02
12/14/2016	16:10	35	2.85	1.16	1.0
12/14/2016	16:17	84	4.13	1.86	1.36
12/14/2016	16:16	89	4.05	1.60	1.47
12/14/2016	16:15	37	2.86	1.38	0.95
12/14/2016	16:14	33	2.67	1.2	0.97
12/14/2016	16:13	62	3.76	1.48	1.23
12/14/2016	16:12	27	2.67	1.07	0.93
12/14/2016	16:27	28	2.81	1.16	0.86
12/14/2016	16:20	35	2.75	1.15	1.03

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
12/14/2016 2:20:00 PM	Metals;PestSW8081B;SVOCs/PAHs 270D/SIM;%L;PCB homologs by EPA 680	Store cool at 4°C, HCl		1	1 gal ZipLoc

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-05-ME45R-1
Sample ID: ET09-05
QC Duplicate ID: ET09-ME45R-FD01

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data			
Species Common Name	Quahogs	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	11:03	161	2.45	3.00	1.68
12/14/2016	10:50	124	2.30	2.81	1.52
12/14/2016	10:51	106	2.21	2.67	1.49
12/14/2016	10:52	183	2.60	3.21	1.67
12/14/2016	10:53	57	1.77	2.34	1.18
12/14/2016	10:54	156	2.42	3.06	1.70
12/14/2016	10:55	92	2.02	2.51	1.49
12/14/2016	10:56	110	2.30	2.88	1.43
12/14/2016	10:57	196	2.69	3.47	1.74
12/14/2016	10:58	192	1.59	3.17	1.82
12/14/2016	10:59	91	2.09	2.60	1.34
12/14/2016	11:00	140	2.38	2.98	1.56
12/14/2016	10:49	87	2.09	2.63	1.38
12/14/2016	11:02	103	2.05	2.72	1.48
12/14/2016	11:15	223	2.88	3.55	1.84
12/14/2016	11:04	160	2.52	3.10	1.73
12/14/2016	11:05	76	1.96	2.48	1.32
12/14/2016	11:06	68	1.87	2.46	1.23
12/14/2016	11:07	108	2.19	2.69	1.50
12/14/2016	11:08	132	2.20	2.98	1.56
12/14/2016	11:09	109	2.23	2.82	1.43
12/14/2016	11:10	79	1.95	2.44	1.35

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-05-ME45R-1
Sample ID: ET09-05
QC Duplicate ID: ET09-ME45R-FD01

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data

Species Common Name	Quahogs	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	11:11	182	2.52	3.15	1.75
12/14/2016	11:12	108	2.10	2.76	1.46
12/14/2016	11:13	131	2.34	2.88	1.55
12/14/2016	11:14	138	2.36	2.97	1.58
12/14/2016	11:01	145	2.30	2.86	1.66

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
12/13/2016 2:00:00 PM	Metals;PestSW8081B;SVOCs/PAHs 270D/SIM;%L;PCB homologs by EPA 680	Store cool at 4°C, HCl		1	1 gal ZipLoc

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-06-ME45R-1
Sample ID: ET09-06
QC Duplicate ID: N/A
Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data

Species Common Name	Quahogs	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	9:32	52	1.67	2.21	1.16
12/14/2016	9:31	50	1.80	2.15	1.16
12/14/2016	9:30	75	1.98	2.52	1.34
12/14/2016	9:29	94	2.12	2.60	1.36
12/14/2016	9:28	135	2.33	3.13	1.52
12/14/2016	9:27	164	2.42	3.42	1.71
12/14/2016	9:26	115	2.27	2.86	1.47
12/14/2016	9:25	168	2.75	3.31	1.65
12/14/2016	9:24	87	2.18	2.52	1.37

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
12/13/2016 10:55:00 AM	Metals;PestSW8081B;SVOCs/PAHs 270D/SIM;%L;PCB homologs by EPA 680	Store cool at 4°C, HCl		1	1 gal ZipLoc

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-07-ME45R-1
Sample ID: ET09-07
QC Duplicate ID: N/A

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data			
Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	16:58	19	2.56	0.98	0.77
12/14/2016	17:08	29	2.89	1.09	0.90
12/14/2016	17:07	12	2.21	1.94	0.63
12/14/2016	17:06	16	2.39	0.91	0.70
12/14/2016	17:05	32	2.88	1.09	0.95
12/14/2016	17:04	19	2.46	0.97	0.79
12/14/2016	17:03	18	2.50	1.0	0.70
12/14/2016	17:02	32	2.95	1.06	0.90
12/14/2016	17:01	10	2.12	0.81	0.57
12/14/2016	16:48	21	2.57	1.0	0.8
12/14/2016	16:59	21	2.62	1.0	0.80
12/14/2016	17:11	15	2.31	0.94	0.68
12/14/2016	16:57	13	2.38	0.91	0.74
12/14/2016	16:56	15	2.24	0.96	0.73
12/14/2016	16:55	20	2.56	0.97	0.77
12/14/2016	16:54	19	2.56	0.98	0.75
12/14/2016	16:53	18	2.45	0.95	0.80
12/14/2016	16:52	16	2.4	1.02	0.72
12/14/2016	16:51	27	2.85	1.20	0.89
12/14/2016	16:50	23	2.63	1.19	1.78
12/14/2016	16:49	33	3.17	1.23	0.91
12/14/2016	17:00	18	2.47	1.0	0.76

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-07-ME45R-1
Sample ID: ET09-07
QC Duplicate ID: N/A

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data			
Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	17:20	16	2.19	0.95	0.68
12/14/2016	17:31	12	2.09	0.85	0.61
12/14/2016	17:30	24	2.71	1.19	0.79
12/14/2016	17:29	17	2.29	0.88	0.74
12/14/2016	17:28	33	2.86	1.26	0.96
12/14/2016	17:27	24	2.65	1.09	0.83
12/14/2016	17:26	20	2.62	0.96	0.73
12/14/2016	17:25	14	2.51	0.91	0.70
12/14/2016	17:24	20	2.72	1.01	0.77
12/14/2016	17:23	16	2.25	1.0	0.70
12/14/2016	17:09	16	2.35	0.90	0.69
12/14/2016	17:21	23	2.69	1.05	0.91
12/14/2016	17:10	15	2.21	0.97	0.66
12/14/2016	17:19	30	2.86	1.10	0.95
12/14/2016	17:18	17	2.58	0.96	0.67
12/14/2016	17:17	27	2.80	1.10	0.85
12/14/2016	17:16	15	2.27	0.99	0.72
12/14/2016	17:15	11	2.11	0.85	0.66
12/14/2016	17:14	19	2.58	0.98	0.74
12/14/2016	17:13	19	2.51	0.96	0.77
12/14/2016	17:12	16	2.48	1.02	0.70
12/14/2016	17:32	16	2.41	0.92	0.72

SHELLFISH SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-07-ME45R-1
Sample ID: ET09-07
QC Duplicate ID: N/A

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data

Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	17:22	28	2.77	1.16	0.87

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
12/14/2016 1:10:00 PM	Metals;PestSW8081B;SVOCs/PAHs 270D/SIM;%L;PCB homologs by EPA 680	Store cool at 4°C, HCl		1	1 gal ZipLoc

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-08-ME45R-1
Sample ID: ET09-08
QC Duplicate ID: N/A

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data			
Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	16:34	11	2.08	0.82	0.64
12/14/2016	16:25	11	2.08	0.84	0.66
12/14/2016	16:42	14	2.34	0.92	0.72
12/14/2016	16:41	14	2.28	0.99	0.68
12/14/2016	16:40	13	2.05	0.90	0.68
12/14/2016	16:39	13	2.32	0.95	0.87
12/14/2016	16:38	14	2.30	0.94	0.67
12/14/2016	16:37	17	2.27	0.96	0.77
12/14/2016	16:44	13	2.24	0.94	0.67
12/14/2016	16:35	12	2.20	0.87	0.67
12/14/2016	16:45	13	2.09	0.93	0.68
12/14/2016	16:33	12	2.08	0.87	0.61
12/14/2016	16:32	12	2.16	0.83	0.63
12/14/2016	16:31	9	2.04	0.81	0.6
12/14/2016	16:30	30	2.80	1.05	0.92
12/14/2016	16:29	10	1.99	0.85	0.60
12/14/2016	16:28	9	1.93	0.86	0.60
12/14/2016	16:27	59	3.53	1.48	1.19
12/14/2016	16:26	12	2.10	0.91	0.62
12/14/2016	16:36	10	2.02	0.80	0.61
12/14/2016	16:54	13	2.12	0.91	0.65
12/14/2016	17:03	16	2.27	0.96	0.76

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-08-ME45R-1
Sample ID: ET09-08
QC Duplicate ID: N/A

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data			
Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	17:02	16	2.48	1.06	0.73
12/14/2016	17:01	11	2.03	0.88	0.63
12/14/2016	17:00	28	2.79	1.11	0.88
12/14/2016	16:59	19	2.42	1.05	0.66
12/14/2016	16:58	15	2.23	0.94	0.70
12/14/2016	16:57	10	2.11	0.87	0.63
12/14/2016	16:43	10	1.93	0.86	0.61
12/14/2016	16:55	19	2.45	1.0	0.78
12/14/2016	17:04	20	2.76	1.07	0.77
12/14/2016	16:53	14	2.29	0.87	0.65
12/14/2016	16:52	15	2.32	0.99	0.68
12/14/2016	16:51	18	2.35	1.07	0.74
12/14/2016	16:50	11	2.13	0.90	0.60
12/14/2016	16:49	14	2.17	0.90	0.67
12/14/2016	16:48	14	2.25	1.07	0.66
12/14/2016	16:47	11	1.99	0.86	0.62
12/14/2016	16:46	18	2.52	0.96	0.76
12/14/2016	16:56	13	2.19	0.85	0.67

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-08-ME45R-1
Sample ID: ET09-08
QC Duplicate ID: N/A
Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data			
Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
12/14/2016 1:40:00 PM	Metals;PestSW8081B;SVOCs/PAHs 270D/SIM;%L;PCB homologs by EPA 680	Store cool at 4°C, HCl		1	1 gal ZipLoc

SHELLFISH SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-09-ME45R-1
Sample ID: ET09-09
QC Duplicate ID: N/A

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data

Species Common Name	Quahogs	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	9:59	73	1.93	2.47	1.32
12/14/2016	9:58	73	1.93	2.55	1.29
12/14/2016	9:57	77	2.10	2.47	1.33
12/14/2016	9:56	32	1.39	1.72	0.92
12/14/2016	9:55	115	2.21	2.78	1.50
12/14/2016	9:54	135	2.26	2.90	1.67
12/14/2016	9:53	189	2.63	3.45	1.81
12/14/2016	9:52	213	2.82	3.61	1.74
12/14/2016	9:51	150	2.86	3.13	1.69
12/14/2016	9:50	56	2.04	2.26	1.23

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
12/13/2016 12:50:00 PM	Metals;PestSW8081B;SVOCs/PAHs 270D/SIM;%L;PCB homologs by EPA 680	Store cool at 4°C, HCl		1	1 gal ZipLoc

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-10-ME45R-1
Sample ID: ET09-10
QC Duplicate ID: N/A
Sampler: Briley Morril
MS/MSD: ET09-10-ME45R-1MS/MSD

Specimen Collection Data			
Species Common Name	Quahogs	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	11:36	169	2.64	3.24	1.72
12/14/2016	11:23	321	3.05	3.95	2.04
12/14/2016	11:24	248	2.82	3.89	1.80
12/14/2016	11:25	307	2.98	3.93	2.02
12/14/2016	11:26	284	3.03	3.90	1.92
12/14/2016	11:27	249	2.78	3.74	1.85
12/14/2016	11:28	280	2.89	3.87	1.91
12/14/2016	11:29	141	2.28	3.02	1.57
12/14/2016	11:30	195	2.64	3.42	1.64
12/14/2016	11:31	106	2.11	2.80	1.37
12/14/2016	11:32	211	3.01	3.42	1.79
12/14/2016	11:33	159	2.58	3.29	1.70
12/14/2016	11:22	124	2.21	2.93	1.38
12/14/2016	11:35	123	2.27	3.01	1.51
12/14/2016	11:49	94	2.05	2.84	1.38
12/14/2016	11:37	111	2.25	2.90	1.43
12/14/2016	11:38	119	2.19	2.85	1.53
12/14/2016	11:39	106	2.22	2.80	1.42
12/14/2016	11:40	117	2.15	2.91	1.53
12/14/2016	11:41	223	2.82	3.63	1.85
12/14/2016	11:42	153	2.39	3.12	1.64
12/14/2016	11:43	91	2.03	2.75	1.42

SHELLFISH SAMPLE LOG SHEET

RESOLUTION CONSULTANTS

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-10-ME45R-1
Sample ID: ET09-10
QC Duplicate ID: N/A
Sampler: Briley Morril
MS/MSD: ET09-10-ME45R-1MS/MSD

Specimen Collection Data

Species Common Name	Quahogs	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	11:44	99	2.11	2.79	1.39
12/14/2016	11:45	257	3.01	3.89	1.93
12/14/2016	11:46	229	2.88	3.67	1.81
12/14/2016	11:47	52	1.66	2.17	1.09
12/14/2016	11:48	193	2.62	3.38	1.83
12/14/2016	11:34	132	2.31	3.01	1.57

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
12/13/2016 12:25:00 PM	Metals;PestSW8081B;SVOCs/PAHs 270D/SIM;%L;PCB homologs by EPA 680	Store cool at 4°C, HCl		2	1 gal ZipLoc

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-11-ME45R-1
Sample ID: ET09-11
QC Duplicate ID: N/A

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data			
Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/13/2016	15:30	22	2.46	0.97	0.9
12/13/2016	13:30	44	3.25	1.09	1.07
12/13/2016	15:39	35	3.10	1.20	0.97
12/13/2016	15:38	29	2.49	1.01	1.05
12/13/2016	15:37	22	2.53	1.02	0.85
12/13/2016	15:36	35	2.97	1.31	0.94
12/13/2016	15:35	33	2.75	1.16	0.93
12/13/2016	15:34	44	3.06	1.22	1.09
12/13/2016	15:33	42	3.09	1.11	1.07
12/13/2016	15:41	31	2.81	1.14	1.01
12/13/2016	15:31	35	2.73	1.16	0.97
12/13/2016	15:42	47	3.26	1.35	1.18
12/13/2016	15:29	35	2.98	1.24	0.9
12/13/2016	15:28	40	3.04	1.11	1.08
12/13/2016	15:27	43	3.11	1.19	1.05
12/13/2016	15:26	38	2.97	1.20	1.05
12/13/2016	15:25	54	3.43	1.35	1.19
12/13/2016	15:24	34	2.89	1.08	1.02
12/13/2016	15:23	55	3.29	1.23	1.15
12/13/2016	15:22	46	1.45	1.17	1.06
12/13/2016	15:21	55	3.25	1.26	1.19
12/13/2016	15:32	50	3.15	1.31	1.20

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-11-ME45R-1
Sample ID: ET09-11
QC Duplicate ID: N/A

Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data			
Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/13/2016	15:52	45	3.12	1.14	1.11
12/13/2016	16:02	22	2.45	1.00	0.83
12/13/2016	16:01	30	2.59	1.15	0.94
12/13/2016	16:00	31	2.68	1.09	1.00
12/13/2016	15:59	20	2.54	0.98	0.80
12/13/2016	15:58	31	2.80	1.20	0.99
12/13/2016	15:57	40	3.07	1.21	1.04
12/13/2016	15:56	22	2.50	0.98	0.88
12/13/2016	15:55	25	2.49	0.96	0.86
12/13/2016	15:40	49	3.06	1.17	1.16
12/13/2016	15:53	17	2.21	0.93	0.80
12/13/2016	16:30	26	2.50	1.00	0.94
12/13/2016	15:51	45	3.12	1.29	1.11
12/13/2016	15:50	36	2.89	1.12	1.03
12/13/2016	15:49	29	2.77	1.14	0.90
12/13/2016	15:48	21	2.54	0.96	0.83
12/13/2016	15:47	23	2.49	0.98	0.92
12/13/2016	15:46	35	2.98	1.09	1.05
12/13/2016	15:45	15	2.25	0.93	0.71
12/13/2016	15:44	45	3.23	1.20	1.10
12/13/2016	15:43	18	2.29	0.95	0.85
12/13/2016	15:54	41	3.06	1.26	1.07

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-11-ME45R-1
Sample ID: ET09-11
QC Duplicate ID: N/A
Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data

Species Common Name	Ribbed Mussles	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
12/13/2016 1:30:00 PM	Metals;PestSW8081B;SVOCs/PAHs 270D/SIM;%L;PCB homologs by EPA 680	Store cool at 4°C, HCl		1	1 gal ZipLoc

SHELLFISH SAMPLE LOG SHEET

Event: ME45
Site Name: NCBC DAVISVILLE IRP SITE 09
Project No: 60273164 LT.FI

Location ID: ET09-12-ME45R-1
Sample ID: ET09-12
QC Duplicate ID: N/A
Sampler: Briley Morril
MS/MSD: N/A

Specimen Collection Data

Species Common Name	Quahogs	Area Surveyed (ft)	Dec 2016
Number of Specimens	ME45	Weight = Whole animal in shell	
Sample Method	Grab		

Date	Time	Weight	Length	Width	Girth
12/14/2016	10:15	215	2.68	3.71	1.81
12/14/2016	10:14	180	2.43	3.23	1,76
12/14/2016	10:13	195	2.63	3.42	1.77
12/14/2016	10:12	102	2.15	2.85	1.37
12/14/2016	10:11	184	2.69	3.46	1.74
12/14/2016	10:10	223	2.72	3.71	1.91
12/14/2016	10:09	256	2.93	3.80	1.90
12/14/2016	10:08	160	2.54	3.24	1.64
12/14/2016	10:07	37	1.56	1.92	1.04
12/14/2016	10:06	70	1.89	2.44	1.28
12/14/2016	10:05	139	2.45	3.07	1.64

Laboratory Analysis

Date/Time	Analysis	Preservative	No. of Filtered Containers	No. of Unfiltered Containers	Type/Vol.
12/13/2016 11:40:00 AM	Metals;PestSW8081B;SVOCs/PAHs 270D/SIM;%L;PCB homologs by EPA 680	Store cool at 4°C, HCl		1	1 gal ZipLoc

Attachment B

Data Validation Reports

RESOLUTION CONSULTANTS

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0812
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants Completed on: 12/02/2016
Reviewed by:	Kristin Rutherford/Resolution Consultants File Name: R0812_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 6, 7, 8, and 9, 2016.

Sample ID	Matrix/Sample Type
MW09-07S-ME45-1	Ground water
MW09-08DA-ME45-1	Ground water
MW09-09DA-ME45-1	Ground water
MW09-11S-ME45-1	Ground water
MW09-17I-ME45-1	Ground water
MW09-21S-ME45-1	Ground water
MW09-24D-ME45-1	Ground water
MW09-25S-ME45-1	Ground water
MW09-26DA-ME45-1	Ground water
MW09-26S-ME45-1	Ground water
MW09-27D-ME45-1	Ground water
MW09-ME45-FD01	Field Duplicate of MW09-27D-ME45-1
MW09-27S-ME45-1	Ground water
MW09-ME45-TB05	Trip Blank

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance (April 2013)*;

- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✗	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✗	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated and/or rejected due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.

- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-1.

Criteria	Detect	Non-detect
Sample temperature > 6°C but ≤ 10°C upon receipt at the laboratory	Use professional judgment	Use professional judgment
Sample temperature > 10°C upon receipt at the laboratory	Use professional judgment J-	Use professional judgment R
Aqueous sample properly preserved but analyzed outside the 14-day technical holding time	J*	R
Holding times grossly exceeded	J-	R

* The true direction of any bias may be unknown in this case. Use professional judgment based on knowledge of the chemistry of the analytes in the sample, or do not assign a direction to the bias.

Qualified sample results are shown in Table 1.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and (RF) acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Tables A-2, A-3, A-4 and A-5. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualifications
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

The RFs for acetone and 2-butanone did not meet the method 8260C requirements for initial and/or continuing calibrations as required by the QSM. The nonconformances are summarized in Tables A-2 and A-5. The RFs for acetone and 2-butanone met the National Functional Guidelines requirements. Professional judgement was used to qualify the results for acetone and 2-butanone as estimated (J/UJ).

Laboratory Blanks/Trip Blanks

Laboratory method blanks and trip blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks were not collected since dedicated sampling equipment was used for ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank sample MW09-ME45-TB05.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS/MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-6. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R>UL	J+	No qualification
20% ≤ %R < LL	J-	UJ
%R <20% (see note 1)	J-	R*
RPD >UL	J	No qualification
Note: Actions are applied to the native unspiked sample only (see note 2) *When the native sample concentration is >4X the concentration of the spike added (based on Region I criteria), evaluate the MS, MSD, and native sample with regards to %RSD rather than %R (Resolution Consultants professional judgment).		

1. Based on NFG 2016 VOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in associated samples for any analyte with < 20% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.
2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis, professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-7. Data qualification to the analytes associated with the specific LCS/LCSD %Rs or RPDs was as follows:

Criteria[1]	Action	
	Detected Compounds	Nondetected Compounds
%R or RPD > UL	J+	No qualification
%R < LL	J-	UJ
%R < 20% (see note 1)	J-	R
(LL = lower limit, UL = upper limit)		

Notes:

1. Based on NFG 2016 VOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in all associated samples for any analyte with < 20% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather reject sample results previously negated (U) on the basis of blank contamination.

Qualified sample results are shown in Table 1.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standard Results

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and limits of detection (LODs) were adjusted accordingly by the laboratory.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-07S-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-07S-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-07S-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-07S-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-07S-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-07S-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-07S-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-08DA-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-08DA-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-08DA-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-08DA-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-08DA-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-08DA-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-08DA-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-09DA-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-09DA-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-09DA-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-09DA-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-09DA-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-09DA-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-09DA-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-11S-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-11S-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-11S-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-11S-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-11S-ME45-1	WG	BROMOFORM	2.0	2.0	5.0	UG/L	UJ	c
MW09-11S-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-17I-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-17I-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-17I-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-17I-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-17I-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-17I-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-17I-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-21S-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-21S-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-21S-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-21S-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-21S-ME45-1	WG	BROMOFORM	2.0	2.0	5.0	UG/L	UJ	c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-21S-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-24D-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-24D-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-24D-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-24D-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-24D-ME45-1	WG	BROMOFORM	2.0	2.0	5.0	UG/L	UJ	c
MW09-24D-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-25S-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-25S-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-25S-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-25S-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-25S-ME45-1	WG	BROMOFORM	2.0	2.0	5.0	UG/L	UJ	c
MW09-25S-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-26DA-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-26DA-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-26DA-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-26DA-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-26DA-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-26DA-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-26DA-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-26S-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-26S-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-26S-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-26S-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-26S-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-26S-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-26S-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-27D-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	R	c,h
MW09-27D-ME45-1	WG	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	1,1,2-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	1,1-DICHLOROETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	1,1-DICHLOROETHENE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	1,2-DICHLOROETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	1,2-DICHLOROPROPANE	2.0	2.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	R	c,h
MW09-27D-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	R	c,h
MW09-27D-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	R	c,h
MW09-27D-ME45-1	WG	BENZENE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	BROMODICHLOROMETHANE	1.0	1.0	5.0	UG/L	R	h

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-27D-ME45-1	WG	BROMOFORM	2.0	2.0	5.0	UG/L	R	c,h
MW09-27D-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	CARBON DISULFIDE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	R	c,h
MW09-27D-ME45-1	WG	CHLOROBENZENE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	CHLOROETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	CHLOROFORM	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	CHLOROMETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	CIS-1,2-DICHLOROETHENE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	DIBROMOCHLOROMETHANE	2.0	2.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	ETHYLBENZENE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	METHYLENE CHLORIDE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	STYRENE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	TOLUENE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	TRANS-1,2-DICHLOROETHENE	2.0	2.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	TRICHLOROETHENE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	VINYL CHLORIDE	1.0	1.0	5.0	UG/L	R	h
MW09-27D-ME45-1	WG	XYLENES, TOTAL	1.0	1.0	5.0	UG/L	R	h
MW09-27S-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-27S-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-27S-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-27S-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-27S-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-27S-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	m,c
MW09-27S-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-27S-ME45-1	WG	ETHYLBENZENE	1.0	1.0	5.0	UG/L	UJ	m
MW09-27S-ME45-1	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	UJ	m
MW09-ME45-FD01	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	R	c,h
MW09-ME45-FD01	WG	1,1,2,2-TETRACHLOROETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	1,1,2-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	1,1-DICHLOROETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	1,1-DICHLOROETHENE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	1,2-DICHLOROETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	1,2-DICHLOROPROPANE	2.0	2.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	R	c,h
MW09-ME45-FD01	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	R	c,h
MW09-ME45-FD01	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	R	h

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-ME45-FD01	WG	ACETONE	5.0	5.0	5.0	UG/L	R	c,h
MW09-ME45-FD01	WG	BENZENE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	BROMODICHLOROMETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	BROMOFORM	2.0	2.0	5.0	UG/L	R	c,h
MW09-ME45-FD01	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	CARBON DISULFIDE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	R	c,h
MW09-ME45-FD01	WG	CHLOROBENZENE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	CHLOROETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	CHLOROFORM	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	CHLOROMETHANE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	CIS-1,2-DICHLOROETHENE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	DIBROMOCHLOROMETHANE	2.0	2.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	ETHYLBENZENE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	METHYLENE CHLORIDE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	STYRENE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	TETRACHLOROETHENE	2.0	2.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	TOLUENE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	TRANS-1,2-DICHLOROETHENE	2.0	2.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	TRICHLOROETHENE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	VINYL CHLORIDE	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-FD01	WG	XYLENES, TOTAL	1.0	1.0	5.0	UG/L	R	h
MW09-ME45-TB05	WQ	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WQ	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WQ	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WQ	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WQ	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WQ	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WQ	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WQ	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WQ	TRICHLOROETHENE	1.0	1.0	5.0	UG/L	UJ	l,c

Attachment A

Nonconformance Summary Tables

Table A-1 - Hold Times

Sample ID	Days from Sampling to Prep	Days from Prep to Analysis	Days from Sampling to Analysis	Status
MW09-ME45-FD01	16	0	16	>14 days
MW09-27D-ME45-1	16	0	16	>14 days

Table A-2 Initial Calibration – VOC

ICAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 09/19/16	ACETONE	0.021	0.100	0.010	MW09-27S-ME45-1 MW09-26DA-ME45-1 MW09-08DA-ME45-1 MW09-09DA-ME45-1 MW09-07S-ME45-1 MW09-26S-ME45-1 MW09-17I-ME45-1 MW09-27D-ME45-1 MW09-ME45-FD01 MW09-11S-ME45-1 MW09-21S-ME45-1 MW09-24D-ME45-1 MW09-25S-ME45-1
	2-BUTANONE	0.024	0.100	0.010	
Instrument: V10 09/21/16	ACETONE	0.066	0.100	0.010	MW09-ME45-TB05
	2-BUTANONE	0.070	0.100	0.010	

NFG – National Functional Guidelines

Table A-3 Initial Calibration– VOC

ICAL	Compound	% RSD	%RSD Limit	Associated Samples	Action
Instrument: V6 09/19/16-09/19/16	ACETONE	24.4	<15	MW09-27S-ME45-1 MW09-26DA-ME45-1 MW09-08DA-ME45-1 MW09-09DA-ME45-1 MW09-07S-ME45-1 MW09-26S-ME45-1 MW09-17I-ME45-1 MW09-27D-ME45-1 MW09-ME45-FD01 MW09-11S-ME45-1 MW09-21S-ME45-1 MW09-24D-ME45-1 MW09-25S-ME45-1	Qualify UJ, with the exception of result for sample MW09-27D-ME45-1 and MW09-ME45-FD01 which were previously rejected due to holding time nonconformances.
	1,1,1-TRICHLOROETHANE	16.3	<15		Qualify UJ, with the exception of result for sample MW09-27D-ME45-1 and MW09-ME45-FD01 which were previously rejected due to holding time nonconformances.
	CARBON TETRACHLORIDE	20.5	<15		Qualify UJ, with the exception of result for sample MW09-27D-ME45-1 and MW09-ME45-FD01 which were previously rejected due to holding time nonconformances.
Instrument: V10 09/21/16-09/21/16	BROMOMETHANE	16.7	<15	MW09-ME45-TB05	Qualify UJ
	2-BUTANONE	41.3	<15		Qualify UJ
	TRICHLOROETHENE	89.0	<15		Qualify UJ
	CIS-1,3-DICHLOROPROPENE	17.0	<15		Qualify UJ
	4-METHYL-2-PENTANONE	19.4	<15		Qualify UJ
	TRANS-1,3-DICHLOROPROPENE	18.2	<15		Qualify UJ
	2-HEXANONE	40.9	<15		Qualify UJ
	STYRENE	16.1	<15		Qualify UJ

Table A-4 Continuing Calibration – VOC

CCAL	Compound	% D	%D Limit	Associated Samples	Action
Instrument: V6 09/21/16 11:52	BROMOMETHANE	-25.3	<20	MW09-27S-ME45-1 MW09-26DA-ME45-1 MW09-08DA-ME45-1 MW09-09DA-ME45-1 MW09-07S-ME45-1 MW09-26S-ME45-1 MW09-17I-ME45-1	Qualify UJ
	ACETONE	58.9	<20		Qualify UJ
	2-BUTANONE	52.6	<20		Qualify UJ
	4-METHYL-2-PENTANONE	28.5	<20		Qualify UJ
	2-HEXANONE	57.0	<20		Qualify UJ

CCAL	Compound	% D	%D Limit	Associated Samples	Action
Instrument: V10 09/21/16 16:38	2-BUTANONE	31.7	<20	MW09-ME45-TB05	Qualify UJ
	TRICHLOROETHENE	-56.6	<20		Qualify UJ
	4-METHYL-2-PENTANONE	31.2	<20		Qualify UJ
	2-HEXANONE	33.0	<20		Qualify UJ
Instrument: V6 09/22/16 10:28	ACETONE	34.6	<20	MW09-27D-ME45-1 MW09-ME45-FD01 MW09-11S-ME45-1 MW09-21S-ME45-1 MW09-24D-ME45-1 MW09-25S-ME45-1	Qualify UJ, with the exception of results in samples MW09-27D-ME45-1 and MW09-ME45-FD01 which were previously rejected due to holding time nonconformances.
	2-BUTANONE	39.0	<20		Qualify UJ, with the exception of results in samples MW09-27D-ME45-1 and MW09-ME45-FD01 which were previously rejected due to holding time nonconformances.
	CARBON TETRACHLORIDE	26.5	<20		Qualify UJ, with the exception of results in samples MW09-27D-ME45-1 and MW09-ME45-FD01 which were previously rejected due to holding time nonconformances.
	2-HEXANONE	37.3	<20		Qualify UJ, with the exception of results in samples MW09-27D-ME45-1 and MW09-ME45-FD01 which were previously rejected due to holding time nonconformances.
	BROMOFORM	25.5	<20		Qualify UJ, with the exception of results in samples MW09-27D-ME45-1 and MW09-ME45-FD01 which were previously rejected due to holding time nonconformances.

Table A-5 Continuing Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 09/21/16 11:52 OPENING CCV	ACETONE	0.033	0.100	0.010	MW09-27S-ME45-1
	2-BUTANONE	0.037	0.100	0.010	MW09-26DA-ME45-1 MW09-08DA-ME45-1 MW09-09DA-ME45-1

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 09/21/16 21:03 CLOSING CCV	ACETONE	0.025	0.100	0.010	MW09-07S-ME45-1 MW09-26S-ME45-1 MW09-17I-ME45-1
	2-BUTANONE	0.032	0.100	0.010	
Instrument: V10 09/21/16 16:38 OPENING CCV	ACETONE	0.070	0.100	0.010	MW09-ME45-TB05
	2-BUTANONE	0.092	0.100	0.010	
Instrument: V10 09/22/16 03:46 CLOSING CCV	ACETONE	0.081	0.100	0.010	
	2-BUTANONE	0.090	0.100	0.010	
Instrument: V6 09/22/16 10:28 OPENING CCV	ACETONE	0.028	0.100	0.010	MW09-27D-ME45-1 MW09-ME45-FD01 MW09-11S-ME45-1 MW09-21S-ME45-1 MW09-24D-ME45-1 MW09-25S-ME45-1
	2-BUTANONE	0.034	0.100	0.010	
Instrument: V6 09/22/16 21:20 CLOSING CCV	ACETONE	0.019	0.100	0.010	
	2-BUTANONE	0.031	0.100	0.010	

NFG – National Functional Guidelines

Table A-6- Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
MW09-27S-ME45-1	ETHYLBENZENE	82	78	79	121	5	20
MW09-27S-ME45-1	TETRACHLOROETHENE	70	70	74	129	0	20
MW09-27S-ME45-1	BROMOMETHANE	46	65	53	141	34	20

Table A-7 - Lab Control Samples

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples
LCS-85434	TRICHLOROETHENE	78	83	79	123	6	20	MW09-ME45-TB05

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0813
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants Completed on: 11/22/2016
Reviewed by:	Kristin Rutherford/Resolution Consultants File Name: R0813_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 6, 7 and 8, 2016.

Sample ID	Matrix/Sample Type
MW09-02S-ME45-1	Ground water
MW09-03D-ME45-1	Ground water
MW09-08S-ME45-1	Ground water
MW09-ME45-FD02	Field Duplicate of MW09-08S-ME45-1
MW09-10D-ME45-1	Ground water
MW09-10S-ME45-1	Ground water
MW09-21D-ME45-1	Ground water
MW09-23D-ME45-1	Ground water
MW09-23S-ME45-1	Ground water
MW09-24S-ME45-1	Ground water
MW09-ME45-TB01	Trip Blank
MW09-ME45-TB02	Trip Blank
MW09-ME45-TB03	Trip Blank
MW09-ME45-TB04	Trip Blank

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);

- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
NA	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✗	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met and/or qualification of the data was not required.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Tables A-1, A-2, A-3, A-4 and A-5. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	UJ
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

The response factors (RFs) for acetone and 2-butanone did not meet the method 8260C requirements for initial and/or continuing calibrations as required by the QSM. The nonconformances are summarized in Tables A-1 and A-5. The RFs for acetone and 2-butanone met the National Functional Guidelines requirements; therefore, professional judgement was used to qualify (J/UJ) as estimated and not reject the results.

Laboratory Blanks/Trip Blanks

Laboratory method blanks and trip blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks were not collected since dedicated sampling equipment was used for ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank samples MW09-ME45-TB01, MW09-ME45-TB02, MW09-ME45-TB03 and MW09-ME45-TB04.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

MS/MSD analyses were not performed on samples reported in this SDG. There were no validation actions taken on this basis.

LCS/LCSD Results

The LCS/LCSD %Rs and/or relative percent recoveries (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-6. Data qualification to the analytes associated with the specific LCS %Rs or RPDs was as follows:

Criteria[1]	Action	
	Detected Compounds	Nondetected Compounds
%R > UL	J+	No qualification
%R < LL	J-	UJ
%R < 20% (see note 1)	J-	R
%RPD > UL	J	No qualification
(LL = lower limit, UL = upper limit)		
[1]Professional judgment was applied to use MS/MSD RPD actions in the absence of NFG or Region 1 actions.		

Qualified sample results are shown in Table 1.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and limits of detection (LODs) were adjusted accordingly by the laboratory. The sample requiring a dilution has not met all Project Action Limits (PALs) due to the high concentration of target or non-target results.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-02S-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-02S-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	l,c
MW09-02S-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-02S-ME45-1	WG	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-02S-ME45-1	WG	ETHYLBENZENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-02S-ME45-1	WG	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-02S-ME45-1	WG	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-02S-ME45-1	WG	XYLENES, TOTAL	1.0	1.0	5.0	UG/L	UJ	c
MW09-03D-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-03D-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	l,c
MW09-03D-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-03D-ME45-1	WG	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-03D-ME45-1	WG	ETHYLBENZENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-03D-ME45-1	WG	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-03D-ME45-1	WG	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-03D-ME45-1	WG	XYLENES, TOTAL	1.0	1.0	5.0	UG/L	UJ	c
MW09-08S-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-08S-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-08S-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-08S-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-08S-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-08S-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-08S-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-10D-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-10D-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-10D-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-10D-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-10D-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-10D-ME45-1	WG	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-10D-ME45-1	WG	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-10D-ME45-1	WG	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-10D-ME45-1	WG	TRICHLOROETHENE	1.0	1.0	5.0	UG/L	UJ	l,c
MW09-10S-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-10S-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-10S-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-10S-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-10S-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-10S-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-10S-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-21D-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-21D-ME45-1	WG	2-BUTANONE	25	25	25	UG/L	UJ	c
MW09-21D-ME45-1	WG	2-HEXANONE	25	25	25	UG/L	UJ	c
MW09-21D-ME45-1	WG	ACETONE	25	25	25	UG/L	UJ	c
MW09-21D-ME45-1	WG	BROMOFORM	10	10	25	UG/L	UJ	c
MW09-21D-ME45-1	WG	CARBON TETRACHLORIDE	10	10	25	UG/L	UJ	c
MW09-23D-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-23D-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-23D-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-23D-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-23D-ME45-1	WG	BROMOFORM	2.0	2.0	5.0	UG/L	UJ	c
MW09-23D-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-23S-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-23S-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-23S-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-23S-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-23S-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-23S-ME45-1	WG	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-23S-ME45-1	WG	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-23S-ME45-1	WG	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-23S-ME45-1	WG	TRICHLOROETHENE	1.0	1.0	5.0	UG/L	UJ	l,c
MW09-24S-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-24S-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-24S-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-24S-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-24S-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-24S-ME45-1	WG	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-24S-ME45-1	WG	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-24S-ME45-1	WG	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-24S-ME45-1	WG	TRICHLOROETHENE	1.0	1.0	5.0	UG/L	UJ	l,c
MW09-ME45-FD02	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-FD02	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-FD02	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-FD02	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-FD02	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-FD02	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-FD02	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-TB01	WQ	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB01	WQ	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	l,c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-ME45-TB01	WQ	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB01	WQ	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB01	WQ	ETHYLBENZENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB01	WQ	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB01	WQ	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB01	WQ	XYLENES, TOTAL	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB02	WQ	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB02	WQ	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB02	WQ	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB02	WQ	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-TB02	WQ	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB02	WQ	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-TB02	WQ	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-TB03	WQ	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB03	WQ	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB03	WQ	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-TB03	WQ	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB03	WQ	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-TB03	WQ	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB03	WQ	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB03	WQ	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB03	WQ	TRICHLOROETHENE	1.0	1.0	5.0	UG/L	UJ	l,c
MW09-ME45-TB04	WQ	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB04	WQ	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB04	WQ	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-TB04	WQ	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB04	WQ	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-TB04	WQ	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB04	WQ	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB04	WQ	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB04	WQ	TRICHLOROETHENE	1.0	1.0	5.0	UG/L	UJ	l,c

Attachment A

Nonconformance Summary Tables

Table A-1 Initial Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V10 09/19/16	ACETONE	0.046	0.100	0.010	MW09-02S-ME45-1 MW09-03D-ME45-1 MW09-ME45-TB01
	2-BUTANONE	0.054	0.100	0.010	
Instrument: V6 09/19/16	ACETONE	0.021	0.100	0.010	MW09-ME45-FD02 MW09-08S-ME45-1 MW09-10S-ME45-1 MW09-ME45-TB02 MW09-02S-ME45-1RE MW09-03D-ME45-1RE MW09-ME45-TB01RE MW09-21D-ME45-1 MW09-23D-ME45-1
	2-BUTANONE	0.024	0.100	0.010	
Instrument: V10 09/21/16	ACETONE	0.066	0.100	0.010	MW09-ME45-TB03 MW09-24S-ME45-1 MW09-10D-ME45-1 MW09-23S-ME45-1 MW09-ME45-TB04
	2-BUTANONE	0.070	0.100	0.010	

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Table A-2 Initial Calibration– VOC

ICAL	Compound	% RSD	%RSD Limit	Associated Samples
Instrument: V10 09/19/16-09/19/16	CIS-1,3-DICHLOROPROPENE	24.5	<15	MW09-02S-ME45-1 MW09-03D-ME45-1 MW09-ME45-TB01
	TRANS-1,3-DICHLOROPROPENE	20.6	<15	
	2-HEXANONE	38.6	<15	
	ETHYLBENZENE	21.3	<15	
	STYRENE	32.9	<15	
Instrument: V6 09/19/16-09/19/16	ACETONE	24.4	<15	MW09-ME45-FD02 MW09-08S-ME45-1 MW09-10S-ME45-1 MW09-ME45-TB02 MW09-21D-ME45-1 MW09-23D-ME45-1
	1,1,1-TRICHLOROETHANE	16.3	<15	
	CARBON TETRACHLORIDE	20.5	<15	

ICAL	Compound	% RSD	%RSD Limit	Associated Samples
Instrument: V10 09/21/16-09/21/16	BROMOMETHANE	16.7	<15	MW09-ME45-TB03 MW09-24S-ME45-1 MW09-10D-ME45-1 MW09-23S-ME45-1 MW09-ME45-TB04
	2-BUTANONE	41.3	<15	
	TRICHLOROETHENE	89.0	<15	
	CIS-1,3-DICHLOROPROPENE	17.0	<15	
	4-METHYL-2-PENTANONE	19.4	<15	
	TRANS-1,3-DICHLOROPROPENE	18.2	<15	
	2-HEXANONE	40.9	<15	
	STYRENE	16.1	<15	

Table A-3 Initial Calibration Verification – VOC

ICV	Compound	% D	%D Limit	Associated Samples	Action
Instrument: V10 09/19/16 20:58	2-HEXANONE	25.0	<20	MW09-02S-ME45-1 MW09-03D-ME45-1 MW09-ME45-TB01	Qualify UJ
	STYRENE	24.8	<20		Qualify UJ
Instrument: V10 09/21/16 15:37	2-BUTANONE	32.5	<20	MW09-ME45-TB03 MW09-24S-ME45-1 MW09-10D-ME45-1 MW09-23S-ME45-1 MW09-ME45-TB04	Qualify UJ
	TRICHLOROETHENE	-43.9	<20		Qualify UJ
	2-HEXANONE	30.6	<20		Qualify UJ

Table A-4 Continuing Calibration – VOC

CCAL	Compound	% D	%D Limit	Associated Samples	Action
Instrument: V6 09/21/16 11:52	BROMOMETHANE	-25.3	<20	MW09-ME45-FD02 MW09-08S-ME45-1 MW09-10S-ME45-1 MW09-ME45-TB02	Qualify UJ
	ACETONE	58.9	<20		Qualify UJ
	2-BUTANONE	52.6	<20		Qualify UJ
	4-METHYL-2-PENTANONE	28.5	<20		Qualify UJ
	2-HEXANONE	57.0	<20		Qualify UJ
Instrument: V10 09/20/16 09:16 OPENING CCV	ETHYLBENZENE	22.3	<20	MW09-02S-ME45-1 MW09-03D-ME45-1 MW09-ME45-TB01	Qualify UJ
	XYLENE(TOTAL)	25.1	<20		Qualify UJ
	STYRENE	27.4	<20		Qualify UJ
Instrument: V10 09/20/16 20:45 CLOSING CCV	ACETONE	114.9	<50		Qualify UJ
Instrument: V10 09/21/16 16:38	2-BUTANONE	31.7	<20	MW09-ME45-TB03 MW09-24S-ME45-1 MW09-10D-ME45-1 MW09-23S-ME45-1 MW09-ME45-TB04	Qualify UJ
	TRICHLOROETHENE	-56.6	<20		Qualify UJ
	4-METHYL-2-PENTANONE	31.2	<20		Qualify UJ
	2-HEXANONE	33.0	<20		Qualify UJ

CCAL	Compound	% D	%D Limit	Associated Samples	Action
Instrument: V6 09/22/16 10:28	ACETONE	34.6	<20	MW09-21D-ME45-1 MW09-23D-ME45-1	Qualify UJ
	2-BUTANONE	39.0	<20		Qualify UJ
	CARBON TETRACHLORIDE	26.5	<20		Qualify UJ
	2-HEXANONE	37.3	<20		Qualify UJ
	BROMFORM	25.5	<20		Qualify UJ

Table A-5 Continuing Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 09/21/16 11:52 OPENING CCV	ACETONE	0.033	0.100	0.010	MW09-ME45-FD02 MW09-08S-ME45-1 MW09-10S-ME45-1 MW09-ME45-TB02
	2-BUTANONE	0.037	0.100	0.010	
Instrument: V6 09/21/16 21:03 CLOSING CCV	ACETONE	0.025	0.100	0.010	
	2-BUTANONE	0.032	0.100	0.010	
Instrument: V10 09/20/16 09:16 OPENING CCV	ACETONE	0.050	0.100	0.010	MW09-02S-ME45-1 MW09-03D-ME45-1 MW09-ME45-TB01
	2-BUTANONE	0.055	0.100	0.010	
Instrument: V10 09/20/16 20:45 CLOSING CCV	ACETONE	0.099	0.100	0.010	
	2-BUTANONE	0.070	0.100	0.010	
Instrument: V10 09/21/16 16:38 OPENING CCV	ACETONE	0.070	0.100	0.010	MW09-ME45-TB03 MW09-24S-ME45-1 MW09-10D-ME45-1 MW09-23S-ME45-1 MW09-ME45-TB04
	2-BUTANONE	0.092	0.100	0.010	
Instrument: V10 09/22/16 03:46 CLOSING CCV	ACETONE	0.081	0.100	0.010	
	2-BUTANONE	0.090	0.100	0.010	
Instrument: V6 09/22/16 10:28 OPENING CCV	ACETONE	0.028	0.100	0.010	MW09-21D-ME45-1 MW09-23D-ME45-1
	2-BUTANONE	0.034	0.100	0.010	
Instrument: V6 09/22/16 21:20 CLOSING CCV	ACETONE	0.019	0.100	0.010	
	2-BUTANONE	0.031	0.100	0.010	

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Table A-6 - Lab Control Samples

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples
LCS-85429	TOLUENE	134	NA	80	121	NA	NA	MW09-02S-ME45-1 MW09-03D-ME45-1 MW09-ME45-TB01
LCS-85429	2-HEXANONE	45	NA	57	139	NA	NA	MW09-02S-ME45-1 MW09-03D-ME45-1 MW09-ME45-TB01
LCS-85429	CHLOROETHANE	140	NA	60	138	NA	NA	MW09-02S-ME45-1 MW09-03D-ME45-1 MW09-ME45-TB01
LCS-85429	1,1,2-TRICHLOROETHANE	136	NA	80	119	NA	NA	MW09-02S-ME45-1 MW09-03D-ME45-1 MW09-ME45-TB01
LCS-85434	TRICHLOROETHENE	78	83	79	123	6	20	MW09-10D-ME45-1 MW09-23S-ME45-1 MW09-24S-ME45-1 MW09-ME45-TB03 MW09-ME45-TB04

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0814
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants Completed on: 11/23/2016
Reviewed by:	Lori Herberich/Resolution Consultants File Name: R0814_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 7 and 8, 2016.

Sample ID	Matrix/Sample Type
MW09-09S-ME45-1	Ground water
MW09-14D-ME45-1	Ground water
MW09-20D-ME45-1	Ground water
MW09-ME45-FD03	Field Duplicate of MW09-20D-ME45-1
MW09-20I-ME45-1	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✗	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
✓	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✗	Field duplicates
✓	Internal standards
✗	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated and/or rejected, due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-1.

Criteria	Detect	Non-detect
Sample temperature > 6°C but ≤ 10°C upon receipt at the laboratory	Use professional judgment	Use professional judgment
Sample temperature > 10°C upon receipt at the laboratory	Use professional judgment J-	Use professional judgment R
Aqueous sample properly preserved but analyzed outside the 14-day technical holding time	J*	R
Holding times grossly exceeded	J-	R

* The true direction of any bias may be unknown in this case. Use professional judgment based on knowledge of the chemistry of the analytes in the sample, or do not assign a direction to the bias.

Qualified sample results are shown in Table 1.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-2, A-3, A-4, A-5 and A-6. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

The RFs for acetone and 2-butanone did not meet the method 8260C requirements for initial and/or continuing calibrations as required by the QSM. The nonconformances are summarized in Table A-2 and A-6. The RFs for acetone and 2-butanone met the National Functional Guidelines requirements. Professional judgement was used to qualify the results for acetone and 2-butanone as estimated (J/UJ).

The closing CCV was not analyzed by the laboratory for sample MW09-20I-ME45-1DL. Professional judgment was used to estimate the reported results from the diluted analysis. The results for cis-1,2-dichloroethene, trans-1,2-dichloroethene, trichloroethene and 1,1,2,2-tetrachloroethane were qualified as estimated (J).

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks, trip blanks, and equipment rinsate blanks were evaluated as to whether there were contaminants detected above detection limit (DL). Equipment blanks were not collected since dedicated sampling equipment was used for ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no trip blank samples submitted with the data package.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-7. Data qualification to the analytes associated with the specific LCS %Rs or RPDs was as follows:

Criteria[1]	Action	
	Detected Compounds	Nondetected Compounds
%R > UL	J+	No qualification
%R < LL	J-	UJ
%R < 20% (see note 1)	J-	R
%RPD > UL	J	No qualification
(LL = lower limit, UL = upper limit)		
[1]Professional judgment was applied to use MS/MSD RPD actions in the absence of NFG or Region 1 actions.		

Qualified sample results are shown in Table 1.

Field Duplicates

The field duplicate samples were analyzed outside of holding time and the nondetect results were rejected.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the limit of quantitation (LOQ) but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

The results for vinyl chloride, 1,1-dichloroethene and 1,1,2-trichloroethane in sample MW09-20I-ME45-1 were reported above the calibration range and are qualified as estimated results (J).

Any sample that was analyzed at a dilution because of elevated concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and limits of detection (LODs) were adjusted accordingly by the laboratory. Sample MW09-09S-ME45-1 required a 10X dilution and did not meet the Project Action Limit (PAL) for tetrachloroethene due to the elevated concentration of target or non-target results.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-09S-ME45-1	WG	1,1,1-TRICHLOROETHANE	10	10	50	UG/L	UJ	c
MW09-09S-ME45-1	WG	2-BUTANONE	50	50	50	UG/L	UJ	c
MW09-09S-ME45-1	WG	2-HEXANONE	50	50	50	UG/L	UJ	c
MW09-09S-ME45-1	WG	4-METHYL-2-PENTANONE	20	20	50	UG/L	UJ	c
MW09-09S-ME45-1	WG	ACETONE	50	50	50	UG/L	UJ	c
MW09-09S-ME45-1	WG	BROMOMETHANE	20	20	50	UG/L	UJ	c
MW09-09S-ME45-1	WG	CARBON TETRACHLORIDE	20	20	50	UG/L	UJ	c
MW09-14D-ME45-1	WG	1,1,1-TRICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	1,1,2,2-TETRACHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	1,1,2-TRICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	1,1-DICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	1,1-DICHLOROETHENE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	1,2-DICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	1,2-DICHLOROPROPANE		2.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	2-BUTANONE		5.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	2-HEXANONE		5.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	4-METHYL-2-PENTANONE		2.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	ACETONE		5.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	BENZENE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	BROMODICHLOROMETHANE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	BROMOFORM		2.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	BROMOMETHANE		2.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	CARBON DISULFIDE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	CARBON TETRACHLORIDE		2.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	CHLOROBENZENE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	CHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	CHLOROFORM		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	CHLOROMETHANE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	CIS-1,2-DICHLOROETHENE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	CIS-1,3-DICHLOROPROPENE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	DIBROMOCHLOROMETHANE		2.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	ETHYLBENZENE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	METHYLENE CHLORIDE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	STYRENE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	TETRACHLOROETHENE		2.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	TOLUENE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	TRANS-1,2-DICHLOROETHENE		2.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	TRANS-1,3-DICHLOROPROPENE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	TRICHLOROETHENE	1.7	1.0	5.0	UG/L	J	h

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-14D-ME45-1	WG	VINYL CHLORIDE		1.0	5.0	UG/L	R	h
MW09-14D-ME45-1	WG	XYLENES, TOTAL		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	1,1,1-TRICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	1,1,2,2-TETRACHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	1,1,2-TRICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	1,1-DICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	1,1-DICHLOROETHENE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	1,2-DICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	1,2-DICHLOROPROPANE		2.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	2-BUTANONE		5.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	2-HEXANONE		5.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	4-METHYL-2-PENTANONE		2.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	ACETONE		5.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	BENZENE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	BROMODICHLOROMETHANE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	BROMOFORM		2.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	BROMOMETHANE		2.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	CARBON DISULFIDE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	CARBON TETRACHLORIDE		2.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	CHLOROBENZENE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	CHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	CHLOROFORM		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	CHLOROMETHANE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	CIS-1,2-DICHLOROETHENE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	CIS-1,3-DICHLOROPROPENE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	DIBROMOCHLOROMETHANE		2.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	ETHYLBENZENE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	METHYLENE CHLORIDE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	STYRENE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	TETRACHLOROETHENE		2.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	TOLUENE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	TRANS-1,2-DICHLOROETHENE		2.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	TRANS-1,3-DICHLOROPROPENE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	TRICHLOROETHENE	1.5	1.0	5.0	UG/L	J	h
MW09-20D-ME45-1	WG	VINYL CHLORIDE		1.0	5.0	UG/L	R	h
MW09-20D-ME45-1	WG	XYLENES, TOTAL		1.0	5.0	UG/L	R	h
MW09-20I-ME45-1	WG	1,1,2,2-TETRACHLOROETHANE	95000	5000	25000	UG/L	J	h,c
MW09-20I-ME45-1	WG	1,1,2-TRICHLOROETHANE	3600	1.0	5.0	UG/L	J	q
MW09-20I-ME45-1	WG	1,1-DICHLOROETHENE	550	1.0	5.0	UG/L	J	q
MW09-20I-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-20I-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-20I-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-20I-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-20I-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-20I-ME45-1	WG	CIS-1,2-DICHLOROETHENE	22000	5000	25000	UG/L	J	h,c
MW09-20I-ME45-1	WG	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-20I-ME45-1	WG	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-20I-ME45-1	WG	TRANS-1,2-DICHLOROETHENE	14000	10000	25000	UG/L	J	h,c
MW09-20I-ME45-1	WG	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-20I-ME45-1	WG	TRICHLOROETHENE	490000	5000	25000	UG/L	J	h,c
MW09-20I-ME45-1	WG	VINYL CHLORIDE	4500	1.0	5.0	UG/L	J	q
MW09-ME45-FD03	WG	1,1,1-TRICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	1,1,2,2-TETRACHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	1,1,2-TRICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	1,1-DICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	1,1-DICHLOROETHENE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	1,2-DICHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	1,2-DICHLOROPROPANE		2.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	2-BUTANONE		5.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	2-HEXANONE		5.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	4-METHYL-2-PENTANONE		2.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	ACETONE		5.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	BENZENE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	BROMODICHLOROMETHANE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	BROMOFORM		2.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	BROMOMETHANE		2.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	CARBON DISULFIDE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	CARBON TETRACHLORIDE		2.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	CHLOROBENZENE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	CHLOROETHANE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	CHLOROFORM		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	CHLOROMETHANE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	CIS-1,2-DICHLOROETHENE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	CIS-1,3-DICHLOROPROPENE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	DIBROMOCHLOROMETHANE		2.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	ETHYLBENZENE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	METHYLENE CHLORIDE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	STYRENE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	TETRACHLOROETHENE		2.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	TOLUENE		1.0	5.0	UG/L	R	h

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-ME45-FD03	WG	TRANS-1,2-DICHLOROETHENE		2.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	TRANS-1,3-DICHLOROPROPENE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	TRICHLOROETHENE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	VINYL CHLORIDE		1.0	5.0	UG/L	R	h
MW09-ME45-FD03	WG	XYLENES, TOTAL		1.0	5.0	UG/L	R	h

Attachment A

Nonconformance Summary Tables

Table A-1 - Hold Times

Sample ID	Days from Sampling to Prep	Days from Prep to Analysis	Days from Sampling to Analysis	Status	Action
MW09-14D-ME45-1	15	1	16	>14 days	J/R
MW09-20D-ME45-1	15	1	16	>14 days	J/R
MW09-20I-ME45-1DL	19	0	19	>14 days	J/R
MW09-ME45-FD03	15	1	16	>14 days	J/R

Table A-2 Initial Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 09/19/16	ACETONE	0.021	0.100	0.010	MW09-09S-ME45-1
	2-BUTANONE	0.024	0.100	0.010	
Instrument: V10 09/21/16	ACETONE	0.066	0.100	0.010	MW09-20I-ME45-1
	2-BUTANONE	0.070	0.100	0.010	
Instrument: V10 09/23/16	ACETONE	0.028	0.100	0.010	MW09-14D-ME45-1 MW09-20D-ME45-1 MW09-ME45-FD03
	2-BUTANONE	0.030	0.100	0.010	

NFG – National Functional Guidelines

Table A-3 Initial Calibration – VOC

ICAL	Compound	%RSD	%RSD Limit	Associated Samples
Instrument: V6 09/19/16-09/19/16	ACETONE	24.4	<15	MW09-09S-ME45-1
	1,1,1-TRICHLOROETHANE	16.3	<15	
	CARBON TETRACHLORIDE	20.5	<15	
Instrument: V10 09/21/16-09/21/16	BROMOMETHANE	16.7	<15	MW09-20I-ME45-1
	2-BUTANONE	41.3	<15	
	TRICHLOROETHENE	89.0	<15	
	CIS-1,3-DICHLOROPROPENE	17.0	<15	
	4-METHYL-2-PENTANONE	19.4	<15	
	TRANS-1,3-DICHLOROPROPENE	18.2	<15	
	2-HEXANONE	40.9	<15	
	STYRENE	16.1	<15	

ICAL	Compound	%RSD	%RSD Limit	Associated Samples
Instrument: V10 09/23/16-09/23/16	BROMOMETHANE	17.4	<15	MW09-14D-ME45-1, MW09-20D-ME45-1, MW09-ME45-FD03 Previously Rejected due to holding time nonconformance.
	2-BUTANONE	22.4	<15	
	CIS-1,3-DICHLOROPROPENE	23.0	<15	
	4-METHYL-2-PENTANONE	24.4	<15	
	TRANS-1,3-DICHLOROPROPENE	21.0	<15	
	2-HEXANONE	56.5	<15	
	XYLENE(TOTAL)	18.0	<15	
	STYRENE	21.9	<15	

Table A-4 Initial Calibration Verification – VOC

ICV	Compound	% D	%D Limit	Associated Samples
Instrument: V10 09/21/16 15:37	2-BUTANONE	32.5	<20	MW09-20I-ME45-1
	TRICHLOROETHENE	-43.9	<20	
	2-HEXANONE	30.6	<20	
Instrument: V10 09/23/16 04:19	2-HEXANONE	23.0	<20	MW09-14D-ME45-1, MW09-20D-ME45-1, MW09-ME45-FD03

Table A-5 Continuing Calibration – VOC

CCAL	Compound	% D	%D Limit	Associated Samples	Action
Instrument: V6 09/21/16 11:52	BROMOMETHANE	-25.3	<20	MW09-09S-ME45-1	Qualify UJ
	ACETONE	58.9	<20		
	2-BUTANONE	52.6	<20		
	4-METHYL-2-PENTANONE	28.5	<20		
	2-HEXANONE	57.0	<20		
Instrument: V10 09/21/16 16:38	TRICHLOROETHENE	-56.6	<20	MW09-20I-ME45-1	No action trichloroethene reported from a different analysis.
	4-METHYL-2-PENTANONE	31.2	<20		Qualify UJ
	2-HEXANONE	33.0	<20		Qualify UJ

CCAL	Compound	% D	%D Limit	Associated Samples	Action
Instrument: V10 09/27/16 10:36	BROMOMETHANE	-20.2	<20	MW09-20I-ME45-1DL	No action, result reported from original analysis.
	ACETONE	23.1	<20		No action, result reported from original analysis.
	2-BUTANONE	25.8	<20		No action, result reported from original analysis.
	4-METHYL-2-PENTANONE	20.9	<20		No action, result reported from original analysis.
	2-HEXANONE	41.0	<20		No action, result reported from original analysis.
Instrument: V10	Closing CCV not analyzed	-	-	MW09-20I-ME45-1DL	Qualify J results, CIS-1,2-DICHLOROETHENE, TRANS-1,2-DICHLOROETHENE, TRICHLOROETHENE, 1,1,2,2-TETRACHLOROETHANE

Table A-6 Continuing Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 09/21/16 11:52 OPENING CCV	ACETONE	0.033	0.100	0.010	MW09-09S-ME45-1
	2-BUTANONE	0.037	0.100	0.010	
Instrument: V6 09/21/16 21:03 CLOSING CCV	ACETONE	0.025	0.100	0.010	
	2-BUTANONE	0.032	0.100	0.010	
Instrument: V10 09/21/16 16:38 OPENING CCV	ACETONE	0.070	0.100	0.010	MW09-20I-ME45-1
	2-BUTANONE	0.092	0.100	0.010	
Instrument: V10 09/22/16 03:46 CLOSING CCV	ACETONE	0.081	0.100	0.010	
	2-BUTANONE	0.090	0.100	0.010	
Instrument: V10 09/24/16 12:49 OPENING CCV	ACETONE	0.028	0.100	0.010	MW09-14D-ME45-1 MW09-20D-ME45-1 MW09-ME45-FD03
	2-BUTANONE	0.032	0.100	0.010	
Instrument: V10 09/24/16 22:29 CLOSING CCV	ACETONE	0.024	0.100	0.010	
	2-BUTANONE	0.030	0.100	0.010	

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V10 09/27/16 10:36 OPENING CCV	ACETONE	0.034	0.100	0.010	MW09-20I-ME45-1DL
	2-BUTANONE	0.035	0.100	0.010	

NFG – National Functional Guidelines

Table A-7 - Lab Control Samples

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples	Action
LCS-85494	ACETONE	162	124	39	160	27	20	MW09-14D-ME45-1 MW09-20D-ME45-1 MW09-ME45-FD03	No action, ND in samples and ND rejected due to HT nonconformances.
LCS-85434	TRICHLOROETHENE	78	OK	79	123	6	20	MW09-20I-ME45-1	No action, trichloroethene reported from diluted analysis.

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0898
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants Completed on: 11/30/2016
Reviewed by:	Kristin Rutherford/Resolution Consultants File Name: R0898_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 27, 2016.

Sample ID	Matrix/Sample Type
ALLENHARBOR-ME45-1	Ground water
MW09-ME45-FD06	Field Duplicate of Allenharbor-ME45-1
MW07-ME45-TB07	Trip Blank

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
NA	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated, due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1 and A-2. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks, trip blanks, and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank sample MW07-ME45-TB07.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

MS/MSD analyses were not performed on samples reported in this SDG. There were no validation actions taken on this basis.

LCS/LCSD Results

The LCS/LCSD %Rs and/or relative percent recoveries (RPDs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and limits of detection (LODs) were adjusted accordingly by the laboratory.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ALLENHARBOR-ME45-1	WG	CARBON DISULFIDE	1.0	1.0	2.0	UG/L	UJ	c
ALLENHARBOR-ME45-1	WG	CHLOROMETHANE	1.0	1.0	2.0	UG/L	UJ	c
ALLENHARBOR-ME45-1	WG	VINYL CHLORIDE	1.0	1.0	1.0	UG/L	UJ	c
MW07-ME45-TB07	WQ	CARBON DISULFIDE	1.0	1.0	2.0	UG/L	UJ	c
MW07-ME45-TB07	WQ	CHLOROMETHANE	1.0	1.0	2.0	UG/L	UJ	c
MW07-ME45-TB07	WQ	VINYL CHLORIDE	1.0	1.0	1.0	UG/L	UJ	c
MW09-ME45-FD06	WG	CARBON DISULFIDE	1.0	1.0	2.0	UG/L	UJ	c
MW09-ME45-FD06	WG	CHLOROMETHANE	1.0	1.0	2.0	UG/L	UJ	c
MW09-ME45-FD06	WG	VINYL CHLORIDE	1.0	1.0	1.0	UG/L	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1 Initial Calibration Verification – VOC

ICV	Compound	% R	%R Limit	Associated Samples	Action
Instrument: HPV1 09/21/16 03:09	CARBON DISULFIDE	77	80-120	ALLENHARBOR-ME45-1, MW07-ME45-TB07, MW09-ME45-FD06	Qualify UJ
	VINYL CHLORIDE	65	80-120		Qualify UJ

Table A-2 Continuing Calibration – VOC

CCAL	Compound	% D	%D Limit	Associated Samples	Action
Instrument: HPV1 10/10/16 09:51	CHLOROMETHANE	-23.6	<20	ALLENHARBOR-ME45-1, MW07-ME45-TB07, MW09-ME45-FD06	Qualify UJ
	VINYL CHLORIDE	-28.6	<20		

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	Eurofins Spectrum Analytical
Service Request:	R0838
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants — Completed on: 02/01/2017
Reviewed by:	Lori Herberich/Resolution Consultants — File Name: R0838_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 9, 12, 13, 14 and 16, 2016.

Sample ID	Matrix/Sample Type
MW07-ME20-TB01	Trip Blank
MW09-14IA-ME45-1	Ground water
MW09-ME45-FD05	Field Duplicate of MW09-14IA-ME45-1
MW09-ME45-TB05	Trip Blank
MW09-ME45-TB06	Trip Blank
P09-01-ME45-1	Ground water
P09-02A-ME45-1	Ground water
P09-03A-ME45-1	Ground water
P09-04A-ME45-1	Ground water
P09-06B-ME45-1	Ground water
P09-07B-ME45-1	Ground water
P09-08B-ME45-1	Ground water
P09-09-ME45-1	Ground water
P09-10-ME45-1	Ground water
P09-11B-ME45-1	Ground water
P09-12B-ME45-1	Ground water
SP09-01-ME45-1	Ground water
SP09-02-ME45-1	Ground water
SP09-03-ME45-1	Ground water

Data validation activities were conducted with reference to:

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW-846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✗	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✗	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated and/or rejected due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Sample R0838-29 (MW09-141A-ME45-1) was incorrectly listed on the COC and subsequently the laboratory report. The sample corresponds to location MW09-14IA-ME45-1 and is referenced in the database and report as MW09-14IA-ME45-1.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1, A-2, A-3, A-4 and A-5. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20% opening CCV	%D > 50%	J	UJ
%Drift >20% opening CCV	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

The RFs for acetone and 2-butanone did not meet the method 8260C requirements for initial and/or continuing calibrations as required by the QSM. The nonconformances are summarized in Table A-1 and A-5. The RFs for acetone and 2-butanone met the National Functional Guidelines requirements. Professional judgement was used to qualify the results for acetone and 2-butanone as estimated (J/UJ).

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks and trip blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks were not collected with ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank sample MW07-ME20-TB01, MW09-ME45-TB05 and MW09-ME45-TB06.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-6. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R>UL	J+	No qualification
20% ≤ %R < LL	J-	UJ
%R <20% (see note 1)	J-	R*
RPD >UL	J	No qualification
Note: Actions are applied to the native unspiked sample only (see note 2) *When the native sample concentration is >4X the concentration of the spike added (based on Region I criteria), evaluate the MS, MSD, and native sample with regards to %RSD rather than %R (Resolution Consultants professional judgment).		

1. Based on NFG 2016 VOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in associated samples for any analyte with < 20% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.
2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis, professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

On February 2, 2017 the laboratory submitted a corrective action (attached) indicating that the analyst was incorrectly spiking the MS/MSD solution in sample MW09-14IA-ME45-1 leading to depressed recoveries. The corrective action indicated only the MS/MSD solution was being incorrectly spiked, and based on acceptable surrogate and internal standard no recoveries, professional judgment was used to not qualify data based on MS/MSD recoveries.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-3. Data qualification to the analytes associated with the specific LCS %Rs or RPDs was as follows:

Criteria[1]	Action	
	Detected Compounds	Nondetected Compounds
%R > UL	J+	No qualification
%R < LL	J-	UJ
%R < 20% (see note 1)	J-	R
%RPD > UL	J	No qualification
(LL = lower limit, UL = upper limit)		
[1]Professional judgment was applied to use MS/MSD RPD actions in the absence of NFG or Region 1 actions.		

Qualified sample results are shown in Table 1.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ).

Nonconformances are summarized in Attachment A in Table A-8. Data qualification to the analytes associated with the specific field duplicate RPDs was as follows:

Criteria	RPD	Action	
		Detected	Nondetected
Sample and duplicate are nondetect results	Not calculable (NC)	No qualification	No qualification
Sample and duplicate results ≥2xLOQ	>30 (aqueous) >50 (solids)	J	Not Applicable
Sample and duplicate results <2xLOQ	>60 (aqueous) >100 (solids)	J	Not Applicable
If sample or duplicate result is >2xLOQ and the other is not detected	NC	J	UJ
If sample or duplicate result is <2xLOQ and the other is not detected	NC	No qualification	No qualification

Qualified sample results are shown in Table 1.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and limits of detection (LODs) were adjusted accordingly by the laboratory.

The LOQ for vinyl chloride is greater than the Project Action Limit (PAL). The LOD and the DL are less than the PAL results and are usable for project objectives.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Attachment D: Laboratory Corrective Action

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW07-ME20-TB01	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW07-ME20-TB01	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW07-ME20-TB01	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW07-ME20-TB01	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW07-ME20-TB01	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW07-ME20-TB01	WG	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW07-ME20-TB01	WG	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
MW07-ME20-TB01	WG	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW07-ME20-TB01	WG	XYLENE(TOTAL)	1.0	1.0	5.0	UG/L	UJ	c
MW09-14IA-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-14IA-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-14IA-ME45-1	WG	BENZENE	26	1.0	5.0	UG/L	J	fd
MW09-14IA-ME45-1	WG	CHLOROMETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-14IA-ME45-1	WG	XYLENES, TOTAL	13	1.0	5.0	UG/L	J	fd
MW09-ME45-FD05	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-FD05	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-FD05	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-FD05	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-FD05	WG	BENZENE	19	1.0	5.0	UG/L	J	fd
MW09-ME45-FD05	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-FD05	WG	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-FD05	WG	STYRENE	1.5	1.0	5.0	UG/L	J	c
MW09-ME45-FD05	WG	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-FD05	WG	XYLENES, TOTAL	8.7	1.0	5.0	UG/L	J	c,fd
MW09-ME45-TB05	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB05	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
MW09-ME45-TB05	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
MW09-ME45-TB06	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB06	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
MW09-ME45-TB06	WG	CHLOROMETHANE	1.0	1.0	5.0	UG/L	UJ	c
P09-01-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
P09-01-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-01-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-01-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
P09-01-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
P09-01-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
P09-02A-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
P09-02A-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-02A-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-02A-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
P09-02A-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
P09-02A-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
P09-03A-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
P09-03A-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-03A-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-03A-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
P09-03A-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
P09-03A-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
P09-04A-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
P09-04A-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-04A-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-04A-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
P09-04A-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
P09-04A-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
P09-06B-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
P09-06B-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-06B-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-06B-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
P09-06B-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
P09-06B-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
P09-07B-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
P09-07B-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-07B-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-07B-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
P09-07B-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
P09-07B-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
P09-08B-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
P09-08B-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-08B-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-08B-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
P09-08B-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
P09-08B-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
P09-09-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
P09-09-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-09-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
P09-09-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
P09-09-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
P09-09-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
P09-10-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
P09-10-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-10-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-10-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
P09-10-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
P09-10-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
P09-11B-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-11B-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-11B-ME45-1	WG	4-METHYL-2-PENTANONE	2.0	2.0	5.0	UG/L	UJ	c
P09-11B-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
P09-11B-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	c
P09-11B-ME45-1	WG	CIS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
P09-11B-ME45-1	WG	STYRENE	1.0	1.0	5.0	UG/L	UJ	c
P09-11B-ME45-1	WG	TRANS-1,3-DICHLOROPROPENE	1.0	1.0	5.0	UG/L	UJ	c
P09-11B-ME45-1	WG	XYLENE(TOTAL)	1.0	1.0	5.0	UG/L	UJ	c
P09-12B-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
P09-12B-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-12B-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
P09-12B-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
P09-12B-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
P09-12B-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
SP09-01-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SP09-01-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
SP09-01-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
SP09-01-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
SP09-01-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
SP09-01-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
SP09-02-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SP09-02-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
SP09-02-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
SP09-02-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c
SP09-02-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
SP09-02-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c
SP09-03-ME45-1	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	5.0	UG/L	UJ	c
SP09-03-ME45-1	WG	2-BUTANONE	5.0	5.0	5.0	UG/L	UJ	c
SP09-03-ME45-1	WG	2-HEXANONE	5.0	5.0	5.0	UG/L	UJ	c
SP09-03-ME45-1	WG	ACETONE	5.0	5.0	5.0	UG/L	UJ	c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SP09-03-ME45-1	WG	BROMOMETHANE	2.0	2.0	5.0	UG/L	UJ	l,lp
SP09-03-ME45-1	WG	CARBON TETRACHLORIDE	2.0	2.0	5.0	UG/L	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1 Initial Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 09/19/16	ACETONE	0.021	0.100	0.010	P09-10-ME45-1 P09-09-ME45-1 P09-04A-ME45-1 P09-08B-ME45-1 P09-07B-ME45-1 P09-01-ME45-1 P09-12B-ME45-1 P09-06B-ME45-1 MW09-ME45-TB05 P09-02A-ME45-1 P09-03A-ME45-1 SP09-01-ME45-1 SP09-03-ME45-1 SP09-02-ME45-1
	2-BUTANONE	0.024	0.100	0.010	
Instrument: V6 09/24/16	ACETONE	0.022	0.100	0.010	MW09-ME45-TB06 MW09-14IA-ME45-1
	2-BUTANONE	0.030	0.100	0.010	
Instrument: V10 09/23/16	ACETONE	0.028	0.100	0.010	P09-11B-ME45-1 MW09-ME45-FD05 MW07-ME20-TB01

Table A-2 Initial Calibration – VOC

ICAL	Compound	%RSD	%RSD Limit	Associated Samples
Instrument: V6 09/19/16	ACETONE	24.4	<15	P09-10-ME45-1, P09-09-ME45-1, P09-04A-ME45-1, P09-08B-ME45-1, P09-07B-ME45-1, P09-01-ME45-1, P09-12B-ME45-1, P09-06B-ME45-1, MW09-ME45-TB05, P09-02A-ME45-1, P09-03A-ME45-1, SP09-01-ME45-1, SP09-03-ME45-1, SP09-02-ME45-1
	1,1,1-TRICHLOROETHANE	16.3	<15	
	CARBON TETRACHLORIDE	20.5	<15	

ICAL	Compound	%RSD	%RSD Limit	Associated Samples
Instrument: V6 09/24/16-09/25/16	CHLOROMETHANE	16.0	<15	MW09-ME45-TB06 MW09-14IA-ME45-1
	2-BUTANONE	16.0	<15	
Instrument: V10 09/23/16	BROMOMETHANE	17.4	<15	P09-11B-ME45-1, MW09-ME45-FD05, MW07-ME20-TB01
	2-BUTANONE	22.4	<15	
	CIS-1,3-DICHLOROPROPENE	23.0	<15	
	4-METHYL-2-PENTANONE	24.4	<15	
	TRANS-1,3-DICHLOROPROPENE	21.0	<15	
	2-HEXANONE	56.5	<15	
	XYLENE(TOTAL)	18.0	<15	
	STYRENE	21.9	<15	

Table A-3 Initial Calibration Verification – VOC

ICV	Compound	% D	%D Limit	Associated Samples	Action
Instrument: V10 09/23/16 04:19	2-HEXANONE	23.0	<20	P09-11B-ME45-1, MW09-ME45-FD05, MW07-ME20-TB01	UJ

Table A-4 Continuing Calibration – VOC

CCAL	Compound	% D	%D Limit	Associated Samples	Action
Instrument: V6 09/22/16 22:39	1,1,1-TRICHLOROETHANE	29.1	<20	P09-10-ME45-1, P09-09-ME45-1, P09-04A-ME45-1, P09-08B-ME45-1, P09-07B-ME45-1, P09-01-ME45-1, P09-12B-ME45-1, P09-06B-ME45-1, MW09-ME45-TB05, P09-02A-ME45-1, P09-03A-ME45-1, SP09-01-ME45-1, SP09-03-ME45-1, SP09-02-ME45-1,	J/UJ
	CARBON TETRACHLORIDE	31.0	<20		
	2-HEXANONE	22.5	<20		

Table A-5 Continuing Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 09/22/16 22:39 OPENING CCV	ACETONE	0.019	0.100	0.010	P09-10-ME45-1 P09-09-ME45-1 P09-04A-ME45-1 P09-08B-ME45-1 P09-07B-ME45-1 P09-01-ME45-1 P09-12B-ME45-1 P09-06B-ME45-1 MW09-ME45-TB05 P09-02A-ME45-1 P09-03A-ME45-1 SP09-01-ME45-1 SP09-03-ME45-1 SP09-02-ME45-1
	2-BUTANONE	0.027	0.100	0.010	
Instrument: V6 09/23/16 09:41 CLOSING CCV	ACETONE	0.027	0.100	0.010	
	2-BUTANONE	0.036	0.100	0.010	
Instrument: V6 09/25/16 01:48 OPENING CCV	ACETONE	0.022	0.100	0.010	MW09-ME45-TB06 MW09-14IA-ME45-1
	2-BUTANONE	0.028	0.100	0.010	
Instrument: V6 09/25/16 08:19 CLOSING CCV	ACETONE	0.019	0.100	0.010	
	2-BUTANONE	0.027	0.100	0.010	
Instrument: V10 09/24/16 12:49 OPENING CCV	ACETONE	0.028	0.100	0.010	P09-11B-ME45-1 MW09-ME45-FD05 MW07-ME20-TB01
	2-BUTANONE	0.032	0.100	0.010	
Instrument: V10 09/24/16 22:29 CLOSING CCV	ACETONE	0.024	0.100	0.010	
	2-BUTANONE	0.030	0.100	0.010	

NFG – National Functional Guidelines

Table A-6 - Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
MW09-14IA-ME45-1	ETHYLBENZENE	32	23	79	121	46	20
MW09-14IA-ME45-1	STYRENE	24	16	78	123	40	20
MW09-14IA-ME45-1	CIS-1,3-DICHLOROPROPENE	25	17	75	124	37	20
MW09-14IA-ME45-1	TRANS-1,3-DICHLOROPROPENE	25	18	73	127	32	20
MW09-14IA-ME45-1	1,2-DICHLOROETHANE	29	23	73	128	22	20
MW09-14IA-ME45-1	4-METHYL-2-PENTANONE	23	13	67	130	57	20
MW09-14IA-ME45-1	TOLUENE	36	28	80	121	36	20
MW09-14IA-ME45-1	CHLOROBENZENE	27	19	82	118	36	20
MW09-14IA-ME45-1	DIBROMOCHLOROMETHANE	22	14	74	126	46	20
MW09-14IA-ME45-1	TETRACHLOROETHENE	23	15	74	129	41	20
MW09-14IA-ME45-1	XYLENES, TOTAL	31.3	23.2	79	121	44	20
MW09-14IA-ME45-1	CIS-1,2-DICHLOROETHENE	30	20	78	123	40	20
MW09-14IA-ME45-1	TRANS-1,2-DICHLOROETHENE	29	21	75	124	32	20
MW09-14IA-ME45-1	CARBON TETRACHLORIDE	21	14	72	136	44	20
MW09-14IA-ME45-1	2-HEXANONE	26	19	57	139	33	20
MW09-14IA-ME45-1	ACETONE	25	20	39	160	23	20
MW09-14IA-ME45-1	CHLOROFORM	25	19	79	124	30	20
MW09-14IA-ME45-1	BENZENE	76	77	79	120	OK	20
MW09-14IA-ME45-1	1,1,1-TRICHLOROETHANE	23	15	74	131	42	20
MW09-14IA-ME45-1	BROMOMETHANE	29	23	53	141	25	20
MW09-14IA-ME45-1	CHLOROMETHANE	36	28	50	139	24	20
MW09-14IA-ME45-1	CHLOROETHANE	34	26	60	138	24	20
MW09-14IA-ME45-1	VINYL CHLORIDE	41	35	58	137	OK	20
MW09-14IA-ME45-1	METHYLENE CHLORIDE	32	23	74	124	30	20
MW09-14IA-ME45-1	CARBON DISULFIDE	32	25	64	133	25	20
MW09-14IA-ME45-1	BROMOFORM	18	11	66	130	50	20
MW09-14IA-ME45-1	BROMODICHLOROMETHANE	22	17	79	125	30	20
MW09-14IA-ME45-1	1,1-DICHLOROETHANE	26	18	77	125	34	20
MW09-14IA-ME45-1	1,1-DICHLOROETHENE	25	20	71	131	OK	20
MW09-14IA-ME45-1	1,2-DICHLOROPROPANE	29	17	78	122	53	20
MW09-14IA-ME45-1	2-BUTANONE	23	20	56	143	OK	20
MW09-14IA-ME45-1	1,1,2-TRICHLOROETHANE	25	17	80	119	37	20
MW09-14IA-ME45-1	TRICHLOROETHENE	25	15	79	123	48	20
MW09-14IA-ME45-1	1,1,2,2-TETRACHLOROETHANE	23	15	71	121	42	20

Table A-7 - Lab Control Samples

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples
LCS-85486	BROMOMETHANE	27	36	53	141	29	20	MW09-ME45-TB05 P09-01-ME45-1 P09-02A-ME45-1 P09-03A-ME45-1 P09-04A-ME45-1 P09-06B-ME45-1 P09-07B-ME45-1 P09-08B-ME45-1 P09-09-ME45-1 P09-10-ME45-1 P09-12B-ME45-1 SP09-01-ME45-1 SP09-02-ME45-1 SP09-03-ME45-1
LCS-85494	ACETONE	162	OK	39	160	27	20	DPT07-39-03D-ME20-1 DPT07-39-04D-ME20-1 MW07-ME20-TB01 MW09-ME45-FD05 P07-08-ME20-1 P07-09-ME20-1 P09-11B-ME45-1

Table A-8 Field Duplicates

Sample ID	Duplicate ID	Compound	Sample Result	Qual	Duplicate Result	Qual	LOD	LOQ	Units	RPD
MW09-14IA-ME45-1	MW09-ME45-FD05	ETHYLBENZENE	3.6	J	2.4	J	1.0	5.0	UG/L	40
MW09-14IA-ME45-1	MW09-ME45-FD05	TOLUENE	4.8	J	3.0	J	1.0	5.0	UG/L	46
MW09-14IA-ME45-1	MW09-ME45-FD05	STYRENE	5.0	U	1.5	J	1.0	5.0	UG/L	NC
MW09-14IA-ME45-1	MW09-ME45-FD05	BENZENE	26		19		1.0	5.0	UG/L	31
MW09-14IA-ME45-1	MW09-ME45-FD05	VINYL CHLORIDE	3.4	J	2.7	J	1.0	5.0	UG/L	23
MW09-14IA-ME45-1	MW09-ME45-FD05	XYLENES, TOTAL	13		8.7		1.0	5.0	UG/L	40

NC – Not calculable

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Attachment D

Laboratory Corrective Action

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

Corrective Action Report

Date Initiated: 29-Dec-16 **Corrective Action Report ID:** 000 681

Initiated By: Edward A Lawler **Department:** MSVOA

Corrective Action Description

CAR Summary: Client has formally requested a corrective action to determine the cause of low reported MS/MSD recoveries for VOCs in SDG R0838. It is either a spiking error or a calculation error, and needs to be reviewed by the laboratory.

Description of Nonconformance: Client Summary: The MS/MSD form now appears to show the sample results in the latest resubmittal. However, MS/MSD recoveries are still listed as consistently failing (attached) but there is no indication that is caused by sample matrix interference based on results of the native sample, surrogate recoveries, and internal standards. Based on the lab's difficulty in reporting the MS/MSD data (and the need for multiple resubmittals) I believe an error exists in the MS/MSD data,

Ed's Summary: In our original report, the Form 3 had no compounds listed at all. Then in our _R1 revision, the MS and MSD were not associated with the correct native sample. Then in our _R2 revision we have the associations correct--so that insures all the calculations are correct. However, in both the R1 and R2 reports it looks like the MS has across-the-board low recoveries. The low recoveries do not appear to be matrix interference (the surrogate recoveries are OK for the MS and MSD, as well as for all samples in this SDG. The IS areas are OK for the MS and MSD, as well as for all samples in this SDG, and there is no apparent bias in percent recoveries based on compound type {volatility, aromatics, chlorinated, etc.})
Note--the _R3 revision of this report address a separate (SVOA) issue.

Description of Corrective Action: Investigate data trail of sample/MS/MSD for reasons of confused and erroneous Form 3 reports. The initial/ original DP that was sent out on 10/24/16 had a shell of a form 3 for the MS/MSD and all LCS form 3s were present. When noted, the form 3 was generated however this data review missed the omission of native sample linking in OMEGA. This means that in the V6_160925B analysis, the sample SEQ# 2404720 was not properly loaded under the SPKref columns for either of the MS/MSD. The RPDref seems to have been loaded fine for the MS/MSD. Because of this, the native sample values for target compounds was not included on the form 3 or in the calculations for recovery. The last attempt to correct the issue did result in a correct form 3. The initial review of the run by the analyst and then the supervisor determined the low recoveries to be due to matrix interferences as that day's LCS met QC criteria. The Run log notes the addition of 20ul for the spiked standards which includes LCS and MS. If a mistake was made the logbook would not show it unless the analyst realized an error had been made and noted that.

Performed By: Sharyn B Lawler **Completion Date:** 05-Jan-17

Client Notification

Client Notification Required: No **Notified By:**

Comment: new information has come to light on spiking technique

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

Corrective Action Report

Date Initiated: 29-Dec-16 **Corrective Action Report ID:** 000 681

Initiated By: Edward A Lawler **Department:** MSVOA

Quality Assurance Review

Nonconformance Type: Routine

Further Action required by QA: The overall low recoveries should have prompted further investigation by the peer reviewer and supervisor rather than assuming matrix effect. Typically poor MS recoveries with an acceptable LCS do confirm matrix but it is unusual to see it across the board on all compounds, especially with good IS/SS. Since this report was sent out another work order had similar issues that were again not investigated until client intervention. At this time a different analyst was requested to run the samples and it came to light that the spiking had been done improperly in workorder S0037. This is the same analyst who performed the spiking in R0838. She has been pulled from analytical duties. Although not intentional she was not following correct procedures which led to insufficient mixing of the spike solution into the sample and resulted in depressed recoveries. The LCS was spiked correctly. The spiking procedure will be revised to include additional detail in our SW8260C SOP and training procedures to prevent this error from reoccuring.

Approval and Closure

QA Officer Approval: Sharyn B Lawler

Sharyn B Lawler

QA Date: 06-Jan-17 Close Date: 27-Jan-17

Last Updated BY slawler Updated: 01-Feb-2017 10:07 AM Reported: 01-Feb-2017 10:08 A

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0812
Analyses/Method:	EPA SW-846 Method 8270D-SIM for SVOCs (GC/MS) / 8270D-SIM and EPA SW-846 Method 8270D for SVOCs (GC/MS) / 8270D
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Cathy Larson/Resolution Consultants Completed on: 11/21/16
Reviewed by:	Kristin Rutherford/Resolution Consultants File Name: R0812_SVOC_PAH

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 6, 7, 8, and 9, 2016.

Sample ID	Matrix/Sample Type
MW09-07S-ME45-1	Ground water
MW09-08DA-ME45-1	Ground water
MW09-09DA-ME45-1	Ground water
MW09-17I-ME45-1	Ground water
MW09-21S-ME45-1	Ground water
MW09-25S-ME45-1	Ground water
MW09-26DA-ME45-1	Ground water
MW09-26S-ME45-1	Ground water
MW09-27D-ME45-1	Ground water
MW09-27S-ME45-1	Ground water
MW09-ME45-FD01	Field duplicate of MW09-27D-ME45-1

Data validation activities were conducted with reference to:

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8270D, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2014) and *SW-846 Method 8270D-SIM, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry/Selected Ion Monitoring* (USEPA, 2014);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);

- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	Instrument tuning
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/equipment blanks
✓	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✗	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicate results
✓	Internal standard results
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Exceptions noted during the review were:

1. Sample misidentification: Sample MW09-27-ME45-1 was listed on the COC. This sample identifier was corrected to MW09-27D-ME45-1 as described in email correspondence dated September 8, 2016.

2. The SAP SVOC list of analytes included N-Nitrosodimethylamine. This analyte was not reported by the laboratory. Also, the compound 2,2'-oxybis (1-chloropropane) was reported by the laboratory, but this compound was not listed in the SAP. No actions were taken except to note these discrepancies.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met and/or data qualification was not required.

Instrument Tuning

The data were reviewed to ensure that the decafluorotriphenylphosphine (DFTPP) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the DFTPP tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Tables A-1a, A-1b, and A-1c. Data qualification to the analytes associated with the specific ICAL and/or CCV was in accordance with QSM and professional judgement as follows:

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualifications
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results
Beginning CCV +/- 20% true value	J	UJ
Ending CCV +/- 50% true value	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

Qualified sample results are shown in Table 1.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks were not collected since dedicated sampling equipment was used for ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met and/or qualification of the sample results was not required.

MS/MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification to the analytes associated with the MS/MSD nonconformances was as follows:

Actions: (Based on NFG 2016, Region 1, and Resolution Consultants professional judgment)

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R> UL	J+	No qualification
10% ≤ %R < LL	J-	UJ
%R <10%	J-	R
%RPD > UL	J	No qualification

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria. For SVOCs, control limits in the QSM were used and for the 8270D SIM method, the laboratory presented laboratory control limits. Results analyzed by 8270D SIM were also compared to the QSM criteria.

Nonconformances are summarized in Attachment A in Table A-3. Data qualification to the analytes associated with the specific LCS %Rs or RPDs was as follows:

Criteria[1]	Action	
	Detected Compounds	Nondetected Compounds
%R or RPD > UL	J+	No qualification
10%≥%R < LL	J-	UJ
%R < 10%	J-	R
[1] In the absence of NFG 2014 guidance for LCS results, NFG 2014 MS/MSD guidance was applied with Resolution Consultants professional judgment.		

Qualified sample results are shown in Table 1.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤30% for aqueous matrices. This criterion applies if both results were greater than five times the limit of quantitation (LOQ).

All QC acceptance criteria were met and/or qualification of the data was not required.

Internal Standard Results

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the limit of detection (LOD) were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution due to high concentrations of target or non-targets was checked to ensure that the results and/or sample specific limits of detection (LODs) and LOQs were adjusted accordingly by the laboratory.

All analytes reported using method 8270D-SIM were also reported using 8270D. The reporting limit is lower for the SIM method and duplicate results for 8270D were noted as "not reported" in the database.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-07S-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-07S-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-07S-ME45-1	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-07S-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-07S-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-07S-ME45-1	WG	2-METHYLNAPHTHALENE	3.4	0.10	0.10	UG/L	J	c
MW09-07S-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-07S-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-07S-ME45-1	WG	NAPHTHALENE	0.50	0.10	0.10	UG/L	J	c
MW09-07S-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-07S-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-07S-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-08DA-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-08DA-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-08DA-ME45-1	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-08DA-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-08DA-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-08DA-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-08DA-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-08DA-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-08DA-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-08DA-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-08DA-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-08DA-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-09DA-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-09DA-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-09DA-ME45-1	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-09DA-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-09DA-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-09DA-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-09DA-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-09DA-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-09DA-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-09DA-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-09DA-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-09DA-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-17I-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-17I-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-17I-ME45-1	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-17I-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-17I-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-17I-ME45-1	WG	2-METHYLNAPHTHALENE	20	1.0	1.0	UG/L	J	c
MW09-17I-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-17I-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-17I-ME45-1	WG	NAPHTHALENE	3.7	0.10	0.10	UG/L	J	c
MW09-17I-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-17I-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-17I-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-21S-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-21S-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-21S-ME45-1	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-21S-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-21S-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-21S-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-21S-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-21S-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-21S-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-21S-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-21S-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-21S-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-25S-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-25S-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-25S-ME45-1	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-25S-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-25S-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-25S-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-25S-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-25S-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-25S-ME45-1	WG	NAPHTHALENE	0.18	0.10	0.10	UG/L	J	c
MW09-25S-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-25S-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-25S-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-26DA-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-26DA-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-26DA-ME45-1	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-26DA-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-26DA-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-26DA-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-26DA-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-26DA-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-26DA-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-26DA-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-26DA-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-26DA-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-26S-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-26S-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-26S-ME45-1	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-26S-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-26S-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-26S-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-26S-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-26S-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-26S-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-26S-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-26S-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-26S-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-27D-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-27D-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-27D-ME45-1	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-27D-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-27D-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-27D-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-27D-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-27D-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-27D-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-27D-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-27D-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-27D-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-27S-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-27S-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-27S-ME45-1	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-27S-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-27S-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-27S-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-27S-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-27S-ME45-1	WG	BENZO[A]PYRENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-27S-ME45-1	WG	BENZO[G,H,I]PERYLENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-27S-ME45-1	WG	BENZO[K]FLUORANTHENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-27S-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	m,l

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-27S-ME45-1	WG	CHRYSENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-27S-ME45-1	WG	DIBENZ[A,H]ANTHRACENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-27S-ME45-1	WG	INDENO[1,2,3-CD]PYRENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-27S-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-27S-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-27S-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-27S-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-ME45-FD01	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-ME45-FD01	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-ME45-FD01	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-ME45-FD01	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-ME45-FD01	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-ME45-FD01	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-ME45-FD01	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-ME45-FD01	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-ME45-FD01	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-ME45-FD01	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-ME45-FD01	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-ME45-FD01	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1a Initial Calibration

Method	Date	Inst	Analyte	%RSD	% RSD Limit	Associated Samples
8270 SIM	9/9/16	S6	Naphthalene	16.7	<15	MW09-07S-ME45-1, MW09-08DA-ME45-1, MW09-09DA-ME45-1, MW09-17I-ME45-1, MW09-21S-ME45-1, MW09-25S-ME45-1, MW09-26DA-ME45-1, MW09-26S-ME45-1, MW09-27D-ME45-1, MW09-27S-ME45-1, MW09-ME45-FD01
8270 SIM	9/9/16	S6	2-Methylnaphthalene	19.0	<15	
8270 SIM	9/9/16	S6	Acenaphthene	20.6	<15	
8270 SIM	9/9/16	S6	Pentachlorophenol	15.8	<15	
8270 SIM	9/9/16	S6	Phenanthrene	21.5	<15	
8270 SIM	9/9/16	S6	Pyrene	15.8	<15	
8270	9/9/16	S3	2,4-Dinitrophenol	30.6	<15	MW09-07S-ME45-1, MW09-08DA-ME45-1, MW09-09DA-ME45-1, MW09-17I-ME45-1, MW09-21S-ME45-1, MW09-25S-ME45-1, MW09-26DA-ME45-1, MW09-26S-ME45-1, MW09-27D-ME45-1, MW09-27S-ME45-1, MW09-ME45-FD01
8270	9/9/16	S3	4-Chlorophenyl-phenylether	16.5	<15	
8270	9/9/16	S3	4,6-Dinitro-2-methylphenol	19.4	<15	

Table A-1b Initial Calibration Verification

Method	Date/Time	Inst	Analyte	ICV %D	ICV Limit	Associated Samples
8270 SIM	9/9/16 @ 1504	S6	Pentachlorophenol	-70.4	<20%	MW09-07S-ME45-1, MW09-08DA-ME45-1, MW09-09DA-ME45-1, MW09-17I-ME45-1, MW09-21S-ME45-1, MW09-25S-ME45-1, MW09-26DA-ME45-1, MW09-26S-ME45-1, MW09-27D-ME45-1, MW09-27S-ME45-1, MW09-ME45-FD01
8270	9/9/16 @ 1452	S3	4-Methylphenol	83.6	<20%	
8270	9/9/16 @ 1452	S3	Hexachlorobutadiene	22.2	<20%	
8270	9/9/16 @ 1452	S3	2,4-Dinitrophenol	32.3	<20%	
8270	9/9/16 @ 1452	S3	Pentachlorophenol	37.6	<20%	

Table A-1c Continuing Calibration Verification

Method	Data/Time	Inst	Analyte	CCV %D	CCV Limit	Associated Samples
8270	9/15/16 @ 2151	S3	2,4-Dinitrophenol	76.5	<50	MW09-07S-ME45-1, MW09-08DA-ME45-1, MW09-09DA-ME45-1, MW09-17I-ME45-1, MW09-21S-ME45-1, MW09-25S-ME45-1, MW09-26DA-ME45-1, MW09-26S-ME45-1, MW09-27D-ME45-1, MW09-27S-ME45-1, MW09-ME45-FD01

Table A-2 - Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
Method 8270D:							
MW09-27S-ME45-1	3,3-DICHLOROBENZIDINE	52	42	27	129	**21**	20
Method 8270D SIM:							
MW09-27S-ME45-1	BIS(2-ETHYLHEXYL)PHTHALATE	**29**	**36**	45	135	22	30
MW09-27S-ME45-1	BENZO[G,H,I]PERYLENE	**31**	**41**	52	135	28	30
MW09-27S-ME45-1	INDENO[1,2,3-CD]PYRENE	**32**	**42**	52	142	27	30
MW09-27S-ME45-1	BENZO[B]FLUORANTHENE	51	72	61	130	**34**	30
MW09-27S-ME45-1	BENZO[K]FLUORANTHENE	**50**	**57**	62	131	13	30
MW09-27S-ME45-1	CHRYSENE	**63**	72	64	110	13	30
MW09-27S-ME45-1	BENZO[A]PYRENE	**47**	**60**	66	114	24	30
MW09-27S-ME45-1	DIBENZ[A,H]ANTHRACENE	**32**	**41**	49	143	25	30

Table A-3 Laboratory Control Sample

Sample ID	Compound	LCS % Recovery	Lower Limit	Upper Limit
Method 8270D SIM:				
LCS-85390	BIS(2-ETHYLHEXYL)PHTHALATE	63	67	150

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0814
Analyses/Method:	EPA SW-846 Method 8270D-SIM for SVOCs (GC/MS) and EPA SW-846 Method 8270D for SVOCs (GC/MS) / 8270D and 8270D-SIM
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/01/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0814_SVOC_PAH

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 7 and 8, 2016.

Sample ID	Matrix/Sample Type
MW09-09S-ME45-1	Ground water
MW09-14D-ME45-1	Ground water
MW09-20D-ME45-1	Ground water
MW09-ME45-FD03	Field Duplicate of MW09-20D-ME45-1
MW09-20I-ME45-1	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8270D, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry and Mass Spectrometry/Selected Ion Monitoring* (USEPA, 2014);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	Gas Chromatography/Mass Spectrometry (GC/MS) Performance Checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/equipment blanks
✓	Surrogate spike recoveries
NA	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✗	Laboratory control sample (LCS) results
✓	Field duplicate results
✓	Internal standard recoveries
✓	Sample results/reporting issues

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

It was noted during review that the SAP SVOC list of analytes included N-Nitrosodimethylamine. This analyte was not reported by the laboratory. Also, the compound 2,2'-oxybis (1-chloropropane) was reported by the laboratory, but this compound was not listed in the SAP. No actions were taken except to note these discrepancies.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the decafluorotriphenylphosphine (DFTPP) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the DFTPP tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1a and A-1b. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8270D)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results
%D > 20%	J	UJ
%Drift >20%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

Qualified sample results are shown in Table 1.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks were not collected since dedicated sampling equipment was used for ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

MS/MSD Results

No client-requested MS/MSD analyses were included in this SDG.

LCS Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria. For SVOCs, control limits in the QSM were used and for the 8270D SIM method, the laboratory presented laboratory control limits. Results analyzed by 8270D SIM were also compared to the QSM criteria.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification to the analytes associated with the specific LCS %Rs was as follows:

Criteria[1]	Action	
	Detected Compounds	Nondetected Compounds
%R or RPD > UL	J+	No qualification
10%≥%R < LL	J-	UJ
%R < 10%	J-	R

[1] In the absence of NFG 2016 guidance for LCS results, NFG 2016 MS/MSD guidance was applied with Resolution Consultants professional judgment.

Qualified sample results are shown in Table 1.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than five times the limit of quantitation (LOQ).

Since all sample results were nondetect, field duplicate precision was deemed acceptable.

Internal Standard Recoveries

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the limit of detection (LOD) were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

All analytes reported using method 8270D SIM were also reported using 8270D. The reporting limit is lower for the SIM method; therefore duplicate results for 8270D were noted as “not reported” in the database.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-09S-ME45-1	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
MW09-09S-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-09S-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-09S-ME45-1	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-09S-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-09S-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-09S-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-09S-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-09S-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-09S-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-09S-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-09S-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-09S-ME45-1	WG	PYRENE	0.20	0.10	0.10	UG/L	J	c
MW09-14D-ME45-1	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
MW09-14D-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-14D-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-14D-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-14D-ME45-1	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
MW09-14D-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-14D-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-14D-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-14D-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-14D-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-14D-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-14D-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-14D-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-20D-ME45-1	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
MW09-20D-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-20D-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-20D-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-20D-ME45-1	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
MW09-20D-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-20D-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-20D-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-20D-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-20D-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-20D-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-20D-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-20D-ME45-1	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-20I-ME45-1	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
MW09-20I-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-20I-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-20I-ME45-1	WG	4-METHYLPHENOL	1.7	5.0	10	UG/L	J	c
MW09-20I-ME45-1	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
MW09-20I-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-20I-ME45-1	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-20I-ME45-1	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-20I-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-20I-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-20I-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-20I-ME45-1	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-20I-ME45-1	WG	PYRENE	0.35	0.10	0.10	UG/L	J	c
MW09-ME45-FD03	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
MW09-ME45-FD03	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-ME45-FD03	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-ME45-FD03	WG	4-CHLOROPHENYL-PHENYLETHER	2.0	2.0	10	UG/L	UJ	c
MW09-ME45-FD03	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-ME45-FD03	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-ME45-FD03	WG	2-METHYLNAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-ME45-FD03	WG	ACENAPHTHENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-ME45-FD03	WG	BIS(2-ETHYLHEXYL)PHTHALATE	1.0	1.0	1.0	UG/L	UJ	l
MW09-ME45-FD03	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-ME45-FD03	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-ME45-FD03	WG	PHENANTHRENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-ME45-FD03	WG	PYRENE	0.10	0.10	0.10	UG/L	UJ	c

Attachment A

Non Conformance Summary Tables

Table A-1a Initial Calibration – (Method 8270 SVOC and 8270-SIM SVOC)

ICAL	Compound	% RSD	%RSD Limit	Associated Samples
Instrument: S3 09/09/16 SVOC	2,4-Dinitrophenol	30.6	<15	MW09-ME45-FD03 MW09-09S-ME45-1
	4-Chlorophenyl-phenylether	16.5	<15	MW09-ME45-FD03 MW09-09S-ME45-1
	4,6-Dinitro-2-methylphenol	19.4	<15	MW09-ME45-FD03 MW09-09S-ME45-1
Instrument: S3 09/19/16 SVOC	2,4-Dinitrophenol	33.2	<15	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1
	4,6-Dinitro-2-methylphenol	20.5	<15	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1
	Di-n-octylphthalate	16.4	<15	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1
Instrument: S6 09/09/16 SVOC-SIM	Naphthalene	16.7	<15	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1 MW09-ME45-FD03 MW09-09S-ME45-1
	2-Methylnaphthalene	19.0	<15	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1 MW09-ME45-FD03 MW09-09S-ME45-1
	Acenaphthene	20.5	<15	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1 MW09-ME45-FD03 MW09-09S-ME45-1
	Pentachlorophenol	15.8	<15	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1 MW09-ME45-FD03 MW09-09S-ME45-1
	Phenanthrene	21.5	<15	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1 MW09-ME45-FD03 MW09-09S-ME45-1
	Pyrene	15.8	<15	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1 MW09-ME45-FD03 MW09-09S-ME45-1

ICV	Compound	% D	%D Limit	Associated Samples
Instrument: S3 09/09/16 SVOC	2,2´-oxybis(1-Chloropropane)	29.9	<20	MW09-ME45-FD03 MW09-09S-ME45-1
	4-Methylphenol	83.6	<20	MW09-ME45-FD03 MW09-09S-ME45-1
	Hexachlorobutadiene	22.2	<20	MW09-ME45-FD03 MW09-09S-ME45-1
	2,4-Dinitrophenol	32.3	<20	MW09-ME45-FD03 MW09-09S-ME45-1
Instrument: S3 09/19/16 SVOC	2,2´-oxybis(1-Chloropropane)	25.2	<20	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1
	4-Methylphenol	77.3	<20	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1
	Hexachlorobutadiene	22.8	<20	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1
	2,4-Dinitrophenol	20.4	<20	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1
Instrument: S6 09/09/16 SVOC-SIM	Pentachlorophenol	70.4	<20	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1 MW09-ME45-FD03 MW09-09S-ME45-1

Table A-1b Continuing Calibration – (Method 8270 SVOC)

CCAL	Compound	% D	%D Limit	Associated Samples
Instrument: S3 09/15/16 21:51 S3J7357A.D SVOC (closing)	2,4-Dinitrophenol	76.5	<20	MW09-ME45-FD03 MW09-09S-ME45-1
Instrument: S3 09/21/16 10:32 S3J7393.D SVOC (opening)	2,4-Dinitrophenol	-20.6	<20	MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1

Table A-2 Laboratory Control Sample

Sample ID	Compound	LCS % Recovery	Lower Limit	Upper Limit	Associated Samples
Method 8270D SIM:					
LCS-85390	BIS(2-ETHYLHEXYL)PHTHALATE	63	67	150	MW09-09S-ME45-1 MW09-20I-ME45-1 MW09-14D-ME45-1 MW09-20D-ME45-1 MW09-ME45-FD03

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0838
Analyses/Method:	EPA SW-846 Method 8270D-SIM for SVOCs (GC/MS-SIM) and EPA SW-846 Method 8270D for SVOCs (GC/MS)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/05/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0838_SVOC_PAH

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 12, 13, 15, and 16, 2016.

Sample ID	Matrix/Sample Type
MW09-14IA-ME45-1	Ground water
MW09-ME45-FD05	Field Duplicate of MW09-14IA-ME45-1
P09-04A-ME45-1A	Ground water
P09-06B-ME45-1	Ground water
P09-08B-ME45-1A	Ground water
P09-09-ME45-1	Ground water
P09-10-ME45-1	Ground water
P09-11B-ME45-1	Ground water
P09-12B-ME45-1	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8270D, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry and Mass Spectrometry/Selected Ion Monitoring* (USEPA, 2014);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

- ✓ Data completeness (chain-of-custody [COC])/sample integrity
- ✓ Holding times and sample preservation
- ✓ Gas Chromatography/Mass Spectrometry (GC/MS) Performance Checks
- ✗ Initial calibration/continuing calibration verification
- ✓ Laboratory blanks/equipment blanks
- ✓ Surrogate spike recoveries
- ✗ Matrix spike (MS) and/or matrix spike duplicate (MSD) results
- ✗ Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
- ✓ Field duplicate results
- ✓ Internal standard recoveries
- ✓ Sample results/reporting issues

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

The sample ID listed in the laboratory data package and electronic data deliverable (MW09-14**1**A-ME45-1) for laboratory sample R0838-29 should be MW09-14**I**A-ME45-1. The sample ID was corrected in the project database. No actions were taken except to note this discrepancy.

It was noted during review that the SAP SVOC list of analytes included N-Nitrosodimethylamine. This analyte was not reported by the laboratory. Also, the compound 2,2'-oxybis (1-chloropropane) was reported by the laboratory, but this compound was not listed in the SAP. No actions were taken except to note these discrepancies.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the decafluorotriphenylphosphine (DFTPP) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the DFTPP tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1a and A-1b. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8270D)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	UJ
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results
%D > 20%	J	UJ
%Drift >20%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

Qualified sample results are shown in Table 1.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the limit of detection (LOD).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met and/or qualification of the sample results was not required.

MS/MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Actions: (Based on NFG 2016, Region 1, and Resolution Consultants professional judgment)

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R> UL	J+	No qualification
10% ≤ %R < LL	J-	UJ
%R <10%	J-	R
%RPD > UL	J	No qualification

Notes:

1. Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.

2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis,

professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS and/or LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria. For SVOCs, control limits in the QSM were used and for the 8270D SIM method, the laboratory presented laboratory control limits. Results analyzed by 8270D SIM were also compared to the QSM criteria.

Nonconformances are summarized in Attachment A in Table A-3. Data qualification to the analytes associated with the specific LCS %Rs or RPDs was as follows:

Criteria[1]	Action	
	Detected Compounds	Nondetected Compounds
%R or RPD > UL	J+	No qualification
10%≥%R < LL	J-	UJ
%R < 10%	J-	R

[1] In the absence of NFG 2014 guidance for LCS results, NFG 2014 MS/MSD guidance was applied with Resolution Consultants professional judgment.

Qualified sample results are shown in Table 1.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than five times the limit of quantitation (LOQ).

All QC acceptance criteria were met and/or qualification of the data was not required and/or qualification of the sample results was not required.

Internal Standard Recoveries

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the LOD were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution due to high concentrations of target or non-targets was checked to ensure that the results and/or sample specific LODs and LOQs were adjusted accordingly by the laboratory.

All analytes reported using method 8270D SIM were also reported using 8270D. The reporting limit is lower for the SIM method; therefore duplicate results for 8270D were noted as “not reported” in the database.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-14IA-ME45-1	WG	2,4,5-TRICHLOROPHENOL	0.10	0.10	1.0	UG/L	UJ	c
MW09-14IA-ME45-1	WG	BENZO[A]PYRENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-14IA-ME45-1	WG	BENZO[G,H,I]PERYLENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-14IA-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	0.19	1.0	1.0	UG/L	J	c,l,m
MW09-14IA-ME45-1	WG	DIBENZ[A,H]ANTHRACENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-14IA-ME45-1	WG	INDENO[1,2,3-CD]PYRENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-14IA-ME45-1	WG	NAPHTHALENE	13	0.50	0.50	UG/L	J	c,m
MW09-14IA-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-14IA-ME45-1	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
MW09-14IA-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-14IA-ME45-1	WG	2,6-DINITROTOLUENE	2.0	2.0	10	UG/L	UJ	c
MW09-14IA-ME45-1	WG	3,3-DICHLOROBENZIDINE	5.0	5.0	10	UG/L	UJ	m
MW09-14IA-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-14IA-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-14IA-ME45-1	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
MW09-14IA-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
MW09-ME45-FD05	WG	2,4,5-TRICHLOROPHENOL	0.10	0.10	1.0	UG/L	UJ	c
MW09-ME45-FD05	WG	BENZO[A]PYRENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD05	WG	BENZO[G,H,I]PERYLENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD05	WG	BIS(2-ETHYLHEXYL)PHTHALATE	0.25	1.0	1.0	UG/L	J	c,l,m
MW09-ME45-FD05	WG	DIBENZ[A,H]ANTHRACENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD05	WG	INDENO[1,2,3-CD]PYRENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD05	WG	NAPHTHALENE	14	0.50	0.50	UG/L	J	c,m
MW09-ME45-FD05	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
MW09-ME45-FD05	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
MW09-ME45-FD05	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
MW09-ME45-FD05	WG	2,6-DINITROTOLUENE	2.0	2.0	10	UG/L	UJ	c
MW09-ME45-FD05	WG	3,3-DICHLOROBENZIDINE	5.0	5.0	10	UG/L	UJ	m
MW09-ME45-FD05	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
MW09-ME45-FD05	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
MW09-ME45-FD05	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
MW09-ME45-FD05	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
P09-04A-ME45-1A	WG	2,4,5-TRICHLOROPHENOL	0.10	0.10	1.0	UG/L	UJ	c
P09-04A-ME45-1A	WG	BENZO[A]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-04A-ME45-1A	WG	BIS(2-ETHYLHEXYL)PHTHALATE	0.40	1.0	1.0	UG/L	J	c,l
P09-04A-ME45-1A	WG	INDENO[1,2,3-CD]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-04A-ME45-1A	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
P09-04A-ME45-1A	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
P09-04A-ME45-1A	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
P09-04A-ME45-1A	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
P09-04A-ME45-1A	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
P09-04A-ME45-1A	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
P09-04A-ME45-1A	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
P09-06B-ME45-1	WG	2,4,5-TRICHLOROPHENOL	0.10	0.10	1.0	UG/L	UJ	c
P09-06B-ME45-1	WG	BENZO[A]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-06B-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	0.44	1.0	1.0	UG/L	J	c,l
P09-06B-ME45-1	WG	INDENO[1,2,3-CD]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-06B-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
P09-06B-ME45-1	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
P09-06B-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
P09-06B-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
P09-06B-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
P09-06B-ME45-1	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
P09-06B-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
P09-08B-ME45-1A	WG	2,4,5-TRICHLOROPHENOL	0.10	0.10	1.0	UG/L	UJ	c
P09-08B-ME45-1A	WG	BENZO[A]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-08B-ME45-1A	WG	BIS(2-ETHYLHEXYL)PHTHALATE	0.45	1.0	1.0	UG/L	J	c,l
P09-08B-ME45-1A	WG	INDENO[1,2,3-CD]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-08B-ME45-1A	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
P09-08B-ME45-1A	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
P09-08B-ME45-1A	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
P09-08B-ME45-1A	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
P09-08B-ME45-1A	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
P09-08B-ME45-1A	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
P09-08B-ME45-1A	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
P09-09-ME45-1	WG	2,4,5-TRICHLOROPHENOL	0.10	0.10	1.0	UG/L	UJ	c
P09-09-ME45-1	WG	BENZO[A]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-09-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	0.34	1.0	1.0	UG/L	J	c,l
P09-09-ME45-1	WG	INDENO[1,2,3-CD]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-09-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
P09-09-ME45-1	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
P09-09-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
P09-09-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
P09-09-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
P09-09-ME45-1	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
P09-09-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
P09-10-ME45-1	WG	2,4,5-TRICHLOROPHENOL	0.10	0.10	1.0	UG/L	UJ	c
P09-10-ME45-1	WG	BENZO[A]PYRENE	0.26	0.10	0.10	UG/L	J	c
P09-10-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	0.51	1.0	1.0	UG/L	J	c,l

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
P09-10-ME45-1	WG	INDENO[1,2,3-CD]PYRENE	0.20	0.10	0.10	UG/L	J	c
P09-10-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
P09-10-ME45-1	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
P09-10-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
P09-10-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
P09-10-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
P09-10-ME45-1	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
P09-10-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
P09-11B-ME45-1	WG	2,4,5-TRICHLOROPHENOL	0.10	0.10	1.0	UG/L	UJ	c
P09-11B-ME45-1	WG	BENZO[A]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-11B-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	0.17	1.0	1.0	UG/L	J	c,l
P09-11B-ME45-1	WG	INDENO[1,2,3-CD]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-11B-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
P09-11B-ME45-1	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
P09-11B-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
P09-11B-ME45-1	WG	2,6-DINITROTOLUENE	2.0	2.0	10	UG/L	UJ	c
P09-11B-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
P09-11B-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
P09-11B-ME45-1	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
P09-11B-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c
P09-12B-ME45-1	WG	2,4,5-TRICHLOROPHENOL	0.10	0.10	1.0	UG/L	UJ	c
P09-12B-ME45-1	WG	BENZO[A]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-12B-ME45-1	WG	BIS(2-ETHYLHEXYL)PHTHALATE	0.43	1.0	1.0	UG/L	J	c,l
P09-12B-ME45-1	WG	INDENO[1,2,3-CD]PYRENE	0.10	0.10	0.10	UG/L	UJ	c
P09-12B-ME45-1	WG	PENTACHLOROPHENOL	1.0	1.0	1.0	UG/L	UJ	c
P09-12B-ME45-1	WG	2,2'-OXYBIS(1-CHLOROPROPANE)	2.0	2.0	10	UG/L	UJ	c
P09-12B-ME45-1	WG	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
P09-12B-ME45-1	WG	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
P09-12B-ME45-1	WG	4-METHYLPHENOL	5.0	5.0	10	UG/L	UJ	c
P09-12B-ME45-1	WG	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
P09-12B-ME45-1	WG	HEXACHLOROBUTADIENE	2.0	2.0	10	UG/L	UJ	c

Attachment A

Non Conformance Summary Tables

Table A-1a Initial Calibration – (Method 8270 SVOC and 8270-SIM SVOC)

ICAL	Compound	% RSD	%RSD Limit	Associated Samples
8270D SVOC				
Instrument: S3 09/19/16	2,4-Dinitrophenol	33.2	<15	P09-08B-ME45-1 P09-10-ME45-1 P09-12B-ME45-1 P09-04A-ME45-1 P09-09-ME45-1 P09-06B-ME45-1 P09-11B-ME45-1 MW09-14IA-ME45-1 MW09-ME45-FD05
	4,6-Dinitro-2-methylphenol	20.5	<15	
	Di-n-octylphthalate	16.4	<15	
8270D-SIM SVOC				
Instrument: S3 10/03/16	Pentachlorophenol	30.6	<15	P09-08B-ME45-1 P09-10-ME45-1 P09-12B-ME45-1 P09-04A-ME45-1 P09-09-ME45-1 P09-06B-ME45-1 P09-11B-ME45-1 MW09-14IA-ME45-1 MW09-ME45-FD05
	Bis(2-ethylhexyl)phthalate	21.3	<15	
Instrument: S6 10/07/16	Naphthalene	19.1	<15	MW09-14IA-ME45-1 MW09-ME45-FD05

ICV	Compound	% D	%D Limit	Associated Samples
8270D SVOC				
Instrument: S3 09/19/16 SVOC	2,2´-oxybis(1-Chloropropane)	25.2	<20	P09-04A-ME45-1 P09-06B-ME45-1 P09-08B-ME45-1 P09-09-ME45-1 P09-10-ME45-1 P09-11B-ME45-1 P09-12B-ME45-1 MW09-14IA-ME45-1 MW09-ME45-FD05
	4-Methylphenol	77.3	<20	
	Hexachlorobutadiene	22.8	<20	
	2,4-Dinitrophenol	20.4	<20	

ICV	Compound	% D	%D Limit	Associated Samples
8270D-SIM SVOC				
Instrument: S3 10/03/16 SVOC-SIM	2,4,5-Trichlorophenol	-22.3	<20	P09-04A-ME45-1 P09-06B-ME45-1 P09-08B-ME45-1 P09-09-ME45-1 P09-10-ME45-1 P09-11B-ME45-1 P09-12B-ME45-1 MW09-14IA-ME45-1 MW09-ME45-FD05
	Pentachlorophenol	-69.4	<20	
	Benzo(a)pyrene	-20.8	<20	
	Indeno(1,2,3-cd)pyrene	-20.8	<20	

Table A-1b Continuing Calibration – (Method 8270 SVOC and 8270-SIM SVOC)

CCAL	Compound	% D	%D Limit	Associated Samples
8270D SVOC				
Instrument: S3 09/21/16 10:32 S3J7393.D	2,4-Dinitrophenol	-20.6	<20	P09-08B-ME45-1 P09-10-ME45-1
Instrument: S3 09/23/16 10:26 S3J7430.D	2,6-Dinitrotoluene	-20.8	<20	MW09-14IA-ME45-1 P09-11B-ME45-1 MW09-ME45-FD05

Table A-2 Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
8270D SVOC							
MW09-14IA-ME45-1	3,3-DICHLOROBENZIDINE	23	21	27	129	10	20
8270D-SIM SVOC							
MW09-14IA-ME45-1	BIS(2-ETHYLHEXYL)PHTHALATE	33	43	45	135	27	30
MW09-14IA-ME45-1	BENZO[G,H,I]PERYLENE	50	60	52	135	18	30
MW09-14IA-ME45-1	INDENO[1,2,3-CD]PYRENE	51	61	52	142	19	30
MW09-14IA-ME45-1	DIBENZ[A,H]ANTHRACENE	46	56	49	143	18	30
MW09-14IA-ME45-1	BENZO[A]PYRENE	65	73	66	114	11	30
MW09-14IA-ME45-1	NAPHTHALENE	127	107	47	105	17	30

Note: MS qualifications made to sample MW09-14IA-ME45-1 and its field duplicate MW09-ME45-FD05

Table A-3 Laboratory Control Sample

Sample ID	Compound	LCS % Recovery	Lower Limit	Upper Limit	Associated Samples
8270D SIM SVOC:					
LCS-85424	BIS(2-ETHYLHEXYL)PHTHALATE	62	67	150	P09-04A-ME45-1 P09-12B-ME45-1 P09-06B-ME45-1 P09-09-ME45-1 P09-08B-ME45-1 P09-10-ME45-1
LCSD-85424	BIS(2-ETHYLHEXYL)PHTHALATE	58	67	150	
LCS-85474	BIS(2-ETHYLHEXYL)PHTHALATE	52	67	150	MW09-14IA-ME45-1 MW09-ME45-FD05 P09-11B-ME45-1

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0898
Analyses/Method:	EPA SW-846 Method 8270-SIM for SVOCs (GC/MS-SIM) / 8270_SIM
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/02/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0898_PAH

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 27, 2016.

Sample ID	Matrix/Sample Type
ALLENHARBOR-ME45-1	Ground water
MW09-ME45-FD06	Field Duplicate of Allenharbor-ME45-1

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8270D, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry/Selective Ion Monitoring (SIM)* (USEPA, 2007);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody (COC)/sample integrity
✓	Holding times and sample preservation
✓	Gas Chromatography/Mass Spectrometry (GCMS) Performance Checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/equipment blanks
✓	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS) results
✓	Field duplicate results
✓	Internal standard results
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the decafluorotriphenylphosphine (DFTPP) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the DFTPP tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8270D)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120	J	No qualification
Recovery < 80	J	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results
%D > 20%	J	UJ
%Drift >20%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

Qualified sample results are shown in Table 1.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks were not collected with ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met.

MS/MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Actions: (Based on NFG 2016, Region 1, and Resolution Consultants professional judgment)

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R> UL	J+	No qualification
10% ≤ %R < LL*	J-	UJ
%R <10%*	J-	R
%RPD > UL	J	No qualification
* NFG 2016 does not list a minimum limit. Based on Region 1 and Resolution Consultants professional judgment, a minimum limit of 10% was used.		

Notes:

1. Based on NFG 2016 SVOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in all associated samples for any analyte with < 10% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.

2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis, professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than five times the limit of quantitation (LOQ).

Since all sample results were nondetect, field duplicate precision was deemed acceptable.

Internal Standard Results

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution due to high concentrations of target or non-targets was checked to ensure that the results and/or sample specific limits of detection (LODs) and LOQs were adjusted accordingly by the laboratory.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ALLENHARBOR-ME45-1	WG	BENZO[A]ANTHRACENE	0.10	0.10	0.10	UG/L	UJ	m
ALLENHARBOR-ME45-1	WG	BENZO[A]PYRENE	0.10	0.10	0.10	UG/L	UJ	m
ALLENHARBOR-ME45-1	WG	BENZO[B]FLUORANTHENE	0.10	0.10	0.10	UG/L	UJ	m
ALLENHARBOR-ME45-1	WG	BENZO[G,H,I]PERYLENE	0.10	0.10	0.10	UG/L	UJ	m
ALLENHARBOR-ME45-1	WG	BENZO[K]FLUORANTHENE	0.10	0.10	0.10	UG/L	UJ	m
ALLENHARBOR-ME45-1	WG	CHRYSENE	0.10	0.10	0.10	UG/L	UJ	m
ALLENHARBOR-ME45-1	WG	DIBENZ[A,H]ANTHRACENE	0.10	0.10	0.10	UG/L	UJ	m
ALLENHARBOR-ME45-1	WG	INDENO[1,2,3-CD]PYRENE	0.10	0.10	0.10	UG/L	UJ	m
ALLENHARBOR-ME45-1	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
MW09-ME45-FD06	WG	BENZO[A]ANTHRACENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD06	WG	BENZO[A]PYRENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD06	WG	BENZO[B]FLUORANTHENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD06	WG	BENZO[G,H,I]PERYLENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD06	WG	BENZO[K]FLUORANTHENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD06	WG	CHRYSENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD06	WG	DIBENZ[A,H]ANTHRACENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD06	WG	INDENO[1,2,3-CD]PYRENE	0.10	0.10	0.10	UG/L	UJ	m
MW09-ME45-FD06	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c

Attachment A

Non Conformance Summary Tables

Table A-1 Initial Calibration

ICAL	Compound	% RSD	%RSD Limit	Associated Samples
Instrument: S6 10/07/16 SVOC-SIM	Naphthalene	19.1	<15	MW09-ME45-FD06 ALLENHARBOR-ME45-1

Table A-2 Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
ALLENHARBOR-ME45-1	BENZO[G,H,I]PERYLENE	**32**	**36**	52	135	13	30
ALLENHARBOR-ME45-1	INDENO[1,2,3-CD]PYRENE	**33**	**35**	52	142	6	30
ALLENHARBOR-ME45-1	BENZO[B]FLUORANTHENE	**41**	**47**	61	130	12	30
ALLENHARBOR-ME45-1	BENZO[K]FLUORANTHENE	**41**	**46**	62	131	12	30
ALLENHARBOR-ME45-1	CHRYSENE	**55**	**63**	64	110	14	30
ALLENHARBOR-ME45-1	BENZO[A]PYRENE	**41**	**45**	66	114	11	30
ALLENHARBOR-ME45-1	DIBENZ[A,H]ANTHRACENE	**29**	**32**	49	143	9	30
ALLENHARBOR-ME45-1	BENZO[A]ANTHRACENE	**56**	64	58	112	15	30

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0812
Analyses/Method:	EPA SW-846 Method 8081B for Organochlorine Pesticides (GC/ECD) and EPA SW-846 Method 8082A for PCBs (GC/ECD)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/02/2016
Reviewed by:	Linda Adams/ Resolution Consultants File Name: R0812_PEST_PCB

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 6, 7, 8, and 9, 2016.

Sample ID	Matrix/Sample Type
MW09-07S-ME45-1	Ground water
MW09-08DA-ME45-1	Ground water
MW09-09DA-ME45-1	Ground water
MW09-11S-ME45-1	Ground water
MW09-17I-ME45-1	Ground water
MW09-21S-ME45-1	Ground water
MW09-24D-ME45-1	Ground water
MW09-25S-ME45-1	Ground water
MW09-26DA-ME45-1	Ground water
MW09-26S-ME45-1	Ground water
MW09-27D-ME45-1	Ground water
MW09-ME45-FD01	Field Duplicate of MW09-27D-ME45-1
MW09-27S-ME45-1	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8081B, Organochlorine Pesticides by Gas Chromatography* (USEPA, 2007);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8082A, Polychlorinated Biphenyls (PCBs) by Gas Chromatography* (USEPA, 2007);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);

- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/ECD Instrument Performance Check
✓	Initial calibration/continuing calibration verification
✓	Laboratory blanks/equipment blanks
✓	Surrogate spike recoveries
✓	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS) results
✓	Field duplicates results
NA	Sulfur Clean-up
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. There were no results qualified on the basis of this data review.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

GC/ECD Instrument Performance Check

Instrument performance check standards were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and method acceptance criteria were met;
- the second-source calibration verification (ICV) method acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) acceptance criteria were met.

All criteria were met and/or qualification of the sample results was not required.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks were not collected since dedicated sampling equipment was used for ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance.

The surrogate recoveries were within the QC acceptance criteria and/or qualification of the sample results was not required.

MS/MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met and/or qualification of the sample results was not required.

LCS Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria.

The LCS %Rs were within the QC acceptance criteria.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the sample limit of quantitation (LOQ).

Since all sample results were nondetect, field duplicate precision was deemed acceptable.

Sulfur Clean-up

Sulfur clean-up was not applicable for aqueous samples.

Sample Results/Reporting Issues

For detected results for both pesticides and PCBs, the laboratory reported the lower of the two values between the two columns. Based on DoD QSM v5.0, positive results should be reported from the primary column. No actions were taken except to note this discrepancy.

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation

Dual Column Precision

Sample results were reviewed to ensure that the dual column precision RPD criteria were met.

Since all sample results were nondetect, dual column precision was deemed acceptable.

QUALIFICATION ACTIONS

No sample results were qualified as a result of this data review.

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0838
Analyses/Method:	EPA SW-846 Method 8081B for Organochlorine Pesticides (GC/ECD) and EPA SW-846 Method 8082A for PCBs (GC/ECD)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 11/21/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0838_PEST_PCB

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 12 and 16, 2016.

Sample ID	Matrix/Sample Type
MW09-14IA-ME45-1	Ground water
MW09-ME45-FD05	Field Duplicate of MW09-14IA-ME45-1
P09-09-ME45-1	Ground water
P09-10-ME45-1	Ground water
P09-11B-ME45-1	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8081B, Organochlorine Pesticides by Gas Chromatography* (USEPA, 2007);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8082A, Polychlorinated Biphenyls (PCBs) by Gas Chromatography* (USEPA, 2007);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM v5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/ECD Instrument Performance Check
✓	Initial calibration/continuing calibration verification
✓	Laboratory blanks/equipment blanks
✗	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates results
NA	Sulfur Clean-up
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

The sample ID for laboratory sample R0838-29 should be MW09-14IA-ME45-1 (with a capital letter "I") not MW09-141A-ME45-1 (with the number one). Revised data were not requested. No other actions were required except to note this discrepancy.

Sample P09-01-ME45-1 was listed on the COC for Pesticide and PCB analyses but due to laboratory error, the sample was recollected on September 27, 2016 and reported in SDG R0898.

Sample P09-11B-ME45-1 was not listed on the COC for analysis, but results for pesticides and PCBs were reported in this data set. This sample was analyzed and reported in error by the laboratory, and the results have not been retained. No further actions were taken except to note this discrepancy.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

GC/ECD Instrument Performance Check

Instrument performance check standards were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and method acceptance criteria were met;
- the second-source calibration verification (ICV) method acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) acceptance criteria were met.

All criteria were met.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment rinsate blank samples were not collected for ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance.

Nonconformances are summarized in Attachment A in Table A-1. Data qualification on the basis of surrogate recoveries was as follows:

Actions: (Based on NFG 2016)

Criteria	Action	
	Detected	Nondetected
%R <10% (undiluted)	J-	R
%R <10% (diluted)	Use professional judgment*	Use professional judgment*
%R ≥10% but is < LL	J-	UJ
%R > UL but ≤200%	J+	No qualification
%R >200	J+	Use professional judgment*
* Use professional judgment in qualifying data, as surrogate recovery problems may not directly apply to target compounds.		

Qualified sample results are shown in Table 1.

MS/MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Actions: (Based on NFG 2016)

Criteria	Action	
	Detected	Nondetected
%R <20%	J-	R
%R ≥20% but is < LL	J-	UJ
%R > UL	J+	No qualification
%RPD > QC limit	J	No qualification

Notes: *(applies to PCBs)*

1. If the native sample Aroclor does not qualitatively match the spiked Aroclor then consider the effect of overlapping in evaluating the spike recovery results. Apparently high recoveries may be due to Aroclor mismatch alone.
2. Based on Resolution Consultants professional judgment, apply actions to Aroclors with similar retention time ranges. Apply actions to Aroclors 1016, 1221, 1232, 1242 and 1248 if Aroclor 1016 exceeds MS/MSD %R or RPD criteria and apply actions to Aroclors 1248, 1254 and 1260 if Aroclor 1260 exceeds MS/MSD %R or RPD criteria.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS and/or LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

The LCS and/or LCSD %Rs and/or RPDs were within the QC acceptance criteria.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the sample limit of quantitation (LOQ).

Since all sample results were nondetect, field duplicate precision was deemed acceptable.

Sulfur Clean-up

Sulfur clean-up was not applicable for aqueous samples.

Sample Results/Reporting Issues

For detected results for both pesticides and PCBs, the laboratory reported the lower of the two values between the two columns. Based on DoD QSM v5.0, positive results should be reported from the primary column. No actions were taken except to note this discrepancy.

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation

Dual Column Precision

Sample results were reviewed to ensure that the dual column precision RPD criteria were met.

Since all sample results were nondetect, dual column precision was deemed acceptable.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-14IA-ME45-1	WG	4,4-DDD	0.0063	0.0063	0.050	UG/L	UJ	s
MW09-14IA-ME45-1	WG	4,4-DDE	0.0063	0.0063	0.050	UG/L	UJ	s
MW09-14IA-ME45-1	WG	4,4-DDT	0.0063	0.0063	0.050	UG/L	UJ	s
MW09-14IA-ME45-1	WG	ALDRIN	0.0031	0.0031	0.025	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	ALPHA-BHC	0.0031	0.0031	0.025	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	ALPHA-CHLORDANE	0.0031	0.0031	0.025	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	BETA-BHC	0.0031	0.0031	0.025	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	DELTA-BHC	0.0031	0.0031	0.025	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	DIELDRIN	0.0063	0.0063	0.050	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	ENDOSULFAN I	0.0031	0.0031	0.025	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	ENDOSULFAN II	0.0063	0.0063	0.050	UG/L	UJ	s
MW09-14IA-ME45-1	WG	ENDOSULFAN SULFATE	0.0063	0.0063	0.050	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	ENDRIN	0.0063	0.0063	0.050	UG/L	UJ	s
MW09-14IA-ME45-1	WG	ENDRIN ALDEHYDE	0.031	0.031	0.050	UG/L	UJ	s
MW09-14IA-ME45-1	WG	ENDRIN KETONE	0.0063	0.0063	0.050	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	HEPTACHLOR	0.0031	0.0031	0.025	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	HEPTACHLOR EPOXIDE	0.0031	0.0031	0.025	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	LINDANE	0.0031	0.0031	0.025	UG/L	UJ	m,s
MW09-14IA-ME45-1	WG	METHOXYCHLOR	0.063	0.063	0.25	UG/L	UJ	s
MW09-14IA-ME45-1	WG	TOXAPHENE	0.25	0.25	2.5	UG/L	UJ	s
MW09-14IA-ME45-1	WG	TRANS-CHLORDANE	0.0031	0.0031	0.025	UG/L	UJ	s

Attachment A

Nonconformance Summary Tables

Table A-1 Surrogates

Sample ID	Surrogate	Column 1 % Recovery	Column 2 % Recovery	Lower Limit	Upper Limit
Pesticide Analysis					
MW09-14IA-ME45-1	TETRACHLORO-M-XYLENE	43	29	44	124

Table A-2 Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
MW09-14IA-ME45-1	HEPTACHLOR EPOXIDE	52	70	61	133	29	30
MW09-14IA-ME45-1	ENDOSULFAN SULFATE	56	75	62	133	29	30
MW09-14IA-ME45-1	ALDRIN	45	59	45	134	27	30
MW09-14IA-ME45-1	ALPHA-BHC	40	52	54	138	28	30
MW09-14IA-ME45-1	BETA-BHC	46	59	56	136	25	30
MW09-14IA-ME45-1	DELTA-BHC	47	62	52	142	28	30
MW09-14IA-ME45-1	ALPHA-CHLORDANE	51	68	60	129	27	30
MW09-14IA-ME45-1	ENDRIN KETONE	55	74	58	134	29	30
MW09-14IA-ME45-1	LINDANE	42	55	59	134	27	30
MW09-14IA-ME45-1	DIELDRIN	51	65	60	136	24	30
MW09-14IA-ME45-1	HEPTACHLOR	45	60	54	130	29	30
MW09-14IA-ME45-1	ENDOSULFAN I	56	73	62	126	26	30
MW09-14IA-ME45-1	4,4’-DDT	57	77	51	143	31	30

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0898
Analyses/Method:	EPA SW-846 Method 8081B for Organochlorine Pesticides (GC/ECD) and EPA SW-846 Method 8082A for PCBs (GC/ECD)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/02/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0898_PEST_PCB

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 27, 2016.

Sample ID	Matrix/Sample Type
P09-01-ME45R-1	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8081B, Organochlorine Pesticides by Gas Chromatography* (USEPA, 2007);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8082A, Polychlorinated Biphenyls (PCBs) by Gas Chromatography* (USEPA, 2007);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/ECD Instrument Performance Check
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/equipment blanks
✓	Surrogate spike recoveries
NA	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
NA	Field duplicates results
NA	Sulfur Clean-up
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Sample P09-01-ME45-1 was originally sampled on September 13, 2016 but needed to be recollected on September 27, 2016 for Pesticide/PCB analysis only. Because the database only allows one sample date per unique sample ID, the original sample ID for the resampling as listed on the COC has been revised to P09-01-ME45R-1 to allow the correct re-sampling date to be reported.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

GC/ECD Instrument Performance Check

Instrument performance check standards were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and method acceptance criteria were met;
- the second-source calibration verification (ICV) method acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) acceptance criteria were met.

Pesticide nonconformances are summarized in Attachment A in Tables A-1a and A-1b. Data qualification on the basis of the initial calibration was as follows:

Pesticides Initial Calibration

Criteria	Actions	
	Detected Results	Nondetected Results
%RSD > 20%	J	UJ[1]
r < 0.995 or r^2 < 0.99 for each peak[2,3]	J[4]	UJ[4]

[1] NFG recommends professional judgment, thus Resolution Consultants professional judgment was used
[2] 6 points required for second order; 7 points required for third order
[3] For toxaphene and technical chlordane each peak, not the average must meet the criteria
[4] No guidance in NFG, thus Resolution Consultants professional judgment was used

PCBs Initial Calibration

Criteria	Actions[3]	
	Detected Results	Nondetected Results
%RSD > 20% for each peak	J	UJ
r < 0.995 or r^2 < 0.99 for each peak[1]	J[2]	UJ[2]

[1] 6 points required for second order; 7 points required for third order
[2] No guidance in NFG, thus Resolution Consultants professional judgment was used.
[3] In the absence of an ICAL for a particular Aroclor, Resolution Consultants professional judgment was used as follows: If the traditional model of a linear calibration was employed by the laboratory, validation actions were applied to Aroclors with similar retention time ranges. Actions were applied to Aroclors 1016, 1221, 1232, 1242, and 1248 when Aroclor 1016 exceeded ICAL criteria and actions were applied to Aroclors 1248, 1254, and 1260 when Aroclor 1260 exceeded ICAL criteria. If multipoint calibration was performed for the individual Aroclors, the calibration factors for those calibrations were used to evaluate linearity.

Data qualification on the basis of the ICVs was as follows:

Pesticides Second-Source Calibration Verification

Criteria	Actions[1]	
	Detected	Nondetected
%D or %Drift >20%	J	UJ

[1] Actions are applied to positive results reported from the nonconforming column. Do not qualify nondetect results unless both columns are noncompliant.

PCBs Second-Source Calibration Verification

Criteria	Actions[1,2]	
	Detected	Nondetected
%D or %Drift[3] >20% for each peak	J	UJ

[1] Actions are applied to positive results reported from the nonconforming column. Do not qualify nondetect results unless both columns are noncompliant.
[2] In the absence of an ICV for a particular Aroclor, Resolution Consultants professional judgment was used to apply validation actions to Aroclors with similar retention time ranges. Actions were applied to Aroclors 1016, 1221, 1232, 1242, and 1248 when Aroclor 1016 exceeded ICV criteria and actions were applied to Aroclors 1248, 1254, and 1260 when Aroclor 1260 exceeded ICV criteria.
[3] No guidance for % drift in NFG, thus Resolution Consultants professional judgment was used.

Data qualification on the basis of the CCVs was as follows:

Pesticides Continuing Calibration

Criteria	Actions[1]	
	Detected	Nondetected
%D or %Drift >20%	J	UJ

[1] Actions are applied to positive results reported from the nonconforming column. Do not qualify nondetect results unless both columns are noncompliant.

PCBs Continuing Calibration

Criteria	Actions[1,2]	
	Detected	Nondetected
%D or %Drift[3] >20% for each peak (>50% for each peak in an ending CCV)	J	UJ

[1] Actions are applied to positive results reported from the nonconforming column. Do not qualify nondetect results unless both columns are noncompliant.
[2] In the absence of a CCV for a particular Aroclor, Resolution Consultants professional judgment was used to apply validation actions to Aroclors with similar retention time ranges. Actions were applied to Aroclors 1016, 1221, 1232, 1242, and 1248 when Aroclor 1016 exceeded CCV criteria and actions were applied to Aroclors 1248, 1254, and 1260 when Aroclor 1260 exceeded CCV criteria.
[3] No guidance for % drift in NFG, thus Resolution Consultants professional judgment was used.

Qualified results are shown in Table 1.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment rinsate blank samples were not collected for ground water samples.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance.

The surrogate recoveries were within the QC acceptance criteria.

MS/MSD Results

MS/MSD analyses were not performed on samples reported in this SDG. There were no validation actions taken on this basis.

LCS/LCSD Results

The LCS and/or LCSD %Rs and/or relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

The LCS and/or LCSD %Rs and/or RPDs were within the QC acceptance criteria.

Field Duplicate Results

There were no field duplicate samples submitted with this data set. No validation actions were taken on this basis.

Sulfur Clean-up

Sulfur clean-up was not applicable for aqueous samples.

Sample Results/Reporting Issues

For detected results for both pesticides and PCBs, the laboratory reported the lower of the two values between the two columns. Based on DoD QSM v5.0, positive results should be reported from the primary column. No actions were taken except to note this discrepancy.

All compounds detected at concentrations less than the LOQ but greater than the limit of detection (LOD) were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation

Dual Column Precision

Sample results were reviewed to ensure that the dual column precision RPD criteria were met.

Since all sample results were nondetect, dual column precision was deemed acceptable.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
P09-01-ME45R-1	WG	4,4-DDT	0.0063	0.0063	0.050	UG/L	UJ	c
P09-01-ME45R-1	WG	AROCLOR-1016	0.20	0.20	0.50	UG/L	UJ	c
P09-01-ME45R-1	WG	AROCLOR-1221	0.10	0.10	0.50	UG/L	UJ	c
P09-01-ME45R-1	WG	AROCLOR-1232	0.20	0.20	0.50	UG/L	UJ	c
P09-01-ME45R-1	WG	AROCLOR-1242	0.10	0.10	0.50	UG/L	UJ	c
P09-01-ME45R-1	WG	AROCLOR-1248	0.10	0.10	0.50	UG/L	UJ	c
P09-01-ME45R-1	WG	AROCLOR-1254	0.20	0.20	0.50	UG/L	UJ	c
P09-01-ME45R-1	WG	AROCLOR-1260	0.20	0.20	0.50	UG/L	UJ	c

Attachment A

Non Conformance Summary Tables

Table A-1a Continuing Calibration (Method 8081B Pesticides)

CCV	Compound	%D Col 1	%D Col 2	%D Limit	Associated Samples
Inst E5 10/7/16 01:12	4,4'-DDT	-37.8	-42.0	<20	P09-01-ME45R-1

Table A-1b Continuing Calibration (Method 8082A PCBs)

CCV	Compound	%D Col 1	%D Col 2	%D Limit	Associated Samples
Inst E6 10/19/16 14:52	AR1016-3	-54.5	-70.3	<50	P09-01-ME45R-1
	AR1260-1	-48.6	-53.1	<50	
	AR1260-2	-94.7	-95.2	<50	

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0812
Analyses/Method:	EPA SW-846 Method 6020A for Metals (ICP-MS) and EPA SW-846 Method 7470A for Mercury in Liquid Waste (Manual Cold-Vapor Technique)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Cathy Larson/Resolution Consultants — Completed on: 12/14/2016
Reviewed by:	Linda Adams/Resolution Consultants — File Name: R0812_Metals

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 6, 7, 8, and 9, 2016.

Sample ID	Matrix/Sample Type
MW09-07S-ME45-1	Ground water
MW09-07S-ME45-1-F	Ground water
MW09-08DA-ME45-1	Ground water
MW09-08DA-ME45-1-F	Ground water
MW09-09DA-ME45-1	Ground water
MW09-09DA-ME45-1-F	Ground water
MW09-11S-ME45-1	Ground water
MW09-11S-ME45-1-F	Ground water
MW09-17I-ME45-1	Ground water
MW09-17I-ME45-1-F	Ground water
MW09-21S-ME45-1	Ground water
MW09-21S-ME45-1-F	Ground water
MW09-24D-ME45-1	Ground water
MW09-24D-ME45-1-F	Ground water
MW09-25S-ME45-1	Ground water
MW09-25S-ME45-1-F	Ground water
MW09-26DA-ME45-1	Ground water
MW09-26DA-ME45-1-F	Ground water
MW09-26S-ME45-1	Ground water
MW09-26S-ME45-1-F	Ground water

Sample ID	Matrix/Sample Type
MW09-27D-ME45-1	Ground water
MW09-ME45-FD01	Field Duplicate of MW09-27D-ME45-1
MW09-ME45-FD01-F	Field Duplicate of MW09-27D-ME45-1-F
MW09-27D-ME45-1-F	Ground water
MW09-27S-ME45-1	Ground water
MW09-27S-ME45-1-F	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 6020A, Inductively Coupled Plasma-Mass Spectrometry* (USEPA, 1996);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 7470A, Mercury in Liquid Waste* (USEPA, 1996);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

✓ Data completeness (chain-of-custody [COC])/sample integrity
✓ Holding times and sample preservation
✓ ICP/MS Instrument tuning
✓ Initial calibration/continuing calibration verification
✗ Laboratory blanks/equipment blanks
✓ ICP interference check standards
✓ Matrix spike (MS) results
✓ Laboratory duplicate results
✓ Laboratory control sample (LCS)
✓ Field duplicate results
✓ ICP/MS serial dilution results
✓ ICP/MS internal standard performance
✓ Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In

addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were estimated and/or negated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Exceptions noted during the review were:

1. Sample misidentification: Sample MW09-27-ME45-1 was listed on the COC. This sample identifier was corrected to MW09-27D-ME45-1 as described in email correspondence dated September 8, 2016.

2. A note in the lab report indicated samples were split between SDGs R0812, R0813, and R0814. These SDGs were reviewed and all samples were accounted for.

The exceptions noted did not affect completeness.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

ICP/MS Instrument Tuning

ICP/MS tuning results were reviewed for conformance with the QC acceptance criteria to ensure that:

- the proper tuning solution was used with elements representing all of the mass regions of interest;
- the tunings were performed at the beginning of each analysis and prior to calibration;
- the tuning solution was analyzed at least 4 times as required by the method;
- the mass calibration was within 0.1 amu of the true value for all masses within the region of interest;
- the resolution was verified to be <0.9 amu full width at 10% peak height; and
- the %RSD was ≤ 5% for the analytes contained in the tuning solution.

The QC acceptance criteria were met.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- all criteria were met for the calibration curves
- the initial calibration verification (ICV) percent recovery (%R) criteria were met;
- the continuing calibration verification standard (CCV) method percent difference (%Ds) were met; and
- the low level check standards (CRI or CRA) %R criteria were met.

The QC acceptance criteria were met.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks were not collected since dedicated sampling equipment was used for ground water samples. Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Method and equipment rinsate results were reviewed for conformance with the QC acceptance criteria. Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

Nonconformances are summarized in Attachment A in Table A-1. Sample results were qualified as follows:

Blank Type	Blank Result	Sample Result	Action for Samples
ICB/CCB (Positive)	≥IDL/DL but ≤ LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
	>LOQ	≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ but < ICB/CCB Result	Qualify at level of Blank Result with a "U" or Qualify result as unusable
		>ICB/CCB but <10x the ICB/CCB result	Qualify as estimated (J)
		≥10x ICB/CCB	No action is taken based on Resolution Consultants professional judgment
ICB/CCB (Negative)	< (-LOQ)	Nondetect	Use Resolution Consultants professional judgment and qualify as estimated (UJ)
		≥IDL/DL but < LOQ	Use Resolution Consultants professional judgment and qualify results < LOQ as estimated (J-)
		< 10x LOQ	Qualify results >LOQ but <10x LOQ as estimated (J-)
		≥10x LOQ	No action is taken based on Resolution Consultants professional judgment
	≤ -IDL/DL and ≥ -LOQ	Nondetect	Use Resolution Consultants professional judgment, qualify as estimated (UJ)
		≥IDL/DL and <5x |neg. blank|	Use Resolution Consultants professional judgment, qualify results as estimated (J-)

Blank Type	Blank Result	Sample Result	Action for Samples
PB / EB/ FB (Positive)	> LOQ	≥IDL/DL but ≤ LOQ	Qualify as nondetect (U) at the LOQ
		>LOQ but < 10x Blank Result	Qualify results as unusable
		≥10x Blank Result	No action
	≥IDL/DL but ≤LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
PB (Negative)	< (-LOQ)	< 10x LOQ	Qualify positive results <10x LOQ as estimated (J-) and nondetects as estimated (UJ)
		≥10x LOQ	No action

[1] Establish an action level (AL) at 5x the blank contamination. If sample result is <AL, qualify the reported result with a U.

If positive and negative blanks are reported for an analyte in the calibration blanks, pick the highest blank (absolute value) and use the table above with the following modifications:

Blank Type	Blank Results	Actions in Table to Use	Modifications
ICB/CCB	Positive > Negative	ICB/CCB (Positive)	Estimate nondetects (UJ)
	Negative > Positive	ICB/CCB (Negative)	Estimate J

Qualified sample results are shown in Table 1.

ICP Interference Check Standards

The ICP interference check standards (ICSA, ICSAB) were reviewed for conformance.

All criteria were met for the ICSA and ICSAB.

MS Results

The MS %Rs were reviewed for conformance with the QC acceptance criteria.

The MS %Rs were within the QC acceptance criteria.

Laboratory Duplicate Results

The laboratory duplicate relative percent differences (RPDs) were reviewed for conformance.

The laboratory duplicate RPDs were within the QC acceptance criteria.

LCS Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria.

The LCS %Rs were within the QC acceptance criteria.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC acceptance criterion of ≤30% for aqueous matrices. This criterion applies if both results were greater than five times the limit of quantitation (LOQ).

All field duplicate precision criteria were met.

ICP/MS Serial Dilution Results

The serial dilution percent differences (%Ds) were reviewed for conformance with the QC acceptance criteria.

The serial dilution %Ds were within the QC acceptance criteria.

ICP/MS Internal Standard Performance

ICP/MS Internal standard performance was reviewed for conformance with the QC acceptance criteria. Internal standards were within the QC acceptance criteria and/or qualifications were not required.

Sample Results/Reporting Issues

All analytes detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

All criteria were met.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-07S-ME45-1	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-07S-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-07S-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-08DA-ME45-1	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-08DA-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-08DA-ME45-1	WG	LEAD	1.0	1.0	1.0	UG/L	U	bl
MW09-08DA-ME45-1-F	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-08DA-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-09DA-ME45-1	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-09DA-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-09DA-ME45-1-F	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-09DA-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-11S-ME45-1	WG	ARSENIC	0.80	0.80	2.0	UG/L	UJ	nb
MW09-11S-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-11S-ME45-1-F	WG	ARSENIC	0.80	0.80	2.0	UG/L	UJ	nb
MW09-11S-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-17I-ME45-1	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-17I-ME45-1	WG	ARSENIC	0.47	0.80	2.0	UG/L	J-	nb
MW09-17I-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-17I-ME45-1-F	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-17I-ME45-1-F	WG	ARSENIC	0.58	0.80	2.0	UG/L	J-	nb
MW09-17I-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-21S-ME45-1	WG	ALUMINUM	100	100	100	UG/L	U	bl
MW09-21S-ME45-1	WG	CHROMIUM, TOTAL	0.93	3.0	10.0	UG/L	J-	nb
MW09-21S-ME45-1-F	WG	ARSENIC	20.0	20.0	50.0	UG/L	UJ	nb
MW09-21S-ME45-1-F	WG	CHROMIUM, TOTAL	15.0	15.0	50.0	UG/L	UJ	nb
MW09-24D-ME45-1	WG	CHROMIUM, TOTAL	1.2	1.2	4.0	UG/L	UJ	nb
MW09-24D-ME45-1-F	WG	ALUMINUM	40.0	40.0	40.0	UG/L	U	bl
MW09-24D-ME45-1-F	WG	CHROMIUM, TOTAL	1.2	1.2	4.0	UG/L	UJ	nb
MW09-25S-ME45-1	WG	ALUMINUM	10.7	20.0	20.0	UG/L	U	bl
MW09-25S-ME45-1	WG	ARSENIC	0.86	0.80	2.0	UG/L	J-	nb
MW09-25S-ME45-1	WG	CHROMIUM, TOTAL	1.3	0.60	2.0	UG/L	J-	nb
MW09-25S-ME45-1-F	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-25S-ME45-1-F	WG	ARSENIC	0.43	0.80	2.0	UG/L	J-	nb
MW09-25S-ME45-1-F	WG	CHROMIUM, TOTAL	0.79	0.60	2.0	UG/L	J-	nb
MW09-25S-ME45-1-F	WG	LEAD	1.0	1.0	1.0	UG/L	U	bl
MW09-26DA-ME45-1	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-26DA-ME45-1	WG	CHROMIUM, TOTAL	1.2	0.60	2.0	UG/L	J-	nb
MW09-26DA-ME45-1	WG	LEAD	1.0	1.0	1.0	UG/L	U	bl

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-26DA-ME45-1-F	WG	CHROMIUM, TOTAL	1.0	0.60	2.0	UG/L	J-	nb
MW09-26S-ME45-1	WG	ARSENIC	0.80	0.80	2.0	UG/L	UJ	nb
MW09-26S-ME45-1	WG	CHROMIUM, TOTAL	0.95	0.60	2.0	UG/L	J-	nb
MW09-26S-ME45-1-F	WG	ARSENIC	0.80	0.80	2.0	UG/L	UJ	nb
MW09-26S-ME45-1-F	WG	CHROMIUM, TOTAL	0.27	0.60	2.0	UG/L	J-	nb
MW09-27D-ME45-1	WG	ARSENIC	1.2	0.80	2.0	UG/L	J-	nb
MW09-27D-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-27D-ME45-1-F	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-27D-ME45-1-F	WG	ARSENIC	1.2	0.80	2.0	UG/L	J-	nb
MW09-27D-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-27S-ME45-1	WG	CHROMIUM, TOTAL	0.66	0.60	2.0	UG/L	J-	nb
MW09-27S-ME45-1-F	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-27S-ME45-1-F	WG	CHROMIUM, TOTAL	0.74	0.60	2.0	UG/L	J-	nb
MW09-ME45-FD01	WG	ARSENIC	1.2	0.80	2.0	UG/L	J-	nb
MW09-ME45-FD01	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-ME45-FD01-F	WG	ALUMINUM	20.0	20.0	20.0	UG/L	U	bl
MW09-ME45-FD01-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb

Attachment A

Nonconformance Summary Tables

Table A-1 - Lab Blanks

Blank ID	Compound	Result	LOD	LOQ	Units	Qualified Samples
PBW--MB-85519	ALUMINUM	4.0	10.0	20.0	UG/L	MW09-07S-ME45-1 MW09-08DA-ME45-1-F MW09-09DA-ME45-1 MW09-09DA-ME45-1-F MW09-17I-ME45-1 MW09-17I-ME45-1-F MW09-21S-ME45-1 MW09-24D-ME45-1-F MW09-27D-ME45-1-F MW09-ME45-FD01-F
PBW--MB-85523	LEAD	0.46	0.30	1.0	UG/L	MW09-08DA-ME45-1 MW09-25S-ME45-1-F MW09-26DA-ME45-1
CCB	ARSENIC	-0.26	0.80	2.0	UG/L	MW09-11S-ME45-1 MW09-11S-ME45-1-F MW09-17I-ME45-1 MW09-17I-ME45-1-F MW09-21S-ME45-1-F MW09-25S-ME45-1 MW09-25S-ME45-1-F MW09-26S-ME45-1 MW09-26S-ME45-1-F MW09-27D-ME45-1 MW09-27D-ME45-1-F MW09-ME45-FD01
CCB	CHROMIUM, TOTAL	-0.34	0.60	2.0	UG/L	ALL
CCB	ALUMINUM	4.0	10.0	20.0	UG/L	MW09-08DA-ME45-1 MW09-25S-ME45-1 MW09-25S-ME45-1-F MW09-26DA-ME45-1 MW09-27S-ME45-1-F

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0813
Analyses/Method:	EPA SW-846 Method 6020A for Metals (ICP-MS) EPA SW-846 Method 7470A for Mercury in Liquid Waste (Manual Cold-Vapor Technique)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Linda Adams/Resolution Consultants — Completed on: 12/08/2016
Reviewed by:	Cathy Larson/Resolution Consultants — File Name: R0813_Metals

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 6, 7, and 8, 2016.

Sample ID	Matrix/Sample Type
MW09-02S-ME45-1	Ground water
MW09-02S-ME45-1-F	Ground water
MW09-03D-ME45-1	Ground water
MW09-03D-ME45-1-F	Ground water
MW09-08S-ME45-1	Ground water
MW09-ME45-FD02	Field Duplicate of MW09-08S-ME45-1
MW09-08S-ME45-1-F	Ground water
MW09-ME45-FD02-F	Field Duplicate of MW09-08S-ME45-1-F
MW09-10D-ME45-1	Ground water
MW09-10D-ME45-1-F	Ground water
MW09-10S-ME45-1	Ground water
MW09-10S-ME45-1-F	Ground water
MW09-21D-ME45-1	Ground water
MW09-21D-ME45-1-F	Ground water
MW09-23D-ME45-1	Ground water
MW09-23D-ME45-1-F	Ground water
MW09-23S-ME45-1	Ground water
MW09-23S-ME45-1-F	Ground water
MW09-24S-ME45-1	Ground water
MW09-24S-ME45-1-F	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 6020A, Inductively Coupled Plasma-Mass Spectrometry* (USEPA, 1996);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 7470A, Mercury in Liquid Waste or SW-846 Method 7471B, Mercury in Solid or Semisolid Waste, as appropriate (Manual Cold-Vapor Technique)* (USEPA, 1996);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

✓	Data completeness (chain-of-custody[COC])/sample integrity
✓	Holding times and sample preservation
✓	ICP/MS Instrument tuning
✗	Initial calibration/continuing calibration verification
✗	Laboratory blanks/equipment blanks
✓	ICP interference check standards
NA	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
NA	Laboratory duplicate results
✓	Laboratory control sample (LCS) results
✓	Field duplicate results
NA	ICP/MS serial dilution results
✓	ICP/MS internal standard performance
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were estimated and/or negated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

ICP/MS Instrument Tuning

ICP/MS tuning results were reviewed for conformance with the QC acceptance criteria to ensure that:

- the proper tuning solution was used with elements representing all of the mass regions of interest;
- the tunings were performed at the beginning of each analysis and prior to calibration;
- the tuning solution was analyzed at least 4 times as required by the method;
- the mass calibration was within 0.1 amu of the true value for all masses within the region of interest;
- the resolution was verified to be <0.9 amu full width at 10% peak height; and
- the %RSD was ≤ 5% for the analytes contained in the tuning solution.

The QC acceptance criteria were met.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- all criteria were met for the calibration curves
- the initial calibration verification (ICV) percent recovery (%R) criteria were met;
- the continuing calibration verification standard (CCV) method percent difference (%Ds) were met; and
- the low level check standards %R criteria were met

Nonconformances are summarized in Attachment A in Table A-1. Data qualification to the analytes associated with the specific ICV and/or CCV was as follows:

Criteria	Action	
	Detect	Non-detect
Calibration not performed	R	R
Calibration incomplete	Use professional judgment J or R	Use professional judgment UJ or R
Correlation coefficient < 0.995, %D outside ±30%, or y-intercept ≥ CRQL	J	UJ
ICV/CCV %R < 75%	Use professional judgment J- or R	R
ICV/CCV %R 75-89%	J	UJ
ICV/CCV %R 90-110%	No qualification	No qualification
ICV/CCV %R 111-125%	J+	No qualification
ICV/CCV %R > 125%	Use professional judgment J+ or R	No qualification

Qualified sample results are shown in Table 1.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks were not collected since dedicated sampling equipment was used for ground water samples. Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Method results were reviewed for conformance with the QC acceptance criteria. Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

Nonconformances are summarized in Attachment A in Table A-2. Sample results were qualified as follows:

Blank Type	Blank Result	Sample Result	Action for Samples
ICB/CCB (Positive)	≥IDL/DL but ≤ LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
	>LOQ	≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ but < ICB/CCB Result	Qualify at level of Blank Result with a "U" or Qualify result as unusable
		>ICB/CCB but <10x the ICB/CCB result	Qualify as estimated (J)
		≥10x ICB/CCB	No action is taken based on Resolution Consultants professional judgment
ICB/CCB (Negative)	< (-LOQ)	Nondetect	Use Resolution Consultants professional judgment and qualify as estimated (UJ)
		≥IDL/DL but < LOQ	Use Resolution Consultants professional judgment and qualify results < LOQ as estimated (J)
		< 10x LOQ	Qualify results >LOQ but <10x LOQ as estimated (J)
		≥10x LOQ	No action is taken based on Resolution Consultants professional judgment
	≤ -IDL/DL and ≥ -LOQ	Nondetect	Use Resolution Consultants professional judgment, qualify as estimated (UJ)
		≥IDL/DL and <5x |neg. blank|	Use Resolution Consultants professional judgment, qualify results as estimated (J-)

Blank Type	Blank Result	Sample Result	Action for Samples
PB / EB/ FB (Positive)	> LOQ	≥IDL/DL but ≤ LOQ	Qualify as nondetect (U) at the LOQ
		>LOQ but < 10x Blank Result	Qualify results as unusable
		≥10x Blank Result	No action
	≥IDL/DL but ≤LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
PB (Negative)	< (-LOQ)	< 10x LOQ	Qualify positive results <10x LOQ as estimated (J) and nondetects as estimated (UJ)
		≥10x LOQ	No action

[1] Establish an action level (AL) at 5x the blank contamination. If sample result is <AL, qualify the reported result with a U.

If positive and negative blanks are reported for an analyte in the calibration blanks, pick the highest blank (absolute value) and use the table above with the following modifications:

Blank Type	Blank Results	Actions in Table to Use	Modifications
ICB/CCB	Positive > Negative	ICB/CCB (Positive)	Estimate nondetects (UJ)
	Negative > Positive	ICB/CCB (Negative)	Estimate J

Qualified sample results are shown in Table 1.

ICP Interference Check Standards

The ICP interference check standards (ICSA, ICSAB) were reviewed for conformance.

All criteria were met for the ICSA and ICSAB.

MS/MSD Results

MS/MSD analyses were not performed on the samples in this SDG. MS results for ground water samples in SDG R0814 were in control and no validation action was taken.

Laboratory Duplicate Results

The laboratory duplicate analyses were not performed on the samples in this SDG. Laboratory duplicate results for ground water samples in SDG R0814 were in control and no validation action was taken.

LCS Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria.

The LCS %Rs were within the QC acceptance criteria.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC acceptance criterion of ≤50% for solid matrices and ≤30% for aqueous matrices. This criterion applies if both results were greater than five times the limit of quantitation (LOQ).

All field duplicate precision criteria were met.

ICP/MS Serial Dilution Results

Serial dilution analyses were not performed on the samples in this SDG. Results for the serial dilution for ground water samples in SDG R0814 were in control and no validation action was taken.

ICP/MS Internal Standard Performance

ICP/MS Internal standard performance was reviewed for conformance and was within the QC acceptance criteria.

Sample Results/Reporting Issues

All analytes detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

All criteria were met.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	Units	Validation Qualifiers	Validation Reason
MW09-02S-ME45-1	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-02S-ME45-1	WG	ARSENIC	0.80	0.80	UG/L	UJ	nb
MW09-02S-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	UG/L	UJ	nb
MW09-02S-ME45-1-F	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-02S-ME45-1-F	WG	LEAD	1.0	1.0	UG/L	U	bl
MW09-02S-ME45-1-F	WG	ARSENIC	0.46	0.80	UG/L	J-	nb
MW09-02S-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	UG/L	UJ	nb
MW09-03D-ME45-1	WG	ARSENIC	1.1	0.80	UG/L	J-	nb
MW09-03D-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	UG/L	J-	nb
MW09-03D-ME45-1-F	WG	ARSENIC	1.0	0.80	UG/L	J-	nb
MW09-03D-ME45-1-F	WG	CHROMIUM, TOTAL	0.52	0.60	UG/L	J-	nb
MW09-08S-ME45-1	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-08S-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	UG/L	UJ	nb
MW09-08S-ME45-1-F	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-08S-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	UG/L	UJ	nb
MW09-10D-ME45-1	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-10D-ME45-1	WG	LEAD	1.0	1.0	UG/L	U	bl
MW09-10D-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	UG/L	UJ	nb
MW09-10D-ME45-1-F	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-10D-ME45-1-F	WG	LEAD	1.0	1.0	UG/L	U	bl
MW09-10D-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	UG/L	UJ	nb
MW09-10S-ME45-1	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-10S-ME45-1	WG	LEAD	1.0	1.0	UG/L	U	bl
MW09-10S-ME45-1	WG	CHROMIUM, TOTAL	0.72	0.60	UG/L	J-	nb
MW09-10S-ME45-1-F	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-10S-ME45-1-F	WG	LEAD	1.0	1.0	UG/L	U	bl
MW09-10S-ME45-1-F	WG	CHROMIUM, TOTAL	0.72	0.60	UG/L	J-	nb
MW09-21D-ME45-1	WG	LEAD	1.0	1.0	UG/L	U	bl
MW09-21D-ME45-1	WG	ARSENIC	1.1	0.80	UG/L	J-	nb
MW09-21D-ME45-1	WG	CHROMIUM, TOTAL	0.31	0.60	UG/L	J-	nb
MW09-21D-ME45-1-F	WG	CHROMIUM, TOTAL	0.46	0.60	UG/L	J-	nb
MW09-21D-ME45-1-F	WG	ARSENIC	0.75	0.80	UG/L	J-	nb
MW09-23D-ME45-1	WG	CHROMIUM, TOTAL	12.0	12.0	UG/L	UJ	nb
MW09-23D-ME45-1-F	WG	CHROMIUM, TOTAL	12.0	12.0	UG/L	UJ	nb
MW09-23S-ME45-1	WG	ARSENIC	1.1	0.80	UG/L	J-	nb
MW09-23S-ME45-1	WG	CHROMIUM, TOTAL	0.58	0.60	UG/L	J-	nb
MW09-23S-ME45-1-F	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-23S-ME45-1-F	WG	ARSENIC	1.0	0.80	UG/L	J-	nb
MW09-23S-ME45-1-F	WG	CHROMIUM, TOTAL	0.63	0.60	UG/L	J-	nb
MW09-24S-ME45-1	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-24S-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	UG/L	UJ	nb
MW09-24S-ME45-1-F	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-24S-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	UG/L	UJ	nb
MW09-ME45-FD02	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-ME45-FD02	WG	CHROMIUM, TOTAL	0.20	0.60	UG/L	J-	nb
MW09-ME45-FD02-F	WG	ALUMINUM	20.0	20.0	UG/L	U	bl
MW09-ME45-FD02-F	WG	CHROMIUM, TOTAL	0.60	0.60	UG/L	UJ	nb
MW09-02S-ME45-1	WG	MERCURY	0.10	0.10	UG/L	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1 – Calibration

Compound	ICAL True Value Standard (ug/L)	Calculated Conc. (ug/L)	%D	QC Limit	Associated Sample
Mercury	0.2	0.29	43	±30%	MW09-02S-ME45-1

Table A-2 - Lab Blanks

Blank ID	Compound	Result	LOD	LOQ	Units	Associated Samples
CCB	CHROMIUM, TOTAL	-0.34	0.60	2.0	UG/L	All samples except samples MW09-23D-ME45-1 MW09-23D-ME45-1-F
ICB	CHROMIUM, TOTAL	-0.36	0.60	2.0	UG/L	MW09-23D-ME45-1 MW09-23D-ME45-1-F
CCB	ALUMINUM	4.0	3.0	10	UG/L	All samples except samples MW09-23D-ME45-1 MW09-23D-ME45-1-F
PBW--MB-85523	LEAD	0.46	0.30	1.0	UG/L	
CCB	ARSENIC	-0.26	0.80	2.0	UG/L	

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0814
Analyses/Method:	EPA SW-846 Method 6020A for Trace Elements and Metals (ICP-MS) and EPA SW-846 Method 7470A for Mercury in Liquid Waste (Manual Cold-Vapor Technique)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Cathy Larson/Resolution Consultants — Completed on: 12/06/2016
Reviewed by:	Linda Adams/Resolution Consultants — File Name: R0814_Metals

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 7 and 8, 2016.

Sample ID	Matrix/Sample Type
MW09-09S-ME45-1	Ground water
MW09-09S-ME45-1-F	Ground water
MW09-14D-ME45-1	Ground water
MW09-14D-ME45-1-F	Ground water
MW09-20D-ME45-1	Ground water
MW09-ME45-FD03	Field Duplicate of MW09-20D-ME45-1
MW09-20D-ME45-1-F	Ground water
MW09-ME45-FD03-F	Field Duplicate of MW09-20D-ME45-1-F
MW09-20I-ME45-1	Ground water
MW09-20I-ME45-1-F	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 6020A, Inductively Coupled Plasma-Mass Spectrometry* (USEPA, 1996);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 7470A, Mercury in Liquid Waste (Manual Cold-Vapor Technique)* (USEPA, 1996);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);

- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- Laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	ICP/MS Instrument tuning
✓	Initial calibration/continuing calibration verification
✗	Laboratory blanks/equipment blanks
✓	ICP interference check standards
✓	Matrix spike (MS) results
✓	Laboratory duplicate results
✓	Laboratory control sample (LCS) results
✗	Field duplicate results
✓	ICP/MS serial dilution results
✓	ICP/MS internal standard performance
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, non-conformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were estimated and/or negated due to non-conformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times/Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

ICP/MS Instrument Tuning

ICP/MS tuning results were reviewed for conformance with the QC acceptance criteria to ensure that:

- the proper tuning solution was used with elements representing all of the mass regions of interest;
- the tunings were performed at the beginning of each analysis and prior to calibration;
- the tuning solution was analyzed at least 4 times as required by the method;
- the mass calibration was within 0.1 amu of the true value for all masses within the region of interest;
- the resolution was verified to be <0.9 amu full width at 10% peak height; and
- the %RSD was ≤ 5% for the analytes contained in the tuning solution.

The QC acceptance criteria were met. Note, the laboratory reported peak width at 5% peak height which is more conservative than the above requirement and criteria were met.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- all criteria were met for the calibration curves
- the initial calibration verification (ICV) percent recovery (%R) criteria were met;
- the continuing calibration verification standard (CCV) method percent difference (%Ds) were met; and
- the low level check standards (CRI or CRA) %R criteria were met.

The QC acceptance criteria were met.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Method results were reviewed for conformance with the QC acceptance criteria. Equipment blanks were not collected since dedicated sampling equipment was used for ground water samples. Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

Nonconformances are summarized in Attachment A in Table A-1. Sample results were qualified as follows:

Blank Type	Blank Result	Sample Result	Action for Samples
ICB/CCB (Positive)	≥IDL/DL but ≤ LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
	>LOQ	≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ but < ICB/CCB Result	Qualify at level of Blank Result with a "U" or Qualify result as unusable
		>ICB/CCB but <10x the ICB/CCB result	Qualify as estimated (J)
		≥10x ICB/CCB	No action is taken based on Resolution Consultants professional judgment
ICB/CCB (Negative)	< (-LOQ)	Nondetect	Use Resolution Consultants professional judgment and qualify as estimated (UJ)
		≥IDL/DL but < LOQ	Use Resolution Consultants professional judgment and qualify results < LOQ as estimated (J-)
		< 10x LOQ	Qualify results >LOQ but <10x LOQ as estimated (J-)
		≥10x LOQ	No action is taken based on Resolution Consultants professional judgment
	≤ -IDL/DL and ≥ Q	Nondetect	Use Resolution Consultants professional judgment, qualify as estimated (UJ)
		≥IDL/DL and <5x |neg. blank|	Use Resolution Consultants professional judgment, qualify results as estimated (J)
PB / EB/ FB (Positive)	> LOQ	≥IDL/DL but ≤ LOQ	Qualify as nondetect (U) at the LOQ
		>LOQ but < 10x Blank Result	Qualify results as unusable
		≥10x Blank Result	No action
	≥IDL/DL but ≤LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
PB (Negative)	< (-LOQ)	< 10x LOQ	Qualify positive results <10x LOQ as estimated (J-) and nondetects as estimated (UJ)
		≥10x LOQ	No action

[1] Establish an action level (AL) at 5x the blank contamination. If sample result is <AL, qualify the reported result with a U.

Qualified sample results are shown in Table 1.

ICP Interference Check Standards

The ICP interference check standards (ICSA, ICSAB) were reviewed for conformance.

All criteria were met for the ICSA and ICSAB.

MS Results

The MS %Rs were reviewed for conformance with the QC acceptance criteria.

The MS %Rs were within the QC acceptance criteria.

Laboratory Duplicate Results

The laboratory duplicate relative percent differences (RPDs) were reviewed for conformance.

The laboratory duplicate RPDs were within the QC acceptance criteria.

LCS Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria.

The LCS %Rs were within the QC acceptance criteria.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC acceptance criterion of ≤50% for solid matrices and ≤30% for aqueous matrices. This criterion applies if both results were greater than 5 times the limit of quantitation (LOQ).

Nonconformances are summarized in Attachment A in Table A-2. Data qualification on the basis of field duplicate RPDs was as follows:

Actions: (Based on Resolution Consultants professional judgment)

Criteria	RPD	Action	
		Detected	Nondetected
Sample and duplicate are nondetect results	Not calculable (NC)	No qualification	No qualification
Sample and duplicate results <SLOQ	Not applicable	No qualification	No qualification
Sample and duplicate results ≥5xSLOQ	>30% Aqueous >50% All other sample types	J	Not Applicable
Sample and duplicate results are >SLOQ and <5xSLOQ	>60% Aqueous >100% All other sample types	J	Not Applicable
If sample or duplicate result is =SLOQ and the other is not detected	NC	J	UJ
If sample or duplicate result is <SLOQ and the other is not detected	NC	No qualification	No qualification

Qualified sample results are summarized in Table 1.

ICP/MS Serial Dilution Results

The serial dilution percent differences (%Ds) were reviewed for conformance with the QC acceptance criteria.

The serial dilution %Ds were within the QC acceptance criteria.

ICP/MS Internal Standard Performance

ICP/MS Internal standard performance was reviewed for conformance and was within the QC acceptance criteria.

Sample Results/Reporting Issues

All analytes detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

All criteria were met.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-09S-ME45-1	WG	CHROMIUM, TOTAL	0.83	0.60	2.0	UG/L	J-	nb
MW09-09S-ME45-1-F	WG	CHROMIUM, TOTAL	0.97	0.60	2.0	UG/L	J-	nb
MW09-09S-ME45-1-F	WG	COPPER	0.26	1.0	2.0	UG/L	J	fd
MW09-14D-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-14D-ME45-1-F	WG	ALUMINUM		20.0	20.0	UG/L	U	bl
MW09-14D-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-14D-ME45-1-F	WG	COPPER	0.96	1.0	2.0	UG/L	J	fd
MW09-20D-ME45-1	WG	ALUMINUM		20.0	20.0	UG/L	U	bl
MW09-20D-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-20D-ME45-1-F	WG	ALUMINUM		20.0	20.0	UG/L	U	bl
MW09-20D-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-20D-ME45-1-F	WG	COPPER	0.63	1.0	2.0	UG/L	J	fd
MW09-20I-ME45-1-F	WG	COPPER	0.35	1.0	2.0	UG/L	J	fd
MW09-ME45-FD03	WG	ALUMINUM		20.0	20.0	UG/L	U	bl
MW09-ME45-FD03	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-ME45-FD03-F	WG	ALUMINUM		20.0	20.0	UG/L	U	bl
MW09-ME45-FD03-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-ME45-FD03-F	WG	COPPER	2.6	1.0	2.0	UG/L	J	fd

Attachment A

Nonconformance Summary Tables

Table A-1 - Lab Blanks

Blank ID	Compound	Result	LOD	LOQ	Units	Qualified Samples
CCB	CHROMIUM	-0.34	0.60	2.0	UG/L	MW09-14D-ME45-1 MW09-14D-ME45-1-F MW09-20D-ME45-1 MW09-20D-ME45-1-F MW09- ME45-FD03 MW09-ME45-FD03-F
CCB	ALUMINUM	4.0	10	20	UG/L	MW09-14D-ME45-1-F MW09-20D-ME45-1 MW09-20D-ME45-1-F MW09-ME45-FD03 MW09-ME45-FD03-F
CCB	CHROMIUM	-0.36	0.60	2.0	UG/L	MW09-09S-ME45-1 MW09-09S-ME45-1-F

Table A-2 - Field Duplicates

Sample ID	Duplicate ID	Compound	Sample Result	Duplicate Result	LOD	LOQ	Units	RPD
MW09-20D-ME45-1-F	MW09-ME45-FD03-F	COPPER	0.63 J	2.6	1	2	UG/L	122

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0838
Analyses/Method:	EPA SW-846 Method 6020A for Metals (ICP-AES) EPA SW-846 Method 7470A for Mercury in Liquid Waste (Manual Cold-Vapor Technique)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/14/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0838_Metals

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 12, 13, 14, 15, and 16, 2016.

Sample ID	Matrix/Sample Type
MW09-14IA-ME45-1	Ground water
MW09-14IA-ME45-1-F	Ground water
MW09-ME45-FD05	Field Duplicate of MW09-14IA-ME45-1
MW09-ME45-FD05-F	Field Duplicate of MW09-14IA-ME45-1-F
P09-01-ME45-1	Ground water
P09-01-ME45-1-F	Ground water
P09-02A-ME45-1	Ground water
P09-02A-ME45-1-F	Ground water
P09-04A-ME45-1	Ground water
P09-04A-ME45-1-F	Ground water
P09-06B-ME45-1	Ground water
P09-06B-ME45-1-F	Ground water
P09-07B-ME45-1	Ground water
P09-08B-ME45-1	Ground water
P09-08B-ME45-1-F	Ground water
P09-09-ME45-1	Ground water
P09-09-ME45-1-F	Ground water
P09-10-ME45-1	Ground water
P09-10-ME45-1-F	Ground water
P09-11B-ME45-1	Ground water

Sample ID	Matrix/Sample Type
P09-11B-ME45-1-F	Ground water
P09-12B-ME45-1	Ground water
P09-12B-ME45-1-F	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 6020A, Inductively Coupled Plasma-Mass Spectrometry* (USEPA, 1996);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 7470A, Mercury in Liquid Waste or SW-846 Method 7471B, Mercury in Solid or Semisolid Waste, as appropriate (Manual Cold-Vapor Technique)* (USEPA, 1996);
- *EPA New England Environmental Data Review Program Guidance* (April 2013)*;*
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✗	Holding times and sample preservation
✓	ICP/MS Instrument tuning
✓	Initial calibration/continuing calibration verification
✗	Laboratory blanks/equipment blanks
✓	ICP interference check standards
✗	Matrix spike (MS) results
✓	Laboratory duplicate results
✓	Laboratory control sample (LCS) results
✓	Field duplicate results
✓	ICP/ICPMS serial dilution results
✓	ICP/MS internal standard performance
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were

noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were estimated, negated, and/or rejected due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

The sample ID for laboratory sample R0838-29 should be MW09-14IA-ME45-1 (with a capital letter "I") not MW09-141A-ME45-1 (with the number one). Revised data were not requested. No other actions were required except to note this discrepancy.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The holding time for mercury is 28 days, and 180 days for other metals. Qualify detected results as estimated low (J-) and reject nondetects (R).

Nonconformances are summarized in Attachment A in Table A-1.

Qualified sample results are shown in Table 1.

ICP/MS Instrument Tuning

ICP/MS tuning results were reviewed for conformance with the QC acceptance criteria to ensure that:

- the proper tuning solution was used with elements representing all of the mass regions of interest;
- the tunings were performed at the beginning of each analysis and prior to calibration;
- the tuning solution was analyzed at least 4 times as required by the method;
- the mass calibration was within 0.1 amu of the true value for all masses within the region of interest;
- the resolution was verified to be <0.9 amu full width at 5% peak height; and
- the %RSD was ≤ 5% for the analytes contained in the tuning solution.

The QC acceptance criteria were met.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- all criteria were met for the calibration curves
- the initial calibration verification (ICV) percent recovery (%R) criteria were met;
- the continuing calibration verification standard (CCV) method percent difference (%Ds) were met; and
- the low level check standards (CRI or CRA) %R criteria were met.

The QC acceptance criteria were met.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment rinsate blank samples were not collected for ground water samples.

Method blank results were reviewed for conformance with the QC acceptance criteria. Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

Nonconformances are summarized in Attachment A in Table A-2. Sample results were qualified as follows:

Blank Type	Blank Result	Sample Result	Action for Samples
ICB/CCB (Positive)	≥IDL/DL but ≤ LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
	>LOQ	≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ but < ICB/CCB Result	Qualify at level of Blank Result with a "U" or Qualify result as unusable
		>ICB/CCB but <10x the ICB/CCB result	Qualify as estimated (J)
		≥10x ICB/CCB	No action is taken based on Resolution Consultants professional judgment
ICB/CCB (Negative)	< (-LOQ)	Nondetect	Use Resolution Consultants professional judgment and qualify as estimated (UJ)
		≥IDL/DL but < LOQ	Use Resolution Consultants professional judgment and qualify results < LOQ as estimated (J-)
		< 10x LOQ	Qualify results >LOQ but <10x LOQ as estimated (J-)
		≥10x LOQ	No action is taken based on Resolution Consultants professional judgment
	≤ -IDL/DL and ≥ -LOQ	Nondetect	Use Resolution Consultants professional judgment, qualify as estimated (UJ)
		≥IDL/DL and <5x |neg. blank|	Use Resolution Consultants professional judgment, qualify results as estimated (J-)

Blank Type	Blank Result	Sample Result	Action for Samples
PB / EB/ FB (Positive)	> LOQ	≥IDL/DL but ≤ LOQ	Qualify as nondetect (U) at the LOQ
		>LOQ but < 10x Blank Result	Qualify results as unusable
		≥10x Blank Result	No action
	≥IDL/DL but ≤LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
PB (Negative)	< (-LOQ)	< 10x LOQ	Qualify positive results <10x LOQ as estimated (J-) and nondetects as estimated (UJ)
		≥10x LOQ	No action

[1] Establish an action level (AL) at 5x the blank contamination. If sample result is <AL, qualify the reported result with a U.

If positive and negative blanks are reported for an analyte in the calibration blanks, pick the highest blank (absolute value) and use the table above with the following modifications:

Qualified sample results are shown in Table 1.

ICP Interference Check Standards

The ICP interference check standards (ICSA, ICSAB) were reviewed for conformance.

All criteria were met for the ICSA and ICSAB.

MS Results

The MS %Rs were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-3. Data qualification on the basis of MS nonconformances was as follows:

Spike Sample Actions for Mercury Analysis

Criteria	Action	
	Detect	Non-detect
Matrix Spike %R < 30%	J-	R
Matrix Spike %R 30-74%	J-	UJ
Matrix Spike %R 75-125%	No qualification	No qualification
Matrix Spike %R > 125%	J+	No qualification

Notes: MS actions apply to all samples of the same matrix. This qualification will also be applied to the results of all samples within a given area of the site, if deemed appropriate.

1. If the sample result (SR) > 4x the spike concentration (S), no action is taken.

Qualified sample results are shown in Table 1.

Laboratory Duplicate Results

The laboratory duplicate relative percent differences (RPDs) were reviewed for conformance.

The laboratory duplicate RPDs were within the QC acceptance criteria and/or qualification of the sample results was not required.

LCS Results

The LCS%Rs were reviewed for conformance with the QC acceptance criteria.

The LCS %Rs were within the QC acceptance criteria.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC acceptance criterion of ≤50% for solid matrices and ≤30% for aqueous matrices. This criterion applies if both results were greater than five times the limit of quantitation (LOQ).

All field duplicate precision criteria were met and/or qualification of the sample results was not required.

ICP/MS Serial Dilution Results

The serial dilution percent differences (%Ds) were reviewed for conformance with the QC acceptance criteria.

The serial dilution %Ds were within the QC acceptance criteria.

ICP/MS Internal Standard Performance

ICP/MS Internal standard performance was reviewed for conformance and was within the QC acceptance criteria.

Sample Results/Reporting Issues

All analytes detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Due to dilutions, the nondetect results for several analytes exceeded the project action limit and may not be usable for project objectives.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
MW09-14IA-ME45-1	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-14IA-ME45-1-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-ME45-FD05	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
MW09-ME45-FD05	WG	COPPER	2.0	2.0	2.0	UG/L	U	bl
MW09-ME45-FD05-F	WG	CHROMIUM, TOTAL	0.60	0.60	2.0	UG/L	UJ	nb
P09-04A-ME45-1-F	WG	CHROMIUM, TOTAL	30.0	30.0	100	UG/L	UJ	nb
P09-08B-ME45-1-F	WG	COPPER	50.0	50.0	50.0	UG/L	U	bl
P09-09-ME45-1	WG	MERCURY		0.10	0.20	UG/L	R	h,m
P09-10-ME45-1	WG	MERCURY		0.10	0.20	UG/L	R	h,m
P09-10-ME45-1-F	WG	MERCURY		0.10	0.20	UG/L	R	h
P09-12B-ME45-1	WG	ARSENIC	0.35	0.80	2.0	UG/L	J-	nb
P09-12B-ME45-1-F	WG	ARSENIC	0.20	0.80	2.0	UG/L	J-	nb
P09-12B-ME45-1-F	WG	CHROMIUM, TOTAL	1.1	0.60	2.0	UG/L	J-	nb

Attachment A

Nonconformance Summary Tables

Table A-1 Hold Times

Sample ID	Days from Sampling to Analysis	Analyte	Holding Time Criteria	Status
P09-09-ME45-1	29	MERCURY	28 days	>28 days
P09-10-ME45-1	29	MERCURY	28 days	>28 days
P09-10-ME45-1-F	29	MERCURY	28 days	>28 days

Table A-2 Lab Blanks

Blank ID	Compound	Result	LOD	LOQ	Units	Associated Samples
ICB	CHROMIUM, TOTAL	-0.36 J	0.60	2.0	UG/L	all samples
CCB	ARSENIC	-0.37 J	0.80	2.0	UG/L	all samples
PBW--MB-85553	COPPER	0.24 J	1.0	2.0	UG/L	MW09-ME45-FD05 MW09-ME45-FD05-1 P09-01-ME45-1 P09-01-ME45-1-F P09-07B-ME45-1 P09-08B-ME45-1-F MW09-14IA-ME45-1-F P09-11B-ME45-1 P09-11B-ME45-1-F

Table A-3 Matrix Spikes

Sample ID	Compound	MS % Recovery	Lower Limit	Upper Limit	Associated Samples
P09-09-ME45-1	MERCURY	68	82	119	P09-09-ME45-1 P09-10-ME45-1

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0898
Analyses/Method:	EPA SW-846 Method 6020A for Metals (ICP-MS) and EPA SW-846 Method 7470A for Mercury in Liquid Waste (Manual Cold-Vapor Technique)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/12/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0898_Metals

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 27, 2016.

Sample ID	Matrix/Sample Type
ALLENHARBOR-ME45-1	Ground water
ALLENHARBOR-ME45-1-F	Ground water
MW09-ME45-FD06	Field Duplicate of Allenharbor-ME45-1
MW09-ME45-FD06-F	Field Duplicate of Allenharbor-ME45-1-F

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 6020A, Inductively Coupled Plasma-Mass Spectrometry* (USEPA, 1998);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 7470A (*USEPA, 1994*), Mercury in Liquid Waste (Manual Cold-Vapor Technique)* (USEPA, 1996);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

- ✓ Data completeness (chain-of-custody [COC])/sample integrity
- ✓ Holding times and sample preservation
- ✓ ICP/MS Instrument tuning
- ✓ Initial calibration/continuing calibration verification
- ✗ Laboratory blanks/equipment blanks
- ✓ ICP interference check standards
- ✗ Matrix spike (MS) results
- ✓ Laboratory duplicate results
- ✓ Laboratory control sample (LCS) results
- ✓ Field duplicate results
- ✓ ICP/ICPMS serial dilution results
- ✓ ICP/MS internal standard performance
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were estimated and/or negated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

ICP/MS Instrument Tuning

ICP/MS tuning results were reviewed for conformance with the QC acceptance criteria to ensure that:

- the proper tuning solution was used with elements representing all of the mass regions of interest;
- the tunings were performed at the beginning of each analysis and prior to calibration;
- the tuning solution was analyzed at least 4 times as required by the method;
- the mass calibration was within 0.1 amu of the true value for all masses within the region of interest;
- the resolution was verified to be <0.9 amu full width at 5% peak height; and
- the %RSD was ≤5% for the analytes contained in the tuning solution.

The QC acceptance criteria were met.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- all criteria were met for the calibration curves
- the initial calibration verification (ICV) percent recovery (%R) criteria were met;
- the continuing calibration verification standard (CCV) method percent difference (%Ds) were met; and
- the low level check standards (CRI or CRA) %R criteria were met.

The QC acceptance criteria were met.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Method blanks were reviewed for conformance with the QC acceptance criteria. Equipment blanks were not collected for ground water samples. Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

Nonconformances are summarized in Attachment A in Table A-1. Sample results were qualified as follows:

Blank Type	Blank Result	Sample Result	Action for Samples
ICB/CCB (Positive)	≥IDL/DL but ≤ LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
	>LOQ	≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ but < ICB/CCB Result	Qualify at level of Blank Result with a "U" or Qualify result as unusable
		>ICB/CCB but <10x the ICB/CCB result	Qualify as estimated (J)
		≥10x ICB/CCB	No action is taken based on Resolution Consultants professional judgment
ICB/CCB (Negative)	< (-LOQ)	Nondetect	Use Resolution Consultants professional judgment and qualify as estimated (UJ)
		≥IDL/DL but < LOQ	Use Resolution Consultants professional judgment and qualify results < LOQ as estimated (J-)
		< 10x LOQ	Qualify results >LOQ but <10x LOQ as estimated (J-)
		≥10x LOQ	No action is taken based on Resolution Consultants professional judgment
	≤ -IDL/DL and ≥ -LOQ	Nondetect	Use Resolution Consultants professional judgment, qualify as estimated (UJ)
		≥IDL/DL and <5x |neg. blank|	Use Resolution Consultants professional judgment, qualify results as estimated (J)
PB / EB/ FB (Positive)	> LOQ	≥IDL/DL but ≤ LOQ	Qualify as nondetect (U) at the LOQ
		>LOQ but < 10x Blank Result	Qualify results as unusable
		≥10x Blank Result	No action
	≥IDL/DL but ≤LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
PB (Negative)	< (-LOQ)	< 10x LOQ	Qualify positive results <10x LOQ as estimated (J-) and nondetects as estimated (UJ)
		≥10x LOQ	No action

[1] Establish an action level (AL) at 5x the blank contamination. If sample result is <AL, qualify the reported result with a U.

If positive and negative blanks are reported for an analyte in the calibration blanks, pick the highest blank (absolute value) and use the table above with the following modifications:

Blank Type	Blank Results	Actions in Table to Use	Modifications
ICB/CCB	Positive > Negative	ICB/CCB (Positive)	Estimate nondetects (UJ)
	Negative > Positive	ICB/CCB (Negative)	Estimate J

Qualified sample results are shown in Table 1.

ICP Interference Check Standards

The ICP interference check standards (ICSA, ICSAB) were reviewed for conformance.

All criteria were met for the ICSA and ICSAB.

MS Results

The MS %Rs were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification on the basis of MS nonconformances was as follows:

Spike Sample Actions for ICP/MS Analysis

Criteria	Action	
	Detect	Non-detect
Matrix Spike %R < 30% Post-digestion spike %R < 75%	J-	R
Matrix Spike %R < 30% Post-digestion spike %R ≥ 75%	J	UJ
Matrix Spike %R 30-74% Post-digestion Spike %R < 75%	J-	UJ
Matrix Spike %R 30-74% Post-digestion spike %R ≥ 75%	J	UJ
Matrix Spike %R > 125% Post-digestion spike %R > 125%	J+	No qualification
Matrix Spike %R > 125% Post-digestion spike %R ≤ 125%	J	No qualification
Matrix Spike %R < 30% No post-digestion spike performed (e.g., not required for Ag)	J-	R
Matrix Spike %R 30-74% No post-digestion spike performed (e.g., not required for Ag)	J-	UJ
Matrix Spike %R 75-125% Post-digestion spike not required	No qualification	No qualification
Matrix Spike %R > 125% No post-digestion spike performed (e.g., not required for Ag)	J+	No qualification

Spike Sample Actions for Mercury Analysis

Criteria	Action	
	Detect	Non-detect
Matrix Spike %R < 30%	J-	R
Matrix Spike %R 30-74%	J-	UJ
Matrix Spike %R 75-125%	No qualification	No qualification
Matrix Spike %R > 125%	J+	No qualification

Notes: MS actions apply to all samples of the same matrix. This qualification will also be applied to the results of all samples within a given area of the site, if deemed appropriate.

1. If the sample result (SR) > 4x the spike concentration (S), no action is taken.

Qualified sample results are shown in Table 1.

Laboratory Duplicate Results

The laboratory duplicate relative percent differences (RPDs) were reviewed for conformance.

The laboratory duplicate RPDs were within the QC acceptance criteria.

LCS Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria.

The LCS %Rs were within the QC acceptance criteria.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC acceptance criterion of ≤50% for solid matrices and ≤30% for aqueous matrices. This criterion applies if both results were greater than five times the limit of quantitation (LOQ).

All field duplicate precision criteria were met and/or data qualification was not required.

ICP/MS Serial Dilution Results

The serial dilution percent differences (%Ds) were reviewed for conformance with the QC acceptance criteria.

The serial dilution %Ds were within the QC acceptance criteria.

ICP/MS Internal Standard Performance

ICP/MS Internal standard performance was reviewed for conformance and was within the QC acceptance criteria.

Sample Results/Reporting Issues

All analytes detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ALLENHARBOR-ME45-1	WG	CHROMIUM, TOTAL	40.5	150	500	UG/L	J+	m
ALLENHARBOR-ME45-1	WG	IRON	13000	13000	50000	UG/L	UJ	m
ALLENHARBOR-ME45-1	WG	LEAD	15.0	15.0	50.0	UG/L	UJ	m
ALLENHARBOR-ME45-1-F	WG	ARSENIC	500	500	500	UG/L	U	bl
ALLENHARBOR-ME45-1-F	WG	MERCURY	0.10	0.10	0.20	UG/L	UJ	m
MW09-ME45-FD06	WG	ARSENIC	500	500	500	UG/L	U	bl
MW09-ME45-FD06	WG	CHROMIUM, TOTAL	91.9	150	500	UG/L	J+	m
MW09-ME45-FD06	WG	IRON	13000	13000	50000	UG/L	UJ	m
MW09-ME45-FD06	WG	LEAD	15.0	15.0	50.0	UG/L	UJ	m
MW09-ME45-FD06-F	WG	ARSENIC	500	500	500	UG/L	U	bl
MW09-ME45-FD06-F	WG	MERCURY	0.10	0.10	0.20	UG/L	UJ	m

Attachment A

Nonconformance Summary Tables

Table A-1 Lab Blanks

Blank ID	Compound	Result	LOD	LOQ	Units	Associated Samples
PBW--MB-85658	ARSENIC	0.34	0.80	2.0	UG/L	ALLENHARBOR-ME45-1 ALLENHARBOR-ME45-1-F MW09-ME45-FD06 MW09-ME45-FD06-F

Table A-2 Matrix Spikes

Sample ID	Compound	MS % Recovery	Lower Limit	Upper Limit
ALLENHARBOR-ME45-1	CHROMIUM, TOTAL	125	85	116
ALLENHARBOR-ME45-1	ARSENIC	287	84	116
ALLENHARBOR-ME45-1	LEAD	86	88	115
ALLENHARBOR-ME45-1	IRON	0	87	118
MW09-ME45-FD06-F	MERCURY	71	82	119

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0838
Analyses/Method:	Standard Methods 2520B for Salinity (Electrical Conductivity Method) and Standard Methods 4500_S_D for Sulfide (Methylene Blue)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/06/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0838_Sulfide_Salinity

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 12, 13, 14, and 16, 2016.

Sample ID	Matrix/Sample Type
P09-01-ME45-1	Ground water
P09-02A-ME45-1	Ground water
P09-03A-ME45-1	Ground water
P09-04A-ME45-1	Ground water
P09-06B-ME45-1	Ground water
P09-07B-ME45-1	Ground water
P09-08B-ME45-1	Ground water
P09-09-ME45-1	Ground water
P09-10-ME45-1	Ground water
P09-11B-ME45-1	Ground water
P09-12B-ME45-1	Ground water
SP09-01-ME45-1	Ground water
MW09-ME45-FD04	Field Duplicate of SP09-01-ME45-1
SP09-02-ME45-1	Ground water
SP09-03-ME45-1	Ground water

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Standard Methods For The Examination Of Water And Wastewater*;
- *EPA New England Environmental Data Review Program Guidance* (April 2013);

- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

- ✓ Data completeness (chain-of-custody[COC])/sample integrity
- ✓ Holding times and sample preservation
- ✓ Initial calibration/continuing calibration verification
- ✓ Laboratory blanks/equipment blanks
- ✓ Matrix spike (MS)/matrix duplicate (MD) and/or matrix spike duplicate (MSD) results
- ✓ Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
- ✓ Field duplicate results
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no results were qualified based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. There were no results qualified on the basis of this data review.

RESULTS

Data Completeness (COC)/Sample Integrity

The laboratory report was reviewed and found to be complete. No sample integrity issues were noted.

Holding Times and Sample Preservation

Sample preservation requirements and preparation/analysis holding times were met and/or qualification of the data was not required.

Initial Calibration/Continuing Calibration Verification

Initial calibration and continuing calibration criteria were met and/or qualification of the data was not required.

Laboratory Blanks/Equipment Blanks

Laboratory and field blanks were free of contamination and/or qualification of data due to blank contamination was not required. Equipment blanks were not collected for ground water samples.

MS/MD and/or MSD Results

All MS/MD/MSD criteria were met and/or qualification of the data was not required.

LCS/LCSD Results

LCS and/or LCSD criteria were met and/or qualification of the data was not required.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results are greater than five times the limit of quantitation (LOQ). The results for sulfide were nondetect in the field duplicate pair; therefore, precision was deemed acceptable. A field duplicate pair was not submitted for salinity analysis.

Sample Results/Reporting Issues

No other issues were narrated.

QUALIFICATION ACTIONS

No sample results were qualified as a result of this data review.

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0898
Analyses/Method:	Standard Methods 2520B for Salinity (Electrical Conductivity Method)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/06/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0898_Salinity

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 27, 2016.

Sample ID	Matrix/Sample Type
ALLENHARBOR-ME45-1	Ground water
MW09-ME45-FD06	Field Duplicate of Allenharbor-ME45-1

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Standard Methods For The Examination Of Water And Wastewater*;
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
NA	Initial calibration/continuing calibration verification

- ✓ Laboratory blanks/equipment blanks
- ✓ Matrix spike (MS)/matrix duplicate (MD)/matrix spike duplicate (MSD) results
- ✓ Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
- ✓ Field duplicate results
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no results were qualified based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. There were no results qualified on the basis of this data review.

RESULTS

Data Completeness (COC)/Sample Integrity

The laboratory report was reviewed and found to be complete. No sample integrity issues were noted.

Holding Times and Sample Preservation

Sample preservation requirements and preparation/analysis holding times were met and/or qualification of the data was not required.

Initial Calibration/Continuing Calibration Verification

Initial calibration and continuing calibration criteria are not applicable to this method. Qualification of the data was not required.

Laboratory Blanks/Equipment Blanks

Laboratory blanks were free of contamination and/or qualification of data due to blank contamination was not required. Equipment blanks were not collected for ground water samples.

MS/MD/MSD Results

MS/MSD analyses were not performed on a sample from this data set. All MD criteria were met and/or qualification of the data was not required.

LCS/LCSD Results

LCS and/or LCSD criteria were met and/or qualification of the data was not required.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results are greater than five times the quantitation limit (QL). All QC acceptance criteria were met.

Sample Results/Reporting Issues

No other issues were narrated.

QUALIFICATION ACTIONS

No sample results were qualified as a result of this data review.

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0837
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants Completed on: 11/30/2016
Reviewed by:	Kristin Rutherford/Resolution Consultants File Name: R0837_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 12 and 13, 2016.

Sample ID	Matrix/Sample Type
SED09-01-ME45-1	Sediment
SED09-02A-ME45-1	Sediment
SD09-ME45-FD01	Field Duplicate of SED09-02A-ME45-1
SED09-03A-ME45-1	Sediment
SED09-04A-ME45-1	Sediment
SED09-05A-ME45-1	Sediment
SED09-09-ME45-1	Sediment
SED09-10-ME45-1	Sediment
SED09-11B-ME45-1	Sediment
SED09-ME45-TB01	Trip Blank

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✓	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1, A-2, A-3 and A-4. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

The RFs for acetone and 2-butanone did not meet the method 8260C requirements for initial and/or continuing calibrations as required by the QSM. The nonconformances are summarized in Table A-1 and A-4. The RFs for acetone and 2-butanone met the National Functional Guidelines requirements. Professional judgement was used to qualify the results for acetone and 2-butanone as estimated (J/UJ).

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks, trip blanks, and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-5. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R>UL	J+	No qualification
20% ≤ %R < LL	J-	UJ
%R <20% (see note 1)	J-	R*
RPD >UL	J	No qualification
Note: Actions are applied to the native unspiked sample only (see note 2) *When the native sample concentration is >4X the concentration of the spike added (based on Region I criteria), evaluate the MS, MSD, and native sample with regards to %RSD rather than %R (Resolution Consultants professional judgment).		

1. Based on NFG 2016 VOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in associated samples for any analyte with < 20% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.
2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis, professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and limits of detection (LODs) were adjusted accordingly by the laboratory.

The percent solids data were reviewed to ensure that NFG 2016 specified criteria were met.

All percent solids criteria were met.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SD09-ME45-FD01	SE	ACETONE	5.9	5.9	7.4	UG/KG	UJ	c
SD09-ME45-FD01	SE	2-BUTANONE	5.9	5.9	7.4	UG/KG	UJ	c
SD09-ME45-FD01	SE	2-HEXANONE	5.9	5.9	7.4	UG/KG	UJ	c
SD09-ME45-FD01	SE	BROMOMETHANE	5.9	5.9	7.4	UG/KG	UJ	c
SED09-01-ME45-1	SE	ACETONE	5.1	5.1	6.4	UG/KG	UJ	c
SED09-01-ME45-1	SE	2-BUTANONE	5.1	5.1	6.4	UG/KG	UJ	c
SED09-01-ME45-1	SE	2-HEXANONE	5.1	5.1	6.4	UG/KG	UJ	c
SED09-01-ME45-1	SE	STYRENE	2.6	2.6	6.4	UG/KG	UJ	m
SED09-02A-ME45-1	SE	ACETONE	5.4	5.4	6.8	UG/KG	UJ	c
SED09-02A-ME45-1	SE	2-BUTANONE	5.4	5.4	6.8	UG/KG	UJ	c
SED09-02A-ME45-1	SE	2-HEXANONE	5.4	5.4	6.8	UG/KG	UJ	c
SED09-02A-ME45-1	SE	BROMOMETHANE	5.4	5.4	6.8	UG/KG	UJ	c
SED09-03A-ME45-1	SE	ACETONE	5.0	5.0	6.3	UG/KG	UJ	c
SED09-03A-ME45-1	SE	2-BUTANONE	5.0	5.0	6.3	UG/KG	UJ	c
SED09-03A-ME45-1	SE	2-HEXANONE	5.0	5.0	6.3	UG/KG	UJ	c
SED09-03A-ME45-1	SE	BROMOMETHANE	5.0	5.0	6.3	UG/KG	UJ	c
SED09-04A-ME45-1	SE	ACETONE	5.1	5.1	6.4	UG/KG	UJ	c
SED09-04A-ME45-1	SE	2-BUTANONE	5.1	5.1	6.4	UG/KG	UJ	c
SED09-04A-ME45-1	SE	2-HEXANONE	5.1	5.1	6.4	UG/KG	UJ	c
SED09-04A-ME45-1	SE	BROMOMETHANE	5.1	5.1	6.4	UG/KG	UJ	c
SED09-05A-ME45-1	SE	ACETONE	5.9	5.9	7.3	UG/KG	UJ	c
SED09-05A-ME45-1	SE	2-BUTANONE	5.9	5.9	7.3	UG/KG	UJ	c
SED09-05A-ME45-1	SE	2-HEXANONE	5.9	5.9	7.3	UG/KG	UJ	c
SED09-09-ME45-1	SE	ACETONE	8.5	8.5	11	UG/KG	UJ	c
SED09-09-ME45-1	SE	2-BUTANONE	8.5	8.5	11	UG/KG	UJ	c
SED09-09-ME45-1	SE	2-HEXANONE	8.5	8.5	11	UG/KG	UJ	c
SED09-09-ME45-1	SE	BROMOMETHANE	8.5	8.5	11	UG/KG	UJ	c
SED09-10-ME45-1	SE	ACETONE	12	12	15	UG/KG	UJ	c
SED09-10-ME45-1	SE	2-BUTANONE	12	12	15	UG/KG	UJ	c
SED09-10-ME45-1	SE	2-HEXANONE	12	12	15	UG/KG	UJ	c
SED09-10-ME45-1	SE	BROMOMETHANE	12	12	15	UG/KG	UJ	c
SED09-11B-ME45-1	SE	ACETONE	16	4.8	6.0	UG/KG	J	c
SED09-11B-ME45-1	SE	2-BUTANONE	4.8	4.8	6.0	UG/KG	UJ	c
SED09-11B-ME45-1	SE	2-HEXANONE	4.8	4.8	6.0	UG/KG	UJ	c
SED09-11B-ME45-1	SE	BROMOMETHANE	4.8	4.8	6.0	UG/KG	UJ	c
SED09-ME45-TB01	SO	ACETONE	4.0	4.0	5.0	UG/KG	UJ	c
SED09-ME45-TB01	SO	2-BUTANONE	4.0	4.0	5.0	UG/KG	UJ	c
SED09-ME45-TB01	SO	2-HEXANONE	4.0	4.0	5.0	UG/KG	UJ	c
SED09-ME45-TB01	SO	BROMOMETHANE	4.0	4.0	5.0	UG/KG	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1 Initial Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 09/23/16	ACETONE	0.032	0.100	0.010	All samples in R0837
	2-BUTANONE	0.031	0.100	0.010	

NFG – National Functional Guidelines

Table A-2 Initial Calibration – VOC

ICAL	Compound	%RSD	%RSD Limit	Associated Samples
Instrument: V6 09/23/16	2-HEXANONE	15.7	<15	SED09-03A-ME45-1 SED09-04A-ME45-1 SED09-09-ME45-1 SED09-10-ME45-1 SED09-02A-ME45-1 SD09-ME45-FD01 SED09-11B-ME45-1 SED09-ME45-TB01 SED09-05A-ME45-1 SED09-01-ME45-1

Table A-3 Continuing Calibration – VOC

CCAL	Compound	% D	%D Limit	Associated Samples	Action
Instrument: V6 09/24/16 13:08	BROMOMETHANE	-34.5	<20	SED09-03A-ME45-1 SED09-04A-ME45-1 SED09-09-ME45-1 SED09-10-ME45-1 SED09-02A-ME45-1 SD09-ME45-FD01 SED09-11B-ME45-1 SED09-ME45-TB01	Qualify UJ
	2-BUTANONE	21.1	<20		Qualify UJ
Instrument: V6 09/26/16 11:59	ACETONE	-28.0	<20	SED09-05A-ME45-1 SED09-01-ME45-1	Qualify UJ

Table A-4 Continuing Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 09/24/16 13:08 OPENING CCV	ACETONE	0.035	0.100	0.010	SED09-03A-ME45-1 SED09-04A-ME45-1 SED09-09-ME45-1 SED09-10-ME45-1 SED09-02A-ME45-1 SD09-ME45-FD01 SED09-11B-ME45-1 SED09-ME45-TB01
	2-BUTANONE	0.031	0.100	0.010	
Instrument: V6 09/24/16 20:35 CLOSING CCV	ACETONE	0.016	0.100	0.010	
	2-BUTANONE	0.024	0.100	0.010	
Instrument: V6 09/26/16 11:59 OPENING CCV	ACETONE	0.023	0.100	0.010	SED09-05A-ME45-1 SED09-01-ME45-1
	2-BUTANONE	0.028	0.100	0.010	
Instrument: V6 09/26/16 19:16 CLOSING CCV	ACETONE	0.021	0.100	0.010	
	2-BUTANONE	0.031	0.100	0.010	

NFG – National Functional Guidelines

Table A-5 - Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
SED09-01-ME45-1	STYRENE	74	OK	76	124	OK	20

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0888
Analyses/Method:	EPA SW-846 Method 8260C for VOCs (GC/MS) / 8260C
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants Completed on: 12/05/2016
Reviewed by:	Kristin Rutherford/Resolution Consultants File Name: R0888_VOC

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 26, 2016.

Sample ID	Matrix/Sample Type
SD-EB01-ME45	Equipment blank
SED09-06B-ME45-1	Soil
SED09-07B-ME45-1	Soil
SED09-08B-ME45-1	Soil
SED09-12B-ME45-1	Soil
SED09-ME45-FD02	Field Duplicate of SED09-08B-ME45-1
SED09-ME45-TB02	Trip blank

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8260C, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry* (USEPA, 2006);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✗	Surrogate spike recoveries
NA	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicates
✓	Internal standards
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated, due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Tables A-1, A-2 and A-3. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8260C)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria		Actions	
		Detected Results	Nondetected Results
Opening CCV	Closing CCV		
%D > 20%	%D > 50%	J	UJ
%Drift >20%	%Drift >50%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used			

Qualified sample results are shown in Table 1.

The RFs for acetone, 2-butanone and tetrachloroethene did not meet the method 8260C requirements for initial and/or continuing calibrations as required by the QSM. The nonconformances are summarized in Tables A-1 and A-3. The RFs for acetone, 2-butanone and tetrachloroethene met the National Functional Guidelines requirements. Professional judgment was used to qualify the results for acetone, 2-butanone and tetrachloroethene as estimated (J/UJ).

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks, trip blanks, and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in trip blank sample SED-ME45-TB02 or equipment blank sample SD-EB01-ME45.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-4. Data qualification on the basis of surrogate recovery nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R > Upper Limit (UL)	J+	No qualification
20% ≤%R < Lower Limit (LL)	J-	UJ
%R < 20%	J-	R

Qualified sample results are shown in Table 1.

MS and/or MSD Results

MS/MSD analyses were not performed on samples reported in this SDG. There were no validation actions taken on this basis.

LCS/LCSD Results

The LCS/LCSD %Rs and/or relative percent recoveries (RPDs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Field Duplicates

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Internal Standards

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and limits of detection (LODs) were adjusted accordingly by the laboratory.

The percent solids data were reviewed to ensure that NFG 2016 specified criteria were met.

All percent solids criteria were met.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SD-EB01-ME45	WG	1,1,1-TRICHLOROETHANE	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	1,1,2,2-TETRACHLOROETHANE	0.5	0.5	0.5	UG/L	UJ	s
SD-EB01-ME45	WG	1,1,2-TRICHLOROETHANE	0.5	0.5	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	1,1-DICHLOROETHANE	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	1,1-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	1,2-DICHLOROETHANE	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	1,2-DICHLOROPROPANE	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	2-BUTANONE	2.0	2.0	2.0	UG/L	UJ	s,c
SD-EB01-ME45	WG	2-HEXANONE	2.0	2.0	2.0	UG/L	UJ	s
SD-EB01-ME45	WG	4-METHYL-2-PENTANONE	2.0	2.0	2.0	UG/L	UJ	s
SD-EB01-ME45	WG	ACETONE	5.0	5.0	10.0	UG/L	UJ	s
SD-EB01-ME45	WG	BENZENE	0.5	0.5	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	BROMODICHLOROMETHANE	0.5	0.5	0.5	UG/L	UJ	s
SD-EB01-ME45	WG	BROMOFORM	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	BROMOMETHANE	2.0	2.0	2.0	UG/L	UJ	s
SD-EB01-ME45	WG	CARBON DISULFIDE	1.0	1.0	2.0	UG/L	UJ	s
SD-EB01-ME45	WG	CARBON TETRACHLORIDE	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	CHLOROBENZENE	0.5	0.5	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	CHLOROETHANE	2.0	2.0	2.0	UG/L	UJ	s
SD-EB01-ME45	WG	CHLOROFORM	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	CHLOROMETHANE	1.0	1.0	2.0	UG/L	UJ	s
SD-EB01-ME45	WG	CIS-1,2-DICHLOROETHENE	0.5	0.5	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	CIS-1,3-DICHLOROPROPENE	0.5	0.5	0.5	UG/L	UJ	s
SD-EB01-ME45	WG	DIBROMOCHLOROMETHANE	0.5	0.5	0.5	UG/L	UJ	s
SD-EB01-ME45	WG	ETHYLBENZENE	0.5	0.5	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	METHYLENE CHLORIDE	2.0	2.0	2.0	UG/L	UJ	s
SD-EB01-ME45	WG	STYRENE	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	TETRACHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s,c
SD-EB01-ME45	WG	TOLUENE	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	TRANS-1,2-DICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	TRANS-1,3-DICHLOROPROPENE	0.5	0.5	0.5	UG/L	UJ	s
SD-EB01-ME45	WG	TRICHLOROETHENE	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	VINYL CHLORIDE	1.0	1.0	1.0	UG/L	UJ	s
SD-EB01-ME45	WG	XYLENES, TOTAL	1.0	1.0	1.0	UG/L	UJ	s
SED09-06B-ME45-1	SO	2-BUTANONE	8.9	8.9	11	UG/KG	UJ	c
SED09-06B-ME45-1	SO	2-HEXANONE	8.9	8.9	11	UG/KG	UJ	c
SED09-06B-ME45-1	SO	ACETONE	8.9	8.9	11	UG/KG	UJ	c

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SED09-06B-ME45-1	SO	BROMOMETHANE	8.9	8.9	11	UG/KG	UJ	c
SED09-07B-ME45-1	SO	2-BUTANONE	8.2	8.2	10	UG/KG	UJ	c
SED09-07B-ME45-1	SO	2-HEXANONE	8.2	8.2	10	UG/KG	UJ	c
SED09-07B-ME45-1	SO	ACETONE	8.2	8.2	10	UG/KG	UJ	c
SED09-07B-ME45-1	SO	BROMOMETHANE	8.2	8.2	10	UG/KG	UJ	c
SED09-08B-ME45-1	SO	2-BUTANONE	7.3	7.3	9.2	UG/KG	UJ	c
SED09-08B-ME45-1	SO	2-HEXANONE	7.3	7.3	9.2	UG/KG	UJ	c
SED09-08B-ME45-1	SO	ACETONE	7.3	7.3	9.2	UG/KG	UJ	c
SED09-08B-ME45-1	SO	BROMOMETHANE	7.3	7.3	9.2	UG/KG	UJ	c
SED09-12B-ME45-1	SO	2-BUTANONE	3.9	3.9	4.9	UG/KG	UJ	c
SED09-12B-ME45-1	SO	2-HEXANONE	3.9	3.9	4.9	UG/KG	UJ	c
SED09-12B-ME45-1	SO	ACETONE	20	3.9	4.9	UG/KG	J	c
SED09-12B-ME45-1	SO	BROMOMETHANE	3.9	3.9	4.9	UG/KG	UJ	c
SED09-ME45-FD02	SO	2-BUTANONE	6.6	6.6	8.2	UG/KG	UJ	c
SED09-ME45-FD02	SO	2-HEXANONE	6.6	6.6	8.2	UG/KG	UJ	c
SED09-ME45-FD02	SO	ACETONE	9.9	6.6	8.2	UG/KG	J	c
SED09-ME45-FD02	SO	BROMOMETHANE	6.6	6.6	8.2	UG/KG	UJ	c
SED09-ME45-TB02	SO	2-BUTANONE	4.0	4.0	5.0	UG/KG	UJ	c
SED09-ME45-TB02	SO	2-HEXANONE	4.0	4.0	5.0	UG/KG	UJ	c
SED09-ME45-TB02	SO	ACETONE	4.0	4.0	5.0	UG/KG	UJ	c
SED09-ME45-TB02	SO	BROMOMETHANE	4.0	4.0	5.0	UG/KG	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1 Initial Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 10/03/16	ACETONE	0.027	0.100	0.010	SED09-06B-ME45-1 SED09-07B-ME45-1 SED09-08B-ME45-1 SED09-12B-ME45-1 SED09-ME45-FD02 SED09-ME45-TB02
	2-BUTANONE	0.024	0.100	0.010	
Instrument: HPV2 10/04/16	2-BUTANONE	0.073	0.100	0.010	SD-EB01-ME45
	TETRACHLOROETHENE	0.182	0.200	0.100	

NFG – National Functional Guidelines

Table A-2 Initial Calibration – VOC

ICAL	Compound	%RSD	%RSD Limit	Associated Samples
Instrument: V6 10/03/16	BROMOMETHANE	17.3	<15	SED09-06B-ME45-1 SED09-07B-ME45-1 SED09-08B-ME45-1 SED09-12B-ME45-1 SED09-ME45-FD02 SED09-ME45-TB02
	ACETONE	31.9	<15	
	2-HEXANONE	15.3	<15	

Table A-3 Continuing Calibration – VOC

CCAL	Compound	RF	8260C RF Limit	NFG RF Limit	Associated Samples
Instrument: V6 10/04/16 0:22 CLOSING CCV	ACETONE	0.019	0.100	0.010	SED09-06B-ME45-1 SED09-07B-ME45-1 SED09-08B-ME45-1 SED09-12B-ME45-1 SED09-ME45-FD02 SED09-ME45-TB02
	2-BUTANONE	0.021	0.100	0.010	
Instrument: HPV2 10/10/16 09:48 OPENING CCV	2-BUTANONE	0.067	0.100	0.010	SD-EB01-ME45
	TETRACHLOROETHENE	0.193	0.200	0.100	
Instrument: HPV2 10/10/16 20:04 CLOSING CCV	2-BUTANONE	0.064	0.100	0.010	
	TETRACHLOROETHENE	0.197	0.200	0.100	

NFG – National Functional Guidelines

Table A-4 - Surrogates

Sample ID	Surrogate	% Recovery	Lower Limit	Upper Limit
SD-EB01-ME45	4-BROMOFLUOROBENZENE	82	85	114

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0837
Analyses/Method:	EPA SW-846 Method 8270D-SIM for SVOCs (GC/MS) / 8270D-SIM
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 11/17/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0837_PAH

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 12 and 13, 2016.

Sample ID	Matrix/Sample Type
SD09-ME45-FD01	Field duplicate of SED09-02A-ME45-1
SED09-01-ME45-1	Sediment
SED09-02A-ME45-1	Sediment
SED09-03A-ME45-1	Sediment
SED09-04A-ME45-1	Sediment
SED09-05A-ME45-1	Sediment
SED09-09-ME45-1	Sediment
SED09-10-ME45-1	Sediment
SED09-11B-ME45-1	Sediment

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8270D-SIM, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry/Selected Ion Monitoring* (USEPA, 2014);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

- ✓ Data completeness (chain-of-custody [COC])/sample integrity
- ✓ Holding times and sample preservation
- ✓ Gas Chromatography/Mass Spectrometry (GC/MS) Performance Checks
- ✓ Initial calibration/continuing calibration verification
- ✓ Laboratory blanks/equipment blanks
- ✓ Surrogate spike recoveries
- ✗ Matrix spike (MS) and/or matrix spike duplicate (MSD) results
- ✓ Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
- ✓ Field duplicate results
- ✓ Internal standard recoveries
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the decafluorotriphenylphosphine (DFTPP) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the DFTPP tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

The QC acceptance criteria were met.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in equipment blank sample SD-EB01-ME45, reported in SDG R0888.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met.

MS/MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-1. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Actions: (Based on NFG 2016, Region 1, and Resolution Consultants professional judgment)

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R> UL	J+	No qualification
10% ≤ %R < LL	J-	UJ
%R <10%	J-	R
%RPD > UL	J	No qualification

Notes:

1. Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.

2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis, professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than five times the limit of quantitation (LOQ).

All QC acceptance criteria were met and/or qualification of the data was not required.

Internal Standard Recoveries

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution due to high concentrations of target or non-targets was checked to ensure that the results and/or sample specific limits of detection (LODs) and LOQs were adjusted accordingly by the laboratory.

The percent solids data were reviewed to ensure that NFG 2016 specified criteria were met.

All percent solids criteria were met.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SED09-01-ME45-1	SE	ANTHRACENE	4.8	4.2	4.2	UG/KG	J	m,md
SED09-01-ME45-1	SE	BENZO[A]ANTHRACENE	18	4.2	4.2	UG/KG	J	m,md
SED09-01-ME45-1	SE	BENZO[A]PYRENE	22	4.2	4.2	UG/KG	J	m,md
SED09-01-ME45-1	SE	BENZO[B]FLUORANTHENE	35	4.2	4.2	UG/KG	J	m,md
SED09-01-ME45-1	SE	BENZO[G,H,I]PERYLENE	21	4.2	4.2	UG/KG	J+	m
SED09-01-ME45-1	SE	BENZO[K]FLUORANTHENE	11	4.2	4.2	UG/KG	J	md
SED09-01-ME45-1	SE	CHRYSENE	20	4.2	4.2	UG/KG	J	m,md
SED09-01-ME45-1	SE	FLUORANTHENE	35	4.2	4.2	UG/KG	J	m,md
SED09-01-ME45-1	SE	INDENO[1,2,3-CD]PYRENE	16	4.2	4.2	UG/KG	J+	m
SED09-01-ME45-1	SE	PHENANTHRENE	17	4.2	4.2	UG/KG	J	m,md
SED09-01-ME45-1	SE	PYRENE	30	4.2	4.2	UG/KG	J	m,md

Attachment A

Non Conformance Summary Tables

Table A-1 Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
SED09-01-ME45-1	ACENAPHTHENE	85	58	33	113	**38**	30
SED09-01-ME45-1	BENZO[B]FLUORANTHENE	**264**	**147**	39	128	**57**	30
SED09-01-ME45-1	BENZO[A]ANTHRACENE	**242**	**134**	39	111	**57**	30
SED09-01-ME45-1	CHRYSENE	**203**	**126**	36	112	**47**	30
SED09-01-ME45-1	FLUORENE	90	64	32	122	**34**	30
SED09-01-ME45-1	BENZO[A]PYRENE	**195**	**137**	43	119	**35**	30
SED09-01-ME45-1	ANTHRACENE	**125**	80	35	114	**44**	30
SED09-01-ME45-1	PYRENE	**308**	**174**	39	119	**56**	30
SED09-01-ME45-1	BENZO[K]FLUORANTHENE	**131**	90	30	133	**37**	30
SED09-01-ME45-1	INDENO[1,2,3-CD]PYRENE	**125**	100	48	119	22	30
SED09-01-ME45-1	FLUORANTHENE	**376**	**200**	41	117	**61**	30
SED09-01-ME45-1	BENZO[G,H,I]PERYLENE	**124**	101	45	116	20	30
SED09-01-ME45-1	PHENANTHRENE	**251**	**130**	38	108	**64**	30

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0888
Analyses/Method:	EPA SW-846 Method 8270D-SIM for SVOCs (GC/MS-SIM)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/14/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0888_PAH

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 26, 2016.

Sample ID	Matrix/Sample Type
SD-EB01-ME45	Aqueous Equipment Blank
SED09-06B-ME45-1	Sediment
SED09-07B-ME45-1	Sediment
SED09-08B-ME45-1	Sediment
SED09-12B-ME45-1	Sediment
SED09-ME45-FD02	Field duplicate of SED09-08B-ME45-1

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8270D, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry and Mass Spectrometry/Selected Ion Monitoring* (USEPA, 2014);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

- ✓ Data completeness (chain-of-custody [COC])/sample integrity
- ✓ Holding times and sample preservation
- ✓ Gas Chromatography/Mass Spectrometry (GC/MS) Performance Checks
- ✗ Initial calibration/continuing calibration verification
- ✓ Laboratory blanks/equipment blanks
- ✓ Surrogate spike recoveries
- ✗ Matrix spike (MS) and/or matrix spike duplicate (MSD) results
- ✗ Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
- ✗ Field duplicate results
- ✓ Internal standard results
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the decafluorotriphenylphosphine (DFTPP) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the DFTPP tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8270D)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results
%D > 20%	J	UJ
%Drift >20%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

Qualified sample results are shown in Table 1.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in equipment blank sample SD-EB01-ME45.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

MS and/or MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria. Nonconformances are summarized in Attachment A in Table A-2. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Actions: (Based on NFG 2016, Region 1, and Resolution Consultants professional judgment)

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R> UL	J+	No qualification
10% ≤ %R < Lower limit	J-	UJ
%R <10%	J-	R
%RPD > UL	J	No qualification

Notes:

1. Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.

2. If a field duplicate sample was also collected for the native sample chosen for MS/MSD analysis,

professional judgment is used to apply MS/MSD actions to the corresponding field duplicate sample as well as the native sample.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria. The laboratory presented laboratory control limits instead of QSM criteria; therefore, results were also compared to the QSM criteria.

Nonconformances are summarized in Attachment A in Table A-3. Data qualification to the analytes associated with the specific LCS/LCSD %Rs and/or RPDs was as follows:

Criteria[1]	Action[2]	
	Detected Compounds	Nondetected Compounds
%R or RPD > UL	J+	No qualification
10%≥%R < LL	J-	UJ
%R < 10%	J-	R
[1] In the absence of NFG 2016 guidance for LCS results, NFG 2016 MS/MSD guidance was applied with Resolution Consultants professional judgment.		
[2]If the %R of more than half of the analytes are not within limits, then reject (R) nondetects for the analytes with <10% recovery and estimate (J/UJ) all other analyte(s) in the associated samples.		

Qualified sample results are shown in Table 1.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than five times the limit of quantitation (LOQ).

Nonconformances are summarized in Attachment A in Table A-4. Data qualification to the analytes associated with the specific field duplicate RPDs was as follows:

Criteria	RPD	Action	
		Detected	Nondetected
Sample and duplicate are nondetect results	Not calculable (NC)	No qualification	No qualification
Sample and duplicate results ≥5xLOQ	>30 (aqueous) >50 (solids)	J	Not Applicable
Sample and duplicate results <5xLOQ	>60 (aqueous) >100 (solids)	J	Not Applicable
If sample or duplicate result is >5xLOQ and the other is not detected	NC	J	UJ
If sample or duplicate result is <5xLOQ and the other is not detected	NC	No qualification	No qualification

Actions: (Resolution Consultants professional judgment was used)

Qualified sample results are shown in Table 1.

Internal Standard Results

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the limit of detection (LOD) were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

The percent solids data were reviewed to ensure that NFG 2016 specified criteria were met.

All percent solids criteria were met.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SD-EB01-ME45	WG	NAPHTHALENE	0.10	0.10	0.10	UG/L	UJ	c
SED09-06B-ME45-1	SE	2-METHYLNAPHTHALENE	5.5	5.5	5.5	UG/KG	UJ	c
SED09-06B-ME45-1	SE	ANTHRACENE	11	5.5	5.5	UG/KG	J-	l
SED09-06B-ME45-1	SE	BENZO[A]ANTHRACENE	62	5.5	5.5	UG/KG	J-	l
SED09-06B-ME45-1	SE	BENZO[K]FLUORANTHENE	38	5.5	5.5	UG/KG	J	l,ld
SED09-06B-ME45-1	SE	CHRYSENE	80	5.5	5.5	UG/KG	J-	l
SED09-06B-ME45-1	SE	FLUORANTHENE	120	5.5	5.5	UG/KG	J-	l
SED09-06B-ME45-1	SE	NAPHTHALENE	5.5	5.5	5.5	UG/KG	UJ	c
SED09-06B-ME45-1	SE	PYRENE	130	5.5	5.5	UG/KG	J-	l
SED09-07B-ME45-1	SE	2-METHYLNAPHTHALENE	4.9	4.9	4.9	UG/KG	UJ	c
SED09-07B-ME45-1	SE	ANTHRACENE	8.2	4.9	4.9	UG/KG	J-	l
SED09-07B-ME45-1	SE	BENZO[A]ANTHRACENE	34	4.9	4.9	UG/KG	J-	l
SED09-07B-ME45-1	SE	BENZO[K]FLUORANTHENE	21	4.9	4.9	UG/KG	J	l,ld
SED09-07B-ME45-1	SE	CHRYSENE	45	4.9	4.9	UG/KG	J-	l
SED09-07B-ME45-1	SE	FLUORANTHENE	66	4.9	4.9	UG/KG	J-	l
SED09-07B-ME45-1	SE	NAPHTHALENE	4.9	4.9	4.9	UG/KG	UJ	c
SED09-07B-ME45-1	SE	PYRENE	75	4.9	4.9	UG/KG	J-	l
SED09-08B-ME45-1	SE	2-METHYLNAPHTHALENE	5.2	5.2	5.2	UG/KG	UJ	c
SED09-08B-ME45-1	SE	ANTHRACENE	5.4	5.2	5.2	UG/KG	J	fd,l
SED09-08B-ME45-1	SE	BENZO[A]ANTHRACENE	21	5.2	5.2	UG/KG	J	fd,l
SED09-08B-ME45-1	SE	BENZO[A]PYRENE	22	5.2	5.2	UG/KG	J	fd
SED09-08B-ME45-1	SE	BENZO[B]FLUORANTHENE	35	5.2	5.2	UG/KG	J	fd
SED09-08B-ME45-1	SE	BENZO[G,H,I]PERYLENE	18	5.2	5.2	UG/KG	J	fd
SED09-08B-ME45-1	SE	BENZO[K]FLUORANTHENE	13	5.2	5.2	UG/KG	J	fd,l,ld
SED09-08B-ME45-1	SE	CHRYSENE	27	5.2	5.2	UG/KG	J	fd,l
SED09-08B-ME45-1	SE	FLUORANTHENE	44	5.2	5.2	UG/KG	J	fd,l
SED09-08B-ME45-1	SE	INDENO[1,2,3-CD]PYRENE	22	5.2	5.2	UG/KG	J	fd
SED09-08B-ME45-1	SE	NAPHTHALENE	5.2	5.2	5.2	UG/KG	UJ	c
SED09-08B-ME45-1	SE	PHENANTHRENE	24	5.2	5.2	UG/KG	J	fd
SED09-08B-ME45-1	SE	PYRENE	42	5.2	5.2	UG/KG	J	fd,l
SED09-12B-ME45-1	SE	2-METHYLNAPHTHALENE	4.9	4.9	4.9	UG/KG	UJ	c
SED09-12B-ME45-1	SE	ANTHRACENE	12	4.9	4.9	UG/KG	J-	l
SED09-12B-ME45-1	SE	BENZO[A]ANTHRACENE	45	4.9	4.9	UG/KG	J	l,md
SED09-12B-ME45-1	SE	BENZO[A]PYRENE	40	4.9	4.9	UG/KG	J	md
SED09-12B-ME45-1	SE	BENZO[B]FLUORANTHENE	62	4.9	4.9	UG/KG	J	m,md
SED09-12B-ME45-1	SE	BENZO[G,H,I]PERYLENE	30	4.9	4.9	UG/KG	J	m,md
SED09-12B-ME45-1	SE	BENZO[K]FLUORANTHENE	25	4.9	4.9	UG/KG	J	l,ld,md
SED09-12B-ME45-1	SE	CHRYSENE	51	4.9	4.9	UG/KG	J	l,m,md
SED09-12B-ME45-1	SE	FLUORANTHENE	88	4.9	4.9	UG/KG	J	l,m,md

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SED09-12B-ME45-1	SE	INDENO[1,2,3-CD]PYRENE	37	4.9	4.9	UG/KG	J	m,md
SED09-12B-ME45-1	SE	NAPHTHALENE	4.9	4.9	4.9	UG/KG	UJ	c
SED09-12B-ME45-1	SE	PHENANTHRENE	57	4.9	4.9	UG/KG	J	m,md
SED09-12B-ME45-1	SE	PYRENE	73	4.9	4.9	UG/KG	J	l,m,md
SED09-ME45-FD02	SE	2-METHYLNAPHTHALENE	4.9	4.9	4.9	UG/KG	UJ	c
SED09-ME45-FD02	SE	ANTHRACENE	14	4.9	4.9	UG/KG	J	fd,l
SED09-ME45-FD02	SE	BENZO[A]ANTHRACENE	56	4.9	4.9	UG/KG	J	fd,l
SED09-ME45-FD02	SE	BENZO[A]PYRENE	50	4.9	4.9	UG/KG	J	fd
SED09-ME45-FD02	SE	BENZO[B]FLUORANTHENE	87	4.9	4.9	UG/KG	J	fd
SED09-ME45-FD02	SE	BENZO[G,H,I]PERYLENE	40	4.9	4.9	UG/KG	J	fd
SED09-ME45-FD02	SE	BENZO[K]FLUORANTHENE	30	4.9	4.9	UG/KG	J	fd,l,ld
SED09-ME45-FD02	SE	CHRYSENE	77	4.9	4.9	UG/KG	J	fd,l
SED09-ME45-FD02	SE	FLUORANTHENE	110	4.9	4.9	UG/KG	J	fd,l
SED09-ME45-FD02	SE	INDENO[1,2,3-CD]PYRENE	50	4.9	4.9	UG/KG	J	fd
SED09-ME45-FD02	SE	NAPHTHALENE	4.9	4.9	4.9	UG/KG	UJ	c
SED09-ME45-FD02	SE	PHENANTHRENE	43	4.9	4.9	UG/KG	J	fd
SED09-ME45-FD02	SE	PYRENE	110	4.9	4.9	UG/KG	J	fd,l

Attachment A

Non Conformance Summary Tables

Table A-1 Initial Calibration

ICAL	Compound	% RSD	%RSD Limit	Associated Samples
Instrument: S6 10/07/16	Naphthalene	19.1	<15	SD-EB01-ME45
Instrument: S6 10/12/16	Naphthalene	20.0	<15	all soil samples
	2-Methylnaphthalene	16.0	<15	

Table A-2 Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
SED09-12B-ME45-1	PYRENE	**42**	106	55	117	**86**	30
SED09-12B-ME45-1	BENZO[G,H,I]PERYLENE	76	**131**	49	127	**53**	30
SED09-12B-ME45-1	INDENO[1,2,3-CD]PYRENE	78	**141**	49	130	**57**	30
SED09-12B-ME45-1	BENZO[B]FLUORANTHENE	65	**146**	53	128	**77**	30
SED09-12B-ME45-1	FLUORANTHENE	**36**	110	55	119	**102**	30
SED09-12B-ME45-1	BENZO[K]FLUORANTHENE	64	101	56	123	**44**	30
SED09-12B-ME45-1	CHRYSENE	**54**	113	57	118	**70**	30
SED09-12B-ME45-1	BENZO[A]PYRENE	63	118	50	125	**62**	30
SED09-12B-ME45-1	BENZO[A]ANTHRACENE	56	103	54	122	**59**	30
SED09-12B-ME45-1	PHENANTHRENE	**35**	57	49	113	**48**	30

Table A-3 Lab Control Samples

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples
LCS-85634	ANTHRACENE	**48**	56	50	114	15	30	SED09-06B-ME45-1 SED09-07B-ME45-1 SED09-08B-ME45-1 SED09-12B-ME45-1 SED09-ME45-FD02
	BENZO[K]FLUORANTHENE	**52**	71	56	123	**31**	30	
	FLUORANTHENE	**53**	65	55	119	20	30	
	PYRENE	**53**	64	55	117	19	30	
	BENZO[A]ANTHRACENE	**53**	66	54	122	22	30	
	CHRYSENE	**54**	67	57	118	21	30	

Table A-4 Field Duplicates

Sample ID	Duplicate ID	Compound	Sample Result	Qual	Duplicate Result	Qual	LOD	LOQ	Units	RPD
SED09-08B-ME45-1	SED09-ME45-FD02	ANTHRACENE	5.4		14		5.2	5.2	UG/KG	88.7
		BENZO[A]ANTHRACENE	21		56		5.2	5.2	UG/KG	90.9
		BENZO[A]PYRENE	22		50		5.2	5.2	UG/KG	77.8
		BENZO[B]FLUORANTHENE	35		87		5.2	5.2	UG/KG	85.2
		BENZO[G,H,I]PERYLENE	18		40		5.2	5.2	UG/KG	75.9
		BENZO[K]FLUORANTHENE	13		30		5.2	5.2	UG/KG	79.1
		CHRYSENE	27		77		5.2	5.2	UG/KG	96.2
		FLUORANTHENE	44		110		5.2	5.2	UG/KG	85.7
		INDENO[1,2,3-CD]PYRENE	22		50		5.2	5.2	UG/KG	77.8
		PHENANTHRENE	24		43		5.2	5.2	UG/KG	56.7
		PYRENE	42		110		5.2	5.2	UG/KG	89.5

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0837
Analyses/Method:	EPA SW-846 Method 8081B for Organochlorine Pesticides (GC/ECD) and EPA SW-846 Method 8082A for PCBs (GC/ECD)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/12/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0837_PEST_PCB

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 12 and 13, 2016.

Sample ID	Matrix/Sample Type
SED09-01-ME45-1	Sediment
SED09-02A-ME45-1	Sediment
SD09-ME45-FD01	Field Duplicate of SED09-02A-ME45-1
SED09-09-ME45-1	Sediment
SED09-10-ME45-1	Sediment

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8081B, Organochlorine Pesticides by Gas Chromatography* (USEPA, 2007);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8082A, Polychlorinated Biphenyls (PCBs) by Gas Chromatography* (USEPA, 2007);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/ECD Instrument Performance Check
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/equipment blanks
✗	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓	Field duplicate results
✓	Sulfur clean-up
✗	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC) / Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

GC/ECD Instrument Performance Check

Instrument performance check standards were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and method acceptance criteria were met;
- the second-source calibration verification (ICV) method acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) acceptance criteria were met.

Nonconformances are summarized in Attachment A in Table A-1.

All initial calibration criteria were met for pesticides and PCBs. No qualifications were required for PCB CCVs.

Data qualification on the basis of the pesticide CCVs was as follows:

Pesticides Continuing Calibration

Criteria	Actions[1]	
	Detected	Nondetected
%D or %Drift >20%	J	UJ
[1] Actions are applied to positive results reported from the nonconforming column. Do not qualify nondetect results unless both columns are noncompliant.		

Qualified results are shown in Table 1.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in equipment blank sample SD-EB01-ME45, reported in SDG R0888.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification on the basis of surrogate recoveries was as follows:

Actions: (Based on NFG 2016)

Criteria	Action	
	Detected	**Nondetected**
%R <10% (undiluted)	J-	R
%R <10% (diluted)	Use professional judgment**	Use professional judgment**
%R ≥10% but is < LL	J-	UJ
%R > UL but ≤200%	J+	No qualification
%R >200	J+	Use professional judgment**
** Use professional judgment in qualifying data, as surrogate recovery problems may not directly apply to target compounds.		

Qualified sample results are shown in Table 1.

MS/MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-3. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Criteria	Action	
	Detected Compounds	**Nondetected Compounds**
%R> UL	J+	No qualification
20% ≤ %R < LL	J-	UJ
%R <20% (see note 1)	J-	R*
%RPD > UL	J	No qualification
Note: Actions are applied to the native unspiked sample only (see note 2) *When the native sample concentration is >4X the concentration of the spike added (based on Region I criteria), evaluate the MS, MSD, and native sample with regards to %RSD rather than %R (Resolution Consultants professional judgment)		

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS and/or LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

The LCS and/or LCSD %Rs and/or RPDs were within the QC acceptance criteria.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the sample limit of quantitation (LOQ).

All QC acceptance criteria were met.

Sulfur Clean-up

Sulfur clean-up was performed on the samples in this data set. Data qualification was not required.

Sample Results/Reporting Issues

For detected results for both pesticides and PCBs, the laboratory reported the lower of the two values between the two columns. Based on DoD QSM v5.0, positive results should be reported from the primary column. No actions were taken except to note this discrepancy.

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation

Dual Column Precision

Sample results were reviewed to ensure that the dual column precision RPD criteria were met.

Nonconformances are summarized in Attachment A in Table A-4. Data qualification on the basis of dual column RPDs was as follows:

Actions: (Based on Resolution Consultants professional judgment)

Criteria	Action
RPD > 40 and no interference	J (report higher result)
RPD > 40 and interference on 1 column	J (report result from column without interference)
RPD > 40 and interference on both columns	J (report lower result)

Qualified results are shown in Table 1.

Percent Solids

The percent solids data were reviewed to ensure that NFG specified criteria were met.

All percent solids criteria were met.

Multiple Aroclors

Multiple Aroclors were not detected in any samples in this data set.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SD09-ME45-FD01	SE	4,4-DDT	0.63	0.63	2.4	UG/KG	UJ	c
SED09-01-ME45-1	SE	4,4-DDE	0.54	0.54	2.1	UG/KG	UJ	m
SED09-01-ME45-1	SE	4,4-DDT	4.6	0.54	2.1	UG/KG	J	c,m,md
SED09-01-ME45-1	SE	ALPHA-CHLORDANE	0.13	0.13	1.1	UG/KG	UJ	m
SED09-01-ME45-1	SE	ENDOSULFAN I	0.13	0.13	1.1	UG/KG	UJ	m
SED09-01-ME45-1	SE	ENDOSULFAN SULFATE	0.27	0.27	2.1	UG/KG	UJ	m
SED09-01-ME45-1	SE	ENDRIN KETONE	0.27	0.27	2.1	UG/KG	UJ	m
SED09-01-ME45-1	SE	METHOXYCHLOR	1.3	1.3	11	UG/KG	UJ	m
SED09-01-ME45-1	SE	TRANS-CHLORDANE	0.27	0.27	1.1	UG/KG	UJ	m
SED09-02A-ME45-1	SE	4,4-DDT	0.57	0.57	2.2	UG/KG	UJ	c
SED09-02A-ME45-1	SE	AROCLOR-1016	4.4	4.4	22	UG/KG	UJ	s
SED09-02A-ME45-1	SE	AROCLOR-1221	8.9	8.9	22	UG/KG	UJ	s
SED09-02A-ME45-1	SE	AROCLOR-1232	4.4	4.4	22	UG/KG	UJ	s
SED09-02A-ME45-1	SE	AROCLOR-1242	4.4	4.4	22	UG/KG	UJ	s
SED09-02A-ME45-1	SE	AROCLOR-1248	4.4	4.4	22	UG/KG	UJ	s
SED09-02A-ME45-1	SE	AROCLOR-1254	8.9	8.9	22	UG/KG	UJ	s
SED09-02A-ME45-1	SE	AROCLOR-1260	4.4	4.4	22	UG/KG	UJ	s
SED09-09-ME45-1	SE	4,4-DDT	0.90	0.90	3.5	UG/KG	UJ	c
SED09-09-ME45-1	SE	LINDANE	2.1	0.22	1.8	UG/KG	J	r
SED09-09-ME45-1	SE	AROCLOR-1016	0.070	0.070	0.35	UG/KG	UJ	s
SED09-09-ME45-1	SE	AROCLOR-1221	0.14	0.14	0.35	UG/KG	UJ	s
SED09-09-ME45-1	SE	AROCLOR-1232	0.070	0.070	0.35	UG/KG	UJ	s
SED09-09-ME45-1	SE	AROCLOR-1242	0.070	0.070	0.35	UG/KG	UJ	s
SED09-09-ME45-1	SE	AROCLOR-1248	0.070	0.070	0.35	UG/KG	UJ	s
SED09-09-ME45-1	SE	AROCLOR-1254	0.14	0.14	0.35	UG/KG	UJ	s
SED09-09-ME45-1	SE	AROCLOR-1260	0.69	0.070	0.35	UG/KG	J-	s
SED09-10-ME45-1	SE	4,4-DDT	1.2	1.2	4.8	UG/KG	UJ	c
SED09-10-ME45-1	SE	LINDANE	3.0	0.31	2.5	UG/KG	J	r
SED09-10-ME45-1	SE	AROCLOR-1016	9.7	9.7	48	UG/KG	UJ	s
SED09-10-ME45-1	SE	AROCLOR-1221	19	19	48	UG/KG	UJ	s
SED09-10-ME45-1	SE	AROCLOR-1232	9.7	9.7	48	UG/KG	UJ	s
SED09-10-ME45-1	SE	AROCLOR-1242	9.7	9.7	48	UG/KG	UJ	s
SED09-10-ME45-1	SE	AROCLOR-1248	9.7	9.7	48	UG/KG	UJ	s
SED09-10-ME45-1	SE	AROCLOR-1254	19	19	48	UG/KG	UJ	s
SED09-10-ME45-1	SE	AROCLOR-1260	74	9.7	48	UG/KG	J-	s

Attachment A

Nonconformance Summary Tables

Table A-1 Pesticides Calibrations

CCV ID	Compound	%D Column 1	%D Column 2	Action	Associated Samples
10/7/16 01:12	4,4'-DDT	-37.8	-42.0	J/UJ	all sediment samples

Table A-2 PCB Surrogates

Sample ID	Surrogate	% Recovery Column 1	% Recovery Column 2	Lower Limit	Upper Limit
SED09-02A-ME45-1	DECACHLOROBIPHENYL	31	31	33	108
SED09-09-ME45-1	DECACHLOROBIPHENYL	28	26	33	108
SED09-10-ME45-1	DECACHLOROBIPHENYL	26	25	33	108

Table A-3 Pesticide Matrix Spikes

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
SED09-01-ME45-1	ENDOSULFAN SULFATE	56	**40**	55	136	**33**	30
SED09-01-ME45-1	4,4-DDT	**48**	**34**	50	141	**36**	30
SED09-01-ME45-1	ALPHA-CHLORDANE	54	**47**	54	133	14	30
SED09-01-ME45-1	TRANS-CHLORDANE	**44**	**43**	53	135	3	30
SED09-01-ME45-1	ENDRIN KETONE	**48**	**41**	55	136	16	30
SED09-01-ME45-1	ENDOSULFAN I	**43**	**40**	53	132	5	30
SED09-01-ME45-1	METHOXYCHLOR	59	**46**	52	143	24	30
SED09-01-ME45-1	4,4-DDE	**44**	**38**	56	134	16	30

Table A-4 Dual Column Precision - Pesticides

Sample ID	Compound	Result Column 1	Result Column 2	LOQ	Units	RPD
SED09-09-ME45-1	gamma-BHC (Lindane)	3.4	2.1	1.8	ug/kg	65.2
SED09-10-ME45-1	gamma-BHC (Lindane)	10	3.0	2.5	ug/kg	248

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0888
Analyses/Method:	EPA SW-846 Method 8081B for Organochlorine Pesticides (GC/ECD) and EPA SW-846 Method 8082A for PCBs (GC/ECD)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/05/2016
Reviewed by:	Constance Lapite/Resolution Consultants File Name: R0888_Pest_PCB

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 26, 2016.

Sample ID	Matrix/Sample Type
SD-EB01-ME45	Aqueous Equipment Blank

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8081B, Organochlorine Pesticides by Gas Chromatography* (USEPA, 2007);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8082A, Polychlorinated Biphenyls (PCBs) by Gas Chromatography* (USEPA, 2007);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/ECD Instrument Performance Check
✗	Initial calibration/continuing calibration verification
✓	Laboratory blanks/equipment blanks
✓	Surrogate spike recoveries
NA	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
NA	Field duplicate results
NA	Sulfur Clean-up
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

GC/ECD Instrument Performance Check

Instrument performance check standards were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and method acceptance criteria were met;
- the second-source calibration verification (ICV) method acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) acceptance criteria were met.

Nonconformances are summarized in Attachment A in Tables A-1a and A-1b. Data qualification on the basis of the initial calibration was as follows:

PCBs Initial Calibration

Criteria	Actions[3]	
	Detected Results	Nondetected Results
%RSD > 20% for each peak	J	UJ
r < 0.995 or r^2 < 0.99 for each peak[1]	J[2]	UJ[2]

[1] 6 points required for second order; 7 points required for third order
[2] No guidance in NFG, thus Resolution Consultants professional judgment was used.
[3] In the absence of an ICAL for a particular Aroclor, Resolution Consultants professional judgment was used as follows: If the traditional model of a linear calibration was employed by the laboratory, validation actions were applied to Aroclors with similar retention time ranges. Actions were applied to Aroclors 1016, 1221, 1232, 1242, and 1248 when Aroclor 1016 exceeded ICAL criteria and actions were applied to Aroclors 1248, 1254, and 1260 when Aroclor 1260 exceeded ICAL criteria. If multipoint calibration was performed for the individual Aroclors, the calibration factors for those calibrations were used to evaluate linearity.

Pesticides Initial Calibration

Criteria	Actions	
	Detected Results	Nondetected Results
%RSD > 20%	J	UJ[1]
r < 0.995 or r^2 < 0.99 for each peak[2,3]	J[4]	UJ[4]

[1] NFG recommends professional judgment, thus Resolution Consultants professional judgment was used
[2] 6 points required for second order; 7 points required for third order
[3] For toxaphene and technical chlordane each peak, not the average must meet the criteria
[4] No guidance in NFG, thus Resolution Consultants professional judgment was used

Data qualification on the basis of the ICVs was as follows:

PCBs Second-Source Calibration Verification

Criteria	Actions[1,2]	
	Detected	Nondetected
%D or %Drift[3] >20% for each peak	J	UJ

[1] Actions are applied to positive results reported from the nonconforming column. Do not qualify nondetect results unless both columns are noncompliant.
[2] In the absence of a ICV for a particular Aroclor, Resolution Consultants professional judgment was used to apply validation actions to Aroclors with similar retention time ranges. Actions were applied to Aroclors 1016, 1221, 1232, 1242, and 1248 when Aroclor 1016 exceeded ICV criteria and actions were applied to Aroclors 1248, 1254, and 1260 when Aroclor 1260 exceeded ICV criteria.
[3] No guidance for % drift in NFG, thus Resolution Consultants professional judgment was used.

Pesticides Second-Source Calibration Verification

Criteria	Actions[1]	
	Detected	Nondetected
%D or %Drift >20%	J	UJ

[1] Actions are applied to positive results reported from the nonconforming column. Do not qualify nondetect results unless both columns are noncompliant.

Data qualification on the basis of the CCVs was as follows:

PCBs Continuing Calibration

Criteria	Actions[1,2]	
	Detected	Nondetected
%D or %Drift[3] >20% for each peak	J	UJ

[1] Actions are applied to positive results reported from the nonconforming column. Do not qualify nondetect results unless both columns are noncompliant.
[2] In the absence of a CCV for a particular Aroclor, Resolution Consultants professional judgment was used to apply validation actions to Aroclors with similar retention time ranges. Actions were applied to Aroclors 1016, 1221, 1232, 1242, and 1248 when Aroclor 1016 exceeded CCV criteria and actions were applied to Aroclors 1248, 1254, and 1260 when Aroclor 1260 exceeded CCV criteria.
[3] No guidance for % drift in NFG, thus Resolution Consultants professional judgment was used.

Pesticides Continuing Calibration

Criteria	Actions[1]	
	Detected	Nondetected
%D or %Drift >20%	J	UJ
[1] Actions are applied to positive results reported from the nonconforming column. Do not qualify nondetect results unless both columns are noncompliant.		

Qualified results are shown in Table 1.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in equipment blank sample SD-EB01-ME45.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance.

The surrogate recoveries were within the QC acceptance criteria.

MS/MSD Results

MS/MSD analyses were not performed on samples reported in this SDG. There were no validation actions taken on this basis.

LCS/LCSD Results

The LCS and/or LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

The LCS and/or LCSD %Rs and/or RPDs were within the QC acceptance criteria.

Field Duplicate Results

There were no field duplicate samples submitted with this data set. No validation actions were taken on this basis.

Sulfur Clean-up

Sulfur clean-up was not applicable for aqueous samples.

Sample Results/Reporting Issues

For detected results for both pesticides and PCBs, the laboratory reported the lower of the two values between the two columns. Based on DoD QSM v5.0, positive results should be reported from the primary column. No actions were taken except to note this discrepancy.

All compounds detected at concentrations less than the LOQ but greater than the limit of detection (LOD) were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation

Dual Column Precision

Sample results were reviewed to ensure that the dual column precision RPD criteria were met. Since the equipment blank was nondetect for pesticides and PCBs, precision was deemed acceptable.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SD-EB01-ME45	WG	4,4-DDT	0.0063	0.0063	0.050	UG/L	UJ	c
SD-EB01-ME45	WG	AROCLOR-1016	0.20	0.20	0.50	UG/L	UJ	c
SD-EB01-ME45	WG	AROCLOR-1221	0.10	0.10	0.50	UG/L	UJ	c
SD-EB01-ME45	WG	AROCLOR-1232	0.20	0.20	0.50	UG/L	UJ	c
SD-EB01-ME45	WG	AROCLOR-1242	0.10	0.10	0.50	UG/L	UJ	c
SD-EB01-ME45	WG	AROCLOR-1248	0.10	0.10	0.50	UG/L	UJ	c
SD-EB01-ME45	WG	AROCLOR-1254	0.20	0.20	0.50	UG/L	UJ	c
SD-EB01-ME45	WG	AROCLOR-1260	0.20	0.20	0.50	UG/L	UJ	c

Attachment A

Nonconformance Summary Tables

Table A-1a Pesticides Calibrations

CCV ID	Compound	%D Column 1	%D Column 2	Action	Associated Samples
10/7/16 01:12	4,4'-DDT	-37.6	-42.0	J/UJ	SD-EB01-ME45

Table A-1b PCB Calibrations

CCV ID	Compound	%D Column 1	%D Column 2	Action	Associated Samples
10/19/16 14:52	Aroclor 1016-2	-34.2	-37.8	J/UJ	SD-EB01-ME45
10/19/16 14:52	Aroclor 1016-3	-54.5	-70.3	J/UJ	SD-EB01-ME45
10/19/16 14:52	Aroclor 1260-1	-48.6	-53.1	J/UJ	SD-EB01-ME45
10/19/16 14:52	Aroclor 1260-2	-94.7	-95.2	J/UJ	SD-EB01-ME45
10/19/16 14:52	Aroclor 1260-3	-46.6	-34.0	J/UJ	SD-EB01-ME45

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0837
Analyses/Method:	EPA SW-846 Method 6010C for Metals (ICP-AES) and EPA SW-846 Method 7471A for Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Cathy Larson/Resolution Consultants — Completed on: 12/12/2016
Reviewed by:	Linda Adams/Resolution Consultants — File Name: R0837_Metals

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 12 and 13, 2016.

Sample ID	Matrix/Sample Type
SED09-01-ME45-1	Sediment
SED09-02A-ME45-1	Sediment
SD09-ME45-FD01	Field Duplicate of SED09-02A-ME45-1
SED09-03A-ME45-1	Sediment
SED09-04A-ME45-1	Sediment
SED09-05A-ME45-1	Sediment
SED09-09-ME45-1	Sediment
SED09-10-ME45-1	Sediment
SED09-11B-ME45-1	Sediment

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 6010C, Inductively Coupled Plasma-Atomic Emission Spectrometry* (USEPA, 1996);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 7470A, Mercury in Liquid Waste or SW-846 Method 7471B, Mercury in Solid or Semisolid Waste, as appropriate (Manual Cold-Vapor Technique)* (USEPA, 1996);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);

- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✗	Holding times and sample preservation
✓	Initial calibration/continuing calibration verification
✗	Laboratory blanks/equipment blanks
✓	ICP interference check standards
✗	Matrix spike (MS) results
✗	Laboratory duplicate results
✓	Laboratory control sample (LCS) results
✗	Field duplicate results
✓	ICP serial dilution results
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were estimated and/or negated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

Holding time for mercury is 28 days, and 180 days for other metals. Qualify detected results for mercury as estimated low (J-).

Nonconformances are summarized in Attachment A in Table A-1.

Qualified sample results are shown in Table 1.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- all criteria were met for the calibration curves
- the initial calibration verification (ICV) percent recovery (%R) criteria were met;
- the continuing calibration verification standard (CCV) method percent difference (%Ds) were met; and
- the low level check standards (CRI or CRA) %R criteria were met.

The QC acceptance criteria were met.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Method and equipment rinsate results were reviewed for conformance with the QC acceptance criteria. The equipment blank was reported in R0888. Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

Nonconformances are summarized in Attachment A in Table A-2. Sample results were qualified as follows:

Blank Type	Blank Result	Sample Result	Action for Samples
ICB/CCB (Positive)	≥IDL/DL but ≤ LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
	>LOQ	≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ but < ICB/CCB Result	Qualify at level of Blank Result with a "U" or Qualify result as unusable
		>ICB/CCB but <10x the ICB/CCB result	Qualify as estimated (J)
		≥10x ICB/CCB	No action is taken based on Resolution Consultants professional judgment

Blank Type	Blank Result	Sample Result	Action for Samples
ICB/CCB (Negative)	< (-LOQ)	Nondetect	Use Resolution Consultants professional judgment and qualify as estimated (UJ)
		≥IDL/DL but < LOQ	Use Resolution Consultants professional judgment and qualify results < LOQ as estimated (J-)
		< 10x LOQ	Qualify results >LOQ but <10x LOQ as estimated (J-)
		≥10x LOQ	No action is taken based on Resolution Consultants professional judgment
	≤ -IDL/DL and ≥ -LOQ	Nondetect	Use Resolution Consultants professional judgment, qualify as estimated (UJ)
		≥IDL/DL and <5x |neg. blank|	Use Resolution Consultants professional judgment, qualify results as estimated (J)
PB / EB/ FB (Positive)	> LOQ	≥IDL/DL but ≤ LOQ	Qualify as nondetect (U) at the LOQ
		>LOQ but < 10x Blank Result	Qualify results as unusable
		≥10x Blank Result	No action
	≥IDL/DL but ≤LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
PB (Negative)	< (-LOQ)	< 10x LOQ	Qualify positive results <10x LOQ as estimated (J-) and nondetects as estimated (UJ)
		≥10x LOQ	No action

[1] Establish an action level (AL) at 5x the blank contamination. If sample result is <AL, qualify the reported result with a U.

Qualified sample results are shown in Table 1.

ICP Interference Check Standards

The ICP interference check standards (ICSA, ICSAB) were reviewed for conformance.

All criteria were met for the ICSA and ICSAB.

MS Results

The MS and %Rs were reviewed for conformance with the QC acceptance criteria. MS results were provided for all project metals with the exception of aluminum.

Nonconformances are summarized in Attachment A in Table A-3. A post digestion spike was analyzed for these compounds and recoveries were in control. Data qualification on the basis of MS nonconformances was as follows:

Criteria	Action	
	Detect	Non-detect
Matrix Spike %R < 30% Post-digestion spike %R < 75%	J-	R
Matrix Spike %R < 30% Post-digestion spike %R ≥ 75%	J	UJ
Matrix Spike %R 30-74% Post-digestion Spike %R < 75%	J-	UJ
Matrix Spike %R 30-74% Post-digestion spike %R ≥ 75%	J	UJ
Matrix Spike %R > 125% Post-digestion spike %R > 125%	J+	No qualification

Criteria	Action	
	Detect	Non-detect
Matrix Spike %R > 125% Post-digestion spike %R ≤ 125%	J	No qualification
Matrix Spike %R < 30% No post-digestion spike performed (e.g., not required for Ag)	J-	R
Matrix Spike %R 30-74% No post-digestion spike performed (e.g., not required for Ag)	J-	UJ
Matrix Spike %R 75-125% Post-digestion spike not required	No qualification	No qualification
Matrix Spike %R > 125% No post-digestion spike performed (e.g., not required for Ag)	J+	No qualification

Notes: MS actions apply to all samples of the same matrix. This qualification will also be applied to the results of all samples within a given area of the site, if deemed appropriate.

1. If the sample result (SR) > 4x the spike concentration (S), no action is taken.
2. If any analyte does not meet the %R criteria and a post digestion spike (PDS) analysis was performed, use professional judgement to assess the results.
3. If the MS does not meet %R criteria, qualify all associated samples.

Qualified sample results are shown in Table 1.

Laboratory Duplicate Results

The laboratory duplicate relative percent differences (RPDs) were reviewed for conformance.

Nonconformances are summarized in Attachment A in Table A-4. Data qualification on the basis of laboratory duplicate RPDs was as follows:

Sample Results	RPD	Action (Detect/Nondetect)
≥5x LOQ (both sample and duplicate)	RPD>20%	Estimate (J/UJ)
<5x LOQ (either sample and/or duplicate)	if absolute difference is > the LOQ, estimate (J) positive results <5x the LOQ and nondetects (UJ).	

Qualified sample results are shown in Table 1.

LCS Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria.

The LCS %Rs were within the QC acceptance criteria.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC acceptance criterion of ≤50% for solid matrices and ≤30% for aqueous matrices. This criterion applies if both results were greater than five times the limit of quantitation (LOQ).

Nonconformances are summarized in Attachment A in Table A-5. Data qualification on the basis of field duplicate RPDs was as follows:

Actions: (Based on Resolution Consultants professional judgment)

Criteria	RPD	Action	
		Detected	Nondetected
Sample and duplicate are nondetect results	Not calculable (NC)	No qualification	No qualification
Sample and duplicate results <SLOQ	Not applicable	No qualification	No qualification
Sample and duplicate results ≥5xSLOQ	>30% Aqueous >50% All other sample types	J	Not Applicable
Sample and duplicate results are >SLOQ and <5xSLOQ	>60% Aqueous >100% All other sample types	J	Not Applicable
If sample or duplicate result is =SLOQ and the other is not detected	NC	J	UJ
If sample or duplicate result is <SLOQ and the other is not detected	NC	No qualification	No qualification

Qualified sample results are summarized in Table 1.

ICP Serial Dilution Results

The serial dilution percent differences (%Ds) were reviewed for conformance with the QC acceptance criteria.

The serial dilution %Ds were within the QC acceptance criteria.

Sample Results/Reporting Issues

All analytes detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Resolution Consultants professional judgment was used to qualify sample results with percent solids that were <30%.

All criteria were met.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SD09-ME45-FD01	SE	ANTIMONY	0.86	0.86	1.1	MG/KG	UJ	m
SD09-ME45-FD01	SE	ARSENIC	4.2	0.86	1.1	MG/KG	J	ld
SD09-ME45-FD01	SE	CHROMIUM, TOTAL	18.1	0.21	1.1	MG/KG	J	ld
SD09-ME45-FD01	SE	COPPER	30.2	0.27	1.6	MG/KG	J	ld
SD09-ME45-FD01	SE	IRON	9360	5.3	10.7	MG/KG	J	ld
SD09-ME45-FD01	SE	LEAD	15.8	0.27	0.53	MG/KG	J	ld
SD09-ME45-FD01	SE	ZINC	60.2	0.80	2.7	MG/KG	J	m,fd
SD09-ME45-FD01	SE	MERCURY	0.072	0.033	0.055	MG/KG	J-	h
SED09-01-ME45-1	SE	ANTIMONY	0.95	0.95	0.95	MG/KG	UJ	bl,m
SED09-01-ME45-1	SE	ARSENIC	3.0	0.76	0.95	MG/KG	J	ld
SED09-01-ME45-1	SE	CHROMIUM, TOTAL	9.0	0.19	0.95	MG/KG	J	ld
SED09-01-ME45-1	SE	COPPER	14.7	0.24	1.4	MG/KG	J	ld
SED09-01-ME45-1	SE	IRON	7290	4.8	9.5	MG/KG	J	ld
SED09-01-ME45-1	SE	LEAD	9.7	0.24	0.48	MG/KG	J	ld
SED09-01-ME45-1	SE	ZINC	49.7	0.71	2.4	MG/KG	J	m,fd
SED09-01-ME45-1	SE	MERCURY	0.021	0.027	0.044	MG/KG	J-	h
SED09-02A-ME45-1	SE	ANTIMONY	0.65	0.65	0.82	MG/KG	UJ	m
SED09-02A-ME45-1	SE	ARSENIC	3.2	0.65	0.82	MG/KG	J	ld
SED09-02A-ME45-1	SE	CHROMIUM, TOTAL	14.8	0.16	0.82	MG/KG	J	ld
SED09-02A-ME45-1	SE	COPPER	21.2	0.20	1.2	MG/KG	J	ld
SED09-02A-ME45-1	SE	IRON	8040	4.1	8.2	MG/KG	J	ld
SED09-02A-ME45-1	SE	LEAD	12.5	0.20	0.41	MG/KG	J	ld
SED09-02A-ME45-1	SE	ZINC	33.0	0.61	2.0	MG/KG	J	m,fd
SED09-02A-ME45-1	SE	MERCURY	0.050	0.030	0.050	MG/KG	J-	h
SED09-03A-ME45-1	SE	ANTIMONY	1.2	1.2	1.2	MG/KG	UJ	bl,m
SED09-03A-ME45-1	SE	ARSENIC	2.9	0.96	1.2	MG/KG	J	ld
SED09-03A-ME45-1	SE	CHROMIUM, TOTAL	12.9	0.24	1.2	MG/KG	J	ld
SED09-03A-ME45-1	SE	COPPER	16.9	0.30	1.8	MG/KG	J	ld
SED09-03A-ME45-1	SE	IRON	8250	6.0	12.0	MG/KG	J	ld
SED09-03A-ME45-1	SE	LEAD	11.3	0.30	0.60	MG/KG	J	ld
SED09-03A-ME45-1	SE	ZINC	33.3	0.90	3.0	MG/KG	J	m,fd
SED09-03A-ME45-1	SE	MERCURY	0.047	0.027	0.044	MG/KG	J-	h
SED09-04A-ME45-1	SE	ANTIMONY	0.66	0.66	0.66	MG/KG	UJ	bl,m
SED09-04A-ME45-1	SE	ARSENIC	2.3	0.53	0.66	MG/KG	J	ld
SED09-04A-ME45-1	SE	CHROMIUM, TOTAL	10.0	0.13	0.66	MG/KG	J	ld
SED09-04A-ME45-1	SE	COPPER	11.7	0.17	1.0	MG/KG	J	ld
SED09-04A-ME45-1	SE	IRON	7260	3.3	6.6	MG/KG	J	ld
SED09-04A-ME45-1	SE	LEAD	7.9	0.17	0.33	MG/KG	J	ld
SED09-04A-ME45-1	SE	ZINC	25.3	0.50	1.7	MG/KG	J	m,fd

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
SED09-04A-ME45-1	SE	MERCURY	0.031	0.028	0.046	MG/KG	J-	h
SED09-05A-ME45-1	SE	ANTIMONY	0.80	0.80	1.0	MG/KG	UJ	m
SED09-05A-ME45-1	SE	ARSENIC	3.2	0.80	1.0	MG/KG	J	ld
SED09-05A-ME45-1	SE	CHROMIUM, TOTAL	15.3	0.20	1.0	MG/KG	J	ld
SED09-05A-ME45-1	SE	COPPER	23.7	0.25	1.5	MG/KG	J	ld
SED09-05A-ME45-1	SE	IRON	9040	5.0	10	MG/KG	J	ld
SED09-05A-ME45-1	SE	LEAD	13.3	0.25	0.50	MG/KG	J	ld
SED09-05A-ME45-1	SE	ZINC	47.3	0.75	2.5	MG/KG	J	m,fd
SED09-05A-ME45-1	SE	MERCURY	0.049	0.030	0.049	MG/KG	J-	h
SED09-09-ME45-1	SE	ANTIMONY	1.3	1.3	1.3	MG/KG	UJ	bl,m
SED09-09-ME45-1	SE	ARSENIC	8.2	1.1	1.3	MG/KG	J	ld
SED09-09-ME45-1	SE	CHROMIUM, TOTAL	32.4	0.27	1.3	MG/KG	J	ld
SED09-09-ME45-1	SE	COPPER	80.5	0.33	2.0	MG/KG	J	ld
SED09-09-ME45-1	SE	IRON	24100	6.7	13.4	MG/KG	J	ld
SED09-09-ME45-1	SE	LEAD	53.0	0.33	0.67	MG/KG	J	ld
SED09-09-ME45-1	SE	ZINC	172	1.0	3.3	MG/KG	J	m,fd
SED09-09-ME45-1	SE	MERCURY	0.20	0.045	0.074	MG/KG	J-	h
SED09-10-ME45-1	SE	ANTIMONY	2.7	2.7	2.7	MG/KG	UJ	bl,m
SED09-10-ME45-1	SE	ARSENIC	11.6	2.2	2.7	MG/KG	J	ld
SED09-10-ME45-1	SE	CHROMIUM, TOTAL	23.7	0.54	2.7	MG/KG	J	ld
SED09-10-ME45-1	SE	COPPER	65.5	0.68	4.1	MG/KG	J	ld
SED09-10-ME45-1	SE	IRON	22900	14.0	27.1	MG/KG	J	ld
SED09-10-ME45-1	SE	LEAD	50.0	0.68	1.4	MG/KG	J	ld
SED09-10-ME45-1	SE	ZINC	158	2.0	6.8	MG/KG	J	m,fd
SED09-10-ME45-1	SE	MERCURY	0.15	0.063	0.10	MG/KG	J-	h
SED09-11B-ME45-1	SE	ANTIMONY	0.83	0.83	0.83	MG/KG	UJ	bl,m
SED09-11B-ME45-1	SE	ARSENIC	1.8	0.67	0.83	MG/KG	J	ld
SED09-11B-ME45-1	SE	CHROMIUM, TOTAL	12.8	0.17	0.83	MG/KG	J	ld
SED09-11B-ME45-1	SE	COPPER	19.3	0.21	1.3	MG/KG	J	ld
SED09-11B-ME45-1	SE	IRON	8850	83.0	167	MG/KG	J	ld
SED09-11B-ME45-1	SE	LEAD	13.7	0.21	0.42	MG/KG	J	ld
SED09-11B-ME45-1	SE	ZINC	76.1	0.63	2.1	MG/KG	J	m,fd
SED09-11B-ME45-1	SE	MERCURY	0.021	0.025	0.042	MG/KG	J-	h

Attachment A

Nonconformance Summary Tables

Table A-1 - Hold Times

Sample ID	Days from Sampling to Prep	Days from Prep to Analysis	Days from Sampling to Analysis	Status
SED09-11B-ME45-1	28	1	29	>28 days
SED09-10-ME45-1	29	1	30	>28 days
SED09-09-ME45-1	29	1	30	>28 days
SED09-05A-ME45-1	28	1	29	>28 days
SED09-04A-ME45-1	29	1	30	>28 days
SED09-03A-ME45-1	29	1	30	>28 days
SED09-02A-ME45-1	29	1	30	>28 days
SED09-01-ME45-1	28	1	29	>28 days
SD09-ME45-FD01	29	1	30	>28 days

Table A-2 - Lab Blanks

Blank ID	Compound	Result	LOD	LOQ	Units	Associated Samples
CCB	Antimony	6.5 J	10.0	20.0	ug/L	SED09-03A-ME45-1 SED09-04A-ME45-1 SED09-09-ME45-1 SED09-01-ME45-1 SED09-10-ME45-1 SED09-11B-ME45-1

Table A-3 - Matrix Spikes

Sample ID	Compound	MS % Recovery	Lower Limit	Upper Limit
SED09-01-ME45-1	ZINC	126	82	113
SED09-01-ME45-1	ANTIMONY	55	79	114

Table A-4 - Lab Duplicates

Sample ID	Duplicate ID	Compound	Sample Result	Lab Qual	Duplicate Result	Lab Qual	LOD	LOQ	Units	RPD
SED09-01-ME45-1	SED09-01-ME45-1D	IRON	7290	*	5790	*	4.8	9.5	MG/KG	22.9
		LEAD	9.7	*	7.8	*	0.24	0.48	MG/KG	21.7
		ARSENIC	3	*	1.9	*	0.76	0.95	MG/KG	44.9
		CHROMIUM, TOTAL	9	*	6.7	*	0.19	0.95	MG/KG	29.3
		COPPER	14.7	*	9.8	*	0.24	1.4	MG/KG	40

Table A-5 - Field Duplicates

Sample ID	Duplicate ID	Compound	Sample Result	Qual	Duplicate Result	Qual	LOD	LOQ	Units	RPD
SED09-02A-ME45-1	SD09-ME45-FD01	ZINC	33	N	60.2	N	0.61	2	MG/KG	58.4

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0888
Analyses/Method:	EPA SW-846 Method 6010C for Metals (ICP-AES) EPA SW-846 Method 7470A for Mercury in Liquid Waste (Manual Cold-Vapor Technique) and EPA SW-846 Method 7471B for Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM

Prepared by:	Linda Adams/Resolution Consultants	Completed on: 12/09/2016
Reviewed by:	Cathy Larson/Resolution Consultants	File Name: R0888_Metals

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 26, 2016.

Sample ID	Matrix/Sample Type
SD-EB01-ME45	Equipment blank
SED09-06B-ME45-1	Sediment
SED09-07B-ME45-1	Sediment
SED09-08B-ME45-1	Sediment
SED09-ME45-FD02	Field Duplicate of SED09-08B-ME45-1
SED09-12B-ME45-1	Sediment

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 6010C, Inductively Coupled Plasma-Atomic Emission Spectrometry* (USEPA, 1996);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 7470A, Mercury in Liquid Waste or SW-846 Method 7471B, Mercury in Solid or Semisolid Waste, as appropriate (Manual Cold-Vapor Technique)* (USEPA, 1996);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	Initial calibration/continuing calibration verification
✗	Laboratory blanks/equipment blanks
✓	ICP interference check standards
✗	Matrix spike (MS) results
✗	Laboratory duplicate results
✓	Laboratory control sample (LCS) results
✗	Field duplicate results
✗	ICP serial dilution results
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were estimated and/or negated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- all criteria were met for the calibration curves
- the initial calibration verification (ICV) percent recovery (%R) criteria were met;
- the continuing calibration verification standard (CCV) method percent difference (%Ds) were met; and
- the low level check standards %R criteria were met.

The QC acceptance criteria were met.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Method and equipment rinsate results were reviewed for conformance with the QC acceptance criteria. Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

Nonconformances are summarized in Attachment A in Table A-1. Sample results were qualified as follows:

Blank Type	Blank Result	Sample Result	Action for Samples
ICB/CCB (Positive)	≥IDL/DL but ≤ LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
	>LOQ	≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ but < ICB/CCB Result	Qualify at level of Blank Result with a "U" or Qualify result as unusable
		>ICB/CCB but <10x the ICB/CCB result	Qualify as estimated (J)
		≥10x ICB/CCB	No action is taken based on Resolution Consultants professional judgment

Blank Type	Blank Result	Sample Result	Action for Samples
ICB/CCB (Negative)	< (-LOQ)	Nondetect	Use Resolution Consultants professional judgment and qualify as estimated (UJ)
		≥IDL/DL but < LOQ	Use Resolution Consultants professional judgment and qualify results < LOQ as estimated (J-)
		< 10x LOQ	Qualify results >LOQ but <10x LOQ as estimated (J-)
		≥10x LOQ	No action is taken based on Resolution Consultants professional judgment
	≤ -IDL/DL and ≥ -LOQ	Nondetect	Use Resolution Consultants professional judgment, qualify as estimated (UJ)
		≥IDL/DL and <5x |neg. blank|	Use Resolution Consultants professional judgment, qualify results as estimated (J)
PB / EB/ FB (Positive)	> LOQ	≥IDL/DL but ≤ LOQ	Qualify as nondetect (U) at the LOQ
		>LOQ but < 10x Blank Result	Qualify results as unusable
		≥10x Blank Result	No action
	≥IDL/DL but ≤LOQ	Nondetect	No action
		≥IDL/DL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
PB (Negative)	< (-LOQ)	< 10x LOQ	Qualify positive results <10x LOQ as estimated (J-) and nondetects as estimated (UJ)
		≥10x LOQ	No action

[1] Establish an action level (AL) at 5x the blank contamination. If sample result is <AL, qualify the reported result with a U.

If positive and negative blanks are reported for an analyte in the calibration blanks, pick the highest blank (absolute value) and use the table above with the following modifications:

Blank Type	Blank Results	Actions in Table to Use	Modifications
ICB/CCB	Positive > Negative	ICB/CCB (Positive)	Estimate nondetects (UJ)
	Negative > Positive	ICB/CCB (Negative)	Estimate (J)

Qualified sample results are shown in Table 1.

ICP Interference Check Standards

The ICP interference check standards (ICSA, ICSAB) were reviewed for conformance.

All criteria were met for the ICSA and ICSAB.

MS Results

The MS %Rs were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification on the basis of MS nonconformances was as follows:

Criteria	Action	
	Detect	Non-detect
Matrix Spike %R < 30% Post-digestion spike %R < 75%	J-	R
Matrix Spike %R < 30% Post-digestion spike %R ≥ 75%	J	UJ
Matrix Spike %R 30-74% Post-digestion Spike %R < 75%	J-	UJ
Matrix Spike %R 30-74% Post-digestion spike %R ≥ 75%	J	UJ
Matrix Spike %R > 125% Post-digestion spike %R > 125%	J+	No qualification
Matrix Spike %R > 125% Post-digestion spike %R ≤ 125%	J	No qualification
Matrix Spike %R < 30% No post-digestion spike performed (e.g., not required for Ag)	J-	R
Matrix Spike %R 30-74% No post-digestion spike performed (e.g., not required for Ag)	J-	UJ
Matrix Spike %R 75-125% Post-digestion spike not required	No qualification	No qualification
Matrix Spike %R > 125% No post-digestion spike performed (e.g., not required for Ag)	J+	No qualification

Notes: MS actions apply to all samples of the same matrix. This qualification will also be applied to the results of all samples within a given area of the site, if deemed appropriate.

1. If the sample result (SR) > 4x the spike concentration (S), no action is taken.
2. If any analyte does not meet the %R criteria and a post digestion spike (PDS) analysis was performed, use professional judgement to assess the results.
3. If the MS does not meet %R criteria, qualify all associated samples.

Apply actions to all samples of the same matrix.

Qualified sample results are shown in Table 1.

Laboratory Duplicate Results

The laboratory duplicate relative percent differences (RPDs) were reviewed for conformance.

Nonconformances are summarized in Attachment A in Table A-3. Data qualification on the basis of laboratory duplicate RPDs was as follows:

Sample Results	RPD	Action (Detect/Nondetect)
≥5x LOQ (both sample and duplicate)	RPD>20%	Estimate (J/UJ)
<5x LOQ (either sample and/or duplicate)	if absolute difference is > the LOQ, estimate (J) positive results <5x the LOQ and nondetects (UJ).	

Actions apply to all samples of the same matrix.

Qualified sample results are shown in Table 1.

LCS Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria.

The LCS %Rs were within the QC acceptance criteria.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC acceptance criterion of ≤50% for solid matrices and ≤30% for aqueous matrices. This criterion applies if both results were greater than 5 times the limit of quantitation (LOQ).

Nonconformances are summarized in Attachment A in Table A-4. Data qualification on the basis of field duplicate RPDs was as follows:

Actions: (Based on Resolution Consultants professional judgment)

Criteria	RPD	Action	
		Detected	Nondetected
Sample and duplicate are nondetect results	Not calculable (NC)	No qualification	No qualification
Sample and duplicate results ≤5x LOQ	Not applicable	No qualification	No qualification
Sample and duplicate results >5x LOQ	>30% Aqueous >50% All other sample types	J	Not Applicable
Sample and duplicate results are >5x LOQ and ≤5x LOQ	>60% Aqueous >100% All other sample types	J	Not Applicable
If sample or duplicate result is > 5x LOQ and the other is not detected	NC	J	UJ
If sample or duplicate result is ≤ 5x LOQ and the other is not detected	NC	No qualification	No qualification

Actions apply to all samples of the same matrix.

Qualified sample results are summarized in Table 1.

ICP Serial Dilution Results

The serial dilution percent differences (%Ds) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-5. Data qualification on the basis of serial dilution %Ds was as follows:

%D	Qualify Results
>10%	Estimate (J) detected results

Apply actions to all samples in the same preparation batch.

Qualified sample results are shown in Table 1.

Sample Results/Reporting Issues

All analytes detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Resolution Consultants professional judgment was used to qualify sample results with percent solids that were <30%.

All criteria were met.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	Units	Validation Qualifiers	Validation Reason
SD-EB01-ME45	WQ	ALUMINUM	100	100	UG/L	UJ	nb
SD-EB01-ME45	WQ	VANADIUM	4.0	4.0	UG/L	U	bl
SD-EB01-ME45	WQ	CALCIUM	300	300	UG/L	UJ	nb
SD-EB01-ME45	WQ	ANTIMONY	10.0	10.0	UG/L	U	bl
SD-EB01-ME45	WQ	BARIUM	3.0	3.0	UG/L	U	bl
SD-EB01-ME45	WQ	COBALT	2.0	2.0	UG/L	U	bl
SD-EB01-ME45	WQ	SODIUM	100	100	UG/L	UJ	nb
SED09-06B-ME45-1	SE	IRON	16500	6.4	MG/KG	J	y
SED09-06B-ME45-1	SE	ZINC	120	0.96	MG/KG	J	ld,fd
SED09-06B-ME45-1	SE	ANTIMONY	1.0	1.0	MG/KG	UJ	bl,m
SED09-06B-ME45-1	SE	LEAD	33.2	0.32	MG/KG	J	ld,fd
SED09-06B-ME45-1	SE	NICKEL	13.2	0.51	MG/KG	J	fd
SED09-07B-ME45-1	SE	IRON	9740	4.0	MG/KG	J	y
SED09-07B-ME45-1	SE	ZINC	60.6	0.60	MG/KG	J	ld,fd
SED09-07B-ME45-1	SE	LEAD	17.7	0.20	MG/KG	J	ld,fd
SED09-07B-ME45-1	SE	NICKEL	7.7	0.32	MG/KG	J	fd
SED09-07B-ME45-1	SE	ANTIMONY	0.63	0.63	MG/KG	UJ	m
SED09-08B-ME45-1	SE	IRON	9660	5.3	MG/KG	J	y
SED09-08B-ME45-1	SE	ANTIMONY	0.86	0.86	MG/KG	UJ	m
SED09-08B-ME45-1	SE	ZINC	192	0.80	MG/KG	J	ld,fd
SED09-08B-ME45-1	SE	LEAD	43.0	0.27	MG/KG	J	ld,fd
SED09-08B-ME45-1	SE	NICKEL	25.4	0.43	MG/KG	J	fd
SED09-12B-ME45-1	SE	IRON	10600	4.4	MG/KG	J	y
SED09-12B-ME45-1	SE	LEAD	16.0	0.22	MG/KG	J	ld,y,fd
SED09-12B-ME45-1	SE	NICKEL	8.1	0.35	MG/KG	J	fd
SED09-12B-ME45-1	SE	ANTIMONY	0.70	0.70	MG/KG	UJ	m
SED09-12B-ME45-1	SE	ZINC	60.6	0.66	MG/KG	J	ld,fd
SED09-ME45-FD02	SE	IRON	13100	5.0	MG/KG	J	y
SED09-ME45-FD02	SE	LEAD	23.9	0.25	MG/KG	J	ld,fd
SED09-ME45-FD02	SE	NICKEL	10.7	0.40	MG/KG	J	fd
SED09-ME45-FD02	SE	ANTIMONY	0.81	0.81	MG/KG	UJ	m
SED09-ME45-FD02	SE	ZINC	115	0.76	MG/KG	J	ld,fd

Attachment A

Nonconformance Summary Tables

Table A-1 - Lab Blanks

Blank ID	Compound	Result	LOD	LOQ	Units	Associated Samples
PBW--MB-85654	SODIUM	-22	100	1000	UG/L	SD-EB01-ME45
CCB	ALUMINUM	-11	100	200	UG/L	
CCB	CALCIUM	-52	300	800	UG/L	
ICB	ANTIMONY	8.3	10.0	20.0	UG/L	
ICB	BARIUM	2.0	3.0	200	UG/L	
ICB	BERYLLIUM	0.063	1.0	5.0	UG/L	
CCB	COBALT	0.75	2.0	50.0	UG/L	
CCB	MAGNESIUM	21.2	200	500	UG/L	
CCB	MANGANESE	0.61	30.0	50.0	UG/L	
CCB	THALLIUM	4.0	10.0	20.0	UG/L	
ICB	VANADIUM	6.9	4.0	50.0	UG/L	
ICB	ZINC	4.1	15.0	50.0	UG/L	
PBS--MB-85655	ANTIMONY	0.90	0.80	1.0	MG/KG	SED09-06B-ME45-1
CCB	BERYLLIUM	0.15	1.0	5.0	UG/L	SED09-07B-ME45-1
PBS--MB-85655	CHROMIUM, TOTAL	0.024	0.20	1.0	MG/KG	SED09-08B-ME45-1
ICB	MANGANESE	0.75	30.0	50.0	UG/L	SED09-12B-ME45-1
						SED09-ME45-FD02

Table A-2 - Matrix Spikes

Sample ID	Compound	MS % Recovery	Lower Limit	Upper Limit
SED09-12B-ME45-1	ANTIMONY	47	79	114

Table A-3 - Lab Duplicates

Sample ID	Duplicate ID	Compound	Sample Result	Duplicate Result	LOQ	DL	Units	RPD
SED09-12B-ME45-1	SED09-12B-ME45-1D	LEAD	16.0	25.7	0.44	0.15	MG/KG	46
SED09-12B-ME45-1	SED09-12B-ME45-1D	ZINC	60.6	422	2.2	0.16	MG/KG	150

Table A-4 - Field Duplicates

Sample ID	Duplicate ID	Compound	Sample Result	Duplicate Result	LOD	LOQ	Units	RPD
SED09-08B-ME45-1	SED09-ME45-FD02	LEAD	43	23.9	0.27	0.53	MG/KG	57.1
SED09-08B-ME45-1	SED09-ME45-FD02	NICKEL	25.4	10.7	0.43	2.7	MG/KG	81.4
SED09-08B-ME45-1	SED09-ME45-FD02	ZINC	192	115	0.8	2.7	MG/KG	50.2

Table A-5 – Serial Dilutions

Sample ID	Compound	Sample Result	Serial Dilution Result	LOD	LOQ	Units	RPD
SED09-12B-ME45-1	IRON	10600	12200	4.4	8.8	MG/KG	15

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0837
Analyses/Method:	Standard Methods 4500_S_D for Sulfide (Methylene Blue)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/06/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0837_Sulfide

SUMMARY

The sample listed below was collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 13, 2016.

Sample ID	Matrix/Sample Type
SED09-11B-ME45-1	Sediment

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Standard Methods For The Examination Of Water And Wastewater*;
- *EPA New England Environmental Data Review Program Guidance* (April 2013)*;*
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters:

- ✓ Data completeness (chain-of-custody [COC])/sample integrity
- ✓ Holding times and sample preservation
- ✓ Initial calibration/continuing calibration verification
- ✓ Laboratory blanks/equipment blanks

- ✓ Matrix spike (MS) results
- ✓ Laboratory Duplicate Results
- ✓ Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
- ✓ Field duplicates
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no results were qualified based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. There were no results qualified on the basis of this data review.

RESULTS

Data Completeness (COC)/Sample Integrity

The laboratory report was reviewed and found to be complete. No sample integrity issues were noted.

Holding Times and Sample Preservation

Sample preservation requirements and preparation/analysis holding times were met and/or qualification of the data was not required.

Initial Calibration/Continuing Calibration Verification

Initial and continuing calibration criteria were met and/or qualification of the data was not required.

Laboratory Blanks/Equipment Blanks

Laboratory and equipment blanks were free of contamination and/or qualification of data due to blank contamination was not required. The equipment blank, SD-EB01-ME45, was reported in SDG R0888 and was free of contamination.

MS Results

MS analysis was not performed on the sample in this data set. MS results for sediment samples from this site, reported in SDG R0838, were in control and no validation action was taken.

Laboratory Duplicate Results

Laboratory duplicate analyses were not performed on the sample in this data set. Laboratory duplicate results for sediment samples from this site, reported in SDG R0838, were in control and no validation action was taken.

LCS/LCSD Results

LCS and/or LCSD criteria were met and/or qualification of the data was not required.

Field Duplicate Results

Field duplicates were not submitted with this data set. There were no data validation actions made on this basis.

Sample Results/Reporting Issues

No other issues were narrated and percent solids were >30% for all sediment samples.

QUALIFICATION ACTIONS

No sample results were qualified as a result of this data review.

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0888
Analyses/Method:	Standard Methods 4500_S_D for Sulfide (Methylene Blue)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 12/06/2016
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0888_Sulfide

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 26, 2016.

Sample ID	Matrix/Sample Type
SD-EB01-ME45	Aqueous Equipment Blank
SED09-06B-ME45-1	Sediment
SED09-07B-ME45-1	Sediment
SED09-08B-ME45-1	Sediment
SED09-12B-ME45-1	Sediment
SED09-ME45-FD02	Field duplicate of SED09-08B-ME45-1

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Standard Methods For The Examination Of Water And Wastewater*;
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters:

- ✓ Data completeness (chain-of-custody [COC])/sample integrity
- ✓ Holding times and sample preservation
- ✓ Initial calibration/continuing calibration verification
- ✓ Laboratory blanks/equipment blanks
- ✓ Matrix spike (MS)/matrix duplicate (MD) and/or matrix spike duplicate (MSD) results
- ✓ Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
- ✓ Field duplicate results
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no results were qualified based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. There were no results qualified on the basis of this data review.

RESULTS

Data Completeness (COC)/Sample Integrity

The laboratory report was reviewed and found to be complete. No sample integrity issues were noted.

Holding Times and Sample Preservation

Sample preservation requirements and preparation/analysis holding times were met and/or qualification of the data was not required.

Initial Calibration/Continuing Calibration Verification

Initial and continuing calibration criteria were met and/or qualification of the data was not required.

Laboratory Blanks/Equipment Blanks

Laboratory and field blanks were free of contamination and/or qualification of data due to blank contamination was not required.

Matrix Spike (MS)/Matrix Duplicate (MD) and/or Matrix Spike Duplicate (MSD) Results

All MS/MD/MSD criteria were met and/or qualification of the data was not required.

Laboratory Control Sample (LCS)/Laboratory Control Sample Duplicate (LCSD) Results

LCS and/or LCSD criteria were met and/or qualification of the data was not required.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results are greater than five times the quantitation limit (QL).

The results for sulfide in the field duplicate pair were nondetect; therefore, precision was deemed acceptable.

Sample Results/Reporting Issues

No other issues were narrated and percent solids were > 30% for all sediment samples.

QUALIFICATION ACTIONS

No sample results were qualified as a result of this data review.

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R1136
Analyses/Method:	EPA SW-846 Method 8270C-SIM for SVOCs (GC/MS) and EPA SW-846 Method 8270D for SVOCs (GC/MS)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 01/31/2017
Reviewed by:	Linda Adams/Resolution Consultants File Name: R1136_SVOC_PAH

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on December 13 and 14, 2016.

Sample ID	Matrix/Sample Type
BLENDER BLANK_121516	Equipment blank
ET09-03-ME45R-1	Tissue
ET09-04-ME45R-1	Tissue
ET09-05-ME45R-1	Tissue
ET09-ME45R-FD01	Field Duplicate of ET09-05-ME45R-1
ET09-06-ME45R-1	Tissue
ET09-07-ME45R-1	Tissue
ET09-08-ME45R-1	Tissue
ET09-09-ME45R-1	Tissue
ET09-10-ME45R-1	Tissue
ET09-11-ME45R-1	Tissue
ET09-12-ME45R-1	Tissue

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8270D and 8270D-SIM, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry/Selected Ion Monitoring* (USEPA, 2014);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);

- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters:

✓ Data completeness (chain-of-custody [COC])/sample integrity
✓ Holding times and sample preservation
✓ Gas Chromatography/Mass Spectrometry (GC/MS) Performance Checks
✗ Initial calibration/continuing calibration verification
✓ Laboratory blanks/equipment blanks
✗ Surrogate spike recoveries
✗ Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✗ Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✓ Field duplicate results
✓ Internal standard results
✓ Sample results/reporting issues

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

It was noted during review that the SAP SVOC list of analytes included N-Nitrosodimethylamine. This analyte was not reported by the laboratory. Also, the compound 2,2'-oxybis (1-chloropropane) was reported by the laboratory, but this compound was not listed in the SAP. No actions were taken except to note these discrepancies.

Sample ET09-11-ME45R-1 was listed twice on the COC. The sample ID listed on the sample container for sample ET09-11-ME45R-1 which was collected on 12/14/16 identified the sample as ET09-04-ME45R-1. The sample collected on 12/14/16 was logged in by the laboratory using the sample ID that was noted on the sample container.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the decafluorotriphenylphosphine (DFTPP) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the DFTPP tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

Nonconformances are summarized in Attachment A in Tables A-1a and A-1b. Data qualification to the analytes associated with the specific ICAL and/or CCV was as follows:

ICAL and CCV Response Factor Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results[2]
RF<minimum RF (Table 4 method 8270D)	J	R[1]
[1]Resolution Consultants professional judgment may be used to either raise reporting level or to estimate reporting limit if low standard response is adequate.		
[2]Sample results qualified as not detected (U) due to blank contamination are not rejected, but estimated (UJ).		

ICAL Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected
%RSD > 15% and quantitation based on mean RF	J	UJ
r or r^2 < 0.99 and quantitation based on linear regression	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

ICV Recovery Nonconformances

Criteria	Actions*	
	Detected Results	Nondetected Results
Recovery > 120%	J+	No qualification
Recovery < 80%	J-	UJ
* No guidance in NFG, thus Resolution Consultants professional judgment was used		

CCV Linearity Nonconformances

Criteria	Actions	
	Detected Results	Nondetected Results
%D > 20% (except ending CCV >50%[1])	J	UJ
%Drift >20%	J*	UJ*
* No guidance in NFG, thus Resolution Consultants professional judgment was used [1]DoD QSM 5.0 criteria		

Qualified sample results are shown in Table 1.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Tables A-2a and A-2b. Data qualification on the basis of surrogate recovery nonconformances was as follows:

Actions: (Based on NFG 2016, except as noted)

Actions are only taken when one surrogate %R is <10% or when 2 or more surrogates in one fraction are outside limits.

Actions apply to only the compounds in the affected fraction, *i.e.* if 2 acid surrogate %Rs are below the LL, then all acid compounds will be qualified as indicated in the table.

Criteria	Action	
	Detected Results	Nondetected Results
%R> upper limit (UL)	J+	No qualification
10% ≤ %R < lower limit (LL)[1]	J-	UJ
%R <10% (sample dilution is not a factor)[1]	J-	R
%R <10% (sample dilution is a factor)[1,2]	No qualification	No qualification

[1] NFG 2016 does not list a minimum limit. Based on Region 1 and Resolution Consultants professional judgment, a minimum limit of 10% was used.

[2] If there is no surrogate information due to dilution then estimate (J/UJ) all results. However, in cases where there is surrogate information from multiple runs then base the surrogate actions on the least diluted run.

Qualified sample results are shown in Table 1.

MS/MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-3a and A-3b. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Actions: (Based on NFG 2016, Region 1, and Resolution Consultants professional judgment)

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R> UL	J+	No qualification
10% ≤ %R < LL*	J-	UJ
%R <10%*	J-	R
%RPD > UL	J	No qualification

* NFG 2016 does not list a minimum limit. Based on Region 1 and Resolution Consultants professional judgment, a minimum limit of 10% was used.

Notes:

1. Based on NFG 2016 SVOC guidance, Resolution Consultants professional judgment is used to reject (R) non-detects in all associated samples for any analyte with < 10% recovery. Also, Resolution Consultants professional judgment is used to estimate (UJ) rather the reject (R) sample results previously negated (U) on the basis of blank contamination.

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS/LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria. For SVOCs, control limits in the QSM were used by the laboratory and for the 8270D SIM method, the laboratory presented laboratory control limits. Results analyzed by 8270D SIM were also compared to the QSM criteria.

Nonconformances are summarized in Attachment A in Table A-4. Data qualification to the analytes associated with the specific LCS %Rs or RPDs was as follows:

Criteria[1,2]	Action[3]	
	Detected Compounds	Nondetected Compounds
%R or RPD > UL	J+	No qualification
10%≥%R < LL	J-	UJ
%R < 10%	J-	R
[1] In the absence of NFG 2016 guidance for LCS results, NFG 2016 MS/MSD guidance was applied with Resolution Consultants professional judgment. [2] NFG 2016 MS/MSD does not list a minimum limit. Based on Region 1 and Resolution Consultants professional judgment, a minimum limit of 10% was used.		
[3]If the %R of more than half of the analytes are not within limits, then reject (R) nondetects for the analytes with <10% recovery and estimate (J/UJ) all other analyte(s) in the associated samples.		

Qualified sample results are shown in Table 1.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than five times the limit of quantitation (LOQ).

All QC acceptance criteria were met and/or qualification of the data was not required.

Internal Standard Results

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria.

All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

All analytes reported using method 8270D SIM were also reported using 8270D. The reporting limit is lower for the SIM method; therefore duplicate results for 8270D were noted as “not reported” in the database.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
BLENDER BLANK_121516	WQ	2,4-DINITROPHENOL	10	10	20	UG/L	UJ	c
BLENDER BLANK_121516	WQ	4,6-DINITRO-2-METHYLPHENOL	2.0	2.0	20	UG/L	UJ	c
BLENDER BLANK_121516	WQ	BIS(2-ETHYLHEXYL)PHTHALATE	5.0	5.0	10	UG/L	UJ	c
BLENDER BLANK_121516	WQ	DI-N-BUTYLPHTHALATE	3.0	2.0	10	UG/L	J	lp
BLENDER BLANK_121516	WQ	DI-N-OCTYLPHTHALATE	2.0	2.0	10	UG/L	UJ	c
BLENDER BLANK_121516	WQ	HEXACHLOROCYCLOPENTADIENE	2.0	2.0	10	UG/L	UJ	c
BLENDER BLANK_121516	WQ	ANTHRACENE	0.10	0.10	0.10	UG/L	UJ	c
BLENDER BLANK_121516	WQ	DIBENZ[A,H]ANTHRACENE	0.10	0.10	0.10	UG/L	UJ	c
ET09-03-ME45R-1	TX	1,2,4-TRICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	1,2-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	1,3-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	1,4-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	2,2'-OXYBIS(1-CHLOROPROPANE)	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	2,4-DIMETHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-03-ME45R-1	TX	2,4-DINITROPHENOL	330	330	670	UG/KG	UJ	c
ET09-03-ME45R-1	TX	2,4-DINITROTOLUENE	130	130	330	UG/KG	UJ	l,s
ET09-03-ME45R-1	TX	2,6-DINITROTOLUENE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	2-CHLORONAPHTHALENE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	2-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-03-ME45R-1	TX	3,3-DICHLOROBENZIDINE	130	130	330	UG/KG	UJ	c,s
ET09-03-ME45R-1	TX	3-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-03-ME45R-1	TX	4,6-DINITRO-2-METHYLPHENOL	130	130	670	UG/KG	UJ	c,l
ET09-03-ME45R-1	TX	4-BROMOPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	4-CHLORO-3-METHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-03-ME45R-1	TX	4-CHLOROANILINE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	4-CHLOROPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	4-METHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-03-ME45R-1	TX	4-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-03-ME45R-1	TX	BIS(2-CHLOROETHOXY)METHANE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	BIS(2-CHLOROETHYL)ETHER	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	BIS(2-ETHYLHEXYL)PHTHALATE	170	130	330	UG/KG	J-	l,s
ET09-03-ME45R-1	TX	BUTYLBENZYLPHTHALATE	130	130	330	UG/KG	UJ	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-03-ME45R-1	TX	CARBAZOLE	130	130	330	UG/KG	UJ	l,s
ET09-03-ME45R-1	TX	DIBENZOFURAN	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	DIETHYLPHTHALATE	130	130	330	UG/KG	UJ	l,s
ET09-03-ME45R-1	TX	DIMETHYL PHTHALATE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	DI-N-BUTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	DI-N-OCTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	HEXACHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	HEXACHLOROBUTADIENE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	HEXACHLOROCYCLOPENTADIENE	330	330	330	UG/KG	UJ	c,l,s
ET09-03-ME45R-1	TX	HEXACHLOROETHANE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	ISOPHORONE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	NITROBENZENE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	N-NITROSODINPROPYLAMINE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	N-NITROSODIPHENYLAMINE	130	130	330	UG/KG	UJ	s
ET09-03-ME45R-1	TX	PENTACHLOROPHENOL	330	330	670	UG/KG	UJ	c,l
ET09-03-ME45R-1	TX	ANTHRACENE	6.5	6.5	6.5	UG/KG	UJ	c
ET09-03-ME45R-1	TX	DIBENZ[A,H]ANTHRACENE	6.5	6.5	6.5	UG/KG	UJ	c
ET09-04-ME45R-1	TX	2,4-DINITROPHENOL	320	320	660	UG/KG	UJ	c
ET09-04-ME45R-1	TX	4,6-DINITRO-2-METHYLPHENOL	130	130	660	UG/KG	UJ	c
ET09-04-ME45R-1	TX	BIS(2-ETHYLHEXYL)PHTHALATE	130	130	320	UG/KG	UJ	c
ET09-04-ME45R-1	TX	DI-N-OCTYLPHTHALATE	130	130	320	UG/KG	UJ	c
ET09-04-ME45R-1	TX	HEXACHLOROCYCLOPENTADIENE	320	320	320	UG/KG	UJ	c
ET09-04-ME45R-1	TX	ANTHRACENE	6.5	6.5	6.5	UG/KG	UJ	c
ET09-04-ME45R-1	TX	DIBENZ[A,H]ANTHRACENE	6.5	6.5	6.5	UG/KG	UJ	c
ET09-05-ME45R-1	TX	1,2,4-TRICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	1,2-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	1,3-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	1,4-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	2,2'-OXYBIS(1-CHLOROPROPANE)	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	2,4-DIMETHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-05-ME45R-1	TX	2,4-DINITROPHENOL	330	330	670	UG/KG	UJ	c
ET09-05-ME45R-1	TX	2,4-DINITROTOLUENE	130	130	330	UG/KG	UJ	l,s
ET09-05-ME45R-1	TX	2,6-DINITROTOLUENE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	2-CHLORONAPHTHALENE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	2-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-05-ME45R-1	TX	3,3-DICHLOROBENZIDINE	130	130	330	UG/KG	UJ	c,s
ET09-05-ME45R-1	TX	3-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-05-ME45R-1	TX	4,6-DINITRO-2-METHYLPHENOL	130	130	670	UG/KG	UJ	c,l
ET09-05-ME45R-1	TX	4-BROMOPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	4-CHLORO-3-METHYLPHENOL	130	130	330	UG/KG	UJ	l

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-05-ME45R-1	TX	4-CHLOROANILINE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	4-CHLOROPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	4-METHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-05-ME45R-1	TX	4-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-05-ME45R-1	TX	BIS(2-CHLOROETHOXY)METHANE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	BIS(2-CHLOROETHYL)ETHER	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	BIS(2-ETHYLHEXYL)PHTHALATE	130	130	330	UG/KG	UJ	l,s
ET09-05-ME45R-1	TX	BUTYLBENZYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	CARBAZOLE	130	130	330	UG/KG	UJ	l,s
ET09-05-ME45R-1	TX	DIBENZOFURAN	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	DIETHYLPHTHALATE	130	130	330	UG/KG	UJ	l,s
ET09-05-ME45R-1	TX	DIMETHYL PHTHALATE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	DI-N-BUTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	DI-N-OCTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	HEXACHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	HEXACHLOROBUTADIENE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	HEXACHLOROCYCLOPENTADIENE	330	330	330	UG/KG	UJ	c,l,s
ET09-05-ME45R-1	TX	HEXACHLOROETHANE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	ISOPHORONE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	NITROBENZENE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	N-NITROSODINPROPYLAMINE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	N-NITROSODIPHENYLAMINE	130	130	330	UG/KG	UJ	s
ET09-05-ME45R-1	TX	PENTACHLOROPHENOL	330	330	670	UG/KG	UJ	c,l
ET09-05-ME45R-1	TX	2-METHYLNAPHTHALENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	ACENAPHTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	ACENAPHTHYLENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,s
ET09-05-ME45R-1	TX	BENZO[A]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	BENZO[A]PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	BENZO[B]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	BENZO[G,H,I]PERYLENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	BENZO[K]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	CHRYSENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	DIBENZ[A,H]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,s
ET09-05-ME45R-1	TX	FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	FLUORENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	INDENO[1,2,3-CD]PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	NAPHTHALENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-05-ME45R-1	TX	PHENANTHRENE	6.6	6.6	6.6	UG/KG	UJ	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-05-ME45R-1	TX	PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-06-ME45R-1	TX	2,4-DINITROPHENOL	330	330	670	UG/KG	UJ	c
ET09-06-ME45R-1	TX	4,6-DINITRO-2-METHYLPHENOL	130	130	670	UG/KG	UJ	c
ET09-06-ME45R-1	TX	BIS(2-ETHYLHEXYL)PHTHALATE	130	130	330	UG/KG	UJ	c
ET09-06-ME45R-1	TX	DI-N-OCTYLPHTHALATE	130	130	330	UG/KG	UJ	c
ET09-06-ME45R-1	TX	HEXACHLOROCYCLOPENTADIENE	330	330	330	UG/KG	UJ	c
ET09-06-ME45R-1	TX	ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c
ET09-06-ME45R-1	TX	DIBENZ[A,H]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c
ET09-07-ME45R-1	TX	1,2,4-TRICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	1,2-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	1,3-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	1,4-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	2,2'-OXYBIS(1-CHLOROPROPANE)	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	2,4-DIMETHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-07-ME45R-1	TX	2,4-DINITROPHENOL	330	330	660	UG/KG	UJ	c
ET09-07-ME45R-1	TX	2,4-DINITROTOLUENE	130	130	330	UG/KG	UJ	l,s
ET09-07-ME45R-1	TX	2,6-DINITROTOLUENE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	2-CHLORONAPHTHALENE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	2-NITROANILINE	130	130	660	UG/KG	UJ	s
ET09-07-ME45R-1	TX	3,3-DICHLOROBENZIDINE	130	130	330	UG/KG	UJ	c,s
ET09-07-ME45R-1	TX	3-NITROANILINE	130	130	660	UG/KG	UJ	s
ET09-07-ME45R-1	TX	4,6-DINITRO-2-METHYLPHENOL	130	130	660	UG/KG	UJ	c,l
ET09-07-ME45R-1	TX	4-BROMOPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	4-CHLORO-3-METHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-07-ME45R-1	TX	4-CHLOROANILINE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	4-CHLOROPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	4-METHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-07-ME45R-1	TX	4-NITROANILINE	130	130	660	UG/KG	UJ	s
ET09-07-ME45R-1	TX	BIS(2-CHLOROETHOXY)METHANE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	BIS(2-CHLOROETHYL)ETHER	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	BIS(2-ETHYLHEXYL)PHTHALATE	130	130	330	UG/KG	UJ	l,s
ET09-07-ME45R-1	TX	BUTYLBENZYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	CARBAZOLE	130	130	330	UG/KG	UJ	l,s
ET09-07-ME45R-1	TX	DIBENZOFURAN	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	DIETHYLPHTHALATE	130	130	330	UG/KG	UJ	l,s
ET09-07-ME45R-1	TX	DIMETHYL PHTHALATE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	DI-N-BUTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	DI-N-OCTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	HEXACHLOROBENZENE	130	130	330	UG/KG	UJ	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-07-ME45R-1	TX	HEXACHLOROBUTADIENE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	HEXACHLOROCYCLOPENTADIENE	330	330	330	UG/KG	UJ	c,l,s
ET09-07-ME45R-1	TX	HEXACHLOROETHANE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	ISOPHORONE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	NITROBENZENE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	N-NITROSODINPROPYLAMINE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	N-NITROSODIPHENYLAMINE	130	130	330	UG/KG	UJ	s
ET09-07-ME45R-1	TX	PENTACHLOROPHENOL	330	330	660	UG/KG	UJ	c,l
ET09-07-ME45R-1	TX	2-METHYLNAPHTHALENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	ACENAPHTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	ACENAPHTHYLENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,s
ET09-07-ME45R-1	TX	BENZO[A]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	BENZO[A]PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	BENZO[B]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	BENZO[G,H,I]PERYLENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	BENZO[K]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	CHRYSENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	DIBENZ[A,H]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,s
ET09-07-ME45R-1	TX	FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	FLUORENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	INDENO[1,2,3-CD]PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-07-ME45R-1	TX	NAPHTHALENE	8.8	6.6	6.6	UG/KG	J-	s
ET09-07-ME45R-1	TX	PHENANTHRENE	8.8	6.6	6.6	UG/KG	J-	s
ET09-07-ME45R-1	TX	PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	1,2,4-TRICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	1,2-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	1,3-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	1,4-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	2,2'-OXYBIS(1-CHLOROPROPANE)	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	2,4-DIMETHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-08-ME45R-1	TX	2,4-DINITROPHENOL	330	330	670	UG/KG	UJ	c
ET09-08-ME45R-1	TX	2,4-DINITROTOLUENE	130	130	330	UG/KG	UJ	l,s
ET09-08-ME45R-1	TX	2,6-DINITROTOLUENE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	2-CHLORONAPHTHALENE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	2-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-08-ME45R-1	TX	3,3-DICHLOROBENZIDINE	130	130	330	UG/KG	UJ	c,s
ET09-08-ME45R-1	TX	3-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-08-ME45R-1	TX	4,6-DINITRO-2-METHYLPHENOL	130	130	670	UG/KG	UJ	c,l
ET09-08-ME45R-1	TX	4-BROMOPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-08-ME45R-1	TX	4-CHLORO-3-METHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-08-ME45R-1	TX	4-CHLOROANILINE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	4-CHLOROPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	4-METHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-08-ME45R-1	TX	4-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-08-ME45R-1	TX	BIS(2-CHLOROETHOXY)METHANE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	BIS(2-CHLOROETHYL)ETHER	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	BIS(2-ETHYLHEXYL)PHTHALATE	130	130	330	UG/KG	UJ	l,s
ET09-08-ME45R-1	TX	BUTYLBENZYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	CARBAZOLE	130	130	330	UG/KG	UJ	l,s
ET09-08-ME45R-1	TX	DIBENZOFURAN	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	DIETHYLPHTHALATE	130	130	330	UG/KG	UJ	l,s
ET09-08-ME45R-1	TX	DIMETHYL PHTHALATE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	DI-N-BUTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	DI-N-OCTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	HEXACHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	HEXACHLOROBUTADIENE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	HEXACHLOROCYCLOPENTADIENE	330	330	330	UG/KG	UJ	c,l,s
ET09-08-ME45R-1	TX	HEXACHLOROETHANE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	ISOPHORONE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	NITROBENZENE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	N-NITROSODINPROPYLAMINE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	N-NITROSODIPHENYLAMINE	130	130	330	UG/KG	UJ	s
ET09-08-ME45R-1	TX	PENTACHLOROPHENOL	330	330	670	UG/KG	UJ	c,l
ET09-08-ME45R-1	TX	2-METHYLNAPHTHALENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	ACENAPHTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	ACENAPHTHYLENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,s
ET09-08-ME45R-1	TX	BENZO[A]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	BENZO[A]PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	BENZO[B]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	BENZO[G,H,I]PERYLENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	BENZO[K]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	CHRYSENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	DIBENZ[A,H]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,s
ET09-08-ME45R-1	TX	FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	FLUORENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	INDENO[1,2,3-CD]PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	NAPHTHALENE	6.6	6.6	6.6	UG/KG	UJ	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-08-ME45R-1	TX	PHENANTHRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-08-ME45R-1	TX	PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-09-ME45R-1	TX	2,4-DINITROPHENOL	330	330	670	UG/KG	UJ	c
ET09-09-ME45R-1	TX	4,6-DINITRO-2-METHYLPHENOL	130	130	670	UG/KG	UJ	c
ET09-09-ME45R-1	TX	BIS(2-ETHYLHEXYL)PHTHALATE	130	130	330	UG/KG	UJ	c
ET09-09-ME45R-1	TX	DI-N-OCTYLPHTHALATE	130	130	330	UG/KG	UJ	c
ET09-09-ME45R-1	TX	HEXACHLOROCYCLOPENTADIENE	330	330	330	UG/KG	UJ	c
ET09-09-ME45R-1	TX	ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c
ET09-09-ME45R-1	TX	DIBENZ[A,H]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c
ET09-10-ME45R-1	TX	1,2,4-TRICHLOROBENZENE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	1,2-DICHLOROBENZENE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	1,3-DICHLOROBENZENE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	1,4-DICHLOROBENZENE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	2,2'-OXYBIS(1-CHLOROPROPANE)	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	2,4,5-TRICHLOROPHENOL	130	130	660	UG/KG	UJ	m
ET09-10-ME45R-1	TX	2,4,6-TRICHLOROPHENOL	130	130	330	UG/KG	UJ	m
ET09-10-ME45R-1	TX	2,4-DICHLOROPHENOL	130	130	330	UG/KG	UJ	m
ET09-10-ME45R-1	TX	2,4-DIMETHYLPHENOL	130	130	330	UG/KG	UJ	l,m
ET09-10-ME45R-1	TX	2,4-DINITROPHENOL	330	330	660	UG/KG	UJ	c,m
ET09-10-ME45R-1	TX	2,4-DINITROTOLUENE	130	130	330	UG/KG	UJ	l,m,s
ET09-10-ME45R-1	TX	2,6-DINITROTOLUENE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	2-CHLORONAPHTHALENE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	2-CHLOROPHENOL	130	130	330	UG/KG	UJ	m
ET09-10-ME45R-1	TX	2-METHYLPHENOL	130	130	330	UG/KG	UJ	m
ET09-10-ME45R-1	TX	2-NITROANILINE	130	130	660	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	2-NITROPHENOL	130	130	330	UG/KG	UJ	m
ET09-10-ME45R-1	TX	3,3-DICHLOROBENZIDINE	130	130	330	UG/KG	R	c,m,s
ET09-10-ME45R-1	TX	3-NITROANILINE	130	130	660	UG/KG	R	m,s
ET09-10-ME45R-1	TX	4,6-DINITRO-2-METHYLPHENOL	130	130	660	UG/KG	UJ	c,l,m
ET09-10-ME45R-1	TX	4-BROMOPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	4-CHLORO-3-METHYLPHENOL	130	130	330	UG/KG	UJ	l,m
ET09-10-ME45R-1	TX	4-CHLOROANILINE	130	130	330	UG/KG	R	m,s
ET09-10-ME45R-1	TX	4-CHLOROPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	4-METHYLPHENOL	130	130	330	UG/KG	UJ	l,m
ET09-10-ME45R-1	TX	4-NITROANILINE	130	130	660	UG/KG	R	m,s
ET09-10-ME45R-1	TX	4-NITROPHENOL	130	130	660	UG/KG	UJ	m
ET09-10-ME45R-1	TX	BIS(2-CHLOROETHOXY)METHANE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	BIS(2-CHLOROETHYL)ETHER	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	BIS(2-ETHYLHEXYL)PHTHALATE	130	130	330	UG/KG	R	l,m,s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-10-ME45R-1	TX	BUTYLBENZYLPHTHALATE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	CARBAZOLE	130	130	330	UG/KG	UJ	l,m,s
ET09-10-ME45R-1	TX	DIBENZOFURAN	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	DIETHYLPHTHALATE	130	130	330	UG/KG	UJ	l,m,s
ET09-10-ME45R-1	TX	DIMETHYL PHTHALATE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	DI-N-BUTYLPHTHALATE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	DI-N-OCTYLPHTHALATE	130	130	330	UG/KG	R	m,s
ET09-10-ME45R-1	TX	HEXACHLOROBENZENE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	HEXACHLOROBUTADIENE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	HEXACHLOROCYCLOPENTADIENE	330	330	330	UG/KG	R	c,l,m,s
ET09-10-ME45R-1	TX	HEXACHLOROETHANE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ISOPHORONE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	NITROBENZENE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	N-NITROSODINPROPYLAMINE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	N-NITROSODIPHENYLAMINE	130	130	330	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	PENTACHLOROPHENOL	330	330	660	UG/KG	R	c,l,m
ET09-10-ME45R-1	TX	PHENOL	130	130	330	UG/KG	UJ	m
ET09-10-ME45R-1	TX	2-METHYLNAPHTHALENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-10-ME45R-1	TX	ACENAPHTHENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ACENAPHTHYLENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,m,s
ET09-10-ME45R-1	TX	BENZO[A]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	BENZO[A]PYRENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	BENZO[B]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	BENZO[G,H,I]PERYLENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	BENZO[K]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	CHRYSENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	DIBENZ[A,H]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,m,s
ET09-10-ME45R-1	TX	FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	FLUORENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	INDENO[1,2,3-CD]PYRENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	NAPHTHALENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-10-ME45R-1	TX	PHENANTHRENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	PYRENE	6.6	6.6	6.6	UG/KG	UJ	m,s
ET09-11-ME45R-1	TX	1,2,4-TRICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	1,2-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	1,3-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	1,4-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	2,2'-OXYBIS(1-CHLOROPROPANE)	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	2,4-DIMETHYLPHENOL	130	130	330	UG/KG	UJ	l

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-11-ME45R-1	TX	2,4-DINITROPHENOL	330	330	660	UG/KG	UJ	c
ET09-11-ME45R-1	TX	2,4-DINITROTOLUENE	130	130	330	UG/KG	UJ	l,s
ET09-11-ME45R-1	TX	2,6-DINITROTOLUENE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	2-CHLORONAPHTHALENE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	2-NITROANILINE	130	130	660	UG/KG	UJ	s
ET09-11-ME45R-1	TX	3,3-DICHLOROBENZIDINE	130	130	330	UG/KG	UJ	c,s
ET09-11-ME45R-1	TX	3-NITROANILINE	130	130	660	UG/KG	UJ	s
ET09-11-ME45R-1	TX	4,6-DINITRO-2-METHYLPHENOL	130	130	660	UG/KG	UJ	c,l
ET09-11-ME45R-1	TX	4-BROMOPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	4-CHLORO-3-METHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-11-ME45R-1	TX	4-CHLOROANILINE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	4-CHLOROPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	4-METHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-11-ME45R-1	TX	4-NITROANILINE	130	130	660	UG/KG	UJ	s
ET09-11-ME45R-1	TX	BIS(2-CHLOROETHOXY)METHANE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	BIS(2-CHLOROETHYL)ETHER	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	BIS(2-ETHYLHEXYL)PHTHALATE	130	130	330	UG/KG	UJ	l,s
ET09-11-ME45R-1	TX	BUTYLBENZYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	CARBAZOLE	130	130	330	UG/KG	UJ	l,s
ET09-11-ME45R-1	TX	DIBENZOFURAN	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	DIETHYLPHTHALATE	130	130	330	UG/KG	UJ	l,s
ET09-11-ME45R-1	TX	DIMETHYL PHTHALATE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	DI-N-BUTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	DI-N-OCTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	HEXACHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	HEXACHLOROBUTADIENE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	HEXACHLOROCYCLOPENTADIENE	330	330	330	UG/KG	UJ	c,l,s
ET09-11-ME45R-1	TX	HEXACHLOROETHANE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	ISOPHORONE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	NITROBENZENE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	N-NITROSODINPROPYLAMINE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	N-NITROSODIPHENYLAMINE	130	130	330	UG/KG	UJ	s
ET09-11-ME45R-1	TX	PENTACHLOROPHENOL	330	330	660	UG/KG	UJ	c,l
ET09-11-ME45R-1	TX	2-METHYLNAPHTHALENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	ACENAPHTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	ACENAPHTHYLENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,s
ET09-11-ME45R-1	TX	BENZO[A]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	BENZO[A]PYRENE	6.6	6.6	6.6	UG/KG	UJ	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-11-ME45R-1	TX	BENZO[B]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	BENZO[G,H,I]PERYLENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	BENZO[K]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	CHRYSENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	DIBENZ[A,H]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,s
ET09-11-ME45R-1	TX	FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	FLUORENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	INDENO[1,2,3-CD]PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	NAPHTHALENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	PHENANTHRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-11-ME45R-1	TX	PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-12-ME45R-1	TX	1,2,4-TRICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	1,2-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	1,3-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	1,4-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	2,2'-OXYBIS(1-CHLOROPROPANE)	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	2,4-DINITROPHENOL	330	330	670	UG/KG	UJ	c
ET09-12-ME45R-1	TX	2,4-DINITROTOLUENE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	2,6-DINITROTOLUENE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	2-CHLORONAPHTHALENE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	2-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-12-ME45R-1	TX	3,3-DICHLOROBENZIDINE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	3-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-12-ME45R-1	TX	4,6-DINITRO-2-METHYLPHENOL	130	130	670	UG/KG	UJ	c
ET09-12-ME45R-1	TX	4-BROMOPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	4-CHLOROANILINE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	4-CHLOROPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	4-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-12-ME45R-1	TX	BIS(2-CHLOROETHOXY)METHANE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	BIS(2-CHLOROETHYL)ETHER	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	BIS(2-ETHYLHEXYL)PHTHALATE	130	130	330	UG/KG	UJ	c,s
ET09-12-ME45R-1	TX	BUTYLBENZYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	CARBAZOLE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	DIBENZOFURAN	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	DIETHYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	DIMETHYL PHTHALATE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	DI-N-BUTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	DI-N-OCTYLPHTHALATE	130	130	330	UG/KG	UJ	c,s
ET09-12-ME45R-1	TX	HEXACHLOROBENZENE	130	130	330	UG/KG	UJ	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-12-ME45R-1	TX	HEXACHLOROBUTADIENE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	HEXACHLOROCYCLOPENTADIENE	330	330	330	UG/KG	UJ	c,s
ET09-12-ME45R-1	TX	HEXACHLOROETHANE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	ISOPHORONE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	NITROBENZENE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	N-NITROSODINPROPYLAMINE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	N-NITROSODIPHENYLAMINE	130	130	330	UG/KG	UJ	s
ET09-12-ME45R-1	TX	ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c
ET09-12-ME45R-1	TX	DIBENZ[A,H]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c
ET09-ME45R-FD01	TX	1,2,4-TRICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	1,2-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	1,3-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	1,4-DICHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	2,2'-OXYBIS(1-CHLOROPROPANE)	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	2,4-DIMETHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-ME45R-FD01	TX	2,4-DINITROPHENOL	330	330	670	UG/KG	UJ	c
ET09-ME45R-FD01	TX	2,4-DINITROTOLUENE	130	130	330	UG/KG	UJ	l,s
ET09-ME45R-FD01	TX	2,6-DINITROTOLUENE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	2-CHLORONAPHTHALENE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	2-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-ME45R-FD01	TX	3,3-DICHLOROBENZIDINE	130	130	330	UG/KG	UJ	c,s
ET09-ME45R-FD01	TX	3-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-ME45R-FD01	TX	4,6-DINITRO-2-METHYLPHENOL	130	130	670	UG/KG	UJ	c,l
ET09-ME45R-FD01	TX	4-BROMOPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	4-CHLORO-3-METHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-ME45R-FD01	TX	4-CHLOROANILINE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	4-CHLOROPHENYL-PHENYLETHER	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	4-METHYLPHENOL	130	130	330	UG/KG	UJ	l
ET09-ME45R-FD01	TX	4-NITROANILINE	130	130	670	UG/KG	UJ	s
ET09-ME45R-FD01	TX	BIS(2-CHLOROETHOXY)METHANE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	BIS(2-CHLOROETHYL)ETHER	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	BIS(2-ETHYLHEXYL)PHTHALATE	130	130	330	UG/KG	UJ	l,s
ET09-ME45R-FD01	TX	BUTYLBENZYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	CARBAZOLE	130	130	330	UG/KG	UJ	l,s
ET09-ME45R-FD01	TX	DIBENZOFURAN	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	DIETHYLPHTHALATE	130	130	330	UG/KG	UJ	l,s
ET09-ME45R-FD01	TX	DIMETHYL PHTHALATE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	DI-N-BUTYLPHTHALATE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	DI-N-OCTYLPHTHALATE	130	130	330	UG/KG	UJ	s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-ME45R-FD01	TX	HEXACHLOROBENZENE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	HEXACHLOROBUTADIENE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	HEXACHLOROCYCLOPENTADIENE	330	330	330	UG/KG	UJ	c,l,s
ET09-ME45R-FD01	TX	HEXACHLOROETHANE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	ISOPHORONE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	NITROBENZENE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	N-NITROSODINPROPYLAMINE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	N-NITROSODIPHENYLAMINE	130	130	330	UG/KG	UJ	s
ET09-ME45R-FD01	TX	PENTACHLOROPHENOL	330	330	670	UG/KG	UJ	c,l
ET09-ME45R-FD01	TX	2-METHYLNAPHTHALENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	ACENAPHTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	ACENAPHTHYLENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,s
ET09-ME45R-FD01	TX	BENZO[A]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	BENZO[A]PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	BENZO[B]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	BENZO[G,H,I]PERYLENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	BENZO[K]FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	CHRYSENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	DIBENZ[A,H]ANTHRACENE	6.6	6.6	6.6	UG/KG	UJ	c,s
ET09-ME45R-FD01	TX	FLUORANTHENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	FLUORENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	INDENO[1,2,3-CD]PYRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	NAPHTHALENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	PHENANTHRENE	6.6	6.6	6.6	UG/KG	UJ	s
ET09-ME45R-FD01	TX	PYRENE	6.6	6.6	6.6	UG/KG	UJ	s

Attachment A

Non Conformance Summary Tables

Table A-1a Initial Calibration – (Method 8270 SVOC)

ICAL	Compound	% RSD	%RSD Limit	Associated Samples
Method 8270 SVOC				
Instrument: S4 12/29/16 SVOC	Hexachlorocyclopentadiene	18.7	<15	BLENDER BLANK ET09-06-ME45R-1RE ET09-12-ME45R-1RE ET09-09-ME45R-1RE ET09-04-ME45R-1RE
	2,4-Dinitrophenol	27.5	<15	
	4,6-Dinitro-2-methylphenol	20.4	<15	
	Bis(2-ethylhexyl)phthalate	16.6	<15	
	Di-n-octylphthalate	18.3	<15	
Instrument: S6 12/28/16 SVOC	Hexachlorocyclopentadiene	15.2	<15	ET09-10-ME45R-1 ET09-11-ME45R-1 ET09-05-ME45R-1 ET09-ME45R-FD01 ET09-03-ME45R-1 ET09-07-ME45R-1 ET09-08-ME45R-1
	2,4-Dinitrophenol	41.6	<15	
	4,6-Dinitro-2-methylphenol	16.7	<15	
	Pentachlorophenol	45.3	<15	

ICV	Compound	% D	%D Limit	Associated Samples
Method 8270 SVOC				
Instrument: S6 12/28/16 SVOC	3,3´-Dichlorobenzidine	-24.8	<20	ET09-10-ME45R-1 ET09-11-ME45R-1 ET09-05-ME45R-1 ET09-ME45R-FD01 ET09-03-ME45R-1 ET09-07-ME45R-1 ET09-08-ME45R-1

Table A-1a Initial Calibration – (Method 8270-SIM PAH)

ICAL	Compound	% RSD	%RSD Limit	Associated Samples
Method 8270-SIM (PAH)				
Instrument: S3 01/03/17 SVOC-SIM	Anthracene	15.3	<15	BLENDER BLANK ET09-06-ME45R-1 ET09-12-ME45R-1 ET09-10-ME45R-1 ET09-09-ME45R-1 ET09-11-ME45R-1RE ET09-05-ME45R-1RE ET09-ME45R-FD01RE ET09-03-ME45R-1 ET09-07-ME45R-1RE ET09-08-ME45R-1RE ET09-04-ME45R-1
	Dibenzo(a,h)anthracene	16.4	<15	

Table A-1b Continuing Calibration – (Method 8270 SVOC)

CCAL	Compound	% D	%D Limit	Associated Samples
Method 8270 SVOC				
Instrument: S4 01/05/17 15:20 SVOC	2,4-Dinitrophenol	-39.9	<20	ET09-06-ME45R-1RE ET09-12-ME45R-1RE ET09-09-ME45R-1RE ET09-04-ME45R-1RE
	4,6-Dinitro-2-methylphenol	-24.9	<20	

Table A-1b Continuing Calibration – (Method 8270-SIM PAH)

CCAL	Compound	% D	%D Limit	Associated Samples
Method 8270-SIM (PAH)				
Instrument: S3 01/05/17 12:10	Dibenzo(a,h)anthracene	24.2	<20	BLENDER BLANK

Table A-2a Surrogates (SVOC)

Sample ID	SDMC1 %R (NBZ)	SDMC2 %R (FBP)	SDMC3 %R (TPH)	SDMC4 %R (PHL)	SDMC5 %R (2FP)	SDMC6 %R (TBP)
ET09-12-ME45R-1RX	44	**43**	**44**	43	36	53
ET09-10-ME45R-1	41	**29**	**18**	41	38	48
ET09-11-ME45R-1	41	**40**	**27**	46	35	56
ET09-05-ME45R-1	40	**34**	**19**	40	**33**	53
ET09-ME45R-FD01	**35**	**30**	**22**	41	36	52
ET09-03-ME45R-1	39	**34**	**22**	40	**29**	56
ET09-07-ME45R-1	46	**42**	**29**	51	46	60
ET09-08-ME45R-1	45	**41**	**23**	48	43	57

Bold = outside QC limits

QC Limits
Surrogates associated with bases
SDMC1 (NBZ) = Nitrobenzene-d5 (37-122)
SDMC2 (FBP) = 2-Fluorobiphenyl (44-115)
SDMC3 (TPH) = Terphenyl-d14 (54-127)

Surrogates associated with acids
SDMC4 (PHL) = Phenol-d5 (33-122)
SDMC5 (2FP) = 2-Fluorophenol (35-115)
SDMC6 (TBP) = 2,4,6-Tribromophenol (39-132)

Table A-2b Surrogates (PAH)

Sample ID	SDMC17 %R (BEP)	QC Limits
ET09-ME45R-FD01RX	**25**	32-153
ET09-05-ME45R-1RX	**23**	32-153
ET09-11-ME45R-1RX	**11**	32-153
ET09-07-ME45R-1RX	**30**	32-153
ET09-08-ME45R-1RX	**29**	32-153
ET09-10-ME45R-1	**24**	32-153

Bold = outside QC limits

BEP = Benzo(e)pyrene-d12

Table A-3a Matrix Spikes (SVOC)

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
ET09-10-ME45R-1	1,2,4-TRICHLOROBENZENE	15	14	34	118	11	20
ET09-10-ME45R-1	1,2-DICHLOROBENZENE	15	13	33	117	19	20
ET09-10-ME45R-1	1,3-DICHLOROBENZENE	15	12	30	115	23	20
ET09-10-ME45R-1	1,4-DICHLOROBENZENE	15	12	31	115	22	20
ET09-10-ME45R-1	2,2'-OXYBIS(1-CHLOROPROPANE)	16	14	33	131	9	20
ET09-10-ME45R-1	2,4,5-TRICHLOROPHENOL	20	19	41	124	7	20
ET09-10-ME45R-1	2,4,6-TRICHLOROPHENOL	20	18	39	126	8	20
ET09-10-ME45R-1	2,4-DICHLOROPHENOL	18	17	40	122	5	20
ET09-10-ME45R-1	2,4-DIMETHYLPHENOL	14	16	30	127	14	20
ET09-10-ME45R-1	2,4-DINITROPHENOL	0	13	19	127	31	20
ET09-10-ME45R-1	2,4-DINITROTOLUENE	18	16	48	126	10	20
ET09-10-ME45R-1	2,6-DINITROTOLUENE	19	17	46	124	7	20
ET09-10-ME45R-1	2-CHLORONAPHTHALENE	17	17	41	114	3	20
ET09-10-ME45R-1	2-CHLOROPHENOL	16	15	34	121	4	20
ET09-10-ME45R-1	2-METHYLPHENOL	17	16	32	122	1	20
ET09-10-ME45R-1	2-NITROANILINE	19	18	44	127	5	20
ET09-10-ME45R-1	2-NITROPHENOL	16	16	36	123	4	20
ET09-10-ME45R-1	3,3-DICHLOROBENZIDINE	0	0	22	121	NC	20
ET09-10-ME45R-1	3-NITROANILINE	9	7	33	119	29	20
ET09-10-ME45R-1	4,6-DINITRO-2-METHYLPHENOL	10	10	29	132	0	20
ET09-10-ME45R-1	4-BROMOPHENYL-PHENYLETHER	14	15	46	124	10	20
ET09-10-ME45R-1	4-CHLORO-3-METHYLPHENOL	22	23	45	122	4	20
ET09-10-ME45R-1	4-CHLOROANILINE	8	10	17	106	20	20
ET09-10-ME45R-1	4-CHLOROPHENYL-PHENYLETHER	14	15	45	121	8	20
ET09-10-ME45R-1	4-METHYLPHENOL	17	17	42	126	4	20
ET09-10-ME45R-1	4-NITROANILINE	8	5	32	100	33	20
ET09-10-ME45R-1	4-NITROPHENOL	17	16	30	132	6	20
ET09-10-ME45R-1	BIS(2-CHLOROETHOXY)METHANE	17	16	36	121	7	20
ET09-10-ME45R-1	BIS(2-CHLOROETHYL)ETHER	16	14	31	120	9	20
ET09-10-ME45R-1	BIS(2-ETHYLHEXYL)PHTHALATE	9	12	51	133	32	20
ET09-10-ME45R-1	BUTYLBENZYLPHTHALATE	12	15	48	132	21	20
ET09-10-ME45R-1	CARBAZOLE	20	19	50	123	6	20
ET09-10-ME45R-1	DIBENZOFURAN	17	17	44	120	2	20
ET09-10-ME45R-1	DIETHYLPHTHALATE	19	18	50	124	6	20
ET09-10-ME45R-1	DIMETHYL PHTHALATE	20	18	48	124	8	20
ET09-10-ME45R-1	DI-N-BUTYLPHTHALATE	12	15	51	128	20	20
ET09-10-ME45R-1	DI-N-OCTYLPHTHALATE	9	12	45	140	31	20
ET09-10-ME45R-1	HEXACHLOROBENZENE	13	14	45	122	11	20
ET09-10-ME45R-1	HEXACHLOROBUTADIENE	12	12	32	123	2	20
ET09-10-ME45R-1	HEXACHLOROCYCLOPENTA-DIENE	0	0	27	141	NC	20
ET09-10-ME45R-1	HEXACHLOROETHANE	14	10	28	117	37	20

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
ET09-10-ME45R-1	ISOPHORONE	15	14	30	122	8	20
ET09-10-ME45R-1	NITROBENZENE	17	15	34	122	9	20
ET09-10-ME45R-1	N-NITROSODINPROPYLAMINE	16	16	36	120	5	20
ET09-10-ME45R-1	N-NITROSODIPHENYLAMINE	19	17	38	127	6	20
ET09-10-ME45R-1	PENTACHLOROPHENOL	0	13	25	133	NC	20
ET09-10-ME45R-1	PHENOL	15	15	34	121	0	20

NC = Not Calculable

Table A-3b Matrix Spikes (PAH)

Sample ID	Compound	MS % Recovery	MSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit
ET09-10-ME45R-1	ANTHRACENE	48	19	35	114	86	30
ET09-10-ME45R-1	PYRENE	47	20	39	119	79	30
ET09-10-ME45R-1	BENZO[G,H,I]PERYLENE	27	10	45	116	93	30
ET09-10-ME45R-1	INDENO[1,2,3-CD]PYRENE	45	17	48	119	92	30
ET09-10-ME45R-1	BENZO[B]FLUORANTHENE	34	14	39	128	84	30
ET09-10-ME45R-1	FLUORANTHENE	48	21	41	117	79	30
ET09-10-ME45R-1	ACENAPHTHENE	50	21	33	113	81	30
ET09-10-ME45R-1	PHENANTHRENE	44	19	38	108	81	30
ET09-10-ME45R-1	FLUORENE	47	19	32	122	87	30
ET09-10-ME45R-1	NAPHTHALENE	45	21	19	102	73	30
ET09-10-ME45R-1	2-METHYLNAPHTHALENE	47	20	19	112	81	30
ET09-10-ME45R-1	BENZO[K]FLUORANTHENE	42	16	30	133	88	30
ET09-10-ME45R-1	ACENAPHTHYLENE	47	20	23	134	81	30
ET09-10-ME45R-1	CHRYSENE	52	20	36	112	87	30
ET09-10-ME45R-1	BENZO[A]PYRENE	39	16	43	119	84	30
ET09-10-ME45R-1	DIBENZ[A,H]ANTHRACENE	46	14	48	121	106	30
ET09-10-ME45R-1	BENZO[A]ANTHRACENE	55	21	39	111	91	30

Table A-4 Lab Control Samples (SVOC)

LCS ID	Compound	LCS % Recovery	Lower Limit	Upper Limit	Associated Samples
LCS-85971	2,4-DIMETHYLPHENOL	**21**	30	127	ET09-03-ME45R-1 ET09-05-ME45R-1 ET09-07-ME45R-1 ET09-08-ME45R-1 ET09-10-ME45R-1 ET09-11-ME45R-1 ET09-ME45R-FD01
LCS-85971	4-METHYLPHENOL	**39**	42	126	
LCS-85971	BIS(2-ETHYLHEXYL)PHTHALATE	**49**	51	133	
LCS-85971	2,4-DINITROTOLUENE	**44**	48	126	
LCS-85971	4,6-DINITRO-2-METHYLPHENOL	**24**	29	132	
LCS-85971	4-CHLORO-3-METHYLPHENOL	**44**	45	122	
LCS-85971	HEXACHLOROCYCLOPENTADIENE	**24**	27	141	
LCS-85971	DIETHYLPHTHALATE	**48**	50	124	
LCS-85971	CARBAZOLE	**49**	50	123	
LCS-85971	PENTACHLOROPHENOL	**10**	25	133	

LCS ID	Compound	LCS % Recovery	LCSD % Recovery	Lower Limit	Upper Limit	RPD	RPD Limit	Associated Samples
LCS-85984	DI-N-BUTYLPHTHALATE	90	69	59	127	**26**	20	BLENDER BLANK_

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R1136
Analyses/Method:	EPA SW-846 Method 8081B for Organochlorine Pesticides (GC/ECD)
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Kristin Rutherford/Resolution Consultants Completed on: 01/31/2017
Reviewed by:	Linda Adams/Resolution Consultants File Name: R1136_PEST

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on December 13 and 14, 2016.

Sample ID	Matrix/Sample Type
BLENDER BLANK_121516	Equipment blank
ET09-03-ME45R-1	Tissue
ET09-04-ME45R-1	Tissue
ET09-05-ME45R-1	Tissue
ET09-ME45R-FD01	Field Duplicate of ET09-05-ME45R-1
ET09-06-ME45R-1	Tissue
ET09-07-ME45R-1	Tissue
ET09-08-ME45R-1	Tissue
ET09-09-ME45R-1	Tissue
ET09-10-ME45R-1	Tissue
ET09-11-ME45R-1	Tissue
ET09-12-ME45R-1	Tissue

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 8081B, Organochlorine Pesticides by Gas Chromatography* (USEPA, 2007);
- *EPA New England Environmental Data Review Program Guidance* (April 2013);
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters:

- ✓ Data completeness (chain-of-custody [COC])/sample integrity
- ✓ Holding times and sample preservation
- ✓ Initial calibration/continuing calibration verification
- ✓ Laboratory blanks/equipment blanks
- ✗ Surrogate spike recoveries
- ✗ Matrix spike (MS) and/or matrix spike duplicate (MSD) results
- ✓ Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
- ✓ Field duplicate results
- ✓ Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Sample ET09-11-ME45R-1 was listed twice on the COC. The sample ID listed on the sample container for sample ET09-11-ME45R-1 which was collected on 12/14/16 identified the sample as ET09-04-ME45R-1. The sample collected on 12/14/16 was logged in by the laboratory using the sample ID that was noted on the sample container.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and method acceptance criteria were met;
- the second-source calibration verification (ICV) method acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) acceptance criteria were met.

All criteria were met and/or data qualification was not required.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks were evaluated as to whether there were contaminants detected above the detection limit (DL).

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required. There were no detected target analytes reported in equipment blank sample (BLENDER BLANK).

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance.

Nonconformances are summarized in Attachment A in Table A-1. Data qualification on the basis of surrogate recoveries was as follows:

Criteria[2]	Action	
	Detected Compounds	Nondetected Compounds
%R>upper limit (UL)	J+	No qualification[1]
10% ≤ %R < lower limit (LL)	J-	UJ
%R <10% (sample dilution is not a factor)	J-	R
%R <10% (sample dilution is a factor)	No qualification[2]	No qualification[2]

[1] NFG recommends no NFG recommends no qualification if %R >UL, but <200%, and professional judgment if %R >200%, thus Resolution Consultants professional judgment was used.
[2] Resolution Consultants professional judgment was used.

Note: If there is no surrogate information due to dilution then estimate (J/UJ) all results. However, in cases where there is surrogate information from multiple runs then base the surrogate actions on the least diluted run.

Qualified sample results are shown in Table 1.

MS/MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-2. Data qualification to the analytes associated with the specific MS/MSD nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R> UL	J+	No qualification
20% ≤ %R < LL	J-	UJ
%R <20%	J-	R*
%RPD > UL	J	No qualification
Note: Actions are applied to the native unspiked sample only *When the native sample concentration is >4X the concentration of the spike added (based on Region I criteria), evaluate the MS, MSD, and native sample with regards to %RSD rather than %R (Resolution Consultants professional judgment)		

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS and/or LCSD %Rs and/or RPDs were reviewed for conformance with the QC acceptance criteria.

The %Rs and/or RPDs were within the QC acceptance criteria and/or qualification of the sample results was not required.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the sample limit of quantitation (LOQ).

All QC acceptance criteria were met.

Sample Results/Reporting Issues

For detected results for both pesticides, the laboratory reported the lower of the two values between the two columns. Based on DoD QSM v5.0, positive results should be reported from the primary column. No actions were taken except to note this discrepancy.

All compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation

Dual Column Precision

Sample results were reviewed to ensure that the dual column precision RPD criteria were met. Since all sample results were nondetect, precision was deemed acceptable.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-09-ME45R-1	TX	4,4-DDD	0.84	0.84	3.3	UG/KG	UJ	s
ET09-09-ME45R-1	TX	4,4-DDE	0.84	0.84	3.3	UG/KG	UJ	s
ET09-09-ME45R-1	TX	4,4-DDT	0.84	0.84	3.3	UG/KG	UJ	s
ET09-09-ME45R-1	TX	ALDRIN	0.42	0.42	1.7	UG/KG	UJ	s
ET09-09-ME45R-1	TX	ALPHA-BHC	0.21	0.21	1.7	UG/KG	UJ	s
ET09-09-ME45R-1	TX	ALPHA-CHLORDANE	0.21	0.21	1.7	UG/KG	UJ	s
ET09-09-ME45R-1	TX	BETA-BHC	0.21	0.21	1.7	UG/KG	UJ	s
ET09-09-ME45R-1	TX	DELTA-BHC	0.42	0.42	1.7	UG/KG	UJ	s
ET09-09-ME45R-1	TX	DIELDRIN	0.42	0.42	3.3	UG/KG	UJ	s
ET09-09-ME45R-1	TX	ENDOSULFAN I	0.21	0.21	1.7	UG/KG	UJ	s
ET09-09-ME45R-1	TX	ENDOSULFAN II	0.42	0.42	3.3	UG/KG	UJ	s
ET09-09-ME45R-1	TX	ENDOSULFAN SULFATE	0.42	0.42	3.3	UG/KG	UJ	s
ET09-09-ME45R-1	TX	ENDRIN	0.42	0.42	3.3	UG/KG	UJ	s
ET09-09-ME45R-1	TX	ENDRIN ALDEHYDE	0.84	0.84	3.3	UG/KG	UJ	s
ET09-09-ME45R-1	TX	ENDRIN KETONE	0.42	0.42	3.3	UG/KG	UJ	s
ET09-09-ME45R-1	TX	HEPTACHLOR	0.21	0.21	1.7	UG/KG	UJ	s
ET09-09-ME45R-1	TX	HEPTACHLOR EPOXIDE	0.42	0.42	1.7	UG/KG	UJ	s
ET09-09-ME45R-1	TX	LINDANE	0.21	0.21	1.7	UG/KG	UJ	s
ET09-09-ME45R-1	TX	METHOXYCHLOR	2.1	2.1	17	UG/KG	UJ	s
ET09-09-ME45R-1	TX	TOXAPHENE	17	17	170	UG/KG	UJ	s
ET09-09-ME45R-1	TX	TRANS-CHLORDANE	0.42	0.42	1.7	UG/KG	UJ	s
ET09-10-ME45R-1	TX	4,4-DDD	0.85	0.85	3.3	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	4,4-DDE	0.85	0.85	3.3	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	4,4-DDT	0.85	0.85	3.3	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ALDRIN	0.43	0.43	1.7	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ALPHA-BHC	0.21	0.21	1.7	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ALPHA-CHLORDANE	0.21	0.21	1.7	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	BETA-BHC	0.21	0.21	1.7	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	DELTA-BHC	0.43	0.43	1.7	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	DIELDRIN	0.43	0.43	3.3	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ENDOSULFAN I	0.21	0.21	1.7	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ENDOSULFAN II	0.43	0.43	3.3	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ENDOSULFAN SULFATE	0.43	0.43	3.3	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ENDRIN	0.43	0.43	3.3	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ENDRIN ALDEHYDE	0.85	0.85	3.3	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	ENDRIN KETONE	0.43	0.43	3.3	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	HEPTACHLOR	0.21	0.21	1.7	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	HEPTACHLOR EPOXIDE	0.43	0.43	1.7	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	LINDANE	0.21	0.21	1.7	UG/KG	UJ	m,s

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-10-ME45R-1	TX	METHOXYCHLOR	2.1	2.1	17	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	TOXAPHENE	17	17	170	UG/KG	UJ	m,s
ET09-10-ME45R-1	TX	TRANS-CHLORDANE	0.43	0.43	1.7	UG/KG	UJ	m,s

Attachment A

Non Conformance Summary Tables

Table A-1 Surrogates

Sample ID	Surrogate	% Recovery Column CLPPest	% Recovery Column CLPPestII	Lower Limit	Upper Limit
ET09-10-ME45R-1	TETRACHLORO-M-XYLENE	34	37	42	129
ET09-09-ME45R-1	TETRACHLORO-M-XYLENE	33	27	42	129

Table A-2 Matrix Spikes

Sample ID	Compound	MS % Recovery CLPPest	MSD % Recovery CLPPest	Lower Limit	Upper Limit	RPD	RPD Limit
ET09-10-ME45R-1	HEPTACHLOR EPOXIDE	33	29	52	136	13	30
ET09-10-ME45R-1	ENDOSULFAN SULFATE	36	39	55	136	6	30
ET09-10-ME45R-1	ALDRIN	25	26	45	136	5	30
ET09-10-ME45R-1	ALPHA-BHC	35	35	45	137	1	30
ET09-10-ME45R-1	BETA-BHC	32	30	50	136	8	30
ET09-10-ME45R-1	DELTA-BHC	39	43	47	139	8	30
ET09-10-ME45R-1	ENDOSULFAN II	27	30	53	134	11	30
ET09-10-ME45R-1	4,4-DDT	31	32	50	141	5	30
ET09-10-ME45R-1	ALPHA-CHLORDANE	27	28	54	133	5	30
ET09-10-ME45R-1	TRANS-CHLORDANE (gamma-chlordane)	25	28	53	135	13	30
ET09-10-ME45R-1	ENDRIN KETONE	38	40	55	136	5	30
ET09-10-ME45R-1	LINDANE	35	37	49	135	6	30
ET09-10-ME45R-1	DIELDRIN	33	36	56	136	10	30
ET09-10-ME45R-1	ENDRIN	23	29	57	140	23	30
ET09-10-ME45R-1	METHOXYCHLOR	38	39	52	143	4	30
ET09-10-ME45R-1	4,4-DDD	28	30	56	139	6	30
ET09-10-ME45R-1	4,4-DDE	33	42	56	134	25	30
ET09-10-ME45R-1	HEPTACHLOR	27	29	47	136	7	30
ET09-10-ME45R-1	ENDOSULFAN I	28	34	53	132	19	30

All sample results were qualified as estimated (UJ) since majority of spiked compounds failed %R criteria in MS and MSD.

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	Eurofins Spectrum Analytical
Service Request:	R1136
Analyses/Method:	EPA Method 680 for the Determination of PCB Homologs by Gas Chromatography/Mass Spectrometry
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Paula DiMattei/Resolution Consultants — Completed on: 1/26/2017
Reviewed by:	Linda Adams/Resolution Consultants — File Name: R1136_PCB congeners

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on December 13-14, 2017.

Sample ID	Matrix/Sample Type
Blender Blank-121516	Equipment blank
ET09-03-ME45R-1	Shellfish
ET09-04-ME45R-1	Shellfish
ET09-05-ME45R-1	Shellfish
ET09-06-ME45R-1	Shellfish
ET09-07-ME45R-1	Shellfish
ET09-08-ME45R-1	Shellfish
ET09-09-ME45R-1	Shellfish
ET09-10-ME45R-1	Shellfish
ET09-11-ME45R-1	Shellfish
ET09-12-ME45R-1	Shellfish
ET09-ME45R-FD01	Field duplicate of ET09-05-ME45R-1

- *DoD Quality Systems Manual (QMS) for Environmental Laboratories, version 5.0* (July 2013);
- *USEPA Method 680: Determination of Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry* (November 1985);
- *EPA New England, Environmental Data Review Program Guidance* (USEPA, April 2013);
- *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016); and
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants' professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	GC/MS performance checks
✓	Initial calibration/continuing calibration verification
✓	Laboratory blanks/equipment blanks
✗	Surrogate spike recoveries
✗	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS)/laboratory control sample duplicate (LCSD) results
✗	Field duplicate results
✓	Internal standard results
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. An "NA" indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Sample ET09-11-ME45R-1 was listed twice on the COC. The sample ID listed on the sample container for sample ET09-11-ME45R-1 which was collected on 12/14/16 identified the sample as

ET09-**04**-ME45R-1. The sample collected on 12/14/16 was logged in by the laboratory using the sample ID that was noted on the sample container.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

GC/MS Performance Checks

The lab monitors the ratios of the primary and confirmatory ions at each level of chlorination with the exception of nonachlorobiphenyl as stipulated in the method. All ion ratios were within the QC acceptance limits.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r^2), and method acceptance criteria were met;
- the second-source calibration verification (ICV) method acceptance criteria were met; and
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) acceptance criteria were met.

All QC acceptance criteria were met.

Laboratory Blanks/Equipment Blanks

Laboratory method blanks and equipment rinsate blanks are evaluated as to whether there are contaminants detected above the detection limit (DL). Target compounds were not detected in the laboratory method blanks or blender blank associated with the samples in this data set.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance. Nonconformances are summarized in Attachment A in Table A-1. Data qualification was as follows:

Actions: (Based on NFG 2016)

Criteria	Action	
	Detected	**Nondetected**
%R <10% (undiluted)	J-	R
%R <10% (diluted)	Use professional judgment**	Use professional judgment**
%R ≥10% but is < LL	J-	UJ
%R > UL but ≤200%	J+	No qualification
%R >200	J+	Use professional judgment**
** Use professional judgment in qualifying data, as surrogate recovery problems may not directly apply to target compounds.		

Qualified sample results are shown in Table 1.

MS/MSD Results

The MS/MSD %Rs and relative percent differences (RPDs) were reviewed for conformance with the QC acceptance criteria. Nonconformances are summarized in Attachment A in Table A-2. Data qualification was as follows:

Actions: (Based on NFG 2016)

Criteria	Action	
	Detected	Nondetected
%R <20%	J-	R
%R ≥20% but is < LL	J-	UJ
%R > UL	J+	No qualification
%RPD > QC limit	J	No qualification

Qualified sample results are shown in Table 1.

LCS/LCSD Results

The LCS and LCSD %Rs and RPDs were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤50% for solid matrices and ≤30% for aqueous matrices. These criteria apply if both results were greater than two times the sample limit of quantitation (LOQ).

Nonconformances are summarized in Attachment A in Table A-3. Data qualification was as follows:

Actions: (Resolution Consultants professional judgment was used)

Criteria	RPD	Action	
		Detected	Nondetected
Sample and duplicate are nondetect results	Not calculable (NC)	No qualification	No qualification
Sample and duplicate results ≥2xLOQ	>30 (aqueous) >50 (solids)	J	Not Applicable
Sample and duplicate results <2xLOQ	>60 (aqueous) >100 (solids)	J	Not Applicable
If sample or duplicate result is >2xLOQ and the other is not detected	NC	J	UJ
If sample or duplicate result is <2xLOQ and the other is not detected	NC	No qualification	No qualification

Qualified sample results are shown in Table 1.

Internal Standard Results

The internal standard recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

If applicable, all compounds detected at concentrations less than the LOQ but greater than the DL were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-05-ME45R-1	TX	POLYCHLORINATED BIPHENYLS (PCBS)	3.0	0.083	0.33	µg/kg	J	fd
ET09-06-ME45R-1	TX	POLYCHLORINATED BIPHENYLS (PCBS)	2.2	0.083	0.33	µg/kg	J-	s
ET09-06-ME45R-1	TX	DECACHLOROBIPHENYL		0.42	1.7	µg/kg	UJ	s
ET09-06-ME45R-1	TX	TRICHLOROBIPHENYL		0.083	0.33	µg/kg	UJ	s
ET09-06-ME45R-1	TX	PENTACHLOROBIPHENYL	0.21	0.17	0.66	µg/kg	J-	s
ET09-06-ME45R-1	TX	DICHLOROBIPHENYL		0.083	0.33	µg/kg	UJ	s
ET09-06-ME45R-1	TX	HEXACHLOROBIPHENYL	1.3	0.17	0.66	µg/kg	J-	s
ET09-06-ME45R-1	TX	TETRACHLOROBIPHENYL		0.17	0.66	µg/kg	UJ	s
ET09-06-ME45R-1	TX	MONOCHLOROBIPHENYL		0.17	0.33	µg/kg	UJ	s
ET09-06-ME45R-1	TX	HEPTACHLOROBIPHENYL	0.76	0.25	1.0	µg/kg	J-	s
ET09-06-ME45R-1	TX	NONACHLOROBIPHENYL		0.42	1.7	µg/kg	UJ	s
ET09-06-ME45R-1	TX	OCTACHLOROBIPHENYL		0.50	1.0	µg/kg	UJ	s
ET09-09-ME45R-1	TX	POLYCHLORINATED BIPHENYLS (PCBS)	1.1	0.083	0.33	µg/kg	J-	s
ET09-09-ME45R-1	TX	DECACHLOROBIPHENYL		0.42	1.7	µg/kg	UJ	s
ET09-09-ME45R-1	TX	TRICHLOROBIPHENYL		0.083	0.33	µg/kg	UJ	s
ET09-09-ME45R-1	TX	PENTACHLOROBIPHENYL		0.17	0.66	µg/kg	UJ	s
ET09-09-ME45R-1	TX	DICHLOROBIPHENYL		0.083	0.33	µg/kg	UJ	s
ET09-09-ME45R-1	TX	HEXACHLOROBIPHENYL	0.86	0.17	0.66	µg/kg	J-	s
ET09-09-ME45R-1	TX	TETRACHLOROBIPHENYL		0.17	0.66	µg/kg	UJ	s
ET09-09-ME45R-1	TX	MONOCHLOROBIPHENYL		0.17	0.33	µg/kg	UJ	s
ET09-09-ME45R-1	TX	HEPTACHLOROBIPHENYL	0.20	0.25	1.0	µg/kg	J-	s
ET09-09-ME45R-1	TX	NONACHLOROBIPHENYL		0.42	1.7	µg/kg	UJ	s
ET09-09-ME45R-1	TX	OCTACHLOROBIPHENYL		0.50	1.0	µg/kg	UJ	s
ET09-10-ME45R-1	TX	POLYCHLORINATED BIPHENYLS (PCBS)	1.2	0.083	0.33	µg/kg	J-	m
ET09-10-ME45R-1	TX	DECACHLOROBIPHENYL	0.20	0.42	1.7	µg/kg	J	m,md
ET09-10-ME45R-1	TX	TRICHLOROBIPHENYL		0.083	0.33	µg/kg	UJ	m
ET09-10-ME45R-1	TX	PENTACHLOROBIPHENYL	0.18	0.17	0.66	µg/kg	J-	m
ET09-10-ME45R-1	TX	HEXACHLOROBIPHENYL	0.63	0.17	0.66	µg/kg	J-	m
ET09-10-ME45R-1	TX	TETRACHLOROBIPHENYL		0.17	0.66	µg/kg	UJ	m
ET09-10-ME45R-1	TX	HEPTACHLOROBIPHENYL	0.21	0.25	1.0	µg/kg	J-	m
ET09-10-ME45R-1	TX	NONACHLOROBIPHENYL		0.42	1.7	µg/kg	UJ	m
ET09-10-ME45R-1	TX	OCTACHLOROBIPHENYL		0.50	1.0	µg/kg	UJ	m
ET09-12-ME45R-1	TX	POLYCHLORINATED BIPHENYLS (PCBS)	0.86	0.082	0.33	µg/kg	J-	s
ET09-12-ME45R-1	TX	DECACHLOROBIPHENYL		0.41	1.6	µg/kg	UJ	s
ET09-12-ME45R-1	TX	TRICHLOROBIPHENYL		0.082	0.33	µg/kg µg/kg	UJ	s
ET09-12-ME45R-1	TX	PENTACHLOROBIPHENYL		0.17	0.66	µg/kg	UJ	s
ET09-12-ME45R-1	TX	DICHLOROBIPHENYL		0.082	0.33	µg/kg	UJ	s
ET09-12-ME45R-1	TX	HEXACHLOROBIPHENYL	0.51	0.17	0.66	µg/kg	J-	s
ET09-12-ME45R-1	TX	TETRACHLOROBIPHENYL		0.17	0.66	µg/kg	UJ	s
ET09-12-ME45R-1	TX	MONOCHLOROBIPHENYL		0.17	0.33	µg/kg	UJ	s
ET09-12-ME45R-1	TX	HEPTACHLOROBIPHENYL	0.35	0.25	0.99	µg/kg	J-	s
ET09-12-ME45R-1	TX	NONACHLOROBIPHENYL		0.41	1.6	µg/kg	UJ	s
ET09-12-ME45R-1	TX	OCTACHLOROBIPHENYL		0.50	0.99	µg/kg	UJ	s
ET09-ME45R-FD01	TX	POLYCHLORINATED BIPHENYLS (PCBS)	1.5	0.082	0.32	µg/kg	J	fd

Attachment A

Nonconformance Summary Tables

Table A-1 – Surrogate Recoveries

Sample ID	3,3',4,4'-TetraCB-C13 %R	2,2',3,3',4,4',5,5'-OctaCB-C13 %R	QC Limits
ET09-06-ME45R-1	32	26	60-140
ET09-12-ME45R-1	50	43	60-140
ET09-09-ME45R-1	ok	52	60-140

Table A-2 – MS/MSD Results

Sample ID	Compound	MS/MSD %R	QC Limits	RPD	QC Limit
	TRICHLOROBIPHENYL	54/48	60-140	ok	30
	TETRACHLOROBIPHENYL	49/43	60-140	ok	30
	PENTACHLOROBIPHENYL	45/36	60-140	ok	30
	HEXACHLOROBIPHENYL	35/27	60-140	ok	30
	HEPTACHLOROBIPHENYL	38/28	60-140	ok	30
	OCTACHLOROBIPHENYL	40/29	60-140	31	30
	DECACHLOROBIPHENYL	40/28	60-140	36	30
	POLYCHLORINATED BIPHENYLS (PCBS)	44/35	60-140	ok	30

Table A-3 - Field Duplicates

Sample ID	Duplicate ID	Compound	Sample Result	Duplicate Result	LOQ	Units	RPD
ET09-05-ME45R-1	ET09-ME45R-FD01	POLYCHLORINATED BIPHENYLS (PCBS)	3.0	1.5	0.33	µg/Kg	66.7

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R1136
Analyses/Method:	EPA SW-846 Method 6010C (ICP-AES), EPA SW-846 Method 7470A for Mercury in Liquid Waste (Manual Cold-Vapor Technique), EPA SW-846 Method 7471A for Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique) and Lipid Analysis / 6010C, 7470A, 7471A and LIPIDS
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM

Prepared by:	Cathy Larson/Resolution Consultants	Completed on: 02/02/2017
Reviewed by:	Linda Adams/Resolution Consultants	File Name: R1136_6010C, 7470A, 7471A and LIPIDS

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on December 13 and 14, 2016.

Sample ID	Matrix/Sample Type
BLENDER BLANK_121516	Laboratory Equipment blank
ET09-03-ME45R-1	Tissue
ET09-04-ME45R-1	Tissue
ET09-05-ME45R-1	Tissue
ET09-ME45R-FD01	Field Duplicate of ET09-05-ME45R-1
ET09-06-ME45R-1	Tissue
ET09-07-ME45R-1	Tissue
ET09-08-ME45R-1	Tissue
ET09-09-ME45R-1	Tissue
ET09-10-ME45R-1	Tissue
ET09-11-ME45R-1	Tissue
ET09-12-ME45R-1	Tissue

Data validation activities were conducted with reference to:

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 6010C, Inductively Coupled Plasma-Atomic Emission Spectrometry* (USEPA, 1996);
- *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods SW846, specifically SW-846 Method 7470A, Mercury in Liquid Waste or SW-846 Method 7471B, Mercury in Solid or Semisolid Waste, as appropriate (Manual Cold-Vapor Technique)* (USEPA, 1996);
- *EPA New England Environmental Data Review Program Guidance (April 2013)* ;
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, AECOM professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following parameters (where applicable to the method):

✓	Data completeness (chain-of-custody (COC)/sample integrity
✓	Holding times/sample preservation
✓	Initial calibration/continuing calibration verification
✗	Laboratory blanks/equipment blanks
✓	ICP interference check standards
✓	Matrix spike (MS) results
✓	Laboratory duplicate results
✓	Laboratory control sample (LCS) results
✗	Field duplicate results
✓	ICP/ICPMS serial dilution results
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. The symbol (✗) indicates that a quality control (QC) nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. Selected data points were estimated and/or negated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness(COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Sample ET09-11-ME45R-1 was listed on the COC twice. A sample container was received labeled ET09-04-ME45R-1 which was not listed on the COC. Sample ET09-04-ME45R-1 was reported as Lab Sample ID R1136-11 and the inconsistency and corrective action was documented in the laboratory sample receipt forms.

Holding Times/Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria.

The QC acceptance criteria were met.

Initial Calibration/Continuing Calibration Verification

Calibration data for the metals analyses were reviewed for conformance with the QC acceptance criteria to ensure that:

- all criteria were met for the calibration curves
- the initial calibration verification (ICV) percent recovery (%R) criteria were met;
- the continuing calibration verification standard (CCV) method %Rs were met; and
- the low level check standards (CRI or CRA) %R criteria were met.

The QC acceptance criteria were met.

Laboratory Blanks/Equipment Blanks

Laboratory blanks and a blender blank were evaluated as to whether there were contaminants detected above the detection limit (DL). Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detections in the blender blank sample were first qualified as not detected if they were associated with laboratory blank contamination. Detections remaining in the blender blank were then used to qualify the tissue samples. Laboratory blank and blender blank results were reviewed for conformance with the QC acceptance criteria. Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

Nonconformances are summarized in Attachment A in Table A-1a and A-1b. Sample results were qualified as follows:

Blank Type	Blank Result	Sample Result	Action for Sample
ICB/CCB (Positive)	≥IDL/MDL but ≤ LOQ	Nondetect	No action
		≥IDL/MDL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Reslution Consultants professional judgment (see below [1])
	>LOQ	≥IDL/MDL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ but < ICB/CCB Result	Qualify at level of Blank Result with a "U" or Qualify result as unusable
		>ICB/CCB but <10x the ICB/CCB result	Qualify as estimated (J)
		≥10x ICB/CCB	No action is taken based on Resolution Consultants professional judgment
ICB/CCB (Negative)	< (-LOQ)	Nondetect	Use Resolution Consultants professional judgment and qualify as estimated (UJ)
		≥IDL/MDL but < LOQ	Use Resolution Consultants professional judgment and qualify results < LOQ as estimated (J)
		< 10x LOQ	Qualify results >LOQ but <10x LOQ as estimated (J)
		≥10x LOQ	No action is taken based on Resolution Consultants professional judgment
	≤ -IDL/Mand ≥ -LOQ	Nondetect	Use Resolution Consultants professional judgment, qualify as estimated (UJ)
		≥IDL/MDL and <5x |neg. blank|	Use Resolution Consultants professional judgment, qualify results as estimated (J)
PB / EB/ FB (Positive)	> LOQ	≥IDL/MDL but ≤ LOQ	Qualify as nondetect (U) at the LOQ
		>LOQ but < 10x Blank Result	Qualify results as unusable
		≥10x Blank Result	No action
	≥IDL/MDL but ≤LOQ	Nondetect	No action
		≥IDL/MDL but ≤LOQ	Qualify as nondetect (U) at the LOQ
		> LOQ	Use Resolution Consultants professional judgment (see below [1])
PB (Negative)	< (-LOQ)	< 10x LOQ	Qualify positive results <10x LOQ as estimated (J) and nondetects as estimated (UJ)
		≥10x LOQ	No action

[1] Establish an action level (AL) at 5x the blank contamination. If sample result is <AL, qualify the reported result with a U.

Qualified sample results are shown in Table 1.

ICP Interference Check Standards

The ICP interference check standards (ICSA, ICSAB) were reviewed for conformance.

All criteria were met for the ICSA and ICSAB.

MS Results

The MS %Rs were reviewed for conformance with the QC acceptance criteria.

The MS %Rs were within the QC acceptance criteria.

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Laboratory Duplicate Results

The laboratory duplicate relative percent differences (RPDs) were reviewed for conformance.

The laboratory duplicate RPDs were within the QC acceptance criteria.

LCS Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria.

The LCS %Rs were within the QC acceptance criteria.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC acceptance criterion of ≤50% for solid matrices and ≤30% for aqueous matrices. This criterion applies if both results were greater than 5 times the limit of quantitation (LOQ).

Nonconformances are summarized in Attachment A in Table A-2. Data qualification on the basis of field duplicate RPDs was as follows:

Actions: (Based on Resolution Consultants professional judgment)

Criteria	RPD	Action	
		Detected	Nondetected
Sample and duplicate are nondetect results	Not calculable (NC)	No qualification	No qualification
Sample and duplicate results <5xLOQ	Not applicable	No qualification	No qualification
Sample and duplicate results ≥5xLOQ	>30% Aqueous >50% All other sample types	J	Not Applicable
Sample and duplicate results are >5xLOQ and <5xSLOQ	>60% Aqueous >100% All other sample types	J	Not Applicable
If sample or duplicate result is =5xLOQ and the other is not detected	NC	J	UJ
If sample or duplicate result is <5xLOQ and the other is not detected	NC	No qualification	No qualification

Qualified sample results are summarized in Table 1.

ICP/ICPMS Serial Dilution Results

The serial dilution percent differences (%Ds) were reviewed for conformance with the QC acceptance criteria.

The serial dilution %Ds were within the QC acceptance criteria.

Sample Results/Reporting Issues

All analytes detected at concentrations less than the limit of quantitation (LOQ) but greater than the method detection limit (MDL) were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Percent solids were not measured for the tissue samples.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
BLENDER BLANK_121516	WQ	ALUMINUM	200	200	200	UG_L	U	bl
BLENDER BLANK_121516	WQ	BARIUM	200	200	200	UG_L	U	bl
BLENDER BLANK_121516	WQ	BERYLLIUM	5.0	5.0	5.0	UG_L	U	bl
BLENDER BLANK_121516	WQ	CALCIUM	300	300	800	UG_L	UJ	nb
BLENDER BLANK_121516	WQ	COBALT	50	50	50.0	UG_L	U	bl
BLENDER BLANK_121516	WQ	MAGNESIUM	500	500	500	UG_L	U	bl
BLENDER BLANK_121516	WQ	POTASSIUM	200	200	1000	UG_L	UJ	nb
BLENDER BLANK_121516	WQ	SODIUM	1000	1000	1000	UG_L	U	bl
BLENDER BLANK_121516	WQ	VANADIUM	50	50	50.0	UG_L	U	bl
ET09-03-ME45R-1	TX	ANTIMONY	0.82	0.82	0.82	MG_KG	U	bl
ET09-03-ME45R-1	TX	BARIUM	8.2	8.2	8.2	MG_KG	U	bl
ET09-03-ME45R-1	TX	BERYLLIUM	0.20	0.20	0.20	MG_KG	U	bl
ET09-03-ME45R-1	TX	CHROMIUM, TOTAL	0.82	0.82	0.82	MG_KG	U	bl
ET09-03-ME45R-1	TX	COPPER	1.4	1.4	1.2	MG_KG	U	be
ET09-03-ME45R-1	TX	THALLIUM	0.41	0.41	0.82	MG_KG	UJ	nb
ET09-03-ME45R-1	TX	VANADIUM	2.0	2.0	2.0	MG_KG	U	bl
ET09-04-ME45R-1	TX	BARIUM	10.0	10.0	10.0	MG_KG	U	bl
ET09-04-ME45R-1	TX	BERYLLIUM	0.25	0.25	0.25	MG_KG	U	bl
ET09-04-ME45R-1	TX	THALLIUM	0.50	0.50	1.0	MG_KG	UJ	nb
ET09-04-ME45R-1	TX	VANADIUM	2.5	2.5	2.5	MG_KG	U	bl
ET09-05-ME45R-1	TX	ALUMINUM	21.5	3.4	6.9	MG_KG	J	fd
ET09-05-ME45R-1	TX	BARIUM	6.9	6.9	6.9	MG_KG	U	bl
ET09-05-ME45R-1	TX	BERYLLIUM	0.17	0.17	0.17	MG_KG	U	bl
ET09-05-ME45R-1	TX	CHROMIUM, TOTAL	0.69	0.69	0.69	MG_KG	U	bl
ET09-05-ME45R-1	TX	COPPER	1.1	1.1	1.0	MG_KG	U	be
ET09-05-ME45R-1	TX	IRON	71.5	3.4	6.9	MG_KG	J	fd
ET09-05-ME45R-1	TX	THALLIUM	0.34	0.34	0.69	MG_KG	UJ	nb
ET09-05-ME45R-1	TX	VANADIUM	1.7	1.7	1.7	MG_KG	U	bl
ET09-06-ME45R-1	TX	ALUMINUM	2.1	3.7	7.4	MG_KG	J	nb
ET09-06-ME45R-1	TX	BARIUM	7.4	7.4	7.4	MG_KG	U	bl
ET09-06-ME45R-1	TX	BERYLLIUM	0.18	0.18	0.18	MG_KG	U	bl
ET09-06-ME45R-1	TX	CHROMIUM, TOTAL	0.74	0.74	0.74	MG_KG	U	bl
ET09-06-ME45R-1	TX	COPPER	1.8	1.8	1.1	MG_KG	U	be
ET09-06-ME45R-1	TX	THALLIUM	0.37	0.37	0.74	MG_KG	UJ	nb
ET09-06-ME45R-1	TX	VANADIUM	1.8	1.8	1.8	MG_KG	U	bl
ET09-07-ME45R-1	TX	ANTIMONY	0.72	0.72	0.72	MG_KG	U	bl
ET09-07-ME45R-1	TX	BARIUM	7.2	7.2	7.2	MG_KG	U	bl

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-07-ME45R-1	TX	BERYLLIUM	0.18	0.18	0.18	MG_KG	U	bl
ET09-07-ME45R-1	TX	COPPER	1.9	1.9	1.1	MG_KG	U	be
ET09-07-ME45R-1	TX	THALLIUM	0.36	0.36	0.72	MG_KG	UJ	nb
ET09-07-ME45R-1	TX	VANADIUM	1.8	1.8	1.8	MG_KG	U	bl
ET09-08-ME45R-1	TX	BARIUM	6.5	6.5	6.5	MG_KG	U	bl
ET09-08-ME45R-1	TX	BERYLLIUM	0.16	0.16	0.16	MG_KG	U	bl
ET09-08-ME45R-1	TX	THALLIUM	0.33	0.33	0.65	MG_KG	UJ	nb
ET09-08-ME45R-1	TX	VANADIUM	1.6	1.6	1.6	MG_KG	U	bl
ET09-09-ME45R-1	TX	ALUMINUM	2.6	3.2	6.5	MG_KG	J	nb
ET09-09-ME45R-1	TX	ANTIMONY	0.65	0.65	0.65	MG_KG	U	bl
ET09-09-ME45R-1	TX	BARIUM	6.5	6.5	6.5	MG_KG	U	bl
ET09-09-ME45R-1	TX	BERYLLIUM	0.16	0.16	0.16	MG_KG	U	bl
ET09-09-ME45R-1	TX	CHROMIUM, TOTAL	0.65	0.65	0.65	MG_KG	U	bl
ET09-09-ME45R-1	TX	THALLIUM	0.32	0.32	0.65	MG_KG	UJ	nb
ET09-09-ME45R-1	TX	VANADIUM	1.6	1.6	1.6	MG_KG	U	bl
ET09-10-ME45R-1	TX	ANTIMONY	0.87	0.87	0.87	MG_KG	U	bl
ET09-10-ME45R-1	TX	BARIUM	8.7	8.7	8.7	MG_KG	U	bl
ET09-10-ME45R-1	TX	BERYLLIUM	0.22	0.22	0.22	MG_KG	U	bl
ET09-10-ME45R-1	TX	CHROMIUM, TOTAL	0.87	0.87	0.87	MG_KG	U	bl
ET09-10-ME45R-1	TX	COPPER	2.2	2.2	1.3	MG_KG	U	be
ET09-10-ME45R-1	TX	THALLIUM	0.43	0.43	0.87	MG_KG	UJ	nb
ET09-10-ME45R-1	TX	VANADIUM	2.2	2.2	2.2	MG_KG	U	bl
ET09-11-ME45R-1	TX	ANTIMONY	0.82	0.82	0.82	MG_KG	U	bl
ET09-11-ME45R-1	TX	BARIUM	8.2	8.2	8.2	MG_KG	U	bl
ET09-11-ME45R-1	TX	BERYLLIUM	0.20	0.20	0.20	MG_KG	U	bl
ET09-11-ME45R-1	TX	CHROMIUM, TOTAL	0.82	0.82	0.82	MG_KG	U	bl
ET09-11-ME45R-1	TX	COPPER	1.6	1.6	1.2	MG_KG	U	be
ET09-11-ME45R-1	TX	THALLIUM	0.41	0.41	0.82	MG_KG	UJ	nb
ET09-11-ME45R-1	TX	VANADIUM	2.0	2.0	2.0	MG_KG	U	bl
ET09-12-ME45R-1	TX	BARIUM	6.4	6.4	6.4	MG_KG	U	bl
ET09-12-ME45R-1	TX	BERYLLIUM	0.16	0.16	0.16	MG_KG	U	bl
ET09-12-ME45R-1	TX	CHROMIUM, TOTAL	0.64	0.64	0.64	MG_KG	U	bl
ET09-12-ME45R-1	TX	THALLIUM	0.32	0.32	0.64	MG_KG	UJ	nb
ET09-12-ME45R-1	TX	VANADIUM	1.6	1.6	1.6	MG_KG	U	bl
ET09-ME45R-FD01	TX	ALUMINUM	6.8	4.3	8.7	MG_KG	J	fd
ET09-ME45R-FD01	TX	BARIUM	8.7	8.7	8.7	MG_KG	U	bl
ET09-ME45R-FD01	TX	BERYLLIUM	0.22	0.22	0.22	MG_KG	U	bl

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
ET09-ME45R-FD01	TX	CHROMIUM, TOTAL	0.87	0.87	0.87	MG_KG	U	bl
ET09-ME45R-FD01	TX	COPPER	1.3	1.3	1.3	MG_KG	U	be
ET09-ME45R-FD01	TX	IRON	32.8	4.3	8.7	MG_KG	J	fd
ET09-ME45R-FD01	TX	MANGANESE	2.2	2.2	2.2	MG_KG	U	be
ET09-ME45R-FD01	TX	THALLIUM	0.43	0.43	0.87	MG_KG	UJ	nb
ET09-ME45R-FD01	TX	VANADIUM	2.2	2.2	2.2	MG_KG	U	bl

Attachment A

Nonconformance Summary Tables

Table A-1a- Lab Blanks

Blank ID	Compound	Result	LOD	LOQ	Units	Associated Samples
CCB	ALUMINUM	-16 J	100	200	UG/L	ET09-06-ME45R-1
ICB	ANTIMONY	6.3 J	10	20	UG/L	ET09-03-ME45R-1 ET09-07-ME45R-1 ET09-09-ME45R-1 ET09-10-ME45R-1 ET09-11-ME45R-1
CCB	BARIUM	1.1 J	3	200	UG/L	ALL TISSUE SAMPLES
MB-85979	BERYLLIUM	0.0023 J	0.05	0.25	MG/KG	ALL TISSUE SAMPLES
MB-85979	CHROMIUM, TOTAL	0.029 J	0.20	1.0	MG/KG	ET09-03-ME45R-1 ET09-05-ME45R-1 ET09-06-ME45R-1 ET09-09-ME45R-1 ET09-10-ME45R-1 ET09-11-ME45R-1 ET09-12-ME45R-1 ET09-ME45R-FD01
CCB	THALLIUM	-2.6 J	10	20	UG/L	ALL TISSUE SAMPLES
CCB	VANADIUM	0.50 J	4	50	UG/L	ALL TISSUE SAMPLES
CCB	ALUMINUM	32.6 J	100	200	UG/L	Blender blank only
MB-86013	ANTIMONY	9.9 J	10.0	20.0	UG/L	Blender blank only
CCB	BARIUM	1.1 J	3.0	200	UG/L	Blender blank only
CCB	BERYLLIUM	0.063 J	1.0	5.0	UG/L	Blender blank only
MB-86013	CALCIUM	-110 J	300	800	UG/L	Blender blank only
CCB	COBALT	0.44 J	2.0	50.0	UG/L	Blender blank only
CCB	MAGNESIUM	12.5 J	200	500	UG/L	Blender blank only
MB-86013	POTASSIUM	-95 J	200	1000	UG/L	Blender blank only
CCB	SODIUM	37.8 J	100	1000	UG/L	Blender blank only
CCB	THALLIUM	2.5 J	10.0	20.0	UG/L	Blender blank only
CCB	VANADIUM	0.28 J	4.0	50.0	UG/L	Blender blank only

Table A-1b - Field Blanks

Blank ID	Compound	Result	LOD	LOQ	Units	Associated Samples
BLENDER BLANK_121516	COPPER	11.4	10.0	30.0	UG_L	ET09-03-ME45R-1 ET09-05-ME45R-1 ET09-06-ME45R-1 ET09-07-ME45R-1 ET09-10-ME45R-1 ET09-11-ME45R-1 ET09-ME45R-FD01
BLENDER BLANK_121516	MANGANESE	0.62	30.0	50.0	UG_L	ET09-ME45R-FD01

Table A-2 - Field Duplicates

Sample ID	Duplicate ID	Compound	Sample Result	Qual	Duplicate Result	Qual	LOD	LOQ	Units	RPD
ET09-05-ME45R-1	ET09-ME45R-FD01	ALUMINUM	21.5		6.8	J	3.4	6.9	MG_KG	103.9
		IRON	71.5		32.8		3.4	6.9	MG_KG	74.2

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Data Validation Report

Project:	Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville
Laboratory:	EUROFINS SPECTRUM ANALYTICAL
Service Request:	R0832
Analyses/Method:	EPA Method 3C for Methane (GC) and EPA Method TO-15, VOCs Collected in Canisters
Validation Level:	Tier 1 Plus
Resolution Consultants Project Number:	60273164.SA.DM
Prepared by:	Elissa McDonagh/Resolution Consultants Completed on: 12/07/16
Reviewed by:	Linda Adams/Resolution Consultants File Name: R0832_3C and TO-15

SUMMARY

The samples listed below were collected by Resolution Consultants from the Site 09 Allen Harbor Landfill LTM, Former NCBC Davisville site on September 9, 2016.

Sample ID	Matrix/Sample Type
GV09-01-ME45-1	Air sample
GV09-02-ME45-1	Air sample
GV09-ME45-FD01	Field Duplicate of GV09-02-ME45-1
GV09-03-ME45-1	Air sample
GV09-04-ME45-1	Air sample
GV09-05-ME45-1	Air sample

Data validation activities were conducted with reference to

- *DoD Quality Systems Manual (QSM) for Environmental Laboratories, version 5.0* (July 2013);
- *EPA method TO-15*
- *Modified EPA 3C*
- *EPA New England Environmental Data Review Program Guidance (April 2013)*;
- *EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Specific Guidance/Procedures* (April 2013);
- *USEPA National Functional Guidelines for Superfund Organic Methods Data Review* (September 2016);
- laboratory quality control (QC) limits, as applicable.

The USEPA Region 1 and National Data Validation Functional Guidelines were modified to accommodate the non-CLP methodologies. In the absence of method-specific information, laboratory quality control (QC) limits, DoD QSM 5.0, or project-specific requirements, Resolution Consultants professional judgment was used as appropriate.

REVIEW ELEMENTS

The data were evaluated based on the following review elements (where applicable to the method):

✓	Data completeness (chain-of-custody [COC])/sample integrity
✓	Holding times and sample preservation
✓	Gas Chromatography/Mass Spectrometry (GC/MS) performance checks
✓	Initial calibration/continuing calibration verification
✓	Laboratory blanks/trip blanks/equipment blanks
✗	Surrogate spike recoveries
NA	Matrix spike (MS) and/or matrix spike duplicate (MSD) results
✓	Laboratory control sample (LCS) results
✓	Lab Duplicate results
✓	Field duplicate results
✓	Internal standard recoveries
✓	Sample results/reporting issues

The symbol (✓) indicates that no validation qualifiers were applied based on this parameter. NA indicates that the parameter was not included as part of this data set or was not applicable to this validation and therefore not reviewed. The symbol (✗) indicates that a QC nonconformance resulted in the qualification of data. Any QC nonconformance that resulted in the qualification of data is discussed below. In addition, nonconformances or other issues that were noted during validation, but did not result in qualification of data, may be discussed for informational purposes only.

The data appear valid as reported and may be used for decision making purposes. No data were rejected. Selected data points were qualified as estimated due to nonconformances of certain QC criteria (see discussion below). Qualified sample results are presented in Table 1.

RESULTS

Data Completeness (COC)/Sample Integrity

The data package was reviewed and found to meet acceptance criteria for completeness:

- The COCs were reviewed for completeness of information relevant to the samples and requested analyses, and for signatures indicating transfer of sample custody.
- The laboratory sample login sheet(s) were reviewed for issues potentially affecting sample integrity, including the condition of sample containers upon receipt at the laboratory.
- Completeness of analyses was verified by comparing the reported results to the COC requests.

Holding Times and Sample Preservation

Sample preservation and preparation/analysis holding times were reviewed for conformance with the QC acceptance criteria. The QC acceptance criteria were met.

GC/MS Performance Checks

The data were reviewed to ensure that the 4-bromofluorobenzene (BFB) tuning was performed at the correct frequency and that the method acceptance criteria were met. All samples were analyzed within 12 hours of the BFB tunes.

Initial Calibration/Continuing Calibration Verification

Calibration data were reviewed for conformance with the QC acceptance criteria to ensure that:

- the initial calibration (ICAL) percent relative standard deviation (%RSD), correlation coefficient (r)/coefficient of determination (r2), and/or response factor (RF) method acceptance criteria were met;
- the initial calibration verification standard (ICV) percent recovery acceptance criteria were met;
- the continuing calibration verification standard (CCV) method percent difference or percent drift (%Ds) and RF acceptance criteria were met; and
- the retention time method acceptance criteria were met.

The QC acceptance criteria were met.

Laboratory Blanks/Trip Blanks/Equipment Blanks

Laboratory method blanks were evaluated as to whether there were contaminants detected above the detection limit (DL). Equipment blanks and trip blanks were not submitted with the samples in this SDG. No validation action was taken.

Data validation qualifications for individual samples are based on the maximum contaminant concentration detected in all associated blanks.

Detected results in blanks are not discussed in this data validation report if the associated results were nondetect or if qualification of sample results was not required.

The QC acceptance criteria were met and/or qualification of the sample results was not required.

Surrogate Spike Recoveries

The surrogate recoveries (%Rs) were reviewed for conformance with the QC acceptance criteria.

Nonconformances are summarized in Attachment A in Table A-1. Data qualification on the basis of surrogate recovery nonconformances was as follows:

Criteria	Action	
	Detected Compounds	Nondetected Compounds
%R > Upper Limit (UL)	J+	No qualification
20% ≤%R < Lower Limit (LL)	J-	UJ
%R < 20%	J-	R

Qualified sample results are shown in Table 1.

MS/MSD Results

MS/MSD analyses were not performed on samples reported in this SDG. There were no validation actions taken on this basis.

LCS Results

The LCS %Rs were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Lab Duplicate Results

Lab duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤20% for air matrices. These criteria apply if both results were greater than two times the limit of quantitation (LOQ). All QC acceptance criteria were met.

Field Duplicate Results

Field duplicate RPDs were reviewed for conformance with the Resolution Consultants QC criteria of ≤30% for air matrices. These criteria apply if both results were greater than two times LOQ. All QC acceptance criteria were met.

Internal Standard Recoveries

The internal standard (IS) recoveries were reviewed for conformance with the QC acceptance criteria. All QC acceptance criteria were met.

Sample Results/Reporting Issues

All compounds detected at concentrations less than the LOQ but greater than the limit of detection (LOD) were qualified by the laboratory as estimated (J). This "J" qualifier was retained during data validation.

Any sample that was analyzed at a dilution because of high concentrations of target or non-targets was checked to confirm that the results and/or sample-specific LOQs and LODs were adjusted accordingly by the laboratory.

QUALIFICATION ACTIONS

Sample results qualified as a result of validation actions are summarized in Table 1. All actions are described above.

ATTACHMENTS

Attachment A: Nonconformance Summary Tables

Attachment B: Qualifier Codes and Explanations

Attachment C: Reason Codes and Explanations

Table 1 - Data Validation Summary of Qualified Data

Sample ID	Matrix	Compound	Result	LOD	LOQ	Units	Validation Qualifiers	Validation Reason
GV09-02-ME45-1	Air	2-BUTANONE	3.15	1.00	1.00	PPBV	J+	s
GV09-02-ME45-1	Air	CARBON DISULFIDE	4.98	1.00	1.00	PPBV	J+	s
GV09-02-ME45-1	Air	CIS-1,2-DICHLOROETHENE	1.22	1.00	1.00	PPBV	J+	s
GV09-02-ME45-1	Air	TRICHLOROETHENE	1.16	1.00	1.00	PPBV	J+	s
GV09-02-ME45-1	Air	VINYL CHLORIDE	10.6	1.00	1.00	PPBV	J+	s
GV09-03-ME45-1	Air	2-BUTANONE	5.94	1.00	1.00	PPBV	J+	s
GV09-04-ME45-1	Air	ACETONE	170	10.0	10.0	PPBV	J+	s
GV09-04-ME45-1	Air	CARBON DISULFIDE	22.0	10.0	10.0	PPBV	J+	s
GV09-ME45-FD01	Air	2-BUTANONE	3.21	1.00	1.00	PPBV	J+	s
GV09-ME45-FD01	Air	CARBON DISULFIDE	5.02	1.00	1.00	PPBV	J+	s
GV09-ME45-FD01	Air	CIS-1,2-DICHLOROETHENE	1.28	1.00	1.00	PPBV	J+	s
GV09-ME45-FD01	Air	TRICHLOROETHENE	1.17	1.00	1.00	PPBV	J+	s
GV09-ME45-FD01	Air	VINYL CHLORIDE	10.7	1.00	1.00	PPBV	J+	s

Attachment A

Nonconformance Summary Tables

Table A-1- Surrogates

Sample ID	Surrogate	% Recovery	Lower Limit	Upper Limit
GV09-ME45-FD01	4-BROMOFLUOROBENZENE	150	70	130
GV09-04-ME45-1	4-BROMOFLUOROBENZENE	146	70	130
GV09-03-ME45-1	4-BROMOFLUOROBENZENE	140	70	130
GV09-02-ME45-1	4-BROMOFLUOROBENZENE	149	70	130

Attachment B

Qualifier Codes and Explanations

Qualifier	Explanation
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased high.
J-	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample and is potentially biased low.
JN	The analyte was tentatively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual quantitation limit necessary to accurately and precisely measure the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Attachment C

Reason Codes and Explanations

Reason Code	Explanation
be	Equipment blank contamination
bf	Field blank contamination
bl	Laboratory blank contamination
bt	Trip blank contamination
c	Calibration issue
d	Reporting limit raised due to chromatographic interference
fd	Field duplicate RPDs
h	Holding times
i	Internal standard areas
k	Estimated Maximum Possible Concentration (EMPC)
l	LCS or OPR recoveries
lc	Labeled compound recovery
ld	Laboratory duplicate RPDs
lp	Laboratory control sample/laboratory control sample duplicate RPDs
m	Matrix spike recovery
md	Matrix spike/matrix spike duplicate RPDs
nb	Negative laboratory blank contamination
p	Chemical preservation issue
r	Dual column RPD
q	Quantitation issue
s	Surrogate recovery
su	Ion suppression
t	Temperature preservation issue
x	Percent solids
y	Serial dilution results
z	ICS results

Attachment C

Institutional Control Checklist

INSTITUTIONAL CONTROL INSPECTION CHECKLIST
for LAND USE CONTROL AND IMPLEMENTATION PLAN
Parcel 10, Zone 3
(Includes OU1, Site 09)

A. Annual Certification:

Name: THOMAS J. MULLIGAN

Affiliation: TOWN MANAGER, TOWN of NORTH KINGSTOWN

Signature: Thomas J. Mulligan

Date: 12/21/2016

B. Documentation Inspection:

Inspect documentation to ensure no permits have been issued to change the use of the Site, build residential or commercial units, or install ground-water supply wells, including the following:

	ITEM	CHECK ONE	COMMENTS*
1.	Any related notice(s) filed with the Town of North Kingstown, RIDEM, or CRMC?	☐ Yes ☑ No	
2.	Any related building permits found?	☐ Yes ☑ No	
3.	Any related Department of Public Works Permits found?	☐ Yes ☑ No	
4.	Any related Zoning permits or variances found?	☐ Yes ☑ No	
5.	Any related Conservation Commission findings, proposals, or notices of intent found?	☐ Yes ☑ No	

C. Physical On-Site Inspection:

Name: Rachel MacPhee

Affiliation: Resolution Consultants

Signature:

Date: 09/23/16

	ITEM	CHECK ONE	COMMENTS*
1.	Land-Use Condition; i.e. Buildings Present? If yes, is there evidence of damage to the remedy?	☐ Yes ☒ No ☐ Yes ☒ No	
2.	Evidence of any ground-water supply wells? If yes, is there evidence of damage to the remedy?	☐ Yes ☒ No ☐ Yes ☒ No	
3.	Weather Conditions?	--	Sunny 285°F

*If the answer to a question is 'Yes', use the 'Comments' column to explain, e.g. list type(s) and names(s) of notices, permits, variances, notices of intent found; describe the type and location of where a building or ground-water supply well was observed.

Attachment D

Site Inspection Report

SITE INSPECTION REPORT

ALLEN HARBOR LANDFILL, NCBC DAVISVILLE, RHODE ISLAND

INSPECTOR NAME: Rachel MacPhee

POST-CLOSURE YEAR: 2016

SIGNATURE:

DATE & TIME OF INSPECTION: 09/28/16 10:00-15:00

WEATHER: Sunny, 80°F

TIDES: high tide: 06:40; low tide: 12:16

Component/Frequency	What to Inspect	Observations/Comments
Landfill Cap Inspection Annually during LTM sampling event.	Erosion, differential settling, vegetation coverage, vegetation maintenance, and animal burrowing.	Overall, the landfill cap is in good condition with little erosion or settling. • Small amounts of soil have washed from the cap and onto the revetment, leading to small patches of grass, moss, and other plants growing on the revetment. (Photo 1) • Several small animal burrows were observed on the landfill, mostly concentrated along the edge of the landfill cap. • Large animal burrow / erosion area observed on the southern area of the landfill in between well MW09-05S and MW09-24D/24S observed during 2015 inspection is recovering well. Depression is gone and grass is growing. • In some areas along the edge of the landfill cap, the geotextile liner is exposed (Photo 2) • No areas of erosion were observed. • The wooden fence was in moderately good condition; several broken rails were replaced. • Animal burrows and exposed geotextile liner were filled in with soil from the Soil Stockpile and seeded. (Photo 3) • See the "Vegetation and Shrub Inspection" section below for a description of vegetation conditions on site. **Recommendation:** Backfill new burrows, areas of exposed liner, and areas of erosion each year. Continue to replace broken rails on the fence. Continue monitoring program.

Storm Drainage System Inspection Annually during LTM sampling event.	Sediment accumulation, subsidence, erosion, vegetative growth, ponding, and obstructions to flow.	<u>Southern Drainage Channel</u> • The channel is in good condition overall. There is some vegetation and sedimentation in the channel. No flow was observed during inspection; however the flow path was not obstructed. • Cord Grass growth was observed around the southern culvert, but flow path does not appear to be impeded. (Photo 4) • The surrounding revetment was in good condition. Some organic sheen was observed in the water. <u>Northern Drainage Channel</u> • The culvert on the west side of the road had slight vegetative growth which is not hindering flow through channel. (Photo 5) • The east side of the culvert and the channel are in good condition. (Photo 6) <u>Southern Landfill Drain</u> • The screen and drain are in good condition. Some slight damage to the screen observed, but is not hindering the flow path. • There is minor algal growth and debris in the drain (Photo 7). <u>Northern Drainage Swale and Landfill Drain</u> • There is some vegetation growth within the northern drainage swale. Flow is not impeded. (Photo 8). • Some damage to the screen and nearby shrub growth were observed. Flow path was not obstructed. **Recommendation:** Monitor vegetative growth around drainage channel culverts. Monitor damage to southern landfill and northern drainage swale screens. Continue clearing vegetation in the drainage channels during yearly landfill maintenance. Continue monitoring program.
Gas Vent and Monitoring Well Survey Biennially	Survey the elevations of the benchmark points on the gas vents and the tops of the monitoring wells. Compare the elevations to the as-built elevations at the completion of construction.	A landfill settlement survey was completed on October 31, 2016. See Section 5 of the 2016 Five Year monitoring Report for a summary and analysis of the survey.

Gas Monitoring Vents Inspection Annually during LTM sampling event.	Damage to riser pipes, vents, screen on vents, and settlement in surrounding area. Damage to the fence and gate, rusted or damaged locks, and signs of intrusion.	Each of the five gas vents is in good condition. The riser pipes, vents, screens, and surrounding fence were in good condition. There were no signs of intrusion or settlement and the posted "No Smoking" signs were well-secured and gates are secure. **Recommendation:** Continue monitoring program.
Access Ramp Inspection Annually during LTM sampling event.	Potholes, ruts, settlement, vegetative growth, and erosion.	The entrance gate is in good condition. There is a shallow area of erosion (about 10 feet long) along the south side of the entrance ramp, likely a result of precipitation. Otherwise, there is no significant erosion, vegetative growth, potholes, or settlement. (Photo 9) Soil stockpile and tarp replaced during the 2015 inspection are in good condition. (Photo 10). **Recommendation:** Continue to monitor deterioration of Soil Stockpile erosion controls during landfill maintenance. Conduct repairs as needed. .
Restricted Shell Fishing Sign Inspection Annually during LTM sampling event.	Damaged or illegible signs, stability and integrity of the sign footings.	All three Restricted Shell Fishing Signs are in good condition. No bolts were missing and there were no new signs of vandalism. As observed in the 2015 inspection, the letters are beginning to peel on the central sign. (Photo 11). **Recommendation:** Continue monitoring program, especially regarding peeling letters on central sign.

Vegetation and Shrub Inspection Annually during LTM sampling event.	Areas of stressed vegetation larger than 6-ft square, vehicle ruts, erosion, need for maintenance such as mowing, watering, hydroseeding, planting, mulching, etc., Inspect shrubs to assess the need for maintenance such as watering or replacement.	There is good, consistent grass cover across the landfill cap. The grass is short due to recent mowing efforts. There are no large shrubs or saplings other than the planted cedar evergreen trees. (Photo 12). There are no significant ruts and the driving path is in good condition with no significant areas of erosion. Trees that were damaged by landscaping rope continue to recover well. (Photo 13) **Recommendation:** Continue monitoring and maintenance of landfill cap.
Revetment Slope Inspection Annually during LTM sampling event.	Inspect the slope for potential areas of sliding and/or stone displacement.	Overall, the revetment is in good condition; the slope is smooth, consistent, with little signs of sliding or displacement. Exposed geotextile liner, minor areas of soil erosion, and small animal borrows observed at the top of the revetment slope were backfilled with soil from the soil stockpile and seeded. There are few pieces of debris scattered across the revetment which appear to have been washed in by tides. This debris is minor, and does not appear to be impacting cord grass growth in the wetland or compromise the stability of the slope. **Recommendation:** Continue monitoring program.
Surveying Biennially	Survey the elevations of the settlement monitoring points and compare them against the as-built elevations.	A landfill settlement survey was completed on October 31, 2016. See Section 5of the 2016 Five Year monitoring Report for a summary and analysis of the survey.

Breakwater Structure Inspection Annually during LTM sampling event.	Inspect the breakwater structure for areas of sliding and stone displacement.	The breakwater structure is in good condition with no areas of significant settling, erosion, or stone displacement. (Photo 14). There are several areas with a build-up of broken mussel and clam shells across the top of the breakwater. **Recommendation:** Continue monitoring program.
Surveying Biennially	Survey the elevations of the settlement monitoring points on the breakwater structure and compare them against the as-built elevations.	A landfill settlement survey was completed on October 31, 2016. See Section 5 of the 2016 Five Year monitoring Report for a summary and analysis of the survey.

Created Wetland Annually during LTM sampling event.	Inspect wetland plants for percent survivability, physical appearance, density of growth, and presence of invasive wetland species in 3 locations: 1. Created wetland between the landfill revetment and the breakwater structure. 2. Planted wetland just north of the capped area. 3. Salt marsh enhancement area located along the north shore of Allen Harbor.	<u>Constructed Wetland</u> • There is excellent cord grass cover throughout the majority of the wetland. (Photo 15) Sea-lavender (Limonium carolinianum or nashi) was found growing in several areas against the revetment slope. This is a native marsh plant, and is also listed as "suitable for restoration plantings in coastal environment" by the CT Coastal Planting Guide. • Large holes created by sediment sampling near P09-05 were observed, consistent with previous year's inspections. • Consistent with previous years, a large salt panne has developed near these sediment holes. (Photo 16). • Several smaller salt pannes were also observed throughout the wetland. • The area of stressed vegetation observed during the 2015 inspection along the breakwater from P09-08 to the end of the breakwater has recovered significantly. Some debris washed in by violent wave action can still be seen on the revetment slope adjacent to this area. (Photo 17) <u>Salt Marsh Enhancement Area / Planted Wetland</u> • Invasive common reed (*Phragmites australis*) was observed on the west side of the planted wetland / enhancement area, growing alongside the Cord Grass. • A large wetland containing >90% of the common reed (*Phragmites australis*) can be found to the west of the bike path. The northern drainage swale drains this wetland in to Allen Harbor. **Recommendation:** Continue monitoring program. Navy does not suggest removing the common invasive reed from the study area. Doing so might cause instability and erosion in the shoreline.
Groundwater Monitoring System Inspection Annually during LTM sampling event.	Rusted locks, subsidence, well casing damage, or vandalism.	The monitoring wells are in good condition. See the attached monitoring well inspection table. **Recommendation:** Continue monitoring program.

Shellfish Inspection Annually during LTM sampling event.	Presence or absence of shellfish in the created wetland between the landfill revetment and the breakwater structure. Type (i.e., ribbed mussel, hard or soft-shell clam, oyster, etc.). General location, extent, and abundance.	Crabs, fish fry, oysters and other sea life noted on the harbor side of the breakwater. Burrow holes and evidence of sediment macroinvertebrates were observed in the constructed wetland. Ribbed Mussels were found in wetland sampling locations ET09-07 and ET09-08. Healthy quahog beds were observed at sampling locations ET-05, ET-08, ET-10, and ET-12. Several areas of broken shellfish shells were observed along the top of the breakwater. (Photo 18) **Recommendation:** Continue monitoring program.

MONITORING WELL INSPECTION

ALLEN HARBOR LANDFILL, NCBC DAVISVILLE, RHODE ISLAND

Well ID	Locked? (Y or N)	Labeled? (Y or N)	Damaged? (Y or N)	Depth to Water (ft TOR)	Comments
MW09-02S	Y	Y	N	8.78	No deficiencies noted.
MW09-03D	Y	Y	N	8.77	No deficiencies noted.
MW09-05S	Y	Y	N	16.38	No deficiencies noted.
MW09-07S	Y	Y	N	22.09	No deficiencies noted.
MW09-08S	Y	Y	N	16.5	No deficiencies noted.
MW09-08DA	Y	Y	N	17.5	No deficiencies noted.
MW09-09DA	Y	Y	N	23.31	No deficiencies noted.
MW09-09S	Y	Y	N	22.52	No deficiencies noted.
MW09-10D	Y	Y	N	19.62	No deficiencies noted.
MW09-10S	Y	Y	N	20.4	No deficiencies noted.
MW09-11S	Y	Y	N	13.17	No deficiencies noted.
MW09-14D	Y	Y	N	23.31	No deficiencies noted.
MW09-14IA	Y	Y	N	24.21	No deficiencies noted.
MW09-17I	Y	Y	N	21.83	No deficiencies noted.
MW09-20D	Y	Y	N	19.33	No deficiencies noted.
MW09-20I	Y	Y	N	20.47	No deficiencies noted.
MW09-21D	Y	Y	N	17.33	No deficiencies noted.
MW09-21S	Y	Y	N	17.73	No deficiencies noted.
MW09-23D	Y	Y	N	21.49	No deficiencies noted.
MW09-23S	Y	Y	N	22.65	No deficiencies noted.
MW09-24D	Y	Y	N	7.91	No deficiencies noted.
MW09-24S	Y	Y	N	8.12	No deficiencies noted.
MW09-25S	Y	Y	N	8.17	No deficiencies noted.
MW09-26S	Y	Y	N	8.2	No deficiencies noted.
MW09-26D	Y	Y	N	6.87	No deficiencies noted.
MW09-26DA	Y	Y	N	8.3	No deficiencies noted.
MW09-27S	Y	Y	N	3.42	No deficiencies noted.
MW09-27D	Y	Y	N	3.02	No deficiencies noted.

MONITORING WELL INSPECTION

ALLEN HARBOR LANDFILL, NCBC DAVISVILLE, RHODE ISLAND

Signature

Name: Rachel MacPhee

Affiliation: Resolution Consultants

Signature:

Date: 09/28/17

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	Site Location: IRP Site 09 Allen Harbor Landfill, North Kingstown, RI	Project No. 60273164

Photo No. 1	Date: 09/28/16

Direction Photo Taken:

NA

Description:

Small patches of grass, moss, and other plants growing on the revetment.

Photo No. 2	Date: 09/28/16

Direction Photo Taken:

NA

Description:

Geotextile liner was visible in several areas across the landfill.

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	Site Location: IRP Site 09 Allen Harbor Landfill, North Kingstown, RI	Project No. 60273164

Photo No. 3	Date: 09/28/16

Direction Photo Taken:

NA

Description:

Animal burrows and exposed geotextile liner were filled in with soil from the Soil Stockpile and seeded.

Photo No. 4	Date: 09/28/16

Direction Photo Taken:

West

Description:

Cord Grass growth observed around the southern culvert.

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	Site Location: IRP Site 09 Allen Harbor Landfill, North Kingstown, RI	Project No. 60273164

Photo No. 5	Date: 09/28/16

Direction Photo Taken:

NA

Description:

The Northern culvert on the west side of the road had vegetative growth which is not hindering flow through channel.

Photo No. 6	Date: 09/28/16

Direction Photo Taken:

West

Description:

The east side of the Northern Drainage Channel culvert and channel are in good condition.

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	Site Location: IRP Site 09 Allen Harbor Landfill, North Kingstown, RI	Project No. 60273164

Photo No. 7	Date: 09/28/16

Direction Photo Taken:

NA

Description:

There is minor algal growth and damage to the Southern Landfill Drain.

Photo No. 8	Date: 09/28/16

Direction Photo Taken:

North

Description:

Some vegetation growth within the northern drainage swale

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	Site Location: IRP Site 09 Allen Harbor Landfill, North Kingstown, RI	Project No. 60273164

Photo No. 9	Date: 09/28/16

Direction Photo Taken:

West

Description:

The entrance gate is in good condition.

Photo No. 10	Date: 09/28/16

Direction Photo Taken:

West

Description:

Tarp replaced during 2015 inspection in good condition.

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	Site Location: IRP Site 09 Allen Harbor Landfill, North Kingstown, RI	Project No. 60273164

Photo No. 11	Date: 09/28/16

Direction Photo Taken:

East

Description:

Restricted Shell Fishing Sign. (South)

Photo No. 12	Date: 09/28/16

Direction Photo Taken:

South

Description:

There is good, consistent grass cover across the landfill cap.

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	Site Location: IRP Site 09 Allen Harbor Landfill, North Kingstown, RI	Project No. 60273164

Photo No. 13	Date: 09/28/16

Direction Photo Taken:

North

Description:

Trees that were damaged by landscaping rope continue to recover well

Photo No. 14	Date: 09/28/16

Direction Photo Taken:

North

Description:

The breakwater structure is in good condition.

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	Site Location: IRP Site 09 Allen Harbor Landfill, North Kingstown, RI	Project No. 60273164

Photo No. 15	Date: 09/28/16

Direction Photo Taken:

North

Description:

Excellent cord grass coverage throughout the wetland.

Photo No. 16	Date: 09/28/16

Direction Photo Taken:

East

Description:

Salt Panne and drainage area near P09-05 at low tide.

RESOLUTION CONSULTANTS

PHOTOGRAPHIC LOG

Client Name: NAVY	Site Location: IRP Site 09 Allen Harbor Landfill, North Kingstown, RI	Project No. 60273164

Photo No. 17	Date: 09/28/16

Direction Photo Taken:

East

Description:

Area of stressed vegetation around P09-08 – P09-12.

Photo No. 18	Date: 09/28/16

Direction Photo Taken:

NA

Description:

Several areas of broken clam shells were observed along the top of the breakwater.

RESOLUTION CONSULTANTS

Drawn:	RM	04/20/2017
Approved:	BS	04/20/2017
Project #:	60273164	

Legend

- Gas Vent
- Monitoring Well
- Exposed Geosynthetic Liner
- Possible Animal Burrow
- 75% Vegitation Coverage 2016
- 95% Vegitation Coverage 2016
- Settlement Survey Locations
- Geosynthetic Liner
- Subsurface Drainage Trench

N

0 100 200 Feet

FIGURE 1
MONITORING EVENT 45
ANNUAL LANDFILL INSPECTION

IRP SITE 09 NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

\\USCHL1FP001\Data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\ME 45\Fig_1_Landfill_Inspection_2015.mxd

Attachment E

Summary of Detected Analytes Tables

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
2,4,5-TRICHLOROPHENOL (UG_L)	-															
MW09-02S	-	--	--	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	--	< 100 U	--	--	--	--
MW09-03D	-	--	--	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	--	< 100 U	--	--	--	--
MW09-07S	-	< 100 U	--	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	--	< 100 U	--	--	--	--
MW09-08S	-	--	--	--	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 UJ	< 100 U	--	< 100 U	--	--	--	--
MW09-09S	-	< 100 U	--	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	--	< 100 U	--	--	--	--
MW09-10D	-	--	--	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	--	< 100 U	--	--	--	--
MW09-10S	-	--	--	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	--	< 100 U	--	--	--	--
MW09-11S	-	--	--	< 100 U	< 100 U	--	< 100 UJ	< 100 U	< 100 UJ	< 100 U	--	< 100 U	--	--	--	--
MW09-14D	-	< 100 U	--	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	--	< 100 U	--	--	--	--
MW09-20D	-	--	--	< 100 U	--	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	--	< 100 U	--	--	--	--
MW09-20I	-	--	--	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	--	< 100 U	--	--	--	--
MW09-21D	-	--	--	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	--	< 100 U	--	--	--	--
MW09-21S	-	--	--	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	--	< 100 U	--	--	--	--
MW09-23D	-	< 100 U	--	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 UJ	< 100 U	--	< 100 U	--	--	--	--
MW09-23S	-	< 100 U	--	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 UJ	< 100 U	--	< 100 U	--	--	--	--
MW09-24D	-	--	--	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	--	< 100 U	--	--	--	--
MW09-24S	-	--	--	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 U	< 100 U	--	< 100 U	--	--	--	--
MW09-25S	-	--	--	< 100 U	< 100 U	< 100 U	< 100 UJ	< 100 U	< 100 UJ	< 100 U	--	< 100 U	--	--	--	--
PENTACHLOROPHENOL (1 UG_L)	-															
MW09-02S	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 UJ	< 50 U	--	< 50 U	--	--	--	--
MW09-03D	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 UJ	< 50 U	--	< 50 U	--	--	--	--
MW09-07S	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	--	< 50 U	--	--	--	--
MW09-08S	1	< 50 U	--	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 UJ	< 50 U	--	< 50 U	--	--	--	--
MW09-09S	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 UJ	< 50 U	--	< 50 U	--	--	--	--
MW09-10D	1	0.41	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 UJ	< 50 U	--	< 50 U	--	--	--	--
MW09-10S	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 UJ	< 50 U	--	< 50 U	--	--	--	--
MW09-11S	1	< 50 U	--	< 50 U	< 50 U	--	< 50 U	< 50 U	< 50 UJ	< 50 U	--	< 50 U	--	--	--	--
MW09-14D	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	--	< 50 U	--	--	--	--
MW09-20D	1	< 50 U	--	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	--	< 50 U	--	--	--	--
MW09-20I	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	--	< 50 U	--	--	--	--
MW09-21D	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	--	< 50 U	--	--	--	--
MW09-21S	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	--	< 50 U	--	--	--	--
MW09-23D	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 UJ	< 50 U	--	< 50 U	--	--	--	--
MW09-23S	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 UJ	< 50 U	--	< 50 U	--	--	--	--
MW09-24D	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	--	< 50 U	--	--	--	--
MW09-24S	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	--	< 50 U	--	--	--	--
MW09-25S	1	< 50 U	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 UJ	< 50 U	--	< 50 U	--	--	--	--
ALUMINUM, DISSOLVED (UG_L)	-															
MW09-02S	-	< 62 U	< 62 UJ	< 83.8 U	< 110 U	15.5 J	< 12 U	57.6	16 J	< 2.3 U	--	6.8	< 56.1 U	< 200 U	< 200 U	< 200 U
MW09-03D	-	< 62 U	< 62 UJ	< 15.2 U	< 62 UJ	< 37.5 U	< 3.2 U	< 3.2 U	4.1 J	< 0.45 U	--	< 0.72 U	< 119 U	< 200 U	< 200 U	< 200 U
MW09-07S	-	< 62 U	< 62 U	< 8.9 U	< 62 UJ	< 37.5 U	4.0 J	< 2.3 U	4.4 J	< 0.73 U	--	0.99	< 53.7 U	< 200 U	< 200 U	< 200 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	68.1 J	< 62 U	< 9.7 U	R	< 37.5 U	5.8 J	6 J	6.1 J	< 3.4 U	--	3.7	< 56.5 U	< 200 U	< 200 U	< 200 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 62 U	< 62 UJ	< 8.9 U	R	21.9 J	< 19.1 U	17.1 J	18.1 J	12.9	--	16.2	< 200 U	< 200 U	< 200 U	< 200 U
MW09-10D	-	< 62 U	< 62 U	< 15 U	< 83 U	< 30 U	< 3.3 U	4.3 J	4.3 J	< 2.3 U	--	2.7	< 10.2 U	< 200 U	< 200 U	< 200 U
MW09-10S	-	< 62 U	< 62 U	< 8.9 U	< 81 UJ	13.7 J	< 7.5 U	8.8 J	45.3	10.5	--	6.1	< 132 U	< 200 U	< 200 U	< 200 U
MW09-11S	-	< 62 U	< 62 UJ	4070	R	< 30 U	< 3.2 U	< 2.1 U	3.9 J	< 3.5 U	--	0.77	< 9.2 U	< 200 U	< 200 U	< 200 U
MW09-14D	-	< 62 U	< 62 UJ	< 8.9 U	< 62 UJ	< 37.5 U	3.3 J	< 2.2 U	1.6 J	< 1 U	--	1.4	< 200 U	< 200 U	< 200 U	< 200 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 62 U	< 62 U	< 64.8 U	< 62 UJ	58.6	5.7 J	< 3.6 U	9.2 J	< 3.5 U	--	3.6	< 10.4 U	< 200 U	< 200 U	< 200 U
MW09-20I	-	< 62 U	< 62 UJ	< 64.5 U	< 62 UJ	37.3	46.7	37.6	36.2	36.3	--	35	< 50.7 U	< 200 U	< 200 U	< 200 U
MW09-21D	-	292	< 161 UJ	< 317 U	R	318	379	138	204	289	--	190	< 131 U	148 J	131 J	154 J
MW09-21S	-	< 62 U	< 62 UJ	< 27.7 U	R	22.1 J	25.4 J	18.6 J	29.9 J	21.8	--	20.6	< 61.9 U	< 200 U	< 200 U	< 200 U
MW09-23D	-	< 62 U	< 62 U	< 50 U	< 62 UJ	< 30 U	< 3.2 U	< 1 U	6.2 J	< 0.66 U	--	0.76	< 8.3 U	< 200 U	< 200 U	< 200 U
MW09-23S	-	< 336 U	< 1240 U	< 17.6 U	< 62 UJ	22.2 J	57.3	15 J	14.1 J	15.3	--	8.9	< 18.7 U	< 200 U	< 200 U	< 200 U
MW09-24D	-	< 62 U	< 62 UJ	< 8.9 U	< 62 UJ	23.1 J	< 3.2 U	< 1.8 U	2.2 J	< 1.3 U	--	< 0.72 U	< 53.4 U	< 200 U	< 200 U	< 200 U
MW09-24S	-	< 62 U	< 62 UJ	< 8.9 U	< 62 UJ	16.0 J	4.1 J	12.2 J	2.6 J	< 2.1 U	--	2.3	< 54.4 U	< 200 U	< 200 U	< 200 U
MW09-25S	-	< 62 U	< 62 UJ	< 24.4 U	R	< 30 U	3.6 J	< 2.0 U	4.4 J	< 1.3 U	--	1.7	< 100 U	< 200 U	< 200 U	< 200 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALUMINUM (UG_L)	-															
MW09-02S	-	< 62 U	< 62 U	< 65.5 U	950 J	70.2	286 J	76.3 J	17.9 J	55.6	--	41.5	< 139 U	200	198 J	571
MW09-03D	-	< 62 U	< 62 U	< 8.9 U	< 62 UJ	19.7 J	< 3.2 UJ	19.8 J	11.2 J	11.3	--	27.3	< 119 U	< 200 U	< 200 U	< 200 U
MW09-07S	-	< 62 U	< 62 U	< 8.9 U	< 62 UJ	< 37.5 U	6.4 J	4.9 J	8 J	3.7	--	< 6.2 U	< 57.5 U	< 200 U	< 200 U	< 200 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 62 U	< 62 U	< 8.9 U	< 8.9 UJ	< 37.5 U	16.6 J	12.6 J	12.5 J	11.7	--	21.2	< 44.9 U	< 200 U	< 200 U	< 200 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 62 U	< 62 U	< 8.9 U	R	29.7	< 25.6 U	29.8 J	23.9 J	20.2	--	21.6	< 200 U	< 200 U	< 200 U	< 200 U
MW09-10D	-	88.1 J	< 62 U	< 18.3 U	< 64 U	< 30 U	< 5.1 U	9.4 J	5.8 J	14.7	--	9.5	< 14.6 U	< 200 U	< 200 U	< 200 U
MW09-10S	-	< 62 U	< 86.8 U	< 8.9 U	< 58 U	< 30 U	< 37.0 U	77.8 J	81.7 J	38.5	--	35.6	< 126 U	399	< 200 U	< 200 U
MW09-11S	-	< 62 U	< 62 U	< 8.9 U	R	< 30 U	5.3 J	8.6 J	8.1 J	6.7	--	< 6.2 U	< 46.1 U	< 200 U	< 200 U	< 200 U
MW09-14D	-	< 62 U	< 62 U	< 8.9 U	< 62 UJ	< 37.5 U	< 3.2 UJ	15.3 J	4 J	18.5	--	< 6.2 U	< 200 U	< 200 U	< 200 U	< 200 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 62 U	< 62 U	< 18.1 U	120 J	47.3	14.7 J	14.2 J	20.6 J	12.4	--	10.6	< 21 U	< 200 U	< 200 U	< 200 U
MW09-20I	-	299	< 62 U	< 39 U	< 62 UJ	85.7	70.4 J	131 J	112 J	45.5	--	59.8	< 83.6 U	98.2 J	98.0 J	< 200 U
MW09-21D	-	338	263 J	8690	R	342	374 J	407 J	205 J	296 J	--	373 J	< 165 U	< 200 U	180 J	163 J
MW09-21S	-	< 62 U	< 62 U	< 8.9 U	R	38.1	65.3 J	38.8 J	54.7 J	43.5	--	98.1	< 145 U	< 200 U	99.4 J	< 200 U
MW09-23D	-	< 250 U	< 62 U	< 8.9 U	190 J	21.5 J	9.1 J	< 3.2 U	8.5 J	4.5 J	--	7.7	< 12.6 U	< 200 U	< 200 U	< 200 U
MW09-23S	-	< 62 U	< 1240 U	< 8.9 U	< 62 UJ	< 30 U	101 J	52.5 J	59.6 J	27.3	--	15.8	< 20.4 U	< 200 U	80.1 J	< 200 U
MW09-24D	-	< 62 U	< 62 U	< 8.9 U	< 62 UJ	15.3 J	3.9 J	< 3.2 U	4.4 J	4.4 J	--	9	< 35.9 U	< 200 U	< 200 U	< 200 U
MW09-24S	-	< 62 U	< 62 U	< 8.9 U	< 62 UJ	< 30 U	7.8 J	10.7 J	4.2 J	4.9 J	--	12.6	< 35.9 U	< 200 U	< 200 U	< 200 U
MW09-25S	-	< 62 U	< 62 U	< 41.8 U	< 110 UJ	15.2 J	15.3 J	13.2 J	16.4 J	18.2	--	8.2	< 17.2 U	< 200 U	< 200 U	< 200 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY, DISSOLVED (6 UG_L)	-															
MW09-02S	6	< 1.8 U	< 1.8 U	< 2.5 U	< 1.8 U	< 0.42 U	< 0.53 U	0.55 J	0.55 J	0.45	--	< 0.23 U	4.8	< 6 U	< 6 U	< 6 U
MW09-03D	**6**	< 1.8 U	< 1.8 U	< 2.5 U	< 1.8 U	< 2.5 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.06 UJ	**9.1**	< 6 U	< 6 U	< 6 U
MW09-07S	6	< 1.8 U	< 1.8 U	4.2 J	< 1.8 U	< 0.27 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.06 UJ	4.7	< 6 U	< 6 U	< 6 U
MW09-08DA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	6	< 1.8 U	< 1.8 U	< 2.5 U	< 2.5 U	< 0.24 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.06 UJ	4.7	< 6 U	< 6 U	< 6 U
MW09-09DA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	6	< 1.8 U	< 1.8 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.06 U	4.4 J	< 6 U	< 6 U	< 6 U
MW09-10D	6	< 1.8 U	< 1.8 U	< 2.5 U	< 2.5 U	< 2 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.06 UJ	3.1 J	< 6 U	< 6 U	< 6 U
MW09-10S	**6**	< 1.8 U	< 1.8 U	3.8 J	< 5.7 U	< 2 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.1 U	**8.6**	< 6 U	< 6 U	< 6 U
MW09-11S	**6**	< 1.8 U	< 1.8 U	< 2.5 U	< 2.5 U	< 2 U	< 0.53 U	0.21 J	0.39 J	< 0.21 U	--	5.4 J	3.8 J	< 6 U	< 6 U	< 6 U
MW09-14D	**6**	< 1.8 U	< 1.8 U	**6.8**	**7.1 J**	< 0.23 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.06 UJ	< 5 U	< 6 U	< 6 U	< 6 UJ
MW09-14IA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	6	< 1.8 U	< 1.8 U	< 2.5 U	< 1.8 U	< 2 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.06 UJ	< 2.7 U	< 6 U	< 6 U	< 6 U
MW09-20I	**6**	< 1.8 U	< 1.8 U	**6.7 J**	**7.6 J**	< 2 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.11 U	< 2.9 U	< 6 U	< 6 U	< 6 U
MW09-21D	6	< 1.8 U	< 1.8 U	< 2.5 U	< 2.5 U	< 0.26 U	< 0.53 U	< 0.21 U	< 0.21 U	0.21	--	< 0.19 U	< 5 U	< 6 U	< 6 U	< 6 U
MW09-21S	**6**	< 2.4 U	< 1.8 U	< 2.5 U	< 2.5 U	< 0.23 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.16 U	**6.1**	< 6 U	< 6 U	2.3 J
MW09-23D	6	< 1.8 U	< 1.8 U	< 2.5 U	< 1.8 U	< 2 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.06 UJ	3.2 J	< 6 U	< 6 U	< 6 UJ
MW09-23S	**6**	< 1.8 UJ	< 36 U	< 2.5 U	< 1.8 U	< 1.2 U	2.6	0.42 J	0.53 J	0.48	--	1.6 J	**6.5**	< 6 U	< 6 U	< 6 UJ
MW09-24D	**6**	< 1.8 U	< 1.8 U	5.7	**7.7 J**	< 0.25 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.08 U	4.4	< 6 U	< 6 U	< 6 U
MW09-24S	**6**	< 1.8 U	< 1.8 U	**23.6**	**20**	< 2 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.06 UJ	4.2	< 6 U	< 6 U	< 6 U
MW09-25S	**6**	< 1.8 U	< 1.8 U	**12.8**	< 8.7 U	< 0.28 U	< 0.53 U	< 0.21 U	< 0.21 U	< 0.21 U	--	< 0.06 UJ	< 0.76 U	< 6 U	< 6 U	< 6 U
MW09-26D	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY (6 UG_L)	-															
MW09-02S	6	1.9 J	< 1.8 U	< 2.5 U	< 1.8 U	< 0.43 U	< 0.53 U	0.7 J	0.66 J	0.54	--	< 0.38 U	3.5 J	< 6 U	< 6 U	< 6 U
MW09-03D	6	< 1.8 U	< 1.8 U	< 2.5 U	< 1.8 U	< 0.38 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.2 U	3.9 J	< 6 U	< 6 U	< 6 U
MW09-07S	6	< 1.8 U	< 1.8 U	3.3 J	< 1.8 U	< 0.27 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.29 U	3.7 J	< 6 U	< 6 U	< 6 U
MW09-08DA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	6	< 1.8 U	< 1.8 U	< 2.5 U	< 2.5 U	< 0.25 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.34 U	2.5 J	< 6 U	< 6 U	< 6 U
MW09-09DA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	6	< 1.8 U	< 1.8 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.18 U	< 5 U	< 6 U	< 6 U	< 6 U
MW09-10D	6	< 1.8 U	< 1.8 U	< 2.5 U	< 2.5 U	< 2 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.18 U	3.9 J	< 6 U	< 6 U	< 6 U
MW09-10S	6	< 1.8 U	< 1.8 U	2.5 J	< 7.7 U	< 2 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.26 U	4.3	< 6 U	< 6 U	< 6 U
MW09-11S	**6**	< 1.8 U	< 1.8 U	< 2.5 U	< 2.5 U	< 2 U	0.72 J	0.61 J	1.3 J	< 0.53 U	--	**6.2**	**6.8**	< 6 U	< 6 U	1.7 J
MW09-14D	**6**	< 1.8 U	< 1.8 U	**8.1**	< 6.2 U	< 0.28 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.17 U	< 5 U	< 6 U	< 6 U	< 6 U
MW09-14IA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	6	< 1.8 U	< 1.8 U	< 2.5 U	< 1.8 U	< 2 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.21 U	< 2.8 U	< 6 U	< 6 U	< 6 U
MW09-20I	**6**	< 1.8 U	< 1.8 U	**8.9**	< 7.2 U	< 2 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.3 U	3.5 J	< 6 U	< 6 U	< 6 U
MW09-21D	6	3.2 J	< 1.8 U	< 2.5 U	< 2.5 U	< 0.18 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.38 U	< 5 U	< 6 U	< 6 U	< 6 U
MW09-21S	6	< 1.8 U	< 1.8 U	< 2.5 U	< 2.5 U	< 0.22 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.63 U	< 5 U	< 6 U	< 6 U	< 6 U
MW09-23D	6	< 1.8 U	< 1.8 U	< 2.5 U	< 1.8 U	< 2 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.22 U	3 J	< 6 U	< 6 U	< 6 U
MW09-23S	**6**	< 1.8 UJ	< 36 U	< 2.5 U	< 1.8 U	< 0.68 U	1.3 J	1.6 J	2.6	2.5	--	2.1	**7.4**	< 6 U	< 6 U	< 6 U
MW09-24D	**6**	< 1.8 U	< 1.8 U	**6.5**	< 7.8 U	< 2 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.44 U	**11.3**	< 6 U	< 6 U	< 6 U
MW09-24S	**6**	< 1.8 U	< 1.8 U	**23.7**	**19**	< 2 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.15 U	1.9 J	< 6 U	< 6 U	< 6 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-25S	**6**	< 1.8 U	< 1.8 U	**11.8**	< 7.5 U	< 2 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	--	< 0.14 U	3.8 J	< 6 U	< 6 U	< 6 U
MW09-26D	**6**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC, DISSOLVED (10 UG_L)	-															
MW09-02S	10	< 5 U	< 5 UJ	< 4.9 U	7.5 J	< 1.3 U	0.63 J	0.38 J	0.58 J	0.36 J	--	0.13 J	1.4 J	< 5 U	< 5 U	< 5 U
MW09-03D	10	< 5 U	< 5 UJ	< 4.9 U	10 J	< 0.64 U	1.2 J	1.8	1.7	1.6 J	--	< 0.63 U	6	< 5 U	< 5 U	< 5 U
MW09-07S	**10**	**13.4**	< 5 U	**21.4**	**30 J**	**21.2**	**21.8**	**25.6**	**24.4**	**26.8 J**	--	**22.9 J**	**19.4**	**19.9 J**	**18.8 J**	**22.9**
MW09-08DA	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	**10**	< 5 U	< 5 U	**10.1**	< 4.9 U	9.3	**10.9**	**14.7**	**15.5**	**15.5 J**	--	**11.5 J**	8.8	8.9	9	< 5 U
MW09-09DA	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	10	< 5 U	< 5 UJ	< 4.9 U	< 4.9 U	< 1.3 U	1.8 J	1.1	0.85 J	1.1 J	--	< 1.2 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-10D	**10**	< 5 U	< 5 U	**10.2 J**	< 4.9 U	5.6	8.5 J	8.1 J	8.2	8.2 J	--	8.5 J	5.8	5.7	9.6	< 5 U
MW09-10S	**10**	9.7 J	5.3 J	**13**	< 4.9 U	8.8	**13.6 J**	**10.7**	**19.6**	**22.9 J**	--	**11.7 J**	**15.7**	**11.1**	9	< 5 U
MW09-11S	10	< 5 U	< 5 UJ	8.4 J	< 4.9 U	0.47	0.7 J	1.6	1.7	0.66 J	--	< 0.77 U	< 4 U	8.3	< 5 U	< 5 U
MW09-14D	10	< 5 U	< 5 UJ	< 4.9 U	< 5 U	6.4	7.8	6.5	7.1	6.4 J	--	7.2 J	6.9	2.3 J	4.6 J	< 5 U
MW09-14IA	**10**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	**10**	< 5 U	< 5 U	< 4.9 U	**11 J**	2.6	4.4	3.5	4.1	4.3 J	--	4.2 J	< 4 U	3.9 J	3.8 J	4.5 J
MW09-20I	**10**	< 5 U	< 5 UJ	8 J	6.7 J	5.7	9.8	7.9	**11.2**	**10.6 J**	--	**10.5 J**	4.2	7.6	7.5 J	8.2
MW09-21D	10	< 5 U	< 5 UJ	< 4.9 U	< 4.9 U	1.2	2	0.84 J	1.6	1.4 J	--	< 1.7 U	5.1 J	< 5 U	< 5 U	< 5 U
MW09-21S	**10**	< 5 U	< 5 UJ	6.3 J	< 4.9 U	6.1	9	8.7	9.5	8.5 J	--	9.4 J	5.7	2.8 J	< 5 U	3.1 J
MW09-23D	10	< 5 U	< 5 U	9.1 J	7.7 J	5.1	8.1	4.2	7.3	6.8 J	--	6.6 J	2.7 J	6.1	3 J	< 5 U
MW09-23S	**10**	< 5 U	< 100 U	5.6 J	**17 J**	**22.4**	**38.1**	**33.6**	**22.9**	**15 J**	--	**19.2 J**	**12.4**	2.2 J	< 5 U	< 5 U
MW09-24D	**10**	**15.4**	< 5 UJ	**17**	**21 J**	7.7	**10.6**	**17.3 J**	**25.5**	**29 J**	--	**11.7 J**	**16.6**	**18.5**	**25.1**	**14.9**
MW09-24S	10	< 5 U	< 5 UJ	< 4.9 U	< 5 U	2.0	2.9	3.6	5.4	5 J	--	4.1 J	4.7	3.2 J	2.8 J	4 J
MW09-25S	10	< 5 U	< 5 UJ	< 4.9 U	< 4.9 U	0.7	1.1	0.83 J	0.7 J	0.64 J	--	1.2 J	< 4 U	< 5 U	< 5 U	< 5 U
MW09-26D	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC (10 UG_L)	-															
MW09-02S	**10**	< 5 U	< 5 UJ	< 4.9 U	**19 J**	< 1.3 U	0.89 J	0.36 J	0.48 J	0.21	--	0.33	< 4 U	< 5 U	< 5 U	< 5 U
MW09-03D	10	< 5 U	< 5 UJ	< 4.9 U	7.2 J	0.76	1.4 J	2.5 J	1.4	1.6	--	1.7	4.6	3 J	< 5 U	< 5 U
MW09-07S	**10**	**15.7**	< 5 U	**25.9**	**31 J**	**20.3**	**20.2**	**20.3 J**	**20.1**	**19.7**	--	**20**	**19.2**	**20.6 J**	**21.0 J**	**22.5**
MW09-08DA	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	**10**	< 5 U	< 5 U	**11.3**	< 4.9 U	9	**11.1**	**11 J**	**10.1**	9.9	--	9.8	9	9.6	9.6	< 5 U
MW09-09DA	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	10	< 5 U	< 5 UJ	< 4.9 U	< 4.9 U	0.43 J	1.7 J	0.85 J	0.96 J	1.1	--	0.67 J	< 5 U	< 5 U	< 5 U	< 5 U
MW09-10D	**10**	< 5 U	< 5 U	9.5 J	< 4.9 U	6.1	8.9 J	8.3 J	7.8	7.4	--	7.8	6.6	8.4	7.1	< 5 U
MW09-10S	**10**	6.4 J	5.4 J	9.5 J	< 4.9 U	9.5	**14.2 J**	**12 J**	**14.6**	**14.4**	--	9.5	**12.9**	**13**	**11.6**	< 5 U
MW09-11S	10	< 5 U	< 5 UJ	< 4.9 U	< 4.9 U	< 0.37 U	0.97 J	1.6 J	1.9	0.49	--	< 0.33 U	< 4 U	< 5 U	< 5 U	< 5 U
MW09-14D	10	< 5 U	< 5 UJ	< 4.9 U	6.9 J	5.8	7.1	7.2 J	7	5.7	--	6.3	< 5 U	3.6 J	< 5 U	6.7
MW09-14IA	**10**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	**10**	< 5 U	< 5 U	5.4 J	**12 J**	2.3	3.9	4 J	4.3	4	--	3.5	1.3 J	2.6 J	5.9	7.3
MW09-20I	**10**	< 5 U	< 5 UJ	5.7	5.8 J	7.3	**10.6**	**10.7 J**	9.5	7.2	--	9.3	5	7.1	7.0	9.5
MW09-21D	**10**	< 5 U	< 5 UJ	**21.1**	< 4.9 U	< 1.1 U	2.3	1.5 J	1.7	1.6 J	--	1.6	< 5 U	< 5 U	< 5 U	< 5 U
MW09-21S	**10**	< 5 U	< 5 UJ	< 4.9 U	< 4.9 U	7.1	9.2	9.3 J	8.6	6.8	--	9	< 5 U	2.7 J	3.5 J	2.7 J
MW09-23D	10	< 5 U	< 5 U	< 4.9 U	8 J	6.1	8.1	2.9 J	7.4	5.8 J	--	6.2	3.1 J	4.8 J	4 J	5.2
MW09-23S	**10**	< 5 U	< 100 U	< 4.9 U	**24 J**	**31.6**	**37.3**	**38.6 J**	**30.3**	**18**	--	**26**	**11.9**	3.5 J	6.7	< 5 U
MW09-24D	**10**	**12.3**	< 5 UJ	**14.8**	**22 J**	6.9	6.2	**18.7 J**	**22.2**	**19.7 J**	--	**18.8**	**29.6**	**15.9**	**22.9**	**18.6**
MW09-24S	10	< 5 U	< 5 UJ	< 4.9 U	< 5 U	2	3	4.1 J	4.7	4 J	--	4	2 J	3.9 J	3.7 J	3.6 J
MW09-25S	10	< 5 U	< 5 UJ	< 4.9 U	< 4.9 U	< 0.48 U	1 J	0.92 J	0.72 J	0.9	--	0.58	< 4 U	< 5 U	< 5 U	< 5 U
MW09-26D	**10**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BARIUM, DISSOLVED (UG_L)	-															
MW09-02S	-	< 33.9 U	< 4.1 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	96.2	< 27.2 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	91.5	< 81.6 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 37.8 U	< 4.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 25.2 U	< 4.1 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 9.3 U	< 4.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	116	< 80.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 39 U	< 4.1 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	< 77.4 U	< 47.8 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-20D	-	< 17 U	< 4.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 42.2 U	< 4.1 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	109	< 27.4 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	79.9	< 4.1 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 82 U	< 70.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	84.8	< 82 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 19.2 U	< 4.1 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	371	< 76.4 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 39.6 U	< 4.1 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
BARIUM (UG_L)	-															
MW09-02S	-	< 37.2 U	< 4.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	98.2	< 18.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	93.6	< 83.4 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 40.8 U	< 4.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 22.7 U	< 4.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 20.8 U	351	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	121	< 74.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 45.2 U	< 4.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	< 82.4 U	< 24.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 17.7 U	< 4.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 40.3 U	< 4.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	111	< 47.9 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	83.5	< 4.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	90	< 65.6 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	102	< 82 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 20.3 U	< 4.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	389	< 95.4 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 43.6 U	< 4.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM, DISSOLVED (4 UG_L)	-															
MW09-02S	4	< 0.48 U	< 0.48 UJ	< 0.11 U	< 0.48 U	< 1.3 U	< 0.06 UJ	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-03D	4	< 0.48 U	< 0.48 UJ	< 0.11 U	< 0.48 U	< 1.3 U	< 0.06 UJ	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-07S	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.48 U	< 1.3 U	< 0.06 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-08DA	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.11 U	< 1.3 U	< 0.06 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 UJ
MW09-09DA	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	4	< 0.48 U	< 0.48 UJ	< 0.11 U	< 0.11 U	< 1.3 U	< 0.06 UJ	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 5 U	< 4 U	< 4 U	< 4 U
MW09-10D	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.11 U	< 1 U	< 0.06 UJ	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-10S	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.11 U	< 1 U	< 0.06 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 0.08 U	< 4 U	< 4 U	< 4 U
MW09-11S	4	< 0.48 U	< 0.48 UJ	< 0.51 U	< 0.11 U	< 1 U	< 0.06 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-14D	4	< 0.48 U	< 0.48 UJ	< 0.11 U	< 0.48 U	< 1.3 U	< 0.06 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 5 U	< 4 U	< 4 U	< 4 U
MW09-14IA	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.48 U	< 1 U	< 0.06 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-20I	4	< 0.48 U	< 0.48 UJ	< 0.11 U	< 0.48 U	< 1 U	0.09 J	0.05 J	0.06 J	0.05 J	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-21D	4	< 0.48 U	< 0.48 UJ	< 0.11 U	< 0.11 U	< 1 U	< 0.06 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 5 U	< 4 U	< 4 U	< 4 U
MW09-21S	**4**	< 0.48 U	< 0.48 UJ	< 0.11 U	< 0.11 U	< 1 U	< 0.06 U	< 0.02 U	0.03 J	0.03 J	--	< 0.12 U	< 5 U	< 4 U	< 4 U	< 4 U
MW09-23D	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.48 U	< 1 U	< 0.06 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-23S	**4**	< 0.48 U	< 9.6 U	< 0.11 U	< 0.48 U	< 1 U	0.13 J	0.04 J	0.07 J	0.05 J	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-24D	4	< 0.48 U	< 0.48 UJ	< 0.11 U	< 0.48 U	< 1 U	< 0.06 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-24S	4	< 0.48 U	< 0.48 UJ	< 0.11 U	< 0.48 U	< 1 U	< 0.06 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-25S	4	< 0.48 U	< 0.48 UJ	< 0.11 U	< 0.11 U	< 1 U	< 0.06 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.12 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-26D	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM (4 UG_L)	-															
MW09-02S	4	< 0.48 U	< 0.48 U	< 1.3 U	< 0.48 U	< 1.3 U	< 0.06 UJ	< 0.06 U	< 0.06 U	< 0.06 UJ	--	0.13	< 2 U	< 4 U	< 4 U	< 4 U
MW09-03D	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.48 U	< 1.3 U	< 0.06 UJ	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-07S	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.48 U	< 1.3 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-08DA	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.11 U	< 1.3 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 0.08 U	< 4 U	< 4 U	< 4 U
MW09-09DA	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.11 U	< 1.3 U	< 0.06 UJ	< 0.06 U	< 0.06 U	< 0.06 U	--	< 0.13 U	< 5 U	< 4 U	< 4 U	< 4 U
MW09-10D	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.11 U	< 1 U	< 0.06 UJ	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 0.22 U	< 4 U	< 4 U	< 4 U
MW09-10S	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.11 U	< 1 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-11S	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.11 U	< 1 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-14D	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.48 U	< 1.3 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 5 U	< 4 U	< 4 U	< 4 U
MW09-14IA	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.48 U	< 1 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-20I	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.48 U	< 1 U	0.06 J	< 0.06 U	0.09 J	< 0.06 UJ	--	< 0.13 U	< 2 U	< 4 U	< 4 U	< 4 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-21D	4	< 0.48 U	< 0.48 U	< 0.14 UJ	< 0.11 U	< 1 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 U	--	< 0.13 U	< 5 U	< 4 U	< 4 U	< 4 U
MW09-21S	**4**	< 0.48 U	< 0.48 U	< 0.11 U	< 0.11 U	< 1 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 5 U	< 4 U	< 4 U	< 4 U
MW09-23D	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.48 U	< 1 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-23S	**4**	< 0.48 U	< 9.6 U	< 0.11 U	< 0.48 U	< 1 U	0.1 J	< 0.06 U	0.08 J	0.07 J	--	< 0.13 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-24D	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.48 U	< 1 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 0.25 U	< 4 U	< 4 U	< 4 U
MW09-24S	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.48 U	< 1 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-25S	4	< 0.48 U	< 0.48 U	< 0.11 U	< 0.11 U	< 1 U	< 0.06 U	< 0.06 U	< 0.06 U	< 0.06 UJ	--	< 0.13 U	< 2 U	< 4 U	< 4 U	< 4 U
MW09-26D	**4**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM, DISSOLVED (UG_L)	-															
MW09-02S	-	< 0.35 U	< 0.35 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 0.35 U	< 0.35 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	0.46 J	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	1.2	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.35 U	< 0.35 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	0.41 J	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 0.35 U	< 0.35 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	0.71	< 0.35 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 0.35 U	< 0.35 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	< 0.35 U	< 0.35 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	< 0.35 U	< 0.35 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	R	< 7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 0.35 U	< 0.35 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	0.41 J	< 0.35 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 0.35 U	< 0.35 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM (UG_L)	-															
MW09-02S	-	0.41 J	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	0.44 J	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	0.88	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	0.94	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	R	< 7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 0.35 U	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--
CALCIUM, DISSOLVED (UG_L)	-															
MW09-02S	-	42500	18600 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	35700	30300 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	94500	95100	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	64400	48900 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	70500	51900 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	22400	20500	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	29600	15000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	42100	74600 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	67900	68800 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	51500	48500 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	31900	23500 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	30900	23500 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	30100	18200 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	26700	23800	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	202000	168000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	54300	39100 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	53100	16800 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	12300	18600 J	--	--	--	--	--	--	--	--	--	--	--	--	--
CALCIUM (UG_L)	-															
MW09-02S	-	45600	19600 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	36500	25100 J	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-07S	-	96900	93900	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	72400	42600 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	62600	61000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	23600	21400	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	32600	12000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	48700	64500 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	72700	47000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	53400	45400 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	31900	19600 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	30500	29400 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	31000	20500 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	26700	22300	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	193000	170000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	57100	37200 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	57500	18300 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	13900	20700 J	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM, TOTAL, DISSOLVED (100 UG_L)	-															
MW09-02S	100	< 6.4 U	< 6.4 U	< 1.1 U	< 6.4 U	< 0.64 U	< 0.9 U	7.6	13	11.5 J	--	4.4 J	2.7 J	< 10 U	< 10 U	< 10 U
MW09-03D	100	< 6.4 U	< 6.4 U	< 0.53 U	< 6.4 UJ	< 0.45 U	< 0.68 U	11.5	16.1	16.9 J	--	7.6 J	3.1 J	< 10 U	< 10 U	< 10 U
MW09-07S	100	< 6.4 U	< 6.4 U	< 0.53 U	< 6.4 UJ	< 0.37 U	0.23 J	13.1	9.7	14.2 J	--	5.4 J	2.3 J	< 10 U	< 10 U	< 10 U
MW09-08DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	100	< 6.4 U	< 6.4 U	< 3.6 U	< 2.7 UJ	< 0.75 U	0.68 J	23.3	28.5	31 J	--	8.1 J	3.3 J	< 10 U	< 10 U	< 10 UJ
MW09-09DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	100	< 6.4 U	< 6.4 U	1.3	< 4.6 UJ	< 1.4 U	< 1.6 U	29.3	33.3	35.0 J	--	15.8 J	< 10 U	< 10 U	< 10 U	0.53 J
MW09-10D	100	< 6.4 U	< 6.4 U	1.2 J	< 0.53 U	< 2 U	< 0.52 U	< 3.3 U	< 2.8 U	3 J	--	1.5 J	3.5 J	< 10 U	< 10 U	< 10 U
MW09-10S	100	< 6.4 U	< 6.4 U	< 0.53 U	< 0.53 UJ	< 0.19 U	< 0.55 U	< 2.3 U	21	24.9 J	--	10.8 J	3.2 J	< 10 U	< 10 U	< 10 U
MW09-11S	**100**	< 6.4 U	< 6.4 U	**314**	< 0.53 UJ	< 0.22 U	0.38 J	< 0.74 U	8.8	9.6 J	--	6.4 J	8.1 J	< 10 U	< 10 U	< 10 U
MW09-14D	100	< 6.4 U	< 6.4 U	< 0.53 U	< 6.4 UJ	< 0.36 U	< 0.21 U	< 0.33 U	< 3.6 U	5.5 J	--	2.1 J	< 10 U	< 10 U	< 10 U	< 10 U
MW09-14IA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	100	< 6.4 U	< 6.4 U	1.1	< 6.4 UJ	< 0.16 U	0.25 J	< 0.13 U	< 2.8 U	3 J	--	1.9 J	4.3 J	< 10 U	< 10 U	< 10 U
MW09-20I	100	< 6.4 U	< 6.4 U	1.9	< 6.4 UJ	< 2.4 U	3.6	< 4.8 U	24.1	30 J	--	18.2 J	6.5 J	2.5 J	< 10 U	< 10 U
MW09-21D	100	< 6.4 U	< 6.4 U	< 0.79 U	< 2.4 UJ	< 0.49 U	0.72 J	< 0.72 U	5.1	7.8 J	--	4.4 J	< 10 U	< 10 U	< 10 U	< 10 U
MW09-21S	100	< 6.4 U	< 6.4 U	< 2.7 U	< 1.7 UJ	< 2 U	2.5	< 4.2 U	30.8	47.2 J	--	21 J	1.4 J	1.7 J	< 10 U	< 10 U
MW09-23D	100	< 6.4 U	< 6.4 U	< 0.53 U	< 6.4 UJ	< 2 U	0.85 J	< 0.8 U	4.5	5.2 J	--	2.3 J	3.8 J	< 10 U	< 10 U	< 10 U
MW09-23S	100	< 6.4 U	< 128 U	2	< 6.4 UJ	< 1.1 U	3.9	9.5	34.5	38.8 J	--	16.9 J	11.6	< 10 U	< 10 U	< 10 U
MW09-24D	100	< 6.4 U	< 6.4 U	< 0.53 U	< 6.4 UJ	< 0.27 U	0.31 J	< 0.83 U	10.1	12.6 J	--	4 J	2.2 J	< 10 U	5.9 J	< 10 U
MW09-24S	100	< 6.4 U	< 6.4 U	< 0.53 U	< 6.4 UJ	< 2.0 U	0.32 J	< 0.9 U	8.6	12.5 J	--	5 J	3.2 J	< 10 U	< 10 U	< 10 U
MW09-25S	100	< 6.4 U	< 6.4 U	< 0.53 U	6.3 J	< 0.23 U	0.22 J	< 0.27 U	< 3.6 U	4.7 J	--	1.7 J	< 2.2 U	< 10 U	< 10 U	< 10 U
MW09-26D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM, TOTAL (100 UG_L)	-															
MW09-02S	100	< 6.4 U	< 6.4 UJ	< 0.53 U	< 6.4 U	< 0.72 U	< 1 U	< 1 U	< 1.5 U	< 0.8 U	--	< 0.45 U	3.3 J	0.33 J	< 10 U	< 10 U
MW09-03D	100	< 6.4 U	< 6.4 UJ	< 0.8 U	< 6.4 UJ	< 0.5 U	< 0.55 U	< 0.6 U	< 1.2 U	< 0.52 U	--	< 0.49 U	3.4 J	< 10 U	< 10 U	< 10 U
MW09-07S	100	< 6.4 U	< 6.4 U	< 0.53 U	< 6.4 UJ	< 0.51 U	< 0.36 U	< 0.65 U	< 0.93 U	< 0.47 U	--	< 0.46 U	2.7 J	< 10 U	< 10 U	< 10 U
MW09-08DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	100	< 6.4 U	52.3 J	< 0.88 U	< 1 UJ	< 0.66 U	< 0.7 U	< 1.3 U	< 0.96 U	< 0.63 U	--	< 0.75 U	2.5 J	< 10 U	< 10 U	< 10 U
MW09-09DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	100	7.3 J	< 6.4 UJ	1.5	< 1.6 UJ	< 1.4 U	< 1.5 U	< 1.6 U	< 2.2 U	< 1.6 U	--	< 1.3 U	< 10 U	< 10 U	< 10 U	< 10 U
MW09-10D	100	< 6.4 U	< 6.4 U	0.89 J	< 1.9 U	< 0.44 U	< 0.39 U	< 0.79 U	< 1.4 U	< 0.7 U	--	< 0.55 U	2.4 J	< 10 U	< 10 U	< 10 U
MW09-10S	100	< 6.4 U	< 6.4 U	< 0.53 U	< 0.53 U	< 0.67 U	< 0.73 U	< 0.86 U	< 1.1 U	< 0.88 U	--	< 0.68 U	3.7 J	0.61 J	< 10 U	0.54 J
MW09-11S	100	< 6.4 U	< 6.4 UJ	1.5	< 0.78 UJ	< 0.44 U	< 0.34 U	< 0.82 U	< 0.74 U	< 0.39 U	--	< 0.5 U	3 J	0.3 J	< 10 U	< 10 U
MW09-14D	100	< 6.4 U	< 6.4 UJ	< 0.53 U	< 6.4 UJ	< 0.42 U	< 0.21 U	< 1.4 U	< 0.42 U	< 0.79 U	--	< 0.29 UJ	< 10 U	< 10 U	< 10 U	< 10 U
MW09-14IA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	100	< 6.4 U	< 6.4 U	1.1	< 6.4 UJ	< 0.34 U	< 0.26 U	< 0.57 U	< 0.96 U	< 0.42 U	--	< 1.1 U	2.2 J	< 10 U	< 10 U	< 10 U
MW09-20I	100	7.2 J	< 6.4 UJ	2.5	< 6.4 UJ	4.3	4.7	< 4.6 U	4.2	< 2.9 U	--	7.9 J	5.5 J	3.3 J	< 10 U	< 10 U
MW09-21D	100	< 6.4 U	< 6.4 UJ	18.4 J	< 1.2 UJ	< 0.52 U	< 0.74 U	< 0.9 U	< 1.9 U	< 0.81 U	--	< 0.91 U	< 10 U	< 10 U	< 10 U	< 10 U
MW09-21S	100	< 6.4 U	< 6.4 UJ	< 2.8 U	< 2.3 UJ	4.1	2.5	< 2.9 U	< 3.3 U	< 2.8 U	--	9.9 J	1.8 J	1.2 J	< 10 U	< 10 U
MW09-23D	100	< 6.4 U	< 6.4 U	0.87 J	< 6.4 UJ	< 0.83 U	< 0.96 U	< 1.5 U	< 1.2 U	< 0.62 U	--	< 1.1 U	2.5 J	< 10 U	< 10 U	< 10 U
MW09-23S	100	< 6.4 U	< 128 U	1.6	< 6.4 UJ	< 1.5 U	3.4	38.3 J	21.1	3.3 J	--	4.1 J	2 J	< 10 U	< 10 U	1.4 J
MW09-24D	100	< 6.4 U	< 6.4 UJ	< 0.53 U	< 6.4 UJ	< 0.45 U	< 0.24 U	< 0.36 U	< 0.91 U	< 0.27 U	--	< 0.56 U	5.2 J	0.58 J	< 10 U	< 10 U
MW09-24S	100	< 6.4 U	< 6.4 UJ	< 0.53 U	< 6.4 UJ	< 0.28 U	< 0.21 U	< 0.3 U	< 0.52 U	< 0.58 U	--	< 0.48 U	21.1	< 10 U	< 10 U	< 10 U
MW09-25S	100	< 6.4 U	< 6.4 UJ	< 0.53 U	< 0.53 UJ	< 0.22 U	< 0.42 U	< 0.40 U	< 0.73 U	< 0.25 U	--	< 0.32 U	2.4 J	< 10 U	< 10 U	< 10 U
MW09-26D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
COBALT, DISSOLVED (UG_L)	-															
MW09-02S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	4.9 J	< 3.8 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 3.3 U	< 4.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	< 3.3 U	< 66 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	3.6 J	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
COBALT (UG_L)	-															
MW09-02S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	5.1 J	< 3.4 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 3.3 U	< 3.4 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	< 3.3 U	< 66 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	3.7 J	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 3.3 U	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER, DISSOLVED (UG_L)	-															
MW09-02S	-	< 8.7 U	< 8.7 UJ	< 5.9 U	< 8.7 U	< 0.94 U	1.4 J	2.3	2.4	1.1 J	--	1.4 J	3 J	< 25 U	< 25 U	< 25 U
MW09-03D	-	< 8.7 U	< 8.7 UJ	< 5.9 U	< 8.7 U	< 0.68 U	< 0.38 UJ	0.24 J	0.53 J	< 0.19 U	--	0.32 J	< 10 U	< 25 U	< 25 U	< 25 U
MW09-07S	-	< 8.7 U	< 8.7 U	< 5.9 U	< 8.7 U	< 0.31 U	< 0.38 U	0.52 J	< 0.27 U	< 0.18 U	--	0.32 J	7.8 J	< 25 U	< 25 U	< 25 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 8.7 U	< 8.7 U	< 5.9 U	< 5.9 UJ	< 1.5 U	0.48 J	0.41 J	< 0.35 U	1.4 J	--	1.8 J	< 10 U	< 25 U	< 25 U	< 25 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 8.7 U	< 8.7 UJ	< 5.9 U	8.8 J	< 1.3 U	< 0.38 UJ	0.5 J	1 J	1.5 J	--	1.1 J	< 25 U	< 25 U	< 25 U	< 25 U
MW09-10D	-	< 8.7 U	< 8.7 U	< 5.9 U	< 7.3 U	1.1	< 0.38 UJ	0.54 J	< 0.24 U	0.35 J	--	< 0.16 UJ	< 10 U	< 25 U	< 25 U	< 25 U
MW09-10S	-	< 8.7 U	< 8.7 U	< 5.9 U	< 5.9 U	2.2	< 0.38 U	0.47 J	0.5 J	1.3 J	--	1.1 J	< 10 U	< 25 U	< 25 U	< 25 U
MW09-11S	-	< 8.7 U	< 8.7 UJ	23	< 5.9 UJ	1.3	0.66 J	0.78 J	0.79 J	0.41 J	--	0.47 J	< 10 U	< 25 U	< 25 U	< 25 U
MW09-14D	-	< 8.7 U	< 8.7 UJ	< 5.9 U	< 8.7 U	< 1 U	< 0.38 U	0.24 J	< 0.18 U	1.3 J	--	1.1 J	< 25 U	< 25 U	< 25 U	< 25 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 8.7 U	< 8.7 U	< 5.9 U	< 8.7 U	5.9	< 0.38 U	0.12 J	< 0.27 U	0.45 J	--	0.47 J	< 10 U	< 25 U	< 25 U	< 25 U
MW09-20I	-	< 8.7 U	< 8.7 UJ	< 5.9 U	< 8.7 U	3.6	2.1	1.1 J	0.84 J	3 J	--	3.5 J	< 10 U	< 25 U	15.1 J	< 25 U
MW09-21D	-	< 8.7 U	< 8.7 UJ	< 5.9 U	< 5.9 UJ	< 0.72 U	< 0.38 U	0.22 J	< 0.38 U	0.29 J	--	0.39 J	< 25 U	< 25 U	< 25 U	< 25 U
MW09-21S	-	< 8.7 U	< 8.7 UJ	< 5.9 U	6.3 J	4.8	1.4 J	0.51 J	< 0.31 U	7.7 J	--	8 J	< 25 U	< 25 U	< 25 U	< 25 U
MW09-23D	-	< 8.7 U	< 8.7 U	< 5.9 U	< 8.7 U	2.1	0.39 J	0.13 J	< 0.22 U	< 1 U	--	< 1.3 U	< 10 U	< 25 U	< 25 U	< 25 U
MW09-23S	-	< 8.7 U	< 174 U	< 5.9 U	15 J	52.2	4.1	2.2	2.4	34.2 J	--	140 J	2.5 J	< 25 U	< 25 U	< 25 U
MW09-24D	-	< 8.7 U	< 8.7 UJ	< 5.9 U	< 8.7 U	1.1	< 0.38 U	0.3 J	< 0.21 U	< 1.2 U	--	< 7.5 U	14.4	< 25 U	< 25 U	< 25 U
MW09-24S	-	< 8.7 U	< 8.7 UJ	< 5.9 U	< 8.7 U	< 0.90 U	< 0.38 U	0.72 J	< 0.16 U	< 1.5 U	--	< 6.6 U	4.4 J	< 25 U	< 25 U	< 25 U
MW09-25S	-	< 8.7 U	< 8.7 UJ	< 5.9 U	< 5.9 UJ	< 0.88 U	< 0.38 U	0.18 J	< 0.13 U	< 1.4 U	--	< 2.6 U	< 10 U	< 25 U	< 25 U	< 25 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER (UG_L)	-															
MW09-02S	-	< 8.7 U	< 8.7 U	< 5.9 U	12 J	1.2	3 J	2.9	2.6	2 J	--	2.1 J	4.5 J	< 25 U	< 25 U	< 25 U
MW09-03D	-	< 8.7 U	< 8.7 U	< 5.9 U	20	2.4	< 0.38 UJ	0.42 J	< 0.38 U	< 0.38 UJ	--	< 0.65 U	4.7 J	< 25 U	< 25 U	< 25 U
MW09-07S	-	< 8.7 U	< 8.7 U	< 5.9 U	< 8.7 U	< 0.54 U	< 0.38 U	< 0.38 U	0.42 J	0.44 J	--	< 0.65 U	< 10 U	< 25 U	< 25 U	< 25 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 8.7 U	< 8.7 U	< 5.9 U	< 5.9 UJ	2.9	0.72 J	0.58 J	0.5 J	1.8 J	--	2.5 J	< 10 U	< 25 U	< 25 U	< 25 U

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 8.7 U	< 8.7 U	< 5.9 U	7.5 J	3.4	0.73 J	1.7 J	1 J	1.7 J	--	1.3 J	< 25 U	< 25 U	< 25 U	< 25 U
MW09-10D	-	< 8.7 U	10 J	< 5.9 U	< 7.2 U	< 0.63 U	< 0.38 UJ	< 0.38 U	0.4 J	0.43 J	--	< 0.65 U	< 10 U	< 25 U	< 25 U	< 25 U
MW09-10S	-	< 8.7 U	< 8.7 U	< 5.9 U	< 5.9 U	1.6 J	< 0.38 U	1.1 J	1.1 J	2.7 J	--	1.6 J	15.4	< 25 U	< 25 U	< 25 U
MW09-11S	-	< 8.7 U	< 8.7 U	130	< 5.9 UJ	1.1 J	0.81 J	1.2 J	1.6 J	0.74 J	--	1 J	< 10 U	< 25 U	< 25 U	< 25 U
MW09-14D	-	< 8.7 U	< 8.7 U	< 5.9 U	69	< 1.1 U	< 0.38 U	0.63 J	< 0.38 U	2 J	--	1.2 J	< 25 U	< 25 U	< 25 U	< 25 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 8.7 U	< 8.7 U	< 5.9 U	< 8.7 U	5.5 J	0.57 J	0.62 J	0.70 J	0.82 J	--	0.95 J	< 10 U	< 25 U	< 25 U	< 25 U
MW09-20I	-	< 8.7 U	< 8.7 U	< 5.9 U	< 8.7 U	5.5 J	0.85 J	1.8 J	0.99 J	3.3 J	--	4.1 J	< 10 U	< 25 U	< 25 U	< 25 U
MW09-21D	-	< 8.7 U	< 8.7 U	35	< 5.9 UJ	3 J	< 0.38 U	0.4 J	0.93 J	0.76 J	--	1.0 J	< 25 U	< 25 U	< 25 U	< 25 U
MW09-21S	-	< 8.7 U	< 8.7 U	< 5.9 U	8.6 J	8.1 J	0.57 J	0.42 J	0.68 J	8.8 J	--	11.1 J	< 25 U	< 25 U	< 25 U	< 25 U
MW09-23D	-	< 8.7 U	< 8.7 U	< 5.9 U	< 8.7 U	7.7 J	0.74 J	< 0.38 U	0.41 J	< 1.6 U	--	< 1.6 U	< 10 U	< 25 U	< 25 U	< 25 U
MW09-23S	-	< 8.7 U	< 174 U	< 5.9 U	14 J	50.6	3.7	3.4	3.7	40.3 J	--	79.4 J	< 10 U	< 25 U	< 25 U	< 25 U
MW09-24D	-	< 8.7 U	< 8.7 U	< 5.9 U	< 8.7 U	2.2	< 0.38 U	0.43 J	0.41 J	< 4.9 U	--	< 2.2 U	5.9 J	< 25 U	< 25 U	< 25 U
MW09-24S	-	< 8.7 U	< 8.7 U	< 5.9 U	< 8.7 U	< 0.72 U	< 0.38 U	0.43 J	< 0.38 U	< 3.7 U	--	< 1.4 U	< 10 U	< 25 U	< 25 U	< 25 U
MW09-25S	-	< 8.7 U	< 8.7 U	< 5.9 U	< 5.9 UJ	< 0.75 U	< 0.38 U	< 0.38 U	0.42 J	< 2.2 U	--	< 1.1 U	< 10 U	< 25 U	< 25 U	< 25 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON, DISSOLVED (UG_L)	-															
MW09-02S	-	81 J	< 47 U	194	< 47 U	52.5	40.9	103	161	74.7	--	82.9	< 50.3 U	52.9 J	16.2 J	36.6 J
MW09-03D	-	2650 J	776	2280	2200 J	866	935	2430	1950	1760	--	718	2040	2300	2030	647
MW09-07S	-	19600	20700	20600	18000 J	22400	21500 J	20000	18800 J	20600	--	18800	20600	20600	21900	22200
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	3540 J	2650	3740 J	3100	3410	3750	3930	3210	3340	--	4270	4130	4070	4360	4260
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	1150	558 J	989	1600	959	871	889	651	953	--	638	582	870	429	668
MW09-10D	-	819 J	< 782 U	897	810	656	822	812 J	806	746	--	799	781	880	913	876
MW09-10S	-	11600 J	10100	15000	12000	12100	12200	14200	9870 J	10200	--	14300	12100	11700	15800	13500
MW09-11S	-	3830 J	7500	16200	4700	6310	3430	17300	13100 J	8970	--	199	8630	2310	4810	12300
MW09-14D	-	30200	38300 J	33900	27000 J	32500	40400	38000	32800 J	49300	--	37100	33800	31200	31700	30000
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	1630 J	1790	2100 J	1500 J	1690	2430	2010	2050	2190	--	2260	2580	2700	2810	2920
MW09-20I	-	20300 J	17200	22900 J	18000 J	20200	27000	26400	22000 J	23400	--	26300	19800	23900	31200	25000
MW09-21D	-	163 J	94.2	253	< 32 U	128	108	338	202	270	--	354	646	312	703	197
MW09-21S	-	2870 J	980	1690	1500	1210	1960	1300	1390	1480	--	1360	1560	1750	2200	2110
MW09-23D	-	4170	3930	4530 J	3500 J	3230	5030	2480	4470	3770	--	3800	3970	4040	3870	3780
MW09-23S	-	24700	15400	16000 J	13000 J	15800	14100	11800	11000 J	13800	--	13000	9600	10400	13900	12000
MW09-24D	-	25500 J	16300	28500	26000 J	7890	18000	30200 J	26900 J	14500	--	18000	31200	32600	34100	27500
MW09-24S	-	49700 J	33800	58100	48000 J	27000	40900	64300	49400 J	85200	--	98600	66000	64800	96100	54500
MW09-25S	-	15600 J	17000	31200	18000	25400	30600	24400 J	16700 J	20500	--	27400	10200	21700	24200	24900
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON (UG_L)	-															
MW09-02S	-	85.7 J	< 47 U	< 180 U	600 J	167	600 J	176	184	226	--	163	140	302	210	643
MW09-03D	-	2270 J	787	2330	2200	1630	1060 J	4880	2560	3470	--	3250	7650	2590	2640	1850
MW09-07S	-	20400	20500	21000	17000	22800	21400	21000	21600 J	22800	--	20800	20000	20600	22200	20900
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	3660 J	2310 J	3740	3000	3340	3550	4020	3720	4020	--	4300	4090	4190	4340	4150
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	1110	682	1040	1400	1040	1000 J	1380	772	1070	--	792	731	1030	558	889
MW09-10D	-	998 J	< 847 U	1000	830	736	886 J	918	874	873	--	840	830	898	850	922
MW09-10S	-	12400 J	9650	13900	13000	11200	12700 J	14400	11300 J	7970	--	14800	12400	12000	12500	11300
MW09-11S	-	4410 J	6530 J	9610	3000	6170	4230	18400	18200 J	10100	--	734	11900	2830	4180	14300
MW09-14D	-	32500	28800	35000	27000	33900	38000	52900 J	37000 J	57800	--	36700	35100	32500	34700	30700
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	1640 J	1640 J	2140	1500	1740	2380	2480	2370	2500	--	2490	2750	2840	2990	3170
MW09-20I	-	18100 J	14700 J	23400	16000	21400	29400	27900	25400 J	21800	--	27400	23300	23600	36400	25400
MW09-21D	-	668 J	744	12700	< 290 U	447	222	505	376	642 J	--	1410	438	1550	2150	599
MW09-21S	-	2640 J	1300 J	1710	1700	1470	2190	1850	1690	1870	--	2260	2630	1860	2860	2420
MW09-23D	-	6090	3810	4670	3900	4590	5230	1770	4170	4360 J	--	4510	3830	3920	3860	3830
MW09-23S	-	20200	14900	15200	13000	15200	15100	11600	12000 J	12700	--	12100	10000	10000	13700	10300
MW09-24D	-	21700 J	15600	29300	26000	8040	17700	31900	30500 J	30300 J	--	22600	34800	28800	33200	30400
MW09-24S	-	53700 J	35300	56300	46000	26200	38800	68300	53700 J	95300 J	--	91600	65400	66400	95700	53400

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-25S	-	18200 J	19200 J	30300	18000	24700	29100	25500	18200 J	23600	--	27000	21200	22300	20800	26400
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD, DISSOLVED (15 UG_L)	-															
MW09-02S	15	< 1.8 U	< 9 U	< 2.6 U	< 1.8 U	< 0.12 U	< 0.15 UJ	< 0.26 U	0.09 J	0.1 J	--	0.26	2.1	< 5 U	< 5 U	< 5 U
MW09-03D	15	< 1.8 U	< 9 U	< 2.6 U	< 1.8 U	< 0.12 U	< 0.15 UJ	< 0.09 U	0.14 J	< 0.05 UJ	--	0.15	3.6	< 5 U	< 5 U	< 5 U
MW09-07S	15	< 1.8 U	< 1.8 U	< 2.6 U	< 1.8 U	< 1.3 U	< 0.15 U	< 0.52 U	0.07 J	< 0.05 UJ	--	0.1	2.1	< 5 U	< 5 U	< 5 U
MW09-08DA	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	15	< 1.8 U	< 9 U	< 2.6 U	< 2.6 U	< 0.31 U	< 0.15 U	5.3	0.11 J	0.07 J	--	0.19	2.1	< 5 U	< 5 U	< 5 U
MW09-09DA	**15**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	15	< 1.8 U	< 9 U	< 2.6 U	< 2.6 U	< 1.3 U	< 0.15 UJ	< 0.69 U	0.11 J	< 0.05 U	--	< 0.08 U	< 3 U	< 5 U	< 5 U	< 5 U
MW09-10D	15	< 1.8 U	< 1.8 U	< 2.6 U	< 2.6 U	0.12 J	< 0.15 UJ	< 0.48 U	0.08 J	0.06 J	--	0.17	< 0.21 U	< 5 U	< 5 U	< 5 U
MW09-10S	15	< 1.8 U	< 1.8 U	< 2.6 U	< 2.6 U	0.1 J	< 0.15 U	< 0.22 U	0.66 J	0.16 J	--	0.13	3.6	< 5 U	< 5 U	< 5 U
MW09-11S	**15**	< 1.8 U	< 9 U	**51.2**	< 2.6 U	0.09 J	< 0.15 U	< 0.15 U	0.14 J	0.51 J	--	0.24	< 0.17 U	< 5 U	< 5 U	< 5 U
MW09-14D	15	< 1.8 U	< 9 U	< 2.6 U	< 1.8 U	< 1.3 U	< 0.15 U	< 0.15 U	< 0.05 U	0.05 J	--	0.17	< 3 U	< 5 U	< 5 U	< 5 U
MW09-14IA	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	15	< 1.8 U	< 9 U	< 2.6 U	< 1.8 U	0.43	< 0.15 U	< 0.05 U	0.19 J	0.09 J	--	0.18	< 0.19 U	< 5 U	< 5 U	< 5 U
MW09-20I	15	< 1.8 U	< 9 U	< 2.6 U	< 1.8 U	0.11 J	< 0.15 U	< 0.29 U	0.35 J	0.05 J	--	0.09	< 0.59 U	< 5 U	< 5 U	< 5 U
MW09-21D	15	< 1.8 U	< 9 U	< 2.6 U	< 2.6 U	0.17	< 0.15 U	< 0.63 U	0.24 J	0.14 J	--	0.21 J	< 3 U	< 5 U	< 5 U	< 5 U
MW09-21S	15	< 1.8 U	< 9 U	< 2.6 U	< 2.6 U	0.12 J	< 0.15 U	< 0.11 U	0.08 J	0.1 J	--	0.09	< 3 U	< 5 U	< 5 U	< 5 U
MW09-23D	15	< 1.8 U	< 1.8 U	< 2.6 U	< 1.8 U	0.15 J	< 0.15 U	< 0.05 U	0.06 J	< 0.05 UJ	--	0.09	0.34 J	< 5 U	< 5 U	< 5 U
MW09-23S	15	< 1.8 U	< 36 U	< 2.6 U	< 1.8 U	1.2	< 0.15 U	< 0.56 U	0.39 J	0.15 J	--	0.1	< 0.22 U	< 5 U	< 5 U	< 10 U
MW09-24D	15	< 1.8 U	< 9 U	< 2.6 U	< 1.8 U	0.36	< 0.15 U	< 0.09 U	< 0.05 U	0.05 J	--	0.12	1.9	< 5 U	< 5 U	< 5 U
MW09-24S	15	< 1.8 U	< 9 U	< 2.6 U	< 1.8 U	0.57	< 0.15 U	< 0.48 U	< 0.05 U	0.06 J	--	0.17	1.9	< 5 U	< 5 U	< 5 U
MW09-25S	15	< 1.8 U	< 9 U	< 2.6 U	< 2.6 U	0.39	0.16 J	< 0.14 U	0.06 J	< 0.05 UJ	--	0.16	< 1 U	< 5 U	< 5 U	< 5 U
MW09-26D	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD (15 UG_L)	-															
MW09-02S	15	< 1.8 UJ	11.1 J	< 2.6 U	< 1.8 U	0.35	1.9 J	< 0.74 U	0.15 J	0.44	--	< 0.65 U	2.3	< 5 U	< 5 U	< 5 U
MW09-03D	15	< 1.8 UJ	< 9 UJ	< 2.6 U	4.5	0.4	< 0.15 UJ	< 0.51 U	0.22 J	0.16	--	< 0.65 U	2.2	< 5 U	< 5 U	< 5 U
MW09-07S	15	< 1.8 U	< 1.8 U	< 2.6 U	< 1.8 U	< 0.17 U	< 0.15 U	< 0.32 U	0.24 J	< 0.15 U	--	< 0.65 U	2	< 5 U	< 5 U	< 5 U
MW09-08DA	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	15	< 1.8 UJ	< 9 U	< 2.6 U	< 2.6 U	0.18	0.31 J	< 0.46 U	0.24 J	0.21	--	< 0.65 U	1.4	< 5 U	< 5 U	< 5 U
MW09-09DA	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	15	< 1.8 U	< 9 UJ	< 2.6 U	< 2.6 U	0.17	< 0.15 UJ	< 0.4 U	0.2 J	< 0.15 U	--	< 0.65 U	< 3 U	< 5 U	< 5 U	< 5 U
MW09-10D	15	< 1.8 UJ	< 1.8 U	< 2.6 U	< 2.6 U	0.09 J	< 0.15 UJ	< 0.47 U	0.17 J	0.6	--	< 0.65 U	< 0.59 U	< 5 U	< 5 U	< 5 U
MW09-10S	15	< 1.8 UJ	< 1.8 U	< 2.6 U	2.6 J	0.07 J	0.59 J	1.7	1.2	0.6	--	< 0.65 U	2.4	< 5 U	< 5 U	< 5 U
MW09-11S	15	< 1.8 UJ	< 9 UJ	< 2.6 U	< 2.6 U	0.15	< 0.15 U	< 0.45 U	0.45 J	< 0.15 U	--	< 0.65 U	1	< 5 U	< 5 U	< 5 U
MW09-14D	15	< 1.8 U	< 9 UJ	< 2.6 U	< 1.8 U	< 0.2 U	< 0.15 U	< 0.31 U	< 0.15 U	0.52	--	< 0.65 U	< 3 U	< 5 U	< 5 U	< 5 U
MW09-14IA	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	15	< 1.8 UJ	< 9 U	< 2.6 U	< 1.8 U	0.37	0.43 J	< 0.61 U	0.71 J	0.54	--	< 0.65 U	0.61 J	< 5 U	< 5 U	< 5 U
MW09-20I	15	< 1.8 UJ	< 9 UJ	< 2.6 U	< 1.8 U	0.53	0.21 J	< 0.81 U	0.37 J	< 0.15 U	--	< 0.65 U	< 0.2 U	< 5 U	< 5 U	< 5 U
MW09-21D	**15**	< 1.8 UJ	< 9 UJ	**38.2**	< 2.6 U	0.26	0.36 J	< 0.58 U	0.7 J	0.70 J	--	1.1	< 3 U	< 5 U	< 5 U	< 5 U
MW09-21S	15	< 1.8 U	< 9 UJ	< 2.6 U	< 2.6 U	0.18	0.33 J	< 0.33 U	0.25 J	0.38	--	< 0.65 U	< 3 U	< 5 U	< 5 U	< 5 U
MW09-23D	15	< 1.8 U	< 1.8 U	< 2.6 U	< 1.8 U	0.41 J	0.2 J	< 0.15 U	< 0.15 U	< 0.15 U	--	< 0.65 U	< 0.16 U	< 5 U	< 5 U	< 5 U
MW09-23S	15	< 1.8 U	< 36 U	< 2.6 U	< 1.8 U	< 1 U	0.2 J	< 0.34 U	0.24 J	< 0.15 U	--	< 0.65 U	< 0.23 U	< 5 U	< 10 U	< 10 U
MW09-24D	15	< 1.8 UJ	13.1 J	< 2.6 U	< 1.8 U	0.19	< 0.15 U	< 0.15 U	< 0.15 U	0.17 J	--	< 0.65 U	6.8	< 5 U	< 5 U	< 5 U
MW09-24S	15	< 1.8 UJ	< 9 UJ	< 2.6 U	< 1.8 U	0.08 J	< 0.15 U	< 0.23 U	< 0.15 U	< 0.15 U	--	< 0.65 U	< 0.46 U	< 5 U	< 5 U	< 5 U
MW09-25S	15	< 1.8 UJ	< 9 UJ	< 2.6 U	< 2.6 U	0.98	0.53 J	< 0.77 U	0.35 J	0.49	--	< 0.65 U	< 0.21 U	< 5 U	< 5 U	< 5 U
MW09-26D	**15**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAGNESIUM, DISSOLVED (UG_L)	-															
MW09-02S	-	6880 J	2600 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	28900 J	24900 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	52500	54100	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	34000 J	26000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	77900	51800 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	3160 J	< 3070 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	25900 J	21000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	11500 J	15600 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	16200	17200 J	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-20D	-	11400 J	10500 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	37200 J	27400 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	14900 J	11800 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	54500 J	35500 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	31300	29300	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	759000	595000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	8290 J	5740 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	9380 J	2850 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	2530 J	6250 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MAGNESIUM (UG_L)	-															
MW09-02S	-	7650	2780	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	29400	20900	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	54000	54600	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	38100	22800	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	69100	61400	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	3320	< 3270 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	27800	20000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	13300	13500	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	17400	12200	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	11900	9880	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	37500	23100	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	14300	12500	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	55500	40100	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	30500	27500	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	696000	605000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	8740	5450	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	10200	3190	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	2820	6960	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE, DISSOLVED (UG_L)	-															
MW09-02S	-	908	244 J	< 6.6 U	460	1.2	13.2 J	266 J	183	12.7 J	--	1.8	7	524	33.1	< 15 U
MW09-03D	-	971	836 J	1030	1100	973	1220 J	1090 J	1000	894 J	--	1060	1050	1020	1080	979
MW09-07S	-	189	209	207	190	229	224	217 J	175	190 J	--	179	196	188	225	206
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	765	591 J	829	850	849	870	879 J	789	821 J	--	851	796	812	918	834
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	1580	1290 J	1530	2300	1300	1250 J	1300 J	1260	1370 J	--	1240	1280	1570	1360	1240
MW09-10D	-	368	324	415	400 J	297	376 J	395 J	362	367 J	--	386	382	380	428	396
MW09-10S	-	400	338	504	430 J	357	408 J	374 J	344	366 J	--	419	398	390	440	399
MW09-11S	-	523	2030 J	358	700	1360	1390	3040 J	2710	1600 J	--	574	2290	371	1920	2030
MW09-14D	-	1250	1390 J	1220	1200	1210	1180	944 J	1000	1200 J	--	1200	1140	1080	1230	1140
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	504	488 J	616	600	493	712	581 J	639	712 J	--	721	783	818	877	870
MW09-20I	-	702	535 J	760	760	591	870	714 J	730	718 J	--	860	684	771	996	783
MW09-21D	-	170	108 J	84.8	64	58.7	42.1	335 J	51.5	112 J	--	258	436	398	445	157
MW09-21S	-	214	108 J	152	170	98.9	140	85.5 J	96.9	113 J	--	84.4	83.8	83.6	107	119
MW09-23D	-	915	842	878	860	656	797	463 J	718	661 J	--	708	748	744	770	730
MW09-23S	-	544	438	504	500	358	537	417 J	410	356 J	--	399	403	389	472	461
MW09-24D	-	274	197 J	290	280	180	310	276 J	271	256 J	--	254	296	297	332	312
MW09-24S	-	1600	999 J	1760	1600	819	1240	1800 J	1420	2520 J	--	2390	1820	1680	2700	1410
MW09-25S	-	243	518 J	397	370	410	479	366 J	263	299 J	--	324	161	273	500	852
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE (UG_L)	-															
MW09-02S	-	1030	301 J	< 3.9 U	1200 J	28.5	143 J	293 J	188	27.9	--	9.3	15.6	423	67.6	33.3
MW09-03D	-	991	700 J	1030	1000	929	1230 J	1180 J	1140	1100	--	1070	1050	1050	1070	970
MW09-07S	-	190	184	202	180	218	231	229 J	213	206	--	198	190	185	226	196
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	850	510 J	797	860	817	875	979 J	871	920	--	885	808	832	902	821
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	1410	1520 J	1570	2000	1190	1300 J	1400 J	1390	1440	--	1450	1260	1580	1350	1210
MW09-10D	-	404	347	405	430 J	308	408 J	439 J	394	386	--	393	379	384	396	395
MW09-10S	-	429	328	467	470 J	361	435 J	505 J	395	306	--	450	399	390	416	371
MW09-11S	-	582	1830 J	3220	490	1420	1480	4110 J	3550	1660	--	592	2560	375	2010	2160
MW09-14D	-	1330	976 J	1250	1100	1120	1180	1380 J	1250	1370	--	1230	1150	1140	1270	1190
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	528	458 J	614	550	487	695	786 J	732	770	--	784	789	816	906	919
MW09-20I	-	611	455 J	777	700	618	908	956 J	836	741	--	882	746	762	1060	795

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-21D	-	181	149 J	654	75	69.4	43.2	78.2 J	60.3	186 J	--	417 J	92.9	424	473	163
MW09-21S	-	218	127 J	145	160	106	135	113 J	93.3	115	--	95.7	90.8	81.8	118	104
MW09-23D	-	915	797	868	870	658	858	341 J	753	761 J	--	786	700	710	765	721
MW09-23S	-	582	466	498	470	395	532	542 J	459	390	--	479	408	395	466	467
MW09-24D	-	276	191 J	289	270	173	306	345 J	291	258 J	--	293	302	262	317	323
MW09-24S	-	1720	1050 J	1710	1500	816	1210	2170 J	1540	2580 J	--	2690	1740	1710	2690	1420
MW09-25S	-	286	615 J	381	340	402	466	459 J	315	329	--	360	305	281	364	847
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY, DISSOLVED (2 UG_L)	-															
MW09-02S	2	< 0.11 U	R	0.1 J	< 0.42 U	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-03D	2	< 0.05 U	R	0.09 J	0.77 J	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-07S	**2**	**2.1**	< 0.07 U	< 0.07 U	< 0.41 UJ	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	0.11 J
MW09-08DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	2	< 0.17 U	R	0.07 J	< 0.09 U	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	0.07 J
MW09-09DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	2	< 0.05 U	R	< 0.07 U	< 0.09 U	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-10D	2	< 0.05 U	< 0.08 U	< 0.07 U	--	< 0.11 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-10S	2	< 0.05 U	< 0.07 U	< 0.07 U	0.36 J	< 0.27 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-11S	2	< 0.05 U	R	< 0.07 U	< 0.12 U	< 0.27 UJ	< 0.09 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-14D	2	0.07 J	R	< 0.07 U	< 0.48 UJ	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.13 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-14IA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	2	< 0.15 U	R	< 0.07 U	< 0.59 UJ	0.59 J	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	0.04 J	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-20I	2	< 0.16 U	R	< 0.07 U	< 0.45 UJ	< 0.28 UJ	< 0.03 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	0.06 J	< 0.2 U	< 0.2 U	< 0.2 U
MW09-21D	2	< 0.17 U	R	0.09 J	< 0.13 U	< 0.27 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW09-21S	2	< 0.13 U	R	0.1 J	< 0.1 U	< 0.27 UJ	< 0.02 U	< 0.02 U	0.02 J	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW09-23D	2	0.07 J	< 0.08 U	< 0.07 U	< 0.36 UJ	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	0.085 J
MW09-23S	2	0.06 J	< 0.08 U	< 0.07 U	1 J	< 0.29 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	0.088 J
MW09-24D	2	< 0.14 U	R	< 0.07 U	< 0.73 UJ	< 0.27 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	0.04 J	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-24S	2	< 0.13 U	R	< 0.07 U	< 0.65 UJ	< 0.28 U	< 0.03 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-25S	2	< 0.06 U	R	< 0.07 U	< 0.13 U	< 0.06 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-26D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY (2 UG_L)	-															
MW09-02S	2	< 0.06 U	R	0.08 J	< 0.23 U	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW09-03D	2	< 0.05 U	R	0.09 J	< 0.22 U	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW09-07S	2	< 0.05 U	< 0.08 U	< 0.07 U	< 0.2 U	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW09-08DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	2	< 0.05 U	R	< 0.07 U	< 0.05 U	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-09DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	2	0.08 J	R	< 0.07 U	< 0.04 U	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	0.02 J	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-10D	2	< 0.06 U	< 0.07 U	< 0.07 U	0.78 J	< 0.27 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-10S	2	< 0.05 U	< 0.06 U	< 0.07 U	0.98 J	< 0.27 UJ	< 0.02 U	< 0.02 U	< 0.02 U	0.03	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-11S	2	< 0.05 U	R	< 0.07 U	< 0.04 U	< 0.27 UJ	< 0.02 U	< 0.02 U	0.22	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-14D	2	0.13 J	R	< 0.07 U	< 0.26 U	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.14 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-14IA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	2	< 0.06 U	R	< 0.07 U	< 0.19 U	< 0.27 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW09-20I	2	< 0.05 U	R	< 0.07 U	< 0.22 U	< 0.27 UJ	< 0.02 U	< 0.02 U	0.05 J	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW09-21D	2	< 0.05 U	R	0.09 J	< 0.06 U	< 0.27 UJ	< 0.02 U	< 0.02 U	0.04 J	< 0.02 U	--	< 0.02 U	< 0.12 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-21S	2	< 0.06 U	R	< 0.07 U	< 0.04 U	< 0.27 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.1 U	< 0.2 U	< 0.2 U	< 0.2 U
MW09-23D	2	0.07 J	< 0.06 U	< 0.07 U	< 0.21 U	< 0.27 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-23S	2	0.06 J	< 0.08 U	< 0.07 U	< 0.21 U	< 0.28 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	0.095 J
MW09-24D	2	< 0.05 U	R	< 0.07 U	< 0.2 U	< 0.27 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-24S	2	< 0.05 U	R	< 0.07 U	< 0.2 U	< 0.27 U	< 0.02 U	< 0.02 U	0.02 J	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
MW09-25S	2	< 0.06 U	R	< 0.07 U	< 0.05 U	< 0.27 UJ	< 0.02 U	< 0.02 U	0.03 J	< 0.02 U	--	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-26D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL, DISSOLVED (100 UG_L)	-															
MW09-02S	100	< 7.3 U	< 7.3 UJ	< 5 U	< 7.3 U	< 0.66 U	0.6 J	1.6	2.8 J	0.93 J	--	1.2	2.4 J	2.1 J	< 40 U	< 40 U
MW09-03D	100	< 7.3 U	< 7.3 UJ	< 5 U	< 7.3 U	3.1	3.1 J	3.7	3 J	2.2 J	--	2.9	4.7 J	2.5 J	< 40 U	1.9 J
MW09-07S	100	< 7.3 U	< 7.3 U	< 5 U	< 7.3 U	2.7	2.8	4	2.6 J	1.8 J	--	2.6	3.2 J	1.1 J	< 40 U	< 40 U

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-08DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	100	< 7.3 U	< 7.3 U	< 5 U	5.5 J	3.1	4	4.4	2.9 J	2.4 J	--	3.2	4 J	< 40 U	< 40 U	< 40 U
MW09-09DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	100	< 7.3 U	< 7.3 UJ	< 5 U	< 5 UJ	1.8	1.7 J	2.6	2 J	1.6 J	--	1.8	< 40 U	< 40 U	< 40 U	< 40 U
MW09-10D	100	< 7.3 U	< 7.3 U	< 5 U	< 5 U	0.5	0.55 J	1.1 J	0.61 J	0.45 J	--	0.72	< 10 U	< 40 U	< 40 U	< 40 U
MW09-10S	100	< 7.3 U	< 7.3 U	< 5 U	< 5 U	1.7	1.9 J	2.4	1.7 J	2 J	--	2	4.3 J	< 40 U	< 40 U	< 40 U
MW09-11S	**100**	< 7.3 U	12 J	**202**	5.6 J	10	21.4	25.3	22.8 J	9.7 J	--	43.7	28.4	3.3 J	42.4	19.6 J
MW09-14D	100	< 7.3 U	< 7.3 UJ	< 5 U	< 7.3 U	1.3	1.5	1.8	1.3 J	1 J	--	1.4	< 40 U	0.81 J	< 40 U	< 40 U
MW09-14IA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	100	< 7.3 U	< 7.3 U	< 5 U	< 7.3 U	1.5	2	1.6	1.4 J	0.89 J	--	1.6	1 J	< 40 U	< 40 U	< 40 U
MW09-20I	100	< 7.3 U	< 7.3 UJ	< 5 U	< 7.3 U	1.4	2.5	2.5	1.9 J	1.7 J	--	4	3 J	< 40 U	< 40 U	0.81 J
MW09-21D	100	< 7.3 U	< 7.3 UJ	< 5 U	< 5 UJ	1.2	1.4	1.5	1.4 J	1.1 J	--	1.7	< 40 U	0.65 J	< 40 U	< 40 U
MW09-21S	100	< 7.3 U	< 7.3 UJ	< 5 U	< 5 UJ	1.5	1.8	1.4	1.2 J	1.8 J	--	4.5	< 40 U	< 40 U	< 40 U	4.2 J
MW09-23D	100	< 7.3 U	< 7.3 U	< 5 U	18	0.60	0.92 J	1.3	0.68 J	0.68 J	--	0.82	0.94 J	< 40 U	< 40 U	< 40 U
MW09-23S	100	< 7.3 U	< 146 U	< 5 U	< 7.3 U	4.8	7.7	15.9	9.2 J	4.4 J	--	5.1	6 J	< 40 U	< 40 U	< 40 U
MW09-24D	100	< 7.3 U	< 7.3 UJ	< 5 U	< 7.3 U	8.5	2	2.4 J	1.2 J	1 J	--	1.4	2.8 J	2.5 J	< 40 U	< 40 U
MW09-24S	100	< 7.3 U	< 7.3 UJ	< 5 U	< 7.3 U	0.44	0.82 J	1.3	0.68 J	0.9 J	--	0.96	9.4 J	< 40 U	< 40 U	< 40 U
MW09-25S	100	< 7.3 U	< 7.3 UJ	< 5 U	< 5 U	0.9	0.92 J	0.67 J	0.6 J	0.31 J	--	0.73	0.8 J	1.2 J	< 40 U	< 40 U
MW09-26D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL (100 UG_L)	-															
MW09-02S	100	< 7.3 U	< 7.3 U	< 5 U	< 7.3 U	< 0.81 U	1.1 J	1.5	2.7	1.3	--	1.1	2.4 J	2.5 J	< 40 U	< 40 U
MW09-03D	100	< 7.3 U	< 7.3 U	< 5 U	< 7.3 U	3.7	5.6 J	3.5	3.6	3	--	3.1	3.9 J	2 J	< 40 U	0.98 J
MW09-07S	100	< 7.3 U	< 7.3 U	< 5 U	< 7.3 U	2.9	3.2	2.9	2.8	2	--	3	2.4 J	0.82 J	< 40 U	< 40 U
MW09-08DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	100	< 7.3 U	< 7.3 U	< 5 U	< 5 U	3.1	3.5	3.9	3.3	2.9	--	3.7	2.9 J	< 40 U	< 40 U	< 40 U
MW09-09DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	100	< 7.3 U	< 7.3 U	< 5 U	< 5 U	2	2 J	2.7	2.5	2	--	2.2	< 40 U	< 40 U	< 40 U	< 40 U
MW09-10D	100	< 7.3 U	< 7.3 U	< 5 U	< 5 U	0.59	0.63 J	0.85 J	0.73 J	0.7	--	0.81	< 10 U	< 40 U	< 40 U	< 40 U
MW09-10S	100	< 7.3 U	< 7.3 U	< 5 U	< 5 U	1.9	2.2 J	2.6	2.4	2	--	2.3	3.7 J	< 40 U	< 40 U	< 40 U
MW09-11S	100	< 7.3 U	9.9 J	15.3	7.9 J	11.6	21.7	29.4	30.8	10.6	--	48.6	30.3	2.7 J	55.3	20.6 J
MW09-14D	100	< 7.3 U	< 7.3 U	< 5 U	39	1.9	1.9	3.3 J	1.7	2.7	--	1.6	< 40 U	< 40 U	< 40 U	< 40 U
MW09-14IA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	100	< 7.3 U	< 7.3 U	< 5 U	< 7.3 U	1.6	1.8	2.5	2.2	1.3	--	2	< 10 U	< 40 U	< 40 U	< 40 U
MW09-20I	100	< 7.3 U	< 7.3 U	< 5 U	< 7.3 U	4.8	3.3	3.6	2.9	1.8	--	4.9	1.7 J	< 40 U	< 40 U	0.99 J
MW09-21D	100	< 7.3 U	< 7.3 U	10.4 J	< 5 U	1.2	1.3	1.5	2	1.4 J	--	1.6	< 40 U	< 40 U	< 40 U	< 40 U
MW09-21S	100	< 7.3 U	< 7.3 U	< 5 U	< 5 U	2.8	2	1.9	2	2.6	--	6.9	< 40 U	< 40 U	< 40 U	1.2 J
MW09-23D	100	< 7.3 U	< 7.3 U	< 5 U	< 7.3 U	1.3	1.5	1.1	1.2	1 J	--	1.5	< 10 U	< 40 U	< 40 U	< 40 U
MW09-23S	100	< 7.3 U	< 146 U	< 5 U	< 7.3 U	5	6.9	24.6	14.7	5.8	--	6.8	1.5 J	< 40 U	< 40 U	< 40 U
MW09-24D	100	< 7.3 U	< 7.3 U	< 5 U	< 7.3 U	9	1.9	2.2	2.1	1.5 J	--	1.8	9.4 J	3.8 J	< 40 U	< 40 U
MW09-24S	100	< 7.3 U	< 7.3 U	< 5 U	< 7.3 U	0.51	0.75 J	1.5	1.1	1.2 J	--	1.1	24.8	0.64 J	< 40 U	< 40 U
MW09-25S	100	< 7.3 U	< 7.3 U	< 5 U	< 5 U	0.94	0.77 J	0.80 J	0.94 J	0.52	--	0.58	0.55 J	< 40 U	< 40 U	< 40 U
MW09-26D	**100**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POTASSIUM, DISSOLVED (UG_L)	-															
MW09-02S	-	6590	3630	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	15500	13700	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	31400	33500	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	31900	24700	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	49000	32000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	1370	1150	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	27800	27800	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	7230	5620	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	3460	3700	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	3650	3340	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	27600	21300	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	25600	22300	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	52500	33300	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	12100	10900	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	245000	166000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	9970	7310	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	8240	4180	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	7050	7300	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-02S	-	7350	3610	--	--	--	--	--	--	--	--	--	--	--	--	--

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
POTASSIUM (UG_L)	-															
MW09-03D	-	16500	11000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	31600	33500	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	33900	21600	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	42600	37900	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	1110	1290	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	29800	27100	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	7860	4600	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	3370	2620	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	3720	3170	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	29400	17100	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	26000	24100	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	55000	39400	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	11700	10300	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	219000	170000	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	11200	6930	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	8340	4360	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	8470	8260	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM, DISSOLVED (UG_L)	-															
MW09-02S	-	< 3.7 UJ	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 3.7 UJ	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	< 3.7 U	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 3.7 UJ	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	6.2	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 3.7 UJ	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	< 3.7 UJ	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 3.7 UJ	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 3.7 UJ	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 3.7 UJ	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	< 3.7 UJ	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	< 3.7 U	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 3.7 U	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	6.4	< 74 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 3.7 UJ	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 3.7 UJ	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 3.7 UJ	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM (UG_L)	-															
MW09-02S	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	< 3.7 U	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 3.7 U	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 3.7 U	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	< 3.7 U	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 3.7 U	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 3.7 U	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	4.4 J	< 74 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 3.7 U	< 3.7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER, DISSOLVED (UG_L)	-															
MW09-02S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	< 6.1 U	< 122 U	--	--	--	--	--	--	--	--	--	--	--	--	--

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-24D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER (UG_L)	-															
MW09-02S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 6.1 U	235	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	< 6.1 U	< 122 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 6.1 U	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM, DISSOLVED (UG_L)	-															
MW09-02S	-	9660	5200 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	25500	21400 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	33600	34400 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	154000	122000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	155000	121000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	8170	7290 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	114000	135000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	84600	62800 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	91100	107000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	42100	38400 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	311000	233000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	21200	19500 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	588000	409000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	161000	146000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	< 242 U	4640000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	13300	9440 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	33500	22600 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	54800	75900 J	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM (UG_L)	-															
MW09-02S	-	11000	5220 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	27600	17400 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	32700	35400 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	163000	108000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	133000	140000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	7850	9400 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	126000	138000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	93700	53400 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	93400	77300 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	42300	35600 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	333000	203000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	21800	19500 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	642000	460000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	151000	138000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	< 242 U	5060000 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	13300	8770 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	34500	23500 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	62800	83800 J	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM, DISSOLVED (UG_L)	-															
MW09-02S	-	< 4.5 U	< 4.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 4.5 U	< 4.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 4.5 U	< 4.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 4.5 U	< 4.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	< 4.5 U	< 4.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	7.1 J	< 4.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-21D	-	< 4.5 U	< 4.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	13.9	< 4.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	< 4.5 U	< 90 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 4.5 U	< 4.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 4.5 U	< 4.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 4.5 U	< 4.5 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM (UG_L)	-															
MW09-02S	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	6.8 J	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	13.6	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	< 4.5 U	< 90 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 4.5 U	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC, DISSOLVED (UG_L)	-															
MW09-02S	-	< 7.1 U	44.4 J	8.5	< 13 U	< 18 U	1.7 J	10.6 J	3.7 J	1.4 J	--	2.2 J	10.7	< 20 U	7.6 J	5 J
MW09-03D	-	< 8.5 U	< 7.1 UJ	12	< 11 U	< 22.3 U	5 J	4.2 J	21.1 J	1.9 J	--	2.3 J	14.1	< 20 U	5.4 J	5.4 J
MW09-07S	-	9.8 J	17.5	< 3.2 U	< 13 U	< 20.5 U	< 1.3 U	8.3 J	3.3 J	< 0.49 U	--	1.1 J	11.2	< 20 U	5.0 J	3.7 J
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 38.3 U	9.3 J	7.6	< 8.5 U	< 12.8 U	16.6 J	6.7 J	3 J	< 0.82 U	--	0.92 J	11.5	< 20 U	3.3 J	3.3 J
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	12.2 J	< 7.1 UJ	< 3.2 U	< 8.5 U	< 10 U	0.49 J	3.2 J	29 J	< 0.83 U	--	< 0.61 U	10.4 J	< 20 U	7 J	7.7 J
MW09-10D	-	< 12.5 U	23.4	4.7 J	< 10 U	< 56.7 U	1.3 J	2.2 J	2.5 J	< 0.2 UJ	--	1.6 J	< 10 U	< 20 U	4.1 J	4.6 J
MW09-10S	-	< 19.8 U	76.2	< 3.2 U	< 5.2 U	< 57.8 U	0.73 J	20.2 J	28.2 J	1.5 J	--	1.1 J	15	< 20 U	6.3 J	4 J
MW09-11S	-	< 19 U	< 7.1 UJ	260	< 6.6 U	< 59 U	43.1 J	16.1 J	22.1 J	11.2 J	--	436 J	277	36.4	176	126
MW09-14D	-	11.5 J	< 7.1 UJ	< 3.2 U	< 7.1 U	< 16.2 U	< 2.5 U	2.8 J	0.33 J	3.5 J	--	0.95 J	3.4 J	< 20 U	4.2 J	2.9 J
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 10.9 U	< 7.1 U	21	< 7.6 U	< 86.2 U	< 1.7 U	< 1.2 U	1.5 J	0.28 J	--	< 0.34 U	< 10 U	< 20 U	2.3 J	3.7 J
MW09-20I	-	< 7.1 U	< 7.1 UJ	< 3.2 U	< 7.1 U	< 79.1 U	5.6 J	15.1 J	7.7 J	0.86 J	--	1.6 J	< 10 U	< 20 U	5.9 J	3.3 J
MW09-21D	-	< 7.1 U	15.1 J	< 3.2 U	< 12 U	< 56.2 U	< 1 U	4.4 J	1 J	1.3 J	--	0.67 J	< 20 U	< 20 U	2.8 J	4.1 J
MW09-21S	-	< 8.8 U	< 7.1 UJ	11	< 4.6 U	< 43.2 U	< 2.7 U	4.4 J	0.64 J	1.6 J	--	< 0.43 U	8.1 J	< 20 U	3.2 J	< 20 U
MW09-23D	-	41.1	11.3 J	< 3.2 U	< 15 U	< 73.6 U	10.2 J	2.9 J	1.1 J	< 0.57 U	--	< 0.27 U	< 10 U	< 20 U	5.9 J	3.1 J
MW09-23S	-	96.9	< 142 U	4.5 J	< 7.1 U	249 J	< 7.8 U	6.4 J	3.7 J	2 J	--	2.8 J	< 10 U	< 20 U	< 20 U	< 20 U
MW09-24D	-	< 7.1 U	< 7.1 UJ	< 3.2 U	< 7.1 U	231 J	< 1.7 U	7.5 J	3.6 J	4.4 J	--	1.1 J	9.2 J	< 20 U	3.3 J	3.1 J
MW09-24S	-	< 10 U	< 7.1 UJ	< 3.2 U	< 8.5 U	382 J	< 1.8 U	17.5 J	0.52 J	< 0.7 U	--	< 0.53 U	9.4 J	< 20 U	7.9 J	< 20 U
MW09-25S	-	< 17.8 U	< 7.1 UJ	4.3 J	< 9.4 U	283 J	< 2.2 U	< 1.7 U	1.1 J	1.4 J	--	< 0.6 U	< 10 U	< 20 U	5.3 J	4 J
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC (UG_L)	-															
MW09-02S	-	< 11.8 U	< 7.1 U	4.9 J	30 J	< 13.4 U	5.7 J	9.3 J	4.6 J	5.3 J	--	1.6	11.3	19.2 J	6.7 J	6.6 J
MW09-03D	-	< 7.1 U	< 7.1 U	14	19	< 23.2 U	2.3 J	4.8 J	7.5 J	4.8 J	--	3.7	12.6	< 20 U	6 J	5.5 J
MW09-07S	-	10.5 J	12.6 J	< 3.2 U	11 J	< 20.2 U	< 2.7 U	4.3 J	5.8 J	4 J	--	2.3	9.5 J	11.6 J	16.4 J	2.6 J
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 7.1 U	< 7.1 U	7.9	< 9.6 U	< 20.5 U	< 13 U	7.4 J	10.8 J	8.4 J	--	14.8	27	< 20 U	8.6 J	5.1 J
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	16.8	< 7.1 U	< 3.2 U	< 8.8 U	< 27.3 U	5.5 J	7.9 J	7.1 J	8.4 J	--	3.3	15.1 J	< 20 U	9.9 J	4.1 J
MW09-10D	-	< 11.4 U	14.2 J	4.8 J	< 23 U	< 2.8 U	0.5 J	< 1.8 U	2.8 J	5.1 J	--	1.8	< 10 U	< 20 U	4.8 J	5 J
MW09-10S	-	< 13.6 U	19.7	< 3.2 U	< 7.9 U	< 4.9 U	3.0 J	7 J	11 J	9.5 J	--	3.3	14	18.1 J	11.5 J	11.9 J
MW09-11S	-	< 10.4 U	< 7.1 U	310	< 17 U	< 11.2 U	65.9 J	37.9 J	104 J	18.1 J	--	527	444	72.9	447	226
MW09-14D	-	13.7 J	< 7.1 U	< 3.2 U	< 7.1 U	< 19.2 U	< 3.5 U	4.2 J	1.6 J	4.5 J	--	2.1	8 J	< 20 U	4.5 J	< 20 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 7.1 U	< 7.1 U	6.4 J	7.9 J	< 9.3 U	< 5.4 U	4.3 J	11 J	7.5 J	--	3.5	8.1 J	< 20 U	4.4 J	8.2 J
MW09-20I	-	< 10.6 U	< 7.1 U	7.2	10 J	< 5.3 U	< 2.2 U	3.9 J	3.7 J	3.3 J	--	6.3	< 10 U	< 20 U	5.6 J	3.1 J
MW09-21D	-	< 7.5 U	< 7.1 U	190	< 7.9 U	< 3 U	< 2.5 U	4.7 J	3.7 J	5.1 J	--	5.0	8.6 J	< 20 U	4.3 J	5.2 J
MW09-21S	-	< 8.2 U	< 7.1 U	7.2	< 12 U	< 7.2 U	< 4 U	3.6 J	5.7 J	8.9 J	--	5.9	8.7 J	< 20 U	4.1 J	4.7 J

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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-23D	-	17.1	10.2 J	18	8.7 J	< 7.2 U	< 3.2 U	< 0.7 U	2.2 J	3.7 J	--	2.6	< 10 U	< 20 U	4.4 J	3.6 J
MW09-23S	-	11.1 J	< 142 U	< 3.2 U	< 7.1 U	< 5.5 U	< 5.9 U	8.2 J	9.1 J	5.3 J	--	4	< 10 U	< 20 U	< 20 U	< 20 U
MW09-24D	-	< 7.1 U	< 7.1 U	< 3.2 U	< 7.1 U	< 18.3 U	< 1.1 U	< 1.1 U	1.1 J	3.7 J	--	1.9	34.9	< 20 U	2.6 J	< 20 U
MW09-24S	-	< 7.1 U	< 7.1 U	< 3.2 U	< 7.1 U	< 14.8 U	< 3.7 U	10.5 J	1.7 J	5.7 J	--	0.78	8 J	< 20 U	6.5 J	< 20 U
MW09-25S	-	< 7.1 U	< 7.1 U	4.6 J	< 13 U	< 16.4 U	< 0.71 U	2.9 J	2.4 J	2.3 J	--	0.5	< 10 U	< 20 U	5.9 J	3.2 J
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1016 (UG_L)	-															
MW09-02S	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-03D	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-07S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.27 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 UJ	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.26 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.2 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-10D	-	< 0.31 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-10S	-	< 0.28 U	< 0.11 U	< 0.1 U	< 0.2 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.27 U
MW09-11S	-	< 0.25 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-14D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.25 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-20I	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.26 U
MW09-23D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-23S	-	< 0.11 U	< 0.11 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24D	-	< 0.13 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24S	-	< 0.12 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-25S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1221 (UG_L)	-															
MW09-02S	-	< 0.21 U	< 0.21 UJ	< 0.2 U	< 0.42 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-03D	-	< 0.21 U	< 0.21 UJ	< 0.2 U	< 0.42 U	R	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.25 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-07S	-	< 0.22 U	< 0.2 U	< 0.2 U	< 0.42 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.26 U	< 0.26 U	< 0.27 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.42 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 UJ	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.25 U	< 0.26 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.2 UJ	< 0.2 UJ	< 0.2 U	< 0.4 U	R	< 0.2 U	< 0.2 U	< 2 U	< 0.2 U	--	< 0.2 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-10D	-	< 0.63 U	< 0.2 U	< 0.2 U	< 0.4 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-10S	-	< 0.56 U	< 0.21 U	< 0.2 U	< 0.4 U	< 0.2 UJ	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.27 U
MW09-11S	-	< 0.5 U	< 0.2 U	< 0.2 U	< 0.42 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-14D	-	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.42 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.25 U	< 0.25 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.42 U	R	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-20I	-	< 0.22 U	< 0.2 U	< 0.2 U	< 0.42 U	< 0.2 UJ	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.25 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21D	-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.4 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 0.2 U	--	< 0.2 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21S	-	< 0.22 U	< 0.2 U	< 0.2 U	< 0.4 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.26 U	< 0.26 U	< 0.26 U
MW09-23D	-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.42 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-23S	-	< 0.22 U	< 0.22 U	< 0.2 U	< 0.42 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24D	-	< 0.25 U	< 0.21 UJ	< 0.2 U	< 0.42 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24S	-	< 0.24 U	< 0.21 UJ	< 0.2 U	< 0.42 U	< 0.2 U	< 0.2 U	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-25S	-	< 0.2 U	< 0.2 U	< 0.2 U	< 0.42 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 2 U	< 0.2 UJ	--	< 0.2 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1232 (UG_L)	-															
MW09-02S	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-03D	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.25 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-07S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.26 U	< 0.26 U	< 0.27 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 UJ	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.25 U	< 0.26 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.2 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-10D	-	< 0.31 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-10S	-	< 0.28 U	< 0.11 U	< 0.1 U	< 0.2 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.27 U
MW09-11S	-	< 0.25 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-14D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-20I	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.25 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.26 U	< 0.26 U	< 0.26 U
MW09-23D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-23S	-	< 0.11 U	< 0.11 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24D	-	< 0.13 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24S	-	< 0.12 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-25S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 UJ	< 0.1 U	< 1 U	< 0.1 UJ	--	< 0.1 UJ	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1242 (UG_L)	-															
MW09-02S	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-03D	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-07S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.27 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 UJ	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.26 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.2 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-10D	-	< 0.31 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-10S	-	< 0.28 U	< 0.11 U	< 0.1 U	< 0.2 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.27 U
MW09-11S	-	< 0.25 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-14D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.25 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-20I	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.26 U
MW09-23D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-23S	-	< 0.11 U	< 0.11 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24D	-	< 0.13 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24S	-	< 0.12 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-25S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 UJ	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1248 (UG_L)	-															
MW09-02S	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-03D	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-07S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.27 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 UJ	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.26 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.2 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-10D	-	< 0.31 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-10S	-	< 0.28 U	< 0.11 U	< 0.1 U	< 0.2 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.27 U
MW09-11S	-	< 0.25 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-14D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.25 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-20I	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.26 U
MW09-23D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-23S	-	< 0.11 U	< 0.11 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24D	-	< 0.13 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24S	-	< 0.12 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-25S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 UJ	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1254 (UG_L)	-															
MW09-02S	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-03D	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-07S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.27 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 UJ	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.26 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.2 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-10D	-	< 0.31 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-10S	-	< 0.28 U	< 0.11 U	< 0.1 U	< 0.2 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.27 U
MW09-11S	-	< 0.25 U	0.15	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	0.07 J	< 1 U	0.14	--	0.94	0.13 J	0.15 J	0.71	0.17 J
MW09-14D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.25 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-20I	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.26 U
MW09-23D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-23S	-	< 0.11 U	< 0.11 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24D	-	< 0.13 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24S	-	< 0.12 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-25S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 UJ	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260 (UG_L)	-															
MW09-02S	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-03D	-	< 0.11 U	< 0.11 UJ	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.25 U	< 0.28 U	< 0.26 U
MW09-07S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.27 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 UJ	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.26 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.2 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-10D	-	< 0.31 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-10S	-	< 0.28 U	< 0.11 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.27 U
MW09-11S	-	< 0.25 U	0.15	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	0.07 J	< 1 U	0.14	--	0.94	0.13 J	0.15 J	0.71	0.17 J
MW09-14D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	< 0.25 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	R	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-20I	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-21S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.26 U	< 0.26 U	< 0.26 U
MW09-23D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-23S	-	< 0.11 U	< 0.11 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24D	-	< 0.13 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-24S	-	< 0.12 U	< 0.11 UJ	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.25 U
MW09-25S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	0.04 J	< 0.1 UJ	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	< 0.26 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCHLORINATED BIPHENYLS (PCBS) (UG_L)	-															
MW09-02S	-	< 0.11 U	< 0.11 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.041 U	< 0.043 U	< 0.26 U
MW09-03D	-	< 0.11 U	< 0.11 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.041 U	< 0.046 U	< 0.26 U
MW09-07S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.043 U	< 0.043 U	< 0.27 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.041 U	< 0.041 U	< 0.26 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.041 U	< 0.043 U	< 0.25 U
MW09-10D	-	< 0.31 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.041 U	< 0.043 U	< 0.26 U
MW09-10S	-	< 0.28 U	< 0.11 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.041 U	< 0.043 U	< 0.27 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-11S	-	< 0.25 U	0.15	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	0.07	< 1 U	0.14	--	0.94	0.13	0.15	0.71	0.17
MW09-14D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.042 U	< 0.041 U	< 0.25 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.041 U	< 0.043 U	< 0.26 U
MW09-20I	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.25 U	< 0.041 U	< 0.042 U	< 0.26 U
MW09-21D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.041 U	< 0.042 U	< 0.26 U
MW09-21S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.042 U	< 0.043 U	< 0.26 U
MW09-23D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.041 U	< 0.043 U	< 0.26 U
MW09-23S	-	< 0.11 U	< 0.11 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.041 U	< 0.042 U	< 0.26 U
MW09-24D	-	< 0.13 U	< 0.11 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.041 U	< 0.043 U	< 0.26 U
MW09-24S	-	< 0.12 U	< 0.11 U	< 0.1 U	< 0.21 U	< 0.1 U	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.041 U	< 0.043 U	< 0.25 U
MW09-25S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	0.04	< 0.1 U	< 0.1 U	< 1 U	< 0.1 U	--	< 0.1 U	< 0.26 U	< 0.042 U	< 0.042 U	< 0.26 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDD (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDE (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDT (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALDRIN (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALPHA-BHC (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALPHA-CHLORDANE (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BETA-BHC (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DELTA-BHC (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIELDRIN (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN I (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN II (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN (2 UG_L)	-															
MW09-08DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN KETONE (2 UG_L)	-															
MW09-08DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEPTACHLOR (0.4 UG_L)	-															
MW09-08DA	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE (0.2 UG_L)	-															
MW09-08DA	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-27S	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROBENZENE (1 UG_L)	-															
MW09-08DA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LINDANE (UG_L)	-															
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHOXYCHLOR (40 UG_L)	-															
MW09-08DA	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDD (UG_L)	-															
MW09-02S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 UJ
MW09-10D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.052 UJ
MW09-10S	-	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.054 UJ
MW09-11S	-	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.052 UJ
MW09-14D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.051 U
MW09-20I	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 UJ
MW09-23S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 UJ
MW09-24D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.02 U	--	< 0.01 U	0.03 J	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 UJ	< 0.051 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDE (UG_L)	-															
MW09-02S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.052 U
MW09-10S	-	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-11S	-	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.056 U	< 0.052 U
MW09-14D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.053 U	< 0.051 U
MW09-20I	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.052 U	< 0.052 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-23S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 UJ	< 0.05 UJ	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.051 U	< 0.051 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDT (UG_L)	-															
MW09-02S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.053 U	< 0.051 UJ
MW09-03D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.056 U	< 0.053 UJ
MW09-07S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.053 UJ	< 0.052 U
MW09-10S	-	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.053 UJ	< 0.054 U
MW09-11S	-	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.056 U	< 0.052 U
MW09-14D	-	< 0.01 U	< 0.01 UJ	0.0075 J	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.01 U	0.07 J	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.053 UJ	< 0.051 UJ
MW09-20I	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	0.044 J	< 0.052 U	< 0.053 UJ
MW09-21S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 UJ
MW09-23D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.052 U	< 0.052 UJ
MW09-23S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 UJ	< 0.05 UJ	< 0.05 U	< 0.051 UJ	< 0.052 UJ
MW09-24D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.052 U	< 0.053 UJ
MW09-24S	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.052 U	< 0.05 UJ
MW09-25S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 UJ	< 0.05 U	< 0.051 UJ	< 0.051 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALDRIN (UG_L)	-															
MW09-02S	-	< 0.005 UJ	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.005 UJ	< 0.0053 U	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 UJ
MW09-10D	-	< 0.005 UJ	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.052 UJ
MW09-10S	-	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 UJ
MW09-11S	-	< 0.005 UJ	< 0.0052 UJ	< 0.005 UJ	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.052 UJ
MW09-14D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-20I	-	< 0.0055 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 UJ	< 0.05 U	< 0.05 U	< 0.051 UJ	< 0.052 U
MW09-24D	-	< 0.005 UJ	< 0.0053 UJ	< 0.005 U	0.006	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	-	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALPHA-BHC (UG_L)	-															
MW09-02S	-	< 0.005 UJ	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.005 U	< 0.0053 U	< 0.005 UJ	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-09S	-	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.0052 UJ	< 0.005 U	< 0.005 UJ	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 UJ
MW09-10D	-	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.052 UJ
MW09-10S	-	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.054 UJ
MW09-11S	-	< 0.005 U	< 0.0052 UJ	< 0.005 UJ	< 0.0053 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.056 U	< 0.052 UJ
MW09-14D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.053 UJ	< 0.051 U
MW09-20I	-	< 0.0055 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.052 U	< 0.052 UJ
MW09-23S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 UJ	< 0.05 UJ	< 0.05 U	< 0.051 UJ	< 0.052 UJ
MW09-24D	-	< 0.005 U	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.051 UJ	< 0.051 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALPHA-CHLORDANE (UG_L)	-															
MW09-02S	-	< 0.005 UJ	< 0.0053 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.005 U	< 0.005 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	< 0.005 U	< 0.0053 U	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.005 U	< 0.0053 U	< 0.02 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.005 UJ	< 0.005 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	-	< 0.005 U	< 0.0052 U	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.052 U
MW09-10S	-	< 0.005 U	< 0.005 U	< 0.02 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-11S	-	< 0.005 U	< 0.0052 U	< 0.02 UJ	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.052 U
MW09-14D	-	< 0.005 U	< 0.005 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.005 U	< 0.005 U	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-20I	-	< 0.0055 U	< 0.005 U	< 0.02 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.005 U	< 0.005 U	< 0.02 U	< 0.005 UJ	< 0.005 U	< 0.005 U	0.0064	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.005 U	< 0.005 U	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	-	< 0.005 U	< 0.005 U	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	-	< 0.005 U	< 0.0053 U	< 0.02 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	-	< 0.005 U	< 0.0053 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.005 U	< 0.005 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	0.0067	< 0.005 UJ	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	-	< 0.005 U	< 0.005 U	< 0.02 U	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1016 (UG_L)	-															
MW09-02S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1221 (UG_L)	-															
MW09-02S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-08S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1232 (UG_L)	-															
MW09-02S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1242 (UG_L)	-															
MW09-02S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
AROCLOR-1254 (UG_L)	-															
MW09-02S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260 (UG_L)	-															
MW09-02S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BETA-BHC (UG_L)	-															
MW09-02S	-	< 0.005 UJ	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	R	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	0.02 J	< 0.005 U	< 0.01 U	--	0.0066 J	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.0052 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	-	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.052 U
MW09-10S	-	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-11S	-	< 0.005 U	< 0.0052 U	< 0.005 UJ	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.052 U
MW09-14D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-20I	-	< 0.0055 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	0.0085 J	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	-	< 0.005 U	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.005 U	< 0.005 UJ	0.0077	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DELTA-BHC (UG_L)	-															
MW09-02S	-	< 0.005 UJ	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.005 U	< 0.0053 U	< 0.005 UJ	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 UJ

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 UJ
MW09-10D	-	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.052 UJ
MW09-10S	-	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.054 UJ
MW09-11S	-	< 0.005 U	< 0.0052 UJ	< 0.005 UJ	< 0.0053 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.056 U	< 0.052 UJ
MW09-14D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.053 UJ	< 0.051 U
MW09-20I	-	< 0.0055 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.052 U	< 0.052 UJ
MW09-23S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 UJ	< 0.05 UJ	< 0.05 U	0.016 J	< 0.052 UJ
MW09-24D	-	< 0.005 U	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 UJ
MW09-25S	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.051 UJ	< 0.051 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIELDRIN (UG_L)	-															
MW09-02S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.052 U
MW09-10S	-	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-11S	-	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.052 U
MW09-14D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-20I	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN I (UG_L)	-															
MW09-02S	-	< 0.005 U	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	-	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.052 U
MW09-10S	-	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.054 U
MW09-11S	-	< 0.005 U	< 0.0052 U	< 0.005 UJ	< 0.0053 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.052 U
MW09-14D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.051 U
MW09-20I	-	< 0.0055 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.005 U	0.01 J	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	-	< 0.005 U	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-25S	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 UJ	< 0.051 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN II (UG_L)	-															
MW09-02S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	-	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-10S	-	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-11S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.052 U
MW09-14D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-20I	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 UJ	--	< 0.01 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	0.04	< 0.01 UJ	0.03 J	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 UJ
MW09-25S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 UJ	< 0.02 UJ	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE (UG_L)	-															
MW09-02S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.052 U
MW09-10S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-14D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-20I	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	0.03 J	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	0.01	< 0.01 UJ	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	-	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN (2 UG_L)	-															
MW09-02S	2	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 UJ
MW09-03D	2	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 UJ
MW09-07S	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	2	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.052 U
MW09-10S	2	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-11S	2	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.052 U
MW09-14D	2	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
MW09-14IA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 UJ
MW09-20I	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 UJ
MW09-21S	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 UJ
MW09-23D	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	2	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	2	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 UJ
MW09-25S	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 UJ	< 0.051 U
MW09-26D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN KETONE (2 UG_L)	-															
MW09-02S	2	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	2	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 UJ	< 0.053 U
MW09-07S	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	2	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.052 U
MW09-10S	2	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.054 U
MW09-11S	2	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.056 UJ	< 0.052 U
MW09-14D	2	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 U
MW09-14IA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.051 U
MW09-20I	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	2	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	2	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 UJ
MW09-25S	2	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.02 U	--	< 0.01 U	< 0.05 U	< 0.05 U	< 0.051 UJ	< 0.051 U
MW09-26D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEPTACHLOR (0.4 UG_L)	-															
MW09-02S	0.4	< 0.005 UJ	< 0.0053 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	0.4	< 0.005 U	< 0.005 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	0.4	< 0.005 U	< 0.0053 U	< 0.02 U	< 0.005 U	0.0069	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	0.4	< 0.005 U	< 0.0053 U	< 0.02 U	< 0.0053 U	R	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	0.4	< 0.005 UJ	< 0.005 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	0.4	< 0.005 U	< 0.0052 U	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.052 U
MW09-10S	0.4	0.0058 J	< 0.005 U	< 0.02 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-11S	0.4	< 0.005 U	< 0.0052 U	< 0.02 UJ	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.052 U
MW09-14D	0.4	< 0.005 U	< 0.005 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U
MW09-14IA	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	0.4	< 0.005 U	< 0.005 U	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-20I	0.4	< 0.0055 U	< 0.005 U	< 0.02 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	0.4	< 0.005 U	< 0.005 U	< 0.02 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	0.4	< 0.005 U	0.01	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	0.4	< 0.005 U	< 0.005 U	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	0.4	< 0.005 U	< 0.0053 U	< 0.02 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	0.4	< 0.005 U	< 0.0053 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	0.4	< 0.005 U	< 0.005 UJ	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	0.4	< 0.005 U	< 0.005 U	< 0.02 U	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-26D	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-27D	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE (0.2 UG_L)	-															
MW09-02S	0.2	< 0.005 UJ	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	0.2	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	0.2	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	R	< 0.005 U	< 0.005 U	0.01	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	0.2	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	0.2	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.0052 U	0.0064	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	0.2	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.052 U
MW09-10S	0.2	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-11S	0.2	< 0.005 U	< 0.0052 U	< 0.005 UJ	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.052 U
MW09-14D	0.2	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U
MW09-14IA	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	0.2	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-20I	0.2	< 0.0055 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	0.2	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	0.08 J	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	0.2	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	0.2	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	0.2	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	0.2	< 0.005 U	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	0.2	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	0.2	< 0.005 U	< 0.005 U	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-26D	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROBENZENE (1 UG_L)	-															
MW09-02S	1	< 0.005 UJ	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	1	< 0.005 U	< 0.005 UJ	0.0044 J	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	1	< 0.005 U	< 0.0053 U	0.01 J	< 0.005 U	< 0.005 U	0.01 J	< 0.005 U	0.0084	< 0.01 U	--	0.0085 J	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08S	1	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09S	1	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	1	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.052 U
MW09-10S	1	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	0.0057	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-11S	1	< 0.005 U	< 0.0052 U	< 0.005 UJ	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.052 U
MW09-14D	1	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U
MW09-17I	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	1	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-20I	1	< 0.0055 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	1	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	0.08 J	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	1	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	1	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	1	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	1	< 0.005 U	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	1	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	1	< 0.005 U	< 0.005 U	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-26D	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LINDANE (UG_L)	-															
MW09-02S	-	< 0.005 UJ	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-03D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.005 U	< 0.0053 U	< 0.005 UJ	< 0.0053 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.0052 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 UJ
MW09-10D	-	< 0.005 U	< 0.0052 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.052 UJ
MW09-10S	-	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.053 UJ	< 0.054 UJ
MW09-11S	-	< 0.005 U	< 0.0052 UJ	< 0.005 UJ	< 0.0053 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.056 U	< 0.052 UJ
MW09-14D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.053 UJ	< 0.051 U
MW09-20I	-	< 0.0055 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.051 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-23D	-	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.052 U	< 0.052 UJ
MW09-23S	-	< 0.005 U	< 0.0053 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 UJ	< 0.05 UJ	< 0.05 U	< 0.051 UJ	< 0.052 UJ
MW09-24D	-	< 0.005 U	< 0.0053 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	--	< 0.005 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	-	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.0053 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	--	< 0.005 U	< 0.05 UJ	< 0.05 U	< 0.051 UJ	< 0.051 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHOXYCHLOR (40 UG_L)	-															
MW09-02S	40	< 0.05 UJ	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	0.016 J	< 0.051 U
MW09-03D	40	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.056 U	< 0.053 U
MW09-07S	40	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-08DA	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	40	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U
MW09-09DA	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	40	< 0.05 UJ	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-10D	40	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.052 U
MW09-10S	40	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.054 U
MW09-11S	40	< 0.05 U	< 0.05 UJ	< 0.05 UJ	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	0.023 J	< 0.052 U
MW09-14D	40	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U
MW09-14IA	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	40	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.053 U	< 0.051 U
MW09-20I	40	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-21D	40	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-21S	40	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.052 U	< 0.051 U
MW09-23D	40	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.052 U
MW09-23S	40	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.051 U	< 0.052 U
MW09-24D	40	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.053 U
MW09-24S	40	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.052 U	< 0.05 U
MW09-25S	40	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.1 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.051 U	< 0.051 U
MW09-26D	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCHLORINATED BIPHENYLS (PCBS) (UG_L)	-															
MW09-02S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE (70 UG_L)	-															
MW09-02S	70	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-03D	70	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-07S	70	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 11 U
MW09-08DA	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	70	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 11 U
MW09-09DA	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	70	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-10D	70	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 10 U	< 11 U
MW09-10S	70	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2 U	< 10 U	< 11 U
MW09-11S	70	12	4 J	2 J	6 J	3 J	3 J	1 J	5	2 J	--	4 J	4.1 J	5.7 J	< 10 U	2.5 J
MW09-14D	70	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2 UJ	< 11 U	< 10 U
MW09-14IA	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	70	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 11 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-20I	70	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-21D	70	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	70	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-23D	70	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 10 U
MW09-23S	70	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 11 U
MW09-24D	70	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-24S	70	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-25S	70	< 5 U	< 5 U	3 J	3 J	3 J	3 J	3 J	2 J	2 J	--	4 J	3.4 J	4.6 J	6.4 J	7 J
MW09-26D	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE (600 UG_L)	-															
MW09-02S	600	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-03D	600	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-07S	600	1 J	2 J	1 J	1 J	< 5 U	1 J	< 5 U	1 J	1 J	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 11 U
MW09-08DA	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 11 U
MW09-09DA	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	600	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-10D	600	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 10 U	< 11 U
MW09-10S	600	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2.1 U	< 10 U	< 11 U
MW09-11S	600	11	4 J	2 J	3 J	2 J	< 5 U	< 5 U	2 J	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 10 U	< 11 U
MW09-14D	600	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2.1 UJ	< 11 U	< 10 U
MW09-14IA	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 11 U
MW09-20I	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-21D	600	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-23D	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.4 U	< 11 U	< 10 U
MW09-23S	600	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 11 U
MW09-24D	600	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-24S	600	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-25S	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-26D	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE (600 UG_L)	-															
MW09-02S	600	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-03D	600	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-07S	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 11 U
MW09-08DA	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 11 U
MW09-09DA	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	600	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-10D	600	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 10 U	< 11 U
MW09-10S	600	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2.2 U	< 10 U	< 11 U
MW09-11S	600	58	21	< 5 U	21 J	7 J	6	1 J	12	3 J	--	4 J	7.4 J	11.3	2.3 J	< 11 U
MW09-14D	600	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2.2 UJ	< 11 U	< 10 U
MW09-14IA	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 11 U
MW09-20I	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-21D	600	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-23D	600	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.5 U	< 11 U	< 10 U
MW09-23S	600	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 11 U
MW09-24D	600	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-24S	600	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-25S	600	3 J	3 J	7	4 J	4 J	2 J	4 J	3 J	3 J	--	3 J	3.8 J	6.1 J	6.4 J	4.7 J
MW09-26D	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE (75 UG_L)	-															
MW09-02S	75	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-03D	75	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-07S	75	2 J	2 J	2 J	2 J	3 J	2 J	1 J	1 J	1 J	--	1 J	< 10 U	< 2.1 U	< 11 U	< 11 U
MW09-08DA	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	75	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 11 U
MW09-09DA	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	75	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-10D	75	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 10 U	< 11 U
MW09-10S	75	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2.1 U	< 10 U	< 11 U
MW09-11S	**75**	**210**	**100**	39	70 J	28 J	24	3 J	42	9	--	16	31.2	39.2	7.6 J	2.6 J
MW09-14D	75	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2.1 UJ	< 11 U	< 10 U
MW09-14IA	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	75	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 11 U
MW09-20I	75	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-21D	75	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	75	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-23D	75	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.4 U	< 11 U	< 10 U
MW09-23S	75	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 11 U
MW09-24D	75	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-24S	75	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-25S	75	3 J	3 J	8	4 J	5	4 J	5 J	4 J	5	--	4 J	4.3 J	6.8 J	7.3 J	6 J
MW09-26D	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE (UG_L)	-															
MW09-02S	-	< 0.5 U	< 0.55 UJ	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 0.5 U	< 0.5 UJ	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	12 J	7.5 J	8.8 J	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 0.5 UJ	< 0.5 UJ	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	< 0.5 U	< 0.5 UJ	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 0.5 U	< 0.55 UJ	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 0.5 U	< 0.55 UJ	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	1.4 J	1.7	2.2	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE) (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 10 U
MW09-03D	-	2 J	2 J	1 J	1 J	1 J	< 5 U	2 J	2 J	1 J	--	< 5 U	1 J	--	1.3 J	1 J
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 10 U	< 11 U
MW09-10S	-	6	6	6	6 J	< 5 U	< 5 U	3 J	3 J	3 J	--	< 5 U	2.6 J	--	< 10 U	3.6 J
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	--	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
2,4,5-TRICHLOROPHENOL (UG_L)	-															
MW09-02S	-	< 10 U	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 10 U	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	--	< 11 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 11 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	< 10 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 10 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 10 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 10 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	< 10 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	< 10 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	--	< 11 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 10 U	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 10 U	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	< 10 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-TRICHLOROPHENOL (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	R	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.4 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.4 UJ	R	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	R	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-DICHLOROPHENOL (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	R	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	--	< 5 U	< 11 U	< 1.8 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	2 J	< 5 U	1 J	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	--	< 5 U	< 11 U	< 1.8 UJ	R	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.8 U	R	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 11 U	< 11 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	R	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 U	< 20 U	< 20 U	< 21 U	< 21 U
MW09-03D	-	< 5 U	< 5 UJ	R	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 U	< 20 U	< 1.6 U	R	< 20 U
MW09-07S	-	< 5 U	< 5 UJ	R	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 U	< 20 U	< 1.6 U	< 21 U	< 22 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	R	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 U	< 20 U	< 1.6 U	< 21 U	< 22 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 21 U	< 1.6 U	< 21 U	< 20 U
MW09-10D	-	< 5 U	< 5 UJ	R	< 10 U	R	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 U	< 20 U	< 1.6 U	< 20 U	< 21 U
MW09-10S	-	< 5 U	< 5 UJ	R	< 10 U	R	< 5 U	< 5 UJ	< 5 U	< 5 UJ	--	< 5 U	< 21 U	< 1.6 U	< 20 U	< 21 U
MW09-11S	-	< 5 U	< 5 U	R	< 5 UJ	R	< 5 U	< 5 U	< 5 U	R	--	< 5 U	< 21 U	< 1.6 U	< 20 U	< 21 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 UJ	< 5 U	R	< 5 U	< 5 UJ	< 5 U	< 5 UJ	--	< 5 U	< 21 UJ	< 1.6 UJ	R	< 21 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 UJ	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 U	< 20 U	< 1.6 U	R	< 21 U
MW09-20I	-	< 5 U	< 5 U	< 5 UJ	< 5 U	R	< 5 U	1 J	< 5 U	< 5 UJ	--	< 5 U	< 20 U	< 1.6 U	< 21 U	< 20 U
MW09-21D	-	2 J	< 5 U	3 J	2 J	R	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 20 U	< 1.6 U	< 21 U	< 20 U
MW09-21S	-	< 5 U	< 5 U	R	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 U	< 20 UJ	< 1.6 U	< 21 U	< 20 U
MW09-23D	-	< 5 U	< 5 UJ	< 5 UJ	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 U	< 21 U	< 1.8 U	< 21 U	< 21 U
MW09-23S	-	< 6 U	< 5 UJ	< 5 UJ	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 U	< 21 U	< 1.6 U	< 21 U	< 21 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 UJ	< 5 U	R	< 5 U	< 5 UJ	< 5 U	< 5 UJ	--	< 5 U	< 20 U	< 1.6 U	< 22 U	< 20 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 UJ	< 5 U	R	< 5 U	< 5 UJ	< 5 U	< 5 UJ	--	< 5 U	< 20 U	< 1.6 U	< 22 U	< 20 U
MW09-25S	-	1 J	< 5 U	R	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 U	< 20 U	< 1.6 U	< 21 U	< 20 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-DINITROPHENOL (UG_L)	-															
MW09-02S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 20 U	< 20 U	< 21 U	< 21 UJ
MW09-03D	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 20 U	< 1.5 U	R	< 20 UJ
MW09-07S	-	< 10 UJ	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 20 U	< 1.5 U	< 21 U	< 22 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 10 UJ	< 11 U	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 20 U	< 1.5 UJ	< 21 U	< 22 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 10 UJ	< 10 UJ	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 21 U	< 1.5 UJ	< 21 U	< 20 UJ
MW09-10D	-	< 11 UJ	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 20 U	< 1.5 UJ	< 20 U	< 21 UJ
MW09-10S	-	< 10 UJ	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	--	< 10 U	< 21 U	< 1.5 UJ	< 20 U	< 21 UJ
MW09-11S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 21 U	< 1.5 U	< 20 U	< 21 UJ
MW09-14D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	--	< 10 U	< 21 U	< 1.5 UJ	R	< 21 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 20 U	< 1.5 UJ	R	< 21 UJ
MW09-20I	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 20 U	< 1.5 U	< 21 U	< 20 U
MW09-21D	-	< 10 UJ	< 10 UJ	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 20 U	< 1.5 U	< 21 U	< 20 UJ
MW09-21S	-	< 10 U	< 10 UJ	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 20 U	< 1.5 U	< 21 U	< 20 UJ
MW09-23D	-	< 10 UJ	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 21 U	< 1.7 UJ	< 21 U	< 21 UJ
MW09-23S	-	< 11 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 21 U	< 1.5 UJ	< 21 U	< 21 UJ
MW09-24D	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 20 U	< 1.5 U	< 22 U	< 20 UJ
MW09-24S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 20 U	< 1.5 U	< 22 U	< 20 UJ
MW09-25S	-	< 10 UJ	< 10 UJ	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 20 U	< 1.5 U	< 21 U	< 20 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-DINITROTOLUENE (UG_L)	-															
MW09-02S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-03D	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-07S	-	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
35 of 225

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-10D	-	< 5 UJ	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 10 U	< 11 U
MW09-10S	-	< 5 UJ	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2 U	< 10 U	< 11 U
MW09-11S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 11 U
MW09-20I	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-21D	-	< 5 UJ	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-23D	-	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 10 U
MW09-23S	-	< 6 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 11 U
MW09-24D	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-24S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	R	R	< 10 U
MW09-25S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-DINITROTOLUENE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.74 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.74 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.85 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	R	R	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.74 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.5 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.5 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-CHLOROPHENOL (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	R	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.4 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.4 UJ	R	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	R	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE (UG_L)	-															
MW09-02S	-	< 0.5 U	< 0.55 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-03D	-	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-07S	-	8 J	5.7 J	6.3 J	8	1.2 J	4.2	3.3	5.1	4.6	--	4.4	5.2	4.6 J	6.6	4.8 J
MW09-08S	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-09S	-	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-10D	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-10S	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-11S	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-14D	-	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-20I	-	< 0.5 U	< 0.5 U	< 0.5 U	< 5 U	R	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-21D	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-21S	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-23D	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-23S	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW09-24D	-	< 0.5 U	< 0.55 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-24S	-	< 0.5 U	< 0.55 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U
MW09-25S	-	0.22 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-METHYLPHENOL (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	R	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.2 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 UJ	< 1.2 UJ	R	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	R	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 11 U	< 10 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-21D	-	2 J	< 5 U	1 J	3 J	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-NITROANILINE (UG_L)	-															
MW09-02S	-	< 10 U	< 10 UJ	< 10 U	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 11 U	< 10 U
MW09-03D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 11 U	< 10 U
MW09-07S	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 11 U	< 10 U
MW09-10D	-	< 11 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 10 U	< 11 U
MW09-10S	-	< 10 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	--	< 10 U	< 11 U	< 1.9 U	< 10 U	< 11 U
MW09-11S	-	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 10 U	< 11 U
MW09-14D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	--	< 10 U	< 11 U	< 1.9 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 11 U	< 11 U
MW09-20I	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 11 U	< 10 U
MW09-21D	-	< 10 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 11 U	< 10 U
MW09-23D	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 2.1 U	< 11 U	< 10 U
MW09-23S	-	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 11 U	< 11 U
MW09-24D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 11 U	< 10 U
MW09-24S	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	R	< 11 U	< 10 U
MW09-25S	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.9 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-NITROPHENOL (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	R	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.6 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.6 UJ	R	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	R	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.9 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3- AND 4-METHYLPHENOL (UG_L)	-															
MW09-02S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 11 U	< 10 UJ
MW09-03D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	R	< 10 UJ
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 11 U	< 11 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 11 U	< 11 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 11 U	< 10 UJ
MW09-10D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 10 U	< 11 UJ
MW09-10S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 10 U	< 11 UJ
MW09-11S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 10 U	< 11 UJ
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 UJ	R	< 10 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	R	< 11 UJ
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 11 U	< 10 U
MW09-21D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 11 UJ	< 10 UJ
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 11 U	< 10 UJ
MW09-23D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 5.3 U	< 11 UJ	< 10 UJ
MW09-23S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 11 UJ	< 11 UJ
MW09-24D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 11 U	< 10 UJ
MW09-24S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 11 U	< 10 UJ
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 4.7 U	< 11 U	< 10 UJ
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3-DICHLOROBENZIDINE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5.1 U	< 0.84 U	< 5.3 U	< 5.2 UJ
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5 U	< 0.84 U	< 5.3 U	< 5.1 UJ
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	R	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5.1 U	< 0.84 U	< 5.3 U	< 5.6 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	R	< 5 U	< 5 U	R	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5.1 U	< 0.84 U	< 5.3 U	< 5.6 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	--	< 5 U	< 5.2 U	< 0.84 U	< 5.3 U	< 5.1 UJ
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5.1 U	< 0.84 U	< 5 U	< 5.3 UJ
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5.3 U	< 0.84 U	< 5 U	< 5.3 UJ
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	R	R	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5.2 U	< 0.84 U	< 5.1 U	< 5.3 UJ
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	R	< 5 UJ	< 5 U	< 5 UJ	--	< 5 UJ	< 5.3 U	< 0.84 UJ	< 5.3 U	< 5.2 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	R	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5 U	< 0.84 U	< 5.6 U	< 5.3 UJ
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	R	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5 U	< 0.84 U	< 5.3 U	< 5.1 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	R	R	< 5 U	< 5 U	--	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 UJ
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	R	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5.1 U	< 0.84 U	< 5.3 U	< 5.1 UJ
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	R	R	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5.2 U	< 0.96 U	< 5.3 U	< 5.2 UJ
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	R	R	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5.2 U	< 0.84 U	< 5.3 U	< 5.3 UJ
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	R	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5.1 U	< 0.84 U	< 5.6 U	< 5.1 UJ
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	R	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5.1 U	< 0.84 U	< 5.6 U	< 5.1 UJ
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	R	R	R	< 5 U	< 5 UJ	--	< 5 UJ	< 5 U	< 0.84 U	< 5.3 U	< 5 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-NITROANILINE (UG_L)	-															
MW09-02S	-	< 10 U	< 10 UJ	< 10 U	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 11 U	< 10 UJ
MW09-03D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 11 U	< 10 UJ
MW09-07S	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 11 U	< 11 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 11 U	< 10 UJ
MW09-10D	-	< 11 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 10 U	< 11 UJ
MW09-10S	-	< 10 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	--	< 10 U	< 11 U	< 0.97 U	< 10 U	< 11 UJ
MW09-11S	-	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 10 U	< 11 UJ
MW09-14D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	--	< 10 U	< 11 U	< 0.97 UJ	< 11 U	< 10 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 11 U	< 11 UJ
MW09-20I	-	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.98 U	< 11 U	< 10 U
MW09-21D	-	< 10 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 10 U	< 11 U	< 10 UJ
MW09-21S	-	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 11 U	< 10 UJ
MW09-23D	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 1.1 U	< 11 U	< 10 UJ
MW09-23S	-	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 11 U	< 11 UJ
MW09-24D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 11 U	< 10 UJ
MW09-24S	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	R	< 11 U	< 10 UJ

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-25S	-	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.97 U	< 11 U	< 10 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-DINITRO-2-METHYLPHENOL (UG_L)	-															
MW09-02S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	< 10 U	< 11 U	< 10 UJ
MW09-03D	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	< 3.2 U	R	< 10 UJ
MW09-07S	-	< 10 UJ	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	< 3.2 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 10 UJ	< 11 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	R	< 11 U	< 11 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	R	< 11 U	< 10 UJ
MW09-10D	-	< 11 UJ	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	R	< 10 U	< 11 UJ
MW09-10S	-	< 10 UJ	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	--	< 10 U	< 11 U	R	< 10 U	< 11 UJ
MW09-11S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	< 3.2 U	< 10 U	< 11 UJ
MW09-14D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	--	< 10 U	< 11 U	< 3.2 UJ	R	< 10 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	R	R	< 11 UJ
MW09-20I	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	R	< 11 U	< 10 U
MW09-21D	-	< 10 UJ	< 10 U	< 10 U	< 20 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 3.2 U	< 11 U	< 10 UJ
MW09-21S	-	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	< 3.2 U	< 11 U	< 10 UJ
MW09-23D	-	< 10 UJ	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	R	< 11 U	< 10 UJ
MW09-23S	-	< 11 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	R	< 11 U	< 11 UJ
MW09-24D	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	< 3.2 U	< 11 U	< 10 UJ
MW09-24S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	< 3.2 U	< 11 U	< 10 UJ
MW09-25S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 U	< 10 U	< 3.2 U	< 11 U	< 10 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-BROMOPHENYL-PHENYLETHER (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.1 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.1 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 U	< 20 U	< 21 U	< 21 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 U	< 1.8 U	R	< 20 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 U	< 1.8 U	< 21 U	< 22 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 U	< 1.8 U	< 21 U	< 22 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 21 U	< 1.8 U	< 21 U	< 20 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 U	< 1.8 U	< 20 U	< 21 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 21 U	< 1.8 U	< 20 U	< 21 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 21 U	< 1.8 U	< 20 U	< 21 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 21 UJ	< 1.8 UJ	R	< 21 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 U	< 1.8 U	R	< 21 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 U	< 1.8 U	< 21 U	< 20 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 U	< 1.8 U	< 21 U	< 20 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 UJ	< 1.8 U	< 21 U	< 20 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 21 U	< 2 U	< 21 U	< 21 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 21 U	< 1.8 U	< 21 U	< 21 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 U	< 1.8 U	< 22 U	< 20 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 U	< 1.8 U	< 22 U	< 20 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 20 U	< 1.8 U	< 21 U	< 20 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-CHLOROANILINE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 UJ	< 11 U	< 10 UJ
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 UJ	< 11 U	< 10 UJ
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	8	--	< 5 U	< 10 UJ	< 1.2 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 UJ	< 11 U	< 11 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 UJ	< 11 U	< 10 UJ
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 UJ	< 10 U	< 11 UJ
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 UJ	< 1.2 UJ	< 10 U	< 11 UJ
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 UJ	< 10 U	< 11 UJ
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.2 UJ	< 11 U	< 10 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 UJ	< 11 U	< 11 UJ
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 UJ	< 11 U	< 10 UJ
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.2 UJ	< 11 U	< 10 UJ
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.4 UJ	< 11 U	< 10 UJ
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 UJ	< 11 U	< 11 UJ
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 UJ	< 11 U	< 10 UJ
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 UJ	< 11 U	< 10 UJ
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.2 UJ	< 11 U	< 10 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-CHLOROPHENYL-PHENYLETHER (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.3 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.3 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-METHYLPHENOL (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	78	< 5 U	< 5 U	< 5 U	1 J	--	< 5 U	--	--	--	--
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-20I	-	4 J	5 J	4 J	3 J	4 J	8	4 J	4 J	3 J	--	6	--	--	--	--
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	--	--	--
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-NITROANILINE (UG_L)	-															
MW09-02S	-	< 10 U	< 10 UJ	< 10 U	< 10 U	R	< 10 UJ	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 11 U	< 10 U
MW09-03D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 11 U	< 10 U
MW09-07S	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 11 U	< 10 U
MW09-10D	-	< 11 U	< 10 U	< 10 U	< 20 U	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 10 U	< 11 U
MW09-10S	-	< 10 U	< 10 U	< 10 U	< 20 U	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	--	< 10 U	< 11 U	< 0.84 U	< 10 U	< 11 U
MW09-11S	-	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 10 U	< 11 U
MW09-14D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	--	< 10 U	< 11 U	< 0.84 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 11 U	< 11 U
MW09-20I	-	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.85 U	< 11 U	< 10 U
MW09-21D	-	< 10 U	< 10 U	< 10 U	< 20 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 11 U	< 10 U
MW09-23D	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.96 U	< 11 U	< 10 U
MW09-23S	-	< 11 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 11 U	< 11 U
MW09-24D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 11 U	< 10 U
MW09-24S	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	R	< 11 U	< 10 U
MW09-25S	-	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.84 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-NITROPHENOL (UG_L)	-															
MW09-02S	-	< 10 U	< 10 UJ	< 10 U	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 51 UJ	< 50 U	< 53 U	< 52 U
MW09-03D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 50 UJ	< 1.2 U	R	< 51 U
MW09-07S	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 51 UJ	< 1.2 U	< 53 U	< 56 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 51 UJ	< 1.2 U	< 53 U	< 56 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 52 U	< 1.2 U	< 53 U	< 51 UJ
MW09-10D	-	< 11 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 51 UJ	< 1.2 U	< 50 U	< 53 UJ
MW09-10S	-	< 10 U	< 10 U	< 10 U	< 20 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	--	< 10 U	< 53 UJ	< 1.2 U	< 50 U	< 53 UJ
MW09-11S	-	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 52 UJ	< 1.2 U	< 51 U	< 53 UJ
MW09-14D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	--	< 10 U	< 53 U	< 1.2 UJ	R	< 52 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-20D	-	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 50 UJ	< 1.2 U	R	< 53 U
MW09-20I	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 50 UJ	< 1.3 U	< 53 U	< 51 U
MW09-21D	-	< 10 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 51 U	< 1.2 U	< 53 U	< 51 U
MW09-21S	-	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 51 U	< 1.2 U	< 53 U	< 51 U
MW09-23D	-	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 52 UJ	< 1.4 U	< 53 U	< 52 U
MW09-23S	-	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 52 UJ	< 1.2 U	< 53 U	< 53 U
MW09-24D	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 51 UJ	< 1.2 U	< 56 U	< 51 U
MW09-24S	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 51 UJ	< 1.2 U	< 56 U	< 51 U
MW09-25S	-	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 50 UJ	< 1.2 U	< 53 U	< 50 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACENAPHTHENE (UG_L)	-															
MW09-02S	-	< 0.5 U	< 0.55 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1 U	0.14 J	< 1 U	< 1 U
MW09-03D	-	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-07S	-	10 J	6.8 J	7.6 J	5	4.1 J	4.5	1.9	5.5	4.9 J	--	4	2.8 J	3.5 J	3.8	3.5 J
MW09-08S	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1.1 UJ
MW09-09S	-	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1.1 U	< 1 U	< 1 U	< 1 UJ
MW09-10D	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1.1 U	< 1 U	< 1 U	< 1 UJ
MW09-10S	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1.1 U	< 1 U	< 1 U	< 1 UJ
MW09-11S	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1 U	0.11 J	< 1.1 U	< 1 UJ
MW09-14D	-	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1 UJ
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-20I	-	< 0.5 U	< 0.5 U	< 0.5 U	< 5 U	R	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	1.4 J
MW09-21D	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-21S	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1 U	0.34 J	< 1.1 U	< 1.1 U
MW09-23D	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1.1 U	< 1 U	< 1 U	< 1 UJ
MW09-23S	-	9.5	12	13	14	11	9	4.9	4.9	5 J	--	4.6 J	4.6 J	0.48 J	6.4	4.6 J
MW09-24D	-	< 0.5 U	< 0.55 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1 U	< 1 U	< 1 U	0.066 J
MW09-24S	-	< 0.5 U	< 0.55 UJ	< 0.5 U	< 0.5 U	< 0.5 U	0.4 J	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	0.14 J	0.18 J	< 1.1 U	0.44 J
MW09-25S	-	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACENAPHTHYLENE (UG_L)	-															
MW09-02S	-	< 1 U	< 1.1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.21 U
MW09-03D	-	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.21 U
MW09-07S	-	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	4.2	6.4 J	9.8	< 0.21 U
MW09-08S	-	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.2 U	< 0.2 UJ	< 0.21 U	< 0.21 U
MW09-09S	-	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.21 U	< 0.2 UJ	< 0.2 U	< 0.2 U
MW09-10D	-	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.21 U	< 0.2 UJ	< 0.2 U	< 0.2 U
MW09-10S	-	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.21 U	< 0.2 UJ	< 0.2 U	< 0.2 U
MW09-11S	-	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.2 U	< 0.2 UJ	< 0.21 U	< 0.21 U
MW09-14D	-	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.2 U	< 0.2 UJ	< 0.21 U	< 0.2 U
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.2 U	< 0.2 UJ	< 0.21 U	< 0.21 U
MW09-20I	-	< 1 U	< 1 U	< 1 U	< 5 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	4.3	< 0.2 U	< 0.22 U	2.3 J
MW09-21D	-	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.2 U	< 0.2 UJ	< 0.21 U	0.38 J
MW09-21S	-	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.21 U	< 0.2 UJ	< 0.21 U	0.059 J
MW09-23D	-	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.21 U	< 0.2 UJ	< 0.21 U	< 0.2 U
MW09-23S	-	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 UJ	< 0.2 U	0.074 J	< 0.21 U	< 0.2 U
MW09-24D	-	< 1 U	< 1.1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.22 U
MW09-24S	-	< 1 U	< 1.1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	0.56	< 0.2 UJ	< 0.21 U	< 0.21 U
MW09-25S	-	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	0.33	< 0.2 UJ	< 0.21 U	< 0.2 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTHRACENE (UG_L)	-															
MW09-02S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-03D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-07S	-	0.04 J	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	0.08 J	< 1 U	< 1.1 U	< 1.1 U
MW09-08S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	0.04 J	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-09S	-	< 0.05 UJ	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	0.03 J	< 0.05 U	< 0.05 U	< 0.06 U	--	< 0.05 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-10D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-10S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-11S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.07 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-14D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	< 1 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.13 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-20I	-	< 0.05 U	< 0.05 U	< 0.05 U	< 5 U	R	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-21D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 U	--	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-21S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-23D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-23S	-	0.21	0.16	< 0.05 U	0.2	0.25 J	0.19	0.12	0.16	< 0.06 UJ	--	0.19 J	< 1 U	< 1 U	< 1 U	< 1 U
MW09-24D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.07 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-24S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.07 UJ	--	< 0.05 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U
MW09-25S	-	0.07 J	0.07	0.03 J	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.07 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE (UG_L)	-															
MW09-02S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-03D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	0.03 J	< 0.15 U	< 0.15 U	< 0.16 U
MW09-07S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-08S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	0.052 J	< 0.16 U	< 0.16 U
MW09-09S	-	< 0.05 UJ	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-11S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-14D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-20I	-	< 0.05 U	< 0.05 U	< 0.05 U	< 5 U	R	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.16 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-21D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-21S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-23D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.16 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-23S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-24D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-24S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.16 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-25S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(A)PYRENE (0.2 UG_L)	-															
MW09-02S	0.2	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-03D	0.2	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-07S	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	0.083 J
MW09-08S	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-09S	0.2	< 0.05 UJ	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 U	--	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	0.071 J
MW09-10D	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10S	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-11S	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.07 UJ	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-14D	0.2	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-17I	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.13 UJ	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-20I	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 5 U	R	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-21D	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 U	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-21S	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-23D	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 U	< 0.16 U	< 0.15 U	< 0.16 U	0.073 J
MW09-23S	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.06 UJ	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	0.051 J
MW09-24D	0.2	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.07 UJ	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-24S	0.2	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.07 UJ	--	< 0.05 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-25S	0.2	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.07 UJ	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-26D	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE (UG_L)	-															
MW09-02S	-	< 0.1 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-03D	-	< 0.1 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-07S	-	< 0.11 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-08S	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-09S	-	< 0.1 UJ	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10D	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10S	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-11S	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-14D	-	< 0.1 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-20I	-	< 0.1 U	< 0.05 U	< 0.05 U	< 5 U	R	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-21D	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-21S	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-23D	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-23S	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-24D	-	< 0.1 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-24S	-	< 0.1 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-25S	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE (UG_L)	-															
MW09-02S	-	< 0.1 U	< 0.11 UJ	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-03D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-07S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	0.11 J
MW09-08S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-09S	-	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-11S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-14D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-20I	-	< 0.1 U	< 0.05 U	< 0.05 U	< 5 U	R	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-21D	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-21S	-	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-23D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-23S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-24D	-	< 0.1 U	< 0.11 UJ	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-24S	-	< 0.1 U	< 0.11 UJ	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-25S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE (UG_L)	-															
MW09-02S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	0.024 J	< 0.16 UJ
MW09-03D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 UJ
MW09-07S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-08S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 UJ
MW09-09S	-	< 0.05 UJ	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 UJ
MW09-10D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 UJ
MW09-10S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 UJ
MW09-11S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 UJ
MW09-14D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 UJ
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	0.029 J	< 0.16 UJ
MW09-20I	-	< 0.05 U	< 0.05 U	< 0.05 U	< 5 U	R	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	0.085 J
MW09-21D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	0.28 J
MW09-21S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 UJ
MW09-23D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.16 U	< 0.15 U	< 0.16 U	< 0.15 UJ
MW09-23S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 UJ
MW09-24D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 UJ
MW09-24S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.16 U	< 0.15 U	< 0.16 U	< 0.16 UJ
MW09-25S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZOIC ACID (UG_L)	-															
MW09-02S	-	< 10 U	< 10 UJ	< 10 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-03D	-	< 10 U	< 10 UJ	< 10 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-07S	-	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-08S	-	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-09S	-	< 10 UJ	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-10D	-	< 11 UJ	< 10 U	< 10 U	--	--	--	--	--	--	--	--	< 10 U	--	< 10 U	--
MW09-10S	-	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--	< 11 U	--	< 10 U	--
MW09-11S	-	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--	< 10 U	--	< 10 U	--
MW09-14D	-	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--	< 11 UJ	--	< 11 U	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-20D	-	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-20I	-	5 J	7 J	4 J	--	--	--	--	--	--	--	--	6.5 J	--	17.5	--
MW09-21D	-	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-21S	-	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--	< 10 UJ	--	< 11 U	--
MW09-23D	-	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-23S	-	< 11 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-24D	-	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-24S	-	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-25S	-	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
BENZYL ALCOHOL (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	R	--
MW09-07S	-	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-09S	-	< 5 UJ	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-10D	-	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 10 U	--
MW09-10S	-	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 11 U	--	< 10 U	--
MW09-11S	-	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 10 U	--
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	--	--	--	--	--	--	--	--	< 11 U	--	< 10 U	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-20I	-	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-21D	-	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-21S	-	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-23D	-	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-23S	-	< 6 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-25S	-	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--	< 10 U	--	< 11 U	--
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.8 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.8 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.81 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.8 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-CHLOROETHYL)ETHER (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 10 U
MW09-03D	-	3 J	3 J	3 J	2 J	3 J	< 5 U	3 J	3 J	2 J	--	2 J	2.1 J	< 1.7 U	1.8 J	2.1 J
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.7 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.7 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 10 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	8	10	12	9	9	7	11	8	11	--	9	< 10 U	4.1 J	6.7 J	6.5 J
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-CHLOROISOPROPYL)ETHER (UG_L)	-															
MW09-02S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-03D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-08S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-10D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-10S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-11S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 UJ	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.78 U	--	--
MW09-21D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-23D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.88 U	--	--
MW09-23S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-24D	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-24S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	< 0.77 U	--	--
BIS(2-ETHYLHEXYL)PHTHALATE (6 UG_L)	-															
MW09-02S	**6**	< 5 U	< 5 UJ	< 32 U	2 J	R	< 26 U	< 5 U	< 3 U	< 1 U	--	< 5 U	< 10 U	< 0.72 U	< 11 U	2.4 J
MW09-03D	6	< 5 U	< 5 UJ	< 33 U	2 J	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.72 U	< 11 U	2.1 J
MW09-07S	**6**	< 5 U	1 J	< 5 U	< 5 U	< 5 U	< 7 U	< 5 U	**38**	< 1 U	--	< 5 U	< 10 U	< 0.72 U	< 11 U	< 11 U
MW09-08DA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	**6**	< 5 U	< 20 U	< 7 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.72 U	< 11 U	< 11 U
MW09-09DA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	6	1 J	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 2 U	< 5 U	--	< 5 U	< 10 U	< 0.72 U	< 11 U	2.2 J
MW09-10D	**6**	< 5 U	< 5 U	**27**	< 10 U	< 5 U	< 4 U	< 5 U	< 3 U	< 5 U	--	< 5 U	< 10 U	< 0.72 U	< 10 U	< 11 U
MW09-10S	**6**	< 5 U	< 5 U	**57**	< 10 U	< 5 U	< 5 U	< 5 UJ	< 1 U	< 1 U	--	< 5 U	< 11 U	< 0.72 U	< 10 U	2.2 J
MW09-11S	6	< 5 U	< 5 U	< 5 U	1 J	< 5 U	< 5 U	< 5 U	< 1 U	< 5 U	--	< 5 U	< 10 U	< 0.72 U	< 10 U	2.2 J
MW09-14D	**6**	1 J	< 5 UJ	< 5 U	2 J	< 5 U	< 3 U	< 5 UJ	**49**	< 1 U	--	< 5 U	< 11 U	< 0.72 UJ	< 11 U	< 10 U
MW09-14IA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	**6**	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	**20 J**	< 5 U	--	< 5 U	< 10 U	< 0.72 U	< 11 U	< 11 U
MW09-20I	**6**	1 J	< 5 U	< 5 U	2 J	< 5 U	< 4 U	< 5 U	**37 J**	< 1 U	--	< 5 U	< 10 U	< 0.73 U	< 11 U	2.2 J
MW09-21D	**6**	< 5 U	< 5 U	< 32 U	**13**	< 5 U	< 1 U	< 1 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	2.3 J
MW09-21S	**6**	< 5 U	< 5 U	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 8 U	< 5 U	--	< 5 U	< 10 U	< 0.72 U	< 11 U	2.3 J
MW09-23D	**6**	< 5 U	1 J	**59 J**	2 J	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.83 U	5.4 J	< 10 U
MW09-23S	**6**	1 J	1 J	**46 J**	< 5 U	< 5 U	< 2 U	< 5 U	< 5 U	< 2 U	--	< 5 U	< 10 U	< 0.72 U	< 11 U	< 11 U
MW09-24D	**6**	< 5 U	< 5 UJ	< 13 U	**8**	< 6 U	< 5 U	< 2 U	< 5 U	< 1 U	--	< 5 U	< 10 U	< 0.72 U	< 11 U	< 10 U
MW09-24S	6	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U	< 2 U	< 5 U	--	< 5 U	< 10 U	< 0.72 U	< 11 U	2.2 J
MW09-25S	**6**	< 5 U	< 5 U	< 30 U	< 5 U	< 5 U	< 9 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.72 U	< 11 U	2.1 J
MW09-26D	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	**6**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYLBENZYLPHTHALATE (UG_L)																
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.5 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.5 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.7 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.5 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 11 U	< 10 U
MW09-07S	-	10	10	8	10	12	7 J	6	8	9	--	7	6.4 J	6.5 J	7.5 J	6.2 J
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.77 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.77 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.78 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	--	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.89 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE (UG_L)	-															
MW09-02S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	0.051 J	< 0.15 U	0.066 J
MW09-03D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.15 U	0.087 J
MW09-07S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.16 U
MW09-08S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.16 U
MW09-09S	-	< 0.05 UJ	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 UJ	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 UJ	< 0.15 U	< 0.15 U	< 0.15 U
MW09-11S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.15 U
MW09-14D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.16 U
MW09-20I	-	< 0.05 U	< 0.05 U	< 0.05 U	< 5 U	R	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.16 U
MW09-21D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-21S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-23D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 UJ	< 0.15 U	< 0.16 U	< 0.15 U
MW09-23S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.15 U
MW09-24D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.15 U	< 0.16 U
MW09-24S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 UJ	< 0.15 U	< 0.16 U	< 0.16 U
MW09-25S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.15 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CRESOLS (UG_L)	-															
MW09-02S	-	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--
MW09-03D	-	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--
MW09-08S	-	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-10D	-	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--
MW09-10S	-	--	--	--	--	--	--	--	--	--	--	--	< 11 UJ	--	--	--
MW09-11S	-	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	< 11 U	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	< 5.1 UJ	--	--	--
MW09-21D	-	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--	--	--
MW09-23D	-	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--	--	--
MW09-23S	-	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--
MW09-24D	-	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--
MW09-24S	-	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--
DIBENZ(A,H)ANTHRACENE (UG_L)	-															
MW09-02S	-	< 0.1 U	< 0.11 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-03D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-07S	-	< 0.11 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-08S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	0.1 J
MW09-09S	-	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U
MW09-11S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-14D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-20I	-	< 0.1 U	< 0.1 U	< 0.1 U	< 5 U	R	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-21D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-21S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-23D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-23S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 UJ	< 0.15 U	< 0.15 U	< 0.16 U	< 0.15 U
MW09-24D	-	< 0.1 U	< 0.11 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U
MW09-24S	-	< 0.1 U	< 0.11 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.16 U	< 0.15 U	< 0.16 U	0.32 J
MW09-25S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 0.15 U	< 0.15 U	< 0.16 U	0.085 J
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIBENZOFURAN (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.1 U	--	< 5.3 U	< 5.2 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5 U	< 1.1 U	< 5.3 U	< 5.1 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.1 U	< 1.1 U	< 5.3 U	< 5.6 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.1 U	< 1.1 U	< 5.3 U	< 5.6 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.2 U	< 1.1 U	< 5.3 U	< 5.1 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.1 U	< 1.1 U	< 5 U	< 5.3 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 5.3 U	< 1.1 U	< 5 U	< 5.3 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.2 U	< 1.1 U	< 5.1 U	< 5.3 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 5.3 U	< 1.1 UJ	< 5.3 U	< 5.2 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5 U	< 1.1 U	< 5.6 U	< 5.3 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5 U	< 1.1 U	< 5.3 U	< 5.1 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.1 U	< 1.1 U	< 5.3 U	< 5.1 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.2 U	< 1.2 U	< 5.3 U	< 5.2 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.2 U	< 1.1 U	< 5.3 U	< 5.3 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.1 U	< 1.1 U	< 5.6 U	< 5.1 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5.1 U	< 1.1 U	< 5.6 U	< 5.1 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5 U	< 1.1 U	< 5.3 U	< 5 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIETHYLPHTHALATE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.4 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.4 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.4 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.4 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.6 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.4 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.4 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 1.4 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIMETHYL PHTHALATE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.6 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.6 UJ	< 11 U	< 10 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.8 U	< 11 U	< 10 UJ
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 11 UJ
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.6 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYLPHTHALATE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 10 U
MW09-03D	-	1 J	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	1 J	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 10 U	< 11 U
MW09-10S	-	1 J	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1 U	< 10 U	< 11 U
MW09-11S	-	1 J	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 11 U
MW09-24D	-	1 J	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 10 U
MW09-25S	-	1 J	1 J	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 10 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYLPHTHALATE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.69 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	2 J	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 UJ	< 0.69 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.70 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 UJ	< 0.69 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.79 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.69 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE (UG_L)	-															
MW09-02S	-	< 0.1 U	< 0.11 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-03D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-07S	-	0.08 J	< 0.1 U	0.06 J	< 0.1 U	0.1 J	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1.1 U	0.38 J
MW09-08S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	0.21 J	< 1.1 U	< 1.1 U
MW09-09S	-	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-10D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-10S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-11S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-14D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	0.09 J	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-20I	-	< 0.1 U	< 0.1 U	< 0.1 U	< 5 U	R	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-21D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-21S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-23D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-23S	-	2 J	1 J	1.7	1.5	1.5	0.99	0.87	1.3	0.98	--	1.8 J	1.2 J	0.89 J	< 1 U	0.68 J
MW09-24D	-	< 0.1 U	< 0.11 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-24S	-	< 0.1 U	< 0.11 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U
MW09-25S	-	0.16 J	0.17	0.08 J	< 0.1 U	0.05 J	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORENE (UG_L)	-															
MW09-02S	-	< 0.1 U	< 0.11 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-03D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-07S	-	3.5 J	2.2 J	2.7 J	3 J	0.8 J	2.0	1.9	2.4	2.2	--	2.3	2.2	2.0 J	4.2	1.5 J
MW09-08S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1.1 U	0.053 J
MW09-09S	-	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1.1 U	< 1 U	< 1 U	0.097 J
MW09-10D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-10S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1.1 U	< 1 U	< 1 U	0.052 J
MW09-11S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	0.45 J	< 1 U
MW09-14D	-	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-20I	-	< 0.1 U	< 0.1 U	< 0.1 U	< 5 U	R	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	0.37 J	0.1 J
MW09-21D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-21S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-23D	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-23S	-	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 UJ	< 1 U	< 1 U	< 1 U	< 1 U
MW09-24D	-	< 0.1 U	< 0.11 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-24S	-	< 0.1 U	0.06 J	< 0.1 U	< 0.1 U	0.12	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	0.13 J	< 1 U	< 1.1 U	0.12 J
MW09-25S	-	0.2 J	0.18	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.1 U	< 1 U	< 1 U	2.8	< 1 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROBENZENE (1 UG_L)	-															
MW09-17I	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2.2 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2.2 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.6 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.2 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE (50 UG_L)	-															
MW09-02S	50	< 10 U	< 10 UJ	< 10 U	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.68 U	< 11 U	< 10 U
MW09-03D	50	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.68 U	< 11 U	< 10 U
MW09-07S	50	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.68 U	< 11 U	< 11 U
MW09-08DA	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	50	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.68 U	< 11 U	< 11 U
MW09-09DA	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	50	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 0.68 U	< 11 U	< 10 U
MW09-10D	50	< 11 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.68 U	< 10 U	< 11 U
MW09-10S	50	< 10 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	--	< 10 UJ	< 11 U	< 0.68 U	< 10 U	< 11 U
MW09-11S	50	< 10 U	< 10 U	< 10 U	< 10 UJ	R	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.68 U	< 10 U	< 11 U
MW09-14D	50	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	--	< 10 UJ	< 11 UJ	< 0.68 UJ	< 11 U	< 10 U
MW09-14IA	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	50	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.68 U	< 11 U	< 11 U
MW09-20I	50	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.69 U	< 11 U	< 10 U
MW09-21D	50	< 10 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U
MW09-21S	50	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 UJ	< 0.68 U	< 11 U	< 10 U
MW09-23D	50	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.78 U	< 11 UJ	< 10 U
MW09-23S	50	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.68 U	< 11 UJ	< 11 U
MW09-24D	50	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.68 U	< 11 U	< 10 U
MW09-24S	50	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.68 U	< 11 U	< 10 U
MW09-25S	50	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 10 UJ	< 10 U	< 0.68 U	< 11 U	< 10 U
MW09-26D	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROETHANE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2.3 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 2.3 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.7 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 2.3 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE (UG_L)	-															
MW09-02S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.15 U	0.022 J
MW09-03D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.15 U	< 0.16 U
MW09-07S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.16 U
MW09-08S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.16 UJ
MW09-09S	-	< 0.05 UJ	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 UJ
MW09-10D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 UJ	< 0.15 U	< 0.15 U	< 0.15 U
MW09-10S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 UJ	< 0.15 U	< 0.15 U	0.033 J
MW09-11S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.15 UJ
MW09-14D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	0.034 J
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	0.032 J
MW09-20I	-	< 0.05 U	< 0.05 U	< 0.05 U	< 5 U	R	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	0.025 J
MW09-21D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-21S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.16 U
MW09-23D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 UJ	< 0.15 U	< 0.16 U	0.07 J
MW09-23S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 UJ	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.15 U
MW09-24D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.15 U	< 0.16 U
MW09-24S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.16 UJ	< 0.15 U	< 0.16 U	< 0.16 U
MW09-25S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.15 UJ	< 0.15 U	< 0.16 U	< 0.15 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ISOPHORONE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.92 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.92 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.93 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.92 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NAPHTHALENE (20 UG_L)	-															
MW09-02S	20	< 0.5 U	< 0.55 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-03D	20	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-07S	**20**	**23 J**	16 J	**23 J**	**27**	6.1 J	20	**23 J**	**26**	**22**	--	**23**	17.8	15.4	19.0	**22.9 J**
MW09-08S	20	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-09S	20	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-10D	20	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-10S	20	< 0.5 U	0.31 J	0.51	< 0.5 U	< 0.5 U	0.26 J	0.29 J	< 0.5 U	< 0.5 U	--	0.35 J	< 1.1 U	< 1 U	0.25 J	0.37 J
MW09-11S	20	< 0.5 U	1 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-14D	20	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-14IA	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	20	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-20I	20	< 0.5 U	< 0.5 U	< 0.5 U	< 5 U	R	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-21D	20	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1 U	0.23 J
MW09-21S	20	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U
MW09-23D	20	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-23S	20	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	0.6	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	0.9 J	0.2 J	< 1 U	0.38 J	0.31 J
MW09-24D	20	< 0.5 U	< 0.55 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-24S	20	< 0.5 U	< 0.55 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.5 U	0.08 J	< 1 U	< 1.1 U	< 1 U
MW09-25S	20	2 J	1.4	1.8	1 J	0.96	0.47 J	0.71 J	0.59	< 0.5 U	--	< 0.5 U	0.52 J	< 1 U	0.51 J	0.21 J
MW09-26D	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NITROBENZENE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.67 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 UJ	< 5 U	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.67 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.68 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.77 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	R	R	< 10 U
MW09-25S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.67 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-NITROSODINPROPYLAMINE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.88 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.88 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.89 U	< 11 U	< 10 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.88 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 10 U
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 10 U
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.76 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 0.76 UJ	< 11 U	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 11 U
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 10 U	< 11 U	< 10 U
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 10 U
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	R	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.87 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	R	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 10 U
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 10 U
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	R	< 5 UJ	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 0.76 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL (1 UG_L)	-															
MW09-02S	1	--	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	1	--	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	1	--	< 11 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	1	--	< 11 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	1	--	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	1	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	1	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	1	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	1	--	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	1	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	1	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	1	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	1	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	1	--	< 11 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	1	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	1	--	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	1	--	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	1	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PHENANTHRENE (UG_L)	-															
MW09-02S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.2 U	< 0.2 U	0.14 J	< 0.21 U
MW09-03D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.21 U
MW09-07S	-	0.34 J	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	0.62	1.7	11.5	10.9 J
MW09-08S	-	< 0.05 U	< 0.05 U	0.01 J	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.2 U	< 0.2 U	< 0.21 U	0.15 J

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-09S	-	< 0.05 UJ	< 0.05 UJ	0.02 J	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.21 U	< 0.2 U	< 0.2 U	0.18 J
MW09-10D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.06 U	< 0.21 U	< 0.2 U	< 0.2 U	0.15 J
MW09-10S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.21 U	< 0.2 U	0.17 J	0.19 J
MW09-11S	-	< 0.05 U	0.04 J	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.06 U	< 0.2 U	< 0.2 U	0.095 J	0.21 J
MW09-14D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.1 U	< 0.2 U	< 0.2 U	0.16 J	0.079 J
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.2 U	< 0.2 U	< 0.21 U	< 0.21 U
MW09-20I	-	< 0.05 U	< 0.05 U	< 0.05 U	< 5 U	R	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.2 U	0.23 J	< 0.22 U	0.14 J
MW09-21D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.2 U	< 0.2 U	< 0.21 U	< 0.22 U
MW09-21S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.21 U	< 0.2 U	< 0.21 U	< 0.22 U
MW09-23D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.21 U	< 0.2 U	< 0.21 U	0.063 J
MW09-23S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.06 U	0.05 J	< 0.2 U	0.15 J	0.15 J
MW09-24D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.2 U	< 0.2 U	0.29	< 0.22 U
MW09-24S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 0.21 U	< 0.2 U	< 0.21 U	< 0.21 U
MW09-25S	-	0.35 J	0.33	1.8	0.09	0.07	< 0.05 U	< 0.05 U	< 0.05 U	0.06	--	< 0.06 U	< 0.2 U	< 0.2 U	< 0.21 U	< 0.2 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PHENOL (UG_L)	-															
MW09-02S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 UJ
MW09-03D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	R	< 10 UJ
MW09-07S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 11 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 11 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 UJ	< 5 UJ	< 5 U	< 5 U	32	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-10D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 10 U	< 11 U
MW09-10S	-	< 5 U	< 5 U	< 5 U	< 10 UJ	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.1 U	< 10 U	< 11 U
MW09-11S	-	< 5 U	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 10 U	< 11 U
MW09-14D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 11 U	< 1.1 UJ	R	< 10 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	R	< 11 UJ
MW09-20I	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-21D	-	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 UJ
MW09-21S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 UJ
MW09-23D	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.3 U	< 11 U	< 10 U
MW09-23S	-	< 6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 11 U
MW09-24D	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 UJ
MW09-24S	-	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 UJ
MW09-25S	-	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	< 10 U	< 1.1 U	< 11 U	< 10 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE (UG_L)	-															
MW09-02S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1 U	< 1 U	0.056 J	< 1 U
MW09-03D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1 U	< 1.1 U
MW09-07S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	0.15 J	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	0.06 J	< 1 U	< 1.1 U	< 1.1 U
MW09-08S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1 U	0.079 J	< 1.1 U	< 1.1 U
MW09-09S	-	< 0.05 UJ	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-10D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-10S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-11S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-14D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	0.15 J
MW09-20I	-	< 0.05 U	< 0.05 U	< 0.05 U	< 5 U	R	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1 U	0.061 J	< 1.1 U	9.3 J
MW09-21D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	--	< 0.05 U	< 1 U	< 1 U	< 1 U	3.3 J
MW09-21S	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	2.8 J
MW09-23D	-	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1.1 U	< 1 U	< 1 U	< 1 U
MW09-23S	-	0.83	0.52	0.82	0.56	0.72	0.73	0.44	0.71	0.73 J	--	0.9 J	0.6 J	0.41 J	0.45 J	< 1 U
MW09-24D	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1 U	0.12 J
MW09-24S	-	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U
MW09-25S	-	0.08 J	0.11	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	--	< 0.05 U	< 1 U	< 1 U	< 1.1 U	< 1 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL (UG_L)	-															

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
56 of 225

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-02S	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.53 U	< 1 U
MW09-03D	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	R	R	< 1 U
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.53 U	< 1.1 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.53 U	< 1.1 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.53 U	< 1 U
MW09-10D	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.5 U	< 1.1 U
MW09-10S	-	--	--	--	--	--	--	--	--	--	--	--	< 5.5 U	< 0.5 U	< 0.5 U	< 1.1 U
MW09-11S	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.51 U	< 1.1 U
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	< 5.5 U	R	R	< 1.1 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	R	< 1.1 U
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.55 U	< 0.53 U	< 1 U
MW09-21D	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.53 U	< 1 U
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.53 U	< 1 U
MW09-23D	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.55 U	< 0.53 U	< 1.1 U
MW09-23S	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.53 U	< 1.1 U
MW09-24D	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.56 U	< 1 U
MW09-24S	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.56 U	< 1 U
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 0.5 U	< 0.53 U	< 1 U
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACENAPHTHENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACENAPHTHYLENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
57 of 225

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTHRACENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(A)PYRENE (0.2 UG_L)	-															
MW09-07S	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	**0.2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	**0.2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	**0.2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE (6 UG_L)	-															
MW09-07S	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIBENZ(A,H)ANTHRACENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROBENZENE (1 UG_L)	-															
MW09-07S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NAPHTHALENE (20 UG_L)	-															
MW09-07S	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
60 of 225

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-14IA	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL (1 UG_L)	-															
MW09-02S	**1**	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.5 U	< 0.53 U	< 1 UJ
MW09-03D	**1**	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	**1.1 J**	R	< 1 UJ
MW09-07S	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.5 U	< 0.53 U	< 1.1 U
MW09-08DA	**1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.5 U	< 0.53 U	< 1.1 UJ
MW09-09DA	**1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.5 U	< 0.53 U	< 1 UJ
MW09-10D	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.5 U	< 0.5 U	< 1.1 UJ
MW09-10S	1	--	--	--	--	--	--	--	--	--	--	--	< 0.11 U	0.88	< 0.5 U	< 1.1 UJ
MW09-11S	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.5 U	< 0.51 U	< 1.1 UJ
MW09-14D	1	--	--	--	--	--	--	--	--	--	--	--	< 0.11 UJ	0.98 J	R	< 1.1 UJ
MW09-14IA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	**1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.5 U	R	< 1.1 UJ
MW09-20I	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.55 U	< 0.53 U	< 1 U
MW09-21D	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.5 U	< 0.53 U	< 1 UJ
MW09-21S	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 UJ	< 0.5 U	< 0.53 U	< 1 UJ
MW09-23D	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.55 U	< 0.53 U	< 1.1 UJ
MW09-23S	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.5 U	< 0.53 U	< 1.1 UJ
MW09-24D	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.5 U	< 0.56 U	< 1 UJ
MW09-24S	**1**	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	**1.2**	< 0.56 U	< 1 UJ
MW09-25S	1	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.5 U	< 0.53 U	< 1 UJ
MW09-26DA	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	**1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PHENANTHRENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE (UG_L)	-															
MW09-07S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE (200 UG_L)	-															
MW09-02S	200	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
61 of 225

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-07S	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	**200**	< 10000 U	< 5 UJ	R	< 1 U	R	< 10000 U	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	< 2 UJ	< 2 U	< 2 U	< 4000 U
MW09-21D	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	200	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE (UG_L)	-															
MW09-02S	-	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 UJ	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 5 UJ	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-07S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	1.88	< 1 UJ	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 5 UJ	< 1 U	< 5 UJ	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	--	1.16	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	-	3.16	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	-	140000	150000	240000 J	150000	170000 J	170000	87000 J	140000	--	160000	190000	123000 J	132000	136000	104000
MW09-21D	-	280	< 5 U	< 1 U	< 1 U	< 1 UJ	18	< 20 UJ	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-TRICHLOROETHANE (5 UG_L)	-															
MW09-02S	5	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 5 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-07S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.5 J	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	5	< 1 U	< 5 U	< 1 UJ	< 1 U	0.45 J	1.41	< 5 U	< 1 U	< 5 UJ	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	5	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	**5**	**3300 J**	**3200 J**	**38000 J**	< 1 U	**4300 J**	**3800 J**	< 10000 U	**88 J**	--	< 1000 U	**4400**	**3770 J**	**4150**	**4230**	**3550 J**
MW09-21D	5	3.94	< 5 U	< 1 U	< 1 U	< 1 UJ	0.15 J	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-23S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	5	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	5	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-DICHLOROETHANE (5 UG_L)	-															
MW09-02S	5	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-07S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	5	< 1 U	< 5 U	< 1 U	0.16 J	0.2 J	< 1 U	< 1 U	0.18 J	--	0.17 J	0.22 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	0.13 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	5	< 1 U	< 5 U	0.1	0.12 J	0.11 J	< 1 U	< 1 U	< 1 U	< 1 U	--	0.1 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	**5**	< 10000 U	< 5 UJ	R	< 1 U	R	< 10000 U	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	< 2 UJ	< 2 U	3.5 J	< 4000 U
MW09-21D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	5	0.19 J	< 5 U	< 1 U	0.24 J	0.17 J	0.16 J	< 1 U	< 1 U	0.16 J	--	0.17 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-DICHLOROETHENE (7 UG_L)	-															
MW09-02S	7	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-03D	7	0.77 J	< 5 U	< 1 U	0.73 J	0.44 J	0.41 J	< 5 U	0.64 J	0.51 J	--	0.7 J	< 1 U	< 1 U	< 1 U	< 1 U
MW09-07S	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-08DA	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-09DA	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	**7**	2.22	< 5 U	1.79	< 1 U	0.98 J	0.86 J	< 5 U	0.96 J	< 5 U	0.51 J	0.84 J	1.1 J	< 1 U	< 1 U	< 1 U
MW09-10D	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-10S	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-11S	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-14D	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-14IA	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-20I	**7**	< 10000 U	**280 J**	**6400 J**	**590 J**	**1600 J**	< 10000 UJ	< 10000 U	**30**	--	**230 J**	--	**273 J**	**301 J**	**315 J**	**212**
MW09-21D	**7**	< 1 U	3 J	2 J	3	1.86 J	1.62	< 20 U	**32**	--	1.49	2.69	1.6	2.2	3.7	< 5 U
MW09-21S	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-23D	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-23S	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-24D	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-24S	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-25S	7	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-26D	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROETHANE (5 UG_L)	-															
MW09-02S	5	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	5	1.28	1 J	1 J	0.94 J	1.21 J	0.72 J	< 5 U	< 1 U	< 1 UJ	--	1.05	0.73 J	< 2 U	< 2 U	0.66 J
MW09-07S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	5	0.26 J	< 5 U	< 1 U	< 1 U	0.33 J	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-09S	5	0.95 J	< 5 U	1.67 J	0.8 J	1.79	1.93	< 5 U	2.56	< 5 UJ	1.08 J	1.76	1.7 J	1 J	< 2 U	1.4 J
MW09-10D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	5	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	**5**	< 10000 U	**12 J**	R	< 1 U	R	< 10000 U	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	**12.8 J**	**14.1 J**	**13.5 J**	< 4000 U
MW09-21D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	0.45 J
MW09-23D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	5	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	5	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROETHENE, TOTAL (UG_L)	-															
MW09-02S	-	1.43	< 5 U	< 1 U	1.46	< 1 U	< 1 U	< 1 U	0.68	< 1 U	--	0.13	< 2 U	< 0.8 U	< 0.8 U	< 2 U
MW09-03D	-	130	140	150	120	120	110.1	110	120	150	--	140	119.6	121	123	123
MW09-07S	-	--	< 5 U	0.11	0.16	0.27	0.63	< 1 U	0.35	0.47	--	0.97	1.1	< 0.8 U	< 0.8 U	< 2 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	6.51	6	6	4.94	6.48	5.46	4.49	4.58	--	4.46	5.05	4.4	5.1	4.5	4.3
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	27	127.06	6	84.12	124.89	146.03	125.83	123.8	425.05	207.25	208.4	54.5	253.3	184.2
MW09-10D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	0.18	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 0.8 U	< 0.8 U	< 2 U
MW09-10S	-	0.24	< 5 U	0.12	< 1 U	0.19	0.29	< 1 U	0.15	< 1 U	--	1.49	< 2 U	< 0.8 U	< 0.8 U	< 2 U
MW09-11S	-	< 1 U	< 5 U	0.47	< 1 U	1.1	0.25	1.02	1.37	0.6	--	0.28	< 2 U	< 0.8 U	< 0.8 U	1.3
MW09-14D	-	--	< 5 U	< 1 U	0.12	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 0.8 U	< 0.8 U	< 2 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	0.55	< 5 U	0.16	0.44	< 1 U	0.54	< 1 U	0.36	< 1 U	--	2.81	0.83	< 0.8 U	< 0.8 U	< 2 U
MW09-20I	-	66000	17200	176000	43000	54000	53000	51000	58000	--	65000	69000	55300	57900	54800	57900
MW09-21D	-	1208.86	856	744	573.82	884.3	384.76	780	554.84	--	795.12	926.37	467.3	735	843.8	631.4
MW09-21S	-	0.55	< 5 U	< 1 U	0.25	< 1 U	0.29	1.4	< 1 U	< 1 U	--	0.17	< 2 U	< 0.8 U	< 0.8 U	< 2 U
MW09-23D	-	--	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 0.8 U	< 0.8 U	< 2 U
MW09-23S	-	--	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 0.8 U	< 0.8 U	< 2 U
MW09-24D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 0.8 U	< 0.8 U	< 2 U
MW09-24S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	0.24	< 2 U	< 0.8 U	< 0.8 U	< 2 U
MW09-25S	-	0.45	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 0.8 U	< 0.8 U	< 2 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE (5 UG_L)	-															
MW09-02S	5	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-07S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	5	0.16 J	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 5 U	0.18 J	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	5	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	5	< 10000 U	< 5 UJ	R	< 1 U	R	< 10000 U	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	< 2 UJ	< 2 U	< 2 U	< 4000 U
MW09-21D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	5	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	5	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-26DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE (UG_L)	-															
MW09-02S	-	R	R	R	R	R	< 5 U	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-03D	-	R	R	R	R	R	< 5 U	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-07S	-	R	R	R	R	R	< 5 U	R	R	R	--	1.02 J	< 5 UJ	< 5 U	< 5 U	< 5 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	R	R	< 5 U	R	R	< 5 U	R	R	--	R	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	R	R	R	R	R	< 5 U	R	R	R	R	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-10D	-	R	R	R	R	R	< 5 U	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-10S	-	R	R	R	R	R	< 5 U	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-11S	-	R	R	R	R	R	< 5 U	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-14D	-	R	R	R	R	R	< 5 UJ	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	R	R	R	R	R	< 5 U	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-20I	-	R	R	R	R	R	< 50000 U	R	R	--	R	< 5000 U	< 5 UJ	< 5 U	< 5 U	< 10000 U
MW09-21D	-	R	R	R	R	R	< 5 U	R	R	--	R	1.59 J	< 5 U	< 5 UJ	< 5 U	< 25 UJ
MW09-21S	-	R	R	R	R	R	< 5 U	R	R	R	--	< 5 U	< 5 UJ	20.8 J	< 5 U	< 5 UJ
MW09-23D	-	R	R	R	R	R	< 5 U	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-23S	-	R	R	R	R	R	< 5 UJ	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-24D	-	R	R	R	R	R	< 5 U	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-24S	-	R	R	R	R	R	< 5 U	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-25S	-	R	R	< 5 U	R	R	< 5 U	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-HEXANONE (UG_L)	-															
MW09-02S	-	< 5 U	< 10 U	< 5 U	R	R	< 5 UJ	R	R	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-03D	-	< 5 U	< 10 U	< 5 UJ	R	R	< 5 UJ	R	< 5 U	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-07S	-	< 5 U	< 10 U	R	R	R	< 5 U	R	< 5 U	R	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 10 U	< 5 UJ	R	R	< 5 UJ	R	< 5 U	--	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 U	< 10 U	R	R	R	< 5 UJ	R	< 5 U	R	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-10D	-	< 5 U	< 10 U	R	R	R	< 5 UJ	R	< 5 U	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-10S	-	< 5 U	< 10 U	R	R	R	< 5 U	R	< 5 U	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-11S	-	< 5 U	< 10 U	R	R	R	< 5 UJ	R	< 5 U	R	--	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-14D	-	< 5 U	< 10 U	R	R	R	< 5 UJ	R	< 5 U	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 10 U	R	R	R	< 5 UJ	R	< 5 U	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-20I	-	< 50000 U	< 10 UJ	R	R	R	< 50000 UJ	R	< 50000 U	--	< 5000 UJ	< 5000 UJ	< 5 UJ	< 5 U	< 5 U	< 10000 U
MW09-21D	-	< 5 U	< 10 U	< 5 UJ	R	R	< 5 UJ	R	< 5 U	--	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 25 UJ
MW09-21S	-	< 5 U	< 10 U	< 5 UJ	R	R	11 J	R	< 5 U	R	--	11	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-23D	-	< 5 U	< 10 U	R	R	R	< 5 UJ	R	< 5 U	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-23S	-	< 5 U	< 10 U	R	R	R	< 5 UJ	R	< 5 U	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-24D	-	< 5 U	< 10 U	R	R	R	< 5 UJ	R	< 5 U	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-24S	-	< 5 U	< 10 U	R	R	R	< 5 UJ	R	< 5 U	R	--	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-25S	-	< 5 U	< 10 U	< 5 UJ	12 J	R	< 5 UJ	R	< 5 U	R	--	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-METHYL-2-PENTANONE (UG_L)	-															
MW09-02S	-	< 5 U	< 10 U	< 5 U	< 5 U	R	< 5 UJ	R	< 5 U	< 5 UJ	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-03D	-	< 5 U	< 10 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-07S	-	< 5 U	< 10 U	R	< 5 U	< 5 U	< 5 U	R	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 5 U	< 10 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	R	< 5 U	--	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 5 U	< 10 U	R	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 25 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-10D	-	< 5 U	< 10 U	R	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-10S	-	< 5 U	< 10 U	R	< 5 U	< 5 U	< 5 U	R	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-11S	-	< 5 U	< 10 U	R	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	--	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-14D	-	< 5 U	< 10 U	R	< 5 U	< 5 U	< 5 UJ	R	5.04	2.53 J	--	1.65 J	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 5 U	< 10 U	R	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-20I	-	< 50000 U	< 10 UJ	R	< 5 U	< 5 U	< 50000 UJ	R	< 50000 U	--	< 5000 UJ	< 5000 UJ	< 5 UJ	< 5 U	< 5 U	< 10000 U
MW09-21D	-	< 5 U	< 10 U	< 5 UJ	< 5 U	< 5 UJ	< 5 UJ	R	< 5 U	--	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 25 UJ
MW09-21S	-	< 5 U	< 10 U	< 5 UJ	< 5 U	< 5 U	50 J	R	< 5 U	130	--	78	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-23D	-	< 5 U	< 10 U	R	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-23S	-	< 5 U	< 10 U	R	< 5 U	< 5 UJ	< 5 UJ	R	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-24D	-	< 5 U	< 10 U	R	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-24S	-	< 5 U	< 10 U	R	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-25S	-	< 5 U	2 J	< 5 UJ	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 U	--	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 5 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE (UG_L)	-															
MW09-02S	-	130 T	390 J	R	1.80 J	R	< 5 UJ	R	R	R	--	< 2.54 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ
MW09-03D	-	5.82 T	R	R	R	R	< 5 UJ	R	R	R	--	< 2.57 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ
MW09-07S	-	R	R	R	R	R	< 5 U	R	16	R	--	< 6.06 U	< 5 UJ	< 5 U	6.2	< 5 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	R	R	R	R	R	< 5 UJ	R	6.28	--	2.39 J	< 3.59 U	< 5 UJ	< 5 U	< 5 UJ	< 5 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	21 T	R	R	R	R	< 5 UJ	R	8.99	R	1.65 J	< 8.70 U	9.8 J	< 5 U	< 5 UJ	< 5 UJ
MW09-10D	-	R	R	R	R	R	< 5 UJ	R	R	R	--	< 2.25 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ
MW09-10S	-	R	R	R	R	R	< 5 U	R	4.98 J	R	--	< 2.05 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ
MW09-11S	-	18 T	R	R	R	R	4.64 J	R	R	R	--	< 2.43 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ
MW09-14D	-	R	R	R	R	R	< 5 UJ	R	R	R	--	< 2.36 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	R	R	R	R	6.76 J	< 5 UJ	R	R	R	--	< 3.67 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ
MW09-20I	-	100000 J	R	R	R	R	< 50000 UJ	R	R	--	R	R	12.9 J	51.0 J	26.2 J	< 10000 U
MW09-21D	-	R	14 J	14 J	R	R	< 5 UJ	R	10	--	4.63 J	< 5.61 U	< 5 U	11.9 J	< 5 U	< 25 UJ
MW09-21S	-	13 J	R	R	R	10 J	7.64 J	R	5.42	R	--	< 4.51 U	15.9 J	10 J	< 5 UJ	< 5 UJ
MW09-23D	-	R	R	R	R	R	< 5 UJ	R	R	R	--	< 2.82 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-23S	-	R	R	R	2.13 J	R	< 5 UJ	R	R	R	--	< 4.47 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ
MW09-24D	-	R	R	R	R	R	< 5 UJ	R	R	R	--	< 3.08 U	< 5 UJ	< 5 U	< 5 UJ	< 5 UJ
MW09-24S	-	R	R	R	3.65 J	R	3.45 J	R	R	R	--	< 2.54 U	< 5 UJ	< 5 U	< 5 UJ	< 5 UJ
MW09-25S	-	R	R	R	R	R	< 5 UJ	R	R	R	--	< 2.34 U	< 5 UJ	< 5 U	6.9	< 5 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZENE (5 UG_L)	-															
MW09-02S	5	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-03D	5	0.33 J	< 5 U	< 1 U	0.23 J	0.23 J	0.23 J	< 5 U	0.24 J	0.18 J	--	0.22 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-07S	**5**	**58**	**69**	**54 J**	**46**	**32**	**34 J**	**31**	**22**	**29 J**	--	**26**	**21.9**	**22.6**	**17.7**	**12.1**
MW09-08DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	5	1.1	1 J	1 J	0.84 J	1.09	1.56	0.98 J	0.99 J	--	0.98 J	1.26	1.1	1.3	1.1	1.3
MW09-09DA	**5**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	**5**	4.26	5	**5.07**	4.3	4.42	4.39	**9.79**	**5.65**	**6.11**	**5.21 J**	**6.40 J**	**5.9**	**5.9 J**	**6.6 J**	**7**
MW09-10D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-10S	5	3.21	3 J	1.86	2.31	2.67	2.17	2.4	2.09	3.23	--	2.54	2.5	2.4	2	2
MW09-11S	**5**	2.36	2 J	0.5	0.33 J	0.71 J	0.28 J	1.05	0.63 J	0.99 J	--	0.17 J	0.59	1.1	< 0.5 U	1.1
MW09-14D	5	2.05	1 J	1.9	2.18	2.05	1.79	2.25	2.15	2.08	--	2.19	2	2	1.7	2
MW09-14IA	**5**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	**5**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	0.55 J	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-20I	**5**	< 10000 U	**8 J**	**130 J**	**11**	R	< 10000 U	**2100 J**	0.65 J	--	< 1000 U	< 1000 U	**6.8 J**	**7.0 J**	**7.6 J**	< 1000 U
MW09-21D	**5**	4.46	5	2 J	2.87	**5.03 J**	2.66	**9.69 J**	3.79	--	4.12	**8.23**	2.6	**9.6**	**11.3**	**5.4**
MW09-21S	**5**	**25**	**20**	**20 J**	**23**	**20**	**18**	**17**	**20**	**22 J**	--	**18**	**15.2**	**16.1 J**	**15.9**	**15.2**
MW09-23D	5	< 1 U	< 5 U	< 1.56 UJ	< 1 U	< 1 U	0.52 J	< 0.2 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-23S	5	< 1 U	< 5 U	< 1.13 UJ	< 1 U	0.15 J	0.13 J	< 0.21 U	< 1 U	0.1 J	--	< 1 U	< 0.5 U	R	R	< 0.5 U
MW09-24D	5	0.79 J	< 5 U	< 1 U	0.86 J	0.76 J	0.45 J	< 0.75 U	0.83 J	0.81 J	--	0.6 J	0.72	0.77	0.69	0.71
MW09-24S	5	0.49 J	< 5 U	< 1 U	0.47 J	< 1 U	0.12 J	< 0.78 U	0.28 J	0.62 J	--	0.5 J	< 0.5 U	< 0.5 U	0.57	< 0.5 U
MW09-25S	**5**	**6.46**	**42**	**12**	**7.03**	**21**	**11**	< 13 U	**7.16**	**15**	--	**12**	**11.9**	**9.7**	**7.3**	**13.7**
MW09-26D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
BROMODICHLOROMETHANE (80 UG_L)	-															
MW09-02S	80	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-07S	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	**80**	< 10000 U	< 5 UJ	R	< 1 U	R	< 10000 U	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	< 2 UJ	< 2 U	69.4 J	< 4000 U
MW09-21D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BROMOFORM (80 UG_L)	-															
MW09-02S	80	< 1 U	< 5 U	< 1 U	0.78 J	R	< 0.24 U	< 1 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-03D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 0.81 U	< 5 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-07S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	R	< 1 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-08DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	R	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-09DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	R	< 1 U	< 1 U	< 2 U	< 2 UJ	< 2 U	< 2 U
MW09-10D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-10S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-11S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	R	< 1 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-14D	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	R	< 1 U	< 1 U	R	--	< 1 U	< 2 U	< 2 UJ	< 2 U	< 2 U
MW09-14IA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	R	< 1 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-20I	**80**	< 10000 U	< 5 UJ	< 1 U	< 1 U	< 1 U	R	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	< 2 UJ	< 2 U	< 2 U	< 4000 U
MW09-21D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	R	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 UJ	< 2 U	< 10 U
MW09-21S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	R	< 1 U	< 1 U	R	--	< 1 U	< 2 U	< 2 UJ	< 2 U	< 2 U
MW09-23D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	R	< 1 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-23S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	R	< 1 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-24D	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	R	< 1 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-24S	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	R	< 1 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-25S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	R	< 1 U	< 1 U	R	--	< 1 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U
MW09-26D	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BROMOMETHANE (UG_L)	-															
MW09-02S	-	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 UJ	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-03D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 5 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-07S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-10S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-11S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-14D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-20I	-	< 10000 U	< 5 UJ	R	< 1 U	R	< 10000 UJ	< 10000 UJ	< 10000 U	--	< 1000 U	< 1000 U	< 2 UJ	< 2 U	< 2 U	< 4000 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-21D	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-23D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-23S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-24D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-24S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-25S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE (UG_L)	-															
MW09-02S	-	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 UJ	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-03D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	0.15 J	< 5 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-07S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	0.19 J	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-10D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-10S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-11S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-14D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-20I	-	< 10000 U	6 J	R	13	140 J	< 10000 U	< 10000 U	0.65 J	--	< 1000 U	< 1000 U	10.4 J	12.1 J	9.7 J	34.2 J
MW09-21D	-	< 1 U	< 5 U	< 1 U	< 1 U	0.34 J	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 25 UJ
MW09-21S	-	0.28 J	< 5 U	< 1 U	< 1 U	2.74	0.22 J	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	0.54 J
MW09-23D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-23S	-	0.11 J	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	0.55 J	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-24D	-	0.3 J	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-24S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-25S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON TETRACHLORIDE (5 UG_L)	-															
MW09-02S	5	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	0.24 J	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-03D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-07S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-08DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-09DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-10S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-11S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-14D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-20I	**5**	< 10000 U	< 5 UJ	R	< 1 U	R	< 10000 U	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	< 2 UJ	< 2 U	< 2 U	< 4000 U
MW09-21D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.14 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-23S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-24D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-24S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-25S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U
MW09-26D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHLOROBENZENE (100 UG_L)	-															
MW09-02S	100	< 1 U	< 5 U	< 1 U	0.13 J	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-07S	100	1.7	2 J	< 1.48 U	1.51	1.26	1.32 J	1.11	1.03	1 J	--	0.98 J	0.86 J	0.92 J	0.87 J	0.86 J

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-08DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	100	0.35 J	< 5 U	0.33	0.45 J	0.29 J	0.2 J	< 5 U	0.47 J	< 5 U	0.37 J	0.38 J	< 2 U	0.71 J	R	0.56 J
MW09-10D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	100	0.39 J	< 5 U	< 0.27 U	0.28 J	0.35 J	0.25 J	< 1 U	0.29 J	0.36 J	--	0.29 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	**100**	**300**	**230**	55	53 J	26	20	41	34	**140**	--	19	40	**151**	21.9	6.1
MW09-14D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	**100**	< 10000 U	< 5 UJ	0.08	< 1 U	< 1 U	< 10000 U	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	< 2 UJ	< 2 U	< 2 U	< 4000 U
MW09-21D	**100**	40	35	4 J	5.55	13 J	4.68	66	11	--	17	88 J	12.9	**147**	**166**	**106**
MW09-21S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	0.12 J	< 1 U	< 1 U	R	--	< 1 U	< 2 U	R	< 2 U	< 2 U
MW09-23D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	100	< 1 U	< 5 U	< 1 U	0.47 J	0.75 J	0.25 J	0.35 J	0.4 J	1.6	--	0.47 J	< 2 U	0.52 J	R	< 2 U
MW09-24D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	**100**	9.64	11	27	14	22	20	23	19	19	--	21	28.8	25.9	18.1	15.7
MW09-26D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHLOROETHANE (UG_L)	-															
MW09-02S	-	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-03D	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 5 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-07S	-	< 1 U	< 5 U	0.96 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.68 J	--	1.39	< 5 U	< 5 U	< 5 U	< 5 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 1 U	< 5 U	< 1 U	0.49 J	1.06	< 1 U	< 1 U	0.41 J	--	0.58 J	0.56 J	< 5 U	< 5 U	< 5 U	< 5 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-10D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-10S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	0.41 J	< 5 U	< 5 U	< 5 U	< 5 U
MW09-11S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	R	< 1 U	R	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-14D	-	< 1 U	< 5 U	0.57 J	0.6 J	0.6 J	< 1 U	< 1 U	< 1 U	0.71 J	--	0.72 J	< 5 U	< 5 U	< 5 U	< 5 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-20I	-	< 10000 U	< 5 UJ	R	< 1 U	R	< 10000 U	R	< 10000 U	--	< 1000 U	< 1000 U	< 5 UJ	< 5 U	< 5 U	< 10000 U
MW09-21D	-	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 25 U
MW09-21S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-23D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	R	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-23S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	R	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-24D	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-24S	-	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-25S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 U	R	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHLOROFORM (80 UG_L)	-															
MW09-02S	80	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	0.85 J	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-07S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	2.01 J	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	80	0.12 J	< 5 U	< 1 U	< 1 U	0.15 J	0.18 J	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 5 UJ	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	0.11 J	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	**80**	< 10000 U	**83 J**	**1300 J**	**94 J**	**450 J**	< 10000 U	< 10000 U	6.32	--	< 1000 U	< 1000 U	72.4 J	78.4 J	76.4 J	69 J
MW09-21D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-24D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.17 J	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHLOROMETHANE (UG_L)	-															
MW09-02S	-	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 UJ	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-03D	-	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U	< 1 UJ	< 5 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-07S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	0.13 J	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U	< 1 UJ	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-10D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-10S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-11S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-14D	-	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-20I	-	< 10000 U	< 5 UJ	R	< 1 UJ	R	< 10000 U	< 10000 UJ	< 10000 U	--	< 1000 U	< 1000 U	< 5 UJ	< 5 U	< 5 U	< 10000 U
MW09-21D	-	< 1 U	< 5 U	< 1 UJ	< 1 UJ	3.06 J	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 25 U
MW09-21S	-	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-23D	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 UJ	< 5 U	< 5 U
MW09-23S	-	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 UJ	< 5 U	< 5 U
MW09-24D	-	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-24S	-	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-25S	-	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE (70 UG_L)	-															
MW09-02S	70	1.43	< 5 U	< 1 U	1.46 J	R	< 1 U	< 1 U	0.68 J	< 1 UJ	--	0.13 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	**70**	**130**	**140**	**150 J**	**120**	**120 J**	**110 J**	**110**	**120 J**	**150**	--	**140**	**118**	**121**	**123**	**123**
MW09-07S	70	--	< 5 U	< 1 U	< 1 U	< 1 U	0.15 J	< 1 U	< 1 UJ	< 1 U	--	0.12 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	**70**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	70	6.08	6	6	4.62	6.05	5.2	4.49	4.25 J	--	4.2	4.71	4.4	5.1	4.5	4.3
MW09-09DA	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	**70**	--	24	**120 J**	4.42	**79**	**120**	**140**	**120 J**	**120**	**420**	**200**	**199**	51	**246**	**176**
MW09-10D	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	0.18 J	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	70	0.24 J	< 5 U	0.12	< 1 U	0.19 J	0.29 J	< 1 U	0.15 J	< 1 U	--	0.96 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	70	< 1 U	< 5 U	0.47	< 1 U	1.1	0.25 J	1.02	1.18 J	0.6 J	--	0.28 J	< 2 U	< 2 U	< 2 U	1.3 J
MW09-14D	70	--	< 5 U	< 1 U	0.12 J	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	70	0.55 J	< 5 U	0.16	0.32 J	< 1 U	0.37 J	< 1 U	0.36 J	< 1 U	--	1.63	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	**70**	**45000**	**9100 E**	**120000 J**	**27000**	**36000 J**	**36000**	**35000**	**39000 J**	--	**45000**	**47000**	**37800 J**	**39200**	**36200**	**40700**
MW09-21D	**70**	**1200**	**850 E**	**740 J**	**570**	**880 J**	**380**	**780**	**550 J**	--	**790**	**920**	**461**	**725**	**829**	**625**
MW09-21S	70	0.55 J	< 5 U	< 1 U	0.25 J	< 1 U	0.29 J	1.4	< 1 UJ	< 1 U	--	0.17 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	70	--	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	70	--	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	0.24 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	70	0.45 J	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CIS-1,3-DICHLOROPROPENE (UG_L)	-															
MW09-02S	-	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 UJ	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-03D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 5 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-07S	-	< 1 U	< 5 U	0.13	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	--	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-10D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-10S	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-11S	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-14D	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-20I	-	< 10000 U	< 5 UJ	R	< 1 U	R	< 10000 UJ	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 1000 U
MW09-21D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 20 U	< 1 U	--	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2.5 U
MW09-21S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-23D	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-23S	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-24D	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-24S	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-25S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIBROMOCHLOROMETHANE (80 UG_L)	-															
MW09-02S	80	< 1 U	< 5 U	< 1 U	0.32 J	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	80	< 1 U	< 5 U	< 1 U	< 1 U	0.17 J	0.27 J	< 5 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-07S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	**80**	< 10000 U	< 5 UJ	< 1 U	< 1 U	< 1 U	< 10000 U	< 10000 U	**170 J**	--	< 1000 U	< 1000 U	< 2 UJ	< 2 U	< 2 U	< 4000 U
MW09-21D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	80	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	80	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ETHYLBENZENE (70 UG_L)	-															
MW09-02S	70	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-03D	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-07S	70	1.37	1 J	1.99 J	0.74 J	0.67 J	1.1 J	0.63 J	0.51 J	0.52 J	--	0.57 J	0.48 J	0.50 J	0.44 J	0.36 J
MW09-08DA	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-09DA	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	R	R	< 1 U
MW09-10D	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-10S	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-11S	70	0.27 J	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-14D	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-14IA	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-20I	**70**	< 10000 U	< 5 UJ	< 1 U	0.15 J	< 1 U	< 10000 U	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	< 1 UJ	< 1 U	< 1 U	< 2000 U
MW09-21D	70	2.57	2 J	< 1 U	0.79 J	0.77 J	0.5 J	< 20 U	0.67 J	--	0.56 J	1.63	< 1 U	2.4	3	< 5 U
MW09-21S	70	0.24 J	< 5 U	< 1 U	0.19 J	0.18 J	0.18 J	0.28 J	< 1 U	0.14 J	--	0.19 J	< 1 U	R	< 1 U	< 1 U
MW09-23D	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-23S	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	R	R	< 1 U
MW09-24D	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-24S	70	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-25S	70	3.65	4 J	4 J	2.63	2.03	1.23	0.86 J	0.48 J	0.32 J	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-26D	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-26DA	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M- AND P-XYLENE (UG_L)	-															
MW09-02S	-	< 2 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 2 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	--	13	14	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 2 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	< 10 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 2 U	< 10 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	0.82 J	< 10 U	0.41	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	0.21 J	3 J	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	< 10 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 2 U	< 10 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 20000 U	< 10 U	0.3	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	1.87 J	1 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	0.22 J	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	--	< 10 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	--	< 10 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	< 2 U	< 10 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	< 2 U	< 10 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	2.16	4 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE (5 UG_L)	-															
MW09-02S	5	< 0.18 U	< 5 U	< 1 U	< 1 U	R	< 0.17 U	< 1.43 U	< 2 U	< 0.81 U	--	< 1.33 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	5	< 1.79 U	< 5 U	< 1 UJ	< 1 UJ	< 1 UJ	< 0.21 U	< 2.24 U	< 2.34 U	< 0.88 U	--	< 0.58 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-07S	5	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1.14 UJ	< 1.0 U	< 0.43 U	< 2.46 U	< 0.78 U	--	< 1.33 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	5	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1.24 UJ	< 1 U	< 1 U	< 0.99 U	--	< 1.1 U	< 0.26 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	5	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1.18 UJ	< 0.11 U	< 1.51 U	< 2.57 U	< 7.61 U	< 0.53 U	< 0.19 U	< 2.9 U	< 2 U	< 2 U	< 2 U
MW09-10D	5	< 1.43 UJ	< 5 U	< 1 U	< 1 U	< 1 UJ	< 0.12 U	< 0.28 U	< 2.75 U	< 0.99 U	--	< 0.38 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	5	< 0.96 U	< 5 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1.85 U	< 0.47 U	--	< 0.22 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	5	< 1.39 U	< 5 U	< 1 U	< 1 UJ	< 1 UJ	< 0.28 U	< 0.18 U	< 1.3 U	< 0.58 U	--	< 0.26 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	5	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1.02 UJ	< 0.44 U	< 0.43 U	< 1.64 U	< 0.68 U	--	< 0.23 U	< 2.6 U	< 2 U	< 2 U	< 2 U
MW09-14IA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	**5**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	5	< 1.05 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 0.19 U	< 0.25 U	< 2.33 U	< 0.6 U	--	< 0.54 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	**5**	< 10000 U	< 5 UJ	**130 J**	**5.44 J**	**54 J**	**1900 J**	< 2200 U	< 10000 U	--	< 1200 U	--	< 13.5 U	**13.9 J**	**16.8 J**	< 4000 U
MW09-21D	5	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 UJ	< 0.12 U	< 16 U	< 2.42 U	--	< 1.1 U	< 0.99 U	< 2.6 U	< 2 U	< 2 U	< 10 U
MW09-21S	5	< 2.53 U	< 5 U	< 1 UJ	< 1 UJ	< 1 UJ	< 0.16 U	< 0.83 U	< 1.75 U	< 0.55 U	--	< 0.66 U	< 2.7 U	< 2 U	< 2 U	< 2 U
MW09-23D	5	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 0.12 U	< 0.99 U	< 0.67 U	--	< 0.16 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	5	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 UJ	< 0.1 U	< 0.17 U	< 1.01 U	< 0.56 U	--	< 0.39 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	5	< 2.41 U	< 5 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1.33 U	< 0.97 U	< 0.46 U	--	< 0.65 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	5	< 1 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 0.2 U	< 0.34 U	< 0.57 U	< 0.56 U	--	< 1.02 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	5	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 UJ	< 0.2 U	< 0.30 U	< 1.67 U	< 0.82 U	--	< 0.4 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
O-XYLENE (UG_L)	-															
MW09-02S	-	< 1 U	< 5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	-	< 1 U	< 5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	-	--	6	7.54	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 1 U	< 5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	--	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	-	< 1 U	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	-	0.38 J	< 5 U	0.16	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	-	< 1 U	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	-	--	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-20D	-	< 1 U	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	-	< 10000 U	< 5 U	0.27	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	-	1.18	< 5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	-	0.16 J	< 5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	-	--	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	-	--	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	-	0.12 J	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	-	0.14 J	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	-	0.28 J	< 5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STYRENE (100 UG_L)	-															
MW09-02S	100	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-03D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-07S	100	< 1 U	< 5 U	0.39	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-08DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-09DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 5 U	R	< 5 U	< 5 U
MW09-10D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-10S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-11S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-14D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-14IA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-20I	**100**	< 10000 U	< 5 UJ	< 1 U	< 1 U	< 1 U	< 10000 U	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	< 5 UJ	< 5 U	< 5 U	< 10000 U
MW09-21D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 25 U
MW09-21S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	R	--	< 1 U	< 5 U	R	< 5 U	< 5 U
MW09-23D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-23S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	0.13 J	< 1 U	< 1 U	--	< 1 U	< 5 U	R	< 5 U	< 5 UJ
MW09-24D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-24S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U
MW09-25S	100	< 1 U	< 5 U	< 1 U	0.2 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 5 U	< 5 U	< 5 U	< 5 UJ
MW09-26D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE (5 UG_L)	-															
MW09-02S	5	< 1 UJ	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-07S	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 5 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	0.15 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-20I	**5**	< 10000 UJ	**180 J**	**3500 J**	**320 J**	**720 J**	< 10000 U	< 10000 U	**6.08**	--	< 1000 U	--	**218 J**	**202 J**	**168 J**	**181**
MW09-21D	5	< 1 UJ	< 5 U	< 1 U	0.1 J	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 10 U
MW09-21S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	5	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE (100 UG_L)	-															
MW09-02S	100	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-03D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-07S	100	0.89 J	2 J	5.45	1.12	1.26	2.22 J	1.09	1.36	1.65 J	--	2.36	2.1	1.2	0.70 J	0.47 J

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-08DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	100	1 T	< 5 U	< 1 U	< 1 U	< 1 U	0.12 J	< 1 U	0.1 J	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-09DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	100	0.14 J	< 5 U	< 1 U	< 1 U	< 1 U	0.18 J	< 5 U	< 1 U	< 5 U	0.11 J	< 1 U	< 1 U	R	R	< 1 U
MW09-10D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-10S	100	1 T	< 5 U	0.13	< 1 U	0.19 J	0.14 J	< 1 U	0.14 J	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-11S	100	1 T	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-14D	100	0.19 J	< 5 U	0.16	0.17 J	< 1 U	0.19 J	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-14IA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	0.16 J	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-20I	**100**	< 10000 U	3 J	49 J	4.57	12 J	< 10000 U	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	1.9 J	1.6 J	1.5 J	< 2000 U
MW09-21D	100	64	34	24 J	26	21 J	17	16 J	19	--	18	22	11.3	18.4	24.6	12.6
MW09-21S	100	2.55	2 J	2 J	2.26	1.79	0.86 J	0.67 J	0.84 J	1.25 J	--	1.06	< 1 U	0.56 J	< 1 U	0.63 J
MW09-23D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-23S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	R	R	< 1 U
MW09-24D	100	< 1 U	< 5 U	< 1 U	< 1 U	0.18 J	0.13 J	< 1 U	0.19 J	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-24S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-25S	100	1 T	< 5 U	< 1 U	0.14 J	0.14 J	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-26D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE (100 UG_L)	-															
MW09-02S	100	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	0.1 J	< 5 U	< 1 U	< 1 U	--	< 1 U	1.6 J	< 2 U	< 2 U	< 2 U
MW09-07S	100	--	< 5 U	0.11	0.16 J	0.27 J	0.48 J	< 1 U	0.35 J	0.47 J	--	0.85 J	1.1 J	< 2 U	< 2 U	< 2 U
MW09-08DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	100	0.43 J	< 5 U	< 1 U	0.32 J	0.43 J	0.26 J	< 1 U	0.33 J	--	0.26 J	0.34 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	100	--	3 J	7.06	1.58	5.12	4.89	6.03	5.83	3.8 J	5.05 J	7.25	9.4	3.5	7.3	8.2
MW09-10D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	0.53 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.19 J	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	100	--	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	100	< 1 U	< 5 U	< 1 U	0.12 J	< 1 U	0.17 J	< 1 U	< 1 U	< 1 U	--	1.18	0.83 J	< 2 U	< 2 U	< 2 U
MW09-20I	**100**	**21000**	**8100 E**	**56000 J**	**16000**	**18000 J**	**17000**	**16000**	**19000**	--	**20000**	**22000**	**17500 J**	**18700**	**18600**	**18100**
MW09-21D	100	8.86	6	4 J	3.82	4.3 J	4.76	< 20 U	4.84	--	5.30	7.65	7.5	10	14.8	6.4 J
MW09-21S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	100	--	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	100	--	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	100	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	100	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRANS-1,3-DICHLOROPROPENE (UG_L)	-															
MW09-02S	-	< 1 U	< 5 U	< 1 U	< 1 U	R	< 1 UJ	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-03D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 5 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-07S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-08DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-09DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 5 U	< 1 U	< 5 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-10D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-10S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-11S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-14D	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U
MW09-14IA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-20I	-	< 10000 U	< 5 UJ	R	< 1 U	R	< 10000 U	< 10000 U	< 10000 U	--	< 1000 U	< 1000 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 1000 U
MW09-21D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 20 U	< 1 U	--	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2.5 U
MW09-21S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U
MW09-23D	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-23S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-24D	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-24S	-	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-25S	-	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
MW09-26D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE (5 UG_L)	-															
MW09-02S	5	0.12 J	< 5 UJ	< 1 U	0.16 J	R	< 1 U	< 1 U	< 1 UJ	< 1 UJ	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	**5**	**7.29**	< 7 UJ	**6 J**	**6.62**	< 5.67 UJ	**5.04**	4.37 J	**7.29 J**	**5.22**	--	**7.3**	**6.3**	**6.6**	**5.4**	**6.5**
MW09-07S	5	3.82	< 5 U	< 1 U	< 1 U	< 1 U	0.71 J	< 1 U	< 0.52 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	**5**	**6.28**	< 5 U	< 1 U	< 1 U	1.66	< 2.13 U	0.34 J	< 0.32 U	--	0.25 J	0.31 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-09DA	**5**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	5	< 1 U	< 5 UJ	< 1 U	< 1 U	< 1 U	0.34 J	< 5 U	< 1.27 U	< 5 U	0.27 J	0.24 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	**5**	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	**21**	< 2 U	< 2 U	< 2 U	< 2 U
MW09-11S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1.49 UJ	< 0.8 U	0.55 J	< 0.4 U	< 1 U	--	0.55 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	5	2.16	< 5 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.55 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14IA	**5**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	**5**	< 1 U	< 5 U	< 1 U	0.53 J	< 3.79 U	2.1	1.69	< 1.11 U	0.9 J	--	0.42 J	1.5 J	1 J	< 2 U	1.8 J
MW09-20I	**5**	**420000**	**420000**	**510000 J**	**480000**	**500000 J**	**450000**	**420000**	**400000 J**	--	**410000**	**570000**	**371000 J**	**392000**	**447000**	**404000**
MW09-21D	**5**	**500**	**320**	**210 J**	**120**	**330 J**	**160 J**	**210**	**100 J**	--	**100**	**230**	**89.1**	**196**	**300**	**99.8**
MW09-21S	5	< 1 U	< 5 UJ	< 1 U	< 1 U	< 1 U	< 0.26 U	0.57 J	< 0.63 U	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	0.13 J	1.67	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	5	< 1 U	< 5 UJ	< 1 U	< 1 U	< 1 U	0.19 J	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	5	< 1 U	< 5 UJ	< 1 U	< 1 U	< 1 U	< 0.14 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	5	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 0.36 U	< 1 U	< 1 UJ	< 1 U	--	0.14 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VINYL CHLORIDE (2 UG_L)	-															
MW09-02S	2	0.31 J	< 5 U	< 1 U	0.44 J	R	< 1 UJ	< 1 U	< 1 UJ	< 1 UJ	--	0.27 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-03D	**2**	**26**	**17**	**16 J**	**24**	**18**	**18 J**	**9.98**	**19 J**	**17**	--	**20**	**19**	**18.4**	**19.1**	**17.5**
MW09-07S	2	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	0.16 J	--	0.57 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-08DA	**2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	**2**	**23**	**20**	**17 J**	**12 J**	**33**	**37**	**21**	**14 J**	--	**18**	**20**	**17.2**	**19.3**	**19.4**	**23.2**
MW09-09DA	**2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	**2**	**38**	**21**	**62 J**	**16**	**90**	**140 J**	**110**	**130 J**	**130**	**410**	**170**	**153**	**56.6**	**247**	**226**
MW09-10D	2	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-10S	**2**	**2.23**	2 J	1.68	1.54	**2.42**	**2.20 J**	< 1 U	1.04 J	1.33	--	1.3	1.4 J	< 2 U	< 2 U	1.3 J
MW09-11S	2	< 1 U	< 5 U	0.51	< 1 UJ	0.82 J	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-14D	2	< 1 U	< 5 U	0.5 J	0.59 J	0.42 J	< 1 U	< 1 U	< 1 UJ	0.1 J	--	0.4 J	< 2 U	< 2 U	< 2 U	1.2 J
MW09-14IA	**2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	**2**	< 1 U	< 5 U	0.34	0.35 J	0.39 J	0.79 J	< 1 U	0.47 J	0.83 J	--	0.91 J	1.5 J	< 2 U	< 2 U	**2.8**
MW09-20I	**2**	**3000 J**	**1800 J**	**17000 J**	**1400 J**	**4900 J**	< 10000 U	< 10000 U	**220 J**	--	**2400**	**2500**	**3040 J**	**2970**	**2030 J**	**4600**
MW09-21D	**2**	**44**	**44**	**44 J**	**44**	**110 J**	**120 J**	**50**	**75 J**	--	**85**	**110**	**97.6**	**113**	**234**	**108**
MW09-21S	2	0.91 J	< 5 U	< 1 UJ	0.6 J	0.69 J	1.34	< 1 U	< 1 UJ	< 1 U	--	0.6 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23D	2	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-23S	2	< 1 U	< 5 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24D	2	< 1 U	< 5 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	0.16 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-24S	2	< 1 U	< 5 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	0.28 J	< 2 U	< 2 U	< 2 U	< 2 U
MW09-25S	2	0.7 J	< 5 U	< 1 UJ	0.24 J	0.38 J	0.2 J	< 1 U	< 1 UJ	< 1 U	--	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U
MW09-26D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
XYLENES, TOTAL (10000 UG_L)	-															
MW09-02S	10000	< 1 U	< 5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	10000	< 1 U	< 5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	10000	--	19	21.54	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	10000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	10000	< 1 U	< 5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	10000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	10000	--	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14
		Dec 2001/Jan 2002	Feb/Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr/May 2003	Jun/Jul 2003	Sep 2003	Dec 2003	Jan 2004	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005
MW09-10D	10000	< 1 U	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	10000	1.2	< 5 U	0.57	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	10000	0.21	3	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	10000	--	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	10000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	10000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	10000	< 1 U	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	10000	< 10000 U	< 5 U	0.57	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	10000	3.05	1	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	10000	0.38	< 5 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	10000	--	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	10000	--	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	10000	0.12	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	10000	0.14	< 5 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	10000	2.44	4	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	10000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	10000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	10000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	10000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
2,4,5-TRICHLOROPHENOL (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL (1 UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALUMINUM, DISSOLVED (UG_L)																
MW09-02S	< 200 U	21.8 J	< 200 U	< 22 U	14.6 J	< 200 U	< 200 U	< 200 U	--	26.9 J	--	80.6	--	< 20 UJ	--	< 300 UJ
MW09-03D	< 200 U	14.7 J	< 200 U	< 200 U	13.7 J	< 200 U	< 200 U	< 200 U	--	11.6 J	--	< 17.1 UJ	--	< 20 UJ	--	< 12.5 U
MW09-07S	< 200 U	16.9 J	< 200 U	< 200 U	33.2 J	13.5 J	< 200 U	< 200 U	--	44.2	--	< 300 U	--	< 20 UJ	--	< 300 UJ
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 UJ	< 300 UJ
MW09-08S	< 200 U	< 200 U	< 200 U	< 200 U	40.1 J	17.6 J	27.4 J	< 200 U	< 24.8 UJ	18.1 J	33.8	46.6 J	< 200 U	< 20 U	< 20 UJ	< 300 UJ
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2490	2360
MW09-09S	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	24.4 J	35.7 J	< 200 U	< 42.5 U	57.4	< 22.9 UJ	38.4	< 200 U	14.1 J	< 20 U	< 300 UJ
MW09-10D	< 200 U	< 200 U	< 200 U	< 200 U	19.1 J	11.3 J	< 200 U	< 200 U	--	40.6	--	< 300 U	--	< 20 UJ	--	< 300 UJ
MW09-10S	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	--	26.4 J	--	< 300 UJ	--	< 20 U	--	< 300 U
MW09-11S	< 200 U	< 200 U	48.5 J	< 200 U	25.9 J	< 200 U	< 200 U	< 200 U	< 25.4 UJ	< 23.2 UJ	< 12.6 UJ	< 300 UJ	< 200 U	< 20 UJ	< 20 U	< 300 UJ
MW09-14D	< 200 U	14.3 J	< 200 U	< 200 U	< 200 U	15 J	< 200 U	< 200 U	--	34.2	--	< 300 U	--	< 20 UJ	--	< 300 UJ
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	115	< 300 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 28.1 U	18.3 J	32.7	34.8	< 200 U	< 20 U	< 20 U	< 300 UJ
MW09-20D	< 200 U	17.4 J	< 200 U	< 200 U	18.7 J	< 200 U	< 200 U	< 200 U	< 18.1 UJ	< 20.3 UJ	< 14.7 UJ	27.5 J	< 200 U	< 20 UJ	< 20 UJ	< 300 UJ
MW09-20I	< 200 U	78.9 J	< 200 U	< 200 U	< 200 U	< 200 U	35.5 J	< 200 U	87.3 J	< 50.4 UJ	91.1	74	< 200 U	45.2	< 100 UJ	< 300 UJ
MW09-21D	< 200 U	87.3 J	< 200 U	< 200 U	107 J	< 200 U	69.5 J	59.0 J	--	61.4 J	--	61.9 J	--	38.6 J	--	< 300 UJ
MW09-21S	< 200 U	29.6 J	< 200 U	< 200 U	59.2 J	< 200 U	39.1 J	< 200 U	--	41.2 J	--	55.8 J	--	< 200 UJ	--	< 600 U
MW09-23D	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	--	< 56.0 U	--	24.4 J	--	< 20 UJ	--	< 12.5 U
MW09-23S	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 400 U	< 200 U	--	< 47.4 UJ	--	35.5	--	< 400 UJ	--	< 62.5 U
MW09-24D	< 200 U	< 200 U	< 200 U	< 200 U	44 J	< 200 U	< 200 U	< 200 U	--	34	--	66.7	--	< 20 UJ	--	< 12.5 U
MW09-24S	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	--	23.1 J	--	46.3	--	< 20 UJ	--	< 300 UJ
MW09-25S	< 200 U	< 200 U	42.7 J	< 200 U	17.5 J	< 200 U	28.6 J	< 200 U	< 30.4 UJ	41.4	< 17.7 UJ	< 300 UJ	< 200 U	< 20 UJ	< 20 UJ	< 300 UJ
MW09-26D	--	--	--	--	--	--	--	--	146 J	< 174 UJ	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 25.9 UJ	26.6 J	17.2 J	< 19.1 UJ	< 200 U	< 20 UJ	< 20 UJ	< 12.5 U
MW09-27D	--	--	--	--	--	--	--	--	< 25.1 UJ	16.7 J	19 J	24.5 J	< 200 U	< 20 UJ	< 20 UJ	< 300 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 45 UJ	25.4 J	35.2	32.7	< 200 U	< 20 UJ	< 20 UJ	< 300 U
ALUMINUM (UG_L)																
MW09-02S	< 200 U	113 J	141 J	128 J	39.9 J	189 J	< 200 U	< 200 U	--	38	--	391	--	< 20 U	--	< 300 UJ
MW09-03D	< 200 U	< 200 U	< 200 U	< 200 U	12.2 J	< 200 U	< 200 U	< 200 U	--	27.9 J	--	< 24 UJ	--	< 20 UJ	--	< 300 UJ
MW09-07S	< 200 U	< 200 U	< 200 U	< 200 U	40.7 J	43.2 J	< 200 U	< 200 U	--	48	--	< 300 U	--	38.5	--	< 300 UJ
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	924	< 300 UJ
MW09-08S	< 200 U	< 200 U	< 200 U	< 200 U	43.5 J	20.1 J	24.6 J	< 200 U	< 29 UJ	22.3 J	41.1 J	54.1	56.4 J	< 20 U	< 20 UJ	< 300 UJ

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2670	2340
MW09-09S	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	29 J	35.4 J	< 200 U	< 47.2 U	50.2	< 28 UJ	38.1	< 200 U	< 20 U	22.1	< 300 UJ
MW09-10D	< 200 U	< 200 U	20.3 J	--	17.3 J	17 J	< 200 U	< 200 U	--	42.6	--	< 300 U	--	< 20 UJ	--	< 300 UJ
MW09-10S	< 200 U	< 200 U	90.6 J	--	< 200 U	< 200 U	< 200 U	< 200 U	--	40.6	--	< 300 UJ	--	< 20 U	--	< 300 U
MW09-11S	< 200 U	< 200 U	< 200 U	--	< 200 U	< 200 U	< 200 U	< 200 U	< 35.1 UJ	< 30.8 UJ	< 16.9 UJ	< 300 UJ	< 200 U	< 20 UJ	< 20 U	< 300 UJ
MW09-14D	< 200 U	< 200 U	< 200 U	--	< 200 U	15.6 J	< 200 U	< 200 U	--	29.5 J	--	< 300 U	--	< 20 UJ	--	< 300 UJ
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	646	519
MW09-17I	--	--	--	--	--	--	--	--	< 53.3 U	51.3 J	71.6	51.8	79.4 J	219 J	693	< 300 UJ
MW09-20D	< 200 U	< 200 U	< 200 U	< 200 U	26.9 J	< 200 U	< 200 U	< 200 U	< 25.5 UJ	< 20.5 UJ	< 15 UJ	28.2 J	< 200 U	< 20 UJ	16.6 J	< 300 UJ
MW09-20I	< 200 U	< 200 U	< 200 U	63 J	92.9 J	< 200 U	81.5 J	< 200 U	117 J	< 62.7 UJ	101	79.6	61.4 J	57.9	49.9 J	< 300 UJ
MW09-21D	271	141 J	< 200 U	162 J	156 J	< 200 U	91.9 J	64.0 J	--	63.3 J	--	64.1	--	20.5 J	--	< 300 UJ
MW09-21S	< 200 U	138 J	106 J	< 200 U	63.6 J	< 200 U	44.7 J	< 200 U	--	49.2 J	--	102	--	< 200 UJ	--	< 600 U
MW09-23D	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	--	< 54.6 U	--	25.3 J	--	< 20 UJ	--	< 12.5 U
MW09-23S	< 200 U	< 200 U	< 200 U	< 200 U	12.6 J	< 200 U	< 200 U	< 200 U	--	< 50.8 UJ	--	55.9	--	< 400 UJ	--	< 1500 UJ
MW09-24D	< 200 U	< 200 U	23.3 J	< 200 U	43.4 J	< 200 U	< 200 U	< 200 U	--	30.9	--	67.6	--	< 20 UJ	--	< 300 UJ
MW09-24S	< 200 U	< 200 U	24.4 J	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	--	28.4 J	--	47.1	--	< 20 UJ	--	< 300 UJ
MW09-25S	< 200 U	< 200 U	< 200 U	23.2 J	24.5 J	< 200 U	27.1 J	< 200 U	< 41.1 UJ	58.4	< 29.9 UJ	< 300 UJ	< 200 U	15.5 J	21.2	< 300 UJ
MW09-26D	--	--	--	--	--	--	--	--	27700 J	31800 J	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 62.9 UJ	33.6 J	20.1 J	< 33.1 U	< 200 U	< 20 UJ	< 20 UJ	< 12.5 U
MW09-27D	--	--	--	--	--	--	--	--	< 34.4 UJ	32 J	23.7 J	25.8 J	< 200 U	< 20 UJ	30.7	< 300 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 70.2 UJ	59.1 J	68.4	47.3	226	24.8 J	32	< 300 U
ANTIMONY, DISSOLVED (6 UG_L)																
MW09-02S	< 6 U	< 6 U	< 6 U	< 2.4 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 2 UJ	--	< 1 UJ
MW09-03D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	3.1	--	< 2.1 U	--	< 2 UJ	--	< 0.15 U
MW09-07S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	3 J	--	< 8 U	--	< 2 UJ	--	< 1 UJ
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 UJ	< 0.15 U
MW09-08S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	2.1 J	< 6 U	< 6 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 U	< 2 U	< 0.15 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 UJ	< 40 UJ
MW09-09S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 UJ	< 2 UJ	< 0.15 U
MW09-10D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	2.3 J	< 6 U	< 6 U	--	< 2.1 U	--	< 1 U	--	< 2 UJ	--	< 0.15 U
MW09-10S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 1 UJ	--	< 2 U	--	< 40 U
MW09-11S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	**12.6**	**6.1**	< 2.6 U	< 1 UJ	< 20 U	< 2 UJ	< 2 U	< 40 UJ
MW09-14D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 8 U	--	< 2 UJ	--	< 0.15 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 UJ	< 40 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 U	< 2 U	< 0.15 UJ
MW09-20D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 UJ	< 2 U	< 0.15 U
MW09-20I	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 UJ	< 10 U	< 0.15 U
MW09-21D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 2 U	--	< 1 UJ
MW09-21S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 20 U	--	< 1 U
MW09-23D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 2 U	--	< 0.15 U
MW09-23S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 40 U	--	< 0.75 U
MW09-24D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	2.4	--	< 2 UJ	--	< 0.15 U
MW09-24S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 2 UJ	--	< 0.15 U
MW09-25S	< 6 U	< 6 U	2.2 J	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 2.1 U	< 2.1 U	< 1 UJ	< 20 U	0.38 J	< 2 UJ	< 0.15 U
MW09-26D	--	--	--	--	--	--	--	--	< 2.1 U	< 2.1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 UJ	< 2 UJ	< 0.15 U
MW09-27D	--	--	--	--	--	--	--	--	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 U	< 2 UJ	< 1 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 2.1 U	3.6	< 2.5 U	3	< 20 U	< 2 U	< 2 UJ	< 1.0 U
ANTIMONY (6 UG_L)																
MW09-02S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 2 UJ	--	< 1 UJ
MW09-03D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	1.4 J	< 6 U	--	3.4	--	< 2.1 U	--	< 2 UJ	--	< 0.15 U
MW09-07S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	2.1 J	< 6 U	< 6 U	--	3.1 J	--	< 8 UJ	--	< 2 UJ	--	< 1 UJ
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 UJ	< 0.15 U
MW09-08S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 U	< 2 UJ	< 0.15 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 UJ	< 0.15 U
MW09-09S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 UJ	< 2 UJ	< 0.15 U
MW09-10D	< 6 U	< 6 U	< 6 U	--	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 1 U	--	< 2 UJ	--	< 0.15 U
MW09-10S	< 6 U	< 6 U	2 J	--	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 1 UJ	--	< 2 U	--	< 0.15 U
MW09-11S	< 6 U	< 6 U	< 6 U	--	< 6 U	< 6 U	< 6 U	< 6 U	**13.3**	**6.2**	< 2.4 U	1.3	< 20 U	< 2 UJ	< 2 U	< 40 UJ
MW09-14D	< 6 U	< 6 U	< 6 U	--	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 8 U	--	< 2 UJ	--	< 0.15 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 UJ	< 0.15 U
MW09-17I	--	--	--	--	--	--	--	--	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 UJ	< 2 U	< 2 U	< 0.15 U
MW09-20D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 UJ	< 2 UJ	< 0.15 U
MW09-20I	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 UJ	< 10 U	< 0.15 U
MW09-21D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 2 U	--	< 1 UJ
MW09-21S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 20 U	--	< 1 U
MW09-23D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 2 U	--	< 0.15 U
MW09-23S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 40 U	--	< 0.75 U
MW09-24D	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	2.2	--	< 2 UJ	--	< 0.15 U
MW09-24S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	--	< 2.1 U	--	< 2.1 U	--	< 2 U	--	< 0.15 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-25S	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 2.1 U	< 2.1 U	< 1 UJ	< 20 U	0.38 J	< 2 UJ	< 0.15 U
MW09-26D	--	--	--	--	--	--	--	--	**13**	**39.9**	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 UJ	< 2 UJ	< 0.15 U
MW09-27D	--	--	--	--	--	--	--	--	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 20 U	< 2 U	< 2 UJ	< 0.15 U
MW09-27S	--	--	--	--	--	--	--	--	< 2.1 U	3.6	< 2.5 U	3	< 20 UJ	< 2 U	< 2 UJ	< 1.0 U
ARSENIC, DISSOLVED (10 UG_L)																
MW09-02S	< 5 U	< 5 U	< 5 U	< 3.3 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 1.7 U	--	< 1.7 U	--	0.58 J	--	3.9 J
MW09-03D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 1.7 U	--	< 1.7 U	--	1.4 J	--	2.5 J
MW09-07S	**17.8**	**22.1**	**20.7**	**20.0 J**	**15.6**	**16.0**	**18.8**	**19.1 J**	--	**17.6**	--	**21.8**	--	**22**	--	**17.6**
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	< 40 UJ
MW09-08S	**11 J**	8.5	< 5 U	**11.7**	< 5 U	9	**10.4 J**	< 5 U	8.1 J	7.6 J	5.5 J	3.7 J	9.3	**11.1**	9.7	9
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	< 40 UJ
MW09-09S	< 5 U	< 5 U	< 5 U	2.7 J	< 5 U	< 5 U	2.7 J	< 5 U	1.7 J	< 1.7 U	< 1.7 U	< 1.7 UJ	< 20 U	< 1 UJ	0.94 J	< 40 U
MW09-10D	7.1 J	7.9	9	7	5.8	6.4	8	< 5 U	--	7	--	8.0	--	8.8	--	**10.7**
MW09-10S	7.9 J	**10.4**	**11.5**	**14.4**	< 5 U	6.2	7.7	< 5 UJ	--	7.7	--	**13.8**	--	**14.3**	--	**10.2**
MW09-11S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	0.76 J	< 5 UJ	< 1.7 UJ	< 1.7 U	< 1.7 U	< 5 U	0.249 J	1.6 J	1.1 J	< 40 UJ
MW09-14D	3.3 J	< 5 U	5.6	8.3	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 1.7 U	--	7.3 J	--	6.2	--	< 40 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**37.1**	**39.6**
MW09-17I	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 UJ	< 1.7 U	0.231 J	0.3 J	0.88 J	< 1.5 U
MW09-20D	4.9 J	< 5 U	< 5 U	5.5	< 5 U	< 5 U	< 5 U	< 5 UJ	3.3 J	< 1.7 U	< 1.7 U	< 1.7 UJ	3.7	5.2	4.4	< 40 UJ
MW09-20I	8.3 J	< 5 U	8.2 J	**11.6 J**	4.9 J	**11.4**	**10.7 J**	< 5 UJ	4.2 J	< 1.7 U	< 1.7 UJ	< 1.7 UJ	7.3	7.1	6.3 J	< 40 U
MW09-21D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	4.3 J	< 5 U	--	< 1.7 U	--	< 1.7 UJ	--	< 1 UJ	--	2.2 J
MW09-21S	8	< 5 U	6.2	**16.4**	< 5 U	**31.2**	6.4 J	**40.3**	--	< 1.7 U	--	< 1.7 UJ	--	6 J	--	9.0
MW09-23D	3.8 J	4.7 J	3.8 J	5.2	< 5 U	6	< 5 U	< 5 U	--	< 1.7 U	--	< 1.7 UJ	--	2.2 J	--	3.2 J
MW09-23S	4.2 J	< 5 U	3.5 J	< 5 U	< 5 U	5	**46.3**	< 5 U	--	< 1.7 U	--	< 1.7 UJ	--	**10.4 J**	--	**11.1 J**
MW09-24D	**19 J**	**26.4**	**19.1**	**17**	**15.3**	**15.5**	**12.4 J**	**21 J**	--	**10.1**	--	**14.3**	--	**20.5**	--	**29.9**
MW09-24S	3.8 J	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	2.7 J	< 5 UJ	--	< 1.7 U	--	< 1.7 UJ	--	3.1 J	--	< 40 UJ
MW09-25S	< 5 U	4.3 J	< 5 U	< 5 U	< 50 U	< 5 U	< 5 UJ	< 5 UJ	< 1.7 UJ	< 1.7 U	< 1.7 U	< 5 U	0.746 J	< 1 UJ	0.85 J	< 1.5 U
MW09-26D	--	--	--	--	--	--	--	--	7.9 J	2.8 J	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1.7 UJ	< 1.7 U	< 1.7 U	< 1.7 U	< 20 U	0.64 J	< 2 U	< 1.5 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.7 UJ	< 1.7 U	< 1.7 U	< 1.7 UJ	1.3	0.89 J	1.5 J	< 1.5 U
MW09-27S	--	--	--	--	--	--	--	--	< 1.7 UJ	< 1.7 U	< 1.7 U	< 1.7 UJ	< 20 U	0.3 J	0.3 J	2.4 J
ARSENIC (10 UG_L)																
MW09-02S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	5.8
MW09-03D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	2.2 J
MW09-07S	**17.4**	**24.4**	**19.4**	**21.6 J**	**13.8**	**16.6**	**18.1**	< 5 U	--	**17.6**	--	**21**	--	**21.2**	--	**18**
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.2	< 40 UJ
MW09-08S	9.8 J	7	< 5 U	9.9	5.7	< 5 U	7.7 J	< 5 U	8.2 J	6.5 J	4.9 J	3.2 J	9.6	**10.3**	10	9.4
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	< 40 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 UJ	< 20 U	< 1 UJ	0.91 J	< 40 UJ
MW09-10D	7.2 J	8.2	8.5	--	3.7 J	< 5 U	7.2	< 5 U	--	6.5	--	8.5	--	9.2	--	**11.4**
MW09-10S	9.1 J	7.7	9.6	--	4.6 J	5.7	**10.3**	< 5 UJ	--	9	--	**13.7**	--	**15.6**	--	**12.6**
MW09-11S	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 1.7 UJ	< 1.7 U	< 1.7 U	< 5 U	0.56 J	< 1 UJ	1.4 J	< 40 UJ
MW09-14D	5	< 5 U	5.1	--	3.8 J	< 5 U	< 5 U	< 5 UJ	--	< 1.7 U	--	< 8 UJ	--	5.6	--	< 40 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**39.5**	**40.8**
MW09-17I	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 UJ	< 1.7 U	0.239 J	0.3 J	0.74 J	< 1.5 U
MW09-20D	3.1 J	< 5 U	< 5 U	4.9 J	< 5 U	5.3	< 5 U	< 5 UJ	2.4 J	< 1.7 U	< 1.7 UJ	< 1.7 UJ	4	5	4.9	< 40 UJ
MW09-20I	7.3 J	< 5 U	< 5 U	**10.9 J**	4 J	**11.5**	4.8 J	< 5 UJ	7.6 J	5.8 J	< 1.7 UJ	< 1.7 UJ	8.3	8.5	8.6 J	< 40 U
MW09-21D	< 5 U	< 5 U	< 5 U	2.3 J	< 5 U	< 5 U	3.5 J	< 5 U	--	< 1.7 U	--	< 1.7 UJ	--	< 1 UJ	--	< 1.5 U
MW09-21S	7.2	< 5 U	3.2 J	**14.9**	< 5 U	**29.5**	5.2 J	**31.9**	--	< 2 UJ	--	< 1.7 UJ	--	4.3 J	--	10
MW09-23D	3.1 J	3.4 J	3.4 J	2.6 J	< 5 U	6.4	< 5 U	< 5 U	--	< 1.7 U	--	< 1.7 UJ	--	2.1 J	--	3.4 J
MW09-23S	3.1 J	< 5 U	2.4 J	< 5 U	< 5 U	5.5	**78.4**	< 5 U	--	< 1.7 U	--	< 1.7 UJ	--	< 20 UJ	--	**13.3 J**
MW09-24D	**21.2 J**	**25.4**	**18.6**	**19.4**	**20.3**	**17**	**15.9 J**	**20.5 J**	--	**12.2**	--	**11.8**	--	**17.1**	--	**29**
MW09-24S	< 5 UJ	< 5 U	3.5 J	4.1 J	< 5 U	< 5 U	1.7 J	< 5 UJ	--	< 1.7 U	--	< 1.7 UJ	--	2.8	--	< 40 UJ
MW09-25S	< 5 U	2.3 J	< 5 U	< 5 U	< 5 U	< 5 U	2.8 J	< 5 UJ	< 1.7 UJ	< 1.7 U	< 3.3 U	< 5 U	0.912 J	< 1 UJ	0.61 J	< 1.5 U
MW09-26D	--	--	--	--	--	--	--	--	**21.5 J**	**18.1 J**	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	1.8 J	< 1.7 U	< 1.7 U	< 1.7 U	< 20 U	< 1 U	< 2 U	2.6 J
MW09-27D	--	--	--	--	--	--	--	--	< 1.7 UJ	< 1.7 U	< 1.7 U	< 1.7 UJ	1.3	0.82 J	1.3 J	< 1.5 U
MW09-27S	--	--	--	--	--	--	--	--	< 1.7 UJ	< 1.7 U	< 1.7 U	< 1.7 UJ	0.312 J	0.3 J	0.33 J	1.5 J
BARIUM, DISSOLVED (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BARIUM (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM, DISSOLVED (4 UG_L)																
MW09-02S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	--	< 1.3 U	--	< 1.3 U	--	< 1 UJ	--	< 0.05 U
MW09-03D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	--	< 1.3 U	--	< 1.3 U	--	< 1 U	--	< 0.05 U
MW09-07S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	0.34 J	< 4 U	--	< 1.3 U	--	< 5 U	--	< 1 U	--	< 0.05 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.05 U
MW09-08S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 U	< 1 U	< 0.05 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.05 U
MW09-09S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	0.23 J	1.3	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 UJ	< 1 U	< 0.05 U
MW09-10D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	--	< 1.3 U	--	< 1 U	--	< 1 UJ	--	< 0.05 U
MW09-10S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	--	< 1.3 U	--	< 1 UJ	--	< 1 U	--	< 0.05 U
MW09-11S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1 UJ	< 5 U	< 1 UJ	< 1 U	< 0.05 U
MW09-14D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	--	< 1.3 U	--	< 5 U	--	< 1 UJ	--	< 0.05 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.05 U
MW09-17I	--	--	--	--	--	--	--	--	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 U	< 1 U	< 0.05 U
MW09-20D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	0.39 J	< 4 U	< 4 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 UJ	< 1 U	< 0.05 U
MW09-20I	< 4 U	< 4 U	< 4 U	2.1 J	< 4 U	2.0 J	0.27 J	< 4 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 UJ	< 5 U	< 0.05 U
MW09-21D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	--	< 1.3 U	--	< 1.3 U	--	< 1 U	--	< 0.05 U
MW09-21S	**6.2**	< 4 U	< 4 U	**5.3**	< 4 U	< 4 U	< 4 UJ	**5.8**	--	< 1.3 U	--	< 1.3 U	--	< 10 U	--	< 0.05 U
MW09-23D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	0.73 J	< 4 U	< 4 U	--	< 1.3 U	--	< 1.3 U	--	< 1 U	--	< 0.05 U
MW09-23S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	**17.2**	< 4 U	--	< 1.3 U	--	< 1.3 U	--	< 20 U	--	< 0.25 U
MW09-24D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	--	< 1.3 U	--	< 1.3 U	--	< 1 UJ	--	< 0.05 U
MW09-24S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	--	< 1.3 U	--	< 1.3 U	--	< 1 UJ	--	< 0.05 U
MW09-25S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1 UJ	< 5 U	< 1 UJ	< 1 U	< 0.05 U
MW09-26D	--	--	--	--	--	--	--	--	< 1.3 U	< 1.3 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 UJ	< 1 U	< 0.05 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 U	< 1 U	< 0.05 U
MW09-27S	--	--	--	--	--	--	--	--	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 UJ	< 1 U	< 0.05 U
BERYLLIUM (4 UG_L)																
MW09-02S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	--	< 1.3 U	--	< 1.3 U	--	< 1 UJ	--	< 0.05 U
MW09-03D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	--	< 1.3 U	--	< 1.3 U	--	< 1 U	--	< 0.05 U
MW09-07S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	--	< 1.3 U	--	< 5 U	--	< 1 UJ	--	< 0.05 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11 J	< 0.05 U
MW09-08S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	0.13 J	< 4 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 U	< 1 U	< 0.05 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.05 U
MW09-09S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 U	< 1 U	< 0.05 U
MW09-10D	< 4 U	< 4 U	< 4 U	--	< 4 U	< 4 U	< 4 U	< 4 UJ	--	< 1.3 U	--	< 1 U	--	< 1 UJ	--	< 0.05 U
MW09-10S	< 4 U	< 4 U	< 4 U	--	< 4 U	< 4 U	< 4 U	< 4 UJ	--	< 1.3 U	--	< 1 UJ	--	< 1 U	--	< 0.05 U
MW09-11S	< 4 U	< 4 U	< 4 U	--	< 4 U	< 4 U	< 4 UJ	< 4 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1 UJ	< 5 U	< 1 U	< 1 U	< 0.05 U
MW09-14D	< 4 U	< 4 U	< 4 U	--	< 4 U	< 4 U	< 4 U	< 4 UJ	--	< 1.3 U	--	< 5 U	--	< 1 UJ	--	< 0.05 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.05 U
MW09-17I	--	--	--	--	--	--	--	--	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 U	< 1 U	< 0.05 U
MW09-20D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	0.32 J	< 4 U	< 4 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 UJ	< 1 U	< 0.05 U
MW09-20I	< 4 U	< 4 U	< 4 U	2.3 J	< 4 U	2 J	< 4 UJ	< 4 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 UJ	< 5 U	< 0.05 U

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-21D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	--	< 1.3 U	--	< 1.3 U	--	< 1 U	--	< 0.05 U
MW09-21S	**6.1**	< 4 U	< 4 U	**5.3**	< 4 U	< 4 U	< 4 UJ	**6**	--	< 1.3 U	--	< 1.3 U	--	< 10 U	--	< 0.05 U
MW09-23D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	0.63 J	< 4 U	< 4 U	--	< 1.3 U	--	< 1.3 U	--	< 1 U	--	< 0.05 U
MW09-23S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	**16.8**	< 4 U	--	< 1.3 U	--	< 1.3 U	--	< 20 U	--	< 0.25 U
MW09-24D	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	--	< 1.3 U	--	< 1.3 U	--	< 1 U	--	< 0.05 U
MW09-24S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	--	< 1.3 U	--	< 1.3 U	--	< 1 U	--	< 0.05 U
MW09-25S	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 UJ	< 4 UJ	< 1.3 U	< 1.3 U	< 1.3 U	< 1 UJ	< 5 U	< 1 UJ	< 1 U	< 0.05 U
MW09-26D	--	--	--	--	--	--	--	--	< 1.3 U	**18.2**	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 UJ	< 1 U	< 0.05 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 U	< 1 U	< 0.05 U
MW09-27S	--	--	--	--	--	--	--	--	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 5 U	< 1 UJ	< 1 U	< 0.05 U
CADMIUM, DISSOLVED (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CALCIUM, DISSOLVED (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CALCIUM (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM, TOTAL, DISSOLVED (100 UG_L)																
MW09-02S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	0.63 J	--	1.5 J	--	0.7 J	--	< 2 UJ	--	< 0.44 U
MW09-03D	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	0.51 J	--	2.5 J	--	2.2 J	--	0.22 J	--	< 15 UJ
MW09-07S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	0.88 J	--	0.55 J	--	< 2 UJ	--	< 15 UJ
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 15 UJ
MW09-08S	< 10 U	< 10 U	0.62 J	< 10 U	< 10 U	< 10 U	< 10 U	0.86 J	3.1 J	2.2 J	2.7 J	3.7 J	< 20 U	0.59 J	0.26 J	< 15 UJ
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.33 J	< 15 UJ
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	0.69 J	< 10 U	< 10 U	1.2 J	4.7 J	4.8 J	6.2 J	4 J	< 20 U	0.91 J	1.1 J	< 15 UJ
MW09-10D	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	0.62 J	--	1.2 J	--	< 3 U	--	0.27 J	--	< 0.44 U
MW09-10S	< 10 U	< 10 U	< 10 U	< 10 U	0.79 J	< 10 U	< 10 U	< 10 UJ	--	2 J	--	< 3 UJ	--	0.53 J	--	< 15 U
MW09-11S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	< 2.2 UJ	< 0.96 UJ	1.8 J	< 3 UJ	< 20 U	< 2 UJ	< 2 U	< 15 UJ
MW09-14D	< 10 U	< 10 U	0.55 J	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	1.4 J	--	0.59 J	--	0.14 J	--	< 0.44 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 0.44 U
MW09-17I	--	--	--	--	--	--	--	--	2.3 J	1.8 J	2.8 J	2.2 J	< 20 U	9.6	< 2 U	< 15 UJ
MW09-20D	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 2.4 UJ	1.9 J	3 J	2 J	< 20 U	< 2 UJ	< 2 U	< 15 UJ
MW09-20I	3.5 J	3.4 J	2.5 J	1.5 J	2.9 J	< 10 U	2.2 J	< 10 UJ	< 5 UJ	5.3 J	4.7 J	4 J	2.3 J	2.2	2.3 J	3.3 J
MW09-21D	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	1.9 J	--	3.9 J	--	0.81 J	--	< 0.44 U
MW09-21S	< 10 U	1.1 J	1.5 J	1.2 J	1.5 J	< 10 U	< 10 U	< 10 U	--	4.3 J	--	5.7 J	--	1.7 J	--	< 30 U
MW09-23D	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	7.0 J	--	1.9 J	--	0.75 J	--	< 15 UJ
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	8.9 J	--	6.4 J	--	6.2 J	--	< 75 UJ
MW09-24D	< 10 U	< 10 U	< 10 U	< 10 U	0.88 J	< 10 U	< 10 UJ	< 10 UJ	--	0.84 J	--	< 16.7 U	--	0.14 J	--	< 15 UJ
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 U	1.1 J	< 10 U	< 10 UJ	< 10 UJ	--	1.2 J	--	< 16.7 U	--	0.14 J	--	< 0.44 U
MW09-25S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 1.6 UJ	1.4 J	< 1.3 UJ	< 3 UJ	< 20 U	0.92 J	< 2 U	< 15 UJ
MW09-26D	--	--	--	--	--	--	--	--	< 1.4 UJ	0.84 J	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.55 UJ	1.5 J	1.3 J	0.63 J	< 20 U	< 2 UJ	0.51 J	< 0.44 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.4 UJ	1.1 J	1.2 J	1.3 J	< 20 U	0.43 J	< 2 U	< 0.44 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.65 UJ	0.86 J	1.1 J	0.5 J	< 20 U	0.83 J	0.36 J	< 0.44 U
CHROMIUM, TOTAL (100 UG_L)																
MW09-02S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	0.44 J	--	1 J	--	2.3 J	--	0.25 J	--	< 15 UJ
MW09-03D	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	0.67 J	--	2.6 J	--	2.5 J	--	0.38 J	--	< 15 UJ
MW09-07S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	1.6 J	--	0.95 J	--	0.28 J	--	< 15 UJ
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2 J	< 15 UJ
MW09-08S	< 10 U	< 10 U	0.53 J	< 10 U	< 10 U	< 10 U	0.39 J	0.64 J	< 3.1 UJ	2.6 J	3.2 J	3.5 J	< 20 U	0.37 J	0.56 J	< 15 UJ
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.49 J	< 15 UJ
MW09-09S	0.94 J	< 10 U	0.53 J	< 10 U	0.81 J	< 10 U	< 10 U	0.98 J	4.7 J	4.7 J	5.5 J	4.1 J	< 20 U	1.2 J	0.95 J	< 0.44 U
MW09-10D	< 10 U	< 10 U	< 10 U	--	< 10 U	< 10 U	< 10 U	0.34 J	--	1.7 J	--	< 3 U	--	0.3 J	--	< 0.44 U
MW09-10S	< 10 U	< 10 U	< 10 U	--	1 J	< 10 U	< 10 U	< 10 UJ	--	2.1 J	--	< 3 UJ	--	0.58 J	--	< 15 U
MW09-11S	< 10 U	< 10 U	0.73 J	--	< 10 U	< 10 U	< 10 UJ	< 10 UJ	< 2.2 UJ	< 2.2 UJ	1.4 J	< 3 U	< 20 U	0.3 J	0.5 J	< 15 UJ
MW09-14D	< 10 U	< 10 U	< 10 U	--	1.2 J	< 10 U	< 10 U	< 10 UJ	--	1.5 J	--	0.93 J	--	< 2 UJ	--	< 15 UJ
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.16 J	< 0.44 U
MW09-17I	--	--	--	--	--	--	--	--	2.5 J	2.7 J	2.5 J	2.1 J	< 20 U	12.8	1.5 J	< 15 UJ
MW09-20D	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 2.6 UJ	2 J	4 J	1.9 J	< 20 U	< 2 UJ	0.44 J	< 15 UJ
MW09-20I	4.7 J	3.4 J	3.0 J	2.9 J	4.9 J	< 10 U	3.3 J	< 10 UJ	6.3 J	5 J	5.4 J	4.6 J	3.1 J	2.6	5.2 J	4.1 J
MW09-21D	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	1.7 J	--	2.3 J	--	< 2 UJ	--	< 15 UJ
MW09-21S	3.2 J	2 J	6.7 J	1.2 J	1.1 J	< 10 U	< 10 U	< 10 U	--	4.3 J	--	6.4 J	--	5 J	--	< 30 U
MW09-23D	< 10 U	< 10 U	1.3 J	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	7.7 J	--	2 J	--	< 2 UJ	--	< 0.44 U
MW09-23S	< 10 U	4.7 J	4.5 J	12.9	< 10 U	< 10 U	< 10 U	5.1 J	--	8 J	--	6.7 J	--	< 40 UJ	--	< 75 UJ
MW09-24D	< 10 U	< 10 U	0.8 J	< 10 U	0.69 J	< 10 U	< 10 UJ	< 10 UJ	--	1.1 J	--	< 16.7 U	--	< 2 UJ	--	< 0.44 U
MW09-24S	< 10 U	< 10 U	0.63 J	< 10 U	1.2 J	< 10 U	< 10 UJ	< 10 UJ	--	1 J	--	< 16.7 U	--	< 2 UJ	--	< 0.44 U
MW09-25S	< 10 U	< 10 U	0.74 J	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 1.8 UJ	1.5 J	2.8 J	< 3 UJ	< 20 U	< 2 UJ	0.43 J	< 15 UJ
MW09-26D	--	--	--	--	--	--	--	--	39.3 J	23.4	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.67 UJ	0.99 J	1.2 J	< 16.7 U	< 20 U	0.25 J	0.62 J	< 0.44 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.4 UJ	1.1 J	1.4 J	1 J	< 20 U	< 2 UJ	< 2 U	< 15 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 16.7 U	0.96 J	0.78 J	0.7 J	< 20 U	< 2 UJ	0.42 J	< 0.44 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
COBALT, DISSOLVED (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COBALT (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER, DISSOLVED (UG_L)																
MW09-02S	< 25 U	< 25 U	< 25 U	< 25 UJ	1.6 J	2.7 J	< 25 U	< 25 U	--	< 0.96 UJ	--	4.2	--	1.1 J	--	2.8 J
MW09-03D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	< 0.96 UJ	--	< 0.96 U	--	0.35 J	--	< 0.7 U
MW09-07S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	134	--	< 25 U	--	0.24 J	--	< 0.7 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 0.7 UJ
MW09-08S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 0.96 U	5.6 J	< 0.96 U	< 0.96 U	< 30 U	0.33 J	< 2 U	< 0.7 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	1 J
MW09-09S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 0.96 U	< 0.96 U	< 0.96 UJ	< 0.96 U	< 30 U	0.48 J	< 2 U	< 0.7 UJ
MW09-10D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	97.7	--	< 1 U	--	0.24 J	--	< 0.7 UJ
MW09-10S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	120	--	< 1 U	--	0.31 J	--	< 0.7 U
MW09-11S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 0.96 U	< 0.96 U	< 0.96 UJ	< 1 UJ	< 30 UJ	0.21 J	< 2 U	0.76 J
MW09-14D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	75.9 J	--	< 25 U	--	0.23 J	--	< 0.7 UJ
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.88 J	< 0.7 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 0.96 U	6.1 J	< 0.96 U	< 0.96 U	< 30 U	< 2 U	< 2 U	< 0.7 UJ
MW09-20D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 0.96 U	< 6.9 UJ	< 0.96 UJ	< 0.96 U	< 30 U	0.26 J	< 2 U	< 0.7 UJ
MW09-20I	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	1.3 J	< 25 U	< 25 U	< 0.96 U	< 7.7 UJ	< 0.96 U	< 0.96 U	< 30 U	0.35 J	< 10 U	< 0.7 UJ
MW09-21D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	8.0 J	--	< 0.96 U	--	0.33 J	--	< 0.7 U
MW09-21S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	2.7 J	--	4.7 J	--	< 0.96 U	--	< 20 U	--	< 1.4 U
MW09-23D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	1.5 J	--	< 0.96 U	--	< 0.96 U	--	0.23 J	--	0.89 J
MW09-23S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	< 0.96 U	--	< 0.96 U	--	< 40 U	--	< 3.5 U
MW09-24D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	55.7 J	--	< 0.96 U	--	0.27 J	--	< 0.7 UJ
MW09-24S	< 25 U	< 25 U	< 25 U	< 25 U	1.5 J	< 25 U	< 25 U	< 25 U	--	57.2 J	--	< 0.96 U	--	< 2 U	--	< 0.7 UJ
MW09-25S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 0.96 U	140	< 0.96 UJ	< 1 U	< 30 U	0.73 J	< 2 U	< 0.7 UJ
MW09-26D	--	--	--	--	--	--	--	--	< 1.2 UJ	< 10.9 UJ	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.96 U	6.3 J	< 0.9 UJ	< 0.96 U	< 30 U	0.66 J	0.68 J	< 0.7 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.96 U	< 0.96 UJ	< 0.96 U	< 0.96 U	< 30 U	0.44 J	< 2 U	1.5 J
MW09-27S	--	--	--	--	--	--	--	--	< 2 UJ	12 J	< 1.2 U	< 0.96 U	< 30 U	1.7 J	1.2 J	1.5 J
COPPER (UG_L)																
MW09-02S	< 25 U	< 25 U	< 25 U	< 25 U	1.4 J	2.6 J	< 25 U	< 25 U	--	< 0.96 UJ	--	5.0	--	< 2 UJ	--	2.9 J
MW09-03D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	< 0.96 UJ	--	< 0.96 U	--	< 2 UJ	--	< 0.7 U
MW09-07S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	96.7	--	2.4 J	--	5.4	--	4 J
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.7	< 0.7 UJ
MW09-08S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 0.96 U	3 J	< 0.96 U	< 0.96 U	< 30 U	0.36 J	< 2 U	< 0.7 U

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 0.7 UJ
MW09-09S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 0.96 U	65.8	< 0.96 UJ	< 0.96 U	< 30 U	< 2 UJ	< 2 U	< 0.7 UJ
MW09-10D	< 25 U	< 25 U	< 25 U	--	< 25 U	< 25 U	< 25 U	< 25 U	--	98.5	--	< 1 U	--	< 2 UJ	--	< 0.7 UJ
MW09-10S	< 25 U	< 25 U	< 25 U	--	< 25 U	< 25 U	< 25 U	< 25 U	--	98.8	--	< 1 UJ	--	< 2 U	--	< 0.7 U
MW09-11S	< 25 U	< 25 U	< 25 U	--	< 25 U	< 25 U	< 25 U	< 25 U	< 0.96 U	< 0.96 U	< 0.96 UJ	< 1 U	< 30 U	< 2 UJ	0.83 J	1.7 J
MW09-14D	< 25 U	< 25 U	< 25 U	--	< 25 U	< 25 U	< 25 U	< 25 U	--	81.9 J	--	< 25 U	--	< 2 UJ	--	< 0.7 UJ
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.1 J	< 0.7 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 0.96 U	2.6 J	< 0.96 U	< 0.96 U	< 30 UJ	0.80 J	1.4 J	< 0.7 UJ
MW09-20D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 0.96 U	< 7 UJ	< 0.96 UJ	< 0.96 U	< 30 U	< 2 UJ	0.58 J	< 0.7 UJ
MW09-20I	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 0.96 U	< 11 UJ	< 0.96 U	< 0.96 U	< 30 UJ	< 2 UJ	< 10 U	< 0.7 UJ
MW09-21D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	6.7 J	--	< 0.96 U	--	0.33 J	--	< 0.7 U
MW09-21S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	1.7 J	--	6.8 J	--	< 0.96 U	--	< 20 U	--	< 1.4 U
MW09-23D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	0.95 J	< 25 U	1.4 J	--	< 0.96 U	--	< 0.96 U	--	0.45 J	--	< 0.7 U
MW09-23S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	0.92 J	--	< 0.96 U	--	< 0.96 U	--	< 40 U	--	< 3.5 U
MW09-24D	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	54.3 J	--	< 0.96 U	--	< 2 UJ	--	< 0.7 UJ
MW09-24S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	--	68.5 J	--	< 0.96 U	--	< 2 U	--	< 0.7 UJ
MW09-25S	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 0.96 U	106	< 0.96 UJ	< 1 UJ	< 30 U	0.9 J	0.55 J	< 0.7 UJ
MW09-26D	--	--	--	--	--	--	--	--	78.1 B	< 0.96 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.87 UJ	8.5 J	0.63 J	< 0.96 U	< 30 U	< 2 UJ	0.61 J	< 0.7 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.96 U	< 0.96 UJ	< 0.96 U	< 0.96 U	< 30 U	0.59 J	0.96 J	2.8 J
MW09-27S	--	--	--	--	--	--	--	--	< 2.3 UJ	13.7 J	< 1.5 U	< 1.1 U	< 30 UJ	2.1	2.6	< 0.7 U
IRON, DISSOLVED (UG_L)																
MW09-02S	< 100 U	15.6 J	< 100 U	< 100 U	12.6 J	< 100 U	< 100 U	638 J	--	27.7 J	--	53.8 J	--	< 200 U	--	< 100 U
MW09-03D	1630	1930	1660 J	318	2000	502	1400	1960 J	--	565	--	1680 B	--	515	--	1270
MW09-07S	17300	17600	18000	17500	17400	17500	16100	17400	--	18200	--	15100	--	16000	--	13600
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9460	10900
MW09-08S	4720	4790	4390 J	4340	4550	4900	4600	6470 J	5770	5960 J	5700	5770	6050	6130	5680	6390
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 200 U	< 100 UJ
MW09-09S	476	1440	538	512	703	729	628	976 J	922	631	488	490	707	533	794	1300
MW09-10D	823	924	827	822	846	918	820	912 J	--	994	--	833	--	880	--	873
MW09-10S	15700	15800	10100	11300	21400	14800	15600	13100	--	12500	--	6860	--	7520	--	9390
MW09-11S	8290	4370	6010	9250	3460	2370	1780	2790	2710	1310 J	1540	1640	2900	1770	1770	2480
MW09-14D	27400	29800	34000	28700	29600	31500	27500	30000	--	27500	--	29800	--	29700	--	34400
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9350	10600
MW09-17I	--	--	--	--	--	--	--	--	10400	9560 J	9710	8730	9690	9110	8210	8400
MW09-20D	2890	2760	2870 J	3040	3280	3390	3430	2970	3600	3840 J	3230	3330 J	4070	3760	3130	3520
MW09-20I	22200	21500	26900 J	22300	35800	25100	6400	20700	32300	29500 J	18520	23300 J	27300	22600	22000	25500
MW09-21D	< 100 U	820	1370	917	240	2380	2030	2340	--	443 J	--	235	--	619	--	< 100 U
MW09-21S	2010	1730	1740	2190	2110	2270	2610	2150	--	2400 J	--	2490	--	2290	--	2610
MW09-23D	3380	3370	2950	2640	2770	3240	2710	2360	--	6820 J	--	2200	--	2220	--	1990
MW09-23S	12500	5860	7070	7340	13400	8320	8300	2260	--	7990 J	--	3230	--	8050	--	< 500 U
MW09-24D	36100	35200	32200	34000	38300	34400	34400	45200	--	48500	--	64500 J	--	75900	--	126000
MW09-24S	34400	70500	20900	35400	39500	35900	33400	67700	--	17900	--	33400 J	--	39100	--	33800
MW09-25S	20000	12600	16000	16100	15800	18000	15000	9590	11600	6710	7650	13300	15200	1170	10900	6390
MW09-26D	--	--	--	--	--	--	--	--	8760	3180 J	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 23.7 U	56.5 J	< 12.3 UJ	50 J	< 200 U	< 200 UJ	< 200 UJ	< 5.17 U
MW09-27D	--	--	--	--	--	--	--	--	2720	2720	2260	2200 J	1680	836	1150	1100
MW09-27S	--	--	--	--	--	--	--	--	17900	4180 J	2260	6500 J	< 200 UJ	319	2050	< 100 U
IRON (UG_L)																
MW09-02S	< 100 U	107	181	225	44.2 J	197	< 100 U	533 J	--	52.6 J	--	465	--	< 200 UJ	--	< 100 U
MW09-03D	3160	1930	2770 J	1590	1740	734	1630	2050 J	--	898	--	1650	--	1700	--	1710
MW09-07S	17900	18100	18200	18200	16900	16100	15900	16500	--	19500	--	15800	--	14900	--	14800
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12500	11400
MW09-08S	5130	4760	4300 J	4800	4650	4930	4650	6450 J	5600	6020 J	5500	5530	6310	5780	5790	6480
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 200 UJ	< 100 UJ
MW09-09S	3310	1590	689	666	758	745	650	959 J	1200	1230	559	635	569	625	896	1310
MW09-10D	871	919	851	--	910	971	844	913 J	--	1110	--	886	--	931	--	882
MW09-10S	12600	16100	11100	--	21300	15400	12700	13300	--	11900	--	7360	--	7350	--	9390
MW09-11S	12300	4490	6500	--	3560	2240	2720	2960	3090	1440 J	1820	1780	3460	1800	2220	2570
MW09-14D	27600	30000	33700	--	30300	31900	28200	30200	--	32900	--	31000	--	28600	--	32200
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10700	11500
MW09-17I	--	--	--	--	--	--	--	--	10800	10300 J	9740	8330	9910	9380	10500	8140
MW09-20D	2560	2600	2930 J	2990	3520	3410	3400	3060	3630	3960 J	3310	3350 J	4120	3810	3820	3610
MW09-20I	23100	20300	26200 J	18800	29300	23500	22500	20500	29900	30900 J	19000	23000 J	28300	23000	25200	27600
MW09-21D	1390	1550	1420	1520	1210	2550	2810	2350	--	1840 J	--	713	--	144 J	--	< 100 U
MW09-21S	2040	2320	2430	2450	2150	2280	2670	2290	--	2470 J	--	2720	--	2330	--	2660
MW09-23D	3580	3170	4020	2890	2920	3720	2920	3170	--	8140 J	--	2280	--	2400	--	1970
MW09-23S	11500	8310	7860	6970	13300	9560	9170	2170	--	7950 J	--	3240	--	7580	--	< 500 U
MW09-24D	36900	36300	32900	34400	38300	34400	38900	45900	--	47400	--	56900 J	--	74200	--	127000
MW09-24S	35600	73200	21300	37300	40800	37500	34100	64200	--	19800	--	33700 J	--	38000	--	34200

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-25S	19900	11500	16700	18200	14900	18800	15400	8320	12500	7180	7230	12300	16400	1650	12100	6560
MW09-26D	--	--	--	--	--	--	--	--	69600	306000 J	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 100 U	49.9 J	< 13 UJ	30.7 J	< 200 U	< 200 UJ	< 200 UJ	< 100 UJ
MW09-27D	--	--	--	--	--	--	--	--	2670	2870	2260	2300 J	1700	864	1280	< 100 U
MW09-27S	--	--	--	--	--	--	--	--	18500	2890 J	2450	6580 J	647	416	2360	< 100 U
LEAD, DISSOLVED (15 UG_L)																
MW09-02S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 2.6 U	--	< 2.6 U	--	< 1 UJ	--	< 1.02 U
MW09-03D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	1.5 J	< 5 U	< 5 U	--	< 2.6 U	--	< 2.6 UJ	--	< 1 UJ	--	< 1.02 U
MW09-07S	< 5 U	< 5 U	< 5 U	< 5 U	1.6 J	< 5 U	< 5 U	< 5 U	--	< 2.6 U	--	1.4 J	--	< 1 UJ	--	< 1.02 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 1.02 U
MW09-08S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 2.6 UJ	< 2.6 UJ	< 2.6 U	< 2.6 UJ	< 10 U	< 1 U	< 1 UJ	< 1.02 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 1.02 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 0.86 U	< 2.6 U	< 2.6 UJ	< 2.6 U	< 10 U	0.39 J	< 1 UJ	< 1.02 U
MW09-10D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 2.6 U	--	< 1 U	--	< 1 UJ	--	< 1.02 U
MW09-10S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 0.7 UJ	--	< 1 UJ	--	< 1 U	--	< 1.02 U
MW09-11S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 UJ	< 2.6 U	< 2.6 UJ	< 1 U	< 10 UJ	< 1 UJ	< 1 U	< 1.02 U
MW09-14D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 1.3 UJ	--	< 5 U	--	< 1 UJ	--	< 1.02 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 1.02 U
MW09-17I	--	--	--	--	--	--	--	--	< 2.6 U	< 2.6 UJ	< 2.6 U	< 2.6 U	< 10 U	< 1 U	< 1 U	< 1.02 U
MW09-20D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 2 UJ	< 2.6 U	< 2.6 UJ	< 2.6 U	< 10 U	< 1 UJ	< 1 UJ	< 1.02 U
MW09-20I	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	1 J	< 5 U	< 5 U	< 3.6 UJ	< 2.1 UJ	< 0.68 UJ	< 2.6 U	< 10 U	< 1 UJ	< 5 U	< 1.02 U
MW09-21D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 2.6 U	--	< 2.6 UJ	--	< 1 UJ	--	< 1.02 U
MW09-21S	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 2.6 UJ	--	< 2.6 UJ	--	< 10 U	--	< 2.04 U
MW09-23D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 2.6 U	--	< 2.6 U	--	< 1 UJ	--	< 1.02 U
MW09-23S	< 5 U	< 5 U	< 5 U	2.1 J	< 5 U	< 5 U	8.4	< 5 U	--	< 2.6 U	--	< 2.6 U	--	< 20 U	--	< 5.1 U
MW09-24D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 2.5 UJ	--	1.9 J	--	< 1 UJ	--	< 5 UJ
MW09-24S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 1.8 UJ	--	3.2 J	--	< 1 UJ	--	< 1.02 U
MW09-25S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1.6 UJ	< 2.6 U	< 2.6 UJ	< 1 UJ	< 10 U	< 1 UJ	< 1 UJ	< 1.02 U
MW09-26D	--	--	--	--	--	--	--	--	< 2.5 UJ	0.82 J	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.96 UJ	< 2.6 UJ	< 1.4 UJ	< 2.6 UJ	< 10 U	< 1 UJ	< 1 UJ	< 1.02 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.7 UJ	< 2.6 U	< 2.6 U	< 2.6 U	< 10 U	< 1 UJ	< 1 UJ	< 1.02 U
MW09-27S	--	--	--	--	--	--	--	--	< 1.7 UJ	< 2.6 UJ	< 2.6 U	< 2.6 U	< 10 U	< 1 UJ	< 1 UJ	< 1.02 U
LEAD (15 UG_L)																
MW09-02S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 2.6 U	--	< 2.6 U	--	< 1 UJ	--	< 1.02 U
MW09-03D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 2.6 U	--	< 2.6 UJ	--	< 1 UJ	--	< 1.02 U
MW09-07S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 0.94 UJ	--	< 5 U	--	< 1 UJ	--	1.3 J
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.9	< 1.02 U
MW09-08S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1.9 UJ	< 2.6 UJ	< 2.6 U	< 2.6 UJ	< 10 U	< 1 U	< 1 UJ	< 1.02 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.26 J	1.2 J
MW09-09S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1.3 U	< 2.6 U	< 2.6 UJ	< 2.6 U	< 10 U	< 1 UJ	< 1 UJ	< 1.02 U
MW09-10D	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5 U	0.96 J	< 5 U	--	< 2.6 U	--	< 1 U	--	< 1 UJ	--	< 1.02 U
MW09-10S	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 U	< 5 U	--	< 0.69 UJ	--	< 1 UJ	--	< 1 U	--	< 1.02 U
MW09-11S	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 U	< 5 U	< 1.7 UJ	< 2.6 U	< 2.6 UJ	< 1 UJ	< 10 UJ	< 1 UJ	< 1 U	< 1.02 U
MW09-14D	< 5 U	< 5 U	< 5 U	--	< 5 U	< 5 U	< 5 U	< 5 U	--	< 1.8 UJ	--	< 5 U	--	< 1 UJ	--	< 1.02 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 1.02 U
MW09-17I	--	--	--	--	--	--	--	--	< 2.6 U	< 2.6 UJ	< 2.6 U	< 2.6 U	< 10 U	0.35 J	0.67 J	< 1.02 U
MW09-20D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	1.1 J	< 5 U	< 5 U	< 2.6 U	< 2.6 U	< 2.6 UJ	< 2.6 U	< 10 U	< 1 UJ	0.33 J	< 1.02 U
MW09-20I	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3.6 UJ	< 2 UJ	< 1.2 UJ	< 0.61 UJ	< 10 U	< 1 UJ	< 5 UJ	< 1.02 U
MW09-21D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 2.6 U	--	< 2.6 UJ	--	< 1 UJ	--	< 1.02 U
MW09-21S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 2.6 UJ	--	< 2.6 UJ	--	< 10 U	--	< 2.04 U
MW09-23D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	1.3 J	< 5 U	< 5 U	--	< 2.6 U	--	< 2.6 U	--	< 1 UJ	--	< 1.02 U
MW09-23S	< 10 U	< 5 U	< 5 U	3 J	< 5 U	< 5 U	8.199999	< 5 U	--	< 2.6 U	--	< 2.6 U	--	< 20 U	--	< 5.1 U
MW09-24D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 2.5 UJ	--	1.4 J	--	< 1 UJ	--	< 1.02 U
MW09-24S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 1.9 UJ	--	3.4 J	--	< 1 UJ	--	< 1.02 U
MW09-25S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	4.8 J	< 1 UJ	< 4 UJ	< 1 UJ	< 10 UJ	0.43 J	0.47 J	2.5 J
MW09-26D	--	--	--	--	--	--	--	--	**26.4 J**	< 36.1 UJ	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.87 UJ	< 2.6 UJ	< 2.6 UJ	< 2.6 UJ	< 10 U	< 1 UJ	< 1 UJ	< 1.02 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.7 UJ	< 2.6 U	< 2.6 U	< 2.6 U	< 10 U	< 1 UJ	< 1 UJ	< 1.02 U
MW09-27S	--	--	--	--	--	--	--	--	< 2.3 UJ	< 2.6 UJ	< 0.77 UJ	< 2.6 U	< 10 UJ	< 1 UJ	< 1 UJ	< 1.02 U
MAGNESIUM, DISSOLVED (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAGNESIUM (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE, DISSOLVED (UG_L)																
MW09-02S	16.7	43.3	1.1 J	2.1 J	99.6	< 15 U	< 15 U	651 J	--	< 1.4 U	--	12.9	--	3.4 J	--	164
MW09-03D	1040	1040	973	901	1020	956	971	1010 J	--	1110	--	788	--	711 J	--	768
MW09-07S	176	172	175	178	167	169	177	193	--	187	--	145	--	190 J	--	138
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	589	486
MW09-08S	872	865	844	825	795	881	834	857 J	850	903 J	826	875	857	880 J	862	809
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 UJ	< 0.67 U
MW09-09S	1140	1830	1280	1230	1670	1410	1250	1870 J	1090	902	848	974	855	997 J	838	1440
MW09-10D	382	412	398	398	391	410	385	404 J	--	432	--	372	--	388 J	--	415
MW09-10S	402	413	362	359	440	373	344	370	--	366	--	258	--	269 J	--	343
MW09-11S	1320	865	1120	1660	873	409	413	421	921	383 J	278	691	1110	500 J	524	808
MW09-14D	1060	1160	1040	1080	1090	1190	966	1100	--	984	--	982	--	953 J	--	1040
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	929	490
MW09-17I	--	--	--	--	--	--	--	--	1090	1050 J	985	1060	1030	981	924	906
MW09-20D	913	944	936	953	1030	1030	1140	960	1130	1190	1030	1030	1170	1100 J	1010	1080
MW09-20I	751	774	857	756	1010	808	946	738	913	847	673	799	871	783 J	816	878
MW09-21D	371	434	483	436	313	546	491	532	--	376 J	--	158	--	156	--	123
MW09-21S	82	82	61.4	71.7	70.6	62.2	74.3	56.2	--	73.4 J	--	63.3	--	59.8	--	62.8
MW09-23D	688	690	618	565	609	621	661	619	--	573 J	--	549	--	526	--	538
MW09-23S	436	364	402	416	464	431	469	359	--	416 J	--	323	--	422	--	357
MW09-24D	343	330	313	348	330	349	381	423	--	432	--	540	--	731 J	--	993
MW09-24S	939	2490	706	1000	1090	944	878	2090	--	485	--	943	--	1080 J	--	885
MW09-25S	401	245	583	449	322	242	239	144	529	548	144	390	927	135	405	511
MW09-26D	--	--	--	--	--	--	--	--	1130	618	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	123	34 J	17.1	23.4	9.5 J	4.5 J	7.7	7.8
MW09-27D	--	--	--	--	--	--	--	--	447	432	405	397	429	463	622	320
MW09-27S	--	--	--	--	--	--	--	--	454	354 J	140	387	92.8	94	707	34.3
MANGANESE (UG_L)																
MW09-02S	28.9	53	14.5 J	18.2	95	26	10.7 J	936 J	--	15	--	88.3 J	--	10.9	--	171
MW09-03D	1010	1040	970	913	992	973	974	996 J	--	1210	--	811 J	--	695	--	791
MW09-07S	183	175	186	183	167	170	174	185	--	194	--	151	--	169	--	142
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	651	497
MW09-08S	860	850	831	844	805	860	825	866 J	830	929	804	873	893	847	883	818
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.9 J	< 5 UJ
MW09-09S	1130	1850	1260	1320	1650	1440	1270	1850 J	1040	913	792	993	872	995	811	1390
MW09-10D	382	406	405	--	394	423	379	404 J	--	459	--	395	--	408	--	414
MW09-10S	382	409	385	--	439	381	344	362	--	361	--	268	--	267	--	339
MW09-11S	1860	860	1160	--	864	385	364	434	956	382 J	277	692	1130	494	561	839
MW09-14D	1060	1140	1030	--	1080	1220	994	1040	--	982	--	985	--	935	--	966
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	961	463
MW09-17I	--	--	--	--	--	--	--	--	1060	1110	994	1050	1080	990	984	889
MW09-20D	901	905	935	924	1030	1020	1130	985	1140	1180	1030	1030	1170	1130	1110	1110
MW09-20I	781	754	835	699	870	773	779	733	893	824	685	797	885	795	886	943

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-21D	392	439	381	426	326	539	505	521	--	362	--	163	--	153	--	115
MW09-21S	79.4	80.1	96.5	72.2	68.6	60.8	73.7	58.1	--	63.3	--	66.8	--	60.9	--	62.8
MW09-23D	666	642	671	573	600	639	634	622	--	569 J	--	555	--	514	--	536
MW09-23S	436	392	390	433	462	438	453	350	--	422 J	--	322	--	405	--	365
MW09-24D	338	338	318	342	331	347	381	424	--	433	--	537	--	718	--	994
MW09-24S	943	2580	682	1030	1130	959	880	1980	--	512	--	944	--	1080	--	884
MW09-25S	383	219	578	506	290	242	245	122	598	535	139	354	945	134	416	509
MW09-26D	--	--	--	--	--	--	--	--	1610	34100	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	130	31.6	16.8	25.2 J	10 J	4.1	8.9	7.6
MW09-27D	--	--	--	--	--	--	--	--	430	450	401	408	433	466	644	298
MW09-27S	--	--	--	--	--	--	--	--	447	303	141	393	117	97.4	721	32.7
MERCURY, DISSOLVED (2 UG_L)																
MW09-02S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	--
MW09-03D	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	--
MW09-07S	< 0.2 U	0.076 J	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U	< 0.02 U
MW09-08S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	< 0.2 U	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U	< 0.02 UJ
MW09-09S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 U	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.02 UJ
MW09-10D	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.2 U	--	< 0.2 UJ	--	< 0.02 UJ
MW09-10S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.2 U	--	< 0.2 U	--	< 0.02 U
MW09-11S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.02 U
MW09-14D	< 0.2 U	0.083 J	< 0.06 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	< 0.02 UJ
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U	< 0.02 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 0.044 U	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW09-20D	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.02 UJ
MW09-20I	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.02 UJ
MW09-21D	0.096 J	0.079 J	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 U	--	--
MW09-21S	0.075 J	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 U	--	--
MW09-23D	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 U	--	--
MW09-23S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	0.035 J	--	--
MW09-24D	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	< 0.02 U
MW09-24S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	< 0.02 U
MW09-25S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 UJ
MW09-26D	--	--	--	--	--	--	--	--	< 0.044 UJ	< 0.044 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 UJ	< 0.2 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	< 0.2 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	< 0.2 U	--
MERCURY (2 UG_L)																
MW09-02S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	< 0.02 UJ
MW09-03D	0.073 J	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	< 0.2 UJ
MW09-07S	< 0.2 U	0.11 J	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	< 0.2 UJ
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U	< 0.2 UJ
MW09-08S	< 0.2 U	< 0.2 U	0.08 J	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U	< 0.2 UJ
MW09-09S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 U	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.2 UJ
MW09-10D	< 0.2 U	< 0.2 U	< 0.06 U	--	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.2 U	--	< 0.2 UJ	--	< 0.2 UJ
MW09-10S	< 0.2 U	< 0.2 U	< 0.06 U	--	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.2 U	--	0.058 J	--	< 0.2 U
MW09-11S	< 0.2 U	< 0.2 U	< 0.06 U	--	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	0.03 J	< 0.2 U	< 0.2 UJ
MW09-14D	< 0.2 U	< 0.2 U	< 0.06 U	--	< 0.2 UJ	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	< 0.2 UJ
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U	< 0.2 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 0.044 U	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-20D	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.2 UJ
MW09-20I	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.2 UJ
MW09-21D	< 0.2 U	0.17 J	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 U	--	< 0.02 U
MW09-21S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 U	--	< 0.2 U
MW09-23D	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 U	--	< 0.02 U
MW09-23S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	0.089 J	--	< 0.02 UJ
MW09-24D	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	< 0.2 UJ
MW09-24S	< 0.2 U	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.2 U	--	< 0.044 U	--	< 0.044 U	--	< 0.2 UJ	--	< 0.2 UJ
MW09-25S	0.098 J	< 0.2 U	< 0.06 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ
MW09-26D	--	--	--	--	--	--	--	--	< 0.044 UJ	< 0.044 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.02 UJ
MW09-27D	--	--	--	--	--	--	--	--	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 0.044 UJ	< 0.044 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.02 U
NICKEL, DISSOLVED (100 UG_L)																
MW09-02S	< 40 U	< 40 U	0.86 J	< 40 U	1.6 J	< 40 U	0.77 J	< 40 U	--	< 2.6 U	--	< 2.1 U	--	< 1 UJ	--	< 40 UJ
MW09-03D	< 40 U	< 40 U	2 J	< 40 U	8.2 J	2.2 J	2.1 J	< 40 U	--	1.6	--	< 2 U	--	1.5	--	< 40 UJ
MW09-07S	< 40 U	< 40 U	< 40 U	< 40 U	1.4 J	2.9 J	1.1 J	< 40 U	--	0.91	--	< 40 U	--	0.59 J	--	< 40 UJ

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.5 J	< 40 UJ
MW09-08S	< 40 U	< 40 U	1.8 J	< 40 U	2.2 J	3.7 J	1.7 J	< 40 U	1.9 J	2.5	2.0 J	2.3 J	< 50 U	2.1	1.9	< 40 UJ
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.4	< 40 UJ
MW09-09S	< 40 U	< 40 U	< 40 U	< 40 U	0.92 J	< 40 U	1.3 J	< 40 U	< 0.9 U	0.85 J	< 0.9 U	< 0.9 U	< 50 UJ	1.2	0.98 J	< 40 UJ
MW09-10D	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	--	< 0.9 U	--	< 1 U	--	< 1 UJ	--	< 0.24 UJ
MW09-10S	< 40 U	< 40 U	< 40 U	< 40 U	3.8 J	3.2 J	< 40 U	< 40 U	--	2.3	--	1.8	--	1.8	--	< 40 U
MW09-11S	< 40 U	43	20.8 J	< 40 U	31.8 J	10 J	9.5 J	2 J	36.1	27	7	45.7	72.9	31	42.2	48.2
MW09-14D	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	1.5 J	< 40 U	< 40 U	--	< 0.9 U	--	< 40 U	--	< 1 UJ	--	< 0.24 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	< 40 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 0.9 U	< 0.85 UJ	< 0.9 U	1.5	< 50 UJ	8.9	0.62 J	< 0.24 U
MW09-20D	< 40 U	< 40 U	< 40 U	< 40 U	1.8 J	2 J	0.88 J	< 40 U	< 0.9 UJ	< 0.9 U	< 0.9 U	< 0.9 U	< 50 UJ	< 1 UJ	0.56 J	< 40 UJ
MW09-20I	< 40 U	< 40 U	1.4 J	< 40 U	2.1 J	0.86 J	2.2 J	< 40 U	< 0.9 UJ	< 2.2 U	< 0.88 UJ	1.2	< 50 UJ	0.99 J	< 5 UJ	< 40 UJ
MW09-21D	< 40 U	< 40 U	< 40 U	< 40 U	1.3 J	2 J	3.4 J	< 40 U	--	< 1.1 U	--	< 2 UJ	--	< 1 UJ	--	< 40 UJ
MW09-21S	< 40 U	< 40 U	< 40 U	< 40 U	1.3 J	1.5 J	< 40 UJ	< 40 U	--	1.8	--	< 1.9 UJ	--	< 10 UJ	--	< 80 U
MW09-23D	< 40 U	< 40 U	< 40 U	< 40 U	1.6 J	< 40 U	< 40 U	< 40 U	--	< 1.8 U	--	< 0.9 U	--	< 1 UJ	--	< 0.24 U
MW09-23S	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	1.3 J	< 40 U	< 40 U	--	< 2.4 U	--	1.2	--	< 20 UJ	--	< 200 UJ
MW09-24D	< 40 U	< 40 U	< 40 U	< 40 U	1.7 J	< 40 U	< 40 U	< 40 U	--	0.89 J	--	< 0.9 U	--	2.3	--	< 40 UJ
MW09-24S	< 40 U	< 40 U	< 40 U	< 40 U	1.8 J	0.76 J	< 40 U	< 40 U	--	< 0.9 U	--	< 0.9 U	--	< 1 U	--	< 0.24 U
MW09-25S	< 40 U	< 40 U	< 40 U	< 40 U	1.4 J	1.6 J	1.2 J	< 40 U	2.3 J	< 0.9 U	1.7 J	< 1 UJ	< 50 UJ	1.3	0.47 J	< 40 UJ
MW09-26D	--	--	--	--	--	--	--	--	1 J	< 1.4 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	2.3 J	2.3	1.3	< 2 U	< 50 U	< 1 UJ	0.54 J	< 40 UJ
MW09-27D	--	--	--	--	--	--	--	--	< 0.9 UJ	< 0.9 U	0.5 J	< 0.9 U	< 50 UJ	1.4	1.1	< 40 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 0.9 UJ	5.8	2.7	2.1	< 50 UJ	0.88 J	0.78 J	< 40 U
NICKEL (100 UG_L)																
MW09-02S	< 40 U	< 40 U	1 J	< 40 U	0.98 J	< 40 U	1 J	< 40 U	--	< 0.9 U	--	2.7	--	0.78 J	--	< 40 UJ
MW09-03D	< 40 U	< 40 U	2.3 J	< 40 U	2.4 J	1.5 J	2.3 J	< 40 U	--	2 J	--	< 2 U	--	1.6	--	< 40 UJ
MW09-07S	< 40 U	< 40 U	< 40 U	< 40 U	1.5 J	< 40 U	< 40 U	< 40 U	--	1.4	--	< 40 U	--	0.97 J	--	< 40 UJ
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.9	< 0.24 U
MW09-08S	< 40 U	< 40 U	1.7 J	< 40 U	2.6 J	1.2 J	2.3 J	< 40 U	1.7 J	4.2	1.9 J	2.2	< 50 U	2.9	1.8	< 40 UJ
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.6	< 40 UJ
MW09-09S	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	1.2 J	< 40 U	< 0.9 U	1.5	< 0.9 U	< 0.9 U	< 50 UJ	0.82 J	0.82 J	< 40 UJ
MW09-10D	< 40 U	< 40 U	< 40 U	--	1.6 J	< 40 U	< 40 U	< 40 U	--	< 0.9 U	--	< 1 U	--	< 1 UJ	--	< 0.24 U
MW09-10S	< 40 U	< 40 U	< 40 U	--	4.2 J	1.3 J	< 40 U	1.3 J	--	2.6	--	2.2	--	1.8	--	< 40 U
MW09-11S	10.9 J	47.1	22.4 J	--	26.7 J	8.5 J	10.9 J	2.3 J	38.5	29.2	7	44.8	72.2	33.3	44.6	49.2
MW09-14D	< 40 U	< 40 U	< 40 U	--	< 40 U	< 40 U	< 40 U	1.6 J	--	< 0.9 U	--	< 40 U	--	< 1 UJ	--	< 0.24 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.1	< 40 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 0.9 U	< 0.8 UJ	< 0.9 U	< 0.9 U	< 50 UJ	8.4	1.4	< 40 UJ
MW09-20D	< 40 U	< 40 U	< 40 U	< 40 U	1.2 J	< 40 U	0.74 J	< 40 U	< 0.9 UJ	< 0.9 U	< 0.9 U	< 0.9 U	< 50 UJ	< 1 UJ	0.7 J	< 40 UJ
MW09-20I	< 40 U	< 40 U	2.2 J	< 40 U	2.6 J	1.2 J	1.8 J	0.91 J	1.1 J	< 1.3 U	< 1 UJ	0.92	< 50 UJ	0.99 J	< 5 UJ	< 40 UJ
MW09-21D	< 40 U	< 40 U	< 40 U	< 40 U	1 J	< 40 U	1.0 J	< 40 U	--	< 1.4 U	--	< 1.1 U	--	0.78 J	--	< 40 UJ
MW09-21S	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	1.6 J	< 40 U	--	19.9	--	2.5	--	< 10 UJ	--	< 80 U
MW09-23D	< 40 U	< 40 U	< 40 U	< 40 U	0.93 J	< 40 U	3.3 J	< 40 U	--	< 1.9 U	--	< 0.9 U	--	0.75 J	--	< 40 UJ
MW09-23S	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	--	< 2.5 U	--	0.94	--	< 20 UJ	--	< 200 UJ
MW09-24D	< 40 U	< 40 U	< 40 U	< 40 U	0.93 J	< 40 U	< 40 U	< 40 U	--	1.1	--	< 0.9 U	--	2.5	--	< 40 UJ
MW09-24S	< 40 U	< 40 U	< 40 U	< 40 U	1.2 J	< 40 U	< 40 U	< 40 U	--	0.94	--	< 0.9 U	--	< 1 UJ	--	< 0.24 U
MW09-25S	< 40 U	< 40 U	< 40 U	< 40 U	1.1 J	< 40 U	0.73 J	< 40 U	2.7	2	2.3 J	< 1 UJ	< 50 UJ	1.4	< 1 UJ	< 40 UJ
MW09-26D	--	--	--	--	--	--	--	--	53.5	**182**	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	2.4	1.6	1.4	< 1.6 U	< 50 UJ	< 1 UJ	0.55 J	< 40 UJ
MW09-27D	--	--	--	--	--	--	--	--	< 0.9 UJ	< 0.82 UJ	< 0.9 U	< 0.9 U	< 50 UJ	1.3	1.1	< 40 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 0.9 UJ	5.8	2.6	2	< 50 UJ	0.75 J	0.99 J	< 40 U
POTASSIUM, DISSOLVED (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
POTASSIUM (UG_L)																
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM, DISSOLVED (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER, DISSOLVED (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM, DISSOLVED (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM, DISSOLVED (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC, DISSOLVED (UG_L)																
MW09-02S	6.7 J	11.5 J	< 20 U	6.7 J	12.1 J	< 20 U	10.2 J	8.9 J	--	12.8	--	53.1 J	--	13.5	--	7.3 J
MW09-03D	7.9 J	7.2 J	< 20 U	7.3 J	7.3 J	10.6 J	< 20 U	4.9 J	--	6.6	--	6.8 J	--	10.3	--	1.9 J
MW09-07S	8.4 J	< 20 U	< 20 U	28.8 J	8.6 J	17.5 J	4.8 J	3.3 J	--	8.9	--	5.1 J	--	12.8	--	2 J
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.1	1.9 J
MW09-08S	< 20 U	2.5 J	< 20 U	4.6 J	4.7 J	14.9 J	< 20 U	2.5 J	< 4.9 U	6.7 J	< 4.5 U	3.8 J	< 50 U	12.1	9.3	< 1.73 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.9	< 1.73 U
MW09-09S	7.6 J	< 20 U	< 20 U	2.7 J	6.6 J	< 20 U	< 20 U	2.2 J	< 6.6 U	25.7	6.3 J	6.9 J	< 50 UJ	10.4	635	< 1.73 U
MW09-10D	< 20 U	4.3 J	< 20 U	4.8 J	6.6 J	10.2 J	5.4 J	4.2 J	--	< 5 U	--	< 10 U	--	8.9	--	< 1.73 U
MW09-10S	< 20 U	4.9 J	< 20 U	4.9 J	7.2 J	< 20 U	7.2 J	2.8 J	--	20.2	--	< 10 UJ	--	11.7	--	13.5 J
MW09-11S	42.6	215	67.9	10.4 J	21.2	20.1	41.7 J	22.6	524	404 J	89.5 J	552	386	279	543	439
MW09-14D	9.9 J	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	4.4 J	4.5 J	--	9.3	--	6.4 J	--	9.7	--	< 1.73 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.3	30.5
MW09-17I	--	--	--	--	--	--	--	--	9.0 J	6.4 J	< 2.2 U	15.5 J	< 50 UJ	10.4	12.1	< 1.73 U
MW09-20D	< 20 U	< 20 U	< 20 U	3.9 J	7.5 J	9.3 J	4 J	2.7 J	< 3.9 U	< 2.3 UJ	5.4 J	4.7 J	< 50 UJ	9.7	8.9	< 1.73 U
MW09-20I	< 20 U	< 20 U	< 20 U	2.4 J	7.1 J	10.8 J	< 20 U	3.6 J	< 12.3 U	< 24.2 UJ	< 23.2 UJ	5.3 J	< 50 UJ	12.1	11.4 J	2 J
MW09-21D	8.7 J	< 20 U	< 20 U	2 J	4.5 J	< 20 U	< 20 U	< 20 U	--	33.6 J	--	2.2 J	--	11	--	< 1.73 U
MW09-21S	6.5 J	< 20 U	< 20 U	< 20 U	4.4 J	< 20 U	< 20 U	< 20 U	--	7.2 J	--	4.2 J	--	< 20 UJ	--	< 3.46 U
MW09-23D	< 20 U	2.3 J	< 20 U	2.2 J	7 J	8.5 J	6.2 J	2.6 J	--	38.0 J	--	< 2.5 UJ	--	8.6	--	< 1.73 U
MW09-23S	< 20 UJ	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	6.5 J	< 20 U	--	34.8 J	--	29.5 J	--	< 40 U	--	< 8.65 U
MW09-24D	< 20 U	< 20 U	< 20 U	5.2 J	5 J	8.4 J	19.4 J	4.9 J	--	15.3	--	< 3.5 UJ	--	9.3	--	< 25 UJ
MW09-24S	< 20 U	< 20 U	< 20 U	< 20 U	7.6 J	8.9 J	< 20 U	6.8 J	--	17.5	--	6.4 J	--	13.3	--	< 1.73 U
MW09-25S	6.6 J	3.8 J	< 20 U	4.2 J	5.6 J	9.7 J	< 20 U	3.5 J	< 2.8 U	16.4	20.2 J	< 10 UJ	< 50 UJ	7.3	8.4	< 1.73 U
MW09-26D	--	--	--	--	--	--	--	--	< 6.4 U	< 10.9 UJ	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 3.2 U	39.1 J	5	10.2 J	< 50 UJ	23	17.6	3.6 J
MW09-27D	--	--	--	--	--	--	--	--	< 2.7 U	6	3.4	10.5	< 50 UJ	484	523	1210
MW09-27S	--	--	--	--	--	--	--	--	< 4.1 U	277 J	43	482 J	1780	1280	724	301
ZINC (UG_L)																
MW09-02S	7.8 J	< 20 U	< 20 U	9 J	7.6 J	9 J	17.2 J	8.4 J	--	9.3	--	22.7 J	--	14.9	--	6.8 J
MW09-03D	8.5 J	< 20 U	< 20 U	6.2 J	7.6 J	9.5 J	< 20 U	5 J	--	27 J	--	3.4 J	--	10	--	1.7 J
MW09-07S	10.6 J	11 J	< 20 U	4 J	8.6 J	11.6 J	8.0 J	4.7 J	--	20.7	--	16.6 J	--	25.7	--	17.8 J
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.3	< 1.73 U
MW09-08S	12.4 J	6.4 J	< 20 U	9.7 J	10 J	< 20 U	< 20 U	4.5 J	< 9.2 U	12.2 J	< 3.8 U	3.3 J	< 50 U	12.7	10.6	< 1.73 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10.9	< 1.73 U
MW09-09S	16.6 J	5.1 J	< 20 U	5.7 J	5 J	20.6	< 20 U	1.4 J	< 9.5 U	25.6	5.4 J	7.4 J	< 50 UJ	10.5	8.9	< 1.73 U
MW09-10D	3.2 J	4.5 J	< 20 U	--	6.6 J	9 J	6.8 J	2.9 J	--	13.3	--	< 10 U	--	14.7	--	< 1.73 U
MW09-10S	13.3 J	6.8 J	< 20 U	--	6.2 J	10.8 J	7.2 J	4.4 J	--	11.4	--	< 10 UJ	--	14.1	--	11.6 J
MW09-11S	143	212	91.9	--	131	41.2	238 J	27.9	585	422 J	125 J	585	427	311	598	542
MW09-14D	4.3 J	< 20 U	< 20 U	--	< 20 U	< 20 U	4.7 J	3.8 J	--	13.6	--	6.5 J	--	10.7	--	< 1.73 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	27.6	47.8
MW09-17I	--	--	--	--	--	--	--	--	4.3	8.8 J	< 4.4 UJ	5.3 J	< 50 UJ	12.4	15.0	2.9 J
MW09-20D	3.5 J	< 20 U	< 20 U	5.3 J	10.1 J	11.9 J	6.3 J	3.8 J	< 8.5 U	< 9.5 UJ	6.6 J	< 3.7 UJ	< 50 UJ	12.5	12.8	< 1.73 U
MW09-20I	5.0 J	< 20 U	< 20 U	3.9 J	8.2 J	10.9 J	< 20 U	9.2 J	< 23.2 U	< 5.8 UJ	< 7.9 UJ	5.5 J	< 50 UJ	12.4	11.7 J	2.4 J
MW09-21D	11.5 J	< 20 U	< 20 U	6.6 J	6.5 J	< 20 U	< 20 U	< 20 U	--	8.8 J	--	2.5	--	9.7	--	1.9 J
MW09-21S	7.4 J	< 20 U	< 20 U	4.9 J	1.5 J	< 20 U	< 20 U	< 20 U	--	24.4 J	--	6.2	--	< 20 UJ	--	< 3.46 U

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NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-23D	2.3 J	4.1 J	< 20 U	5.8 J	5.6 J	8 J	5.3 J	5.6 J	--	38.9 J	--	< 3.9 UJ	--	7.3	--	< 1.73 U
MW09-23S	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	5.8 J	< 20 U	--	39 J	--	26.2 J	--	< 40 UJ	--	< 8.65 U
MW09-24D	< 20 U	< 20 U	< 20 U	< 20 U	5 J	7 J	< 20 U	5.2 J	--	12.1	--	4.4 J	--	12.8	--	< 25 UJ
MW09-24S	2.9 J	< 20 U	< 20 U	< 20 U	6.5 J	9 J	< 20 U	2.8 J	--	17.2	--	10.7 J	--	8.2	--	< 1.73 U
MW09-25S	7 J	4.2 J	< 20 U	< 20 U	5.8 J	9.4 J	< 20 U	2.5 J	< 4.7 U	11.6	< 3.1 UJ	< 10 UJ	< 50 UJ	11.6	10.9	< 1.73 U
MW09-26D	--	--	--	--	--	--	--	--	164 B	633 J	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 4.4 U	42.7 J	3.3	8.5 J	< 50 UJ	16.5	14.1	3 J
MW09-27D	--	--	--	--	--	--	--	--	< 3.1 U	9.9 J	7.6	47.1	< 50 UJ	477	554	1370
MW09-27S	--	--	--	--	--	--	--	--	< 7.4 U	328 J	42.4	490 J	1900	1280	724	286
AROCLOR-1016 (UG_L)																
MW09-02S	< 0.26 U	--	< 0.03 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.27 U	--	< 0.02 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.26 U	--	< 0.03 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.28 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.071 U
MW09-08S	< 0.26 U	--	< 0.02 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.26 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.071 U
MW09-09S	< 0.27 U	--	< 0.02 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.26 U	--	< 0.03 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.26 U	--	< 0.03 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.26 U	--	< 0.03 U	< 0.29 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.071 U
MW09-14D	< 0.25 U	--	< 0.03 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.074 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.19 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.071 U
MW09-20D	< 0.26 U	--	< 0.02 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.26 U	--	< 0.03 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-21D	< 0.26 U	--	< 0.03 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.26 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.27 U	--	< 0.03 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-23D	< 0.26 U	--	< 0.03 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.26 U	--	< 0.03 U	< 0.26 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.26 U	--	< 0.03 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.25 U	--	< 0.03 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.26 U	--	< 0.03 U	< 0.28 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.073 U
MW09-26D	--	--	--	--	--	--	--	--	< 0.2 U	< 0.17 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.51 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.076 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.071 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.071 U
AROCLOR-1221 (UG_L)																
MW09-02S	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.27 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.28 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.095 U
MW09-08S	< 0.26 U	--	< 0.06 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.26 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.095 U
MW09-09S	< 0.27 U	--	< 0.06 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.26 U	--	< 0.06 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.26 U	--	< 0.06 U	< 0.29 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.094 U
MW09-14D	< 0.25 U	--	< 0.06 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.098 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.19 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.094 U
MW09-20D	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-21D	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.26 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.27 U	--	< 0.06 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-23D	< 0.26 U	--	< 0.06 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.26 U	--	< 0.06 U	< 0.26 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.26 U	--	< 0.06 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.25 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.26 U	--	< 0.06 U	< 0.28 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.097 U
MW09-26D	--	--	--	--	--	--	--	--	< 0.2 U	< 0.17 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.51 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.1 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.095 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.095 U
AROCLOR-1232 (UG_L)																
MW09-02S	< 0.26 U	--	< 0.08 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.27 U	--	< 0.07 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.26 U	--	< 0.08 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.28 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.043 U
MW09-08S	< 0.26 U	--	< 0.07 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.26 U	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.043 U
MW09-09S	< 0.27 U	--	< 0.07 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.26 U	--	< 0.08 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.26 U	--	< 0.08 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.26 U	--	< 0.08 U	< 0.29 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.042 U
MW09-14D	< 0.25 U	--	< 0.08 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.044 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.19 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.042 U
MW09-20D	< 0.26 U	--	< 0.07 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.26 U	--	< 0.08 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-21D	< 0.26 U	--	< 0.08 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.26 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.27 U	--	< 0.08 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-23D	< 0.26 U	--	< 0.08 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.26 U	--	< 0.08 U	< 0.26 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.26 U	--	< 0.08 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.25 U	--	< 0.08 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.26 U	--	< 0.08 U	< 0.28 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.044 U
MW09-26D	--	--	--	--	--	--	--	--	< 0.2 U	< 0.17 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.51 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.045 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.043 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.043 U
AROCLOR-1242 (UG_L)																
MW09-02S	< 0.26 U	--	< 0.14 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.27 U	--	< 0.13 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.26 U	--	< 0.13 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.28 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.086 U
MW09-08S	< 0.26 U	--	< 0.13 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.26 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.086 U
MW09-09S	< 0.27 U	--	< 0.13 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.26 U	--	< 0.14 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.26 U	--	< 0.13 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.26 U	--	< 0.13 U	< 0.29 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.085 U
MW09-14D	< 0.25 U	--	< 0.14 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.088 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.19 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.085 U
MW09-20D	< 0.26 U	--	< 0.13 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.26 U	--	< 0.14 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-21D	< 0.26 U	--	< 0.14 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.26 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.27 U	--	< 0.13 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-23D	< 0.26 U	--	< 0.14 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.26 U	--	< 0.13 U	< 0.26 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.26 U	--	< 0.13 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.25 U	--	< 0.14 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.26 U	--	< 0.13 U	< 0.28 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.087 U
MW09-26D	--	--	--	--	--	--	--	--	< 0.2 U	< 0.17 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.51 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.091 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.086 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.086 U
AROCLOR-1248 (UG_L)																
MW09-02S	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.27 U	--	< 0.05 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.26 U	0.12 J	< 0.28 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.095 U
MW09-08S	< 0.26 U	--	< 0.05 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.26 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.095 U
MW09-09S	< 0.27 U	--	< 0.05 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.26 U	--	< 0.06 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.26 U	--	< 0.06 U	< 0.29 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.094 U
MW09-14D	< 0.25 U	--	< 0.06 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.098 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.19 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.094 U
MW09-20D	< 0.26 U	--	< 0.05 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-21D	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.26 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.27 U	--	< 0.06 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-23D	< 0.26 U	--	< 0.06 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.26 U	--	< 0.06 U	< 0.26 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.26 U	--	< 0.06 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.25 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-25S	< 0.26 U	--	< 0.06 U	< 0.28 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.097 U
MW09-26D	--	--	--	--	--	--	--	--	< 0.2 U	< 0.17 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.51 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.1 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.095 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.095 U
AROCLOR-1254 (UG_L)																
MW09-02S	< 0.26 U	--	< 0.07 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.27 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.26 U	--	< 0.07 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.28 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.038 U
MW09-08S	< 0.26 U	--	< 0.06 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.26 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.038 U
MW09-09S	< 0.27 U	--	< 0.06 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.26 U	--	< 0.07 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.26 U	--	< 0.07 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.26 U	--	< 0.07 U	< 0.29 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.038 U
MW09-14D	< 0.25 U	--	< 0.07 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.039 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.19 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.038 U
MW09-20D	< 0.26 U	--	< 0.06 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.26 U	--	< 0.07 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-21D	< 0.26 U	--	< 0.07 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.26 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.27 U	--	< 0.07 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-23D	< 0.26 U	--	< 0.07 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.26 U	--	< 0.07 U	< 0.26 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.26 U	--	< 0.07 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.25 U	--	< 0.07 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.26 U	--	< 0.07 U	< 0.28 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.039 U
MW09-26D	--	--	--	--	--	--	--	--	< 0.2 U	< 0.17 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.51 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.04 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.038 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.038 U
AROCLOR-1260 (UG_L)																
MW09-02S	< 0.26 U	--	< 0.02 U	< 0.27 U	0.012 J	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.27 U	--	< 0.02 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.26 U	--	< 0.02 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.28 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.081 U
MW09-08S	< 0.26 U	--	< 0.02 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 UJ	< 0.26 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.081 U
MW09-09S	< 0.27 U	--	< 0.02 U	< 0.28 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.26 U	--	< 0.02 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.26 U	--	< 0.02 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-11S	0.35	--	0.18 J	0.4	0.39	0.19 J	0.29	0.16 J	1.1	0.59	0.61	0.97	< 0.5 U	< 0.5 U	< 0.5 U	< 0.08 U
MW09-14D	< 0.25 U	--	< 0.02 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.083 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.19 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.08 U
MW09-20D	< 0.26 U	--	< 0.02 U	< 0.27 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.26 U	--	< 0.02 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-21D	< 0.26 U	--	< 0.02 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.26 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.27 U	--	< 0.02 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-23D	< 0.26 U	--	< 0.02 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.26 U	--	< 0.02 U	< 0.26 U	< 0.1 U	< 0.25 U	< 0.25 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.26 U	--	< 0.02 U	< 0.26 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.25 U	--	< 0.02 U	< 0.27 U	< 0.1 U	< 0.26 U	< 0.25 UJ	< 0.27 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.26 U	--	0.02 J	0.061 J	0.038 J	< 0.26 U	< 0.25 U	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.082 U
MW09-26D	--	--	--	--	--	--	--	--	< 0.2 U	< 0.17 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.51 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.086 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.48 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.081 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.081 U
POLYCHLORINATED BIPHENYLS (PCBS) (UG_L)																
MW09-02S	< 0.043 U	--	< 0.02 U	< 0.025 U	0.012	< 0.028 U	< 0.039 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.044 U	--	< 0.02 U	< 0.025 U	< 0.011 U	< 0.028 U	< 0.039 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.043 U	--	< 0.02 U	< 0.025 U	< 0.011 U	< 0.029 U	0.12	< 0.28 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.038 U
MW09-08S	< 0.043 U	--	< 0.02 U	< 0.026 U	< 0.011 U	< 0.028 U	< 0.039 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.038 U
MW09-09S	< 0.044 U	--	< 0.02 U	< 0.026 U	< 0.011 U	< 0.028 U	< 0.039 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.043 U	--	< 0.02 U	< 0.024 U	< 0.011 U	< 0.029 U	< 0.039 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.042 U	--	< 0.02 U	< 0.025 U	< 0.011 U	< 0.028 U	< 0.039 U	< 0.27 U	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-11S	0.35	--	0.18	0.4	0.39	0.19	0.29	0.16	1.1	0.59	0.61	0.97	< 0.5 U	< 0.5 U	< 0.5 U	< 0.038 U
MW09-14D	< 0.041 U	--	< 0.02 U	< 0.024 U	< 0.028 U	< 0.028 U	< 0.039 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.039 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.19 U	< 0.076 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.038 U
MW09-20D	< 0.043 U	--	< 0.02 U	< 0.025 U	< 0.011 U	< 0.028 U	< 0.039 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.042 U	--	< 0.02 U	< 0.025 U	< 0.011 U	< 0.029 U	< 0.039 U	< 0.26 U	--	--	--	--	--	--	--	--
MW09-21D	< 0.042 U	--	< 0.02 U	< 0.025 U	< 0.011 U	< 0.029 U	< 0.039 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.044 U	--	< 0.02 U	< 0.024 U	< 0.011 U	< 0.029 U	< 0.039 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-23D	< 0.042 U	--	< 0.02 U	< 0.024 U	< 0.011 U	< 0.029 U	< 0.039 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.043 U	--	< 0.02 U	< 0.024 U	< 0.011 U	< 0.028 U	< 0.039 U	< 0.25 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.042 U	--	< 0.02 U	< 0.025 U	< 0.011 U	< 0.029 U	< 0.039 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.041 U	--	< 0.02 U	< 0.025 U	< 0.011 U	< 0.029 U	< 0.039 U	< 0.27 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.042 U	--	0.02	0.061	0.038	< 0.029 U	< 0.039 U	< 0.27 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.077 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.039 U
MW09-26D	--	--	--	--	--	--	--	--	< 0.2 U	< 0.17 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.082 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.04 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.078 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.038 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.17 U	< 0.17 U	< 0.17 U	< 0.079 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.038 U
4,4-DDD (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0043 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0043 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0045 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0043 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0045 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0043 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0044 U
4,4-DDE (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0023 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0023 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0024 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0023 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0025 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0023 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0024 U
4,4-DDT (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0042 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0042 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0044 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0042 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0045 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0042 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0044 U
ALDRIN (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0035 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0035 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0037 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0035 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0037 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0035 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0037 U
ALPHA-BHC (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0033 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0033 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0034 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0033 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0035 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0033 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0034 U
ALPHA-CHLORDANE (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0036 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0036 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0038 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0036 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0038 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0036 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0038 U
BETA-BHC (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.003 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.003 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0032 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.003 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0032 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.003 U

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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
DELTA-BHC (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0062 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0048 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.005 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0062 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0066 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0062 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0064 U
DIELDRIN (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0032 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0033 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0032 U
ENDOSULFAN I (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.003 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.003 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0032 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.003 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0032 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.003 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0032 U
ENDOSULFAN II (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0027 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0027 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0028 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0027 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0029 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0027 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0028 U
ENDOSULFAN SULFATE (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0032 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0032 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0033 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0032 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0034 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0032 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0033 U
ENDRIN (2 UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.004 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.004 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0042 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.004 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0042 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.004 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0042 U
ENDRIN KETONE (2 UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0037 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0037 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0039 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0037 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0039 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0037 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0039 U
HEPTACHLOR (0.4 UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0038 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0038 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.004 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0038 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.004 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0038 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0040 U
HEPTACHLOR EPOXIDE (0.2 UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0035 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0035 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0037 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0035 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0037 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0035 U

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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0037 U
HEXACHLOROBENZENE (1 UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.048 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0095 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.01 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.048 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.048 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.050 U
LINDANE (UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0034 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0034 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0036 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0034 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0036 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0034 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0036 U
METHOXYCHLOR (40 UG_L)																
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.004 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.004 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0042 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.004 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0042 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.004 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0042 U
4,4-DDD (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-08S	< 0.052 UJ	< 0.05 U	< 0.02 U	< 5.6 U	< 0.02 U	< 5 UJ	< 0.021 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.02 U	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.02 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 UJ	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.11 U	< 0.0095 UJ	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-20D	< 0.053 UJ	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	0.061	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.11 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
4,4-DDE (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.4 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-08S	< 0.052 UJ	< 0.05 U	< 0.02 UJ	< 5.6 U	< 0.02 U	< 5 UJ	< 0.021 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.02 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 UJ	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.011 U	< 0.0095 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-20D	< 0.053 UJ	< 0.052 U	< 0.02 UJ	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--

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	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-23S	< 0.052 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	< 0.05 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.01 U	< 0.01 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.011 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
4,4-DDT (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.01 UJ	< 5.4 UJ	< 0.02 U	< 5 UJ	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.01 UJ	< 5.4 UJ	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-08S	< 0.052 UJ	< 0.05 U	< 0.02 UJ	< 5.6 UJ	< 0.02 U	< 5 UJ	< 0.021 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.01 UJ	< 5.6 UJ	< 0.02 U	< 5.1 UJ	< 0.02 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 UJ	< 0.054 U	< 0.02 U	< 5.2 UJ	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.005 U	< 0.005 U	< 0.0055 U	< 0.0095 UJ	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.01 UJ	< 5.3 UJ	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 5.1 UJ	< 0.02 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 UJ	< 0.052 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.056 UJ	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 UJ	< 0.051 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 UJ	< 0.052 U	< 0.02 U	< 5.3 UJ	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 UJ	0.075	< 0.02 U	< 5.3 UJ	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 UJ	< 0.02 U	< 5.1 UJ	< 0.02 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.005 U	< 0.005 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.005 U	< 0.005 U	< 0.0055 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
ALDRIN (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-08S	< 0.052 UJ	< 0.05 U	< 0.01 U	< 5.6 U	< 0.02 U	< 5 U	< 0.021 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.01 U	< 5.6 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 UJ	< 0.054 U	< 0.01 U	< 5.2 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 UJ	< 0.05 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.01 U	< 5.9 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.055 U	< 0.0048 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-20D	< 0.053 UJ	< 0.052 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 UJ	< 0.052 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 UJ	< 0.051 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5 U	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 UJ	< 0.052 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 UJ	< 0.05 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.01 U	< 5.7 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.055 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
ALPHA-BHC (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.01 U	< 5.4 UJ	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.01 U	< 5.4 UJ	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-08S	< 0.052 UJ	< 0.05 U	< 0.01 U	< 5.6 UJ	< 0.02 U	< 5 U	< 0.021 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-09S	< 0.053 U	< 0.052 U	< 0.01 U	< 5.6 UJ	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 UJ	< 0.054 U	< 0.01 U	< 5.2 UJ	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 UJ	< 0.05 U	< 0.01 U	< 5.4 UJ	< 0.02 U	< 5.3 U	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.01 U	< 5.9 UJ	< 0.02 U	< 5.1 U	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.055 U	< 0.0048 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-20D	< 0.053 UJ	< 0.052 U	< 0.01 U	< 5.3 UJ	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.01 U	< 5.3 UJ	< 0.02 U	< 5.1 U	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 UJ	< 0.052 U	< 0.01 U	< 5.1 UJ	< 0.02 U	< 5.1 U	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 UJ	< 0.051 U	< 0.01 U	< 5.1 UJ	< 0.02 U	< 5 U	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 UJ	< 0.052 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 UJ	< 0.05 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.01 U	< 5.7 UJ	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.055 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
ALPHA-CHLORDANE (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-08S	< 0.052 U	< 0.05 U	< 0.01 U	< 5.6 U	< 0.02 U	< 5 UJ	< 0.021 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.01 U	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.02 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.01 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 UJ	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.01 U	< 5.9 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.012 U	< 0.012 U	< 0.013 U	< 0.0048 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 U	< 0.051 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	< 0.05 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.01 U	< 5.7 U	< 0.02 U	< 5.1 U	< 0.02 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.012 U	< 0.012 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.012 U	< 0.012 U	< 0.013 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.012 U	< 0.012 U	< 0.012 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.012 U	< 0.012 U	< 0.012 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
AROCLOR-1016 (UG_L)																
MW09-02S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1221 (UG_L)																
MW09-02S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-08S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1232 (UG_L)																
MW09-02S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1242 (UG_L)																
MW09-02S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1248 (UG_L)																
MW09-02S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
AROCLOR-1254 (UG_L)																
MW09-02S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260 (UG_L)																
MW09-02S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	< 0.27 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	< 0.26 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	< 0.25 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	0.057 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BETA-BHC (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-08S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.6 U	< 0.02 U	< 5 UJ	< 0.021 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.02 U	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.02 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.055 U	< 0.0048 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	< 0.05 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.055 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
DELTA-BHC (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.03 U	< 5.4 UJ	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.03 UJ	< 5.4 UJ	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.03 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-08S	< 0.052 UJ	< 0.05 U	< 0.03 UJ	< 5.6 UJ	< 0.02 U	< 5 UJ	< 0.021 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--

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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.03 UJ	< 5.6 UJ	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 UJ	< 0.054 U	< 0.03 U	< 5.2 UJ	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 UJ	< 0.05 U	< 0.03 U	< 5.4 UJ	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.03 U	< 5.9 UJ	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.03 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.055 U	< 0.0048 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-20D	< 0.053 UJ	< 0.052 U	< 0.03 UJ	< 5.3 UJ	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.03 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.03 U	< 5.3 UJ	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.03 U	< 5.1 U	< 0.02 U	< 5.1 UJ	< 0.02 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 UJ	< 0.052 U	< 0.03 U	< 5.1 UJ	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 UJ	< 0.051 U	< 0.03 U	< 5.1 UJ	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 UJ	< 0.052 U	< 0.03 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 UJ	< 0.05 U	< 0.03 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.03 U	< 5.7 UJ	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.055 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
DIELDRIN (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.01 UJ	< 5.4 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-08S	< 0.052 U	< 0.05 U	< 0.01 UJ	< 5.6 U	< 0.02 U	< 5 UJ	< 0.021 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.01 UJ	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.01 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.01 U	< 5.9 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.009 U	< 0.009 UJ	< 0.0099 U	< 0.0095 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.01 UJ	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 U	< 0.051 U	< 0.01 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	< 0.05 U	< 0.01 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.01 U	< 5.7 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.009 U	< 0.009 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.009 U	< 0.009 UJ	< 0.0099 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.009 U	< 0.009 U	< 0.009 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.009 U	< 0.009 UJ	< 0.009 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
ENDOSULFAN I (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.051 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.4 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-08S	< 0.052 U	< 0.05 U	< 0.02 UJ	< 5.6 U	< 0.02 U	< 5 UJ	< 0.021 U	< 0.05 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.05 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.02 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.051 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.007 U	< 0.007 U	< 0.0077 U	< 0.0048 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 U	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 U	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	< 0.05 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 U	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.007 U	< 0.007 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.007 U	< 0.007 U	< 0.0077 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.007 U	< 0.007 U	< 0.007 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.007 U	< 0.007 U	< 0.007 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
ENDOSULFAN II (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.051 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.4 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-08S	< 0.052 U	< 0.05 U	< 0.02 UJ	< 5.6 U	< 0.02 U	< 5 UJ	< 0.05 UJ	< 0.05 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.05 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.02 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.051 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.11 U	< 0.0095 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.05 UJ	< 0.05 U	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.051 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.05 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	0.049 J	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 U	< 0.02 U	< 5.1 U	< 0.05 UJ	< 0.054 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.11 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
ENDOSULFAN SULFATE (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.4 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-08S	< 0.052 U	< 0.05 U	< 0.02 UJ	< 5.6 U	< 0.02 U	< 5 UJ	R	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.02 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.11 U	< 0.0095 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.05 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.051 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.05 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	0.062	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 U	< 0.02 U	< 5.1 U	< 0.05 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.11 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
ENDRIN (2 UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.03 U	< 5.4 UJ	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.03 U	< 5.4 UJ	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.03 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-08S	< 0.052 U	< 0.05 U	< 0.03 U	< 5.6 UJ	< 0.02 U	< 5 U	< 0.021 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.03 U	< 5.6 UJ	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.03 U	< 5.2 UJ	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.03 U	< 5.4 UJ	< 0.02 U	< 5.3 U	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-11S	< 0.051 U	< 0.053 U	< 0.03 U	< 5.9 UJ	< 0.02 U	< 5.1 U	< 0.05 U	0.015 J	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.03 U	< 5.1 UJ	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.011 U	< 0.0095 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.03 U	< 5.3 UJ	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.03 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.03 U	< 5.3 UJ	< 0.02 U	< 5.1 U	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.03 U	< 5.1 UJ	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.03 U	< 5.1 UJ	< 0.02 U	< 5.1 U	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 U	< 0.051 U	< 0.03 U	< 5.1 UJ	< 0.02 U	< 5 U	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.03 U	< 5.3 UJ	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	0.042 J	< 0.03 U	< 5.3 UJ	< 0.02 U	< 5.1 U	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.03 U	< 5.7 UJ	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.01 U	< 0.01 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.011 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
ENDRIN KETONE (2 UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 UJ	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.4 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-08S	< 0.052 U	< 0.05 U	< 0.02 UJ	< 5.6 U	< 0.02 U	< 5 UJ	< 0.05 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.02 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.67 U	< 0.67 U	< 0.74 U	< 0.0095 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.02 UJ	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.05 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.051 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	< 0.05 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.67 U	< 0.67 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.67 U	< 0.67 U	< 0.74 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.67 U	< 0.67 U	< 0.67 U	< 0.01 U	< 0.05 U	< 0.05 U	< 0.05 U	--
HEPTACHLOR (0.4 UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 UJ	< 0.051 UJ	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 UJ	< 0.05 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-08S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.6 U	< 0.02 U	< 5 UJ	< 0.021 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.02 U	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.02 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.014 U	< 0.014 U	< 0.015 U	< 0.0048 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	< 0.05 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.014 U	< 0.014 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.014 U	< 0.014 U	< 0.015 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-27D	--	--	--	--	--	--	--	--	< 0.014 U	< 0.014 U	< 0.014 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.014 U	< 0.014 U	< 0.014 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
HEPTACHLOR EPOXIDE (0.2 UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-08S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.6 U	< 0.02 U	< 5 U	< 0.021 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.02 U	< 5.6 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 U	< 0.054 U	< 0.02 U	< 5.2 U	< 0.02 U	< 5.1 U	< 0.05 UJ	< 0.05 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 UJ	< 0.052 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 U	< 0.05 UJ	< 0.051 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 U	0.0093 J	< 5 U	< 0.05 UJ	< 0.054 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.005 U	< 0.005 U	< 0.0055 U	< 0.0048 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 U	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 U	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 UJ	< 0.053 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 U	< 0.05 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 UJ	< 0.053 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.054 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.33 U	< 0.33 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.33 U	< 0.33 U	< 0.36 U	< 0.01 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.33 U	< 0.33 U	< 0.33 U	< 0.01 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.33 U	< 0.33 U	< 0.33 U	< 0.01 U	--	--	--	--
LINDANE (UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5 U	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-08S	< 0.052 UJ	< 0.05 U	< 0.02 U	< 5.6 U	< 0.02 U	< 5 UJ	< 0.021 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.02 U	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 UJ	< 0.054 U	< 0.02 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 UJ	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 U	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.055 U	< 0.0048 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-20D	< 0.053 UJ	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 U	< 0.05 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 U	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-23D	< 0.052 UJ	< 0.052 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.056 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 UJ	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.052 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 UJ	< 0.052 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 UJ	< 0.05 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.055 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.005 U	< 0.025 U	< 0.025 U	< 0.025 U	--
METHOXYCHLOR (40 UG_L)																
MW09-02S	< 0.052 U	< 0.053 U	< 0.01 U	< 5.4 U	< 0.02 U	< 5 UJ	< 0.051 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 0.053 U	< 0.052 U	< 0.01 UJ	< 5.4 U	< 0.02 U	< 5 UJ	< 0.05 U	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.052 U	< 0.053 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 U	< 0.05 U	< 0.057 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 U	--
MW09-08S	< 0.052 U	< 0.05 U	< 0.02 UJ	< 5.6 U	< 0.02 U	< 5 UJ	< 0.021 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 U	--
MW09-09S	< 0.053 U	< 0.052 U	< 0.01 UJ	< 5.6 U	< 0.02 U	< 5.1 UJ	< 0.02 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 0.053 UJ	< 0.054 U	< 0.02 U	< 5.2 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.052 U	< 0.05 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.3 UJ	< 0.05 UJ	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.051 U	< 0.053 U	< 0.02 U	< 5.9 U	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.051 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.05 U	< 0.05 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 5 UJ	< 0.05 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 U	--
MW09-17I	--	--	--	--	--	--	--	--	< 13.3 U	< 13.3 U	< 15 U	< 0.048 U	< 0.25 U	< 0.25 U	< 0.25 U	--
MW09-20D	< 0.053 U	< 0.052 U	< 0.01 UJ	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.052 U	< 0.054 U	< 0.02 U	< 5.4 U	< 0.02 U	< 5.1 U	< 0.02 UJ	< 0.05 UJ	--	--	--	--	--	--	--	--
MW09-21D	< 0.052 U	< 0.053 U	< 0.02 U	< 5.3 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 0.053 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.053 U	< 0.051 U	< 0.02 U	< 5.1 UJ	< 0.02 U	< 5.1 UJ	< 0.02 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-23D	< 0.052 UJ	< 0.052 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5.1 UJ	< 0.05 UJ	< 0.056 UJ	--	--	--	--	--	--	--	--
MW09-23S	< 0.052 UJ	< 0.051 U	< 0.02 U	< 5.1 U	< 0.02 U	< 5 UJ	< 0.05 UJ	< 0.052 UJ	--	--	--	--	--	--	--	--
MW09-24D	< 0.052 UJ	< 0.052 U	< 0.02 U	< 5.3 UJ	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 0.05 UJ	0.02 J	< 0.02 U	< 5.3 UJ	< 0.02 U	< 5.1 UJ	< 0.05 U	< 0.053 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 0.052 U	< 0.052 UJ	< 0.02 U	< 5.7 U	< 0.02 U	< 5.1 UJ	< 0.02 UJ	< 0.054 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 13.3 U	< 13.3 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 13.3 U	< 13.3 U	< 15 U	< 0.05 U	< 0.25 U	< 0.25 U	< 0.25 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 13.3 U	< 13.3 U	< 13.3 U	< 0.05 U	< 0.25 U	< 0.25 U	< 0.25 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 13.3 U	< 13.3 U	< 13.3 U	< 0.05 U	< 0.25 U	< 0.25 U	< 0.25 U	--
POLYCHLORINATED BIPHENYLS (PCBS) (UG_L)																
MW09-02S	--	< 0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	< 0.024 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	< 0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	< 0.023 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	< 0.024 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	< 0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	< 0.023 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	0.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	< 0.023 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	< 0.024 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	< 0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	< 0.025 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 0.024 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	< 0.024 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	< 0.024 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	< 0.024 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	< 0.023 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	0.057	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE (70 UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	3.9 J	8.1	4.7 J	1.7 J	2 J	9.8	8.5	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 26 U	< 23.3 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 23.3 U	--	< 26 UJ	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	8.1	16.8	14.7	5.6	15.8	13.7	< 5.1 UJ	7.1	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 UJ	< 23.3 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 10 U	< 10 U	< 10 U	< 2 U
1,2-DICHLOROBENZENE (600 UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	1.3 J	< 5.1 U	1.0 J	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	1.7 J	2.3 J	2.9 J	4.8 J	2.6 J	4.6 J	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 5 UJ	--	< 5.5 UJ	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 U	1.3 J	0.66 J	< 5.1 UJ	1 J	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
1,3-DICHLOROBENZENE (600 UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	2.4 J	13.6	3.7 J	< 5.4 U	< 5.1 U	3.2 J	1.2 J	4 J	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 5 UJ	--	< 5.5 UJ	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	6.1	8.5	7.8	2.3 J	10.6	7.2	< 5.1 UJ	12.5	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
1,4-DICHLOROBENZENE (75 UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-07S	< 5.2 U	< 5.1 U	1.1 J	1.3 J	< 5.1 U	1.1 J	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	8.9	69.1	18.5	1.5 J	2.6 J	19.4	4.6 J	25.6	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	0.92 J	< 5 U	1.9 J	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 5 UJ	--	< 5.5 UJ	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	8.4	9.1	8.6	2.7 J	14.6	10.3	< 5.1 UJ	26.3	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
1-METHYLNAPHTHALENE (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE) (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	--	< 5.3 U	--	--	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	1 J	< 5.6 U	--	< 5.3 UJ	--	--	R	1.2 J	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	--	< 5.3 U	--	--	1.1 J	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	< 5.1 UJ	< 5.1 U	--	< 5.3 U	--	--	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	< 5 U	< 5 U	--	< 5.2 U	--	--	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 UJ	< 5.3 U	--	< 5.2 UJ	--	--	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	3.1 J	< 5.3 U	--	2 J	--	--	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	--	< 5.4 U	--	--	< 5.3 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	--	< 5.3 UJ	--	--	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	1 J	< 5 UJ	< 5.5 U	0.77 J	--	--	--	--
MW09-20D	< 5.3 UJ	< 5.6 U	--	< 5.2 UJ	--	--	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	--	< 5.3 U	--	--	< 5 U	< 5.1 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	--	--	--
MW09-21D	< 5.3 U	< 5.3 U	--	< 5.2 U	--	--	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	--	< 5 UJ	--	--	< 5 UJ	< 5 U	--	< 5 UJ	--	< 5.5 UJ	--	--	--	--
MW09-23D	< 5.1 UJ	< 5.2 U	--	< 5.3 U	--	--	< 5 U	< 5 UJ	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 UJ	< 5 U	--	< 5.1 U	--	--	< 5 U	< 5 UJ	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 UJ	< 5 U	--	< 5 UJ	--	--	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 UJ	< 5 U	--	< 5 UJ	--	--	< 5.6 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	--	< 5.4 U	--	--	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	--	--	--	--

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
2,4,5-TRICHLOROPHENOL (UG_L)																
MW09-02S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 UJ	< 0.95 UJ	--	--	--	--
MW09-20D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	< 1 U	--	--	--	0.18 J	< 5 UJ	< 5 UJ	< 0.99 UJ	--	--	--	--
MW09-21D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	< 1 U	--	--	--	--	< 5 UJ	--	< 1 U	--	--	--	--
MW09-23D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 6 UJ	< 5 UJ	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 UJ	< 1 UJ	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 UJ	< 0.95 UJ	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 UJ	< 1 UJ	--	--	--	--
2,4,6-TRICHLOROPHENOL (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 UJ	R	< 11 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-20D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	< 5 U	--	< 5.5 U	--	< 10 U	--	< 2 U
MW09-23D	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
2,4-DICHLOROPHENOL (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 UJ	R	< 11 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 3 U
MW09-08S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 3 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 3 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-20D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 UJ	< 3 U
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	1.2 J	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	< 5 U	--	< 5.5 U	--	< 10 U	--	< 3 U
MW09-23D	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 UJ	< 3 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 UJ	< 3 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 UJ	< 3 U
2,4-DIMETHYLPHENOL (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 UJ	R	< 11 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 4 UJ
MW09-08S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 U	< 10 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 4 UJ
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	29	< 4 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 4 UJ
MW09-20D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	1.3 J	1.3 J	1.1 J	0.94 J	< 5 U	1.1 J	0.87 J	0.73 J	< 10 U	< 10 UJ	< 10 U	< 4 UJ
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	0.72 J	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	--	< 5 U	--	< 5.5 U	--	< 10 UJ	--	< 4 U
MW09-23D	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 U	< 11 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 UJ	< 10 U	< 4 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ	< 10 UJ	< 10 UJ	< 10 U	< 4 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 UJ	< 10 U	< 4 U
2,4-DINITROPHENOL (UG_L)																
MW09-02S	< 21 U	< 22 U	< 22 UJ	< 21 UJ	< 20 U	< 20 UJ	< 20 UJ	< 22 U	--	--	--	--	--	--	--	--
MW09-03D	< 20 U	< 22 U	< 23 UJ	< 21 UJ	< 20 U	< 20 UJ	R	< 22 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 21 U	< 20 U	< 22 U	--	< 20 U	< 21 U	< 20 U	< 22 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 UJ	< 1 UJ
MW09-08S	< 20 UJ	< 20 UJ	< 20 UJ	< 21 UJ	< 20 U	< 20 UJ	< 21 UJ	< 20 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 UJ	< 1 UJ
MW09-09S	< 20 U	< 20 UJ	< 21 UJ	< 21 UJ	< 20 U	< 20 UJ	< 21 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 22 UJ	< 21 UJ	< 22 UJ	< 21 UJ	< 20 U	< 20 UJ	< 20 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 20 UJ	< 21 UJ	< 22 UJ	< 21 UJ	< 20 U	< 20 UJ	< 20 U	< 22 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 21 U	< 24 UJ	< 21 UJ	< 22 UJ	< 20 U	< 20 UJ	< 21 UJ	< 22 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 21 U	< 22 U	< 20 UJ	< 21 UJ	< 20 UJ	< 20 UJ	< 20 UJ	< 22 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 UJ	< 1 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 UJ	< 11 UJ	< 10 U	< 20 U	< 20 U	< 20 U	< 1 UJ
MW09-20D	< 21 UJ	< 22 U	< 22 UJ	< 21 UJ	< 20 U	< 20 UJ	< 20 U	< 20 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 20 U	< 20 U	< 21 U	< 21 U	< 20 U	< 20 U	< 20 UJ	< 20 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 U	< 20 U	< 20 U	< 20 UJ	< 1 UJ
MW09-21D	< 21 U	< 21 U	< 21 UJ	< 21 UJ	< 20 U	< 20 UJ	< 20 U	< 20 U	--	--	--	--	--	--	--	--
MW09-21S	< 21 U	< 20 U	< 21 UJ	< 20 UJ	< 20 U	< 20 UJ	< 20 UJ	< 20 UJ	--	< 10 UJ	--	< 11 U	--	< 20 UJ	--	< 1 U
MW09-23D	< 20 UJ	< 21 UJ	< 20 UJ	< 21 UJ	< 20 U	< 20 UJ	< 20 U	< 20 U	--	--	--	--	--	--	--	--
MW09-23S	< 20 UJ	< 20 UJ	< 21 UJ	< 20 UJ	< 20 U	< 20 UJ	< 20 U	< 20 U	--	--	--	--	--	--	--	--
MW09-24D	< 20 UJ	< 20 U	< 22 UJ	< 20 UJ	< 20 U	< 20 UJ	< 21 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 20 UJ	< 20 U	< 21 UJ	< 20 UJ	< 20 U	< 20 UJ	< 22 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 20 U	< 21 UJ	< 21 UJ	< 22 UJ	< 20 U	< 20 UJ	< 20 UJ	< 22 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 UJ	< 10 UJ	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 UJ	< 10 UJ	< 10 UJ	< 10 U	< 20 U	< 20 UJ	< 20 UJ	< 1 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 20 U	< 20 UJ	< 20 UJ	< 1 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 UJ	< 10 UJ	< 10 UJ	< 10 U	< 20 U	< 20 UJ	< 20 UJ	< 1 U
2,4-DINITROTOLUENE (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 U	R	< 11 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-10D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	--	< 5 U	--	< 5.5 U	--	< 10 U	--	< 2 U
MW09-23D	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
2,6-DINITROTOLUENE (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 U	R	< 11 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	--	< 5 U	--	< 5.5 U	--	< 10 U	--	< 2 U
MW09-23D	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
2-CHLORONAPHTHALENE (UG_L)																
MW09-02S	< 5.3 UJ	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 UJ	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 UJ
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 UJ
MW09-09S	< 5 UJ	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 UJ	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 UJ	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 UJ
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 UJ
MW09-21D	< 5.3 UJ	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 5 U	--	< 5.5 U	--	< 10 U	--	< 3 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 UJ	< 5.2 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
2-CHLOROPHENOL (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 UJ	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 UJ	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 UJ	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-20D	< 5.3 UJ	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5.1 U	< 5.1 UJ	< 5 U	--	< 5 U	--	< 5.5 UJ	--	< 10 U	--	< 3 U
MW09-23D	< 5.1 UJ	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 UJ	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 UJ	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
2-METHYLNAPHTHALENE (UG_L)																
MW09-02S	< 1.1 U	< 1.1 U	< 1 U	< 0.05 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-03D	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.2 U	--	--	--	--	--	--	--	--
MW09-07S	10.7	7.4	8.3	10.9 J	5.5	12.7	8.1	10	--	--	--	--	--	--	--	--
MW09-08S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-09S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10D	< 1.1 U	< 1.1 U	< 1 U	0.052 J	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10S	< 1 U	< 1 U	0.23 J	< 1 U	0.032 J	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-11S	< 1 U	< 1.1 U	0.14 J	< 1.1 U	< 1 U	0.31 J	< 1 U	0.12 J	--	--	--	--	--	--	--	--
MW09-14D	< 1.1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	0.062 J	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	6.3 J	10 J	20	25 J	--	33	21	--
MW09-20D	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-20I	< 1.1 U	< 1.1 U	< 1 U	< 1.1 U	0.3 J	< 1 U	< 1 U	< 1 U	--	--	--	< 0.2 U	--	--	--	--
MW09-21D	< 1 U	< 1 U	0.12 J	< 1 U	< 1 U	< 1 U	< 1 U	0.34 J	--	--	--	--	--	--	--	--
MW09-21S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	0.047 J	< 1 U	< 1 U	< 1 U	--	--	--	< 0.2 U	--	--	--	--
MW09-23D	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-23S	< 1.1 U	< 1 U	< 1 U	< 1 U	1	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-24D	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-24S	< 1 U	< 1 U	< 1 U	0.093 J	0.038 J	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-25S	< 1 U	< 1 U	1.9	< 1.2 U	2.5	0.51 J	< 1 U	0.76 J	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.6 UJ	< 0.5 UJ	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.2 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.19 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.21 U	--	--	--	--
2-METHYLPHENOL (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 UJ	R	< 11 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 4 U
MW09-08S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 4 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.7 J	< 4 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 4 U
MW09-20D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 4 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	--	< 5 U	--	< 5.5 U	--	< 10 U	--	< 4 U
MW09-23D	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 4 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 10 U	< 4 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 4 U
2-NITROANILINE (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 U	R	< 11 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 2 UJ
MW09-08S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 2 UJ
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 2 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 11 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 UJ
MW09-20D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 UJ
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	--	< 10 U	--	< 11 U	--	< 20 U	--	< 2 U
MW09-23D	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 UJ	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 U
2-NITROPHENOL (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 UJ	R	< 11 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	< 5 U	--	< 5.5 UJ	--	< 10 U	--	< 2 U
MW09-23D	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 11 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 11 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
3- AND 4-METHYLPHENOL (UG_L)																
MW09-02S	< 11 UJ	< 11 UJ	< 11 U	< 11 UJ	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 UJ	< 11 UJ	< 11 U	< 11 UJ	< 10 U	< 10 UJ	R	< 11 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	1.7 J	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 U
MW09-08S	< 10 U	< 10 UJ	< 10 U	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 U
MW09-09S	< 10 UJ	< 10 UJ	77	< 10 UJ	< 10 U	< 10 U	< 11 UJ	0.67 J	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 UJ	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 UJ	< 11 U	< 11 UJ	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 UJ	< 12 UJ	< 10 U	< 11 UJ	< 10 U	< 10 U	< 11 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 UJ	< 11 UJ	< 10 U	< 11 UJ	< 10 UJ	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8 J
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 U
MW09-20D	< 11 UJ	< 11 UJ	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	6.7 J	2.9 J	4.7 J	5.5 J	4.4 J	3.8 J	--	--	--	--	--	--	--	< 5 U
MW09-21D	< 11 UJ	< 11 UJ	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 UJ	< 10 UJ	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	--	--	--	--	--	--	--	< 5 U
MW09-23D	< 10 UJ	< 10 UJ	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 UJ	< 11 U	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 UJ	< 10 UJ	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 6 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 U
3,3-DICHLOROBENZIDINE (UG_L)																
MW09-02S	R	< 5.6 U	< 5 U	< 5.3 UJ	< 5.1 U	< 5 UJ	< 5.1 UJ	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-03D	R	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-07S	R	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 1 U
MW09-08S	< 5.1 UJ	< 5.1 U	< 5 U	< 5.3 UJ	< 5 U	< 5 UJ	< 5.3 U	< 5 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 1 U
MW09-09S	R	< 5 U	< 5 U	< 5.2 UJ	< 5.1 U	< 5.1 UJ	< 5.3 U	< 5 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 UJ	< 5.3 U	< 6 UJ	< 5.2 UJ	< 5.1 U	< 5.1 UJ	< 5 UJ	< 5.1 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 UJ	< 5.3 U	< 6 UJ	< 5.3 UJ	< 5 U	< 5.1 UJ	< 5 UJ	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-11S	R	< 6 U	< 5 UJ	< 5.4 UJ	< 5.1 U	< 5.1 UJ	< 5.3 UJ	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-14D	R	< 5.6 U	< 5 UJ	< 5.3 UJ	< 5 UJ	< 5.1 UJ	< 5 UJ	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 1 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 1 U
MW09-20D	< 5.3 UJ	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 UJ	< 5 UJ	< 5.1 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 UJ	< 5.1 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 UJ	< 10 U	< 1 U
MW09-21D	R	< 5.3 U	< 5 UJ	< 5.2 UJ	< 5 U	< 5 UJ	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	R	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5.1 UJ	< 5 UJ	< 5 UJ	--	< 5 U	--	< 5.5 U	--	< 10 U	--	< 1 U
MW09-23D	< 5.1 UJ	< 5.2 U	< 5 UJ	< 5.3 UJ	< 5.1 U	< 5 UJ	< 5 UJ	< 5 UJ	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 UJ	< 5 U	< 5 UJ	< 5.1 UJ	< 5 U	< 5.1 UJ	< 5 UJ	< 5 UJ	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 UJ	< 5 U	< 5 UJ	< 5 UJ	< 5.1 U	< 5.1 UJ	< 5.3 UJ	< 5 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 UJ	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ	< 5.6 UJ	< 5 UJ	--	--	--	--	--	--	--	--
MW09-25S	R	< 5.2 U	< 5 UJ	< 5.4 UJ	< 5.1 U	< 5.1 UJ	< 5.1 U	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 1 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 1 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 1 U
3-NITROANILINE (UG_L)																
MW09-02S	< 11 UJ	< 11 UJ	< 11 U	< 11 UJ	< 10 U	< 10 UJ	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 UJ	< 11 UJ	< 11 U	< 11 UJ	< 10 U	< 10 U	R	< 11 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 1 U
MW09-08S	< 10 UJ	< 10 UJ	< 10 U	< 11 UJ	< 10 U	< 10 UJ	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 1 U
MW09-09S	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 UJ	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 UJ	< 11 UJ	< 11 UJ	< 11 UJ	< 10 U	< 10 UJ	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 UJ	< 12 UJ	< 10 UJ	< 11 UJ	< 10 U	< 10 UJ	< 11 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 UJ	< 11 UJ	< 10 UJ	< 11 UJ	< 10 UJ	< 10 UJ	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 1 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 11 U	< 10 U	< 20 U	< 20 U	< 20 U	< 1 U
MW09-20D	< 11 UJ	< 11 UJ	< 11 U	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	R	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 UJ	< 20 U	< 1 U
MW09-21D	< 11 UJ	< 11 UJ	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 UJ	< 10 UJ	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 UJ	< 10 U	--	< 10 U	--	< 11 U	--	< 20 U	--	< 1 U
MW09-23D	< 10 UJ	< 10 UJ	< 10 UJ	< 11 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 UJ	< 10 UJ	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-25S	< 10 UJ	< 10 UJ	< 10 UJ	< 11 UJ	< 10 U	< 10 UJ	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 1 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 1 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 1 U
4,6-DINITRO-2-METHYLPHENOL (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 U	< 10 U	R	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 10 U	R	R	< 11 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	--	< 10 U	R	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 UJ	< 2 U
MW09-08S	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	R	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 UJ	< 2 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	R	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	R	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 UJ	< 11 U	< 11 U	< 11 U	< 10 U	R	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 10 U	R	< 11 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 UJ	< 10 U	R	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 UJ	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 11 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 U
MW09-20D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	R	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	R	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 UJ	< 2 U
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	R	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 UJ	< 10 U	R	< 10 UJ	< 10 U	--	< 10 U	--	< 11 U	--	< 20 U	--	< 2 U
MW09-23D	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	R	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	R	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 UJ	< 10 U	< 11 U	< 10 UJ	< 10 U	R	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	R	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	R	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 UJ	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 UJ	< 20 U	< 20 U	< 20 UJ	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 UJ	< 2 U
4-BROMOPHENYL-PHENYLETHER (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	0.31 J	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 5 U	--	< 5.5 U	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
4-CHLORO-3-METHYLPHENOL (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 UJ	R	< 11 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-08S	< 10 U	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 U	< 10 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 U	< 10 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 10 U	< 10 U	< 11 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-20D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 UJ	< 10 U	< 3 U
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	< 5 U	--	< 5.5 U	--	< 10 U	--	< 3 U
MW09-23D	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 U	< 11 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 4 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 3 U
4-CHLOROANILINE (UG_L)																
MW09-02S	< 11 UJ	< 11 UJ	< 11 UJ	< 11 UJ	< 10 U	< 10 UJ	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 UJ	< 11 UJ	< 11 UJ	< 11 UJ	< 10 U	< 10 U	R	< 11 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 2 U
MW09-08S	< 10 UJ	< 10 UJ	< 10 UJ	< 11 UJ	< 10 U	< 10 UJ	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 2 U
MW09-09S	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 UJ	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 UJ	< 11 UJ	< 11 UJ	< 11 UJ	< 10 U	< 10 UJ	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 UJ	< 12 UJ	< 10 UJ	< 11 UJ	< 10 U	< 10 UJ	< 11 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 UJ	< 11 UJ	< 10 UJ	< 11 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	5 J
MW09-20D	< 11 UJ	< 11 UJ	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 UJ	< 10 UJ	< 2 U
MW09-21D	< 11 UJ	< 11 UJ	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 UJ	< 10 UJ	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 UJ	< 10 U	--	< 5 U	--	< 5.5 U	--	< 10 U	--	< 2 U
MW09-23D	< 10 UJ	< 10 UJ	< 10 UJ	< 11 UJ	< 10 U	< 10 UJ	< 10 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 UJ	< 10 UJ	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 UJ	< 10 UJ	< 10 UJ	< 11 UJ	< 10 U	< 10 UJ	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 UJ	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 UJ	< 2 U
4-CHLOROPHENYL-PHENYLETHER (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	0.26 J	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 5 U	--	< 5.5 U	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
4-METHYLPHENOL (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18	--
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	9.1	5	4.6 J	4.2 J	6 J	5.2 J	3.3 J	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	< 5 U	--	< 5.5 U	--	< 10 U	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	--
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 10 U	--
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	--
4-NITROANILINE (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 U	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 U	R	< 11 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 2 U
MW09-08S	< 10 UJ	< 10 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 2 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 11 U	< 10 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 UJ	< 11 U	< 11 U	< 11 UJ	< 10 U	< 10 U	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 UJ	< 11 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 11 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 U
MW09-20D	< 11 UJ	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 U
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	--	< 10 U	--	< 11 U	--	< 20 U	--	< 2 U
MW09-23D	< 10 UJ	< 10 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 UJ	< 10 U	< 11 U	< 10 UJ	< 10 U	< 10 U	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 11 UJ	< 10 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 UJ	< 10 U	< 10 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 UJ	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 U
4-NITROPHENOL (UG_L)																
MW09-02S	< 21 U	< 22 U	< 22 U	< 21 UJ	< 20 U	< 20 U	< 20 UJ	< 22 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 20 U	< 22 U	< 23 U	< 21 UJ	< 20 U	< 20 UJ	R	< 22 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 21 U	< 20 U	< 22 U	--	< 20 U	< 21 U	< 20 U	< 22 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 2 U
MW09-08S	< 20 UJ	< 20 U	< 20 U	< 21 UJ	< 20 U	< 20 U	< 21 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 2 U
MW09-09S	< 20 U	< 20 U	< 21 U	< 21 UJ	< 20 U	< 20 U	< 21 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 22 UJ	< 21 U	< 22 U	< 21 UJ	< 20 U	< 20 U	< 20 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 20 UJ	< 21 U	< 22 U	< 21 UJ	< 20 U	< 20 U	< 20 UJ	< 22 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 21 U	< 24 U	< 21 U	< 22 UJ	< 20 U	< 20 U	< 21 UJ	< 22 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 21 U	< 22 U	< 20 U	--	< 20 U	< 20 U	< 20 UJ	< 22 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 11 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-20D	< 21 UJ	< 22 U	< 22 U	< 21 UJ	< 20 U	< 20 U	< 20 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 20 U	< 20 U	< 21 U	< 21 U	< 20 U	< 20 U	< 20 UJ	< 20 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 U	< 20 U	< 2 U
MW09-21D	< 21 U	< 21 U	< 21 U	< 21 UJ	< 20 U	< 20 U	< 20 U	< 20 U	--	--	--	--	--	--	--	--
MW09-21S	< 21 U	< 20 U	< 21 U	--	< 20 U	< 20 U	< 20 UJ	< 20 UJ	--	< 10 U	--	< 11 U	--	< 20 UJ	--	< 2 U
MW09-23D	< 20 UJ	< 21 U	< 20 U	< 21 UJ	< 20 U	< 20 U	< 20 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-23S	< 20 UJ	< 20 U	< 21 U	< 20 UJ	< 20 U	< 20 U	< 20 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-24D	< 20 UJ	< 20 U	< 22 U	--	< 20 U	< 20 U	< 21 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 20 UJ	< 20 U	< 21 U	--	< 20 U	< 20 U	< 22 UJ	< 20 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 20 U	< 21 U	< 21 U	< 22 UJ	< 20 U	< 20 U	< 20 UJ	< 22 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 UJ	< 20 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 UJ	< 20 U	< 20 UJ	< 20 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 20 UJ	< 20 U	< 2 U
ACENAPHTHENE (UG_L)																
MW09-02S	< 1.1 U	< 1.1 U	< 1 U	< 0.073 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-03D	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.2 UJ	--	--	--	--	--	--	--	--
MW09-07S	5.1 J	2.7	4.2	8.9 J	1.8	8.1	5.2	5.4 J	--	--	--	--	--	--	--	--
MW09-08S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-09S	< 1.1 U	2.7	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10D	< 1.1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 1 U	< 1 U	0.11 J	< 1 U	< 1 U	< 1 U	0.061 J	< 1.1 UJ	--	--	--	--	--	--	--	--
MW09-11S	0.08 J	< 1.1 U	0.37 J	< 1.1 U	< 1 U	1.2	< 1 U	< 1.1 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 1.1 U	0.31 J	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	0.97 J	1.2	1.7	2.9	--	--	--	--
MW09-20D	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 1.1 U	0.21 J	0.15 J	1.7 J	0.049 J	0.20 J	1.1	< 1 UJ	--	--	--	< 0.2 U	--	--	--	--
MW09-21D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.15 J	--	--	--	--	--	--	--	--
MW09-21S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	--	--	0.2 J	--	--	--	--
MW09-23D	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-23S	4	< 1 U	2.7	< 1 U	< 1 U	2.3	2	0.43 J	--	--	--	--	--	--	--	--
MW09-24D	< 1.1 U	< 1 U	0.11 J	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 1 U	< 1 U	< 1 U	0.11 J	0.075 J	0.14 J	< 1 U	0.15 J	--	--	--	--	--	--	--	--
MW09-25S	< 1 U	< 1 U	12.6	< 1.2 U	< 1 U	1.7	< 1 U	< 1 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 1.2 U	< 1 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 0.2 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 1 UJ	< 1 UJ	< 1 U	< 0.19 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 0.21 U	--	--	--	--
ACENAPHTHYLENE (UG_L)																
MW09-02S	< 0.22 U	< 0.21 U	< 0.03 U	< 0.038 U	< 0.2 U	< 0.2 U	< 0.21 U	< 0.22 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.21 U	< 0.21 U	< 0.03 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.24 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 0.21 U	6.7 J	0.83	0.31 J	< 0.2 U	2.3	< 0.2 U	< 0.22 U	--	--	--	--	--	--	--	--
MW09-08S	< 0.21 UJ	0.15 J	< 0.03 U	< 0.22 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-09S	< 0.22 U	< 0.21 U	< 0.03 U	< 0.22 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.21 UJ	< 0.21 U	< 0.04 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 0.21 UJ	< 0.2 U	0.57	< 0.21 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.22 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 0.21 U	< 0.22 U	< 0.03 U	< 0.21 U	< 0.2 U	--	< 0.2 U	< 0.22 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 0.21 U	0.19 J	< 0.03 U	0.29 J	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 0.19 U	--	--	--	--
MW09-20D	< 0.2 UJ	< 0.21 U	< 0.03 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 0.21 U	1.5	1.5	< 0.21 U	1.5	0.84 J	1.4	< 0.2 UJ	--	--	--	< 0.2 U	--	--	--	--
MW09-21D	< 0.21 U	< 0.21 U	< 0.03 U	< 0.2 U	< 0.2 U	< 0.21 U	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.21 U	< 0.21 U	0.06 J	0.17 J	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	--	--	< 0.2 U	--	--	--	--
MW09-23D	< 0.21 UJ	< 0.21 U	< 0.03 U	< 0.21 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.22 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.21 UJ	0.29	< 0.03 U	< 0.2 U	< 0.2 U	< 0.2 U	0.26	< 0.22 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.21 UJ	0.12 J	< 0.03 U	< 0.21 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.21 UJ	0.069 J	< 0.03 U	0.47 J	0.068 J	< 0.2 U	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.21 U	< 0.21 U	5.9	< 0.24 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 1.2 UJ	< 1 UJ	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1 UJ	< 1 UJ	< 1 U	< 0.2 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 1 UJ	< 1 U	< 1 UJ	< 0.19 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 1 UJ	< 1 U	< 1 UJ	< 0.21 U	--	--	--	--
ANTHRACENE (UG_L)																
MW09-02S	< 1.1 U	< 1.1 U	< 1 U	< 0.048 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-03D	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.2 U	--	--	--	--	--	--	--	--
MW09-07S	< 1.1 U	< 1 U	< 1 U	0.42 J	< 1 U	0.11 J	< 1 U	0.20 J	--	--	--	--	--	--	--	--
MW09-08S	< 1.1 UJ	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-09S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10D	< 1.1 UJ	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-11S	< 1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-14D	< 1.1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-17I	--	--	--	--	--	--	--	--	< 0.094 U	< 0.094 UJ	< 0.094 U	< 0.19 U	--	--	--	--
MW09-20D	< 1 UJ	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-20I	< 1.1 U	< 1.1 U	0.58 J	0.97 J	< 1 U	0.62 J	< 1 U	< 1 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-21D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-21S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-23S	< 1.1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	1.1	0.6 J	< 1.1 U	--	--	--	--	--	--	--	--
MW09-24D	< 1.1 UJ	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-24S	< 1 UJ	< 1 U	< 1 U	< 1.1 U	< 1 U	0.12 J	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-25S	< 1 U	< 1 U	< 1 U	< 1.2 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.11 U	< 0.094 UJ	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.094 U	< 0.094 UJ	< 0.094 U	< 0.2 UJ	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.094 UJ	< 0.094 U	< 0.094 U	< 0.19 UJ	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.094 U	< 0.094 U	< 0.094 U	< 0.21 UJ	--	--	--	--
BENZO(A)ANTHRACENE (UG_L)																
MW09-02S	< 0.16 U	< 0.16 U	< 0.07 U	< 0.076 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.16 U	< 0.16 U	< 0.07 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.18 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.16 U	0.098 J	< 0.07 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U	--	--	--	--	--	--	--	--
MW09-08S	< 0.16 U	< 0.15 U	< 0.07 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	0.12 J	--	--	--	--	--	--	--	--
MW09-09S	< 0.16 U	< 0.16 U	< 0.07 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.16 U	< 0.16 U	< 0.07 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.16 U	< 0.15 U	< 0.07 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.15 U	< 0.17 U	< 0.07 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.16 U	< 0.16 U	< 0.07 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.19 U	--	--	--	--
MW09-20D	< 0.15 U	< 0.16 U	< 0.07 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.16 U	< 0.16 U	< 0.07 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-21D	< 0.16 U	< 0.16 U	< 0.07 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.16 U	0.079 J	< 0.07 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-23D	< 0.16 U	< 0.16 U	< 0.07 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-23S	< 0.16 U	< 0.16 U	< 0.07 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.16 U	< 0.16 U	< 0.07 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.16 U	< 0.15 U	< 0.07 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.16 U	< 0.16 U	< 0.07 U	< 0.18 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.078 UJ	< 0.065 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	0.07 J	< 0.065 U	< 0.065 U	< 0.2 UJ	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.065 UJ	< 0.065 U	< 0.065 U	< 0.19 UJ	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.065 U	< 0.065 U	< 0.065 U	< 0.21 UJ	--	--	--	--
BENZO(A)PYRENE (0.2 UG_L)																
MW09-02S	< 0.16 U	< 0.16 U	< 0.09 U	< 0.098 U	< 0.15 U	< 0.15 UJ	< 0.16 UJ	< 0.17 U	--	--	--	--	--	--	--	--
MW09-03D	0.039 J	< 0.16 U	< 0.09 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.15 UJ	< 0.18 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.16 U	< 0.15 U	< 0.09 U	0.12 J	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U	--	--	--	--	--	--	--	--
MW09-08S	< 0.16 U	< 0.15 U	< 0.09 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.15 U	--	--	--	--	--	--	--	--
MW09-09S	< 0.16 U	< 0.16 U	< 0.09 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.16 U	< 0.16 U	< 0.1 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.16 U	< 0.15 U	< 0.1 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.17 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.15 U	< 0.17 U	< 0.09 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.17 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.16 U	< 0.16 U	< 0.09 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.15 U	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.07 U	< 0.07 U	< 0.07 U	< 0.19 U	--	--	--	--
MW09-20D	< 0.15 U	< 0.16 U	< 0.09 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.15 UJ	< 0.15 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.16 U	< 0.16 U	< 0.09 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.15 U	--	--	--	< 0.2 U	--	--	--	--
MW09-21D	< 0.16 U	< 0.16 U	< 0.09 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-21S	0.077 J	< 0.16 U	< 0.09 U	0.16 J	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.15 U	--	--	--	< 0.2 U	--	--	--	--
MW09-23D	< 0.16 U	< 0.16 U	< 0.09 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.17 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.16 U	< 0.16 U	< 0.09 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.17 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.16 U	< 0.15 U	< 0.09 U	< 0.16 U	< 0.15 U	< 0.15 UJ	< 0.15 UJ	< 0.15 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.16 U	< 0.15 U	< 0.09 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.15 U	--	--	--	--	--	--	--	--
MW09-25S	0.014 J	< 0.16 U	< 0.09 U	< 0.18 U	< 0.15 U	< 0.15 U	< 0.15 UJ	< 0.15 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.084 U	< 0.07 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.07 U	< 0.07 U	< 0.07 U	< 0.2 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.07 UJ	< 0.07 U	< 0.07 U	< 0.19 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.07 U	< 0.07 U	< 0.07 U	< 0.21 U	--	--	--	--
BENZO(B)FLUORANTHENE (UG_L)																
MW09-02S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.16 U	< 0.16 U	< 0.03 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.18 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.16 U	< 0.15 U	< 0.03 U	0.096 J	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U	--	--	--	--	--	--	--	--
MW09-08S	< 0.16 U	< 0.15 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-09S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.16 U	< 0.16 U	< 0.04 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.16 U	< 0.15 U	< 0.04 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.15 U	< 0.17 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.16 U	< 0.16 U	< 0.03 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-17I	--	--	--	--	--	--	--	--	< 0.98 U	< 0.1 U	< 0.1 U	< 0.19 U	--	--	--	--
MW09-20D	< 0.15 U	< 0.16 U	< 0.03 U	< 0.15 U	< 0.15 U	< 0.15 U	0.091 J	< 0.15 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.16 U	< 0.16 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-21D	< 0.16 U	< 0.16 U	< 0.03 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-21S	0.06 J	< 0.16 U	< 0.03 U	< 0.16 U	0.13 J	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-23D	< 0.16 U	< 0.16 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.16 U	< 0.15 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.16 U	< 0.15 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.18 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.12 U	< 0.1 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	0.07 J	< 0.1 U	< 0.1 U	< 0.2 UJ	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.19 UJ	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 UJ	--	--	--	--
BENZO(G,H,I)PERYLENE (UG_L)																
MW09-02S	< 0.16 U	< 0.16 U	< 0.04 U	0.046 J	< 0.15 U	< 0.15 U	< 0.16 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.16 U	< 0.16 U	< 0.03 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.18 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.16 U	< 0.15 U	< 0.04 U	0.41 J	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U	--	--	--	--	--	--	--	--
MW09-08S	< 0.16 U	< 0.15 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-09S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.16 U	< 0.16 U	< 0.04 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.16 U	< 0.15 U	< 0.04 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.15 U	< 0.17 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.16 U	< 0.16 U	< 0.04 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.98 U	< 0.1 U	< 0.1 U	< 0.19 U	--	--	--	--
MW09-20D	< 0.15 U	< 0.16 U	< 0.03 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.16 U	< 0.16 U	< 0.04 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 U	--	--	--	--
MW09-21D	< 0.16 U	< 0.16 U	< 0.03 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-23D	< 0.16 U	< 0.16 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.15 U	< 0.15 U	< 0.15 U	0.028 J	< 0.17 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.16 U	< 0.15 U	< 0.04 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.16 U	< 0.15 U	< 0.04 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.18 U	< 0.15 U	< 0.15 U	0.029 J	< 0.15 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.12 U	< 0.1 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.2 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.19 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 U	--	--	--	--
BENZO(K)FLUORANTHENE (UG_L)																
MW09-02S	0.026 J	< 0.16 U	< 0.05 UJ	< 0.16 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.16 U	< 0.16 U	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.18 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.16 U	< 0.15 U	< 0.05 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U	--	--	--	--	--	--	--	--
MW09-08S	< 0.16 U	< 0.15 U	< 0.05 UJ	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-09S	< 0.16 U	< 0.16 U	< 0.05 UJ	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.16 U	< 0.16 U	< 0.05 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.16 U	< 0.15 U	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-11S	0.037 J	< 0.17 U	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.16 U	< 0.16 U	< 0.05 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.074 U	< 0.074 U	< 0.074 U	< 0.19 U	--	--	--	--
MW09-20D	< 0.15 U	< 0.16 U	< 0.05 UJ	< 0.15 U	< 0.15 U	< 0.15 U	0.026 J	< 0.15 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.16 U	< 0.16 U	< 0.05 U	< 0.16 U	< 0.15 U	0.21 J	< 0.15 U	< 0.15 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-21D	< 0.16 U	< 0.16 U	< 0.05 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-21S	0.063 J	< 0.16 U	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 U	--	--	--	--
MW09-23D	< 0.16 U	< 0.16 U	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.16 U	< 0.16 U	< 0.05 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.16 U	< 0.15 U	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.16 U	< 0.15 U	< 0.05 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-25S	0.03 J	< 0.16 U	< 0.05 U	< 0.18 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.089 U	< 0.074 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.074 U	< 0.074 UJ	< 0.074 U	< 0.2 UJ	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.074 UJ	< 0.074 U	< 0.074 UJ	< 0.19 UJ	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.074 U	< 0.074 U	< 0.074 UJ	< 0.21 UJ	--	--	--	--
BENZOIC ACID (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	< 10 UJ	--	--	--	--	--	--	--	--	--	--	--

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	17.7	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZYL ALCOHOL (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 UJ	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5.5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 UJ	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 5 U	--	< 5.5 UJ	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
BIS(2-CHLOROETHYL)ETHER (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	1.8 J	< 5.6 U	2.2 J	2.2 J	2.7 J	2.2 J	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	1.9 J	1.3 J	1.5 J	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	0.54 J	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 UJ	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	1.4 J	< 5 UJ	< 5.5 U	1.1 J	1.1 J	1.2 J	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 UJ	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	4.7 J	9.6	7.2 J	6.3	3.5 J	< 5 UJ	< 5 U	--	5.2 J	--	5 J	--	5.1 J	--	5 J
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 UJ	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 10 U	< 10 U	< 10 U	< 2 U
BIS(2-CHLOROISOPROPYL)ETHER (UG_L)																
MW09-02S	--	--	< 5 U	--	< 5.1 U	< 5 U	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	< 6 U	--	1.6 J	0.8 J	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	< 5 U	--	1.2 J	< 5.3 U	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	< 5 U	--	< 5 U	< 5 U	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	< 5 U	--	< 5.1 U	< 5.1 U	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	< 6 U	--	< 5.1 U	< 5.1 U	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	3.8 J	--	4.1 J	4.9 J	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	< 5 U	--	< 5.1 U	< 5.1 U	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	< 5 U	--	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	< 5 U	--	< 5 U	< 5 U	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	< 5 U	--	< 5.1 U	< 5 U	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	< 5 U	--	< 5 U	< 5 U	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	< 5 U	--	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	< 5 U	--	< 5.1 U	< 5 U	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	< 5 U	--	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	< 5 U	--	< 5.1 U	< 5.1 U	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	< 5 U	--	< 5 U	< 5 U	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	< 5 U	--	< 5.1 U	< 5.1 U	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE (6 UG_L)																
MW09-02S	**47.6**	1.3 J	< 11 U	< 11 U	< 5.1 U	0.99 J	< 5.1 UJ	< 2.2 UJ	--	--	--	--	--	--	--	--
MW09-03D	1.6 J	0.86 J	< 11 U	< 11 U	< 5 U	< 5 U	R	< 2.2 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	2.9 J	< 11 U	< 11 U	**9 J**	3.4 J	3.1 J	< 2.2 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U
MW09-08S	< 10 U	< 10 U	< 10 U	< 11 U	< 5 U	**6.4**	< 5.3 UJ	< 2 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 5.1 U	1.3 J	< 5.3 UJ	< 2 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 5.1 U	1.6 J	< 5 UJ	< 2 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	0.92 J	5.4	2.4 J	< 2.2 UJ	--	--	--	--	--	--	--	--
MW09-11S	1.4 J	< 12 U	< 10 U	< 11 U	< 5.1 U	3.9 J	< 5.3 UJ	< 2.2 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	1.2 J	< 10 U	< 11 U	< 5 U	**6.5**	< 5 UJ	< 2.2 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	0.83 J	0.7 J	< 2 U	< 2 U	--	--	--	< 2 U
MW09-20D	< 11 U	< 11 U	< 11 U	< 10 U	< 5 U	1.2 J	< 5 UJ	< 2 UJ	--	--	--	--	--	--	--	--
MW09-20I	3.8 J	0.94 J	< 11 U	< 11 U	< 5.1 U	2.7 J	< 5 U	< 2 UJ	< 2 U	0.68 J	< 2 U	< 2 U	--	--	--	< 2 U
MW09-21D	1.4 J	< 11 U	< 11 U	< 10 U	< 5 U	**21.1**	< 5 U	< 2 U	--	--	--	--	--	--	--	--
MW09-21S	**39.8**	< 10 U	< 11 U	< 10 U	1.2 J	**16.3**	< 5 UJ	< 2 UJ	--	1 J	--	< 2.2 U	--	--	--	< 2 U
MW09-23D	< 10 U	< 10 U	< 10 U	< 11 U	< 5.1 U	**17**	< 5 UJ	< 2 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	3.4 J	< 5 UJ	< 2 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 UJ	< 10 U	< 11 U	< 10 U	< 5.1 U	1.9 J	< 5.3 UJ	< 2 UJ	--	--	--	--	--	--	--	--
MW09-24S	1.3 J	< 10 U	< 10 U	< 10 U	1.1 J	1.7 J	< 5.6 UJ	< 2 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 U	< 5.1 U	**56.5**	< 5.1 UJ	< 2.2 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 2 U	< 2 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	--	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	--	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 2 U	< 2 U	< 2 U	< 2 U	--	--	--	< 2 U
BUTYLBENZYLPHTHALATE (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 UJ	< 11 U	< 5.1 U	< 5 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 UJ	< 11 UJ	< 5 U	1.9 J	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 5.1 U	< 5.3 U	2.1 J	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 10 U	< 10 U	< 10 UJ	< 11 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 10 U	< 10 U	< 10 UJ	< 10 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 5.1 U	< 5.1 U	1.7 J	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 5 U	< 5.1 U	2.1 J	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 U	< 5 U	< 5.1 U	1.8 J	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	0.68 J	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-20D	< 11 U	< 11 U	< 11 UJ	< 10 UJ	< 5 U	0.61 J	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 5.1 U	< 5 U	< 5 UJ	< 5.1 U	< 10 U	0.49 J	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	0.3 J	--	< 11 U	--	< 10 U	--	< 2 U
MW09-23D	< 10 U	< 10 U	< 10 U	< 11 U	< 5.1 U	< 5 U	1.8 J	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 5.1 U	1.8 J	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 5 U	< 5.6 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
CARBAZOLE (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	6.0 J	2.6 J	4.0 J	5.3 J	3.2 J	2.2 J	3.4 J	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	11	8.4 J	8.2 J	8.6 J	6.3 J	8.9 J	6.9 J	7 J
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 10 U	--	< 11 U	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
CHRYSENE (UG_L)																
MW09-02S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.16 U	< 0.16 U	< 0.02 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.18 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.16 U	0.20	0.07 J	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U	--	--	--	--	--	--	--	--
MW09-08S	< 0.16 U	< 0.15 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-09S	< 0.16 U	< 0.16 U	< 0.02 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.16 U	< 0.16 U	0.14 J	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.16 U	< 0.15 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.15 U	< 0.17 U	0.03 J	3.3 J	< 0.15 U	< 0.15 U	0.038 J	< 0.17 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.16 U	< 0.16 U	< 0.03 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.054 U	< 0.054 U	< 0.054 U	< 0.19 U	--	--	--	--
MW09-20D	< 0.15 U	< 0.16 U	< 0.03 U	< 0.15 U	< 0.15 U	< 0.15 U	0.079 J	< 0.15 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.16 U	< 0.16 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 U	--	--	--	--
MW09-21D	< 0.16 U	< 0.16 U	< 0.03 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 U	--	--	--	--
MW09-23D	< 0.16 U	< 0.16 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.15 U	< 0.15 U	< 0.15 U	0.11 J	< 0.17 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.16 U	< 0.15 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.16 U	< 0.15 U	< 0.03 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.16 U	< 0.16 U	< 0.03 U	< 0.18 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.065 U	< 0.054 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	0.06	< 0.054 U	< 0.054 U	< 0.2 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.054 UJ	< 0.054 U	< 0.054 U	< 0.19 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.054 U	< 0.054 U	< 0.054 U	< 0.21 U	--	--	--	--
CRESOLS (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIBENZ(A,H)ANTHRACENE (UG_L)																
MW09-02S	< 0.16 U	< 0.16 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.16 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.16 U	< 0.16 U	< 0.02 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.18 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.16 U	< 0.15 U	< 0.02 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.16 U	--	--	--	--	--	--	--	--
MW09-08S	< 0.16 U	< 0.15 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-09S	< 0.16 U	< 0.16 U	< 0.02 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.16 U	< 0.16 U	< 0.02 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.16 U	< 0.15 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.15 U	< 0.17 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.16 U	< 0.16 U	< 0.02 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.98 U	< 0.1 U	< 0.1 U	< 0.19 U	--	--	--	--
MW09-20D	< 0.15 U	< 0.16 U	< 0.02 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.16 U	< 0.16 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-21D	< 0.16 U	< 0.16 U	< 0.02 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.16 U	< 0.16 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-23D	< 0.16 U	< 0.16 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.16 U	< 0.16 U	< 0.02 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.16 U	< 0.15 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.16 U	< 0.15 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.16 U	< 0.16 U	< 0.02 U	< 0.18 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.12 U	< 0.1 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.2 UJ	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.19 UJ	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 UJ	--	--	--	--
DIBENZOFURAN (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 1 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	0.62 J	0.94 J	0.84 J	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 10 U	--	< 11 U	--	< 10 U	--	< 1 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
DIETHYLPHTHALATE (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 UJ	< 11 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 UJ	< 11 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 10 U	< 10 U	< 10 UJ	< 11 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-09S	< 10 U	< 10 U	< 10 UJ	< 10 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.2 J	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	0.54 J	< 10 U	0.74 J	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 11 U	< 11 U	< 11 UJ	< 10 UJ	< 5 U	< 5 U	175	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 5.1 U	< 5 U	< 5 UJ	< 5.1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 10 U	--	0.33 J	--	< 10 U	--	< 2 U
MW09-23D	< 10 U	< 10 U	< 10 U	< 11 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
DIMETHYL PHTHALATE (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 UJ	< 11 U	< 5.1 U	< 5 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 UJ	< 11 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 10 UJ	< 10 U	< 10 UJ	< 11 U	< 5 U	< 5 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 5.1 U	< 5.1 U	1.6 J	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 U	< 11 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 U	< 11 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 U	< 11 U	< 5 U	< 5.1 U	1.2 J	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	1.1 J	0.6 J	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 5.1 U	< 5 U	< 5 UJ	< 5.1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 11 U	< 11 U	< 11 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 U	< 10 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	0.59 J	--	< 10 U	--	< 10 U	--	< 2 U
MW09-23D	< 10 U	< 10 U	< 10 U	< 11 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 U	< 10 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 U	< 10 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 U	< 11 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	1.3 J	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
DI-N-OCTYLPHTHALATE (UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 U	< 11 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 U	< 11 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 10 U	< 10 U	< 10 U	< 11 U	< 5 U	< 5 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 10 U	< 10 U	< 10 U	< 10 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 11 U	< 11 U	< 11 UJ	< 10 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 10 U	< 11 U	< 11 UJ	< 11 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 UJ	< 11 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 UJ	< 11 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	0.48 J	< 10 U	< 11 U	0.37 J	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 11 U	< 11 U	< 11 U	< 10 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 11 U	< 11 U	< 11 UJ	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 UJ	< 10 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 10 U	--	< 11 U	--	< 10 U	--	< 2 U
MW09-23D	< 10 U	< 10 U	< 10 UJ	< 11 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 10 U	< 10 U	< 10 UJ	< 10 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 10 U	< 10 U	< 11 UJ	< 10 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 10 U	< 10 U	< 10 UJ	< 10 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 UJ	< 11 U	< 5.1 U	< 5.1 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
FLUORANTHENE (UG_L)																
MW09-02S	< 1.1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-03D	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.2 U	--	--	--	--	--	--	--	--
MW09-07S	< 1.1 U	< 1 U	0.13 J	< 1.1 U	0.026 J	0.10 J	< 1 U	0.12 J	--	--	--	--	--	--	--	--
MW09-08S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-09S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	0.033 J	< 1 U	--	--	--	--	--	--	--	--
MW09-10D	< 1.1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-11S	< 1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-14D	< 1.1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.98 U	< 0.1 U	< 0.1 U	< 0.19 U	--	--	--	--
MW09-20D	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-20I	< 1.1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	0.033 J	--	--	--	< 0.2 UJ	--	--	--	--
MW09-21D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.022 J	--	--	--	--	--	--	--	--
MW09-21S	< 1.1 U	< 1 U	< 1 U	0.11 J	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-23D	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-23S	1 J	< 1 U	1	< 1 U	0.84 J	0.77 J	1.2	1.1	--	--	--	--	--	--	--	--
MW09-24D	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	0.034 J	--	--	--	--	--	--	--	--
MW09-24S	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	0.07 J	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-25S	< 1 U	< 1 U	< 1 U	< 1.2 U	< 1 U	< 1 U	0.057 J	< 1 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.12 U	< 0.1 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.2 UJ	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.19 UJ	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.21 UJ	--	--	--	--
FLUORENE (UG_L)																
MW09-02S	< 1.1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-03D	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.2 U	--	--	--	--	--	--	--	--
MW09-07S	3 J	3.4 J	2.9 J	4.4 J	1.5	2.9	1.1 J	3.5	--	--	--	--	--	--	--	--
MW09-08S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-09S	< 1.1 U	0.35 J	< 1 U	< 1.1 U	< 1 U	0.18 J	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10D	< 1.1 U	0.22 J	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10S	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-11S	< 1 U	3.7	< 1 UJ	< 1.1 U	0.4 J	3.8	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-14D	< 1.1 U	0.27 J	< 1 UJ	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	0.21 J	0.34	0.4 J	0.56	--	--	--	--
MW09-20D	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-20I	< 1.1 U	< 1.1 U	0.11 J	0.15 J	0.08 J	0.15 J	< 1 U	< 1 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-21D	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-21S	< 1.1 U	< 1 U	< 1 UJ	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	< 0.2 UJ	--	--	--	--

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NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-23D	< 1 U	< 1 U	< 1 UJ	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-23S	< 1.1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	0.027 J	--	--	--	--	--	--	--	--
MW09-24D	< 1.1 U	< 1 U	< 1 UJ	< 1.1 U	< 1 U	< 1 U	0.041 J	< 1 U	--	--	--	--	--	--	--	--
MW09-24S	< 1 U	< 1 U	< 1 UJ	0.11 J	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-25S	< 1 U	7.8	< 1 UJ	< 1.2 U	0.21 J	5.9	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.12 U	< 0.1 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.2 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.1 UJ	< 0.1 U	< 0.1 UJ	< 0.19 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.21 U	--	--	--	--
HEXACHLOROBENZENE (1 UG_L)																
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	< 0.19 U	--	--	--	--
HEXACHLOROBUTADIENE (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 10 U	--	< 11 UJ	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
HEXACHLOROCYCLOPENTADIENE (50 UG_L)																
MW09-02S	< 11 U	< 11 U	< 11 UJ	< 11 UJ	< 10 U	< 10 UJ	< 10 U	< 11 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 10 U	< 11 U	< 11 UJ	< 11 UJ	< 10 U	< 10 U	R	< 11 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 11 U	< 10 U	< 11 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 1 U
MW09-08S	< 10 UJ	< 10 U	< 10 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 1 U
MW09-09S	< 10 U	< 10 U	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 11 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 11 UJ	< 11 U	< 11 UJ	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 10 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 10 UJ	< 11 U	< 11 UJ	< 11 UJ	< 10 U	< 10 U	< 10 U	< 11 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 10 U	< 12 U	< 10 UJ	< 11 UJ	< 10 U	< 10 UJ	< 11 U	< 11 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 10 U	< 11 U	< 10 UJ	< 11 UJ	< 10 U	< 10 UJ	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 1 U
MW09-17I	--	--	--	--	--	--	--	--	< 16.7 U	< 16.7 U	< 18 U	< 16.7 U	< 10 UJ	< 10 U	< 10 U	< 1 U
MW09-20D	< 11 UJ	< 11 U	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U	R	< 10 UJ	< 16.7 U	< 16.7 UJ	< 16.7 U	< 16.7 U	< 10 UJ	< 10 UJ	< 10 U	< 1 U
MW09-21D	< 11 U	< 11 U	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	--	--	--	--	--	--	--	--
MW09-21S	< 11 U	< 10 U	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 UJ	< 10 UJ	--	< 16.7 UJ	--	< 18 U	--	< 10 UJ	--	< 1 U
MW09-23D	< 10 UJ	< 10 U	< 10 UJ	< 11 UJ	< 10 U	< 10 UJ	< 10 U	< 10 UJ	--	--	--	--	--	--	--	--
MW09-23S	< 10 UJ	< 10 U	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 UJ	--	--	--	--	--	--	--	--
MW09-24D	< 10 UJ	< 10 U	< 11 UJ	< 10 UJ	< 10 U	< 10 UJ	< 11 U	< 10 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 10 UJ	< 10 U	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 11 U	< 10 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 10 U	< 10 U	< 10 UJ	< 11 UJ	< 10 U	< 10 UJ	< 10 UJ	< 11 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 16.7 U	< 16.7 UJ	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 16.7 U	< 16.7 U	< 16.7 U	< 16.7 U	< 10 UJ	< 10 UJ	< 10 U	< 1 U
MW09-27D	--	--	--	--	--	--	--	--	< 16.7 U	< 16.7 U	< 16.7 U	< 16.7 U	< 10 UJ	< 10 U	< 10 U	< 1 U
MW09-27S	--	--	--	--	--	--	--	--	< 16.7 U	< 16.7 U	< 16.7 U	< 16.7 U	< 10 UJ	< 10 U	< 10 U	< 1 U
HEXACHLOROETHANE (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 UJ	< 5.1 U	< 5 UJ	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 UJ	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 UJ	< 5.1 U	< 5.1 UJ	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 UJ	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 UJ	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 UJ	< 5.1 U	< 5.1 UJ	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 UJ	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 UJ	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 UJ	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 UJ	< 5 U	< 5 UJ	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 UJ	< 5 UJ	< 5 U	--	< 10 UJ	--	< 11 UJ	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 UJ	< 5.1 U	< 5 UJ	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 UJ	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 UJ	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 UJ	< 5.1 U	< 5.1 UJ	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 UJ	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
INDENO(1,2,3-CD)PYRENE (UG_L)																
MW09-02S	< 0.16 U	< 0.16 U	< 0.02 U	0.043 J	< 0.15 U	< 0.15 U	< 0.16 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.16 U	< 0.16 U	< 0.02 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.18 U	--	--	--	--	--	--	--	--
MW09-07S	< 0.16 U	< 0.15 U	< 0.02 U	< 0.17 U	< 0.15 U	0.34 J	0.45	< 0.16 U	--	--	--	--	--	--	--	--
MW09-08S	< 0.16 U	< 0.15 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-09S	< 0.16 U	< 0.16 U	< 0.02 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.16 U	< 0.16 U	< 0.02 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.16 U	< 0.15 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.15 U	< 0.17 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.16 U	< 0.16 U	< 0.02 U	< 0.17 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.19 U	--	--	--	--
MW09-20D	< 0.15 U	< 0.16 U	< 0.02 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.16 U	< 0.16 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-21D	< 0.16 U	< 0.16 U	< 0.02 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.16 U	< 0.16 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-23D	< 0.16 U	< 0.16 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-23S	< 0.16 U	< 0.16 U	< 0.02 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.16 U	< 0.15 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.16 U	< 0.15 U	< 0.02 U	< 0.16 U	< 0.15 U	< 0.15 U	< 0.15 U	< 0.15 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.16 U	< 0.16 U	< 0.02 U	< 0.18 U	< 0.15 U	< 0.15 U	< 0.15 U	0.033 J	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.073 U	< 0.061 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.2 UJ	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.061 UJ	< 0.061 U	< 0.061 U	< 0.19 UJ	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.061 U	< 0.061 U	< 0.061 U	< 0.21 UJ	--	--	--	--
ISOPHORONE (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 10 U	--	< 11 U	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
NAPHTHALENE (20 UG_L)																
MW09-02S	< 1.1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-03D	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.2 U	--	--	--	--	--	--	--	--
MW09-07S	**27.4**	18.5	16.7	**27.0 J**	10.9	**26.2 J**	**20.4 J**	19.6 J	--	--	--	--	--	--	--	--
MW09-08S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-09S	< 1.1 U	< 1 U	0.18 J	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10D	< 1.1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10S	< 1 U	< 1 U	0.43 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-11S	< 1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-14D	< 1.1 U	2	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	19 J	19 J	20 J	17	--	20	14	--
MW09-20D	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-20I	< 1.1 U	< 1.1 U	< 1 U	< 1.1 U	0.072 J	< 1 U	< 1 U	< 1 U	--	--	--	< 0.2 U	--	--	--	--
MW09-21D	< 1 U	0.37 J	< 1 U	< 1 U	0.14 J	0.66 J	< 1 U	1.1	--	--	--	--	--	--	--	--
MW09-21S	< 1.1 U	< 1 U	< 1 U	0.11 J	< 1 U	< 1 U	< 1 U	0.09 J	--	--	--	< 0.2 U	--	--	--	--
MW09-23D	< 1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-23S	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-24D	< 1.1 U	< 1 U	< 1 U	0.14 J	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-24S	< 1 U	< 1 U	< 1 U	0.14 J	0.045 J	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-25S	< 1 U	0.62 J	< 1 U	< 1.2 U	1.1	< 1 U	< 1 U	0.58 J	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 8 U	< 6.67 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 6.67 U	< 6.67 U	< 6.67 U	< 0.2 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 6.67 UJ	< 6.67 U	< 6.67 U	< 0.19 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 6.67 U	< 6.67 U	< 6.67 U	0.33	--	--	--	--
NITROBENZENE (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-08S	< 5.1 UJ	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 UJ	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 UJ	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-20D	< 5.3 UJ	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 UJ	< 5.1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 10 U	--	< 11 U	--	< 10 U	--	< 3 U
MW09-23D	< 5.1 UJ	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 UJ	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 10 U	< 10 U	< 3 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 3 U
N-NITROSODINPROPYLAMINE (UG_L)																
MW09-02S	< 5.3 U	< 5.6 UJ	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 UJ	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 2 U
MW09-08S	< 5.1 UJ	< 5.1 UJ	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 2 U
MW09-09S	< 5 U	< 5 UJ	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 UJ	< 5.3 UJ	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 UJ	< 5.3 UJ	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 UJ	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 UJ	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 11 U	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 UJ	< 5.6 UJ	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-21D	< 5.3 U	< 5.3 UJ	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 10 U	--	< 11 U	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 UJ	< 5.2 UJ	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 UJ	< 5 UJ	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 UJ	< 5 UJ	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 U	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 UJ	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 2 U
N-NITROSODIPHENYLAMINE (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 U	R	< 5.6 U	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 3 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 4 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 U	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 U	< 5 U	< 5.1 U	< 5 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 4 U
MW09-17I	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 11 U	0.67 J	< 10 U	< 10 U	< 10 U	< 4 U
MW09-20D	< 5.3 U	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 U	< 5.1 U	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 4 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5 UJ	< 5 U	--	< 10 U	--	< 11 U	--	< 10 U	--	< 3 U
MW09-23D	< 5.1 U	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5.6 UJ	< 5 U	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 4 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 4 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 4 U
PENTACHLOROPHENOL (1 UG_L)																
MW09-02S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.3 U	0.36 J	0.12 J	< 0.95 UJ	--	--	--	--
MW09-20D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	< 1 U	--	--	--	0.54	< 0.3 UJ	< 0.3 UJ	< 0.99 UJ	--	--	--	--
MW09-21D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	< 1 U	--	--	--	--	< 0.3 UJ	--	< 1 UJ	--	--	--	--
MW09-23D	--	--	--	--	0.22 J	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	0.11 J	0.38 J	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.3 U	< 0.3 UJ	< 0.3 U	< 1 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.3 UJ	< 0.3 UJ	< 0.3 UJ	< 0.95 UJ	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	0.17 J	< 0.3 UJ	< 0.3 UJ	< 1 UJ	--	--	--	--
PHENANTHRENE (UG_L)																
MW09-02S	< 0.22 U	< 0.21 U	< 0.07 U	0.26	< 0.2 U	< 0.2 U	< 0.21 U	< 0.22 U	--	--	--	--	--	--	--	--
MW09-03D	< 0.21 U	< 0.21 U	< 0.06 U	< 0.2 U	< 0.2 U	0.25	< 0.2 U	< 0.24 U	--	--	--	--	--	--	--	--
MW09-07S	2.5 J	9.2	4.1	5.8 J	1.3	3.1	2.1	2.8	--	--	--	--	--	--	--	--
MW09-08S	< 0.21 U	0.23	< 0.06 U	0.17 J	< 0.2 U	0.4	0.041 J	< 0.2 U	--	--	--	--	--	--	--	--

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-09S	< 0.22 U	0.3	< 0.06 U	< 0.22 U	< 0.2 U	0.32	0.18 J	< 0.2 U	--	--	--	--	--	--	--	--
MW09-10D	< 0.21 U	< 0.21 U	< 0.07 U	0.087 J	< 0.2 U	0.12 J	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-10S	< 0.21 U	0.48	< 0.07 U	< 0.21 U	< 0.2 U	0.09 J	< 0.2 U	< 0.22 U	--	--	--	--	--	--	--	--
MW09-11S	< 0.21 U	< 0.22 U	< 0.07 U	< 0.21 U	< 0.2 U	0.34	< 0.2 U	< 0.22 U	--	--	--	--	--	--	--	--
MW09-14D	< 0.21 U	0.97	< 0.07 U	< 0.22 U	< 0.2 U	0.1 J	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.053 U	< 0.053 U	< 0.053 U	< 0.19 U	--	--	--	--
MW09-20D	< 0.2 U	< 0.21 U	< 0.07 U	< 0.2 U	< 0.2 U	0.093 J	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-20I	< 0.21 U	0.49 J	0.19 J	0.24 J	< 0.21 U	0.61	0.64	< 0.2 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-21D	< 0.21 U	0.33	< 0.07 U	< 0.2 U	< 0.2 U	0.12 J	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-21S	< 0.21 U	0.084 J	< 0.07 U	< 0.21 U	< 0.2 U	0.14 J	0.088 J	< 0.2 U	--	--	--	< 0.2 UJ	--	--	--	--
MW09-23D	< 0.21 U	< 0.21 U	< 0.07 U	< 0.21 U	< 0.2 U	0.28	< 0.2 U	< 0.22 U	--	--	--	--	--	--	--	--
MW09-23S	0.18 J	0.51	< 0.07 U	0.1 J	< 0.2 U	0.21	< 0.2 U	< 0.22 U	--	--	--	--	--	--	--	--
MW09-24D	< 0.21 U	0.23	< 0.07 U	0.19 J	< 0.2 U	0.18 J	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-24S	< 0.21 U	< 0.21 U	< 0.07 U	< 0.21 U	< 0.2 U	0.41	< 0.2 U	< 0.2 U	--	--	--	--	--	--	--	--
MW09-25S	< 0.21 U	1.1	< 0.07 U	0.22 J	< 0.2 U	0.55	0.22	< 0.2 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.064 U	< 0.053 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.053 U	< 0.053 U	< 0.053 U	< 0.2 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.053 UJ	< 0.053 U	< 0.053 U	< 0.19 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.053 U	< 0.053 U	< 0.053 U	< 0.21 U	--	--	--	--
PHENOL (UG_L)																
MW09-02S	< 5.3 U	< 5.6 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5.1 UJ	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-03D	< 5 U	< 5.6 U	< 6 U	< 5.3 UJ	< 5 U	< 5 UJ	R	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-07S	< 5.2 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5.3 U	< 5.1 U	< 5.6 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-08S	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5 U	< 5 U	< 5.3 UJ	< 5 UJ	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-09S	< 5 U	< 5 U	11.4	< 5.2 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 UJ	--	--	--	--	--	--	--	--
MW09-10D	< 5.6 UJ	< 5.3 U	< 6 U	< 5.2 UJ	< 5.1 U	< 5.1 U	< 5 UJ	< 5.1 UJ	--	--	--	--	--	--	--	--
MW09-10S	< 5.1 U	< 5.3 U	< 6 U	< 5.3 U	< 5 U	< 5.1 U	< 5 UJ	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-11S	< 5.2 U	< 6 U	< 5 U	< 5.4 U	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-14D	< 5.2 U	< 5.6 U	< 5 U	< 5.3 UJ	< 5 U	< 5.1 U	< 5 UJ	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	1.1 J	1.1 J	1.2 J	1.3 J	< 10 U	< 10 U	< 10 U	< 2 U
MW09-20D	< 5.3 UJ	< 5.6 U	< 5 U	< 5.2 UJ	< 5 U	< 5 U	< 5 UJ	< 5.1 UJ	--	--	--	--	--	--	--	--
MW09-20I	< 5.1 U	< 5.1 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 U	< 5.1 UJ	< 10 U	< 10 U	1.4 J	< 10 U	< 10 U	< 10 U	< 10 U	< 2 U
MW09-21D	< 5.3 U	< 5.3 U	< 5 U	< 5.2 U	< 5 U	< 5 U	< 5 U	< 5 U	--	--	--	--	--	--	--	--
MW09-21S	< 5.3 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5.1 U	< 5.1 UJ	< 5 UJ	--	< 10 UJ	--	1 J	--	< 10 U	--	< 2 U
MW09-23D	< 5.1 UJ	< 5.2 U	< 5 U	< 5.3 U	< 5.1 U	< 5 U	< 5 UJ	< 5 UJ	--	--	--	--	--	--	--	--
MW09-23S	< 5.1 U	< 5 U	< 5 U	< 5.1 U	< 5 U	< 5.1 U	< 5 UJ	< 5 UJ	--	--	--	--	--	--	--	--
MW09-24D	< 5.1 U	< 5 U	< 5 U	< 5 UJ	< 5.1 U	< 5.1 U	< 5.3 UJ	< 5 UJ	--	--	--	--	--	--	--	--
MW09-24S	< 5.1 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5.6 UJ	< 5 UJ	--	--	--	--	--	--	--	--
MW09-25S	< 5.1 U	< 5.2 U	< 5 U	< 5.4 UJ	< 5.1 U	< 5.1 U	< 5.1 UJ	< 5.6 UJ	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 10 U	< 10 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 10 U	< 10 UJ	< 10 U	0.4 J	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 10 U	1.2 J	< 10 U	0.95 J	< 10 U	< 10 U	< 10 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 10 U	< 10 UJ	< 10 U	0.84 J	< 10 U	< 10 U	< 10 U	< 2 U
PYRENE (UG_L)																
MW09-02S	< 1.1 U	< 1.1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-03D	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.14 J	0.038 J	--	--	--	--	--	--	--	--
MW09-07S	< 1.1 U	< 1 U	2.5	1.9 J	< 1 U	0.15 J	< 1 U	0.26 J	--	--	--	--	--	--	--	--
MW09-08S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-09S	< 1.1 U	< 1 U	< 1 U	< 1.1 U	< 1 U	0.05 J	0.066 J	< 1 U	--	--	--	--	--	--	--	--
MW09-10D	< 1.1 U	< 1.1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.034 J	--	--	--	--	--	--	--	--
MW09-10S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.03 J	--	--	--	--	--	--	--	--
MW09-11S	< 1 U	< 1.1 U	< 1 U	0.22 J	< 1 U	< 1 U	< 1 U	0.059 J	--	--	--	--	--	--	--	--
MW09-14D	< 1.1 U	0.13 J	0.38 J	< 1.1 U	< 1 U	0.081 J	< 1 U	0.11 J	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	< 0.066 U	< 0.066 U	< 0.066 U	< 0.19 U	--	--	--	--
MW09-20D	< 1 U	< 1.1 U	0.19 J	0.16 J	< 1 U	< 1 U	0.32 J	< 1 U	--	--	--	--	--	--	--	--
MW09-20I	< 1.1 U	< 1.1 U	0.64 J	10.3 J	0.41 J	0.75 J	0.46 J	< 1 U	--	--	--	< 0.2 U	--	--	--	--
MW09-21D	< 1 U	< 1 U	0.28 J	< 1 U	< 1 U	0.15 J	0.2 J	0.14 J	--	--	--	--	--	--	--	--
MW09-21S	< 1.1 U	< 1 U	< 1 U	0.4 J	0.5 J	< 1 U	0.14 J	< 1 U	--	--	--	< 0.2 U	--	--	--	--
MW09-23D	< 1 U	< 1 U	0.17 J	< 1.1 U	< 1 U	< 1 U	< 1 U	0.15 J	--	--	--	--	--	--	--	--
MW09-23S	0.38 J	< 1 U	0.22 J	< 1 U	0.26 J	0.39 J	0.85 J	0.67 J	--	--	--	--	--	--	--	--
MW09-24D	< 1.1 U	< 1 U	0.18 J	2.2 J	< 1 U	0.22 J	< 1 U	0.16 J	--	--	--	--	--	--	--	--
MW09-24S	< 1 U	< 1 U	< 1 U	0.2 J	< 1 U	< 1 U	0.26 J	0.05 J	--	--	--	--	--	--	--	--
MW09-25S	< 1 U	< 1 U	1.5	< 1.2 U	< 1 U	< 1 U	0.084 J	< 1 U	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	< 0.079 U	< 0.066 UJ	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	0.09	< 0.066 U	< 0.066 U	< 0.2 U	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	< 0.066 UJ	< 0.066 U	< 0.066 U	< 0.19 U	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	< 0.066 U	< 0.066 U	< 0.066 U	< 0.21 U	--	--	--	--
2,4,5-TRICHLOROPHENOL (UG_L)																

TABLE E-1
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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-02S	< 1.1 U	< 1.1 U	< 1 U	0.15 J	--	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-03D	< 1 U	< 1.1 U	< 1 U	< 1.1 UJ	--	< 1 UJ	R	< 1.1 U	--	--	--	--	--	--	--	--
MW09-07S	< 1 U	< 1 U	< 1 U	< 1.1 U	--	< 1.1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.07 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 1.1 U	--	< 1 UJ	< 1.1 U	< 0.91 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.07 U
MW09-09S	< 1 UJ	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10D	< 1 UJ	< 1.1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10S	< 1 U	< 1.1 U	< 1 U	< 1.1 U	--	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-11S	< 1 U	< 1.2 U	< 1 U	< 1.1 UJ	--	< 1 U	< 1.1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-14D	< 1 U	< 1.1 U	< 1 U	< 1.1 UJ	--	< 1 UJ	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.08 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 0.07 U
MW09-20D	< 1.1 UJ	< 1.1 U	< 1 U	< 1 UJ	--	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-20I	< 1 U	< 1 U	< 1 U	< 1.1 U	--	< 1 U	< 1 U	< 1 U	--	--	--	--	< 1 U	< 1 U	< 1 U	< 0.08 U
MW09-21D	< 1.1 U	< 1.1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-21S	< 1.1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	< 1 U	--	< 0.07 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1.1 U	--	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-23S	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 1.1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 U	< 1.1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-25S	< 1 U	< 1 U	< 1 U	< 1.1 U	--	< 1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 0.08 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 0.07 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 0.07 U
2-METHYLNAPHTHALENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.07 UJ
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1	< 0.07 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.07 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	17	--	--	30 J
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.07 UJ
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.07 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.08 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.07 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.07 U
ACENAPHTHENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.06 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.16	0.1 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.06 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	2	3.2	2.8	2
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.06 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
ACENAPHTHYLENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.05 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.05 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.05 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.05 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U

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FORMER NCBC DAVISVILLE
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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
ANTHRACENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.04 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.06 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.04 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.11	0.18	< 0.04 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.04 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.04 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.04 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.04 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.04 U
BENZO(A)ANTHRACENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.04 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.06 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.05 J
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	0.14	< 0.04 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	0.05 J
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.04 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.04 UJ
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.04 UJ
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.04 U
BENZO(A)PYRENE (0.2 UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.06 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.07 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.06 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.06 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
BENZO(B)FLUORANTHENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.08 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.08 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.08 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	0.12	< 0.08 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.08 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.08 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.09 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.08 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.08 U
BENZO(G,H,I)PERYLENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.1 J
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.1 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.08 J
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	0.11	0.07 J
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	0.1 J
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.06 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
BENZO(K)FLUORANTHENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.05 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.05 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.05 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	0.11	< 0.05 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.05 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
BIS(2-ETHYLHEXYL)PHTHALATE (6 UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 UJ	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 UJ	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 UJ	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 UJ	--
CHRYSENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.06 J
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.07 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.05 J
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.03 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	0.04 J
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.03 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.04 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.03 UJ
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.03 U
DIBENZ(A,H)ANTHRACENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.2 J
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.1 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.1 J
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	0.08 J
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	0.1 J
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.07 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.07 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.07 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.07 U
FLUORANTHENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.07 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.08 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.07 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	0.13	< 0.07 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.07 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.07 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.07 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.07 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.07 U
FLUORENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.06 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.07 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.06 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	0.46	0.66	0.66	0.5
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.06 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
HEXACHLOROBENZENE (1 UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--
INDENO(1,2,3-CD)PYRENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.05 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.05 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.05 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	0.11	< 0.05 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.05 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
NAPHTHALENE (20 UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.06 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.29	0.2
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.2	4
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	13	--	--	19
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.06 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.21	0.12	< 0.06 U
PENTACHLOROPHENOL (1 UG_L)																
MW09-02S	< 1.1 U	< 1.1 U	**2.1 J**	0.052 J	--	< 1 UJ	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-03D	< 1 U	< 1.1 U	< 1 UJ	< 1.1 UJ	--	< 1 UJ	R	< 1.1 U	--	--	--	--	--	--	--	--
MW09-07S	< 1 U	< 1 U	< 1 U	--	--	< 1.1 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.3 UJ
MW09-08S	< 1 U	< 1 U	< 1 UJ	< 1.1 U	--	< 1 UJ	< 1.1 U	< 0.91 U	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.3 UJ
MW09-09S	< 1 UJ	< 1 U	< 1 UJ	< 1 U	--	< 1 UJ	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10D	< 1 UJ	< 1.1 U	< 1 U	< 1 U	--	< 1 UJ	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-10S	< 1 U	< 1.1 U	< 1 U	< 1.1 U	--	< 1 UJ	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-11S	< 1 U	< 1.2 U	< 1 U	< 1.1 UJ	--	< 1 UJ	< 1.1 U	0.23	--	--	--	--	--	--	--	--
MW09-14D	< 1 U	< 1.1 U	< 1 U	< 1.1 UJ	--	< 1 UJ	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.3 UJ
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 1 U	< 1 U	< 0.3 UJ
MW09-20D	< 1.1 UJ	< 1.1 U	< 1 UJ	< 1 UJ	--	< 1 UJ	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-20I	< 1 U	< 1 U	< 1 U	< 1.1 U	--	< 1 U	< 1 UJ	< 1 U	--	--	--	--	< 1 UJ	< 1 UJ	< 1 UJ	< 0.3 UJ
MW09-21D	< 1.1 U	< 1.1 U	< 1 U	< 1 U	--	< 1 UJ	0.33 J	< 1 U	--	--	--	--	--	--	--	--
MW09-21S	< 1.1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 UJ	< 1 U	< 1.1 U	--	--	--	--	--	< 1 UJ	--	< 0.3 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1.1 U	--	< 1 UJ	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-23S	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 UJ	< 1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 UJ	< 1.1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 UJ	--	< 1 UJ	< 1.1 U	< 1 U	--	--	--	--	--	--	--	--
MW09-25S	< 1 U	< 1 U	< 1 U	< 1.1 U	--	< 1 UJ	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 1 UJ	< 1 UJ	< 0.3 UJ
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 1 UJ	< 1 UJ	< 0.3 UJ
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 1 UJ	< 1 UJ	< 0.3 U
PHENANTHRENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.05 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.15	0.1 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.05 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	0.12	< 0.05 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	0.2 J
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U
PYRENE (UG_L)																
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.06 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.08 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.06 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	0.11	< 0.06 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.06 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.06 U
1,1,1-TRICHLOROETHANE (200 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 67 U	--	< 67 U	--	< 1 U	--	< 0.2 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 67 U	--	< 67 U	--	< 1 U	--	< 0.2 U

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 67 U	--	< 67 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 67 U	< 67 U	< 67 U	< 67 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 67 U	< 67 U	< 67 U	< 67 U	< 10 U	< 1 U	< 5 U	< 0.2 U
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 67 U	--	< 67 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 67 U	--	< 67 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 67 U	< 67 U	< 67 U	< 67 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 67 U	--	< 67 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-17I	--	--	--	--	--	--	--	--	< 67 U	< 67 U	< 67 U	< 67 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 67 U	< 67 U	< 67 U	< 67 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	< 1 U	< 200 U	< 1000 U	< 1000 U	< 1000 U	< 2000 U	< 1000 U	< 1000 U	< 67000 U	< 67000 UJ	< 67000 U	< 67000 U	< 4000 U	< 1 U	< 100 U	< 100 U
MW09-21D	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 2.5 U	< 2 U	< 2 U	--	< 67 U	--	< 67 U	--	< 5 U	--	< 0.2 U
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 67 U	--	< 67 U	--	< 1 UJ	--	< 0.2 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 67 U	--	< 67 U	--	< 1 U	--	< 0.2 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 67 U	--	< 67 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 67 U	--	< 67 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 67 U	--	< 67 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 67 U	< 67 U	< 67 U	< 67 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 67 U	< 67 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 67 U	< 67 U	< 67 U	< 67 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	< 67 U	< 67 U	< 67 U	< 67 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	< 67 U	< 67 U	< 67 U	< 67 U	< 1 U	< 1 UJ	< 1 U	< 0.2 U
1,1,2,2-TETRACHLOROETHANE (UG_L)																
MW09-02S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-03D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	--	< 1 UJ	--	< 1 U	--	< 0.4 U
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.4 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.4 U
MW09-09S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 10 U	< 1 U	< 5 U	0.4 J
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-14D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.4 U
MW09-17I	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-20D	< 1 UJ	4.3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-20I	144000 J	94800	138000	99000	129000	114000 J	< 1000 U	90600	120000	96000 J	96000 J	120000	79000	8800 J	64000	94000
MW09-21D	< 1 UJ	< 5 U	< 1 U	< 1 U	< 1 U	2.7	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 5 U	--	< 0.4 U
MW09-21S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-25S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-26D	--	--	--	--	--	--	--	--	< 1 UJ	< 1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	9	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-27D	--	--	--	--	--	--	--	--	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-27S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U
1,1,2-TRICHLOROETHANE (5 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	1.5 J	2.1	0.6 J	< 10 U	< 1 U	< 5 U	< 0.3 U
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-17I	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20I	**3900 J**	**2890**	**4240 J**	**2700**	**4590**	**3330 J**	**3380**	**2990**	**3400**	**3100 J**	**3300**	**4600**	< 4000 U	**2300 J**	**2700**	**4400**
MW09-21D	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 2.5 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 5 U	--	< 0.3 U
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-26D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
1,1-DICHLOROETHANE (5 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U	< 1 U	< 5 U	< 0.2 U
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-17I	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	< 1 U	< 200 U	< 1000 U	< 1000 U	< 1000 U	< 2000 U	< 1000 U	< 1000 U	< 1000 U	< 1000 UJ	< 1000 U	< 1000 U	< 4000 U	< 1 U	< 100 U	< 100 U
MW09-21D	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 2.5 U	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 5 U	--	< 0.2 U
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 1 U	< 1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
1,1-DICHLOROETHENE (7 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 2.3 U	--	< 2.3 U	--	< 1 U	--	< 0.4 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	1.2	< 1 U	0.55 J	--	0.72 J	--	0.63 J	--	< 1 U	--	< 0.4 U
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 2.3 U	--	< 2.3 U	--	< 1 U	--	< 0.4 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.4 UJ
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.3 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3	0.7 J
MW09-09S	1	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.6 J	< 1 U	1.7 J	2.7	2.4	1.8 J	< 10 U	3	5.5	2 J
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 2.3 U	--	< 2.3 U	--	< 1 U	--	< 0.4 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 2.3 U	--	< 2.3 U	--	< 1 U	--	< 0.4 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.3 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 2.3 U	--	< 2.3 U	--	< 1 U	--	< 0.4 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.4 U
MW09-17I	--	--	--	--	--	--	--	--	< 2.3 U	< 2.3 U	< 2.3 U	< 2.3 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.3 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-20I	**275 J**	**329 J**	**227 J**	< 1000 U	< 1000 U	**421 J**	< 1000 U	**381 J**	< 2300 U	< 2300 UJ	**480 J**	**570 J**	< 4000 U	**530 J**	**270**	**400 J**
MW09-21D	2	< 5 U	1.7	1.7	1.4	2.9	1.3 J	2.0 J	--	1.4 J	--	1.4 J	--	< 5 U	--	0.9 J
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 2.3 U	--	< 2.3 U	--	< 1 U	--	< 0.4 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 2.3 U	--	< 2.3 U	--	< 1 U	--	< 0.4 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 2.3 U	--	< 2.3 U	--	< 1 U	--	< 0.4 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 2.3 U	--	< 2.3 U	--	< 1 U	--	< 0.4 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 2.3 U	--	< 2.3 U	--	< 1 U	--	< 0.4 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.3 U	< 2.3 U	< 2.3 U	< 2.3 U	< 1 U	< 1 U	< 1 U	< 0.4 UJ
MW09-26D	--	--	--	--	--	--	--	--	< 2.3 U	< 2.3 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 2.3 U	< 2.3 UJ	< 2.3 U	< 2.3 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-27D	--	--	--	--	--	--	--	--	< 2.3 U	< 2.3 U	< 2.3 U	< 2.3 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-27S	--	--	--	--	--	--	--	--	< 2.3 U	< 2.3 U	< 2.3 U	< 2.3 U	< 1 U	< 1 U	< 1 U	< 0.4 U
1,2-DICHLOROETHANE (5 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-03D	0.69 J	0.76 J	< 1 U	< 1 U	< 1 U	< 1 U	0.49 J	0.51 J	--	< 1.7 U	--	0.58 J	--	< 1 U	--	< 0.2 U
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	0.7 J
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-09S	1.8	1	< 1 U	1.3	< 1 U	1.1	1.3	0.61 J	1.5 J	2.3	2.2	2	< 10 U	< 1 U	< 5 U	1
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.9	3
MW09-17I	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	**11.3 J**	**26.3 J**	< 1000 U	< 1000 U	< 1000 U	< 2000 U	< 1000 U	< 1000 U	< 1700 U	< 1700 UJ	< 1700 U	< 1700 U	< 4000 U	< 1 U	< 100 U	< 100 U
MW09-21D	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 2.5 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 5 U	--	< 0.2 U
MW09-21S	0.61 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.66 J	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 UJ	--	< 0.2 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 1.7 U	--	< 1.7 U	--	< 1 UJ	--	< 0.2 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 UJ	--	< 0.2 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 UJ	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	2.2	2	2.4	2.8	2.3	< 1 U	1.3	2
MW09-27S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 UJ	< 1 U	< 0.2 U
1,2-DICHLOROETHENE, TOTAL (UG_L)																
MW09-02S	< 0.8 U	< 0.8 U	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.4 U	2.7	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-03D	118	110	129	109	105	149.4	102.9	88.5	--	90.63	--	100.47	--	86	--	79.5
MW09-07S	< 0.8 U	< 0.8 U	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.36 U	1.16	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.8	2
MW09-08S	3.6	3.8	1.2	4.1	2.7	4.6	2.9	2.28	2.9	3.3	3.1	3.5	3.3	3.2	2.5	3
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	32.1	29
MW09-09S	274.3	42.6	197.5	156.7	53.5	182.9	211.8	19.3	392	637	741	657	1127	995	1546	520
MW09-10D	< 0.8 U	< 0.8 U	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.36 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 0.8 U	< 0.8 U	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.36 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	2
MW09-11S	< 0.8 U	< 0.8 U	1.2	1	< 1 U	< 1 U	< 0.36 U	< 1 U	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	1.3	< 1 U	< 1 U	0.8
MW09-14D	< 0.8 U	< 0.8 U	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.36 U	0.44	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	1
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	27.4
MW09-17I	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 0.8 U	3.7	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.36 U	< 1 U	< 23.3 U	< 23.3 U	< 23.3 U	1.06	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	57400	43300	55500	53100	59700	42900	47000	47100	58000	56000	57000	73000	63000	20300	50000	65000
MW09-21D	613	697	716.8	624.9	648	607.9	514.9	617.3	--	538	--	482	--	527	--	356
MW09-21S	< 0.8 U	< 0.8 U	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.36 U	1.6	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 0.8 U	< 0.8 U	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.36 U	< 5 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-23S	< 0.8 U	< 0.8 U	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.36 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 0.8 U	< 0.8 U	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.36 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 0.8 U	< 0.8 U	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.36 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 0.8 U	< 0.8 U	< 0.51 U	< 0.51 U	< 1 U	< 1 U	< 0.36 U	< 1 U	< 23.3 U	< 23.3 U	0.68	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	0.69	0.82	1.2	1.5	1.4	< 1 U	0.73	1
MW09-27S	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
1,2-DICHLOROPROPANE (5 UG_L)																
MW09-02S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-03D	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-07S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-09S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 10 U	< 1 U	< 5 U	< 0.2 U
MW09-10D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-14D	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-17I	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	< 2 U	< 400 U	< 2000 U	< 2000 U	< 2000 U	< 4000 U	< 2000 U	< 2000 U	< 1700 U	< 1700 UJ	< 1700 U	< 1700 U	< 4000 U	< 1 U	< 100 U	< 120 U
MW09-21D	< 2 U	< 10 U	< 2 U	< 2 U	< 2 U	< 5 U	< 4 U	< 4 U	--	< 1.7 U	--	< 1.7 U	--	< 5 U	--	< 0.2 U
MW09-21S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 10 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-23S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	3.1	3.8	3.8	3.8	3.2	2.6	< 1 U	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
2-BUTANONE (UG_L)																
MW09-02S	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-03D	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 UJ	--	< 5 UJ	--	< 5 UJ	--	< 1 U
MW09-07S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 UJ	< 1 U
MW09-08S	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 1 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 UJ	< 1 U
MW09-09S	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 50 UJ	< 5 UJ	< 25 UJ	< 1 U
MW09-10D	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-10S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 UJ	--	< 5 U	--	< 5 U	--	< 1 U
MW09-11S	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 1 U
MW09-14D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 UJ	< 1 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 1 U
MW09-20D	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 1 U
MW09-20I	< 5 U	< 1000 U	< 5000 U	< 5000 U	< 5000 U	< 10000 U	< 5000 U	< 5000 U	< 5000 UJ	< 5000 UJ	< 5000 U	< 5000 U	< 20000 UJ	< 5 UJ	< 500 UJ	< 650 U
MW09-21D	< 5 U	< 25 U	< 5 U	< 5 U	< 5 U	< 13 U	< 10 U	< 10 U	--	< 5 U	--	< 5 U	--	< 25 UJ	--	< 1 U
MW09-21S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	--	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-23D	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 25 U	--	< 5 U	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-23S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-24D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-24S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-25S	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 1 U
MW09-26D	--	--	--	--	--	--	--	--	1.2 J	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 1 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 1 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 1 U
2-HEXANONE (UG_L)																
MW09-02S	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 UJ	--	< 2 U
MW09-03D	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	< 2 U
MW09-07S	< 5 U	< 5 U	1.6 J	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	< 2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 2 U
MW09-08S	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 2 U
MW09-09S	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 50 U	< 5 U	< 25 UJ	< 2 U
MW09-10D	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	< 2 U
MW09-10S	< 5 UJ	< 5 UJ	2.5 J	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	< 2 U
MW09-11S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U
MW09-14D	4.3 J	< 5 U	4.2 J	3.5 J	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	< 2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 UJ	< 2 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U
MW09-20D	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U
MW09-20I	< 5 U	< 1000 U	< 5000 U	< 5000 U	< 5000 U	< 10000 U	< 5000 U	< 5000 U	< 5000 U	< 5000 UJ	< 5000 UJ	< 5000 U	< 20000 U	< 5 U	< 500 U	< 850 U
MW09-21D	< 5 UJ	< 25 U	< 5 U	< 5 U	< 5 U	< 13 U	< 10 U	< 10 U	--	< 5 U	--	< 5 U	--	< 25 UJ	--	< 2 U
MW09-21S	11.9 J	8.7	6.7	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 UJ	--	< 2 U
MW09-23D	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 25 U	--	< 5 U	--	< 5 U	--	< 5 UJ	--	< 2 U
MW09-23S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	--	< 5 U	--	< 5 UJ	--	< 2 U
MW09-24D	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 UJ	--	< 2 U
MW09-24S	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	< 2 U
MW09-25S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 2 U
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 2 U
4-METHYL-2-PENTANONE (UG_L)																
MW09-02S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-03D	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	< 1 U
MW09-07S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	< 1 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 1 U
MW09-08S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 1 U
MW09-09S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 50 U	< 5 U	< 25 U	< 1 U
MW09-10D	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	< 1 U
MW09-10S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	< 1 U
MW09-11S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U
MW09-14D	< 5 UJ	< 5 U	< 5 U	2.2 J	< 5 U	< 5 U	1.5 J	< 5 U	--	2.9 J	--	0.95 J	--	< 5 U	--	< 1 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 1 U
MW09-17I	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U
MW09-20D	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U
MW09-20I	< 5 U	< 1000 U	< 5000 U	< 5000 U	< 5000 U	< 10000 U	< 5000 U	< 5000 U	< 5000 U	< 5000 UJ	< 5000 U	< 5000 U	< 20000 U	< 5 U	< 500 U	< 660 U
MW09-21D	< 5 UJ	< 25 U	< 5 U	< 5 U	< 5 U	< 13 U	< 10 U	< 10 U	--	< 5 U	--	< 5 U	--	< 25 UJ	--	< 1 U
MW09-21S	< 5 UJ	< 5 U	11.1	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-23D	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 25 U	--	< 5 U	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-23S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	< 5 U	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-24D	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 UJ	--	< 1 U
MW09-24S	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 5 U	--	< 5 U	--	< 5 U	--	< 1 U
MW09-25S	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	2.4 J	< 5 U	< 5 U	< 5 UJ	< 5 U	< 1 U
MW09-26D	--	--	--	--	--	--	--	--	< 5 U	< 5 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U
MW09-27D	--	--	--	--	--	--	--	--	290	170 J	120	38 J	< 5 U	20 J	< 5 U	< 1 U
MW09-27S	--	--	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 1 U
ACETONE (UG_L)																
MW09-02S	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	--	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 2 U
MW09-03D	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 5 UJ	--	< 2 U
MW09-07S	< 5 U	< 5 U	< 5 U	23.3	< 5 U	< 5 U	12.6 J	< 5 U	--	6.7 J	--	< 5 U	--	< 5 UJ	--	< 2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 UJ	< 2 U
MW09-08S	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	8.199999	< 5 UJ	< 5 UJ	3 J	< 5 U	2.2 J	< 5 U	< 5 U	< 5 UJ	3 J
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5 UJ	6
MW09-09S	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ	< 5 U	1.4 J	< 50 UJ	< 5 UJ	< 25 UJ	3 J
MW09-10D	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	--	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 2 U
MW09-10S	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	6.5 J	< 5 UJ	--	2.3 J	--	< 5 U	--	< 5 U	--	3 J
MW09-11S	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	8 J
MW09-14D	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	6.4 J	< 5 U	--	< 5 UJ	--	< 5 U	--	< 5 UJ	--	< 2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6.7 J	8
MW09-17I	--	--	--	--	--	--	--	--	2.7 J	< 5 UJ	2.4 J	2.2 J	< 5 UJ	< 5 U	< 5 U	10 J
MW09-20D	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	4 J
MW09-20I	< 5 U	< 1000 U	< 5000 U	< 5000 U	< 5000 U	< 10000 U	< 5000 UJ	< 5000 UJ	< 5000 UJ	< 5000 UJ	< 5000 U	< 5000 U	< 20000 UJ	< 5 UJ	< 500 UJ	< 1100 U
MW09-21D	< 5 U	< 25 UJ	< 5 UJ	< 5 U	< 5 U	< 13 U	< 10 U	< 10 U	--	2.6 J	--	1.7 J	--	< 25 UJ	--	< 2 UJ
MW09-21S	11.4	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	4.5 J	3.1 J	--	2.4 J	--	1.6 J	--	< 5 UJ	--	6 J
MW09-23D	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 25 U	--	< 5 U	--	< 5 UJ	--	< 5 UJ	--	< 2 U
MW09-23S	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	--	1.8 J	--	2.1 J	--	< 5 UJ	--	< 2 U
MW09-24D	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	5.4 J	< 5 UJ	--	< 5 UJ	--	< 5 UJ	--	< 5 UJ	--	5 J
MW09-24S	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	--	< 5 UJ	--	1.3 J	--	< 5 UJ	--	< 2 UJ
MW09-25S	< 5 U	< 5 UJ	< 5 UJ	10.1	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	2.7 J	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	4 J
MW09-26D	--	--	--	--	--	--	--	--	< 5 UJ	< 5 UJ	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 2 U
MW09-27D	--	--	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	4 J
MW09-27S	--	--	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	4 J
BENZENE (5 UG_L)																
MW09-02S	< 0.5 U	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-03D	< 0.5 U	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	0.23 J	< 0.5 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-07S	**11.9**	**10.2**	**9.5**	**22.3**	**11.1**	**18.1**	**13.8**	**12.7**	--	**11**	--	**12**	--	**8.3**	--	**7**
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-08S	0.78 J	1.3	1.3	1.2	1.1	1.2	1.1	1.3	0.99 J	1.2 J	1.2 J	1.2 J	1.1	1.2	0.91 J	1
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-09S	**7.5**	**6.8**	**6.3**	**6.9**	**6.4**	**7.2**	**7.7**	**7.6**	**6.3**	**8.2**	**9.3**	**8.9**	< 10 U	**7.4**	**8.1**	**9**
MW09-10D	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-10S	2.2 J	2.3	2.4	2.6	1.5	2	2	2.1	--	2.4	--	2.8	--	3.5	--	3
MW09-11S	0.6	1.7	0.57	0.75	< 0.5 U	1.6	0.7	1.9	< 1.7 U	2.1	3.4	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-14D	2.3	2	2.2	2.6	1.4	2.4	2.3	1.9	--	3	--	1.5 J	--	1.8	--	2
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**46**	**62**
MW09-17I	--	--	--	--	--	--	--	--	**15**	**26**	**26**	**24**	**23**	**27**	**20**	**21**
MW09-20D	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20I	**6.6 J**	**20 J**	< 500 U	< 500 U	< 500 U	< 1000 U	< 500 U	< 500 U	< 1700 U	< 1700 UJ	< 1700 U	< 1700 U	< 4000 U	**8.6**	< 100 U	< 130 U
MW09-21D	**6**	**7.7**	4.8	**5.8**	4.5	4.8	4.5	**5.1**	--	4.1	--	3.1	--	< 5 U	--	2
MW09-21S	**16.6**	**15.6**	**13.2**	**13.7**	**13.9**	**15.2**	**11.9**	**12**	--	**12**	--	**12**	--	**14**	--	**10**
MW09-23D	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2.5 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-23S	R	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-24D	< 0.5 U	0.7	0.65	0.71	< 0.5 U	0.72	0.69	0.7	--	0.68 J	--	0.8 J	--	< 1 U	--	0.7 J
MW09-24S	< 0.5 U	0.4 J	< 0.2 U	0.24 J	< 0.5 U	< 0.5 U	< 0.5 U	0.45 J	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-25S	**10.1**	**13.1**	**7.8**	**10.5**	**15.8**	**10.9**	**14.5**	**6.7**	**29**	**15**	**17**	**10**	**13**	3.1	**6.3**	0.6 J
MW09-26D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
BROMODICHLOROMETHANE (80 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 10 U	< 1 U	< 5 U	< 0.3 U
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-17I	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20I	< 1 U	< 200 U	< 1000 U	< 1000 U	< 1000 U	< 2000 U	< 1000 U	< 1000 U	< 27000 U	< 27000 UJ	< 27000 U	< 27000 U	< 4000 U	< 1 U	< 100 U	< 160 U
MW09-21D	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 2.5 U	1.5 J	< 2 U	--	< 26.7 U	--	< 26.7 U	--	< 5 U	--	< 0.3 U
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-26D	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27D	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27S	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
BROMOFORM (80 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.2 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.2 U
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 10 U	< 1 U	< 5 U	< 0.2 U
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 UJ	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-17I	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	< 1 U	< 200 U	< 1000 U	< 1000 U	< 1000 U	< 2000 U	< 1000 U	< 1000 U	< 27000 U	< 27000 UJ	< 27000 U	< 27000 U	< 4000 U	< 1 U	< 100 U	< 120 U
MW09-21D	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 2.5 U	< 2 U	< 2 U	--	< 26.7 U	--	< 26.7 U	--	< 5 U	--	< 0.2 U
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.2 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 UJ	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 26.7 UJ	< 26.7 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	< 26.7 UJ	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
BROMOMETHANE (UG_L)																
MW09-02S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.5 U
MW09-03D	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 UJ	--	< 1 UJ	--	< 1 U	--	< 0.5 U
MW09-07S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	8.9 J	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.5 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.5 UJ
MW09-08S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 0.5 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.5 U
MW09-09S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 10 U	< 1 U	< 5 UJ	< 0.5 U
MW09-10D	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.5 U
MW09-10S	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 UJ	--	< 1 UJ	--	< 1 U	--	< 0.5 U
MW09-11S	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.5 UJ
MW09-14D	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	9.1	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.5 UJ
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.5 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 UJ
MW09-20D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	< 0.5 U
MW09-20I	< 2 U	< 400 U	< 2000 U	< 2000 U	< 2000 U	< 4000 U	< 2000 U	< 2000 U	< 1000 U	< 1000 UJ	< 1000 UJ	< 1000 U	< 4000 U	< 1 U	< 100 UJ	< 240 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-21D	< 2 U	< 10 U	< 2 UJ	< 2 U	< 2 U	< 5 U	< 4 U	20.6	--	< 1 U	--	< 1 U	--	< 5 U	--	< 0.5 U
MW09-21S	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.5 U
MW09-23D	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	5 J	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U
MW09-23S	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 UJ	0.97 J	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.5 U
MW09-24D	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 UJ	--	0.5 J	--	< 1 U	--	< 0.5 UJ
MW09-24S	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.5 UJ
MW09-25S	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 0.5 U
MW09-26D	--	--	--	--	--	--	--	--	< 1 U	< 1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 0.5 U
MW09-27D	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	< 0.5 U
MW09-27S	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 UJ	< 0.5 U
CARBON DISULFIDE (UG_L)																
MW09-02S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	0.52 J	< 5 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-03D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	0.47 J	< 5 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-07S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	0.44 J	< 5 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 10 U	< 1 U	< 5 U	< 0.2 U
MW09-10D	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	0.45 J	< 5 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	0.45 J	< 5 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-14D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	0.43 J	< 5 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-17I	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	6.5 J	19.6 J	< 5000 U	< 5000 U	< 5000 U	< 10000 U	< 5000 U	< 5000 U	< 1000 U	< 1000 UJ	< 1000 U	< 1000 U	< 4000 U	7	< 100 U	< 120 U
MW09-21D	< 5 U	< 25 U	1.2 J	< 5 U	< 5 U	< 13 U	< 10 U	< 10 U	--	< 1 U	--	< 1 U	--	< 5 U	--	< 0.2 U
MW09-21S	0.79 J	< 5 U	< 5 U	0.84 J	< 5 U	< 5 U	< 5 U	6.2 J	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 25 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-23S	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	0.73 J	< 5 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	0.54 J	< 5 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	0.6 J	< 5 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	0.95 J	< 1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
CARBON TETRACHLORIDE (5 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 10 U	< 1 U	< 5 U	< 0.2 U
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-17I	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	< 1 U	< 200 U	< 1000 U	< 1000 U	< 1000 U	< 2000 U	< 1000 U	< 1000 U	< 1700 U	< 1700 UJ	< 1700 U	< 1700 U	< 4000 U	< 1 U	< 100 U	< 110 U
MW09-21D	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 2.5 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 U	--	< 5 U	--	< 0.2 U
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 UJ	--	< 0.2 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 1.7 U	--	< 1.7 U	--	< 1 UJ	--	< 0.2 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 UJ	--	< 0.2 U
MW09-24D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 UJ	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 UJ	< 1 U	< 0.2 U
CHLOROBENZENE (100 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-07S	0.75 J	0.76 J	0.86 J	0.79 J	< 1 U	1.2	0.94 J	1	--	0.63 J	--	0.79 J	--	< 1 U	--	< 0.2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-09S	< 1 U	0.62 J	< 1 U	< 1 UJ	< 1 U	0.77 J	0.6 J	0.97 J	< 33.3 U	< 33.3 U	0.42 J	0.45 J	< 10 U	< 1 U	< 5 U	0.6 J
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	0.39 J	--	< 1 U	--	0.4 J
MW09-11S	9.1	**258**	47.9	6.9 J	65.8	**182**	47.7	**205**	12 J	**180**	**280**	3.5 J	2.2	37 J	4.3	8
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.61 J	0.8 J
MW09-17I	--	--	--	--	--	--	--	--	1.9 J	2.5 J	< 33.3 U	2.4 J	2.4	2.6	2.3	2
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	0.83 J	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	< 1 U	< 200 U	< 1000 U	< 1000 U	< 1000 U	< 2000 U	< 1000 U	< 1000 U	< 33000 U	< 33000 UJ	< 33000 U	< 33000 U	< 4000 U	< 1 U	< 100 U	< 110 U
MW09-21D	67.2	**147**	**105**	**145 J**	96.9	**147**	**148**	**164**	--	91	--	11 J	--	7.7	--	4
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.9 J	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-23S	R	< 1 U	0.47 J	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.35 J	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-25S	17.1	28	16.1	18.2 J	21.6	19.9	24.2	42.3	3.2 J	1.6 J	12 J	35	18	< 1 U	23	4
MW09-26D	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
CHLOROETHANE (UG_L)																
MW09-02S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.6 UJ
MW09-03D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.6 UJ
MW09-07S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 UJ	--	< 1 UJ	--	< 1 U	--	< 0.6 UJ
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.6 U
MW09-08S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.6 UJ
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.6 U
MW09-09S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 10 U	< 1 U	< 5 U	< 0.6 U
MW09-10D	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.6 U
MW09-10S	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.6 U
MW09-11S	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.6 U
MW09-14D	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	1.6 J	< 2 U	< 2 UJ	--	0.94 J	--	< 1 UJ	--	< 1 U	--	2 J
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.6 UJ
MW09-17I	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.6 U
MW09-20D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.6 U
MW09-20I	< 2 U	< 400 U	< 2000 U	< 2000 U	< 2000 U	< 4000 U	< 2000 U	< 2000 U	< 1000 U	< 1000 UJ	< 1000 UJ	< 1000 U	< 4000 U	< 1 U	< 100 U	< 280 U
MW09-21D	< 2 UJ	< 10 U	< 2 UJ	< 2 U	< 2 U	< 5 U	< 4 U	< 4 U	--	< 1 U	--	< 1 U	--	< 5 U	--	< 0.6 UJ
MW09-21S	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 UJ	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.6 U
MW09-23D	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 UJ	< 2 U	16.8	--	< 1 U	--	< 1 U	--	< 1 UJ	--	< 0.6 UJ
MW09-23S	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 UJ	< 2 UJ	3.5	--	< 1 UJ	--	< 1 U	--	< 1 UJ	--	< 0.6 UJ
MW09-24D	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.6 U
MW09-24S	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.6 U
MW09-25S	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 0.6 U
MW09-26D	--	--	--	--	--	--	--	--	< 1 U	< 1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.6 UJ
MW09-27D	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.6 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.6 U
CHLOROFORM (80 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 10 U	< 1 U	< 5 U	< 0.3 U
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-17I	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20I	70.5 J	46 J	72.4 J	< 1000 U	< 1000 U	< 2000 U	< 1000 U	< 1000 U	< 27000 U	< 27000 UJ	< 27000 U	< 27000 U	< 4000 U	**82**	< 100 U	< 160 U
MW09-21D	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 2.5 U	< 2 U	< 2 U	--	< 26.7 U	--	< 26.7 U	--	< 5 U	--	< 0.3 U
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-26D	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27D	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27S	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
CHLOROMETHANE (UG_L)																
MW09-02S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-03D	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-07S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.4 UJ
MW09-08S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.4 U
MW09-09S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 10 U	< 1 U	< 5 U	< 0.4 U
MW09-10D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	--	< 1 U	--	< 1 U	--	2.1 J	--	< 0.4 U
MW09-10S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-11S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-14D	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.4 U
MW09-17I	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-20D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-20I	< 2 U	319 J	< 2000 U	< 2000 U	< 2000 U	< 4000 U	< 2000 U	< 2000 UJ	< 1000 U	< 1000 UJ	< 1000 UJ	< 1000 U	< 4000 U	< 1 U	< 100 U	< 180 U
MW09-21D	< 2 U	< 10 U	< 2 U	< 2 U	< 2 U	< 5 U	< 4 U	8.7 J	--	< 1 U	--	< 1 U	--	< 5 U	--	< 0.4 U
MW09-21S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.4 U
MW09-23D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	14.8	--	< 1 U	--	< 1 UJ	--	< 1 U	--	< 0.4 U
MW09-23S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	--	< 1 UJ	--	< 1 UJ	--	< 1 U	--	< 0.4 U
MW09-24D	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	--	< 1 U	--	< 1 UJ	--	< 1 U	--	< 0.4 U
MW09-24S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	--	< 1 U	--	< 1 UJ	--	< 1 U	--	< 0.4 U
MW09-25S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-26D	--	--	--	--	--	--	--	--	< 1 UJ	< 1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 UJ	0.32 J	< 1 U	3	< 1 U	< 0.4 U
MW09-27D	--	--	--	--	--	--	--	--	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U
MW09-27S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U
CIS-1,2-DICHLOROETHENE (70 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	2.7	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-03D	**118**	**110**	**129**	**109**	**105**	**148**	**101**	**87.4**	--	**90**	--	**100**	--	**86**	--	**79**
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.57 J	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.8	2
MW09-08S	3.6 J	3.8	1.2	4.1	2.7	4.6	2.9	1.7	2.9 J	3.3 J	3.1 J	3.5 J	3.3	3.2	2.5	3
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	29	27
MW09-09S	**266**	41.1	**192**	**149**	53.5	**176**	**205**	18.3	**380**	**620**	**720**	**640**	**1100**	**980**	**1500**	**510**
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	2
MW09-11S	< 1 U	< 1 U	1.2	1	< 1 U	< 1 U	< 1 U	< 1 U	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	1.3	< 1 U	< 1 U	0.8 J
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	1
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	14	27
MW09-17I	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 1 UJ	2.3	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 23.3 U	< 23.3 U	< 23.3 U	0.47 J	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	**39900 J**	**28000**	**38100 J**	**35900**	**39400**	**26800**	**32100**	**31100**	**36000**	**39000 J**	**40000**	**50000**	**43000**	**12000 J**	**36000**	**45000**
MW09-21D	**602**	**697**	**707**	**617**	**641**	**599**	**508**	**609**	--	**520**	--	**460**	--	**510**	--	**340**
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	1.6	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 23.3 U	< 23.3 U	0.68 J	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	0.69 J	0.82 J	1.2 J	1.5 J	1.4	< 1 U	0.73 J	1
MW09-27S	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
CIS-1,3-DICHLOROPROPENE (UG_L)																
MW09-02S	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-03D	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-07S	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-09S	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U	< 1 U	< 5 U	< 0.2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-10D	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-14D	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-17I	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	< 0.5 U	< 100 U	< 500 U	< 500 U	< 500 U	< 1000 U	< 500 U	< 500 U	< 1000 U	< 1000 UJ	< 1000 U	< 1000 U	< 4000 U	< 1 U	< 100 U	< 95 U
MW09-21D	< 0.5 U	< 2.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.3 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 5 U	--	< 0.2 U
MW09-21S	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	5.6	--	< 1 U	--	< 0.2 U
MW09-23D	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-23S	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 1 U	< 1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
DIBROMOCHLOROMETHANE (80 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 10 U	< 1 U	< 5 U	< 0.3 U
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-17I	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20I	< 1 U	< 200 U	< 1000 U	< 1000 U	< 1000 U	< 2000 U	< 1000 U	< 1000 U	< 27000 U	< 27000 UJ	< 27000 U	< 27000 U	< 4000 U	< 1 U	< 100 U	< 150 U
MW09-21D	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 2.5 U	< 2 U	< 2 U	--	< 26.7 U	--	< 26.7 U	--	< 5 U	--	< 0.3 U
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 26.7 U	--	< 26.7 U	--	< 1 U	--	< 0.3 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-26D	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27D	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27S	--	--	--	--	--	--	--	--	< 26.7 U	< 26.7 U	< 26.7 U	< 26.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
ETHYLBENZENE (70 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 UJ
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 UJ
MW09-07S	< 1 U	< 1 U	0.27 J	0.52 J	< 1 U	0.32 J	0.22 J	0.30 J	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 UJ
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 10 U	< 1 U	< 5 U	< 0.2 U
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.5	5
MW09-17I	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	< 1 U	< 200 U	< 1000 U	< 1000 U	< 1000 U	< 2000 U	< 1000 U	< 1000 U	< 23000 U	< 23000 UJ	< 23000 U	< 23000 U	< 4000 U	< 1 U	< 100 U	< 100 U
MW09-21D	1.3	3.5 J	1.7	2.2	1.4	2.5	2.3	2.7	--	1.4 J	--	0.38 J	--	< 5 U	--	< 0.2 U
MW09-21S	< 1 U	< 1 U	0.3 J	0.21 J	< 1 U	< 1 U	< 1 U	0.22 J	--	0.37 J	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 UJ
MW09-23S	R	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 UJ
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 23.3 U	--	< 23.3 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.32 J	0.42 J	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 UJ
MW09-27D	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 UJ
MW09-27S	--	--	--	--	--	--	--	--	< 23.3 U	< 23.3 U	< 23.3 U	< 23.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
M- AND P-XYLENE (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.8 J
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 290 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.6 U
METHYLENE CHLORIDE (5 UG_L)																
MW09-02S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 UJ	--	< 1 U	--	< 1 U	--	< 1 U
MW09-03D	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U
MW09-07S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	0.51 J	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 1 U
MW09-08S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 1 U
MW09-09S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U	< 1 U	< 5 UJ	< 1 U
MW09-10D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U
MW09-10S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U
MW09-11S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
MW09-14D	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 1 U
MW09-17I	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	**55 J**	< 1 U	< 1 U	< 1 U	< 1 U
MW09-20D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U
MW09-20I	**12.0 J**	**9.3 J**	< 2000 U	< 2000 U	< 2000 U	**143 J**	**506 J**	< 2000 U	< 1000 U	< 1000 UJ	< 1000 U	< 1000 U	< 4000 U	< 1 U	< 100 UJ	< 560 U
MW09-21D	< 2 U	< 10 U	1.3 J	< 2 U	< 2 U	2 J	1.2 J	< 4 U	--	< 1 U	--	< 1 U	--	< 5 U	--	< 1 U
MW09-21S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U
MW09-23D	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 10 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U
MW09-23S	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U
MW09-24D	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U
MW09-24S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U
MW09-25S	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U
MW09-26D	--	--	--	--	--	--	--	--	< 1 U	< 1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U
MW09-27D	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U
MW09-27S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U
O-XYLENE (UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.9 J

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 120 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 UJ
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
STYRENE (100 UG_L)																
MW09-02S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-03D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-07S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 10 U	< 1 U	< 5 U	< 0.2 U
MW09-10D	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 33.3 UJ	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-14D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-17I	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	2.7 J	< 1000 U	< 5000 U	< 5000 U	< 5000 U	< 10000 U	< 5000 U	< 5000 U	< 33000 UJ	< 33000 UJ	< 33000 U	< 33000 U	< 4000 U	< 1 U	< 100 U	< 120 U
MW09-21D	< 5 U	< 25 U	< 5 U	< 5 U	< 5 U	< 13 U	< 10 U	< 10 U	--	< 33.3 U	--	< 33.3 U	--	< 5 U	--	< 0.2 U
MW09-21S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	9.3 J	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-23S	R	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	1.5 J	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 33.3 UJ	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 33.3 UJ	< 33.3 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	< 33.3 UJ	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	< 33.3 UJ	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
TETRACHLOROETHENE (5 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 UJ	--	< 1.7 U	--	< 1 U	--	< 0.9 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 UJ	--	< 1.7 U	--	< 1 U	--	< 0.9 U
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 UJ	--	< 1.7 UJ	--	< 1 U	--	< 0.9 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.9 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 UJ	< 1.7 U	< 1.7 UJ	< 1 U	< 1 U	< 1 U	< 0.9 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.9 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 UJ	< 1.7 UJ	< 1.7 UJ	< 10 U	< 1 U	< 5 U	< 0.9 U
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 UJ	--	< 1.7 U	--	< 1 U	--	< 0.9 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 UJ	--	< 1.7 U	--	< 1 U	--	< 0.9 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 UJ	< 1.7 UJ	< 1.7 UJ	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.9 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 UJ	--	< 1.7 UJ	--	< 1 U	--	< 0.9 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.9 U
MW09-17I	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 UJ	< 1.7 UJ	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.9 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 UJ	< 1.7 UJ	< 1.7 UJ	< 1 U	< 1 U	< 1 U	< 0.9 U
MW09-20I	**211 J**	**275 J**	**138 J**	< 1000 U	< 1000 U	**375 J**	< 1000 U	< 1000 U	< 1700 U	< 1700 UJ	< 1700 UJ	< 1700 UJ	< 4000 U	**250 J**	**150**	< 450 U
MW09-21D	< 1 U	< 5 U	< 1 U	< 1 U	< 1 U	< 2.5 U	< 2 U	< 2 U	--	< 1.7 U	--	< 1.7 UJ	--	< 5 U	--	< 0.9 U
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 UJ	--	< 1.7 UJ	--	< 1 U	--	< 0.9 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 1.7 U	--	< 1.7 UJ	--	< 1 U	--	< 0.9 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1.7 UJ	--	< 1.7 UJ	--	< 1 U	--	< 0.9 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 UJ	--	< 1.7 UJ	--	< 1 U	--	< 0.9 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 UJ	--	< 1.7 UJ	--	< 1 U	--	< 0.9 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 UJ	< 1.7 UJ	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.9 U
MW09-26D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 UJ	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 UJ	< 1.7 UJ	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.9 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 UJ	< 1.7 UJ	< 1.7 UJ	< 1 U	< 1 U	< 1 U	< 0.9 U
MW09-27S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 UJ	< 1.7 UJ	< 1.7 UJ	< 1 U	< 1 U	< 1 U	< 0.9 U
TOLUENE (100 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.3 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.3 U
MW09-07S	< 1 U	< 1 U	0.39 J	0.36 J	< 1 U	0.35 J	0.36 J	1.1	--	< 33.3 U	--	0.81 J	--	< 1 U	--	< 0.3 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 10 U	< 1 U	< 5 U	< 0.3 U
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.3 U
MW09-10S	< 1 UJ	< 1 U	0.32 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.3 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.3 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19	12
MW09-17I	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20I	3.9 J	10.5 J	**808 J**	< 1000 U	< 1000 U	< 2000 U	< 1000 U	**746 J**	< 33000 U	< 33000 UJ	< 33000 U	< 33000 U	< 4000 U	2.8	< 100 U	< 140 U
MW09-21D	15	18.3	10.4	11.9	12.1	9.9	9.4	14.3	--	9.8 J	--	7.8 J	--	6.9	--	6
MW09-21S	0.56 J	0.5 J	0.75 J	0.98 J	0.89 J	1.3	0.44 J	1.7	--	0.92 J	--	0.87 J	--	< 1 U	--	0.3 J
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.3 U
MW09-23S	R	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.3 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.3 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.3 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.33 J	< 1 U	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-26D	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27D	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27S	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.3 U
TRANS-1,2-DICHLOROETHENE (100 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-03D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	1.4	1.9	1.1	--	0.63 J	--	0.47 J	--	< 1 UJ	--	0.5 J
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.59 J	--	< 33.3 U	--	< 33.3 U	--	< 1 UJ	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.58 J	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3.1	2
MW09-09S	8.3	1.5	5.5	7.7	< 1 U	6.9	6.8	1	13 J	17 J	21 J	17 J	27	15 J	46	10
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 UJ	< 1 U	< 0.2 U
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.44 J	--	< 33.3 U	--	< 33.3 U	--	< 1 UJ	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	0.4 J
MW09-17I	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 1 UJ	1.4	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	< 33.3 U	0.59 J	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	**18700 J**	**15300**	**17400**	**17200**	**20300**	**16100 J**	**14900**	**16000**	**22000 J**	**17000 J**	**17000 J**	**23000 J**	**20000**	**8300 J**	**14000**	**20000**
MW09-21D	11	< 5 U	9.8	7.9	7	8.9	9.2	8.3	--	18 J	--	22 J	--	17	--	16
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 33.3 U	--	< 33.3 U	--	< 1 UJ	--	< 0.2 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 UJ	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	< 33.3 U	< 33.3 U	< 33.3 U	< 33.3 U	< 1 U	< 1 U	< 1 U	< 0.2 U
TRANS-1,3-DICHLOROPROPENE (UG_L)																
MW09-02S	< 0.5 U	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-03D	< 0.5 U	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-07S	< 0.5 U	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-08S	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-09S	< 0.5 U	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U	< 1 U	< 5 U	< 0.2 U
MW09-10D	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-11S	< 0.5 U	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-14D	< 0.5 U	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U
MW09-17I	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20I	< 0.5 U	< 100 U	< 500 U	< 500 U	< 500 U	< 1000 U	< 500 U	< 500 U	< 1000 U	< 1000 UJ	< 1000 U	< 1000 U	< 4000 U	< 1 U	< 100 U	< 100 U
MW09-21D	< 0.5 U	< 2.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 1.3 U	< 1 U	< 1 U	--	< 1 U	--	< 1 U	--	< 5 U	--	< 0.2 U
MW09-21S	< 0.5 U	3.9	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-23S	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-24D	< 0.5 U	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-24S	< 0.5 U	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 0.5 U	< 0.5 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 1 U	< 1 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U
TRICHLOROETHENE (5 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-03D	4.9	4.7	**5.5**	**5.4**	2.7	**5.4**	4.5	4.3	--	4.6	--	**6.5 J**	--	4.2	--	**6**
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	0.3 J
MW09-08S	1.7 J	< 1 U	< 1 U	< 1 U	< 1 U	1.3	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**65**	**36**
MW09-09S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.84 J	< 1 U	< 1 U	< 1.7 U	0.47 J	0.61 J	4.6	< 10 U	< 1 U	< 5 U	1
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	0.8 J	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-10S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	0.7 J	< 1 U	< 1 U	< 1 U	0.6 J
MW09-14D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.3 U
MW09-17I	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20D	< 1 UJ	**73.9**	1.4	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 UJ	< 1.7 U	**8.4**	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-20I	**449000 J**	**383000**	**375000**	**287000**	**507000**	**430000 J**	**375000**	**375000 J**	**370000**	**280000 J**	**400000**	**390000**	**380000**	**1200000**	**330000**	**410000**
MW09-21D	**146**	**166**	**141**	**154**	**196**	**181**	**176**	**171**	--	**160**	--	**120**	--	**130**	--	**95**
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.7 J	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 1.7 U	--	< 1.7 U	--	< 1 U	--	< 0.3 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-26D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 UJ	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 UJ	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27D	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
MW09-27S	--	--	--	--	--	--	--	--	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1 U	< 1 U	< 1 U	< 0.3 U
VINYL CHLORIDE (2 UG_L)																
MW09-02S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.71 J	--	< 0.7 U	--	< 0.7 U	--	< 1 U	--	< 0.2 U
MW09-03D	**22.2**	**29.9**	**19.2**	**13.2 J**	**18.6**	**18.5**	**20.2**	**15.6**	--	**14**	--	**14 J**	--	**11**	--	**15**
MW09-07S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 0.7 U	--	< 0.7 U	--	< 1 U	--	< 0.2 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1 J
MW09-08S	**28.5 J**	**17.5**	**15.6**	**18.9 J**	**15.3**	**15.5**	**10.7**	**6.3**	**10**	**14**	**12 J**	**12**	**11**	**15**	**9.7**	**11**
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**4.2**	**4**
MW09-09S	**293**	**118**	**205**	**192 J**	**64.6**	**155**	**169**	**36.3**	**370**	**440**	**500**	**460**	**670**	**650**	**870**	**540**
MW09-10D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 0.7 U	--	< 0.7 U	--	< 1 U	--	< 0.2 U
MW09-10S	< 1 UJ	< 1 U	1.2	1.3 J	< 1 U	1.1	< 1 U	< 1 U	--	0.71	--	0.71	--	1.4	--	**3 J**
MW09-11S	< 1 U	< 1 U	< 1 U	1.4 J	< 1 U	< 1 U	< 1 U	< 1 U	< 0.7 U	< 0.7 U	< 0.7 U	0.6 J	< 1 U	< 1 U	< 1 U	1 J
MW09-14D	< 1 U	< 1 U	< 1 U	0.9 J	< 1 U	< 1 U	< 1 U	< 1 U	--	0.57 J	--	0.39 J	--	< 1 U	--	2 J
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**88**	**160 J**
MW09-17I	--	--	--	--	--	--	--	--	< 0.7 U	0.39 J	< 0.7 UJ	< 0.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-20D	**3.4 J**	**4.3**	**3.2**	**4.1 J**	**2.9**	**6.2**	**2.8**	**2.6**	1.2	1.7	1.2	1.1	< 1 U	**3 J**	< 1 U	1 J
MW09-20I	**5610 J**	**2870 J**	**2370**	**4380 J**	**3300**	**4430 J**	**2500**	**2390**	**2900**	**4100 J**	**4900 J**	**4900**	< 4000 U	**4300 J**	**4300**	**3600**
MW09-21D	**171**	**119**	**92.4**	**161 J**	**132**	**124**	**145 J**	**116**	--	**190**	--	**150**	--	**190**	--	**110**
MW09-21S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	0.65 J	--	< 0.7 U	--	< 1 U	--	< 0.2 U
MW09-23D	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	--	< 0.7 U	--	< 0.7 U	--	< 1 U	--	0.3 J
MW09-23S	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	--	< 0.7 U	--	< 0.7 U	--	< 1 U	--	< 0.2 U
MW09-24D	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	0.43 J	--	< 0.7 U	--	< 1 U	--	0.3 J
MW09-24S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	--	< 0.7 U	--	< 0.7 U	--	< 1 U	--	< 0.2 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.7 U	< 0.7 U	< 0.7 U	< 0.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-26D	--	--	--	--	--	--	--	--	< 0.7 U	< 0.7 U	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	< 0.7 U	< 0.7 U	< 0.7 UJ	< 0.7 UJ	< 1 U	< 1 U	< 1 U	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	1.2	1.2	1.2 J	1.2	< 1 U	1.2	0.71 J	1 J
MW09-27S	--	--	--	--	--	--	--	--	< 0.7 U	< 0.7 U	< 0.7 UJ	< 0.7 U	< 1 U	< 1 U	< 1 U	< 0.2 U
XYLENES, TOTAL (10000 UG_L)																
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 23	ME 24	ME 25	ME 26	ME 27	ME 28	ME 29	ME 30
	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Jan/Feb 2008	Apr/May 2008	Jul 2008	Sep/Oct 2008	Dec 2008	Mar/Apr 2009	Aug 2009	Oct 2009
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.7
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 120 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
2,4,5-TRICHLOROPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL (1 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALUMINUM, DISSOLVED (UG_L)															
MW09-02S	--	< 300 UJ	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	33.8	64.6 J	< 100 U	--	--	< 20.0 U
MW09-03D	--	< 300 UJ	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	< 6.8 U	18.1 J	< 100 U	--	--	< 10.0 U
MW09-07S	--	< 300 U	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	< 6.8 U	--	--	< 20 U	< 20 U	< 10.0 U
MW09-08DA	< 300 UJ	< 300 UJ	< 300 UJ	< 40 UJ	< 40 UJ	< 40 UJ	< 40 UJ	< 40 U	< 6.8 U	< 6.8 U	69.8 J	95.9 J	--	--	< 20.0 U
MW09-08S	< 300 UJ	< 300 UJ	< 300 UJ	< 40 U	< 40 UJ	< 40 UJ	< 40 UJ	< 40 U	< 6.8 U	< 6.8 U	68.0 J	< 300 U	--	--	< 20.0 U
MW09-09DA	1830	1090	588	466	170 J	44.2 J	< 40 UJ	< 40 U	< 11 U	< 8.8 U	70.9 J	34.1 J	--	29.8	< 20.0 U
MW09-09S	< 300 UJ	< 300 UJ	< 300 UJ	< 40 UJ	< 40 UJ	< 40 UJ	< 40 UJ	< 40 U	< 13.2 U	17.4 J	78.3 J	32.8 J	--	--	11.4 J
MW09-10D	--	< 300 UJ	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	7.7 J	--	--	--	--	< 20.0 U
MW09-10S	--	36.4 J	--	< 40 UJ	--	< 40 U	--	< 40 U	--	5.8 J	--	< 100 U	< 20 U	< 20 U	< 20.0 U
MW09-11S	< 300 UJ	< 300 U	< 300 U	< 40 U	< 40 U	< 40 U	< 40 UJ	< 40 U	< 6.8 U	< 6.8 U	76.1 J	--	--	< 20.0 U	24.4
MW09-14D	--	< 300 UJ	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	11.3 J	--	--	--	--	< 20.0 U
MW09-14IA	< 300 UJ	< 300 UJ	< 300 UJ	53.6 J	< 40 UJ	< 40 U	< 40 UJ	< 40 U	< 15.7 U	24.6	131 J	--	< 23.4 U	< 20 U	5.1 J
MW09-17I	96.5 J	< 300 U	< 300 UJ	< 40 U	< 40 UJ	< 40 UJ	< 40 UJ	< 40 U	< 9 U	< 8.6 U	99.6 J	--	--	--	< 20.0 U
MW09-20D	< 300 UJ	< 300 UJ	< 300 UJ	< 40 UJ	< 40 UJ	< 40 UJ	< 40 UJ	< 40 U	< 6.8 U	< 6.8 U	104 J	65.0 J	--	< 22.8 U	< 20.0 U
MW09-20I	< 300 UJ	< 300 UJ	< 300 UJ	58.6 J	45.5 J	59.4 J	63.2 J	40 J	< 49.6 U	43.4	84.7 J	96.7 J	--	--	29.5
MW09-21D	--	< 300 UJ	--	63.6 J	--	44.8 J	--	< 40 U	--	< 20 U	46.3 J	--	--	--	29.3
MW09-21S	--	< 300 U	--	< 40 U	--	< 40 U	--	< 40 U	--	< 68 U	63.3 J	80.1 J	--	< 100 U	< 250 U
MW09-23D	--	< 300 UJ	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	3.8 J	--	< 100 U	--	--	< 200 U
MW09-23S	--	< 300 UJ	--	< 40 UJ	--	< 40 U	--	< 45.5 U	--	< 270 U	197 J	--	< 140 U	< 500 U	< 20.0 U
MW09-24D	--	< 300 U	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	< 20 U	--	< 300 U	< 40 U	< 60.0 U	< 40.0 U
MW09-24S	--	< 300 U	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	7.7 J	--	< 100 U	--	--	< 20.0 U
MW09-25S	< 300 U	< 300 UJ	< 300 U	< 40 UJ	< 40 UJ	< 40 UJ	< 40 U	< 40 U	< 6.8 U	< 6.8 U	66.0 J	--	--	--	< 20.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10.0 U
MW09-26S	< 300 U	19.4 J	< 300 UJ	< 40 UJ	< 40 UJ	< 40 U	< 40 UJ	< 40 U	< 6.8 U	< 9.4 U	25.7 J	--	--	--	22.9
MW09-27D	< 300 UJ	< 300 UJ	< 300 UJ	< 40 UJ	< 40 U	< 40 UJ	< 40 UJ	< 40 U	< 12.9 U	< 17.4 U	63.9 J	--	--	< 34.5 U	< 20.0 U
MW09-27S	< 300 U	33.8 J	< 300 U	< 40 UJ	< 40 UJ	< 40 UJ	< 40 U	< 40 U	< 12.0 U	< 23.2 U	15.3 J	--	--	--	< 20.0 U
ALUMINUM (UG_L)															
MW09-02S	--	198 J	--	78.7 J	--	105 J	--	< 62.8 U	--	120	104 J	< 300 U	--	--	< 20.0 U
MW09-03D	--	< 300 U	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	< 6.8 U	22.8 J	< 100 U	--	--	< 10.0 U
MW09-07S	--	< 300 U	--	< 40 UJ	--	< 70.3 UJ	--	< 40 U	--	< 12.9 U	--	--	< 20 U	25.4 J	< 20.0 U
MW09-08DA	102 J	403	< 300 U	40.4 J	< 40 UJ	< 40 UJ	< 40 UJ	103 J	61	20.5	324	127 J	--	--	< 20.0 U
MW09-08S	< 300 UJ	< 300 UJ	< 300 UJ	< 40 U	< 40 UJ	< 40 UJ	101 J	< 40 U	< 6.8 U	< 6.8 U	79.0 J	< 300 U	--	--	< 20.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-09DA	1920	1080	631	487	239 J	52.9 J	40.5 J	< 40 U	377	22.3	94.2 J	191 J	--	51.2 J	< 20.0 U
MW09-09S	< 300 UJ	< 300 UJ	< 300 UJ	< 40 UJ	< 40 UJ	< 40 UJ	< 40 UJ	< 40 U	< 15.9 U	< 16.5 U	80.6 J	42.1 J	--	--	12.9 J
MW09-10D	--	< 300 UJ	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	< 6.8 U	--	--	--	--	< 20.0 U
MW09-10S	--	45.7 J	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	< 9.5 U	--	< 100 U	< 20 U	< 30.6 U	< 20.0 U
MW09-11S	< 300 UJ	103 J	< 300 UJ	< 40 U	< 40 U	< 40 U	< 40 UJ	< 40 U	< 7 U	< 10.5 U	79.0 J	--	--	< 20.0 U	37.8
MW09-14D	--	< 300 UJ	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	< 6.8 U	--	--	--	--	< 10.0 U
MW09-14IA	426	177 J	182 J	216 J	186 J	183 J	105 J	124 J	80.4	27.1	103 J	--	< 20 U	< 20 UJ	11.0 J
MW09-17I	474	< 300 U	< 300 UJ	< 40 U	< 40 UJ	< 40 UJ	< 40 UJ	< 40 U	< 18.6 U	17.7 J	109 J	--	--	--	< 20.0 U
MW09-20D	< 300 UJ	< 300 UJ	< 300 U	< 40 UJ	< 40 UJ	< 40 UJ	< 40 UJ	< 40 U	< 6.8 U	< 6.8 U	108 J	35.2 J	--	76.4	< 20.0 U
MW09-20I	95.9 J	< 300 UJ	< 300 UJ	62.9 J	50.6 J	59.1 J	74.1 J	64.7 J	< 72.6 U	53.3	83.8 J	187 J	--	--	109
MW09-21D	--	< 300 UJ	--	69.3 J	--	42.9 J	--	< 44.9 U	--	27	78.2 J	--	--	--	28.6
MW09-21S	--	< 300 U	--	< 40 U	--	< 40 U	--	< 40 U	--	< 68 U	78.6 J	86.3 J	--	< 100 U	< 100 U
MW09-23D	--	< 300 U	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	< 6.8 U	--	< 100 U	--	--	63.8 J
MW09-23S	--	< 300 UJ	--	< 40 UJ	--	< 40 U	--	254 J	--	146 J	213 J	--	< 400 U	< 500 U	< 10.0 U
MW09-24D	--	< 300 UJ	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	< 20 U	--	< 300 U	< 14.0 U	< 60.0 U	< 20.0 U
MW09-24S	--	< 300 U	--	< 40 UJ	--	< 40 UJ	--	< 40 U	--	< 9.4 U	--	< 100 U	--	--	< 20.0 U
MW09-25S	< 300 U	105 J	< 300 U	< 40 UJ	< 40 UJ	< 40 UJ	< 40 U	< 40 U	< 10.9 U	6.7 J	71.7 J	--	--	--	< 20.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20.0 U
MW09-26S	< 300 UJ	15.5 J	< 300 U	< 40 UJ	< 40 UJ	< 40 U	87.8 J	< 41.3 U	< 28.2 U	24.4	46.7 J	--	--	--	587
MW09-27D	< 300 UJ	133 J	< 300 UJ	< 40 UJ	< 40 U	< 40 UJ	116 J	< 65.1 U	< 23.1 U	88.2	58.4 J	--	--	206	35.5
MW09-27S	< 300 U	36.8 J	< 300 U	44.5 J	< 40 UJ	< 40 UJ	41.9 J	< 40 U	< 22.9 U	55.7	15.7 J	--	--	--	32.1
ANTIMONY, DISSOLVED (6 UG_L)															
MW09-02S	--	< 1 UJ	--	< 0.5 UJ	--	< 0.5 UJ	--	0.45 J	--	< 0.39 U	< 0.50 U	< 1.0 U	--	--	0.39 J
MW09-03D	--	< 1 U	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.2 U	< 0.50 U	< 1.0 U	--	--	< 0.80 U
MW09-07S	--	< 1 U	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.2 U	--	--	< 0.20 U	< 0.80 U	< 0.80 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.23 U	< 0.64 U	< 0.50 U	0.12 J	--	--	< 0.80 U
MW09-08S	< 1 U	< 1 UJ	< 1 U	< 0.5 U	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.23 U	< 0.2 U	< 0.50 U	< 1.0 U	--	--	< 0.80 U
MW09-09DA	< 1 UJ	< 1 UJ	< 1 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.26 U	< 0.35 U	< 0.50 U	< 1.0 U	--	< 0.80 U	< 0.80 U
MW09-09S	< 1 U	< 1 UJ	< 1 U	0.12 J	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.23 U	< 0.44 U	< 0.50 U	< 1.0 U	--	--	< 0.80 U
MW09-10D	--	< 1 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.2 U	--	--	--	--	< 0.80 U
MW09-10S	--	0.13 J	--	< 0.5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.87 U	--	< 1.0 U	< 0.20 U	< 0.80 U	< 0.80 U
MW09-11S	< 1 U	< 1 U	< 1 UJ	< 0.5 U	1.5 J	< 0.5 U	< 0.5 UJ	0.73 J	< 0.2 U	< 0.98 U	< 0.50 U	--	--	< 0.80 U	0.31 J
MW09-14D	--	< 1 UJ	--	< 0.5 U	--	< 0.5 UJ	--	< 0.5 U	--	< 0.36 U	--	--	--	--	< 0.80 U
MW09-14IA	< 1 UJ	0.25 J	< 1 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.53 UJ	< 0.5 U	< 0.33 U	< 0.29 U	< 0.50 U	--	< 0.20 U	< 0.80 U	< 0.80 U
MW09-17I	< 1 U	< 1 U	< 1 UJ	0.1 J	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.2 U	< 0.50 U	--	--	--	< 0.80 U
MW09-20D	< 1 U	< 1 UJ	< 1 U	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.2 U	< 0.50 U	< 1.0 U	--	< 0.80 U	< 0.80 U
MW09-20I	< 1 U	< 1 UJ	< 1 UJ	0.13 J	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.4 U	< 0.50 U	0.15 J	--	--	< 0.80 U
MW09-21D	--	< 1 UJ	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.2 U	< 0.50 U	--	--	--	0.28 J
MW09-21S	--	< 1 U	--	0.22 J	--	< 0.5 U	--	< 0.5 U	--	< 2 U	< 0.50 U	0.19 J	--	< 4.0 U	< 4.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 UJ	--	< 0.5 U	--	< 0.37 U	--	< 1.0 U	--	--	< 16.0 U
MW09-23S	--	< 2 U	--	< 0.5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 8 U	< 0.50 U	--	< 4.0 U	< 40.0 U	< 0.80 U
MW09-24D	--	< 1 UJ	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.97 U	--	< 1.0 U	< 0.40 U	< 2.4 U	< 1.6 U
MW09-24S	--	< 1 UJ	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.3 U	--	< 1.0 U	--	--	< 0.80 U
MW09-25S	< 1 U	< 1 UJ	< 1 U	< 0.5 UJ	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.32 U	< 0.2 U	0.55 J	--	--	--	0.43 J
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23 J
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.2 U	< 0.50 U	--	--	--	< 0.80 U
MW09-27D	< 1 U	< 1 UJ	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.32 U	< 0.2 U	< 0.50 U	--	--	< 0.80 U	< 0.80 U
MW09-27S	< 1 U	0.11 J	< 1 U	0.14 J	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.2 U	< 0.24 U	< 0.50 U	--	--	--	0.27 J
ANTIMONY (6 UG_L)															
MW09-02S	--	< 1 UJ	--	< 0.5 UJ	--	< 0.5 UJ	--	0.46 J	--	< 0.47 U	< 0.50 U	< 1.0 U	--	--	< 0.80 U
MW09-03D	--	< 1 UJ	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.2 U	< 0.50 U	< 1.0 U	--	--	< 0.80 U
MW09-07S	--	< 1 U	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.2 U	--	--	< 0.20 U	< 0.80 U	< 0.80 U
MW09-08DA	< 1 U	< 1 UJ	< 1 U	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.33 U	< 0.84 U	< 0.50 U	0.11 J	--	--	< 0.80 U
MW09-08S	< 1 U	< 1 UJ	< 1 U	< 0.5 U	< 0.5 UJ	< 0.5 UJ	< 0.56 UJ	< 0.5 U	< 0.24 U	< 0.2 U	< 0.50 U	< 1.0 U	--	--	< 0.80 U
MW09-09DA	< 1 UJ	< 1 UJ	< 1 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.39 U	< 0.32 U	< 0.50 U	< 1.0 U	--	< 0.80 U	< 0.80 U
MW09-09S	< 1 U	< 1 UJ	< 1 U	< 0.5 U	0.52 J	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.23 U	< 0.2 U	< 0.50 U	< 1.0 U	--	--	< 0.80 U
MW09-10D	--	< 1 UJ	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.2 U	--	--	--	--	< 0.80 U
MW09-10S	--	0.17 J	--	< 0.5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.38 U	--	< 1.0 U	< 0.20 U	< 0.80 U	< 0.80 U
MW09-11S	< 1 UJ	< 1 U	< 1 UJ	< 0.5 U	2.1 J	0.57 J	< 0.62 UJ	1.2	< 0.26 U	< 1.5 U	< 0.50 U	--	--	< 0.80 U	0.50 J
MW09-14D	--	< 1 UJ	--	< 0.5 U	--	< 0.5 UJ	--	< 0.5 U	--	< 0.24 U	--	--	--	--	< 0.80 U
MW09-14IA	< 1 UJ	0.19 J	< 1 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.33 U	< 0.44 U	< 0.50 U	--	< 0.20 U	< 0.80 U	< 0.80 U
MW09-17I	< 1 U	< 1 U	< 1 UJ	0.13 J	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.37 U	< 0.50 U	--	--	--	< 0.80 U
MW09-20D	< 1 U	< 1 UJ	< 1 U	< 0.5 U	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.28 U	< 0.50 U	< 1.0 U	--	< 0.80 U	< 0.80 U
MW09-20I	< 1 U	< 1 UJ	< 1 UJ	0.12 J	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.4 U	< 0.50 U	0.20 J	--	--	0.28 J
MW09-21D	--	< 1 UJ	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.3 U	< 0.50 U	--	--	--	0.27 J
MW09-21S	--	< 1 U	--	0.41 J	--	< 0.5 U	--	0.34 J	--	< 2 U	< 0.50 U	0.20 J	--	< 4.0 U	< 4.0 U
MW09-23D	--	< 1 U	--	< 0.5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.2 U	--	< 1.0 U	--	--	< 16.0 U
MW09-23S	--	< 2 U	--	< 0.5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 8 U	< 0.50 U	--	< 4.0 U	< 40.0 U	< 0.80 U
MW09-24D	--	< 1 UJ	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.6 U	--	< 1.0 U	< 0.40 U	< 2.4 U	< 1.6 U
MW09-24S	--	< 1 UJ	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.25 U	--	< 1.0 U	--	--	< 0.80 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-25S	< 1 U	< 1 UJ	< 1 U	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.38 U	< 0.33 U	0.42 J	--	--	--	0.52 J
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.26 J
MW09-26S	< 1 U	< 1 U	< 1 UJ	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.21 U	< 0.50 U	--	--	--	< 0.80 U
MW09-27D	< 1 U	< 1 UJ	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.2 U	< 0.2 U	< 0.50 U	--	--	0.32 J	< 0.80 U
MW09-27S	< 1 U	< 1 U	< 1 U	0.11 J	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.2 U	< 0.29 U	< 0.50 U	--	--	--	< 0.80 U
ARSENIC, DISSOLVED (10 UG_L)															
MW09-02S	--	< 5 UJ	--	4 J	--	< 4 U	--	< 4 U	--	< 0.38 U	< 4.0 U	< 4.0 U	--	--	0.46 J-
MW09-03D	--	< 5 UJ	--	1.8 J	--	< 4 U	--	< 4 U	--	< 0.65 U	< 4.0 U	< 4.0 U	--	--	1.0 J-
MW09-07S	--	**19.7**	--	**18.9**	--	**19.3**	--	**17.2**	--	**18.9**	--	--	**17.2**	**19.7**	**20.9**
MW09-08DA	3 J	3.5 J	< 5 U	4.3 J	< 4.5 UJ	4.3 J	4.2 J	3.3 J	4.1	4.1	3.0 J	3.6 J	--	--	4.5
MW09-08S	**11.6**	**10.1**	**10.4**	9.8	9.8	9	7.1	9	**10.2**	8.9	9.9	9.6	--	--	8.7
MW09-09DA	< 5 U	< 5 UJ	< 5 UJ	3.2 J	3.5 J	< 4 UJ	2.4 J	4.6 J	4.6	4.5	4.3 J	4.8 J	--	4.3	5.2
MW09-09S	3.5 J	< 5 UJ	< 5 UJ	< 4 UJ	2.8 J	< 4 U	2.3 J	< 4 U	< 0.85 U	0.98 J	< 4.0 U	< 4.0 U	--	--	0.65 J
MW09-10D	--	7.8	--	8.2	--	< 4 U	--	8.3	--	7.5	--	--	--	--	8.6
MW09-10S	--	**13.4**	--	**12.3**	--	< 4 U	--	8.9	--	**14.6**	--	**15.9**	**15.4**	7.6	**15.5**
MW09-11S	1.9 J	1.4 J	< 5 UJ	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.4 U	1.8 J	< 4.0 U	--	--	< 0.80 U	< 0.80 UJ
MW09-14D	--	6	--	5.4	--	6.9	--	4.2 J	--	5.2	--	--	--	--	4.4
MW09-14IA	**47.7**	**49.5**	**53.6**	**54.5**	**54.7**	**61.0**	**56.4**	**60.3**	**62.6**	**62.7**	**69.4**	--	**64.1**	**58.8**	**59.4**
MW09-17I	< 5 U	< 5 U	< 5 U	< 4 U	< 4 U	< 4 UJ	< 4 U	< 4 U	< 0.81 U	0.56 J	< 4.0 U	--	--	--	0.58 J-
MW09-20D	7.5	< 5 UJ	< 5 U	4.6 J	5.3	6	6.2	6.6	5.2	4.8	4.6 J	5.1	--	4.4	5.6
MW09-20I	6.6	7	< 5 U	< 4.5 UJ	6.4	7	5	6.7	6.3	5.1	7.2	4.4 J	--	--	2.7
MW09-21D	--	0.98 J	--	1.5 J	--	< 4 U	--	< 4 U	--	< 1 U	< 4.0 U	--	--	--	0.75 J-
MW09-21S	--	7.9	--	9.2	--	8.9	--	8.1	--	9.2 J	7.7	9.4	--	8.3	< 20.0 UJ
MW09-23D	--	5.4	--	3 J	--	< 4 UJ	--	3.4 J	--	2.2	--	< 4.0 U	--	--	< 16.0 U
MW09-23S	--	**10.4**	--	8	--	< 4 U	--	9.8	--	**18.7 J**	**12.1**	--	**17.9 J**	< 40.0 U	1.0 J-
MW09-24D	--	**27.2**	--	**28.7**	--	**26.9**	--	**31.3**	--	**30**	--	**31.1**	**28.8**	**32.2**	**28.5**
MW09-24S	--	< 5 UJ	--	3.3 J	--	3.1 J	--	5 J	--	5.1	--	4.5 J	--	--	5.3
MW09-25S	< 5 U	1.1 J	< 5 U	1.6 J	2.2 J	2.9 J	< 4 U	< 4 U	< 1.8 U	0.7 J	4.4 J	--	--	--	0.43 J-
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.7
MW09-26S	< 5 U	< 5 UJ	< 5 U	< 4 U	1.3 J	< 4 U	< 4 U	< 4 U	< 0.38 U	< 0.38 U	< 4.0 U	--	--	--	< 0.80 UJ
MW09-27D	1.7 J	< 5 U	< 5 UJ	< 4.6 UJ	3.1 J	< 4 U	3.6 J	3 J	< 1.5 U	2.1	< 4.0 U	--	--	< 2.0 U	1.4 J
MW09-27S	< 5 U	< 5 UJ	< 5 U	< 4 UJ	1.8 J	< 4 U	< 4 U	< 4 U	< 0.38 U	< 0.49 U	< 4.0 U	--	--	--	1.4 J
ARSENIC (10 UG_L)															
MW09-02S	--	< 5 UJ	--	4.1 J	--	< 4 U	--	< 4 U	--	0.28 J	< 4.0 U	< 4.0 U	--	--	< 0.80 UJ
MW09-03D	--	< 5 UJ	--	3 J	--	< 4 U	--	< 4 U	--	0.83 J	< 4.0 U	< 4.0 U	--	--	1.1 J-
MW09-07S	--	**20.1**	--	**19.3**	--	**20.2**	--	**20.5**	--	**18.8**	--	--	**17.6**	**19.2**	**21.0**
MW09-08DA	3.4 J	5.3	< 5 U	3.3 J	< 4.8 UJ	5.4	3.7 J	4 J	4.2	3.6	4.5 J	3.7 J	--	--	4.3
MW09-08S	9.1	9	9.4	9.0	9.2	10	8.9 J	**10.2**	**10.3**	8.9	8.0	10.0	--	--	9.3
MW09-09DA	3.4 J	< 5 UJ	< 5 UJ	2.7 J	2.6 J	< 4.1 UJ	< 4 U	3.2 J	4.6	4	3.9 J	5.7	--	4.9	4.9
MW09-09S	3.2 J	< 5 UJ	< 5 UJ	< 4 UJ	2 J	< 4 U	< 4 U	< 4 U	< 0.98 U	0.79 J	< 4.0 U	< 4.0 U	--	--	0.67 J
MW09-10D	--	8	--	8.2	--	9	--	8	--	7.8	--	--	--	--	8.4
MW09-10S	--	**13.8**	--	**12.9**	--	< 4 U	--	9.4	--	**15.4**	--	**14.3**	**14.9**	7.3	**15.7**
MW09-11S	2.4 J	2.7 J	< 5 UJ	1.4 J	< 4 U	< 4 U	< 4 U	< 4 U	< 0.38 U	1.8 J	< 4.0 U	--	--	< 0.80 U	< 0.80 UJ
MW09-14D	--	5.1	--	6.2	--	5.5	--	4.6 J	--	5	--	--	--	--	4.2
MW09-14IA	**50.7**	**52.5**	**59.5**	**57.5**	**57.4**	**61.3**	**55.6**	**59.2**	**63.4**	**59.3**	**63.2**	--	**61.1**	**59.3**	**59.9**
MW09-17I	< 5 U	< 5 U	< 5 UJ	< 4 U	< 4 U	< 4 UJ	< 4 U	< 4 U	< 0.89 U	0.52 J	< 4.0 U	--	--	--	0.47 J-
MW09-20D	7.2	< 5 UJ	< 5 U	4.1 J	< 5 U	5.6	5.7 J	5.6 J	5.3	4.6	6.2	4.8 J	--	5.5	5.5
MW09-20I	9.6	7.3	< 5 U	5.7	7.3	8.3	6.8	9	8.9	7.4	9.8	3.6 J	--	--	3.5
MW09-21D	--	1.2 J	--	1.6 J	--	< 4 U	--	< 4 U	--	0.97 J	< 4.0 U	--	--	--	1.1 J-
MW09-21S	--	6.4	--	8.6	--	9.3	--	9.7	--	8 J	8.5	9.8	--	**11.0**	4.0 J
MW09-23D	--	4.6 J	--	2.8 J	--	< 4 UJ	--	3.3 J	--	2.1	--	2.7 J	--	--	< 16.0 U
MW09-23S	--	9.2	--	5.8	--	< 4 U	--	7.8	--	**19.9 J**	**10.3**	--	**19.2 J**	< 40.0 U	1.1 J-
MW09-24D	--	**25.6**	--	**28.5**	--	**29.2**	--	**30.2**	--	**30.2**	--	**41.9**	**28.3**	**39.5**	**25.7**
MW09-24S	--	< 5 UJ	--	3.1 J	--	3.2 J	--	5.8	--	5.2	--	7.0	--	--	4.3
MW09-25S	< 5 U	1.4 J	< 5 U	< 4 U	< 4 U	3.6 J	< 4 U	< 4 U	< 1.7 U	0.76 J	3.9 J	--	--	--	0.86 J-
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7.7
MW09-26S	< 5 U	< 5 UJ	< 5 UJ	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 0.38 U	< 0.38 U	< 4.0 U	--	--	--	< 0.80 UJ
MW09-27D	2.2 J	0.87 J	< 5 U	< 5.2 U	4.0 J	< 4 U	< 4 U	2.9 J	< 1.8 U	2.1	< 4.0 U	--	--	< 2.0 U	1.2 J
MW09-27S	< 5 U	< 5 U	< 5 U	< 4 UJ	1.8 J	< 4 U	< 4 U	< 4 U	< 0.38 U	0.69 J	< 4.0 U	--	--	--	3.1
BARIUM, DISSOLVED (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BARIUM (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM, DISSOLVED (4 UG_L)															
MW09-02S	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	< 0.20 U	< 0.20 U	--	--	< 0.30 U
MW09-03D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	< 0.20 U	< 0.20 U	--	--	< 0.30 U
MW09-07S	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	--	< 0.15 U	< 0.30 U	< 0.30 U
MW09-08DA	< 1 U	0.09 J	0.07 J	0.06 J	0.07 J	0.11 J	0.07 J	0.08 J	0.083 J	0.079 J	0.09 J	0.09 J	--	--	0.10 J
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	< 0.20 U	--	--	< 0.30 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	< 0.20 U	--	< 0.30 U	< 0.30 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	< 0.20 U	--	--	< 0.30 U
MW09-10D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	--	--	--	< 0.30 U
MW09-10S	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	< 0.20 U	< 0.15 U	< 0.30 U	< 0.30 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	--	< 0.30 U	< 0.30 U
MW09-14D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	--	--	--	< 0.30 U
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	< 0.15 U	< 0.30 U	< 0.30 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	--	--	< 0.30 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	< 0.20 U	--	< 0.30 U	< 0.30 U
MW09-20I	0.07 J	0.08 J	0.07 J	0.08 J	0.07 J	0.06 J	0.06 J	0.06 J	< 0.15 U	< 0.3 U	0.1 J	0.07 J	--	--	< 0.30 U
MW09-21D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	< 0.20 U	--	--	--	< 0.30 U
MW09-21S	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 1.5 U	< 0.20 U	< 0.20 U	--	< 1.5 U	< 7.5 U
MW09-23D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	< 0.20 U	--	--	< 6.0 U
MW09-23S	--	< 2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 6 U	< 0.20 U	--	< 3.0 U	< 15.0 U	< 0.30 U
MW09-24D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.45 U	--	< 0.20 U	< 0.30 U	< 0.90 U	< 0.60 U
MW09-24S	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	< 0.20 U	--	--	< 0.30 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	--	--	< 0.30 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.30 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	--	--	< 0.30 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	--	< 0.30 U	< 0.30 U
MW09-27S	0.06 J	< 1 U	0.05 J	< 0.2 U	< 0.2 U	< 0.2 U	0.04 J	0.04 J	< 0.15 U	< 0.15 U	0.05 J	--	--	--	< 0.30 U
BERYLLIUM (4 UG_L)															
MW09-02S	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	< 0.20 U	< 0.20 U	--	--	< 0.30 U
MW09-03D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	< 0.20 U	< 0.20 U	--	--	< 0.30 U
MW09-07S	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	--	< 0.15 U	< 0.30 U	< 0.30 U
MW09-08DA	< 1 U	0.14 J	0.06 J	0.07 J	0.1 J	0.08 J	0.05 J	0.08 J	0.11 J	0.082 J	0.13 J	0.09 J	--	--	0.083 J
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	0.04 J	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	< 0.20 U	--	--	< 0.30 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	< 0.20 U	--	< 0.30 U	< 0.30 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	< 0.20 U	--	--	< 0.30 U
MW09-10D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	--	--	--	< 0.30 U
MW09-10S	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	< 0.20 U	< 0.15 U	< 0.30 U	< 0.30 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	--	< 0.30 U	< 0.30 U
MW09-14D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	--	--	--	< 0.30 U
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	< 0.15 U	< 0.30 U	< 0.30 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	--	--	< 0.30 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	< 0.20 U	--	< 0.30 U	< 0.30 U
MW09-20I	0.1 J	0.06 J	0.08 J	0.07 J	0.07 J	0.07 J	0.08 J	0.08 J	< 0.15 U	< 0.3 U	0.09 J	0.07 J	--	--	< 0.30 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-21D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	< 0.20 U	--	--	--	< 0.30 U
MW09-21S	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 1.5 U	< 0.20 U	< 0.20 U	--	< 1.5 U	< 1.5 U
MW09-23D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	< 0.20 U	--	--	< 6.0 U
MW09-23S	--	< 2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 6 U	< 0.20 U	--	< 3.0 U	< 15.0 U	< 0.30 U
MW09-24D	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.45 U	--	< 0.20 U	< 0.30 U	< 0.90 U	< 0.60 U
MW09-24S	--	< 1 U	--	< 0.2 U	--	< 0.2 U	--	< 0.2 U	--	< 0.15 U	--	< 0.20 U	--	--	< 0.30 U
MW09-25S	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	--	--	< 0.30 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.30 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	--	--	< 0.30 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.15 U	< 0.15 U	< 0.20 U	--	--	< 0.30 U	< 0.30 U
MW09-27S	< 1 U	< 1 U	0.06 J	0.06 J	< 0.2 UJ	< 0.2 U	0.05 J	0.06 J	< 0.15 U	< 0.15 U	0.06 J	--	--	--	< 0.30 U
CADMIUM, DISSOLVED (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CALCIUM, DISSOLVED (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CALCIUM (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM, TOTAL, DISSOLVED (100 UG_L)															
MW09-02S	--	< 15 U	--	< 2 UJ	--	< 3 UJ	--	< 4 U	--	0.21 J	< 4.0 U	< 5.0 U	--	--	< 0.60 UJ
MW09-03D	--	< 15 UJ	--	< 2 UJ	--	< 3 UJ	--	< 4 U	--	< 0.25 U	< 4.0 U	< 5.0 U	--	--	0.52 J-
MW09-07S	--	< 15 U	--	< 2 U	--	< 3 UJ	--	< 4 U	--	< 0.25 U	--	--	< 5.0 UJ	0.40 J	< 0.60 UJ
MW09-08DA	0.81 J	< 15 UJ	< 15 UJ	< 2 U	< 2 UJ	< 3 UJ	< 4 UJ	< 4 U	< 0.25 UJ	< 0.25 UJ	< 4.0 U	< 5.0 U	--	--	< 0.60 UJ
MW09-08S	0.76 J	0.68 J	< 15 UJ	< 2 U	< 2 UJ	< 3 UJ	< 4 UJ	< 4 U	< 0.25 UJ	0.23 J	< 4.0 U	< 5.0 U	--	--	< 0.60 U
MW09-09DA	0.71 J	< 15 UJ	< 15 UJ	< 2 U	< 2 U	< 3 UJ	< 4 UJ	< 4 U	< 0.25 UJ	< 0.25 UJ	< 4.0 U	< 5.0 U	--	< 0.60 UJ	< 0.60 UJ
MW09-09S	1.1 J	< 15 UJ	< 15 UJ	< 2.1 UJ	< 2 UJ	< 3 UJ	< 4 UJ	< 4 U	0.68 J	0.83 J	< 4.0 U	< 5.0 U	--	--	0.97 J-
MW09-10D	--	0.42 J	--	< 2 UJ	--	< 3 U	--	< 4 U	--	0.27 J	--	--	--	--	< 0.60 UJ
MW09-10S	--	< 15 U	--	< 2 UJ	--	< 3 U	--	< 4 U	--	0.29 J	--	< 5.0 U	< 2.0 UJ	< 0.60 UJ	0.72 J-
MW09-11S	0.57 J	0.64 J	< 15 UJ	< 2 U	< 2 U	< 3 U	< 4 UJ	< 4 U	< 0.25 UJ	0.21 J	< 4.0 U	--	--	< 2.0 U	< 0.60 UJ
MW09-14D	--	0.54 J	--	< 2 U	--	< 3 UJ	--	< 4 U	--	< 0.25 U	--	--	--	--	< 0.60 UJ
MW09-14IA	0.46 J	0.54 J	< 15 UJ	< 2 U	< 2 U	< 3 U	< 4 UJ	< 4 U	< 0.25 UJ	< 0.25 UJ	< 4.0 U	--	< 3.9 U	< 0.60 UJ	< 0.60 U
MW09-17I	0.93 J	< 15 U	< 15 UJ	< 2 U	< 2 UJ	< 3 UJ	< 4 UJ	< 4 U	< 0.25 UJ	0.21 J	< 4.0 U	--	--	--	< 0.60 UJ
MW09-20D	0.72 J	< 15 UJ	< 15 UJ	< 2 UJ	< 2 UJ	< 3 UJ	< 4 UJ	< 4 U	< 0.25 UJ	< 0.25 U	< 4.0 U	< 5.0 U	--	< 0.60 U	< 0.60 U
MW09-20I	3.3 J	3.8 J	< 15 UJ	< 2.8 UJ	< 2.9 UJ	3.2 J	< 4 UJ	< 4 U	2.7	2.9 J	< 4.0 U	< 5.0 U	--	--	1.9 J
MW09-21D	--	1 J	--	< 2 UJ	--	< 3 UJ	--	< 4 U	--	< 0.25 U	< 4.0 U	--	--	--	0.46 J-
MW09-21S	--	1.9 J	--	< 3.0 U	--	< 3 U	--	2.1 J	--	< 2.5 UJ	< 4.0 U	< 5.0 U	--	< 3.0 U	< 15.0 UJ
MW09-23D	--	< 15 UJ	--	< 2 UJ	--	< 3 UJ	--	< 4 U	--	0.75 J	--	< 5.0 U	--	--	< 12.0 UJ
MW09-23S	--	< 15 UJ	--	4 J	--	< 3 U	--	3.6 J	--	< 10 U	< 4.0 U	--	< 40 U	< 30.0 U	0.63 J-
MW09-24D	--	< 15 UJ	--	< 2 U	--	< 3 UJ	--	< 4 U	--	< 0.75 U	--	< 5.0 U	< 4.0 UJ	< 1.8 U	< 1.2 UJ
MW09-24S	--	< 15 UJ	--	< 2 U	--	< 3 UJ	--	< 4 U	--	0.23 J	--	< 5.0 U	--	--	< 0.60 UJ
MW09-25S	0.69 J	0.77 J	< 15 U	< 2 U	< 2 UJ	< 3 UJ	< 4 U	< 4 U	0.34 J	0.22 J	< 4.0 U	--	--	--	0.79 J-
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.0 J-
MW09-26S	< 15 U	< 15 U	< 15 U	< 2 U	< 2.1 UJ	< 3 U	< 4 UJ	< 4 U	< 0.25 UJ	0.26 J	< 4.0 U	--	--	--	0.27 J-
MW09-27D	0.5 J	0.33 J	< 15 UJ	< 2 UJ	< 2.5 U	< 3 UJ	< 4 UJ	< 4 U	< 0.25 UJ	< 0.25 U	< 4.0 U	--	--	0.19 J	< 0.60 U
MW09-27S	< 15 U	< 15 U	< 15 U	< 2 UJ	< 2 UJ	< 3 UJ	< 4 U	< 4 U	< 0.25 U	0.3 J	< 4.0 U	--	--	--	0.74 J-
CHROMIUM, TOTAL (100 UG_L)															
MW09-02S	--	< 15 UJ	--	< 2 UJ	--	< 3 UJ	--	< 4 U	--	0.29 J	< 4.0 U	< 5.0 U	--	--	< 0.60 UJ
MW09-03D	--	< 15 UJ	--	< 2 UJ	--	< 3 UJ	--	< 4 U	--	< 0.25 U	< 4.0 U	< 5.0 U	--	--	0.60 J-
MW09-07S	--	< 15 U	--	< 2 U	--	< 3 UJ	--	< 4 U	--	0.16 J	--	--	< 2.7 UJ	0.37 J	< 0.60 UJ
MW09-08DA	0.62 J	< 15 UJ	< 15 UJ	< 2 UJ	< 2 UJ	< 3 UJ	< 4 UJ	< 4 U	< 0.25 UJ	0.21 J	< 4.0 U	< 5.0 U	--	--	< 0.60 UJ
MW09-08S	0.75 J	0.97 J	< 15 UJ	< 2 U	< 2 UJ	< 3 UJ	< 4 UJ	< 4 U	< 0.25 UJ	0.33 J	< 4.0 U	< 5.0 U	--	--	0.20 J
MW09-09DA	0.8 J	< 15 UJ	< 15 UJ	< 2 UJ	< 2 UJ	< 3 UJ	< 4 UJ	< 4 U	0.47 J	0.26 J	< 4.0 U	< 5.0 U	--	0.45 J-	< 0.60 UJ
MW09-09S	0.76 J	< 15 UJ	< 15 UJ	< 2 UJ	< 2 UJ	< 3 UJ	< 4 UJ	< 4 U	0.57 J	0.81 J	< 4.0 U	< 5.0 U	--	--	0.83 J-
MW09-10D	--	0.45 J	--	< 2 UJ	--	< 3 UJ	--	< 4 U	--	0.18 J	--	--	--	--	< 0.60 UJ
MW09-10S	--	< 15 U	--	< 2 UJ	--	< 3 UJ	--	< 4 U	--	0.23 J	--	8.4	23.6 J	< 0.60 UJ	0.72 J-
MW09-11S	0.78 J	0.53 J	< 15 UJ	< 2 U	< 2 U	< 3 U	< 4 UJ	< 4 U	< 0.25 UJ	0.26 J	< 4.0 U	--	--	< 2.0 U	< 0.60 UJ
MW09-14D	--	0.72 J	--	< 2 U	--	< 3 UJ	--	< 4 U	--	< 0.25 UJ	--	--	--	--	< 0.60 UJ
MW09-14IA	0.69 J	< 15 U	< 15 UJ	< 2 U	< 2 UJ	< 3 U	< 4 UJ	< 4 U	< 0.25 UJ	0.18 J	< 4.0 U	--	13.9 J	2.2	< 0.60 U
MW09-17I	1.6 J	< 15 U	< 15 UJ	< 2 U	< 2 UJ	< 3 UJ	< 4 UJ	< 4 U	< 0.25 UJ	0.43 J	< 4.0 U	--	--	--	< 0.60 UJ
MW09-20D	0.95 J	< 15 UJ	< 15 U	< 2 UJ	< 2 UJ	< 3 UJ	< 4 UJ	< 4 U	< 0.25 UJ	< 0.25 U	< 4.0 U	< 5.0 U	--	0.25 J	< 0.60 U
MW09-20I	4.2 J	4.3 J	3.6 J	< 2.9 UJ	< 2.9 UJ	4.9 J	< 4.2 UJ	< 4 U	3.9	3.3 J	< 4.0 U	8.0	--	--	2.9
MW09-21D	--	0.38 J	--	< 2 UJ	--	5 J	--	< 4 U	--	0.2 J	< 4.0 U	--	--	--	0.31 J-
MW09-21S	--	1.8 J	--	< 3.1 U	--	< 3 U	--	2 J	--	< 2.5 U	8.8	< 5.0 U	--	0.85	0.93 J-
MW09-23D	--	< 15 UJ	--	< 2 UJ	--	< 3 UJ	--	< 4 U	--	< 0.25 UJ	--	< 5.0 U	--	--	< 12.0 UJ
MW09-23S	--	< 15 UJ	--	4.2 J	--	< 3 U	--	6.3	--	< 10 UJ	< 4.0 U	--	< 61 U	< 30.0 U	0.58 J-
MW09-24D	--	< 15 UJ	--	< 2 U	--	< 3 UJ	--	< 4 U	--	< 0.75 UJ	--	< 5.0 U	< 4.0 UJ	0.53 J	< 1.2 UJ
MW09-24S	--	< 15 UJ	--	< 2 U	--	< 3 UJ	--	< 4 U	--	0.19 J	--	< 5.0 U	--	--	< 0.60 UJ
MW09-25S	0.99 J	0.66 J	< 15 U	< 2 U	< 2 UJ	< 3 UJ	< 4 U	< 4 U	0.32 J	0.32 J	< 4.0 U	--	--	--	1.3 J-
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.2 J-
MW09-26S	< 15 U	< 15 U	< 15 U	< 2 U	< 2 UJ	< 3 U	< 4 UJ	< 4 U	< 0.25 UJ	0.31 J	< 4.0 U	--	--	--	0.95 J-
MW09-27D	< 15 U	< 15 U	< 15 UJ	< 2 UJ	< 2 U	< 3 UJ	< 4 UJ	< 4 U	< 0.25 UJ	< 0.25 U	< 4.0 U	--	--	0.20 J	< 0.60 U
MW09-27S	< 15 U	< 15 U	< 15 U	< 2 UJ	< 2 UJ	< 3 UJ	< 4 U	< 4 U	< 0.25 U	0.42 J	< 4.0 U	--	--	--	0.66 J-

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
COBALT, DISSOLVED (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COBALT (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER, DISSOLVED (UG_L)															
MW09-02S	--	2.4 J	--	2 J	--	2.6 J	--	< 3.7 U	--	3.2	< 2.0 U	3.7	--	--	2.1
MW09-03D	--	< 25 U	--	0.4 J	--	17.2 J	--	< 2.4 U	--	< 0.62 U	< 2.0 U	< 3.0 U	--	--	0.39 J
MW09-07S	--	< 25 U	--	< 2 U	--	< 2 UJ	--	< 2 U	--	1.9 J	--	--	0.36 J	0.91 J	0.28 J
MW09-08DA	2.9 J	0.6 J	< 25 U	< 2 U	< 2 UJ	< 2 U	< 2 UJ	< 2 U	< 0.38 U	0.38 J	9.1	< 3.0 U	--	--	0.32 J
MW09-08S	< 25 U	< 25 U	< 25 U	0.57 J	< 2 UJ	< 2 UJ	< 2 UJ	< 2 U	0.34 J	2.4	< 2.0 U	< 3.0 U	--	--	0.26 J
MW09-09DA	< 25 UJ	0.89 J	0.86 J	0.87 J	< 2 UJ	< 2 UJ	< 2 UJ	< 2 U	0.26 J	0.37 J	111	< 3.0 U	--	0.37 J	0.35 J
MW09-09S	< 25 U	0.59 J	< 25 U	0.92 J	< 2 UJ	< 2 UJ	< 2 UJ	< 2 U	0.32 J	0.65 J	15.4	< 3.0 U	--	--	0.26 J
MW09-10D	--	< 25 U	--	< 2 U	--	< 2 U	--	< 2 U	--	1.4 J	--	--	--	--	0.42 J
MW09-10S	--	< 25 UJ	--	< 2 U	--	< 2 U	--	< 2 U	--	0.44 J	--	< 3.0 U	0.61 J	< 1.0 U	0.40 J
MW09-11S	< 25 U	< 25 U	< 25 U	< 2 U	6.4 J	1.5 J	< 2 UJ	< 2 U	< 0.38 U	< 1.2 U	< 2.0 U	--	--	< 1.0 U	1.3 J
MW09-14D	--	< 25 U	--	< 2 U	--	< 2 U	--	< 2 U	--	1.6 J	--	--	--	--	0.96 J
MW09-14IA	< 25 UJ	< 25 UJ	< 25 U	0.86 J	< 2 UJ	< 2 U	< 2 UJ	1.7 J	0.93 J	10.2	< 2.0 U	--	0.56 J	0.92 J	< 1.0 U
MW09-17I	< 25 U	0.50 J	< 25 U	< 2 U	< 2 UJ	< 2 UJ	< 2 UJ	< 2 U	0.27 J	0.27 J	< 2.0 U	--	--	--	< 1.0 U
MW09-20D	< 25 U	0.96 J	0.5 J	< 2 U	< 2 UJ	0.33 J	< 2 UJ	< 2 U	< 0.38 U	7.5	< 2.0 U	< 3.0 U	--	0.55 J	2.6 J
MW09-20I	< 25 U	< 25 U	< 25 U	0.42 J	< 2 UJ	0.42 J	< 2 UJ	< 2 U	< 0.38 U	< 0.75 U	< 2.0 U	< 3.0 U	--	--	0.35 J
MW09-21D	--	< 25 U	--	< 2 U	--	0.69 J	--	< 2 U	--	1.6 J	< 2.0 U	--	--	--	< 1.0 U
MW09-21S	--	< 25 U	--	0.58 J	--	0.58 J	--	< 2 U	--	< 3.8 U	< 2.0 U	< 3.0 U	--	< 5.0 U	< 25.0 U
MW09-23D	--	< 25 U	--	< 2 U	--	< 2 U	--	< 2 U	--	0.34 J	--	4.9	--	--	< 20.0 U
MW09-23S	--	1.6 J	--	1.1 J	--	< 2 U	--	< 2 U	--	< 15 U	< 2.0 U	--	< 7.5 U	< 50.0 U	< 1.0 U
MW09-24D	--	< 25 U	--	0.63 J	--	0.9 J	--	< 2 U	--	2.6 J	--	< 3.0 U	0.91 J	< 3.0 U	< 2.0 U
MW09-24S	--	< 25 U	--	1.2 J	--	0.47 J	--	< 2 U	--	< 0.38 U	--	< 3.0 U	--	--	< 1.0 U
MW09-25S	< 25 U	< 25 U	< 25 U	< 2 U	< 2 UJ	< 2 UJ	< 2 U	< 2 U	0.23 J	0.27 J	55.4	--	--	--	1.0 J
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.55 J
MW09-26S	< 25 U	< 25 UJ	< 25 U	0.66 J	< 2 UJ	< 2 U	1.8 J	3.3 J	1 J	< 0.75 U	< 2.0 U	--	--	--	2.4
MW09-27D	< 25 UJ	7.8 J	< 25 U	< 2 U	< 2 U	1.2 J	< 2 UJ	< 2 U	< 0.38 U	< 0.92 U	< 2.0 U	--	--	0.42 J	0.55 J
MW09-27S	< 25 U	< 25 UJ	< 25 U	1.3 J	< 2 UJ	< 2 UJ	4 J	< 4 U	1.8 J	10.2	< 2.0 U	--	--	--	1.0 J
COPPER (UG_L)															
MW09-02S	--	2.9 J	--	2 J	--	< 2 UJ	--	< 2.6 U	--	3.2	< 2.0 U	4.2	--	--	0.71 J
MW09-03D	--	< 25 U	--	< 2 U	--	< 2 UJ	--	< 2 U	--	< 0.38 U	< 2.0 U	< 3.0 U	--	--	< 1.0 U
MW09-07S	--	1.6 J	--	2 J	--	4 J	--	< 2 U	--	1.1 J	--	--	0.36 J	0.45 J	0.48 J
MW09-08DA	6 J	0.63 J	< 25 U	< 2 U	< 2 UJ	< 2 U	< 2 UJ	< 2 U	0.42 J	0.41 J	< 2.0 U	< 3.0 U	--	--	0.41 J
MW09-08S	< 25 U	< 25 UJ	< 25 U	0.55 J	< 2 UJ	< 2 UJ	< 2.4 UJ	< 2 U	0.3 J	0.43 J	< 2.0 U	< 3.0 U	--	--	0.27 J

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-09DA	< 25 UJ	1.3 J	< 25 U	0.79 J	< 2 UJ	< 2 UJ	< 2 UJ	< 2 U	0.77 J	< 0.38 U	< 2.0 U	< 3.0 U	--	0.25 J	< 1.0 U
MW09-09S	< 25 U	< 25 U	< 25 U	0.77 J	< 2 UJ	< 2 UJ	< 2 UJ	< 2 U	0.32 J	0.52 J	< 2.0 U	< 3.0 U	--	--	< 1.0 U
MW09-10D	--	0.67 J	--	< 2 U	--	< 2 UJ	--	< 2 U	--	< 0.38 U	--	--	--	--	0.28 J
MW09-10S	--	< 25 UJ	--	0.41 J	--	< 2 U	--	< 2 U	--	0.26 J	--	< 3.0 U	0.59 J	1.9 B	0.74 J
MW09-11S	< 25 UJ	1.3 J	< 25 U	< 2 U	2.3 J	0.65 J	< 2 UJ	< 2 U	< 0.38 U	0.81 J	< 2.0 U	--	--	< 2.0 U	2.6
MW09-14D	--	< 25 UJ	--	0.39 J	--	< 2 U	--	< 2 U	--	< 0.38 U	--	--	--	--	0.32 J
MW09-14IA	2.9 J	< 25 UJ	< 25 U	0.96 J	< 2 UJ	< 2 U	< 2 UJ	1.1 J	0.81 J	0.79 J	< 2.0 U	--	0.87 J	0.90 J	0.98 J
MW09-17I	< 25 U	< 25 U	< 25 U	0.5 J	< 2 UJ	< 2 UJ	< 2 UJ	< 2 U	0.44 J	< 0.38 U	< 2.0 U	--	--	--	< 1.0 U
MW09-20D	< 25 U	1 J	< 25 U	< 2 U	4.9 J	0.38 J	< 2 UJ	< 2 U	< 0.38 U	< 0.38 U	< 2.0 U	< 3.0 U	--	0.81 J	0.36 J
MW09-20I	< 25 U	< 25 U	< 25 U	0.36 J	< 2 UJ	0.46 J	< 2 UJ	< 2 U	1.5 J	0.72 J	< 2.0 U	< 3.0 U	--	--	2.0 J
MW09-21D	--	< 25 UJ	--	< 2 U	--	0.26 J	--	< 2 U	--	< 0.38 U	< 2.0 U	--	--	--	0.25 J
MW09-21S	--	99.5 J	--	0.99 J	--	0.51 J	--	< 2 U	--	< 3.8 U	1220	< 3.0 U	--	< 5.0 U	< 5.0 U
MW09-23D	--	< 25 U	--	< 2 U	--	< 2 U	--	2.7 J	--	0.24 J	--	< 3.0 U	--	--	< 20.0 U
MW09-23S	--	1.8 J	--	1.6 J	--	< 2 U	--	5.3	--	< 15 U	< 2.0 U	--	6.8 J	22.8 J	< 1.0 U
MW09-24D	--	< 25 UJ	--	0.55 J	--	0.7 J	--	< 2 U	--	< 1.1 U	--	< 3.0 U	0.65 J	< 3.0 U	< 2.0 U
MW09-24S	--	< 25 U	--	0.72 J	--	< 2 UJ	--	< 2 U	--	< 0.38 U	--	< 3.0 U	--	--	< 1.0 U
MW09-25S	< 25 U	1 J	< 25 U	< 2 U	< 2 UJ	2.7 J	1.7 J	< 2 U	0.37 J	0.4 J	< 2.0 U	--	--	--	0.63 J
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.2
MW09-26S	< 25 U	< 25 UJ	< 25 U	0.37 J	< 2 UJ	< 2 U	1.7 J	< 2 U	0.29 J	1.2 J	< 2.0 U	--	--	--	5.5
MW09-27D	< 25 UJ	9.3 J	< 25 U	0.59 J	< 2.6 U	1.4 J	< 2.4 UJ	< 3.3 U	0.85 J	3.5	< 2.0 U	--	--	2.0	0.82 J
MW09-27S	< 25 U	< 25 UJ	0.72 J	1.9 J	< 2 UJ	< 2 UJ	< 2 U	< 2 U	1.7 J	2	< 2.0 U	--	--	--	1.3 J
IRON, DISSOLVED (UG_L)															
MW09-02S	--	< 100 UJ	--	2510	--	< 60 UJ	--	< 60 U	--	< 67.7 U	< 80 U	< 100 U	--	--	68.2 J
MW09-03D	--	237 J	--	1280	--	222	--	1000	--	865	149	837	--	--	746
MW09-07S	--	14200	--	13100	--	13800	--	13200	--	13600	--	--	11800	13800 J	13600
MW09-08DA	11700	11000	11200	12200	11500	11500	11200	11100	11000	11100	10700	10500	--	--	9970
MW09-08S	6210	6100 J	6150	6220	5960	5210	5050	6780	6160	5830	5180	6870	--	--	6600
MW09-09DA	< 100 UJ	< 100 U	< 100 UJ	97.4 J	140 J	< 132 U	554	146	877	1130	1700	1600	--	1990 J+	2560
MW09-09S	1890	677 J	630	1420	1360 J	813	926	615	865	839	979	723	--	--	394
MW09-10D	--	816 J	--	900	--	< 60 U	--	884	--	847	--	--	--	--	817
MW09-10S	--	9360	--	9360	--	< 60 U	--	8940	--	7650	--	8270	8220	11800	8180
MW09-11S	2140	3360 J	4890	4200	1420	2910	4260	2230	3940	2960	4940	--	--	5460	4380
MW09-14D	--	31300 J	--	29600	--	31700	--	31500	--	28600	--	--	--	--	26800
MW09-14IA	12600	12800	13000	13600	14400 J	15000	14900	15800	16100	16600	20000	--	16400	15100 J+	13800
MW09-17I	8230	8280 J	8260	8160	7180 J	8160	7200	6880	6540	7280	6760	--	--	--	6080
MW09-20D	3660	3950 J	3560	3180	3850	4350	3920	3960	3670	3830	3790	4140	--	3510	3930
MW09-20I	25200	25700	18100	16200	29200	26900	20100	31900	21800	24200	24800	22600	--	--	22700
MW09-21D	--	331 J	--	266	--	648	--	200	--	195 J	455	--	--	--	34.2 J
MW09-21S	--	2440 J	--	1990	--	2960	--	2570	--	2400	2390	2010	--	2180	1820 J
MW09-23D	--	2110	--	1290	--	2110	--	1790	--	1570	--	1500	--	--	1540 J
MW09-23S	--	5770	--	4070	--	< 60 U	--	31700	--	4180 J	5190	--	10800	2810 J	1570
MW09-24D	--	122000 J	--	129000	--	138000	--	133000	--	123000	--	117000	82700	66500	54100
MW09-24S	--	41200 J	--	56300	--	24700	--	34800	--	35700	--	36600	--	--	31200
MW09-25S	14600	3440 J	10900	11300	19500 J	10100	12200	10300	10100 J	11500	6450	--	--	--	6350
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6340
MW09-26S	< 100 U	< 100 U	< 100 U	< 60 UJ	< 60 UJ	< 60 U	< 60 U	< 60 U	< 20 U	< 20 U	< 80 U	--	--	--	23.4 J
MW09-27D	1280	82.8 J	1600	2620	12200 J	1760	484	2490	1410	2520	151	--	--	1340	5630
MW09-27S	154	474	6660	14400	11900 J	1200	< 60 U	< 146 U	< 207 U	2150	< 80 U	--	--	--	6310
IRON (UG_L)															
MW09-02S	--	266 J	--	2850	--	205	--	< 133 U	--	196 J	136	1180	--	--	249
MW09-03D	--	730 J	--	1400	--	350	--	1140	--	1110	430	1140	--	--	1030
MW09-07S	--	13900	--	13600	--	14200	--	14000	--	13300	--	--	12900	14000	13600
MW09-08DA	11700	12700	11300	12000	11800	11400	11400	11400	11100	11000	11200	10700	--	--	10500
MW09-08S	6140	6060 J	6220	6310	6190	5320	5620	6760	6280	5840	5380	6610	--	--	6660
MW09-09DA	< 100 UJ	< 100 UJ	< 100 UJ	128 J	225 J	< 148 U	201	< 92.4 U	1720	1020	1570	1890	--	2120	2460
MW09-09S	2000	783 J	678	1460	1410 J	906	1100	713	968	998	1050	826	--	--	427
MW09-10D	--	826 J	--	846	--	1070	--	886	--	904	--	--	--	--	863
MW09-10S	--	9090	--	9740	--	< 60 U	--	8880	--	7620	--	7980	8910	12000	7780
MW09-11S	3130	4440 J	5370	4110	1230	2830	4400	2140	3880	3050	5080	--	--	5400	5040
MW09-14D	--	29600 J	--	28600	--	32300	--	32600	--	29800	--	--	--	--	28100
MW09-14IA	14300	15200	14400	15300	15400 J	16000	15300	16200	16700	16400	17100	--	16200	15500	14000
MW09-17I	8620	8070 J	8290	8020	7560 J	7940	7900	7060	6820	7220	6860	--	--	--	6150
MW09-20D	3900	3680 J	3770	3220	3940	4480	4100	3970	3720	3920	3890	4100	--	4160	3830
MW09-20I	25500	25900	19100	17800	28600	29200	22900	30100	22800	26300	24800	3700	--	--	25200
MW09-21D	--	703 J	--	894	--	1740	--	446	--	389	1090	--	--	--	167 J
MW09-21S	--	2540 J	--	2350	--	3420	--	3020	--	2490	2530	2070	--	2860	1720
MW09-23D	--	2170	--	1450	--	2000	--	1730	--	1520	--	1570	--	--	1990 J
MW09-23S	--	6650	--	4070	--	< 60 U	--	33400	--	4510 J	5300	--	11200	3080 J	1650
MW09-24D	--	121000 J	--	126000	--	140000	--	134000	--	126000	--	126000	83500	68800	52700
MW09-24S	--	41900 J	--	56500	--	25500	--	37100	--	37300	--	39500	--	--	32400

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-25S	15200	4590 J	10800	11800	19300 J	12500	11600	11500	10200 J	11700	8140	--	--	--	6750
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6590
MW09-26S	54.3 J	< 100 U	< 100 UJ	< 60 UJ	< 60 UJ	< 60 U	< 119 U	< 61.2 U	< 49 U	50.7 J	73.0 J	--	--	--	731
MW09-27D	1310	218 J	1550	2410	9160 J	1980	608	2570	1460	1960	194	--	--	1580	5250
MW09-27S	442	869	6980	17100	9740 J	1210	718	< 309 U	< 362 U	2880	< 80 U	--	--	--	14900
LEAD, DISSOLVED (15 UG_L)															
MW09-02S	--	< 5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.3 U	< 0.50 U	< 1.0 U	--	--	< 1.0 U
MW09-03D	--	< 5 U	--	< 0.5 U	--	< 0.5 UJ	--	< 0.5 U	--	< 0.15 U	< 0.50 U	< 1.0 U	--	--	< 0.30 U
MW09-07S	--	< 5 U	--	< 0.5 U	--	< 0.5 UJ	--	0.08 J	--	< 0.3 U	--	--	< 0.15 U	< 0.30 U	< 0.30 U
MW09-08DA	1.4 J	1.2 J	3.3 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.15 U	0.47 J	1.4	< 1.0 U	--	--	< 0.30 U
MW09-08S	< 5 U	< 5 UJ	1.2 J	0.11 J	< 0.5 U	< 0.5 U	< 0.5 UJ	0.06 J	< 0.15 U	< 0.3 U	< 0.50 U	< 1.0 U	--	--	< 0.30 U
MW09-09DA	< 5 U	< 5 UJ	< 5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.15 U	0.43 J	**16.3**	< 1.0 U	--	< 0.30 U	< 0.30 U
MW09-09S	< 5 U	< 5 UJ	< 5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.15 U	< 0.096 U	< 0.50 U	< 1.0 U	--	--	< 0.30 U
MW09-10D	--	< 5 UJ	--	< 0.5 U	--	< 0.5 U	--	0.12 J	--	0.24 J	--	--	--	--	< 1.0 U
MW09-10S	--	< 5 UJ	--	< 0.5 U	--	< 0.5 U	--	0.07 J	--	< 0.15 U	--	< 1.0 U	0.15 J	< 0.30 U	< 1.0 U
MW09-11S	1.6 J	< 5 U	< 5 U	< 0.5 U	< 0.5 U	0.2 J	< 0.5 UJ	< 0.5 U	< 0.15 U	< 0.30 U	0.11 J	--	--	< 0.30 U	0.41 J
MW09-14D	--	< 5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.15 U	--	--	--	--	0.099 J
MW09-14IA	< 5 U	< 5 U	0.99 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	0.12 J	< 0.15 U	< 0.15 U	< 0.50 U	--	< 0.15 U	< 0.30 U	< 0.30 U
MW09-17I	< 5 U	< 5 U	< 5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.15 U	< 0.15 U	< 0.50 U	--	--	--	< 0.30 U
MW09-20D	1.7 J	< 5 UJ	2 J	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.15 U	< 0.3 U	< 0.50 U	< 1.0 U	--	< 1.0 U	< 0.30 U
MW09-20I	< 5 U	< 5 U	< 5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.15 U	< 0.3 U	< 0.50 U	< 1.0 U	--	--	< 0.30 U
MW09-21D	--	< 5 UJ	--	< 0.5 U	--	< 0.5 U	--	0.06 J	--	< 0.3 U	0.07 J	--	--	--	< 0.30 U
MW09-21S	--	< 5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1.5 U	0.08 J	< 1.0 U	--	< 1.5 U	< 1.5 U
MW09-23D	--	< 5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.15 U	--	< 1.0 U	--	--	< 6.0 U
MW09-23S	--	< 10 U	--	< 0.5 U	--	< 0.5 U	--	0.11 J	--	< 6 U	0.14 J	--	< 3.0 U	< 15.0 U	< 0.30 U
MW09-24D	--	< 5 UJ	--	< 0.5 U	--	0.06 J	--	0.08 J	--	< 0.45 U	--	< 1.0 U	< 0.30 U	< 0.90 U	< 0.60 U
MW09-24S	--	< 5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.15 U	--	< 1.0 U	--	--	< 0.30 U
MW09-25S	< 5 U	< 5 UJ	1.6 J	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.15 U	< 0.15 U	8.9	--	--	--	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.30 U
MW09-26S	< 5 U	< 5 UJ	< 5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	0.16 J	< 0.15 U	< 0.3 U	0.14 J	--	--	--	< 0.30 U
MW09-27D	< 5 U	< 5 UJ	1.7 J	< 0.5 U	< 0.5 U	0.06 J	< 0.5 UJ	< 0.5 U	< 0.15 U	< 0.3 U	< 0.50 U	--	--	< 1.0 U	< 0.30 U
MW09-27S	< 5 U	< 5 UJ	1.7 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.15 U	< 0.3 U	< 0.50 U	--	--	--	< 0.30 U
LEAD (15 UG_L)															
MW09-02S	--	< 5 UJ	--	< 0.5 UJ	--	< 0.5 UJ	--	< 0.5 U	--	< 0.3 U	< 0.50 U	< 1.0 U	--	--	< 0.30 U
MW09-03D	--	< 5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.15 U	< 0.50 U	< 1.0 U	--	--	< 0.30 U
MW09-07S	--	< 5 U	--	0.23 J	--	< 0.68 UJ	--	0.1 J	--	< 0.17 U	--	--	< 0.15 U	< 0.30 U	< 0.30 U
MW09-08DA	1.2 J	0.74 J	1.5 J	< 0.5 UJ	0.15 J	< 0.5 U	< 0.5 UJ	0.25 J	0.18 J	0.94 J	1.0	< 1.0 U	--	--	< 1.0 U
MW09-08S	< 5 U	< 5 UJ	1.1 J	< 0.5 U	< 0.5 U	< 0.5 UJ	0.85 J	0.14 J	< 0.15 U	< 0.15 U	< 0.50 U	< 1.0 U	--	--	< 0.30 U
MW09-09DA	< 5 U	< 5 UJ	< 5 U	< 0.5 UJ	< 0.5 UJ	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.31 U	0.31 J	< 0.50 U	< 1.0 U	--	< 0.30 U	< 0.30 U
MW09-09S	< 5 U	< 5 UJ	1.2 J	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 UJ	0.07 J	< 0.15 U	0.11 J	< 0.50 U	< 1.0 U	--	--	< 0.30 U
MW09-10D	--	< 5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	0.079 J	--	--	--	--	< 1.0 U
MW09-10S	--	< 5 UJ	--	0.15 J	--	< 0.5 U	--	0.19 J	--	0.082 J	--	< 1.0 U	0.13 J	0.16 B	< 1.0 U
MW09-11S	< 5 U	< 5 U	1 J	< 0.5 U	0.30 J	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.15 U	< 0.21 U	0.45 J	--	--	< 1.0 U	1.1
MW09-14D	--	< 5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.15 U	--	--	--	--	< 0.30 U
MW09-14IA	< 5 U	< 5 U	0.95 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	0.05 J	< 0.15 U	< 0.15 U	0.05 J	--	< 0.15 U	< 0.30 U	< 0.30 U
MW09-17I	1 J	< 5 U	1.1 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.15 U	< 0.15 U	0.07 J	--	--	--	< 0.30 U
MW09-20D	1.1 J	< 5 UJ	0.8 J	< 0.5 U	0.76 J	< 0.5 U	< 0.5 UJ	0.06 J	< 0.15 U	< 0.15 U	< 0.50 U	< 1.0 U	--	1.1	< 0.30 U
MW09-20I	< 5 U	< 5 U	1.5 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	0.14 J	< 0.38 U	< 0.3 U	< 0.50 U	< 1.0 U	--	--	0.50 J
MW09-21D	--	< 5 UJ	--	< 0.5 U	--	< 0.5 U	--	0.17 J	--	< 0.15 U	0.21 J	--	--	--	< 1.0 U
MW09-21S	--	< 5 U	--	0.16 J	--	< 0.5 U	--	0.15 J	--	< 1.5 U	0.16 J	< 1.0 U	--	< 1.5 U	< 1.5 U
MW09-23D	--	< 5 U	--	< 0.5 U	--	< 0.5 U	--	0.12 J	--	< 0.15 U	--	< 1.0 U	--	--	< 6.0 U
MW09-23S	--	< 10 U	--	0.12 J	--	< 0.5 U	--	1.5	--	< 6 U	0.13 J	--	1.5 J	< 15.0 U	< 0.30 U
MW09-24D	--	< 5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.45 U	--	< 1.0 U	< 0.30 U	< 0.90 U	< 0.60 U
MW09-24S	--	< 5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.15 U	--	< 1.0 U	--	--	< 0.30 U
MW09-25S	< 5 U	< 5 UJ	< 5 U	< 0.5 UJ	0.53 J	1.8	1.5	0.38 J	< 0.52 U	0.51 J	0.82 J	--	--	--	1.1
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U
MW09-26S	< 5 U	< 5 UJ	1 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	0.22 J	< 0.18 U	< 0.18 U	0.13 J	--	--	--	2.1
MW09-27D	< 5 U	< 5 UJ	1 J	< 0.5 U	< 0.5 U	0.12 J	0.58 J	< 0.5 U	< 0.15 U	< 0.56 U	< 0.50 U	--	--	< 1.0 U	0.21 J
MW09-27S	1.1 J	< 5 UJ	1.2 J	0.13 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.15 U	< 0.21 U	< 0.50 U	--	--	--	0.17 J
MAGNESIUM, DISSOLVED (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAGNESIUM (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE, DISSOLVED (UG_L)															
MW09-02S	--	< 5 UJ	--	643	--	1.6 J	--	40.6	--	104	13.1	181	--	--	118
MW09-03D	--	720	--	698	--	486	--	548	--	447	394	360	--	--	351
MW09-07S	--	149	--	140	--	153	--	138	--	137	--	--	126	127	143
MW09-08DA	463	437	452	497	469	475	454	468	451	460	454	414	--	--	423
MW09-08S	843	815	865	865	872	832	721	1090	821	815	766	767	--	--	837
MW09-09DA	< 5 U	< 5 UJ	28.2	13.9	65.8	158 J	63.8	177	495	499	628	510	--	511	593
MW09-09S	722	699	703	1500	1010	750 J	635	1040	648	621	629	592	--	--	657
MW09-10D	--	386	--	414	--	< 1 U	--	414	--	420	--	--	--	--	402
MW09-10S	--	325	--	322	--	< 1 U	--	298	--	286	--	272	279	322	290
MW09-11S	667	298	402	334	942	536 J	359	348	503	632	536	--	--	335	251
MW09-14D	--	987	--	879	--	816	--	885	--	799	--	--	--	--	690
MW09-14IA	285	228	161	165	183	161	134	144	131	139	159	--	137	121	117
MW09-17I	898	982	868	899	824	1010	852	820	730	755	743	--	--	--	681
MW09-20D	1080	1190	1110	939	1130	1300 J	1060	1170	1120	1160	1170	1080	--	1190	1240
MW09-20I	850	875	683	697	947	928 J	746	980	795	858	853	763	--	--	894
MW09-21D	--	186	--	200	--	279 J	--	125	--	124	225	--	--	--	42.1
MW09-21S	--	64.0	--	66.3	--	78.4 J	--	65.1	--	66.3	63.4	52.2	--	60.7	54.8
MW09-23D	--	522	--	502	--	590 J	--	522	--	476	--	452	--	--	227
MW09-23S	--	376	--	317	--	< 1 U	--	826	--	361	372	--	457	253	473
MW09-24D	--	1000	--	1010	--	1150 J	--	966	--	960	--	678	599	512	465
MW09-24S	--	1140	--	1840	--	667 J	--	909	--	920	--	794	--	--	1000
MW09-25S	743	303	198	199	413	690	270	204	495	209	438	--	--	--	181
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	406
MW09-26S	5.1	2.7 J	4.5 J	8.8	< 3.9 U	4.2	4.6	4.2	3 J	7.3	5.1	--	--	--	51.1
MW09-27D	472	47.3	602	448	450	639 J	497	879	407	799	351	--	--	246	286
MW09-27S	46.1	66.2	235	237	448	201	23.6	43.7	75.1	258	9.6	--	--	--	180
MANGANESE (UG_L)															
MW09-02S	--	23.7	--	688	--	37.2	--	98.4	--	152	81.4	347	--	--	271
MW09-03D	--	712	--	687	--	510	--	532	--	434	395	362	--	--	352
MW09-07S	--	142	--	135	--	158	--	145	--	133	--	--	134	129	135
MW09-08DA	460	447	456	491	482	475	460	469	454	472	460	415	--	--	442
MW09-08S	840	797	868	888	874	822	740	921	826	814	767	750	--	--	845
MW09-09DA	0.74 J	< 5 UJ	32	19.2	33.6	159 J	70.2	101	522	502	591	503	--	550	577
MW09-09S	363	718	709	1510	998	769 J	666	1070	640	636	646	579	--	--	632
MW09-10D	--	385	--	406	--	475 J	--	403	--	406	--	--	--	--	405
MW09-10S	--	320	--	330	--	< 1 U	--	298	--	287	--	263	283	331	279
MW09-11S	699	296	424	326	1100	482 J	374	340	501	639	535	--	--	324	245
MW09-14D	--	921	--	912	--	856	--	880	--	816	--	--	--	--	701
MW09-14IA	303	248	162	174	190	164	141	146	133	137	147	--	133	123	120
MW09-17I	887	949	878	878	842	988	818	803	756	756	786	--	--	--	668
MW09-20D	1150	1140	1120	942	1160	1320 J	1160	1160	1120	1170	1190	1060	--	1250	1220
MW09-20I	846	867	707	730	912	976 J	758	932	811	910	870	424	--	--	960

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NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-21D	--	175	--	208	--	316 J	--	118	--	125	223	--	--	--	45.9
MW09-21S	--	63.3	--	68.9	--	80.0 J	--	72.8	--	68.1	64.3	52.6	--	63.9	55.9
MW09-23D	--	520	--	486	--	537 J	--	520	--	501	--	457	--	--	225
MW09-23S	--	391	--	313	--	< 1 U	--	852	--	373	370	--	503	269	473
MW09-24D	--	985	--	994	--	1200 J	--	962	--	985	--	700	603	517	449
MW09-24S	--	1130	--	1820	--	669 J	--	946	--	963	--	813	--	--	1030
MW09-25S	752	299	194	209	412	686	263	224	511	213	454	--	--	--	182
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	409
MW09-26S	5.9	2.9 J	5.1	7.3	< 3.8 U	4.4	5.6	5.9	3.6 J	8.1	4.8	--	--	--	64.2
MW09-27D	455	52.2	597	446	394	676 J	467	994	415	763	353	--	--	256	283
MW09-27S	46.6	66.8	238	250	349	201	21.2	44.8	76.8	255	9.1	--	--	--	263
MERCURY, DISSOLVED (2 UG_L)															
MW09-02S	--	< 0.2 U	--	< 0.1 U	--	< 0.1 UJ	--	< 0.1 U	--	< 0.05 U	< 0.10 U	< 0.10 U	--	--	0.040 J
MW09-03D	--	< 0.2 U	--	< 0.1 U	--	< 0.1 UJ	--	< 0.1 U	--	< 0.05 U	< 0.10 U	< 0.10 UJ	--	--	0.036 J
MW09-07S	--	< 0.22 U	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	--	< 0.050 UJ	< 0.050 U	< 0.10 U
MW09-08DA	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05 U	< 0.05 U	< 0.10 U	< 0.10 U	--	--	0.039 J
MW09-08S	< 0.2 UJ	< 0.2 UJ	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05 U	< 0.05 U	< 0.10 U	< 0.10 UJ	--	--	0.029 J
MW09-09DA	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.051 U	< 0.05 U	< 0.05 U	< 0.10 U	< 0.10 U	--	< 0.050 U	< 0.10 U
MW09-09S	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 UJ	< 0.1 UJ	0.01 J	< 0.1 UJ	< 0.1 UJ	< 0.05 U	< 0.05 U	< 0.10 U	< 0.10 U	--	--	< 0.10 U
MW09-10D	--	< 0.2 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	0.01 J	--	< 0.05 U	--	--	--	--	< 0.10 U
MW09-10S	--	< 0.2 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	< 0.10 U	< 0.050 UJ	< 0.20 U	0.029 J
MW09-11S	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.056 U	< 0.05 U	0.010 J	--	--	< 0.050 UJ	< 0.10 U
MW09-14D	--	< 0.2 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	--	--	--	< 0.10 U
MW09-14IA	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.05 U	< 0.05 U	< 0.10 U	--	0.041 J	< 0.050 U	< 0.10 U
MW09-17I	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.05 U	< 0.05 U	< 0.10 U	--	--	--	< 0.10 U
MW09-20D	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.075 U	< 0.05 U	< 0.10 U	< 0.20 U	--	< 0.050 UJ	< 0.10 U
MW09-20I	< 0.2 UJ	< 0.22 U	< 0.2 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.07 U	< 0.05 U	< 0.10 U	< 0.10 U	--	--	< 0.10 U
MW09-21D	--	< 0.2 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	< 0.10 U	--	--	--	0.043 J
MW09-21S	--	< 0.2 U	--	< 0.1 U	--	< 0.1 U	--	< 0.1 U	--	< 0.05 U	0.01 J	< 0.10 U	--	< 0.20 U	< 0.10 U
MW09-23D	--	< 0.2 U	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	< 0.20 U	--	--	< 0.10 U
MW09-23S	--	< 0.22 U	--	< 0.1 UJ	--	< 0.1 UJ	--	0.04 J	--	< 0.05 U	< 0.10 U	--	< 0.050 U	< 0.050 U	< 0.10 U
MW09-24D	--	< 0.2 UJ	--	< 0.1 UJ	--	0.02 J	--	< 0.1 UJ	--	< 0.05 U	--	< 0.10 U	< 0.050 UJ	< 0.050 U	< 0.10 U
MW09-24S	--	< 0.2 U	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	< 0.10 U	--	--	0.037 J
MW09-25S	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.065 U	< 0.05 U	< 0.10 U	--	--	--	< 0.10 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 UJ	< 0.2 UJ	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.053 U	< 0.05 U	< 0.10 U	--	--	--	< 0.10 U
MW09-27D	< 0.2 UJ	< 0.2 UJ	< 0.2 UJ	< 0.1 UJ	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.074 U	< 0.05 U	< 0.10 UJ	--	--	< 0.050 UJ	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.077 U	< 0.05 U	0.020 J	--	--	--	< 0.10 U
MERCURY (2 UG_L)															
MW09-02S	--	< 0.2 U	--	< 0.1 U	--	< 0.1 UJ	--	< 0.1 U	--	< 0.05 U	< 0.10 U	< 0.10 U	--	--	< 0.10 UJ
MW09-03D	--	< 0.2 U	--	< 0.1 U	--	< 0.1 UJ	--	0.01 J	--	< 0.05 U	< 0.10 U	< 0.10 UJ	--	--	0.037 J
MW09-07S	--	< 0.22 U	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	--	< 0.050 UJ	< 0.050 U	< 0.10 U
MW09-08DA	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05 U	< 0.05 U	< 0.10 U	< 0.10 U	--	--	< 0.10 U
MW09-08S	< 0.2 UJ	< 0.2 UJ	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	0.01 J	< 0.05 U	< 0.05 U	< 0.10 U	< 0.10 UJ	--	--	0.038 J
MW09-09DA	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.07 U	< 0.05 U	< 0.10 U	< 0.10 U	--	< 0.050 U	0.041 J
MW09-09S	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.05 U	< 0.05 U	< 0.10 U	< 0.10 U	--	--	< 0.10 U
MW09-10D	--	< 0.2 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	--	--	--	< 0.10 U
MW09-10S	--	< 0.2 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	< 0.10 U	< 0.050 UJ	< 0.20 U	0.033 J
MW09-11S	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.054 U	< 0.05 U	< 0.10 U	--	--	< 0.050 UJ	< 0.10 U
MW09-14D	--	< 0.2 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	--	--	--	< 0.10 U
MW09-14IA	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.05 U	< 0.05 U	< 0.10 U	--	< 0.050 U	< 0.050 U	< 0.10 U
MW09-17I	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.02 UJ	< 0.1 UJ	< 0.1 U	< 0.05 U	< 0.05 U	< 0.10 U	--	--	--	< 0.10 U
MW09-20D	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.073 U	< 0.05 U	< 0.10 U	< 0.20 U	--	< 0.050 UJ	< 0.10 U
MW09-20I	< 0.2 UJ	< 0.22 U	< 0.2 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.079 U	< 0.05 U	< 0.10 U	< 0.10 U	--	--	< 0.10 U
MW09-21D	--	< 0.2 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	< 0.10 U	--	--	--	0.034 J
MW09-21S	--	< 0.2 U	--	< 0.1 U	--	< 0.1 U	--	0.02 J	--	< 0.05 U	< 0.10 U	< 0.10 U	--	< 0.050 U	< 0.10 U
MW09-23D	--	< 0.22 U	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	< 0.20 U	--	--	< 0.10 U
MW09-23S	--	< 0.22 U	--	< 0.1 UJ	--	< 0.1 UJ	--	0.02 J	--	< 0.05 U	< 0.10 U	--	< 0.050 U	< 0.050 U	< 0.10 U
MW09-24D	--	< 0.2 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	< 0.10 U	< 0.050 UJ	< 0.050 U	< 0.10 U
MW09-24S	--	< 0.2 U	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.1 UJ	--	< 0.05 U	--	< 0.10 U	--	--	0.037 J
MW09-25S	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.081 U	< 0.05 U	< 0.10 U	--	--	--	< 0.10 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 UJ	< 0.2 UJ	< 0.2 UJ	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.05 U	< 0.05 U	< 0.10 U	--	--	--	< 0.10 U
MW09-27D	< 0.2 UJ	< 0.2 UJ	< 0.2 UJ	< 0.1 UJ	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.066 U	< 0.05 U	< 0.10 U	--	--	< 0.050 UJ	0.045 J
MW09-27S	< 0.2 U	< 0.2 UJ	< 0.2 U	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.083 U	< 0.05 U	< 0.10 U	--	--	--	< 0.10 U
NICKEL, DISSOLVED (100 UG_L)															
MW09-02S	--	< 40 U	--	3.9 J	--	1.5 J	--	< 2.6 U	--	< 0.5 U	< 1.2 U	7.3	--	--	1.2
MW09-03D	--	0.81 J	--	< 1.6 UJ	--	2.1	--	< 3.2 U	--	< 0.72 U	< 1.2 U	3.9	--	--	0.76 J
MW09-07S	--	< 40 U	--	0.89 J	--	0.89 J	--	3.6	--	2.4	--	--	< 2.3 UJ	0.83 J	0.59 J

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-08DA	< 40 U	< 40 U	< 40 UJ	< 1.2 UJ	0.93 J	0.81 J	3 J	< 1.2 U	0.5 J	0.51 J	< 1.2 U	< 2.0 U	--	--	0.35 J
MW09-08S	1.7 J	1.4 J	< 40 UJ	2.4 J	2.3 J	2.6	3.6 J	3.3	3.2	2.2	3.0	2.9	--	--	2.2
MW09-09DA	< 40 UJ	< 40 U	< 40 UJ	< 1.3 UJ	0.98 J	< 1.2 UJ	2.5 J	2.2	1.3 J	0.33 J	< 1.2 U	< 1.2 U	--	0.30 J	0.45 J
MW09-09S	< 40 UJ	< 40 U	< 40 UJ	1.9 J	1.7 J	0.96 J	< 1.7 UJ	1.4 J	2.4	2.3	< 1.2 U	< 2.0 U	--	--	1.1
MW09-10D	--	< 40 U	--	< 1.2 UJ	--	< 1.2 U	--	< 1.2 U	--	0.45 J	--	--	--	--	0.49 J
MW09-10S	--	1.2 J	--	1.7 J	--	< 1.2 U	--	2.8	--	1.9	--	8.1	< 2.1 UJ	1.2	2.0
MW09-11S	37.6 J	18.5 J	6.7 J	4.0 J	61.6 J	30.1 J	16.6 J	33.2	19 J	32.2	9.5	--	--	< 1.0 U	2.0
MW09-14D	--	< 40 U	--	< 1.2 UJ	--	0.64 J	--	2.1	--	2.2	--	--	--	--	0.75 J
MW09-14IA	1.6 J	< 40 UJ	< 40 UJ	2.8 J	2.3 J	2.4	2.6 J	4	2.8	2	3.0	--	< 2.9 U	1.7	1.8
MW09-17I	< 40 U	< 40 U	< 40 UJ	0.81 J	< 1.2 UJ	< 1.8 UJ	3.1 J	< 3.2 U	1.2 J	0.26 J	1.1 J	--	--	--	0.41 J
MW09-20D	< 40 U	< 40 U	< 40 UJ	0.76 J	0.91 J	0.73 J	< 1.9 UJ	2.4 J	2.4 J	2	< 1.2 U	< 2.0 U	--	0.61 J	0.78 J
MW09-20I	< 40 UJ	< 40 U	< 40 UJ	1.2 J	1.6 J	1.5 J	2.1 J	2.8	1.2 J	< 1.5 U	3.9	2.5	--	--	1.6
MW09-21D	--	< 40 U	--	< 1.2 UJ	--	0.63 J	--	1.9 J	--	1.7	0.61 J	--	--	--	0.59 J
MW09-21S	--	0.49 J	--	3.0 J	--	4.0 J	--	3.4	--	1.8 J	7.6	4.4	--	2.1	5.0 J
MW09-23D	--	< 40 U	--	< 1.2 UJ	--	< 1.2 UJ	--	2.1	--	0.64 J	--	< 2.0 U	--	--	10.5 J
MW09-23S	--	< 80 UJ	--	4.6 J	--	< 1.2 U	--	12.8	--	8.3 J	8.0	--	< 20 U	< 30.0 U	0.57 J
MW09-24D	--	< 40 UJ	--	12.3 J	--	5.8 J	--	7.7	--	5	--	6.2	< 2.0 UJ	1.2 J	1.9 J
MW09-24S	--	< 40 U	--	< 1.2 UJ	--	< 1.2 U	--	1.4 J	--	< 0.25 U	--	5.6	--	--	0.23 J
MW09-25S	< 40 U	1.8 J	< 40 U	< 1.2 UJ	< 1.2 UJ	2 J	3.2 J	< 1.7 U	15.9 J	0.44 J	4.0	--	--	--	1.6
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.97 J
MW09-26S	< 40 U	< 40 U	< 40 UJ	< 1.2 UJ	1.3 J	0.32 J	< 1.2 UJ	1.2 J	1.4 J	< 0.29 U	0.42 J	--	--	--	0.71 J
MW09-27D	2.2 J	1.9 J	< 40 UJ	< 1.2 UJ	1.9 J	2.8 J	< 2.1 U	< 2.3 U	1.2 J	2	1.8 J	--	--	0.55 J	1.5 J
MW09-27S	< 40 U	< 40 U	< 40 U	3.9 J	1.5 J	0.8 J	2.4 J	< 1.4 U	3.2 J	2.2	< 1.2 U	--	--	--	1.2
NICKEL (100 UG_L)															
MW09-02S	--	< 40 U	--	3.5 J	--	0.34 J	--	< 1.2 U	--	< 0.57 U	< 1.2 U	3.1	--	--	0.61 J
MW09-03D	--	0.63 J	--	< 1.6 UJ	--	1 J	--	< 1.2 U	--	< 0.6 U	< 1.2 U	0.47 J	--	--	0.72 J
MW09-07S	--	< 40 U	--	0.82 J	--	0.92 J	--	< 1.2 U	--	< 0.44 U	--	--	< 1.2 U	1.2 J	0.44 J
MW09-08DA	< 40 U	< 40 UJ	< 40 UJ	< 1.2 UJ	0.95 J	0.57 J	< 1.2 UJ	1.2 J	0.48 J	< 0.25 U	< 1.2 U	< 2.0 U	--	--	0.48 J
MW09-08S	1.6 J	1.6 J	< 40 UJ	2.4 J	2.2 J	2.7 J	3.2 J	2.5	2.2	2	2.3	1.9 J	--	--	2.1
MW09-09DA	11.2 J	0.55 J	< 40 UJ	< 1.4 UJ	< 1.2 UJ	< 1.2 UJ	< 1.2 UJ	0.6 J	0.98 J	< 0.25 U	< 1.2 U	< 1.2 U	--	0.38 J	0.46 J
MW09-09S	< 40 UJ	< 40 U	< 40 UJ	1.6 J	1.7 J	< 1.2 UJ	< 1.2 UJ	1.4 J	0.75 J	0.4 J	< 1.2 U	< 1.2 U	--	--	1.3
MW09-10D	--	< 40 U	--	< 1.2 UJ	--	< 1.2 UJ	--	< 1.2 U	--	< 0.25 U	--	--	--	--	0.26 J
MW09-10S	--	1.1 J	--	1.7 J	--	< 1.2 U	--	2.4	--	1.6	--	11.0	6.4	1.3	1.8
MW09-11S	39 J	18.7 J	7.3 J	4.3 J	65.2 J	31.7 J	14.7 J	33.6	16.2	31.9	9.8	--	--	< 1.0 U	2.3
MW09-14D	--	< 40 U	--	< 1.2 UJ	--	0.68 J	--	0.78 J	--	0.29 J	--	--	--	--	0.83 J
MW09-14IA	1.6 J	< 40 UJ	< 40 UJ	2.9 J	2.3 J	2.4 J	2.6 J	2.4	2.2	1.8	2.3	--	< 2.6 U	3.6 J	2.0
MW09-17I	< 40 U	< 40 U	< 40 U	< 1.2 U	< 1.2 UJ	< 1.2 UJ	1.2 J	< 1.3 U	0.25 J	0.21 J	1.4 J	--	--	--	0.26 J
MW09-20D	< 40 U	< 40 U	< 40 UJ	< 1.2 UJ	0.82 J	0.66 J	< 1.2 UJ	0.82 J	< 0.25 U	< 0.25 U	< 1.2 U	< 2.0 U	--	0.58 J	0.75 J
MW09-20I	< 40 UJ	< 40 U	< 40 UJ	1.2 J	1.6 J	1.3 J	1.4 J	2 J	1.7	1.5 J	1.7 J	3.6	--	--	2.1
MW09-21D	--	0.32 J	--	< 1.2 UJ	--	0.72 J	--	0.65 J	--	< 0.53 U	0.66 J	--	--	--	0.66 J
MW09-21S	--	0.58 J	--	2.5 J	--	1.6 J	--	4.2	--	1.9 J	7.6	4.2	--	2.2	2.6 J
MW09-23D	--	< 40 U	--	< 1.2 UJ	--	< 1.2 UJ	--	< 1.2 U	--	0.45 J	--	< 1.2 U	--	--	7.2 J
MW09-23S	--	< 80 UJ	--	4.7 J	--	< 1.2 U	--	14.1	--	7.8 J	7.9	--	< 20 U	< 30.0 U	0.34 J
MW09-24D	--	< 40 UJ	--	12.6 J	--	6 J	--	6.2	--	2.9 J	--	2.6	< 2.0 U	1.6 J	1.6 J
MW09-24S	--	< 40 U	--	< 1.2 UJ	--	0.58 J	--	< 1.2 U	--	< 0.25 U	--	6.2	--	--	0.22 J
MW09-25S	< 40 U	1.6 J	< 40 U	< 1.2 UJ	< 1.2 UJ	2.2 J	1.4 J	< 1.5 U	17 J	0.24 J	3.7	--	--	--	1.8
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.1
MW09-26S	< 40 U	< 40 U	< 40 UJ	< 1.2 UJ	< 1.2 UJ	0.23 J	< 1.2 UJ	0.35 J	< 0.25 U	< 0.26 U	0.46 J	--	--	--	1.3
MW09-27D	2.2 J	2.2 J	< 40 UJ	1 J	1.2 J	2.7 J	3.1 J	< 3 U	1.2	1.6	1.5 J	--	--	0.41 J	0.69 J
MW09-27S	< 40 U	0.33 J	< 40 U	4.2 J	1.1 J	0.82 J	< 1.2 U	< 1.2 U	0.74 J	1.3	< 1.2 U	--	--	--	1.3
POTASSIUM, DISSOLVED (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
163 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
POTASSIUM (UG_L)															
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM, DISSOLVED (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM, DISSOLVED (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM, DISSOLVED (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC, DISSOLVED (UG_L)															
MW09-02S	--	3.7 J	--	17.6	--	5 J	--	6.7 J	--	4.3 J	6.2 J	11.0	--	--	5.2
MW09-03D	--	1.5 J	--	< 8 U	--	< 8 U	--	6.2 J	--	1.9 J	< 8.0 UJ	5.5 J	--	--	2.1
MW09-07S	--	< 25 U	--	< 8 U	--	< 8 U	--	6 J	--	7.8	--	--	14.1 J	6.2 J	4.4
MW09-08DA	< 25 U	< 25 UJ	< 25 UJ	< 8 U	1.9 J	< 8 U	4.4 J	< 8 U	13.6	2.3 J	< 8.0 UJ	< 8.0 U	--	--	< 1.5 U
MW09-08S	< 25 U	< 25 UJ	< 25 UJ	< 8 U	1.8 J	< 8 U	3.9 J	7.8 J	13.3	7	5.1 J	5.5 J	--	--	2.1
MW09-09DA	< 25 U	< 25 UJ	< 25 UJ	2.6 J	< 8 U	< 8 U	< 8 U	4 J	12.2	1.5 J	< 8.0 UJ	< 10 U	--	2.6 J	1.0 J
MW09-09S	< 25 U	< 25 UJ	< 25 UJ	< 8 U	< 8 UJ	< 8 U	< 8 U	< 8 U	12.5	8 J	4.0 J	< 8.0 U	--	--	< 1.5 U
MW09-10D	--	< 25 UJ	--	< 8 U	--	< 8 U	--	< 8 U	--	85	--	--	--	--	1.4 J
MW09-10S	--	2.5 J	--	< 8 U	--	< 8 U	--	< 8 U	--	2.5 J	--	< 8.0 U	11.9 J	1.8 B	2.9
MW09-11S	64.3	116 J	< 25 UJ	6.0 J	646	141	7.7 J	22.4	20.3	486	4.4 J	--	--	3.2	69.8
MW09-14D	--	< 25 UJ	--	< 8 U	--	< 8 U	--	< 8 U	--	4.6 J	--	--	--	--	1.5 J
MW09-14IA	18.7 J	16.7 J	< 25 UJ	11.6	< 10 UJ	11.2	10.3	14.2	20.2	18.6	12.6	--	24.1 J	5.6 J	0.83 J
MW09-17I	< 25 U	2.2 J	< 25 UJ	< 8 U	< 8 U	< 8 U	5 J	4.9 J	11.7	1.7 J	< 8.0 U	--	--	--	1.4 J
MW09-20D	< 25 U	< 25 UJ	< 25 UJ	< 8 U	< 8 U	< 8 U	< 8 U	5.2 J	11.9	10.1	4.3 J	8.5 J	--	3.0	2.9
MW09-20I	2.4 J	< 25 UJ	< 25 UJ	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	10.8	3.1 J	4.3 J	7.5 J	--	--	1.3 J
MW09-21D	--	< 25 UJ	--	< 8 U	--	< 8 U	--	< 8 U	--	3.3 J	< 8.0 U	--	--	--	2.3
MW09-21S	--	< 25 U	--	< 8 U	--	< 8 U	--	< 8 U	--	< 10 U	< 8.0 U	5.9 J	--	< 7.5 U	< 38.0 U
MW09-23D	--	< 25 UJ	--	< 8 U	--	< 8 U	--	< 8 U	--	< 1 UJ	--	11.5	--	--	< 30.0 U
MW09-23S	--	< 50 UJ	--	< 8 U	--	< 8 U	--	53	--	< 40 UJ	7.5 J	--	< 40.0 U	< 75.0 U	4.4
MW09-24D	--	< 25 UJ	--	< 8 U	--	< 8 U	--	5.1 J	--	8.6 J	--	< 8.0 U	< 4.9 UJ	4.6 J	< 3.0 U
MW09-24S	--	< 25 UJ	--	< 8 U	--	< 8 U	--	3.9 J	--	3.5 J	--	5.9 J	--	--	3.2
MW09-25S	< 25 U	< 25 UJ	< 25 U	< 8 U	< 8 UJ	< 8 U	6 J	7 J	17.6	1.7 J	5.4 J	--	--	--	3.6
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16.9
MW09-26S	7.8 J	278	< 25 UJ	7 J	< 8 UJ	17.5	17.2	12.8 J	23.7	4.6 J	13.1	--	--	--	270
MW09-27D	392	844 J	< 25 UJ	< 8 U	856 J	316	692 J	246	231	278	1360 J	--	--	19.7	7.9
MW09-27S	723	743	826	602	850 J	860	524 J	134	375	462	428 J	--	--	--	54.4
ZINC (UG_L)															
MW09-02S	--	4.1 J	--	17.1	--	< 8 U	--	< 8 U	--	4.3 J	< 8.0 U	7.1 J	--	--	46.1
MW09-03D	--	1.7 J	--	< 8 U	--	< 8 U	--	< 8 U	--	1.2 J	< 8.0 U	< 8.0 U	--	--	2.9
MW09-07S	--	5.1 J	--	6.5 J	--	10.7	--	< 8 U	--	4.1 J	--	--	< 4.6 UJ	3.1 J	2.9
MW09-08DA	< 25 U	2.8 J	< 25 UJ	1.7 J	< 8 U	< 8 U	< 8 U	< 8 U	13.2	2.2 J	4.9 J	< 8.0 U	--	--	1.1 J
MW09-08S	< 25 U	3.9 J	< 25 UJ	< 8 U	< 8 U	< 8 U	24.6 J	3.9 J	22.7	3.1 J	< 8.0 U	4.0 J	--	--	0.91 J
MW09-09DA	< 25 U	< 25 UJ	< 25 UJ	3.6 J	< 8 U	< 8 U	< 8 U	< 8 U	16.1	< 1 U	< 8.0 U	6.7 J	--	1.5 J	1.4 J
MW09-09S	2.6 J	< 25 UJ	< 25 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	11.9	1.3 J	< 8.0 U	< 8.0 U	--	--	1.3 J
MW09-10D	--	< 25 UJ	--	< 8 U	--	< 8 U	--	< 8 U	--	0.91 J	--	--	--	--	2.9
MW09-10S	--	3.7 J	--	2.1 J	--	< 8 U	--	4.1 J	--	2.0 J	--	< 8.0 U	84.7 J	5.2	2.3
MW09-11S	118	246 J	< 25 UJ	22.0	889	240	10.7	162	50.9	585	39.9	--	--	46.0	136
MW09-14D	--	< 25 UJ	--	< 8 U	--	< 8 U	--	< 8 U	--	1.1 J	--	--	--	--	0.86 J
MW09-14IA	24 J	19.8 J	< 25 UJ	13.3	< 11.3 UJ	13.4	9.5 J	11	20.6	9.2 J	9.2 J	--	30.4 J	5.9 J	5.8
MW09-17I	2.7 J	< 25 U	< 25 UJ	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	12.6	< 1 UJ	< 8.0 U	--	--	--	< 1.5 U
MW09-20D	1.8 J	< 25 UJ	< 25 UJ	< 8 U	8.6 J	< 8 U	< 8 U	< 8 U	9.6	1.6 J	< 8.0 U	5.3 J	--	5.7	1.5 J
MW09-20I	3.7 J	< 25 UJ	< 25 UJ	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	10.6	2.6 J	< 8.0 U	< 8.0 U	--	--	5.1
MW09-21D	--	< 25 UJ	--	< 8 U	--	< 8 U	--	< 8 U	--	8.1	< 8.0 U	--	--	--	1.9 J
MW09-21S	--	66.7 J	--	3.5 J	--	4.4 J	--	< 8 U	--	31.8 J	< 8.0 U	< 8.0 U	--	< 7.5 U	12.6

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-23D	--	< 25 U	--	< 8 U	--	< 8 U	--	7.3 J	--	2.4 J	--	< 8.0 U	--	--	< 30.0 U
MW09-23S	--	< 50 UJ	--	< 8 U	--	< 8 U	--	16.3	--	< 40 U	6.6 J	--	216 J	37.2 J	< 1.5 U
MW09-24D	--	< 25 UJ	--	< 8 U	--	< 8 U	--	< 8 U	--	< 3 U	--	< 8.0 U	< 4.1 UJ	3.2 J	< 3.0 U
MW09-24S	--	< 25 UJ	--	1.9 J	--	< 8 U	--	< 8 U	--	1.7 J	--	< 8.0 U	--	--	2.2
MW09-25S	< 25 U	< 25 UJ	< 25 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	60.7 J	< 1 UJ	< 8.0 U	--	--	--	2.3
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21.3
MW09-26S	8 J	283	< 25 UJ	6.8 J	< 8 UJ	15.8	22.7	8.1 J	21.8	13.4 J	14.2	--	--	--	272
MW09-27D	392	842 J	< 25 UJ	5.1 J	878 J	339	887 J	282	256	258	1480	--	--	89.8	38.6
MW09-27S	740	716	825	652	879 J	862	385 J	123	391	442	464	--	--	--	54.7
AROCLOR-1016 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.20 U
MW09-08DA	< 0.26 U	< 0.28 U	< 0.24 U	< 0.053 U	< 0.048 U	< 0.048 U	< 0.048 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 U	--	--	< 0.20 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 0.24 U	< 0.24 U	< 0.24 U	< 0.05 U	< 0.12 U	< 0.05 U	< 0.048 U	< 0.048 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 U	--	--	< 0.20 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	< 0.24 U	< 0.29 U	< 0.26 U	< 0.049 U	< 0.054 U	< 0.048 U	< 0.05 U	< 0.053 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	< 0.13 U	< 0.13 U	< 0.20 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	< 0.25 U	< 0.24 U	< 0.24 U	< 0.056 U	< 0.12 U	< 0.049 U	< 0.05 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.26 UJ	--	--	< 0.13 U	< 0.20 U
MW09-17I	< 0.24 U	< 0.24 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.049 U	< 0.048 U	< 0.05 UJ	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.24 UJ	< 0.25 U	--	--	< 0.20 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.20 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 UJ	--
MW09-25S	< 0.27 U	< 0.24 U	< 0.24 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.050 U	< 0.047 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.20 U
MW09-26S	< 0.24 U	< 0.25 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.049 U	< 0.050 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-27D	< 0.29 UJ	< 0.24 U	< 0.25 U	< 0.048 U	< 0.13 U	< 0.05 U	< 0.048 UJ	< 0.05 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	< 0.13 U	< 0.20 U
MW09-27S	< 0.29 U	< 0.24 U	< 0.26 U	< 0.049 U	< 0.15 U	< 0.049 U	< 0.053 U	< 0.054 UJ	< 0.13 U	< 0.13 U	< 0.24 U	--	--	< 0.13 U	< 0.20 U
AROCLOR-1221 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 U	< 0.10 U
MW09-08DA	< 0.26 U	< 0.28 U	< 0.24 U	< 0.053 U	< 0.048 U	< 0.048 U	< 0.048 U	< 0.05 U	< 0.25 U	< 0.25 U	< 0.25 UJ	< 0.24 U	--	--	< 0.10 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 0.24 U	< 0.24 U	< 0.24 U	< 0.05 U	< 0.12 U	< 0.05 U	< 0.048 U	< 0.048 U	< 0.25 U	< 0.25 U	< 0.25 UJ	< 0.24 U	--	--	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	< 0.24 U	< 0.29 U	< 0.26 U	< 0.049 U	< 0.054 U	< 0.048 U	< 0.05 U	< 0.053 U	< 0.25 U	< 0.25 U	< 0.24 UJ	--	< 0.25 U	< 0.25 U	< 0.10 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	< 0.25 U	< 0.24 U	< 0.24 U	< 0.056 U	< 0.12 U	< 0.049 U	< 0.05 U	< 0.05 U	< 0.25 U	< 0.25 U	< 0.26 UJ	--	--	< 0.25 U	< 0.10 U
MW09-17I	< 0.24 U	< 0.24 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.049 U	< 0.048 U	< 0.05 UJ	< 0.25 U	< 0.25 U	< 0.24 UJ	--	--	--	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.24 UJ	< 0.25 U	--	--	< 0.10 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 U	< 0.10 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 UJ	--
MW09-25S	< 0.27 U	< 0.24 U	< 0.24 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.050 U	< 0.047 U	< 0.25 U	< 0.25 U	< 0.24 UJ	--	--	--	< 0.10 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.24 U	< 0.25 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.049 U	< 0.050 U	< 0.25 U	< 0.25 U	< 0.24 UJ	--	--	--	< 0.10 U
MW09-27D	< 0.29 U	< 0.24 U	< 0.25 U	< 0.048 U	< 0.13 U	< 0.05 U	< 0.048 UJ	< 0.05 U	< 0.25 U	< 0.25 U	< 0.24 UJ	--	--	< 0.25 U	< 0.10 U
MW09-27S	< 0.29 U	< 0.24 U	< 0.26 U	< 0.049 U	< 0.15 U	< 0.049 U	< 0.053 U	< 0.054 U	< 0.25 U	< 0.25 U	< 0.24 U	--	--	< 0.25 U	< 0.10 U
AROCLOR-1232 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.20 U
MW09-08DA	< 0.26 U	< 0.28 U	< 0.24 U	< 0.053 U	< 0.048 U	< 0.048 U	< 0.048 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 U	--	--	< 0.20 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-09DA	< 0.24 U	< 0.24 U	< 0.24 U	< 0.05 U	< 0.12 U	< 0.05 U	< 0.048 U	< 0.048 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 U	--	--	< 0.20 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	< 0.24 U	< 0.29 U	< 0.26 U	< 0.049 U	< 0.054 U	< 0.048 U	< 0.05 U	< 0.053 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	< 0.13 U	< 0.13 U	< 0.20 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	< 0.25 U	< 0.24 U	< 0.24 U	< 0.056 U	< 0.12 U	< 0.049 U	< 0.05 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.26 UJ	--	--	< 0.13 U	< 0.20 U
MW09-17I	< 0.24 U	< 0.24 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.049 U	< 0.048 U	< 0.05 UJ	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.24 UJ	< 0.25 U	--	--	< 0.20 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.20 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 UJ	--
MW09-25S	< 0.27 U	< 0.24 U	< 0.24 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.050 U	< 0.047 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.20 U
MW09-26S	< 0.24 U	< 0.25 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.049 U	< 0.050 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-27D	< 0.29 U	< 0.24 U	< 0.25 U	< 0.048 U	< 0.13 U	< 0.05 U	< 0.048 UJ	< 0.05 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	< 0.13 U	< 0.20 U
MW09-27S	< 0.29 U	< 0.24 U	< 0.26 U	< 0.049 U	< 0.15 U	< 0.049 U	< 0.053 U	< 0.054 U	< 0.13 U	< 0.13 U	< 0.24 U	--	--	< 0.13 U	< 0.20 U
AROCLOR-1242 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.10 U
MW09-08DA	< 0.26 U	< 0.28 U	< 0.24 U	< 0.053 U	< 0.048 U	< 0.048 U	< 0.048 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 U	--	--	< 0.10 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 0.24 U	< 0.24 U	< 0.24 U	< 0.05 U	< 0.12 U	< 0.05 U	< 0.048 U	< 0.048 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 U	--	--	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	< 0.24 U	< 0.29 U	< 0.26 U	< 0.049 U	< 0.054 U	< 0.048 U	< 0.05 U	< 0.053 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	< 0.13 U	< 0.13 U	< 0.10 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	< 0.25 U	< 0.24 U	< 0.24 U	< 0.056 U	< 0.12 U	< 0.049 U	< 0.05 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.26 UJ	--	--	< 0.13 U	< 0.10 U
MW09-17I	< 0.24 U	< 0.24 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.049 U	< 0.048 U	< 0.05 UJ	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.24 UJ	< 0.25 U	--	--	< 0.10 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.10 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 UJ	--
MW09-25S	< 0.27 U	< 0.24 U	< 0.24 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.050 U	< 0.047 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.10 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.24 U	< 0.25 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.049 U	< 0.050 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.10 U
MW09-27D	< 0.29 U	< 0.24 U	< 0.25 U	< 0.048 U	< 0.13 U	< 0.05 U	< 0.048 UJ	< 0.05 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	< 0.13 U	< 0.10 U
MW09-27S	< 0.29 U	< 0.24 U	< 0.26 U	< 0.049 U	< 0.15 U	< 0.049 U	< 0.053 U	< 0.054 U	< 0.13 U	< 0.13 U	< 0.24 U	--	--	< 0.13 U	< 0.10 U
AROCLOR-1248 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.10 U
MW09-08DA	< 0.26 U	< 0.28 U	< 0.24 U	< 0.053 U	< 0.048 U	< 0.048 U	< 0.048 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 U	--	--	< 0.10 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 0.24 U	< 0.24 U	< 0.24 U	< 0.05 U	< 0.12 U	< 0.05 U	< 0.048 U	< 0.048 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 U	--	--	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	< 0.24 U	< 0.29 U	< 0.26 U	< 0.049 U	< 0.054 U	< 0.048 U	< 0.05 U	< 0.053 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	< 0.13 U	< 0.13 U	< 0.10 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	< 0.25 U	< 0.24 U	< 0.24 U	< 0.056 U	< 0.12 U	< 0.049 U	< 0.05 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.26 UJ	--	--	< 0.13 U	< 0.10 U
MW09-17I	< 0.24 U	< 0.24 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.049 U	< 0.048 U	< 0.05 UJ	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.24 UJ	< 0.25 U	--	--	< 0.10 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.10 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 UJ	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-25S	< 0.27 U	< 0.24 U	< 0.24 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.050 U	< 0.047 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.10 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.24 U	< 0.25 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.049 U	< 0.050 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.10 U
MW09-27D	< 0.29 U	< 0.24 U	< 0.25 U	< 0.048 U	< 0.13 U	< 0.05 U	< 0.048 UJ	< 0.05 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	< 0.13 U	< 0.10 U
MW09-27S	< 0.29 U	< 0.24 U	< 0.26 U	< 0.049 U	< 0.15 U	< 0.049 U	< 0.053 U	< 0.054 U	< 0.13 U	< 0.13 U	< 0.24 U	--	--	< 0.13 U	< 0.10 U
AROCLOR-1254 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.20 U
MW09-08DA	< 0.26 U	< 0.28 U	< 0.24 U	< 0.053 U	< 0.048 U	< 0.048 U	< 0.048 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 U	--	--	< 0.20 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 0.24 U	< 0.24 U	< 0.24 U	< 0.05 U	< 0.12 U	< 0.05 U	< 0.048 U	< 0.048 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 U	--	--	< 0.20 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	< 0.24 U	< 0.29 U	< 0.26 U	< 0.049 U	< 0.054 U	< 0.048 U	< 0.05 U	< 0.053 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	< 0.13 U	< 0.13 U	< 0.20 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	< 0.25 U	< 0.24 U	< 0.24 U	< 0.056 U	< 0.12 U	< 0.049 U	< 0.05 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.26 UJ	--	--	< 0.13 U	< 0.20 U
MW09-17I	< 0.24 U	< 0.24 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.049 U	< 0.048 U	< 0.05 UJ	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.24 UJ	< 0.25 U	--	--	< 0.20 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.20 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 UJ	--
MW09-25S	< 0.27 U	< 0.24 U	< 0.24 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.050 U	< 0.047 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.20 U
MW09-26S	< 0.24 U	< 0.25 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.049 U	< 0.050 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-27D	< 0.29 U	< 0.24 U	< 0.25 U	< 0.048 U	< 0.13 U	< 0.05 U	< 0.048 UJ	< 0.05 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	< 0.13 U	< 0.20 U
MW09-27S	< 0.29 U	< 0.24 U	< 0.26 U	< 0.049 U	< 0.15 U	< 0.049 U	< 0.053 U	< 0.054 U	< 0.13 U	< 0.13 U	< 0.24 U	--	--	< 0.13 U	< 0.20 U
AROCLOR-1260 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.20 U
MW09-08DA	< 0.26 U	< 0.28 U	< 0.24 U	< 0.053 U	< 0.048 U	< 0.048 U	< 0.048 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 UJ	--	--	< 0.20 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 0.24 U	< 0.24 U	< 0.24 U	< 0.05 U	< 0.12 U	< 0.05 U	< 0.048 U	< 0.048 U	< 0.13 U	< 0.13 U	< 0.25 UJ	< 0.24 UJ	--	--	< 0.20 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	0.19 J	0.26 J	< 0.26 U	< 0.049 U	0.32 J	< 0.048 U	< 0.05 U	0.30 J	< 0.13 U	< 0.13 U	0.45 J	--	< 0.13 U	< 0.13 U	< 0.20 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	< 0.25 U	< 0.24 U	< 0.24 U	< 0.056 U	< 0.12 U	< 0.049 U	< 0.05 U	< 0.05 U	< 0.13 U	< 0.13 U	< 0.26 UJ	--	--	< 0.13 U	< 0.20 U
MW09-17I	< 0.24 U	< 0.24 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.049 U	< 0.048 U	< 0.05 UJ	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.24 UJ	< 0.25 U	--	--	< 0.20 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.20 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 UJ	--
MW09-25S	< 0.27 U	< 0.24 U	< 0.24 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.050 U	< 0.047 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.20 U
MW09-26S	< 0.24 U	< 0.25 U	< 0.27 U	< 0.054 U	< 0.12 U	< 0.052 U	< 0.049 U	< 0.050 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	--	< 0.20 U
MW09-27D	< 0.29 UJ	< 0.24 UJ	< 0.25 U	< 0.048 U	< 0.13 U	< 0.05 UJ	< 0.048 UJ	< 0.05 U	< 0.13 U	< 0.13 U	< 0.24 UJ	--	--	< 0.13 U	< 0.20 U
MW09-27S	< 0.29 U	< 0.24 U	< 0.26 U	< 0.049 U	< 0.15 U	< 0.049 U	< 0.053 U	< 0.054 UJ	< 0.13 U	< 0.13 U	< 0.24 U	--	--	< 0.13 U	< 0.20 U
POLYCHLORINATED BIPHENYLS (PCBS) (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	< 0.041 U	< 0.044 U	< 0.038 U	< 0.37 U	< 0.34 U	< 0.34 U	< 0.33 U	< 0.05 U	< 0.147 U	< 0.147 U	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 0.038 U	< 0.038 U	< 0.038 U	< 0.35 U	< 0.84 U	< 0.35 U	< 0.34 U	< 0.048 U	< 0.147 U	< 0.147 U	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-11S	0.19	0.26	< 0.042 U	< 0.34 U	0.32 J	< 0.34 U	< 0.35 U	0.30 J	< 0.147 U	< 0.147 U	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	< 0.04 U	< 0.038 U	< 0.038 U	< 0.39 U	< 0.84 U	< 0.34 U	< 0.35 U	< 0.05 U	< 0.147 U	< 0.147 U	--	--	--	--	--
MW09-17I	< 0.039 U	< 0.038 U	< 0.044 U	< 0.38 U	< 0.82 U	< 0.34 U	< 0.34 U	< 0.05 UJ	< 0.147 U	< 0.147 U	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	< 0.044 U	< 0.038 U	< 0.038 U	< 0.38 U	< 0.82 U	< 0.36 U	< 0.35 U	< 0.047 U	< 0.147 U	< 0.147 U	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	< 0.039 U	< 0.04 U	< 0.043 U	< 0.38 U	< 0.83 U	< 0.36 U	< 0.34 U	< 0.050 U	< 0.147 U	< 0.147 U	--	--	--	--	--
MW09-27D	< 0.046 U	< 0.038 U	< 0.04 U	< 0.33 U	< 0.94 U	< 0.35 U	< 0.33 UJ	< 0.05 U	< 0.147 U	< 0.147 U	--	--	--	--	--
MW09-27S	< 0.046 U	< 0.038 U	< 0.041 U	< 0.34 U	< 1 U	< 0.34 U	< 0.37 U	< 0.054 UJ	< 0.147 U	< 0.147 U	--	--	--	--	--
4,4-DDD (UG_L)															
MW09-08DA	< 0.052 U	< 0.056 UJ	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0096 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-09DA	< 0.048 U	< 0.047 UJ	< 0.048 U	< 0.01 U	< 0.0096 U	< 0.0099 U	< 0.0096 U	< 0.0095 U	--	--	--	--	--	--	--
MW09-14IA	< 0.05 U	< 0.048 U	< 0.047 U	< 0.011 U	0.0056 J	< 0.0098 U	< 0.01 U	< 0.0099 U	--	--	--	--	--	--	--
MW09-17I	< 0.049 U	< 0.048 U	< 0.055 U	< 0.011 U	< 0.0094 U	< 0.0098 U	< 0.0097 U	< 0.01 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.048 U	< 0.05 U	< 0.054 U	< 0.011 U	< 0.0095 U	< 0.010 U	--	< 0.0099 U	--	--	--	--	--	--	--
MW09-27D	< 0.052 U	< 0.047 U	< 0.05 U	< 0.0095 U	< 0.011 U	< 0.01 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-27S	< 0.048 U	< 0.048 U	< 0.051 U	< 0.011 U	< 0.012 U	< 0.0098 U	< 0.01 U	< 0.011 U	--	--	--	--	--	--	--
4,4-DDE (UG_L)															
MW09-08DA	< 0.052 U	< 0.056 U	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0096 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-09DA	< 0.048 U	< 0.047 U	< 0.048 U	< 0.01 U	0.0036 J	< 0.0099 U	< 0.0096 U	< 0.0095 U	--	--	--	--	--	--	--
MW09-14IA	< 0.05 U	< 0.048 U	< 0.047 U	< 0.011 U	0.0036 J	0.0028 J	< 0.01 U	< 0.0099 U	--	--	--	--	--	--	--
MW09-17I	< 0.049 U	< 0.048 U	< 0.055 U	< 0.011 U	< 0.0094 U	< 0.0098 U	< 0.0097 U	< 0.01 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.048 U	< 0.05 U	< 0.054 U	< 0.011 U	0.0036 J	< 0.010 U	--	< 0.0099 U	--	--	--	--	--	--	--
MW09-27D	< 0.052 U	< 0.047 U	< 0.05 U	< 0.0095 UJ	< 0.011 U	0.0024 J	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-27S	0.0082 J	< 0.048 U	< 0.051 U	< 0.011 U	0.0056 J	< 0.0098 U	< 0.01 U	< 0.011 U	--	--	--	--	--	--	--
4,4-DDT (UG_L)															
MW09-08DA	< 0.052 U	< 0.056 UJ	< 0.047 U	< 0.011 U	< 0.0096 UJ	< 0.0096 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-09DA	< 0.048 U	< 0.047 UJ	< 0.048 U	< 0.01 U	< 0.0096 U	< 0.0099 U	< 0.0096 U	< 0.0095 U	--	--	--	--	--	--	--
MW09-14IA	< 0.05 U	< 0.048 U	< 0.047 U	< 0.011 U	0.0058 J	< 0.0098 U	< 0.01 U	< 0.0099 U	--	--	--	--	--	--	--
MW09-17I	< 0.049 U	< 0.048 U	< 0.055 U	< 0.011 U	< 0.0094 U	< 0.0098 U	< 0.0097 U	< 0.01 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.048 U	< 0.05 U	< 0.054 U	< 0.011 U	< 0.0095 U	< 0.010 U	--	< 0.0099 U	--	--	--	--	--	--	--
MW09-27D	< 0.052 U	< 0.047 U	< 0.05 U	< 0.0095 UJ	< 0.011 U	0.0023 J	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-27S	< 0.048 U	< 0.048 U	< 0.051 U	< 0.011 U	< 0.012 U	< 0.0098 U	< 0.01 U	< 0.011 U	--	--	--	--	--	--	--
ALDRIN (UG_L)															
MW09-08DA	< 0.026 U	< 0.028 U	< 0.024 U	< 0.0053 U	< 0.0048 U	< 0.0048 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-09DA	< 0.024 U	< 0.024 U	< 0.024 U	< 0.005 U	< 0.0048 U	< 0.005 U	< 0.0048 U	< 0.0048 U	--	--	--	--	--	--	--
MW09-14IA	< 0.025 U	< 0.024 U	< 0.024 U	< 0.0056 U	< 0.0048 U	< 0.0049 U	< 0.005 U	0.0025 J	--	--	--	--	--	--	--
MW09-17I	< 0.024 U	< 0.024 U	< 0.027 U	< 0.0054 U	< 0.0047 U	< 0.0049 U	< 0.0048 U	0.0017 J	--	--	--	--	--	--	--
MW09-26S	< 0.024 U	< 0.025 U	< 0.027 U	< 0.0054 U	< 0.0048 U	< 0.0052 U	--	< 0.0050 U	--	--	--	--	--	--	--
MW09-27D	< 0.026 U	< 0.024 U	< 0.025 U	< 0.0048 U	< 0.0054 U	< 0.005 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-27S	< 0.024 U	< 0.024 U	< 0.026 U	< 0.0053 U	< 0.0059 U	< 0.0049 U	0.0027 J	< 0.0054 U	--	--	--	--	--	--	--
ALPHA-BHC (UG_L)															
MW09-08DA	< 0.026 U	< 0.028 UJ	< 0.024 U	< 0.0053 U	< 0.0048 U	< 0.0048 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-09DA	< 0.024 U	< 0.024 UJ	< 0.024 U	< 0.005 U	< 0.0048 U	< 0.005 U	< 0.0048 U	< 0.0048 U	--	--	--	--	--	--	--
MW09-14IA	< 0.025 U	< 0.024 U	< 0.024 U	< 0.0056 U	< 0.0048 U	< 0.0049 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--
MW09-17I	< 0.024 U	< 0.024 U	< 0.027 U	< 0.0054 U	< 0.0047 U	< 0.0049 U	< 0.0048 U	< 0.005 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.024 U	< 0.025 U	< 0.027 U	< 0.0054 U	< 0.0048 U	< 0.0052 U	--	< 0.0050 U	--	--	--	--	--	--	--
MW09-27D	< 0.026 U	< 0.024 U	< 0.025 U	< 0.0048 U	< 0.0054 U	< 0.005 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-27S	< 0.024 U	< 0.024 U	< 0.026 U	< 0.0053 U	< 0.0059 U	0.004 J	< 0.0053 U	< 0.0054 U	--	--	--	--	--	--	--
ALPHA-CHLORDANE (UG_L)															
MW09-08DA	< 0.026 U	< 0.028 U	< 0.024 U	< 0.0053 U	< 0.0048 U	< 0.0048 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-09DA	< 0.024 U	< 0.024 U	< 0.024 U	< 0.005 U	< 0.0048 U	< 0.005 U	< 0.0048 U	< 0.0048 U	--	--	--	--	--	--	--
MW09-14IA	< 0.025 U	< 0.024 U	< 0.024 U	< 0.0056 U	< 0.0048 U	< 0.0049 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--
MW09-17I	< 0.024 U	< 0.024 U	< 0.027 U	< 0.0054 U	< 0.0047 U	< 0.0049 U	< 0.0048 U	< 0.005 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.024 U	< 0.025 U	< 0.027 U	< 0.0054 U	< 0.0048 U	< 0.0052 U	--	< 0.0050 U	--	--	--	--	--	--	--
MW09-27D	< 0.026 U	< 0.024 U	< 0.025 U	< 0.0048 U	< 0.0054 U	< 0.005 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-27S	< 0.024 U	< 0.024 U	< 0.026 U	< 0.0053 U	< 0.0059 U	0.0072 J	< 0.0053 U	< 0.0054 U	--	--	--	--	--	--	--
BETA-BHC (UG_L)															
MW09-08DA	< 0.026 U	< 0.028 U	< 0.024 U	< 0.0053 U	< 0.0048 U	< 0.0048 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-09DA	< 0.024 U	< 0.024 U	< 0.024 U	< 0.005 U	< 0.0048 U	< 0.005 U	< 0.0048 U	< 0.0048 U	--	--	--	--	--	--	--
MW09-14IA	< 0.025 U	< 0.024 U	< 0.024 U	< 0.0056 U	< 0.0048 U	< 0.0049 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--
MW09-17I	< 0.024 U	< 0.024 U	< 0.027 U	< 0.0054 U	< 0.0047 U	< 0.0049 U	< 0.0048 U	< 0.005 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.024 U	< 0.025 U	< 0.027 U	< 0.0054 U	< 0.0048 U	< 0.0052 U	--	< 0.0050 U	--	--	--	--	--	--	--
MW09-27D	< 0.026 U	< 0.024 U	< 0.025 U	< 0.0048 U	< 0.0054 U	< 0.005 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-27S	< 0.024 U	< 0.024 U	< 0.026 U	< 0.0053 U	< 0.0059 U	< 0.0049 U	< 0.0053 U	< 0.0054 U	--	--	--	--	--	--	--
DELTA-BHC (UG_L)															
MW09-08DA	< 0.026 U	< 0.028 UJ	< 0.024 U	< 0.0053 U	< 0.0048 UJ	< 0.0048 UJ	< 0.0048 UJ	< 0.005 U	--	--	--	--	--	--	--
MW09-09DA	< 0.024 U	< 0.024 UJ	< 0.024 U	< 0.005 U	< 0.0048 U	< 0.005 UJ	< 0.0048 UJ	< 0.0048 U	--	--	--	--	--	--	--
MW09-14IA	< 0.025 U	< 0.024 U	< 0.024 U	< 0.0056 U	< 0.0048 U	0.0084 J	< 0.005 UJ	< 0.005 U	--	--	--	--	--	--	--
MW09-17I	< 0.024 U	< 0.024 U	< 0.027 U	< 0.0054 U	< 0.0047 U	< 0.0049 UJ	< 0.0048 UJ	< 0.005 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.024 U	< 0.025 U	< 0.027 U	< 0.0054 U	< 0.0048 U	< 0.0052 U	--	< 0.0050 U	--	--	--	--	--	--	--
MW09-27D	< 0.026 U	< 0.024 U	< 0.025 U	< 0.0048 U	< 0.0054 U	< 0.005 UJ	< 0.0048 UJ	< 0.005 U	--	--	--	--	--	--	--
MW09-27S	< 0.024 U	< 0.024 U	< 0.026 U	< 0.0053 U	< 0.0059 U	< 0.0049 UJ	< 0.0053 U	< 0.0054 U	--	--	--	--	--	--	--
DIELDRIN (UG_L)															
MW09-08DA	< 0.052 U	< 0.056 U	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0096 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-09DA	< 0.048 U	< 0.047 U	< 0.048 U	< 0.01 U	< 0.0096 U	< 0.0099 U	< 0.0096 U	< 0.0095 U	--	--	--	--	--	--	--
MW09-14IA	< 0.05 U	< 0.048 U	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0098 U	< 0.01 U	< 0.0099 U	--	--	--	--	--	--	--
MW09-17I	< 0.049 U	< 0.048 U	< 0.055 U	< 0.011 U	< 0.0094 U	< 0.0098 U	< 0.0097 U	< 0.01 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.048 U	< 0.05 U	< 0.054 U	< 0.011 U	< 0.0095 U	< 0.010 U	--	< 0.0099 U	--	--	--	--	--	--	--
MW09-27D	< 0.052 U	< 0.047 U	< 0.05 U	< 0.0095 U	< 0.011 U	< 0.01 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-27S	< 0.048 U	< 0.048 U	< 0.051 U	< 0.011 U	< 0.012 U	< 0.0098 U	< 0.01 U	< 0.011 U	--	--	--	--	--	--	--
ENDOSULFAN I (UG_L)															
MW09-08DA	< 0.026 U	< 0.028 U	< 0.024 UJ	< 0.0053 U	< 0.0048 U	< 0.0048 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-09DA	< 0.024 U	< 0.024 U	< 0.024 UJ	< 0.005 U	< 0.0048 U	< 0.005 U	< 0.0048 U	< 0.0048 U	--	--	--	--	--	--	--
MW09-14IA	< 0.025 U	< 0.024 U	< 0.024 UJ	< 0.0056 U	< 0.0048 U	< 0.0049 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--
MW09-17I	< 0.024 U	< 0.024 U	< 0.027 UJ	< 0.0054 U	< 0.0047 U	< 0.0049 U	< 0.0048 U	< 0.005 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.024 U	< 0.025 U	< 0.027 UJ	< 0.0054 U	< 0.0048 U	< 0.0052 U	--	< 0.0050 U	--	--	--	--	--	--	--
MW09-27D	< 0.026 U	< 0.024 U	< 0.025 UJ	< 0.0048 UJ	< 0.0054 U	< 0.005 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-27S	< 0.024 U	< 0.024 U	< 0.026 U	< 0.0053 U	0.0049 J	< 0.0049 U	< 0.0053 U	< 0.0054 U	--	--	--	--	--	--	--
ENDOSULFAN II (UG_L)															
MW09-08DA	< 0.052 U	< 0.056 U	< 0.047 UJ	< 0.011 U	< 0.0096 U	< 0.0096 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-09DA	< 0.048 U	< 0.047 U	< 0.048 UJ	< 0.01 U	< 0.0096 U	< 0.0099 U	< 0.0096 U	< 0.0095 U	--	--	--	--	--	--	--
MW09-14IA	< 0.05 U	< 0.048 U	< 0.047 UJ	< 0.011 U	< 0.0096 U	< 0.0098 U	0.0052 J	< 0.0099 U	--	--	--	--	--	--	--
MW09-17I	< 0.049 U	< 0.048 U	< 0.055 UJ	< 0.011 U	< 0.0094 U	< 0.0098 U	< 0.0097 U	< 0.01 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.048 U	< 0.05 U	< 0.054 UJ	< 0.011 U	< 0.0095 U	< 0.010 U	--	< 0.0099 U	--	--	--	--	--	--	--
MW09-27D	< 0.052 U	< 0.047 U	< 0.05 UJ	< 0.0095 U	< 0.011 U	< 0.01 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-27S	< 0.048 U	< 0.048 U	< 0.051 U	< 0.011 U	< 0.012 U	< 0.0098 U	< 0.01 U	< 0.011 U	--	--	--	--	--	--	--
ENDOSULFAN SULFATE (UG_L)															
MW09-08DA	< 0.052 U	< 0.056 UJ	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0096 U	< 0.0095 UJ	< 0.01 U	--	--	--	--	--	--	--
MW09-09DA	< 0.048 UJ	< 0.047 UJ	< 0.048 U	< 0.01 U	< 0.0096 U	< 0.0099 U	< 0.0096 UJ	< 0.0095 U	--	--	--	--	--	--	--
MW09-14IA	< 0.05 U	< 0.048 U	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0098 U	< 0.01 UJ	< 0.0099 U	--	--	--	--	--	--	--
MW09-17I	< 0.049 U	< 0.048 U	< 0.055 U	< 0.011 U	< 0.0094 U	< 0.0098 U	< 0.0097 UJ	< 0.01 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.048 U	< 0.05 U	< 0.054 U	< 0.011 U	< 0.0095 U	< 0.010 U	--	< 0.0099 U	--	--	--	--	--	--	--
MW09-27D	< 0.052 U	< 0.047 U	< 0.05 U	< 0.0095 UJ	< 0.011 U	< 0.01 U	< 0.0095 UJ	< 0.01 U	--	--	--	--	--	--	--
MW09-27S	< 0.048 U	< 0.048 U	< 0.051 U	< 0.011 UJ	< 0.012 U	< 0.0098 U	< 0.01 U	< 0.011 U	--	--	--	--	--	--	--
ENDRIN (2 UG_L)															
MW09-08DA	< 0.052 U	< 0.056 U	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0096 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-09DA	< 0.048 U	< 0.047 U	< 0.048 U	< 0.01 U	< 0.0096 U	< 0.0099 U	< 0.0096 U	< 0.0095 U	--	--	--	--	--	--	--
MW09-14IA	< 0.05 U	< 0.048 U	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0098 U	< 0.01 U	< 0.0099 U	--	--	--	--	--	--	--
MW09-17I	< 0.049 U	< 0.048 U	< 0.055 U	< 0.011 U	< 0.0094 U	< 0.0098 U	< 0.0097 U	< 0.01 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.048 U	< 0.05 U	< 0.054 U	< 0.011 U	< 0.0095 U	< 0.010 U	--	< 0.0099 U	--	--	--	--	--	--	--
MW09-27D	< 0.052 U	< 0.047 U	< 0.05 U	< 0.0095 U	< 0.011 U	< 0.01 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-27S	< 0.048 U	< 0.048 U	< 0.051 U	< 0.011 U	< 0.012 U	< 0.0098 U	< 0.01 U	< 0.011 U	--	--	--	--	--	--	--
ENDRIN KETONE (2 UG_L)															
MW09-08DA	< 0.052 U	< 0.056 UJ	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0096 U	< 0.0095 UJ	< 0.01 U	--	--	--	--	--	--	--
MW09-09DA	< 0.048 UJ	< 0.047 UJ	< 0.048 U	< 0.01 U	< 0.0096 U	< 0.0099 U	< 0.0096 UJ	< 0.0095 U	--	--	--	--	--	--	--
MW09-14IA	< 0.05 U	< 0.048 U	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0098 U	< 0.01 UJ	< 0.0099 U	--	--	--	--	--	--	--
MW09-17I	< 0.049 U	< 0.048 U	< 0.055 U	< 0.011 U	< 0.0094 U	< 0.0098 U	< 0.0097 UJ	< 0.01 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.048 U	< 0.05 U	< 0.054 U	< 0.011 U	< 0.0095 U	< 0.010 U	--	< 0.0099 U	--	--	--	--	--	--	--
MW09-27D	< 0.052 U	< 0.047 U	< 0.05 U	< 0.0095 UJ	< 0.011 U	< 0.01 U	< 0.0095 UJ	< 0.01 U	--	--	--	--	--	--	--
MW09-27S	< 0.048 U	< 0.048 U	< 0.051 U	< 0.011 UJ	< 0.012 U	< 0.0098 U	< 0.01 U	< 0.011 U	--	--	--	--	--	--	--
HEPTACHLOR (0.4 UG_L)															
MW09-08DA	< 0.026 U	< 0.028 UJ	< 0.024 U	< 0.0053 U	< 0.0048 U	< 0.0048 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-09DA	< 0.024 U	< 0.024 UJ	< 0.024 U	< 0.005 U	< 0.0048 U	< 0.005 U	< 0.0048 U	< 0.0048 U	--	--	--	--	--	--	--
MW09-14IA	< 0.025 U	< 0.024 U	< 0.024 U	< 0.0056 U	< 0.0048 U	0.0038 J	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--
MW09-17I	< 0.024 U	< 0.024 U	< 0.027 U	< 0.0054 U	< 0.0047 U	< 0.0049 U	< 0.0048 U	< 0.005 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.024 U	< 0.025 U	< 0.027 U	< 0.0054 U	< 0.0048 U	< 0.0052 U	--	< 0.0050 U	--	--	--	--	--	--	--
MW09-27D	< 0.026 U	< 0.024 U	< 0.025 U	< 0.0048 U	< 0.0054 U	< 0.005 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-27S	< 0.024 U	< 0.024 U	< 0.026 U	< 0.0053 U	< 0.0059 U	< 0.0049 U	< 0.0053 U	< 0.0054 U	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE (0.2 UG_L)															
MW09-08DA	< 0.026 U	< 0.028 U	< 0.024 U	< 0.0053 U	< 0.0048 U	< 0.0048 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-09DA	< 0.024 U	< 0.024 U	< 0.024 U	< 0.005 U	< 0.0048 U	< 0.005 U	< 0.0048 U	< 0.0048 U	--	--	--	--	--	--	--
MW09-14IA	< 0.025 U	< 0.024 U	< 0.024 U	< 0.0056 U	< 0.0048 U	< 0.0049 U	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--
MW09-17I	< 0.024 U	< 0.024 U	< 0.027 U	< 0.0054 U	< 0.0047 U	< 0.0049 U	< 0.0048 U	< 0.005 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.024 U	< 0.025 U	< 0.027 U	< 0.0054 U	< 0.0048 U	< 0.0052 U	--	< 0.0050 U	--	--	--	--	--	--	--
MW09-27D	< 0.026 U	< 0.024 U	< 0.025 U	< 0.0048 U	< 0.0054 U	< 0.005 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
171 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-27S	< 0.024 U	< 0.024 U	< 0.026 U	< 0.0053 U	< 0.0059 U	< 0.0049 U	< 0.0053 U	< 0.0054 U	--	--	--	--	--	--	--
HEXACHLOROBENZENE (1 UG_L)															
MW09-08DA	< 0.052 U	< 0.056 U	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0096 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-09DA	< 0.048 U	< 0.047 U	< 0.048 U	< 0.01 U	< 0.0096 UJ	< 0.0099 U	< 0.0096 U	< 0.0095 U	--	--	--	--	--	--	--
MW09-14IA	< 0.05 U	< 0.048 U	< 0.047 U	< 0.011 U	< 0.0096 U	< 0.0098 U	< 0.01 U	< 0.0099 U	--	--	--	--	--	--	--
MW09-17I	< 0.049 U	< 0.048 U	< 0.055 U	< 0.011 U	< 0.0094 U	< 0.0098 U	< 0.0097 U	< 0.01 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.048 U	< 0.05 U	< 0.054 U	< 0.011 U	< 0.0095 UJ	< 0.010 U	--	< 0.0099 U	--	--	--	--	--	--	--
MW09-27D	< 0.052 UJ	< 0.047 U	< 0.05 U	< 0.0095 U	< 0.011 U	< 0.01 U	< 0.0095 U	< 0.01 U	--	--	--	--	--	--	--
MW09-27S	< 0.048 U	< 0.048 U	< 0.051 U	< 0.011 U	< 0.012 U	< 0.0098 U	< 0.01 U	< 0.011 U	--	--	--	--	--	--	--
LINDANE (UG_L)															
MW09-08DA	< 0.026 U	< 0.028 U	< 0.024 U	< 0.0053 U	< 0.0048 U	< 0.0048 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-09DA	< 0.024 U	< 0.024 U	< 0.024 U	< 0.005 U	< 0.0048 U	< 0.005 U	< 0.0048 U	< 0.0048 U	--	--	--	--	--	--	--
MW09-14IA	< 0.025 U	< 0.024 U	< 0.024 U	< 0.0056 U	< 0.0048 U	0.0049 J	< 0.005 U	< 0.005 U	--	--	--	--	--	--	--
MW09-17I	< 0.024 U	< 0.024 U	< 0.027 U	< 0.0054 U	0.0046 J	< 0.0049 U	< 0.0048 U	< 0.005 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.024 U	< 0.025 U	< 0.027 U	< 0.0054 U	< 0.0048 U	< 0.0052 U	--	< 0.0050 U	--	--	--	--	--	--	--
MW09-27D	< 0.026 U	< 0.024 U	< 0.025 U	< 0.0048 U	< 0.0054 U	< 0.005 U	< 0.0048 U	< 0.005 U	--	--	--	--	--	--	--
MW09-27S	< 0.024 U	< 0.024 U	< 0.026 U	< 0.0053 U	< 0.0059 U	< 0.0049 U	< 0.0053 U	< 0.0054 U	--	--	--	--	--	--	--
METHOXYCHLOR (40 UG_L)															
MW09-08DA	< 0.26 U	< 0.28 UJ	< 0.24 U	< 0.053 U	< 0.048 UJ	< 0.048 U	< 0.048 U	< 0.05 U	--	--	--	--	--	--	--
MW09-09DA	< 0.24 U	< 0.24 UJ	< 0.24 U	< 0.05 U	< 0.048 UJ	< 0.05 U	< 0.048 U	< 0.048 U	--	--	--	--	--	--	--
MW09-14IA	< 0.25 U	< 0.24 U	< 0.24 U	< 0.056 U	< 0.048 UJ	< 0.049 U	< 0.05 U	< 0.05 U	--	--	--	--	--	--	--
MW09-17I	< 0.24 U	< 0.24 U	< 0.27 U	< 0.054 U	< 0.047 UJ	< 0.049 U	< 0.048 U	< 0.05 UJ	--	--	--	--	--	--	--
MW09-26S	< 0.24 U	< 0.25 U	< 0.27 U	< 0.054 U	< 0.048 UJ	< 0.052 U	--	< 0.050 U	--	--	--	--	--	--	--
MW09-27D	< 0.26 U	< 0.24 U	< 0.25 U	< 0.048 U	< 0.054 U	< 0.05 U	< 0.048 U	< 0.05 UJ	--	--	--	--	--	--	--
MW09-27S	< 0.24 U	< 0.24 U	< 0.26 U	< 0.053 U	< 0.059 UJ	< 0.049 U	< 0.053 U	< 0.054 UJ	--	--	--	--	--	--	--
4,4-DDD (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.0063 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	< 0.047 U	--	--	< 0.0063 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 UJ	< 0.047 U	--	--	< 0.0063 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 UJ	< 0.0063 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.052 U	--	--	< 0.013 U	< 0.0063 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 U	--	--	--	< 0.0063 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.048 U	< 0.050 U	--	--	< 0.0063 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.050 U	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	< 0.0063 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 U	--	--	--	< 0.0063 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 U	< 0.0063 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 U	< 0.0063 U
4,4-DDE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.0063 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	< 0.047 U	--	--	< 0.0063 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 UJ	< 0.047 U	--	--	< 0.0063 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 UJ	< 0.0063 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.052 U	--	--	< 0.013 U	< 0.0063 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 U	--	--	--	< 0.0063 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.048 U	< 0.050 U	--	--	< 0.0063 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.050 U	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	< 0.0063 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 U	--	--	--	< 0.0063 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 UJ	< 0.0063 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 U	< 0.0063 U
4,4-DDT (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.0063 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	< 0.047 UJ	--	--	< 0.0063 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 UJ	< 0.047 U	--	--	< 0.0063 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 UJ	< 0.0063 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.052 U	--	--	< 0.013 U	< 0.0063 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 U	--	--	--	< 0.0063 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.048 U	< 0.050 U	--	--	< 0.0063 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.050 U	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	< 0.0063 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 U	--	--	--	< 0.0063 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 UJ	< 0.0063 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 U	< 0.0063 U
ALDRIN (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0031 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	< 0.024 U	--	--	< 0.0031 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 UJ	< 0.024 U	--	--	< 0.0031 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 UJ	< 0.0031 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.026 UJ	--	--	< 0.0063 U	< 0.0031 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.024 UJ	< 0.025 U	--	--	< 0.0031 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.025 UJ	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	< 0.0031 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 UJ	< 0.0031 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 U	< 0.0031 U
ALPHA-BHC (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0031 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	< 0.024 U	--	--	< 0.0031 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 UJ	< 0.024 U	--	--	< 0.0031 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 UJ	< 0.0031 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.026 U	--	--	< 0.0063 U	< 0.0031 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 U	--	--	--	< 0.0031 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.024 U	< 0.025 U	--	--	< 0.0031 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	< 0.0031 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 U	--	--	--	< 0.0031 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 UJ	< 0.0031 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 U	< 0.0031 U
ALPHA-CHLORDANE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0031 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	< 0.024 UJ	--	--	< 0.0031 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 UJ	< 0.024 U	--	--	< 0.0031 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 UJ	< 0.0031 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.026 UJ	--	--	< 0.0063 U	< 0.0031 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.024 UJ	< 0.025 U	--	--	< 0.0031 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.025 UJ	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	< 0.0031 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.0063 UJ	< 0.0063 U	< 0.025 U	--	--	< 0.0063 UJ	< 0.0031 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 U	< 0.0031 U
AROCLOR-1016 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1221 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1232 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1242 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1248 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
175 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
AROCLOR-1254 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260 (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BETA-BHC (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	0.020 J	< 0.0031 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	< 0.024 UJ	--	--	< 0.0031 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 UJ	< 0.024 U	--	--	< 0.0031 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 UJ	< 0.0031 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.026 U	--	--	< 0.0063 U	< 0.0031 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 U	--	--	--	< 0.0031 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.024 U	< 0.025 U	--	--	< 0.0031 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	< 0.0031 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	0.016 J	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 U	--	--	--	< 0.0031 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 UJ	< 0.0031 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 U	< 0.0031 U
DELTA-BHC (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0031 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	< 0.024 U	--	--	< 0.0031 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-09DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 UJ	< 0.024 U	--	--	< 0.0031 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 UJ	< 0.0031 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.026 UJ	--	--	< 0.0063 U	< 0.0031 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.024 UJ	< 0.025 U	--	--	< 0.0031 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.025 UJ	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	< 0.0031 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 UJ	< 0.0031 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 U	< 0.0031 U
DIELDRIN (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.0063 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	< 0.047 U	--	--	< 0.0063 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 UJ	< 0.047 U	--	--	< 0.0063 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 UJ	< 0.0063 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.052 UJ	--	--	< 0.013 U	< 0.0063 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 UJ	--	--	--	< 0.0063 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.048 UJ	< 0.050 U	--	--	< 0.0063 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.050 UJ	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	< 0.0063 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 UJ	--	--	--	< 0.0063 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 UJ	< 0.0063 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 U	< 0.0063 U
ENDOSULFAN I (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0031 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	< 0.024 U	--	--	< 0.0031 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 UJ	< 0.024 U	--	--	< 0.0031 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 UJ	< 0.0031 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.026 UJ	--	--	< 0.0063 U	< 0.0031 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.024 UJ	< 0.025 U	--	--	< 0.0031 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.025 UJ	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	< 0.0031 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
177 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 UJ	< 0.0031 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 U	< 0.0031 U
ENDOSULFAN II (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.0063 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	< 0.047 U	--	--	< 0.0063 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 UJ	< 0.047 U	--	--	< 0.0063 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 UJ	< 0.0063 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.052 UJ	--	--	< 0.013 U	< 0.0063 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 UJ	--	--	--	< 0.0063 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.048 UJ	< 0.050 U	--	--	< 0.0063 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.050 UJ	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	< 0.0063 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 UJ	--	--	--	< 0.0063 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 UJ	< 0.0063 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 U	< 0.0063 U
ENDOSULFAN SULFATE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.0063 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	< 0.047 U	--	--	< 0.0063 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 UJ	< 0.047 U	--	--	< 0.0063 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 UJ	< 0.0063 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.052 U	--	--	< 0.013 U	< 0.0063 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 U	--	--	--	< 0.0063 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.048 U	< 0.050 U	--	--	< 0.0063 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.050 U	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	< 0.0063 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 U	--	--	--	< 0.0063 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 UJ	< 0.0063 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 U	< 0.0063 U
ENDRIN (2 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.0063 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	< 0.047 UJ	--	--	< 0.0063 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 UJ	< 0.047 U	--	--	< 0.0063 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
178 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 UJ	< 0.0063 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.052 UJ	--	--	< 0.013 U	< 0.0063 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 UJ	--	--	--	< 0.0063 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.048 UJ	< 0.050 U	--	--	< 0.0063 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.050 UJ	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	< 0.0063 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 UJ	--	--	--	< 0.0063 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 UJ	< 0.0063 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 U	< 0.0063 U
ENDRIN KETONE (2 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.0063 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	< 0.047 UJ	--	--	< 0.0063 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 UJ	< 0.047 U	--	--	< 0.0063 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 UJ	< 0.0063 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.052 U	--	--	< 0.013 U	< 0.0063 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 U	--	--	--	< 0.0063 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.048 U	< 0.050 U	--	--	< 0.0063 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.050 U	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	< 0.0063 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.048 U	--	--	--	< 0.0063 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 UJ	< 0.0063 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.013 U	< 0.013 U	< 0.050 U	--	--	< 0.013 U	< 0.0063 U
HEPTACHLOR (0.4 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0031 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	< 0.024 U	--	--	< 0.0031 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 UJ	< 0.024 U	--	--	< 0.0031 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 UJ	< 0.0031 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.026 U	--	--	< 0.0063 U	< 0.0031 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 U	--	--	--	< 0.0031 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.024 U	< 0.025 U	--	--	< 0.0031 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.025 U	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	< 0.0031 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 U	--	--	--	< 0.0031 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-27D	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 UJ	< 0.0031 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 U	< 0.0031 U
HEPTACHLOR EPOXIDE (0.2 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0031 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	< 0.024 U	--	--	< 0.0031 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 UJ	< 0.024 U	--	--	< 0.0031 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 UJ	< 0.0031 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.026 UJ	--	--	< 0.0063 U	< 0.0031 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.024 UJ	< 0.025 U	--	--	< 0.0031 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.025 UJ	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	< 0.0031 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 UJ	< 0.0031 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 U	< 0.0031 U
HEXACHLOROBENZENE (1 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LINDANE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0031 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	< 0.024 U	--	--	< 0.0031 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 UJ	< 0.024 U	--	--	< 0.0031 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 UJ	< 0.0031 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.026 UJ	--	--	< 0.0063 U	< 0.0031 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.024 UJ	< 0.025 U	--	--	< 0.0031 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.025 UJ	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	< 0.0031 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.024 UJ	--	--	--	< 0.0031 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 U	< 0.0031 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.0063 U	< 0.0063 U	< 0.025 U	--	--	< 0.0063 U	< 0.0031 U
METHOXYCHLOR (40 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.063 U	< 0.063 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.063 U	< 0.063 U	< 0.25 U	< 0.24 U	--	--	< 0.063 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 0.063 U	< 0.063 U	< 0.25 UJ	< 0.24 U	--	--	< 0.063 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.063 U	< 0.063 UJ	< 0.063 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	< 0.063 U	< 0.063 U	< 0.26 U	--	--	< 0.063 U	< 0.063 U
MW09-17I	--	--	--	--	--	--	--	--	< 0.063 U	< 0.063 U	< 0.24 U	--	--	--	< 0.063 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.24 U	< 0.25 U	--	--	< 0.063 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	< 0.25 U	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.063 UJ	< 0.063 U
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.063 UJ	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.063 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.063 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.063 U	< 0.063 U	< 0.24 U	--	--	--	< 0.063 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.063 U	< 0.063 U	< 0.25 U	--	--	< 0.063 UJ	< 0.063 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.063 U	< 0.063 U	< 0.25 U	--	--	< 0.063 U	< 0.063 U
POLYCHLORINATED BIPHENYLS (PCBS) (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE (70 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
1,2-DICHLOROBENZENE (600 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	1.1 J	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	1.6 J	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	3.8 J	2.4 J	1.7 J
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
1,3-DICHLOROBENZENE (600 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	1.0 J	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	3.8 J	2.4 J	1.7 J
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
1,4-DICHLOROBENZENE (75 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	1.1 J	< 2.0 U	< 5.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 5.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 5.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	1.2 J	< 2.0 U	< 5.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	1.8 J	< 2.0 U	< 5.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 5.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	6.9 J	3.5 J	3.0 J
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 5.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 5.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 5.0 U
1-METHYLNAPHTHALENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE) (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3 J	< 2.0 U
MW09-08DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 UJ
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 UJ
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 UJ
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
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NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
2,4,5-TRICHLOROPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-TRICHLOROPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 U	R	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 U	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
2,4-DICHLOROPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 U	R	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
2,4-DIMETHYLPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 UJ	< 7.5 U	R	--	--	< 5.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 UJ	< 7.2 U	< 7.1 U	--	< 2.0 U	< 5.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 UJ	< 7.7 U	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 UJ	< 7.1 U	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 UJ	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 5.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 UJ	< 7.2 U	< 7.2 U	--	--	< 5.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 5.0 U
MW09-27D	< 10 UJ	< 10 U	< 9 UJ	< 7.6 UJ	< 8.2 U	< 7.5 UJ	< 7.5 UJ	< 7.3 UJ	< 2 U	< 2 UJ	< 7.1 U	--	--	--	< 5.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 UJ	< 7.3 U	--	--	--	< 5.0 U
2,4-DINITROPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 10 U	< 10 UJ
MW09-08DA	< 27 U	< 26 U	< 24 UJ	< 19 U	< 18 UJ	< 18 U	< 18 UJ	< 19 U	< 10 UJ	< 10 UJ	< 19.0 UJ	R	--	--	< 10 UJ
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 24 U	< 24 U	< 24 UJ	< 20 U	< 18 UJ	< 19 U	< 18 UJ	--	< 10 UJ	< 10 UJ	< 18.0 UJ	< 18 UJ	--	< 10 UJ	< 10 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 10 UJ
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 10 UJ
MW09-14IA	< 24 U	< 24 UJ	< 24 UJ	< 20 U	< 18 UJ	< 18 U	< 19 U	< 19 U	< 10 UJ	< 10 UJ	< 19.0 U	--	< 10 U	< 10 UJ	< 10 U
MW09-17I	< 24 U	< 24 U	< 26 UJ	< 20 U	< 18 UJ	< 18 U	< 18 U	< 18 U	< 10 UJ	< 10 UJ	< 18.0 U	--	< 10 UJ	< 10 UJ	< 10 UJ
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 10 U
MW09-20I	< 24 U	< 26 UJ	< 24 UJ	< 20 U	< 18 UJ	< 18 U	< 19 U	< 20 U	< 10 UJ	< 10 UJ	< 19.0 UJ	< 18 UJ	< 10 UJ	< 10 UJ	< 10 UJ
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 26 U	--	< 20 U	--	< 18 U	--	< 19 U	--	< 10 UJ	< 18.0 U	< 18 U	--	--	< 10 UJ
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 10 U	< 10 UJ
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ
MW09-26S	< 26 U	< 26 U	< 26 UJ	< 21 U	< 18 UJ	< 19 U	< 18 UJ	--	< 10 UJ	< 10 U	< 18.0 U	--	--	--	< 10 UJ
MW09-27D	< 26 U	< 24 U	< 24 UJ	< 19 U	< 20 U	< 19 U	< 19 U	< 18 UJ	< 10 UJ	< 10 UJ	< 18.0 UJ	--	--	--	< 10 U
MW09-27S	< 25 U	< 24 U	< 24 U	< 19 U	< 20 UJ	< 19 UJ	< 20 U	< 18 U	< 10 U	< 10 UJ	< 18.0 U	--	--	--	< 10 UJ
2,4-DINITROTOLUENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 UJ	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 UJ	< 7.6 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 UJ	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 U	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 UJ	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
2,6-DINITROTOLUENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 UJ	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
2-CHLORONAPHTHALENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 UJ	< 9 U	< 7.5 U	< 7.1 U	< 7.2 UJ	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 UJ	< 7.1 UJ	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 UJ	< 7.1 U	--	< 2 U	< 2 U	< 7.2 UJ	< 7.1 UJ	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 U	< 2 U	< 2 U	< 7.7 UJ	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 UJ	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 UJ	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 UJ	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 UJ	< 7.1 UJ	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 UJ	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 UJ	--	--	--	< 2.0 U
MW09-27D	< 10 UJ	< 10 UJ	< 9 U	< 7.6 U	< 8.2 U	< 7.5 UJ	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 UJ	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 UJ	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
2-CHLOROPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 U	R	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
2-METHYLNAPHTHALENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	22 J	20	22	--	--	--	23	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 UJ	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-METHYLPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 U	R	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	5 J	4.8 J	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
187 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 UJ	< 9 U	< 7.6 UJ	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
2-NITROANILINE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 27 U	< 26 UJ	< 24 U	< 19 U	< 18 U	< 18 U	< 18 U	< 19 U	< 2 U	< 2 U	< 19.0 U	< 18 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 24 U	< 24 UJ	< 24 U	< 20 U	< 18 U	< 19 U	< 18 U	--	< 2 U	< 2 U	< 18.0 U	< 18 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 24 U	< 24 U	< 24 U	< 20 U	< 18 U	< 18 U	< 19 U	< 19 U	< 2 U	< 2 U	< 19.0 UJ	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 24 U	< 24 U	< 26 U	< 20 U	< 18 U	< 18 U	< 18 U	< 18 U	< 2 U	< 2 U	< 18.0 UJ	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 24 U	< 26 U	< 24 U	< 20 U	< 18 U	< 18 U	< 19 U	< 20 U	< 2 U	< 2 U	< 19.0 U	< 18 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 26 U	--	< 20 U	--	< 18 U	--	< 19 U	--	< 2 U	< 18.0 UJ	< 18 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 26 U	< 26 U	< 26 U	< 21 U	< 18 U	< 19 U	< 18 U	--	< 2 U	< 2 U	< 18.0 UJ	--	--	--	< 2.0 U
MW09-27D	< 26 U	< 24 U	< 24 U	< 19 U	< 20 U	< 19 U	< 19 U	< 18 U	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
MW09-27S	< 25 U	< 24 U	< 24 U	< 19 U	< 20 U	< 19 U	< 20 U	< 18 U	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
2-NITROPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 U	R	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
3- AND 4-METHYLPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	--	--	< 7.5 U	R	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	--	--	< 7.2 U	< 7.1 U	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	--	--	< 7.7 U	--	--	--	--
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	--	--	< 7.1 U	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	--	--	< 7.5 U	< 7.1 U	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	--	< 7.2 U	< 7.2 U	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	--	--	< 7.2 U	--	--	--	--
MW09-27D	< 10 U	< 10 UJ	< 9 U	< 7.6 UJ	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	--	--	< 7.1 U	--	--	--	--
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	--	--	< 7.3 U	--	--	--	--
3,3-DICHLOROBENZIDINE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 10 U	< 5.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 10 U	< 10 U	< 7.5 U	< 7.1 UJ	--	--	< 5.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 10 U	< 10 U	< 7.2 U	< 7.1 UJ	--	< 10 U	< 5.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 5.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 5.0 U
MW09-14IA	< 10 U	< 10 UJ	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 U	< 10 U	< 10 U	< 7.7 U	--	< 10 U	< 10 U	< 5.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 10 U	< 10 U	< 7.1 U	--	< 10 U	< 10 U	< 5.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 5.0 U
MW09-20I	< 10 U	< 10 UJ	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 10 U	< 10 U	< 7.5 U	< 7.1 UJ	< 10 U	< 10 U	< 5.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 10 U	< 7.2 U	< 7.2 U	--	--	< 5.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 10 UJ	< 5.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 10 U	< 10 U	< 7.2 U	--	--	--	< 5.0 U
MW09-27D	< 10 U	< 10 UJ	< 9 U	< 7.6 UJ	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 10 U	< 10 U	< 7.1 U	--	--	--	< 5.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 10 U	< 10 U	< 7.3 U	--	--	--	< 5.0 U
3-NITROANILINE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 27 U	< 26 UJ	< 24 U	< 19 U	< 18 U	< 18 U	< 18 U	< 19 U	< 2 U	< 2 U	< 19.0 U	< 18 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 24 U	< 24 UJ	< 24 U	< 20 U	< 18 U	< 19 U	< 18 U	--	< 2 U	< 2 U	< 18.0 U	< 18 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 24 U	< 24 U	< 24 U	< 20 U	< 18 U	< 18 U	< 19 U	< 19 U	< 2 U	< 2 U	< 19.0 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 24 U	< 24 U	< 26 U	< 20 U	< 18 U	< 18 U	< 18 U	< 18 U	< 2 U	< 2 U	< 18.0 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 24 U	< 26 U	< 24 U	< 20 U	< 18 U	< 18 U	< 19 U	< 20 U	< 2 U	< 2 U	< 19.0 U	< 18 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 26 U	--	< 20 U	--	< 18 U	--	< 19 U	--	< 2 U	< 18.0 U	< 18 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 26 U	< 26 U	< 26 U	< 21 U	< 18 U	< 19 U	< 18 U	--	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
MW09-27D	< 26 U	< 24 U	< 24 U	< 19 UJ	< 20 U	< 19 U	< 19 U	< 18 U	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
MW09-27S	< 25 U	< 24 U	< 24 U	< 19 U	< 20 U	< 19 U	< 20 U	< 18 U	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
4,6-DINITRO-2-METHYLPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 UJ
MW09-08DA	< 27 U	< 26 U	< 24 U	< 19 U	< 18 UJ	< 18 U	< 18 U	< 19 U	< 2 U	< 2 U	< 19.0 U	R	--	--	< 2.0 UJ
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 24 U	< 24 U	< 24 U	< 20 U	< 18 UJ	< 19 U	< 18 U	--	< 2 U	< 2 U	< 18.0 U	< 18 UJ	--	< 2.0 U	< 2.0 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 UJ
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 UJ
MW09-14IA	< 24 U	< 24 U	< 24 U	< 20 U	< 18 UJ	< 18 U	< 19 U	< 19 U	< 2 U	< 2 U	< 19.0 U	--	< 2.0 U	< 2.0 UJ	< 2.0 U
MW09-17I	< 24 U	< 24 U	< 26 U	< 20 U	< 18 UJ	< 18 U	< 18 U	< 18 U	< 2 U	< 2 U	< 18.0 U	--	< 2.0 U	< 2.0 UJ	< 2.0 UJ
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 24 U	< 26 U	< 24 U	< 20 U	< 18 UJ	< 18 U	< 19 U	< 20 U	< 2 U	< 2 U	< 19.0 U	< 18 UJ	< 2.0 U	< 2.0 UJ	< 2.0 UJ
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 26 U	--	< 20 U	--	< 18 U	--	< 19 U	--	< 2 U	< 18.0 U	< 18 U	--	--	< 2.0 UJ
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 UJ
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
MW09-26S	< 26 U	< 26 U	< 26 U	< 21 U	< 18 UJ	< 19 U	< 18 UJ	--	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 UJ
MW09-27D	< 26 U	< 24 U	< 24 U	< 19 U	< 20 U	< 19 U	< 19 U	< 18 U	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
MW09-27S	< 25 U	< 24 U	< 24 U	< 19 U	< 20 UJ	< 19 U	< 20 U	< 18 U	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 UJ
4-BROMOPHENYL-PHENYLETHER (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 UJ	< 10 UJ	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 UJ	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 U	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 UJ	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 UJ	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 UJ	< 10 UJ	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
4-CHLORO-3-METHYLPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 U	R	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 UJ	< 7.6 U	< 8.2 U	< 7.5 UJ	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
4-CHLOROANILINE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-08DA	< 11 U	< 10 UJ	< 9 U	< 7.5 U	< 7.1 UJ	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 5.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 5.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 U	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 UJ	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 5.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 5.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 5.0 U
MW09-27D	< 10 U	< 10 UJ	< 9 U	< 7.6 UJ	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 5.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 5.0 U
4-CHLOROPHENYL-PHENYLETHER (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 UJ
MW09-08DA	< 11 U	< 10 UJ	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 UJ
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 UJ
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 UJ
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 UJ
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 UJ
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 UJ

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 UJ
4-METHYLPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 UJ
MW09-08DA	--	--	--	--	--	--	--	--	< 2 U	< 2 U	--	--	--	--	< 5.0 UJ
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	< 2 U	< 2 U	--	--	--	< 2.0 U	< 5.0 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 UJ
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 UJ
MW09-14IA	--	--	--	--	--	--	--	--	10	8.4 J	--	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-17I	--	--	--	--	--	--	--	--	< 2 U	< 2 U	--	--	< 2.0 U	< 2.0 U	< 5.0 UJ
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-20I	--	--	--	--	--	--	--	--	5.4 J	3.3 J	--	--	1.4 J	1.7 J	1.7 J
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	< 2 U	--	--	--	--	< 5.0 UJ
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 UJ
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 UJ
MW09-26S	--	--	--	--	--	--	--	--	< 2 U	< 2 U	--	--	--	--	< 5.0 UJ
MW09-27D	--	--	--	--	--	--	--	--	< 2 U	< 2 U	--	--	--	--	< 5.0 U
MW09-27S	--	--	--	--	--	--	--	--	< 2 U	< 2 U	--	--	--	--	< 5.0 UJ
4-NITROANILINE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 27 U	< 26 U	< 24 U	< 19 U	< 18 UJ	< 18 U	< 18 UJ	< 19 U	< 2 U	< 2 U	< 19.0 U	< 18 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 24 U	< 24 U	< 24 U	< 20 U	< 18 UJ	< 19 U	< 18 UJ	--	< 2 U	< 2 U	< 18.0 U	< 18 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 24 U	< 24 UJ	< 24 U	< 20 U	< 18 UJ	< 18 U	< 19 U	< 19 U	< 2 U	< 2 U	< 19.0 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 24 U	< 24 U	< 26 U	< 20 U	< 18 UJ	< 18 U	< 18 U	< 18 U	< 2 U	< 2 U	< 18.0 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 24 U	< 26 UJ	< 24 U	< 20 U	< 18 UJ	< 18 U	< 19 U	< 20 U	< 2 U	< 2 U	< 19.0 U	< 18 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 26 U	--	< 20 U	--	< 18 U	--	< 19 U	--	< 2 U	< 18.0 U	< 18 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 26 U	< 26 U	< 26 U	< 21 U	< 18 UJ	< 19 U	< 18 U	--	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
MW09-27D	< 26 U	< 24 UJ	< 24 U	< 19 U	< 20 U	< 19 U	< 19 U	< 18 UJ	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
MW09-27S	< 25 U	< 24 U	< 24 U	< 19 U	< 20 U	< 19 U	< 20 U	< 18 U	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
4-NITROPHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 27 U	< 26 UJ	< 24 U	< 19 U	< 18 U	< 18 U	< 18 UJ	< 19 U	< 2 U	< 2 U	< 19.0 U	R	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 24 U	< 24 U	< 24 U	< 20 U	< 18 UJ	< 19 U	< 18 UJ	--	< 2 U	< 2 U	< 18.0 U	< 18 UJ	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 24 U	< 24 UJ	< 24 U	< 20 U	< 18 UJ	< 18 U	< 19 UJ	< 19 U	< 2 U	< 2 U	< 19.0 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 24 U	< 24 U	< 26 U	< 20 U	< 18 UJ	< 18 U	< 18 UJ	< 18 U	< 2 U	< 2 U	< 18.0 U	--	< 2.0 U	< 2.0 U	< 2.0 U

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 24 U	< 26 UJ	< 24 U	< 20 U	< 18 U	< 18 U	< 19 UJ	< 20 U	< 2 U	< 2 U	< 19.0 U	< 18 UJ	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 26 U	--	< 20 U	--	< 18 U	--	< 19 U	--	< 2 U	< 18.0 U	< 18 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 26 U	< 26 U	< 26 U	< 21 U	< 18 UJ	< 19 U	< 18 UJ	--	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
MW09-27D	< 26 U	< 24 UJ	< 24 U	< 19 U	< 20 U	< 19 U	< 19 UJ	< 18 UJ	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
MW09-27S	< 25 U	< 24 U	< 24 U	< 19 U	< 20 U	< 19 U	< 20 U	< 18 U	< 2 U	< 2 U	< 18.0 U	--	--	--	< 2.0 U
ACENAPHTHENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	3.4 J	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTHRACENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
193 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
194 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZOIC ACID (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
195 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZYL ALCOHOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-08DA	< 11 U	< 10 UJ	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 5.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 5.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 5.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 5.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 5.0 U
MW09-27D	< 10 U	< 10 UJ	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 5.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 5.0 U
BIS(2-CHLOROETHYL)ETHER (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	1.4 J	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 UJ	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 UJ	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 UJ	1.3 J	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 UJ	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 UJ	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
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NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	4 J	--	4.2 J	--	4.8 J	--	3.4 J	--	3.9 J	3.9 J	< 7.2 U	--	--	2.7 J
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 UJ	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 UJ	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
BIS(2-CHLOROISOPROPYL)ETHER (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE (6 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 UJ	< 7.6 U	< 2 U	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 UJ	--	< 2 U	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	< 10 U	< 10 U	< 9 UJ	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 UJ	2.9 J	< 2 U	--	--	--	--	--	--
MW09-17I	< 9 U	< 9 U	< 10 U	3.6 J	< 7.1 U	< 7.4 U	< 7.2 UJ	< 7.3 U	< 2 U	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	< 10 U	< 10 U	< 9 U	3.5 J	< 7.1 U	< 7.4 U	< 7.5 U	2.8 J	< 2 U	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	5.8 J	--	< 7.3 U	--	< 7.6 U	--	1.9 J	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	< 10 U	< 10 U	< 10 U	2.7 J	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	--	--	--	--	--	--
MW09-27D	< 10 U	< 10 U	< 9 UJ	4.3 J	2.1 J	< 7.5 U	< 7.5 UJ	< 7.3 U	< 2 U	--	--	--	--	--	--
MW09-27S	< 10 U	< 9 U	< 10 U	**8.1 J**	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	--	--	--	--	--	--
BUTYLBENZYLPHTHALATE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 U	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
CARBAZOLE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 U	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	8 J	8 J	8 J	7.8 J	10	9.5 J	10	7.5 J	7.4 J	7.9 J	9.6	--	8.2 J	7.7 J	6.9 J
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
CHRYSENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CRESOLS (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
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NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIBENZ(A,H)ANTHRACENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIBENZOFURAN (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 UJ	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	2.5 J	1.7 J	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
DIETHYLPHTHALATE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 UJ	< 7.1 UJ	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 UJ	< 7.1 UJ	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	2 J	2 J	< 9 U	2.2 J	3.2 J	< 7.4 U	< 7.5 UJ	3 J	1.6 J	2 J	2.4 J	--	2.6 J	1.9 J	1.6 J
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 UJ	< 7.2 UJ	2.4 J	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 UJ	< 7.5 UJ	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 UJ	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 UJ	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 UJ	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
DIMETHYL PHTHALATE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 10 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 UJ	< 7.6 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 UJ	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 10 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	2.0 J	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 UJ	< 7.6 U	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	1.4 J	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 UJ	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	1.7 J	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	1.9 J	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 UJ	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	1.4 J	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	3.8 J	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 UJ	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 UJ	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
DI-N-BUTYLPHTHALATE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	3.9 J	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 UJ	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 UJ	--	< 2.0 UJ	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 UJ	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ	< 2.0 U	< 2.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
200 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	3.3 J	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 UJ	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
DI-N-OCTYLPHTHALATE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 UJ	< 7.1 UJ	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 UJ	< 7.1 UJ	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 UJ
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 UJ	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 UJ	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 UJ	< 7.1 UJ	< 2.0 U	< 2.0 U	< 2.0 UJ
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 UJ	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 UJ	--	< 2 U	< 2 U	< 7.2 UJ	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 UJ	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 UJ	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
FLUORANTHENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
201 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROBENZENE (1 UG_L)															
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 UJ
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 UJ
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 UJ
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 UJ
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 UJ
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 UJ
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 UJ
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 UJ
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 UJ
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 UJ
HEXACHLOROCYCLOPENTADIENE (50 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 10 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 10 UJ	< 10 UJ	< 7.5 UJ	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 10 UJ	< 10 UJ	< 7.2 UJ	< 7.1 U	--	< 10 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 10 UJ	< 10 UJ	< 7.7 UJ	--	< 10 U	< 10 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 10 UJ	< 10 UJ	< 7.1 UJ	--	< 10 UJ	< 10 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 10 UJ	< 10 UJ	< 7.5 UJ	< 7.1 U	< 10 UJ	< 10 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 10 UJ	< 7.2 UJ	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 10 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 10 UJ	< 10 U	< 7.2 UJ	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 UJ	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 10 UJ	< 10 UJ	< 7.1 UJ	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 10 U	< 10 UJ	< 7.3 U	--	--	--	< 2.0 U
HEXACHLOROETHANE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 UJ	< 7.1 U	--	--	< 2.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
202 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 UJ	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 UJ	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 UJ	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 UJ	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 UJ	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 UJ	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 UJ	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
INDENO(1,2,3-CD)PYRENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ISOPHORONE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 U	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
NAPHTHALENE (20 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	9.8 J	--	--	--	--	--
MW09-17I	--	--	--	15	19	16	--	--	--	17	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NITROBENZENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-08DA	< 11 U	< 10 UJ	< 9 U	< 7.5 U	< 7.1 UJ	< 7.2 U	< 7.1 U	< 7.6 UJ	< 10 U	< 10 U	< 7.5 U	< 7.1 U	--	--	< 5.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 UJ	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 10 U	< 10 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 5.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 10 U	< 10 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 10 U	< 10 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 UJ	< 7.4 U	< 7.5 U	< 7.9 UJ	< 10 U	< 10 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 5.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 10 U	< 7.2 U	< 7.2 U	--	--	< 5.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 10 U	< 10 U	< 7.2 U	--	--	--	< 5.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 10 U	< 10 U	< 7.1 U	--	--	--	< 5.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 10 U	< 10 U	< 7.3 U	--	--	--	< 5.0 U
N-NITROSODINPROPYLAMINE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 2.0 U
N-NITROSODIPHENYLAMINE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	--	--	< 5.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	< 7.1 U	--	< 2.0 U	< 5.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 UJ	< 2 U	< 2 U	< 7.7 U	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 5.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 UJ	< 2 U	< 2 U	< 7.5 U	< 7.1 U	< 2.0 U	< 2.0 U	< 5.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	< 7.2 U	< 7.2 U	--	--	< 5.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 5.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	< 2 U	< 2 U	< 7.2 U	--	--	--	< 5.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	< 2 U	< 2 U	< 7.1 U	--	--	--	< 5.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	< 2 U	< 2 U	< 7.3 U	--	--	--	< 5.0 U
PENTACHLOROPHENOL (1 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	< 10 U	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--	--	--
PHENANTHRENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PHENOL (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-08DA	< 11 U	< 10 U	< 9 U	< 7.5 U	< 7.1 U	< 7.2 U	< 7.1 U	< 7.6 U	1.2 J	< 2 U	--	R	--	--	< 2.0 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 9 U	< 10 U	< 9 U	< 8.2 U	< 7.2 U	< 7.4 U	< 7.1 U	--	< 2 U	< 2 U	--	< 7.1 U	--	< 2.0 U	< 2.0 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-14IA	< 10 U	< 10 U	< 9 U	< 8.1 U	< 7.2 U	< 7.4 U	< 7.5 U	< 7.6 U	2.6 J	< 2 U	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-17I	< 9 U	< 9 U	< 10 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.2 U	< 7.3 U	1.3 J	< 2 U	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U
MW09-20I	< 10 U	< 10 U	< 9 U	< 7.9 U	< 7.1 U	< 7.4 U	< 7.5 U	< 7.9 U	2.9 J	< 2 U	--	< 7.1 U	< 2.0 U	< 2.0 U	< 2.0 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 10 U	--	< 8.0 U	--	< 7.3 U	--	< 7.6 U	--	< 2 U	--	< 7.2 U	--	--	< 2.0 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U	< 2.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
MW09-26S	< 10 U	< 10 U	< 10 U	< 8.2 U	< 7.1 U	< 7.5 U	< 7.1 U	--	2.8 J	< 2 U	--	--	--	--	< 2.0 U
MW09-27D	< 10 U	< 10 U	< 9 U	< 7.6 U	< 8.2 U	< 7.5 U	< 7.5 U	< 7.3 U	1 J	< 2 U	--	--	--	--	< 2.0 U
MW09-27S	< 10 U	< 9 U	< 10 U	< 7.6 U	< 7.9 U	< 7.5 U	< 8.1 U	< 7.3 U	1.6 J	< 2 U	--	--	--	--	< 2.0 U
PYRENE (UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20I	--	--	--	--	--	--	< 7.5 U	--	--	--	--	--	--	--	--
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL (UG_L)															

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-08DA	< 1 U	0.2 J	< 0.9 U	< 0.5 U	< 0.48 U	< 0.48 U	< 0.48 U	0.34 J	< 0.1 U	< 0.1 U	0.089 J	< 0.47 U	--	--	< 0.10 U
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 0.9 U	< 1 UJ	< 0.9 U	< 0.54 U	< 0.48 U	< 0.5 U	< 0.48 U	< 0.48 U	< 0.1 U	< 0.1 U	< 0.48 U	< 0.48 U	--	< 0.10 U	0.44 J
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.48 U	< 0.50 U	--	< 0.10 U	< 0.10 U
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 1 U	< 1 U	< 0.9 U	--	--	< 0.49 U	--	< 0.51 U	< 0.1 U	< 0.1 U	< 0.52 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.9 U	< 0.9 U	< 1 U	< 0.53 U	--	--	--	0.12 J	< 0.1 U	< 0.1 U	< 0.48 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 1 UJ	< 0.9 U	< 0.53 UJ	< 0.48 U	< 0.49 U	< 0.5 U	< 0.53 U	< 0.1 U	< 0.1 U	--	< 0.48 U	< 0.10 U	< 0.10 U	< 0.10 U
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 1 U	--	< 0.53 U	--	--	--	< 0.51 U	--	< 0.1 U	< 0.48 U	< 0.48 U	--	--	< 0.10 U
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 1 U	< 1 UJ	< 1 U	< 0.55 U	0.088 J	< 0.5 U	< 0.48 U	< 0.52 U	< 0.1 U	< 0.1 U	< 0.48 U	--	--	--	0.19 J
MW09-27D	< 1 U	< 1 U	< 0.9 U	< 0.51 UJ	< 0.54 U	< 0.5 U	< 0.5 UJ	< 0.48 U	< 0.1 U	< 0.1 U	< 0.47 U	--	--	--	0.51 J
MW09-27S	< 1 U	< 0.9 UJ	< 1 U	< 0.51 U	< 0.5 UJ	< 0.5 U	< 0.54 U	< 0.48 U	< 0.1 U	< 0.1 U	< 0.48 U	--	--	--	< 0.10 U
2-METHYLNAPHTHALENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	6.5 J	6.6	3.4 J
MW09-08DA	< 0.2 UJ	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.096 UJ	< 0.095 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 U	< 0.094 U	--	--	< 0.10 UJ
MW09-09DA	< 0.2 UJ	< 0.2 U	< 0.2 U	< 0.11 UJ	< 0.096 U	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 U	< 0.095 U	--	< 0.10 U	< 0.10 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 U	< 0.099 U	--	< 0.10 U	< 0.10 UJ
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 UJ
MW09-14IA	0.03 J	< 0.2 UJ	< 0.2 U	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	15 J	18 J	21	--	--	--	20	12	18	--	25.0 J	--	17 J	14	20 J
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 UJ	< 0.10 UJ	< 0.10 U	< 0.10 UJ
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	< 0.1 U	--	< 0.1 U	< 0.096 U	< 0.096 U	--	--	< 0.10 UJ
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ	< 0.10 U	< 0.10 UJ
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 UJ	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 U	--	--	--	< 0.10 UJ
MW09-27D	< 0.2 UJ	< 0.2 UJ	< 0.2 U	< 0.1 UJ	< 0.11 U	< 0.1 UJ	< 0.1 UJ	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.094 U	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.09 J	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.11 U	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 UJ
ACENAPHTHENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	2.3	2.6	< 0.10 UJ
MW09-08DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 U	< 0.095 U	0.21 J	< 0.1 U	< 0.1 U	< 0.10 U	< 0.094 U	--	--	< 0.10 UJ
MW09-09DA	0.08 J	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 U	< 0.095 U	--	< 0.10 U	< 0.10 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 U	< 0.099 U	--	< 0.10 U	< 0.10 UJ
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 UJ
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 U	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	2 J	3 J	2	2.8	--	--	--	2.2	2.5	--	3.2	--	2.9	3.0	< 0.10 UJ
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 UJ
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	< 0.1 U	--	< 0.1 U	< 0.096 U	< 0.096 U	--	--	< 0.10 UJ
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	0.43	< 0.10 UJ
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.18 UJ	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 U	--	--	--	< 0.10 UJ
MW09-27D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.2 U	< 0.1 U	< 0.1 UJ	< 0.097 U	< 0.1 U	< 0.1 U	< 0.094 U	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.19 UJ	< 0.1 U	< 0.11 U	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 UJ
ACENAPHTHYLENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-08DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 U	< 0.095 U	0.21 J	< 0.1 U	< 0.1 U	< 0.10 U	< 0.094 U	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 U	< 0.095 U	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 U	< 0.099 U	--	< 0.10 U	< 0.10 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 U	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	--	--	--	< 0.097 U	< 0.1 U	< 0.1 U	< 0.095 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	< 0.1 U	--	< 0.1 U	< 0.096 U	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 U	--	--	--	< 0.10 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-27D	< 0.2 UJ	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.11 U	< 0.1 U	< 0.1 UJ	< 0.097 U	< 0.1 U	< 0.1 U	< 0.094 U	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.11 U	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 U
ANTHRACENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	0.022 J	< 0.10 U
MW09-08DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.096 U	< 0.095 U	0.2 J	< 0.1 UJ	< 0.1 U	< 0.10 U	< 0.094 UJ	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 UJ	< 0.096 U	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 U	< 0.095 U	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 U	< 0.099 U	--	< 0.10 U	0.15
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 U	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.10 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	--	--	--	< 0.097 U	< 0.1 U	< 0.1 U	< 0.095 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 U	< 0.10 U	< 0.10 U	0.23
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	< 0.1 U	--	< 0.1 U	< 0.096 U	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	0.11	0.10
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 UJ	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 U	--	--	--	< 0.10 U
MW09-27D	< 0.2 UJ	< 0.2 UJ	< 0.2 U	< 0.1 UJ	< 0.11 U	< 0.1 U	< 0.1 UJ	< 0.097 UJ	< 0.1 UJ	< 0.1 U	< 0.094 UJ	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.04 J	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.11 U	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 U
BENZO(A)ANTHRACENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-08DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.095 U	0.1 J	0.12 J	0.24 J	< 0.1 U	< 0.1 U	0.12 J	< 0.094 UJ	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	0.12 J	< 0.095 UJ	< 0.1 U	< 0.1 U	0.12 J	< 0.095 UJ	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	0.12 J	< 0.099 UJ	--	< 0.10 U	0.23
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 U	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	--	--	--	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.095 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 UJ	< 0.10 U	< 0.10 U	0.41
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	0.19 J	--	< 0.1 U	< 0.096 UJ	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.095 U	0.12 J	< 0.095 U	0.052 J	< 0.1 U	< 0.1 U	< 0.096 UJ	--	--	--	< 0.10 U
MW09-27D	< 0.2 U	< 0.2 U	0.05 J	< 0.1 UJ	< 0.11 U	< 0.1 UJ	0.12 J	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.094 UJ	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.08 J	< 0.1 U	0.074 J	0.12 J	0.13 J	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 U
BENZO(A)PYRENE (0.2 UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-08DA	< 0.2 U	0.2 J	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 U	0.093 J	0.18 J	< 0.1 U	< 0.1 U	< 0.10 UJ	< 0.094 UJ	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	0.08 J	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 UJ	< 0.095 U	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 UJ	< 0.099 U	--	< 0.10 U	**0.21**
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 U	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	0.1 J	< 0.2 U	< 0.1 U	--	--	--	< 0.097 U	< 0.1 U	< 0.1 U	< 0.095 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 U	< 0.10 U	< 0.10 U	**0.43**
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	**0.28 J**	--	< 0.1 U	< 0.096 U	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	0.1 J	< 0.2 U	< 0.11 U	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 U	--	--	--	< 0.10 U
MW09-27D	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.1 UJ	< 0.11 U	< 0.1 UJ	0.081 J	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.094 UJ	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	0.09 J	0.09 J	< 0.1 U	< 0.1 UJ	< 0.1 U	0.086 J	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 UJ
BENZO(B)FLUORANTHENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-08DA	< 0.2 U	0.2	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 U	< 0.095 U	0.29	< 0.1 U	< 0.1 U	< 0.10 UJ	< 0.094 UJ	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	0.12 J	< 0.095 U	< 0.1 U	< 0.1 U	< 0.096 UJ	< 0.095 UJ	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 UJ	< 0.099 UJ	--	< 0.10 U	0.26
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 U	--	--	< 0.098 U	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.10 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	--	--	--	< 0.097 U	< 0.1 U	< 0.1 U	< 0.095 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 U	< 0.1 U	< 0.1 U	--	< 0.095 UJ	< 0.10 U	< 0.10 U	0.50
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	0.38	--	< 0.1 U	< 0.096 UJ	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 UJ	--	--	--	< 0.10 U
MW09-27D	< 0.2 UJ	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.11 U	< 0.1 UJ	0.12 J	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.094 UJ	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.1 J	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.11 U	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 U
BENZO(G,H,I)PERYLENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-08DA	< 0.2 U	0.1 J	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 UJ	< 0.095 U	0.19 J	< 0.1 U	< 0.1 U	< 0.10 U	< 0.094 UJ	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 UJ	< 0.095 U	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 UJ	< 0.099 U	--	< 0.10 U	0.22
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 UJ	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.1 U	--	--	--	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.095 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 UJ	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 UJ	< 0.10 U	< 0.10 U	0.45
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	0.34 J	--	< 0.1 U	< 0.096 UJ	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 UJ	--	--	--	< 0.10 U
MW09-27D	< 0.2 UJ	< 0.2 U	< 0.2 UJ	< 0.1 UJ	< 0.11 U	< 0.1 UJ	< 0.1 UJ	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.094 U	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.1 J	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.11 U	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 UJ
BENZO(K)FLUORANTHENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-08DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 U	< 0.095 U	0.22 J	< 0.1 U	< 0.1 U	< 0.10 U	< 0.094 UJ	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 U	< 0.095 U	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 U	< 0.099 U	--	< 0.10 U	0.22
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 0.2 U	< 0.2 UJ	< 0.2 U	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	--	--	--	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.095 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 U	< 0.10 U	< 0.10 U	0.44
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	0.28 J	--	< 0.1 U	< 0.096 U	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 U	--	--	--	< 0.10 U
MW09-27D	< 0.2 UJ	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.11 U	< 0.1 U	< 0.1 UJ	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.094 U	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.08 J	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.11 U	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 UJ
BIS(2-ETHYLHEXYL)PHTHALATE (6 UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	0.31 J	< 1.0 UJ
MW09-08DA	--	--	--	--	--	--	--	--	--	< 0.1 U	< 1.0 U	< 0.47 UJ	--	--	< 1.0 UJ
MW09-09DA	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.48 U	< 0.48 U	--	0.34 J	< 1.0 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.95 U	< 0.50 U	--	0.31 J	< 1.0 UJ
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	0.22 J	< 1.0 UJ
MW09-14IA	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.52 UJ	--	< 1.0 U	0.23 J	0.25 J
MW09-17I	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.48 UJ	--	< 1.0 U	0.37 J	< 1.0 UJ
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	0.24 J	< 1.0 U
MW09-20I	--	--	--	--	--	--	--	--	--	< 0.1 U	--	< 0.48 UJ	< 1.0 U	0.26 J	< 1.0 UJ
MW09-21S	--	--	--	--	--	--	--	--	--	--	< 0.48 UJ	0.68 J	--	--	< 1.0 UJ
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	0.22 J	< 1.0 UJ
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 UJ
MW09-26S	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.48 UJ	--	--	--	< 1.0 UJ
MW09-27D	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.94 U	--	--	--	< 1.0 U
MW09-27S	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.48 U	--	--	--	< 1.0 UJ
CHRYSENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-08DA	< 0.2 U	0.06 J	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 U	< 0.095 U	0.12 J	< 0.1 U	< 0.1 U	< 0.10 UJ	< 0.094 U	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 UJ	< 0.095 U	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 UJ	< 0.099 U	--	< 0.10 U	0.22
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 U	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	--	--	--	< 0.097 U	< 0.1 U	< 0.1 U	< 0.095 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 U	< 0.10 U	< 0.10 U	0.42
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	0.08 J	--	< 0.1 U	< 0.096 UJ	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 UJ	--	--	--	< 0.10 U
MW09-27D	< 0.2 UJ	< 0.2 U	0.06 J	< 0.1 UJ	< 0.11 U	< 0.1 U	< 0.1 UJ	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.094 U	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.08 J	< 0.1 U	0.076 J	< 0.1 U	< 0.11 U	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 UJ
DIBENZ(A,H)ANTHRACENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-08DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 U	< 0.095 U	0.28 J	< 0.1 U	< 0.1 U	< 0.10 UJ	< 0.094 UJ	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 UJ	< 0.095 UJ	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 UJ	< 0.099 UJ	--	< 0.10 U	0.21
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 0.2 U	< 0.2 UJ	< 0.2 UJ	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.1 U	--	--	--	< 0.097 U	< 0.1 U	< 0.1 U	< 0.095 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 UJ	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 UJ	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 UJ	< 0.10 U	< 0.10 U	0.42
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	0.37 J	--	< 0.1 U	< 0.096 UJ	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 UJ	--	--	--	< 0.10 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-27D	< 0.2 UJ	< 0.2 UJ	0.2 J	< 0.1 UJ	< 0.11 U	< 0.1 UJ	< 0.1 UJ	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.094 UJ	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.2	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.11 U	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 UJ
FLUORANTHENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-08DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 UJ	< 0.096 U	< 0.095 U	0.26 J	< 0.1 U	< 0.1 U	< 0.10 U	< 0.094 U	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 UJ	< 0.096 UJ	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 U	< 0.095 U	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 U	< 0.099 U	--	< 0.10 U	0.21
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 U	--	--	0.093 J	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	--	--	--	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.095 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 UJ	< 0.098 UJ	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 U	< 0.10 U	< 0.10 U	0.37
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	< 0.1 U	--	< 0.1 U	< 0.096 U	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	0.11	0.10
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 UJ	< 0.095 UJ	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 U	--	--	--	< 0.10 U
MW09-27D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.11 U	< 0.1 UJ	< 0.1 UJ	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.094 UM	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.07 J	< 0.1 U	0.12 J	< 0.1 U	< 0.11 U	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 U
FLUORENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	1.0	1.2	< 0.10 U
MW09-08DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 U	< 0.095 U	0.23 J	< 0.1 U	< 0.1 U	< 0.10 U	< 0.094 U	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 U	< 0.095 U	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 U	< 0.099 U	--	< 0.10 U	< 0.10 U
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 U	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	0.5	0.6 J	0.4	0.59	--	--	--	0.53	0.6	0.63	1.1	--	0.64	0.75	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 U
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	< 0.1 U	--	< 0.1 U	< 0.096 U	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	0.27	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 U	--	--	--	< 0.10 U
MW09-27D	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.11 U	< 0.1 U	< 0.1 UJ	< 0.097 U	< 0.1 U	< 0.1 U	< 0.094 U	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.11 U	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 U
HEXACHLOROBENZENE (1 UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-08DA	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.10 U	< 0.094 UJ	--	--	< 0.10 U
MW09-09DA	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.096 U	< 0.095 UJ	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 U	< 0.099 UJ	--	< 0.10 U	0.19 J
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	--	--	--	--	--	--	--	--	--	--	< 0.10 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	--	< 0.095 UJ	< 0.10 U	< 0.10 U	0.36 J
MW09-21S	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.096 U	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.096 U	--	--	--	< 0.10 U
MW09-27D	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.094 U	--	--	--	< 0.10 U
MW09-27S	--	--	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 U
INDENO(1,2,3-CD)PYRENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ	< 0.10 U	< 0.10 U
MW09-08DA	< 0.2 U	0.3	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 UJ	0.19 J	0.23 J	< 0.1 U	< 0.1 U	< 0.10 UJ	< 0.094 UJ	--	--	< 0.10 U
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	0.17 J	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 UJ	< 0.095 UJ	--	< 0.10 U	< 0.10 U
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 UJ	< 0.099 UJ	--	< 0.10 U	0.19
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 UJ	--	--	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	< 0.2 U	< 0.2 UJ	< 0.1 U	--	--	--	< 0.097 U	< 0.1 U	< 0.1 U	< 0.095 UJ	--	< 0.10 UJ	< 0.10 U	< 0.10 U
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	0.2	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 UJ	< 0.10 UJ	< 0.10 U	0.40
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	0.35 J	--	< 0.1 U	< 0.096 UJ	< 0.096 U	--	--	< 0.10 U
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ	< 0.10 U	< 0.10 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
MW09-26S	< 0.2 U	< 0.2 U	0.2	< 0.11 U	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 UJ	--	--	--	< 0.10 U
MW09-27D	< 0.2 UJ	< 0.2 U	0.2 J	< 0.1 UJ	< 0.11 U	< 0.1 UJ	0.18 J	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.094 UJ	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.2	< 0.1 U	< 0.1 UJ	< 0.1 U	0.18 J	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 UJ
NAPHTHALENE (20 UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	2.2 J	5.3 J	0.50 J
MW09-08DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 U	< 0.095 U	0.2	0.13	< 0.1 U	< 0.10 U	0.070 J	--	--	< 0.10 UJ
MW09-09DA	0.2 J	0.08 J	0.08 J	< 0.11 U	< 0.096 U	0.07 J	< 0.095 U	< 0.095 U	0.11	< 0.1 U	< 0.096 U	< 0.095 U	--	< 0.10 U	< 0.10 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 U	< 0.099 U	--	< 0.10 U	< 0.10 UJ
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 UJ

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NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-14IA	4 J	3 J	5	--	--	4 J	--	11	7.9	--	4.2 J	--	9.7	9.4	14 J
MW09-17I	16 J	16	13	--	--	--	14	13	14	--	19.0 J	--	9.2	3.8	3.7 J
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 U	< 0.1 U	< 0.1 U	--	0.093 J	< 0.10 U	< 0.10 U	< 0.10 UJ
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	< 0.1 U	--	< 0.1 U	< 0.096 U	< 0.096 U	--	--	< 0.10 UJ
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	0.84	0.18 J
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.095 UJ	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 U	--	--	--	< 0.10 UJ
MW09-27D	< 0.2 U	< 0.2 U	0.1 J	< 0.1 UJ	< 0.16 U	< 0.1 U	< 0.1 UJ	< 0.097 U	0.11	< 0.1 U	< 0.094 U	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.09 J	< 0.1 U	< 0.14 UJ	< 0.1 U	< 0.11 U	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 UJ
PENTACHLOROPHENOL (1 UG_L)															
MW09-02S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-03D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 1.0 U	< 1.0 UJ
MW09-08DA	< 1 UJ	0.4 J	< 0.9 UJ	< 0.5 U	< 0.48 U	< 0.48 U	< 0.48 U	**1.3 J**	**1.4 J**	--	0.34 J	< 0.47 U	--	--	< 1.0 UJ
MW09-08S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-09DA	< 0.9 U	< 1 UJ	< 0.9 UJ	< 0.54 U	< 0.48 U	< 0.5 U	< 0.48 U	< 0.48 UJ	**2 J**	--	< 0.48 UJ	< 0.48 U	--	< 1.0 U	< 1.0 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.48 UJ	< 0.50 U	--	< 1.0 U	< 1.0 UJ
MW09-10D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-11S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 1.0 UJ
MW09-14IA	< 1 UJ	< 1 U	< 0.9 UJ	--	--	< 0.49 U	--	< 0.51 UJ	R	--	< 0.52 UJ	--	< 1.0 U	< 1.0 U	< 1.0 U
MW09-17I	< 0.9 UJ	< 0.9 U	< 1 UJ	< 0.53 UJ	--	--	--	< 0.48 UJ	**2.4 J**	--	< 0.48 UJ	--	< 1.0 U	< 1.0 U	< 1.0 UJ
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 1.0 U
MW09-20I	--	< 1 U	< 0.9 UJ	< 0.53 UJ	< 0.48 U	< 0.49 U	< 0.5 U	< 0.53 UJ	R	--	--	< 0.48 U	< 1.0 U	< 1.0 U	< 1.0 UJ
MW09-21D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 1 U	--	< 0.53 U	--	--	--	< 0.51 U	--	--	< 0.48 UJ	< 0.48 U	--	--	< 1.0 UJ
MW09-23D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-23S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	< 1.0 UJ
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 UJ
MW09-26S	< 1 UJ	< 1 UJ	< 1 UJ	< 0.55 U	< 0.48 U	< 0.5 U	< 0.48 U	< 0.52 U	R	--	< 0.48 UJ	--	--	--	< 1.0 UJ
MW09-27D	< 1 UJ	< 1 U	< 0.9 UJ	< 0.51 UJ	< 0.54 U	< 0.5 U	< 0.5 UJ	0.72 J	**1.1 J**	--	< 0.47 UJ	--	--	--	< 1.0 U
MW09-27S	< 1 U	< 0.9 UJ	< 1 U	< 0.51 UJ	< 0.5 UJ	< 0.5 U	< 0.54 U	< 0.48 UJ	R	--	< 0.48 U	--	--	--	< 1.0 UJ
PHENANTHRENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	0.17	0.14	< 0.10 UJ
MW09-08DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.095 UJ	< 0.096 U	< 0.095 U	0.27 J	< 0.1 U	< 0.1 U	< 0.10 UJ	< 0.094 U	--	--	< 0.10 UJ
MW09-09DA	0.09 J	< 0.2 U	< 0.2 U	0.058 J	< 0.096 UJ	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	< 0.096 UJ	< 0.095 UJ	--	< 0.10 U	< 0.10 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 UJ	< 0.099 UJ	--	< 0.10 U	< 0.10 UJ
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 UJ
MW09-14IA	< 0.2 U	< 0.2 U	< 0.2 U	--	--	0.075 J	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 U	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	--	--	--	< 0.097 U	< 0.1 U	< 0.1 U	< 0.095 U	--	< 0.10 U	< 0.10 U	< 0.10 UJ
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 UJ	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 U	< 0.10 U	< 0.10 U	< 0.10 UJ
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	< 0.1 U	--	< 0.1 U	< 0.096 U	< 0.096 U	--	--	< 0.10 UJ
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	0.16	< 0.10 UJ
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
MW09-26S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.095 UJ	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 U	--	--	--	< 0.10 UJ
MW09-27D	< 0.2 UJ	< 0.2 UJ	< 0.2 UJ	< 0.1 UJ	< 0.11 U	< 0.1 U	< 0.1 UJ	< 0.097 U	< 0.1 UJ	< 0.1 U	< 0.094 UJ	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	< 0.2 U	< 0.1 U	0.13 J	0.054 J	< 0.11 U	< 0.097 U	< 0.1 U	< 0.1 U	< 0.097 U	--	--	--	< 0.10 UJ
PYRENE (UG_L)															
MW09-07S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 UJ
MW09-08DA	< 0.2 UJ	< 0.2 U	< 0.2 U	< 0.1 U	< 0.095 U	< 0.096 U	< 0.095 U	0.24 J	< 0.1 U	< 0.1 U	< 0.10 U	< 0.094 UJ	--	--	< 0.10 UJ
MW09-09DA	< 0.2 U	< 0.2 U	< 0.2 U	< 0.11 U	< 0.096 U	< 0.099 U	< 0.095 U	< 0.095 UJ	< 0.1 U	< 0.1 U	0.13 J	< 0.095 U	--	< 0.10 U	< 0.10 UJ
MW09-09S	--	--	--	--	--	--	--	--	--	--	< 0.095 UJ	< 0.099 U	--	< 0.10 U	0.20 J
MW09-14D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 UJ
MW09-14IA	< 0.2 UJ	< 0.2 UJ	< 0.2 U	--	--	0.070 J	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.10 UJ	--	< 0.10 U	< 0.10 U	< 0.10 U
MW09-17I	< 0.2 UJ	< 0.2 U	< 0.2 U	< 0.1 U	--	--	--	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.095 UJ	--	< 0.10 U	< 0.10 U	< 0.10 UJ
MW09-20D	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U
MW09-20I	--	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.095 U	< 0.098 U	--	< 0.1 UJ	< 0.1 U	< 0.1 U	--	< 0.095 U	< 0.10 U	< 0.10 U	0.35 J
MW09-21S	--	< 0.2 U	--	< 0.11 U	--	--	--	< 0.1 U	--	< 0.1 U	< 0.096 UJ	< 0.096 U	--	--	< 0.10 UJ
MW09-25S	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	< 0.10 U	< 0.10 UJ
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
MW09-26S	< 0.2 UJ	< 0.2 U	< 0.2 U	< 0.11 U	< 0.095 U	< 0.1 U	< 0.095 U	< 0.10 U	< 0.1 U	< 0.1 U	< 0.096 UJ	--	--	--	< 0.10 UJ
MW09-27D	< 0.2 UJ	< 0.2 U	< 0.2 U	< 0.1 UJ	< 0.11 U	< 0.1 U	< 0.1 UJ	< 0.097 UJ	< 0.1 U	< 0.1 U	< 0.094 U	--	--	--	< 0.10 U
MW09-27S	< 0.2 U	< 0.2 U	0.07 J	< 0.1 U	0.14 J	< 0.1 U	< 0.11 U	< 0.097 UJ	< 0.1 U	< 0.1 U	0.12 J	--	--	--	< 0.10 UJ
1,1,1-TRICHLOROETHANE (200 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 UJ
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 UJ
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 UJ
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 UJ
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 UJ
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	< 100 U	**1400**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 20 U	< 0.5 U	< 250 U	< 250 U	< 0.50 U	< 200 U	< 1.0 U
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 2 U	< 2.5 U	--	< 0.50 U	< 0.50 U	< 5.0 UJ
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 UJ
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 UJ
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 UJ
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 UJ
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
MW09-27D	< 1 U	< 1 U	< 1 UJ	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
1,1,2,2-TETRACHLOROETHANE (UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	23	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 UJ	< 1.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	74000	89000	57000	54000	92000	73000	70000	110000 J	54000 J	79000	70000	9700	45000	50000	95000 J
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 2 U	< 2.5 U	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 UJ	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.50 U	--	--	< 0.50 UJ	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
1,1,2-TRICHLOROETHANE (5 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	--	< 1.0 U	< 1.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	< 1.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 UJ	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 UJ	< 1.0 U
MW09-09S	< 1 U	0.5 J	0.6 J	< 0.5 U	< 0.5 U	2.1	3.6	< 0.5 U	< 1 U	< 1 U	1.3	1.2 J	< 5.0 U	< 5.0 UJ	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	--	< 1.0 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 1.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 UJ	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 UJ	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	R
MW09-20I	**4200**	**4800**	**2000**	**2200**	**4500**	< 2500 U	**2600**	**4200 J**	**3500**	**2100 J**	**3600**	**640**	**2600**	**2900 J**	**3600 J**
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 4 U	< 2.5 U	--	< 1.0 U	< 1.0 U	< 5.0 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 UJ	< 1.0 U

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	--	--	< 1.0 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 UJ	< 1.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 UJ	< 1.0 U
1,1-DICHLOROETHANE (5 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 UJ	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 UJ	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	< 100 U	**2000**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 20 U	< 0.5 U	< 250 U	< 250 UJ	< 0.50 U	< 200 U	< 1.0 U
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 2 U	< 2.5 U	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 UJ	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
1,1-DICHLOROETHENE (7 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	0.40 J	< 0.50 U	< 0.50 U	< 1.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 UJ	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	1.7	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	0.4 J	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	**9 J**	5	2	1.1	3.8	3.6	4.2	0.65 J	5.1	3.4	4.6	2.2	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UL	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UL	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	**350**	**1500**	**370 J**	**360 J**	**330 J**	< 2500 U	**370 J**	**640 J**	**390**	**490 J**	**660**	**1200**	**1200 J**	**770**	**550 J**
MW09-21D	--	0.7 J	--	0.97 J	--	< 0.5 U	--	0.83 J	--	< 2 U	< 2.5 UL	--	0.59 J	< 0.50 U	< 5.0 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 UL	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 UL	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UL	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UL	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
1,2-DICHLOROETHANE (5 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	0.5 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 UJ	< 0.50 U	< 1.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	0.8 J	< 1 U	0.8 J	< 0.5 U	< 0.5 U	< 0.5 U	0.74 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	0.77 J	< 0.50 UJ	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	0.3 J	< 0.5 U	0.32 J	< 0.5 U	0.3 J	0.24 J	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 UJ	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 UJ	< 0.50 U	< 1.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
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NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-09S	2	< 1 U	2	1.2	1.4	2	1.9	1.7	2.4	2	1.8	< 1.0 U	< 2.5 UJ	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	3	3	4	3.7	2.9	2.5	3.6	3.4	4.2	3.3	< 0.50 U	--	2.0	< 0.50 U	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 UJ	< 0.50 U	R
MW09-20I	< 100 U	< 1000 U	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 20 U	< 0.5 U	< 250 U	< 250 U	**6.6**	< 200 U	**11**
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 2 U	< 2.5 U	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	0.5 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 UJ	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	1 J	< 1 U	2	2.3	1.7 J	< 0.5 UJ	1.3	1.4	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
1,2-DICHLOROETHENE, TOTAL (UG_L)															
MW09-02S	--	< 0.2 U	--	1.5	--	< 0.5 U	--	0.21 J	--	< 0.75 U	--	--	--	--	--
MW09-03D	--	96.5	--	83	--	82	--	78	--	75	--	--	--	--	--
MW09-07S	--	< 0.2 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.75 U	--	--	--	--	--
MW09-08DA	2	2	2	2.6	2.3	2.5	2.2	2.3	< 0.75 U	2.1	--	--	--	--	--
MW09-08S	2.3	2	3	2.65 J	2.97 J	2.4	1.9	2.52 J	2.5	1.9	--	--	--	--	--
MW09-09DA	25	24	18	16.7 J	18.8 J	18.7 J	16.5 J	16.56 J	12	14	--	--	--	--	--
MW09-09S	2060	1340	1000	431	1230	1230	1850	295.6	1744	1340	--	--	--	--	--
MW09-10D	--	< 0.2 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.75 U	--	--	--	--	--
MW09-10S	--	< 0.2 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.75 U	--	--	--	--	--
MW09-11S	1	0.5	< 2 U	< 0.5 U	0.22 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.75 U	< 0.75 U	--	--	--	--	--
MW09-14D	--	< 0.2 U	--	0.48 J	--	< 0.5 U	--	< 0.5 U	--	0.74 J	--	--	--	--	--
MW09-14IA	11	8	22	22	12	7.7	13	13	13	7.6	--	--	--	--	--
MW09-17I	< 0.2 U	< 0.2 U	< 2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.75 U	< 0.75 U	--	--	--	--	--
MW09-20D	0.2	< 0.2 U	0.3 J	< 0.5 U	< 0.5 U	< 0.5 U	0.41 J	< 0.5 U	< 0.75 U	< 0.75 U	--	--	--	--	--
MW09-20I	61000	70000	51000	53000	67000	290000	61000	68000 J	54000	61000	--	--	--	--	--
MW09-21D	--	394	--	440	--	530	--	424 J	--	376	--	--	--	--	--
MW09-21S	--	0.7	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.75 U	--	--	--	--	--
MW09-23D	--	< 0.2 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.75 U	--	--	--	--	--
MW09-23S	--	< 0.2 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.75 U	--	--	--	--	--
MW09-24D	--	< 0.2 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.75 U	--	--	--	--	--
MW09-24S	--	0.3	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.75 U	--	--	--	--	--
MW09-25S	0.3	< 0.2 U	< 20 U	< 0.5 U	< 0.5 U	0.33 J	< 0.5 U	< 0.5 U	< 0.75 U	< 0.75 U	--	--	--	--	--
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	< 0.2 U	< 0.2 U	< 2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.75 U	< 0.75 U	--	--	--	--	--
MW09-27D	0.4	< 0.2 U	1 J	1.8	1.6	1.1 J	0.78 J	0.99 J	1.1	1.7	--	--	--	--	--
MW09-27S	< 0.2 U	< 0.2 U	< 2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.75 U	< 0.75 U	--	--	--	--	--
1,2-DICHLOROPROPANE (5 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	1.0	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 1.0 U	< 5.0 U	< 5.0 U	< 20 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	--	< 1.0 U	< 2.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	R
MW09-14IA	< 1 U	< 1 U	0.8 J	< 0.5 U	< 0.5 U	< 0.5 U	1	0.92 J	2.2	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	R
MW09-20I	< 100 U	< 1000 U	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 40 U	< 1 U	< 250 U	< 250 U	< 1.0 U	< 400 U	< 2.0 U
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 4 U	< 2.5 U	--	< 1.0 U	< 1.0 U	< 10 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 2.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
MW09-27D	1	< 1 U	2	2.4	< 0.5 U	< 0.5 UJ	1.5	1.2	1.5	< 1 U	1.7 J	--	--	< 1.0 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
2-BUTANONE (UG_L)															
MW09-02S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	< 2.5 U	< 2.5 UJ	--	< 2.5 UJ	< 5.0 UJ
MW09-03D	--	< 5 U	--	< 2.5 UJ	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 UJ	< 5.0 UJ
MW09-07S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 2.5 U	--	--	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-08DA	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	R	R	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 5.0 UJ
MW09-08S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	R	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5.0 U
MW09-09DA	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	R	R	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-09S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	R	R	< 2.5 U	< 5.0 UJ	< 13 U	< 13 U	< 50 UJ
MW09-10D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	R	--	--	--	< 2.5 UJ	< 5.0 UJ
MW09-10S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	R	--	< 2.5 UJ	--	< 2.5 U	< 5.0 UJ
MW09-11S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	R	< 2.5 U	< 2.5 U	--	--	< 2.5 UJ	< 5.0 UJ
MW09-14D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	R	--	--	< 2.5 U	< 2.5 UJ	R
MW09-14IA	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	R	R	< 2.5 U	--	< 2.5 U	< 2.5 U	< 5.0 U
MW09-17I	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	R	R	< 2.5 U	--	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-20D	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	R	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	R
MW09-20I	< 500 U	< 5000 U	< 5000 U	< 2500 U	< 1200 U	< 12000 U	< 1000 U	< 2500 UJ	R	< 2.5 U	< 1200 U	< 1200 U	< 2.5 U	< 1000 U	< 5.0 UJ
MW09-21D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	R	< 12.0 U	--	< 2.5 U	< 2.5 U	< 25 UJ
MW09-21S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	R	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-23D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	R	--	< 2.5 U	--	< 2.5 U	< 5.0 UJ
MW09-23S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	R	< 2.5 U	--	--	< 2.5 U	< 5.0 UJ
MW09-24D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	R	--	< 2.5 UJ	--	< 2.5 U	< 5.0 UJ
MW09-24S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	R	--	< 2.5 UJ	--	< 2.5 U	< 5.0 UJ
MW09-25S	< 5 U	< 5 U	< 50 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	R	R	< 2.5 U	--	< 2.5 U	< 2.5 UJ	< 5.0 UJ
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 5.0 UJ
MW09-26S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	R	< 2.5 U	< 2.5 U	--	--	< 2.5 U	< 5.0 UJ
MW09-27D	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	R	< 2.5 U	< 2.5 U	--	--	< 2.5 UJ	R
MW09-27S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	R	< 2.5 U	< 2.5 U	--	--	< 2.5 U	< 5.0 UJ
2-HEXANONE (UG_L)															
MW09-02S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	< 2.5 U	< 2.5 UJ	--	< 2.5 U	< 5.0 UJ
MW09-03D	--	< 5 U	--	< 2.5 UJ	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-07S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 2.5 U	--	--	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-08DA	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-08S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5.0 U
MW09-09DA	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-09S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 5.0 UJ	< 13 U	< 13 U	< 50 UJ
MW09-10D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	--	--	< 2.5 U	< 5.0 UJ
MW09-10S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 2.5 U	< 5.0 UJ
MW09-11S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	--	--	< 2.5 U	< 5.0 UJ
MW09-14D	--	< 5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 2.5 U	--	< 2.5 U	< 2.5 U	--	< 2.5 U	< 2.5 U	R
MW09-14IA	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 UJ	< 2.5 UL	--	< 2.5 U	< 2.5 U	< 5.0 U
MW09-17I	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 UL	--	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-20D	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	R
MW09-20I	< 500 U	< 5000 U	< 5000 U	< 2500 U	< 1200 U	< 12000 UJ	< 1000 U	< 2500 UJ	< 100 U	< 2.5 U	< 1200 U	< 1200 U	< 2.5 U	< 1000 U	< 5.0 UJ
MW09-21D	--	< 5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 2.5 UJ	--	< 10 U	< 12.0 UL	--	< 2.5 U	< 2.5 U	< 25 UJ
MW09-21S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	< 2.5 UL	< 2.5 U	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-23D	--	< 5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 2.5 UJ	--	< 2.5 UJ	--	< 2.5 U	--	< 2.5 U	< 5.0 UJ
MW09-23S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 2.5 UJ	< 2.5 UL	--	--	< 2.5 U	< 5.0 UJ
MW09-24D	--	< 5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 2.5 U	--	< 2.5 UJ	--	< 2.5 UJ	--	< 2.5 U	< 5.0 UJ
MW09-24S	--	< 5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 2.5 U	--	< 2.5 UJ	--	< 2.5 UJ	--	< 2.5 U	< 5.0 UJ
MW09-25S	< 5 U	< 5 U	< 50 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 UL	--	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 5.0 UJ
MW09-26S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UL	--	--	< 2.5 U	< 5.0 UJ
MW09-27D	< 5 U	< 5 U	< 5 UJ	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	--	--	< 2.5 U	R
MW09-27S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	--	--	< 2.5 U	< 5.0 UJ
4-METHYL-2-PENTANONE (UG_L)															
MW09-02S	--	< 5 U	--	< 2.5 UJ	--	< 2.5 U	--	< 2.5 U	--	< 1 U	< 2.5 U	< 2.5 U	--	< 2.5 U	< 2.0 U
MW09-03D	--	< 5 U	--	< 2.5 UJ	--	< 2.5 U	--	< 2.5 U	--	< 1 U	< 2.5 U	< 2.5 U	< 1.0 U	< 2.5 U	< 2.0 U
MW09-07S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 1 U	--	--	< 1.0 U	< 2.5 U	< 2.0 UJ
MW09-08DA	< 5 U	< 5 U	< 5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 1 U	< 1 U	< 2.5 U	< 2.5 U	< 1.0 U	< 2.5 U	< 2.0 UJ
MW09-08S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 1 U	< 1 U	< 2.5 U	< 2.5 UJ	< 1.0 U	< 2.5 U	< 2.0 U
MW09-09DA	< 5 U	< 5 U	< 5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 1 U	< 1 U	< 2.5 U	< 2.5 U	< 1.0 U	< 2.5 U	< 2.0 UJ
MW09-09S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 1 U	< 1 U	< 2.5 U	< 5.0 U	< 5.0 U	< 13 U	< 20 UJ
MW09-10D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 1 U	--	--	--	< 2.5 U	< 2.0 UJ
MW09-10S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 1 U	--	< 2.5 U	--	< 2.5 UJ	< 2.0 UJ
MW09-11S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 1 U	< 1 U	< 2.5 U	--	--	< 2.5 U	< 2.0 U
MW09-14D	--	< 5 U	--	< 2.5 U	--	1.5 J	--	< 2.5 UJ	--	< 1 U	--	--	< 1.0 U	< 2.5 U	R

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IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
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NORTH KINGSTOWN, RHODE ISLAND
215 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-14IA	< 5 U	< 5 U	< 5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 1 U	< 1 U	< 2.5 U	--	< 1.0 U	< 2.5 U	< 2.0 U
MW09-17I	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 1 U	< 1 U	< 2.5 U	--	< 1.0 U	< 2.5 U	< 2.0 UJ
MW09-20D	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 1 U	< 1 U	< 2.5 U	< 2.5 UJ	< 1.0 U	< 2.5 U	R
MW09-20I	< 500 U	< 5000 U	< 5000 U	< 2500 U	< 1200 U	< 12000 U	< 1000 U	< 2500 UJ	< 40 U	2.3 J	< 1200 U	< 1200 U	< 1.0 U	< 1000 U	< 2.0 UJ
MW09-21D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 4 U	< 12.0 U	--	< 1.0 U	< 2.5 U	< 10 U
MW09-21S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 1 U	< 2.5 U	< 2.5 U	< 1.0 U	< 2.5 U	29
MW09-23D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 1 U	--	< 2.5 UJ	--	< 2.5 U	< 2.0 U
MW09-23S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	< 1 U	< 2.5 U	--	--	< 2.5 U	< 2.0 UJ
MW09-24D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 1 U	--	< 2.5 U	--	< 2.5 U	< 2.0 U
MW09-24S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 1 U	--	< 2.5 U	--	< 2.5 U	< 2.0 UJ
MW09-25S	< 5 U	< 5 U	< 50 U	< 2.5 UJ	< 2.5 U	2.7 J	< 2.5 U	< 2.5 U	2.2 J	< 1 U	< 2.5 U	--	< 1.0 U	9.8	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.5 UJ	< 2.0 UJ
MW09-26S	< 5 U	< 5 U	< 5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 1 U	< 1 U	< 2.5 U	--	--	< 2.5 UJ	< 2.0 UJ
MW09-27D	< 5 U	< 5 U	< 5 UJ	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 1 U	< 1 U	< 2.5 U	--	--	< 2.5 U	R
MW09-27S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 1 U	< 1 U	< 2.5 U	--	--	< 2.5 U	< 2.0 UJ
ACETONE (UG_L)															
MW09-02S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 5.6 U	--	< 2.5 UJ	< 2.5 U	< 2.5 UJ	--	< 2.5 U	< 5.0 UJ
MW09-03D	--	< 5 U	--	< 2.5 UJ	--	< 2.5 U	--	< 3.4 U	--	< 2.5 UJ	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 UJ	< 5.0 UJ
MW09-07S	--	16 J	--	< 2.5 U	--	< 2.5 U	--	4.9 J	--	< 2.5 UJ	--	--	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-08DA	< 5 U	< 5 UJ	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	R	R	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 UJ	< 5.0 UJ
MW09-08S	< 5 U	4 J	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	4.9 J	< 2.5 UJ	R	< 2.5 UJ	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 5.0 U
MW09-09DA	< 5 U	< 5 UJ	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	6.4 J	R	R	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-09S	< 5 U	< 5 UJ	< 5 U	< 2.5 U	< 2.5 U	3.8 J	8.8 J	< 2.5 U	R	R	< 5 U	< 5.0 UJ	< 13 U	< 13 U	< 50 UJ
MW09-10D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	R	--	--	--	< 2.5 UJ	< 5.0 UJ
MW09-10S	--	3 J	--	< 2.5 U	--	< 2.5 U	--	5.3	--	R	--	< 2.5 UJ	--	< 2.5 UJ	< 5.0 UJ
MW09-11S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 5.5 U	R	< 2.5 U	< 2.5 U	--	--	< 2.5 UJ	< 5.0 UJ
MW09-14D	--	4 J	--	< 2.5 U	--	< 2.5 U	--	5.5 J	--	R	--	--	< 2.5 U	< 2.5 UJ	R
MW09-14IA	13	8	< 5 U	6.1 J	5.5	4.2 J	< 3.8 UJ	< 2.5 UJ	R	R	< 5 U	--	< 2.5 U	< 2.5 U	< 5.0 U
MW09-17I	4 J	< 5 U	< 5 U	2.6 J	< 2.5 U	< 2.5 U	< 3.9 UJ	< 3.2 U	R	R	< 5 U	--	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-20D	< 5 U	< 5 UJ	4 J	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	3.9 J	R	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	R
MW09-20I	< 500 U	< 5000 U	< 5000 U	< 2500 UJ	< 1200 U	< 12000 U	< 1000 U	< 2500 UJ	R	< 2.5 UJ	< 1200 U	< 1200 UJ	< 2.5 U	< 1000 U	< 5.0 UJ
MW09-21D	--	3 J	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	R	< 12.0 UL	--	< 2.5 U	< 2.5 U	< 25 UJ
MW09-21S	--	4 J	--	5.6 J	--	< 2.5 U	--	3.8 J	--	R	< 6.4 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5.0 UJ
MW09-23D	--	< 5 UJ	--	< 2.5 U	--	< 2.5 U	--	2.7 J	--	R	--	< 2.5 U	--	< 2.5 U	< 5.0 UJ
MW09-23S	--	4 J	--	< 2.5 U	--	< 2.5 U	--	< 2.5 UJ	--	R	< 2.5 UL	--	--	< 2.5 U	< 5.0 UJ
MW09-24D	--	4 J	--	< 2.5 U	--	< 2.5 U	--	3.9 J	--	R	--	< 2.5 UJ	--	< 2.5 U	< 5.0 UJ
MW09-24S	--	< 5 UJ	--	< 2.5 U	--	< 2.5 U	--	7.9	--	R	--	< 2.5 UJ	--	< 2.5 U	< 5.0 UJ
MW09-25S	4 J	< 5 U	< 50 U	< 2.5 U	83 J	11	< 2.5 U	< 13 U	R	R	< 14 U	--	< 2.5 U	< 2.5 UJ	< 5.0 UJ
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.5 UJ	< 5.0 UJ
MW09-26S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	5.0 J	R	< 2.5 U	< 2.5 UL	--	--	< 2.5 UJ	< 5.0 UJ
MW09-27D	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	< 2.5 UJ	< 3.4 U	R	< 2.5 UJ	< 2.5 U	--	--	< 2.5 U	R
MW09-27S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5.7 U	R	< 2.5 UJ	< 2.5 U	--	--	< 2.5 U	< 5.0 UJ
BENZENE (5 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-07S	--	**10**	--	**8.7**	--	**7.6**	--	**11**	--	**7.7**	--	--	**6.9**	**11**	< 1.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	0.9 J	0.9 J	1	1.1 J	0.93 J	0.95 J	0.87 J	1.1	< 0.5 U	1.1	0.91 J	0.92 J	1.1	< 0.50 U	1.2 J
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	**5.4**
MW09-09S	**9**	**9**	**9**	**7.8**	**7.9**	**8.9**	**8.5**	**8.2**	**8.4**	**8.7**	**9.6**	**7.0**	**7.9**	**11**	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	3	--	2	--	2.4	--	2	--	2.6	--	2.6	--	2.2	2.5 J
MW09-11S	< 1 U	**9 J**	4	2.4	0.69 J	< 0.5 U	3.8	0.55 J	< 0.5 U	< 0.5 U	0.48 J	--	--	**7.0**	4.9 J
MW09-14D	--	3	--	1.9	--	3.1	--	1.4	--	1.6	--	--	3.3	0.79 J	R
MW09-14IA	**54**	**60**	**64**	**50**	**58**	**56**	**54**	**54**	**42**	**46**	**50**	--	**34**	**25**	**26 J**
MW09-17I	**21**	**23**	**24**	**22**	**22**	**21**	**22**	**21**	**19**	**20**	**24**	--	**18**	**18**	**15**
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	< 100 U	**1800**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 20 U	< 0.5 U	< 250 U	< 250 U	**5.5**	< 200 U	**7.3**
MW09-21D	--	3	--	4.1	--	3.2	--	2.9	--	2.7 J	4.0 J	--	2.4	1.8	< 5.0 U
MW09-21S	--	**11**	--	**9.5**	--	**8.6**	--	**8.9**	--	**9.3**	**11**	**9.6**	**8.4**	**7.7**	**6.8**
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	0.6 J	--	0.64 J	--	< 0.5 U	--	0.56 J	--	0.54 J	--	0.50 J	--	0.70 J	< 1.0 U
MW09-24S	--	0.3 J	--	0.33 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	**8**	**11**	**100 J**	**9.2**	**8.1**	**33**	**12**	**8.3**	**28 J**	**7.6**	**36**	--	**10**	**64**	**14**
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
BROMODICHLOROMETHANE (80 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UJ	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UJ	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	< 100 U	**1400**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 20 U	< 0.5 U	< 250 U	< 250 U	< 0.50 U	< 200 U	< 1.0 U
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 2 U	< 2.5 UJ	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 UJ	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UJ	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UJ	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
BROMOFORM (80 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	--	< 1.0 UJ	< 2.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 UJ	< 2.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 1 UJ	< 1 UJ	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 UJ	< 2.0 U
MW09-08S	< 1 U	< 1 UJ	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 UJ	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 UJ	< 0.50 U	< 1.0 U	< 5.0 U	< 5.0 U	< 20 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 UJ	--	--	--	< 1.0 UJ	< 2.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 UJ	< 2.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 UJ	< 2.0 UJ
MW09-14D	--	< 1 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 UJ	--	--	< 1.0 U	< 1.0 UJ	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 UJ	< 0.50 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 UJ	< 0.50 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 UJ	R
MW09-20I	< 100 U	**320 J**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 U	< 40 U	< 1 U	< 250 U	< 250 U	< 1.0 U	< 400 U	< 2.0 U
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 4 UJ	< 2.5 U	--	< 1.0 U	< 1.0 U	< 10 UJ
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 UJ	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 UJ
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 UJ	--	< 0.50 U	--	< 1.0 U	< 2.0 UJ
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 UJ	< 0.50 U	--	--	< 1.0 U	< 2.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 UJ	--	< 0.50 U	--	< 1.0 U	< 2.0 UJ
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 UJ	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-25S	< 1 U	< 1 UJ	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 UJ	< 0.50 U	--	< 1.0 U	< 1.0 UJ	< 2.0 UJ
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 UJ	< 2.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 UJ	< 2.0 U
MW09-27D	< 1 U	< 1 UJ	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 UJ	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
BROMOMETHANE (UG_L)															
MW09-02S	--	< 2 UJ	--	< 1 U	--	< 1 U	--	< 1 UJ	--	< 1 UJ	< 1.0 UJ	< 1.0 U	--	< 1.0 UJ	< 2.0 U
MW09-03D	--	< 2 UJ	--	< 1 U	--	< 1 U	--	< 1 UJ	--	< 1 UJ	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 2.0 U
MW09-07S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 UJ	--	--	< 1.0 U	< 1.0 U	< 2.0 UJ
MW09-08DA	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 UJ	< 2.0 UJ
MW09-08S	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 U	< 2.0 U
MW09-09DA	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 1.0 U	< 2.0 UJ
MW09-09S	< 2 U	< 2 U	--	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1.0 U	< 2.0 U	< 5.0 UJ	< 5.0 U	< 20 UJ
MW09-10D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 UJ	--	< 1 U	--	--	--	< 1.0 UJ	< 2.0 UJ
MW09-10S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 UJ	--	< 1 U	--	< 1.0 U	--	< 1.0 UJ	< 2.0 UJ
MW09-11S	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1.0 U	--	--	< 1.0 UJ	< 2.0 U
MW09-14D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	--	< 1.0 UJ	< 1.0 UJ	R
MW09-14IA	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-17I	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1 U	< 1.0 U	--	< 1.0 U	< 1.0 U	< 2.0 UJ
MW09-20D	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1.0 UJ	< 1.0 U	< 1.0 UJ	< 1.0 UJ	R
MW09-20I	< 200 U	< 2000 U	< 2000 U	< 1000 U	< 500 U	< 5000 U	< 400 U	< 1000 UJ	< 40 UJ	< 1 UJ	< 500 UJ	< 500 U	< 1.0 UJ	< 400 U	< 2.0 UJ

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-21D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 4 U	< 5.0 U	--	< 1.0 U	< 1.0 U	< 10 U
MW09-21S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-23D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1.0 U	--	< 1.0 U	< 2.0 U
MW09-23S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 1 U	< 1.0 U	--	--	< 1.0 U	< 2.0 UJ
MW09-24D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 UJ	--	< 1 U	--	< 1.0 U	--	< 1.0 U	< 2.0 U
MW09-24S	--	< 2 UJ	--	< 1 U	--	< 1 U	--	< 1 UJ	--	< 1 U	--	< 1.0 U	--	< 1.0 U	< 2.0 UJ
MW09-25S	< 2 U	< 2 U	< 20 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1.0 U	--	< 1.0 UJ	< 1.0 UJ	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 UJ	< 2.0 UJ
MW09-26S	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 1.0 U	--	--	< 1.0 UJ	< 2.0 UJ
MW09-27D	< 2 U	< 2 UJ	< 2 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 UJ	< 1 UJ	< 1.0 UJ	--	--	< 1.0 UJ	R
MW09-27S	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1.0 U	--	--	< 1.0 U	< 2.0 UJ
CARBON DISULFIDE (UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 UJ	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-07S	--	0.5 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 1 U	0.5 J	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UJ	< 0.50 UJ	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UJ	0.26 J	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	0.3 J	< 1 UJ	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 1 U	14	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 UJ	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UJ	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	< 100 U	1600	< 1000 U	< 670 UJ	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 20 U	< 0.5 U	< 250 UJ	< 250 UJ	5.6	< 200 U	4.3 J
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 2 U	< 2.5 U	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	0.3 J	--	< 0.5 U	--	1	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	0.6 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	0.8 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
CARBON TETRACHLORIDE (5 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 UJ	--	--	< 1.0 U	< 1.0 U	< 2.0 UJ
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 UJ
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 UJ	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 UJ
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 1.0 U	< 5.0 U	< 5.0 U	< 20 UJ
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	--	< 1.0 U	< 2.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 UJ
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 UJ
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 UJ	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 UJ	--	< 1.0 U	< 1.0 U	< 2.0 UJ
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 UJ	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	R
MW09-20I	< 100 U	**720 J**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 40 U	< 1 UJ	< 250 U	< 250 U	< 1.0 U	< 400 U	< 2.0 U
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 4 U	< 2.5 UJ	--	< 1.0 U	< 1.0 U	< 10 UJ
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 UJ
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 UJ
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 UJ	--	--	< 1.0 U	< 2.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 UJ
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 UJ	--	< 1.0 U	< 1.0 U	< 2.0 UJ
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 2.0 UJ
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 UJ	--	--	< 1.0 U	< 2.0 UJ
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 UJ
CHLOROBENZENE (100 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-07S	--	0.9 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	0.53 J	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	4	20 J	**200**	**310**	45	5 J	**180**	32	3.1	15	27	--	--	**170**	100
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	0.74 J	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	2	2	2	2.3	2.1	1.6	2.5	2.2	2.1	2.1	2.9	--	2.0	2.0	1.6 J
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	< 100 U	**1600**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 U	< 20 U	< 0.5 U	< 250 U	< 250 U	< 0.50 U	< 200 U	< 1.0 U
MW09-21D	--	5	--	38	--	58	--	3.8	--	2.8 J	18	--	4.4	1.4	< 5.0 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	29	2	**460 J**	51	40	12	49	57	21 J	50	8.8	--	23	11	14
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
CHLOROETHANE (UG_L)															
MW09-02S	--	< 2 U	--	< 1 U	--	< 1 UJ	--	< 1 U	--	< 0.5 UJ	< 1.0 U	< 1.0 U	--	< 0.50 UJ	< 1.0 U
MW09-03D	--	< 2 U	--	< 1 UJ	--	< 1 UJ	--	< 1 U	--	< 0.5 UJ	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-07S	--	< 2 U	--	< 1 U	--	< 1 UJ	--	< 1 U	--	< 0.5 UJ	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 UJ	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-08S	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 UJ	< 1.0 U	< 1.0 UJ	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	< 2.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 UJ	--	< 0.5 U	--	--	--	< 0.50 UJ	< 1.0 U
MW09-10S	--	< 2 UJ	--	< 1 U	--	< 1 U	--	< 1 UJ	--	< 0.5 U	--	< 1.0 U	--	< 0.50 UJ	< 1.0 U
MW09-11S	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	--	< 0.50 UJ	< 1.0 U
MW09-14D	--	1 J	--	1.1 J	--	< 1 UJ	--	1.2 J	--	< 0.5 U	--	--	< 0.50 U	< 0.50 UJ	R
MW09-14IA	< 2 U	< 2 U	< 2 U	< 1 U	0.61 J	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 UJ	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 UJ	R
MW09-20I	< 200 U	2300	< 2000 U	< 1000 U	< 500 U	< 5000 U	< 400 U	< 1000 UJ	< 20 U	< 0.5 UJ	< 500 U	< 500 UJ	< 0.50 U	< 200 U	< 1.0 U
MW09-21D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 2 U	< 5.0 U	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	--	< 1.0 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	< 1.0 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 UJ	--	< 0.5 U	--	< 1.0 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 UJ	--	< 0.5 U	--	< 1.0 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 2 U	< 2 U	< 20 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 UJ	< 1.0 U
MW09-26S	< 2 U	< 2 UJ	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	--	< 0.50 UJ	< 1.0 U
MW09-27D	< 2 U	< 2 U	< 2 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 UJ	< 1.0 U	--	--	< 0.50 UJ	R
MW09-27S	< 2 U	< 2 UJ	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 UJ	< 1.0 U	--	--	< 0.50 U	< 1.0 U
CHLOROFORM (80 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 UJ	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	60 J	**2100**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	54	50	< 250 U	< 250 U	30	< 200 U	54 J
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 2 U	< 2.5 U	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
CHLOROMETHANE (UG_L)															
MW09-02S	--	< 2 UJ	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	< 1.0 U	< 1.0 U	--	< 0.50 UJ	< 1.0 U
MW09-03D	--	< 2 UJ	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-07S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-08S	< 2 U	< 2 UJ	1 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-09DA	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-09S	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	< 2.0 U	< 2.5 U	< 2.5 UJ	< 10 U
MW09-10D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	--	--	--	< 0.50 UJ	< 1.0 U
MW09-10S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	--	< 1.0 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 2 U	< 2 U	0.4 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	--	< 0.50 UJ	< 1.0 U
MW09-14D	--	< 2 UJ	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 UJ	R
MW09-14IA	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-17I	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-20D	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 UJ	R
MW09-20I	< 200 U	2000	< 2000 U	< 1000 U	< 500 U	< 5000 U	< 400 U	< 1000 UJ	< 20 U	< 0.5 U	< 500 U	< 500 U	< 0.50 U	< 200 UJ	< 1.0 U
MW09-21D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 2 U	< 5.0 U	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	--	< 1.0 U	--	< 0.50 UJ	< 1.0 U
MW09-23S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	< 1.0 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	--	< 1.0 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 2 UJ	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	--	< 1.0 U	--	< 0.50 UJ	< 1.0 U
MW09-25S	< 2 U	< 2 UJ	< 20 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	--	< 0.50 UJ	R
MW09-27S	< 2 U	< 2 U	0.5 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	--	< 0.50 UJ	< 1.0 U
CIS-1,2-DICHLOROETHENE (70 UG_L)															
MW09-02S	--	< 1 U	--	1.5	--	< 0.5 U	--	0.21 J	--	< 0.5 U	< 0.50 U	0.38 J	--	0.60 J	1.2 J
MW09-03D	--	**96**	--	**83**	--	**82**	--	**78**	--	**75**	**80**	**77**	65	7.7	**78**
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	9.6
MW09-08DA	2	2	2	2.6	2.3	2.5	2.2	2.3	< 0.5 U	2.1	2.4	**84**	2.2	2.1	< 1.0 U
MW09-08S	2	2	2	2.4	2.7	2.4	1.9	2.2	2.5	1.9	2.4	1.8	1.3	1.5	< 1.0 U
MW09-09DA	23	23	17	16	18	18	16	16	12	14	14	12	12	12	< 1.0 U
MW09-09S	**2000**	**1300**	**990**	**420**	**1200**	**1200**	**1800**	**290**	**1700**	**1300**	**1300**	**950**	**470**	**660**	**580**
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	1	0.5 J	< 1 U	< 0.5 U	0.22 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	0.75 J	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	0.48 J	--	< 0.5 U	--	< 0.5 U	--	0.74 J	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	11	8	22	22	12	7.7	13	13	13	7.6	1.5	--	0.93 J	1.2	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	0.3 J	< 0.5 U	< 0.5 U	< 0.5 U	0.41 J	< 0.5 U	< 0.5 U	< 0.5 U	0.28 J	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	**42000**	**49000**	**38000**	**38000**	**46000**	**150000**	**43000**	**46000 J**	**36000**	**42000**	**44000**	**53000**	**28000**	**39000**	**22000 J**
MW09-21D	--	**380**	--	**430**	--	**520**	--	**400 J**	--	**360**	**420**	--	**320**	**290 J**	**300**
MW09-21S	--	0.7 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	0.36 J	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	0.3 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	0.3 J	< 1 U	< 10 U	< 0.5 U	< 0.5 U	0.33 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	0.37 J	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	0.4 J	< 1 U	1 J	1.8	1.6	1.1 J	0.78 J	0.99 J	1.1	1.7	0.99 J	--	--	2.2	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
CIS-1,3-DICHLOROPROPENE (UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 UJ
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 UJ
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UJ	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UJ	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	< 100 U	1000	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 20 U	< 0.5 U	< 250 U	< 250 U	< 0.50 U	< 200 U	< 1.0 UJ
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 2 UJ	< 2.5 UJ	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 UJ	--	--	< 0.50 U	< 1.0 UJ
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 UJ
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 UJ	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
DIBROMOCHLOROMETHANE (80 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 0.50 U	< 1.0 U	< 5.0 U	< 5.0 U	< 20 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	--	< 1.0 U	< 2.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 0.50 UJ	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 UJ	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	R
MW09-20I	< 100 U	**650 J**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 40 U	< 1 U	< 250 U	< 250 U	< 1.0 U	< 400 U	< 2.0 U
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 4 UJ	< 2.5 UJ	--	< 1.0 U	< 1.0 U	< 10 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 UJ	--	--	< 1.0 U	< 2.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 UJ	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 2.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 UJ	--	--	< 1.0 U	< 2.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
ETHYLBENZENE (70 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 UJ
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	4	5	4	3.7	4.4	4.6	4.4	4.3	4.3	4.2	5.1	--	4.2	3.5	3.6 J
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	< 100 U	**1400**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 U	< 20 U	< 0.5 U	< 250 U	< 250 U	< 0.50 U	< 200 U	< 1.0 U
MW09-21D	--	0.2 J	--	0.77 J	--	< 0.5 U	--	< 0.5 U	--	< 2 U	< 2.5 U	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
221 of 225

	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 UJ
M- AND P-XYLENE (UG_L)															
MW09-02S	--	< 2 U	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-03D	--	< 2 U	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-07S	--	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	< 2 U	< 2 U	< 2 U	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-08S	< 2 U	< 2 U	< 2 U	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-09DA	< 2 U	< 2 U	< 2 U	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-09S	< 2 U	< 2 U	< 2 U	--	--	--	--	--	--	--	--	< 2.0 U	--	--	--
MW09-10D	--	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	< 2 U	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-11S	< 2 U	< 2 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	5	6	8 J	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	0.8 J	1 J	0.9 J	--	--	--	--	--	--	--	--	--	--	--	--
MW09-20D	< 2 U	< 2 U	< 2 U	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-20I	< 200 U	3000	< 2000 U	--	--	--	--	--	--	--	--	< 500 U	--	--	--
MW09-21D	--	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 2 U	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-23D	--	< 2 U	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-23S	--	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	< 2 U	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-24S	--	< 2 U	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-25S	< 2 U	< 2 U	15 J	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	< 2 U	< 2 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	< 2 U	< 2 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	< 2 U	< 2 U	< 2 U	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE (5 UG_L)															
MW09-02S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 0.5 UJ	< 2.5 U	< 2.5 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 0.5 UJ	< 2.5 U	< 2.5 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-07S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 0.5 UJ	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 U	< 0.5 UJ	< 2.5 U	< 2.5 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 U	< 0.5 UJ	< 2.5 U	< 2.5 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 U	< 0.5 UJ	< 2.5 U	< 2.5 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 U	< 0.5 UJ	< 2.5 U	< 5.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 0.5 UJ	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 0.5 U	--	< 2.5 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 U	< 0.5 U	< 2.5 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 0.5 UJ	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 U	< 0.5 UJ	< 2.5 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 U	< 0.5 UJ	< 2.5 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 U	< 0.5 UJ	< 2.5 U	< 2.5 U	< 0.50 U	< 0.50 U	R
MW09-20I	< 500 U	**1700 J**	< 5000 U	< 2500 U	< 1200 U	< 12000 U	< 1000 U	< 2500 UJ	< 20 U	**14 J**	< 1200 U	< 1200 U	**5.7**	< 200 U	**13 J**
MW09-21D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 2 UJ	< 12.0 U	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 0.5 UJ	< 2.5 U	< 2.5 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 0.5 UJ	--	< 2.5 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 0.5 UJ	< 2.5 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 0.5 UJ	--	< 2.5 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 5 U	--	< 2.5 U	--	< 2.5 U	--	< 2.5 U	--	< 0.5 UJ	--	< 2.5 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 5 U	< 5 U	< 50 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 U	< 0.5 UJ	< 2.5 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 U	< 0.5 U	< 2.5 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 5 U	< 5 U	< 5 UJ	< 2.5 U	< 2.5 U	< 2.5 UJ	< 7.6 U	< 2.5 U	< 0.5 U	< 0.5 UJ	< 2.5 U	--	--	< 0.50 U	R
MW09-27S	< 5 U	< 5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 U	< 0.5 UJ	< 2.5 U	--	--	< 0.50 U	< 1.0 U
O-XYLENE (UG_L)															
MW09-02S	--	< 1 U	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
MW09-03D	--	< 1 U	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
MW09-07S	--	2 J	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-08DA	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
MW09-08S	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
MW09-09DA	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
MW09-09S	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
MW09-10D	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-10S	--	< 1 U	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
MW09-11S	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14D	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-14IA	6	6	6 J	--	--	--	--	--	--	--	--	--	--	--	--
MW09-17I	0.9 J	1	0.8 J	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-20D	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
MW09-20I	< 100 U	1400	< 1000 U	--	--	--	--	--	--	--	--	< 250 U	--	--	--
MW09-21D	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-21S	--	< 1 U	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
MW09-23D	--	< 1 U	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
MW09-23S	--	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-24D	--	< 1 U	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
MW09-24S	--	0.4 J	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
MW09-25S	< 1 U	< 1 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26S	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27D	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
MW09-27S	< 1 U	< 1 U	< 1 U	--	--	--	--	--	--	--	--	--	--	--	--
STYRENE (100 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 UJ
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 UJ
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	1.5 J
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	< 100 U	**1200**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 U	< 20 U	< 0.5 U	< 250 U	< 250 U	< 0.50 U	< 200 U	< 1.0 UJ
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 2 U	< 2.5 U	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 UJ
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 UJ
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
TETRACHLOROETHENE (5 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	1.5	< 1.0 U	< 1.0 U	< 2.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	< 1.0 U	< 5.0 U	< 5.0 U	< 20 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	--	< 1.0 U	< 2.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	R
MW09-20I	**140**	**1200**	< 1000 U	< 500 U	< 250 U	**6600**	**170 J**	< 500 UJ	**280 J**	**190**	**210 J**	**1100**	< 2000 U	< 400 U	**140**
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 4 U	< 2.5 U	--	< 1.0 U	< 1.0 U	< 10 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 2.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 1 UJ	< 1 U	< 0.50 U	--	--	< 1.0 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 UJ
TOLUENE (100 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-07S	--	0.4 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 1 U	0.3 J	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 1 U	< 1 U	0.3 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	11	13	15	12	12	17	15	14	13	11	10	--	9.3	2.6	4.8 J
MW09-17I	< 1 U	0.4 J	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	0.28 J	< 0.5 U	< 0.5 U	< 0.5 U	0.28 J	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	R
MW09-20I	< 100 U	**1900**	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 20 U	2.5	< 250 U	< 250 U	2.9	< 200 U	3.2 J
MW09-21D	--	5	--	8.3	--	5.4	--	3.3	--	2.6 J	3.6 J	--	1.9	0.84 J	< 5.0 U
MW09-21S	--	0.6 J	--	0.46 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	0.38 J	0.30 J	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 UJ	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 1 U	< 1 U	3 J	0.53 J	< 0.5 U	0.37 J	0.90 J	0.42 J	< 0.5 U	< 0.5 U	0.32 J	--	< 0.50 U	1.0 J	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	0.39 J	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
TRANS-1,2-DICHLOROETHENE (100 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-03D	--	0.5 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	0.26 J	< 1.0 U	< 1.0 U	< 2.0 U
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	39	< 1.0 U	< 1.0 U	< 2.0 U
MW09-08S	0.3 J	< 1 U	0.4 J	0.32 J	0.27 J	< 0.5 U	< 0.5 U	0.32 J	< 1 U	< 1 U	0.30 J	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-09DA	2	1	0.9 J	0.74 J	0.8 J	0.67 J	0.54 J	0.56 J	< 1 U	< 1 U	0.37 J	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-09S	60	40	25	11	34	29	47	5.6	44	40	41	26	13	21	18 J
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	--	< 1.0 U	< 2.0 U
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	R
MW09-14IA	< 1 U	< 1 U	0.4 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-20D	0.2 J	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	0.29 J	< 1.0 U	< 1.0 U	R
MW09-20I	**19000**	**21000**	**12000**	**15000**	**21000**	**140000**	**18000**	**22000 J**	**18000**	**19000**	**21000**	**20000**	**13000**	**18000**	**14000 J**
MW09-21D	--	14	--	9.9	--	10	--	24	--	16	15	--	12	11 J	9.8 J
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 1 U	--	< 0.50 U	--	< 1.0 U	< 2.0 U
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	< 1.0 U	< 1.0 U	< 2.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 2.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 0.50 U	--	--	< 1.0 U	< 2.0 U
TRANS-1,3-DICHLOROPROPENE (UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 UJ	< 0.50 U	< 0.50 U	--	< 0.50 UJ	< 1.0 UJ
MW09-03D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ	< 1.0 UJ
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 UJ	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-08S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 UJ	--	--	--	< 0.50 UJ	< 1.0 UJ
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 UJ	< 1.0 U
MW09-14D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 UJ	--	--	< 0.50 U	< 0.50 UJ	R
MW09-14IA	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 UJ	R
MW09-20I	< 100 U	720 J	< 1000 U	< 500 U	< 250 U	< 2500 U	< 200 U	< 500 UJ	< 20 U	< 0.5 UJ	< 250 U	< 250 U	< 0.50 U	< 200 U	< 1.0 UJ
MW09-21D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 2 UJ	< 2.5 U	--	< 0.50 U	< 0.50 U	< 5.0 U
MW09-21S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 UJ	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 UJ	< 0.50 U	--	--	< 0.50 U	< 1.0 UJ

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 UJ	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 UJ	--	< 0.50 U	--	< 0.50 U	< 1.0 UJ
MW09-25S	< 1 U	< 1 U	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	< 0.50 U	< 0.50 UJ	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	--	< 0.50 UJ	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	--	< 0.50 U	< 1.0 U
TRICHLOROETHENE (5 UG_L)															
MW09-02S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 1.0 U	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	**6**	--	4.8	--	**6.2**	--	**5.2**	--	**7.2**	**6.3**	**5.3**	**5.6**	0.82 J	**5.8**
MW09-07S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	0.4 J	0.6 J	< 1 U	0.3 J	0.41 J	0.41 J	0.32 J	0.35 J	< 0.5 U	< 0.5 U	< 1.0 U	0.97 J	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08S	< 1 U	0.9 J	< 1 U	0.3 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-09DA	**23**	**15**	**9**	**7.2**	**7.6**	4.2	4.2	3.9	1.8	1.7	< 1.5 U	2.1	2.2	< 0.50 U	< 1.0 U
MW09-09S	2	1	0.5 J	0.29 J	0.97 J	< 0.5 U	0.87 J	0.32 J	< 0.5 U	< 0.5 U	< 1.0 U	< 1.0 U	< 2.5 U	< 2.5 U	< 10 U
MW09-10D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 UJ
MW09-10S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-11S	0.5 J	0.8 J	< 1 U	< 0.5 U	0.66 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	1.1	< 1 U	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	0.6 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	1.7 J
MW09-14IA	< 1 U	0.4 J	0.9 J	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	0.4 J	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	**17**	< 1.0 U
MW09-17I	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.0 U	0.90 J	< 0.50 U	< 0.50 U	1.5 J
MW09-20I	**370000**	**450000**	**340000**	**270000**	**450000**	**540000**	**300000**	**450000**	**370000**	**430000**	**430000**	**140000**	**290000**	**330000**	**490000 J**
MW09-21D	--	**100**	--	**170**	--	**170**	--	**70**	--	**75**	**110**	--	**71**	**47 J**	**48**
MW09-21S	--	0.3 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 1 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	0.3 J	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 UJ
MW09-24D	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	1.4 J
MW09-24S	--	< 1 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.5 U	--	< 0.50 U	--	< 0.50 U	< 1.0 UJ
MW09-25S	< 1 U	1	< 10 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	0.76 J	< 0.5 U	< 0.50 U	--	< 0.50 U	< 0.50 U	1.0 J
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	R
MW09-27S	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 0.50 U	< 1.0 U
VINYL CHLORIDE (2 UG_L)															
MW09-02S	--	< 2 U	--	0.4 J	--	< 1 U	--	< 1 U	--	< 0.5 U	< 1.0 U	< 1.0 U	--	< 0.50 U	< 1.0 U
MW09-03D	--	**10**	--	**19**	--	**8**	--	**14**	--	**13**	**8.8**	**16**	**16**	**2.2**	**21**
MW09-07S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	--	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-08DA	< 2 U	< 2 U	2 J	1.6 J	1.3 J	0.93 J	1.3 J	1.5 J	< 0.5 U	1.2	< 1.0 U	**27**	1.3	1.3	< 1.0 U
MW09-08S	**10**	**12**	**10**	**11**	**11**	**9.5**	**9.5**	**11**	**10**	**8**	**10**	**7.2**	**7.5**	**6.9**	**6.9**
MW09-09DA	**4**	**6**	**5**	**5.4**	**4.3**	**6.4**	**5.2**	**5.5**	**5.1**	**4.4**	**5.3**	**4.1**	**4.6**	**2.9**	< 1.0 U
MW09-09S	**780**	**940**	**1100**	**340**	**1000**	**1000**	**1400**	**460**	**1200**	**1500**	**1100**	**1000**	**450**	**850**	**690**
MW09-10D	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	--	--	--	< 0.50 U	< 1.0 U
MW09-10S	--	0.7 J	--	< 1 U	--	0.52 J	--	0.34 J	--	< 0.5 U	--	< 1.0 U	--	< 0.50 U	< 1.0 U
MW09-11S	0.9 J	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.92 J	< 0.5 U	1.2 J	--	--	< 0.50 U	< 1.0 U
MW09-14D	--	0.4 J	--	0.57 J	--	< 1 U	--	< 1 U	--	0.91 J	--	--	< 0.50 U	< 0.50 U	R
MW09-14IA	**73**	**68**	**110**	**130**	**82**	**71**	**89**	**94**	**72**	**37**	**11**	--	**16**	< 0.50 U	**3.4 J**
MW09-17I	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-20D	0.5 J	< 2 U	1 J	< 1 U	1.3 J	< 1 U	2	**3.5 J**	2	< 0.5 U	**2.4 J**	1.4 J	1.1	1.3	R
MW09-20I	**3800**	**5800**	**4700**	**5400**	**4100**	**13000**	**7200**	**5600 J**	**7200**	**6200**	**7500**	**14000**	**8300**	**9300**	**4500 J**
MW09-21D	--	**160**	--	**140**	--	**170**	--	**120**	--	**94**	**140**	--	**100**	**75 J**	**73**
MW09-21S	--	0.6 J	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	< 1.0 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U
MW09-23D	--	< 2 U	--	< 1 U	--	< 1 U	--	0.56 J	--	0.71 J	--	0.77 J	--	< 0.50 U	< 1.0 U
MW09-23S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	< 1.0 U	--	--	< 0.50 U	1.1 J
MW09-24D	--	0.5 J	--	< 1 U	--	< 1 U	--	0.34 J	--	< 0.5 U	--	0.29 J	--	< 0.50 U	< 1.0 U
MW09-24S	--	< 2 U	--	< 1 U	--	< 1 U	--	< 1 U	--	< 0.5 U	--	< 1.0 U	--	< 0.50 U	< 1.0 U
MW09-25S	< 2 U	< 2 U	< 20 U	< 1 U	< 1 U	0.38 J	< 1 U	< 1 U	1 J	< 0.5 U	< 1.0 U	--	< 0.50 U	< 0.50 U	< 1.0 U
MW09-26D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	< 1.0 U
MW09-26S	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	--	< 0.50 U	< 1.0 U
MW09-27D	0.4 J	< 2 U	0.7 J	1 J	0.99 J	< 1 UJ	0.48 J	0.64 J	< 0.5 U	< 0.5 U	0.79 J	--	--	0.85 J	R
MW09-27S	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 1.0 U	--	--	< 0.50 U	< 1.0 U
XYLENES, TOTAL (10000 UG_L)															
MW09-02S	--	< 3 U	--	< 1.5 U	--	< 1.5 U	--	< 1.5 U	--	< 1 U	< 1.5 U	< 1.5 U	--	< 1.0 U	< 1.0 UJ
MW09-03D	--	< 3 U	--	< 1.5 U	--	< 1.5 U	--	< 1.5 U	--	< 1 U	< 1.5 U	< 1.5 U	< 1.0 U	< 1.0 U	< 1.0 UJ
MW09-07S	--	2 J	--	1.8 J	--	1.6 J	--	2 J	--	1.6	--	--	1.5	1.6	< 1.0 U
MW09-08DA	< 3 U	< 3 U	< 3 U	< 1.5 U	< 1.5 U	< 1.5 UJ	< 1.5 U	< 1.5 U	< 1 U	< 1 U	< 1.5 U	< 1.5 U	< 1.0 U	< 1.0 U	< 1.0 U
MW09-08S	< 3 U	< 3 U	< 3 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1 U	< 1 U	< 1.5 U	< 1.5 U	< 1.0 U	< 1.0 U	< 1.0 U
MW09-09DA	< 3 U	< 3 U	< 3 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1 U	< 1 U	< 1.5 U	< 1.5 U	< 1.0 U	< 1.0 U	< 1.0 U
MW09-09S	< 3 U	< 3 U	< 3 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1 U	< 1 U	< 1.5 U	< 3.0 U	< 5.0 U	< 5.0 U	< 10 U

TABLE E-1
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN GROUNDWATER - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND
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	ME 31	ME 32	ME 33	ME 34	ME 35	ME 36	ME 37	ME 38	ME 39	ME 40	ME 41	ME 42	ME 43	ME 44	ME45
	Jan 2010	Mar 2010	Jul 2010	Sep 2010	Dec 2010	Mar 2011	Jul 2011	Sept/Oct 2011	Mar 2012	Sep 2012	Feb 2013	Sept/Oct 2013	Sept 2014	Sep/Oct 2015	Sept 2016
MW09-10D	--	< 3 U	--	< 1.5 U	--	< 1.5 U	--	< 1.5 U	--	< 1 U	--	--	--	< 1.0 U	< 1.0 U
MW09-10S	--	< 3 U	--	< 1.5 U	--	< 1.5 U	--	< 1.5 U	--	< 1 U	--	< 1.5 U	--	< 1.0 U	< 1.0 U
MW09-11S	< 3 U	< 3 U	< 3 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1 U	< 1 U	< 1.5 U	--	--	< 1.0 U	< 1.0 U
MW09-14D	--	< 3 U	--	< 1.5 U	--	< 1.5 U	--	< 1.5 U	--	< 1 U	--	--	< 1.0 U	< 1.0 U	R
MW09-14IA	11	13	15 J	12	12	15	16	16	17	17	22	--	17	14	13 J
MW09-17I	2 J	2 J	2 J	1.8 J	1.4 J	< 1.5 U	1.8 J	1.6 J	< 1 U	1.5	2.1 J	--	1.4	< 1.0 U	< 1.0 U
MW09-20D	< 3 U	< 3 U	< 3 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1 U	< 1 U	< 1.5 U	< 1.5 U	< 1.0 U	< 1.0 U	R
MW09-20I	< 300 U	4400	< 3000 U	< 1500 U	< 750 U	< 7500 U	< 600 U	< 1500 U	< 40 U	< 1 U	< 750 U	< 750 U	< 1.0 U	< 400 U	< 1.0 U
MW09-21D	--	< 3 U	--	1.2 J	--	< 1.5 U	--	< 1.5 U	--	< 4 U	< 7.5 U	--	< 1.0 U	< 1.0 U	< 5.0 U
MW09-21S	--	< 3 U	--	< 1.5 U	--	< 1.5 U	--	< 1.5 U	--	< 1 U	< 1.5 U	< 1.5 U	< 1.0 U	< 1.0 U	< 1.0 U
MW09-23D	--	< 3 U	--	< 1.5 U	--	< 1.5 U	--	< 1.5 U	--	< 1 U	--	< 1.5 U	--	< 1.0 U	< 1.0 U
MW09-23S	--	< 3 U	--	< 1.5 UJ	--	< 1.5 U	--	< 1.5 U	--	< 1 U	< 1.5 U	--	--	< 1.0 U	< 1.0 U
MW09-24D	--	< 3 U	--	< 1.5 U	--	< 1.5 U	--	< 1.5 U	--	< 1 U	--	< 1.5 U	--	< 1.0 U	< 1.0 U
MW09-24S	--	0.4 J	--	< 1.5 U	--	< 1.5 U	--	< 1.5 U	--	< 1 U	--	< 1.5 U	--	< 1.0 U	< 1.0 U
MW09-25S	< 3 U	< 3 U	15 J	1.1 J	< 1.5 U	0.75 J	0.55 J	1.2 J	< 1 U	< 1 U	< 1.5 U	--	< 1.0 U	< 1.0 U	< 1.0 U
MW09-26DA	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	< 1.0 U
MW09-26S	< 3 U	< 3 U	< 3 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1 U	< 1 U	< 1.5 U	--	--	< 1.0 U	< 1.0 U
MW09-27D	< 3 U	< 3 U	< 3 UJ	< 1.5 U	< 1.5 U	< 1.5 UJ	< 1.5 U	< 1.5 U	< 1 UJ	< 1 U	< 1.5 U	--	--	< 1.0 U	R
MW09-27S	< 3 U	< 3 U	< 3 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1 U	< 1 U	< 1.5 U	--	--	< 1.0 U	< 1.0 U

Notes:
Shaded/Bolded Cell = Detected result exceeds PAL
U = Not Detected; J = Estimated Value; R = Rejected
PAL = Project Action Level (Effects Range Median, September 1999); except total Arochlor, 4,4-DDE, and zinc which are based on site-specific study (SAIC,1998)
Maximum value presented when original and duplilcate samples were analyzed
Parameters that have been detected in at least one sample since ME01 are included on the table

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
SULFIDE (MG_L)																		
P09-06B			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	--	--	--	--	--	--	--
P09-10	--	--	--	--	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	< 100 U	--	--	--	--	--	--	--
PENTACHLOROPHENOL (7.9 UG_L)																		
P09-01	7.9	--	--	--	--	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	--	--	--	--	--	--	--
P09-09	7.9	--	--	--	--	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	--	--	--	--	--	--	--
P09-10	7.9	--	--	--	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	--	--	--	--	--	--	--
ALUMINUM (DISSOLVED) (UG_L)																		
P09-01	--	42600	< 1240 U	18500	880 J	1370 J	169000	< 4 U	58.8 J	< 11.1 U	< 9.3 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	219	--	4530	< 8.9 UJ	14200 J	4370	< 4 U	18.1 J	< 4 U	< 7.2 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
P09-10	--	302000	--	35900	1200 J	1370 J	129 J	< 4 U	14.3 J	< 4 U	< 7.2 U	< 250 U	< 200 UJ	< 200 U	< 200 U	< 200 U	< 200 U	< 200 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALUMINUM (UG_L)																		
P09-01	--	601000	< 1240 U	33900	140000 J	42800 J	189000 J	103000 J	1030	33800 J	141000 J	46400	109000 J	28500	228000 J	37000	42500	43400 J
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 620 U	--	26000	< 8.9 U	13100 J	3260 J	2270 J	197	5010	2150 J	1390	106 J	269	499	279	48900	5350
P09-10	--	1080000	--	66200	1500 J	1380 J	164 J	196 J	< 32.2 U	< 32.2 U	7050 J	61.2 J	897 J	< 200 U	779	157000	167 J	1580 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY (DISSOLVED) (UG_L)																		
P09-01	--	308	< 36 U	90.6	< 6.1 U	< 0.29 U	< 5.3 U	< 2.1 U	2.1	< 2.1 U	< 0.65 UJ	< 5 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 1.8 U	--	2.5 J	< 2.5 U	1.8	< 5.3 U	< 2.1 U	< 2.1 U	< 2.1 U	< 0.65 UJ	< 3.5 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-10	--	< 18 U	--	3.2 J	< 2.5 U	< 0.32 U	< 5.3 U	< 2.1 U	< 2.1 U	< 2.1 U	< 0.65 UJ	1.8 J	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY (UG_L)																		
P09-01	--	R	< 36 U	113 J	700 J	< 0.8 U	< 5.3 U	< 5.3 UJ	< 5.3 U	< 5.3 U	< 1.3 U	< 5 U	< 6 U	< 6 U	< 12 U	< 6 U	< 6 U	< 6 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 18 U	--	35.9	< 4.2 U	1.7	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U	< 3 U	< 5 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U
P09-10	--	< 36 UJ	--	24.7	< 3.4 U	< 2 U	< 5.3 U	< 5.3 U	< 5.3 U	< 5.3 U	< 1.3 U	< 5 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC (DISSOLVED) (36 UG_L)																		
P09-01	**36**	< 100 U	< 100 U	< 4.9 UJ	< 4.9 U	5.2	< 9.2 UJ	32.5 J	21.6	**36.8**	< 5.3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U
P09-02A	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	**36**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	**36**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	**36**	< 5 U	--	< 4.9 U	< 4.9 U	13.9	10.8 J	9.4 J	12.2	< 4.3 U	9.6	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U
P09-10	**36**	**188**	--	8.3 J	< 4.9 U	< 2 U	< 1.8 UJ	3.6 J	< 0.57 U	< 1 U	< 0.92 U	< 10 U	< 5 UJ	< 5 U	2.7 J	< 5 UJ	< 5 UJ	< 5 U
P09-11B	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC (36 UG_L)																		
P09-01	**36**	**182**	< 100 U	R	< 4.9 U	< 1.9 UJ	4.6 J	9.5 J	35	25.8 J	< 3.3 U	15.7	**77.9 J**	25.2	**109 J**	19.4 J	29.2	**38.3**
P09-02A	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	**36**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	**36**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	**36**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	**36**	< 50 U	--	24.6	< 4.9 U	9.9 J	10.7 J	10.4 J	16.1	31.2	11.9 J	< 5 U	< 5 U	< 5 U	< 5 U	3.9 J	**348**	29.1
P09-10	**36**	**339**	--	20.2	< 4.9 U	< 1.3 UJ	< 1.8 UJ	< 1.8 UJ	< 1.8 U	< 1.8 U	< 3.3 U	< 5 U	< 5 U	< 5 U	< 5 U	**63 J**	< 5 U	< 5 U
P09-11B	36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	**36**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BARIUM (UG_L)																		
P09-01	--	279	< 82 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	5.5 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	775	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	1340	122	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 41 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	1920	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM (DISSOLVED) (UG_L)																		
P09-01	--	< 9.6 U	< 9.6 U	8.1	< 0.11 U	0.14 J	31.7 J	< 0.19 U	< 0.19 U	< 0.19 U	< 1.2 UJ	< 5 U	< 4 U	< 4 U	0.2 J	< 4 U	< 4 U	< 4 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 0.48 U	--	< 0.92 U	< 0.11 U	1.7	< 0.63 UJ	< 0.19 U	< 0.19 U	< 0.19 U	< 1.2 U	< 0.75 U	< 4 UJ	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
P09-10	--	38.3	--	< 2.6 U	< 0.11 U	< 1.3 U	< 0.63 UJ	< 0.19 U	< 0.19 U	< 0.19 U	< 1.2 U	< 5 U	< 4 UJ	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM (UG_L)																		
P09-01	--	44.7	< 9.6 U	8.8	31	4.4 J	38.9 J	38.2 J	< 0.63 U	9.8 J	44.7 J	< 1.3 U	10.6 J	3.4 J	26.1 J	5.5	5.6	5.8
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	8.8	--	1.8	< 0.11 U	1.4 J	< 0.63 UJ	< 0.63 U	< 0.63 U	1.1 J	< 1.3 UJ	< 5 U	< 4 U	< 4 U	< 4 U	< 4 U	9.1	1.3 J
P09-10	--	46.4	--	< 3.6 U	< 0.11 U	< 1 U	< 0.63 UJ	< 0.63 U	< 0.63 U	< 0.63 U	< 1.3 UJ	< 5 U	< 4 U	< 4 U	< 4 U	16.6	< 4 U	0.39 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM (UG_L)																		
P09-01	--	< 7 U	< 7 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 0.35 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	< 3.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	< 7 UJ	< 7 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 3.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	< 7 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CALCIUM (UG_L)																		
P09-01	--	356000	248000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	82800	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	97300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	383000	241000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	103000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	131000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM, TOTAL (DISSOLVED) (50 UG_L)																		
P09-01	**50**	**29200**	< 128 U	**1670**	**180 J**	22.3 J	**3600**	3.1 J	8	< 9.6 U	< 3 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
P09-02A	**50**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	**50**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	**50**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	**50**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	**50**	7 J	--	38.6	< 0.53 UJ	**126 J**	34	2.2 J	8.6	< 15.7 U	< 8.4 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
P09-10	**50**	**1230**	--	**285**	< 2.6 UJ	22.5 J	< 2.1 UJ	1.7 J	6.4	< 14.1 U	< 5.9 U	4.1 J	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	5.6 J
P09-11B	**50**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM, TOTAL (50 UG_L)																		
P09-01	**50**	**31800**	< 128 U	**1670**	**4100 J**	**667 J**	**4220 J**	**151 J**	6	**259 J**	**317 J**	**59.3**	**170**	**68.5**	**363 J**	**52.2**	**60.8**	**95.9**
P09-02A	**50**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	**50**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-04A	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	50	< 64 U	--	167	30	113 J	28.2 J	31.6 J	5.3	4350	25 J	10.2	< 10 U	403	331	10.2	1110	771
P09-10	50	2300	--	398	4.7	31.6 J	2.3 J	< 2.1 U	< 2.1 U	< 3.3 U	40.7 J	< 1.2 U	13.2	< 10 U	9.7 J	573	5.4 J	361
P09-11B	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COBALT (UG_L)																		
P09-01	--	< 66 U	< 66 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 3.3 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	328	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	288	< 66 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 33 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	431	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER (DISSOLVED) (2.9 UG_L)																		
P09-01	2.9	492	< 174 U	160	< 39 U	22 J	781 J	12.9	2.5	6.1 J	< 14.4 U	< 1.3 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U
P09-02A	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	2.9	< 8.7 U	--	< 5.9 U	< 15 U	146 J	74.2 J	14.6	2.2	0.66 J	< 56.9 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U
P09-10	2.9	1400	--	46	< 11 U	9.9 J	< 3.8 UJ	5.3	< 0.47 U	0.4 J	< 15.2 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U
P09-11B	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER (2.9 UG_L)																		
P09-01	2.9	981	< 174 U	270	1000	89.5 J	683 J	539 J	7.9	356 J	838 J	76.6	148 J	59.6	393 J	57.2	74.6	80.5
P09-02A	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	2.9	< 87 U	--	42	65	117 J	67.9 J	41.3 J	7.9	108 J	< 159 U	30.3	< 25 U	5.5 J	15 J	7.8 J	785	113
P09-10	2.9	1180	--	100	< 13 U	< 9.9 U	< 3.8 UJ	< 3.8 UJ	< 3.8 U	< 3.8 U	< 89.1 U	< 1.1 U	< 25 U	< 25 U	< 25 U	487	< 25 UJ	42.1
P09-11B	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON (DISSOLVED) (UG_L)																		
P09-01	--	734000	1660	176000	33000 J	27600 J	349000 J	400 J	713	816 J	110	6940	1350 J	36900	34500	20200	870	111000 J
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	51400	--	11800 J	6400	105000 J	66200	3430 J	328	< 108 U	1460	12200	15600 J	31500	32800	< 100 U	455	55000
P09-10	--	418000	--	29100 J	5100	9420 J	5480 J	125 J	216	< 134 U	< 172 U	< 13.9 U	< 100 U	106	< 100 U	< 100 U	< 100 U	5710 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON (UG_L)																		
P09-01	--	2240000	1820	218000	1189099 J	236000 J	411000	148000 J	8170	174000 J	278000 J	86000	232000	184000	644000 J	142000	167000	294000 J
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	64100	--	68900	4900	85900 J	59000	147000 J	41300	196000 J	47700 J	78500	96400	142000	296000	74400	1590000	225000
P09-10	--	1910000	--	72400	6100	7540 J	7010	6580 J	4870	4260 J	12200 J	10700	11600	5620	5510	261000	5120 J	21900 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD (DISSOLVED) (8.1 UG_L)																		
P09-01	**8.1**	**186**	< 36 U	**81.2**	**17**	1.7 J	**830 J**	< 0.5 U	0.88 J	< 0.5 UJ	< 0.78 U	< 3 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
P09-02A	**8.1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	8.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	8.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	**8.1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	8.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	**8.1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	**8.1**	2.3 J	--	**105**	< 2.6 U	**150 J**	**69.6 J**	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.78 U	< 3.6 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
P09-10	**8.1**	**560**	--	**86.8**	**9.7**	2.7 J	< 1.5 UJ	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.78 U	< 2.5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
P09-11B	8.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	8.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD (8.1 UG_L)																		
P09-01	**8.1**	**268**	< 36 U	**83**	**600 J**	**57.5 J**	**976 J**	**289 J**	2.5	**132 J**	**621 J**	**23**	**56.4**	**23.4**	**186 J**	**24.2 J**	**32.3**	**31.2**
P09-02A	**8.1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	8.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	**8.1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	**8.1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	**8.1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	**8.1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	**8.1**	< 18 U	--	**162**	3.5	**118 J**	**69.2 J**	**20.5**	2.1	**47.9**	< 6.5 UJ	< 2.3 U	< 5 U	< 5 U	< 5 U	< 5 U	**330**	**38.3**
P09-10	**8.1**	**555**	--	**117**	3	2.2 J	< 1.5 UJ	< 1.5 U	< 1.5 U	< 1.5 U	**30 J**	< 3 U	< 5 U	< 5 U	< 5 U	**229 J**	< 5 U	6.9 J
P09-11B	8.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	**8.1**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAGNESIUM (UG_L)																		
P09-01	--	870000	831000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	165000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	75700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	1090000	813000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	205000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	337000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE (DISSOLVED) (UG_L)																		
P09-01	--	3420	245	1640	540	825 J	9170 J	584	3140	1850 J	329 J	901	1970	8630	5190	3890	6690	4340
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-2
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IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	965	--	730	740 J	1390 J	847 J	1020	292	284 J	1160 J	1190	1290	1450	938	422	298	812
P09-10	--	3040	--	416	190 J	194 J	170 J	166	140	145 J	174 J	126	123	139	259	174	157 J	480
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE (UG_L)																		
P09-01	--	16100	257	1860	7000 J	1410 J	10600 J	6180 J	936	5550 J	13400 J	3760	2980	3900	14700 J	4730	4200	7360
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	608	--	1150	850 J	1050 J	811 J	942 J	360	547	1130 J	980	1350	1450	1080	471	2160	697
P09-10	--	14800	--	748	200 J	151 J	214 J	181 J	165	144	218 J	133	156	145	308	2180	199	266
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY (DISSOLVED) (0.08 UG_L)																		
P09-01	**0.08**	< 0.05 U	< 0.08 U	< 0.07 U	**0.26 J**	< 0.08 UJ	< 0.02 U	0.04 J	**0.71 J**	< 0.02 U	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.06 U
P09-02A	**0.08**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	**0.08**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	**0.08**	< 0.05 U	--	< 0.07 U	**0.36 J**	**0.37 J**	< 0.02 U	0.05 J	< 0.02 U	< 0.02 U	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
P09-10	**0.08**	**0.74**	--	0.08 J	< 0.19 U	< 0.27 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.06 U
P09-11B	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY (0.08 UG_L)																		
P09-01	**0.08**	< 0.11 U	--	**0.13 J**	**0.54 J**	**0.13 J**	**0.13 J**	0.07 J	< 0.02 U	< 0.02 U	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	**0.09 J**
P09-02A	**0.08**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	**0.08**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	**0.08**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	**0.08**	< 0.05 U	--	**0.68**	**1 J**	**0.36 J**	**0.23**	0.06 J	< 0.02 U	0.03 J	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	**1.5**	**0.2 J**
P09-10	**0.08**	**1.7**	--	**0.63**	**0.45 J**	< 0.27 UJ	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.02 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	**1.9**	< 0.2 U	< 0.06 U
P09-11B	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	**0.08**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL (DISSOLVED) (8.3 UG_L)																		
P09-01	**8.3**	**2900**	< 146 U	**522**	< 47 U	**18.4 J**	**2180 J**	**25.2**	**10.8**	**15.1**	5.5	< 40 U	2.4 J	4.5 J	**8.7 J**	7 J	**17.6 J**	**10.2 J**
P09-02A	**8.3**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	**8.3**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	**8.3**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	**8.3**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	**8.3**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	**8.3**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-09	8.3	14.1 J	--	81.8	< 5 U	141 J	82.5 J	16.3	6.4	62.5 J	35.5	7.7 J	4.7 J	622	17.4 J	< 40 U	< 40 U	19.2 J
P09-10	8.3	3050	--	183	< 7.5 U	17.5 J	4.7 J	3.3 J	2.8	2.7 J	4.7	1 J	1.2 J	< 40 U	14.5 J	25.6 J	5.7 J	1890
P09-11B	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL (8.3 UG_L)																		
P09-01	8.3	5390	< 146 U	533	1300	189 J	2680 J	286 J	16.1	129 J	503 J	53.1	147 J	52.5	313 J	55.7	57.9	77.7
P09-02A	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	8.3	< 73 U	--	162	56	116 J	79.8 J	37 J	9.1	345	76 J	8.7 J	5 J	587	26.6 J	< 40 U	200	132
P09-10	8.3	2320	--	256	< 9.6 U	18.6 J	6.6 J	< 5.2 U	< 4.3 U	< 4.3 U	18.5 J	< 40 U	5.4 J	< 40 U	14.6 J	638	< 40 U	216
P09-11B	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	8.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POTASSIUM (UG_L)																		
P09-01	--	274000	247000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	54600	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	42800	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	368000	241000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	60700	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	71500 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM (UG_L)																		
P09-01	--	< 74 U	< 74 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 3.7 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	< 37 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	< 74 U	< 74 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 37 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	< 74 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER (UG_L)																		
P09-01	--	166	< 122 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 6.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	< 61 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	< 122 U	< 122 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 61 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	< 122 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM (UG_L)																		
P09-01	--	6680000 J	7770000 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 242 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	211000 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	6650000 J	8220000 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	1850000 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	165000 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM (UG_L)																		
P09-01	--	353	< 90 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 4.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	923	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	1430	< 90 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 45 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-10	--	1560	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC (DISSOLVED) (81 UG_L)																		
P09-01	**81**	**1230**	< 142 U	**810**	64	20 J	**3350 J**	22.2 J	< 13.1 U	< 10.7 U	< 5.6 U	7 J	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 UJ
P09-02A	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	**81**	18.5	--	< 3.2 U	< 3.2 U	**304 J**	**222 J**	8.3 J	< 5.9 U	< 2 U	< 10.2 U	14.2 J	< 20 U	< 20 U	< 20 U	< 20 UJ	< 20 U	< 20 U
P09-10	**81**	**1320**	--	**240**	< 23 U	26.7 J	19.7 J	10.3 J	< 11.6 U	< 2.7 U	< 7.7 U	< 25 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U	< 20 U
P09-11B	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC (81 UG_L)																		
P09-01	**81**	**4840**	< 142 U	**920**	**3000**	**289 J**	**3950 J**	**1140 J**	15.9	**479 J**	**1680 J**	**208**	**509**	**203**	**1460 J**	**196**	**261**	**234 J**
P09-02A	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	**81**	< 71 U	--	**160**	52	**248 J**	**215 J**	< 70.4 U	16.6	**171**	31.3 J	33.6	13.9 J	17.7 J	65.6	11.6 J	**1390**	**201**
P09-10	**81**	**1930**	--	**340**	< 26 U	< 25.1 UJ	17 J	< 5 U	< 3.3 U	< 8.5 U	**116 J**	14 J	20.6	11.1 J	44.5	**1420**	< 20 U	34.5
P09-11B	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	**81**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1016 (UG_L)																		
P09-01	--	--	--	--	< 0.38 UJ	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.12 U	< 0.25 U	--	< 0.03 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 0.2 UJ	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.42 U	< 0.25 U	< 0.31 U	< 0.29 U	< 0.48 U	--	< 1 U
P09-10	--	--	--	< 0.1 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	< 0.29 U	--	< 0.03 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1221 (UG_L)																		
P09-01	--	--	--	--	< 0.77 UJ	< 0.57 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.12 U	< 0.25 U	--	< 0.06 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 0.4 UJ	< 0.57 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.42 U	< 0.25 U	< 0.31 U	< 0.29 U	< 0.48 U	--	< 1 U
P09-10	--	--	--	< 0.2 UJ	< 0.4 U	< 0.4 UJ	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.26 U	< 0.25 U	< 0.25 U	--	< 0.29 U	--	< 0.06 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1232 (UG_L)																		
P09-01	--	--	--	--	< 0.38 UJ	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.12 U	< 0.25 U	--	< 0.08 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 0.2 UJ	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.42 U	< 0.25 U	< 0.31 U	< 0.29 U	< 0.48 U	--	< 1 U
P09-10	--	--	--	< 0.1 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	< 0.29 U	--	< 0.08 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1242 (UG_L)																		
P09-01	--	--	--	--	< 0.38 UJ	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.12 U	< 0.25 U	--	< 0.14 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 0.2 UJ	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.42 U	< 0.25 U	< 0.31 U	< 0.29 U	< 0.48 U	--	< 1 U
P09-10	--	--	--	< 0.1 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	< 0.29 U	--	< 0.13 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1248 (UG_L)																		

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-01	--	--	--	--	< 0.38 UJ	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.12 U	< 0.25 U	--	< 0.06 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 0.2 UJ	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.42 U	< 0.25 U	< 0.31 U	< 0.29 U	< 0.48 U	--	< 1 U
P09-10	--	--	--	< 0.1 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	< 0.29 U	--	< 0.06 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1254 (UG_L)																		
P09-01	--	--	--	--	< 0.38 UJ	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.12 U	< 0.25 U	--	< 0.07 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 0.2 UJ	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.42 U	< 0.25 U	< 0.31 U	< 0.29 U	< 0.48 U	--	< 1 U
P09-10	--	--	--	< 0.1 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	< 0.29 U	--	< 0.07 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260 (UG_L)																		
P09-01	--	--	--	--	< 0.38 UJ	1.2	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	0.05 J	< 0.28 U	< 0.25 U	< 0.28 U	< 0.12 U	< 0.25 U	--	< 0.02 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 0.2 UJ	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.42 U	< 0.25 U	< 0.31 U	< 0.29 U	< 0.48 U	--	< 1 U
P09-10	--	--	--	< 0.1 UJ	< 0.2 U	< 0.2 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.26 U	< 0.25 U	< 0.25 U	--	0.19 J	--	0.03 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCHLORINATED BIPHENYLS (PCBS) (0.03 UG_L)																		
P09-01	**0.03**	--	--	--	< 0.38 U	**1.2**	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	**0.05**	< 0.28 U	< 0.041 U	< 0.046 U	< 0.019 U	< 0.041 U	--	< 0.02 U
P09-02A	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	**0.03**	--	--	--	< 0.2 U	< 0.29 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.42 U	< 0.041 U	< 0.051 U	< 0.048 U	< 0.079 U	--	< 0.05 U
P09-10	**0.03**	--	--	< 0.1 U	< 0.2 U	< 0.2 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.26 U	< 0.041 U	< 0.041 U	--	**0.19**	--	0.03
P09-11B	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDD (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.0096 U
P09-09	--	< 0.1 U	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.01 UJ
P09-10	--	< 0.1 U	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.01 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.01 U
P09-09	--	< 0.1 U	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.01 U
P09-10	--	< 0.1 U	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.01 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDT (0.001 UG_L)																		
P09-01	0.001	--	--	--	--	--	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.0074 UJ
P09-09	0.001	< 0.1 U	--	--	--	--	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.063 U	--	--	< 0.04 UJ	< 0.01 U
P09-10	**0.001**	< 0.1 U	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	**0.0073 J**	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 UJ	< 0.0088 U
P09-11B	0.001	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALDRIN (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 UJ	< 0.021 U	< 0.007 U
P09-09	--	< 0.05 U	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.0097 U
P09-10	--	< 0.05 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.0083 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALPHA-BHC (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	< 0.01 U	< 0.056 UJ	< 0.024 U	< 0.022 UJ	< 0.021 U	< 0.0062 U
P09-09	--	< 0.05 U	--	--	--	--	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	< 0.01 U	< 0.063 UJ	--	--	< 0.04 U	< 0.0086 U
P09-10	--	< 0.05 U	--	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	< 0.01 U	< 0.05 UJ	--	< 0.023 UJ	< 0.022 U	< 0.0074 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALPHA-CHLORDANE (0.004 UG_L)																		
P09-01	0.004	--	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.0056 U

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NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-09	0.004	< 0.05 U	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.0078 U
P09-10	0.004	< 0.05 U	--	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.0067 U
P09-11B	0.004	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1016 (UG_L)																		
P09-01	--	< 0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.28 U	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.33 UJ	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	--
AROCLOR-1221 (UG_L)																		
P09-01	--	< 0.67 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.28 U	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.33 UJ	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	--
AROCLOR-1232 (UG_L)																		
P09-01	--	< 0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.28 U	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.33 UJ	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	--
AROCLOR-1242 (UG_L)																		
P09-01	--	< 0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.28 U	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.33 UJ	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	--
AROCLOR-1248 (UG_L)																		
P09-01	--	< 0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.28 U	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.33 UJ	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	--
AROCLOR-1254 (UG_L)																		
P09-01	--	< 0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.28 U	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.33 UJ	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	--
AROCLOR-1260 (UG_L)																		
P09-01	--	< 0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.28 U	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.08 J	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.14 J	--
BETA-BHC (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.0089 U
P09-09	--	< 0.05 U	--	--	--	--	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.01 U
P09-10	--	< 0.05 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.01 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DELTA-BHC (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.01 UJ	< 0.01 U	< 0.056 UJ	< 0.024 U	< 0.022 UJ	< 0.021 U	< 0.01 U
P09-09	--	< 0.05 U	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.01 UJ	< 0.01 U	< 0.063 UJ	--	--	< 0.04 U	< 0.01 U
P09-10	--	< 0.05 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.01 UJ	< 0.01 U	< 0.05 UJ	--	< 0.023 UJ	< 0.022 U	< 0.01 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIELDRIN (0.0019 UG_L)																		
P09-01	0.0019	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.0067 U
P09-09	0.0019	< 0.1 U	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.0093 U
P09-10	**0.0019**	**0.0053 J**	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.0079 U
P09-11B	0.0019	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN I (0.0087 UG_L)																		
P09-01	0.0087	--	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.0089 U
P09-09	0.0087	< 0.05 U	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.01 U
P09-10	0.0087	< 0.05 U	--	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.01 U

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		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-11B	0.0087	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN II (0.0087 UG_L)																		
P09-01	0.0087	--	--	--	--	--	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.0081 U
P09-09	0.0087	< 0.1 U	--	--	--	--	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.01 U
P09-10	0.0087	< 0.1 U	--	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.0097 U
P09-11B	0.0087	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.0093 U
P09-09	--	< 0.1 U	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.01 U
P09-10	--	< 0.1 U	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.01 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN (0.0023 UG_L)																		
P09-01	0.0023	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.01 U
P09-09	0.0023	< 0.1 U	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.01 U
P09-10	0.0023	< 0.1 U	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 UJ	< 0.01 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.01 U
P09-11B	0.0023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN KETONE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.0094 U
P09-09	--	< 0.1 U	--	--	--	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.01 U
P09-10	--	< 0.1 U	--	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.01 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEPTACHLOR (0.0036 UG_L)																		
P09-01	**0.0036**	--	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.009 UJ
P09-09	0.0036	< 0.05 U	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.01 UJ
P09-10	0.0036	< 0.05 U	--	< 0.02 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 U	< 0.01 UJ	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.01 UJ
P09-11B	0.0036	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE (0.0036 UG_L)																		
P09-01	0.0036	--	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.0089 U
P09-09	0.0036	< 0.05 U	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.01 U
P09-10	**0.0036**	< 0.05 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	**0.005 J**	< 0.005 U	< 0.005 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.01 U
P09-11B	0.0036	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROBENZENE (129 UG_L)																		
P09-01	129	--	--	--	--	--	< 0.005 U	0.0071	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.056 U	< 0.024 U	--	< 0.021 U	< 0.008 U
P09-09	129	< 0.1 U	--	--	--	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.063 U	--	--	< 0.04 U	< 0.01 U
P09-10	129	< 0.1 U	--	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.005 U	< 0.01 U	--	< 0.05 U	--	--	< 0.022 U	< 0.0096 U
LINDANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 UJ	< 0.021 U	< 0.0099 U
P09-09	--	< 0.05 U	--	--	--	--	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 UJ	< 0.01 U	< 0.063 U	--	--	< 0.04 U	< 0.01 U
P09-10	--	< 0.05 U	--	< 0.005 U	< 0.005 U	< 0.005 UJ	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.005 U	< 0.005 UJ	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 U	< 0.022 U	< 0.01 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHOXYCHLOR (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.01 U	< 0.01 U	< 0.056 U	< 0.024 U	< 0.022 U	< 0.021 U	< 0.0074 UJ
P09-09	--	< 0.5 U	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.01 U	< 0.01 U	< 0.063 U	--	--	< 0.04 UJ	< 0.01 U
P09-10	--	< 0.5 U	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.01 U	< 0.01 U	< 0.05 U	--	< 0.023 UJ	< 0.022 UJ	< 0.0088 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POLYCHLORINATED BIPHENYLS (PCBS) (0.03 UG_L)																		
P09-01	0.03	< 0.33 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.026 U	--
P09-09	**0.03**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.08**	--
P09-10	**0.03**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.14**	--
1,2,4-TRICHLOROBENZENE (UG_L)																		

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		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 UJ	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROBENZENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 UJ	< 10 U	< 11 UJ	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 UJ	< 11 UJ	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 UJ	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-DICHLOROBENZENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 UJ	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,4-DICHLOROBENZENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 UJ	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1-METHYLNAPHTHALENE (UG_L)																		
P09-10	--	< 1.1 UJ	--	< 0.5 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE) (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 11 UJ	--	< 10 U	< 11 U	< 5.3 U	< 5.2 U	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 10 U	--	< 11 U	--	--	< 8.3 U	--
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 10 UJ	--	< 10 U	--	< 5.7 U	< 7.7 UJ	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	R	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
2,4,6-TRICHLOROPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	R	R	R	R	R	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 17 U	< 19 UJ
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 U	< 11 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-DICHLOROPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	R	R	R	R	R	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 17 U	< 19 UJ
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 U	< 11 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-DIMETHYLPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	R	R	R	< 5 UJ	R	R	R	R	R	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	R	R	R	< 5 UJ	< 20 U	< 20 U	< 21 U	--	--	< 17 U	< 19 UJ
P09-10	--	--	--	R	< 10 U	R	< 5 U	R	R	R	< 5 U	< 20 UJ	< 36 U	< 20 U	--	< 11 U	< 15 U	< 11 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-DINITROPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 10 UJ	R	R	R	R	R	< 21 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 10 UJ	< 20 U	< 20 U	< 21 UJ	--	--	< 33 U	< 38 UJ
P09-10	--	--	--	< 10 U	< 20 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 20 UJ	< 36 U	< 20 UJ	--	< 23 U	< 31 U	< 22 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4-DINITROTOLUENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 11 U	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	R	--	--	< 17 U	< 19 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 UJ	< 11 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,6-DINITROTOLUENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 11 U	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	R	--	--	< 17 U	< 19 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 UJ	< 11 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-CHLORONAPHTHALENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 UJ	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-CHLOROPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	R	R	R	R	R	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 8.3 U	< 9 UJ
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 U	< 6 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.1 U	< 1 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1 U	< 1 U
P09-09	--	--	--	--	--	< 0.85 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.1 U	< 1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.3 U	< 2 U
P09-10	--	< 1.1 UJ	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 1.1 U	< 1 U	< 1 U	--	< 1.2 U	< 1.3 U	< 1 U
2-METHYLPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	R	R	R	R	R	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 17 U	< 19 UJ
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 U	< 11 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-NITROANILINE (UG_L)																		
P09-01	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 11 U	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	R	--	--	< 17 U	< 19 U
P09-10	--	--	--	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 UJ	< 11 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-NITROPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	R	R	R	R	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 17 U	< 19 UJ

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NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 U	< 11 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3- AND 4-METHYLPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	R	R	R	R	< 10 U	5 J
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 11 U	--	--	< 17 U	< 19 UJ
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 18 U	< 10 U	--	< 11 U	< 15 U	< 11 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3,3-DICHLOROBENZIDINE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	R	< 5 UJ	< 5 UJ	< 5 UJ	< 5.6 UJ	< 5 UJ	< 5 U	< 5.6 UJ	< 5.3 UJ	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	R	< 5 UJ	< 5 UJ	< 5 UJ	< 5.1 U	< 5 UJ	< 5.3 U	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 UJ	R	< 5 UJ	< 5 UJ	< 5 U	< 5.1 UJ	< 9.1 UJ	< 5.1 U	--	< 5.7 UJ	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3-NITROANILINE (UG_L)																		
P09-01	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 11 UJ	< 10 UJ	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 U	R	--	--	< 17 UJ	< 19 U
P09-10	--	--	--	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 18 U	< 10 U	--	< 11 UJ	< 15 UJ	< 11 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,6-DINITRO-2-METHYLPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	R	< 10 UJ	R	R	R	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 11 U	--	--	< 17 U	< 19 U
P09-10	--	--	--	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 18 UJ	< 10 U	--	< 11 U	< 15 U	< 11 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-BROMOPHENYL-PHENYLETHER (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 UJ	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-CHLORO-3-METHYLPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	R	R	R	R	R	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 20 U	< 20 U	< 21 U	--	--	< 17 U	< 19 UJ

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NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 20 UJ	< 36 U	< 20 U	--	< 11 U	< 15 U	< 11 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-CHLOROANILINE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	R	< 5 UJ	< 5 UJ	< 5 UJ	< 11 UJ	< 10 UJ	< 10 U	< 11 UJ	< 11 UJ	< 10 UJ	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	R	< 5 UJ	< 5 UJ	< 5 UJ	< 10 U	< 10 UJ	< 11 U	--	--	< 17 UJ	< 19 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	R	< 5 UJ	< 5 UJ	< 5 U	< 10 UJ	< 18 UJ	< 10 U	--	< 11 UJ	< 15 UJ	< 11 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-CHLOROPHENYL-PHENYLETHER (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 UJ	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-METHYLPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	3 J	1 J	< 5 UJ	< 5 UJ	--	--	--	--	--	--	--
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	1 J	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-NITROANILINE (UG_L)																		
P09-01	--	--	--	--	--	--	< 10 UJ	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 11 U	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 10 UJ	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 10 U	R	--	--	< 17 U	< 19 U
P09-10	--	--	--	< 10 U	< 20 U	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 UJ	< 10 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 UJ	< 11 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-NITROPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	R	R	R	R	R	< 21 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 10 U	< 10 UJ	< 10 U	< 10 U	< 10 UJ	< 51 UJ	< 50 U	< 53 U	--	--	< 33 U	< 38 UJ
P09-10	--	--	--	< 10 U	< 20 UJ	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 10 U	< 51 UJ	< 91 U	< 51 U	--	< 23 UJ	< 31 U	< 22 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACENAPHTHENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.1 U	< 1 U	< 1.1 U	< 1.3 U	< 1.1 U	0.11 J	< 1 U

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		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-09	--	--	--	--	--	< 0.85 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.1 U	< 1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.3 U	< 2 U
P09-10	--	< 1.1 UJ	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 1.1 U	< 1 U	< 1 U	--	< 1.2 U	0.044 J	< 1 U
ACENAPHTHYLENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.21 U	< 0.2 U	< 0.21 U	< 0.26 U	< 0.22 UJ	< 0.2 U	< 0.03 U
P09-09	--	--	--	--	--	< 1.7 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.24	< 0.2 U	< 0.23 U	< 0.22 U	< 0.22 UJ	1.1	< 0.06 U
P09-10	--	< 2.2 UJ	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 0.23 U	< 0.21 U	< 0.2 U	--	< 0.24 UJ	0.055 J	< 0.03 U
ANTHRACENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 U	< 1.1 U	< 1 U	< 1.1 U	< 1.3 U	< 1.1 UJ	< 1 U	< 1 UJ
P09-09	--	--	--	--	--	< 0.08 U	< 0.05 U	< 0.05 U	0.03 J	< 0.05 UJ	< 0.05 U	< 1.1 U	< 1 U	< 1.1 U	< 1.1 U	< 1.1 UJ	< 1.3 U	< 2 UJ
P09-10	--	< 0.11 UJ	--	0.04 J	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 U	< 1.1 U	0.05 J	< 1 U	--	< 1.2 UJ	< 1.3 U	< 1 UJ
BENZO(A)ANTHRACENE (UG_L)																		
P09-01	--	--	--	--	--	--	0.02 J	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.19 U	< 0.17 U	0.38	< 0.07 U
P09-09	--	--	--	--	--	< 0.08 U	< 0.05 U	< 0.05 U	0.06 J	< 0.05 U	< 0.05 U	< 0.17 U	< 0.15 U	0.18	< 0.17 U	< 0.17 U	< 0.2 U	< 0.12 U
P09-10	--	< 0.11 UJ	--	0.12	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	0.08 J	< 0.05 UJ	< 0.05 U	< 0.17 U	0.16	0.14 J	--	< 0.18 U	0.26	< 0.07 U
BENZO(A)PYRENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.07 UJ	< 0.05 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.19 U	< 0.17 U	< 0.15 U	< 0.09 U
P09-09	--	--	--	--	--	< 0.08 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.07 UJ	< 0.05 U	< 0.17 U	< 0.15 U	0.34 J	< 0.17 U	< 0.17 U	< 0.2 U	< 0.15 U
P09-10	--	< 0.11 UJ	--	0.12	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	0.12 J	< 0.08 UJ	< 0.05 U	< 0.17 U	0.26	0.13 J	--	0.042 J	< 0.19 U	< 0.09 U
BENZO(B)FLUORANTHENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.19 U	< 0.17 U	0.25	< 0.03 U
P09-09	--	--	--	--	--	< 0.08 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.17 U	< 0.15 U	0.22	< 0.17 U	0.18	< 0.2 U	< 0.06 U
P09-10	--	< 0.22 UJ	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.17 U	< 0.16 U	0.11 J	--	< 0.18 U	< 0.19 U	< 0.03 U
BENZO(G,H,I)PERYLENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.19 U	< 0.17 U	< 0.15 U	0.03 J
P09-09	--	--	--	--	--	< 0.08 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.17 U	< 0.15 U	0.15 J	< 0.17 U	< 0.17 U	0.084 J	< 0.06 U
P09-10	--	< 0.22 UJ	--	< 0.1 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.1 U	< 0.17 U	< 0.16 U	0.066 J	--	< 0.18 U	< 0.19 U	< 0.04 U
BENZO(K)FLUORANTHENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.16 U	< 0.15 U	< 0.16 U	< 0.19 U	< 0.17 U	< 0.15 U	< 0.05 U
P09-09	--	--	--	--	--	< 0.08 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.17 U	< 0.15 U	0.24	< 0.17 U	< 0.17 U	< 0.2 U	< 0.08 U
P09-10	--	< 0.11 UJ	--	0.05	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.17 U	0.13 J	0.072 J	--	0.14 J	< 0.19 U	< 0.05 U
BENZOIC ACID (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	< 11 UJ	--	--	< 11 UJ	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	24.7 J	--	--	--	--	--	--
P09-10	--	--	--	< 10 U	--	--	--	--	--	--	--	13.5 J	--	--	--	--	--	--
BENZYL ALCOHOL (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	R	--	--	< 11 UJ	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--	--	--	--	--	--
P09-10	--	--	--	< 5 U	--	--	--	--	--	--	--	< 10 UJ	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-CHLOROETHYL)ETHER (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-CHLOROISOPROPYL)ETHER (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--	--	--	--	R
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--	--	--	--	< 9 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 18 U	--	--	--	--	< 6 U
BIS(2-ETHYLHEXYL)PHTHALATE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	3 J	< 5 U	< 2 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	< 10 U
P09-09	--	--	--	--	--	--	< 3 U	3 J	< 1 U	< 2 U	< 34 U	< 10 U	< 10 U	< 11 U	--	--	< 17 U	< 19 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 UJ	2 J	< 1 U	< 3 U	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 UJ	< 11 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BUTYLBENZYLPHTHALATE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 17 U	< 19 UJ
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 UJ	< 11 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBAZOLE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE (UG_L)																		
P09-01	--	--	--	--	--	--	0.06	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.16 UJ	< 0.15 U	< 0.16 UJ	< 0.19 U	< 0.17 U	< 0.15 U	< 0.02 U
P09-09	--	--	--	--	--	< 0.08 U	< 0.05 U	< 0.05 U	0.03 J	0.03 J	< 0.05 U	< 0.17 UJ	< 0.15 U	< 0.17 UJ	< 0.17 U	< 0.17 U	< 0.2 U	< 0.04 U
P09-10	--	< 0.11 UJ	--	0.1	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	0.09 J	< 0.05 UJ	< 0.05 U	< 0.17 UJ	0.17	< 0.15 UJ	--	< 0.18 U	< 0.19 U	< 0.03 U
CRESOLS (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	R	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	28.1	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	--	--	--	--	--	--
DIBENZ(A,H)ANTHRACENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.16 U	< 0.15 U	< 0.16 U	< 0.19 U	< 0.17 U	< 0.15 U	< 0.02 U
P09-09	--	--	--	--	--	< 0.17 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.17 U	< 0.15 U	0.4	< 0.17 U	< 0.17 U	< 0.2 U	< 0.04 U
P09-10	--	< 0.22 UJ	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 0.17 U	< 0.16 U	< 0.15 U	--	< 0.18 U	< 0.19 U	< 0.02 U
DIBENZOFURAN (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5.6 UJ	< 5 U	< 5 U	< 5.6 U	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5.1 U	< 5 U	< 5.3 U	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5.1 UJ	< 9.1 U	< 5.1 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIETHYLPHTHALATE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 UJ	< 10 UJ	< 11 U	< 11 U	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 UJ	< 11 UJ	--	--	< 17 U	< 19 UJ
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 UJ	< 10 UJ	--	< 11 U	< 15 UJ	< 11 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIMETHYL PHTHALATE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 UJ	< 11 UJ	< 11 U	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 UJ	--	--	< 17 U	< 19 UJ
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 UJ	--	< 11 U	< 15 UJ	< 11 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-BUTYLPHTHALATE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 17 U	< 19 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 UJ	< 11 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DI-N-OCTYLPHTHALATE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	1 J	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 17 U	< 19 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 UJ	< 11 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	0.1	< 1.1 U	< 1 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1 U	< 1 U
P09-09	--	--	--	--	--	< 0.17 U	< 0.1 U	< 0.1 U	0.12 J	0.16	< 0.1 U	< 1.1 U	< 1 U	0.71 J	< 1.1 U	< 1.1 U	0.32 J	< 2 U
P09-10	--	< 0.22 UJ	--	0.31	< 0.1 UJ	< 0.1 U	< 0.1 U	< 0.1 U	0.19 J	< 0.1 UJ	< 0.1 U	< 1.1 U	0.61 J	< 1 U	--	< 1.2 U	0.64 J	< 1 U
FLUORENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 UJ	< 1.1 U	< 1 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1 U	< 1 U
P09-09	--	--	--	--	--	< 0.17 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 UJ	< 1.1 U	< 1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.3 U	< 2 U
P09-10	--	< 0.22 UJ	--	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.1 UJ	< 0.1 UJ	< 1.1 U	< 1 U	< 1 U	--	< 1.2 U	< 1.3 U	< 1 U
HEXACHLOROBUTADIENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 5.3 U	< 5.2 U	R

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NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROCYCLOPENTADIENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 11 U	< 10 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 UJ	< 10 U	< 10 U	< 11 U	--	--	< 17 U	< 19 UJ
P09-10	--	--	--	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 10 UJ	< 18 U	< 10 U	--	< 11 U	< 15 UJ	< 11 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROETHANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.16 UJ	< 0.15 U	< 0.16 U	< 0.19 U	< 0.17 U	< 0.15 U	0.02 J
P09-09	--	--	--	--	--	< 0.08 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.17 UJ	< 0.15 U	< 0.17 U	< 0.17 U	< 0.17 U	0.69	< 0.04 U
P09-10	--	< 0.11 UJ	--	0.06	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 UJ	< 0.05 U	< 0.17 UJ	< 0.16 U	0.098 J	--	< 0.18 U	0.24	< 0.02 U
ISOPHORONE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NAPHTHALENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.1 U	< 1 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1 U	< 1 U
P09-09	--	--	--	--	--	< 0.85 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.1 U	< 1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.3 U	< 2 U
P09-10	--	< 1.1 UJ	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 1.1 U	< 1 U	< 1 U	--	< 1.2 U	< 1.3 U	< 1 U
NITROBENZENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 UJ	< 5.3 U	R	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	R	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-NITROSODINPROPYLAMINE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
N-NITROSODIPHENYLAMINE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 11 UJ	< 10 U	< 10 U	< 11 U	< 5.3 U	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 8.3 U	< 9 U
P09-10	--	--	--	< 5 U	< 10 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 UJ	< 6 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL (7.9 UG_L)																		
P09-01	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	R	--	--	--
P09-09	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	7.9	--	--	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PHENANTHRENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.08 U	< 0.21 U	< 0.2 U	0.09 J	< 0.26 U	< 0.22 U	< 0.2 U	< 0.06 U
P09-09	--	--	--	--	--	< 0.08 U	< 0.05 U	< 0.05 U	< 0.15 U	0.08	< 0.09 U	< 0.22 U	< 0.2 U	0.58	< 0.22 U	< 0.22 U	< 0.27 U	< 0.12 U
P09-10	--	< 0.11 UJ	--	0.16	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.21 U	< 0.05 UJ	< 0.08 U	< 0.23 U	0.49	0.41	--	< 0.24 U	0.78	< 0.07 U
PHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	R	R	R	R	R	< 5.2 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 10 U	< 10 U	< 11 U	--	--	< 8.3 U	< 9 UJ
P09-10	--	--	--	< 5 U	< 10 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 10 UJ	< 18 U	< 10 U	--	< 5.7 U	< 7.7 U	< 6 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE (UG_L)																		
P09-01	--	--	--	--	--	--	0.09 J	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 1.1 U	< 1 U	< 1.1 U	< 1.3 U	< 1.1 U	< 1 U	< 1 U
P09-09	--	--	--	--	--	< 0.08 U	< 0.05 U	< 0.05 U	0.12 J	< 0.05 U	< 0.05 U	< 1.1 U	< 1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.3 U	< 2 U
P09-10	--	< 0.11 UJ	--	0.3	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	0.15 J	< 0.05 UJ	< 0.05 U	< 1.1 U	0.36 J	0.85 J	--	< 1.2 U	0.65 J	< 1 U
2,4,5-TRICHLOROPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	< 5.6 U	< 1 U	R	--	R	< 1 U	R
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	< 5 U	< 1 U	< 0.53 U	--	--	< 1.7 U	< 2 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	< 5 U	0.24 J	< 0.51 U	--	< 1.1 U	< 1.5 UJ	< 1 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
2-METHYLNAPHTHALENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACENAPHTHENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACENAPHTHYLENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTHRACENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(A)PYRENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHRYSENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIBENZ(A,H)ANTHRACENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORANTHENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROBENZENE (129 UG_L)																		
P09-04A	129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	129	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NAPHTHALENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL (7.9 UG_L)																		
P09-01	7.9	--	--	--	--	--	--	--	--	--	--	< 0.11 U	< 1 U	R	--	R	< 1 U	R
P09-04A	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	7.9	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 1 U	< 0.53 U	--	--	< 1.7 U	< 2 U
P09-10	7.9	--	--	--	--	--	--	--	--	--	--	< 0.1 U	1.9	< 0.51 U	--	< 1.1 U	< 1.5 UJ	< 1 UJ
P09-11B	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	7.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PHENANTHRENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
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		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PYRENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,1-TRICHLOROETHANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 UJ	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 UJ	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2,2-TETRACHLOROETHANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1,2-TRICHLOROETHANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 UJ	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 UJ	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-DICHLOROETHANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,1-DICHLOROETHENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROETHANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 UJ	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 UJ	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROETHENE, TOTAL (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.51 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.51 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	0.14	< 1 U	< 1 U	0.2	< 1 U	< 2 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.8 U	< 0.51 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-DICHLOROPROPANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-BUTANONE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 U	R	R	< 5 U	2.04 J	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	R	R	< 5 U	R	3.95 J	< 5 U	3.94 J	< 5 UJ	R	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
P09-10	--	--	--	< 5 U	R	R	< 5 U	R	R	< 5 U	< 5 UJ	< 5 UJ	R	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2-HEXANONE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	R	R	< 5 UJ	R	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	2.2 J	< 5 U	< 5 UJ
P09-10	--	--	--	< 5 UJ	R	R	< 5 UJ	R	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-METHYL-2-PENTANONE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	1.1 J	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U
P09-10	--	--	--	< 5 UJ	< 5 U	< 5 U	< 5 UJ	R	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ACETONE (UG_L)																		
P09-01	--	--	--	--	--	--	< 5 UJ	R	R	R	< 8.8 U	5.9 J	40.3	7.1	< 5 U	< 5 U	< 5 UJ	< 5 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	R	R	< 5 U	R	24 J	20 J	19	< 5 UJ	27.6	37.2	< 5 U	< 5 U	9.9 J	15.4 J
P09-10	--	--	--	R	R	R	< 5 UJ	< 4.32 U	15 J	R	< 3.6 U	< 5 UJ	9	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.2 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.2 U
P09-10	--	--	--	4 J	2.6	6.45	18	12	13	28 J	5.05 J	3.1	5.2	6.5	5.3	1.9 J	2.6	5.6
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BROMODICHLOROMETHANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 2 UJ	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BROMOFORM (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BROMOMETHANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U

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		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON DISULFIDE (UG_L)																		
P09-01	--	--	--	--	--	--	0.28 J	< 1 U	< 1 U	< 1 U	< 1 UJ	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	1.37	< 1 UJ	< 1 U	0.96 J	< 1 U	1.74 J	1.4 J	< 5 U	< 5 U	< 5 UJ	< 5 UJ	9.4	3.7 J
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	0.3 J	< 1 U	< 1 U	< 1 U	< 1 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CARBON TETRACHLORIDE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 UJ	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 UJ	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 UJ	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHLOROBENZENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHLOROETHANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U	< 2 U	< 2 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.23 J	0.32 J	< 5 U	< 5 U	< 5 U	< 5 U	< 2 UJ	< 2 U	< 2 U
P09-10	--	--	--	< 1 U	< 1 U	0.29 J	< 1 U	0.59 J	< 1 U	0.7 J	0.18 J	< 5 U	< 5 U	< 5 U	< 5 U	< 2 UJ	< 2 U	< 2 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHLOROFORM (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHLOROMETHANE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 2 U	< 2 U	< 2 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 UJ	< 1 UJ	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 2 UJ	< 2 U	< 2 U
P09-10	--	--	--	< 1 UJ	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 U	< 5 U	< 5 U	< 2 UJ	< 2 U	< 2 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CIS-1,2-DICHLOROETHENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	0.14 J	< 1 U	< 1 U	0.2 J	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CIS-1,3-DICHLOROPROPENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIBROMOCHLOROMETHANE (UG_L)																		

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ETHYLBENZENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	0.62 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M- AND P-XYLENE (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE (UG_L)																		
P09-01	--	--	--	--	--	--	< 0.12 U	< 0.62 U	< 1.88 U	< 1.39 U	< 2.33 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 UJ	< 1 UJ	< 1 U	< 0.65 U	< 2.21 U	< 0.82 U	< 0.28 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U
P09-10	--	--	--	< 1 UJ	< 1 UJ	< 1 UJ	< 0.16 U	< 1.8 U	< 1.83 U	< 0.69 U	< 0.25 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 2 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
O-XYLENE (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STYRENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 U	< 5 U	< 5 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 5 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	< 5 UJ	< 5 U	< 5 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TETRACHLOROETHENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TOLUENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	0.39 J	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	29	0.12 J	0.32 J	0.17 J	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	0.21 J	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	2 J	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRANS-1,2-DICHLOROETHENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRANS-1,3-DICHLOROETHENE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.2 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 UJ	< 0.2 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 UJ	< 0.2 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRICHLOROETHENE (UG_L)																		

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NORTH KINGSTOWN, RHODE ISLAND

		ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13	ME 14	ME 15	ME 16	ME 17
	PAL	Dec 2001-Jan 2002	Feb-Mar 2002	Jun 2002	Sep 2002	Jan 2003	Apr-May 2003	Jun-Jul 2003	Sep 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004	Mar 2005	Jun 2005	Sep 2005	Dec 2005
P09-01	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VINYL CHLORIDE (UG_L)																		
P09-01	--	--	--	--	--	--	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 U	< 1 U
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U
P09-10	--	--	--	5 J	3.99	8.72	27 J	14	15	35	5.47	4.9	6.1	6.7	2.1	6.7 J	3	9.5
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
XYLENES, TOTAL (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
SULFIDE (MG_L)																		
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	0.77	< 0.75 UJ	0.20	< 0.030 U	< 0.030 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	1.3	< 0.75 UJ	11	< 0.030 U	< 0.030 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.03 U	< 0.75 U	11	< 0.15 U	< 0.030 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.2	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.70 J	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.03 U	0.80 J	< 0.030 U	< 0.030 U	< 0.030 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1.2	24	< 0.030 U	< 0.030 U
2,4,5-TRICHLOROPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PENTACHLOROPHENOL (7.9 UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALUMINUM (DISSOLVED) (UG_L)																		
P09-01	204	< 200 U	< 200 U	< 200 UJ	< 200 U	28 J	< 1200 U	1430	1280 J	1090	< 200 UJ	< 200 UJ	< 160 U	< 340 U	307	--	873 J	4050
P09-02A	--	--	--	--	--	--	--	--	--	--	< 200 UJ	< 200 UJ	172 J	< 340 U	362	--	< 500 U	14800
P09-03A	--	--	--	--	--	--	--	--	--	--	< 200 UJ	< 200 UJ	< 40 U	--	195 J	--	< 500 U	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 200 UJ	< 200 UJ	293 J	--	174 J	--	< 500 U	< 500 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	367 J	--	3220	3960
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	252 J	--	< 1000 U	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	188000	--	--	8180	5270
P09-09	< 200 U	< 200 UJ	< 200 U	< 400 UJ	< 200 U	77.7	434	< 400 UJ	< 62.5 U	< 600 UJ	< 200 UJ	86.3 J	< 40 U	< 340 U	168 J	--	1840	3690
P09-10	< 200 U	< 200 UJ	< 200 U	< 200 UJ	< 200 U	25.6 J	< 300 U	< 20 UJ	< 300 UJ	< 300 UJ	< 200 UJ	< 200 UJ	< 40 U	< 340 U	219 J	--	144	1800
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	449 J	< 1000 U	--	< 500 U	3680
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	516	43.5
ALUMINUM (UG_L)																		
P09-01	54200	75000	58500	277000 J	515000	411 J	11200	114000	74600	90900	42300	232000	36000	30400	4000	--	10600	37300
P09-02A	--	--	--	--	--	--	--	--	--	--	9150	< 200 UJ	278 J	< 340 U	141 J	--	1800 J	99500
P09-03A	--	--	--	--	--	--	--	--	--	--	1160 J	338 J	35.6 J	--	1630 J	--	5690 J	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 200 UJ	< 200 UJ	474	--	261 J	--	2640 J	2030
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	52100	5560	--	14800	25800
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	125000	106000	--	3460	130000
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	2360	2750 J	--	7460	129000
P09-09	1170	5840	9090	7990 J	13800	1090 J	20300	134000 J	12100	12400	21200	150000	20100	15500	18400	--	45600	23300
P09-10	< 200 U	2640	5200	2780 J	994	2830 J	118 J	24.6 J	2160	1420	6160	432 J	528	< 340 U	805	--	98300	2070
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	482 J	196 J	--	< 500 U	3630
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	622000	622000	--	13500	332
ANTIMONY (DISSOLVED) (UG_L)																		
P09-01	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	3.7 J	< 4 UJ	< 20 U	< 0.75 U	< 1 UJ	< 2.5 UJ	0.38 J	< 2 U	< 10 U	0.23 J	--	< 40.0 U	10.7 J
P09-02A	--	--	--	--	--	--	--	--	--	--	< 2.5 UJ	< 0.5 UJ	0.36 J	< 10 U	0.32 J	--	< 40.0 U	18.6 J
P09-03A	--	--	--	--	--	--	--	--	--	--	< 2.5 UJ	0.34 J	0.48 J	--	< 1.0 U	--	< 40.0 U	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 2.5 UJ	0.55 J	0.79 J	--	< 1.0 U	--	< 40.0 U	< 40.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	< 40.0 U	18.3 J
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	< 40.0 U	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 8 U	--	--	< 40.0 U	9.4 J
P09-09	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 2.1 U	< 40 U	< 0.3 U	0.18 J	< 2.5 U	< 0.5 UJ	< 0.5 U	< 10 U	0.42 J	--	< 40.0 U	16.4 J

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	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-10	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 8 U	< 2 U	< 1 UJ	< 1 U	< 2.5 U	< 0.5 UJ	< 0.5 U	< 10 U	0.12 J	--	< 0.80 U	9.0 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 1.0 U	--	< 40.0 U	18.4 J
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 16.0 U	< 0.80 U
ANTIMONY (UG_L)																		
P09-01	< 6 U	< 6 U	< 6 U	< 18 U	45.6	7.4 J	< 4 UJ	< 20 UJ	< 200 UJ	2.6	< 2.6 UJ	1 J	0.49 J	< 10 U	0.33 J	--	< 40.0 U	10.4 J
P09-02A	--	--	--	--	--	--	--	--	--	--	< 2.5 UJ	< 0.5 UJ	0.3 J	< 10 U	0.33 J	--	< 40.0 U	16.6 J
P09-03A	--	--	--	--	--	--	--	--	--	--	< 2.5 UJ	0.49 J	0.59 J	--	< 1.2 U	--	< 40.0 U	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 2.5 UJ	0.55 J	0.73 J	--	< 1.0 U	--	< 40.0 U	< 40.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 56.5 U	2.7	--	< 40.0 U	20.1 J
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 14 U	2.7	--	< 40.0 U	10.7 J
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 8 U	< 1.0 U	--	< 40.0 U	< 20.0 U
P09-09	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 40 U	< 40 U	< 200 UJ	4.3	< 4 UJ	6.8	3.8	< 10 U	3.2	--	< 40.0 U	18.1 J
P09-10	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 2.1 U	< 8 U	< 2 U	< 1 UJ	0.64 J	< 2.5 UJ	< 0.5 UJ	< 0.5 U	< 10 U	0.22 J	--	< 20.0 U	8.7 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 1.0 U	--	< 40.0 U	20.2 J
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 9 U	9.2	--	< 20.0 U	< 0.80 U
ARSENIC (DISSOLVED) (36 UG_L)																		
P09-01	< 5 U	4 J	< 5 U	32.4	12.6	< 1.7 U	< 20 U	13.9 J	< 200 UJ	7.7	16.6 J	8	15.1 J	< 27.7 U	11.5	--	< 40.0 U	5.4 J
P09-02A	--	--	--	--	--	--	--	--	--	--	12.2 J	7.9	6.4	< 33 U	12.6	--	21.5 J-	11.8 J
P09-03A	--	--	--	--	--	--	--	--	--	--	16 J	5.5	6	--	8.0	--	15.0 J-	--
P09-04A	--	--	--	--	--	--	--	--	--	--	15.9 J	< 7.2 U	7.9	--	12.6	--	< 40.0 U	< 40.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	9.7	--	< 40.0 U	22.2 J
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.0	--	**37.6 J**	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	**176**	--	--	< 40.0 U	8.6 J
P09-09	3.5 J	7	< 5 U	**42.6 J**	25.8	< 1.7 U	< 1.7 U	7.9 J	< 80 UJ	5.7	< 20 U	5.9	7.5	< 21.6 U	7.1	--	23.9 J	< 40.0 U
P09-10	< 5 U	5.6	< 5 U	31.2	< 5 U	< 1.7 U	< 8 UJ	< 1 UJ	1.6 J	< 5 U	7 J	< 6 U	4.9 J	< 18.9 U	7.8	--	3.1	< 20.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	32.7 J	10.2	--	< 40.0 U	< 40.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 16.0 U	0.20 J-
ARSENIC (36 UG_L)																		
P09-01	21.6	26	**59.9**	**187 J**	**171**	< 1.7 U	14 J	**49.8**	**157**	**154**	**118**	**79.6**	16	**54 J**	15.6	--	**131**	**62.0**
P09-02A	--	--	--	--	--	--	--	--	--	--	16.8 J	5.7	7.9	31.4 J	10.7	--	20.1 J-	24.3 J
P09-03A	--	--	--	--	--	--	--	--	--	--	13.1 J	6.3	7.8	--	15.3	--	16.8 J-	--
P09-04A	--	--	--	--	--	--	--	--	--	--	15.5 J	< 5.6 U	8.8	--	14.7	--	16.5 J-	< 40.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	**96.1 J**	19.2	--	14.5 J	12.4 J
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	**112**	**56.1**	--	**78.9 J**	**113**
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	25 J	13.6	--	**81.1 J**	10.0 J
P09-09	< 5 U	23.2	12.4	**61.4 J**	**64.3**	< 1.7 U	**219**	**135**	**56.7**	**102**	**39.3**	**163**	**83.5**	**89.4 J**	**45.6**	--	**318**	19.4 J
P09-10	< 5 U	6.1	12.6	31.7	< 5 U	< 1.7 U	< 8 UJ	0.3 J	9.8	11	31.9	< 5.6 U	5.6	< 19 U	5.2	--	**226**	< 20.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	31.6 J	15.0	--	< 40.0 U	< 40.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	**633**	**432**	--	**115**	0.35 J-
BARIUM (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM (DISSOLVED) (UG_L)																		
P09-01	< 4 U	< 4 U	< 4 U	14.4	< 4 U	< 1.3 U	< 4 U	< 10 UJ	< 0.25 U	0.07 J	< 1 U	< 0.2 U	< 0.8 U	< 7.5 U	< 0.20 U	--	< 15.0 U	< 7.5 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U	0.04 J	< 7.5 U	< 0.20 U	--	< 15.0 U	< 15.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U	< 0.2 U	--	< 0.20 U	--	< 15.0 U	--

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-04A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U	0.17 J	--	< 0.20 U	--	< 15.0 U	< 15.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.06 J	--	< 15.0 U	< 15.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.20 U	--	< 15.0 U	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	16 J	--	--	< 15.0 U	< 7.5 U
P09-09	< 4 U	< 4 U	< 4 U	19.4	11.4	< 1.3 U	< 1.3 U	< 20 U	< 0.1 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 7.5 U	< 0.20 U	--	< 15.0 U	< 15.0 U
P09-10	< 4 U	< 4 U	< 4 U	14	< 4 U	< 1.3 U	< 5 U	< 1 U	< 0.05 U	< 1 U	< 1 U	< 0.2 U	0.04 J	< 7.5 U	< 0.20 U	--	< 0.30 U	< 7.5 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 7.5 U	< 0.20 U	--	< 15.0 U	< 15.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 6.0 U	< 0.30 U
BERYLLIUM (UG_L)																		
P09-01	5.4	10.1	6.2	46.9	66.8	< 1.3 U	0.76 J	16.8	6.8	6.9	4.9 J	18.1	4.4	< 7.5 U	0.24 J	--	< 15.0 U	11.5 J
P09-02A	--	--	--	--	--	--	--	--	--	--	0.65 J	< 0.2 U	0.05 J	< 7.5 U	< 0.20 U	--	< 15.0 U	20.5 J
P09-03A	--	--	--	--	--	--	--	--	--	--	< 1 U	0.06 J	< 0.2 U	--	0.13 J	--	< 15.0 U	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.2 U	< 0.4 U	--	< 0.20 U	--	< 15.0 U	< 15.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 6.9 U	0.53 J	--	< 15.0 U	6.6 J
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 11.3 U	9.7	--	< 15.0 U	20.3 J
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 6 U	0.26 J	--	< 15.0 U	28.9
P09-09	< 4 U	1.1 J	1.5 J	20.2	13.4	< 1.3 U	2.7 J	13.4 J	1.1 J	1.9 J	1.8 J	14.2	2.2	< 7.5 U	1.6	--	11.3 J	4.7 J
P09-10	< 4 U	0.44 J	< 4 U	11.4	< 4 U	< 1.3 U	< 5 U	< 1 U	0.27 J	0.18 J	0.71 J	0.05 J	0.07 J	< 7.5 U	0.06 J	--	23.8 J	< 7.5 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 7.5 U	< 0.20 U	--	< 15.0 U	< 15.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	52.6	56.4	--	< 7.5 U	< 0.30 U
CADMIUM (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CALCIUM (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM, TOTAL (DISSOLVED) (50 UG_L)																		
P09-01	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	7.4 J	< 12 UJ	**58.2**	**210**	**327**	3.8 J	< 3 UJ	< 16 U	< 13 U	7.7	--	**97.4 J**	**1200**
P09-02A	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 3 UJ	< 4 U	< 13 U	< 5.0 U	--	< 30.0 UJ	**607**
P09-03A	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 3 UJ	< 4 U	--	< 5.0 U	--	< 30.0 UJ	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 3 UJ	< 4 U	--	< 5.0 U	--	< 30.0 U	< 30.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**403**	--	24.9 J	40.6 J
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**52.3**	--	< 30.0 U	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	**1580**	--	--	**400**	**305**
P09-09	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	< 16.7 U	12.1 J	5.4 J	< 2.2 UJ	1.2 J	< 10 UJ	< 3 UJ	< 4 U	< 13 U	12.0	--	< 100 U	19.9 J
P09-10	< 10 U	< 10 U	< 10 U	< 10 UJ	< 10 U	2.4 J	1.4 J	16.5	< 15 UJ	3.4 J	30.8 J	14.1 J	< 4 U	< 13 U	< 5.0 U	--	9.4	19.8 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 13 UJ	< 5.0 U	--	< 30.0 U	**52.8 J**
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 40.0 U	1.1 J-
CHROMIUM, TOTAL (50 UG_L)																		
P09-01	**83.8**	**108**	**215**	**724 J**	**21300**	**600 J**	**63.4**	**18300**	**9380**	**56800**	**916 J**	**1090 J**	**388**	**177**	**81.0**	--	**1380**	**43400**
P09-02A	--	--	--	--	--	--	--	--	--	--	44 J	< 4.6 U	< 5.8 U	< 13 U	< 5.0 U	--	**207**	**4040**
P09-03A	--	--	--	--	--	--	--	--	--	--	14.8 J	16.5 J	< 7.8 U	--	**53.4**	--	**473**	--

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-04A	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 3 UJ	8.4	--	< 5.0 U	--	**208**	**67.6 J**
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	**1600**	**6270**	--	**179**	**287**
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	**4430**	**31600**	--	< 100 U	**5570**
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	18.4 J	**2370**	--	**571**	**2490**
P09-09	**448**	**229**	**3420**	**446 J**	**673**	**93.2**	**2290**	**5410**	**153**	**526**	**295 J**	**691 J**	**297**	**6700**	**4970**	--	**526**	**175**
P09-10	**80.7**	**1100**	**294**	**97.5 J**	14.9	**6510**	11.6 J	3.1	**1660**	**3170**	**3830 J**	**690 J**	19.4	< 13 U	**136**	--	**3040**	**51.3**
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 13 UJ	< 5.0 U	--	**378**	36.2 J
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	**3680**	**3810**	--	**208**	8.5
COBALT (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER (DISSOLVED) (2.9 UG_L)																		
P09-01	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	**28.4 J**	**3.4 J**	**5.7 J**	< 3.5 UJ	**8.4 J**	< 10 U	< 5.9 U	< 8 U	< 19 U	< 3.6 U	--	< 50.0 U	**64.8**
P09-02A	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 3.9 U	**5.5**	< 19 U	< 4.5 U	--	< 50.0 U	**192**
P09-03A	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 5.9 U	**4.3**	--	< 3.0 U	--	**24.5 J**	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 6.5 UJ	**19**	--	**6.5**	--	< 50.0 U	< 50.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**13.3**	--	**33.3 J**	< 50.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 3.0 U	--	< 50.0 U	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	**436**	--	--	< 100 U	< 50.0 U
P09-09	< 25 U	< 25 U	< 25 U	< 25 U	**3.2 J**	< 1.2 UJ	< 0.96 U	< 40 U	< 3.5 UJ	< 50 U	< 10 UJ	**3.4 J**	2.5 J	< 19 U	< 3.0 U	--	< 100 U	< 50.0 U
P09-10	< 25 U	< 25 U	< 25 U	< 25 U	< 25 U	< 3.8 UJ	< 25 U	0.44 J	< 0.7 U	< 25 U	< 10 UJ	< 2 UJ	1.2 J	< 19 U	< 3.0 U	--	2.0	< 25.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 19 U	< 3.0 U	--	**88.6 J**	< 50.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 20.0 U	0.44 J
COPPER (2.9 UG_L)																		
P09-01	**98.1**	**111**	**90.7**	**400**	**1090**	< 10.5 UJ	**41.5**	**635**	**332**	**2020**	**223 J**	**359 J**	**99.3**	**78.3 J**	**12.6**	--	**248**	**405**
P09-02A	--	--	--	--	--	--	--	--	--	--	**64.1 J**	< 4.2 U	**6.8**	< 19 U	**6.2**	--	**32.6 J**	**918**
P09-03A	--	--	--	--	--	--	--	--	--	--	< 14.8 UJ	**10.5 J**	**4.4**	--	**7.8**	--	**63.4 J**	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 6.3 UJ	**6.4**	--	< 3.0 U	--	**51.2 J**	**17.4 J**
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	**677**	**183**	--	**134**	**109**
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	**807**	**399**	--	< 100 U	**566**
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 15 U	**25.3**	--	< 100 U	**25.1 J**
P09-09	**27**	**84.4**	**126**	**98.2**	**123**	**18.2 J**	**316**	**930**	**107 J**	**194**	**163 J**	**2860 J**	**220**	**1000**	**558**	--	**216**	**393**
P09-10	< 25 U	**32.6**	**54.4**	**27.3**	**7.1 J**	**49.4 J**	1.4 J	0.34 J	**44.6**	**23.2 J**	**69.2 J**	**11.1 J**	2.8 J	< 19 U	< 5.3 U	--	**175**	**6.1 J**
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 19 U	< 3.0 U	--	< 50.0 U	< 50.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	**3170**	**2150**	--	**59.4**	1.3 J
IRON (DISSOLVED) (UG_L)																		
P09-01	135000	6040	30600	13400	3870	9750	42000	92100	72500	43900	46400	1860	2870	< 2080 U	< 100 U	--	< 10000 U	41000
P09-02A	--	--	--	--	--	--	--	--	--	--	1580	52200	1780	< 4440 U	6140	--	< 2500 U	65000
P09-03A	--	--	--	--	--	--	--	--	--	--	879	658	550	--	< 500 U	--	1190 J+	--
P09-04A	--	--	--	--	--	--	--	--	--	--	949	< 682 U	720	--	< 500 U	--	< 2500 U	< 2500 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	57000	--	< 10000 U	986 J
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	44900	--	< 2500 U	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	488000	--	--	21400	30300
P09-09	1590	< 100 U	2530	454	23600	156000	73500	80900	73200	93100	5160	140000	37500	47300	19400	--	75100	2800 J
P09-10	< 100 U	< 100 U	25.3 J	84.8 J	44.6 J	23500	6800	3870	5770	8360	1380	43700	23300	40400	19000	--	23500	13400
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	1840 J	1940	--	< 2500 U	1730 J

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15400	18600
IRON (UG_L)																		
P09-01	326000	262000	231000	631000	1270000	18700	254000	453000 J	1020000	657000	740000	552000	89100	135000	31200	--	85900	482000
P09-02A	--	--	--	--	--	--	--	--	--	--	18900	56100	2170	4860 J	6150	--	79100	672000
P09-03A	--	--	--	--	--	--	--	--	--	--	3080	1910	776	--	3490	--	91200	--
P09-04A	--	--	--	--	--	--	--	--	--	--	940	< 711 U	1240	--	< 500 U	--	8940 J	4870 J
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	197000	118000	--	27500	42800
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	337000	460000	--	< 10000 U	271000
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	5930 J	349000	--	20700	243000
P09-09	197000	198000	382000	301000	355000	139000 J	931000	669000	345000	1140000	180000	1110000	402000	397000	197000	--	2200000	321000
P09-10	9850	52500	64500	21400	11200	169000 J	7560	5010	39900	53200	64200	13800	25800	42900	26500	--	1550000	22300
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	1950 J	1970	--	< 10000 U	1800 J
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	1770000	1380000	--	36300	43300
LEAD (DISSOLVED) (8.1 UG_L)																		
P09-01	7.2	< 5 U	< 5 U	**8.5**	< 5 U	< 2.6 U	< 4 U	< 10 UJ	< 5.1 U	< 5 U	< 2.5 U	< 0.5 UJ	< 2 U	< 7.5 U	< 1.0 U	--	4.5 J	**16.1 J**
P09-02A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 0.5 U	0.74 J	< 7.5 U	< 1.0 U	--	< 15.0 U	**104**
P09-03A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 0.5 U	0.18 J	--	< 1.0 U	--	< 15.0 U	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 0.5 UJ	3.3	--	< 1.0 U	--	< 15.0 U	< 15.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2.7	--	**14.0 J**	< 15.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	< 15.0 U	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	**331**	--	--	< 50.0 U	**27.3**
P09-09	< 5 U	< 5 UJ	< 5 U	**9.3**	7.4	< 11.3 UJ	2.7 J	< 20 UJ	< 5.1 U	< 10 U	< 2.5 U	0.34 J	0.16 J	< 7.5 U	< 1.0 U	--	< 50.0 U	< 15.0 U
P09-10	< 5 U	< 5 UJ	< 5 U	7.6	< 5 U	< 2.5 UJ	< 5 U	< 1 UJ	< 1.02 U	< 5 U	< 2.5 U	< 0.5 U	0.08 J	< 7.5 U	< 1.0 U	--	1.0	< 7.5 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 7.5 U	< 1.0 U	--	< 15.0 U	< 15.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 6.0 U	0.17 J
LEAD (8.1 UG_L)																		
P09-01	**52.3**	**54.7**	**36.2**	**223**	**396**	< 2.6 U	**17.1**	**292**	**151 J**	**103 J**	**111**	**188**	**53**	**31.5 J**	4.3	--	< 50.0 U	**389**
P09-02A	--	--	--	--	--	--	--	--	--	--	**29.3**	< 0.5 UJ	0.9 J	< 7.5 U	< 1.0 U	--	< 50 U	**712**
P09-03A	--	--	--	--	--	--	--	--	--	--	< 4 UJ	1.4	0.2 J	--	4.8	--	< 50 U	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 0.5 UJ	1.3	--	< 1.0 U	--	< 50 U	**9.5 J**
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	**626**	**56.8**	--	**56.4**	**394**
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	**417**	**202**	--	< 50.0 U	**441**
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 6 U	7.1	--	< 50.0 U	**321**
P09-09	< 5 U	**36.5**	**38.7**	**55.6**	**77.3**	< 10.3 UJ	**136**	**1050**	**65.8**	**57.3**	**99.5**	**555**	**95.2**	**99.4**	**91.0**	--	**273**	**441**
P09-10	< 5 U	**14.3**	**19.2**	**23.7**	7.3	< 23 UJ	< 5 U	< 1 UJ	**14.1**	7.2	**38.9**	1.4	0.58 J	< 7.5 U	2.7	--	**188**	3.7 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 7.5 U	< 1.0 U	--	< 15.0 U	< 15.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	**2570**	**2280**	--	**46.2**	1.6
MAGNESIUM (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE (DISSOLVED) (UG_L)																		
P09-01	8010	929	2390	1420	6180	525	6320	6170 J	3840	3790	4030	227 J	2080	268	47.3	--	262	1210
P09-02A	--	--	--	--	--	--	--	--	--	--	248	821 J	55.3	135 J	93.3	--	120	625
P09-03A	--	--	--	--	--	--	--	--	--	--	8.6 J	7.4 J	2.2	--	31.8	--	509	--
P09-04A	--	--	--	--	--	--	--	--	--	--	19.3	< 5.4 UJ	29.3	--	4.2	--	< 75.0 U	< 75.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	503	--	232	83.6 J

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	728	--	70.9 J	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	4210	--	--	2060	1130
P09-09	397	356	745	462	986	739	425	811	474	773	3300	1420 J	640	610	241	--	1390	130
P09-10	156	129	147	61.8	173	217	120	138	143	175	177	346	163	297	144	--	200	554
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 50 U	184	--	< 75.0 U	752
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17300	1250
MANGANESE (UG_L)																		
P09-01	8830	6440	2300	8590	21900	910	8860	8890	8050	8910	5860	7220 J	3030	1360	843	--	5480	3110
P09-02A	--	--	--	--	--	--	--	--	--	--	410	870 J	51.4	145 J	92.4	--	412	4120
P09-03A	--	--	--	--	--	--	--	--	--	--	37.4	24.1 J	4.3	--	74.8	--	451	--
P09-04A	--	--	--	--	--	--	--	--	--	--	21.8	< 7.7 UJ	11	--	4.5	--	67.7 J	65.9 J
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	1470	818	--	549	614
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	3360	2910	--	136	4700
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	245	2720	--	2130	3060
P09-09	889	635	1210	815	1380	526	1490	4270	792	1620	3800	4010	922	1670	646	--	11700	885
P09-10	184	279	262	292	177	372	129	148	224	224	261	211	197	300	144	--	2970	607
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 50 U	169	--	88.2 J	859
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	13900	10700	--	6830	1150
MERCURY (DISSOLVED) (0.08 UG_L)																		
P09-01	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 U	< 0.2 U	< 0.2 UJ	< 0.02 UJ	< 0.22 U	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.05 U	< 0.10 U	--	< 0.050 UJ	< 0.10 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.1 UJ	< 0.1 UJ	0.02 J	< 0.05 U	< 0.10 U	--	< 0.050 U	**0.14 J**
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.1 UJ	< 0.1 UJ	0.02 J	--	< 0.20 U	--	< 0.050 U	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.1 UJ	< 0.02 UJ	< 0.1 U	--	< 0.20 U	--	< 0.050 U	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U	--	< 0.20 UJ	< 0.10 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.20 U	--	< 0.050 UJ	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.6**	--	--	0.079 J-	< 0.10 U
P09-09	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 U	< 0.044 U	< 0.2 U	< 0.02 UJ	< 0.2 U	< 0.1 UJ	< 0.1 UJ	< 0.1 U	< 0.05 U	< 0.10 U	--	< 0.050 UJ	< 0.10 U
P09-10	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 U	< 0.044 U	< 0.2 U	--	< 0.2 U	< 0.1 UJ	< 0.01 UJ	< 0.1 U	< 0.05 U	< 0.10 U	--	< 0.050 UJ	R
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	< 0.10 U	--	< 0.050 UJ	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.073 J-	< 0.10 U
MERCURY (0.08 UG_L)																		
P09-01	**0.081 J**	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 U	< 0.2 U	**0.13 J**	**0.47**	**0.14 J**	**0.38**	0.06 J	0.02 J	< 0.05 U	< 0.10 U	--	**0.11 J-**	< 0.10 U
P09-02A	--	--	--	--	--	--	--	--	--	--	**0.14 J**	< 0.1 UJ	< 0.1 U	< 0.05 U	< 0.10 U	--	< 0.050 U	< 0.10 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.1 UJ	< 0.1 UJ	< 0.1 U	--	< 0.20 U	--	0.074 J	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.1 UJ	< 0.02 UJ	< 0.1 U	--	< 0.20 U	--	0.063 J	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.64**	< 0.20 U	--	< 0.20 UJ	< 0.10 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	**0.91**	**0.41**	--	< 0.20 UJ	**0.57**
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	0.04 J	--	0.062 J-	< 0.10 U
P09-09	0.073 J	**0.094 J**	< 0.2 U	< 0.2 U	< 0.2 U	< 0.044 U	**0.26**	**3.4**	**0.25**	**0.16 J**	**0.29 J**	< 0.02 UJ	**0.41**	< 0.17 U	**0.24**	--	**5.0 J-**	R
P09-10	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	0.064	< 0.044 U	< 0.2 U	< 0.2 UJ	< 0.2 U	0.08 J	< 0.01 UJ	0.02 J	< 0.05 U	< 0.10 U	--	**9.3 J-**	R
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	< 0.10 U	--	< 0.050 UJ	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	**5**	**11.6**	--	**0.50 J-**	< 0.10 U
NICKEL (DISSOLVED) (8.3 UG_L)																		
P09-01	< 40 U	**11.4 J**	**75.4**	**770**	**2320**	**159**	**386**	**1220**	**397**	**1300**	**161 J**	**233 J**	< 23.7 U	< 15.7 U	**28.9**	--	**31.5 J**	**251**
P09-02A	--	--	--	--	--	--	--	--	--	--	**19 J**	**8.6 J**	**21.4 J**	< 15.1 U	**18.0**	--	< 30.0 U	**203**
P09-03A	--	--	--	--	--	--	--	--	--	--	< 14 UJ	6.6 J	**18.1 J**	--	**33.5**	--	**29.2 J**	--
P09-04A	--	--	--	--	--	--	--	--	--	--	**19 J**	7.3 J	**15.9**	--	**36.4**	--	**13.0 J**	**24.7 J**
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**132**	--	**23.5 J**	**39.2 J**
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	**150**	--	< 30.0 U	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	**1910**	--	--	**436**	**342**

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IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-09	108	< 40 U	12 J	14.9 J	10.7 J	< 0.9 U	4	< 20 UJ	< 200 UJ	< 80 UJ	278 J	15.9 J	16.6	< 24.3 U	75.9	--	< 50 U	26.5 J
P09-10	7 J	13.9 J	2.3 J	6.9 J	2.1 J	5.2	0.9 J	31.4	2.9 J	8.4 J	84.5 J	68.5 J	14.3	< 25.5 U	27.6	--	6.5	28.0
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	16.5 J	18.4	--	41.9 J	55.8
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12500	1.4
NICKEL (8.3 UG_L)																		
P09-01	82	98.5	114	763	8630	886	39.2	6050	1400	8320	228 J	954 J	133	118	256	--	486	3550
P09-02A	--	--	--	--	--	--	--	--	--	--	41 J	9.2 J	21.7 J	15.6 J	19.4	--	114 J	1130
P09-03A	--	--	--	--	--	--	--	--	--	--	24.6 J	17.7 J	14.5	--	64.2	--	264 J	--
P09-04A	--	--	--	--	--	--	--	--	--	--	18.7 J	7.1 J	14.1	--	34.2	--	111 J	80.6
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	1270	1410	--	125	322
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	2360	5250	--	92.2	3410
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	153	2740	--	490	1830
P09-09	144	34.2 J	104	104	81.8	6.4	87.5 J	1680	33.9 J	36.9 J	491 J	573 J	117	510	400	--	448	104
P09-10	14.8 J	23.4 J	40.9	17.8 J	4.8 J	68.2	1.8 J	7.6	33.8 J	44.8	153 J	212 J	32.8	25.1 J	33.8	--	525	28.6
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	15.8 J	16.3	--	66.7	65.8
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	2650	3080	--	4220	9.0
POTASSIUM (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC (DISSOLVED) (81 UG_L)																		
P09-01	< 20 U	12.3 J	< 20 U	30.9	< 20 U	54.3	< 40 UJ	34.4	20.1 J	19.7 J	< 40 U	< 40 U	< 32 U	< 50 U	10 J	--	< 75.0 U	**173**
P09-02A	--	--	--	--	--	--	--	--	--	--	< 40 U	< 8 U	22.4	< 50 U	23.1	--	< 75.0 UJ	**489**
P09-03A	--	--	--	--	--	--	--	--	--	--	< 40 U	< 8 U	20.9	--	**81.3**	--	**119 J**	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 40 U	< 8 U	65.2	--	32.0	--	< 75.0 UJ	**240**
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13.0	--	< 75.0 U	**405**
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--	< 75.0 U	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	**1410**	--	--	**147**	**429**
P09-09	< 20 U	< 20 U	< 20 U	19.3 J	< 20 U	19.8	31.9 J	< 40 UJ	< 8.65 U	5.2 J	< 40 UJ	< 8 U	12	< 50 U	7.6 J	--	< 75.0 U	**154**
P09-10	2.4 J	< 20 U	11.2 J	29.1	< 20 U	< 2.2 UJ	9.7 J	15	< 1.73 U	< 25 UJ	< 40 U	< 8 U	7.4 J	< 50 U	7.2 J	--	8.3	77.1
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 50 U	14.1	--	< 75.0 U	**156**
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	33.9 J	16.9
ZINC (81 UG_L)																		
P09-01	**330**	**471**	**333**	**1670**	**3550**	**87.6**	**124**	**1120**	**1360**	**890**	**827**	**1400**	**237**	**228 J**	37.8	--	**277**	**2970**
P09-02A	--	--	--	--	--	--	--	--	--	--	< 74.1 U	< 8 U	22.7	< 50 U	26.5	--	59.9 J	**3550**
P09-03A	--	--	--	--	--	--	--	--	--	--	< 40 UJ	13.9	24.5	--	**721**	--	**3520 J**	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 40 U	< 8 U	22.7	--	28.8	--	**208 J**	**3080**
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	**1800**	**152**	--	**179**	**138000**
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	**1680**	**821**	--	**90.5 J**	**42700**
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 40 U	42.1	--	**179**	**39800**
P09-09	23	**141**	**131**	**194**	**243**	70.6 J	**860**	**2910**	**288**	**576**	**374**	**1960**	**387**	**385**	**265**	--	**2250**	**1550**
P09-10	14.5 J	45.9	57.6	54.8	< 20 U	**103 J**	13.1 J	23.7	58.1	19.2 J	**104**	11	9.2 J	< 50 U	9.9 J	--	**2820**	**94.0**
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 50 U	21.8	--	< 75.0 U	**160**
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	**9160**	**7260**	--	**397**	**128**
AROCLOR-1016 (UG_L)																		
P09-01	< 6 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.27 U	< 0.17 U	< 0.67 U	< 0.5 UJ	< 0.16 U	--	< 0.089 U	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 U	--	--	< 0.20 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 U	--	--	--
P09-09	< 0.42 U	< 0.71 U	< 0.31 UJ	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.13 U	< 0.68 U	< 0.38 UJ	< 0.056 U	< 0.5 UJ	< 0.13 U	< 0.27 U	--	--	< 0.20 U
P09-10	< 5.4 UJ	< 0.28 U	< 0.25 UJ	< 0.25 U	< 0.42 U	< 0.17 U	< 0.52 U	< 0.5 U	< 0.1 U	< 0.48 U	< 0.094 U	< 0.075 U	< 0.25 UJ	< 0.13 UJ	< 0.24 U	--	--	< 0.20 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 UJ	< 0.24 U	--	--	--
AROCLOR-1221 (UG_L)																		
P09-01	< 6 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.27 U	< 0.17 U	< 0.67 U	< 0.5 UJ	< 0.21 U	--	< 0.089 U	< 0.05 U	< 0.25 UJ	< 0.25 U	< 0.24 U	--	--	< 0.10 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	< 0.25 UJ	< 0.25 U	< 0.24 U	--	--	--
P09-09	< 0.42 U	< 0.71 U	< 0.31 UJ	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.18 U	< 0.68 U	< 0.38 UJ	< 0.056 U	< 0.5 UJ	< 0.25 U	< 0.27 U	--	--	< 0.10 U
P09-10	< 5.4 UJ	< 0.28 U	< 0.25 UJ	< 0.25 U	< 0.42 U	< 0.17 U	< 0.52 U	< 0.5 U	< 0.14 U	< 0.48 U	< 0.094 U	< 0.075 U	< 0.25 UJ	< 0.25 UJ	< 0.24 U	--	--	< 0.10 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.24 U	--	--	--
AROCLOR-1232 (UG_L)																		
P09-01	< 6 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.27 U	< 0.17 U	< 0.67 U	< 0.5 UJ	< 0.094 U	--	< 0.089 U	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 U	--	--	< 0.20 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 U	--	--	--
P09-09	< 0.42 U	< 0.71 U	< 0.31 UJ	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.08 U	< 0.68 U	< 0.38 UJ	< 0.056 U	< 0.5 UJ	< 0.13 U	< 0.27 U	--	--	< 0.20 U
P09-10	< 5.4 UJ	< 0.28 U	< 0.25 UJ	< 0.25 U	< 0.42 U	< 0.17 U	< 0.52 U	< 0.5 U	< 0.063 U	< 0.48 U	< 0.094 U	< 0.075 U	< 0.25 UJ	< 0.13 UJ	< 0.24 U	--	--	< 0.20 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 UJ	< 0.24 U	--	--	--
AROCLOR-1242 (UG_L)																		
P09-01	< 6 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.27 U	< 0.17 U	< 0.67 U	< 0.5 UJ	< 0.19 U	--	< 0.089 U	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 U	--	--	< 0.10 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 U	--	--	--
P09-09	< 0.42 U	< 0.71 U	< 0.31 UJ	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.16 U	< 0.68 U	< 0.38 UJ	< 0.056 U	< 0.5 UJ	< 0.13 U	< 0.27 U	--	--	< 0.10 U
P09-10	< 5.4 UJ	< 0.28 U	< 0.25 UJ	< 0.25 U	< 0.42 U	< 0.17 U	< 0.52 U	< 0.5 U	< 0.13 U	< 0.48 U	< 0.094 U	< 0.075 U	< 0.25 UJ	< 0.13 UJ	< 0.24 U	--	--	< 0.10 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 UJ	< 0.24 U	--	--	--
AROCLOR-1248 (UG_L)																		

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-01	< 6 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.27 U	< 0.17 U	< 0.67 U	< 0.5 UJ	< 0.21 U	--	< 0.089 U	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 U	--	--	< 0.10 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 U	--	--	--
P09-09	< 0.42 U	< 0.71 U	< 0.31 UJ	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.18 U	< 0.68 U	< 0.38 UJ	< 0.056 U	< 0.5 UJ	< 0.13 U	< 0.27 U	--	--	< 0.10 U
P09-10	< 5.4 UJ	< 0.28 U	< 0.25 UJ	< 0.25 U	< 0.42 U	< 0.17 U	< 0.52 U	< 0.5 U	< 0.14 U	< 0.48 U	< 0.094 U	< 0.075 U	< 0.25 UJ	< 0.13 UJ	< 0.24 U	--	--	< 0.10 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 UJ	< 0.24 U	--	--	--
AROCLOR-1254 (UG_L)																		
P09-01	< 6 U	< 0.28 U	< 0.25 U	< 0.28 U	< 0.27 U	< 0.17 U	< 0.67 U	< 0.5 UJ	< 0.083 U	--	< 0.089 U	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 U	--	--	< 0.20 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 U	--	--	--
P09-09	< 0.42 U	< 0.71 U	< 0.31 UJ	< 0.25 UJ	< 0.27 U	< 0.17 U	< 0.5 U	< 0.5 U	< 0.071 U	< 0.68 U	< 0.38 UJ	< 0.056 U	< 0.5 UJ	< 0.13 U	< 0.27 U	--	--	< 0.20 U
P09-10	< 5.4 UJ	< 0.28 U	< 0.25 UJ	< 0.25 U	< 0.42 U	< 0.17 U	< 0.52 U	< 0.5 U	< 0.056 U	< 0.48 U	< 0.094 U	< 0.075 U	< 0.25 UJ	< 0.13 UJ	< 0.24 U	--	--	< 0.20 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 UJ	< 0.24 U	--	--	--
AROCLOR-1260 (UG_L)																		
P09-01	0.014 J	< 0.28 U	< 0.25 U	< 0.28 U	< 0.27 U	< 0.17 U	< 0.67 UJ	< 0.5 UJ	< 0.18 U	--	< 0.089 U	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 UJ	--	--	< 0.20 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	--	< 0.05 U	< 0.25 UJ	< 0.13 U	< 0.24 UJ	--	--	--
P09-09	< 0.42 U	0.93	< 0.31 UJ	< 0.25 UJ	0.11 J	< 0.17 U	< 0.5 UJ	< 0.5 U	< 0.15 U	< 0.68 U	0.48 J	< 0.056 U	< 0.5 UJ	< 0.13 U	< 0.27 UJ	--	--	< 0.20 U
P09-10	< 5.4 UJ	< 0.28 U	< 0.25 UJ	< 0.25 U	< 0.42 U	< 0.17 U	< 0.52 U	< 0.5 U	< 0.12 U	< 0.48 U	< 0.094 U	< 0.075 U	< 0.25 UJ	< 0.13 UJ	< 0.24 UJ	--	--	< 0.20 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.25 UJ	< 0.24 U	--	--	--
POLYCHLORINATED BIPHENYLS (PCBS) (0.03 UG_																		
P09-01	0.014	< 0.031 U	< 0.039 U	< 0.043 U	< 0.27 U	< 0.17 U	< 0.11 U	< 0.5 U	< 0.083 U	--	< 0.62 U	< 0.35 U	< 0.25 UJ	< 0.147 U	--	--	--	--
P09-02A	--	--	--	--	--	--	--	--	--	--	--	< 0.35 U	< 0.25 UJ	< 0.147 U	--	--	--	--
P09-09	< 0.039 U	**0.93**	< 0.048 U	< 0.039 U	**0.11**	< 0.17 U	< 0.079 U	< 0.5 U	< 0.071 U	< 0.11 U	**0.48 J**	< 0.39 U	< 0.5 UJ	< 0.147 U	--	--	--	--
P09-10	< 0.005 U	< 0.031 U	< 0.039 U	< 0.039 U	< 0.42 U	< 0.17 U	< 0.082 U	< 0.5 U	< 0.056 U	< 0.077 U	< 0.66 U	< 0.52 U	< 0.25 UJ	< 0.147 UJ	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.286 UJ	--	--	--	--
4,4-DDD (UG_L)																		
P09-01	< 0.012 U	< 0.022 UJ	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-09	--	< 0.057 UJ	< 0.023 U	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-10	< 1.1 UJ	< 0.022 UJ	< 0.02 U	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	< 0.047 U	--	--	--
4,4-DDE (UG_L)																		
P09-01	< 0.012 U	< 0.022 U	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-09	--	< 0.057 U	< 0.023 U	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 U	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	< 0.047 U	--	--	--
4,4-DDT (0.001 UG_L)																		
P09-01	< 0.012 U	< 0.022 UJ	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 UJ
P09-09	--	< 0.057 UJ	< 0.023 U	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-10	< 1.1 UJ	< 0.022 UJ	< 0.02 U	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	< 0.047 UJ	--	--	--
ALDRIN (UG_L)																		
P09-01	< 0.012 U	< 0.022 U	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-09	--	< 0.057 U	< 0.023 U	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 U	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.024 U	--	--	--
ALPHA-BHC (UG_L)																		
P09-01	< 0.012 U	< 0.022 U	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-09	--	< 0.057 U	< 0.023 UJ	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 UJ	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.024 UJ	--	--	--
ALPHA-CHLORDANE (0.004 UG_L)																		
P09-01	< 0.012 U	< 0.022 U	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U

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	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-09	--	< 0.057 U	< 0.023 U	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 U	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.024 UJ	--	--	--
AROCLOR-1016 (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1221 (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1232 (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1242 (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1248 (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1254 (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260 (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BETA-BHC (UG_L)																		
P09-01	< 0.012 U	< 0.022 U	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-09	--	< 0.057 U	< 0.023 U	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 U	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.024 UJ	--	--	--
DELTA-BHC (UG_L)																		
P09-01	< 0.012 U	< 0.022 U	< 2.1 UJ	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-09	--	< 0.057 U	< 0.023 UJ	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 UJ	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.024 UJ	--	--	--
DIELDRIN (0.0019 UG_L)																		
P09-01	< 0.012 U	< 0.022 U	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-09	--	< 0.057 U	< 0.023 U	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 U	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	< 0.047 UJ	--	--	--
ENDOSULFAN I (0.0087 UG_L)																		
P09-01	< 0.012 U	< 0.022 U	< 2.1 U	< 0.023 U	< 0.04 U	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-09	--	< 0.057 U	< 0.023 U	< 0.033 U	< 0.022 U	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 U	< 0.02 U	< 0.022 U	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.024 UJ	--	--	--
ENDOSULFAN II (0.0087 UG_L)																		
P09-01	< 0.012 U	< 0.022 U	< 2.1 U	< 0.023 UJ	< 0.04 U	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-09	--	< 0.057 U	< 0.023 U	< 0.033 UJ	< 0.022 U	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 U	< 0.02 UJ	< 0.022 U	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	< 0.047 U	--	--	--
ENDOSULFAN SULFATE (UG_L)																		
P09-01	< 0.012 U	< 0.022 U	< 2.1 U	R	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-09	--	< 0.057 U	< 0.023 U	R	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 U	R	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	< 0.047 UJ	--	--	--
ENDRIN (0.0023 UG_L)																		
P09-01	< 0.012 U	< 0.022 UJ	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-09	--	< 0.057 UJ	< 0.023 U	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-10	< 1.1 UJ	< 0.022 UJ	< 0.02 U	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	< 0.047 UJ	--	--	--
ENDRIN KETONE (UG_L)																		
P09-01	< 0.012 U	< 0.022 UJ	< 2.1 U	< 0.023 UJ	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-09	--	< 0.057 UJ	< 0.023 U	< 0.033 UJ	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-10	< 1.1 UJ	< 0.022 UJ	< 0.02 U	< 0.02 UJ	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0063 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.025 U	< 0.047 UJ	--	--	--
HEPTACHLOR (0.0036 UG_L)																		
P09-01	< 0.012 U	< 0.022 U	**0.013 J**	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-09	--	< 0.057 U	< 0.023 U	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 U	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.024 UJ	--	--	--
HEPTACHLOR EPOXIDE (0.0036 UG_L)																		
P09-01	< 0.012 U	< 0.022 UJ	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-09	--	< 0.057 UJ	< 0.023 U	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-10	< 1.1 UJ	< 0.022 UJ	< 0.02 U	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.024 UJ	--	--	--
HEXACHLOROBENZENE (129 UG_L)																		
P09-01	0.0061 J	< 0.022 U	< 2.1 U	< 0.023 U	< 0.04 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 0.057 U	0.0096 J	< 0.033 U	< 0.022 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 U	< 0.02 U	< 0.022 U	--	--	--	--	--	--	--	--	--	--	--	--	--
LINDANE (UG_L)																		
P09-01	< 0.012 U	< 0.022 U	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-09	--	< 0.057 U	< 0.023 UJ	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-10	< 1.1 UJ	< 0.022 U	< 0.02 UJ	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.0031 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.013 U	< 0.024 U	--	--	--
METHOXYCHLOR (UG_L)																		
P09-01	< 0.012 U	< 0.022 UJ	< 2.1 U	< 0.023 U	< 0.04 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.063 U
P09-09	--	< 0.057 UJ	< 0.023 U	< 0.033 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.063 U
P09-10	< 1.1 UJ	< 0.022 UJ	< 0.02 U	< 0.02 U	< 0.022 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 0.063 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.13 U	< 0.24 UJ	--	--	--
POLYCHLORINATED BIPHENYLS (PCBS) (0.03 UG_																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-TRICHLOROBENZENE (UG_L)																		

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
1,2-DICHLOROBENZENE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
1,3-DICHLOROBENZENE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
1,4-DICHLOROBENZENE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 5.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
1-METHYLNAPHTHALENE (UG_L)																		
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2,2'-OXYBIS(1-CHLOROPROPANE) (UG_L)																		
P09-01	--	--	--	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-09	--	--	--	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-10	< 7.6 U	--	--	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
2,4,5-TRICHLOROPHENOL (UG_L)																		
P09-01	--	R	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 1.4 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	< 1.4 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
2,4,6-TRICHLOROPHENOL (UG_L)																		
P09-01	--	R	R	R	< 14 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 14 U	< 20 U	< 100 U	< 17 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 U	< 14 U	< 14 U	< 10 U	< 12 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
2,4-DICHLOROPHENOL (UG_L)																		
P09-01	--	R	R	R	< 14 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 14 U	< 20 U	< 100 U	< 17 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 U	< 14 U	< 14 U	< 10 U	< 12 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
2,4-DIMETHYLPHENOL (UG_L)																		
P09-01	--	R	R	R	< 14 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-09	--	< 14 U	< 20 U	< 100 U	< 17 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-10	< 15 UJ	< 14 U	< 14 U	< 10 U	< 12 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 UJ	< 7.1 U	--	--	< 5.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
2,4-DINITROPHENOL (UG_L)																		
P09-01	--	R	R	R	< 29 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ
P09-09	--	< 29 U	< 40 UJ	< 200 UJ	< 33 U	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ
P09-10	< 30 UJ	< 27 U	< 29 UJ	< 20 UJ	< 24 U	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 18 U	--	--	< 10 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ
2,4-DINITROTOLUENE (UG_L)																		
P09-01	--	R	R	R	< 14 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 14 UJ	< 20 U	< 100 UJ	< 17 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 U	< 14 UJ	< 14 U	< 10 UJ	< 12 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
2,6-DINITROTOLUENE (UG_L)																		
P09-01	--	R	R	R	< 14 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U

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IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-09	--	< 14 U	< 20 U	< 100 U	< 17 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 U	< 14 U	< 14 U	< 10 U	< 12 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
2-CHLORONAPHTHALENE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 UJ	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
2-CHLOROPHENOL (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
2-METHYLNAPHTHALENE (UG_L)																		
P09-01	< 1 U	< 1.1 U	0.067 J	< 1.3 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 1.5 U	R	< 2.3 U	< 1.7 U	< 3.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 1 U	< 1.2 U	0.064 J	0.046 J	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2-METHYLPHENOL (UG_L)																		
P09-01	--	R	R	R	< 14 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 14 U	< 20 U	< 100 UJ	< 17 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 U	< 14 U	< 14 U	< 10 UJ	< 12 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
2-NITROANILINE (UG_L)																		
P09-01	--	R	R	R	< 14 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 14 U	< 20 U	< 100 U	< 17 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 U	< 14 U	< 14 U	< 10 U	< 12 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 18 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
2-NITROPHENOL (UG_L)																		
P09-01	--	R	R	R	< 14 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 14 U	< 20 U	< 100 UJ	< 17 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U

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NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-10	< 15 U	< 14 U	< 14 U	< 10 UJ	< 12 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
3- AND 4-METHYLPHENOL (UG_L)																		
P09-01	--	R	7.7 J	R	< 14 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 14 UJ	7.8 J	< 100 UJ	< 17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 15 UJ	< 14 UJ	< 14 U	< 10 UJ	< 12 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 7.1 UJ	--	--	--
3,3-DICHLOROBENZIDINE (UG_L)																		
P09-01	--	R	R	R	< 7.1 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-09	--	< 7.2 UJ	< 10 U	< 51 U	< 8.3 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-10	< 7.6 UJ	< 6.8 UJ	< 7.2 U	< 5 U	< 5.9 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 7.1 U	--	--	< 5.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
3-NITROANILINE (UG_L)																		
P09-01	--	R	R	R	< 14 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 14 U	< 20 UJ	< 100 U	< 17 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 UJ	< 14 U	< 14 UJ	< 10 U	< 12 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 18 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
4,6-DINITRO-2-METHYLPHENOL (UG_L)																		
P09-01	--	R	R	R	< 14 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-09	--	< 14 U	< 20 UJ	< 100 UJ	< 17 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-10	< 15 U	< 14 U	< 14 UJ	< 10 UJ	< 12 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 18 U	--	--	< 2.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
4-BROMOPHENYL-PHENYLETHER (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
4-CHLORO-3-METHYLPHENOL (UG_L)																		
P09-01	--	R	R	R	< 14 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 14 U	< 20 U	< 100 U	< 17 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U

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	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-10	< 15 U	< 14 U	< 14 U	< 10 U	< 12 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 UJ	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
4-CHLOROANILINE (UG_L)																		
P09-01	--	R	R	R	< 14 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-09	--	< 14 UJ	< 20 U	< 100 UJ	< 17 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-10	< 15 U	< 14 UJ	< 14 U	< 10 UJ	< 12 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 5.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
4-CHLOROPHENYL-PHENYLETHER (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
4-METHYLPHENOL (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 UJ
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 UJ
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	--	--	--	< 5.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 UJ
4-NITROANILINE (UG_L)																		
P09-01	--	R	R	R	< 14 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 14 U	< 20 U	< 100 U	< 17 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 UJ	< 14 U	< 14 U	< 10 U	< 12 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 18 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
4-NITROPHENOL (UG_L)																		
P09-01	--	R	R	R	< 29 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 29 U	< 40 UJ	< 200 UJ	< 33 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 30 U	< 27 U	< 29 UJ	< 20 UJ	< 24 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 18 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
ACENAPHTHENE (UG_L)																		
P09-01	< 1 U	< 1.1 U	< 1.1 U	< 1.3 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-2
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IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-09	< 1.5 U	R	< 2.3 U	< 1.7 U	< 3.1 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 1 U	< 1.2 U	< 1.8 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
ACENAPHTHYLENE (UG_L)																		
P09-01	< 0.2 U	< 0.22 U	< 0.21 U	< 0.25 U	< 0.22 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 0.31 U	R	< 0.45 U	< 0.33 U	< 0.63 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 0.2 U	< 0.24 U	< 0.35 U	< 0.2 U	< 0.22 U	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTHRACENE (UG_L)																		
P09-01	< 1 U	< 1.1 U	< 1.1 U	< 1.3 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 1.5 U	R	< 2.3 U	< 1.7 U	< 3.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 1 U	< 1.2 U	0.18 J	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(A)ANTHRACENE (UG_L)																		
P09-01	< 0.15 U	< 0.17 U	< 0.16 U	< 0.19 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 0.23 U	R	< 0.34 U	< 0.25 U	< 0.47 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 0.15 U	0.039 J	0.56	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(A)PYRENE (UG_L)																		
P09-01	< 0.15 UJ	< 0.17 U	< 0.16 U	< 0.19 UJ	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 0.23 UJ	R	< 0.34 U	< 0.25 UJ	< 0.47 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 0.15 UJ	< 0.18 U	< 0.26 U	< 0.15 UJ	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(B)FLUORANTHENE (UG_L)																		
P09-01	< 0.15 U	< 0.17 U	< 0.16 U	< 0.19 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 0.23 U	R	< 0.34 U	< 0.25 U	< 0.47 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 0.15 U	< 0.18 U	0.27	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(G,H,I)PERYLENE (UG_L)																		
P09-01	< 0.15 U	< 0.17 U	< 0.16 U	< 0.19 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	0.13 J	R	< 0.34 U	0.3	< 0.47 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 0.15 U	< 0.18 U	0.18 J	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZO(K)FLUORANTHENE (UG_L)																		
P09-01	< 0.15 U	< 0.17 U	< 0.16 U	< 0.19 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 0.23 U	R	< 0.34 U	< 0.25 U	< 0.47 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 0.15 U	< 0.18 U	0.4	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZOIC ACID (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BENZYL ALCOHOL (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-CHLOROETHOXY)METHANE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 5.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
BIS(2-CHLOROETHYL)ETHER (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U

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NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
BIS(2-CHLOROISOPROPYL)ETHER (UG_L)																		
P09-01	--	R	R	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 7.2 U	< 10 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	< 6.8 U	< 7.2 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL)PHTHALATE (UG_L)																		
P09-01	0.87 J	R	R	R	< 2.9 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	161 J	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	12.6 J	< 6.8 U	< 7.2 U	< 5 UJ	< 2.4 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	2.3 J	--	--	--	--
BUTYLBENZYLPHTHALATE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	1.1 J	< 10 U	< 51 UJ	< 8.3 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	1.2 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
CARBAZOLE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
CHRYSENE (UG_L)																		
P09-01	< 0.15 U	< 0.17 U	< 0.16 U	< 0.19 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 0.23 U	R	< 0.34 U	< 0.25 U	< 0.47 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 0.15 U	< 0.18 U	0.21 J	0.024 J	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
CRESOLS (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIBENZ(A,H)ANTHRACENE (UG_L)																		
P09-01	< 0.15 U	< 0.17 U	< 0.16 U	< 0.19 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 0.23 U	R	< 0.34 U	< 0.25 U	< 0.47 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 0.15 U	< 0.18 U	0.068 J	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
DIBENZOFURAN (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U

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	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-09	--	< 7.2 U	< 10 U	< 51 U	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 U	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
DIETHYLPHTHALATE (UG_L)																		
P09-01	--	1.1 J	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 U	1.1 J	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
DIMETHYL PHTHALATE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 U	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 U	< 6.8 U	< 7.2 U	< 5 U	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
DI-N-BUTYLPHTHALATE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	1.4 J	< 51 UJ	< 8.3 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 U	< 6.8 U	1.5 J	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	8.1 J	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
DI-N-OCTYLPHTHALATE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-09	--	< 7.2 U	5.7 J	< 51 U	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-10	< 15 U	< 6.8 U	< 7.2 U	< 5 U	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
FLUORANTHENE (UG_L)																		
P09-01	< 1 U	< 1.1 U	< 1.1 U	< 1.3 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 1.5 U	R	0.067 J	0.27 J	0.28 J	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 1 U	0.18 J	0.46 J	0.13 J	0.054 J	--	--	--	--	--	--	--	--	--	--	--	--	--
FLUORENE (UG_L)																		
P09-01	< 1 U	< 1.1 U	< 1.1 U	< 1.3 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 1.5 U	R	< 2.3 U	< 1.7 U	< 3.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 1 U	0.18 J	< 1.8 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
HEXACHLOROBUTADIENE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
HEXACHLOROCYCLOPENTADIENE (UG_L)																		
P09-01	--	R	R	R	< 14 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-09	--	< 14 U	< 20 U	< 100 UJ	< 17 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 15 U	< 14 U	< 14 U	< 10 UJ	< 12 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 UJ	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
HEXACHLOROETHANE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 UJ	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
INDENO(1,2,3-CD)PYRENE (UG_L)																		
P09-01	< 0.15 U	< 0.17 U	< 0.16 U	0.078 J	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 0.23 U	R	< 0.34 U	0.41	< 0.47 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 0.15 U	< 0.18 U	0.2 J	< 0.15 U	< 0.17 U	--	--	--	--	--	--	--	--	--	--	--	--	--
ISOPHORONE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
NAPHTHALENE (UG_L)																		
P09-01	< 1 U	< 1.1 U	< 1.1 U	< 1.3 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 1.5 U	R	< 2.3 U	< 1.7 U	< 3.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 1 U	0.17 J	< 1.8 U	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
NITROBENZENE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 U	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 U	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	< 7.1 U	--	--	< 5.0 U

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
N-NITROSODINPROPYLAMINE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
N-NITROSODIPHENYLAMINE (UG_L)																		
P09-01	--	R	R	R	< 7.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 U	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 5.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 5.0 U
PENTACHLOROPHENOL (7.9 UG_L)																		
P09-01	--	R	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	--	< 1.4 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	--	< 1.4 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 10 U	--	--	--	--
PHENANTHRENE (UG_L)																		
P09-01	< 0.2 U	< 0.22 U	< 0.21 U	< 0.25 U	< 0.22 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 0.31 U	R	0.57	0.73	< 0.63 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 0.2 U	< 0.24 U	10	0.8	< 0.22 U	--	--	--	--	--	--	--	--	--	--	--	--	--
PHENOL (UG_L)																		
P09-01	--	R	R	R	< 7.1 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-09	--	< 7.2 U	< 10 U	< 51 UJ	< 8.3 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-10	< 7.6 U	< 6.8 U	< 7.2 U	< 5 UJ	< 5.9 UJ	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2 U	< 7.1 U	--	--	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.0 U
PYRENE (UG_L)																		
P09-01	< 1 U	< 1.1 U	0.14 J	0.076 J	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-09	< 1.5 U	R	0.1 J	< 1.7 U	0.2 J	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-10	< 1 U	0.15 J	0.75 J	< 1 U	< 1.1 U	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,5-TRICHLOROPHENOL (UG_L)																		
P09-01	--	--	R	< 1.1 U	< 1.4 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-09	--	--	< 2 U	< 1 U	< 1.7 U	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-10	< 1.5 U	--	< 1.4 U	< 1 U	< 1.2 U	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	0.085 J	--	--	< 0.10 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ

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	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
2-METHYLNAPHTHALENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 U	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
ACENAPHTHENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 U	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
ACENAPHTHYLENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 U	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
ANTHRACENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 UJ	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
BENZO(A)ANTHRACENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.30
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 UJ	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
BENZO(A)PYRENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.26 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 U	--	--	< 0.10 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
BENZO(B)FLUORANTHENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.41
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 UJ	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
BENZO(G,H,I)PERYLENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.23
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 U	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
BENZO(K)FLUORANTHENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 U	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
BIS(2-ETHYLHEXYL)PHTHALATE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.40 J
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.44 J
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.45 J
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.34 J
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.51 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.47 UJ	--	--	0.17 J
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.43 J
CHRYSENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.30
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 U	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13
DIBENZ(A,H)ANTHRACENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 UJ	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
FLUORANTHENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U

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NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.64
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 UJ	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
FLUORENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.11
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 U	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
HEXACHLOROBENZENE (129 UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 UJ	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
INDENO(1,2,3-CD)PYRENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.20 J
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 UJ	--	--	< 0.10 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 UJ
NAPHTHALENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 U	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
PENTACHLOROPHENOL (7.9 UG_L)																		
P09-01	--	--	R	< 1.1 U	< 1.4 U	--	--	--	--	--	--	--	--	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 UJ
P09-09	--	--	< 2 U	< 1 U	< 1.7 U	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 UJ
P09-10	< 1.5 U	--	< 1.4 U	< 1 U	< 1.2 U	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.47 U	--	--	< 1.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 UJ
PHENANTHRENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.12
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.10
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U

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	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.31
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 UJ	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
PYRENE (UG_L)																		
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.13
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
P09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.51
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.1 U	< 0.094 UJ	--	--	< 0.10 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.10 U
1,1,1-TRICHLOROETHANE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 67 U	--	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 UJ
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 UJ
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 67 U	< 67 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 UJ
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 67 U	< 67 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
1,1,2,2-TETRACHLOROETHANE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 0.4 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.4 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
1,1,2-TRICHLOROETHANE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1.7 U	< 1 U	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 UJ	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 UJ	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 1 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 1 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 1.0 U
1,1-DICHLOROETHANE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1 U	--	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
1,1-DICHLOROETHENE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 2.3 U	< 1 U	< 1 U	< 0.4 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.3 U	< 2.3 UJ	< 1 U	< 0.4 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2.3 U	< 2.3 U	< 1 U	< 0.4 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
1,2-DICHLOROETHANE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1.7 U	< 1 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
1,2-DICHLOROETHENE, TOTAL (UG_L)																		
P09-01	< 0.51 U	< 1 U	< 0.36 U	< 0.36 U	< 1 U	< 23.3 U	< 0.2 U	< 1 U	< 0.2 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.75 U	--	--	--	--
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	0.42 J	< 0.5 U	< 0.75 U	--	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	--	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.75 U	--	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.75 U	--	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.75 U	--	--	--	--
P09-09	< 0.51 U	< 1 U	< 0.36 U	< 0.36 U	< 1 U	< 23.3 U	< 23.3 U	< 1 U	< 0.2 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.75 U	--	--	--	--
P09-10	< 0.51 U	< 1 U	< 0.36 U	< 0.36 U	< 1 U	< 23.3 U	< 23.3 U	< 1 U	< 0.2 U	< 0.2 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.75 U	--	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.75 U	--	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.75 U	--	--	--	--
1,2-DICHLOROPROPANE (UG_L)																		
P09-01	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 1.7 U	--	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 2.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 2.0 U

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IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-09	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1.7 U	< 1.7 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1.7 U	< 1.7 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
2-BUTANONE (UG_L)																		
P09-01	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	--	< 5 UJ	< 1 U	5	2.4 J	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	--	--	< 5.0 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	--	--	< 5.0 UJ
P09-03A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	--	< 2.5 U	--	--	< 5.0 UJ
P09-04A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	--	< 2.5 U	--	--	< 5.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	R	< 2.5 UJ	< 2.5 U	< 2.5 UJ	< 5.0 UJ
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	R	15 J	< 2.5 U	< 2.5 UJ	< 5.0 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	R	43 J	< 2.5 U	< 2.5 UJ	< 5.0 UJ
P09-09	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	1.9 J	5.2 J	< 5 UJ	2 J	4 J	4.3 J	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	--	--	< 5.0 UJ
P09-10	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	0.93 J	< 5 UJ	< 1 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 UJ	--	--	< 5.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	R	< 2.5 U	< 2.5 U	< 2.5 UJ	< 5.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	R	16	< 2.5 U	< 2.5 UJ	< 5.0 UJ
2-HEXANONE (UG_L)																		
P09-01	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 U	--	< 5 U	< 2 U	< 5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	--	--	< 5.0 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	--	--	< 5.0 UJ
P09-03A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	--	< 2.5 U	--	--	< 5.0 UJ
P09-04A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 UJ	< 2.5 U	--	< 2.5 U	--	--	< 5.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 5.0 UJ
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 5.0 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 5.0 UJ
P09-09	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	2.6 J	< 5 U	< 2 U	< 5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	--	--	< 5.0 UJ
P09-10	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 U	< 2 U	< 5 U	< 2.5 U	< 2.5 UJ	< 2.5 U	< 2.5 U	< 2.5 U	--	--	< 5.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5.0 UJ
4-METHYL-2-PENTANONE (UG_L)																		
P09-01	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 5 U	--	< 5 U	< 1 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 1 U	< 2.5 U	--	--	< 2.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	< 1 U	< 2.5 U	--	--	< 2.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	--	< 2.5 UJ	--	--	< 2.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	--	< 2.5 UJ	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 2.5 U	< 1.0 U	< 2.5 U	< 2.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 2.5 U	< 1.0 U	< 2.5 U	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 2.5 U	< 1.0 U	< 2.5 U	< 2.0 U
P09-09	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 1 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 1 U	< 2.5 U	--	--	< 2.0 U
P09-10	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 1 U	< 2.5 U	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 2.5 UJ	< 1.0 U	< 2.5 U	< 2.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 2.5 UJ	< 1.0 U	< 2.5 U	< 2.0 U
ACETONE (UG_L)																		
P09-01	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 UJ	< 5 UJ	--	< 5 UJ	12	11 J	14 J	< 2.5 U	3.7 J	< 2.5 UJ	< 2.5 U	--	--	< 5.0 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	2.5 J	< 2.5 U	3.2 J	< 2.5 UJ	< 2.5 UJ	--	--	< 5.0 UJ
P09-03A	--	--	--	--	--	--	--	--	--	--	4.4 J	< 2.5 U	< 2.5 U	--	9.1 J	--	--	< 5.0 UJ
P09-04A	--	--	--	--	--	--	--	--	--	--	< 2.5 UJ	< 2.5 U	9.5	--	< 2.5 U	--	--	< 5.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	7.5 J	< 2.5 UJ	23	< 2.5 UJ	< 5.0 UJ
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	R	35 J	< 2.5 U	< 2.5 UJ	< 5.0 UJ

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NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	R	200 J	50	< 2.5 UJ	< 5.0 UJ
P09-09	55	< 5 U	70.3 J	< 5 U	6.7 J	8.2 J	< 15 UJ	14 J	9 J	23	21 J	< 2.5 U	16	< 2.5 UJ	14	--	--	< 5.0 UJ
P09-10	< 5 U	< 5 U	4.6 J	< 5 UJ	4.9 J	3.1 J	< 5 U	< 5 UJ	3 J	< 5 U	3.6 J	< 2.5 U	2.4 J	< 2.5 UJ	3.9 J	--	--	< 5.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	R	< 2.5 U	< 2.5 U	< 2.5 UJ	< 5.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	R	370	15	9.2 J	< 5.0 UJ
BENZENE (UG_L)																		
P09-01	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 1.7 U	< 1 U	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1.7 U	< 1.7 UJ	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	3.5	4.7	0.79	0.72	1.5	5.8	4.6	4.6	3	4	2.1	2	0.87 J	1.1	1.3	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
BROMODICHLOROMETHANE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 26.7 U	--	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 UJ	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 UJ	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
BROMOFORM (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 26.7 U	--	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 UJ	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 UJ	--	< 0.50 U	--	--	< 2.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 UJ	< 2.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 UJ	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 UJ	< 2.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 UJ	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 UJ	< 2.0 U
BROMOMETHANE (UG_L)																		
P09-01	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 1 UJ	--	< 1 U	< 0.5 UJ	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1.0 U	--	--	< 2.0 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	< 1 UJ	< 1.0 U	--	--	< 2.0 UJ
P09-03A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	--	< 1.0 U	--	--	< 2.0 UJ
P09-04A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--	< 1.0 U	--	--	< 2.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 2.0 UJ
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 2.0 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 2.0 UJ
P09-09	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 UJ	< 1 U	< 0.5 UJ	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1.0 U	--	--	< 2.0 UJ

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 UJ	< 1 U	< 1 U	< 0.5 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1.0 U	--	--	< 2.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 2.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1.0 U	< 1.0 U	< 1.0 UJ	< 2.0 UJ
CARBON DISULFIDE (UG_L)																		
P09-01	< 5 U	< 5 U	< 5 U	1.5 J	< 5 U	< 1 UJ	--	< 1 U	< 1 U	6	3.2	< 0.5 U	< 0.5 U	< 0.5 U	5.3	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	0.58 J	0.62 J	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	1.4	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	1.0	< 0.50 U	< 1.0 U
P09-09	< 5 U	1.6 J	2.8 J	0.98 J	< 5 U	< 1 UJ	5.8 J	1.8	3	3	< 0.5 U	1.1	< 0.5 U	< 0.5 U	0.92 J	--	--	2.5 J
P09-10	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 1 UJ	< 1 U	< 1 U	2	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	0.40 J	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
CARBON TETRACHLORIDE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1.7 U	--	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 0.50 U	--	--	< 2.0 UJ
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 0.50 U	--	--	< 2.0 UJ
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 2.0 UJ
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 2.0 UJ
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 UJ
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 UJ
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 UJ
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 0.50 U	--	--	< 2.0 UJ
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 UJ	< 0.50 U	--	--	< 2.0 UJ
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 UJ
CHLOROBENZENE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 33.3 U	--	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
CHLOROETHANE (UG_L)																		
P09-01	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 1 UJ	--	< 1 U	< 0.6 UJ	< 2 U	< 1 U	< 1 U	< 1 U	< 0.5 UJ	< 1.0 UJ	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 0.5 UJ	< 1.0 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 UJ	< 1 U	--	< 1.0 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--	< 1.0 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
P09-09	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 U	< 0.6 UJ	< 2 UJ	< 1 U	< 1 U	< 1 U	< 0.5 UJ	< 1.0 UJ	--	--	< 1.0 U
P09-10	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 U	< 0.6 U	< 2 UJ	< 1 U	< 1 U	< 1 U	< 0.5 UJ	< 1.0 UJ	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U

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IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
CHLOROFORM (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 26.7 U	< 1 U	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 UJ	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 UJ	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
CHLOROMETHANE (UG_L)																		
P09-01	< 2 U	< 2 UJ	< 2 U	< 2 UJ	< 2 UJ	< 1 U	--	< 1 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1.0 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1.0 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--	< 1.0 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--	< 1.0 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
P09-09	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 UJ	< 1 U	< 1 UJ	< 1 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1.0 U	--	--	< 1.0 U
P09-10	< 2 U	< 2 UJ	< 2 U	< 2 U	< 2 UJ	< 1 U	< 1 U	< 1 U	< 0.4 U	< 2 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1.0 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U
CIS-1,2-DICHLOROETHENE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 23.3 U	< 1 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	0.42 J	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 23.3 U	< 23.3 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 23.3 U	< 23.3 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
CIS-1,3-DICHLOROPROPENE (UG_L)																		
P09-01	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 1 U	--	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
DIBROMOCHLOROMETHANE (UG_L)																		

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 26.7 U	--	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 2.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 UJ	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 26.7 U	< 26.7 U	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 UJ	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
ETHYLBENZENE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 23.3 U	--	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 23.3 U	< 23.3 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 23.3 U	< 23.3 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
M- AND P-XYLENE (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	< 0.6 U	< 2 U	--	--	--	--	< 1.0 U	--	--	--
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
P09-09	--	--	--	--	--	--	--	--	< 0.6 U	< 2 U	--	--	--	--	< 1.0 U	--	--	--
P09-10	--	--	--	--	--	--	--	--	< 0.6 U	< 2 U	--	--	--	--	< 1.0 U	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1.0 U	--	--	--
METHYLENE CHLORIDE (UG_L)																		
P09-01	< 2 U	< 2 U	< 2 U	< 2 UJ	< 2 U	< 1 U	--	< 1 U	< 1 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 UJ	< 2.5 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 UJ	< 2.5 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	--	< 2.5 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 2.5 U	< 2.5 U	< 2.5 U	--	< 2.5 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 2.5 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 2.5 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 2.5 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 1 U	< 1 UJ	< 1 U	< 1 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 UJ	< 2.5 U	--	--	< 1.0 U
P09-10	< 2 U	< 2 U	< 2 U	1.1 J	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 0.5 UJ	< 2.5 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 2.5 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 2.5 UJ	< 0.50 U	< 0.50 U	< 1.0 U
O-XYLENE (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	< 0.2 U	< 1 U	--	--	--	--	< 0.50 U	--	--	--
P09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--

TABLE E-2
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IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
P09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
P09-09	--	--	--	--	--	--	--	--	< 0.2 U	< 1 U	--	--	--	--	< 0.50 U	--	--	--
P09-10	--	--	--	--	--	--	--	--	< 0.2 U	< 1 U	--	--	--	--	< 0.50 U	--	--	--
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.50 U	--	--	--
STYRENE (UG_L)																		
P09-01	< 5 U	< 5 U	< 5 U	< 5 UJ	< 5 U	< 33.3 U	--	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 33.3 U	< 33.3 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 33.3 U	< 33.3 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
TETRACHLOROETHENE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1.7 UJ	< 1 U	< 1 U	< 0.9 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 2.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 2.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 UJ	< 1.7 UJ	< 1 U	< 0.9 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 UJ	< 1.7 UJ	< 1 U	< 0.9 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	1.5	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
TOLUENE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 33.3 U	--	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	1.2	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	2.2	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 UJ	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
TRANS-1,2-DICHLOROETHENE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 33.3 U	< 1 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 2.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 2.0 U

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 33.3 U	< 33.3 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.50 U	--	--	< 2.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U
TRANS-1,3-DICHLOROETHENE (UG_L)																		
P09-01	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.5 U	< 1 U	--	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 UJ	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 UJ	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 UJ	< 1.0 U
P09-09	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 UJ	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	--	< 1.0 U
P09-10	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 1 U	< 1 U	< 0.2 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 UJ	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 UJ	< 1.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 UJ	< 0.50 U	< 0.50 U	< 0.50 UJ	< 1.0 U
TRICHLOROETHENE (UG_L)																		

TABLE E-2
SUMMARY OF DETECTED ANALYTES EXCEEDING PALs
IN PIEZOMETER SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME45
	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr-May 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010	Mar 2011	Oct 2011	Sep/Oct 2012	Sept/Oct 2013	Sept 2014	Sept 2015	Sept 2016
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 1.7 U	< 1 U	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.5 U	< 0.5 U	--	< 0.50 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 UJ	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1.7 U	< 1.7 U	< 1 U	< 0.3 U	< 1 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.50 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U
VINYL CHLORIDE (UG_L)																		
P09-01	< 1 U	< 1 U	< 1 U	< 1 UJ	< 1 U	< 0.7 U	< 1 U	< 1 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1.0 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1.0 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--	< 1.0 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1 U	< 1 U	--	< 1.0 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-09	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 0.7 U	< 0.7 UJ	< 1 U	< 0.2 U	< 2 U	< 1 U	< 1 U	< 1 U	< 0.5 U	< 1.0 U	--	--	< 1.0 U
P09-10	4.2	9.6	1	< 1 U	2.2	6	5.7	7.9	4	5	2.7	2.2	1.4 J	< 0.5 U	1.1 J	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 0.5 U	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U
XYLENES, TOTAL (UG_L)																		
P09-01	--	--	--	--	--	--	--	--	< 0.2 U	< 3 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1 U	< 1.5 U	--	--	< 1.0 U
P09-02A	--	--	--	--	--	--	--	--	--	--	< 1.5 U	< 1.5 U	< 1.5 U	< 1 U	< 1.5 U	--	--	< 1.0 U
P09-03A	--	--	--	--	--	--	--	--	--	--	< 1.5 U	< 1.5 U	< 1.5 U	--	< 1.5 U	--	--	< 1.0 U
P09-04A	--	--	--	--	--	--	--	--	--	--	< 1.5 U	< 1.5 U	< 1.5 U	--	< 1.5 U	--	--	< 1.0 U
P09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1.5 U	< 1.0 U	< 1.0 U	< 1.0 U
P09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1.5 U	1.8	< 1.0 U	< 1.0 U
P09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1.5 U	< 1.0 U	< 1.0 U	< 1.0 U
P09-09	--	--	--	--	--	--	--	--	< 0.2 U	< 3 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1 U	< 1.5 U	--	--	< 1.0 U
P09-10	--	--	--	--	--	--	--	--	< 0.2 U	< 3 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1 U	< 1.5 U	--	--	< 1.0 U
P09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1.5 U	< 1.0 U	< 1.0 U	< 1.0 UJ
P09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	< 1 U	< 1.5 U	< 1.0 U	< 1.0 U	< 1.0 U

Notes:
Shaded/Bolded Cell = Detected result exceeds PAL
U = Not Detected; J = Estimated Value; R = Rejected
PAL = Project Action Level (Effects Range Median, September 1999); except total Arochlor, 4,4-DDE, ar
Maximum value presented when original and duplilcate samples were analyzed
Parameters that have been detected in at least one sample since ME01 are included on the table

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
ALUMINUM (MG_KG)														
SED09-01	--	5060	4060 J	4770 J	5400 J	4200 J	4900	4960	6300 J	6860	6750	4990	6910	4500
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	9250 J	9170	10300 J	8200 J	8700 J	9600	11000	10900 J	11300	11100	8790	7040	8430
SED09-10	--	6170 J	6620 J	9960 J	6500 J	6200 J	6400	4130 J	7960 J	6180	7870	8300	5310	8190
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY (MG_KG)														
SED09-01	--	< 0.14 UJ	R	4.6 J	6.3 J	< 4.8 U	< 0.19 U	0.81 J	< 1.2 U	< 0.85 U	< 0.3 U	< 0.17 U	< 0.74 U	< 0.74 U
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	R	R	10.8 J	14 J	< 6.9 U	< 0.33 U	2.1 J	< 1.2 U	< 1.7 U	< 0.44 U	< 0.55 U	< 1 U	< 0.99 U
SED09-10	--	R	R	2.9 J	3.9 J	< 5.4 U	< 0.21 U	R	< 1 U	< 0.11 U	< 0.43 U	< 0.42 U	< 0.84 U	< 0.85 U
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC (70 MG_KG)														
SED09-01	70	2.6 J	< 10.3 U	3.2	R	4.5 J	7.7	5.4	6.2	3.5 J	< 5.9 U	5.4	7.2	6.4
SED09-02A	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	70	12.1 J	< 12.3 U	7.2	R	16 J	5.3	13.4	12.4	5.4 J	12.1 J	7.7	7.5	8.2
SED09-10	70	R	< 12.3 U	2.4 J	1.3 J	3.3 J	1.7	5.6 J	4.3	0.99 J	< 4.5 U	3.1	2.1	3.4
SED09-11B	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	70	--	--	--	--	--	--	--	--	--	--	--	--	--
BARIUM (MG_KG)														
SED09-01	--	22.7	< 8.5 U	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	24.5 J	< 10.1 U	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	8.7 J	< 10 U	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM (MG_KG)														
SED09-01	--	0.41	< 0.99 U	0.38	0.47	0.49 J	0.5 J	0.46 J	< 0.59 U	< 0.88 U	< 0.59 U	0.44	0.61	0.46 J
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	0.99 J	< 1.2 U	0.9	0.81	1.1 J	1.2 J	1.2 J	1.4 J	< 0.92 U	< 1.3 U	1	0.84	1.1
SED09-10	--	0.48 J	< 1.2 U	0.4 J	0.41	0.53	0.5 J	0.4 J	< 0.8 U	< 0.47 U	< 0.57 U	0.78	0.41 J	0.75
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM (MG_KG)														
SED09-01	--	0.66 J	< 0.72 U	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	R	2	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	R	< 0.86 U	--	--	--	--	--	--	--	--	--	--	--
CALCIUM (MG_KG)														
SED09-01	--	1230 J	838 J	< 3240 UJ	--	--	--	--	--	--	--	--	--	--
SED09-09	--	3570 J	2170	< 2220 UJ	--	--	--	--	--	--	--	--	--	--
SED09-10	--	651 J	602 J	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM, TOTAL (70 MG_KG)														
SED09-01	70	15	< 13.2 U	6.9 J	8.3 J	6.8 J	8.3	9	10.2 J	10.8	10.7	8.8	11	7.1
SED09-02A	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	70	33.4 J	32.9	22.4 J	27 J	28 J	30	42.8	33 J	23.4	40.4	21.1	24.6	24.5
SED09-10	70	8.4 J	< 15.7 U	11.2 J	8.2 J	7.4 J	8	8.2 J	11.2 J	7.8 J	13.1	11.1	6.6	11.9
SED09-11B	70	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	70	--	--	--	--	--	--	--	--	--	--	--	--	--
COBALT (MG_KG)														
SED09-01	--	4.3	< 6.8 U	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	R	< 8.1 U	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	R	< 8.1 U	--	--	--	--	--	--	--	--	--	--	--
COPPER (270 MG_KG)														
SED09-01	270	27.5	< 17.9 UJ	7.8 J	15	4.5 J	7.9	9.7 J	9.1 J	10.3 J	7.1	7	9	8.3
SED09-02A	270	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	270	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	270	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	270	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	270	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	270	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	270	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	270	66.5 J	39.1 J	17 J	43	28 J	35	65.5 J	48.8 J	39.2 J	55.1	17.5	69	18.9
SED09-10	270	R	< 21.3 UJ	9.2	17	7.4 J	7.3	9.5 J	26.1 J	10.2 J	17.7	12.8	7.7	11.3
SED09-11B	270	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	270	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON (MG_KG)														
SED09-01	--	10900	7880 J	10700 J	12000 J	9000	10000	10200	12100 J	12600	11600	10200	13200	8950
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	27900	25600 J	23500 J	25000	25000	26000	27700	29600 J	24900	27900	22800	20600	24700
SED09-10	--	9990	8880 J	8130 J	8000	6000	7300	7400 J	10200 J	7790	9390	11300	6650	7630
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD (218 MG_KG)														
SED09-01	218	25.7	13.6	9.8 J	18	5.4 J	4.4 J	7.9 J	5.9 J	6.6	6.3	4.7	5.1	5.5
SED09-02A	218	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	218	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	218	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	218	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	218	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	218	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	218	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	218	46.9 J	35.2	19.8 J	44	32	38 J	66.5 J	46.3 J	32.4	55.3	17	67.3	17.6
SED09-10	218	3.8 J	5.5	10.5 J	15	7.9	7.1 J	7.3 J	23.6 J	7.9	27.9	12.3	6.9	8.5
SED09-11B	218	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	218	--	--	--	--	--	--	--	--	--	--	--	--	--
MAGNESIUM (MG_KG)														
SED09-01	--	2230	1560 J	1560 J	--	--	--	--	--	--	--	--	--	--
SED09-09	--	4150 J	3580	3990 J	--	--	--	--	--	--	--	--	--	--
SED09-10	--	1500 J	1580 J	--	--	--	--	--	--	--	--	--	--	--
MANGANESE (MG_KG)														
SED09-01	--	141	110	111 J	170	110	120	109	148 J	135	126	122	132	96.8
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	281 J	248	248 J	220	250	240	295	283 J	183	287	238	163	229
SED09-10	--	53.7 J	60.1	73.7 J	77	63	52	48.6 J	70.8 J	65.2	69.9	98.9	45.9	54.9
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY (0.71 MG_KG)														
SED09-01	0.71	< 0.04 U	0.05	< 0.04 U	< 0.27 U	< 0.09 U	< 0.03 U	< 0.05 U	< 0.05 UJ	< 0.04 U	< 0.02 UJ	< 0.01 U	0.029 J	0.1
SED09-02A	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	0.71	0.38	0.29	< 0.18 U	< 0.5 U	0.13	0.33	0.25	0.33 J	0.07 J	0.22 J	< 0.03 U	0.19	0.24

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SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-10	0.71	0.04 J	< 0.03 U	< 0.05 U	< 0.36 U	< 0.08 U	< 0.04 U	R	< 0.08 UJ	< 0.04 U	0.03 J	< 0.04 U	0.033 J	0.028 J
SED09-11B	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL (51.6 MG_KG)														
SED09-01	51.6	14.7	< 15 U	14.5 J	15	14	17	16.6 J	19 J	17.6 J	15.4	13.4	11.1 J	11.7
SED09-02A	51.6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	51.6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	51.6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	51.6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	51.6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	51.6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	51.6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	51.6	R	< 18 U	15.9 J	16	17	18	23.2 J	21.8 J	17.3 J	24.2	15.8	21.8 J	14.8
SED09-10	51.6	R	< 17.9 U	34.8 J	13	6.1	7 J	10.2 J	13.9 J	9.6 J	21.9	11.4	7.6 J	9.3
SED09-11B	51.6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	51.6	--	--	--	--	--	--	--	--	--	--	--	--	--
POTASSIUM (MG_KG)														
SED09-01	--	1010	771 J	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	2400 J	1660 J	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	526 J	< 650 U	--	--	--	--	--	--	--	--	--	--	--
SELENIUM (MG_KG)														
SED09-01	--	< 0.28 U	R	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	R	R	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	R	R	--	--	--	--	--	--	--	--	--	--	--
SILVER (MG_KG)														
SED09-01	--	< 2.3 U	R	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	R	R	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	R	R	--	--	--	--	--	--	--	--	--	--	--
SODIUM (MG_KG)														
SED09-01	--	2840	2660 J	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	4990 J	2100 J	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	R	< 593 U	--	--	--	--	--	--	--	--	--	--	--
THALLIUM (MG_KG)														
SED09-01	--	< 0.18 U	R	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	R	R	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	R	R	--	--	--	--	--	--	--	--	--	--	--
VANADIUM (MG_KG)														
SED09-01	--	13.6	< 9.3 U	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	32.2 J	26.3	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	13.4 J	< 11 U	--	--	--	--	--	--	--	--	--	--	--
ZINC (219 MG_KG)														
SED09-01	**219**	< 71.7 U	42.4 J	31	75	23	< 26 U	31.3 J	< 34.1 U	34.3 J	30.8	30.1	33.2	27.4
SED09-02A	219	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	219	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	219	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	219	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	219	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	219	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	219	--	--	--	--	--	--	--	--	--	--	--	--	--

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SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
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	PAL	ME 01 Dec 2001/Jan 2002	ME 02 Feb-Mar 2002	ME 03 June 2002	ME 04 Sep 2002	ME 05 Jan 2003	ME 06 Apr-May2003	ME 07 Jun-Jul 2003	ME 08 Sept 2003	ME 09 Dec 2003	ME 10 Mar 2004	ME 11 Jun 2004	ME 12 Aug 2004	ME 13 Oct 2004
SED09-09	**219**	195 J	159 J	71	110	90	130	214 J	133 J	99.8 J	179	64.2	168	70.4
SED09-10	219	R	R	21	45	19	< 17 U	16.7 J	62.9 J	20.6 J	35	37.5	13.2	13.7
SED09-11B	219	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	219	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1242 (UG_KG)														
SED09-01	--	< 510 U	< 42 U	< 46 U	< 250 U	< 44 U	< 42 U	< 48 U	< 43 U	< 46 U	< 44 U	< 66 U	< 130 U	< 130 U
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	< 61 U	< 61 U	< 63 U	< 70 U	< 60 U	< 67 U	< 62 U	< 61 U	< 61 U	< 70 U	< 170 U	< 170 U
SED09-10	--	--	< 48 U	< 52 U	< 52 U	< 49 U	< 46 U	< 100 U	< 53 U	< 48 U	< 64 U	< 80 U	< 150 U	< 140 U
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1248 (UG_KG)														
SED09-01	--	< 510 U	< 42 U	< 46 U	< 250 U	< 44 U	< 42 U	< 48 U	< 43 U	< 46 U	< 44 U	< 66 U	< 130 U	< 130 U
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	< 61 U	< 61 U	< 63 U	< 70 U	< 60 U	< 67 U	< 62 U	< 61 U	< 61 U	< 70 U	< 170 U	< 170 U
SED09-10	--	--	< 48 U	< 52 U	< 52 U	< 49 U	< 46 U	< 100 U	< 53 U	< 48 U	< 64 U	< 80 U	< 150 U	< 140 U
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1254 (UG_KG)														
SED09-01	--	< 510 U	< 42 U	< 46 U	< 250 U	< 44 U	< 42 U	< 48 U	< 43 U	< 46 U	< 44 U	< 66 U	< 130 U	< 130 U
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	< 61 U	< 61 U	< 63 U	180 J	< 60 U	< 67 U	< 62 U	< 61 U	< 61 U	< 70 U	< 170 U	< 170 U
SED09-10	--	--	< 48 U	< 52 U	< 52 U	< 49 U	< 46 U	< 100 U	< 53 U	< 48 U	< 64 U	< 80 U	< 150 U	< 140 U
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260 (UG_KG)														
SED09-01	--	1600 J	220	140	910 J	97 J	49	350	62 J	270	110	55.5 J	152	195
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	120	190	170 J	270 J	160	170	140 J	130	170	53.6 J	29 J	270
SED09-10	--	--	< 48 U	47 J	79 J	< 49 U	< 46 U	79 J	88 J	< 48 U	46 J	31.6 J	< 150 U	< 140 U
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
(PCBS) (215 UG_KG)														
SED09-01	**215**	**1600**	**220**	140	**910**	97	49	**350**	62	**270**	110	55.5	152	195
SED09-02A	215	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	215	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	215	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-3
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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01 Dec 2001/Jan 2002	ME 02 Feb-Mar 2002	ME 03 June 2002	ME 04 Sep 2002	ME 05 Jan 2003	ME 06 Apr-May2003	ME 07 Jun-Jul 2003	ME 08 Sept 2003	ME 09 Dec 2003	ME 10 Mar 2004	ME 11 Jun 2004	ME 12 Aug 2004	ME 13 Oct 2004
SED09-08B	215	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	**215**	--	120	190	170	**450**	160	170	140	130	170	53.6	29	**270**
SED09-10	**215**	--	< 48 U	47	79	< 49 U	< 46 U	79	88	< 48 U	46	31.6	< 12 U	< 12 U
SED09-11B	215	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	215	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDD (20 UG_KG)														
SED09-01	**20**	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	20	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	20	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDE (7.65 UG_KG)														
SED09-01	7.65	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	7.65	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	7.65	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDT (6 UG_KG)														
SED09-01	6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	**6**	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	6	--	--	--	--	--	--	--	--	--	--	--	--	--
ALDRIN (UG_KG)	--													
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALPHA-CHLORDANE (6 UG_KG)														
SED09-01	6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	6	--	--	--	--	--	--	--	--	--	--	--	--	--
BETA-BHC (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DELTA-BHC (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DIELDRIN (8 UG_KG)														
SED09-01	**8**	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	8	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	8	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN I (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN II (7 UG_KG)														
SED09-01	7	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	7	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	7	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDOSULFAN SULFATE (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
ENDRIN (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ENDRIN KETONE (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEPTACHLOR (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
HEPTACHLOR EPOXIDE (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LINDANE (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
METHOXYCHLOR (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
TRANS-CHLORDANE (UG_KG)														
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDD (20 UG_KG)														
SED09-01	**20**	17	< 4.2 U	< 4.6 U	< 5 U	< 4.4 U	< 4.2 U	< 4.9 U	< 4.2 U	< 4.6 UJ	< 4.3 U	< 4.4 U	< 8.4 UJ	2.2 J
SED09-02A	20	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	20	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	20	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	20	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	20	< 6.9 U	< 6.1 U	< 6.2 U	< 6.3 U	< 7 U	< 6.1 U	< 6.8 U	< 6.1 U	< 6.1 UJ	< 6.2 U	< 4.7 UJ	< 11 UJ	2.8 J
SED09-10	20	< 4.3 U	< 4.8 U	< 5.1 U	< 5.2 U	< 4.8 U	< 4.7 U	< 10 U	< 5.4 U	< 4.8 UJ	< 6.3 U	1.9 J	< 9.8 UJ	< 9.5 UJ
SED09-11B	20	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	20	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDE (7.65 UG_KG)														
SED09-01	7.65	< 5.1 U	< 4.2 U	< 4.6 U	< 5 U	< 4.4 U	< 4.2 U	< 4.9 U	< 4.2 U	< 4.6 UJ	< 4.3 U	< 4.4 U	< 8.4 UJ	0.99 J
SED09-02A	7.65	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	7.65	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	7.65	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	7.65	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	**7.65**	< 6.9 U	6.7 J	**9.5**	< 6.3 U	**12 J**	< 6.1 U	< 6.8 U	< 6.1 U	< 6.1 UJ	**8.3**	< 4.7 U	< 11 UJ	**8.4 J**

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-10	7.65	< 4.3 U	< 4.8 U	< 5.1 U	< 5.2 U	< 4.8 U	< 4.7 U	< 10 U	< 5.4 U	< 4.8 UJ	< 6.3 U	< 5.3 U	< 9.8 UJ	< 9.5 U
SED09-11B	7.65	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	7.65	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDT (6 UG_KG)														
SED09-01	**6**	**62 J**	< 4.2 U	< 4.6 U	< 5 U	< 4.4 U	< 4.2 U	< 4.9 U	< 4.2 U	< 4.6 UJ	< 4.3 U	R	< 8.4 UJ	< 8.5 UJ
SED09-02A	6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	**6**	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	**6**	< 6.9 U	< 6.1 U	< 6.2 U	< 6.3 U	< 7 U	< 6.1 U	< 6.8 U	< 6.1 U	< 6.1 UJ	< 6.2 U	< 4.7 UJ	< 11 UJ	< 11 UJ
SED09-10	**6**	< 4.3 U	< 4.8 U	< 5.1 U	< 5.2 U	< 4.8 U	< 4.7 U	< 10 U	< 5.4 U	< 4.8 UJ	< 6.3 U	< 5.3 UJ	< 9.8 UJ	< 9.5 UJ
SED09-11B	6	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	**6**	--	--	--	--	--	--	--	--	--	--	--	--	--
ALDRIN (UG_KG)														
SED09-01	--	< 2.6 U	< 2.2 U	< 2.4 U	< 2.6 U	< 2.3 U	< 2.2 U	< 2.5 U	< 2.2 U	< 2.4 UJ	< 2.2 U	< 4.4 U	< 8.4 UJ	< 8.5 U
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	< 3.6 U	< 3.1 U	< 3.2 U	< 3.2 U	< 3.6 U	< 3.1 U	< 3.5 U	< 3.2 U	< 3.2 UJ	< 3.2 U	< 4.7 U	< 11 UJ	< 11 U
SED09-10	--	< 2.2 U	< 2.5 U	< 2.6 U	< 2.7 U	< 2.5 U	< 2.4 U	< 5.2 U	< 2.8 U	< 2.4 UJ	< 3.2 U	< 5.3 U	< 9.8 UJ	< 9.5 U
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--													
ALPHA-CHLORDANE (6 UG_KG)														
SED09-01	**6**	< 2.6 U	< 2.2 U	**21**	< 2.6 U	< 2.3 U	< 2.2 U	< 2.5 U	< 2.2 U	< 2.4 UJ	< 2.2 U	< 4.4 U	< 8.4 UJ	< 8.5 U
SED09-02A	6													
SED09-06B	6													
SED09-07B	6													
SED09-08B	6													
SED09-09	6	< 3.6 U	< 3.1 U	< 3.2 U	< 3.2 U	< 3.6 U	< 3.1 U	< 3.5 U	< 3.2 U	< 3.2 UJ	< 3.2 U	< 4.7 U	< 11 UJ	< 11 U
SED09-10	6	< 2.2 U	< 2.5 U	< 2.6 U	< 2.7 U	2.9	< 2.4 U	< 5.2 U	< 2.8 U	< 2.4 UJ	< 3.2 U	< 5.3 U	< 9.8 UJ	< 9.5 U
SED09-11B	6													
SED09-12B	6													
AROCLOR-1242 (UG_KG)														
SED09-01	--													
SED09-09	--	< 70 U												
SED09-10	--	< 43 U												
AROCLOR-1248 (UG_KG)														
SED09-01	--													
SED09-09	--	< 70 U												
SED09-10	--	< 43 U												
AROCLOR-1254 (UG_KG)														
SED09-01	--													
SED09-09	--	< 70 U												
SED09-10	--	< 43 U												
AROCLOR-1260 (UG_KG)														
SED09-01	--													
SED09-09	--	150												
SED09-10	--	< 43 U												

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SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
BETA-BHC (UG_KG)														
SED09-01	--	< 2.6 U	< 2.2 U	< 2.4 U	< 2.6 U	< 2.3 U	< 2.2 U	< 2.5 U	< 2.2 U	< 2.4 UJ	< 2.2 U	< 4.4 U	< 8.4 UJ	< 8.5 U
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 3.6 U	< 3.1 U	< 3.2 U	< 3.2 U	R	< 3.1 U	< 3.5 U	< 3.2 U	< 3.2 UJ	< 3.2 U	< 4.7 U	< 11 UJ	< 11 U
SED09-10	--	< 2.2 U	< 2.5 U	< 2.6 U	< 2.7 U	< 2.5 U	< 2.4 U	7.6 J	< 2.8 U	< 2.4 UJ	< 3.2 U	< 5.3 U	< 9.8 UJ	< 9.5 U
SED09-11B	--													
SED09-12B	--													
DELTA-BHC (UG_KG)														
SED09-01	--	< 2.6 UJ	< 2.2 UJ	< 2.4 U	< 2.6 U	< 2.3 U	< 2.2 UJ	< 2.5 U	< 2.2 U	< 2.4 UJ	< 2.2 U	< 4.4 UJ	< 8.4 UJ	< 8.5 UJ
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 3.6 U	< 3.1 UJ	< 3.2 U	< 3.2 U	< 3.6 U	< 3.1 UJ	< 3.5 U	< 3.2 U	< 3.2 UJ	< 3.2 U	< 4.7 U	< 11 UJ	< 11 UJ
SED09-10	--	< 2.2 U	< 2.5 UJ	< 2.6 U	< 2.7 U	< 2.5 U	< 2.4 UJ	< 5.2 U	< 2.8 U	< 2.4 UJ	< 3.2 U	< 5.3 U	< 9.8 UJ	< 9.5 UJ
SED09-11B	--													
SED09-12B	--													
DIELDRIN (8 UG_KG)														
SED09-01	8	< 5.1 U	< 4.2 U	< 4.6 U	< 5 U	< 4.4 U	< 4.2 U	< 4.9 U	< 4.2 U	< 4.6 UJ	< 4.3 U	< 4.4 U	< 8.4 UJ	< 8.5 U
SED09-02A	8													
SED09-06B	8													
SED09-07B	8													
SED09-08B	8													
SED09-09	8	< 6.9 U	< 6.1 U	< 6.2 U	< 6.3 U	< 7 U	< 6.1 U	< 6.8 U	< 6.1 U	< 6.1 UJ	< 6.2 U	< 4.7 U	< 11 UJ	< 11 U
SED09-10	8	< 4.3 U	< 4.8 U	< 5.1 U	< 5.2 U	< 4.8 U	< 4.7 U	< 10 U	< 5.4 U	< 4.8 UJ	< 6.3 U	< 5.3 U	< 9.8 UJ	< 9.5 U
SED09-11B	8													
SED09-12B	8													
ENDOSULFAN I (UG_KG)														
SED09-01	--	< 2.6 U	< 2.2 U	< 2.4 U	< 2.6 U	< 2.3 U	< 2.2 U	< 2.5 U	< 2.2 U	< 2.4 UJ	< 2.2 U	< 4.4 UJ	< 8.4 UJ	< 8.5 U
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 3.6 U	< 3.1 U	< 3.2 U	< 3.2 U	< 3.6 U	< 3.1 U	< 3.5 U	< 3.2 U	< 3.2 UJ	< 3.2 U	< 4.7 U	< 11 UJ	< 11 UJ
SED09-10	--	< 2.2 U	< 2.5 U	< 2.6 U	< 2.7 U	< 2.5 U	< 2.4 U	< 5.2 U	< 2.8 U	< 2.4 UJ	< 3.2 U	< 5.3 U	< 9.8 UJ	< 9.5 UJ
SED09-11B	--													
SED09-12B	--													
ENDOSULFAN II (7 UG_KG)														
SED09-01	7	< 5.1 UJ	< 4.2 UJ	< 4.6 U	< 5 U	< 4.4 U	< 4.2 U	< 4.9 U	< 4.2 U	< 4.6 UJ	< 4.3 U	< 4.4 U	< 8.4 UJ	< 8.5 U
SED09-02A	7													
SED09-06B	7													
SED09-07B	7													
SED09-08B	7													
SED09-09	7	< 6.9 U	< 6.1 UJ	< 6.2 U	< 6.3 U	< 7 U	< 6.1 U	< 6.8 U	< 6.1 U	< 6.1 UJ	< 6.2 U	< 4.7 U	< 11 UJ	< 11 UJ
SED09-10	7	< 4.3 U	< 4.8 UJ	< 5.1 UJ	< 5.2 U	< 4.8 U	< 4.7 U	< 10 U	< 5.4 U	< 4.8 UJ	< 6.3 U	< 5.3 U	< 9.8 UJ	< 9.5 UJ
SED09-11B	7													

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SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-12B	7													
ENDOSULFAN SULFATE (UG_KG)														
SED09-01	--	< 5.1 U	< 4.2 U	< 4.6 U	< 5 U	< 4.4 U	< 4.2 U	< 4.9 U	< 4.2 U	< 4.6 UJ	< 4.3 U	< 4.4 U	< 8.4 UJ	< 8.5 U
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 6.9 U	< 6.1 U	< 6.2 U	< 6.3 U	< 7 U	< 6.1 U	< 6.8 U	< 6.1 U	< 6.1 UJ	< 6.2 U	< 4.7 U	< 11 UJ	< 11 UJ
SED09-10	--	< 4.3 U	< 4.8 U	< 5.1 U	< 5.2 U	< 4.8 U	< 4.7 U	< 10 U	< 5.4 U	< 4.8 UJ	< 6.3 U	< 5.3 U	< 9.8 UJ	< 9.5 UJ
SED09-11B	--													
SED09-12B	--													
ENDRIN (UG_KG)														
SED09-01	--	< 5.1 U	R	< 4.6 U	5.4	< 4.4 U	< 4.2 U	< 4.9 U	< 4.2 U	< 4.6 UJ	< 4.3 U	R	< 8.4 UJ	< 8.5 U
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 6.9 U	< 6.1 U	< 6.2 U	< 6.3 U	< 7 U	< 6.1 U	< 6.8 U	< 6.1 U	< 6.1 UJ	< 6.2 U	< 4.7 U	< 11 UJ	< 11 U
SED09-10	--	< 4.3 U	< 4.8 U	< 5.1 U	< 5.2 U	< 4.8 U	< 4.7 U	< 10 U	< 5.4 U	< 4.8 UJ	< 6.3 U	< 5.3 U	< 9.8 UJ	< 9.5 U
SED09-11B	--													
SED09-12B	--													
ENDRIN ALDEHYDE (UG_KG)														
SED09-01	--	R	27 J	< 4.6 U	< 5 U	R	< 4.2 U	7.9 J	< 4.2 U	< 4.6 UJ	< 4.3 UJ	< 4.4 U	< 8.4 UJ	0.89 J
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	R	< 6.1 UJ	< 6.2 U	< 6.3 U	R	< 6.1 U	< 6.8 U	< 6.1 U	< 6.1 UJ	< 6.2 UJ	< 4.7 U	< 11 UJ	1.1 J
SED09-10	--	< 4.3 U	< 4.8 UJ	< 5.1 UJ	< 5.2 U	< 4.8 U	< 4.7 U	< 10 UJ	< 5.4 U	< 4.8 UJ	< 6.3 UJ	< 5.3 U	< 9.8 UJ	< 9.5 U
SED09-11B	--													
SED09-12B	--													
ENDRIN KETONE (UG_KG)														
SED09-01	--	< 5.1 UJ	< 4.2 U	11 J	R	< 4.4 U	< 4.2 U	< 4.9 U	< 4.2 U	< 4.6 UJ	< 4.3 U	< 4.4 U	< 8.4 UJ	< 8.5 U
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 6.9 U	< 6.1 U	9.6 J	8.9	< 7 U	< 6.1 U	< 6.8 U	< 6.1 U	< 6.1 UJ	< 6.2 U	< 4.7 U	< 11 UJ	2.4 J
SED09-10	--	< 4.3 U	< 4.8 U	< 5.1 U	7.2 J	< 4.8 U	< 4.7 U	< 10 U	< 5.4 U	< 4.8 UJ	< 6.3 U	< 5.3 U	< 9.8 UJ	< 9.5 UJ
SED09-11B	--													
SED09-12B	--													
HEPTACHLOR (UG_KG)														
SED09-01	--	< 2.6 U	< 2.2 U	7.6	< 2.6 U	< 2.3 U	< 2.2 U	< 2.5 U	< 2.2 U	< 2.4 UJ	< 2.2 U	< 4.4 U	< 8.4 UJ	< 8.5 U
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 3.6 U	< 3.1 U	< 3.2 U	< 3.2 U	< 3.6 U	< 3.1 U	< 3.5 U	< 3.2 U	< 3.2 UJ	< 3.2 U	< 4.7 U	< 11 UJ	< 11 U
SED09-10	--	< 2.2 U	< 2.5 U	< 2.6 U	< 2.7 U	< 2.5 U	< 2.4 U	< 5.2 U	< 2.8 U	< 2.4 UJ	< 3.2 U	< 5.3 U	< 9.8 UJ	< 9.5 U

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SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-11B	--													
SED09-12B	--													
HEPTACHLOR EPOXIDE (UG_KG)														
SED09-01	--	< 2.6 U	< 2.2 U	< 2.4 U	< 2.6 U	< 2.3 U	< 2.2 U	< 2.5 U	< 2.2 U	< 2.4 UJ	R	< 4.4 U	< 8.4 UJ	< 8.5 U
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 3.6 U	< 3.1 U	< 3.2 U	< 3.2 U	< 3.6 U	< 3.1 U	< 3.5 U	< 3.2 U	< 3.2 UJ	R	< 4.7 U	< 11 UJ	< 11 U
SED09-10	--	< 2.2 U	< 2.5 U	< 2.6 U	< 2.7 U	< 2.5 U	< 2.4 U	< 5.2 U	< 2.8 U	< 2.4 UJ	R	< 5.3 U	< 9.8 UJ	< 9.5 U
SED09-11B	--													
SED09-12B	--													
LINDANE (UG_KG)														
SED09-01	--	< 2.6 UJ	< 2.2 UJ	< 2.4 U	< 2.6 U	< 2.3 U	< 2.2 U	< 2.5 U	< 2.2 U	< 2.4 UJ	< 2.2 U	< 4.4 U	< 8.4 UJ	< 8.5 U
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 3.6 U	< 3.1 UJ	< 3.2 U	< 3.2 U	< 3.6 U	< 3.1 U	< 3.5 U	< 3.2 U	< 3.2 UJ	< 3.2 U	< 4.7 U	< 11 UJ	< 11 UJ
SED09-10	--	< 2.2 U	< 2.5 UJ	< 2.6 U	< 2.7 U	< 2.5 U	< 2.4 U	< 5.2 U	< 2.8 U	< 2.4 UJ	< 3.2 U	< 5.3 U	< 9.8 UJ	< 9.5 UJ
SED09-11B	--													
SED09-12B	--													
METHOXYCHLOR (UG_KG)														
SED09-01	--	< 26 U	< 22 U	< 24 U	< 26 U	< 23 U	< 22 U	< 25 U	< 22 U	< 24 UJ	< 22 U	< 4.4 UJ	< 8.4 UJ	< 8.5 UJ
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 36 U	< 31 U	< 32 U	< 32 U	< 36 U	< 31 U	< 35 U	< 32 U	< 32 UJ	< 32 U	< 4.7 UJ	< 11 UJ	< 11 UJ
SED09-10	--	< 22 U	< 25 U	< 26 U	< 27 U	< 25 U	< 24 U	< 52 U	< 28 U	< 24 UJ	< 32 U	< 5.3 UJ	< 9.8 UJ	< 9.5 UJ
SED09-11B	--													
SED09-12B	--													
(PCBS) (215 UG_KG)														
SED09-01	**215**													
SED09-09	215	150												
SED09-10	215	< 43 U												
TRANS-CHLORDANE (UG_KG)														
SED09-01	--	< 2.6 U	< 2.2 U	29 J	< 2.6 U	< 2.3 U	< 2.2 U	< 2.5 U	< 2.2 U	< 2.4 UJ	< 2.2 U	< 4.4 U	< 8.4 UJ	< 8.5 U
SED09-02A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 3.6 U	< 3.1 U	6.9 J	8	8.5 J	< 3.1 U	3.8 J	< 3.2 U	< 3.2 UJ	5.8 J	< 4.7 U	< 11 UJ	< 11 U
SED09-10	--	< 2.2 U	< 2.5 U	< 2.6 U	< 2.7 U	4.4 J	< 2.4 U	< 5.2 U	< 2.8 U	< 2.4 UJ	< 3.2 U	< 5.3 U	< 9.8 UJ	< 9.5 U
SED09-11B	--													
SED09-12B	--													
2,4-DIMETHYLPHENOL (UG_KG)														
SED09-01	--	< 1300 U	< 220 U	< 230 U	< 260 U	< 230 U	< 210 U	< 250 UJ	< 220 U	R	< 230 U	< 1300 U	< 1300 U	< 1300 UJ
SED09-09	--	< 360 UJ	< 630 U	< 620 U	< 320 U	< 360 U	< 310 U	< 350 U	< 320 U	< 310 UJ	< 320 U	< 1500 U	< 1700 U	< 1800 UJ

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01 Dec 2001/Jan 2002	ME 02 Feb-Mar 2002	ME 03 June 2002	ME 04 Sep 2002	ME 05 Jan 2003	ME 06 Apr-May2003	ME 07 Jun-Jul 2003	ME 08 Sept 2003	ME 09 Dec 2003	ME 10 Mar 2004	ME 11 Jun 2004	ME 12 Aug 2004	ME 13 Oct 2004
SED09-10	--	< 220 UJ	< 250 U	< 260 U	< 270 U	< 250 U	< 240 U	< 530 UJ	< 270 U	< 240 UJ	< 320 U	< 1600 U	< 1400 U	< 1400 UJ
2,4-DINITROPHENOL (UG_KG)														
SED09-01	--	< 2600 U	< 420 UJ	< 460 U	< 500 U	< 440 U	< 420 U	150 J	< 420 U	< 450 UJ	< 440 UJ	< 1300 U	< 1300 U	< 1300 U
SED09-09	--	< 700 UJ	< 1200 UJ	< 1200 U	< 630 U	< 700 U	< 610 U	< 670 U	< 620 U	< 610 UJ	< 620 UJ	< 1500 U	< 1700 U	< 1800 U
SED09-10	--	< 430 UJ	< 480 UJ	< 510 U	< 530 U	< 480 U	< 470 U	< 1000 U	< 530 U	< 470 UJ	< 630 UJ	< 1600 U	< 1400 U	< 1400 U
2-METHYLNAPHTHALENE (670 UG_KG)														
SED09-01	670	< 260 U	< 22 UJ	< 230 U	< 26 U	< 45 U	< 22 U	< 25 UJ		< 23 UJ	< 22 U	< 88 U	< 85 UJ	< 87 U
SED09-09	670	< 35 U	< 31 U	< 31 U	< 320 U	< 70 U	< 31 U	< 34 U	< 32 UJ	< 31 UJ	< 32 U	< 93 U	28.2 J	52 J
SED09-10	**670**	< 21 U	< 25 UJ	< 260 U	< 270 U	< 250 U	< 120 U	< 50 UJ	< 27 UJ	**1000 J**	< 32 U	< 110 U	< 99 UJ	8.4 J
3,3-DICHLOROBENZIDINE (UG_KG)														
SED09-01	--	< 1300 U	< 220 U	< 230 U	< 260 U	< 230 U	< 210 UJ	R	< 220 U	< 230 UJ	< 230 U	< 330 U	< 320 U	< 330 U
SED09-09	--	< 360 U	< 630 U	< 620 U	< 320 U	< 360 U	< 310 UJ	R	< 320 U	< 320 UJ	< 320 U	< 370 U	< 430 U	< 440 U
SED09-10	--	< 220 U	< 250 U	< 260 U	< 270 U	< 250 U	< 240 UJ	R	< 270 U	< 240 UJ	< 320 U	< 400 U	< 360 U	< 360 U
4-BROMOPHENYL-PHENYLETHER (UG_KG)														
SED09-01	--	< 1300 U	< 220 U	< 230 U	< 260 U	< 230 U	< 210 U	< 250 UJ	< 220 U	< 230 UJ	< 230 U	< 650 U	< 640 U	< 660 U
SED09-09	--	< 360 U	< 630 U	< 620 U	< 320 U	< 360 U	< 310 U	< 350 U	< 320 U	< 320 U	< 320 U	< 740 U	< 860 U	< 880 U
SED09-10	--	< 220 U	< 250 U	< 260 U	< 270 U	< 250 U	< 240 U	< 530 U	< 270 U	< 240 U	< 320 U	< 790 U	< 720 U	< 710 U
4-METHYLPHENOL (UG_KG)														
SED09-01	--	< 1300 U	< 220 U	< 230 U	< 260 U	< 230 U	< 210 U	380 J	< 220 U	< 230 UJ	< 230 U			
SED09-09	--	< 360 U	< 630 U	< 620 U	< 320 U	< 360 U	< 310 U	160 J	< 320 U	< 320 UJ	< 320 U			
SED09-10	--	< 220 U	< 250 U	< 260 U	< 270 U	< 250 U	< 240 U	< 530 U	< 270 U	< 240 UJ	< 320 U			
SED09-09	--	< 360 U	< 630 U	< 620 U	< 320 U	< 360 U	< 310 U	160 J	< 320 U	< 320 UJ	< 320 U			
SED09-10	--	< 220 U	< 250 U	< 260 U	< 270 U	< 250 U	< 240 U	< 530 U	< 270 U	< 240 UJ	< 320 U			
ACENAPHTHENE (500 UG_KG)														
SED09-01	500	< 260 U	< 22 UJ	< 230 U	< 26 U	< 45 U	< 22 UJ	< 25 UJ	< 22 UJ	< 23 UJ	< 22 U	< 88 U	44.3 J	< 87 U
SED09-09	500	< 35 U	< 31 U	< 31 U	< 320 U	< 70 U	< 31 UJ	< 34 U	< 32 UJ	< 31 UJ	< 32 U	< 93 U	166	< 120 U
SED09-10	**500**	< 21 U	< 25 UJ	< 260 U	56 J	< 250 U	< 120 UJ	< 50 UJ	< 27 UJ	**540 J**	< 32 U	< 110 U	65.7 J	< 96 U
ACENAPHTHYLENE (640 UG_KG)														
SED09-01	640	< 510 U	< 43 UJ	< 230 U	< 51 U	< 89 U	< 43 UJ	< 49 UJ	< 43 UJ	< 46 UJ	< 44 U	< 88 U	< 85 UJ	< 87 UJ
SED09-09	640	< 70 U	< 61 U	< 62 U	< 320 U	< 140 U	< 62 UJ	< 68 U	< 63 UJ	< 62 UJ	< 63 U	< 93 U	37.1 J	< 120 U
SED09-10	640	< 43 U	< 49 UJ	< 260 U	< 270 U	< 490 U	< 240 UJ	< 100 UJ	< 54 UJ	< 48 UJ	< 63 U	< 110 U	28.8 J	< 96 U
ANTHRACENE (1100 UG_KG)														
SED09-01	1100	57	6.4 J	14 J	31 J	27	2.8 J	18 J	3.1 J	3.4 J	4.2 J	< 88 U	4.9 J	< 87 U
SED09-09	1100	33 J	33 J	41 J	89 J	68 J	27 J	25 J	37 J	24 J	62 J	14.8 J	18.2 J	< 120 U
SED09-10	**1100**	< 2.1 U	2.9 J	74 J	**3300 J**	200 J	89 J	48 J	49 J	230 J	23 J	< 110 U	52.6 J	< 96 U
BENZO(A)ANTHRACENE (1600 UG_KG)														
SED09-01	1600	420 J	28 J	62 J	110 J	170	4.2 J	47 J	8.5 J	8.8 J	10 J	7.1 J	9 J	< 13 UJ
SED09-09	1600	150 J	160 J	130 J	270 J	180 J	86 J	79 J	95 J	75 J	170 J	72.8	64.1	< 18 U
SED09-10	**1600**	< 2.1 U	14 J	190 J	**5700 J**	520	180 J	99 J	130 J	410 J	62 J	69.6 J	139	< 14 U
BENZO(A)PYRENE (1600 UG_KG)														
SED09-01	1600	430 J	25 J	51 J	90 J	120	17 J	48 J	12 J	7.8 J	16 J	< 13 U	13.1	< 13 U
SED09-09	1600	150 J	130 J	140 J	210 J	190 J	110 J	55 J	120 J	67 J	200 J	49.6	93.1	< 18 U
SED09-10	**1600**	< 2.1 U	12 J	130 J	**3300 J**	460	150 J	66 J	150 J	300 J	92 J	56.6 J	146	< 14 U
BENZO(B)FLUORANTHENE (UG_KG)														
SED09-01	--	410 J	32 J	48 J	98 J	140 J	3.4 J	55 J	12 J	< 4.6 UJ	< 4.4 U	< 13 U	3.9 J	< 13 U
SED09-09	--	160 J	140 J	170 J	160 J	190 J	56 J	82 J	110 J	52 J	210 J	56.5	57.3	< 18 U
SED09-10	--	< 4.3 U	16 J	110 J	3500 J	470 J	130 J	81 J	170 J	310 J	91 J	16.7	112	42.1 J
BENZO(G,H,I)PERYLENE (UG_KG)														
SED09-01	--	150	27 J	38 J	67 J	130	< 4.3 UJ	26 J	9.7 J	8.6 J	9.8 J	< 13 U	< 13 U	< 13 U
SED09-09	--	110 J	86 J	< 6.2 U	160 J	230 J	53 J	49 J	74 J	42 J	130 J	45.8	46.7 J	< 18 U
SED09-10	--	< 4.3 U	16 J	110 J	2800 J	440	64 J	51 J	75 J	290 J	87 J	< 16 U	81.2 J	< 14 U

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
BENZO(K)FLUORANTHENE (UG_KG)														
SED09-01	--	390 J	22 J	56 J	81 J	51	1.5 J	12 J	2.9 J	4.8 J	5.7 J	< 13 U	< 13 U	< 13 U
SED09-09	--	160 J	62 J	61 J	150 J	79 J	31 J	28 J	42 J	29 J	220 J	66 J	35.4	< 18 U
SED09-10	--	< 2.1 U	9.4 J	75 J	1300 J	250	57 J	97 J	120 J	120 J	49 J	86.7 J	67	2.7 J
BENZOIC ACID (UG_KG)														
SED09-01	--	< 2600 U	< 420 U	59 J								< 650 U		
SED09-09	--	< 700 U	< 1200 U	380 J								< 740 U		
SED09-10	--	< 430 U	< 480 U	< 510 U								< 790 U		
BIS(2-ETHYLHEXYL)PHTHALATE (UG_KG)														
SED09-01	--	< 1300 U	< 220 U	3500	< 260 U	420	< 210 U	< 250 UJ	< 81 U	100 J	< 230 U	< 650 U	< 640 U	< 660 U
SED09-09	--	140 J	< 630 U	< 620 U	< 400 U	750	< 760 U	170 J	< 190 U	180 J	< 320 U	< 740 U	< 860 U	< 880 U
SED09-10	--	< 220 U	< 250 U	< 610 UJ	< 270 U	550	< 240 U	1200 J	< 140 U	170 J	380	< 790 U	< 720 U	< 710 U
BUTYLBENZYLPHTHALATE (UG_KG)														
SED09-01	--	< 1300 U	< 220 U	< 230 U	< 260 U	< 230 U	< 210 U	< 250 UJ	< 220 U	< 230 UJ	< 230 U	< 650 U	< 640 U	< 660 UJ
SED09-09	--	< 360 U	< 630 U	< 620 U	< 320 U	< 360 U	< 310 U	< 350 U	< 320 U	< 320 U	< 320 U	< 740 U	< 860 U	< 880 UJ
SED09-10	--	< 220 U	< 250 U	< 260 U	< 270 U	< 250 U	< 240 U	< 530 U	< 270 U	< 240 U	< 320 U	38.9 J	< 720 U	< 710 UJ
CARBAZOLE (UG_KG)														
SED09-01	--	< 1300 U	< 220 U	< 230 U	< 260 U	< 230 U	< 210 U	< 250 UJ	< 220 U	< 230 UJ	< 230 U	< 650 U	< 640 U	< 660 UJ
SED09-09	--	< 360 U	< 630 U	< 620 U	< 320 U	< 360 U	89 J	< 350 U	< 320 U	< 320 U	91 J	< 740 U	< 860 U	< 880 UJ
SED09-10	--	< 220 U	< 250 U	< 260 U	77 J	180 J	130 J	< 530 U	120 J	340	< 320 U	< 790 U	< 720 U	< 710 UJ
CHRYSENE (2800 UG_KG)														
SED09-01	2800	470 J	21 J	61 J	110 J	180	6.7 J	44 J	8.4 J	3.8 J	11 J	< 13 UJ	8.5 J	< 13 U
SED09-09	2800	180 J	180 J	66 J	200 J	200 J	73 J	62 J	75 J	68 J	180 J	< 14 UJ	60.2	< 18 U
SED09-10	**2800**	< 2.1 U	12 J	100 J	**6300 J**	560	170 J	120 J	140 J	370 J	66 J	78.1 J	134	< 14 U
DIBENZ(A,H)ANTHRACENE (260 UG_KG)														
SED09-01	260	< 51 U	6 J	< 47 U	< 5.1 U	< 8.9 U	< 4.3 UJ	< 4.9 UJ	< 4.3 UJ	< 4.6 UJ	< 4.4 UJ	< 13 U	< 13 U	< 13 UJ
SED09-09	**260**	< 7 U	6.4 J	< 6.2 U	< 320 U	< 14 U	< 6.2 UJ	< 6.8 U	< 6.3 UJ	< 6.2 UJ	< 6.3 UJ	< 14 U	< 17 UJ	< 18 U
SED09-10	**260**	< 4.3 U	< 4.9 UJ	< 52 U	< 270 U	< 49 U	< 24 UJ	< 10 UJ	< 5.4 UJ	< 4.8 UJ	< 6.3 UJ	< 16 U	41.5 J	< 14 U
DIBENZOFURAN (UG_KG)														
SED09-01	--	< 1300 U	< 220 U	< 230 U	< 260 U	< 230 U	< 210 U	< 250 UJ	< 220 U	< 230 UJ	< 230 U	< 330 U	< 320 U	< 330 UJ
SED09-09	--	< 360 U	< 630 U	< 620 U	< 320 U	< 360 U	< 310 U	< 350 U	< 320 U	< 320 U	< 320 U	< 370 U	< 430 U	< 440 UJ
SED09-10	--	< 220 U	< 250 U	< 260 U	< 270 U	72 J	57 J	< 530 U	57 J	92 J	< 320 U	< 400 U	< 360 U	< 360 UJ
FLUORANTHENE (5100 UG_KG)														
SED09-01	5100	960 J	77 J	150 J	210 J	340	14 J	110 J	21 J	22 J	29 J	18.3 J	24.7	28
SED09-09	5100	380	340 J	310 J	550 J	510 J	210 J	210 J	290 J	180 J	280 J	200	215	452
SED09-10	**5100**	< 4.3 U	27 J	440 J	**16000 J**	1400	490 J	320 J	380 J	1100 J	140 J	190 J	507	64.8
FLUORENE (540 UG_KG)														
SED09-01	540	41 J	6.5 J	< 47 U	29 J	< 8.9 U	< 4.3 UJ	< 4.9 UJ	< 4.3 UJ	< 4.6 UJ	< 4.4 U	< 88 U	< 85 UJ	2.5 J
SED09-09	540	25 J	< 6.1 U	59 J	72 J	61 J	24 J	57 J	44 J	8 J	14 J	< 93 U	< 110 UJ	< 120 U
SED09-10	**540**	< 4.3 U	< 4.9 UJ	46 J	**2500 J**	91	55 J	26 J	36 J	200 J	11 J	< 110 U	< 99 UJ	< 96 U
HEXACHLOROCYCLOPENTADIENE (UG_KG)														
SED09-01	--	< 2600 U	< 420 U	< 460 U	< 500 U	< 440 U	< 420 U	R	< 420 UJ	R	< 440 UJ	< 650 U	< 640 U	< 660 U
SED09-09	--	< 700 U	< 1200 U	< 1200 U	< 630 U	< 700 U	< 610 U	R	< 620 UJ	R	< 620 UJ	< 740 U	< 860 U	< 880 U
SED09-10	--	< 430 U	< 480 U	R	< 530 U	< 480 U	< 470 U	R	< 530 UJ	R	< 630 UJ	< 790 U	< 720 U	< 710 U
INDENO(1,2,3-CD)PYRENE (UG_KG)														
SED09-01	--	310 J	18 J	29 J	70 J	71	2.8 J	29 J	6.5 J	6.8 J	7.8 J	< 13 UJ	< 13 UJ	< 13 U
SED09-09	--	67 J	72 J	< 3.1 U	140 J	130 J	49 J	62 J	71 J	45 J	120 J	40.4 J	26	< 18 U
SED09-10	--	< 2.1 U	6.8 J	71 J	1800 J	280	77 J	56 J	78 J	200 J	69 J	< 16 UJ	< 15 UJ	< 14 U
NAPHTHALENE (2100 UG_KG)														

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01 Dec 2001/Jan 2002	ME 02 Feb-Mar 2002	ME 03 June 2002	ME 04 Sep 2002	ME 05 Jan 2003	ME 06 Apr-May2003	ME 07 Jun-Jul 2003	ME 08 Sept 2003	ME 09 Dec 2003	ME 10 Mar 2004	ME 11 Jun 2004	ME 12 Aug 2004	ME 13 Oct 2004
SED09-01	2100	< 260 U	< 22 UJ	< 230 U	< 26 U	< 45 U	< 22 UJ	< 25 UJ	< 22 UJ	< 23 UJ	< 22 UJ	< 88 U	< 85 UJ	< 87 U
SED09-09	2100	< 35 U	< 31 U	< 31 U	< 320 U	< 70 U	< 31 UJ	< 34 U	< 32 UJ	47 J	< 32 UJ	< 93 U	7.1 J	< 120 U
SED09-10	2100	< 21 U	< 25 UJ	< 260 U	< 270 U	< 250 U	< 120 UJ	< 50 UJ	< 27 UJ	160 J	< 32 UJ	< 110 U	< 99 UJ	< 96 U
PENTACHLOROPHENOL (UG_KG)														
SED09-01	--	< 2600 U	< 420 U	< 460 U		< 440 U	< 420 U	R	< 420 U	< 450 UJ	< 440 U	< 650 U	< 640 U	< 660 UJ
SED09-09	--	< 700 U	< 1200 U	< 1200 U		< 700 U	< 610 U	R	< 620 U	< 610 U	< 620 U	< 740 U	< 860 U	< 880 UJ
SED09-10	--	< 430 U	< 480 U	< 510 U		< 480 U	< 470 U	R	< 530 U	< 470 U	< 630 U	< 790 U	< 720 U	< 710 UJ
PHENANTHRENE (1500 UG_KG)														
SED09-01	1500	390 J	28 J	93 J	130 J	77	7.3 J	79 J	10 J	11 J	11 J	24.6 J	< 85 UJ	136
SED09-09	1500	220 J	180 J	160 J	300 J	280 J	110 J	120 J	150 J	98 J	240 J	160	187	420
SED09-10	**1500**	< 2.1 U	14 J	350 J	**18570 J**	830	360 J	250 J	190 J	1000 J	92 J	138 J	418	398
PYRENE (2600 UG_KG)														
SED09-01	2600	770 J	60 J	110 J	220 J	320	12 J	110 J	20 J	27 J	24 J	21 J	20.8 J	< 13 U
SED09-09	2600	300 J	270 J	260 J	470 J	450 J	180 J	190 J	260 J	170 J	240 J	175	167	< 18 U
SED09-10	**2600**	< 2.1 U	21 J	350 J	**12190 J**	1200	410 J	290 J	430 J	920 J	120 J	143 J	343	< 14 U
2-METHYLNAPHTHALENE (670 UG_KG)														
SED09-01	670													
SED09-02A	670													
SED09-03A	670													
SED09-04A	670													
SED09-05A	670													
SED09-06B	670													
SED09-07B	670													
SED09-08B	670													
SED09-09	670													
SED09-10	670													
SED09-11B	670													
SED09-12B	670													
ACENAPHTHENE (500 UG_KG)														
SED09-01	500													
SED09-02A	500													
SED09-03A	500													
SED09-04A	500													
SED09-05A	500													
SED09-06B	500													
SED09-07B	500													
SED09-08B	500													
SED09-09	500													
SED09-10	**500**													
SED09-11B	500													
SED09-12B	500													
ACENAPHTHYLENE (640 UG_KG)														
SED09-01	640													
SED09-02A	640													
SED09-03A	640													
SED09-04A	640													
SED09-05A	640													
SED09-06B	640													
SED09-07B	640													

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-08B	640													
SED09-09	640													
SED09-10	640													
SED09-11B	640													
SED09-12B	640													
ANTHRACENE (1100 UG_KG)														
SED09-01	1100													
SED09-02A	1100													
SED09-03A	1100													
SED09-04A	1100													
SED09-05A	1100													
SED09-06B	1100													
SED09-07B	1100													
SED09-08B	1100													
SED09-09	1100													
SED09-10	**1100**													
SED09-11B	1100													
SED09-12B	1100													
BENZO(A)ANTHRACENE (1600 UG_KG)														
SED09-01	1600													
SED09-02A	1600													
SED09-03A	1600													
SED09-04A	1600													
SED09-05A	1600													
SED09-06B	1600													
SED09-07B	1600													
SED09-08B	1600													
SED09-09	1600													
SED09-10	**1600**													
SED09-11B	1600													
SED09-12B	1600													
BENZO(A)PYRENE (1600 UG_KG)														
SED09-01	1600													
SED09-02A	1600													
SED09-03A	1600													
SED09-04A	1600													
SED09-05A	1600													
SED09-06B	1600													
SED09-07B	1600													
SED09-08B	1600													
SED09-09	1600													
SED09-10	**1600**													
SED09-11B	1600													
SED09-12B	1600													
BENZO(B)FLUORANTHENE (UG_KG)														
SED09-01	--													
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--													
SED09-10	--													
SED09-11B	--													
SED09-12B	--													
BENZO(G,H,I)PERYLENE (UG_KG)														
SED09-01	--													
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--													
SED09-10	--													
SED09-11B	--													
SED09-12B	--													
BENZO(K)FLUORANTHENE (UG_KG)														
SED09-01	--													
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--													
SED09-10	--													
SED09-11B	--													
SED09-12B	--													
CHRYSENE (2800 UG_KG)														
SED09-01	2800													
SED09-02A	2800													
SED09-03A	2800													
SED09-04A	2800													
SED09-05A	2800													
SED09-06B	2800													
SED09-07B	2800													
SED09-08B	2800													
SED09-09	2800													
SED09-10	**2800**													
SED09-11B	2800													
SED09-12B	2800													
DIBENZ(A,H)ANTHRACENE (260 UG_KG)														
SED09-01	260													

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01 Dec 2001/Jan 2002	ME 02 Feb-Mar 2002	ME 03 June 2002	ME 04 Sep 2002	ME 05 Jan 2003	ME 06 Apr-May2003	ME 07 Jun-Jul 2003	ME 08 Sept 2003	ME 09 Dec 2003	ME 10 Mar 2004	ME 11 Jun 2004	ME 12 Aug 2004	ME 13 Oct 2004
SED09-02A	260													
SED09-03A	260													
SED09-04A	260													
SED09-05A	260													
SED09-06B	260													
SED09-07B	260													
SED09-08B	260													
SED09-09	260													
SED09-10	**260**													
SED09-11B	260													
SED09-12B	260													
FLUORANTHENE (5100 UG_KG)														
SED09-01	5100													
SED09-02A	5100													
SED09-03A	5100													
SED09-04A	5100													
SED09-05A	5100													
SED09-06B	5100													
SED09-07B	5100													
SED09-08B	5100													
SED09-09	5100													
SED09-10	**5100**													
SED09-11B	5100													
SED09-12B	5100													
FLUORENE (540 UG_KG)														
SED09-01	540													
SED09-02A	540													
SED09-03A	540													
SED09-04A	540													
SED09-05A	540													
SED09-06B	540													
SED09-07B	540													
SED09-08B	540													
SED09-09	540													
SED09-10	**540**													
SED09-11B	540													
SED09-12B	540													
INDENO(1,2,3-CD)PYRENE (UG_KG)														
SED09-01	--													
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--													
SED09-10	--													
SED09-11B	--													

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-12B	--													
NAPHTHALENE (2100 UG_KG)														
SED09-01	2100													
SED09-02A	2100													
SED09-03A	2100													
SED09-04A	2100													
SED09-05A	2100													
SED09-06B	2100													
SED09-07B	2100													
SED09-08B	2100													
SED09-09	2100													
SED09-10	2100													
SED09-11B	2100													
SED09-12B	2100													
PHENANTHRENE (1500 UG_KG)														
SED09-01	1500													
SED09-02A	1500													
SED09-03A	1500													
SED09-04A	1500													
SED09-05A	1500													
SED09-06B	1500													
SED09-07B	1500													
SED09-08B	1500													
SED09-09	1500													
SED09-10	**1500**													
SED09-11B	1500													
SED09-12B	1500													
PYRENE (2600 UG_KG)														
SED09-01	2600													
SED09-02A	2600													
SED09-03A	2600													
SED09-04A	2600													
SED09-05A	2600													
SED09-06B	2600													
SED09-07B	2600													
SED09-08B	2600													
SED09-09	2600													
SED09-10	**2600**													
SED09-11B	2600													
SED09-12B	2600													
1,1,1-TRICHLOROETHANE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
1,1,2,2-TETRACHLOROETHANE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
1,1,2-TRICHLOROETHANE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
1,1-DICHLOROETHANE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
1,1-DICHLOROETHENE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
1,2-DICHLOROETHANE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
1,2-DICHLOROPROPANE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
2-BUTANONE (UG_KG)														
SED09-01	--	220 T	R	< 1900 U	< 9 U	< 10 U	< 10 U	< 10 U	< 10 U	< 27 U	1 J	< 1.7 U	< 1.9 U	< 2.4 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	9 E	22	5 J	< 13 U	11 J	< 19 U	10	7	3.8	8.6
SED09-10	--	< 810 U	R	< 430 U	< 4 U	< 11 U	2 J	R	< 12 U	< 4 U	5 J	2.1 J	3.1 J	3
SED09-11B	--													
SED09-12B	--													
2-HEXANONE (UG_KG)														
SED09-01	--	< 920 UJ	< 420 U	< 1900 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 27 U	< 10 U	< 1.7 U	< 1.9 U	< 2.4 U
SED09-02A	--													

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 UJ		< 2100 U	< 13 U	< 20 U	< 13 U	< 13 U	< 12 U	< 3 U	< 12 U	< 3.4 U	< 2.7 U	< 3.8 U
SED09-10	--	< 810 UJ	< 380 U	< 430 UJ	< 8 U	< 11 U	< 10 U	R	< 12 U	< 1 U	< 12 U	< 3 U	< 2.7 UJ	< 2.2 U
SED09-11B	--													
SED09-12B	--													
4-METHYL-2-PENTANONE (UG_KG)														
SED09-01	--	< 920 UJ	< 420 U	< 1900 U	< 5 U	< 10 U	< 10 U	< 10 U	< 10 U	< 27 U	< 10 U	< 1.7 U	< 1.9 U	< 2.4 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 UJ		< 2100 U	< 13 U	< 20 U	< 13 U	< 13 U	< 12 U	< 87 UJ	< 12 U	< 3.4 U	< 2.7 U	< 3.8 U
SED09-10	--	< 810 UJ	< 380 U	< 430 UJ	< 8 U	< 11 U	< 10 U	R	< 12 U	< 29 UJ	< 12 U	< 3 U	< 2.7 U	< 2.2 U
SED09-11B	--													
SED09-12B	--													
ACETONE (UG_KG)														
SED09-01	--	< 920 UJ	R	430 T	75 T	31	< 7 U	< 11 U	< 130 U	< 22 U	< 27 U	9.1 J	< 1.9 U	< 2.4 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	R		910 T	150 T	180	< 33 U	< 33 U	< 62 U	300 J	< 120 U	103 J	< 2.7 U	110
SED09-10	--	R	R	250 T	69 T	75	< 13 U	< 72 U	< 28 U	< 30 U	< 110 U	60.5 J	< 2.7 U	< 2.2 U
SED09-11B	--													
SED09-12B	--													
BENZENE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.17 U	< 0.19 U	< 0.24 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 0.34 U	< 0.27 U	< 0.38 U
SED09-10	--	< 810 U	< 190 U	< 430 U	1 J	< 5 U	< 5 U	R	< 6 U	2 J	< 6 U	< 0.3 U	< 0.27 U	< 0.22 U
SED09-11B	--													
SED09-12B	--													

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
BROMODICHLOROMETHANE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
BROMOFORM (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 UJ
SED09-11B	--													
SED09-12B	--													
BROMOMETHANE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
CARBON DISULFIDE (UG_KG)														
SED09-01	--	100 J	< 210 U	< 1900 U	3 T	2 J	< 5 U	3 J	< 5 UJ	1 J	1 J	1.1 J	4	4.6
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	140 J		< 2100 U	6 T	5 J	2 J	< 7 U	5 J	12	5 J	3.8	4.4	16

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-10	--	< 810 U	< 190 U	< 430 U	3 T	3 J	2 J	17 J	3 J	2 J	6	4.7	< 2.7 U	16.9 J
SED09-11B	--													
SED09-12B	--													
CARBON TETRACHLORIDE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
CHLOROBENZENE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 3 U	< 5 UJ	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 UJ	< 11 U	< 6 UJ	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 UJ	< 4 U	< 6 UJ	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
CHLOROETHANE (UG_KG)														
SED09-01	--	< 920 UJ	< 210 U	< 1900 U	< 5 U	< 5 UJ	< 5 U	< 5 U	< 5 UJ	< 3 U	< 5 U	< 1.7 U	< 1.9 U	< 2.4 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 UJ	< 6 U	< 7 U	< 6 UJ	< 11 U	< 6 U	< 3.4 U	< 2.7 U	< 3.8 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 UJ	< 5 U	R	< 6 UJ	< 4 U	< 6 U	< 3 U	< 2.7 U	< 2.2 U
SED09-11B	--													
SED09-12B	--													
CHLOROFORM (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
CHLOROMETHANE (UG_KG)														
SED09-01	--	98 T	< 210 U	< 1900 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 1.7 U	< 1.9 U	0.57 J
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 UJ	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 3.4 U	0.48 J	0.93 J
SED09-10	--	< 810 U	< 190 U	< 430 UJ	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 3 U	< 2.7 U	< 2.2 UJ
SED09-11B	--													
SED09-12B	--													
CIS-1,2-DICHLOROETHENE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
CIS-1,3-DICHLOROPROPENE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 14 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 43 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 14 U	< 6 U	< 1.2 U	< 1.1 UJ	< 0.89 UJ
SED09-11B	--													
SED09-12B	--													
DIBROMOCHLOROMETHANE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													

TABLE E-3
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SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
ETHYLBENZENE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
METHYLENE CHLORIDE (UG_KG)														
SED09-01	--	< 920 UJ	< 210 U	< 1900 UJ	< 27 UJ	< 5 UJ	< 7 U	< 5 U	< 13 U	< 1 U	< 6 U	< 1.3 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 UJ	< 41 UJ	< 10 UJ	< 9 U	< 7 U	< 3 U	< 10 U	< 23 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 UJ	< 17 UJ	< 5 UJ	< 6 U	< 13 U	< 3 U	< 2 U	< 1 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
STYRENE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 1.7 U	< 1.9 U	< 2.4 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 3.4 U	< 2.7 U	< 3.8 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 U	< 6 U	< 3 U	< 2.7 UJ	< 2.2 UJ
SED09-11B	--													
SED09-12B	--													
TETRACHLOROETHENE (UG_KG)														

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	1 J	< 5 U	< 0.67 U	< 0.75 U	< 0.96 UJ
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	6 J	< 6 U	< 1.3 U	< 1.1 U	< 1.5 UJ
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	0.9 J	< 6 U	< 1.2 U	< 1.1 U	< 0.89 UJ
SED09-11B	--													
SED09-12B	--													
TOLUENE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 UJ	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 UJ	< 4 U	< 6 U	0.33 J	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
TRANS-1,2-DICHLOROETHENE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 UJ	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	PAL	ME 01	ME 02	ME 03	ME 04	ME 05	ME 06	ME 07	ME 08	ME 09	ME 10	ME 11	ME 12	ME 13
		Dec 2001/Jan 2002	Feb-Mar 2002	June 2002	Sep 2002	Jan 2003	Apr-May2003	Jun-Jul 2003	Sept 2003	Dec 2003	Mar 2004	Jun 2004	Aug 2004	Oct 2004
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 4 UJ	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
TRANS-1,3-DICHLOROPROPENE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 14 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 43 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 U	< 14 U	< 6 U	< 1.2 U	< 1.1 UJ	< 0.89 UJ
SED09-11B	--													
SED09-12B	--													
TRICHLOROETHENE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 UJ	< 3 UJ	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 U	< 7 U	< 10 U	< 6 U	< 7 U	< 6 UJ	< 11 UJ	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 U	< 4 U	< 5 U	< 5 U	R	< 6 UJ	< 4 UJ	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													
VINYL CHLORIDE (UG_KG)														
SED09-01	--	< 920 U	< 210 U	< 1900 UJ	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 3 U	< 5 U	< 0.67 U	< 0.75 U	< 0.96 U
SED09-02A	--													
SED09-03A	--													
SED09-04A	--													
SED09-05A	--													
SED09-06B	--													
SED09-07B	--													
SED09-08B	--													
SED09-09	--	< 1300 U		< 2100 UJ	< 7 U	< 10 U	< 6 U	< 7 U	< 6 U	< 11 U	< 6 U	< 1.3 U	< 1.1 U	< 1.5 U
SED09-10	--	< 810 U	< 190 U	< 430 UJ	< 4 U	< 5 U	< 5 U	R	< 6 U	1 J	< 6 U	< 1.2 U	< 1.1 U	< 0.89 U
SED09-11B	--													
SED09-12B	--													

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
ALUMINUM (MG_KG)															
SED09-01	3400	4100 J	3950	3820	4180	3950	4220	1590	4110	6200	6180	6630	6800	3450	4840
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	8130	7840 J	7560	8340	7810	8020	6150	8240	8030	8930	7710	8130	15700	10600	9240
SED09-10	5670	7500 J	4370	13400	6070	4730	6760	6020	6680	6570	7260	7110	9580	8310	8730
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ANTIMONY (MG_KG)															
SED09-01	< 0.78 U	< 0.79 U	< 0.79 U	< 1 U	< 0.72 U	0.54 J	< 2.2 U	< 2.6 UJ	< 2.6 UJ	< 6 UJ	< 6 U	0.16 J	< 0.7 UJ	< 0.9 UJ	< 0.38 UJ
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	< 0.98 U	< 0.97 U	< 0.84 U	< 1 U	< 0.82 U	< 2.9 U	< 3.1 U	1.2 J	< 3.1 UJ	< 6 U	< 6 U	< 1.4 UJ	1.7 J	< 1.2 UJ	< 0.56 UJ
SED09-10	< 0.92 U	< 0.77 U	< 0.81 U	< 1 U	< 0.73 U	< 2.8 U	< 2.8 U	< 2 UJ	< 3.1 UJ	< 6 U	< 6 U	< 1.2 UJ	0.32 J	< 1 UJ	< 0.53 UJ
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ARSENIC (70 MG_KG)															
SED09-01	3.4	3	4.8	3.9	3.6	2.5 J	< 2.2 U	< 2.6 U	< 2.6 U	3.65	5.81	5.8 J	4.6	3	2.3
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	7.6	1.8	8.9	7.9	7.2	7.7	< 3.1 U	< 2.6 U	< 3.1 U	6.4	4.25	6 J	12.4	10.7	8.1
SED09-10	2	7.4	3.3	3.5	2.4	1.4 J	< 2.8 U	< 2 U	< 3.1 U	25	1.91	4 J	2.9	6.2	5.9
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BARIUM (MG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
BERYLLIUM (MG_KG)															
SED09-01	0.38 J	0.56	0.59	0.65	0.71	0.39 J	< 0.45 U	0.26 J	< 0.51 U	< 0.5 U	< 0.5 U	0.53	0.42 J	0.32 J	0.57
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	0.99	0.64 J	1.1	1.3	0.99	0.66	< 0.62 U	1	< 0.62 U	< 0.5 U	< 0.5 U	0.89	1.2	0.74	0.72
SED09-10	0.47 J	0.99	0.55	1.1	0.72	< 0.57 U	< 0.57 U	0.52	< 0.63 U	< 0.5 U	< 0.5 U	0.5	0.4 J	0.59 J	0.67
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CADMIUM (MG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CALCIUM (MG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
CHROMIUM, TOTAL (70 MG_KG)															
SED09-01	6.8	17.6	51.1	9.3	13.4	20.3	5.9	2.8	8.4	14.8 J	10.6	12.9	13.6	12.6	35.6
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	28.4	9.1	35.3	31.4	28.7	29.5	24.1	32.1	42.5	20.2 J	16.8	20	61.3	42.3	27.2
SED09-10	7	34.1	7.6	13.8	8.9	5.5	8.8	9.7	8.8	7.95 J	7.19	9.8	13.6	25.9	15
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COBALT (MG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
COPPER (270 MG_KG)															
SED09-01	8.3	14.1	18.1	19.4	40.5	18.7	4.5	4.4	18	12.8 J	11.8 J	15.7	13.2	19.2	26.2
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	55.8	9.5	59.7	53.7	90	43.9	43.1	63.9	63.8	17.3 J	8.69 J	10.8	66	71.4	68.2
SED09-10	8.2	33.1	14.7	7.8	11.7	8.9	9.6	13.5	50.1	10.4 J	5.65 J	9.7	13.1	48.3	32.3
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
IRON (MG_KG)															
SED09-01	7740	9160 J	30400	9030	10300	9070	7210	5040	9700	12900	12200	12900	12000	8450	12300
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	20600	5290 J	21100	22600	19500	23400	19700	22800	21100	28300	22200	26600	32000	26600	19900
SED09-10	6190	19000 J	7060	9330	7760	5200	7230	8650	7520	7240	6810	6980	8950	18900	14900
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LEAD (218 MG_KG)															
SED09-01	6.4	11.2	16.6	18.2	25.9	27	< 0.56 U	< 0.66 U	16.7 J	10.2 J	10.6 J	10.6	9.9 J	14.2	18.8
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	53.1	12.4	56.4	52.8	67.7	38.3	47	65.8	61.3 J	16.9 J	10.3 J	7.7	65.6 J	51	58
SED09-10	8.9	30.4	15.6	12	11.9	7	< 0.71 U	13.2	15.2 J	7.94 J	8.78 J	9.7	13 J	39.1	31
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAGNESIUM (MG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MANGANESE (MG_KG)															
SED09-01	82.3	113	161	119	129	103	62.6	38.7	100 J	160	132	190	152	120	308 J
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	188	37.6	209	221	198	190	148	193	184 J	226	229	234	368	209	179 J
SED09-10	42.9	202	52.6	51.4	59.2	34.4	45.1	64.099999	55 J	45.6	49.4	48.1	86.2	179	132 J
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MERCURY (0.71 MG_KG)															
SED09-01	0.026 J	0.14	0.035	0.03 J	0.033 J	0.022 J	< 0.039 U	< 0.042 U	< 0.046 U	< 0.1 U	< 0.1 U	< 0.037 U	< 0.01 UJ	0.02 J	0.03 J
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	0.3	0.39	0.24	0.22 J	0.27	0.19	0.18	0.31	< 0.031 U	< 0.1 U	< 0.1 U	0.024 J	0.25 J	0.17	0.19

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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-10	0.073	0.17	0.073	0.04 J	0.058	0.034 J	0.035 J	< 0.032 U	< 0.026 U	< 0.1 U	< 0.1 U	0.017 J	0.02 J	0.11	0.11
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NICKEL (51.6 MG_KG)															
SED09-01	13.4	11.2	25.3	9.4	15.9	15	8.2	2.8 J	8.3	13.7	10.8	12.2	10.5	11.2	23.6
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	17.9	5.3 J	20.7	18.3	17.4	15.4	14.9	19	23.1	12.9	11.1	12	24.7	21.2	19.1
SED09-10	7.8	11.8	7.1	6.6 J	6.4	4.2 J	5.4 J	7.5	6.5	5.35	4.53	10	7.5	22.9	10.9
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
POTASSIUM (MG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SELENIUM (MG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SILVER (MG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SODIUM (MG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
THALLIUM (MG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
VANADIUM (MG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ZINC (219 MG_KG)															
SED09-01	24.2	43.4	60.4	107	165	48.4	16.8	20.7 J	72.1	49.1 J	43.7 J	67.5	41	101	181
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-03A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-04A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-05A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-09	164	25.9	185	177	156	117	173	196 J	183	56.8	36.9 J	41.1	**230**	163	154
SED09-10	19	112	44.8	15.8	30.5	14.7	16.3	33.5 J	27	14.2	12 J	19.2	22.2	197	102
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1242 (UG_KG)															
SED09-01	< 140 U	< 140 U	--	< 140 U	< 140 U	< 150 U	< 120 U	< 140 U	< 140 U	< 46 U	< 23 U	< 21 U	< 3.7 U	< 21 U	< 9.6 U
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 11 U
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	73.4 J	< 190 U	--	< 170 U	< 180 U	< 180 U	< 160 U	< 190 U	< 190 U	< 66 U	< 34 U	< 28 U	< 5.5 U	< 14 U	< 7.4 U
SED09-10	< 150 U	< 150 U	--	< 200 U	< 150 U	< 140 U	< 150 U	< 170 U	< 160 U	< 43 U	< 22 U	< 23 U	< 3.8 U	< 11 U	< 7.2 U
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1248 (UG_KG)															
SED09-01	< 140 U	< 140 U	--	< 140 U	< 140 U	14.1 J	< 120 U	< 140 U	< 140 U	< 46 U	< 23 U	< 21 U	< 3.9 U	< 21 U	< 9.6 U
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 11 U
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	< 190 U	< 190 U	--	11.3 J	< 180 U	< 180 U	< 160 U	14.2 J	37.8 J	< 66 U	< 34 U	< 28 U	< 5.8 U	< 14 U	< 7.4 U
SED09-10	< 150 U	< 150 U	--	< 200 U	< 150 U	< 140 U	< 150 U	< 170 U	< 160 U	< 43 U	< 22 U	< 23 U	< 4 U	< 11 U	< 7.2 U
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1254 (UG_KG)															
SED09-01	< 140 U	< 140 U	--	< 140 U	< 140 U	< 150 U	< 120 U	< 140 U	< 140 U	< 46 U	< 23 U	< 21 U	< 3 U	< 21 U	< 9.6 U
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	< 11 U
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	110 J	90.8 J	--	< 170 U	< 180 U	51.1 J	< 160 U	< 190 U	< 190 U	< 66 U	< 34 U	< 28 U	< 4.5 U	< 14 U	< 7.4 U
SED09-10	< 150 U	< 150 U	--	< 200 U	< 150 U	< 140 U	< 150 U	< 170 U	< 160 U	< 43 U	< 22 U	< 23 U	< 3.1 U	< 11 U	< 7.2 U
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AROCLOR-1260 (UG_KG)															
SED09-01	265	298	--	458	647 J	568	57.3 J	226	616	85 J	140	< 21 U	790	250	310
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23 J
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	199	121 J	--	103 J	145 J	136 J	33.3 J	77.9 J	121 J	120	< 34 U	< 28 U	86	140	140 J
SED09-10	55.5 J	47.4 J	--	111 J	81.9 J	33.3 J	< 150 U	61.6 J	61.5 J	< 43 U	12 J	< 23 U	29	330	430
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
(PCBS) (215 UG_KG)															
SED09-01	**265**	**298**	--	**458**	**647**	**582.1**	57.3	**226**	**616**	85	140	< 21 U	**790**	**250**	**310**
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	23 J
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	**382.4**	211.8	--	114.3	145	187.1	33.3	92.1	158.8	120	< 6.6 U	< 28 U	86	140	140 J
SED09-10	55.5	47.4	--	111	81.9	33.3	< 8.3 U	61.6	61.5	< 43 U	12	< 23 U	29	**330**	**430**
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDD (20 UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 2.1 UJ	< 4.1 UJ	< 1.9 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 3.1 UJ	< 2.8 UJ	< 1.4 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	3.4 J	< 2.2 UJ	< 38 UJ
4,4-DDE (7.65 UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 2.1 UJ	3.2 J	2.4 J
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	4.4	3.4 J	3.2
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 2.2 U	< 2.2 U	5.6
4,4-DDT (6 UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 2.1 UJ	< 4.1 UJ	< 1.9 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	**6.9**	< 2.8 UJ	< 1.4 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 2.2 UJ	< 2.2 UJ	< 32 UJ
ALDRIN (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.18 U	< 2.1 U	0.41 J
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 0.27 U	< 1.4 U	< 0.74 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.18 U	< 1.1 U	< 0.72 U
ALPHA-CHLORDANE (6 UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.14 U	< 2.1 U	0.83 J
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 0.2 U	< 1.4 U	< 2.2 UJ
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	0.98 J	< 1.1 U	< 0.72 U
BETA-BHC (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.21 U	< 2.1 U	< 0.96 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 0.31 U	< 1.4 U	< 0.74 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.22 U	< 1.1 U	< 0.72 U
DELTA-BHC (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.21 U	< 2.1 U	1 J
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 1.6 U	< 1.4 U	0.9 J
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.21 U	< 1.1 U	< 0.72 U
DIELDRIN (8 UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	**10**	< 4.1 U	< 1.9 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 0.21 U	< 2.8 U	< 1.4 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.14 U	< 2.2 UJ	< 1.4 U
ENDOSULFAN I (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.15 U	< 2.1 UJ	< 0.96 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 0.23 U	< 1.4 U	< 0.74 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.16 U	42 J	< 0.72 U
ENDOSULFAN II (7 UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	6.1 J	2 J	1.9 J
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	1.2 J	1.5 J	1.6 J
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	0.84 J	5.9 J	4.3 J
ENDOSULFAN SULFATE (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.37 U	11	< 1.9 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	3.2	6 J	< 1.4 UJ
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.38 U	17 J	< 1.4 UJ

TABLE E-3
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SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
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	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
ENDRIN (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.55 U	< 4.1 U	< 1.9 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 0.81 U	< 2.8 U	< 1.4 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.56 U	< 2.2 U	< 1.4 U
ENDRIN ALDEHYDE (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.32 U	< 4.1 U	< 1.9 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 0.46 U	< 2.8 U	< 1.4 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.32 U	< 2.2 U	< 1.4 U
ENDRIN KETONE (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.26 U	< 4.1 U	< 1.9 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 0.38 U	< 2.8 U	< 1.4 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.26 U	< 2.2 UJ	< 1.4 U
HEPTACHLOR (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.19 U	< 2.1 U	< 0.96 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 0.28 U	< 1.4 U	< 0.74 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.19 U	< 1.1 U	< 0.72 U
HEPTACHLOR EPOXIDE (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.14 U	< 2.1 U	< 0.96 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 0.21 U	< 1.4 U	< 0.74 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.14 U	< 1.1 U	< 0.72 U
LINDANE (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	0.47 J	< 2.1 U	< 0.96 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	0.75 J	< 1.4 U	< 0.74 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	3	48	20
METHOXYCHLOR (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	< 0.32 U	< 21 UJ	< 9.6 U
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	< 0.48 U	< 14 UJ	< 7.4 U
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.33 U	< 11 UJ	< 7.2 U
TRANS-CHLORDANE (UG_KG)															
SED09-01	--	--	--	--	--	--	--	--	--	--	--	--	8.7 J	3.7 J	3.5 J
SED09-09	--	--	--	--	--	--	--	--	--	--	--	--	2.1	< 1.4 U	1.7
SED09-10	--	--	--	--	--	--	--	--	--	--	--	--	< 0.15 U	< 1.1 U	< 0.72 U
4,4-DDD (20 UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	**21.5 J**	< 4.7 UJ	< 8.3 U	< 9.2 U	< 9.4 UJ	< 4.6 UJ	< 4.5 U	< 2.1 U	--	--	--
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	4.4 J	< 5.8 UJ	< 11 UJ	< 13 U	< 13 UJ	< 6.6 U	< 6.6 U	< 2.8 U	--	--	--
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	2 J	< 4.8 UJ	1.1 J	< 11 U	< 11 UJ	< 4.3 U	< 4.3 U	< 35 U	--	--	--
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDE (7.65 UG_KG)															
SED09-01	< 9 U	< 9.2 UJ	< 9.6 UJ	< 9 UJ	< 9.5 U	0.99 J	< 8.3 U	2.4 J	< 9.4 UJ	< 4.6 UJ	< 4.5 U	< 2.1 U	--	--	--
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	4.8 J	< 12 U	< 12 U	7.4 J	2.9 J	1.2 J	< 11 UJ	< 13 U	< 13 UJ	< 6.6 U	< 6.6 U	< 2.8 U	--	--	--

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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 UJ	< 10 UJ	< 11 U	< 11 UJ	< 4.3 U	< 4.3 U	< 35 U	--	--	--
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4,4-DDT (6 UG_KG)															
SED09-01	< 9 U	< 9.2 UJ	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 U	< 8.3 U	< 9.2 U	< 9.4 UJ	< 4.6 UJ	< 4.5 UJ	< 2.1 U	--	--	--
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	< 13 U	< 12 UJ	< 12 U	**68.8 J**	< 12 U	< 5.8 U	< 11 UJ	< 13 UJ	< 13 UJ	< 6.6 UJ	< 6.6 UJ	< 2.8 U	--	--	--
SED09-10	< 10 U	< 9.8 UJ	< 11 UJ	< 13 UJ	< 10 U	< 4.8 U	< 10 UJ	< 11 UJ	< 11 UJ	< 4.3 UJ	< 4.3 UJ	< 35 U	--	--	--
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ALDRIN (UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 U	< 8.3 U	< 9.2 U	< 9.4 UJ	< 2.4 UJ	< 2.3 U	< 1.1 U	--	--	--
SED09-02A	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-06B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-07B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-08B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	< 12 U	< 5.8 U	< 11 UJ	< 13 U	< 13 U	< 3.4 U	< 3.4 U	< 1.4 U	--	--	--
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 U	< 10 UJ	< 11 U	< 11 UJ	< 2.2 U	< 2.2 U	< 18 U	--	--	--
SED09-11B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SED09-12B															
ALPHA-CHLORDANE (6 UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 U	< 8.3 U	< 9.2 U	< 9.4 UJ	< 2.4 UJ	< 2.3 U	< 1.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	< 12 U	< 5.8 U	< 11 UJ	< 13 U	< 13 UJ	< 3.4 U	< 3.4 U	< 1.4 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 U	< 10 UJ	< 11 U	< 11 UJ	< 2.2 U	< 2.2 U	< 18 U			
SED09-11B															
SED09-12B															
AROCLOR-1242 (UG_KG)															
SED09-01			< 140 U												
SED09-09			< 170 U												
SED09-10			< 160 U												
AROCLOR-1248 (UG_KG)															
SED09-01			16.8 J												
SED09-09			11.5 J												
SED09-10			< 160 U												
AROCLOR-1254 (UG_KG)															
SED09-01			< 140 U												
SED09-09			< 170 U												
SED09-10			< 160 U												
AROCLOR-1260 (UG_KG)															
SED09-01			435												
SED09-09			104 J												
SED09-10			29 J												

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	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
BETA-BHC (UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 U	< 9.5 U	< 4.7 U	< 8.3 U	< 9.2 U	< 9.4 UJ	< 2.4 UJ	< 2.3 U	< 1.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	< 11 U	< 12 U	< 5.8 U	< 11 UJ	< 13 U	< 13 UJ	< 3.4 U	< 3.4 U	< 1.4 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 U	< 10 UJ	< 11 U	< 11 UJ	< 2.2 U	< 2.2 U	< 18 U			
SED09-11B															
SED09-12B															
DELTA-BHC (UG_KG)															
SED09-01	< 9 UJ	< 9.2 UJ	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 UJ	R	< 9.2 U	< 9.5 UJ	< 2.4 UJ	< 2.3 U	< 1.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 UJ	< 12 UJ	< 12 U	< 11 UJ	< 12 U	< 5.8 UJ	R	< 13 U	< 13 UJ	< 3.4 U	< 3.4 U	< 1.4 U			
SED09-10	< 10 UJ	< 9.8 UJ	< 11 UJ	< 13 UJ	< 10 U	< 4.8 UJ	R	< 11 U	< 11 UJ	< 2.2 U	< 2.2 U	< 18 U			
SED09-11B															
SED09-12B															
DIELDRIN (8 UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 UJ	< 8.3 U	< 9.2 U	< 9.4 UJ	< 4.6 UJ	< 4.5 U	< 2.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	< 12 U	< 5.8 UJ	< 11 UJ	< 13 U	< 13 UJ	< 6.6 U	< 6.6 U	< 2.8 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 UJ	< 10 UJ	< 11 U	< 11 UJ	< 4.3 U	< 4.3 U	< 35 U			
SED09-11B															
SED09-12B															
ENDOSULFAN I (UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 U	< 8.3 U	< 9.2 U	< 9.4 UJ	< 2.4 UJ	< 2.3 U	< 1.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	2 J	< 12 U	< 5.8 U	< 11 UJ	< 13 U	< 13 UJ	< 3.4 U	< 3.4 U	< 1.4 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 U	< 10 UJ	< 11 U	< 11 UJ	< 2.2 U	< 2.2 U	< 18 U			
SED09-11B															
SED09-12B															
ENDOSULFAN II (7 UG_KG)															
SED09-01	< 9 UJ	< 9.2 U	< 9.6 UJ	< 9 U	< 9.5 U	< 4.7 UJ	< 8.3 U	4.9 J	< 9.4 UJ	< 4.6 UJ	< 4.5 U	< 2.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 UJ	< 12 U	< 12 U	< 11 U	< 12 U	< 5.8 UJ	< 11 UJ	< 13 U	< 13 UJ	< 6.6 U	< 6.6 U	< 2.8 U			
SED09-10	< 10 UJ	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 UJ	< 10 UJ	< 11 U	< 11 UJ	< 4.3 U	< 4.3 U	< 35 U			
SED09-11B															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-12B															
ENDOSULFAN SULFATE (UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 U	< 8.3 UJ	< 9.2 U	< 9.4 UJ	< 4.6 UJ	< 4.5 U	< 2.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	< 12 U	< 5.8 U	< 11 UJ	< 13 U	< 13 UJ	< 6.6 U	< 6.6 U	< 2.8 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 U	< 10 UJ	< 11 U	< 11 UJ	< 4.3 U	< 4.3 U	< 35 U			
SED09-11B															
SED09-12B															
ENDRIN (UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 U	< 8.3 UJ	< 9.2 U	< 9.4 UJ	< 4.6 UJ	< 4.5 U	< 2.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	< 12 U	< 5.8 U	< 11 UJ	< 13 U	< 13 UJ	< 6.6 UJ	< 6.6 U	< 2.8 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 U	< 10 UJ	< 11 U	< 11 UJ	< 4.3 UJ	< 4.3 U	< 35 U			
SED09-11B															
SED09-12B															
ENDRIN ALDEHYDE (UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 UJ	< 8.3 U	< 9.2 U	< 9.4 UJ	< 4.6 UJ	< 4.5 U	< 2.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	< 12 U	< 5.8 UJ	< 11 UJ	< 13 U	< 13 UJ	< 6.6 U	< 6.6 U	< 2.8 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 UJ	< 10 UJ	< 11 U	< 11 UJ	< 4.3 U	< 4.3 U	140			
SED09-11B															
SED09-12B															
ENDRIN KETONE (UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 UJ	< 8.3 UJ	< 9.2 U	< 9.4 UJ	< 4.6 UJ	< 4.5 U	< 2.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	< 12 U	< 5.8 UJ	< 11 UJ	< 13 U	< 13 UJ	< 6.6 U	< 6.6 U	< 2.8 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 UJ	< 10 UJ	< 11 U	< 11 UJ	< 4.3 U	< 4.3 U	< 35 U			
SED09-11B															
SED09-12B															
HEPTACHLOR (UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 UJ	< 8.3 U	< 9.2 U	< 9.4 UJ	< 2.4 UJ	< 2.3 U	< 1.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	< 12 U	< 5.8 UJ	< 11 UJ	< 13 U	< 13 UJ	< 3.4 U	< 3.4 U	< 1.4 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 UJ	< 10 UJ	< 11 U	< 11 UJ	< 2.2 U	< 2.2 U	< 18 U			

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-11B															
SED09-12B															
HEPTACHLOR EPOXIDE (UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 U	< 8.3 U	< 9.2 U	< 9.4 UJ	< 2.4 UJ	< 2.3 U	< 1.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	< 12 U	< 5.8 U	< 11 UJ	< 13 U	< 13 UJ	< 3.4 U	< 3.4 U	< 1.4 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 U	< 10 UJ	< 11 U	< 11 UJ	< 2.2 U	< 2.2 U	< 18 U			
SED09-11B															
SED09-12B															
LINDANE (UG_KG)															
SED09-01	< 9 U	< 9.2 UJ	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 UJ	< 8.3 U	< 9.2 U	< 9.4 UJ	< 2.4 UJ	< 2.3 U	< 1.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	< 12 U	< 5.8 UJ	< 11 UJ	< 13 U	< 13 UJ	< 3.4 U	< 3.4 U	< 1.4 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 UJ	< 10 UJ	< 11 U	< 11 UJ	< 2.2 U	< 2.2 U	< 18 U			
SED09-11B															
SED09-12B															
METHOXYCHLOR (UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 U	< 8.3 U	< 9.2 U	< 9.4 UJ	< 24 UJ	< 23 UJ	< 11 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 UJ	< 12 U	< 11 UJ	< 12 U	< 5.8 U	< 11 UJ	< 13 UJ	< 13 UJ	< 34 UJ	< 34 UJ	< 14 U			
SED09-10	< 10 U	< 9.8 UJ	< 11 UJ	< 13 UJ	< 10 U	< 4.8 U	< 10 UJ	< 11 UJ	< 11 UJ	< 22 UJ	< 22 UJ	< 180 U			
SED09-11B															
SED09-12B															
(PCBS) (215 UG_KG)															
SED09-01			**451.8**												
SED09-09			115.5												
SED09-10			29												
TRANS-CHLORDANE (UG_KG)															
SED09-01	< 9 U	< 9.2 U	< 9.6 UJ	< 9 UJ	< 9.5 U	< 4.7 U	< 8.3 U	< 9.2 U	< 9.4 UJ	< 2.4 UJ	< 2.3 U	< 1.1 U			
SED09-02A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 13 U	< 12 U	< 12 U	< 11 UJ	< 12 U	< 5.8 U	< 11 UJ	< 13 U	< 13 UJ	< 3.4 U	< 3.4 U	< 1.4 U			
SED09-10	< 10 U	< 9.8 U	< 11 UJ	< 13 UJ	< 10 U	< 4.8 U	< 10 UJ	< 11 U	< 11 UJ	< 2.2 U	< 2.2 U	< 18 U			
SED09-11B															
SED09-12B															
2,4-DIMETHYLPHENOL (UG_KG)															
SED09-01	< 1300 U	< 700 U	< 730 UJ	< 740 U	< 700 U	< 700 U	< 620 U	< 690 UJ	< 730 U						
SED09-09	< 1900 U	< 920 U	< 880 UJ	< 860 U	< 900 U	< 880 U	< 800 UJ	< 930 UJ	< 980 U						

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SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-10	< 1500 U	< 730 U	< 810 UJ	< 1000 U	< 760 U	< 700 U	< 760 UJ	< 840 UJ	< 830 U						
2,4-DINITROPHENOL (UG_KG)															
SED09-01	< 1300 UJ	< 1400 UJ	< 1500 UJ	< 1500 UJ	< 1400 UJ	< 1400 UJ	< 1200 U	< 1400 U	< 1500 U						
SED09-09	< 1900 UJ	< 1800 UJ	< 1800 UJ	< 1700 UJ	< 1800 UJ	< 1800 UJ	< 1600 UJ	< 1900 U	< 2000 U						
SED09-10	< 1500 UJ	< 1500 UJ	< 1600 UJ	< 2000 UJ	< 1500 UJ	< 1400 UJ	< 1500 UJ	< 1700 U	< 1700 U						
2-METHYLNAPHTHALENE (670 UG_KG)															
SED09-01	28.9 J	< 93 UJ	< 97 U	< 98 U	44.3 J	4.8 J	4.3 J	6.5 J	31.4 J	< 23 UJ	6 J				
SED09-09	14.1 J	< 120 U	< 120 U	< 110 U	19.6 J	23.5 J	2.1 J	26.3 J	56.6 J	< 33 U	< 40 U				
SED09-10	38.3 J	< 97 U	< 110 U	104 J	21.3 J	83.6 J	10.3 J	50.1 J	83.8 J	< 22 U	< 26 U				
3,3-DICHLOROBENZIDINE (UG_KG)															
SED09-01	< 330 UJ	< 350 UJ	< 360 UJ	< 370 U	< 350 UJ	< 350 UJ	< 310 UJ	< 350 UJ	< 360 U						
SED09-09	< 490 UJ	< 460 UJ	< 440 UJ	< 430 U	< 450 UJ	< 440 UJ	< 400 U	< 470 UJ	< 490 U						
SED09-10	< 380 UJ	< 360 UJ	< 400 UJ	< 500 U	< 380 UJ	< 350 UJ	< 380 U	< 420 UJ	< 410 U						
4-BROMOPHENYL-PHENYLETHER (UG_KG)															
SED09-01	< 660 U	< 350 U	< 360 UJ	< 370 U	< 350 U	< 350 U	< 310 U	< 350 U	< 360 U						
SED09-09	< 970 U	< 460 U	< 440 UJ	< 430 U	< 450 U	< 440 U	< 400 U	< 470 U	< 490 U						
SED09-10	< 760 U	< 360 U	< 400 UJ	< 500 U	< 380 U	< 350 U	142 J	< 420 U	< 410 U						
4-METHYLPHENOL (UG_KG)															
SED09-01															
SED09-09															
SED09-10															
ACENAPHTHENE (500 UG_KG)															
SED09-01	< 89 U	< 93 U	< 97 U	< 98 U	280	4.3 J	< 83 U	< 90 U	28.2 J	< 23 U	4 J				
SED09-09	50.6 J	< 120 U	< 120 U	< 110 U	197	< 120 U	< 110 U	22.2 J	42.3 J	14 J	< 40 U				
SED09-10	2.8 J	< 97 U	< 110 U	< 140 U	91.4 J	135	11.4 J	106 J	97.9 J	26	6 J				
ACENAPHTHYLENE (640 UG_KG)															
SED09-01	< 89 U	< 93 U	< 97 U	< 98 U	17.9 J	R	4.3 J	< 90 U	< 96 UJ	19 J	< 27 U				
SED09-09	< 130 U	< 120 U	< 120 U	< 110 U	8.7 J	< 120 U	< 110 U	< 120 U	< 130 U	30 J	< 40 U				
SED09-10	< 100 U	< 97 U	< 110 U	25 J	< 100 U	< 97 U	< 99 U	< 110 U	< 110 U	< 43 UJ	< 26 U				
ANTHRACENE (1100 UG_KG)															
SED09-01	< 89 U	17.2 J	< 97 U	< 98 U	< 95 U	R	4.5 J	< 90 U	25.2 J	6.5 J	9 J				
SED09-09	< 130 U	15.6 J	< 120 U	< 110 U	< 120 U	< 120 U	5 J	< 120 U	51.6 J	52	5 J				
SED09-10	62.1 J	25.7 J	< 110 U	< 140 U	83.7 J	62.4 J	41.4 J	< 110 U	47 J	35	23 J				
BENZO(A)ANTHRACENE (1600 UG_KG)															
SED09-01	< 13 U	43.9 J	129	52.4 J	156	24.8 J	14.8 J	< 90 U	139	21	60				
SED09-09	< 19 U	37.8 J	95.7	39.2 J	167	< 120 U	10.9 J	127	193	120	< 40 U				
SED09-10	< 16 U	135	274	482	183	415	73.7 J	203	289	120	35				
BENZO(A)PYRENE (1600 UG_KG)															
SED09-01	32.2 J	244	15.8 J	56.1 J	189 J	4.5 J	26.8 J	< 90 UJ	79.6 J	17	53				
SED09-09	92.3 J	103 J	< 120 U	185 J	326 J	6 J	11.9 J	95 J	170 J	100	< 40 U				
SED09-10	16.4 J	197	< 110 U	820 J	303 J	29.1 J	117	284 J	< 110 UJ	87	24 J				
BENZO(B)FLUORANTHENE (UG_KG)															
SED09-01	< 13 U	35.8 J	101	39.3 J	44.3 J	56.6 J	41 J	< 90 U	95 J	14	76				
SED09-09	< 19 U	23.5 J	< 120 U	51.5 J	169	136	52.4 J	214	211 J	84	< 40 U				
SED09-10	< 16 U	69.4 J	33.4 J	378	161	214	114	223	256 J	93	37				
BENZO(G,H,I)PERYLENE (UG_KG)															
SED09-01	36.9	34.3 J	110	31.4 J	< 95 U	20.7 J	10 J	< 90 U	188	10	42				
SED09-09	< 19 U	27.7 J	120	31.5 J	123	56.7 J	7.2 J	86.1 J	115 J	61	< 40 U				
SED09-10	86.2 J	68.7 J	< 110 U	232	120	153	46 J	136	162	57	21 J				

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
BENZO(K)FLUORANTHENE (UG_KG)															
SED09-01	< 13 U	26.3 J	84.8 J	19.2 J	68.5 J	7.4 J	19 J	8.3 J	< 96 U	18 J	45				
SED09-09	< 19 U	27.4 J	< 120 U	56.8 J	128	< 120 UJ	20.4 J	30.5 J	< 130 UJ	110 J	< 40 U				
SED09-10	161 J	38.4 J	< 110 U	285 J	107	< 97 UJ	52.7 J	99.1 J	< 110 UJ	61 J	22 J				
BENZOIC ACID (UG_KG)															
SED09-01															
SED09-09															
SED09-10															
BIS(2-ETHYLHEXYL)PHTHALATE (UG_KG)															
SED09-01	< 660 U	< 700 U	39.5 J	< 740 UJ	< 700 U	398	< 310 U	148 J	< 360 U						
SED09-09	< 970 U	< 920 U	52.3 J	< 860 UJ	< 900 U	< 440 U	68 J	287 J	333 J						
SED09-10	< 760 U	< 730 U	127 J	< 1000 UJ	< 760 U	< 350 U	41.3 J	181 J	< 410 U						
BUTYLBENZYLPHTHALATE (UG_KG)															
SED09-01	42.3 J	< 700 U	< 730 UJ	< 740 U	< 700 U	< 350 U	< 310 U	149 J	< 360 U						
SED09-09	< 970 U	< 920 U	< 880 UJ	< 860 U	< 900 U	< 440 U	165 J	< 470 U	< 490 U						
SED09-10	< 760 U	< 730 U	< 810 UJ	< 1000 U	< 760 U	< 350 U	< 380 U	< 420 U	< 410 U						
CARBAZOLE (UG_KG)															
SED09-01	< 660 U	< 350 U	< 360 UJ	< 370 U	< 350 U	< 350 U	< 310 UJ	< 350 U	< 360 U						
SED09-09	< 970 U	< 460 U	< 440 UJ	< 430 U	< 450 U	< 440 U	< 400 U	< 470 U	< 490 U						
SED09-10	184 J	230 J	< 400 UJ	78.2 J	79.1 J	< 350 U	78.9 J	161 J	86.1 J						
CHRYSENE (2800 UG_KG)															
SED09-01	< 13 U	38.5 J	152	24.1 J	72.9 J	43.9 J	10.8 J	< 90 U	< 96 U	21	52				
SED09-09	< 19 U	24.9 J	< 120 U	46.3 J	148	< 120 U	11.7 J	< 120 U	140	120	11 J				
SED09-10	< 16 U	89.8 J	< 110 U	391	194	407	61.6 J	186	271	120	34				
DIBENZ(A,H)ANTHRACENE (260 UG_KG)															
SED09-01	< 13 U	< 93 U	24.9 J	< 98 U	< 95 U	R	< 83 U	21.5 J	45.4 J	4.7	20 J				
SED09-09	**286 J**	< 120 U	21.5 J	< 110 U	25.6 J	16.1 J	< 110 U	64.9 J	< 130 UJ	26	< 40 U				
SED09-10	**340 J**	11.8 J	< 110 U	120 J	7.8 J	< 97 U	16.5 J	63.8 J	< 110 UJ	18	< 26 U				
DIBENZOFURAN (UG_KG)															
SED09-01	< 330 U	< 350 U	< 360 UJ	< 370 U	< 350 U	< 350 U	< 310 UJ	< 350 U	< 360 U						
SED09-09	< 490 U	< 460 U	< 440 UJ	< 430 U	< 450 U	< 440 U	< 400 U	< 470 U	< 490 U						
SED09-10	86.5 J	113 J	< 400 UJ	< 500 U	45.4 J	< 350 U	38.4 J	75.4 J	< 410 U						
FLUORANTHENE (5100 UG_KG)															
SED09-01	147	249	384	134	228	69.1 J	29.9 J	42 J	253	29	100				
SED09-09	257	170	315	128	473	467	34.6 J	407	419	150	26 J				
SED09-10	622	469	750	1320	637	147	265	733	747	260	93				
FLUORENE (540 UG_KG)															
SED09-01	< 89 U	< 93 U	230	< 98 U	< 95 U	36.8 J	19.1 J	45 J	< 96 U	< 4.7 U	4 J				
SED09-09	< 130 U	< 120 U	194	< 110 U	< 120 U	81.4 J	9.8 J	101 J	19.7 J	20	< 40 U				
SED09-10	< 100 U	< 97 U	**1030**	< 140 U	< 100 U	103	16 J	92.5 J	64.3 J	28	11 J				
HEXACHLOROCYCLOPENTADIENE (UG_KG)															
SED09-01	< 660 U	< 700 U	< 730 UJ	< 740 UJ	< 700 UJ	< 700 U	< 620 UJ	< 690 U	< 730 UJ						
SED09-09	< 970 U	< 920 U	< 880 UJ	< 860 UJ	< 900 U	< 880 U	< 800 U	< 930 U	< 980 UJ						
SED09-10	< 760 U	< 730 U	< 810 UJ	< 1000 UJ	< 760 U	< 700 U	< 760 U	< 840 U	< 830 UJ						
INDENO(1,2,3-CD)PYRENE (UG_KG)															
SED09-01	31.7 J	37.5 J	105	40.9 J	90.3 J	27 J	12.7 J	13.2 J	74.3 J	9.8	42				
SED09-09	93.9	41.8 J	6.5 J	24 J	207	46.1 J	6.8 J	101 J	135	61	< 40 U				
SED09-10	109	64.3 J	52.3 J	298	154	< 97 U	57.4 J	148	187	53	19 J				
NAPHTHALENE (2100 UG_KG)															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-01	22.2 J	< 93 U	< 97 U	< 98 U	15.5 J	7.3 J	5.3 J	2.5 J	8.6 J	< 23 U	8 J				
SED09-09	< 130 U	< 120 U	< 120 U	< 110 U	< 120 U	< 120 U	< 110 U	21.8 J	24.5 J	6.1 J	14 J				
SED09-10	42.5 J	< 97 U	< 110 U	8.7 J	< 100 U	< 97 U	< 99 U	38.1 J	24.4 J	6 J	5 J				
PENTACHLOROPHENOL (UG_KG)															
SED09-01	< 660 U	< 700 U	< 730 UJ	< 740 U	< 700 U	< 700 U	< 620 U	< 690 UJ	< 730 U						
SED09-09	< 970 U	< 920 U	< 880 UJ	< 860 U	< 900 U	< 880 U	< 800 U	< 930 UJ	< 980 U						
SED09-10	< 760 U	< 730 U	< 810 UJ	< 1000 U	< 760 U	< 700 U	< 760 U	< 840 UJ	< 830 U						
PHENANTHRENE (1500 UG_KG)															
SED09-01	276	57.8 J	132	< 98 U	76.6 J	35.5 J	76.6 J	208	284	10 J	44				
SED09-09	374 J	55.8 J	194	< 110 U	283	< 120 U	83.1 J	432	400	100	21 J				
SED09-10	753	165	540	37.6 J	467	< 97 U	591	801	938	170 J	74				
PYRENE (2600 UG_KG)															
SED09-01	1110 J	140	317	144	432	73.8 J	26.8 J	< 90 U	208	27	83				
SED09-09	1140 J	111 J	< 120 U	174	832	377	29.3 J	417	132	170	23 J				
SED09-10	918 J	289	751	2310	1090	89.8 J	78.3 J	535	470	230	71				
2-METHYLNAPHTHALENE (670 UG_KG)															
SED09-01												< 4.2 U	< 3 UJ	3 J	< 2.8 UJ
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												< 5.6 U	< 5 UJ	5 J	< 17 UJ
SED09-10												13	10 J	350 J	320 J
SED09-11B															
SED09-12B															
ACENAPHTHENE (500 UG_KG)															
SED09-01												< 4.2 U	2 J	6 J	5.9 J
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												< 5.6 U	< 3 U	39 J	38
SED09-10												60	77	**1400**	**1500 J**
SED09-11B															
SED09-12B															
ACENAPHTHYLENE (640 UG_KG)															
SED09-01												< 4.2 U	2 J	3 J	1.6 J
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-08B															
SED09-09												6.5	< 2 U	< 45 UJ	< 17 UJ
SED09-10												< 4.7 U	< 2 U	< 130 U	< 16 UJ
SED09-11B															
SED09-12B															
ANTHRACENE (1100 UG_KG)															
SED09-01												< 4.2 U	7 J	12 J	15 J
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												< 5.6 U	10 J	70	83 J
SED09-10												150	160	**3500**	**2800 J**
SED09-11B															
SED09-12B															
BENZO(A)ANTHRACENE (1600 UG_KG)															
SED09-01												< 4.2 U	33	36	74
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												9.5	35 J	320	320
SED09-10												240	410	**6800**	**5500**
SED09-11B															
SED09-12B															
BENZO(A)PYRENE (1600 UG_KG)															
SED09-01												< 4.2 U	31	50	67
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												< 5.6 U	31 J	240	310
SED09-10												230	290 J	**4700**	**4000**
SED09-11B															
SED09-12B															
BENZO(B)FLUORANTHENE (UG_KG)															
SED09-01												< 4.2 U	51	75	100
SED09-02A															
SED09-03A															
SED09-04A															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												9.3	52	360	540
SED09-10												300	460	6400	5900
SED09-11B															
SED09-12B															
BENZO(G,H,I)PERYLENE (UG_KG)															
SED09-01												< 4.2 U	24 J	36	46
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												5.7	26 J	170	210
SED09-10												130	180 J	2700	2100
SED09-11B															
SED09-12B															
BENZO(K)FLUORANTHENE (UG_KG)															
SED09-01												< 4.2 U	17 J	21 J	36
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												< 5.6 U	19 J	97	150
SED09-10												160	170 J	1700	2000
SED09-11B															
SED09-12B															
CHRYSENE (2800 UG_KG)															
SED09-01												< 4.2 U	32	27	71
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												14	35 J	220	330
SED09-10												270	370	**5400**	**4400**
SED09-11B															
SED09-12B															
DIBENZ(A,H)ANTHRACENE (260 UG_KG)															
SED09-01												< 4.2 U	4 J	15 J	15 J

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												< 5.6 U	5 J	62	67
SED09-10												42	67 J	**900 J**	**680 J**
SED09-11B															
SED09-12B															
FLUORANTHENE (5100 UG_KG)															
SED09-01												4.2	74	75	170 J
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												13	77	460	890 J
SED09-10												680	1200	**16000**	**15000 J**
SED09-11B															
SED09-12B															
FLUORENE (540 UG_KG)															
SED09-01												< 4.2 U	< 4 U	8 J	7.2 J
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												6.5	< 7 U	45 J	46
SED09-10												78	100	**2100**	**1700**
SED09-11B															
SED09-12B															
INDENO(1,2,3-CD)PYRENE (UG_KG)															
SED09-01												< 4.2 U	30	69 J	42
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												< 5.6 U	34 J	290	200
SED09-10												110	270 J	1700 J	2000
SED09-11B															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-12B															
NAPHTHALENE (2100 UG_KG)															
SED09-01												< 4.2 U	< 3 UJ	< 25 UJ	4.8 J
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												< 5.6 U	< 6 UJ	11 J	10 J
SED09-10												25	48 J	1100 J	680 J
SED09-11B															
SED09-12B															
PHENANTHRENE (1500 UG_KG)															
SED09-01												< 4.2 U	24 J	47	65
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												36 J	40 J	340	440
SED09-10												610 J	980	**14000**	**12000**
SED09-11B															
SED09-12B															
PYRENE (2600 UG_KG)															
SED09-01												< 4.2 U	63	44	150
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09												17	62	450	630
SED09-10												490	700	**12000**	**8600**
SED09-11B															
SED09-12B															
1,1,1-TRICHLOROETHANE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
1,1,2,2-TETRACHLOROETHANE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 UJ						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 UJ	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
1,1,2-TRICHLOROETHANE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
1,1-DICHLOROETHANE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
1,1-DICHLOROETHENE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
1,2-DICHLOROETHANE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 UJ	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
1,2-DICHLOROPROPANE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
2-BUTANONE (UG_KG)															
SED09-01	< 2.6 U	< 9 UJ	< 2.4 UJ	< 5 U	< 2.4 U	< 4.2 U	< 3.9 UJ	< 4 U	< 3.6 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 2.9 UJ	8.1 J	4.3 J	< 3 U	< 2.9 U	< 5.7 U	< 7.2 UJ	< 6.8 UJ	< 7.5 UJ						
SED09-10	< 2.4 U	< 2.7 UJ	< 1.5 UJ	< 3 UJ	< 1.9 U	< 4.3 U	< 4.4 UJ	< 6 UJ	< 5.5 UJ						
SED09-11B															
SED09-12B															
2-HEXANONE (UG_KG)															
SED09-01	< 2.6 U	< 9 UJ	< 2.4 U	< 5 U	< 2.4 U	< 4.2 UJ	< 3.9 UJ	< 4 U	< 3.6 U						
SED09-02A															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 2.9 UJ	< 3.2 UJ	< 3 UJ	< 3 U	< 2.9 U	< 5.7 UJ	< 7.2 UJ	< 6.8 UJ	< 7.5 UJ						
SED09-10	< 2.4 U	< 2.7 UJ	< 1.5 UJ	< 3 UJ	< 1.9 U	< 4.3 UJ	< 4.4 U	< 6 UJ	< 5.5 UJ						
SED09-11B															
SED09-12B															
4-METHYL-2-PENTANONE (UG_KG)															
SED09-01	< 2.6 U	< 9 UJ	< 2.4 U	< 5 U	< 2.4 U	< 4.2 U	< 3.9 UJ	< 4 U	< 3.6 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 2.9 UJ	< 3.2 UJ	< 3 UJ	< 3 U	< 2.9 U	< 5.7 U	< 7.2 UJ	< 6.8 UJ	< 7.5 UJ						
SED09-10	< 2.4 U	< 2.7 UJ	< 1.5 UJ	< 3 UJ	< 1.9 U	< 4.3 U	< 4.4 U	< 6 UJ	< 5.5 UJ						
SED09-11B															
SED09-12B															
ACETONE (UG_KG)															
SED09-01	35.9 J	< 9 U	< 2.4 U	7.4	< 2.4 U	< 4.2 UJ	14.3 J	< 4 U	< 3.6 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	51.6 J	< 3.2 U	60.9 J	2.2 J	< 2.9 U	< 5.7 UJ	197 J	< 6.8 UJ	69.3 J						
SED09-10	33.5	< 2.7 U	< 1.5 U	< 3 UJ	< 1.9 U	< 4.3 UJ	35.1	< 6 UJ	< 5.5 UJ						
SED09-11B															
SED09-12B															
BENZENE (UG_KG)															
SED09-01	< 0.26 U	< 0.9 U	< 0.24 U	< 1 U	< 0.24 U	< 0.42 U	< 0.39 UJ	< 0.4 U	< 0.36 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 0.29 UJ	< 0.32 U	0.25 J	< 0.21 U	< 0.29 U	< 0.57 U	< 0.72 UJ	< 0.68 UJ	< 0.75 UJ						
SED09-10	0.52	< 0.27 U	0.66 J	< 0.22 UJ	< 0.19 U	0.68	< 0.44 U	2 J	6.1 J						
SED09-11B															
SED09-12B															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
BROMODICHLOROMETHANE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 UJ	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
BROMOFORM (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 UJ	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
BROMOMETHANE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	5	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
CARBON DISULFIDE (UG_KG)															
SED09-01	2.8 J	13	10.1	8.8	3.4	5.7 J	1.6 J	< 4 U	7						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	3.4 J	11.9	7.9 J	2.5 J	3.4 J	4.2 J	10.3 J	< 6.8 UJ	16 J						

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-10	2.1 J	6.6	10.9 J	2.3 J	2 J	5.7 J	2.9 J	< 6 UJ	5.4 J						
SED09-11B															
SED09-12B															
CARBON TETRACHLORIDE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 UJ	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 UJ	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
CHLOROBENZENE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
CHLOROETHANE (UG_KG)															
SED09-01	< 2.6 U	< 9 U	< 2.4 U	< 5 U	< 2.4 U	< 4.2 UJ	< 3.9 UJ	< 4 U	< 3.6 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 2.9 UJ	< 3.2 U	< 3 UJ	< 3 U	< 2.9 U	< 5.7 UJ	< 7.2 UJ	< 6.8 UJ	< 7.5 UJ						
SED09-10	< 2.4 U	< 2.7 U	< 1.5 UJ	< 3 UJ	< 1.9 U	< 4.3 UJ	< 4.4 UJ	< 6 UJ	< 5.5 UJ						
SED09-11B															
SED09-12B															
CHLOROFORM (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
CHLOROMETHANE (UG_KG)															
SED09-01	< 2.6 UJ	< 9 UJ	< 2.4 UJ	< 5 U	< 2.4 U	< 4.2 UJ	< 3.9 UJ	< 4 U	< 3.6 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 2.9 UJ	< 3.2 UJ	< 3 UJ	< 3 U	< 2.9 U	< 5.7 UJ	< 7.2 UJ	< 6.8 UJ	< 7.5 UJ						
SED09-10	< 2.4 U	< 2.7 UJ	< 1.5 UJ	< 3 UJ	< 1.9 U	< 4.3 UJ	< 4.4 UJ	< 6 UJ	< 5.5 UJ						
SED09-11B															
SED09-12B															
CIS-1,2-DICHLOROETHENE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
CIS-1,3-DICHLOROPROPENE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 UJ	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
DIBROMOCHLOROMETHANE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
ETHYLBENZENE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
METHYLENE CHLORIDE (UG_KG)															
SED09-01	< 1 UJ	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 UJ						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 UJ	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
STYRENE (UG_KG)															
SED09-01	< 2.6 U	< 9 U	< 2.4 U	< 5 U	< 2.4 U	< 4.2 UJ	< 3.9 UJ	< 4 U	< 3.6 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 2.9 UJ	< 3.2 U	< 3 UJ	< 3 U	< 2.9 U	< 5.7 U	< 7.2 UJ	< 6.8 UJ	< 7.5 UJ						
SED09-10	< 2.4 U	< 2.7 U	< 1.5 UJ	< 3 UJ	< 1.9 U	< 4.3 UJ	< 4.4 U	< 6 UJ	< 5.5 UJ						
SED09-11B															
SED09-12B															
TETRACHLOROETHENE (UG_KG)															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 U	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
TOLUENE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 2.4 U	< 4.2 U	< 3.9 UJ	< 4 U	< 3.6 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 U	< 1 U	< 2.9 U	< 5.7 U	< 7.2 UJ	< 6.8 UJ	< 7.5 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 U	< 1 U	< 1.9 U	< 4.3 U	< 4.4 U	0.5 J	< 5.5 UJ						
SED09-11B															
SED09-12B															
TRANS-1,2-DICHLOROETHENE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 14	ME 15	ME 16	ME 17	ME 18	ME 19	ME 20	ME 21	ME 22	ME 24	ME 26	ME 28	ME 30	ME 32	ME 34
	Mar 2005	Jun 2005	Sep 2005	Dec 2005	Mar 2006	Nov 2006	Mar 2007	Jun 2007	Nov 2007	Apr 2008	Sep-Oct 2008	Mar-Apr 2009	Oct 2009	Mar 2010	Sep 2010
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
TRANS-1,3-DICHLOROPROPENE (UG_KG)															
SED09-01	< 1 UJ	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 UJ	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 UJ	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
TRICHLOROETHENE (UG_KG)															
SED09-01	< 1 U	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	< 0.94 U	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															
VINYL CHLORIDE (UG_KG)															
SED09-01	< 1 UJ	< 3.6 U	< 0.96 U	< 2 U	< 0.95 U	< 1.7 U	< 1.6 UJ	< 1.6 U	< 1.4 U						
SED09-02A															
SED09-03A															
SED09-04A															
SED09-05A															
SED09-06B															
SED09-07B															
SED09-08B															
SED09-09	< 1.2 UJ	< 1.3 U	< 1.2 UJ	< 1 U	< 1.2 U	< 2.3 U	< 2.9 UJ	< 2.7 UJ	< 3 UJ						
SED09-10	0.94 J	< 1.1 U	< 0.61 UJ	< 1 UJ	< 0.78 U	< 1.7 U	< 1.8 U	< 2.4 UJ	< 2.2 UJ						
SED09-11B															
SED09-12B															

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
ALUMINUM (MG_KG)							
SED09-01	3700	3150	2260	8910	--	--	2740
SED09-02A	--	--	--	--	--	--	5200
SED09-03A	--	--	--	--	--	--	3830
SED09-04A	--	--	--	--	--	3060	3690
SED09-05A	--	--	--	--	--	--	4590
SED09-06B	--	--	3090	3080	--	--	5080
SED09-07B	--	--	3180	4130	--	--	3810
SED09-08B	--	--	5960	11700	--	7360	4810
SED09-09	7710	7840	6840	10800	4840	9130	8420
SED09-10	8800	5500	4800	8310	--	--	7950
SED09-11B	--	--	3100	2800	--	--	3770
SED09-12B	--	--	4150	7480	--	--	3890
ANTIMONY (MG_KG)							
SED09-01	< 0.43 UJ	0.53 J	< 0.81 U	< 0.047 UJ	--	--	< 0.95 UJ
SED09-02A	--	--	--	--	--	--	< 0.86 U
SED09-03A	--	--	--	--	--	--	< 1.2 UJ
SED09-04A	--	--	--	--	--	< 0.73 UJ	< 0.66 UJ
SED09-05A	--	--	--	--	--	--	< 0.80 UJ
SED09-06B	--	--	< 0.76 U	0.18 J	--	--	< 1.0 UJ
SED09-07B	--	--	< 0.74 U	0.14 J	--	--	< 0.63 UJ
SED09-08B	--	--	< 1.3 U	0.05 J	--	0.64 J	< 0.86 U
SED09-09	< 0.5 UJ	0.74 J	< 1.6 U	0.14 J	0.46 J	1.7 J-	< 1.3 UJ
SED09-10	< 1.5 UJ	0.59 J	< 1 U	0.03 J	--	--	< 2.7 UJ
SED09-11B	--	--	< 0.95 U	0.07 J	--	--	< 0.83 UJ
SED09-12B	--	--	< 0.84 U	0.17 J	--	--	< 0.70 UJ
ARSENIC (70 MG_KG)							
SED09-01	3.5	2.2	2.2	7.1	--	--	3.0 J
SED09-02A	--	--	--	--	--	--	4.2 J
SED09-03A	--	--	--	--	--	--	2.9 J
SED09-04A	--	--	--	--	--	2.7	2.3 J
SED09-05A	--	--	--	--	--	--	3.2 J
SED09-06B	--	--	4.7	2.5	--	--	7.7
SED09-07B	--	--	2.7 J	2.6	--	--	4.7
SED09-08B	--	--	5.9 J	7.7	--	6.4	6.3
SED09-09	7.4	7.8	5.3	11.7	6.2 J	9.6	8.2 J
SED09-10	16.1	4.2	3.5	2.9	--	--	11.6 J
SED09-11B	--	--	2.8 J	0.71	--	--	1.8 J
SED09-12B	--	--	4.7 J	4.0	--	--	4.9
BARIUM (MG_KG)							
SED09-01	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--
BERYLLIUM (MG_KG)							
SED09-01	0.6	0.33 J	0.24 J	0.51	--	--	0.31
SED09-02A	--	--	--	--	--	--	0.45
SED09-03A	--	--	--	--	--	--	0.34
SED09-04A	--	--	--	--	--	< 0.049 U	0.30
SED09-05A	--	--	--	--	--	--	0.39

TABLE E-3
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	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-06B	--	--	0.25	0.36	--	--	0.56 J
SED09-07B	--	--	0.31	0.34	--	--	0.34 J
SED09-08B	--	--	0.59	0.94	--	0.59	0.46 J
SED09-09	0.6	0.58 J	0.53	0.54	0.42	0.70	0.84
SED09-10	0.7 J	0.33 J	0.52	0.26	--	--	0.85
SED09-11B	--	--	0.32 J	0.26	--	--	1.4
SED09-12B	--	--	0.42	0.58	--	--	0.36 J
CADMIUM (MG_KG)							
SED09-01	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--
CALCIUM (MG_KG)							
SED09-01	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--
CHROMIUM, TOTAL (70 MG_KG)							
SED09-01	10.1	10.3	8.9	20.3	--	--	9.0 J
SED09-02A	--	--	--	--	--	--	18.1 J
SED09-03A	--	--	--	--	--	--	12.9 J
SED09-04A	--	--	--	--	--	8.4 J-	10.0 J
SED09-05A	--	--	--	--	--	--	15.3 J
SED09-06B	--	--	8.8	9.9	--	--	19.1 J
SED09-07B	--	--	8.9	13.3	--	--	11.6 J
SED09-08B	--	--	18	30.0	--	17.6 J	14.6 J
SED09-09	27.4	26.1	23.8	19.0	13.5 J	30.2 J-	32.4 J
SED09-10	23.8	19.8	13	11.7	--	--	23.7 J
SED09-11B	--	--	12	19.7	--	--	12.8 J
SED09-12B	--	--	11.6	16.6	--	--	11.3 J
COBALT (MG_KG)							
SED09-01	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--
COPPER (270 MG_KG)							
SED09-01	41.5	50.5	76.8 J	12.0	--	--	14.7 J
SED09-02A	--	--	--	--	--	--	30.2 J
SED09-03A	--	--	--	--	--	--	16.9 J
SED09-04A	--	--	--	--	--	13.8	11.7 J
SED09-05A	--	--	--	--	--	--	23.7 J
SED09-06B	--	--	19.2	37.0	--	--	77.0 J
SED09-07B	--	--	19.5	19.7	--	--	33.4 J
SED09-08B	--	--	42.7	14.1	--	23.6	62.5 J
SED09-09	57.6	61	55.4 J	14.1	40.3 J	91.0	80.5 J
SED09-10	44.8	26	36 J	8.7	--	--	65.5 J
SED09-11B	--	--	20.8	12.2	--	--	19.3 J
SED09-12B	--	--	24.6	20.1	--	--	27.8 J
IRON (MG_KG)							
SED09-01	9210	7900	6020	16600	--	--	7290 J
SED09-02A	--	--	--	--	--	--	9360 J
SED09-03A	--	--	--	--	--	--	8250 J

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	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-04A	--	--	--	--	--	7090	7260 J
SED09-05A	--	--	--	--	--	--	9040 J
SED09-06B	--	--	6860	9260	--	--	16500 J
SED09-07B	--	--	7600	9920	--	--	9740 J
SED09-08B	--	--	16700	23200	--	19000	13100 J
SED09-09	18500	20400	18300	28400	12400	27500	24100 J
SED09-10	20900	13200	11700	11400	--	--	22900 J
SED09-11B	--	--	7360	7130	--	--	8850 J
SED09-12B	--	--	11200	16400	--	--	10600 J
LEAD (218 MG_KG)							
SED09-01	25.8	14.4	19.1 J	6.4	--	--	9.7 J
SED09-02A	--	--	--	--	--	--	15.8 J
SED09-03A	--	--	--	--	--	--	11.3 J
SED09-04A	--	--	--	--	--	8.2 J	7.9 J
SED09-05A	--	--	--	--	--	--	13.3 J
SED09-06B	--	--	9.6	18.3	--	--	33.2 J
SED09-07B	--	--	17.2	17.9	--	--	17.7 J
SED09-08B	--	--	26.5	14.5	--	20.3 J	43.0 J
SED09-09	46.8	48.9	38.5 J	16.6	39.8 J	83.1 J	53.0 J
SED09-10	42.8	22.8	31.4 J	7.9	--	--	50.0 J
SED09-11B	--	--	18.4	8.2	--	--	13.7 J
SED09-12B	--	--	21.2	23.5	--	--	16.0 J
MAGNESIUM (MG_KG)							
SED09-01	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--
MANGANESE (MG_KG)							
SED09-01	123	101 J	69.4	235 J	--	--	75.3
SED09-02A	--	--	--	--	--	--	83.5
SED09-03A	--	--	--	--	--	--	65.4
SED09-04A	--	--	--	--	--	54.9 J+	70.3
SED09-05A	--	--	--	--	--	--	78.0
SED09-06B	--	--	137	123 J	--	--	136
SED09-07B	--	--	63.8	75.7 J	--	--	73.0
SED09-08B	--	--	116	180 J	--	136 J	94.1
SED09-09	155	168 J	142	185 J	102 J	250 J+	186
SED09-10	124	117 J	90.7	82.4 J	--	--	136
SED09-11B	--	--	119	114 J	--	--	109
SED09-12B	--	--	84.9	140 J	--	--	74.2
MERCURY (0.71 MG_KG)							
SED09-01	0.02 J	0.01 J	0.014 J	< 0.017 U	--	--	0.021 J-
SED09-02A	--	--	--	--	--	--	0.072 J
SED09-03A	--	--	--	--	--	--	0.047 J-
SED09-04A	--	--	--	--	--	0.030	0.031 J-
SED09-05A	--	--	--	--	--	--	0.049 J-
SED09-06B	--	--	0.21	0.04	--	--	0.10
SED09-07B	--	--	0.045 J	0.06	--	--	0.064
SED09-08B	--	--	0.098	< 0.054 U	--	0.058	0.077
SED09-09	0.19	0.21	0.15	0.06	0.075	0.26	0.20 J-

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FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-10	0.1 J	0.12	0.09	0.02 J	--	--	0.15 J-
SED09-11B	--	--	0.039 J	< 0.014 U	--	--	0.021 J-
SED09-12B	--	--	0.077	0.07	--	--	0.066
NICKEL (51.6 MG_KG)							
SED09-01	11.1	9.6	10.9	17.4	--	--	6.5
SED09-02A	--	--	--	--	--	--	9.1
SED09-03A	--	--	--	--	--	--	6.1
SED09-04A	--	--	--	--	--	4.6	5.7
SED09-05A	--	--	--	--	--	--	8.0
SED09-06B	--	--	5.6	7.2	--	--	13.2 J
SED09-07B	--	--	7.2	8.3	--	--	7.7 J
SED09-08B	--	--	12.1	15.9	--	12.6	25.4 J
SED09-09	16.6	16.5	14.3	10.8	15.5 J	23.1	19.0
SED09-10	15.7	9.1	10.2	7.7	--	--	15.5
SED09-11B	--	--	9.8	12.6	--	--	10
SED09-12B	--	--	9.2	13.4	--	--	8.1 J
POTASSIUM (MG_KG)							
SED09-01	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--
SELENIUM (MG_KG)							
SED09-01	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--
SILVER (MG_KG)							
SED09-01	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--
SODIUM (MG_KG)							
SED09-01	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--
THALLIUM (MG_KG)							
SED09-01	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--
VANADIUM (MG_KG)							
SED09-01	--	--	--	--	--	--	--
SED09-09	--	--	--	--	--	--	--
SED09-10	--	--	--	--	--	--	--
ZINC (219 MG_KG)							
SED09-01	**305**	97.2	83.9 J	45.6 J	--	--	49.7 J
SED09-02A	--	--	--	--	--	--	60.2 J
SED09-03A	--	--	--	--	--	--	33.3 J
SED09-04A	--	--	--	--	--	29.3 J,EB	25.3 J
SED09-05A	--	--	--	--	--	--	47.3 J
SED09-06B	--	--	45.2	58.9 J	--	--	120 J
SED09-07B	--	--	62	57.4 J	--	--	60.6 J
SED09-08B	--	--	98.3	56.4 J	--	81.0 J	192 J

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	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-09	140	145	125 J	44.1 J	167 J	**263 J,EB**	172 J
SED09-10	87.2	66.2	132 J	19.5 J	--	--	158 J
SED09-11B	--	--	61.8	41.8 J	--	--	76.1 J
SED09-12B	--	--	68	62.7 J	--	--	60.6 J
AROCLOR-1242 (UG_KG)							
SED09-01	< 9.5 U	< 2 U	< 5.2 U	< 11 U	< 5.5 U	< 5.0 U	< 4.2 U
SED09-02A	< 9.9 U	< 2.2 U	< 6.1 U	< 9.2 U	--	< 5.7 U	< 4.9 U
SED09-06B	--	--	< 5.3 U	< 11 U	--	--	--
SED09-07B	--	--	< 5.4 U	< 9.8 U	--	--	--
SED09-08B	--	--	< 8.2 U	< 15 U	--	--	--
SED09-09	< 14 U	< 2.6 U	< 8.9 U	< 14 U	--	< 7.2 U	< 0.070 UJ
SED09-10	< 39 UJ	< 2.1 U	< 6.6 U	< 11 U	--	< 7.7 U	< 9.7 UJ
SED09-11B	--	--	< 5.3 U	< 9.2 U	--	--	--
SED09-12B	--	--	< 5.9 U	< 11 U	--	--	--
AROCLOR-1248 (UG_KG)							
SED09-01	< 9.5 U	< 2 U	< 5.2 U	< 11 U	< 5.5 U	< 5.0 U	< 4.2 U
SED09-02A	< 9.9 U	< 2.2 U	< 6.1 U	< 9.2 U	--	< 5.7 U	< 4.9 U
SED09-06B	--	--	< 5.3 U	< 11 U	--	--	--
SED09-07B	--	--	< 5.4 U	< 9.8 U	--	--	--
SED09-08B	--	--	< 8.2 U	< 15 U	--	--	--
SED09-09	< 14 U	< 2.6 U	< 8.9 U	< 14 U	--	< 7.2 U	< 0.070 UJ
SED09-10	< 39 UJ	< 2.1 U	< 6.6 U	< 11 U	--	< 7.7 U	< 9.7 UJ
SED09-11B	--	--	< 5.3 U	< 9.2 U	--	--	--
SED09-12B	--	--	< 5.9 U	< 11 U	--	--	--
AROCLOR-1254 (UG_KG)							
SED09-01	< 9.5 U	< 2 U	< 5.2 U	< 11 U	< 5.5 U	< 5.0 U	< 8.4 U
SED09-02A	< 9.9 U	< 2.2 U	< 6.1 U	< 9.2 U	--	< 5.7 U	< 9.7 U
SED09-06B	--	--	< 5.3 U	< 11 U	--	--	--
SED09-07B	--	--	< 5.4 U	< 9.8 U	--	--	--
SED09-08B	--	--	< 8.2 U	< 15 U	--	--	--
SED09-09	< 14 U	< 2.6 U	< 8.9 U	< 14 U	--	97 J	< 0.14 UJ
SED09-10	< 39 UJ	< 2.1 U	< 6.6 U	< 11 U	--	79 J	< 19 UJ
SED09-11B	--	--	< 5.3 U	< 9.2 U	--	--	--
SED09-12B	--	--	< 5.9 U	< 11 U	--	--	--
AROCLOR-1260 (UG_KG)							
SED09-01	290 J	320	84	< 11 U	76 J	49	75
SED09-02A	< 9.9 U	< 2.2 U	< 6.1 U	< 9.2 U	--	< 5.7 U	< 4.9 U
SED09-06B	--	--	< 5.3 U	28 J	--	--	--
SED09-07B	--	--	< 5.4 U	24	--	--	--
SED09-08B	--	--	< 8.2 U	< 15 U	--	--	--
SED09-09	180	150	78	53 J	--	83 J	0.69 J-
SED09-10	110 J	280 J	160	11 J	--	89 J	74 J-
SED09-11B	--	--	78 J	130 J	--	--	--
SED09-12B	--	--	15 J	< 11 U	--	--	--
(PCBS) (215 UG_KG)							
SED09-01	**290 J**	**320 J**	84	--	--	--	--
SED09-02A	< 70 U	< 2.26 UJ	< 6.94 U	--	--	--	--
SED09-06B	--	--	< 6.11 U	--	--	--	--
SED09-07B	--	--	< 6.2 U	--	--	--	--

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	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-08B	--	--	< 9.31 U	--	--	--	--
SED09-09	180 J	150 J	78	--	--	--	--
SED09-10	110 J	**280 J**	160	--	--	--	--
SED09-11B	--	--	78 J	--	--	--	--
SED09-12B	--	--	15 J	--	--	--	--
4,4-DDD (20 UG_KG)							
SED09-01	< 27 UJ	**26 J**	--	--	--	--	--
SED09-09	< 12 UJ	< 0.5 U	--	--	--	--	--
SED09-10	< 8.6 UJ	< 0.4 U	--	--	--	--	--
4,4-DDE (7.65 UG_KG)							
SED09-01	< 1.8 U	2.7 J	--	--	--	--	--
SED09-09	3.6 J	2.9 J	--	--	--	--	--
SED09-10	< 7.6 U	2.7 J	--	--	--	--	--
4,4-DDT (6 UG_KG)							
SED09-01	< 1.8 U	< 0.4 U	--	--	--	--	--
SED09-09	< 2.8 U	< 0.5 U	--	--	--	--	--
SED09-10	< 7.6 U	< 0.4 U	--	--	--	--	--
ALDRIN (UG_KG)							
SED09-01	< 0.95 U	0.97 J	--	--	--	--	--
SED09-09	< 1.4 U	< 0.26 U	--	--	--	--	--
SED09-10	< 3.9 U	< 0.21 U	--	--	--	--	--
ALPHA-CHLORDANE (6 UG_KG)							
SED09-01	< 0.95 U	< 0.2 U	--	--	--	--	--
SED09-09	< 1.4 U	< 0.26 U	--	--	--	--	--
SED09-10	< 3.9 U	< 0.21 U	--	--	--	--	--
BETA-BHC (UG_KG)							
SED09-01	< 0.95 U	< 0.2 U	--	--	--	--	--
SED09-09	< 1.4 U	< 0.26 U	--	--	--	--	--
SED09-10	< 3.9 U	< 0.21 U	--	--	--	--	--
DELTA-BHC (UG_KG)							
SED09-01	< 0.95 U	< 0.2 U	--	--	--	--	--
SED09-09	< 1.4 U	0.75 J	--	--	--	--	--
SED09-10	< 3.9 U	2.4 J	--	--	--	--	--
DIELDRIN (8 UG_KG)							
SED09-01	< 1.8 U	< 0.4 U	--	--	--	--	--
SED09-09	< 2.8 U	< 0.5 U	--	--	--	--	--
SED09-10	< 7.6 U	< 0.4 U	--	--	--	--	--
ENDOSULFAN I (UG_KG)							
SED09-01	< 0.95 U	< 0.2 UJ	--	--	--	--	--
SED09-09	< 1.4 U	< 0.26 UJ	--	--	--	--	--
SED09-10	< 3.9 U	< 0.21 UJ	--	--	--	--	--
ENDOSULFAN II (7 UG_KG)							
SED09-01	< 1.8 U	< 0.4 UJ	--	--	--	--	--
SED09-09	< 2.8 U	< 0.5 UJ	--	--	--	--	--
SED09-10	< 7.6 U	3.2 J	--	--	--	--	--
ENDOSULFAN SULFATE (UG_KG)							
SED09-01	< 1.8 U	10 J	--	--	--	--	--
SED09-09	< 2.8 U	4	--	--	--	--	--
SED09-10	< 7.6 U	< 0.4 U	--	--	--	--	--

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
ENDRIN (UG_KG)							
SED09-01	< 1.8 U	< 0.4 U	--	--	--	--	--
SED09-09	< 2.8 U	< 0.5 U	--	--	--	--	--
SED09-10	< 7.6 U	< 0.4 U	--	--	--	--	--
ENDRIN ALDEHYDE (UG_KG)							
SED09-01	< 1.8 U	< 0.4 U	--	--	--	--	--
SED09-09	< 2.8 U	< 0.5 U	--	--	--	--	--
SED09-10	< 7.6 U	6 J	--	--	--	--	--
ENDRIN KETONE (UG_KG)							
SED09-01	< 1.8 U	25 J	--	--	--	--	--
SED09-09	< 2.8 U	10 J	--	--	--	--	--
SED09-10	< 7.6 U	22 J	--	--	--	--	--
HEPTACHLOR (UG_KG)							
SED09-01	< 0.95 U	< 0.2 U	--	--	--	--	--
SED09-09	< 1.4 U	< 0.26 U	--	--	--	--	--
SED09-10	< 3.9 U	< 0.21 U	--	--	--	--	--
HEPTACHLOR EPOXIDE (UG_KG)							
SED09-01	< 0.95 U	2.4 J	--	--	--	--	--
SED09-09	< 1.4 U	2.8 J	--	--	--	--	--
SED09-10	< 3.9 U	2.1 J	--	--	--	--	--
LINDANE (UG_KG)							
SED09-01	< 0.95 U	< 0.2 U	--	--	--	--	--
SED09-09	< 1.4 U	< 0.26 U	--	--	--	--	--
SED09-10	< 3.9 U	< 0.21 U	--	--	--	--	--
METHOXYCHLOR (UG_KG)							
SED09-01	< 9.5 U	< 2 U	--	--	--	--	--
SED09-09	< 14 U	22 J	--	--	--	--	--
SED09-10	< 39 U	78 J	--	--	--	--	--
TRANS-CHLORDANE (UG_KG)							
SED09-01	< 0.95 U	4 J	--	--	--	--	--
SED09-09	< 1.4 U	< 0.26 U	--	--	--	--	--
SED09-10	< 3.9 U	< 0.21 U	--	--	--	--	--
4,4-DDD (20 UG_KG)							
SED09-01	--	--	< 0.53 U	3.1 J	< 0.55 U	< 0.52 UJ	< 0.54 U
SED09-02A	--	--	--	--	--	< 0.59 U	< 0.63 U
SED09-06B	--	--	< 0.55 U	3.6 J	--	--	--
SED09-07B	--	--	< 0.56 U	4.1 J	--	--	--
SED09-08B	--	--	< 0.84 U	< 2.9 U	--	--	--
SED09-09	--	--	< 0.91 U	< 2.7 U	--	< 0.74 UJ	< 0.90 U
SED09-10	--	--	< 0.68 U	< 2.2 U	--	< 0.79 UJ	< 1.2 U
SED09-11B	--	--	4.8	< 1.8 U	--	--	--
SED09-12B	--	--	< 0.61 U	4.7 J	--	--	--
4,4-DDE (7.65 UG_KG)							
SED09-01	--	--	< 0.53 U	4.2 J	< 0.55 U	< 0.52 UJ	< 0.54 UJ
SED09-02A	--	--	--	--	--	< 0.59 U	< 0.63 U
SED09-06B	--	--	< 0.55 U	1.4 J	--	--	--
SED09-07B	--	--	< 0.56 U	< 1.9 U	--	--	--
SED09-08B	--	--	< 0.84 U	< 2.9 U	--	--	--
SED09-09	--	--	< 0.91 U	1.8 J	--	2.7 J	< 0.90 U

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	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-10	--	--	< 0.68 U	< 2.2 U	--	< 0.79 UJ	< 1.2 U
SED09-11B	--	--	< 0.54 U	1.1 J	--	--	--
SED09-12B	--	--	< 0.61 U	2.1 J	--	--	--
4,4-DDT (6 UG_KG)							
SED09-01	--	--	**7.8 J**	**12**	**8.0 J**	< 0.52 UJ	4.6 J
SED09-02A	--	--	--	--	--	< 0.59 U	< 0.63 U
SED09-06B	--	--	< 0.55 U	< 2.2 U	--	--	--
SED09-07B	--	--	< 0.56 U	**8.2 J**	--	--	--
SED09-08B	--	--	< 0.84 U	< 2.9 UJ	--	--	--
SED09-09	--	--	4.3 J	< 2.7 UJ	--	**9.3 J**	< 0.90 UJ
SED09-10	--	--	**15 J**	< 2.2 UJ	--	< 0.79 UJ	< 1.2 UJ
SED09-11B	--	--	4.6 J	< 1.8 U	--	--	--
SED09-12B	--	--	< 0.61 U	**8.6**	--	--	--
ALDRIN (UG_KG)							
SED09-01	--	--	< 0.26 U	< 1.1 U	< 0.28 U	< 0.26 UJ	< 0.27 U
SED09-02A	--	--	--	--	--	< 0.29 U	< 0.31 U
SED09-06B	--	--	< 0.27 U	< 1.1 U	--	--	--
SED09-07B	--	--	< 0.28 U	< 0.98 U	--	--	--
SED09-08B	--	--	< 0.42 U	< 1.5 U	--	--	--
SED09-09	--	--	< 0.46 U	< 1.4 U	--	< 0.37 UJ	< 0.45 U
SED09-10	--	--	< 0.34 U	< 1.1 U	--	< 0.39 UJ	< 0.62 U
SED09-11B	--	--	< 0.27 U	< 0.92 U	--	--	--
SED09-12B			< 0.3 U	< 1.1 U			
ALPHA-CHLORDANE (6 UG_KG)							
SED09-01			2.8 J	< 1.1 U	< 0.28 U	< 0.26 UJ	< 0.13 UJ
SED09-02A						< 0.29 U	< 0.16 U
SED09-06B			< 0.27 U	< 1.1 U			
SED09-07B			< 0.28 U	< 0.98 U			
SED09-08B			< 0.42 U	< 1.5 U			
SED09-09			< 0.46 U	< 1.4 UJ		< 0.37 UJ	< 0.22 U
SED09-10			< 0.34 U	< 1.1 U		< 0.39 UJ	< 0.31 U
SED09-11B			< 0.27 U	< 0.92 U			
SED09-12B			< 0.3 U	< 1.1 U			
AROCLOR-1242 (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
AROCLOR-1248 (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
AROCLOR-1254 (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
AROCLOR-1260 (UG_KG)							
SED09-01							
SED09-09							
SED09-10							

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SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
BETA-BHC (UG_KG)							
SED09-01			< 0.26 U	< 1.1 U	< 0.28 U	< 0.26 UJ	< 0.13 U
SED09-02A						0.70 J	< 0.16 U
SED09-06B			< 0.27 U	< 1.1 U			
SED09-07B			< 0.28 U	< 0.98 U			
SED09-08B			< 0.42 U	< 1.5 U			
SED09-09			< 0.46 U	< 1.4 U		< 0.37 UJ	< 0.22 U
SED09-10			1.5 J	< 1.1 U		< 0.39 UJ	< 0.31 U
SED09-11B			1.2 J	< 0.92 U			
SED09-12B			< 0.3 U	< 1.1 U			
DELTA-BHC (UG_KG)							
SED09-01			< 0.26 U	< 1.1 U	< 0.28 U	< 0.26 UJ	< 0.27 U
SED09-02A						< 0.29 U	< 0.31 U
SED09-06B			< 0.27 U	< 1.1 U			
SED09-07B			< 0.28 U	< 0.98 U			
SED09-08B			< 0.42 U	< 1.5 U			
SED09-09			< 0.46 U	< 1.4 U		< 0.37 UJ	< 0.45 U
SED09-10			< 0.34 U	< 1.1 U		< 0.39 UJ	< 0.62 U
SED09-11B			< 0.27 U	< 0.92 U			
SED09-12B			< 0.3 U	< 1.1 U			
DIELDRIN (8 UG_KG)							
SED09-01			< 0.53 U	< 2.2 U	< 0.55 U	< 0.52 UJ	< 0.27 U
SED09-02A						< 0.59 U	< 0.31 U
SED09-06B			< 0.55 U	< 2.2 U			
SED09-07B			< 0.56 U	< 1.9 U			
SED09-08B			< 0.84 U	< 2.9 U			
SED09-09			< 0.91 U	< 2.7 UJ		< 0.74 UJ	< 0.45 U
SED09-10			< 0.68 U	< 2.2 U		2.9 J	< 0.62 U
SED09-11B			< 0.54 U	< 1.8 U			
SED09-12B			< 0.61 U	< 2.1 U			
ENDOSULFAN I (UG_KG)							
SED09-01			< 0.26 U	< 1.1 U	< 0.28 U	< 0.26 UJ	< 0.13 UJ
SED09-02A						< 0.29 U	< 0.16 U
SED09-06B			< 0.27 U	< 1.1 U			
SED09-07B			< 0.28 U	< 0.98 U			
SED09-08B			< 0.42 U	< 1.5 U			
SED09-09			< 0.46 U	< 1.4 U		< 0.37 UJ	< 0.22 U
SED09-10			< 0.34 U	< 1.1 U		< 0.39 UJ	< 0.31 U
SED09-11B			< 0.27 U	< 0.92 U			
SED09-12B			< 0.3 U	< 1.1 U			
ENDOSULFAN II (7 UG_KG)							
SED09-01			< 0.53 U	< 2.2 U	< 0.55 U	< 0.52 UJ	< 0.27 U
SED09-02A						< 0.59 U	< 0.31 U
SED09-06B			< 0.55 U	< 2.2 U			
SED09-07B			< 0.56 U	< 1.9 U			
SED09-08B			< 0.84 U	< 2.9 U			
SED09-09			< 0.91 U	< 2.7 U		< 0.74 UJ	< 0.45 U
SED09-10			< 0.68 U	< 2.2 U		< 0.79 UJ	< 0.62 U
SED09-11B			< 0.54 U	< 1.8 U			

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	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-12B			< 0.61 U	< 2.1 U			
ENDOSULFAN SULFATE (UG_KG)							
SED09-01			< 0.53 U	< 2.2 U	< 0.55 U	< 0.52 UJ	< 0.27 UJ
SED09-02A						< 0.59 U	< 0.31 U
SED09-06B			< 0.55 U	< 2.2 U			
SED09-07B			< 0.56 U	< 1.9 UJ			
SED09-08B			< 0.84 U	< 2.9 UJ			
SED09-09			< 0.91 U	< 2.7 UJ		< 0.74 UJ	< 0.45 U
SED09-10			< 0.68 U	< 2.2 UJ		< 0.79 UJ	< 0.62 U
SED09-11B			< 0.54 U	< 1.8 U			
SED09-12B			< 0.61 U	< 2.1 U			
ENDRIN (UG_KG)							
SED09-01			< 0.53 U	< 2.2 UJ	< 0.55 U	< 0.52 UJ	< 0.27 U
SED09-02A						< 0.59 U	< 0.31 U
SED09-06B			< 0.55 U	< 2.2 U			
SED09-07B			< 0.56 U	< 1.9 U			
SED09-08B			< 0.84 U	< 2.9 U			
SED09-09			< 0.91 U	< 2.7 UJ		< 0.74 UJ	< 0.45 U
SED09-10			< 0.68 U	< 2.2 U		< 0.79 UJ	< 0.62 U
SED09-11B			< 0.54 U	< 1.8 U			
SED09-12B			< 0.61 U	< 2.1 U			
ENDRIN ALDEHYDE (UG_KG)							
SED09-01			< 0.53 U	< 2.2 U	2.9 J	< 0.52 UJ	< 0.54 U
SED09-02A						< 0.59 U	< 0.63 U
SED09-06B			< 0.55 U	< 2.2 U			
SED09-07B			< 0.56 U	< 1.9 U			
SED09-08B			< 0.84 U	< 2.9 U			
SED09-09			< 0.91 U	< 2.7 U		3.5 J	< 0.90 U
SED09-10			< 0.68 U	< 2.2 U		< 0.79 UJ	< 1.2 U
SED09-11B			< 0.54 U	< 1.8 U			
SED09-12B			< 0.61 U	< 2.1 U			
ENDRIN KETONE (UG_KG)							
SED09-01			< 0.53 U	< 2.2 U	< 0.55 U	< 0.52 UJ	< 0.27 UJ
SED09-02A						< 0.59 U	< 0.31 U
SED09-06B			< 0.55 U	< 2.2 U			
SED09-07B			< 0.56 U	< 1.9 U			
SED09-08B			< 0.84 U	< 2.9 U			
SED09-09			< 0.91 U	< 2.7 U		< 0.74 UJ	< 0.45 U
SED09-10			9 J	< 2.2 U		< 0.79 UJ	< 0.62 U
SED09-11B			< 0.54 U	< 1.8 UJ			
SED09-12B			< 0.61 U	< 2.1 U			
HEPTACHLOR (UG_KG)							
SED09-01			< 0.26 U	< 1.1 U	< 0.28 U	< 0.26 UJ	< 0.13 U
SED09-02A						< 0.29 U	< 0.16 U
SED09-06B			< 0.27 U	< 1.1 U			
SED09-07B			< 0.28 U	< 0.98 U			
SED09-08B			< 0.42 U	< 1.5 U			
SED09-09			< 0.46 U	< 1.4 U		< 0.37 UJ	< 0.22 U
SED09-10			< 0.34 U	< 1.1 U		< 0.39 UJ	< 0.31 U

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	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-11B			< 0.27 U	< 0.92 U			
SED09-12B			< 0.3 U	< 1.1 U			
HEPTACHLOR EPOXIDE (UG_KG)							
SED09-01			< 0.26 U	< 1.1 U	< 0.28 U	< 0.26 UJ	< 0.27 U
SED09-02A						< 0.29 U	< 0.31 U
SED09-06B			< 0.27 U	< 1.1 U			
SED09-07B			< 0.28 U	< 0.98 U			
SED09-08B			< 0.42 U	< 1.5 U			
SED09-09			< 0.46 U	< 1.4 UJ		1.1 J	< 0.45 U
SED09-10			< 0.34 U	< 1.1 U		< 0.39 UJ	< 0.62 U
SED09-11B			< 0.27 U	< 0.92 U			
SED09-12B			< 0.3 U	< 1.1 U			
LINDANE (UG_KG)							
SED09-01			< 0.26 U	< 1.1 U	< 0.28 U	< 0.26 UJ	< 0.13 U
SED09-02A						< 0.29 U	< 0.16 U
SED09-06B			< 0.27 U	< 1.1 U			
SED09-07B			< 0.28 U	< 0.98 U			
SED09-08B			< 0.42 U	< 1.5 U			
SED09-09			< 0.46 U	< 1.4 U		< 0.37 UJ	2.1 J
SED09-10			< 0.34 U	< 1.1 U		< 0.39 UJ	3.0 J
SED09-11B			< 0.27 U	< 0.92 U			
SED09-12B			< 0.3 U	< 1.1 U			
METHOXYCHLOR (UG_KG)							
SED09-01			< 2.6 U	< 11 U	< 2.8 U	< 2.6 UJ	< 1.3 UJ
SED09-02A						< 2.9 U	2.3 J
SED09-06B			< 2.7 U	< 11 U			
SED09-07B			< 2.8 U	< 9.8 UJ			
SED09-08B			< 4.2 U	< 15 UJ			
SED09-09			< 4.6 U	< 14 UJ		< 3.7 UJ	< 2.2 U
SED09-10			< 3.4 U	< 11 UJ		< 3.9 UJ	< 3.1 U
SED09-11B			< 2.7 U	< 9.2 U			
SED09-12B			< 3 U	< 11 U			
(PCBS) (215 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
TRANS-CHLORDANE (UG_KG)							
SED09-01			2.2 J		< 0.28 U	< 0.26 UJ	< 0.27 UJ
SED09-02A						< 0.29 U	< 0.31 U
SED09-06B			< 0.27 U				
SED09-07B			< 0.28 U				
SED09-08B			< 0.42 U				
SED09-09			< 0.46 U			< 0.37 UJ	< 0.45 U
SED09-10			< 0.34 U			< 0.39 UJ	< 0.62 U
SED09-11B			< 0.27 U				
SED09-12B			< 0.3 U				
2,4-DIMETHYLPHENOL (UG_KG)							
SED09-01							
SED09-09							

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	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-10							
2,4-DINITROPHENOL (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
2-METHYLNAPHTHALENE (670 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
3,3-DICHLOROBENZIDINE (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
4-BROMOPHENYL-PHENYLETHER (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
4-METHYLPHENOL (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
ACENAPHTHENE (500 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
ACENAPHTHYLENE (640 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
ANTHRACENE (1100 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
BENZO(A)ANTHRACENE (1600 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
BENZO(A)PYRENE (1600 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
BENZO(B)FLUORANTHENE (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
BENZO(G,H,I)PERYLENE (UG_KG)							
SED09-01							
SED09-09							
SED09-10							

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SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
BENZO(K)FLUORANTHENE (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
BENZOIC ACID (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
BIS(2-ETHYLHEXYL)PHTHALATE (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
BUTYLBENZYLPHTHALATE (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
CARBAZOLE (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
CHRYSENE (2800 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
DIBENZ(A,H)ANTHRACENE (260 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
DIBENZOFURAN (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
FLUORANTHENE (5100 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
FLUORENE (540 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
HEXACHLOROCYCLOPENTADIENE (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
INDENO(1,2,3-CD)PYRENE (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
NAPHTHALENE (2100 UG_KG)							

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-01							
SED09-09							
SED09-10							
PENTACHLOROPHENOL (UG_KG)							
SED09-01							
SED09-09							
SED09-10							
PHENANTHRENE (1500 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
PYRENE (2600 UG_KG)							
SED09-01							
SED09-09							
SED09-10							
2-METHYLNAPHTHALENE (670 UG_KG)							
SED09-01	< 9.8 U	< 13 UJ	5.4	< 13 U		< 4.0 U	< 4.2 U
SED09-02A						< 4.5 U	< 4.9 U
SED09-03A							< 4.1 U
SED09-04A							< 4.2 U
SED09-05A							< 4.8 U
SED09-06B			< 4.2 U	< 13 U		< 4.1 U	< 5.5 UJ
SED09-07B			< 4.4 U	< 13 U			< 4.9 UJ
SED09-08B			< 6.5 U	< 18 U		< 5.4 U	< 5.2 U
SED09-09	4.1 J	< 18 UJ	< 7.1 U	< 14 U		< 5.8 U	8.2
SED09-10	< 40 U	190 J	93	< 14 U	< 6.9 U	51	34
SED09-11B			< 4.2 U	< 10 U			< 4.0 U
SED09-12B			< 4.7 U	< 14 U			< 4.9 UJ
ACENAPHTHENE (500 UG_KG)							
SED09-01	15 J	6.2 J	12	< 13 U		9.4	< 4.2 U
SED09-02A						< 4.5 U	< 4.9 U
SED09-03A							< 4.1 U
SED09-04A							< 4.2 U
SED09-05A							< 4.8 U
SED09-06B			25	23 J		< 4.1 U	5.7
SED09-07B			< 4.4 U	< 13 U			< 4.9 U
SED09-08B			< 6.5 U	< 18 U		6.8	< 5.2 U
SED09-09	69	42 J	29	5.9 J		10	28
SED09-10	28 J	**820 J**	360	5.1 J	23 J	370	92
SED09-11B			7.7	< 10 U			6.8
SED09-12B			7.9	2.6 J			5.9
ACENAPHTHYLENE (640 UG_KG)							
SED09-01	< 1.2 U	< 13 UJ	11	< 13 U		< 4.0 U	< 4.2 U
SED09-02A						< 4.5 U	< 4.9 U
SED09-03A							< 4.1 U
SED09-04A							< 4.2 U
SED09-05A							< 4.8 U
SED09-06B			4.7	7.2 J		< 4.1 U	< 5.5 U
SED09-07B			6.7	< 13 U			< 4.9 U

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-08B			7.5	< 18 U		< 5.4 U	5.2
SED09-09	< 14 U	< 18 UJ	14	< 14 U		6.0	< 7.0 U
SED09-10	< 40 U	< 14 UJ	36	< 14 U	< 6.9 U	19	11
SED09-11B			5.2	< 10 U			< 4.0 U
SED09-12B			8.4	6.8 J			< 4.9 U
ANTHRACENE (1100 UG_KG)							
SED09-01	33	15 J	37 J	2.4 J		22	4.8 J
SED09-02A						< 4.5 U	< 4.9 U
SED09-03A							< 4.1 U
SED09-04A							< 4.2 U
SED09-05A							< 4.8 U
SED09-06B			51	30		< 4.1 U	11 J-
SED09-07B			14	4.7 J			8.2 J-
SED09-08B			20	< 18 U		14 J	14 J
SED09-09	140	85 J	71	12 J		27	< 7.0 U
SED09-10	87	**1400 J**	720	7.4 J	53 J	840	200
SED09-11B			26	3.6 J			13
SED09-12B			23	5.9 J			12 J-
BENZO(A)ANTHRACENE (1600 UG_KG)							
SED09-01	98	59 J	100 J	4.8 J		57	18 J
SED09-02A						13	14
SED09-03A							6.3
SED09-04A							4.3
SED09-05A							9.5
SED09-06B			130	83		< 4.1 U	62 J-
SED09-07B			45	29			34 J-
SED09-08B			69	5.7 J		45 J	56 J
SED09-09	430	360 J	220	56 J		100	180
SED09-10	500	**3700 J**	1600	28	150	1400	480
SED09-11B			72	< 20 U			32
SED09-12B			74	32 J			45 J
BENZO(A)PYRENE (1600 UG_KG)							
SED09-01	83	48 J	76	4.6 J		52	22 J
SED09-02A						12	14
SED09-03A							7.2
SED09-04A							5.3
SED09-05A							10
SED09-06B			120	47 J		< 4.1 U	72
SED09-07B			44	32			37
SED09-08B			57	9.6 J		38 J	50 J
SED09-09	390	280 J	210	48 J		78	170
SED09-10	330	**2300 J**	1300	45	130 J	1100	430
SED09-11B			57	15 J			33
SED09-12B			60	31 J			40 J
BENZO(B)FLUORANTHENE (UG_KG)							
SED09-01	130	67 J	110 J	10 J		75	35 J
SED09-02A						19	27
SED09-03A							15
SED09-04A							11

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-05A							17
SED09-06B			170	110 J		< 4.1 U	110
SED09-07B			67	83 J			60
SED09-08B			88	21 J		61 J	87 J
SED09-09	560	440 J	300	130 J		100	240
SED09-10	480	3600 J	1900	73 J	190 J	1300	690
SED09-11B			78	< 10 UJ			48
SED09-12B			93	42 J			62 J
BENZO(G,H,I)PERYLENE (UG_KG)							
SED09-01	40 J	32 J	47	3.2 J		32	21 J+
SED09-02A						10	12
SED09-03A							6.3
SED09-04A							5.2
SED09-05A							10
SED09-06B			83	12 J		< 4.1 U	58
SED09-07B			33	18 J			32
SED09-08B			43	3.9 J		29 J	40 J
SED09-09	230 J	210 J	140	24 J		67	130
SED09-10	180 J	1200 J	790	22 J	82 J	640	290
SED09-11B			40	5.3 J			29
SED09-12B			44	12 J			30 J
BENZO(K)FLUORANTHENE (UG_KG)							
SED09-01	44	30 J	38	< 13 U		36	11 J
SED09-02A						8.6	11
SED09-03A							5.7
SED09-04A							4.6
SED09-05A							8.4
SED09-06B			67	17 J		< 4.1 U	38 J
SED09-07B			30	14 J			21 J
SED09-08B			33	< 18 U		24 J	30 J
SED09-09	180	170 J	120	250 J		72	110
SED09-10	180	1400 J	730	30	79 J	850	220
SED09-11B			33	7.2 J			21
SED09-12B			35	24 J			25 J
CHRYSENE (2800 UG_KG)							
SED09-01	98	67 J	96 J	< 13 U		68	20 J
SED09-02A						17	22
SED09-03A							8.2
SED09-04A							6.6
SED09-05A							11
SED09-06B			190	80		< 4.1 U	80 J-
SED09-07B			68	34			45 J-
SED09-08B			71	< 18 U		49 J	77 J
SED09-09	390	440 J	300	56 J		92	170
SED09-10	460	**3900 J**	1800	64	150 J	1400	480
SED09-11B			72	13 J			33
SED09-12B			74	33			51 J
DIBENZ(A,H)ANTHRACENE (260 UG_KG)							
SED09-01	13 J	9.4 J	13	< 13 UJ		8.2	5.7

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-02A						< 4.5 U	< 4.9 U
SED09-03A							< 4.1 U
SED09-04A							< 4.2 U
SED09-05A							5.2
SED09-06B			23	18 J		< 4.1 U	13
SED09-07B			9.4	17 J			7.3
SED09-08B			12	19 J		7.8	9.6
SED09-09	74 J	60 J	39	19 J		18	36
SED09-10	55 J	**360 J**	**270**	19 J	< 6.9 U	140	91
SED09-11B			11	14 J			7.4
SED09-12B			12	12 J			7.4
FLUORANTHENE (5100 UG_KG)							
SED09-01	220	110 J	200 J	4.6 J		130	35 J
SED09-02A						27	29
SED09-03A							14
SED09-04A							9.8
SED09-05A							14
SED09-06B			390	320		5.7	120 J-
SED09-07B			110	60			66 J-
SED09-08B			120	14 J		95 J	110 J
SED09-09	1100	960 J	500	120 J		190	400
SED09-10	1100	**9800 J**	3600	180	370 J	3700	1300
SED09-11B			170	30			72
SED09-12B			130	64			88 J
FLUORENE (540 UG_KG)							
SED09-01	19 J	7.4 J	11	< 13 U		12	< 4.2 U
SED09-02A						< 4.5 U	< 4.9 U
SED09-03A							< 4.1 U
SED09-04A							< 4.2 U
SED09-05A							< 4.8 U
SED09-06B			32	6.8 J		< 4.1 U	< 5.5 U
SED09-07B			< 4.4 U	< 13 U			< 4.9 U
SED09-08B			7.9	< 18 U		6.9	< 5.2 U
SED09-09	86	53 J	34	7.2 J		12	38
SED09-10	32 J	**940 J**	450	5.6 J	38 J	440	130
SED09-11B			8.8	< 10 U			5.5
SED09-12B			11	< 14 U			5.7
INDENO(1,2,3-CD)PYRENE (UG_KG)							
SED09-01	44 J	30 J	42	19 J		34 J	16 J+
SED09-02A						8.3	11
SED09-03A							5.5
SED09-04A							4.4
SED09-05A							8.9
SED09-06B			71	< 26 UJ		< 4.1 U	67
SED09-07B			29	26 J			37
SED09-08B			38	26 J		24 J	50 J
SED09-09	250 J	250 J	120	31 J		55	110
SED09-10	190 J	1300 J	700	96 J	110 J	560	270
SED09-11B			35	< 20 UJ			24

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-12B			38	44 J			37 J
NAPHTHALENE (2100 UG_KG)							
SED09-01	5.3 J	< 13 UJ	8.6	< 13 U		4.2	< 4.2 U
SED09-02A						< 4.5 U	< 4.9 U
SED09-03A							< 4.1 U
SED09-04A							< 4.2 U
SED09-05A							< 4.8 U
SED09-06B			< 4.2 U	< 13 U		< 4.1 U	< 5.5 UJ
SED09-07B			< 4.4 U	< 13 U			< 4.9 UJ
SED09-08B			< 6.5 U	< 18 U		< 5.4 U	< 5.2 U
SED09-09	25 J	11 J	8.2	< 14 U		< 5.8 U	18
SED09-10	< 40 U	400 J	200	6.5 J	< 6.9 U	160	85
SED09-11B			< 4.2 U	< 10 U			< 4.0 U
SED09-12B			< 4.7 U	< 14 U			< 4.9 UJ
PHENANTHRENE (1500 UG_KG)							
SED09-01	150	67 J	180 J	< 13 U		100	17 J
SED09-02A						11	8.5
SED09-03A							4.6
SED09-04A							< 4.2 U
SED09-05A							5.9
SED09-06B			330	31		< 4.1 U	55
SED09-07B			46	26 J			39
SED09-08B			60	5.2 J		60 J	43 J
SED09-09	710	460 J	280	64 J		110	280
SED09-10	390	**7100 J**	**3100**	98	270 J	**3300**	960
SED09-11B			110	17 J			45
SED09-12B			84	34			57 J
PYRENE (2600 UG_KG)							
SED09-01	180	140 J	170 J	4.2 J		100	30 J
SED09-02A						23	25
SED09-03A							13
SED09-04A							7.9
SED09-05A							13
SED09-06B			350	220		5.0	130 J-
SED09-07B			90	63			75 J-
SED09-08B			110	9.6 J		82 J	110 J
SED09-09	690	820 J	380	110 J		160	310
SED09-10	710	**6400 J**	**2900**	130	310 J	**2700**	890
SED09-11B			130	25			55
SED09-12B			120	62 J			73 J
1,1,1-TRICHLOROETHANE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
1,1,2,2-TETRACHLOROETHANE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
1,1,2-TRICHLOROETHANE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 U	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
1,1-DICHLOROETHANE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
1,1-DICHLOROETHENE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
1,2-DICHLOROETHANE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 U	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
1,2-DICHLOROPROPANE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
2-BUTANONE (UG_KG)							
SED09-01							< 5.1 UJ
SED09-02A							< 5.9 U
SED09-03A							< 5.0 UJ
SED09-04A							< 5.1 UJ
SED09-05A						< 7.6 UJ	< 5.9 UJ
SED09-06B			R	< 15 UJ		< 1.8 UJ	< 8.9 UJ
SED09-07B			R	< 20 UJ		< 5.3 UJ	< 8.2 UJ
SED09-08B			R	< 21 UJ		< 8.0 U	< 7.3 U
SED09-09						< 8.1 UJ	< 8.5 UJ
SED09-10						< 6.9 UJ	< 12 UJ
SED09-11B			R	< 11 UJ		19 J	< 4.8 UJ
SED09-12B			R	< 20 U		< 3.9 UJ	< 3.9 UJ
2-HEXANONE (UG_KG)							
SED09-01							< 5.1 UJ
SED09-02A							< 5.9 U

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-03A							< 5.0 UJ
SED09-04A							< 5.1 UJ
SED09-05A						< 7.6 U	< 5.9 UJ
SED09-06B			< 210 U	< 15 UJ		< 1.8 U	< 8.9 UJ
SED09-07B			< 150 U	< 20 UJ		< 5.3 U	< 8.2 UJ
SED09-08B			< 300 U	< 21 UJ		< 8.0 U	< 7.3 U
SED09-09						< 8.1 U	< 8.5 UJ
SED09-10						< 6.9 U	< 12 UJ
SED09-11B			< 140 U	< 11 UJ		< 4.8 U	< 4.8 UJ
SED09-12B			< 240 UJ	< 20 U		< 3.9 U	< 3.9 UJ
4-METHYL-2-PENTANONE (UG_KG)							
SED09-01							< 5.1 U
SED09-02A							< 5.9 U
SED09-03A							< 5.0 U
SED09-04A							< 5.1 U
SED09-05A						< 7.6 U	< 5.9 U
SED09-06B			< 210 U	< 15 UJ		< 1.8 U	< 8.9 U
SED09-07B			< 150 U	< 20 UJ		< 5.3 U	< 8.2 U
SED09-08B			< 300 U	< 21 UJ		< 8.0 U	< 7.3 U
SED09-09						< 8.1 U	< 8.5 U
SED09-10						< 6.9 U	< 12 U
SED09-11B			< 140 U	< 11 UJ		< 4.8 U	< 4.8 U
SED09-12B			< 240 UJ	< 20 U		< 3.9 U	< 3.9 U
ACETONE (UG_KG)							
SED09-01							< 5.1 UJ
SED09-02A							< 5.9 U
SED09-03A							< 5.0 UJ
SED09-04A							< 5.1 UJ
SED09-05A						< 7.6 U	< 5.9 UJ
SED09-06B			R	< 15 UJ		< 1.8 U	< 8.9 UJ
SED09-07B			R	< 20 UJ		18	< 8.2 UJ
SED09-08B			R	< 21 UJ		59 J	9.9 J
SED09-09						62	< 8.5 UJ
SED09-10						22	< 12 UJ
SED09-11B			R	< 11 UJ		54	16 J
SED09-12B			R	< 20 U		6.6	20 J
BENZENE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
BROMODICHLOROMETHANE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 UJ	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 UJ	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
BROMOFORM (UG_KG)							
SED09-01							< 5.1 U
SED09-02A							< 5.9 U
SED09-03A							< 5.0 U
SED09-04A							< 5.1 U
SED09-05A						< 3.8 UJ	< 5.9 U
SED09-06B			< 210 UJ	< 3.0 UJ		< 0.88 U	< 8.9 U
SED09-07B			< 150 UJ	< 4.0 UJ		< 2.6 U	< 8.2 U
SED09-08B			< 300 UJ	< 4.2 UJ		< 4.0 U	< 7.3 U
SED09-09						< 4.1 U	< 8.5 U
SED09-10						< 3.5 U	< 12 U
SED09-11B			< 140 UJ	< 2.2 UJ		< 2.4 U	< 4.8 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 3.9 U
BROMOMETHANE (UG_KG)							
SED09-01							< 5.1 U
SED09-02A							< 5.9 U
SED09-03A							< 5.0 UJ
SED09-04A							< 5.1 UJ
SED09-05A						< 3.8 UJ	< 5.9 U
SED09-06B			< 210 U	< 6.0 UJ		< 0.88 UJ	< 8.9 UJ
SED09-07B			< 150 U	< 8.0 UJ		< 2.6 UJ	< 8.2 UJ
SED09-08B			< 300 U	< 8.5 UJ		< 4.0 U	< 7.3 U
SED09-09						< 4.1 UJ	< 8.5 UJ
SED09-10						< 3.5 UJ	< 12 UJ
SED09-11B			< 140 U	< 4.5 UJ		< 2.4 UJ	< 4.8 UJ
SED09-12B			< 240 UJ	< 8.0 U		< 1.9 UJ	< 3.9 UJ
CARBON DISULFIDE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	7.1 J		< 0.88 U	16
SED09-07B			54 J	6.7 J		14	8.7 J
SED09-08B			< 300 U	11 J		20 J	14
SED09-09						36	< 4.3 U

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-10						11	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		3.8 J	< 2.4 U
SED09-12B			< 240 UJ	14 J		5.2	11
CARBON TETRACHLORIDE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 UJ	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 UJ	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
CHLOROBENZENE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
CHLOROETHANE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 U	< 2.9 U
SED09-06B			< 210 U	< 6.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 8.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 8.5 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 4.5 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 8.0 U		< 1.9 U	< 1.9 U
CHLOROFORM (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
CHLOROMETHANE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 6.0 UJ		< 0.88 UJ	< 4.5 U
SED09-07B			< 150 U	< 8.0 UJ		< 2.6 UJ	< 4.1 U
SED09-08B			< 300 U	< 8.5 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 UJ	< 4.3 U
SED09-10						< 3.5 UJ	< 5.9 U
SED09-11B			< 140 U	< 4.5 UJ		< 2.4 UJ	< 2.4 U
SED09-12B			< 240 UJ	< 8.0 U		< 1.9 UJ	< 1.9 U
CIS-1,2-DICHLOROETHENE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 U	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
CIS-1,3-DICHLOROPROPENE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 UJ	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 UJ	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 UJ	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 UJ	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
DIBROMOCHLOROMETHANE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 UJ	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 UJ	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 UJ	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 UJ	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
ETHYLBENZENE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
METHYLENE CHLORIDE (UG_KG)							
SED09-01							< 5.1 U
SED09-02A							< 5.9 U
SED09-03A							< 5.0 U
SED09-04A							< 5.1 U
SED09-05A						< 3.8 U	< 5.9 U
SED09-06B			< 210 U	< 15 UJ		< 5.9 U	< 8.9 U
SED09-07B			< 150 U	< 20 UJ		< 21 U	< 8.2 U
SED09-08B			< 300 UJ	< 21 UJ		100 J	< 7.3 U
SED09-09						< 10 U	< 8.5 U
SED09-10						< 3.5 U	< 12 U
SED09-11B			< 140 UJ	< 11 UJ		< 2.4 U	< 4.8 U
SED09-12B			< 240 UJ	< 20 U		< 4.9 U	< 3.9 U
STYRENE (UG_KG)							
SED09-01							< 2.6 UJ
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
TETRACHLOROETHENE (UG_KG)							

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	5.3 J
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	3.3 J
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	2.5 J
TOLUENE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
TRANS-1,2-DICHLOROETHENE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 U	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U

TABLE E-3
SUMMARY OF ANALYTES DETECTED COMPARED TO PALs IN
SEDIMENT SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	ME 36	ME 38	ME 40	ME 42	ME 43	ME 44	ME 45
	Mar 2011	Sep/Oct 2011	Sep/Oct 2012	Oct 2013	Sept 2014	Sept 2015	Sept 2016
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
TRANS-1,3-DICHLOROPROPENE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 UJ	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 UJ	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 UJ	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 UJ	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
TRICHLOROETHENE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 UJ	< 2.9 U
SED09-06B			< 210 U	< 3.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 4.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 4.2 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			48 J	< 2.2 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 4.0 U		< 1.9 U	< 1.9 U
VINYL CHLORIDE (UG_KG)							
SED09-01							< 2.6 U
SED09-02A							< 3.0 U
SED09-03A							< 2.5 U
SED09-04A							< 2.6 U
SED09-05A						< 3.8 U	< 2.9 U
SED09-06B			< 210 U	< 6.0 UJ		< 0.88 U	< 4.5 U
SED09-07B			< 150 U	< 8.0 UJ		< 2.6 U	< 4.1 U
SED09-08B			< 300 U	< 8.5 UJ		< 4.0 U	< 3.7 U
SED09-09						< 4.1 U	< 4.3 U
SED09-10						< 3.5 U	< 5.9 U
SED09-11B			< 140 U	< 4.5 UJ		< 2.4 U	< 2.4 U
SED09-12B			< 240 UJ	< 8.0 U		< 1.9 U	< 1.9 U

Notes:
U = Not Detected; J = Estimated Value; R = Rejected
Shaded/Bolded Cell = Detected result exceeds PAL
Maximum value presented when original and duplilcate samples were analyzed
All sediment depths are presented
Parameters that have been detected in at least one sample since ME01 are included on the table

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
LIPIDS (PCT)										
ET09-03	0.6	0.11	0.06	0.56	0.55	0.29	0.90	0.060	0.40	0.16
ET09-04	0.97	0.24	0.083	0.78	0.54	0.55	1.1	0.073	0.30	0.49
ET09-05	0.59	0.27	0.17	0.70	0.46	0.37	0.35	0.017	0.07	0.076
ET09-06	0.68	0.17	0.079	0.25	0.21	0.31	0.90	0.080	0.43	0.12
ET09-07	--	--	--	0.49	--	--	--	--	0.33	0.12
ET09-08	--	--	--	0.52	--	--	--	--	0.27	0.060
ET09-09	--	--	--	--	--	0.21	0.82	0.076	0.40	0.092
ET09-10	--	--	--	--	--	0.13	0.40	0.053	0.10	0.12
ET09-11	--	--	--	--	--	0.4	0.97	0.043	0.53	0.12
ET09-12	--	--	--	--	--	0.31	0.65	0.069	0.23	0.12
ALUMINUM (MG_KG)										
ET09-03	4.4 J	3.4 J	5.5 J	7.5	14.5	68.8	166 J	19.2	107	52.3
ET09-04	5.3 J	3.5 J	2.8 J	8.2 J	10	23.0	133 J	16.3	51.6	128
ET09-05	2.3 J	3.9 J	4.6 J	6.6 J	3.4 J	11.1	15.1 J	19.9	146	21.5 J
ET09-06	2.2 J	3.9 J	3.5 J	4.8 J	4.4 J	17.7	16.9 J	21.3	21.0	2.1 J
ET09-07	--	--	--	12.3	--	--	--	--	54.2	38.3
ET09-08	--	--	--	21.7	--	--	--	--	6.1 J	144
ET09-09	--	--	--	--	--	10.9	7.30 J	14.6	27.2	2.6 J
ET09-10	--	--	--	--	--	6 J	1360 J	9.9	26.2	7.3 J
ET09-11	--	--	--	--	--	21.8	9.72 J	10.4	16.5	9.3
ET09-12	--	--	--	--	--	3.8 J	77.5 J	19.9	19.1	6.2 J
ANTIMONY (MG_KG)										
ET09-03	< 0.12 U	< 0.89 U	< 0.69 U	< 0.62 U	< 0.56 U	< 0.68 U	< 0.740 U	0.24 J	< 0.53 U	< 0.82 U
ET09-04	0.75	< 0.85 U	< 0.52 U	< 0.89 U	< 0.44 U	< 0.74 U	< 0.718 U	0.62 J	< 0.74 U	< 0.80 U
ET09-05	0.14 J	< 0.9 U	< 0.54 U	< 0.71 U	< 0.49 U	< 0.68 U	< 0.725 U	< 0.69 U	0.36 J	< 0.70 U
ET09-06	< 0.1 U	< 0.96 U	< 0.6 U	< 0.68 U	< 0.59 U	< 0.73 U	< 0.740 U	0.37 J	0.45 J	< 0.59 U
ET09-07	--	--	--	< 0.59 U	--	--	--	--	< 0.68 U	< 0.72 U
ET09-08	--	--	--	< 0.86 U	--	--	--	--	< 0.50 U	< 0.52 U
ET09-09	--	--	--	--	--	< 0.7 U	< 0.712 U	0.23 J	0.48 J	< 0.65 U
ET09-10	--	--	--	--	--	< 0.6 U	< 0.733 U	0.36 J	0.44 J	< 0.87 U
ET09-11	--	--	--	--	--	< 0.68 U	< 0.725 U	< 0.45 U	0.42 J	< 0.82 U
ET09-12	--	--	--	--	--	< 0.59 U	< 0.718 U	< 0.57 U	0.31 J	< 0.51 U
ARSENIC (MG_KG)										
ET09-03	0.75 J	< 0.89 U	0.7	1.4	2.5	2.2	3.52 J	3.4	2.7	2.4
ET09-04	0.72 J	< 0.85 U	0.76	1.7	2.7	3.9	5.17	4.1	2.1	3.4
ET09-05	0.72 J	< 0.9 U	0.88	1.6	2.9	2.6	3.15 J	3.2	3.3	2.9
ET09-06	0.64 J	< 0.96 U	0.79	1.2	2.2	2.5	4.73	4.2	3.0	2.6
ET09-07	--	--	--	1.4	--	--	--	--	3.1	2.0
ET09-08	--	--	--	1.2	--	--	--	--	4.1	2.5
ET09-09	--	--	--	--	--	3	4.56	3.6	2.9	2.9
ET09-10	--	--	--	--	--	2.5	2.71 J	3.0	3.9	2.8
ET09-11	--	--	--	--	--	3	3.61 J	3.5	3.0	2.0
ET09-12	--	--	--	--	--	2.8	2.56 J	3.4	3.0	3.1
BARIUM (MG_KG)										
ET09-03	< 7 U	--	0.069 J	< 6.2 U	--	0.45 J	0.608 J	< 5.1 U	< 7.1 U	< 8.2 U
ET09-04	0.074 J	--	0.052 J	< 8.9 U	--	< 0.26 U	0.737 J	< 9.6 U	< 9.8 U	< 10.0 U
ET09-05	< 9 U	--	0.054 J	< 7.1 U	--	< 0.21 U	0.222 J	< 9.3 U	< 7.5 U	< 8.7 U

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-06	< 6 U	--	0.06 J	< 6.8 U	--	< 0.2 U	0.131 J	< 6.8 U	< 8.3 U	< 7.4 U
ET09-07	--	--	--	< 5.9 U	--	--	--	--	< 9.0 U	< 7.2 U
ET09-08	--	--	--	< 8.6 U	--	--	--	--	< 6.7 U	< 6.5 U
ET09-09	--	--	--	--	--	< 0.26 U	0.0856 J	< 5.5 U	< 9.4 U	< 6.5 U
ET09-10	--	--	--	--	--	< 0.2 U	6.05	< 8.1 U	< 8.7 U	< 8.7 U
ET09-11	--	--	--	--	--	< 0.19 U	0.0863 J	< 6.0 U	< 9.6 U	< 8.2 U
ET09-12	--	--	--	--	--	< 0.25 U	0.476 J	< 7.6 U	< 9.4 U	< 6.4 U
BERYLLIUM (MG_KG)										
ET09-03	< 0.0011 UJ	< 0.22 U	< 0.17 UJ	< 0.16 U	0.0028 J	0.0075 J	< 0.0670 U	0.0026 J	0.014 J	< 0.20 U
ET09-04	< 0.0096 UJ	< 0.21 U	< 0.13 UJ	< 0.22 U	0.0022 J	0.0034 J	< 0.0650 U	0.0074 J	0.0061 J	< 0.25 U
ET09-05	< 0.0041 U	< 0.23 U	< 0.13 U	< 0.18 U	0.0018 J	0.0027 J	< 0.0657 U	0.0052 J	0.018 J	< 0.22 U
ET09-06	< 0.0023 UJ	< 0.24 U	< 0.15 UJ	< 0.17 U	< 0.02 U	0.0025 J	< 0.0670 U	0.0057 J	0.0066 J	< 0.18 U
ET09-07	--	--	--	< 0.15 U	--	--	--	--	0.0072 J	< 0.18 U
ET09-08	--	--	--	< 0.22 U	--	--	--	--	0.0023 J	< 0.16 U
ET09-09	--	--	--	--	--	0.0088 J	< 0.0644 U	0.0011 J	0.030 J	< 0.16 U
ET09-10	--	--	--	--	--	0.0084 J	0.111 J	0.0077 J	0.028 J	< 0.22 U
ET09-11	--	--	--	--	--	0.0024 J	< 0.0657 U	0.0065 J	0.0049 J	< 0.20 U
ET09-12	--	--	--	--	--	0.006 J	< 0.0650 U	0.0024 J	0.013 J	< 0.16 U
CADMIUM (MG_KG)										
ET09-03	0.15 J	--	0.095 J	0.15 J	--	0.15 J	0.213 J	0.23	0.17 J	0.12 J
ET09-04	0.048 J	--	0.074 J	0.14 J	--	0.16 J	0.202 J	0.19 J	0.10 J	0.17 J
ET09-05	< 0.034 U	--	0.072 J	0.083 J	--	0.075 J	0.0873 J	0.085 J	0.076 J	0.069 J
ET09-06	0.055 J	--	0.095 J	0.22	--	0.1 J	0.145 J	0.12 J	0.089 J	0.064 J
ET09-07	--	--	--	0.63	--	--	--	--	0.55	0.46
ET09-08	--	--	--	0.68	--	--	--	--	0.21	0.15 J
ET09-09	--	--	--	--	--	0.065 J	0.142 J	0.10 J	0.13 J	0.066 J
ET09-10	--	--	--	--	--	0.1 J	0.206 J	0.093 J	0.18 J	0.059 J
ET09-11	--	--	--	--	--	0.099 J	0.120 J	0.084 J	0.11 J	0.073 J
ET09-12	--	--	--	--	--	0.08 J	0.0845 J	0.10 J	0.14 J	0.055 J
CALCIUM (MG_KG)										
ET09-03	380	--	315 J	305	--	759	685 J	418	559	662
ET09-04	413	--	367 J	374	--	523	2670 J	395	343	2430
ET09-05	400	--	421 J	404	--	416	631 J	448	810	1300
ET09-06	589	--	492 J	361	--	415	427 J	419	403	606
ET09-07	--	--	--	396	--	--	--	--	663	700
ET09-08	--	--	--	373	--	--	--	--	930	635
ET09-09	--	--	--	--	--	986	490 J	465	431	494
ET09-10	--	--	--	--	--	629	968 J	511	904	926
ET09-11	--	--	--	--	--	406	512 J	501	501	988
ET09-12	--	--	--	--	--	819	726 J	441	794	879
CHROMIUM, TOTAL (MG_KG)										
ET09-03	0.59 J	0.28 J	< 0.69 UJ	0.045 J	0.10 J	0.36 J	< 3 U	< 0.51 U	< 0.71 U	< 0.82 U
ET09-04	0.49 J	0.26 J	0.17 J	< 0.89 U	0.094 J	0.18 J	< 2.91 U	< 0.96 U	< 0.98 U	1.1
ET09-05	0.46 J	< 0.9 U	0.14 J	0.069 J	0.06 J	0.099 J	< 0.157 U	< 0.93 U	1.1	< 0.87 U
ET09-06	0.19 J	0.29 J	0.17 J	< 0.68 U	0.05 J	0.17 J	< 3 U	< 0.68 U	< 0.83 U	< 0.74 U
ET09-07	--	--	--	0.1 J	--	--	--	--	< 0.90 U	1.1
ET09-08	--	--	--	0.12 J	--	--	--	--	< 0.67 U	1.4
ET09-09	--	--	--	--	--	0.36 J	< 0.154 U	< 0.55 U	< 0.94 U	< 0.65 U

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-10	--	--	--	--	--	0.11 J	9.37	< 0.81 U	< 0.87 U	< 0.87 U
ET09-11	--	--	--	--	--	0.25 J	< 0.157 U	< 0.60 U	< 0.96 U	< 0.82 U
ET09-12	--	--	--	--	--	0.13 J	< 2.91 U	< 0.76 U	< 0.94 U	< 0.64 U
COBALT (MG_KG)										
ET09-03	< 2 UJ	--	< 1.7 UJ	0.024 J	--	0.14 J	< 1 U	< 1.3 U	< 1.8 U	0.12 J
ET09-04	0.1 J	--	0.049 J	0.069 J	--	0.11 J	< 0.971 U	< 2.4 U	< 2.5 U	0.26 J
ET09-05	< 2 U	--	0.057 J	0.044 J	--	0.062 J	< 0.98 U	< 2.3 U	< 1.9 U	0.18 J
ET09-06	< 1 UJ	--	0.069 J	0.061 J	--	0.064 J	< 0.0990 U	< 1.7 U	< 2.1 U	0.13 J
ET09-07	--	--	--	0.037 J	--	--	--	--	< 2.3 U	0.057 J
ET09-08	--	--	--	0.06 J	--	--	--	--	< 1.7 U	0.14 J
ET09-09	--	--	--	--	--	0.12 J	< 0.0952 U	< 1.4 U	< 2.4 U	0.14 J
ET09-10	--	--	--	--	--	0.12 J	1.01	< 2.0 U	< 2.2 U	0.15 J
ET09-11	--	--	--	--	--	0.054 J	< 0.0971 U	< 1.5 U	< 2.4 U	0.059 J
ET09-12	--	--	--	--	--	0.23 J	< 0.971 U	< 1.9 U	< 2.4 U	0.15 J
COPPER (MG_KG)										
ET09-03	< 1 U	1.2 J	< 1 U	2.1	1.5	3.1	3.58	1.9	3.0	< 1.4 U
ET09-04	< 1 U	1.5	< 0.77 U	2.1	1.6	2.2	2.77	1.9	2.4	6.4
ET09-05	< 1 U	1.1 J	< 0.81 U	1.6	1.4	1.5	1.39 J	1.7 J	2.8	< 1.3 U
ET09-06	< 1 U	1.3 J	< 0.9 U	1.3	1.4	1.6	1.68 J	2.4	4.2	< 1.8 U
ET09-07	--	--	--	1.8	--	--	--	--	6.3	< 1.9 U
ET09-08	--	--	--	1.9	--	--	--	--	6.9	3.0
ET09-09	--	--	--	--	--	3.1	1.83 J	1.9	2.3	2.8
ET09-10	--	--	--	--	--	3.1	9.48	4.1	9.1	< 2.2 U
ET09-11	--	--	--	--	--	1.6	1.60 J	4.2	3.1	< 1.6 U
ET09-12	--	--	--	--	--	3	3.28	2.0	7.2	2.7
IRON (MG_KG)										
ET09-03	32.1	25.5	43.4 J	49.4	63.6	283	542 J	85.4	477	262
ET09-04	51.4	24.7	27.1 J	45.4	47	123	616 J	99.4	204	599
ET09-05	48.7	36.2	58.3 J	52.5	23.7	56.2	43.8 J	60.4	502	71.5 J
ET09-06	26.3	26.1	35.8 J	31.2	24.8	68.2	62.6 J	80.9	108	15.9
ET09-07	--	--	--	62.7	--	--	--	--	208	113
ET09-08	--	--	--	79.1	--	--	--	--	21.8	390
ET09-09	--	--	--	--	--	37.1	30.6 J	46.6	94.3	19.0
ET09-10	--	--	--	--	--	28.6	3160 J	43.6	95.3	38
ET09-11	--	--	--	--	--	62.5	33.0 J	43.5	64.1	38.0
ET09-12	--	--	--	--	--	19.2	205 J	60.9	88.7	39.3
LEAD (MG_KG)										
ET09-03	< 0.22 UJ	< 0.45 U	< 0.35 UJ	0.09 J	< 0.19 U	< 0.66 U	1.19 J	0.21 J	1.0	0.53
ET09-04	< 0.18 UJ	< 0.42 U	< 0.26 UJ	< 0.45 U	< 0.15 U	< 0.27 U	1.15 J	0.19 J	0.42 J	1.2
ET09-05	< 0.10 U	< 0.45 U	< 0.27 U	< 0.35 U	< 0.16 U	< 0.23 U	< 0.490 U	< 0.23 U	1.2	0.14 J
ET09-06	< 0.12 UJ	< 0.48 U	< 0.3 UJ	< 0.34 U	< 0.2 U	< 0.24 U	< 0.500 U	0.16 J	< 0.41 U	0.14 J
ET09-07	--	--	--	< 0.3 U	--	--	--	--	0.39 J	0.26 J
ET09-08	--	--	--	< 0.43 U	--	--	--	--	< 0.34 U	0.88
ET09-09	--	--	--	--	--	< 0.23 U	< 0.481 U	0.11 J	0.21 J	0.16 J
ET09-10	--	--	--	--	--	< 0.2 U	6.90	0.24 J	0.28 J	< 0.22 U
ET09-11	--	--	--	--	--	< 0.23 U	< 0.490 U	0.18 J	< 0.48 U	0.14 J
ET09-12	--	--	--	--	--	< 0.2 U	0.689 J	< 0.19 U	0.35 J	0.22 J
MAGNESIUM (MG_KG)										

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-03	779	--	637	740	--	857	835	858	775	1010
ET09-04	807	--	623	751	--	833	838	905	761	1250
ET09-05	856	--	603	836	--	911	891	960	976	1040
ET09-06	793	--	639	806	--	894	737	890	881	927
ET09-07	--	--	--	771	--	--	--	--	848	941
ET09-08	--	--	--	817	--	--	--	--	1050	959
ET09-09	--	--	--	--	--	871	770	886	934	926
ET09-10	--	--	--	--	--	950	1150	896	995	937
ET09-11	--	--	--	--	--	939	778	855	892	967
ET09-12	--	--	--	--	--	837	790	920	1030	946
MANGANESE (MG_KG)										
ET09-03	< 2 UJ	< 2.2 U	2.8	2.2	5.5	17.5	29.4 J	2.4	21.3	22.1
ET09-04	6.4	11.1	7.4	11.7	11	20.9	46.0 J	10.4	7.8	41.4
ET09-05	5.9	7.6	9.5	9.8	5.6	8.9	4.98 J	5.1	10.4	2.6
ET09-06	2.4	6.8	6.3	11.5	3.6	12.8	11.4 J	3.3	9.0	3.1
ET09-07	--	--	--	3.1	--	--	--	--	4.6	1.8
ET09-08	--	--	--	8.4	--	--	--	--	0.53 J	6.5
ET09-09	--	--	--	--	--	2 J	9.33 J	12.7	13.6	3.2
ET09-10	--	--	--	--	--	6.9	31.0 J	9.7	7.2	4.8
ET09-11	--	--	--	--	--	9.9	9.07 J	5.7	10.8	11.6
ET09-12	--	--	--	--	--	1.8 J	12.6 J	11.1	15.4	4.0
MERCURY (MG_KG)										
ET09-03	0.0049 J	< 0.028 U	< 0.028 UJ	0.01 J	0.01 J	0.0089 J	0.0111 J	0.0063 J	0.0090 J	0.0054 J
ET09-04	0.0042 J	< 0.032 U	< 0.028 UJ	0.0096 J	0.0078 J	0.0077 J	0.0111 J	0.0067 J	0.0072 J	0.0068 J
ET09-05	0.0044 J	< 0.026 U	< 0.029 U	0.0081 J	0.015 J	0.0083 J	< 0.0095 U	0.0068 J	0.0052 J	0.0074 J
ET09-06	0.0048 J	< 0.031 U	< 0.029 UJ	0.008 J	< 0.02 U	0.0081 J	0.0114 J	0.0098 J	0.0073 J	0.0066 J
ET09-07	--	--	--	0.012 J	--	--	--	--	0.0094 J	0.0096 J
ET09-08	--	--	--	0.013 J	--	--	--	--	< 0.020 U	0.014 J
ET09-09	--	--	--	--	--	0.059	0.0110 J	0.0083 J	0.010 J	0.0058 J
ET09-10	--	--	--	--	--	0.011 J	0.0197 J	0.011 J	0.010 J	0.0080 J
ET09-11	--	--	--	--	--	0.011 J	0.0120 J	0.0085 J	0.0079 J	0.0074 J
ET09-12	--	--	--	--	--	0.011 J	< 0.0093 U	0.0095 J	0.0049 J	0.0059 J
NICKEL (MG_KG)										
ET09-03	0.31 J	< 2.2 U	< 1.7 UJ	< 1.6 UJ	0.059 J	0.27 J	1.04 J	< 1.3 U	< 1.8 U	0.20 J
ET09-04	0.32 J	< 2.1 U	0.13 J	< 2.2 UJ	0.11 J	0.17 J	0.544 J	< 2.4 U	< 2.5 U	0.70 J
ET09-05	0.25 J	< 2.3 U	0.12 J	0.13 J	0.06 J	0.083 J	0.649 J	< 2.3 U	< 1.9 U	0.88 J
ET09-06	0.11 J	< 2.4 U	0.11 J	0.12 J	< 0.039 U	0.13 J	< 0.130 U	< 1.7 U	< 2.1 U	0.59 J
ET09-07	--	--	--	0.17 J	--	--	--	--	< 2.3 U	0.45 J
ET09-08	--	--	--	0.19 J	--	--	--	--	< 1.7 U	0.65 J
ET09-09	--	--	--	--	--	0.53 J	< 0.125 U	< 1.4 U	< 2.4 U	0.61 J
ET09-10	--	--	--	--	--	0.59 J	5.52	< 2.0 U	< 2.2 U	0.58 J
ET09-11	--	--	--	--	--	0.11 J	0.152 J	< 1.5 U	< 2.4 U	0.14 J
ET09-12	--	--	--	--	--	0.63 J	0.651 J	< 1.9 U	< 2.4 U	0.37 J
POTASSIUM (MG_KG)										
ET09-03	1330	--	1230	1430	--	1050	1310	1280	840	901
ET09-04	1340	--	1110	1510	--	1400	1630	1400	913	1350
ET09-05	1320	--	1200	1500	--	1240	1350	1530	1190	1170
ET09-06	1410	--	1230	1080	--	1190	1460	1600	1190	1440

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-07	--	--	--	1250	--	--	--	--	810	865
ET09-08	--	--	--	1170	--	--	--	--	822	855
ET09-09	--	--	--	--	--	1900	1440	1470	1090	1510
ET09-10	--	--	--	--	--	1590	1090	1410	1130	1360
ET09-11	--	--	--	--	--	1270	1380	1720	1160	966
ET09-12	--	--	--	--	--	2140	1600	1420	1180	1310
SELENIUM (MG_KG)										
ET09-03	0.31 J	--	0.24 J	< 0.93 U	--	< 0.9 U	< 0.800 U	< 0.51 U	0.61 J	< 0.82 U
ET09-04	0.49 J	--	0.19 J	< 1.3 U	--	< 0.98 U	< 0.777 U	< 0.96 U	< 1.5 U	1.2 J
ET09-05	0.53 J	--	0.30 J	< 1.1 U	--	< 0.91 U	< 0.784 U	< 0.93 U	< 1.1 U	0.64 J
ET09-06	0.55 J	--	< 0.9 U	< 1 U	--	< 0.97 U	< 0.800 U	< 0.68 U	< 1.2 U	0.62 J
ET09-07	--	--	--	< 0.89 U	--	--	--	--	< 1.4 U	< 0.72 U
ET09-08	--	--	--	< 1.3 U	--	--	--	--	< 1.0 U	0.71 J
ET09-09	--	--	--	--	--	< 0.93 U	< 0.769 U	< 0.55 U	< 1.4 U	< 0.65 U
ET09-10	--	--	--	--	--	< 0.81 U	< 0.792 U	< 0.81 U	0.70 J	0.57 J
ET09-11	--	--	--	--	--	< 0.91 U	< 0.784 U	< 0.60 U	< 1.4 U	0.54 J
ET09-12	--	--	--	--	--	< 0.79 U	< 0.777 U	< 0.76 U	< 1.4 U	0.56 J
SILVER (MG_KG)										
ET09-03	< 1 UJ	--	0.095 J	< 0.93 UJ	--	< 0.2 U	< 0.170 U	0.14 J	0.15 J	0.13 J
ET09-04	< 1 UJ	--	0.088 J	< 1.3 UJ	--	< 0.20 U	< 0.165 U	0.20 J	0.11 J	0.15 J
ET09-05	< 1 U	--	0.099 J	< 1.1 U	--	< 0.17 U	< 0.167 U	0.11 J	0.066 J	0.076 J
ET09-06	< 1 UJ	--	0.068 J	< 1 UJ	--	< 0.18 U	< 0.170 U	0.11 J	0.11 J	0.093 J
ET09-07	--	--	--	1.3	--	--	--	--	1.2 J	0.94 J
ET09-08	--	--	--	0.68 J	--	--	--	--	1.2	0.57 J
ET09-09	--	--	--	--	--	< 0.11 U	< 0.163 U	0.14 J	0.26 J	0.079 J
ET09-10	--	--	--	--	--	< 0.16 U	< 0.168 U	0.17 J	0.26 J	0.091 J
ET09-11	--	--	--	--	--	< 0.23 U	< 0.98 U	0.14 J	0.26 J	0.20 J
ET09-12	--	--	--	--	--	< 0.14 U	< 0.165 U	0.17 J	0.14 J	0.11 J
SODIUM (MG_KG)										
ET09-03	6400	--	5650	5700	--	6410	6330	7340	5180	7570
ET09-04	6670	--	5240	5790	--	6500	6380	7510	5660	9130
ET09-05	7320	--	5010	6690	--	7160	6550	7140	6260	7500
ET09-06	6730	--	5590	6770	--	7140	6090	7000	6470	6620
ET09-07	--	--	--	6130	--	--	--	--	6060	7160
ET09-08	--	--	--	6230	--	--	--	--	7530	6890
ET09-09	--	--	--	--	--	6400	6180	7670	7020	6410
ET09-10	--	--	--	--	--	6930	4740	6680	6170	6630
ET09-11	--	--	--	--	--	7430	6410	6250	6430	7470
ET09-12	--	--	--	--	--	5930	5420	7670	5990	6800
VANADIUM (MG_KG)										
ET09-03	< 2 UJ	--	0.079 J	< 1.6 UJ	--	0.89 J	< 1 U	< 1.3 U	0.70 J	< 2.0 U
ET09-04	0.16 J	--	0.055 J	< 2.2 UJ	--	0.25 J	< 0.971 U	< 2.4 U	0.35 J	< 2.5 U
ET09-05	0.11 J	--	0.13 J	< 1.8 U	--	0.12 J	< 0.127 U	< 2.3 U	0.58 J	< 2.2 U
ET09-06	< 1 UJ	--	0.065 J	< 1.7 UJ	--	0.14 J	< 1 U	< 1.7 U	0.28 J	< 1.8 U
ET09-07	--	--	--	0.18 J	--	--	--	--	0.49 J	< 1.8 U
ET09-08	--	--	--	< 2.2 UJ	--	--	--	--	0.27 J	< 1.6 U
ET09-09	--	--	--	--	--	0.13 J	< 0.125 U	< 1.4 U	0.52 J	< 1.6 U
ET09-10	--	--	--	--	--	0.13 J	4.01	< 2.0 U	0.36 J	< 2.2 U

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-11	--	--	--	--	--	0.13 J	< 0.127 U	< 1.5 U	0.30 J	< 2.0 U
ET09-12	--	--	--	--	--	0.1 J	< 0.971 U	< 1.9 U	0.22 J	< 1.6 U
ZINC (MG_KG)										
ET09-03	5.9	4.6	6.3	7.9	6.4	12.6 J	10.4 J	7.2	9.8	5.5
ET09-04	5.7	5.4	5.4	8	6.6	7.5 J	10.0 J	7.5	6.3	10.6
ET09-05	5.3	5.5	6.9	7.2	6.5	6.6 J	17.5 J	16.8	24.2	13.2
ET09-06	5.2	5.1	6.2	5.4	5.4	6.6 J	8.55 J	8.6	6.0	14.6
ET09-07	--	--	--	8.7	--	--	--	--	9.9	5.0
ET09-08	--	--	--	8.3	--	--	--	--	10.5	6.5
ET09-09	--	--	--	--	--	17 J	8.76 J	7.1	7.5	15.6
ET09-10	--	--	--	--	--	12.1 J	29.2 J	18.1	28.8	14
ET09-11	--	--	--	--	--	6.7 J	7.24 J	18.5	7.5	5.3
ET09-12	--	--	--	--	--	26.8 J	18.1 J	7.4	23.6	13.6
DECACHLOROBIPHENYL (UG_KG)										
ET09-03	< 8.3 U	< 1.1 UJ	< 1.1 U	< 4.1 U	< 0.83 U	< 0.41 U	< 0.42 U	< 0.41 U	< 0.42 U	0.26 J
ET09-04	< 8.3 U	< 1.1 UJ	< 1 U	< 4.2 U	< 0.82 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 U
ET09-05	< 8.3 U	< 1.3 UJ	< 1.1 U	< 4.1 U	< 0.82 U	< 0.41 U	< 0.41 U	< 0.42 U	< 0.41 U	0.38 J
ET09-06	< 8.3 U	< 1.3 U	< 1 U	< 4.1 UJ	< 0.82 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 UJ
ET09-07	--	--	--	< 4.1 UJ	--	--	--	--	< 0.42 U	< 0.41 U
ET09-08	--	--	--	< 4.1 UJ	--	--	--	--	< 0.41 U	< 0.41 U
ET09-09	--	--	--	--	--	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 UJ
ET09-10	--	--	--	--	--	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	0.20 J
ET09-11	--	--	--	--	--	< 0.42 U	< 0.41 U	< 0.41 U	< 0.42 U	< 0.41 U
ET09-12	--	--	--	--	--	< 0.41 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.41 UJ
DICHLOROBIPHENYL (UG_KG)										
ET09-03	2.3	< 0.21 U	< 0.21 U	< 0.82 U	1.6 J	< 0.082 U	< 0.083 U	< 0.082 U	< 0.083 U	< 0.082 U
ET09-04	2.2	< 0.21 U	< 0.21 U	< 0.84 U	0.82	0.78	< 0.083 U	< 0.083 U	0.39 J	0.42
ET09-05	1.5 J	0.55	< 0.21 U	< 0.83 U	< 0.16 U	< 0.082 U	< 0.082 U	< 0.083 U	< 0.082 U	< 0.083 U
ET09-06	1.9	0.47 J	< 0.21 U	< 0.83 U	< 0.16 U	< 0.082 U	< 0.083 U	< 0.083 U	0.90	< 0.083 UJ
ET09-07	--	--	--	< 0.83 U	--	--	--	--	< 0.083 U	< 0.082 U
ET09-08	--	--	--	< 0.82 U	--	--	--	--	< 0.082 U	0.21 J
ET09-09	--	--	--	--	--	< 0.082 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 UJ
ET09-10	--	--	--	--	--	< 0.082 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 U
ET09-11	--	--	--	--	--	< 0.083 U	< 0.081 U	< 0.082 U	< 0.083 U	< 0.082 U
ET09-12	--	--	--	--	--	< 0.082 U	< 0.082 U	< 0.083 U	< 0.083 U	< 0.082 UJ
HEPTACHLOROBIPHENYL (UG_KG)										
ET09-03	20	5.1	1.1	13	12	7.8	8.0	< 0.25 U	6.5	5.3
ET09-04	9.3	2.8	1.2	8.4	5.6	9.4 J	1.7 J	< 0.25 U	3.1	3.7
ET09-05	7.7 J	1.3	5.5 J	4.2	1.3 J	3.7	0.75 J	< 0.25 U	1.8	0.71 J
ET09-06	8.9	2.2	6	3.4	< 0.49 U	3.4	4.3	< 0.25 U	7.8	0.76 J-
ET09-07	--	--	--	3.8	--	--	--	--	0.24 J	1.1
ET09-08	--	--	--	7.4	--	--	--	--	< 0.25 U	0.37 J
ET09-09	--	--	--	--	--	< 0.25 U	1.5	< 0.25 U	1.3	0.20 J-
ET09-10	--	--	--	--	--	< 0.25 U	< 0.25 U	< 0.25 U	< 0.25 U	0.21 J-
ET09-11	--	--	--	--	--	1.3	1.2	< 0.25 U	44	1.7
ET09-12	--	--	--	--	--	1.5	< 0.25 U	< 0.25 U	0.26 J	0.35 J-
HEXACHLOROBIPHENYL (UG_KG)										
ET09-03	80	17	7.7	57	43	24 J	8.1 J	2.9	18	16

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-04	46	9.2	8.5	36	22	32	7.1 J	0.92	12	15
ET09-05	39	5.7	26 J	23	12	17	1.8	< 0.17 U	3.2	1.5
ET09-06	40	9.4	27	17	3.4	14	12	0.88	27	1.3 J-
ET09-07	--	--	--	19	--	--	--	--	0.41 J	5.5
ET09-08	--	--	--	37	--	--	--	--	< 0.17 U	1.7
ET09-09	--	--	--	--	--	2.2	5.5	0.57 J	6.2	0.86 J-
ET09-10	--	--	--	--	--	0.65 J	< 0.17 U	< 0.17 U	< 0.17 U	0.63 J-
ET09-11	--	--	--	--	--	11	5.9	< 0.17 U	46	8.3
ET09-12	--	--	--	--	--	1.9	< 0.16 U	< 0.17 U	0.43 J	0.51 J-
NONACHLOROBIPHENYL (UG_KG)										
ET09-03	< 8.3 U	< 1.1 UJ	< 1.1 U	< 4.1 U	< 0.83 U	< 0.41 U	< 0.42 U	< 0.41 U	< 0.42 U	< 0.41 U
ET09-04	< 8.3 U	< 1.1 UJ	< 1 U	< 4.2 U	< 0.82 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 U
ET09-05	< 8.3 U	< 1.3 UJ	< 1.1 U	< 4.1 U	< 0.82 U	< 0.41 U	< 0.41 U	< 0.42 U	< 0.41 U	< 0.42 U
ET09-06	< 8.3 U	< 1.3 U	< 1 U	< 4.1 U	< 0.82 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 UJ
ET09-07	--	--	--	< 4.1 U	--	--	--	--	< 0.42 U	< 0.41 U
ET09-08	--	--	--	< 4.1 U	--	--	--	--	< 0.41 U	< 0.41 U
ET09-09	--	--	--	--	--	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 UJ
ET09-10	--	--	--	--	--	< 0.41 U	< 0.42 U	< 0.42 U	< 0.42 U	< 0.42 UJ
ET09-11	--	--	--	--	--	< 0.42 U	< 0.41 U	< 0.41 U	< 0.42 U	< 0.41 U
ET09-12	--	--	--	--	--	< 0.41 U	< 0.41 U	< 0.42 U	< 0.42 U	< 0.41 UJ
OCTACHLOROBIPHENYL (UG_KG)										
ET09-03	< 5 U	< 0.6 U	< 0.6 U	< 2.3 U	< 0.50 U	< 0.25 U	2.6	< 0.25 U	< 0.50 U	< 0.50 U
ET09-04	< 5 U	< 0.6 U	< 0.6 U	< 2.4 U	< 0.49 U	0.35 J	< 0.25 U	< 0.25 U	< 0.50 U	< 0.50 U
ET09-05	< 5 U	< 0.72 U	< 0.6 U	< 2.4 U	< 0.49 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.50 U	< 0.50 U
ET09-06	< 5 U	< 0.72 U	< 0.6 U	< 2.4 U	< 0.49 U	< 0.25 U	< 0.25 U	< 0.25 U	< 0.50 U	< 0.50 UJ
ET09-07	--	--	--	< 2.4 U	--	--	--	--	< 0.50 U	< 0.49 U
ET09-08	--	--	--	< 2.3 U	--	--	--	--	< 0.50 U	< 0.49 U
ET09-09	--	--	--	--	--	< 0.25 U	< 0.25 U	< 0.25 U	< 0.50 U	< 0.50 UJ
ET09-10	--	--	--	--	--	< 0.25 U	< 0.25 U	< 0.25 U	< 0.50 U	< 0.50 UJ
ET09-11	--	--	--	--	--	< 0.25 U	< 0.24 U	< 0.25 U	7.5	< 0.49 U
ET09-12	--	--	--	--	--	< 0.25 U	< 0.25 U	< 0.25 U	< 0.50 U	< 0.50 UJ
PENTACHLOROBIPHENYL (UG_KG)										
ET09-03	30	7.6	1.8	17	18	10 J	1.1	< 0.17 U	5.8	5.1
ET09-04	22	4.5	3.2	14	12	9.0	3.0 J	< 0.17 U	4.8	6.6
ET09-05	17	3	13 J	11	6.4	6.5	< 0.16 U	< 0.17 U	0.41 J	0.19 J
ET09-06	16	4.0	8.4	6.9	0.86 J	3.6	5.1	< 0.17 U	8.5	0.21 J-
ET09-07	--	--	--	8.4	--	--	--	--	< 0.17 U	2.7
ET09-08	--	--	--	12	--	--	--	--	< 0.17 U	0.99
ET09-09	--	--	--	--	--	< 0.17 U	2.7	< 0.17 U	3.9	< 0.17 UJ
ET09-10	--	--	--	--	--	< 0.16 U	< 0.17 U	< 0.17 U	< 0.17 U	0.18 J-
ET09-11	--	--	--	--	--	4.8	3.3	< 0.17 U	12	4.4
ET09-12	--	--	--	--	--	0.44 J	< 0.16 U	< 0.17 U	< 0.17 U	< 0.17 UJ
POLYCHLORINATED BIPHENYLS (PCBS) (UG_KG)										
ET09-03	140	--	--	--	--	43	20	2.9	31	27
ET09-04	84	--	--	--	--	50	12 J	0.92	20	28
ET09-05	67	--	--	--	--	27	2.6	< 0.083 U	5.4	3.0 J
ET09-06	70	--	--	--	--	21	23	0.88	45	2.2 J-
ET09-07	--	--	--	--	--	--	--	--	0.65	9.4

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-08	--	--	--	--	--	--	--	--	< 0.082 U	3.4
ET09-09	--	--	--	--	--	2.2	10	0.57	12	1.1 J-
ET09-10	--	--	--	--	--	0.65	< 0.083 U	< 0.083 U	0.044 J	1.2 J-
ET09-11	--	--	--	--	--	17	11	< 0.082 U	110	15
ET09-12	--	--	--	--	--	3.9	< 0.082 U	< 0.083 U	0.79 J	0.86 J-
TETRACHLOROBIPHENYL (UG_KG)										
ET09-03	4.4	1.4	< 0.42 U	4.7	1.7 J	0.65 J	< 0.17 U	< 0.17 U	< 0.17 U	0.74
ET09-04	4	1.4	< 0.41 U	5.6	0.8 J	1.1	0.37 J	< 0.17 U	0.28 J	1.2
ET09-05	3.5 J	0.83	2.4 J	5.4	< 0.33 U	< 0.16 U	< 0.16 U	< 0.17 U	< 0.17 U	< 0.17 U
ET09-06	3.2 J	1.2	0.41	1.9	< 0.33 U	< 0.17 U	0.70	< 0.17 U	0.87	< 0.17 UJ
ET09-07	--	--	--	3.4	--	--	--	--	< 0.17 U	0.17 J
ET09-08	--	--	--	4	--	--	--	--	< 0.17 U	0.087 J
ET09-09	--	--	--	--	--	< 0.17 U	0.58 J	< 0.17 U	0.38 J	< 0.17 UJ
ET09-10	--	--	--	--	--	< 0.16 U	< 0.17 U	< 0.17 U	< 0.17 U	< 0.17 UJ
ET09-11	--	--	--	--	--	< 0.17 U	0.67	< 0.17 U	1.3	0.66
ET09-12	--	--	--	--	--	< 0.17 U	< 0.16 U	< 0.17 U	< 0.17 U	< 0.17 UJ
TRICHLOROBIPHENYL (UG_KG)										
ET09-03	< 1.6 U	0.27	< 0.21 U	< 0.82 U	< 0.16 U	< 0.082 U	< 0.083 U	< 0.082 U	< 0.083 U	< 0.082 U
ET09-04	< 1.6 U	0.26	< 0.21 U	0.9	< 0.16 U	< 0.082 U	< 0.083 U	< 0.083 U	0.15 J	0.088 J
ET09-05	< 1.6 U	< 0.25 U	0.24 J	0.99	< 0.16 U	< 0.082 U	< 0.082 U	< 0.083 U	< 0.082 U	0.19 J
ET09-06	< 1.6 U	0.25	< 0.21 U	< 0.83 U	< 0.16 U	< 0.082 U	0.16 J	< 0.083 U	< 0.083 U	< 0.083 UJ
ET09-07	--	--	--	< 0.83 U	--	--	--	--	< 0.083 U	< 0.082 U
ET09-08	--	--	--	< 0.82 U	--	--	--	--	< 0.082 U	0.055 J
ET09-09	--	--	--	--	--	< 0.082 U	< 0.083 U	< 0.083 U	0.26 J	< 0.083 UJ
ET09-10	--	--	--	--	--	< 0.082 U	< 0.083 U	< 0.083 U	< 0.083 U	< 0.083 UJ
ET09-11	--	--	--	--	--	< 0.083 U	0.097 J	< 0.082 U	0.50	< 0.082 U
ET09-12	--	--	--	--	--	< 0.082 U	< 0.082 U	< 0.083 U	< 0.083 U	< 0.082 UJ
4,4-DDD (UG_KG)										
ET09-03	< 37 U	< 3.3 U	< 3.3 UJ	< 6.6 UJ	< 290 U	3.8 J	R	< 0.85 U	12 J	< 0.85 U
ET09-04	< 29 U	< 3.3 U	< 3.3 U	< 6.5 UJ	< 290 UJ	8.9 J	< 15 U	< 0.85 U	< 0.84 UJ	< 0.84 U
ET09-05	< 37 U	< 3.3 U	< 3.3 U	< 6.5 U	< 550 UJ	7.6 J	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.85 U
ET09-06	< 30 U	< 3.3 U	< 3.3 U	< 6.6 UJ	< 160 UJ	12 J	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.85 U
ET09-07	--	--	--	< 6.6 UJ	--	--	--	--	17 J	< 0.85 U
ET09-08	--	--	--	< 6.6 UJ	--	--	--	--	< 0.85 UJ	< 0.85 U
ET09-09	--	--	--	--	--	< 0.84 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.84 UJ
ET09-10	--	--	--	--	--	< 0.84 UJ	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.85 UJ
ET09-11	--	--	--	--	--	5.5 J	< 3.4 U	< 0.85 U	5.7 J	< 0.85 U
ET09-12	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.84 U	< 0.85 U	< 0.85 U
4,4-DDE (UG_KG)										
ET09-03	4.7 J	< 3.3 U	< 3.3 UJ	< 6.6 UJ	< 1.7 U	< 0.85 UJ	3.7	< 0.85 U	2.7 J	< 0.85 U
ET09-04	< 29 U	< 3.3 U	< 3.3 U	< 6.5 U	< 1.6 U	< 0.85 U	2.7 J	< 0.85 U	< 0.84 UJ	< 0.84 U
ET09-05	< 37 U	< 3.3 U	< 3.3 U	< 6.5 U	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.85 U
ET09-06	< 30 U	< 3.3 U	< 3.3 U	< 6.6 U	< 1.7 U	< 0.85 UJ	1.9 J	< 0.85 U	< 0.84 UJ	< 0.85 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.85 U
ET09-08	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.85 U
ET09-09	--	--	--	--	--	< 0.84 UJ	1.7 J	< 0.85 U	< 0.84 UJ	< 0.84 UJ
ET09-10	--	--	--	--	--	< 0.84 UJ	0.87 J	< 0.85 U	< 0.85 UJ	< 0.85 UJ
ET09-11	--	--	--	--	--	< 0.85 UJ	1.6 J	< 0.85 U	< 0.84 UJ	< 0.85 U

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-12	--	--	--	--	--	< 0.85 UJ	0.72 J	< 0.84 U	< 0.85 U	< 0.85 U
4,4-DDT (UG_KG)										
ET09-03	5.9 J	< 3.3 U	< 3.3 UJ	< 6.6 UJ	< 1.7 U	< 0.85 UJ	< 7.3 U	< 0.85 U	5.5 J	< 0.85 U
ET09-04	11 J	< 3.3 U	< 3.3 U	< 6.5 U	< 1.6 U	4.7 J	< 3.6 U	< 0.85 U	< 0.84 UJ	< 0.84 U
ET09-05	7.4 J	< 3.3 U	< 3.3 U	< 6.5 U	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.85 U
ET09-06	7 J	< 3.3 U	< 3.3 U	< 6.6 U	< 1.7 U	3.6 J	< 3.5 U	< 0.85 U	< 0.84 UJ	< 0.85 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	6.5 J	< 0.85 U
ET09-08	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.85 U
ET09-09	--	--	--	--	--	< 0.84 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.84 UJ
ET09-10	--	--	--	--	--	< 0.84 UJ	1.5 J	< 0.85 U	< 0.85 UJ	< 0.85 UJ
ET09-11	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.85 U
ET09-12	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.84 U	0.63 J	< 0.85 U
ALDRIN (UG_KG)										
ET09-03	< 19 UJ	< 1.7 U	< 1.7 UJ	< 3.4 UJ	10 J	< 0.42 UJ	0.60 J	< 0.42 U	1.9 J	< 0.42 U
ET09-04	< 15 UJ	< 1.7 U	< 1.7 U	< 3.3 U	8.5 J	3.1 J	1.2 J	< 0.43 U	< 0.42 UJ	< 0.42 U
ET09-05	< 19 U	< 1.7 U	< 1.7 U	< 3.4 U	28	< 0.43 UJ	< 1.6 U	< 0.43 U	< 0.42 UJ	< 0.43 U
ET09-06	< 15 U	< 1.7 U	< 1.7 U	< 3.4 U	3.3 J	< 0.42 UJ	0.71 J	< 0.43 U	5.6 J	< 0.42 U
ET09-07	--	--	--	< 3.4 U	--	--	--	--	< 0.42 UJ	< 0.43 U
ET09-08	--	--	--	< 3.4 U	--	--	--	--	< 0.43 UJ	< 0.42 U
ET09-09	--	--	--	--	--	< 0.42 UJ	0.70 J	< 0.42 U	< 0.42 UJ	< 0.42 UJ
ET09-10	--	--	--	--	--	< 0.42 UJ	0.64 J	< 0.43 U	< 0.43 UJ	< 0.43 UJ
ET09-11	--	--	--	--	--	< 0.42 UJ	0.36 J	< 0.43 U	1.1 J	< 0.43 U
ET09-12	--	--	--	--	--	< 0.43 UJ	< 1.7 U	< 0.42 U	< 0.42 U	< 0.42 U
ALPHA-BHC (UG_KG)										
ET09-03	< 19 U	< 1.7 U	< 1.7 UJ	4.9 J	< 0.84 U	< 0.42 UJ	1.4 J	< 0.42 U	< 0.42 UJ	< 0.21 U
ET09-04	< 15 U	< 1.7 U	< 1.7 U	< 3.3 U	< 0.82 U	6.7 J	< 1.7 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-05	< 19 U	< 1.7 U	< 1.7 U	< 3.4 U	< 17 UJ	2.2 J	0.76 J	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-06	< 15 U	< 1.7 U	< 1.7 U	< 3.4 U	< 0.83 U	3.9 J	0.58 J	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-07	--	--	--	< 3.4 U	--	--	--	--	1.1 J	< 0.21 U
ET09-08	--	--	--	< 3.4 U	--	--	--	--	< 0.43 UJ	< 0.21 U
ET09-09	--	--	--	--	--	2.4 J	< 1.7 U	< 0.42 U	< 0.42 UJ	< 0.21 UJ
ET09-10	--	--	--	--	--	3.2 J	< 1.6 U	< 0.43 U	< 0.43 UJ	< 0.21 UJ
ET09-11	--	--	--	--	--	16 J	0.69 J	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-12	--	--	--	--	--	2.2 J	0.46 J	< 0.42 U	< 0.42 U	< 0.21 U
ALPHA-CHLORDANE (UG_KG)										
ET09-03	< 19 U	< 1.7 U	< 1.7 UJ	< 3.4 UJ	< 0.84 U	< 0.42 UJ	< 1.6 U	< 0.42 U	1.0 J	< 0.21 U
ET09-04	< 15 UJ	< 1.7 U	< 1.7 U	< 3.3 UJ	< 0.82 U	9.4 J	< 1.7 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-05	2.0 J	< 1.7 U	< 1.7 U	< 3.4 U	< 0.85 U	< 0.43 UJ	1.1 J	< 0.43 U	1.5 J	< 0.21 U
ET09-06	< 15 UJ	2.2	< 1.7 U	24 J	< 0.83 U	3.1 J	< 1.7 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-07	--	--	--	< 3.4 UJ	--	--	--	--	3.9 J	< 0.21 U
ET09-08	--	--	--	< 3.4 UJ	--	--	--	--	< 0.43 UJ	< 0.21 U
ET09-09	--	--	--	--	--	6.2 J	< 1.7 U	< 0.42 U	0.88 J	< 0.21 UJ
ET09-10	--	--	--	--	--	3.8 J	1.0 J	< 0.43 U	2.3 J	< 0.21 UJ
ET09-11	--	--	--	--	--	8.8 J	< 1.7 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-12	--	--	--	--	--	4 J	1.2 J	< 0.42 U	2.1 J	< 0.21 U
BETA-BHC (UG_KG)										
ET09-03	< 19 U	< 1.7 U	< 1.7 UJ	< 3.4 UJ	< 0.84 U	3.6 J	< 3.8 U	< 0.42 U	0.99 J	< 0.21 U
ET09-04	< 15 U	< 1.7 U	< 1.7 U	< 3.3 U	< 0.82 U	5.3 J	< 3.8 U	< 0.43 U	< 0.42 UJ	< 0.21 U

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-05	< 19 U	< 1.7 U	< 1.7 U	< 3.4 U	< 68 UJ	1.7 J	< 3.8 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-06	< 15 U	< 1.7 U	< 1.7 U	< 3.4 U	< 0.83 U	3.4 J	< 3.8 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-07	--	--	--	< 3.4 U	--	--	--	--	< 0.42 UJ	< 0.21 U
ET09-08	--	--	--	11	--	--	--	--	1.4 J	< 0.21 U
ET09-09	--	--	--	--	--	2.1 J	< 3.8 U	< 0.42 U	< 0.42 UJ	< 0.21 UJ
ET09-10	--	--	--	--	--	3.2 J	< 3.8 U	< 0.43 U	1.4 J	< 0.21 UJ
ET09-11	--	--	--	--	--	4.2 J	< 3.8 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-12	--	--	--	--	--	< 0.43 UJ	< 3.8 U	< 0.42 U	< 0.42 U	< 0.21 U
DELTA-BHC (UG_KG)										
ET09-03	< 19 U	2.1	< 1.7 UJ	12 J	8.8 J	< 0.42 UJ	R	< 0.42 U	< 0.42 UJ	< 0.42 U
ET09-04	< 15 U	< 1.7 U	< 1.7 U	8.1 J	12 J	8.9 J	< 2.7 U	< 0.43 U	< 0.42 UJ	< 0.42 U
ET09-05	< 19 U	< 1.7 U	< 1.7 U	12 J	21 J	4.2 J	1.0 J	< 0.43 U	< 0.42 UJ	< 0.43 U
ET09-06	< 15 U	< 1.7 U	< 1.7 U	8	< 0.83 U	< 0.42 UJ	< 1.7 U	< 0.43 U	1.8 J	< 0.42 U
ET09-07	--	--	--	9.5 J	--	--	--	--	1.3 J	< 0.43 U
ET09-08	--	--	--	8.9 J	--	--	--	--	2.1 J	< 0.42 U
ET09-09	--	--	--	--	--	3.1 J	< 1.7 U	< 0.42 U	1.1 J	< 0.42 UJ
ET09-10	--	--	--	--	--	3.5 J	< 1.6 U	< 0.43 U	2.6 J	< 0.43 UJ
ET09-11	--	--	--	--	--	4.2 J	< 1.7 U	< 0.43 U	< 0.42 UJ	< 0.43 U
ET09-12	--	--	--	--	--	2.9 J	< 1.7 U	< 0.42 U	2.3 J	< 0.42 U
DIELDRIN (UG_KG)										
ET09-03	< 37 U	< 3.3 U	< 3.3 UJ	< 6.6 UJ	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-04	4	< 3.3 U	< 3.3 U	< 6.5 U	7.7 J	< 0.85 U	1.0 J	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-05	< 37 U	< 3.3 U	< 3.3 U	< 6.5 U	12 J	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.43 U
ET09-06	< 30 U	< 3.3 U	< 3.3 U	< 6.6 U	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.43 U
ET09-08	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.42 U
ET09-09	--	--	--	--	--	< 0.84 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 UJ
ET09-10	--	--	--	--	--	< 0.84 UJ	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.43 UJ
ET09-11	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.43 U
ET09-12	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.84 U	< 0.85 U	< 0.42 U
ENDOSULFAN I (UG_KG)										
ET09-03	< 19 U	< 1.7 U	< 1.7 UJ	< 3.4 UJ	< 0.84 U	< 0.42 UJ	< 1.6 U	< 0.42 U	< 0.42 UJ	< 0.21 U
ET09-04	2.4 J	< 1.7 U	< 1.7 U	< 3.3 U	< 0.82 U	< 0.42 U	0.84 J	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-05	2.4 J	< 1.7 U	< 1.7 U	< 3.4 U	< 0.85 U	< 0.43 UJ	< 1.6 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-06	< 15 U	< 1.7 U	< 1.7 U	< 3.4 U	< 0.83 U	< 0.42 UJ	1.1 J	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-07	--	--	--	< 3.4 U	--	--	--	--	0.90 J	< 0.21 U
ET09-08	--	--	--	< 3.4 U	--	--	--	--	< 0.43 UJ	< 0.21 U
ET09-09	--	--	--	--	--	< 0.42 UJ	< 1.7 U	< 0.42 U	< 0.42 UJ	< 0.21 UJ
ET09-10	--	--	--	--	--	< 0.42 UJ	1.4 J	< 0.43 U	< 0.43 UJ	< 0.21 UJ
ET09-11	--	--	--	--	--	< 0.42 UJ	0.51 J	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-12	--	--	--	--	--	< 0.43 UJ	0.58 J	< 0.42 U	< 0.42 U	< 0.21 U
ENDOSULFAN II (UG_KG)										
ET09-03	< 37 U	< 3.3 U	< 3.3 UJ	< 6.6 UJ	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-04	< 29 U	< 3.3 U	< 3.3 U	< 6.5 U	< 1.6 U	< 0.85 U	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-05	< 37 U	< 3.3 U	< 3.3 U	< 6.5 U	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.43 U
ET09-06	< 30 U	< 3.3 U	< 3.3 U	< 6.6 U	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.43 U
ET09-08	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.42 U

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-09	--	--	--	--	--	< 0.84 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 UJ
ET09-10	--	--	--	--	--	< 0.84 UJ	0.66 J	< 0.85 U	< 0.85 UJ	< 0.43 UJ
ET09-11	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.43 U
ET09-12	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.84 U	< 0.85 U	< 0.42 U
ENDOSULFAN SULFATE (UG_KG)										
ET09-03	< 37 U	< 3.3 U	< 3.3 UJ	< 6.6 UJ	< 1.7 U	4.1 J	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-04	< 29 U	< 3.3 U	< 3.3 U	< 6.5 U	< 1.6 U	11 J	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-05	< 37 U	< 3.3 U	< 3.3 U	< 6.5 U	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.43 U
ET09-06	< 30 U	< 3.3 U	< 3.3 U	< 6.6 U	< 1.7 U	6.3 J	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	3.2 J	< 0.43 U
ET09-08	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.42 U
ET09-09	--	--	--	--	--	< 0.84 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 UJ
ET09-10	--	--	--	--	--	< 0.84 UJ	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.43 UJ
ET09-11	--	--	--	--	--	4.5 J	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.43 U
ET09-12	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.84 U	< 0.85 U	< 0.42 U
ENDRIN (UG_KG)										
ET09-03	< 37 UJ	< 3.3 U	< 3.3 UJ	< 6.6 UJ	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	3.5 J	< 0.42 U
ET09-04	< 29 UJ	< 3.3 U	< 3.3 U	< 6.5 U	< 1.6 U	< 0.85 U	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-05	< 37 U	< 3.3 U	< 3.3 U	< 6.5 U	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.43 U
ET09-06	< 30 UJ	< 3.3 U	< 3.3 U	< 6.6 U	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	3.1 J	< 0.43 U
ET09-08	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.42 U
ET09-09	--	--	--	--	--	3.4 J	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.42 UJ
ET09-10	--	--	--	--	--	< 0.84 UJ	< 3.4 U	< 0.85 U	5.6 J	< 0.43 UJ
ET09-11	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.43 U
ET09-12	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.84 U	3.0 J	< 0.42 U
ENDRIN ALDEHYDE (UG_KG)										
ET09-03	< 37 U	< 3.3 U	< 3.3 UJ	< 6.6 UJ	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.85 U
ET09-04	< 29 U	< 3.3 U	< 3.3 U	< 6.5 U	< 1.6 U	4.0 J	0.80 J	< 0.85 U	< 0.84 UJ	< 0.84 U
ET09-05	< 37 U	< 3.3 U	< 3.3 U	< 6.5 U	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.85 U
ET09-06	3.4	< 3.3 U	< 3.3 U	< 6.6 U	< 1.7 U	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.85 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.85 U
ET09-08	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.85 U
ET09-09	--	--	--	--	--	< 0.84 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.84 UJ
ET09-10	--	--	--	--	--	< 0.84 UJ	< 3.4 U	< 0.85 U	< 0.85 UJ	< 0.85 UJ
ET09-11	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.85 U	< 0.84 UJ	< 0.85 U
ET09-12	--	--	--	--	--	< 0.85 UJ	< 3.4 U	< 0.84 U	< 0.85 U	< 0.85 U
ENDRIN KETONE (UG_KG)										
ET09-03	< 37 U	< 3.3 U	< 3.3 UJ	< 6.6 UJ	< 1.7 U	< 0.85 UJ	< 3.6 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-04	< 29 U	< 3.3 U	< 3.3 U	< 6.5 U	< 1.6 U	< 0.85 U	< 3.6 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-05	< 37 U	< 3.3 U	< 3.3 U	< 6.5 U	8.2 J	< 0.85 UJ	< 3.6 U	< 0.85 U	< 0.85 UJ	< 0.43 U
ET09-06	< 30 U	< 3.3 U	< 3.3 U	< 6.6 U	< 1.7 U	< 0.85 UJ	< 3.6 U	< 0.85 U	< 0.84 UJ	< 0.42 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.43 U
ET09-08	--	--	--	< 6.6 U	--	--	--	--	< 0.85 UJ	< 0.42 U
ET09-09	--	--	--	--	--	< 0.84 UJ	< 3.6 U	< 0.85 U	< 0.84 UJ	< 0.42 UJ
ET09-10	--	--	--	--	--	< 0.84 UJ	< 3.6 U	< 0.85 U	< 0.85 UJ	< 0.43 UJ
ET09-11	--	--	--	--	--	< 0.85 UJ	< 3.6 U	< 0.85 U	< 0.84 UJ	< 0.43 U
ET09-12	--	--	--	--	--	< 0.85 UJ	< 3.6 U	< 0.84 U	< 0.85 U	< 0.42 U

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
HEPTACHLOR (UG_KG)										
ET09-03	< 19 U	< 1.7 U	< 1.7 UJ	6.3 J	< 21 U	< 0.42 UJ	R	< 0.42 U	< 0.42 UJ	< 0.21 U
ET09-04	< 15 U	< 1.7 U	< 1.7 U	< 3.3 U	9.8 J	< 0.42 U	3.5	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-05	< 19 U	< 1.7 U	< 1.7 U	< 3.4 U	27 J	< 0.43 UJ	< 1.6 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-06	< 15 U	< 1.7 U	< 1.7 U	< 3.4 U	< 0.83 U	< 0.42 UJ	< 1.7 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-07	--	--	--	< 3.4 U	--	--	--	--	1.7 J	< 0.21 U
ET09-08	--	--	--	< 3.4 U	--	--	--	--	< 0.43 UJ	< 0.21 U
ET09-09	--	--	--	--	--	< 0.42 UJ	< 1.7 U	< 0.42 U	< 0.42 UJ	< 0.21 UJ
ET09-10	--	--	--	--	--	< 0.42 UJ	1.4 J	< 0.43 U	< 0.43 UJ	< 0.21 UJ
ET09-11	--	--	--	--	--	2.1 J	< 1.7 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-12	--	--	--	--	--	< 0.43 UJ	< 1.7 U	< 0.42 U	< 0.42 U	< 0.21 U
HEPTACHLOR EPOXIDE (UG_KG)										
ET09-03	< 19 U	< 1.7 U	< 1.7 UJ	< 3.4 UJ	< 0.84 U	< 0.42 UJ	1.1 J	< 0.42 U	< 0.42 UJ	< 0.42 U
ET09-04	< 15 U	< 1.7 U	< 1.7 U	< 3.3 U	< 0.82 U	< 0.42 U	1.3 J	< 0.43 U	< 0.42 UJ	< 0.42 U
ET09-05	< 19 U	< 1.7 U	< 1.7 U	< 3.4 U	< 0.85 U	< 0.43 UJ	< 1.6 U	< 0.43 U	< 0.42 UJ	< 0.43 U
ET09-06	< 15 U	< 1.7 U	< 1.7 U	< 3.4 U	< 0.83 U	< 0.42 UJ	< 1.7 U	< 0.43 U	< 0.42 UJ	< 0.42 U
ET09-07	--	--	--	< 3.4 U	--	--	--	--	< 0.42 UJ	< 0.43 U
ET09-08	--	--	--	< 3.4 U	--	--	--	--	1.3 J	< 0.42 U
ET09-09	--	--	--	--	--	< 0.42 UJ	< 1.7 U	< 0.42 U	< 0.42 UJ	< 0.42 UJ
ET09-10	--	--	--	--	--	< 0.42 UJ	< 1.6 U	< 0.43 U	1.2 J	< 0.43 UJ
ET09-11	--	--	--	--	--	< 0.42 UJ	0.51 J	< 0.43 U	< 0.42 UJ	< 0.43 U
ET09-12	--	--	--	--	--	2.2 J	0.64 J	< 0.42 U	3.4 J	< 0.42 U
LINDANE (UG_KG)										
ET09-03	< 19 U	< 1.7 U	< 1.7 UJ	6.6 J	< 0.84 U	< 0.42 UJ	< 1.6 U	< 0.42 U	< 0.42 UJ	< 0.21 U
ET09-04	< 15 U	< 1.7 U	< 1.7 U	5.2	< 0.82 U	< 0.42 U	< 1.7 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-05	< 19 U	< 1.7 U	< 1.7 U	6.4 J	< 16 UJ	< 0.43 UJ	< 1.6 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-06	< 15 U	< 1.7 U	< 1.7 U	< 3.4 U	< 0.83 U	< 0.42 UJ	< 1.7 U	< 0.43 U	1.4 J	< 0.21 U
ET09-07	--	--	--	< 3.4 U	--	--	--	--	< 0.42 UJ	< 0.21 U
ET09-08	--	--	--	5	--	--	--	--	< 0.43 UJ	< 0.21 U
ET09-09	--	--	--	--	--	< 0.42 UJ	< 1.7 U	< 0.42 U	0.90 J	< 0.21 UJ
ET09-10	--	--	--	--	--	3.9 J	0.65 J	< 0.43 U	< 0.43 UJ	< 0.21 UJ
ET09-11	--	--	--	--	--	< 0.42 UJ	< 1.7 U	< 0.43 U	< 0.42 UJ	< 0.21 U
ET09-12	--	--	--	--	--	< 0.43 UJ	< 1.7 U	< 0.42 U	< 0.42 U	< 0.21 U
METHOXYCHLOR (UG_KG)										
ET09-03	< 190 U	< 17 U	< 17 UJ	< 34 UJ	< 8.4 U	< 4.2 UJ	4.3 J	< 4.2 U	< 4.2 UJ	< 2.1 U
ET09-04	< 150 U	< 17 U	< 17 U	< 33 U	< 8.2 U	< 4.2 U	4.6 J	< 4.3 U	< 4.2 UJ	< 2.1 U
ET09-05	< 190 U	< 17 U	< 17 U	< 34 U	< 8.5 U	< 4.3 UJ	< 13 U	< 4.3 U	< 4.2 UJ	< 2.1 U
ET09-06	< 150 U	< 17 U	< 17 U	< 34 U	< 8.3 U	< 4.2 UJ	3.6 J	< 4.3 U	< 4.2 UJ	< 2.1 U
ET09-07	--	--	--	< 34 U	--	--	--	--	< 4.2 UJ	< 2.1 U
ET09-08	--	--	--	< 34 U	--	--	--	--	< 4.3 UJ	< 2.1 U
ET09-09	--	--	--	--	--	< 4.2 UJ	< 13 U	< 4.2 U	< 4.2 UJ	< 2.1 UJ
ET09-10	--	--	--	--	--	< 4.2 UJ	< 13 U	< 4.3 U	< 4.3 UJ	< 2.1 UJ
ET09-11	--	--	--	--	--	< 4.2 UJ	< 13 U	< 4.3 U	< 4.2 UJ	< 2.1 U
ET09-12	--	--	--	--	--	< 4.3 UJ	< 13 U	< 4.2 U	< 4.2 U	< 2.1 U
TRANS-CHLORDANE (UG_KG)										
ET09-03	< 19 U	< 1.7 U	< 1.7 UJ	8.9 J	< 0.84 U	< 0.42 UJ	6.6 J	< 0.42 U	0.87 J	< 0.42 U
ET09-04	< 15 U	< 1.7 U	< 1.7 U	< 3.3 UJ	< 0.82 U	2.1 J	5.9	< 0.43 U	< 0.42 UJ	< 0.42 U
ET09-05	1.7 J	< 1.7 U	< 1.7 U	7.4 J	< 72 UJ	< 0.43 UJ	0.85 J	< 0.43 U	< 0.42 UJ	< 0.43 U

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-06	< 15 U	< 1.7 U	< 1.7 U	< 3.4 U	< 0.83 U	< 0.42 UJ	7.1	< 0.43 U	< 0.42 UJ	< 0.42 U
ET09-07	--	--	--	3.9 J	--	--	--	--	1.1 J	< 0.43 U
ET09-08	--	--	--	< 3.4 UJ	--	--	--	--	< 0.43 UJ	< 0.42 U
ET09-09	--	--	--	--	--	4.8 J	4.7	< 0.42 U	0.83 J	< 0.42 UJ
ET09-10	--	--	--	--	--	2.7 J	< 1.6 U	< 0.43 U	< 0.43 UJ	< 0.43 UJ
ET09-11	--	--	--	--	--	3.1 J	7.3	< 0.43 U	< 0.42 UJ	< 0.43 U
ET09-12	--	--	--	--	--	< 0.43 UJ	< 1.7 U	< 0.42 U	< 0.42 U	< 0.42 U
1,4-DICHLOROBENZENE (UG_KG)										
ET09-03	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 65 U	< 200 U	< 67 U	< 66 U	< 130 UJ
ET09-04	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 66 U	< 130 U	< 66 U	< 67 U	< 130 U
ET09-05	< 330 U	< 330 U	140 J	< 330 U	< 130 U	< 66 U	< 130 U	< 67 U	< 67 U	< 130 U
ET09-06	< 330 U	< 330 U	< 330 U	< 650 U	< 130 U	< 65 U	< 130 U	< 67 U	< 66 U	< 130 U
ET09-07	--	--	--	< 660 U	--	--	--	--	< 66 U	< 130 UJ
ET09-08	--	--	--	< 650 U	--	--	--	--	< 67 U	< 130 UJ
ET09-09	--	--	--	--	--	< 66 U	< 130 U	< 66 U	< 66 U	< 130 U
ET09-10	--	--	--	--	--	< 67 U	< 130 U	< 67 U	< 67 U	< 130 UJ
ET09-11	--	--	--	--	--	< 66 U	< 130 U	< 66 U	< 67 U	< 130 UJ
ET09-12	--	--	--	--	--	< 66 U	< 130 U	< 67 U	< 66 U	< 130 UJ
2-METHYLPHENOL (UG_KG)										
ET09-03	< 330 U	< 330 UJ	< 330 U	< 330 U	< 130 U	< 65 U	< 200 U	< 67 U	< 66 U	< 130 U
ET09-04	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 66 U	85 J	< 66 U	< 67 U	< 130 U
ET09-05	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 66 U	< 130 U	< 67 U	< 67 U	< 130 U
ET09-06	< 330 U	< 330 U	< 330 U	< 650 U	< 130 U	< 65 U	< 130 U	< 67 U	< 66 U	< 130 U
ET09-07	--	--	--	< 660 U	--	--	--	--	< 66 U	< 130 U
ET09-08	--	--	--	< 650 U	--	--	--	--	< 67 UJ	< 130 U
ET09-09	--	--	--	--	--	< 66 U	< 130 U	< 66 U	< 66 U	< 130 U
ET09-10	--	--	--	--	--	< 67 U	< 130 U	< 67 U	< 67 U	< 130 UJ
ET09-11	--	--	--	--	--	< 66 U	74 J	< 66 U	< 67 U	< 130 U
ET09-12	--	--	--	--	--	< 66 U	< 130 U	< 67 U	< 66 U	< 130 U
4-METHYLPHENOL (UG_KG)										
ET09-03	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 65 U	< 200 UJ	< 67 U	< 66 U	< 130 UJ
ET09-04	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 66 U	< 130 U	< 66 U	< 67 U	< 130 U
ET09-05	< 330 U	73 J	< 330 U	< 330 U	< 130 U	< 66 U	< 130 UJ	< 67 U	< 67 U	< 130 U
ET09-06	< 330 U	< 330 U	< 330 U	< 650 U	< 130 U	< 65 U	< 130 UJ	< 67 U	< 66 U	< 130 U
ET09-07	--	--	--	< 660 U	--	--	--	--	< 66 U	< 130 UJ
ET09-08	--	--	--	< 650 U	--	--	--	--	< 67 UJ	< 130 UJ
ET09-09	--	--	--	--	--	< 66 U	< 130 UJ	< 66 U	< 66 U	< 130 U
ET09-10	--	--	--	--	--	< 67 U	< 130 U	< 67 U	< 67 U	< 130 UJ
ET09-11	--	--	--	--	--	< 66 U	< 130 U	< 66 U	< 67 U	< 130 UJ
ET09-12	--	--	--	--	--	< 66 U	< 130 U	< 67 U	< 66 U	< 130 U
BIS(2-ETHYLHEXYL)PHTHALATE (UG_KG)										
ET09-03	97 J	< 330 U	< 330 U	220 J	< 130 U	< 65 U	620 J	< 170 U	110 J	170 J-
ET09-04	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 66 U	390 J	< 66 U	160 J	< 130 UJ
ET09-05	< 330 U	< 330 U	< 330 U	190 J	< 130 U	< 66 U	< 680 U	< 170 U	120 J	< 130 U
ET09-06	< 330 U	560	< 330 U	< 650 U	< 130 U	< 65 U	450 J	< 67 U	170	< 130 UJ
ET09-07	--	--	--	310 J	--	--	--	--	< 66 U	< 130 UJ
ET09-08	--	--	--	320 J	--	--	--	--	130 J	< 130 UJ
ET09-09	--	--	--	--	--	< 66 U	< 680 U	< 160 U	< 66 U	< 130 UJ

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-10	--	--	--	--	--	< 67 U	< 680 U	< 170 U	57 J	R
ET09-11	--	--	--	--	--	< 66 U	< 680 U	< 160 U	< 67 U	< 130 UJ
ET09-12	--	--	--	--	--	< 66 U	< 680 U	< 67 U	100 J	< 130 UJ
BUTYLBENZYLPHTHALATE (UG_KG)										
ET09-03	< 330 UJ	< 330 U	< 330 U	< 330 U	< 130 U	< 65 U	< 1000 U	< 67 U	< 66 U	< 130 UJ
ET09-04	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 66 U	< 670 U	< 66 U	< 67 U	< 130 U
ET09-05	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 66 U	< 660 U	< 67 U	< 67 U	< 130 U
ET09-06	< 330 U	< 330 U	< 330 U	< 650 U	< 130 U	< 65 U	< 660 U	< 67 U	85 J	< 130 U
ET09-07	--	--	--	< 660 U	--	--	--	--	< 66 U	< 130 UJ
ET09-08	--	--	--	< 650 U	--	--	--	--	< 67 U	< 130 UJ
ET09-09	--	--	--	--	--	< 66 U	< 660 U	< 66 U	< 66 U	< 130 U
ET09-10	--	--	--	--	--	< 67 U	< 670 U	< 67 U	< 67 U	< 130 UJ
ET09-11	--	--	--	--	--	< 66 U	< 660 U	< 66 U	< 67 U	< 130 UJ
ET09-12	--	--	--	--	--	< 66 U	< 660 U	< 67 U	< 66 U	< 130 UJ
DIMETHYL PHTHALATE (UG_KG)										
ET09-03	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 65 U	< 1000 U	< 67 U	< 66 U	< 130 UJ
ET09-04	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 66 U	< 670 U	< 66 U	< 67 U	< 130 U
ET09-05	< 330 U	< 330 U	< 330 U	41 J	< 130 U	< 66 U	< 660 U	< 67 U	< 67 U	< 130 U
ET09-06	< 330 U	< 330 U	< 330 U	77 J	< 130 U	< 65 U	< 660 U	< 67 U	< 66 U	< 130 U
ET09-07	--	--	--	< 660 U	--	--	--	--	< 66 U	< 130 UJ
ET09-08	--	--	--	< 650 U	--	--	--	--	< 67 U	< 130 UJ
ET09-09	--	--	--	--	--	< 66 U	< 660 U	< 66 U	< 66 U	< 130 U
ET09-10	--	--	--	--	--	< 67 U	< 670 U	< 67 U	< 67 U	< 130 UJ
ET09-11	--	--	--	--	--	< 66 U	< 660 U	< 66 U	< 67 U	< 130 UJ
ET09-12	--	--	--	--	--	< 66 U	< 660 U	< 67 U	< 66 U	< 130 UJ
DI-N-BUTYLPHTHALATE (UG_KG)										
ET09-03	< 330 U	< 330 U	< 330 U	< 330 UJ	< 130 U	< 340 U	< 1000 U	< 67 U	< 66 U	< 130 UJ
ET09-04	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 370 U	< 670 U	< 66 U	< 67 U	< 130 U
ET09-05	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 300 U	< 660 U	< 67 U	< 67 U	< 130 U
ET09-06	< 330 U	< 330 U	< 330 U	< 650 U	< 130 U	< 360 U	< 660 U	< 67 U	< 66 U	< 130 U
ET09-07	--	--	--	< 660 U	--	--	--	--	< 66 U	< 130 UJ
ET09-08	--	--	--	< 650 U	--	--	--	--	< 67 U	< 130 UJ
ET09-09	--	--	--	--	--	< 300 U	< 660 U	< 66 U	< 66 U	< 130 U
ET09-10	--	--	--	--	--	< 300 U	< 670 U	< 67 U	< 67 U	< 130 UJ
ET09-11	--	--	--	--	--	< 290 U	< 660 U	48 J	< 67 U	< 130 UJ
ET09-12	--	--	--	--	--	< 270 U	< 660 U	< 67 U	< 66 U	< 130 UJ
NITROBENZENE (UG_KG)										
ET09-03	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 65 U	220	< 67 U	< 66 U	< 130 UJ
ET09-04	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 66 U	< 130 U	< 66 U	< 67 U	< 130 U
ET09-05	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 66 U	< 130 U	< 67 U	< 67 U	< 130 U
ET09-06	< 330 U	< 330 U	< 330 U	< 650 U	< 130 U	< 65 U	< 130 U	< 67 U	< 66 U	< 130 U
ET09-07	--	--	--	< 660 U	--	--	--	--	< 66 U	< 130 UJ
ET09-08	--	--	--	< 650 U	--	--	--	--	< 67 U	< 130 UJ
ET09-09	--	--	--	--	--	< 66 U	< 130 U	< 66 U	< 66 U	< 130 U
ET09-10	--	--	--	--	--	< 67 U	< 130 U	< 67 U	< 67 U	< 130 UJ
ET09-11	--	--	--	--	--	< 66 U	< 130 U	< 66 U	< 67 U	< 130 UJ
ET09-12	--	--	--	--	--	< 66 U	< 130 U	< 67 U	< 66 U	< 130 UJ
PHENANTHRENE (UG_KG)										

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-06	--	--	--	--	--	36 J	--	--	--	--
PHENOL (UG_KG)										
ET09-03	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	< 65 U	< 200 U	< 67 U	< 66 U	< 130 U
ET09-04	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	66 J	100 J	< 66 U	< 67 U	< 130 U
ET09-05	< 330 U	< 330 U	< 330 U	< 330 U	< 130 U	38 J	< 130 U	< 67 U	< 67 U	< 130 U
ET09-06	< 330 U	< 330 U	< 330 U	< 650 U	< 130 U	42 J	< 130 U	< 67 U	< 66 U	< 130 U
ET09-07	--	--	--	< 660 U	--	--	--	--	< 66 U	< 130 U
ET09-08	--	--	--	< 650 U	--	--	--	--	< 67 UJ	< 130 U
ET09-09	--	--	--	--	--	47 J	< 130 U	< 66 U	< 66 U	< 130 U
ET09-10	--	--	--	--	--	< 67 U	< 130 U	< 67 U	< 67 U	< 130 UJ
ET09-11	--	--	--	--	--	45 J	< 130 U	< 66 U	< 67 U	< 130 U
ET09-12	--	--	--	--	--	< 66 U	< 130 U	87 J	< 66 U	< 130 U
2-METHYLNAPHTHALENE (UG_KG)										
ET09-03	22	7.4	20	23 J	33	9.2	37	4.4 J	< 3.3 U	< 6.5 U
ET09-04	30	6.6	21	55	42 J	24	39	7.4 J	8.2	12
ET09-05	20	7.3	25 J	41 J	30	12	9.0	< 3.3 U	< 3.3 U	< 6.6 U
ET09-06	18	7.5	23	44	21	12 J	32	4.5 J	6.8	< 6.6 U
ET09-07	--	--	--	29	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	27	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 U	29	5.2 J	19	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 U	11	< 3.3 UJ	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	13 J	35	4.1 J	11	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 U	17	< 3.3 UJ	< 3.3 U	< 6.6 U
ACENAPHTHENE (UG_KG)										
ET09-03	18	6.3	19	14	29	8.1	25 J	6.0	< 3.3 U	< 6.5 U
ET09-04	22	5.8	18	24	50 J	22	28	6.6	13	< 6.5 U
ET09-05	17	10	30 J	22 J	24	12	< 6.6 U	< 3.3 U	< 3.3 UJ	< 6.6 U
ET09-06	15	9.2	23	26	18	15 J	32	6.1	14	< 6.6 U
ET09-07	--	--	--	13	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	14	--	--	--	--	5.0	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 U	20	4.2	18	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 U	5.1 J	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	14 J	16	3.6	11	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 U	5.2 J	< 3.3 U	< 3.3 U	< 6.6 U
ACENAPHTHYLENE (UG_KG)										
ET09-03	4.5	< 3.3 U	4.5	4.1	8.2	< 3.2 U	5.6 J	< 3.3 U	< 3.3 U	< 6.5 U
ET09-04	6.4	< 3.3 U	4.4	6.9	15 J	7.2	6.2 J	< 3.3 U	4.3	< 6.5 U
ET09-05	4.2	< 3.3 U	5.1	5.2	6.7	3.6	< 6.6 U	< 3.3 U	< 3.3 UJ	< 6.6 U
ET09-06	4	< 3.3 U	5.1	< 6.5 U	< 6.6 U	4.6 J	5.2 J	15	< 3.3 U	< 6.6 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	< 6.5 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 U	4.0 J	< 3.3 U	6.0	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 U	< 6.7 U	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	5.4 J	7.0	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 U	4.4 J	< 3.3 U	< 3.3 U	< 6.6 U
ANTHRACENE (UG_KG)										
ET09-03	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.6 U	< 3.2 U	5.7 J	< 3.3 U	< 3.3 U	< 6.5 UJ
ET09-04	< 3 U	< 3.3 U	< 3.3 U	5	< 6.5 U	4.6	7.7 J	< 3.3 U	21	< 6.5 UJ

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-05	< 3 U	< 3.3 U	< 3.3 U	5.1	< 6.3 U	< 3.3 U	< 6.6 U	< 3.3 U	< 3.3 UJ	< 6.6 U
ET09-06	< 3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.6 U	< 3.2 U	5.0 J	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	< 6.5 U	--	--	--	--	< 3.3 UJ	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 U	3.0 J	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-10	--	--	--	--	--	< 3.3 U	3.6 J	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	< 3.3 U	6.0 J	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 U	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 UJ
BENZO(A)ANTHRACENE (UG_KG)										
ET09-03	5.2	< 3.3 U	< 3.3 U	< 3.3 U	< 6.6 U	< 3.2 UJ	7.0 J	< 3.3 U	< 3.3 U	< 6.5 U
ET09-04	6	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 3.3 U	3.9 J	< 3.3 U	< 3.3 U	< 6.5 U
ET09-05	6.6	< 3.3 U	< 3.3 U	< 3.3 U	< 6.3 U	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
ET09-06	5.1	< 3.3 U	< 3.3 U	< 6.5 U	< 6.6 U	< 3.2 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	< 6.5 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 UJ	13	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
BENZO(A)PYRENE (UG_KG)										
ET09-03	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.6 U	< 3.2 UJ	6.1 J	< 3.3 U	< 3.3 U	< 6.5 U
ET09-04	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 3.3 U	2.8 J	< 3.3 U	< 3.3 U	< 6.5 U
ET09-05	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.3 U	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 UJ	< 6.6 U
ET09-06	< 3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.6 U	< 3.2 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	< 6.5 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 UJ	14	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
BENZO(B)FLUORANTHENE (UG_KG)										
ET09-03	< 3 U	< 3.3 U	< 3.3 UJ	< 3.3 U	< 6.6 U	< 3.2 UJ	7.7 J	< 3.3 U	< 3.3 U	< 6.5 U
ET09-04	< 3 U	< 3.3 U	< 3.3 UJ	< 3.3 U	< 6.5 U	< 3.3 U	4.8 J	< 3.3 U	< 3.3 U	< 6.5 U
ET09-05	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.3 U	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
ET09-06	< 3 U	< 3.3 U	< 3.3 UJ	< 6.5 U	< 6.6 U	< 3.2 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	< 6.5 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 UJ	27	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	< 3.3 UJ	3.1 J	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
BENZO(G,H,I)PERYLENE (UG_KG)										
ET09-03	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.6 U	< 3.2 UJ	< 10 UJ	< 3.3 U	< 3.3 U	< 6.5 U
ET09-04	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 3.3 U	< 6.7 U	< 3.3 U	< 3.3 U	< 6.5 U
ET09-05	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.3 U	< 3.3 UJ	< 6.6 UJ	< 3.3 U	< 3.3 UJ	< 6.6 U
ET09-06	< 3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.6 U	< 3.2 UJ	< 6.6 UJ	< 3.3 U	< 3.3 U	< 6.6 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	< 6.5 U	--	--	--	--	< 3.3 U	< 6.6 UJ

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
17 OF 19

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-09	--	--	--	--	--	< 3.3 UJ	< 6.6 UJ	< 3.3 U	< 3.3 U	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 UJ	5.4 J	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	< 3.3 UJ	< 6.6 UJ	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 UJ	< 6.6 UJ	< 3.3 U	< 3.3 U	< 6.6 U
BENZO(K)FLUORANTHENE (UG_KG)										
ET09-03	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.6 U	< 3.2 UJ	4.3 J	< 3.3 U	< 3.3 U	< 6.5 U
ET09-04	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 3.3 U	2.7 J	< 3.3 U	< 3.3 U	< 6.5 U
ET09-05	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.3 U	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
ET09-06	< 3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.6 U	< 3.2 UJ	3.5 J	< 3.3 U	< 3.3 U	< 6.6 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	< 6.5 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 UJ	2.9 J	< 3.3 U	< 3.3 U	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 UJ	16	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	< 3.3 UJ	3.2 J	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
CHRYSENE (UG_KG)										
ET09-03	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.6 U	< 3.2 UJ	8.1 J	< 3.3 U	< 3.3 U	< 6.5 U
ET09-04	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 3.3 U	5.0 J	< 3.3 U	< 3.3 U	< 6.5 U
ET09-05	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.3 U	< 3.3 UJ	1.6 J	< 3.3 U	< 3.3 U	< 6.6 U
ET09-06	< 3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.6 U	< 3.2 UJ	3.8 J	< 3.3 U	< 3.3 U	< 6.6 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	< 6.5 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 UJ	3.0 J	< 3.3 U	< 3.3 U	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 UJ	14	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	< 3.3 UJ	3.6 J	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 UJ	2.9 J	< 3.3 U	< 3.3 U	< 6.6 U
DIBENZ(A,H)ANTHRACENE (UG_KG)										
ET09-03	< 3 U	< 3.3 U	< 3.3 U	< 3.3 UJ	< 6.6 U	< 3.2 UJ	< 10 U	< 3.3 U	< 3.3 U	< 6.5 UJ
ET09-04	< 3 U	< 3.3 U	< 3.3 U	< 3.3 UJ	< 6.5 U	< 3.3 U	< 6.7 U	< 3.3 U	< 3.3 U	< 6.5 UJ
ET09-05	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.3 U	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 UJ	< 6.6 U
ET09-06	< 3 U	< 3.3 U	< 3.3 U	< 6.5 UJ	< 6.6 U	< 3.2 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-07	--	--	--	< 6.6 UJ	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	< 6.5 UJ	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-10	--	--	--	--	--	< 3.3 UJ	2.8 J	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 UJ
FLUORANTHENE (UG_KG)										
ET09-03	20	3.4	22	12	38	6.8	34	< 3.3 U	< 3.3 U	8.0
ET09-04	22	4.8	14	30	42	11	25	< 3.3 U	< 3.3 U	13
ET09-05	18	7.5	14	47 J	19	7.9	5.7 J	< 3.3 U	< 3.3 UJ	< 6.6 U
ET09-06	27	5.9	12	25	17	9.3	15	< 3.3 U	< 3.3 U	< 6.6 U
ET09-07	--	--	--	19	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	15	--	--	--	--	< 3.3 UJ	< 6.6 UJ
ET09-09	--	--	--	--	--	4.9	13	< 3.3 U	5.9	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 U	27	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	8.7	21	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 U	8.7	< 3.3 U	< 3.3 U	< 6.6 U

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
FLUORENE (UG_KG)										
ET09-03	8	< 3.3 U	13	9.3	21	5	11	< 3.3 U	< 3.3 U	< 6.5 U
ET09-04	12	< 3.3 U	9	17	32 J	9.3	13	< 3.3 U	7.0	6.9
ET09-05	9.0	4.7	11	18 J	17	7.3	< 6.6 U	< 3.3 U	< 3.3 UJ	< 6.6 U
ET09-06	10	4.1	11	14	12	7.4 J	13	< 3.3 U	7.8	< 6.6 U
ET09-07	--	--	--	8.5	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	7.9	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 U	7.2	< 3.3 U	11	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 U	< 6.7 U	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	6.9 J	13	< 3.3 U	6.1	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 U	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
INDENO(1,2,3-CD)PYRENE (UG_KG)										
ET09-03	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.6 U	< 3.2 UJ	< 10 U	< 3.3 UJ	< 3.3 U	< 6.5 U
ET09-04	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 3.3 U	< 6.7 U	< 3.3 UJ	< 3.3 U	< 6.5 U
ET09-05	< 3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.3 U	< 3.3 UJ	< 6.6 U	< 3.3 U	< 3.3 UJ	< 6.6 U
ET09-06	< 3 U	< 3.3 U	< 3.3 U	< 6.5 U	< 6.6 U	< 3.2 UJ	4.3 J	< 3.3 UJ	< 3.3 U	< 6.6 U
ET09-07	--	--	--	< 6.6 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	< 6.5 U	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 UJ	3.0 J	< 3.3 UJ	< 3.3 U	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 UJ	9.5	< 3.3 UJ	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	< 3.3 UJ	4.0 J	< 3.3 UJ	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 UJ	< 6.6 U	< 3.3 UJ	< 3.3 U	< 6.6 U
NAPHTHALENE (UG_KG)										
ET09-03	49	20	37	42 J	49	20	30	10	< 3.3 U	10
ET09-04	58	17	37	81	62	50	45	19	17	24
ET09-05	36	18	42 J	71 J	47	23	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
ET09-06	34	22	45	88	33	25 J	40	13	11	< 6.6 U
ET09-07	--	--	--	59	--	--	--	--	< 3.3 U	8.8 J-
ET09-08	--	--	--	66	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 U	39	12	30	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 U	3.6 J	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	23 J	39	9.7	15	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 U	< 6.6 U	< 3.3 U	< 3.3 U	< 6.6 U
PHENANTHRENE (UG_KG)										
ET09-03	27	8.4	36	27	56	19	44	9.0	< 3.3 U	14
ET09-04	32	9.6	31	53	61	45 J	45	8.7	< 3.3 U	25
ET09-05	22	14	30	55 J	69	21	< 6.6 U	< 3.3 U	< 3.3 UJ	< 6.6 U
ET09-06	26	12	34	60	34	--	39	7.4	25	< 6.6 U
ET09-07	--	--	--	35	--	--	--	--	< 3.3 U	8.8 J-
ET09-08	--	--	--	34	--	--	--	--	15 J	< 6.6 UJ
ET09-09	--	--	--	--	--	< 3.3 U	26	5.9	37	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 U	9.9	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	21	36	6.8	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 U	< 6.6 U	< 3.3 U	12 J	< 6.6 U
PYRENE (UG_KG)										
ET09-03	17 J	4	25	19	35	8.4	30	< 3.3 U	< 3.3 U	7.5
ET09-04	22 J	4.5	13	30	38 J	15	23	< 3.3 U	< 3.3 U	11
ET09-05	18 J	8.1	19 J	35 J	22	14	6.0 J	< 3.3 U	< 3.3 UJ	< 6.6 U

TABLE E-4
SUMMARY OF DETECTED ANALYTES IN
SHELLFISH SAMPLES - SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Analyte	Dec 2007	March 2009	May 2008	May 2010	May 2011	Oct 2012	Oct 2013	Sept 2014	Sept 2015	Dec 2016
ET09-06	20 J	7.2	14	28	18	11	21	< 3.3 U	< 3.3 U	< 6.6 U
ET09-07	--	--	--	18	--	--	--	--	< 3.3 U	< 6.6 UJ
ET09-08	--	--	--	19	--	--	--	--	58 J	< 6.6 UJ
ET09-09	--	--	--	--	--	6.6	16	< 3.3 U	5.7	< 6.6 U
ET09-10	--	--	--	--	--	< 3.3 U	27	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-11	--	--	--	--	--	13	19	< 3.3 U	< 3.3 U	< 6.6 UJ
ET09-12	--	--	--	--	--	< 3.3 U	6.9	< 3.3 U	14 J	< 6.6 U

Notes:
1. When duplicate values were encountered, the maximium of the two values was used.
2. U - Not Detected, UJ - Detection Limit Approximate, J - Quantitation Approximate

Attachment F

Statistical Analysis Data and Trend Plots

Frequency of Detection Tables

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TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
Metals, Dissolved								
MW09-02S	ALUMINUM	10/2/2008 9:20	MW09-02S-100208	80.6	33.8	UG_L	34	10
MW09-03D	ALUMINUM	3/26/2013 10:50	MW09-03D-032613-1	18.1 J	12.4	UG_L	34	5
MW09-07S	ALUMINUM	4/30/2008 14:01	MW09-7S-043008	44.2	16.7	UG_L	34	7
MW09-08DA	ALUMINUM	9/30/2013 13:30	MW09-08DA-093013	95.9 J	82.9	UG_L	15	2
MW09-08S	ALUMINUM	12/4/2001 0:00	MW09-08S-NWG-120401	68.1 J	28.4	UG_L	42	12
MW09-09DA	ALUMINUM	8/7/2009 9:22	MW09-09DA-080709	2490	834	UG_L	16	11
MW09-09S	ALUMINUM	3/25/2013 15:20	MW09-09S-032513-1	78.3 J	28.3	UG_L	42	14
MW09-10D	ALUMINUM	4/30/2008 11:21	MW09-10D-043008	40.6	12.9	UG_L	32	7
MW09-10S	ALUMINUM	9/10/2003 0:00	MW09-10S-NWG-091003	45.3	19.1	UG_L	35	8
MW09-11S	ALUMINUM	6/4/2002 0:00	MW09-11S-NWG-060402	4070	607	UG_L	42	7
MW09-14D	ALUMINUM	4/30/2008 14:33	MW09-14D-043008	34.2	11.6	UG_L	32	7
MW09-14IA	ALUMINUM	3/28/2013 10:25	MW09-14IA-032813-1	131 J	65.9	UG_L	16	5
MW09-17I	ALUMINUM	3/28/2013 10:25	MW09-17I-032813-1	99.6 J	56.4	UG_L	20	5
MW09-20D	ALUMINUM	3/25/2013 14:30	MW09-20D-032513-1	104 J	34.4	UG_L	44	9
MW09-20I	ALUMINUM	9/30/2013 14:45	MW09-20I-093013	96.7 J	55.3	UG_L	43	21
MW09-21D	ALUMINUM	5/7/2003 0:00	MW09-21D-NWG-050703	379	139	UG_L	32	21
MW09-21S	ALUMINUM	9/30/2013 13:05	MW09-21S-093013	80.1 J	39	UG_L	34	13
MW09-23D	ALUMINUM	9/25/2008 9:28	MW09-23D-092508	24.4 J	8.79	UG_L	33	4
MW09-23S	ALUMINUM	3/28/2013 11:00	MW09-23S-032813-1	197 J	45.7	UG_L	35	8
MW09-24D	ALUMINUM	9/24/2008 15:18	MW09-24D-092408	66.7	34	UG_L	35	5
MW09-24S	ALUMINUM	9/24/2008 15:32	MW09-24S-092408	46.3	14.3	UG_L	33	8
MW09-25S	ALUMINUM	3/27/2013 10:30	MW09-25S-032713-1	66 J	25.7	UG_L	41	8
MW09-26DA	ALUMINUM					UG_L	1	0
MW09-26S	ALUMINUM	5/2/2008 15:35	MW09-26S-050208	26.6 J	22.4	UG_L	20	5
MW09-27D	ALUMINUM	3/26/2013 12:00	MW09-27D-032613-1	63.9 J	31	UG_L	21	4
MW09-27S	ALUMINUM	7/17/2008 13:14	MW09-27S-071708	35.2	28.5	UG_L	20	5
MW09-02S	ANTIMONY	6/16/2004 0:00	MW09-02S-NWG-061604	4.8	1.2	UG_L	34	6
MW09-03D	ANTIMONY	6/16/2004 0:00	MW09-03D-NWG-061604	9.1	6.1	UG_L	34	2
MW09-07S	ANTIMONY	6/16/2004 0:00	MW09-07S-NWG-061604	4.7	4	UG_L	34	3
MW09-08DA	ANTIMONY	9/30/2013 13:30	MW09-08DA-093013	0.12 J	0.12	UG_L	15	1
MW09-08S	ANTIMONY	6/16/2004 0:00	MW09-08S-NWG-061604	4.7	3.4	UG_L	43	2
MW09-09DA	ANTIMONY					UG_L	16	0
MW09-09S	ANTIMONY	6/21/2004 0:00	MW09-09S-NWG-062104	4.4 J	2.3	UG_L	43	2
MW09-10D	ANTIMONY	6/16/2004 0:00	MW09-10D-NWG-061604	3.1 J	2.7	UG_L	32	2
MW09-10S	ANTIMONY	6/16/2004 0:00	MW09-10S-NWG-061604	8.6	4.2	UG_L	35	3
MW09-11S	ANTIMONY	1/31/2008 0:00	MW09-11S-013108	12.6	3.45	UG_L	43	9
MW09-14D	ANTIMONY	9/9/2002 0:00	MW09-14D-NWG-090902	7.1 J	7	UG_L	32	2
MW09-14IA	ANTIMONY	3/18/2010 9:53	MW09-14IA-031810	0.25 J	0.25	UG_L	16	1
MW09-17I	ANTIMONY	9/20/2010 4:15	MW09-17I-092010	0.1 J	0.1	UG_L	20	1
MW09-20D	ANTIMONY					UG_L	44	0
MW09-20I	ANTIMONY	9/10/2002 0:00	MW09-20I-NWG-091002	7.6 J	3.6	UG_L	43	4
MW09-21D	ANTIMONY	9/8/2016 14:30	MW09-21D-ME45-1-F	0.28 J	0.25	UG_L	33	2
MW09-21S	ANTIMONY	6/22/2004 0:00	MW09-21S-NWG-062204	6.1	2.2	UG_L	35	4
MW09-23D	ANTIMONY	6/17/2004 0:00	MW09-23D-NWG-061704	3.2 J	3.2	UG_L	33	1
MW09-23S	ANTIMONY	6/17/2004 0:00	MW09-23S-NWG-061704	6.5	2	UG_L	35	6
MW09-24D	ANTIMONY	9/9/2002 0:00	MW09-24D-NWG-090902	7.7 J	5.1	UG_L	35	4
MW09-24S	ANTIMONY	6/12/2002 0:00	MW09-24S-NWG-061202	23.6	15.9	UG_L	33	3
MW09-25S	ANTIMONY	6/10/2002 0:00	MW09-25S-NWG-061002	12.8	3.27	UG_L	42	5
MW09-26DA	ANTIMONY	9/7/2016 11:25	MW09-26DA-ME45-1-F	0.23 J	0.23	UG_L	1	1
MW09-26S	ANTIMONY					UG_L	20	0
MW09-27D	ANTIMONY					UG_L	21	0
MW09-27S	ANTIMONY	5/2/2008 14:45	MW09-27S-050208	3.6	1.4	UG_L	20	5
MW09-02S	ARSENIC	9/10/2002 0:00	MW09-02S-NWG-091002	7.5 J	1.8	UG_L	34	11
MW09-03D	ARSENIC	9/10/2002 0:00	MW09-03D-NWG-091002	10 J	2.9	UG_L	34	10
MW09-07S	ARSENIC	9/9/2002 0:00	MW09-07S-NWG-090902	30 J	20.3	UG_L	34	33
MW09-08DA	ARSENIC	9/7/2016 13:30	MW09-08DA-ME45-1-F	4.5	3.7	UG_L	15	12
MW09-08S	ARSENIC	9/11/2003 12:00:00 AM 12/5/2003 12:00:00 AM		15.5 J	9.8	UG_L	43	36
MW09-09DA	ARSENIC	9/7/2016 14:05	MW09-09DA-ME45-1-F	5.2	4	UG_L	16	11
MW09-09S	ARSENIC	1/8/2010 10:00	MW09-09S-010810	3.5 J	1.8	UG_L	43	13
MW09-10D	ARSENIC	10/20/2009 15:35	MW09-10D-102009	10.7	7.87	UG_L	32	26
MW09-10S	ARSENIC	12/5/2003 0:00	MW09-10S-NWG-120503	22.9 J	12	UG_L	35	30
MW09-11S	ARSENIC	6/4/2002 0:00	MW09-11S-NWG-060402	8.4 J	2.19	UG_L	43	14
MW09-14D	ARSENIC	3/6/2006 0:00	MW09-14D_Q106	8.3	5.9	UG_L	32	20
MW09-14IA	ARSENIC	3/28/2013 10:25	MW09-14IA-032813-1	69.4	55.7	UG_L	16	16
MW09-17I	ARSENIC	8/5/2009 14:35	MW09-17I-080509	0.88 J	0.51	UG_L	20	5
MW09-20D	ARSENIC	9/10/2002 0:00	MW09-20D-NWG-091002	11 J	5	UG_L	44	28
MW09-20I	ARSENIC	3/1/2006 0:00	MW09-20I_Q106	11.6 J	7.34	UG_L	43	33
MW09-21D	ARSENIC	6/21/2004 0:00	MW09-21D-NWG-062104	5.1 J	2	UG_L	33	11
MW09-21S	ARSENIC	11/9/2007 12:00	MW09-21S_20071109	40.3	10.1	UG_L	35	26
MW09-23D	ARSENIC	6/7/2002 0:00	MW09-23D-NWG-060702	9.1 J	5	UG_L	33	22
MW09-23S	ARSENIC	6/18/2007 12:10	MW09-23S_20070618	46.3	15.1	UG_L	35	23
MW09-24D	ARSENIC	9/11/2015 10:00	MW09-24D-091115-1-F	32.2	21	UG_L	35	34
MW09-24S	ARSENIC	9/15/2003 0:00	MW09-24S-NWG-091503	5.4	3.9	UG_L	33	19
MW09-25S	ARSENIC	3/27/2013 10:30	MW09-25S-032713-1	4.4 J	1.52	UG_L	42	16
MW09-26DA	ARSENIC	9/7/2016 11:25	MW09-26DA-ME45-1-F	5.7	5.7	UG_L	1	1
MW09-26S	ARSENIC	12/15/2010 15:57	MW09-26S-121510	1.3 J	0.97	UG_L	20	2
MW09-27D	ARSENIC	7/13/2011 8:46	MW09-27D-071311	3.6 J	2.1	UG_L	21	9
MW09-27S	ARSENIC	10/13/2009 15:30	MW09-27S-101309	2.4 J	1.2	UG_L	20	5
MW09-02S	BARIUM					UG_L	2	0
MW09-03D	BARIUM	12/3/2001 0:00	MW09-03D-NWG-120301	96.2	96.2	UG_L	2	1
MW09-07S	BARIUM	12/7/2001 0:00	MW09-07S-NWG-120701	91.5	91.5	UG_L	2	1
MW09-08S	BARIUM					UG_L	2	0
MW09-09S	BARIUM					UG_L	2	0
MW09-10D	BARIUM					UG_L	2	0
MW09-10S	BARIUM	12/4/2001 0:00	MW09-10S-NWG-120401	116	116	UG_L	2	1
MW09-11S	BARIUM					UG_L	2	0
MW09-14D	BARIUM					UG_L	2	0
MW09-20D	BARIUM					UG_L	2	0
MW09-20I	BARIUM					UG_L	2	0
MW09-21D	BARIUM	12/5/2001 0:00	MW09-21D-NWG-120501	109	109	UG_L	2	1
MW09-21S	BARIUM	12/5/2001 0:00	MW09-21S-NWG-120501	79.9	79.9	UG_L	2	1
MW09-23D	BARIUM					UG_L	2	0
MW09-23S	BARIUM	12/6/2001 0:00	MW09-23S-NWG-120601	84.8	84.8	UG_L	2	1
MW09-24D	BARIUM					UG_L	2	0
MW09-24S	BARIUM	12/5/2001 0:00	MW09-24S-NWG-120501	371	371	UG_L	2	1
MW09-25S	BARIUM					UG_L	2	0
MW09-02S	BERYLLIUM					UG_L	34	0
MW09-03D	BERYLLIUM					UG_L	34	0
MW09-07S	BERYLLIUM	6/18/2007 11:55	MW09-07S_20070618	0.34 J	0.34	UG_L	34	1
MW09-08DA	BERYLLIUM	3/23/2011 9:50	MW09-08DA-032311	0.11 J	0.083	UG_L	15	12
MW09-08S	BERYLLIUM					UG_L	43	0
MW09-09DA	BERYLLIUM					UG_L	16	0
MW09-09S	BERYLLIUM	1/30/2008 0:00	MW09-09S-013008	1.3	0.77	UG_L	43	2
MW09-10D	BERYLLIUM					UG_L	32	0
MW09-10S	BERYLLIUM					UG_L	35	0
MW09-11S	BERYLLIUM					UG_L	43	0
MW09-14D	BERYLLIUM					UG_L	32	0
MW09-14IA	BERYLLIUM					UG_L	16	0
MW09-17I	BERYLLIUM					UG_L	20	0
MW09-20D	BERYLLIUM	3/6/2007 0:00	MW09-20D_20070306	0.39 J	0.39	UG_L	44	1
MW09-20I	BERYLLIUM	3/1/2006 0:00	MW09-20I_Q106	2.1 J	0.31	UG_L	43	17
MW09-21D	BERYLLIUM					UG_L	33	0
MW09-21S	BERYLLIUM	6/15/2005 0:00	MW09-21S	6.2	3.5	UG_L	35	5

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-23D	BERYLLIUM	3/7/2007 0:00	MW09-23D_20070307	0.73 J	0.73	UG_L	33	1
MW09-23S	BERYLLIUM	6/18/2007 12:10	MW09-23S_20070618	17.2	3.5	UG_L	35	5
MW09-24D	BERYLLIUM					UG_L	35	0
MW09-24S	BERYLLIUM					UG_L	33	0
MW09-25S	BERYLLIUM					UG_L	42	0
MW09-26DA	BERYLLIUM					UG_L	1	0
MW09-26S	BERYLLIUM					UG_L	20	0
MW09-27D	BERYLLIUM					UG_L	21	0
MW09-27S	BERYLLIUM	1/7/2010 10:10	MW09-27S-010710	0.06 J	0.05	UG_L	20	5
MW09-02S	CADMIUM					UG_L	2	0
MW09-03D	CADMIUM					UG_L	2	0
MW09-07S	CADMIUM	12/7/2001 0:00	MW09-07S-NWG-120701	0.46 J	0.46	UG_L	2	1
MW09-08S	CADMIUM	12/4/2001 0:00	MW09-08S-NWG-120401	1.2	1.2	UG_L	2	1
MW09-09S	CADMIUM					UG_L	2	0
MW09-10D	CADMIUM					UG_L	2	0
MW09-10S	CADMIUM	12/4/2001 0:00	MW09-10S-NWG-120401	0.41 J	0.41	UG_L	2	1
MW09-11S	CADMIUM					UG_L	2	0
MW09-14D	CADMIUM	12/7/2001 0:00	MW09-14D-NWG-120701	0.71	0.71	UG_L	2	1
MW09-20D	CADMIUM					UG_L	2	0
MW09-20I	CADMIUM					UG_L	2	0
MW09-21D	CADMIUM					UG_L	2	0
MW09-21S	CADMIUM					UG_L	2	0
MW09-23D	CADMIUM					UG_L	2	0
MW09-23S	CADMIUM					UG_L	1	0
MW09-24D	CADMIUM					UG_L	2	0
MW09-24S	CADMIUM	12/5/2001 0:00	MW09-24S-NWG-120501	0.41 J	0.41	UG_L	2	1
MW09-25S	CADMIUM					UG_L	2	0
MW09-02S	CALCIUM	12/3/2001 0:00	MW09-02S-NWG-120301	42500	30600	UG_L	2	2
MW09-03D	CALCIUM	12/3/2001 0:00	MW09-03D-NWG-120301	35700	33000	UG_L	2	2
MW09-07S	CALCIUM	2/27/2002 0:00	MW09-07S-NWG-022702	95100	94800	UG_L	2	2
MW09-08S	CALCIUM	12/4/2001 0:00	MW09-08S-NWG-120401	64400	56700	UG_L	2	2
MW09-09S	CALCIUM	12/5/2001 0:00	MW09-09S-NWG-120501	70500	61200	UG_L	2	2
MW09-10D	CALCIUM	12/4/2001 0:00	MW09-10D-NWG-120401	22400	21500	UG_L	2	2
MW09-10S	CALCIUM	12/4/2001 0:00	MW09-10S-NWG-120401	29600	22300	UG_L	2	2
MW09-11S	CALCIUM	2/27/2002 0:00	MW09-11S-NWG-022702	74600 J	58400	UG_L	2	2
MW09-14D	CALCIUM	3/1/2002 0:00	MW09-14D-NWG-030102	68800 J	68400	UG_L	2	2
MW09-20D	CALCIUM	12/4/2001 0:00	MW09-20D-NWG-120401	51500	50000	UG_L	2	2
MW09-20I	CALCIUM	12/4/2001 0:00	MW09-201-NWG-120401	31900	27700	UG_L	2	2
MW09-21D	CALCIUM	12/5/2001 0:00	MW09-21D-NWG-120501	30900	27200	UG_L	2	2
MW09-21S	CALCIUM	12/5/2001 0:00	MW09-21S-NWG-120501	30100	24200	UG_L	2	2
MW09-23D	CALCIUM	12/6/2001 0:00	MW09-23D-NWG-120601	26700	25300	UG_L	2	2
MW09-23S	CALCIUM	12/6/2001 0:00	MW09-23S-NWG-120601	202000	185000	UG_L	2	2
MW09-24D	CALCIUM	12/5/2001 0:00	MW09-24D-NWG-120501	54300	46700	UG_L	2	2
MW09-24S	CALCIUM	12/5/2001 0:00	MW09-24S-NWG-120501	53100	35000	UG_L	2	2
MW09-25S	CALCIUM	2/27/2002 0:00	MW09-25S-NWG-022702	18600 J	15500	UG_L	2	2
MW09-02S	CHROMIUM, TOTAL	9/10/2003 0:00	MW09-02S-NWG-091003	13	4.69	UG_L	34	9
MW09-03D	CHROMIUM, TOTAL	12/8/2003 0:00	MW09-03D-NWG-120803	16.9 J	6.12	UG_L	34	10
MW09-07S	CHROMIUM, TOTAL	12/4/2003 0:00	MW09-07S-NWG-120403	14.2 J	5.2	UG_L	34	9
MW09-08DA	CHROMIUM, TOTAL	1/7/2010 1:44	MW09-08DA-010710	0.81 J	0.81	UG_L	15	1
MW09-08S	CHROMIUM, TOTAL	12/5/2003 0:00	MW09-08S-NWG-120503	31 J	6.5	UG_L	43	17
MW09-09DA	CHROMIUM, TOTAL	1/11/2010 2:05	MW09-09DA-011110	0.71 J	0.52	UG_L	16	2
MW09-09S	CHROMIUM, TOTAL	12/8/2003 0:00	MW09-09S-NWG-120803	35 J	7.91	UG_L	43	18
MW09-10D	CHROMIUM, TOTAL	6/16/2004 0:00	MW09-10D-NWG-061604	3.5 J	1.3	UG_L	32	9
MW09-10S	CHROMIUM, TOTAL	12/5/2003 0:00	MW09-10S-NWG-120503	24.9 J	7.14	UG_L	35	9
MW09-11S	CHROMIUM, TOTAL	6/4/2002 0:00	MW09-11S-NWG-060402	314	35.1	UG_L	43	10
MW09-14D	CHROMIUM, TOTAL	12/4/2003 0:00	MW09-14D-NWG-120403	5.5 J	1.5	UG_L	32	7
MW09-14IA	CHROMIUM, TOTAL	3/18/2010 9:53	MW09-14IA-031810	0.54 J	0.5	UG_L	16	2
MW09-17I	CHROMIUM, TOTAL	4/1/2009 9:45	MW09-17I-040109	9.6	2.8	UG_L	20	7
MW09-20D	CHROMIUM, TOTAL	6/17/2004 0:00	MW09-20D-NWG-061704	4.3 J	2	UG_L	44	9
MW09-20I	CHROMIUM, TOTAL	12/4/2003 0:00	MW09-20I-NWG-120403	30 J	5.57	UG_L	43	26
MW09-21D	CHROMIUM, TOTAL	12/4/2003 0:00	MW09-21D-NWG-120403	7.8 J	2.9	UG_L	33	9
MW09-21S	CHROMIUM, TOTAL	12/8/2003 0:00	MW09-21S-NWG-120803	47.2 J	8.37	UG_L	35	15
MW09-23D	CHROMIUM, TOTAL	4/29/2008 15:26	MW09-23D-042908	7 J	3	UG_L	33	9
MW09-23S	CHROMIUM, TOTAL	12/4/2003 0:00	MW09-23S-NWG-120403	38.8 J	11.3	UG_L	35	13
MW09-24D	CHROMIUM, TOTAL	12/4/2003 0:00	MW09-24D-NWG-120403	12.6 J	4.11	UG_L	35	9
MW09-24S	CHROMIUM, TOTAL	12/4/2003 0:00	MW09-24S-NWG-120403	12.5 J	3.59	UG_L	33	9
MW09-25S	CHROMIUM, TOTAL	9/10/2002 0:00	MW09-25S-NWG-091002	6.3 J	1.6	UG_L	42	11
MW09-26DA	CHROMIUM, TOTAL	9/7/2016 11:25	MW09-26DA-ME45-1-F	1 J-	1	UG_L	1	1
MW09-26S	CHROMIUM, TOTAL	5/2/2008 15:35	MW09-26S-050208	1.5 J	0.75	UG_L	20	6
MW09-27D	CHROMIUM, TOTAL	9/25/2008 10:00	MW09-27D-092508	1.3 J	0.72	UG_L	21	7
MW09-27S	CHROMIUM, TOTAL	7/17/2008 13:14	MW09-27S-071708	1.1 J	0.67	UG_L	20	7
MW09-02S	COBALT					UG_L	2	0
MW09-03D	COBALT					UG_L	2	0
MW09-07S	COBALT	12/7/2001 0:00	MW09-07S-NWG-120701	4.9 J	4.9	UG_L	2	1
MW09-08S	COBALT					UG_L	2	0
MW09-09S	COBALT					UG_L	2	0
MW09-10D	COBALT					UG_L	2	0
MW09-10S	COBALT					UG_L	2	0
MW09-11S	COBALT					UG_L	2	0
MW09-14D	COBALT					UG_L	2	0
MW09-20D	COBALT					UG_L	2	0
MW09-20I	COBALT					UG_L	2	0
MW09-21D	COBALT					UG_L	2	0
MW09-21S	COBALT					UG_L	2	0
MW09-23D	COBALT					UG_L	2	0
MW09-23S	COBALT					UG_L	2	0
MW09-24D	COBALT	12/5/2001 0:00	MW09-24D-NWG-120501	3.6 J	3.6	UG_L	2	1
MW09-24S	COBALT					UG_L	2	0
MW09-25S	COBALT					UG_L	2	0
MW09-02S	COPPER	10/2/2008 9:20	MW09-02S-100208	4.2	2.4	UG_L	34	17
MW09-03D	COPPER	3/24/2011 2:10	MW09-03D-032411	17.2 J	2.78	UG_L	34	7
MW09-07S	COPPER	4/30/2008 14:01	MW09-7S-043008	134	16.3	UG_L	34	9
MW09-08DA	COPPER	3/26/2013 15:25	MW09-08DA-032613-1	9.1	2.7	UG_L	15	5
MW09-08S	COPPER	5/6/2008 15:08	MW09-08S-050608	5.6 J	1.4	UG_L	43	10
MW09-09DA	COPPER	3/25/2013 14:45	MW09-09DA-032513-1	111	12.9	UG_L	16	9
MW09-09S	COPPER	3/25/2013 15:20	MW09-09S-032513-1	15.4	2.63	UG_L	43	12
MW09-10D	COPPER	4/30/2008 11:21	MW09-10D-043008	97.7	14.5	UG_L	32	7
MW09-10S	COPPER	4/30/2008 11:20	MW09-10S-043008	120	13	UG_L	35	10
MW09-11S	COPPER	6/4/2002 0:00	MW09-11S-NWG-060402	23	3.1	UG_L	43	12
MW09-14D	COPPER	4/30/2008 14:33	MW09-14D-043008	75.9 J	11.6	UG_L	32	7
MW09-14IA	COPPER	9/25/2012 14:29	MW09-14IA-092512	10.2	2.29	UG_L	16	7
MW09-17I	COPPER	5/6/2008 15:30	MW09-17I-050608	6.1 J	1.8	UG_L	20	4
MW09-20D	COPPER	9/27/2012 9:15	MW09-20D-092712	7.5	1.8	UG_L	44	11
MW09-20I	COPPER	10/20/2004 0:00	MW09-20I-NWG-102004	15.1 J	2.67	UG_L	43	12
MW09-21D	COPPER	5/5/2008 15:10	MW09-21D-050508	8 J	1.6	UG_L	33	7
MW09-21S	COPPER	3/17/2004 0:00	MW09-21S-NWG-031704	8 J	3.7	UG_L	35	10
MW09-23D	COPPER	10/10/2013 12:15	MW09-23D-101013	4.9	1.3	UG_L	33	8
MW09-23S	COPPER	3/23/2004 0:00	MW09-23S-NWG-032304	140 J	25.5	UG_L	35	10
MW09-24D	COPPER	4/30/2008 16:40	MW09-24D-043008	55.7 J	8.53	UG_L	35	9
MW09-24S	COPPER	4/30/2008 16:39	MW09-24S-043008	57.2 J	10.9	UG_L	33	6
MW09-25S	COPPER	4/30/2008 11:52	MW09-25S-043008	140	28.3	UG_L	42	7
MW09-26DA	COPPER	9/7/2016 11:25	MW09-26DA-ME45-1-F	0.55 J	0.55	UG_L	1	1
MW09-26S	COPPER	5/2/2008 15:35	MW09-26S-050208	6.3 J	2.1	UG_L	20	8
MW09-27D	COPPER	3/24/2010 1:45	MW09-27D-032410	7.8 J	2	UG_L	21	6

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-27S	COPPER	5/2/2008 14:45	MW09-27S-050208	12 J	3.86	UG_L	20	9
MW09-02S	IRON	9/23/2010 3:00	MW09-02S-092310	2510	235	UG_L	34	18
MW09-03D	IRON	12/3/2001 0:00	MW09-03D-NWG-120301	2650 J	1300	UG_L	34	34
MW09-07S	IRON	1/21/2003 0:00	MW09-07S-NWG-012103	22400	17500	UG_L	34	34
MW09-08DA	IRON	9/23/2010 10:25	MW09-08DA-092310	12200	11000	UG_L	15	15
MW09-08S	IRON	9/30/2013 13:10	MW09-08S-093013	6870	5030	UG_L	43	43
MW09-09DA	IRON	9/7/2016 14:05	MW09-09DA-ME45-1-F	2560	1080	UG_L	16	10
MW09-09S	IRON	1/8/2010 10:00	MW09-09S-010810	1890	833	UG_L	43	43
MW09-10D	IRON	4/30/2008 11:21	MW09-10D-043008	994	845	UG_L	32	30
MW09-10S	IRON	11/3/2006 9:55	MW09-10S-20061103	21400	11800	UG_L	35	34
MW09-11S	IRON	7/2/2003 0:00	MW09-11S-NWG-070203	17300	4910	UG_L	43	43
MW09-14D	IRON	12/4/2003 0:00	MW09-14D-NWG-120403	49300	32100	UG_L	32	32
MW09-14IA	IRON	3/28/2013 10:25	MW09-14IA-032813-1	20000	14400	UG_L	16	16
MW09-17I	IRON	2/10/2008 0:00	MW09-17I-021008	10400	8140	UG_L	20	20
MW09-20D	IRON	3/30/2011 10:43	MW09-20D-033011	4350	3120	UG_L	44	44
MW09-20I	IRON	11/3/2006 9:00	MW09-20I-20061103	35800	23600	UG_L	43	43
MW09-21D	IRON	3/7/2007 0:00	MW09-21D_20070307	2380	576	UG_L	33	30
MW09-21S	IRON	3/30/2011 2:25	MW09-21S-033011	2960	2020	UG_L	35	35
MW09-23D	IRON	4/29/2008 15:26	MW09-23D-042908	6820 J	3130	UG_L	33	33
MW09-23S	IRON	10/4/2011 16:05	MW09-23S-100411	31700	10500	UG_L	35	33
MW09-24D	IRON	3/31/2011 10:29	MW09-24D-033111	138000	54500	UG_L	35	35
MW09-24S	IRON	3/18/2004 0:00	MW09-24S-NWG-031804	98600	47200	UG_L	33	33
MW09-25S	IRON	6/10/2002 0:00	MW09-25S-NWG-061002	31200	15000	UG_L	42	42
MW09-26DA	IRON	9/7/2016 11:25	MW09-26DA-ME45-1-F	6340	6340	UG_L	1	1
MW09-26S	IRON	5/2/2008 15:35	MW09-26S-050208	56.5 J	43.3	UG_L	20	3
MW09-27D	IRON	12/15/2010 9:29	MW09-27D-121510	12200 J	2300	UG_L	21	21
MW09-27S	IRON	1/30/2008 0:00	MW09-27S-013008	17900	5460	UG_L	20	14
MW09-02S	LEAD	6/16/2004 0:00	MW09-02S-NWG-061604	2.1	0.64	UG_L	34	4
MW09-03D	LEAD	6/16/2004 0:00	MW09-03D-NWG-061604	3.6	1.3	UG_L	34	4
MW09-07S	LEAD	6/16/2004 0:00	MW09-07S-NWG-061604	2.1	0.89	UG_L	34	6
MW09-08DA	LEAD	7/14/2010 11:00	MW09-08DA-071410	3.3 J	1.6	UG_L	15	5
MW09-08S	LEAD	7/1/2003 0:00	MW09-08S-NWG-070103	5.3	1.1	UG_L	43	8
MW09-09DA	LEAD	3/25/2013 14:45	MW09-09DA-032513-1	16.3	8.37	UG_L	16	2
MW09-09S	LEAD	3/31/2009 15:24	MW09-09S-033109	0.39 J	0.25	UG_L	43	2
MW09-10D	LEAD	9/25/2012 9:35	MW09-10D-092512	0.24 J	0.13	UG_L	32	6
MW09-10S	LEAD	6/16/2004 0:00	MW09-10S-NWG-061604	3.6	0.7	UG_L	35	7
MW09-11S	LEAD	6/4/2002 0:00	MW09-11S-NWG-060402	51.2	6.06	UG_L	43	9
MW09-14D	LEAD	3/23/2004 0:00	MW09-14D-NWG-032304	0.17	0.11	UG_L	32	3
MW09-14IA	LEAD	7/15/2010 17:40	MW09-14IA-071510	0.99 J	0.56	UG_L	16	2
MW09-17I	LEAD					UG_L	20	0
MW09-20D	LEAD	7/14/2010 12:40	MW09-20D-071410	2 J	0.77	UG_L	44	6
MW09-20I	LEAD	3/6/2007 0:00	MW09-20I_20070306	1 J	0.32	UG_L	43	5
MW09-21D	LEAD	9/17/2003 0:00	MW09-21D-NWG-091703	0.24 J	0.15	UG_L	33	6
MW09-21S	LEAD	1/16/2003 0:00	MW09-21S-NWG-011603	0.12 J	0.094	UG_L	35	5
MW09-23D	LEAD	6/17/2004 0:00	MW09-23D-NWG-061704	0.34 J	0.16	UG_L	33	4
MW09-23S	LEAD	6/18/2007 12:10	MW09-23S_20070618	8.4	1.6	UG_L	35	8
MW09-24D	LEAD	6/16/2004 12:00:00 AM 9/24/2008 3:18:00 PM		1.9 J	0.64	UG_L	35	7
MW09-24S	LEAD	9/24/2008 15:32	MW09-24S-092408	3.2 J	1.2	UG_L	33	5
MW09-25S	LEAD	3/27/2013 10:30	MW09-25S-032713-1	8.9	1.9	UG_L	42	6
MW09-26DA	LEAD					UG_L	1	0
MW09-26S	LEAD	10/6/2011 9:38	MW09-26S-100611	0.16 J	0.15	UG_L	20	2
MW09-27D	LEAD	7/12/2010 16:00	MW09-27D-071210	1.7 J	0.88	UG_L	21	2
MW09-27S	LEAD	7/12/2010 16:00	MW09-27S-071210	1.7 J	1.7	UG_L	20	1
MW09-02S	MAGNESIUM	12/3/2001 0:00	MW09-02S-NWG-120301	6880 J	4740	UG_L	2	2
MW09-03D	MAGNESIUM	12/3/2001 0:00	MW09-03D-NWG-120301	28900 J	26900	UG_L	2	2
MW09-07S	MAGNESIUM	2/27/2002 0:00	MW09-07S-NWG-022702	54100	53300	UG_L	2	2
MW09-08S	MAGNESIUM	12/4/2001 0:00	MW09-08S-NWG-120401	34000 J	30000	UG_L	2	2
MW09-09S	MAGNESIUM	12/5/2001 0:00	MW09-09S-NWG-120501	77900	64900	UG_L	2	2
MW09-10D	MAGNESIUM	12/4/2001 0:00	MW09-10D-NWG-120401	3160 J	3160	UG_L	2	1
MW09-10S	MAGNESIUM	12/4/2001 0:00	MW09-10S-NWG-120401	25900 J	23500	UG_L	2	2
MW09-11S	MAGNESIUM	2/27/2002 0:00	MW09-11S-NWG-022702	15600 J	13600	UG_L	2	2
MW09-14D	MAGNESIUM	3/1/2002 0:00	MW09-14D-NWG-030102	17200 J	16700	UG_L	2	2
MW09-20D	MAGNESIUM	12/4/2001 0:00	MW09-20D-NWG-120401	11400 J	11000	UG_L	2	2
MW09-20I	MAGNESIUM	12/4/2001 0:00	MW09-201-NWG-120401	37200 J	32300	UG_L	2	2
MW09-21D	MAGNESIUM	12/5/2001 0:00	MW09-21D-NWG-120501	14900 J	13400	UG_L	2	2
MW09-21S	MAGNESIUM	12/5/2001 0:00	MW09-21S-NWG-120501	54500 J	45000	UG_L	2	2
MW09-23D	MAGNESIUM	12/6/2001 0:00	MW09-23D-NWG-120601	31300	30300	UG_L	2	2
MW09-23S	MAGNESIUM	12/6/2001 0:00	MW09-23S-NWG-120601	759000	677000	UG_L	2	2
MW09-24D	MAGNESIUM	12/5/2001 0:00	MW09-24D-NWG-120501	8290 J	7020	UG_L	2	2
MW09-24S	MAGNESIUM	12/5/2001 0:00	MW09-24S-NWG-120501	9380 J	6120	UG_L	2	2
MW09-25S	MAGNESIUM	2/27/2002 0:00	MW09-25S-NWG-022702	6250 J	4390	UG_L	2	2
MW09-02S	MANGANESE	12/3/2001 0:00	MW09-02S-NWG-120301	908	170	UG_L	34	28
MW09-03D	MANGANESE	5/1/2003 0:00	MW09-03D-NWG-050103	1220 J	870	UG_L	34	34
MW09-07S	MANGANESE	1/21/2003 0:00	MW09-07S-NWG-012103	229	177	UG_L	34	34
MW09-08DA	MANGANESE	8/7/2009 9:50	MW09-08DA-080709	589	466	UG_L	15	15
MW09-08S	MANGANESE	10/5/2011 9:24	MW09-08S-100511	1090	837	UG_L	43	43
MW09-09DA	MANGANESE	3/25/2013 14:45	MW09-09DA-032513-1	628	312	UG_L	16	12
MW09-09S	MANGANESE	9/11/2002 0:00	MW09-09S-NWG-091102	2300	1160	UG_L	43	43
MW09-10D	MANGANESE	4/30/2008 11:21	MW09-10D-043008	432	390	UG_L	32	31
MW09-10S	MANGANESE	6/4/2002 0:00	MW09-10S-NWG-060402	504	361	UG_L	35	34
MW09-11S	MANGANESE	7/2/2003 0:00	MW09-11S-NWG-070203	3040 J	915	UG_L	43	43
MW09-14D	MANGANESE	3/1/2002 0:00	MW09-14D-NWG-030102	1390 J	1070	UG_L	32	32
MW09-14IA	MANGANESE	8/6/2009 10:00	MW09-14IA-080609	929	230	UG_L	16	16
MW09-17I	MANGANESE	2/10/2008 0:00	MW09-17I-021008	1090	904	UG_L	20	20
MW09-20D	MANGANESE	3/30/2011 10:43	MW09-20D-033011	1300 J	955	UG_L	44	44
MW09-20I	MANGANESE	11/3/2006 9:00	MW09-20I-20061103	1010	804	UG_L	43	43
MW09-21D	MANGANESE	3/7/2007 0:00	MW09-21D_20070307	546	252	UG_L	33	33
MW09-21S	MANGANESE	12/5/2001 0:00	MW09-21S-NWG-120501	214	87.1	UG_L	35	35
MW09-23D	MANGANESE	12/6/2001 0:00	MW09-23D-NWG-120601	915	638	UG_L	33	33
MW09-23S	MANGANESE	10/4/2011 16:05	MW09-23S-100411	826	426	UG_L	35	34
MW09-24D	MANGANESE	3/31/2011 10:29	MW09-24D-033111	1150 J	477	UG_L	35	35
MW09-24S	MANGANESE	10/21/2004 0:00	MW09-24S-NWG-102104	2700	1350	UG_L	33	33
MW09-25S	MANGANESE	12/10/2008 9:32	MW09-25S-121008	927	381	UG_L	42	42
MW09-26DA	MANGANESE	9/7/2016 11:25	MW09-26DA-ME45-1-F	406	406	UG_L	1	1
MW09-26S	MANGANESE	1/30/2008 0:00	MW09-26S-013008	123	17.2	UG_L	20	19
MW09-27D	MANGANESE	9/29/2011 10:08	MW09-27D-092911	879	459	UG_L	21	21
MW09-27S	MANGANESE	8/6/2009 8:52	MW09-27S-080609	707	204	UG_L	20	20
MW09-02S	MERCURY	6/11/2002 0:00	MW09-02S-NWG-061102	0.1 J	0.07	UG_L	32	2
MW09-03D	MERCURY	9/10/2002 0:00	MW09-03D-NWG-091002	0.77 J	0.3	UG_L	32	3
MW09-07S	MERCURY	12/7/2001 0:00	MW09-07S-NWG-120701	2.1	0.76	UG_L	33	3
MW09-08DA	MERCURY	9/7/2016 13:30	MW09-08DA-ME45-1-F	0.039 J	0.039	UG_L	15	1
MW09-08S	MERCURY	6/10/2002 12:00:00 AM 3/21/2005 12:00:00 AM		0.07 JJ	0.056	UG_L	41	3
MW09-09DA	MERCURY					UG_L	16	0
MW09-09S	MERCURY	3/28/2011 3:40	MW09-09S-032811	0.01 J	0.01	UG_L	42	1
MW09-10D	MERCURY	10/4/2011 10:09	MW09-10D-100411	0.01 J	0.01	UG_L	31	1
MW09-10S	MERCURY	9/6/2002 0:00	MW09-10S-NWG-090602	0.36 J	0.19	UG_L	35	2
MW09-11S	MERCURY	3/27/2013 10:30	MW09-11S-032713-1	0.01 J	0.01	UG_L	42	1
MW09-14D	MERCURY	9/27/2005 15:55	MW09-14D-20050927	0.083 J	0.077	UG_L	31	2
MW09-14IA	MERCURY	9/24/2014 11:30	MW09-14IA-092414-1F	0.041 J	0.041	UG_L	16	1
MW09-17I	MERCURY					UG_L	20	0
MW09-20D	MERCURY	1/16/2003 0:00	MW09-20D-NWG-011603	0.59 J	0.32	UG_L	43	2
MW09-20I	MERCURY	6/17/2004 0:00	MW09-20I-NWG-061704	0.06 J	0.06	UG_L	42	1
MW09-21D	MERCURY	6/15/2005 0:00	MW09-21D	0.096 J	0.077	UG_L	31	4
MW09-21S	MERCURY	6/11/2002 0:00	MW09-21S-NWG-061102	0.1 J	0.051	UG_L	33	4

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-23D	MERCURY	3/23/2005 0:00	MW09-23D-032305	0.085 J	0.078	UG_L	32	2
MW09-23S	MERCURY	9/9/2002 0:00	MW09-23S-NWG-090902	1 J	0.24	UG_L	34	5
MW09-24D	MERCURY	6/16/2004 0:00	MW09-24D-NWG-061604	0.04 J	0.03	UG_L	34	2
MW09-24S	MERCURY	9/8/2016 14:15	MW09-24S-ME45-1-F	0.037 J	0.037	UG_L	32	1
MW09-25S	MERCURY					UG_L	41	0
MW09-26DA	MERCURY					UG_L	1	0
MW09-26S	MERCURY					UG_L	19	0
MW09-27D	MERCURY					UG_L	20	0
MW09-27S	MERCURY	3/26/2013 12:00	MW09-27S-032613-1	0.02 J	0.02	UG_L	19	1
MW09-02S	NICKEL	10/3/2013 9:39	MW09-02S-100313	7.3	2.1	UG_L	34	14
MW09-03D	NICKEL	11/2/2006 13:35	MW09-03D-20061102	8.2 J	2.8	UG_L	34	19
MW09-07S	NICKEL	6/30/2003 0:00	MW09-07S-NWG-063003	4	1.9	UG_L	34	19
MW09-08DA	NICKEL	7/13/2011 9:32	MW09-08DA-071311	3 J	0.94	UG_L	15	7
MW09-08S	NICKEL	9/10/2002 0:00	MW09-08S-NWG-091002	5.5 J	2.7	UG_L	43	30
MW09-09DA	NICKEL	7/13/2011 10:20	MW09-09DA-071311	2.5 J	1.2	UG_L	16	8
MW09-09S	NICKEL	7/1/2003 0:00	MW09-09S-NWG-070103	2.6	1.6	UG_L	43	18
MW09-10D	NICKEL	7/1/2003 0:00	MW09-10D-NWG-070103	1.1 J	0.61	UG_L	32	8
MW09-10S	NICKEL	10/4/2013 10:20	MW09-10S-100413	8.1	2.5	UG_L	35	19
MW09-11S	NICKEL	6/4/2002 0:00	MW09-11S-NWG-060402	202	29.3	UG_L	43	39
MW09-14D	NICKEL	9/25/2012 15:48	MW09-14D-092512	2.2	1.4	UG_L	32	12
MW09-14IA	NICKEL	10/5/2011 9:38	MW09-14IA-100511	4	2.4	UG_L	16	12
MW09-17I	NICKEL	4/1/2009 9:45	MW09-17I-040109	8.9	2	UG_L	20	9
MW09-20D	NICKEL	10/6/2011 2:52:00 PM 3/30/2012 9:39:00 AM		2.4 JJ	1.4	UG_L	44	19
MW09-20I	NICKEL	3/22/2004 0:00	MW09-20I-NWG-032204	4	2	UG_L	43	23
MW09-21D	NICKEL	6/20/2007 14:55	MW09-21D_20070620	3.4 J	1.4	UG_L	33	15
MW09-21S	NICKEL	3/27/2013 12:15	MW09-21S-032713-1	7.6	2.8	UG_L	35	19
MW09-23D	NICKEL	9/9/2002 0:00	MW09-23D-NWG-090902	18	3.23	UG_L	33	12
MW09-23S	NICKEL	7/1/2003 0:00	MW09-23S-NWG-070103	15.9	6.42	UG_L	35	14
MW09-24D	NICKEL	9/16/2010 2:40	MW09-24D-091610	12.3 J	3.71	UG_L	35	18
MW09-24S	NICKEL	6/16/2004 0:00	MW09-24S-NWG-061604	9.4 J	2	UG_L	33	12
MW09-25S	NICKEL	3/29/2012 11:58	MW09-25S-032912	15.9 J	2.05	UG_L	42	22
MW09-26DA	NICKEL	9/7/2016 11:25	MW09-26DA-ME45-1-F	0.97 J	0.97	UG_L	1	1
MW09-26S	NICKEL	1/30/2008 12:00:00 AM 5/2/2008 3:35:00 PM		2.3 J	1.2	UG_L	20	10
MW09-27D	NICKEL	3/30/2011 10:06	MW09-27D-033011	2.8 J	1.6	UG_L	21	12
MW09-27S	NICKEL	5/2/2008 14:45	MW09-27S-050208	5.8	2.3	UG_L	20	12
MW09-02S	POTASSIUM	12/3/2001 0:00	MW09-02S-NWG-120301	6590	5110	UG_L	2	2
MW09-03D	POTASSIUM	12/3/2001 0:00	MW09-03D-NWG-120301	15500	14600	UG_L	2	2
MW09-07S	POTASSIUM	2/27/2002 0:00	MW09-07S-NWG-022702	33500	32500	UG_L	2	2
MW09-08S	POTASSIUM	12/4/2001 0:00	MW09-08S-NWG-120401	31900	28300	UG_L	2	2
MW09-09S	POTASSIUM	12/5/2001 0:00	MW09-09S-NWG-120501	49000	41000	UG_L	2	2
MW09-10D	POTASSIUM	12/4/2001 0:00	MW09-10D-NWG-120401	1370	1260	UG_L	2	2
MW09-10S	POTASSIUM	12/4/2001 12:00:00 AM 2/27/2002 12:00:00 AM		27800	27800	UG_L	2	2
MW09-11S	POTASSIUM	12/4/2001 0:00	MW09-11S-NWG-120401	7230	6430	UG_L	2	2
MW09-14D	POTASSIUM	3/1/2002 0:00	MW09-14D-NWG-030102	3700	3580	UG_L	2	2
MW09-20D	POTASSIUM	12/4/2001 0:00	MW09-20D-NWG-120401	3650	3500	UG_L	2	2
MW09-20I	POTASSIUM	12/4/2001 0:00	MW09-201-NWG-120401	27600	24500	UG_L	2	2
MW09-21D	POTASSIUM	12/5/2001 0:00	MW09-21D-NWG-120501	25600	24000	UG_L	2	2
MW09-21S	POTASSIUM	12/5/2001 0:00	MW09-21S-NWG-120501	52500	42900	UG_L	2	2
MW09-23D	POTASSIUM	12/6/2001 0:00	MW09-23D-NWG-120601	12100	11500	UG_L	2	2
MW09-23S	POTASSIUM	12/6/2001 0:00	MW09-23S-NWG-120601	245000	206000	UG_L	2	2
MW09-24D	POTASSIUM	12/5/2001 0:00	MW09-24D-NWG-120501	9970	8640	UG_L	2	2
MW09-24S	POTASSIUM	12/5/2001 0:00	MW09-24S-NWG-120501	8240	6210	UG_L	2	2
MW09-25S	POTASSIUM	2/27/2002 0:00	MW09-25S-NWG-022702	7300	7180	UG_L	2	2
MW09-02S	SELENIUM					UG_L	2	0
MW09-03D	SELENIUM					UG_L	2	0
MW09-07S	SELENIUM					UG_L	2	0
MW09-08S	SELENIUM					UG_L	2	0
MW09-09S	SELENIUM	12/5/2001 0:00	MW09-09S-NWG-120501	6.2	6.2	UG_L	2	1
MW09-10D	SELENIUM					UG_L	2	0
MW09-10S	SELENIUM					UG_L	2	0
MW09-11S	SELENIUM					UG_L	2	0
MW09-14D	SELENIUM					UG_L	2	0
MW09-20D	SELENIUM					UG_L	2	0
MW09-20I	SELENIUM					UG_L	2	0
MW09-21D	SELENIUM					UG_L	2	0
MW09-21S	SELENIUM					UG_L	2	0
MW09-23D	SELENIUM					UG_L	2	0
MW09-23S	SELENIUM	12/6/2001 0:00	MW09-23S-NWG-120601	6.4	6.4	UG_L	2	1
MW09-24D	SELENIUM					UG_L	2	0
MW09-24S	SELENIUM					UG_L	2	0
MW09-25S	SELENIUM					UG_L	2	0
MW09-02S	SILVER					UG_L	2	0
MW09-03D	SILVER					UG_L	2	0
MW09-07S	SILVER					UG_L	2	0
MW09-08S	SILVER					UG_L	2	0
MW09-09S	SILVER					UG_L	2	0
MW09-10D	SILVER					UG_L	2	0
MW09-10S	SILVER					UG_L	2	0
MW09-11S	SILVER					UG_L	2	0
MW09-14D	SILVER					UG_L	2	0
MW09-20D	SILVER					UG_L	2	0
MW09-20I	SILVER					UG_L	2	0
MW09-21D	SILVER					UG_L	2	0
MW09-21S	SILVER					UG_L	2	0
MW09-23D	SILVER					UG_L	2	0
MW09-23S	SILVER					UG_L	2	0
MW09-24D	SILVER					UG_L	2	0
MW09-24S	SILVER					UG_L	2	0
MW09-25S	SILVER					UG_L	2	0
MW09-02S	SODIUM	12/3/2001 0:00	MW09-02S-NWG-120301	9660	7430	UG_L	2	2
MW09-03D	SODIUM	12/3/2001 0:00	MW09-03D-NWG-120301	25500	23500	UG_L	2	2
MW09-07S	SODIUM	2/27/2002 0:00	MW09-07S-NWG-022702	34400 J	34000	UG_L	2	2
MW09-08S	SODIUM	12/4/2001 0:00	MW09-08S-NWG-120401	154000	138000	UG_L	2	2
MW09-09S	SODIUM	12/5/2001 0:00	MW09-09S-NWG-120501	155000	138000	UG_L	2	2
MW09-10D	SODIUM	12/4/2001 0:00	MW09-10D-NWG-120401	8170	7730	UG_L	2	2
MW09-10S	SODIUM	2/27/2002 0:00	MW09-10S-NWG-022702	135000 J	125000	UG_L	2	2
MW09-11S	SODIUM	12/4/2001 0:00	MW09-11S-NWG-120401	84600	73700	UG_L	2	2
MW09-14D	SODIUM	3/1/2002 0:00	MW09-14D-NWG-030102	107000 J	99100	UG_L	2	2
MW09-20D	SODIUM	12/4/2001 0:00	MW09-20D-NWG-120401	42100	40300	UG_L	2	2
MW09-20I	SODIUM	12/4/2001 0:00	MW09-201-NWG-120401	311000	272000	UG_L	2	2
MW09-21D	SODIUM	12/5/2001 0:00	MW09-21D-NWG-120501	21200	20400	UG_L	2	2
MW09-21S	SODIUM	12/5/2001 0:00	MW09-21S-NWG-120501	588000	499000	UG_L	2	2
MW09-23D	SODIUM	12/6/2001 0:00	MW09-23D-NWG-120601	161000	154000	UG_L	2	2
MW09-23S	SODIUM	2/27/2002 0:00	MW09-23S-NWG-022702	4640000 J	4640000	UG_L	2	1
MW09-24D	SODIUM	12/5/2001 0:00	MW09-24D-NWG-120501	13300	11400	UG_L	2	2
MW09-24S	SODIUM	12/5/2001 0:00	MW09-24S-NWG-120501	33500	28100	UG_L	2	2
MW09-25S	SODIUM	2/27/2002 0:00	MW09-25S-NWG-022702	75900 J	65400	UG_L	2	2
MW09-02S	VANADIUM					UG_L	2	0
MW09-03D	VANADIUM					UG_L	2	0
MW09-07S	VANADIUM					UG_L	2	0
MW09-08S	VANADIUM					UG_L	2	0
MW09-09S	VANADIUM					UG_L	2	0
MW09-10D	VANADIUM					UG_L	2	0
MW09-10S	VANADIUM					UG_L	2	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-11S	VANADIUM					UG_L	2	0
MW09-14D	VANADIUM					UG_L	2	0
MW09-20D	VANADIUM					UG_L	2	0
MW09-20I	VANADIUM	12/4/2001 0:00	MW09-201-NWG-120401	7.1 J	7.1	UG_L	2	1
MW09-21D	VANADIUM					UG_L	2	0
MW09-21S	VANADIUM	12/5/2001 0:00	MW09-21S-NWG-120501	13.9	13.9	UG_L	2	1
MW09-23D	VANADIUM					UG_L	2	0
MW09-23S	VANADIUM					UG_L	2	0
MW09-24D	VANADIUM					UG_L	2	0
MW09-24S	VANADIUM					UG_L	2	0
MW09-25S	VANADIUM					UG_L	2	0
MW09-02S	ZINC	10/2/2008 9:20	MW09-02S-100208	53.1 J	10.7	UG_L	34	28
MW09-03D	ZINC	9/10/2003 0:00	MW09-03D-NWG-091003	21.1 J	6.64	UG_L	34	24
MW09-07S	ZINC	3/6/2006 0:00	MW09-07S_Q106	28.8 J	8.63	UG_L	34	23
MW09-08DA	ZINC	3/27/2012 9:47	MW09-08DA-032712	13.6	5.53	UG_L	15	6
MW09-08S	ZINC	5/6/2003 0:00	MW09-08S-NWG-050603	16.6 J	6.53	UG_L	43	26
MW09-09DA	ZINC	3/29/2012 13:31	MW09-09DA-032912	12.2	4.69	UG_L	16	7
MW09-09S	ZINC	8/6/2009 12:54	MW09-09S-080609	635	42	UG_L	43	19
MW09-10D	ZINC	9/25/2012 9:35	MW09-10D-092512	85	10.3	UG_L	32	17
MW09-10S	ZINC	2/27/2002 0:00	MW09-10S-NWG-022702	76.2	11.2	UG_L	35	22
MW09-11S	ZINC	12/16/2010 13:54	MW09-11S-121610	646	175	UG_L	43	38
MW09-14D	ZINC	12/7/2001 0:00	MW09-14D-NWG-120701	11.5 J	4.99	UG_L	32	16
MW09-14IA	ZINC	10/20/2009 11:15	MW09-14IA-102009	30.5	15	UG_L	16	14
MW09-17I	ZINC	9/25/2008 13:33	MW09-17I-092508	15.5 J	7.3	UG_L	20	11
MW09-20D	ZINC	6/5/2002 0:00	MW09-20D-NWG-060502	21	6.23	UG_L	44	21
MW09-20I	ZINC	7/1/2003 0:00	MW09-20I-NWG-070103	15.1 J	5.91	UG_L	43	21
MW09-21D	ZINC	5/5/2008 15:10	MW09-21D-050508	33.6 J	6.46	UG_L	33	15
MW09-21S	ZINC	6/11/2002 0:00	MW09-21S-NWG-061102	11	5.2	UG_L	35	11
MW09-23D	ZINC	12/6/2001 0:00	MW09-23D-NWG-120601	41.1	10.2	UG_L	33	16
MW09-23S	ZINC	1/14/2003 0:00	MW09-23S-NWG-011403	249 J	38.5	UG_L	35	13
MW09-24D	ZINC	1/14/2003 0:00	MW09-24D-NWG-011403	231 J	19.4	UG_L	35	18
MW09-24S	ZINC	1/14/2003 0:00	MW09-24S-NWG-011403	382 J	33	UG_L	33	15
MW09-25S	ZINC	1/14/2003 0:00	MW09-25S-NWG-011403	283 J	19.4	UG_L	42	22
MW09-26DA	ZINC	9/7/2016 11:25	MW09-26DA-ME45-1-F	16.9	16.9	UG_L	1	1
MW09-26S	ZINC	3/25/2010 11:10	MW09-26S-032510	278	46.9	UG_L	20	16
MW09-27D	ZINC	3/26/2013 12:00	MW09-27D-032613-1	1360 J	440	UG_L	21	17
MW09-27S	ZINC	12/11/2008 15:50	MW09-27S-121108	1780	604	UG_L	20	19
Metals, Total								
MW09-02S	ALUMINUM	9/10/2002 0:00	MW09-02S-NWG-091002	950 J	187	UG_L	34	22
MW09-03D	ALUMINUM	4/28/2008 14:48	MW09-03D-042808	27.9 J	19	UG_L	34	8
MW09-07S	ALUMINUM	4/30/2008 14:01	MW09-7S-043008	48	24.3	UG_L	34	9
MW09-08DA	ALUMINUM	8/7/2009 9:50	MW09-08DA-080709	924	234	UG_L	15	9
MW09-08S	ALUMINUM	7/12/2011 10:29	MW09-08S-071211	101 J	36.9	UG_L	43	14
MW09-09DA	ALUMINUM	8/7/2009 9:22	MW09-09DA-080709	2670	728	UG_L	16	14
MW09-09S	ALUMINUM	3/25/2013 15:20	MW09-09S-032513-1	80.6 J	33.5	UG_L	42	13
MW09-10D	ALUMINUM	12/4/2001 0:00	MW09-10D-NWG-120401	88.1 J	25	UG_L	31	9
MW09-10S	ALUMINUM	8/12/2004 0:00	MW09-10S-NWG-081204	399	101	UG_L	34	8
MW09-11S	ALUMINUM	3/23/2010 2:13	MW09-11S-032310	103 J	35.5	UG_L	41	7
MW09-14D	ALUMINUM	4/30/2008 14:33	MW09-14D-043008	29.5 J	16.6	UG_L	31	5
MW09-14IA	ALUMINUM	8/6/2009 10:00	MW09-14IA-080609	646	213	UG_L	16	14
MW09-17I	ALUMINUM	8/5/2009 14:35	MW09-17I-080509	693	196	UG_L	20	9
MW09-20D	ALUMINUM	9/10/2002 0:00	MW09-20D-NWG-091002	120 J	40.9	UG_L	44	13
MW09-20I	ALUMINUM	12/4/2001 0:00	MW09-201-NWG-120401	299	90.9	UG_L	43	28
MW09-21D	ALUMINUM	6/11/2002 0:00	MW09-21D-NWG-061102	8690	516	UG_L	32	25
MW09-21S	ALUMINUM	9/28/2005 11:49	MW09-21S-20050928	138 J	73.8	UG_L	34	15
MW09-23D	ALUMINUM	9/9/2002 0:00	MW09-23D-NWG-090902	190 J	41.3	UG_L	33	8
MW09-23S	ALUMINUM	10/4/2011 16:05	MW09-23S-100411	254 J	92.5	UG_L	35	11
MW09-24D	ALUMINUM	9/24/2008 15:18	MW09-24D-092408	67.6	22.5	UG_L	35	9
MW09-24S	ALUMINUM	9/24/2008 15:32	MW09-24S-092408	47.1	17.5	UG_L	33	8
MW09-25S	ALUMINUM	3/23/2010 2:10	MW09-25S-032310	105 J	29.3	UG_L	42	15
MW09-26DA	ALUMINUM					UG_L	1	0
MW09-26S	ALUMINUM	9/7/2016 14:30	MW09-26S-ME45-1	587	116	UG_L	20	7
MW09-27D	ALUMINUM	9/10/2015 9:45	MW09-27D-091015-1	206	74.9	UG_L	21	10
MW09-27S	ALUMINUM	12/11/2008 15:50	MW09-27S-121108	226	57	UG_L	20	12
MW09-02S	ANTIMONY	6/16/2004 0:00	MW09-02S-NWG-061604	3.5 J	1.3	UG_L	34	6
MW09-03D	ANTIMONY	6/16/2004 0:00	MW09-03D-NWG-061604	3.9 J	2.9	UG_L	34	3
MW09-07S	ANTIMONY	6/16/2004 0:00	MW09-07S-NWG-061604	3.7 J	3.1	UG_L	34	4
MW09-08DA	ANTIMONY	9/30/2013 13:30	MW09-08DA-093013	0.11 J	0.11	UG_L	15	1
MW09-08S	ANTIMONY	6/16/2004 0:00	MW09-08S-NWG-061604	2.5 J	2.5	UG_L	43	1
MW09-09DA	ANTIMONY					UG_L	16	0
MW09-09S	ANTIMONY	12/15/2010 10:01	MW09-09S-121510	0.52 J	0.52	UG_L	43	1
MW09-10D	ANTIMONY	6/16/2004 0:00	MW09-10D-NWG-061604	3.9 J	3.9	UG_L	31	1
MW09-10S	ANTIMONY	6/16/2004 0:00	MW09-10S-NWG-061604	4.3	2.2	UG_L	34	4
MW09-11S	ANTIMONY	1/31/2008 0:00	MW09-11S-013108	13.3	3.27	UG_L	42	13
MW09-14D	ANTIMONY	6/12/2002 0:00	MW09-14D-NWG-061202	8.1	8.1	UG_L	31	1
MW09-14IA	ANTIMONY	3/18/2010 9:53	MW09-14IA-031810	0.19 J	0.19	UG_L	16	1
MW09-17I	ANTIMONY	9/20/2010 4:15	MW09-17I-092010	0.13 J	0.13	UG_L	20	1
MW09-20D	ANTIMONY					UG_L	44	0
MW09-20I	ANTIMONY	6/5/2002 0:00	MW09-20I-NWG-060502	8.9	2.6	UG_L	43	5
MW09-21D	ANTIMONY	12/5/2001 0:00	MW09-21D-NWG-120501	3.2 J	1.7	UG_L	33	2
MW09-21S	ANTIMONY	9/20/2010 2:55	MW09-21S-092010	0.41 J	0.32	UG_L	35	3
MW09-23D	ANTIMONY	6/17/2004 0:00	MW09-23D-NWG-061704	3 J	3	UG_L	33	1
MW09-23S	ANTIMONY	6/17/2004 0:00	MW09-23S-NWG-061704	7.4	2.9	UG_L	35	6
MW09-24D	ANTIMONY	6/16/2004 0:00	MW09-24D-NWG-061604	11.3	6.67	UG_L	35	3
MW09-24S	ANTIMONY	6/12/2002 0:00	MW09-24S-NWG-061202	23.7	14.9	UG_L	33	3
MW09-25S	ANTIMONY	6/10/2002 0:00	MW09-25S-NWG-061002	11.8	3.38	UG_L	42	5
MW09-26DA	ANTIMONY	9/7/2016 11:25	MW09-26DA-ME45-1	0.26 J	0.26	UG_L	1	1
MW09-26S	ANTIMONY					UG_L	20	0
MW09-27D	ANTIMONY	9/10/2015 9:45	MW09-27D-091015-1	0.32 J	0.32	UG_L	21	1
MW09-27S	ANTIMONY	5/2/2008 14:45	MW09-27S-050208	3.6	2.2	UG_L	20	3
MW09-02S	ARSENIC	9/10/2002 0:00	MW09-02S-NWG-091002	19 J	3.5	UG_L	34	9
MW09-03D	ARSENIC	9/10/2002 0:00	MW09-03D-NWG-091002	7.2 J	2.4	UG_L	34	13
MW09-07S	ARSENIC	9/9/2002 0:00	MW09-07S-NWG-090902	31 J	20.1	UG_L	34	32
MW09-08DA	ARSENIC	3/23/2011 9:50	MW09-08DA-032311	5.4	4.1	UG_L	15	12
MW09-08S	ARSENIC	6/10/2002 0:00	MW09-08S-NWG-061002	11.3	9	UG_L	43	36
MW09-09DA	ARSENIC	10/3/2013 11:35	MW09-09DA-100313	5.7	3.9	UG_L	16	11
MW09-09S	ARSENIC	1/8/2010 10:00	MW09-09S-010810	3.2 J	1.2	UG_L	43	11
MW09-10D	ARSENIC	10/20/2009 15:35	MW09-10D-102009	11.4	7.91	UG_L	31	25
MW09-10S	ARSENIC	9/7/2016 15:25	MW09-10S-ME45-1	15.7	11.2	UG_L	34	30
MW09-11S	ARSENIC	3/23/2010 2:13	MW09-11S-032310	2.7 J	1.5	UG_L	42	10
MW09-14D	ARSENIC	6/30/2003 0:00	MW09-14D-NWG-063003	7.2 J	5.6	UG_L	31	19
MW09-14IA	ARSENIC	3/28/2012 10:05	MW09-14IA-032812	63.4	56.3	UG_L	16	16
MW09-17I	ARSENIC	8/5/2009 14:35	MW09-17I-080509	0.74 J	0.454	UG_L	20	5
MW09-20D	ARSENIC	9/10/2002 0:00	MW09-20D-NWG-091002	12 J	4.9	UG_L	44	30
MW09-20I	ARSENIC	3/6/2007 0:00	MW09-20I_20070306	11.5	7.62	UG_L	43	34
MW09-21D	ARSENIC	6/11/2002 0:00	MW09-21D-NWG-061102	21.1	3.37	UG_L	33	12
MW09-21S	ARSENIC	11/9/2007 12:00	MW09-21S_20071109	31.9	9.25	UG_L	35	26
MW09-23D	ARSENIC	5/5/2003 0:00	MW09-23D-NWG-050503	8.1	4.4	UG_L	33	23
MW09-23S	ARSENIC	6/18/2007 12:10	MW09-23S_20070618	78.4	18.4	UG_L	35	22
MW09-24D	ARSENIC	10/4/2013 10:45	MW09-24D-100413	41.9	21.7	UG_L	35	34
MW09-24S	ARSENIC	10/3/2013 10:20	MW09-24S-100313	7	3.8	UG_L	33	20
MW09-25S	ARSENIC	3/27/2013 10:30	MW09-25S-032713-1	3.9 J	1.52	UG_L	42	14
MW09-26DA	ARSENIC	9/7/2016 11:25	MW09-26DA-ME45-1	7.7	7.7	UG_L	1	1
MW09-26S	ARSENIC	10/13/2009 14:50	MW09-26S-101309	2.6 J	2.2	UG_L	20	2

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-27D	ARSENIC	12/15/2010 9:29	MW09-27D-121510	4 J	1.9	UG_L	21	9
MW09-27S	ARSENIC	9/7/2016 10:15	MW09-27S-ME45-1	3.1	1.15	UG_L	20	7
MW09-02S	BARIUM					UG_L	2	0
MW09-03D	BARIUM	12/3/2001 0:00	MW09-03D-NWG-120301	98.2	98.2	UG_L	2	1
MW09-07S	BARIUM	12/7/2001 0:00	MW09-07S-NWG-120701	93.6	93.6	UG_L	2	1
MW09-08S	BARIUM					UG_L	2	0
MW09-09S	BARIUM					UG_L	2	0
MW09-10D	BARIUM	2/27/2002 0:00	MW09-10D-NWG-022702	351	351	UG_L	2	1
MW09-10S	BARIUM	12/4/2001 0:00	MW09-10S-NWG-120401	121	121	UG_L	2	1
MW09-11S	BARIUM					UG_L	2	0
MW09-14D	BARIUM					UG_L	2	0
MW09-20D	BARIUM					UG_L	2	0
MW09-20I	BARIUM					UG_L	2	0
MW09-21D	BARIUM	12/5/2001 0:00	MW09-21D-NWG-120501	111	111	UG_L	2	1
MW09-21S	BARIUM	12/5/2001 0:00	MW09-21S-NWG-120501	83.5	83.5	UG_L	2	1
MW09-23D	BARIUM	12/6/2001 0:00	MW09-23D-NWG-120601	90	90	UG_L	2	1
MW09-23S	BARIUM	12/6/2001 0:00	MW09-23S-NWG-120601	102	102	UG_L	2	1
MW09-24D	BARIUM					UG_L	2	0
MW09-24S	BARIUM	12/5/2001 0:00	MW09-24S-NWG-120501	389	389	UG_L	2	1
MW09-25S	BARIUM					UG_L	2	0
MW09-02S	BERYLLIUM	3/17/2004 0:00	MW09-02S-NWG-031704	0.13	0.13	UG_L	34	1
MW09-03D	BERYLLIUM					UG_L	34	0
MW09-07S	BERYLLIUM					UG_L	34	0
MW09-08DA	BERYLLIUM	3/22/2010 2:57	MW09-08DA-032210	0.14 J	0.091	UG_L	15	13
MW09-08S	BERYLLIUM	6/19/2007 13:40	MW09-08S_20070619	0.13 J	0.085	UG_L	43	2
MW09-09DA	BERYLLIUM					UG_L	16	0
MW09-09S	BERYLLIUM					UG_L	43	0
MW09-10D	BERYLLIUM					UG_L	31	0
MW09-10S	BERYLLIUM					UG_L	34	0
MW09-11S	BERYLLIUM					UG_L	42	0
MW09-14D	BERYLLIUM					UG_L	31	0
MW09-14IA	BERYLLIUM					UG_L	16	0
MW09-17I	BERYLLIUM					UG_L	20	0
MW09-20D	BERYLLIUM	3/6/2007 0:00	MW09-20D_20070306	0.32 J	0.32	UG_L	44	1
MW09-20I	BERYLLIUM	3/1/2006 0:00	MW09-20I_Q106	2.3 J	0.37	UG_L	43	14
MW09-21D	BERYLLIUM					UG_L	33	0
MW09-21S	BERYLLIUM	6/15/2005 0:00	MW09-21S	6.1	5.8	UG_L	35	3
MW09-23D	BERYLLIUM	3/7/2007 0:00	MW09-23D_20070307	0.63 J	0.63	UG_L	33	1
MW09-23S	BERYLLIUM	6/18/2007 12:10	MW09-23S_20070618	16.8	4.26	UG_L	35	4
MW09-24D	BERYLLIUM					UG_L	35	0
MW09-24S	BERYLLIUM					UG_L	33	0
MW09-25S	BERYLLIUM					UG_L	42	0
MW09-26DA	BERYLLIUM					UG_L	1	0
MW09-26S	BERYLLIUM					UG_L	20	0
MW09-27D	BERYLLIUM					UG_L	21	0
MW09-27S	BERYLLIUM	7/12/2010 4:00:00 PM 9/20/2010 2:55:00 AM 9/29/2011 10:25:00 AM 3/26/2013 12:00:00 PM		0.06 JJJ	0.06	UG_L	20	5
MW09-02S	CADMIUM	12/3/2001 0:00	MW09-02S-NWG-120301	0.41 J	0.41	UG_L	2	1
MW09-03D	CADMIUM					UG_L	2	0
MW09-07S	CADMIUM	12/7/2001 0:00	MW09-07S-NWG-120701	0.44 J	0.44	UG_L	2	1
MW09-08S	CADMIUM					UG_L	2	0
MW09-09S	CADMIUM					UG_L	2	0
MW09-10D	CADMIUM					UG_L	2	0
MW09-10S	CADMIUM					UG_L	2	0
MW09-11S	CADMIUM					UG_L	2	0
MW09-14D	CADMIUM	12/7/2001 0:00	MW09-14D-NWG-120701	0.88	0.88	UG_L	2	1
MW09-20D	CADMIUM					UG_L	2	0
MW09-20I	CADMIUM					UG_L	2	0
MW09-21D	CADMIUM	12/5/2001 0:00	MW09-21D-NWG-120501	0.94	0.94	UG_L	2	1
MW09-21S	CADMIUM					UG_L	2	0
MW09-23D	CADMIUM					UG_L	2	0
MW09-23S	CADMIUM					UG_L	1	0
MW09-24D	CADMIUM					UG_L	2	0
MW09-24S	CADMIUM					UG_L	2	0
MW09-25S	CADMIUM					UG_L	2	0
MW09-02S	CALCIUM	12/3/2001 0:00	MW09-02S-NWG-120301	45600	32600	UG_L	2	2
MW09-03D	CALCIUM	12/3/2001 0:00	MW09-03D-NWG-120301	36500	30800	UG_L	2	2
MW09-07S	CALCIUM	12/7/2001 0:00	MW09-07S-NWG-120701	96900	95400	UG_L	2	2
MW09-08S	CALCIUM	12/4/2001 0:00	MW09-08S-NWG-120401	72400	57500	UG_L	2	2
MW09-09S	CALCIUM	12/5/2001 0:00	MW09-09S-NWG-120501	62600	61800	UG_L	2	2
MW09-10D	CALCIUM	12/4/2001 0:00	MW09-10D-NWG-120401	23600	22500	UG_L	2	2
MW09-10S	CALCIUM	12/4/2001 0:00	MW09-10S-NWG-120401	32600	22300	UG_L	2	2
MW09-11S	CALCIUM	2/27/2002 0:00	MW09-11S-NWG-022702	64500 J	56600	UG_L	2	2
MW09-14D	CALCIUM	12/7/2001 0:00	MW09-14D-NWG-120701	72700	59900	UG_L	2	2
MW09-20D	CALCIUM	12/4/2001 0:00	MW09-20D-NWG-120401	53400	49400	UG_L	2	2
MW09-20I	CALCIUM	12/4/2001 0:00	MW09-201-NWG-120401	31900	25800	UG_L	2	2
MW09-21D	CALCIUM	12/5/2001 0:00	MW09-21D-NWG-120501	30500	30000	UG_L	2	2
MW09-21S	CALCIUM	12/5/2001 0:00	MW09-21S-NWG-120501	31000	25800	UG_L	2	2
MW09-23D	CALCIUM	12/6/2001 0:00	MW09-23D-NWG-120601	26700	24500	UG_L	2	2
MW09-23S	CALCIUM	12/6/2001 0:00	MW09-23S-NWG-120601	193000	182000	UG_L	2	2
MW09-24D	CALCIUM	12/5/2001 0:00	MW09-24D-NWG-120501	57100	47200	UG_L	2	2
MW09-24S	CALCIUM	12/5/2001 0:00	MW09-24S-NWG-120501	57500	37900	UG_L	2	2
MW09-25S	CALCIUM	2/27/2002 0:00	MW09-25S-NWG-022702	20700 J	17300	UG_L	2	2
MW09-02S	CHROMIUM, TOTAL	6/16/2004 0:00	MW09-02S-NWG-061604	3.3 J	1.1	UG_L	34	7
MW09-03D	CHROMIUM, TOTAL	6/16/2004 0:00	MW09-03D-NWG-061604	3.4 J	1.7	UG_L	34	6
MW09-07S	CHROMIUM, TOTAL	6/16/2004 0:00	MW09-07S-NWG-061604	2.7 J	1	UG_L	34	6
MW09-08DA	CHROMIUM, TOTAL	8/7/2009 9:50	MW09-08DA-080709	2 J	0.94	UG_L	15	3
MW09-08S	CHROMIUM, TOTAL	2/28/2002 0:00	MW09-08S-NWG-022802	52.3 J	4.92	UG_L	43	14
MW09-09DA	CHROMIUM, TOTAL	1/11/2010 2:05	MW09-09DA-011110	0.8 J	0.49	UG_L	16	5
MW09-09S	CHROMIUM, TOTAL	12/5/2001 0:00	MW09-09S-NWG-120501	7.3 J	2.3	UG_L	43	16
MW09-10D	CHROMIUM, TOTAL	6/16/2004 0:00	MW09-10D-NWG-061604	2.4 J	0.89	UG_L	31	7
MW09-10S	CHROMIUM, TOTAL	9/26/2014 10:10	MW09-10S-092614-1	23.6 J	4.15	UG_L	34	10
MW09-11S	CHROMIUM, TOTAL	6/16/2004 0:00	MW09-11S-NWG-061604	3 J	0.93	UG_L	42	10
MW09-14D	CHROMIUM, TOTAL	4/30/2008 14:33	MW09-14D-043008	1.5 J	1.1	UG_L	31	4
MW09-14IA	CHROMIUM, TOTAL	9/24/2014 11:30	MW09-14IA-092414-1	13.9 J	3.43	UG_L	16	5
MW09-17I	CHROMIUM, TOTAL	4/1/2009 9:45	MW09-17I-040109	12.8	3.27	UG_L	20	8
MW09-20D	CHROMIUM, TOTAL	7/23/2008 11:55	MW09-20D-072308	4 J	1.6	UG_L	44	8
MW09-20I	CHROMIUM, TOTAL	9/30/2013 14:45	MW09-20I-093013	8	4.4	UG_L	43	30
MW09-21D	CHROMIUM, TOTAL	6/11/2002 0:00	MW09-21D-NWG-061102	18.4 J	4.04	UG_L	33	7
MW09-21S	CHROMIUM, TOTAL	3/17/2004 0:00	MW09-21S-NWG-031704	9.9 J	3.5	UG_L	35	18
MW09-23D	CHROMIUM, TOTAL	4/29/2008 15:26	MW09-23D-042908	7.7 J	2.9	UG_L	33	5
MW09-23S	CHROMIUM, TOTAL	7/1/2003 0:00	MW09-23S-NWG-070103	38.3 J	7.54	UG_L	35	17
MW09-24D	CHROMIUM, TOTAL	6/16/2004 0:00	MW09-24D-NWG-061604	5.2 J	1.5	UG_L	35	6
MW09-24S	CHROMIUM, TOTAL	6/16/2004 0:00	MW09-24S-NWG-061604	21.1	4.82	UG_L	33	5
MW09-25S	CHROMIUM, TOTAL	7/23/2008 10:00	MW09-25S-072308	2.8 J	1.1	UG_L	42	10
MW09-26DA	CHROMIUM, TOTAL	9/7/2016 11:25	MW09-26DA-ME45-1	1.2 J-	1.2	UG_L	1	1
MW09-26S	CHROMIUM, TOTAL	7/17/2008 11:00	MW09-26S-071708	1.2 J	0.72	UG_L	20	6
MW09-27D	CHROMIUM, TOTAL	7/17/2008 9:50	MW09-27D-071708	1.4 J	0.93	UG_L	21	4
MW09-27S	CHROMIUM, TOTAL	5/2/2008 14:45	MW09-27S-050208	0.96 J	0.66	UG_L	20	6
MW09-02S	COBALT					UG_L	2	0
MW09-03D	COBALT					UG_L	2	0
MW09-07S	COBALT	12/7/2001 0:00	MW09-07S-NWG-120701	5.1 J	5.1	UG_L	2	1
MW09-08S	COBALT					UG_L	2	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-09S	COBALT					UG_L	2	0
MW09-10D	COBALT					UG_L	2	0
MW09-10S	COBALT					UG_L	2	0
MW09-11S	COBALT					UG_L	2	0
MW09-14D	COBALT					UG_L	2	0
MW09-20D	COBALT					UG_L	2	0
MW09-20I	COBALT					UG_L	2	0
MW09-21D	COBALT					UG_L	2	0
MW09-21S	COBALT					UG_L	2	0
MW09-23D	COBALT					UG_L	2	0
MW09-23S	COBALT					UG_L	2	0
MW09-24D	COBALT	12/5/2001 0:00	MW09-24D-NWG-120501	3.7 J	3.7	UG_L	2	1
MW09-24S	COBALT					UG_L	2	0
MW09-25S	COBALT					UG_L	2	0
MW09-02S	COPPER	9/10/2002 0:00	MW09-02S-NWG-091002	12 J	3.2	UG_L	34	17
MW09-03D	COPPER	9/10/2002 0:00	MW09-03D-NWG-091002	20	6.9	UG_L	34	4
MW09-07S	COPPER	4/30/2008 14:01	MW09-7S-043008	96.7	9.18	UG_L	34	13
MW09-08DA	COPPER	1/7/2010 1:44	MW09-08DA-010710	6 J	1.8	UG_L	15	6
MW09-08S	COPPER	5/6/2008 15:08	MW09-08S-050608	3 J	1.2	UG_L	43	12
MW09-09DA	COPPER	3/22/2010 1:35	MW09-09DA-032210	1.3 J	0.78	UG_L	16	4
MW09-09S	COPPER	4/30/2008 15:47	MW09-09S-043008	65.8	7.7	UG_L	43	11
MW09-10D	COPPER	4/30/2008 11:21	MW09-10D-043008	98.5	18.4	UG_L	31	6
MW09-10S	COPPER	4/30/2008 11:20	MW09-10S-043008	98.8	10.5	UG_L	34	12
MW09-11S	COPPER	6/4/2002 0:00	MW09-11S-NWG-060402	130	10	UG_L	42	14
MW09-14D	COPPER	4/30/2008 14:33	MW09-14D-043008	81.9 J	22.2	UG_L	31	7
MW09-14IA	COPPER	1/7/2010 10:10	MW09-14IA-010710	2.9 J	1.2	UG_L	16	9
MW09-17I	COPPER	5/6/2008 15:30	MW09-17I-050608	2.6 J	1.1	UG_L	20	5
MW09-20D	COPPER	1/16/2003 0:00	MW09-20D-NWG-011603	5.5 J	1.4	UG_L	44	12
MW09-20I	COPPER	1/16/2003 0:00	MW09-20I-NWG-011603	5.5 J	2	UG_L	43	11
MW09-21D	COPPER	6/11/2002 0:00	MW09-21D-NWG-061102	35	4.9	UG_L	33	10
MW09-21S	COPPER	3/27/2013 12:15	MW09-21S-032713-1	1220	105	UG_L	35	13
MW09-23D	COPPER	1/14/2003 0:00	MW09-23D-NWG-011403	7.7 J	1.8	UG_L	33	8
MW09-23S	COPPER	3/23/2004 0:00	MW09-23S-NWG-032304	79.4 J	18	UG_L	35	13
MW09-24D	COPPER	4/30/2008 16:40	MW09-24D-043008	54.3 J	8.14	UG_L	35	8
MW09-24S	COPPER	4/30/2008 16:39	MW09-24S-043008	68.5 J	23.2	UG_L	33	3
MW09-25S	COPPER	4/30/2008 11:52	MW09-25S-043008	106	11.5	UG_L	42	10
MW09-26DA	COPPER	9/7/2016 11:25	MW09-26DA-ME45-1	2.2	2.2	UG_L	1	1
MW09-26S	COPPER	5/2/2008 15:35	MW09-26S-050208	8.5 J	2.4	UG_L	20	8
MW09-27D	COPPER	3/24/2010 1:45	MW09-27D-032410	9.3 J	2.3	UG_L	21	10
MW09-27S	COPPER	5/2/2008 14:45	MW09-27S-050208	13.7 J	3.25	UG_L	20	8
MW09-02S	IRON	9/23/2010 3:00	MW09-02S-092310	2850	385	UG_L	34	27
MW09-03D	IRON	6/16/2004 0:00	MW09-03D-NWG-061604	7650	2000	UG_L	34	34
MW09-07S	IRON	1/21/2003 12:00:00 AM 12/4/2003 12:00:00 AM		22800	17800	UG_L	34	34
MW09-08DA	IRON	3/22/2010 2:57	MW09-08DA-032210	12700	11500	UG_L	15	15
MW09-08S	IRON	10/5/2011 9:24	MW09-08S-100511	6760	5080	UG_L	43	43
MW09-09DA	IRON	9/7/2016 14:05	MW09-09DA-ME45-1	2460	1260	UG_L	16	9
MW09-09S	IRON	6/14/2005 0:00	MW09-09S	3310	1000	UG_L	43	43
MW09-10D	IRON	4/30/2008 11:21	MW09-10D-043008	1110	898	UG_L	31	30
MW09-10S	IRON	11/3/2006 9:55	MW09-10S-20061103	21300	11500	UG_L	34	33
MW09-11S	IRON	7/2/2003 0:00	MW09-11S-NWG-070203	18400	5180	UG_L	42	42
MW09-14D	IRON	12/4/2003 0:00	MW09-14D-NWG-120403	57800	33200	UG_L	31	31
MW09-14IA	IRON	3/28/2013 10:25	MW09-14IA-032813-1	17100	15000	UG_L	16	16
MW09-17I	IRON	2/10/2008 0:00	MW09-17I-021008	10800	8380	UG_L	20	20
MW09-20D	IRON	3/30/2011 10:43	MW09-20D-033011	4480	3210	UG_L	44	44
MW09-20I	IRON	10/20/2004 0:00	MW09-20I-NWG-102004	36400	23900	UG_L	43	43
MW09-21D	IRON	6/11/2002 0:00	MW09-21D-NWG-061102	12700	1460	UG_L	33	31
MW09-21S	IRON	3/30/2011 2:25	MW09-21S-033011	3420	2290	UG_L	35	35
MW09-23D	IRON	4/29/2008 15:26	MW09-23D-042908	8140 J	3400	UG_L	33	33
MW09-23S	IRON	10/4/2011 16:05	MW09-23S-100411	33400	10400	UG_L	35	33
MW09-24D	IRON	3/31/2011 10:29	MW09-24D-033111	140000	55500	UG_L	35	35
MW09-24S	IRON	10/21/2004 0:00	MW09-24S-NWG-102104	95700	48100	UG_L	33	33
MW09-25S	IRON	6/10/2002 0:00	MW09-25S-NWG-061002	30300	15700	UG_L	42	42
MW09-26DA	IRON	9/7/2016 11:25	MW09-26DA-ME45-1	6590	6590	UG_L	1	1
MW09-26S	IRON	9/7/2016 14:30	MW09-26S-ME45-1	731	165	UG_L	20	6
MW09-27D	IRON	12/15/2010 9:29	MW09-27D-121510	9160 J	2210	UG_L	21	20
MW09-27S	IRON	1/30/2008 0:00	MW09-27S-013008	18500	5540	UG_L	20	16
MW09-02S	LEAD	3/1/2002 0:00	MW09-02S-NWG-030102	11.1 J	2.71	UG_L	34	6
MW09-03D	LEAD	9/10/2002 0:00	MW09-03D-NWG-091002	4.5	1.5	UG_L	34	5
MW09-07S	LEAD	6/16/2004 0:00	MW09-07S-NWG-061604	2	0.77	UG_L	34	5
MW09-08DA	LEAD	8/7/2009 9:50	MW09-08DA-080709	1.9	0.87	UG_L	15	9
MW09-08S	LEAD	6/16/2004 0:00	MW09-08S-NWG-061604	1.4	0.55	UG_L	43	8
MW09-09DA	LEAD	10/20/2009 11:20	MW09-09DA-102009	1.2 J	0.59	UG_L	16	3
MW09-09S	LEAD	7/13/2010 11:25	MW09-09S-071310	1.2 J	0.35	UG_L	43	5
MW09-10D	LEAD	6/18/2007 13:30	MW09-10D_20070618	0.96 J	0.38	UG_L	31	5
MW09-10S	LEAD	9/6/2002 0:00	MW09-10S-NWG-090602	2.6 J	0.82	UG_L	34	12
MW09-11S	LEAD	9/8/2016 14:00	MW09-11S-ME45-1	1.1	0.64	UG_L	42	7
MW09-14D	LEAD	12/4/2003 0:00	MW09-14D-NWG-120403	0.52	0.52	UG_L	31	1
MW09-14IA	LEAD	7/15/2010 17:40	MW09-14IA-071510	0.95 J	0.35	UG_L	16	3
MW09-17I	LEAD	7/15/2010 14:10	MW09-17I-071510	1.1 J	0.64	UG_L	20	5
MW09-20D	LEAD	3/6/2007 12:00:00 AM 1/8/2010 10:40:00 AM 9/11/2015 11:50:00 AM		1.1 JJ	0.66	UG_L	44	12
MW09-20I	LEAD	7/14/2010 14:10	MW09-20I-071410	1.5 J	0.54	UG_L	43	6
MW09-21D	LEAD	6/11/2002 0:00	MW09-21D-NWG-061102	38.2	5.21	UG_L	33	8
MW09-21S	LEAD	12/8/2003 0:00	MW09-21S-NWG-120803	0.38	0.23	UG_L	35	7
MW09-23D	LEAD	3/7/2007 0:00	MW09-23D_20070307	1.3 J	0.51	UG_L	33	4
MW09-23S	LEAD	6/18/2007 12:10	MW09-23S_20070618	8.199999	1.86125	UG_L	35	8
MW09-24D	LEAD	2/28/2002 0:00	MW09-24D-NWG-022802	13.1 J	4.33	UG_L	35	5
MW09-24S	LEAD	9/24/2008 15:32	MW09-24S-092408	3.4 J	1.7	UG_L	33	2
MW09-25S	LEAD	1/31/2008 0:00	MW09-25S-013108	4.8 J	1.1	UG_L	42	15
MW09-26DA	LEAD					UG_L	1	0
MW09-26S	LEAD	9/7/2016 14:30	MW09-26S-ME45-1	2.1	0.86	UG_L	20	4
MW09-27D	LEAD	7/12/2010 16:00	MW09-27D-071210	1 J	0.48	UG_L	21	4
MW09-27S	LEAD	7/12/2010 16:00	MW09-27S-071210	1.2 J	0.65	UG_L	20	4
MW09-02S	MAGNESIUM	12/3/2001 0:00	MW09-02S-NWG-120301	7650	5220	UG_L	2	2
MW09-03D	MAGNESIUM	12/3/2001 0:00	MW09-03D-NWG-120301	29400	25200	UG_L	2	2
MW09-07S	MAGNESIUM	2/27/2002 0:00	MW09-07S-NWG-022702	54600	54300	UG_L	2	2
MW09-08S	MAGNESIUM	12/4/2001 0:00	MW09-08S-NWG-120401	38100	30500	UG_L	2	2
MW09-09S	MAGNESIUM	12/5/2001 0:00	MW09-09S-NWG-120501	69100	65300	UG_L	2	2
MW09-10D	MAGNESIUM	12/4/2001 0:00	MW09-10D-NWG-120401	3320	3320	UG_L	2	1
MW09-10S	MAGNESIUM	12/4/2001 0:00	MW09-10S-NWG-120401	27800	23900	UG_L	2	2
MW09-11S	MAGNESIUM	2/27/2002 0:00	MW09-11S-NWG-022702	13500	13400	UG_L	2	2
MW09-14D	MAGNESIUM	12/7/2001 0:00	MW09-14D-NWG-120701	17400	14800	UG_L	2	2
MW09-20D	MAGNESIUM	12/4/2001 0:00	MW09-20D-NWG-120401	11900	10900	UG_L	2	2
MW09-20I	MAGNESIUM	12/4/2001 0:00	MW09-201-NWG-120401	37500	30300	UG_L	2	2
MW09-21D	MAGNESIUM	12/5/2001 0:00	MW09-21D-NWG-120501	14300	13400	UG_L	2	2
MW09-21S	MAGNESIUM	12/5/2001 0:00	MW09-21S-NWG-120501	55500	47800	UG_L	2	2
MW09-23D	MAGNESIUM	12/6/2001 0:00	MW09-23D-NWG-120601	30500	29000	UG_L	2	2
MW09-23S	MAGNESIUM	12/6/2001 0:00	MW09-23S-NWG-120601	696000	651000	UG_L	2	2
MW09-24D	MAGNESIUM	12/5/2001 0:00	MW09-24D-NWG-120501	8740	7100	UG_L	2	2
MW09-24S	MAGNESIUM	12/5/2001 0:00	MW09-24S-NWG-120501	10200	6700	UG_L	2	2
MW09-25S	MAGNESIUM	2/27/2002 0:00	MW09-25S-NWG-022702	6960	4890	UG_L	2	2
MW09-02S	MANGANESE	9/10/2002 0:00	MW09-02S-NWG-091002	1200 J	210	UG_L	34	33
MW09-03D	MANGANESE	5/1/2003 0:00	MW09-03D-NWG-050103	1230 J	879	UG_L	34	34
MW09-07S	MANGANESE	5/5/2003 0:00	MW09-07S-NWG-050503	231	178	UG_L	34	34

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-08DA	MANGANESE	8/7/2009 9:50	MW09-08DA-080709	651	475	UG_L	15	15
MW09-08S	MANGANESE	7/1/2003 0:00	MW09-08S-NWG-070103	979 J	839	UG_L	43	43
MW09-09DA	MANGANESE	3/25/2013 14:45	MW09-09DA-032513-1	591	262	UG_L	16	14
MW09-09S	MANGANESE	9/11/2002 0:00	MW09-09S-NWG-091102	2000	1150	UG_L	43	43
MW09-10D	MANGANESE	3/25/2011 9:50	MW09-10D-032511	475 J	401	UG_L	31	31
MW09-10S	MANGANESE	7/1/2003 0:00	MW09-10S-NWG-070103	505 J	365	UG_L	34	33
MW09-11S	MANGANESE	7/2/2003 0:00	MW09-11S-NWG-070203	4110 J	1040	UG_L	42	42
MW09-14D	MANGANESE	6/30/2003 0:00	MW09-14D-NWG-063003	1380 J	1080	UG_L	31	31
MW09-14IA	MANGANESE	8/6/2009 10:00	MW09-14IA-080609	961	234	UG_L	16	16
MW09-17I	MANGANESE	5/6/2008 15:30	MW09-17I-050608	1110	908	UG_L	20	20
MW09-20D	MANGANESE	3/30/2011 10:43	MW09-20D-033011	1320 J	971	UG_L	44	44
MW09-20I	MANGANESE	10/20/2004 0:00	MW09-20I-NWG-102004	1060	802	UG_L	43	43
MW09-21D	MANGANESE	6/11/2002 0:00	MW09-21D-NWG-061102	654	261	UG_L	33	33
MW09-21S	MANGANESE	12/5/2001 0:00	MW09-21S-NWG-120501	218	89.6	UG_L	35	35
MW09-23D	MANGANESE	12/6/2001 0:00	MW09-23D-NWG-120601	915	635	UG_L	33	33
MW09-23S	MANGANESE	10/4/2011 16:05	MW09-23S-100411	852	440	UG_L	35	34
MW09-24D	MANGANESE	3/31/2011 10:29	MW09-24D-033111	1200 J	480	UG_L	35	35
MW09-24S	MANGANESE	3/18/2004 12:00:00 AM 10/21/2004 12:00:00 AM		2690	1380	UG_L	33	33
MW09-25S	MANGANESE	12/10/2008 9:32	MW09-25S-121008	945	390	UG_L	42	42
MW09-26DA	MANGANESE	9/7/2016 11:25	MW09-26DA-ME45-1	409	409	UG_L	1	1
MW09-26S	MANGANESE	1/30/2008 0:00	MW09-26S-013008	130	18.5	UG_L	20	19
MW09-27D	MANGANESE	9/29/2011 10:08	MW09-27D-092911	994	461	UG_L	21	21
MW09-27S	MANGANESE	8/6/2009 8:52	MW09-27S-080609	721	204	UG_L	20	20
MW09-02S	MERCURY	6/11/2002 0:00	MW09-02S-NWG-061102	0.08 J	0.08	UG_L	33	1
MW09-03D	MERCURY	6/11/2002 0:00	MW09-03D-NWG-061102	0.09 J	0.053	UG_L	33	4
MW09-07S	MERCURY	9/27/2005 13:43	MW09-07S-20050927	0.11 J	0.11	UG_L	34	1
MW09-08DA	MERCURY					UG_L	15	0
MW09-08S	MERCURY	12/15/2005 11:45	MW09-08S-20051215	0.08 J	0.043	UG_L	42	3
MW09-09DA	MERCURY	9/7/2016 14:05	MW09-09DA-ME45-1	0.041 J	0.041	UG_L	16	1
MW09-09S	MERCURY	12/5/2001 0:00	MW09-09S-NWG-120501	0.08 J	0.05	UG_L	42	2
MW09-10D	MERCURY	9/6/2002 0:00	MW09-10D-NWG-090602	0.78 J	0.78	UG_L	31	1
MW09-10S	MERCURY	9/6/2002 0:00	MW09-10S-NWG-090602	0.98 J	0.28	UG_L	34	4
MW09-11S	MERCURY	9/10/2003 0:00	MW09-11S-NWG-091003	0.22	0.13	UG_L	41	2
MW09-14D	MERCURY	12/7/2001 0:00	MW09-14D-NWG-120701	0.13 J	0.13	UG_L	30	1
MW09-14IA	MERCURY					UG_L	16	0
MW09-17I	MERCURY					UG_L	20	0
MW09-20D	MERCURY					UG_L	43	0
MW09-20I	MERCURY	9/15/2003 0:00	MW09-20I-NWG-091503	0.05 J	0.05	UG_L	42	1
MW09-21D	MERCURY	9/28/2005 14:45	MW09-21D-20050928	0.17 J	0.084	UG_L	32	4
MW09-21S	MERCURY	10/4/2011 14:22	MW09-21S-100411	0.02 J	0.02	UG_L	34	1
MW09-23D	MERCURY	12/6/2001 0:00	MW09-23D-NWG-120601	0.07 J	0.07	UG_L	33	1
MW09-23S	MERCURY	3/23/2005 0:00	MW09-23S-032305	0.095 J	0.066	UG_L	35	4
MW09-24D	MERCURY					UG_L	34	0
MW09-24S	MERCURY	9/8/2016 14:15	MW09-24S-ME45-1	0.037 J	0.029	UG_L	32	2
MW09-25S	MERCURY	6/14/2005 0:00	MW09-25S	0.098 J	0.064	UG_L	41	2
MW09-26DA	MERCURY					UG_L	1	0
MW09-26S	MERCURY					UG_L	20	0
MW09-27D	MERCURY	9/6/2016 13:00	MW09-27D-ME45-1	0.045 J	0.045	UG_L	21	1
MW09-27S	MERCURY					UG_L	20	0
MW09-02S	NICKEL	9/23/2010 3:00	MW09-02S-092310	3.5 J	1.7	UG_L	34	16
MW09-03D	NICKEL	5/1/2003 0:00	MW09-03D-NWG-050103	5.6 J	2.3	UG_L	34	19
MW09-07S	NICKEL	5/5/2003 0:00	MW09-07S-NWG-050503	3.2	1.8	UG_L	34	15
MW09-08DA	NICKEL	8/7/2009 9:50	MW09-08DA-080709	2.9	1.1	UG_L	15	6
MW09-08S	NICKEL	5/6/2008 15:08	MW09-08S-050608	4.2	2.5	UG_L	43	29
MW09-09DA	NICKEL	1/11/2010 2:05	MW09-09DA-011110	11.2 J	2.25	UG_L	16	7
MW09-09S	NICKEL	7/1/2003 0:00	MW09-09S-NWG-070103	2.7	1.6	UG_L	43	16
MW09-10D	NICKEL	11/3/2006 9:40	MW09-10D-20061103	1.6 J	0.77	UG_L	31	8
MW09-10S	NICKEL	10/4/2013 10:20	MW09-10S-100413	11	2.8	UG_L	34	21
MW09-11S	NICKEL	12/10/2008 13:15	MW09-11S-121008	72.2	25.4	UG_L	42	40
MW09-14D	NICKEL	9/9/2002 0:00	MW09-14D-NWG-090902	39	4.7	UG_L	31	12
MW09-14IA	NICKEL	9/18/2015 11:35	MW09-14IA-091815-1	3.6 J	2.4	UG_L	16	12
MW09-17I	NICKEL	4/1/2009 9:45	MW09-17I-040109	8.4	1.9	UG_L	20	7
MW09-20D	NICKEL	7/1/2003 0:00	MW09-20D-NWG-070103	2.5	1.3	UG_L	44	14
MW09-20I	NICKEL	3/22/2004 0:00	MW09-20I-NWG-032204	4.9	2.1	UG_L	43	26
MW09-21D	NICKEL	6/11/2002 0:00	MW09-21D-NWG-061102	10.4 J	1.68	UG_L	33	15
MW09-21S	NICKEL	5/5/2008 15:15	MW09-21S-050508	19.9	3.73	UG_L	35	19
MW09-23D	NICKEL	9/8/2016 11:25	MW09-23D-ME45-1	7.2 J	1.8	UG_L	33	11
MW09-23S	NICKEL	7/1/2003 0:00	MW09-23S-NWG-070103	24.6	7.78	UG_L	35	13
MW09-24D	NICKEL	9/16/2010 2:40	MW09-24D-091610	12.6 J	3.87	UG_L	35	18
MW09-24S	NICKEL	6/16/2004 0:00	MW09-24S-NWG-061604	24.8	3.13	UG_L	33	13
MW09-25S	NICKEL	3/29/2012 11:58	MW09-25S-032912	17 J	2.2	UG_L	42	20
MW09-26DA	NICKEL	9/7/2016 11:25	MW09-26DA-ME45-1	1.1	1.1	UG_L	1	1
MW09-26S	NICKEL	1/30/2008 0:00	MW09-26S-013008	2.4	1	UG_L	20	8
MW09-27D	NICKEL	7/13/2011 8:46	MW09-27D-071311	3.1 J	1.6	UG_L	21	13
MW09-27S	NICKEL	5/2/2008 14:45	MW09-27S-050208	5.8	1.8	UG_L	20	12
MW09-02S	POTASSIUM	12/3/2001 0:00	MW09-02S-NWG-120301	7350	5480	UG_L	2	2
MW09-03D	POTASSIUM	12/3/2001 0:00	MW09-03D-NWG-120301	16500	13800	UG_L	2	2
MW09-07S	POTASSIUM	2/27/2002 0:00	MW09-07S-NWG-022702	33500	32600	UG_L	2	2
MW09-08S	POTASSIUM	12/4/2001 0:00	MW09-08S-NWG-120401	33900	27800	UG_L	2	2
MW09-09S	POTASSIUM	12/5/2001 0:00	MW09-09S-NWG-120501	42600	40300	UG_L	2	2
MW09-10D	POTASSIUM	2/27/2002 0:00	MW09-10D-NWG-022702	1290	1200	UG_L	2	2
MW09-10S	POTASSIUM	12/4/2001 0:00	MW09-10S-NWG-120401	29800	28500	UG_L	2	2
MW09-11S	POTASSIUM	12/4/2001 0:00	MW09-11S-NWG-120401	7860	6230	UG_L	2	2
MW09-14D	POTASSIUM	12/7/2001 0:00	MW09-14D-NWG-120701	3370	3000	UG_L	2	2
MW09-20D	POTASSIUM	12/4/2001 0:00	MW09-20D-NWG-120401	3720	3450	UG_L	2	2
MW09-20I	POTASSIUM	12/4/2001 0:00	MW09-201-NWG-120401	29400	23300	UG_L	2	2
MW09-21D	POTASSIUM	12/5/2001 0:00	MW09-21D-NWG-120501	26000	25100	UG_L	2	2
MW09-21S	POTASSIUM	12/5/2001 0:00	MW09-21S-NWG-120501	55000	47200	UG_L	2	2
MW09-23D	POTASSIUM	12/6/2001 0:00	MW09-23D-NWG-120601	11700	11000	UG_L	2	2
MW09-23S	POTASSIUM	12/6/2001 0:00	MW09-23S-NWG-120601	219000	195000	UG_L	2	2
MW09-24D	POTASSIUM	12/5/2001 0:00	MW09-24D-NWG-120501	11200	9070	UG_L	2	2
MW09-24S	POTASSIUM	12/5/2001 0:00	MW09-24S-NWG-120501	8340	6350	UG_L	2	2
MW09-25S	POTASSIUM	12/4/2001 0:00	MW09-25S-NWG-120401	8470	8370	UG_L	2	2
MW09-02S	SELENIUM					UG_L	2	0
MW09-03D	SELENIUM					UG_L	2	0
MW09-07S	SELENIUM					UG_L	2	0
MW09-08S	SELENIUM					UG_L	2	0
MW09-09S	SELENIUM					UG_L	2	0
MW09-10D	SELENIUM					UG_L	2	0
MW09-10S	SELENIUM					UG_L	2	0
MW09-11S	SELENIUM					UG_L	2	0
MW09-14D	SELENIUM					UG_L	2	0
MW09-20D	SELENIUM					UG_L	2	0
MW09-20I	SELENIUM					UG_L	2	0
MW09-21D	SELENIUM					UG_L	2	0
MW09-21S	SELENIUM					UG_L	2	0
MW09-23D	SELENIUM					UG_L	2	0
MW09-23S	SELENIUM	12/6/2001 0:00	MW09-23S-NWG-120601	4.4 J	4.4	UG_L	2	1
MW09-24D	SELENIUM					UG_L	2	0
MW09-24S	SELENIUM					UG_L	2	0
MW09-25S	SELENIUM					UG_L	2	0
MW09-02S	SILVER					UG_L	2	0
MW09-03D	SILVER					UG_L	2	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-07S	SILVER					UG_L	2	0
MW09-08S	SILVER					UG_L	2	0
MW09-09S	SILVER					UG_L	2	0
MW09-10D	SILVER	2/27/2002 0:00	MW09-10D-NWG-022702	235	235	UG_L	2	1
MW09-10S	SILVER					UG_L	2	0
MW09-11S	SILVER					UG_L	2	0
MW09-14D	SILVER					UG_L	2	0
MW09-20D	SILVER					UG_L	2	0
MW09-20I	SILVER					UG_L	2	0
MW09-21D	SILVER					UG_L	2	0
MW09-21S	SILVER					UG_L	2	0
MW09-23D	SILVER					UG_L	2	0
MW09-23S	SILVER					UG_L	2	0
MW09-24D	SILVER					UG_L	2	0
MW09-24S	SILVER					UG_L	2	0
MW09-25S	SILVER					UG_L	2	0
MW09-02S	SODIUM	12/3/2001 0:00	MW09-02S-NWG-120301	11000	8110	UG_L	2	2
MW09-03D	SODIUM	12/3/2001 0:00	MW09-03D-NWG-120301	27600	22500	UG_L	2	2
MW09-07S	SODIUM	2/27/2002 0:00	MW09-07S-NWG-022702	35400 J	34100	UG_L	2	2
MW09-08S	SODIUM	12/4/2001 0:00	MW09-08S-NWG-120401	163000	136000	UG_L	2	2
MW09-09S	SODIUM	3/1/2002 0:00	MW09-09S-NWG-030102	140000 J	137000	UG_L	2	2
MW09-10D	SODIUM	2/27/2002 0:00	MW09-10D-NWG-022702	9400 J	8630	UG_L	2	2
MW09-10S	SODIUM	2/27/2002 0:00	MW09-10S-NWG-022702	138000 J	132000	UG_L	2	2
MW09-11S	SODIUM	12/4/2001 0:00	MW09-11S-NWG-120401	93700	73600	UG_L	2	2
MW09-14D	SODIUM	12/7/2001 0:00	MW09-14D-NWG-120701	93400	85400	UG_L	2	2
MW09-20D	SODIUM	12/4/2001 0:00	MW09-20D-NWG-120401	42300	39000	UG_L	2	2
MW09-20I	SODIUM	12/4/2001 0:00	MW09-201-NWG-120401	333000	268000	UG_L	2	2
MW09-21D	SODIUM	12/5/2001 0:00	MW09-21D-NWG-120501	21800	20700	UG_L	2	2
MW09-21S	SODIUM	12/5/2001 0:00	MW09-21S-NWG-120501	642000	551000	UG_L	2	2
MW09-23D	SODIUM	12/6/2001 0:00	MW09-23D-NWG-120601	151000	145000	UG_L	2	2
MW09-23S	SODIUM	2/27/2002 0:00	MW09-23S-NWG-022702	5060000 J	5060000	UG_L	2	1
MW09-24D	SODIUM	12/5/2001 0:00	MW09-24D-NWG-120501	13300	11000	UG_L	2	2
MW09-24S	SODIUM	12/5/2001 0:00	MW09-24S-NWG-120501	34500	29000	UG_L	2	2
MW09-25S	SODIUM	2/27/2002 0:00	MW09-25S-NWG-022702	83800 J	73300	UG_L	2	2
MW09-02S	VANADIUM					UG_L	2	0
MW09-03D	VANADIUM					UG_L	2	0
MW09-07S	VANADIUM					UG_L	2	0
MW09-08S	VANADIUM					UG_L	2	0
MW09-09S	VANADIUM					UG_L	2	0
MW09-10D	VANADIUM					UG_L	2	0
MW09-10S	VANADIUM					UG_L	2	0
MW09-11S	VANADIUM					UG_L	2	0
MW09-14D	VANADIUM					UG_L	2	0
MW09-20D	VANADIUM					UG_L	2	0
MW09-20I	VANADIUM	12/4/2001 0:00	MW09-201-NWG-120401	6.8 J	6.8	UG_L	2	1
MW09-21D	VANADIUM					UG_L	2	0
MW09-21S	VANADIUM	12/5/2001 0:00	MW09-21S-NWG-120501	13.6	13.6	UG_L	2	1
MW09-23D	VANADIUM					UG_L	2	0
MW09-23S	VANADIUM					UG_L	2	0
MW09-24D	VANADIUM					UG_L	2	0
MW09-24S	VANADIUM					UG_L	2	0
MW09-25S	VANADIUM					UG_L	2	0
MW09-02S	ZINC	9/6/2016 14:50	MW09-02S-ME45-1	46.1	11.4	UG_L	34	26
MW09-03D	ZINC	4/28/2008 14:48	MW09-03D-042808	27 J	7.5	UG_L	34	22
MW09-07S	ZINC	3/30/2009 11:17	MW09-07S-033009	25.7	9.37	UG_L	34	28
MW09-08DA	ZINC	8/7/2009 9:50	MW09-08DA-080709	15.3	5.89	UG_L	15	7
MW09-08S	ZINC	6/16/2004 0:00	MW09-08S-NWG-061604	27	9.79	UG_L	43	24
MW09-09DA	ZINC	3/29/2012 13:31	MW09-09DA-032912	16.1	6.7	UG_L	16	6
MW09-09S	ZINC	4/30/2008 15:47	MW09-09S-043008	25.6	8.64	UG_L	43	24
MW09-10D	ZINC	3/25/2009 10:21	MW09-10D-032509	14.7	5.77	UG_L	31	18
MW09-10S	ZINC	9/26/2014 10:10	MW09-10S-092614-1	84.7 J	11.5	UG_L	34	26
MW09-11S	ZINC	12/16/2010 13:54	MW09-11S-121610	889	251	UG_L	42	37
MW09-14D	ZINC	12/7/2001 0:00	MW09-14D-NWG-120701	13.7 J	5.61	UG_L	31	15
MW09-14IA	ZINC	10/20/2009 11:15	MW09-14IA-102009	47.8	17.7	UG_L	16	14
MW09-17I	ZINC	8/5/2009 14:35	MW09-17I-080509	15	8	UG_L	20	8
MW09-20D	ZINC	8/7/2009 13:46	MW09-20D-080709	12.8	6.73	UG_L	44	25
MW09-20I	ZINC	3/26/2009 9:36	MW09-20I-032609	12.4	6.4	UG_L	43	21
MW09-21D	ZINC	6/11/2002 0:00	MW09-21D-NWG-061102	190	16.7	UG_L	33	17
MW09-21S	ZINC	3/24/2010 2:00	MW09-21S-032410	66.7 J	11.8	UG_L	35	18
MW09-23D	ZINC	4/29/2008 15:26	MW09-23D-042908	38.9 J	8.16	UG_L	33	20
MW09-23S	ZINC	9/24/2014 14:45	MW09-23S-092414-1	216 J	32.1	UG_L	35	12
MW09-24D	ZINC	6/16/2004 0:00	MW09-24D-NWG-061604	34.9	7.83	UG_L	35	12
MW09-24S	ZINC	4/30/2008 16:39	MW09-24S-043008	17.2	6.02	UG_L	33	16
MW09-25S	ZINC	3/29/2012 11:58	MW09-25S-032912	60.7 J	8.69	UG_L	42	17
MW09-26DA	ZINC	9/7/2016 11:25	MW09-26DA-ME45-1	21.3	21.3	UG_L	1	1
MW09-26S	ZINC	3/25/2010 11:10	MW09-26S-032510	283	47.1	UG_L	20	16
MW09-27D	ZINC	3/26/2013 12:00	MW09-27D-032613-1	1480	456	UG_L	21	18
MW09-27S	ZINC	12/11/2008 15:50	MW09-27S-121108	1900	610	UG_L	20	19
PCBs				PCBs				
MW09-02S	AROCLOR-1016					UG_L	22	0
MW09-03D	AROCLOR-1016					UG_L	21	0
MW09-07S	AROCLOR-1016					UG_L	24	0
MW09-08DA	AROCLOR-1016					UG_L	15	0
MW09-08S	AROCLOR-1016					UG_L	22	0
MW09-09DA	AROCLOR-1016					UG_L	15	0
MW09-09S	AROCLOR-1016					UG_L	21	0
MW09-10D	AROCLOR-1016					UG_L	22	0
MW09-10S	AROCLOR-1016					UG_L	22	0
MW09-11S	AROCLOR-1016					UG_L	44	0
MW09-14D	AROCLOR-1016					UG_L	22	0
MW09-14IA	AROCLOR-1016					UG_L	15	0
MW09-17I	AROCLOR-1016					UG_L	20	0
MW09-20D	AROCLOR-1016					UG_L	21	0
MW09-20I	AROCLOR-1016					UG_L	22	0
MW09-21D	AROCLOR-1016					UG_L	22	0
MW09-21S	AROCLOR-1016					UG_L	25	0
MW09-23D	AROCLOR-1016					UG_L	22	0
MW09-23S	AROCLOR-1016					UG_L	22	0
MW09-24D	AROCLOR-1016					UG_L	24	0
MW09-24S	AROCLOR-1016					UG_L	23	0
MW09-25S	AROCLOR-1016					UG_L	42	0
MW09-26DA	AROCLOR-1016					UG_L	1	0
MW09-26S	AROCLOR-1016					UG_L	20	0
MW09-27D	AROCLOR-1016					UG_L	21	0
MW09-27S	AROCLOR-1016					UG_L	21	0
MW09-02S	AROCLOR-1221					UG_L	22	0
MW09-03D	AROCLOR-1221					UG_L	21	0
MW09-07S	AROCLOR-1221					UG_L	24	0
MW09-08DA	AROCLOR-1221					UG_L	15	0
MW09-08S	AROCLOR-1221					UG_L	22	0
MW09-09DA	AROCLOR-1221					UG_L	15	0
MW09-09S	AROCLOR-1221					UG_L	21	0
MW09-10D	AROCLOR-1221					UG_L	22	0
MW09-10S	AROCLOR-1221					UG_L	22	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-11S	AROCLOR-1221					UG_L	44	0
MW09-14D	AROCLOR-1221					UG_L	22	0
MW09-14IA	AROCLOR-1221					UG_L	15	0
MW09-17I	AROCLOR-1221					UG_L	20	0
MW09-20D	AROCLOR-1221					UG_L	21	0
MW09-20I	AROCLOR-1221					UG_L	22	0
MW09-21D	AROCLOR-1221					UG_L	22	0
MW09-21S	AROCLOR-1221					UG_L	25	0
MW09-23D	AROCLOR-1221					UG_L	22	0
MW09-23S	AROCLOR-1221					UG_L	22	0
MW09-24D	AROCLOR-1221					UG_L	24	0
MW09-24S	AROCLOR-1221					UG_L	23	0
MW09-25S	AROCLOR-1221					UG_L	42	0
MW09-26DA	AROCLOR-1221					UG_L	1	0
MW09-26S	AROCLOR-1221					UG_L	20	0
MW09-27D	AROCLOR-1221					UG_L	21	0
MW09-27S	AROCLOR-1221					UG_L	21	0
MW09-02S	AROCLOR-1232					UG_L	22	0
MW09-03D	AROCLOR-1232					UG_L	21	0
MW09-07S	AROCLOR-1232					UG_L	24	0
MW09-08DA	AROCLOR-1232					UG_L	15	0
MW09-08S	AROCLOR-1232					UG_L	22	0
MW09-09DA	AROCLOR-1232					UG_L	15	0
MW09-09S	AROCLOR-1232					UG_L	21	0
MW09-10D	AROCLOR-1232					UG_L	22	0
MW09-10S	AROCLOR-1232					UG_L	22	0
MW09-11S	AROCLOR-1232					UG_L	44	0
MW09-14D	AROCLOR-1232					UG_L	22	0
MW09-14IA	AROCLOR-1232					UG_L	15	0
MW09-17I	AROCLOR-1232					UG_L	20	0
MW09-20D	AROCLOR-1232					UG_L	21	0
MW09-20I	AROCLOR-1232					UG_L	22	0
MW09-21D	AROCLOR-1232					UG_L	22	0
MW09-21S	AROCLOR-1232					UG_L	25	0
MW09-23D	AROCLOR-1232					UG_L	22	0
MW09-23S	AROCLOR-1232					UG_L	22	0
MW09-24D	AROCLOR-1232					UG_L	24	0
MW09-24S	AROCLOR-1232					UG_L	23	0
MW09-25S	AROCLOR-1232					UG_L	42	0
MW09-26DA	AROCLOR-1232					UG_L	1	0
MW09-26S	AROCLOR-1232					UG_L	20	0
MW09-27D	AROCLOR-1232					UG_L	21	0
MW09-27S	AROCLOR-1232					UG_L	21	0
MW09-02S	AROCLOR-1242					UG_L	22	0
MW09-03D	AROCLOR-1242					UG_L	21	0
MW09-07S	AROCLOR-1242					UG_L	24	0
MW09-08DA	AROCLOR-1242					UG_L	15	0
MW09-08S	AROCLOR-1242					UG_L	22	0
MW09-09DA	AROCLOR-1242					UG_L	15	0
MW09-09S	AROCLOR-1242					UG_L	21	0
MW09-10D	AROCLOR-1242					UG_L	22	0
MW09-10S	AROCLOR-1242					UG_L	22	0
MW09-11S	AROCLOR-1242					UG_L	44	0
MW09-14D	AROCLOR-1242					UG_L	22	0
MW09-14IA	AROCLOR-1242					UG_L	15	0
MW09-17I	AROCLOR-1242					UG_L	20	0
MW09-20D	AROCLOR-1242					UG_L	21	0
MW09-20I	AROCLOR-1242					UG_L	22	0
MW09-21D	AROCLOR-1242					UG_L	22	0
MW09-21S	AROCLOR-1242					UG_L	25	0
MW09-23D	AROCLOR-1242					UG_L	22	0
MW09-23S	AROCLOR-1242					UG_L	22	0
MW09-24D	AROCLOR-1242					UG_L	24	0
MW09-24S	AROCLOR-1242					UG_L	23	0
MW09-25S	AROCLOR-1242					UG_L	42	0
MW09-26DA	AROCLOR-1242					UG_L	1	0
MW09-26S	AROCLOR-1242					UG_L	20	0
MW09-27D	AROCLOR-1242					UG_L	21	0
MW09-27S	AROCLOR-1242					UG_L	21	0
MW09-02S	AROCLOR-1248					UG_L	22	0
MW09-03D	AROCLOR-1248					UG_L	21	0
MW09-07S	AROCLOR-1248	6/18/2007 11:55	MW09-07S_20070618	0.12 J	0.12	UG_L	24	1
MW09-08DA	AROCLOR-1248					UG_L	15	0
MW09-08S	AROCLOR-1248					UG_L	22	0
MW09-09DA	AROCLOR-1248					UG_L	15	0
MW09-09S	AROCLOR-1248					UG_L	21	0
MW09-10D	AROCLOR-1248					UG_L	22	0
MW09-10S	AROCLOR-1248					UG_L	22	0
MW09-11S	AROCLOR-1248					UG_L	44	0
MW09-14D	AROCLOR-1248					UG_L	22	0
MW09-14IA	AROCLOR-1248					UG_L	15	0
MW09-17I	AROCLOR-1248					UG_L	20	0
MW09-20D	AROCLOR-1248					UG_L	21	0
MW09-20I	AROCLOR-1248					UG_L	22	0
MW09-21D	AROCLOR-1248					UG_L	22	0
MW09-21S	AROCLOR-1248					UG_L	25	0
MW09-23D	AROCLOR-1248					UG_L	22	0
MW09-23S	AROCLOR-1248					UG_L	22	0
MW09-24D	AROCLOR-1248					UG_L	24	0
MW09-24S	AROCLOR-1248					UG_L	23	0
MW09-25S	AROCLOR-1248					UG_L	42	0
MW09-26DA	AROCLOR-1248					UG_L	1	0
MW09-26S	AROCLOR-1248					UG_L	20	0
MW09-27D	AROCLOR-1248					UG_L	21	0
MW09-27S	AROCLOR-1248					UG_L	21	0
MW09-02S	AROCLOR-1254					UG_L	22	0
MW09-03D	AROCLOR-1254					UG_L	21	0
MW09-07S	AROCLOR-1254					UG_L	24	0
MW09-08DA	AROCLOR-1254					UG_L	15	0
MW09-08S	AROCLOR-1254					UG_L	22	0
MW09-09DA	AROCLOR-1254					UG_L	15	0
MW09-09S	AROCLOR-1254					UG_L	21	0
MW09-10D	AROCLOR-1254					UG_L	22	0
MW09-10S	AROCLOR-1254					UG_L	22	0
MW09-11S	AROCLOR-1254					UG_L	44	0
MW09-14D	AROCLOR-1254					UG_L	22	0
MW09-14IA	AROCLOR-1254					UG_L	15	0
MW09-17I	AROCLOR-1254					UG_L	20	0
MW09-20D	AROCLOR-1254					UG_L	21	0
MW09-20I	AROCLOR-1254					UG_L	22	0
MW09-21D	AROCLOR-1254					UG_L	22	0
MW09-21S	AROCLOR-1254					UG_L	25	0
MW09-23D	AROCLOR-1254					UG_L	22	0
MW09-23S	AROCLOR-1254					UG_L	22	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-24D	AROCLOR-1254					UG_L	24	0
MW09-24S	AROCLOR-1254					UG_L	23	0
MW09-25S	AROCLOR-1254					UG_L	42	0
MW09-26DA	AROCLOR-1254					UG_L	1	0
MW09-26S	AROCLOR-1254					UG_L	20	0
MW09-27D	AROCLOR-1254					UG_L	21	0
MW09-27S	AROCLOR-1254					UG_L	21	0
MW09-02S	AROCLOR-1260	11/2/2006 13:10	MW09-02S-20061102	0.012 J	0.012	UG_L	22	1
MW09-03D	AROCLOR-1260					UG_L	21	0
MW09-07S	AROCLOR-1260					UG_L	24	0
MW09-08DA	AROCLOR-1260					UG_L	15	0
MW09-08S	AROCLOR-1260					UG_L	22	0
MW09-09DA	AROCLOR-1260					UG_L	15	0
MW09-09S	AROCLOR-1260					UG_L	21	0
MW09-10D	AROCLOR-1260					UG_L	22	0
MW09-10S	AROCLOR-1260					UG_L	22	0
MW09-11S	AROCLOR-1260	1/31/2008 0:00	MW09-11S-013108	1.1	0.38	UG_L	44	25
MW09-14D	AROCLOR-1260					UG_L	22	0
MW09-14IA	AROCLOR-1260					UG_L	15	0
MW09-17I	AROCLOR-1260					UG_L	20	0
MW09-20D	AROCLOR-1260					UG_L	21	0
MW09-20I	AROCLOR-1260					UG_L	22	0
MW09-21D	AROCLOR-1260					UG_L	22	0
MW09-21S	AROCLOR-1260					UG_L	25	0
MW09-23D	AROCLOR-1260					UG_L	22	0
MW09-23S	AROCLOR-1260					UG_L	22	0
MW09-24D	AROCLOR-1260					UG_L	24	0
MW09-24S	AROCLOR-1260					UG_L	23	0
MW09-25S	AROCLOR-1260	3/1/2006 0:00	MW09-25S_Q106	0.061 J	0.043	UG_L	42	5
MW09-26DA	AROCLOR-1260					UG_L	1	0
MW09-26S	AROCLOR-1260					UG_L	20	0
MW09-27D	AROCLOR-1260					UG_L	21	0
MW09-27S	AROCLOR-1260					UG_L	21	0
MW09-02S	POLYCHLORINATED BIPHENYLS (PCBS)	11/2/2006 13:10	MW09-02S-20061102	0.012	0.012	UG_L	22	1
MW09-03D	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-07S	POLYCHLORINATED BIPHENYLS (PCBS)	6/18/2007 11:55	MW09-07S_20070618	0.12	0.12	UG_L	22	1
MW09-08DA	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	12	0
MW09-08S	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-09DA	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	12	0
MW09-09S	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-10D	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-10S	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-11S	POLYCHLORINATED BIPHENYLS (PCBS)	1/31/2008 0:00	MW09-11S-013108	1.1	0.38	UG_L	40	24
MW09-14D	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-14IA	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	12	0
MW09-17I	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	18	0
MW09-20D	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-20I	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-21D	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-21S	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-23D	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-23S	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-24D	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-24S	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	22	0
MW09-25S	POLYCHLORINATED BIPHENYLS (PCBS)	3/1/2006 0:00	MW09-25S_Q106	0.061	0.043	UG_L	40	5
MW09-26S	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	18	0
MW09-27D	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	18	0
MW09-27S	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	18	0
Pesticides				Pesticides				
MW09-02S	4,4-DDD					UG_L	22	0
MW09-03D	4,4-DDD					UG_L	22	0
MW09-07S	4,4-DDD					UG_L	24	0
MW09-08DA	4,4-DDD					UG_L	15	0
MW09-08S	4,4-DDD					UG_L	22	0
MW09-09DA	4,4-DDD					UG_L	15	0
MW09-09S	4,4-DDD					UG_L	22	0
MW09-10D	4,4-DDD					UG_L	22	0
MW09-10S	4,4-DDD					UG_L	22	0
MW09-11S	4,4-DDD					UG_L	25	0
MW09-14D	4,4-DDD					UG_L	22	0
MW09-14IA	4,4-DDD	12/15/2010 10:10	MW09-14IA-121510	0.0056 J	0.0056	UG_L	15	1
MW09-17I	4,4-DDD					UG_L	20	0
MW09-20D	4,4-DDD					UG_L	22	0
MW09-20I	4,4-DDD					UG_L	22	0
MW09-21D	4,4-DDD					UG_L	22	0
MW09-21S	4,4-DDD					UG_L	25	0
MW09-23D	4,4-DDD					UG_L	22	0
MW09-23S	4,4-DDD					UG_L	23	0
MW09-24D	4,4-DDD					UG_L	24	0
MW09-24S	4,4-DDD	9/27/2005 16:43	MW09-24S-20050927	0.061	0.046	UG_L	23	2
MW09-25S	4,4-DDD					UG_L	23	0
MW09-26DA	4,4-DDD					UG_L	1	0
MW09-26S	4,4-DDD					UG_L	19	0
MW09-27D	4,4-DDD					UG_L	21	0
MW09-27S	4,4-DDD					UG_L	21	0
MW09-02S	4,4-DDE					UG_L	22	0
MW09-03D	4,4-DDE					UG_L	22	0
MW09-07S	4,4-DDE					UG_L	24	0
MW09-08DA	4,4-DDE					UG_L	15	0
MW09-08S	4,4-DDE					UG_L	22	0
MW09-09DA	4,4-DDE	12/15/2010 12:00	MW09-09DA-121510	0.0036 J	0.0036	UG_L	15	1
MW09-09S	4,4-DDE					UG_L	22	0
MW09-10D	4,4-DDE					UG_L	22	0
MW09-10S	4,4-DDE					UG_L	22	0
MW09-11S	4,4-DDE					UG_L	25	0
MW09-14D	4,4-DDE					UG_L	22	0
MW09-14IA	4,4-DDE	12/15/2010 10:10	MW09-14IA-121510	0.0036 J	0.0032	UG_L	15	2
MW09-17I	4,4-DDE					UG_L	20	0
MW09-20D	4,4-DDE					UG_L	22	0
MW09-20I	4,4-DDE					UG_L	22	0
MW09-21D	4,4-DDE					UG_L	22	0
MW09-21S	4,4-DDE					UG_L	25	0
MW09-23D	4,4-DDE					UG_L	22	0
MW09-23S	4,4-DDE					UG_L	23	0
MW09-24D	4,4-DDE					UG_L	24	0
MW09-24S	4,4-DDE					UG_L	23	0
MW09-25S	4,4-DDE					UG_L	23	0
MW09-26DA	4,4-DDE					UG_L	1	0
MW09-26S	4,4-DDE	12/15/2010 15:57	MW09-26S-121510	0.0036 J	0.0036	UG_L	19	1
MW09-27D	4,4-DDE	3/30/2011 10:06	MW09-27D-033011	0.0024 J	0.0024	UG_L	21	1
MW09-27S	4,4-DDE	1/7/2010 10:10	MW09-27S-010710	0.0082 J	0.0069	UG_L	21	2
MW09-02S	4,4-DDT					UG_L	22	0
MW09-03D	4,4-DDT					UG_L	22	0
MW09-07S	4,4-DDT					UG_L	24	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-08DA	4,4-DDT					UG_L	15	0
MW09-08S	4,4-DDT					UG_L	22	0
MW09-09DA	4,4-DDT					UG_L	15	0
MW09-09S	4,4-DDT					UG_L	22	0
MW09-10D	4,4-DDT					UG_L	22	0
MW09-10S	4,4-DDT					UG_L	22	0
MW09-11S	4,4-DDT					UG_L	25	0
MW09-14D	4,4-DDT	6/12/2002 0:00	MW09-14D-NWG-061202	0.0075 J	0.0075	UG_L	22	1
MW09-14IA	4,4-DDT	12/15/2010 10:10	MW09-14IA-121510	0.0058 J	0.0058	UG_L	15	1
MW09-17I	4,4-DDT					UG_L	20	0
MW09-20D	4,4-DDT	2/28/2002 0:00	MW09-20D-NWG-022802	0.07 J	0.07	UG_L	22	1
MW09-20I	4,4-DDT					UG_L	22	0
MW09-21D	4,4-DDT	8/11/2004 0:00	MW09-21D-NWG-081104	0.044 J	0.044	UG_L	22	1
MW09-21S	4,4-DDT					UG_L	25	0
MW09-23D	4,4-DDT					UG_L	22	0
MW09-23S	4,4-DDT					UG_L	23	0
MW09-24D	4,4-DDT					UG_L	24	0
MW09-24S	4,4-DDT	9/27/2005 16:43	MW09-24S-20050927	0.075	0.075	UG_L	23	1
MW09-25S	4,4-DDT					UG_L	23	0
MW09-26DA	4,4-DDT					UG_L	1	0
MW09-26S	4,4-DDT					UG_L	19	0
MW09-27D	4,4-DDT	3/30/2011 10:06	MW09-27D-033011	0.0023 J	0.0023	UG_L	21	1
MW09-27S	4,4-DDT					UG_L	21	0
MW09-02S	ALDRIN					UG_L	22	0
MW09-03D	ALDRIN					UG_L	22	0
MW09-07S	ALDRIN					UG_L	24	0
MW09-08DA	ALDRIN					UG_L	15	0
MW09-08S	ALDRIN					UG_L	22	0
MW09-09DA	ALDRIN					UG_L	15	0
MW09-09S	ALDRIN					UG_L	22	0
MW09-10D	ALDRIN					UG_L	22	0
MW09-10S	ALDRIN					UG_L	22	0
MW09-11S	ALDRIN					UG_L	25	0
MW09-14D	ALDRIN					UG_L	22	0
MW09-14IA	ALDRIN	10/5/2011 9:38	MW09-14IA-100511	0.0025 J	0.0025	UG_L	15	1
MW09-17I	ALDRIN	9/28/2011 10:19	MW09-17I-092811	0.0017 J	0.0017	UG_L	20	1
MW09-20D	ALDRIN					UG_L	22	0
MW09-20I	ALDRIN					UG_L	22	0
MW09-21D	ALDRIN					UG_L	22	0
MW09-21S	ALDRIN					UG_L	25	0
MW09-23D	ALDRIN					UG_L	22	0
MW09-23S	ALDRIN					UG_L	23	0
MW09-24D	ALDRIN	9/9/2002 0:00	MW09-24D-NWG-090902	0.006	0.006	UG_L	24	1
MW09-24S	ALDRIN					UG_L	23	0
MW09-25S	ALDRIN					UG_L	23	0
MW09-26DA	ALDRIN					UG_L	1	0
MW09-26S	ALDRIN					UG_L	19	0
MW09-27D	ALDRIN					UG_L	21	0
MW09-27S	ALDRIN	7/13/2011 13:18	MW09-27S-071311	0.0027 J	0.0027	UG_L	21	1
MW09-02S	ALPHA-BHC					UG_L	22	0
MW09-03D	ALPHA-BHC					UG_L	22	0
MW09-07S	ALPHA-BHC					UG_L	24	0
MW09-08DA	ALPHA-BHC					UG_L	15	0
MW09-08S	ALPHA-BHC					UG_L	22	0
MW09-09DA	ALPHA-BHC					UG_L	15	0
MW09-09S	ALPHA-BHC					UG_L	22	0
MW09-10D	ALPHA-BHC					UG_L	22	0
MW09-10S	ALPHA-BHC					UG_L	22	0
MW09-11S	ALPHA-BHC					UG_L	25	0
MW09-14D	ALPHA-BHC					UG_L	22	0
MW09-14IA	ALPHA-BHC					UG_L	15	0
MW09-17I	ALPHA-BHC					UG_L	20	0
MW09-20D	ALPHA-BHC					UG_L	22	0
MW09-20I	ALPHA-BHC					UG_L	22	0
MW09-21D	ALPHA-BHC					UG_L	22	0
MW09-21S	ALPHA-BHC					UG_L	25	0
MW09-23D	ALPHA-BHC					UG_L	22	0
MW09-23S	ALPHA-BHC					UG_L	23	0
MW09-24D	ALPHA-BHC					UG_L	24	0
MW09-24S	ALPHA-BHC					UG_L	23	0
MW09-25S	ALPHA-BHC					UG_L	23	0
MW09-26DA	ALPHA-BHC					UG_L	1	0
MW09-26S	ALPHA-BHC					UG_L	19	0
MW09-27D	ALPHA-BHC					UG_L	21	0
MW09-27S	ALPHA-BHC	3/24/2011 1:07	MW09-27S-032411	0.004 J	0.004	UG_L	21	1
MW09-02S	ALPHA-CHLORDANE					UG_L	22	0
MW09-03D	ALPHA-CHLORDANE					UG_L	22	0
MW09-07S	ALPHA-CHLORDANE					UG_L	24	0
MW09-08DA	ALPHA-CHLORDANE					UG_L	15	0
MW09-08S	ALPHA-CHLORDANE					UG_L	22	0
MW09-09DA	ALPHA-CHLORDANE					UG_L	15	0
MW09-09S	ALPHA-CHLORDANE					UG_L	22	0
MW09-10D	ALPHA-CHLORDANE					UG_L	22	0
MW09-10S	ALPHA-CHLORDANE					UG_L	22	0
MW09-11S	ALPHA-CHLORDANE					UG_L	25	0
MW09-14D	ALPHA-CHLORDANE					UG_L	22	0
MW09-14IA	ALPHA-CHLORDANE					UG_L	15	0
MW09-17I	ALPHA-CHLORDANE					UG_L	20	0
MW09-20D	ALPHA-CHLORDANE					UG_L	22	0
MW09-20I	ALPHA-CHLORDANE					UG_L	22	0
MW09-21D	ALPHA-CHLORDANE	6/30/2003 0:00	MW09-21D-NWG-063003	0.0064	0.0064	UG_L	22	1
MW09-21S	ALPHA-CHLORDANE					UG_L	25	0
MW09-23D	ALPHA-CHLORDANE					UG_L	22	0
MW09-23S	ALPHA-CHLORDANE					UG_L	23	0
MW09-24D	ALPHA-CHLORDANE					UG_L	24	0
MW09-24S	ALPHA-CHLORDANE	6/30/2003 0:00	MW09-24S-NWG-063003	0.0067	0.0067	UG_L	23	1
MW09-25S	ALPHA-CHLORDANE					UG_L	23	0
MW09-26DA	ALPHA-CHLORDANE					UG_L	1	0
MW09-26S	ALPHA-CHLORDANE					UG_L	19	0
MW09-27D	ALPHA-CHLORDANE					UG_L	21	0
MW09-27S	ALPHA-CHLORDANE	3/24/2011 1:07	MW09-27S-032411	0.0072 J	0.0072	UG_L	21	1
MW09-02S	BETA-BHC					UG_L	22	0
MW09-03D	BETA-BHC					UG_L	22	0
MW09-07S	BETA-BHC	9/16/2015 15:00	MW09-07S-091615-1	0.02 J	0.02	UG_L	23	1
MW09-08DA	BETA-BHC					UG_L	15	0
MW09-08S	BETA-BHC	7/1/2003 0:00	MW09-08S-NWG-070103	0.02 J	0.013	UG_L	22	2
MW09-09DA	BETA-BHC					UG_L	15	0
MW09-09S	BETA-BHC					UG_L	22	0
MW09-10D	BETA-BHC					UG_L	22	0
MW09-10S	BETA-BHC					UG_L	22	0
MW09-11S	BETA-BHC					UG_L	25	0
MW09-14D	BETA-BHC					UG_L	22	0
MW09-14IA	BETA-BHC					UG_L	15	0
MW09-17I	BETA-BHC					UG_L	20	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-20D	BETA-BHC					UG_L	22	0
MW09-20I	BETA-BHC					UG_L	22	0
MW09-21D	BETA-BHC	6/30/2003 0:00	MW09-21D-NWG-063003	0.0085 J	0.0085	UG_L	22	1
MW09-21S	BETA-BHC					UG_L	25	0
MW09-23D	BETA-BHC					UG_L	22	0
MW09-23S	BETA-BHC					UG_L	23	0
MW09-24D	BETA-BHC					UG_L	24	0
MW09-24S	BETA-BHC	9/18/2015 10:55	MW09-24S-091815-1	0.016 J	0.012	UG_L	23	2
MW09-25S	BETA-BHC					UG_L	23	0
MW09-26DA	BETA-BHC					UG_L	1	0
MW09-26S	BETA-BHC					UG_L	19	0
MW09-27D	BETA-BHC					UG_L	21	0
MW09-27S	BETA-BHC					UG_L	21	0
MW09-02S	DELTA-BHC					UG_L	22	0
MW09-03D	DELTA-BHC					UG_L	22	0
MW09-07S	DELTA-BHC					UG_L	24	0
MW09-08DA	DELTA-BHC					UG_L	15	0
MW09-08S	DELTA-BHC					UG_L	22	0
MW09-09DA	DELTA-BHC					UG_L	15	0
MW09-09S	DELTA-BHC					UG_L	22	0
MW09-10D	DELTA-BHC					UG_L	22	0
MW09-10S	DELTA-BHC					UG_L	22	0
MW09-11S	DELTA-BHC					UG_L	25	0
MW09-14D	DELTA-BHC					UG_L	22	0
MW09-14IA	DELTA-BHC	3/23/2011 10:49	MW09-14IA-032311	0.0084 J	0.0084	UG_L	15	1
MW09-17I	DELTA-BHC					UG_L	20	0
MW09-20D	DELTA-BHC					UG_L	22	0
MW09-20I	DELTA-BHC					UG_L	22	0
MW09-21D	DELTA-BHC					UG_L	22	0
MW09-21S	DELTA-BHC					UG_L	25	0
MW09-23D	DELTA-BHC					UG_L	22	0
MW09-23S	DELTA-BHC	10/20/2004 0:00	MW09-23S-NWG-102004	0.016 J	0.016	UG_L	23	1
MW09-24D	DELTA-BHC					UG_L	24	0
MW09-24S	DELTA-BHC					UG_L	23	0
MW09-25S	DELTA-BHC					UG_L	23	0
MW09-26DA	DELTA-BHC					UG_L	1	0
MW09-26S	DELTA-BHC					UG_L	19	0
MW09-27D	DELTA-BHC					UG_L	21	0
MW09-27S	DELTA-BHC					UG_L	21	0
MW09-02S	DIELDRIN					UG_L	22	0
MW09-03D	DIELDRIN					UG_L	22	0
MW09-07S	DIELDRIN					UG_L	24	0
MW09-08DA	DIELDRIN					UG_L	15	0
MW09-08S	DIELDRIN					UG_L	22	0
MW09-09DA	DIELDRIN					UG_L	15	0
MW09-09S	DIELDRIN					UG_L	22	0
MW09-10D	DIELDRIN					UG_L	22	0
MW09-10S	DIELDRIN					UG_L	22	0
MW09-11S	DIELDRIN					UG_L	25	0
MW09-14D	DIELDRIN					UG_L	22	0
MW09-14IA	DIELDRIN					UG_L	15	0
MW09-17I	DIELDRIN					UG_L	20	0
MW09-20D	DIELDRIN					UG_L	22	0
MW09-20I	DIELDRIN					UG_L	22	0
MW09-21D	DIELDRIN					UG_L	22	0
MW09-21S	DIELDRIN					UG_L	25	0
MW09-23D	DIELDRIN					UG_L	22	0
MW09-23S	DIELDRIN					UG_L	23	0
MW09-24D	DIELDRIN					UG_L	24	0
MW09-24S	DIELDRIN					UG_L	23	0
MW09-25S	DIELDRIN					UG_L	23	0
MW09-26DA	DIELDRIN					UG_L	1	0
MW09-26S	DIELDRIN					UG_L	19	0
MW09-27D	DIELDRIN					UG_L	21	0
MW09-27S	DIELDRIN					UG_L	21	0
MW09-02S	ENDOSULFAN I					UG_L	22	0
MW09-03D	ENDOSULFAN I					UG_L	22	0
MW09-07S	ENDOSULFAN I					UG_L	24	0
MW09-08DA	ENDOSULFAN I					UG_L	15	0
MW09-08S	ENDOSULFAN I					UG_L	22	0
MW09-09DA	ENDOSULFAN I					UG_L	15	0
MW09-09S	ENDOSULFAN I					UG_L	22	0
MW09-10D	ENDOSULFAN I					UG_L	22	0
MW09-10S	ENDOSULFAN I					UG_L	22	0
MW09-11S	ENDOSULFAN I					UG_L	25	0
MW09-14D	ENDOSULFAN I					UG_L	22	0
MW09-14IA	ENDOSULFAN I					UG_L	15	0
MW09-17I	ENDOSULFAN I					UG_L	20	0
MW09-20D	ENDOSULFAN I					UG_L	22	0
MW09-20I	ENDOSULFAN I					UG_L	22	0
MW09-21D	ENDOSULFAN I					UG_L	22	0
MW09-21S	ENDOSULFAN I	2/28/2002 0:00	MW09-21S-NWG-022802	0.01 J	0.01	UG_L	25	1
MW09-23D	ENDOSULFAN I					UG_L	22	0
MW09-23S	ENDOSULFAN I					UG_L	23	0
MW09-24D	ENDOSULFAN I					UG_L	24	0
MW09-24S	ENDOSULFAN I					UG_L	23	0
MW09-25S	ENDOSULFAN I					UG_L	23	0
MW09-26DA	ENDOSULFAN I					UG_L	1	0
MW09-26S	ENDOSULFAN I					UG_L	19	0
MW09-27D	ENDOSULFAN I					UG_L	21	0
MW09-27S	ENDOSULFAN I	12/15/2010 13:43	MW09-27S-121510	0.0049 J	0.0049	UG_L	21	1
MW09-02S	ENDOSULFAN II					UG_L	22	0
MW09-03D	ENDOSULFAN II					UG_L	22	0
MW09-07S	ENDOSULFAN II					UG_L	24	0
MW09-08DA	ENDOSULFAN II					UG_L	15	0
MW09-08S	ENDOSULFAN II					UG_L	22	0
MW09-09DA	ENDOSULFAN II					UG_L	15	0
MW09-09S	ENDOSULFAN II					UG_L	22	0
MW09-10D	ENDOSULFAN II					UG_L	22	0
MW09-10S	ENDOSULFAN II					UG_L	22	0
MW09-11S	ENDOSULFAN II					UG_L	25	0
MW09-14D	ENDOSULFAN II					UG_L	22	0
MW09-14IA	ENDOSULFAN II	7/14/2011 10:10	MW09-14IA-071411	0.0052 J	0.0052	UG_L	15	1
MW09-17I	ENDOSULFAN II					UG_L	20	0
MW09-20D	ENDOSULFAN II					UG_L	22	0
MW09-20I	ENDOSULFAN II					UG_L	22	0
MW09-21D	ENDOSULFAN II					UG_L	22	0
MW09-21S	ENDOSULFAN II					UG_L	25	0
MW09-23D	ENDOSULFAN II					UG_L	22	0
MW09-23S	ENDOSULFAN II					UG_L	23	0
MW09-24D	ENDOSULFAN II					UG_L	24	0
MW09-24S	ENDOSULFAN II	9/27/2005 16:43	MW09-24S-20050927	0.049 J	0.04	UG_L	23	3
MW09-25S	ENDOSULFAN II					UG_L	23	0
MW09-26DA	ENDOSULFAN II					UG_L	1	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-26S	ENDOSULFAN II					UG_L	19	0
MW09-27D	ENDOSULFAN II					UG_L	21	0
MW09-27S	ENDOSULFAN II					UG_L	21	0
MW09-02S	ENDOSULFAN SULFATE					UG_L	22	0
MW09-03D	ENDOSULFAN SULFATE					UG_L	22	0
MW09-07S	ENDOSULFAN SULFATE					UG_L	24	0
MW09-08DA	ENDOSULFAN SULFATE					UG_L	15	0
MW09-08S	ENDOSULFAN SULFATE					UG_L	21	0
MW09-09DA	ENDOSULFAN SULFATE					UG_L	15	0
MW09-09S	ENDOSULFAN SULFATE					UG_L	22	0
MW09-10D	ENDOSULFAN SULFATE					UG_L	22	0
MW09-10S	ENDOSULFAN SULFATE					UG_L	22	0
MW09-11S	ENDOSULFAN SULFATE					UG_L	25	0
MW09-14D	ENDOSULFAN SULFATE					UG_L	22	0
MW09-14IA	ENDOSULFAN SULFATE					UG_L	15	0
MW09-17I	ENDOSULFAN SULFATE					UG_L	20	0
MW09-20D	ENDOSULFAN SULFATE					UG_L	22	0
MW09-20I	ENDOSULFAN SULFATE					UG_L	22	0
MW09-21D	ENDOSULFAN SULFATE	6/21/2004 0:00	MW09-21D-NWG-062104	0.03 J	0.03	UG_L	22	1
MW09-21S	ENDOSULFAN SULFATE					UG_L	25	0
MW09-23D	ENDOSULFAN SULFATE					UG_L	22	0
MW09-23S	ENDOSULFAN SULFATE					UG_L	23	0
MW09-24D	ENDOSULFAN SULFATE					UG_L	24	0
MW09-24S	ENDOSULFAN SULFATE	9/27/2005 16:43	MW09-24S-20050927	0.062	0.036	UG_L	23	2
MW09-25S	ENDOSULFAN SULFATE					UG_L	23	0
MW09-26DA	ENDOSULFAN SULFATE					UG_L	1	0
MW09-26S	ENDOSULFAN SULFATE					UG_L	19	0
MW09-27D	ENDOSULFAN SULFATE					UG_L	21	0
MW09-27S	ENDOSULFAN SULFATE					UG_L	21	0
MW09-02S	ENDRIN					UG_L	22	0
MW09-03D	ENDRIN					UG_L	22	0
MW09-02S	ENDRIN					UG_L	22	0
MW09-03D	ENDRIN					UG_L	22	0
MW09-07S	ENDRIN					UG_L	24	0
MW09-08DA	ENDRIN					UG_L	15	0
MW09-08S	ENDRIN					UG_L	22	0
MW09-09DA	ENDRIN					UG_L	15	0
MW09-09S	ENDRIN					UG_L	22	0
MW09-10D	ENDRIN					UG_L	22	0
MW09-10S	ENDRIN					UG_L	22	0
MW09-11S	ENDRIN	11/8/2007 12:00	MW09-11S_20071108	0.015 J	0.015	UG_L	25	1
MW09-14D	ENDRIN					UG_L	22	0
MW09-14IA	ENDRIN					UG_L	15	0
MW09-17I	ENDRIN					UG_L	20	0
MW09-20D	ENDRIN					UG_L	22	0
MW09-20I	ENDRIN					UG_L	22	0
MW09-21D	ENDRIN					UG_L	22	0
MW09-21S	ENDRIN					UG_L	25	0
MW09-23D	ENDRIN					UG_L	22	0
MW09-23S	ENDRIN					UG_L	23	0
MW09-24D	ENDRIN					UG_L	24	0
MW09-24S	ENDRIN	9/27/2005 16:43	MW09-24S-20050927	0.042 J	0.042	UG_L	23	1
MW09-25S	ENDRIN					UG_L	23	0
MW09-26DA	ENDRIN					UG_L	1	0
MW09-26S	ENDRIN					UG_L	19	0
MW09-27D	ENDRIN					UG_L	21	0
MW09-27S	ENDRIN					UG_L	21	0
MW09-02S	ENDRIN KETONE					UG_L	22	0
MW09-03D	ENDRIN KETONE					UG_L	22	0
MW09-07S	ENDRIN KETONE					UG_L	24	0
MW09-08DA	ENDRIN KETONE					UG_L	15	0
MW09-08S	ENDRIN KETONE					UG_L	22	0
MW09-09DA	ENDRIN KETONE					UG_L	15	0
MW09-09S	ENDRIN KETONE	1/20/2003 0:00	MW09-09S-NWG-012003	0.01	0.01	UG_L	22	1
MW09-10D	ENDRIN KETONE					UG_L	22	0
MW09-10S	ENDRIN KETONE					UG_L	22	0
MW09-11S	ENDRIN KETONE					UG_L	25	0
MW09-14D	ENDRIN KETONE					UG_L	22	0
MW09-14IA	ENDRIN KETONE					UG_L	15	0
MW09-17I	ENDRIN KETONE					UG_L	20	0
MW09-20D	ENDRIN KETONE					UG_L	22	0
MW09-20I	ENDRIN KETONE					UG_L	22	0
MW09-21D	ENDRIN KETONE					UG_L	22	0
MW09-21S	ENDRIN KETONE					UG_L	25	0
MW09-23D	ENDRIN KETONE					UG_L	22	0
MW09-23S	ENDRIN KETONE					UG_L	23	0
MW09-24D	ENDRIN KETONE					UG_L	24	0
MW09-24S	ENDRIN KETONE					UG_L	23	0
MW09-25S	ENDRIN KETONE					UG_L	23	0
MW09-26DA	ENDRIN KETONE					UG_L	1	0
MW09-26S	ENDRIN KETONE					UG_L	19	0
MW09-27D	ENDRIN KETONE					UG_L	21	0
MW09-27S	ENDRIN KETONE					UG_L	21	0
MW09-02S	HEPTACHLOR					UG_L	22	0
MW09-03D	HEPTACHLOR					UG_L	22	0
MW09-07S	HEPTACHLOR	1/21/2003 0:00	MW09-07S-NWG-012103	0.0069	0.0069	UG_L	24	1
MW09-08DA	HEPTACHLOR					UG_L	15	0
MW09-08S	HEPTACHLOR					UG_L	21	0
MW09-09DA	HEPTACHLOR					UG_L	15	0
MW09-09S	HEPTACHLOR					UG_L	22	0
MW09-10D	HEPTACHLOR					UG_L	22	0
MW09-10S	HEPTACHLOR	12/4/2001 0:00	MW09-10S-NWG-120401	0.0058 J	0.0058	UG_L	22	1
MW09-11S	HEPTACHLOR					UG_L	25	0
MW09-14D	HEPTACHLOR					UG_L	22	0
MW09-14IA	HEPTACHLOR	3/23/2011 10:49	MW09-14IA-032311	0.0038 J	0.0038	UG_L	15	1
MW09-17I	HEPTACHLOR					UG_L	20	0
MW09-20D	HEPTACHLOR					UG_L	22	0
MW09-20I	HEPTACHLOR					UG_L	22	0
MW09-21D	HEPTACHLOR					UG_L	22	0
MW09-21S	HEPTACHLOR	2/28/2002 0:00	MW09-21S-NWG-022802	0.01	0.01	UG_L	25	1
MW09-23D	HEPTACHLOR					UG_L	22	0
MW09-23S	HEPTACHLOR					UG_L	23	0
MW09-24D	HEPTACHLOR					UG_L	24	0
MW09-24S	HEPTACHLOR					UG_L	23	0
MW09-25S	HEPTACHLOR					UG_L	23	0
MW09-26DA	HEPTACHLOR					UG_L	1	0
MW09-26S	HEPTACHLOR					UG_L	19	0
MW09-27D	HEPTACHLOR					UG_L	21	0
MW09-27S	HEPTACHLOR					UG_L	21	0
MW09-02S	HEPTACHLOR EPOXIDE					UG_L	22	0
MW09-03D	HEPTACHLOR EPOXIDE					UG_L	22	0
MW09-07S	HEPTACHLOR EPOXIDE	9/17/2003 0:00	MW09-07S-NWG-091703	0.01	0.01	UG_L	23	1
MW09-08DA	HEPTACHLOR EPOXIDE					UG_L	15	0
MW09-08S	HEPTACHLOR EPOXIDE					UG_L	22	0
MW09-09DA	HEPTACHLOR EPOXIDE					UG_L	15	0
MW09-09S	HEPTACHLOR EPOXIDE	7/1/2003 0:00	MW09-09S-NWG-070103	0.0064	0.0064	UG_L	22	1

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-10D	HEPTACHLOR EPOXIDE					UG_L	22	0
MW09-10S	HEPTACHLOR EPOXIDE					UG_L	22	0
MW09-11S	HEPTACHLOR EPOXIDE					UG_L	25	0
MW09-14D	HEPTACHLOR EPOXIDE					UG_L	22	0
MW09-14IA	HEPTACHLOR EPOXIDE					UG_L	15	0
MW09-17I	HEPTACHLOR EPOXIDE					UG_L	20	0
MW09-20D	HEPTACHLOR EPOXIDE					UG_L	22	0
MW09-20I	HEPTACHLOR EPOXIDE					UG_L	22	0
MW09-21D	HEPTACHLOR EPOXIDE					UG_L	22	0
MW09-21S	HEPTACHLOR EPOXIDE					UG_L	25	0
MW09-23D	HEPTACHLOR EPOXIDE					UG_L	22	0
MW09-23S	HEPTACHLOR EPOXIDE					UG_L	23	0
MW09-24D	HEPTACHLOR EPOXIDE					UG_L	24	0
MW09-24S	HEPTACHLOR EPOXIDE	6/30/2003 0:00	MW09-24S-NWG-063003	0.0092	0.0092	UG_L	23	1
MW09-25S	HEPTACHLOR EPOXIDE					UG_L	23	0
MW09-26DA	HEPTACHLOR EPOXIDE					UG_L	1	0
MW09-26S	HEPTACHLOR EPOXIDE					UG_L	19	0
MW09-27D	HEPTACHLOR EPOXIDE					UG_L	21	0
MW09-27S	HEPTACHLOR EPOXIDE					UG_L	21	0
MW09-02S	HEXACHLOROBENZENE					UG_L	22	0
MW09-03D	HEXACHLOROBENZENE	6/11/2002 0:00	MW09-03D-NWG-061102	0.0044 J	0.0044	UG_L	22	1
MW09-07S	HEXACHLOROBENZENE	6/3/2002 12:00:00 AM 5/12/2003 12:00:00 AM		0.01 JJ	0.0092	UG_L	25	4
MW09-08DA	HEXACHLOROBENZENE					UG_L	15	0
MW09-08S	HEXACHLOROBENZENE	12/15/2005 11:45	MW09-08S-20051215	0.14	0.14	UG_L	22	1
MW09-09DA	HEXACHLOROBENZENE					UG_L	16	0
MW09-09S	HEXACHLOROBENZENE	9/7/2016 10:30	MW09-09S-ME45-1	0.19 J	0.19	UG_L	26	1
MW09-10D	HEXACHLOROBENZENE					UG_L	22	0
MW09-10S	HEXACHLOROBENZENE	9/10/2003 0:00	MW09-10S-NWG-091003	0.0057	0.0057	UG_L	22	1
MW09-11S	HEXACHLOROBENZENE					UG_L	22	0
MW09-14D	HEXACHLOROBENZENE	11/8/2006 10:05	MW09-14D-20061108	0.0093 J	0.0093	UG_L	24	1
MW09-14IA	HEXACHLOROBENZENE					UG_L	16	0
MW09-17I	HEXACHLOROBENZENE					UG_L	22	0
MW09-20D	HEXACHLOROBENZENE					UG_L	24	0
MW09-20I	HEXACHLOROBENZENE	9/8/2016 10:10	MW09-20I-ME45-1	0.36 J	0.36	UG_L	31	1
MW09-21D	HEXACHLOROBENZENE	6/21/2004 0:00	MW09-21D-NWG-062104	0.08 J	0.08	UG_L	22	1
MW09-21S	HEXACHLOROBENZENE					UG_L	27	0
MW09-23D	HEXACHLOROBENZENE					UG_L	22	0
MW09-23S	HEXACHLOROBENZENE					UG_L	22	0
MW09-24D	HEXACHLOROBENZENE					UG_L	22	0
MW09-24S	HEXACHLOROBENZENE					UG_L	22	0
MW09-25S	HEXACHLOROBENZENE					UG_L	25	0
MW09-26DA	HEXACHLOROBENZENE					UG_L	1	0
MW09-26S	HEXACHLOROBENZENE					UG_L	19	0
MW09-27D	HEXACHLOROBENZENE					UG_L	20	0
MW09-27S	HEXACHLOROBENZENE					UG_L	20	0
MW09-02S	LINDANE					UG_L	22	0
MW09-03D	LINDANE					UG_L	22	0
MW09-07S	LINDANE					UG_L	24	0
MW09-08DA	LINDANE					UG_L	15	0
MW09-08S	LINDANE					UG_L	22	0
MW09-09DA	LINDANE					UG_L	15	0
MW09-09S	LINDANE					UG_L	22	0
MW09-10D	LINDANE					UG_L	22	0
MW09-10S	LINDANE					UG_L	22	0
MW09-11S	LINDANE					UG_L	25	0
MW09-14D	LINDANE					UG_L	22	0
MW09-14IA	LINDANE	3/23/2011 10:49	MW09-14IA-032311	0.0049 J	0.0049	UG_L	15	1
MW09-17I	LINDANE	12/15/2010 12:45	MW09-17I-121510	0.0046 J	0.0046	UG_L	20	1
MW09-20D	LINDANE					UG_L	22	0
MW09-20I	LINDANE					UG_L	22	0
MW09-21D	LINDANE					UG_L	22	0
MW09-21S	LINDANE					UG_L	25	0
MW09-23D	LINDANE					UG_L	22	0
MW09-23S	LINDANE					UG_L	23	0
MW09-24D	LINDANE					UG_L	24	0
MW09-24S	LINDANE					UG_L	23	0
MW09-25S	LINDANE					UG_L	23	0
MW09-26DA	LINDANE					UG_L	1	0
MW09-26S	LINDANE					UG_L	19	0
MW09-27D	LINDANE					UG_L	21	0
MW09-27S	LINDANE					UG_L	21	0
MW09-02S	METHOXYCHLOR	10/19/2004 0:00	MW09-02S-NWG-101904	0.016 J	0.016	UG_L	22	1
MW09-03D	METHOXYCHLOR					UG_L	22	0
MW09-07S	METHOXYCHLOR					UG_L	24	0
MW09-08DA	METHOXYCHLOR					UG_L	15	0
MW09-08S	METHOXYCHLOR					UG_L	22	0
MW09-09DA	METHOXYCHLOR					UG_L	15	0
MW09-09S	METHOXYCHLOR					UG_L	22	0
MW09-10D	METHOXYCHLOR					UG_L	22	0
MW09-10S	METHOXYCHLOR					UG_L	22	0
MW09-11S	METHOXYCHLOR	10/20/2004 0:00	MW09-11S-NWG-102004	0.023 J	0.023	UG_L	25	1
MW09-14D	METHOXYCHLOR					UG_L	22	0
MW09-14IA	METHOXYCHLOR					UG_L	15	0
MW09-17I	METHOXYCHLOR					UG_L	20	0
MW09-20D	METHOXYCHLOR					UG_L	22	0
MW09-20I	METHOXYCHLOR					UG_L	22	0
MW09-21D	METHOXYCHLOR					UG_L	22	0
MW09-21S	METHOXYCHLOR					UG_L	25	0
MW09-23D	METHOXYCHLOR					UG_L	22	0
MW09-23S	METHOXYCHLOR					UG_L	23	0
MW09-24D	METHOXYCHLOR					UG_L	24	0
MW09-24S	METHOXYCHLOR	9/27/2005 16:43	MW09-24S-20050927	0.02 J	0.02	UG_L	23	1
MW09-25S	METHOXYCHLOR					UG_L	23	0
MW09-26DA	METHOXYCHLOR					UG_L	1	0
MW09-26S	METHOXYCHLOR					UG_L	19	0
MW09-27D	METHOXYCHLOR					UG_L	21	0
MW09-27S	METHOXYCHLOR					UG_L	21	0
Herbicide				Herbicide				
MW09-02S	PENTACHLOROPHENOL	12/14/2005 2:18	MW09-02S-20051214	2.1 J	1.1	UG_L	22	2
MW09-03D	PENTACHLOROPHENOL	8/11/2004 0:00	MW09-03D-NWG-081104	1.1 J	1.1	UG_L	20	1
MW09-07S	PENTACHLOROPHENOL					UG_L	24	0
MW09-08DA	PENTACHLOROPHENOL	3/27/2012 9:47	MW09-08DA-032712	1.4 J	0.86	UG_L	15	4
MW09-08S	PENTACHLOROPHENOL					UG_L	22	0
MW09-09DA	PENTACHLOROPHENOL	3/29/2012 13:31	MW09-09DA-032912	2 J	2	UG_L	16	1
MW09-09S	PENTACHLOROPHENOL					UG_L	26	0
MW09-10D	PENTACHLOROPHENOL	12/4/2001 0:00	MW09-10D-NWG-120401	0.41	0.41	UG_L	22	1
MW09-10S	PENTACHLOROPHENOL	8/12/2004 0:00	MW09-10S-NWG-081204	0.88	0.88	UG_L	22	1
MW09-11S	PENTACHLOROPHENOL	11/8/2007 12:00	MW09-11S_20071108	0.23	0.23	UG_L	21	1
MW09-14D	PENTACHLOROPHENOL	8/11/2004 0:00	MW09-14D-NWG-081104	0.98 J	0.98	UG_L	23	1
MW09-14IA	PENTACHLOROPHENOL					UG_L	12	0
MW09-17I	PENTACHLOROPHENOL	3/29/2012 13:30	MW09-17I-032912	2.4 J	0.96	UG_L	19	3
MW09-20D	PENTACHLOROPHENOL					UG_L	22	0
MW09-20I	PENTACHLOROPHENOL	1/29/2008 0:00	MW09-20I-012908	0.54	0.54	UG_L	42	1
MW09-21D	PENTACHLOROPHENOL	6/20/2007 14:55	MW09-21D_20070620	0.33 J	0.33	UG_L	22	1

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-21S	PENTACHLOROPHENOL					UG_L	33	0
MW09-23D	PENTACHLOROPHENOL	11/3/2006 12:45	MW09-23D-20061103	0.22 J	0.22	UG_L	22	1
MW09-23S	PENTACHLOROPHENOL					UG_L	22	0
MW09-24D	PENTACHLOROPHENOL					UG_L	22	0
MW09-24S	PENTACHLOROPHENOL	8/11/2004 0:00	MW09-24S-NWG-081104	1.2	1.2	UG_L	22	1
MW09-25S	PENTACHLOROPHENOL					UG_L	25	0
MW09-26DA	PENTACHLOROPHENOL					UG_L	1	0
MW09-26S	PENTACHLOROPHENOL					UG_L	19	0
MW09-27D	PENTACHLOROPHENOL	3/29/2012 9:20	MW09-27D-032912	1.1 J	0.91	UG_L	20	2
MW09-27S	PENTACHLOROPHENOL	1/30/2008 0:00	MW09-27S-013008	0.17 J	0.17	UG_L	19	1
SVOCs				SVOCs				
MW09-02S	1,2,4-TRICHLOROBENZENE					UG_L	21	0
MW09-03D	1,2,4-TRICHLOROBENZENE					UG_L	21	0
MW09-07S	1,2,4-TRICHLOROBENZENE					UG_L	25	0
MW09-08DA	1,2,4-TRICHLOROBENZENE					UG_L	15	0
MW09-08S	1,2,4-TRICHLOROBENZENE					UG_L	22	0
MW09-09DA	1,2,4-TRICHLOROBENZENE					UG_L	15	0
MW09-09S	1,2,4-TRICHLOROBENZENE					UG_L	24	0
MW09-10D	1,2,4-TRICHLOROBENZENE					UG_L	22	0
MW09-10S	1,2,4-TRICHLOROBENZENE					UG_L	22	0
MW09-11S	1,2,4-TRICHLOROBENZENE	12/4/2001 0:00	MW09-11S-NWG-120401	12	4.7	UG_L	22	20
MW09-14D	1,2,4-TRICHLOROBENZENE					UG_L	24	0
MW09-14IA	1,2,4-TRICHLOROBENZENE					UG_L	16	0
MW09-17I	1,2,4-TRICHLOROBENZENE					UG_L	22	0
MW09-20D	1,2,4-TRICHLOROBENZENE					UG_L	24	0
MW09-20I	1,2,4-TRICHLOROBENZENE					UG_L	45	0
MW09-21D	1,2,4-TRICHLOROBENZENE					UG_L	22	0
MW09-21S	1,2,4-TRICHLOROBENZENE					UG_L	34	0
MW09-23D	1,2,4-TRICHLOROBENZENE					UG_L	22	0
MW09-23S	1,2,4-TRICHLOROBENZENE					UG_L	22	0
MW09-24D	1,2,4-TRICHLOROBENZENE					UG_L	22	0
MW09-24S	1,2,4-TRICHLOROBENZENE					UG_L	22	0
MW09-25S	1,2,4-TRICHLOROBENZENE	9/26/2005 17:30	MW09-25S-20050926	16.8	6.64	UG_L	25	19
MW09-26DA	1,2,4-TRICHLOROBENZENE					UG_L	1	0
MW09-26S	1,2,4-TRICHLOROBENZENE					UG_L	19	0
MW09-27D	1,2,4-TRICHLOROBENZENE					UG_L	20	0
MW09-27S	1,2,4-TRICHLOROBENZENE					UG_L	20	0
MW09-02S	1,2-DICHLOROBENZENE					UG_L	21	0
MW09-03D	1,2-DICHLOROBENZENE					UG_L	21	0
MW09-07S	1,2-DICHLOROBENZENE	2/27/2002 0:00	MW09-07S-NWG-022702	2 J	1.1	UG_L	25	9
MW09-08DA	1,2-DICHLOROBENZENE					UG_L	15	0
MW09-08S	1,2-DICHLOROBENZENE					UG_L	22	0
MW09-09DA	1,2-DICHLOROBENZENE					UG_L	15	0
MW09-09S	1,2-DICHLOROBENZENE					UG_L	24	0
MW09-10D	1,2-DICHLOROBENZENE					UG_L	22	0
MW09-10S	1,2-DICHLOROBENZENE					UG_L	22	0
MW09-11S	1,2-DICHLOROBENZENE	12/4/2001 0:00	MW09-11S-NWG-120401	11	4	UG_L	22	6
MW09-14D	1,2-DICHLOROBENZENE					UG_L	24	0
MW09-14IA	1,2-DICHLOROBENZENE	9/24/2014 11:30	MW09-14IA-092414-1	1.1 J	1.1	UG_L	16	1
MW09-17I	1,2-DICHLOROBENZENE					UG_L	22	0
MW09-20D	1,2-DICHLOROBENZENE					UG_L	24	0
MW09-20I	1,2-DICHLOROBENZENE	9/26/2014 10:00	MW09-20I-092614-1	1.6 J	1.6	UG_L	45	1
MW09-21D	1,2-DICHLOROBENZENE	3/7/2007 0:00	MW09-21D_20070307	4.8 J	3.2	UG_L	22	6
MW09-21S	1,2-DICHLOROBENZENE					UG_L	34	0
MW09-23D	1,2-DICHLOROBENZENE					UG_L	22	0
MW09-23S	1,2-DICHLOROBENZENE					UG_L	22	0
MW09-24D	1,2-DICHLOROBENZENE					UG_L	22	0
MW09-24S	1,2-DICHLOROBENZENE					UG_L	22	0
MW09-25S	1,2-DICHLOROBENZENE	11/2/2006 16:20	MW09-25S-20061102	1.3 J	0.99	UG_L	25	3
MW09-26DA	1,2-DICHLOROBENZENE					UG_L	1	0
MW09-26S	1,2-DICHLOROBENZENE					UG_L	19	0
MW09-27D	1,2-DICHLOROBENZENE					UG_L	20	0
MW09-27S	1,2-DICHLOROBENZENE					UG_L	20	0
MW09-02S	1,3-DICHLOROBENZENE					UG_L	21	0
MW09-03D	1,3-DICHLOROBENZENE					UG_L	21	0
MW09-07S	1,3-DICHLOROBENZENE	9/16/2015 15:00	MW09-07S-091615-1	1 J	1	UG_L	25	1
MW09-08DA	1,3-DICHLOROBENZENE					UG_L	15	0
MW09-08S	1,3-DICHLOROBENZENE					UG_L	22	0
MW09-09DA	1,3-DICHLOROBENZENE					UG_L	15	0
MW09-09S	1,3-DICHLOROBENZENE					UG_L	24	0
MW09-10D	1,3-DICHLOROBENZENE					UG_L	22	0
MW09-10S	1,3-DICHLOROBENZENE					UG_L	22	0
MW09-11S	1,3-DICHLOROBENZENE	12/4/2001 0:00	MW09-11S-NWG-120401	58	10.1	UG_L	22	18
MW09-14D	1,3-DICHLOROBENZENE					UG_L	24	0
MW09-14IA	1,3-DICHLOROBENZENE					UG_L	16	0
MW09-17I	1,3-DICHLOROBENZENE					UG_L	22	0
MW09-20D	1,3-DICHLOROBENZENE					UG_L	24	0
MW09-20I	1,3-DICHLOROBENZENE					UG_L	45	0
MW09-21D	1,3-DICHLOROBENZENE					UG_L	22	0
MW09-21S	1,3-DICHLOROBENZENE					UG_L	34	0
MW09-23D	1,3-DICHLOROBENZENE					UG_L	22	0
MW09-23S	1,3-DICHLOROBENZENE					UG_L	22	0
MW09-24D	1,3-DICHLOROBENZENE					UG_L	22	0
MW09-24S	1,3-DICHLOROBENZENE					UG_L	22	0
MW09-25S	1,3-DICHLOROBENZENE	11/8/2007 12:00	MW09-25S_20071108	12.5	5	UG_L	25	24
MW09-26DA	1,3-DICHLOROBENZENE					UG_L	1	0
MW09-26S	1,3-DICHLOROBENZENE					UG_L	19	0
MW09-27D	1,3-DICHLOROBENZENE					UG_L	20	0
MW09-27S	1,3-DICHLOROBENZENE					UG_L	20	0
MW09-02S	1,4-DICHLOROBENZENE					UG_L	21	0
MW09-03D	1,4-DICHLOROBENZENE					UG_L	21	0
MW09-07S	1,4-DICHLOROBENZENE	1/21/2003 0:00	MW09-07S-NWG-012103	3 J	1.5	UG_L	25	14
MW09-08DA	1,4-DICHLOROBENZENE					UG_L	15	0
MW09-08S	1,4-DICHLOROBENZENE					UG_L	22	0
MW09-09DA	1,4-DICHLOROBENZENE					UG_L	15	0
MW09-09S	1,4-DICHLOROBENZENE					UG_L	24	0
MW09-10D	1,4-DICHLOROBENZENE					UG_L	22	0
MW09-10S	1,4-DICHLOROBENZENE					UG_L	22	0
MW09-11S	1,4-DICHLOROBENZENE	12/4/2001 0:00	MW09-11S-NWG-120401	210	35.1	UG_L	22	22
MW09-14D	1,4-DICHLOROBENZENE					UG_L	24	0
MW09-14IA	1,4-DICHLOROBENZENE	9/24/2014 11:30	MW09-14IA-092414-1	1.2 J	1.2	UG_L	16	1
MW09-17I	1,4-DICHLOROBENZENE					UG_L	22	0
MW09-20D	1,4-DICHLOROBENZENE					UG_L	24	0
MW09-20I	1,4-DICHLOROBENZENE	9/26/2014 10:00	MW09-20I-092614-1	1.8 J	1.8	UG_L	45	1
MW09-21D	1,4-DICHLOROBENZENE	11/9/2007 12:00	MW09-21D_20071109	1.9 J	1.4	UG_L	22	2
MW09-21S	1,4-DICHLOROBENZENE					UG_L	34	0
MW09-23D	1,4-DICHLOROBENZENE					UG_L	22	0
MW09-23S	1,4-DICHLOROBENZENE					UG_L	22	0
MW09-24D	1,4-DICHLOROBENZENE					UG_L	22	0
MW09-24S	1,4-DICHLOROBENZENE					UG_L	22	0
MW09-25S	1,4-DICHLOROBENZENE	11/8/2007 12:00	MW09-25S_20071108	26.3	6.78	UG_L	25	24
MW09-26DA	1,4-DICHLOROBENZENE					UG_L	1	0
MW09-26S	1,4-DICHLOROBENZENE					UG_L	19	0
MW09-27D	1,4-DICHLOROBENZENE					UG_L	20	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-27S	1,4-DICHLOROBENZENE					UG_L	20	0
MW09-02S	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-03D	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-07S	1-METHYLNAPHTHALENE	12/7/2001 0:00	MW09-07S-NWG-120701	12 J	9.4	UG_L	3	3
MW09-08S	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-09S	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-10D	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-10S	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-11S	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-14D	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-20D	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-20I	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-21D	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-21S	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-23D	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-23S	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-24D	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-24S	1-METHYLNAPHTHALENE					UG_L	3	0
MW09-25S	1-METHYLNAPHTHALENE	6/10/2002 0:00	MW09-25S-NWG-061002	2.2	1.8	UG_L	3	3
MW09-02S	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	17	0
MW09-03D	2,2'-OXYBIS(1-CHLOROPROPANE)	12/3/2001 12:00:00 AM 3/1/2002 12:00:00 AM 6/26/2003 12:00:00 AM 9/10/2003 12:00:00 AM		2 JJJ	1.3	UG_L	17	13
MW09-07S	2,2'-OXYBIS(1-CHLOROPROPANE)	9/16/2015 15:00	MW09-07S-091615-1	1.3 J	1.2	UG_L	20	2
MW09-08DA	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	1	0
MW09-08S	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	18	0
MW09-09DA	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	2	0
MW09-09S	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	20	0
MW09-10D	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	18	0
MW09-10S	2,2'-OXYBIS(1-CHLOROPROPANE)	12/4/2001 12:00:00 AM 2/27/2002 12:00:00 AM 6/4/2002 12:00:00 AM 9/6/2002 12:00:00 AM		6 J	4	UG_L	18	11
MW09-11S	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	17	0
MW09-14D	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	20	0
MW09-14IA	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	2	0
MW09-17I	2,2'-OXYBIS(1-CHLOROPROPANE)	2/10/2008 0:00	MW09-17I-021008	1 J	0.89	UG_L	6	2
MW09-20D	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	20	0
MW09-20I	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	24	0
MW09-21D	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	18	0
MW09-21S	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	21	0
MW09-23D	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	18	0
MW09-23S	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	18	0
MW09-24D	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	18	0
MW09-24S	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	18	0
MW09-25S	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	20	0
MW09-26DA	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	1	0
MW09-26S	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	5	0
MW09-27D	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	5	0
MW09-27S	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	5	0
MW09-02S	2,4,5-TRICHLOROPHENOL	3/2/2006 0:00	MW09-02S_Q106	0.15 J	0.15	UG_L	22	1
MW09-03D	2,4,5-TRICHLOROPHENOL					UG_L	19	0
MW09-07S	2,4,5-TRICHLOROPHENOL					UG_L	25	0
MW09-08DA	2,4,5-TRICHLOROPHENOL	10/5/2011 10:38	MW09-08DA-100511	0.34 J	0.21	UG_L	15	3
MW09-08S	2,4,5-TRICHLOROPHENOL					UG_L	22	0
MW09-09DA	2,4,5-TRICHLOROPHENOL	9/7/2016 14:05	MW09-09DA-ME45-1	0.44 J	0.44	UG_L	16	1
MW09-09S	2,4,5-TRICHLOROPHENOL					UG_L	26	0
MW09-10D	2,4,5-TRICHLOROPHENOL					UG_L	22	0
MW09-10S	2,4,5-TRICHLOROPHENOL					UG_L	22	0
MW09-11S	2,4,5-TRICHLOROPHENOL					UG_L	21	0
MW09-14D	2,4,5-TRICHLOROPHENOL					UG_L	22	0
MW09-14IA	2,4,5-TRICHLOROPHENOL					UG_L	13	0
MW09-17I	2,4,5-TRICHLOROPHENOL	9/28/2011 10:19	MW09-17I-092811	0.12 J	0.12	UG_L	19	1
MW09-20D	2,4,5-TRICHLOROPHENOL					UG_L	22	0
MW09-20I	2,4,5-TRICHLOROPHENOL	1/29/2008 0:00	MW09-20I-012908	0.18 J	0.18	UG_L	43	1
MW09-21D	2,4,5-TRICHLOROPHENOL					UG_L	22	0
MW09-21S	2,4,5-TRICHLOROPHENOL					UG_L	33	0
MW09-23D	2,4,5-TRICHLOROPHENOL					UG_L	22	0
MW09-23S	2,4,5-TRICHLOROPHENOL					UG_L	22	0
MW09-24D	2,4,5-TRICHLOROPHENOL					UG_L	22	0
MW09-24S	2,4,5-TRICHLOROPHENOL					UG_L	22	0
MW09-25S	2,4,5-TRICHLOROPHENOL					UG_L	25	0
MW09-26DA	2,4,5-TRICHLOROPHENOL					UG_L	1	0
MW09-26S	2,4,5-TRICHLOROPHENOL	9/7/2016 14:30	MW09-26S-ME45-1	0.19 J	0.14	UG_L	20	2
MW09-27D	2,4,5-TRICHLOROPHENOL	9/6/2016 13:00	MW09-27D-ME45-1	0.51 J	0.51	UG_L	20	1
MW09-27S	2,4,5-TRICHLOROPHENOL					UG_L	20	0
MW09-02S	2,4,6-TRICHLOROPHENOL					UG_L	21	0
MW09-03D	2,4,6-TRICHLOROPHENOL					UG_L	20	0
MW09-07S	2,4,6-TRICHLOROPHENOL					UG_L	25	0
MW09-08DA	2,4,6-TRICHLOROPHENOL					UG_L	14	0
MW09-08S	2,4,6-TRICHLOROPHENOL					UG_L	22	0
MW09-09DA	2,4,6-TRICHLOROPHENOL					UG_L	15	0
MW09-09S	2,4,6-TRICHLOROPHENOL					UG_L	24	0
MW09-10D	2,4,6-TRICHLOROPHENOL					UG_L	22	0
MW09-10S	2,4,6-TRICHLOROPHENOL					UG_L	22	0
MW09-11S	2,4,6-TRICHLOROPHENOL					UG_L	22	0
MW09-14D	2,4,6-TRICHLOROPHENOL					UG_L	23	0
MW09-14IA	2,4,6-TRICHLOROPHENOL					UG_L	16	0
MW09-17I	2,4,6-TRICHLOROPHENOL					UG_L	22	0
MW09-20D	2,4,6-TRICHLOROPHENOL					UG_L	23	0
MW09-20I	2,4,6-TRICHLOROPHENOL					UG_L	45	0
MW09-21D	2,4,6-TRICHLOROPHENOL					UG_L	22	0
MW09-21S	2,4,6-TRICHLOROPHENOL					UG_L	34	0
MW09-23D	2,4,6-TRICHLOROPHENOL					UG_L	22	0
MW09-23S	2,4,6-TRICHLOROPHENOL					UG_L	22	0
MW09-24D	2,4,6-TRICHLOROPHENOL					UG_L	22	0
MW09-24S	2,4,6-TRICHLOROPHENOL					UG_L	22	0
MW09-25S	2,4,6-TRICHLOROPHENOL					UG_L	25	0
MW09-26DA	2,4,6-TRICHLOROPHENOL					UG_L	1	0
MW09-26S	2,4,6-TRICHLOROPHENOL					UG_L	19	0
MW09-27D	2,4,6-TRICHLOROPHENOL					UG_L	20	0
MW09-27S	2,4,6-TRICHLOROPHENOL					UG_L	20	0
MW09-02S	2,4-DICHLOROPHENOL					UG_L	21	0
MW09-03D	2,4-DICHLOROPHENOL					UG_L	20	0
MW09-07S	2,4-DICHLOROPHENOL					UG_L	25	0
MW09-08DA	2,4-DICHLOROPHENOL					UG_L	14	0
MW09-08S	2,4-DICHLOROPHENOL					UG_L	22	0
MW09-09DA	2,4-DICHLOROPHENOL					UG_L	15	0
MW09-09S	2,4-DICHLOROPHENOL					UG_L	24	0
MW09-10D	2,4-DICHLOROPHENOL					UG_L	22	0
MW09-10S	2,4-DICHLOROPHENOL					UG_L	22	0
MW09-11S	2,4-DICHLOROPHENOL	2/27/2002 0:00	MW09-11S-NWG-022702	2 J	2	UG_L	22	2
MW09-14D	2,4-DICHLOROPHENOL					UG_L	23	0
MW09-14IA	2,4-DICHLOROPHENOL					UG_L	16	0
MW09-17I	2,4-DICHLOROPHENOL					UG_L	22	0
MW09-20D	2,4-DICHLOROPHENOL					UG_L	23	0
MW09-20I	2,4-DICHLOROPHENOL					UG_L	45	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-21D	2,4-DICHLOROPHENOL	3/7/2007 0:00	MW09-21D_20070307	1.2 J	1.2	UG_L	22	1
MW09-21S	2,4-DICHLOROPHENOL					UG_L	34	0
MW09-23D	2,4-DICHLOROPHENOL					UG_L	22	0
MW09-23S	2,4-DICHLOROPHENOL					UG_L	22	0
MW09-24D	2,4-DICHLOROPHENOL					UG_L	22	0
MW09-24S	2,4-DICHLOROPHENOL					UG_L	22	0
MW09-25S	2,4-DICHLOROPHENOL					UG_L	25	0
MW09-26DA	2,4-DICHLOROPHENOL					UG_L	1	0
MW09-26S	2,4-DICHLOROPHENOL					UG_L	19	0
MW09-27D	2,4-DICHLOROPHENOL					UG_L	20	0
MW09-27S	2,4-DICHLOROPHENOL					UG_L	20	0
MW09-02S	2,4-DIMETHYLPHENOL					UG_L	20	0
MW09-03D	2,4-DIMETHYLPHENOL					UG_L	18	0
MW09-07S	2,4-DIMETHYLPHENOL					UG_L	23	0
MW09-08DA	2,4-DIMETHYLPHENOL					UG_L	14	0
MW09-08S	2,4-DIMETHYLPHENOL					UG_L	20	0
MW09-09DA	2,4-DIMETHYLPHENOL					UG_L	15	0
MW09-09S	2,4-DIMETHYLPHENOL					UG_L	23	0
MW09-10D	2,4-DIMETHYLPHENOL					UG_L	20	0
MW09-10S	2,4-DIMETHYLPHENOL					UG_L	20	0
MW09-11S	2,4-DIMETHYLPHENOL					UG_L	19	0
MW09-14D	2,4-DIMETHYLPHENOL					UG_L	22	0
MW09-14IA	2,4-DIMETHYLPHENOL	8/6/2009 10:00	MW09-14IA-080609	29	29	UG_L	16	1
MW09-17I	2,4-DIMETHYLPHENOL					UG_L	22	0
MW09-20D	2,4-DIMETHYLPHENOL					UG_L	22	0
MW09-20I	2,4-DIMETHYLPHENOL	11/3/2006 9:00:00 AM 3/6/2007 12:00:00 AM		1.3 JJ	1	UG_L	44	8
MW09-21D	2,4-DIMETHYLPHENOL	6/11/2002 0:00	MW09-21D-NWG-061102	3 J	1.9	UG_L	21	4
MW09-21S	2,4-DIMETHYLPHENOL					UG_L	32	0
MW09-23D	2,4-DIMETHYLPHENOL					UG_L	21	0
MW09-23S	2,4-DIMETHYLPHENOL					UG_L	21	0
MW09-24D	2,4-DIMETHYLPHENOL					UG_L	21	0
MW09-24S	2,4-DIMETHYLPHENOL					UG_L	21	0
MW09-25S	2,4-DIMETHYLPHENOL	12/4/2001 0:00	MW09-25S-NWG-120401	1 J	1	UG_L	23	1
MW09-26DA	2,4-DIMETHYLPHENOL					UG_L	1	0
MW09-26S	2,4-DIMETHYLPHENOL					UG_L	19	0
MW09-27D	2,4-DIMETHYLPHENOL					UG_L	20	0
MW09-27S	2,4-DIMETHYLPHENOL					UG_L	20	0
MW09-02S	2,4-DINITROPHENOL					UG_L	21	0
MW09-03D	2,4-DINITROPHENOL					UG_L	20	0
MW09-07S	2,4-DINITROPHENOL					UG_L	24	0
MW09-08DA	2,4-DINITROPHENOL					UG_L	14	0
MW09-08S	2,4-DINITROPHENOL					UG_L	21	0
MW09-09DA	2,4-DINITROPHENOL					UG_L	15	0
MW09-09S	2,4-DINITROPHENOL					UG_L	23	0
MW09-10D	2,4-DINITROPHENOL					UG_L	22	0
MW09-10S	2,4-DINITROPHENOL					UG_L	22	0
MW09-11S	2,4-DINITROPHENOL					UG_L	22	0
MW09-14D	2,4-DINITROPHENOL					UG_L	23	0
MW09-14IA	2,4-DINITROPHENOL					UG_L	16	0
MW09-17I	2,4-DINITROPHENOL					UG_L	22	0
MW09-20D	2,4-DINITROPHENOL					UG_L	23	0
MW09-20I	2,4-DINITROPHENOL					UG_L	45	0
MW09-21D	2,4-DINITROPHENOL					UG_L	21	0
MW09-21S	2,4-DINITROPHENOL					UG_L	33	0
MW09-23D	2,4-DINITROPHENOL					UG_L	22	0
MW09-23S	2,4-DINITROPHENOL					UG_L	22	0
MW09-24D	2,4-DINITROPHENOL					UG_L	22	0
MW09-24S	2,4-DINITROPHENOL					UG_L	22	0
MW09-25S	2,4-DINITROPHENOL					UG_L	24	0
MW09-26DA	2,4-DINITROPHENOL					UG_L	1	0
MW09-26S	2,4-DINITROPHENOL					UG_L	19	0
MW09-27D	2,4-DINITROPHENOL					UG_L	20	0
MW09-27S	2,4-DINITROPHENOL					UG_L	20	0
MW09-02S	2,4-DINITROTOLUENE					UG_L	21	0
MW09-03D	2,4-DINITROTOLUENE					UG_L	21	0
MW09-07S	2,4-DINITROTOLUENE					UG_L	25	0
MW09-08DA	2,4-DINITROTOLUENE					UG_L	15	0
MW09-08S	2,4-DINITROTOLUENE					UG_L	22	0
MW09-09DA	2,4-DINITROTOLUENE					UG_L	15	0
MW09-09S	2,4-DINITROTOLUENE					UG_L	24	0
MW09-10D	2,4-DINITROTOLUENE					UG_L	22	0
MW09-10S	2,4-DINITROTOLUENE					UG_L	22	0
MW09-11S	2,4-DINITROTOLUENE					UG_L	22	0
MW09-14D	2,4-DINITROTOLUENE					UG_L	24	0
MW09-14IA	2,4-DINITROTOLUENE					UG_L	16	0
MW09-17I	2,4-DINITROTOLUENE					UG_L	22	0
MW09-20D	2,4-DINITROTOLUENE					UG_L	24	0
MW09-20I	2,4-DINITROTOLUENE					UG_L	45	0
MW09-21D	2,4-DINITROTOLUENE					UG_L	22	0
MW09-21S	2,4-DINITROTOLUENE					UG_L	34	0
MW09-23D	2,4-DINITROTOLUENE					UG_L	22	0
MW09-23S	2,4-DINITROTOLUENE					UG_L	22	0
MW09-24D	2,4-DINITROTOLUENE					UG_L	22	0
MW09-24S	2,4-DINITROTOLUENE					UG_L	20	0
MW09-25S	2,4-DINITROTOLUENE					UG_L	25	0
MW09-26DA	2,4-DINITROTOLUENE					UG_L	1	0
MW09-26S	2,4-DINITROTOLUENE					UG_L	19	0
MW09-27D	2,4-DINITROTOLUENE					UG_L	20	0
MW09-27S	2,4-DINITROTOLUENE					UG_L	20	0
MW09-02S	2,6-DINITROTOLUENE					UG_L	21	0
MW09-03D	2,6-DINITROTOLUENE					UG_L	21	0
MW09-07S	2,6-DINITROTOLUENE					UG_L	25	0
MW09-08DA	2,6-DINITROTOLUENE					UG_L	15	0
MW09-08S	2,6-DINITROTOLUENE					UG_L	22	0
MW09-09DA	2,6-DINITROTOLUENE					UG_L	15	0
MW09-09S	2,6-DINITROTOLUENE					UG_L	24	0
MW09-10D	2,6-DINITROTOLUENE					UG_L	22	0
MW09-10S	2,6-DINITROTOLUENE					UG_L	22	0
MW09-11S	2,6-DINITROTOLUENE					UG_L	22	0
MW09-14D	2,6-DINITROTOLUENE					UG_L	24	0
MW09-14IA	2,6-DINITROTOLUENE					UG_L	16	0
MW09-17I	2,6-DINITROTOLUENE					UG_L	22	0
MW09-20D	2,6-DINITROTOLUENE					UG_L	24	0
MW09-20I	2,6-DINITROTOLUENE					UG_L	45	0
MW09-21D	2,6-DINITROTOLUENE					UG_L	22	0
MW09-21S	2,6-DINITROTOLUENE					UG_L	34	0
MW09-23D	2,6-DINITROTOLUENE					UG_L	22	0
MW09-23S	2,6-DINITROTOLUENE					UG_L	22	0
MW09-24D	2,6-DINITROTOLUENE					UG_L	22	0
MW09-24S	2,6-DINITROTOLUENE					UG_L	20	0
MW09-25S	2,6-DINITROTOLUENE					UG_L	25	0
MW09-26DA	2,6-DINITROTOLUENE					UG_L	1	0
MW09-26S	2,6-DINITROTOLUENE					UG_L	19	0
MW09-27D	2,6-DINITROTOLUENE					UG_L	20	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-27S	2,6-DINITROTOLUENE					UG_L	20	0
MW09-02S	2-CHLORONAPHTHALENE					UG_L	21	0
MW09-03D	2-CHLORONAPHTHALENE					UG_L	21	0
MW09-07S	2-CHLORONAPHTHALENE					UG_L	25	0
MW09-08DA	2-CHLORONAPHTHALENE					UG_L	15	0
MW09-08S	2-CHLORONAPHTHALENE					UG_L	22	0
MW09-09DA	2-CHLORONAPHTHALENE					UG_L	15	0
MW09-09S	2-CHLORONAPHTHALENE					UG_L	24	0
MW09-10D	2-CHLORONAPHTHALENE					UG_L	22	0
MW09-10S	2-CHLORONAPHTHALENE					UG_L	22	0
MW09-11S	2-CHLORONAPHTHALENE					UG_L	22	0
MW09-14D	2-CHLORONAPHTHALENE					UG_L	24	0
MW09-14IA	2-CHLORONAPHTHALENE					UG_L	16	0
MW09-17I	2-CHLORONAPHTHALENE					UG_L	22	0
MW09-20D	2-CHLORONAPHTHALENE					UG_L	24	0
MW09-20I	2-CHLORONAPHTHALENE					UG_L	45	0
MW09-21D	2-CHLORONAPHTHALENE					UG_L	22	0
MW09-21S	2-CHLORONAPHTHALENE					UG_L	34	0
MW09-23D	2-CHLORONAPHTHALENE					UG_L	22	0
MW09-23S	2-CHLORONAPHTHALENE					UG_L	22	0
MW09-24D	2-CHLORONAPHTHALENE					UG_L	22	0
MW09-24S	2-CHLORONAPHTHALENE					UG_L	22	0
MW09-25S	2-CHLORONAPHTHALENE					UG_L	25	0
MW09-26DA	2-CHLORONAPHTHALENE					UG_L	1	0
MW09-26S	2-CHLORONAPHTHALENE					UG_L	19	0
MW09-27D	2-CHLORONAPHTHALENE					UG_L	20	0
MW09-27S	2-CHLORONAPHTHALENE					UG_L	20	0
MW09-02S	2-CHLOROPHENOL					UG_L	21	0
MW09-03D	2-CHLOROPHENOL					UG_L	20	0
MW09-07S	2-CHLOROPHENOL					UG_L	25	0
MW09-08DA	2-CHLOROPHENOL					UG_L	14	0
MW09-08S	2-CHLOROPHENOL					UG_L	22	0
MW09-09DA	2-CHLOROPHENOL					UG_L	15	0
MW09-09S	2-CHLOROPHENOL					UG_L	24	0
MW09-10D	2-CHLOROPHENOL					UG_L	22	0
MW09-10S	2-CHLOROPHENOL					UG_L	22	0
MW09-11S	2-CHLOROPHENOL					UG_L	21	0
MW09-14D	2-CHLOROPHENOL					UG_L	23	0
MW09-14IA	2-CHLOROPHENOL					UG_L	16	0
MW09-17I	2-CHLOROPHENOL					UG_L	22	0
MW09-20D	2-CHLOROPHENOL					UG_L	23	0
MW09-20I	2-CHLOROPHENOL					UG_L	45	0
MW09-21D	2-CHLOROPHENOL					UG_L	22	0
MW09-21S	2-CHLOROPHENOL					UG_L	34	0
MW09-23D	2-CHLOROPHENOL					UG_L	22	0
MW09-23S	2-CHLOROPHENOL					UG_L	22	0
MW09-24D	2-CHLOROPHENOL					UG_L	22	0
MW09-24S	2-CHLOROPHENOL					UG_L	22	0
MW09-25S	2-CHLOROPHENOL					UG_L	25	0
MW09-26DA	2-CHLOROPHENOL					UG_L	1	0
MW09-26S	2-CHLOROPHENOL					UG_L	19	0
MW09-27D	2-CHLOROPHENOL					UG_L	20	0
MW09-27S	2-CHLOROPHENOL					UG_L	20	0
MW09-02S	2-METHYLNAPHTHALENE					UG_L	22	0
MW09-03D	2-METHYLNAPHTHALENE					UG_L	22	0
MW09-07S	2-METHYLNAPHTHALENE	3/8/2007 0:00	MW09-07S_20070308	12.7	6.48	UG_L	25	25
MW09-08DA	2-METHYLNAPHTHALENE					UG_L	15	0
MW09-08S	2-METHYLNAPHTHALENE					UG_L	22	0
MW09-09DA	2-METHYLNAPHTHALENE	8/7/2009 9:22	MW09-09DA-080709	0.1	0.1	UG_L	16	1
MW09-09S	2-METHYLNAPHTHALENE					UG_L	26	0
MW09-10D	2-METHYLNAPHTHALENE	3/1/2006 0:00	MW09-10D_Q106	0.052 J	0.052	UG_L	22	1
MW09-10S	2-METHYLNAPHTHALENE	12/20/2005 11:40	MW09-10S-20051220	0.23 J	0.13	UG_L	22	2
MW09-11S	2-METHYLNAPHTHALENE	3/7/2007 0:00	MW09-11S_20070307	0.31 J	0.19	UG_L	22	3
MW09-14D	2-METHYLNAPHTHALENE	11/9/2007 12:00	MW09-14D_20071109	0.062 J	0.062	UG_L	24	1
MW09-14IA	2-METHYLNAPHTHALENE	1/7/2010 10:10	MW09-14IA-010710	0.03 J	0.03	UG_L	13	1
MW09-17I	2-METHYLNAPHTHALENE	4/1/2009 9:45	MW09-17I-040109	33	20	UG_L	22	22
MW09-20D	2-METHYLNAPHTHALENE					UG_L	24	0
MW09-20I	2-METHYLNAPHTHALENE	11/3/2006 9:00	MW09-20I-20061103	0.3 J	0.3	UG_L	39	1
MW09-21D	2-METHYLNAPHTHALENE	11/9/2007 12:00	MW09-21D_20071109	0.34 J	0.23	UG_L	22	2
MW09-21S	2-METHYLNAPHTHALENE	11/1/2006 14:20	MW09-21S-20061101	0.047 J	0.047	UG_L	32	1
MW09-23D	2-METHYLNAPHTHALENE					UG_L	22	0
MW09-23S	2-METHYLNAPHTHALENE	11/3/2006 12:35	MW09-23S-20061103	1	1	UG_L	22	1
MW09-24D	2-METHYLNAPHTHALENE					UG_L	22	0
MW09-24S	2-METHYLNAPHTHALENE	3/6/2006 0:00	MW09-24S_Q106	0.093 J	0.066	UG_L	22	2
MW09-25S	2-METHYLNAPHTHALENE	11/2/2006 16:20	MW09-25S-20061102	2.5	1.2	UG_L	25	5
MW09-26DA	2-METHYLNAPHTHALENE					UG_L	1	0
MW09-26S	2-METHYLNAPHTHALENE					UG_L	20	0
MW09-27D	2-METHYLNAPHTHALENE					UG_L	20	0
MW09-27S	2-METHYLNAPHTHALENE	7/12/2010 16:00	MW09-27S-071210	0.09 J	0.09	UG_L	20	1
MW09-02S	2-METHYLPHENOL					UG_L	21	0
MW09-03D	2-METHYLPHENOL					UG_L	20	0
MW09-07S	2-METHYLPHENOL					UG_L	25	0
MW09-08DA	2-METHYLPHENOL					UG_L	14	0
MW09-08S	2-METHYLPHENOL					UG_L	22	0
MW09-09DA	2-METHYLPHENOL					UG_L	15	0
MW09-09S	2-METHYLPHENOL					UG_L	24	0
MW09-10D	2-METHYLPHENOL					UG_L	22	0
MW09-10S	2-METHYLPHENOL					UG_L	22	0
MW09-11S	2-METHYLPHENOL					UG_L	21	0
MW09-14D	2-METHYLPHENOL					UG_L	23	0
MW09-14IA	2-METHYLPHENOL	3/28/2012 10:05	MW09-14IA-032812	5 J	4.8	UG_L	16	3
MW09-17I	2-METHYLPHENOL					UG_L	22	0
MW09-20D	2-METHYLPHENOL					UG_L	23	0
MW09-20I	2-METHYLPHENOL					UG_L	45	0
MW09-21D	2-METHYLPHENOL	9/11/2002 0:00	MW09-21D-NWG-091102	3 J	2	UG_L	22	3
MW09-21S	2-METHYLPHENOL					UG_L	34	0
MW09-23D	2-METHYLPHENOL					UG_L	22	0
MW09-23S	2-METHYLPHENOL					UG_L	22	0
MW09-24D	2-METHYLPHENOL					UG_L	22	0
MW09-24S	2-METHYLPHENOL					UG_L	22	0
MW09-25S	2-METHYLPHENOL					UG_L	25	0
MW09-26DA	2-METHYLPHENOL					UG_L	1	0
MW09-26S	2-METHYLPHENOL					UG_L	19	0
MW09-27D	2-METHYLPHENOL					UG_L	20	0
MW09-27S	2-METHYLPHENOL					UG_L	20	0
MW09-02S	2-NITROANILINE					UG_L	21	0
MW09-03D	2-NITROANILINE					UG_L	21	0
MW09-07S	2-NITROANILINE					UG_L	25	0
MW09-08DA	2-NITROANILINE					UG_L	15	0
MW09-08S	2-NITROANILINE					UG_L	22	0
MW09-09DA	2-NITROANILINE					UG_L	15	0
MW09-09S	2-NITROANILINE					UG_L	24	0
MW09-10D	2-NITROANILINE					UG_L	22	0
MW09-10S	2-NITROANILINE					UG_L	22	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-11S	2-NITROANILINE					UG_L	22	0
MW09-14D	2-NITROANILINE					UG_L	24	0
MW09-14IA	2-NITROANILINE					UG_L	16	0
MW09-17I	2-NITROANILINE					UG_L	22	0
MW09-20D	2-NITROANILINE					UG_L	24	0
MW09-20I	2-NITROANILINE					UG_L	45	0
MW09-21D	2-NITROANILINE					UG_L	22	0
MW09-21S	2-NITROANILINE					UG_L	34	0
MW09-23D	2-NITROANILINE					UG_L	22	0
MW09-23S	2-NITROANILINE					UG_L	22	0
MW09-24D	2-NITROANILINE					UG_L	22	0
MW09-24S	2-NITROANILINE					UG_L	21	0
MW09-25S	2-NITROANILINE					UG_L	25	0
MW09-26DA	2-NITROANILINE					UG_L	1	0
MW09-26S	2-NITROANILINE					UG_L	19	0
MW09-27D	2-NITROANILINE					UG_L	20	0
MW09-27S	2-NITROANILINE					UG_L	20	0
MW09-02S	2-NITROPHENOL					UG_L	21	0
MW09-03D	2-NITROPHENOL					UG_L	20	0
MW09-07S	2-NITROPHENOL					UG_L	25	0
MW09-08DA	2-NITROPHENOL					UG_L	14	0
MW09-08S	2-NITROPHENOL					UG_L	22	0
MW09-09DA	2-NITROPHENOL					UG_L	15	0
MW09-09S	2-NITROPHENOL					UG_L	24	0
MW09-10D	2-NITROPHENOL					UG_L	22	0
MW09-10S	2-NITROPHENOL					UG_L	22	0
MW09-11S	2-NITROPHENOL					UG_L	21	0
MW09-14D	2-NITROPHENOL					UG_L	23	0
MW09-14IA	2-NITROPHENOL					UG_L	16	0
MW09-17I	2-NITROPHENOL					UG_L	22	0
MW09-20D	2-NITROPHENOL					UG_L	23	0
MW09-20I	2-NITROPHENOL					UG_L	45	0
MW09-21D	2-NITROPHENOL					UG_L	22	0
MW09-21S	2-NITROPHENOL					UG_L	34	0
MW09-23D	2-NITROPHENOL					UG_L	22	0
MW09-23S	2-NITROPHENOL					UG_L	22	0
MW09-24D	2-NITROPHENOL					UG_L	22	0
MW09-24S	2-NITROPHENOL					UG_L	22	0
MW09-25S	2-NITROPHENOL					UG_L	25	0
MW09-26DA	2-NITROPHENOL					UG_L	1	0
MW09-26S	2-NITROPHENOL					UG_L	19	0
MW09-27D	2-NITROPHENOL					UG_L	20	0
MW09-27S	2-NITROPHENOL					UG_L	20	0
MW09-02S	3- AND 4-METHYLPHENOL					UG_L	11	0
MW09-03D	3- AND 4-METHYLPHENOL					UG_L	9	0
MW09-07S	3- AND 4-METHYLPHENOL	11/9/2007 12:00	MW09-07S_20071109	1.7 J	1.7	UG_L	11	1
MW09-08DA	3- AND 4-METHYLPHENOL					UG_L	10	0
MW09-08S	3- AND 4-METHYLPHENOL					UG_L	11	0
MW09-09DA	3- AND 4-METHYLPHENOL					UG_L	10	0
MW09-09S	3- AND 4-METHYLPHENOL	12/15/2005 1:05	MW09-09S-20051215	77	39	UG_L	11	2
MW09-10D	3- AND 4-METHYLPHENOL					UG_L	11	0
MW09-10S	3- AND 4-METHYLPHENOL					UG_L	11	0
MW09-11S	3- AND 4-METHYLPHENOL					UG_L	11	0
MW09-14D	3- AND 4-METHYLPHENOL					UG_L	10	0
MW09-14IA	3- AND 4-METHYLPHENOL	10/20/2009 11:15	MW09-14IA-102009	8 J	8	UG_L	10	1
MW09-17I	3- AND 4-METHYLPHENOL					UG_L	10	0
MW09-20D	3- AND 4-METHYLPHENOL					UG_L	10	0
MW09-20I	3- AND 4-METHYLPHENOL	12/15/2005 10:52	MW09-20I-20051215	6.7 J	4.7	UG_L	22	6
MW09-21D	3- AND 4-METHYLPHENOL					UG_L	11	0
MW09-21S	3- AND 4-METHYLPHENOL					UG_L	18	0
MW09-23D	3- AND 4-METHYLPHENOL					UG_L	11	0
MW09-23S	3- AND 4-METHYLPHENOL					UG_L	11	0
MW09-24D	3- AND 4-METHYLPHENOL					UG_L	11	0
MW09-24S	3- AND 4-METHYLPHENOL					UG_L	11	0
MW09-25S	3- AND 4-METHYLPHENOL					UG_L	11	0
MW09-26S	3- AND 4-METHYLPHENOL					UG_L	9	0
MW09-27D	3- AND 4-METHYLPHENOL					UG_L	10	0
MW09-27S	3- AND 4-METHYLPHENOL					UG_L	10	0
MW09-02S	3,3-DICHLOROBENZIDINE					UG_L	19	0
MW09-03D	3,3-DICHLOROBENZIDINE					UG_L	19	0
MW09-07S	3,3-DICHLOROBENZIDINE					UG_L	22	0
MW09-08DA	3,3-DICHLOROBENZIDINE					UG_L	15	0
MW09-08S	3,3-DICHLOROBENZIDINE					UG_L	19	0
MW09-09DA	3,3-DICHLOROBENZIDINE					UG_L	15	0
MW09-09S	3,3-DICHLOROBENZIDINE					UG_L	22	0
MW09-10D	3,3-DICHLOROBENZIDINE					UG_L	21	0
MW09-10S	3,3-DICHLOROBENZIDINE					UG_L	21	0
MW09-11S	3,3-DICHLOROBENZIDINE					UG_L	18	0
MW09-14D	3,3-DICHLOROBENZIDINE					UG_L	22	0
MW09-14IA	3,3-DICHLOROBENZIDINE					UG_L	16	0
MW09-17I	3,3-DICHLOROBENZIDINE					UG_L	22	0
MW09-20D	3,3-DICHLOROBENZIDINE					UG_L	22	0
MW09-20I	3,3-DICHLOROBENZIDINE					UG_L	43	0
MW09-21D	3,3-DICHLOROBENZIDINE					UG_L	19	0
MW09-21S	3,3-DICHLOROBENZIDINE					UG_L	31	0
MW09-23D	3,3-DICHLOROBENZIDINE					UG_L	19	0
MW09-23S	3,3-DICHLOROBENZIDINE					UG_L	19	0
MW09-24D	3,3-DICHLOROBENZIDINE					UG_L	19	0
MW09-24S	3,3-DICHLOROBENZIDINE					UG_L	19	0
MW09-25S	3,3-DICHLOROBENZIDINE					UG_L	21	0
MW09-26DA	3,3-DICHLOROBENZIDINE					UG_L	1	0
MW09-26S	3,3-DICHLOROBENZIDINE					UG_L	19	0
MW09-27D	3,3-DICHLOROBENZIDINE					UG_L	20	0
MW09-27S	3,3-DICHLOROBENZIDINE					UG_L	20	0
MW09-02S	3-NITROANILINE					UG_L	21	0
MW09-03D	3-NITROANILINE					UG_L	21	0
MW09-07S	3-NITROANILINE					UG_L	25	0
MW09-08DA	3-NITROANILINE					UG_L	15	0
MW09-08S	3-NITROANILINE					UG_L	22	0
MW09-09DA	3-NITROANILINE					UG_L	15	0
MW09-09S	3-NITROANILINE					UG_L	24	0
MW09-10D	3-NITROANILINE					UG_L	22	0
MW09-10S	3-NITROANILINE					UG_L	22	0
MW09-11S	3-NITROANILINE					UG_L	22	0
MW09-14D	3-NITROANILINE					UG_L	24	0
MW09-14IA	3-NITROANILINE					UG_L	16	0
MW09-17I	3-NITROANILINE					UG_L	22	0
MW09-20D	3-NITROANILINE					UG_L	24	0
MW09-20I	3-NITROANILINE					UG_L	44	0
MW09-21D	3-NITROANILINE					UG_L	22	0
MW09-21S	3-NITROANILINE					UG_L	34	0
MW09-23D	3-NITROANILINE					UG_L	22	0
MW09-23S	3-NITROANILINE					UG_L	22	0
MW09-24D	3-NITROANILINE					UG_L	22	0

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-24S	3-NITROANILINE					UG_L	21	0
MW09-25S	3-NITROANILINE					UG_L	25	0
MW09-26DA	3-NITROANILINE					UG_L	1	0
MW09-26S	3-NITROANILINE					UG_L	19	0
MW09-27D	3-NITROANILINE					UG_L	20	0
MW09-27S	3-NITROANILINE					UG_L	20	0
MW09-02S	4,6-DINITRO-2-METHYLPHENOL					UG_L	20	0
MW09-03D	4,6-DINITRO-2-METHYLPHENOL					UG_L	19	0
MW09-07S	4,6-DINITRO-2-METHYLPHENOL					UG_L	23	0
MW09-08DA	4,6-DINITRO-2-METHYLPHENOL					UG_L	14	0
MW09-08S	4,6-DINITRO-2-METHYLPHENOL					UG_L	20	0
MW09-09DA	4,6-DINITRO-2-METHYLPHENOL					UG_L	15	0
MW09-09S	4,6-DINITRO-2-METHYLPHENOL					UG_L	22	0
MW09-10D	4,6-DINITRO-2-METHYLPHENOL					UG_L	20	0
MW09-10S	4,6-DINITRO-2-METHYLPHENOL					UG_L	20	0
MW09-11S	4,6-DINITRO-2-METHYLPHENOL					UG_L	21	0
MW09-14D	4,6-DINITRO-2-METHYLPHENOL					UG_L	22	0
MW09-14IA	4,6-DINITRO-2-METHYLPHENOL					UG_L	16	0
MW09-17I	4,6-DINITRO-2-METHYLPHENOL					UG_L	22	0
MW09-20D	4,6-DINITRO-2-METHYLPHENOL					UG_L	21	0
MW09-20I	4,6-DINITRO-2-METHYLPHENOL					UG_L	43	0
MW09-21D	4,6-DINITRO-2-METHYLPHENOL					UG_L	21	0
MW09-21S	4,6-DINITRO-2-METHYLPHENOL					UG_L	33	0
MW09-23D	4,6-DINITRO-2-METHYLPHENOL					UG_L	20	0
MW09-23S	4,6-DINITRO-2-METHYLPHENOL					UG_L	20	0
MW09-24D	4,6-DINITRO-2-METHYLPHENOL					UG_L	21	0
MW09-24S	4,6-DINITRO-2-METHYLPHENOL					UG_L	21	0
MW09-25S	4,6-DINITRO-2-METHYLPHENOL					UG_L	24	0
MW09-26DA	4,6-DINITRO-2-METHYLPHENOL					UG_L	1	0
MW09-26S	4,6-DINITRO-2-METHYLPHENOL					UG_L	19	0
MW09-27D	4,6-DINITRO-2-METHYLPHENOL					UG_L	20	0
MW09-27S	4,6-DINITRO-2-METHYLPHENOL					UG_L	20	0
MW09-02S	4-BROMOPHENYL-PHENYLETHER					UG_L	21	0
MW09-03D	4-BROMOPHENYL-PHENYLETHER					UG_L	21	0
MW09-07S	4-BROMOPHENYL-PHENYLETHER					UG_L	25	0
MW09-08DA	4-BROMOPHENYL-PHENYLETHER					UG_L	15	0
MW09-08S	4-BROMOPHENYL-PHENYLETHER					UG_L	22	0
MW09-09DA	4-BROMOPHENYL-PHENYLETHER					UG_L	15	0
MW09-09S	4-BROMOPHENYL-PHENYLETHER					UG_L	24	0
MW09-10D	4-BROMOPHENYL-PHENYLETHER					UG_L	22	0
MW09-10S	4-BROMOPHENYL-PHENYLETHER					UG_L	22	0
MW09-11S	4-BROMOPHENYL-PHENYLETHER					UG_L	22	0
MW09-14D	4-BROMOPHENYL-PHENYLETHER					UG_L	24	0
MW09-14IA	4-BROMOPHENYL-PHENYLETHER					UG_L	16	0
MW09-17I	4-BROMOPHENYL-PHENYLETHER	9/25/2008 13:33	MW09-17I-092508	0.31 J	0.31	UG_L	22	1
MW09-20D	4-BROMOPHENYL-PHENYLETHER					UG_L	24	0
MW09-20I	4-BROMOPHENYL-PHENYLETHER					UG_L	45	0
MW09-21D	4-BROMOPHENYL-PHENYLETHER					UG_L	22	0
MW09-21S	4-BROMOPHENYL-PHENYLETHER					UG_L	34	0
MW09-23D	4-BROMOPHENYL-PHENYLETHER					UG_L	22	0
MW09-23S	4-BROMOPHENYL-PHENYLETHER					UG_L	22	0
MW09-24D	4-BROMOPHENYL-PHENYLETHER					UG_L	22	0
MW09-24S	4-BROMOPHENYL-PHENYLETHER					UG_L	22	0
MW09-25S	4-BROMOPHENYL-PHENYLETHER					UG_L	25	0
MW09-26DA	4-BROMOPHENYL-PHENYLETHER					UG_L	1	0
MW09-26S	4-BROMOPHENYL-PHENYLETHER					UG_L	19	0
MW09-27D	4-BROMOPHENYL-PHENYLETHER					UG_L	20	0
MW09-27S	4-BROMOPHENYL-PHENYLETHER					UG_L	20	0
MW09-02S	4-CHLORO-3-METHYLPHENOL					UG_L	21	0
MW09-03D	4-CHLORO-3-METHYLPHENOL					UG_L	20	0
MW09-07S	4-CHLORO-3-METHYLPHENOL					UG_L	25	0
MW09-08DA	4-CHLORO-3-METHYLPHENOL					UG_L	14	0
MW09-08S	4-CHLORO-3-METHYLPHENOL					UG_L	22	0
MW09-09DA	4-CHLORO-3-METHYLPHENOL					UG_L	15	0
MW09-09S	4-CHLORO-3-METHYLPHENOL					UG_L	24	0
MW09-10D	4-CHLORO-3-METHYLPHENOL					UG_L	22	0
MW09-10S	4-CHLORO-3-METHYLPHENOL					UG_L	22	0
MW09-11S	4-CHLORO-3-METHYLPHENOL					UG_L	22	0
MW09-14D	4-CHLORO-3-METHYLPHENOL					UG_L	23	0
MW09-14IA	4-CHLORO-3-METHYLPHENOL					UG_L	16	0
MW09-17I	4-CHLORO-3-METHYLPHENOL					UG_L	22	0
MW09-20D	4-CHLORO-3-METHYLPHENOL					UG_L	23	0
MW09-20I	4-CHLORO-3-METHYLPHENOL					UG_L	45	0
MW09-21D	4-CHLORO-3-METHYLPHENOL					UG_L	22	0
MW09-21S	4-CHLORO-3-METHYLPHENOL					UG_L	34	0
MW09-23D	4-CHLORO-3-METHYLPHENOL					UG_L	22	0
MW09-23S	4-CHLORO-3-METHYLPHENOL					UG_L	22	0
MW09-24D	4-CHLORO-3-METHYLPHENOL					UG_L	22	0
MW09-24S	4-CHLORO-3-METHYLPHENOL					UG_L	22	0
MW09-25S	4-CHLORO-3-METHYLPHENOL					UG_L	25	0
MW09-26DA	4-CHLORO-3-METHYLPHENOL					UG_L	1	0
MW09-26S	4-CHLORO-3-METHYLPHENOL					UG_L	19	0
MW09-27D	4-CHLORO-3-METHYLPHENOL					UG_L	20	0
MW09-27S	4-CHLORO-3-METHYLPHENOL					UG_L	20	0
MW09-02S	4-CHLOROANILINE					UG_L	21	0
MW09-03D	4-CHLOROANILINE					UG_L	21	0
MW09-07S	4-CHLOROANILINE	12/4/2003 0:00	MW09-07S-NWG-120403	8	8	UG_L	25	1
MW09-08DA	4-CHLOROANILINE					UG_L	15	0
MW09-08S	4-CHLOROANILINE					UG_L	22	0
MW09-09DA	4-CHLOROANILINE					UG_L	15	0
MW09-09S	4-CHLOROANILINE					UG_L	24	0
MW09-10D	4-CHLOROANILINE					UG_L	22	0
MW09-10S	4-CHLOROANILINE					UG_L	22	0
MW09-11S	4-CHLOROANILINE					UG_L	21	0
MW09-14D	4-CHLOROANILINE					UG_L	24	0
MW09-14IA	4-CHLOROANILINE					UG_L	16	0
MW09-17I	4-CHLOROANILINE	10/21/2009 12:10	MW09-17I-102109	5 J	5	UG_L	22	1
MW09-20D	4-CHLOROANILINE					UG_L	24	0
MW09-20I	4-CHLOROANILINE					UG_L	45	0
MW09-21D	4-CHLOROANILINE					UG_L	22	0
MW09-21S	4-CHLOROANILINE					UG_L	34	0
MW09-23D	4-CHLOROANILINE					UG_L	22	0
MW09-23S	4-CHLOROANILINE					UG_L	22	0
MW09-24D	4-CHLOROANILINE					UG_L	22	0
MW09-24S	4-CHLOROANILINE					UG_L	22	0
MW09-25S	4-CHLOROANILINE					UG_L	25	0
MW09-26DA	4-CHLOROANILINE					UG_L	1	0
MW09-26S	4-CHLOROANILINE					UG_L	19	0
MW09-27D	4-CHLOROANILINE					UG_L	20	0
MW09-27S	4-CHLOROANILINE					UG_L	20	0
MW09-02S	4-CHLOROPHENYL-PHENYLETHER					UG_L	21	0
MW09-03D	4-CHLOROPHENYL-PHENYLETHER					UG_L	21	0
MW09-07S	4-CHLOROPHENYL-PHENYLETHER					UG_L	25	0
MW09-08DA	4-CHLOROPHENYL-PHENYLETHER					UG_L	15	0

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-08S	4-CHLOROPHENYL-PHENYLETHER					UG_L	22	0
MW09-09DA	4-CHLOROPHENYL-PHENYLETHER					UG_L	15	0
MW09-09S	4-CHLOROPHENYL-PHENYLETHER					UG_L	24	0
MW09-10D	4-CHLOROPHENYL-PHENYLETHER					UG_L	22	0
MW09-10S	4-CHLOROPHENYL-PHENYLETHER					UG_L	22	0
MW09-11S	4-CHLOROPHENYL-PHENYLETHER					UG_L	22	0
MW09-14D	4-CHLOROPHENYL-PHENYLETHER					UG_L	24	0
MW09-14IA	4-CHLOROPHENYL-PHENYLETHER					UG_L	16	0
MW09-17I	4-CHLOROPHENYL-PHENYLETHER	9/25/2008 13:33	MW09-17I-092508	0.26 J	0.26	UG_L	22	1
MW09-20D	4-CHLOROPHENYL-PHENYLETHER					UG_L	24	0
MW09-20I	4-CHLOROPHENYL-PHENYLETHER					UG_L	45	0
MW09-21D	4-CHLOROPHENYL-PHENYLETHER					UG_L	22	0
MW09-21S	4-CHLOROPHENYL-PHENYLETHER					UG_L	34	0
MW09-23D	4-CHLOROPHENYL-PHENYLETHER					UG_L	22	0
MW09-23S	4-CHLOROPHENYL-PHENYLETHER					UG_L	22	0
MW09-24D	4-CHLOROPHENYL-PHENYLETHER					UG_L	22	0
MW09-24S	4-CHLOROPHENYL-PHENYLETHER					UG_L	22	0
MW09-25S	4-CHLOROPHENYL-PHENYLETHER					UG_L	25	0
MW09-26DA	4-CHLOROPHENYL-PHENYLETHER					UG_L	1	0
MW09-26S	4-CHLOROPHENYL-PHENYLETHER					UG_L	19	0
MW09-27D	4-CHLOROPHENYL-PHENYLETHER					UG_L	20	0
MW09-27S	4-CHLOROPHENYL-PHENYLETHER					UG_L	20	0
MW09-02S	4-METHYLPHENOL					UG_L	9	0
MW09-03D	4-METHYLPHENOL					UG_L	10	0
MW09-07S	4-METHYLPHENOL					UG_L	13	0
MW09-08DA	4-METHYLPHENOL					UG_L	4	0
MW09-08S	4-METHYLPHENOL					UG_L	10	0
MW09-09DA	4-METHYLPHENOL					UG_L	5	0
MW09-09S	4-METHYLPHENOL	1/20/2003 0:00	MW09-09S-NWG-012003	78	40	UG_L	12	2
MW09-10D	4-METHYLPHENOL					UG_L	10	0
MW09-10S	4-METHYLPHENOL					UG_L	10	0
MW09-11S	4-METHYLPHENOL					UG_L	10	0
MW09-14D	4-METHYLPHENOL					UG_L	12	0
MW09-14IA	4-METHYLPHENOL	8/6/2009 10:00	MW09-14IA-080609	18	12	UG_L	6	3
MW09-17I	4-METHYLPHENOL					UG_L	12	0
MW09-20D	4-METHYLPHENOL					UG_L	12	0
MW09-20I	4-METHYLPHENOL	1/29/2008 0:00	MW09-20I-012908	9.1	4.4	UG_L	22	22
MW09-21D	4-METHYLPHENOL					UG_L	10	0
MW09-21S	4-METHYLPHENOL					UG_L	15	0
MW09-23D	4-METHYLPHENOL					UG_L	10	0
MW09-23S	4-METHYLPHENOL					UG_L	10	0
MW09-24D	4-METHYLPHENOL					UG_L	10	0
MW09-24S	4-METHYLPHENOL					UG_L	10	0
MW09-25S	4-METHYLPHENOL					UG_L	13	0
MW09-26DA	4-METHYLPHENOL					UG_L	1	0
MW09-26S	4-METHYLPHENOL					UG_L	10	0
MW09-27D	4-METHYLPHENOL					UG_L	10	0
MW09-27S	4-METHYLPHENOL					UG_L	10	0
MW09-02S	4-NITROANILINE					UG_L	21	0
MW09-03D	4-NITROANILINE					UG_L	21	0
MW09-07S	4-NITROANILINE					UG_L	25	0
MW09-08DA	4-NITROANILINE					UG_L	15	0
MW09-08S	4-NITROANILINE					UG_L	22	0
MW09-09DA	4-NITROANILINE					UG_L	15	0
MW09-09S	4-NITROANILINE					UG_L	24	0
MW09-10D	4-NITROANILINE					UG_L	22	0
MW09-10S	4-NITROANILINE					UG_L	22	0
MW09-11S	4-NITROANILINE					UG_L	22	0
MW09-14D	4-NITROANILINE					UG_L	24	0
MW09-14IA	4-NITROANILINE					UG_L	16	0
MW09-17I	4-NITROANILINE					UG_L	22	0
MW09-20D	4-NITROANILINE					UG_L	24	0
MW09-20I	4-NITROANILINE					UG_L	45	0
MW09-21D	4-NITROANILINE					UG_L	22	0
MW09-21S	4-NITROANILINE					UG_L	34	0
MW09-23D	4-NITROANILINE					UG_L	22	0
MW09-23S	4-NITROANILINE					UG_L	22	0
MW09-24D	4-NITROANILINE					UG_L	22	0
MW09-24S	4-NITROANILINE					UG_L	21	0
MW09-25S	4-NITROANILINE					UG_L	25	0
MW09-26DA	4-NITROANILINE					UG_L	1	0
MW09-26S	4-NITROANILINE					UG_L	19	0
MW09-27D	4-NITROANILINE					UG_L	20	0
MW09-27S	4-NITROANILINE					UG_L	20	0
MW09-02S	4-NITROPHENOL					UG_L	21	0
MW09-03D	4-NITROPHENOL					UG_L	20	0
MW09-07S	4-NITROPHENOL					UG_L	24	0
MW09-08DA	4-NITROPHENOL					UG_L	14	0
MW09-08S	4-NITROPHENOL					UG_L	22	0
MW09-09DA	4-NITROPHENOL					UG_L	15	0
MW09-09S	4-NITROPHENOL					UG_L	24	0
MW09-10D	4-NITROPHENOL					UG_L	22	0
MW09-10S	4-NITROPHENOL					UG_L	22	0
MW09-11S	4-NITROPHENOL					UG_L	22	0
MW09-14D	4-NITROPHENOL					UG_L	22	0
MW09-14IA	4-NITROPHENOL					UG_L	16	0
MW09-17I	4-NITROPHENOL					UG_L	22	0
MW09-20D	4-NITROPHENOL					UG_L	23	0
MW09-20I	4-NITROPHENOL					UG_L	45	0
MW09-21D	4-NITROPHENOL					UG_L	22	0
MW09-21S	4-NITROPHENOL					UG_L	33	0
MW09-23D	4-NITROPHENOL					UG_L	22	0
MW09-23S	4-NITROPHENOL					UG_L	22	0
MW09-24D	4-NITROPHENOL					UG_L	21	0
MW09-24S	4-NITROPHENOL					UG_L	21	0
MW09-25S	4-NITROPHENOL					UG_L	25	0
MW09-26DA	4-NITROPHENOL					UG_L	1	0
MW09-26S	4-NITROPHENOL					UG_L	19	0
MW09-27D	4-NITROPHENOL					UG_L	20	0
MW09-27S	4-NITROPHENOL					UG_L	20	0
MW09-02S	ACENAPHTHENE	8/11/2004 0:00	MW09-02S-NWG-081104	0.14 J	0.14	UG_L	22	1
MW09-03D	ACENAPHTHENE					UG_L	22	0
MW09-07S	ACENAPHTHENE	12/7/2001 0:00	MW09-07S-NWG-120701	10 J	4.8	UG_L	25	24
MW09-08DA	ACENAPHTHENE	10/5/2011 10:38	MW09-08DA-100511	0.21 J	0.21	UG_L	15	1
MW09-08S	ACENAPHTHENE					UG_L	22	0
MW09-09DA	ACENAPHTHENE	8/7/2009 9:22	MW09-09DA-080709	0.16	0.11	UG_L	16	3
MW09-09S	ACENAPHTHENE	9/26/2005 15:00	MW09-09S-20050926	2.7	2.7	UG_L	26	1
MW09-10D	ACENAPHTHENE					UG_L	22	0
MW09-10S	ACENAPHTHENE	12/20/2005 11:40	MW09-10S-20051220	0.11 J	0.086	UG_L	22	2
MW09-11S	ACENAPHTHENE	3/7/2007 0:00	MW09-11S_20070307	1.2	0.44	UG_L	22	4
MW09-14D	ACENAPHTHENE	9/27/2005 15:55	MW09-14D-20050927	0.31 J	0.31	UG_L	24	1
MW09-14IA	ACENAPHTHENE					UG_L	13	0
MW09-17I	ACENAPHTHENE	9/25/2012 11:44	MW09-17I-092512	3.4 J	2.4	UG_L	19	18
MW09-20D	ACENAPHTHENE					UG_L	24	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-20I	ACENAPHTHENE	3/1/2006 0:00	MW09-20I_Q106	1.7 J	0.69	UG_L	39	7
MW09-21D	ACENAPHTHENE	11/9/2007 12:00	MW09-21D_20071109	0.15 J	0.15	UG_L	22	1
MW09-21S	ACENAPHTHENE	8/11/2004 0:00	MW09-21S-NWG-081104	0.34 J	0.27	UG_L	32	2
MW09-23D	ACENAPHTHENE					UG_L	22	0
MW09-23S	ACENAPHTHENE	9/9/2002 0:00	MW09-23S-NWG-090902	14	6.1	UG_L	22	19
MW09-24D	ACENAPHTHENE	12/20/2005 9:13	MW09-24D-20051220	0.11 J	0.088	UG_L	22	2
MW09-24S	ACENAPHTHENE	3/17/2005 0:00	MW09-24S-031705	0.44 J	0.2	UG_L	22	8
MW09-25S	ACENAPHTHENE	12/19/2005 12:30	MW09-25S-20051219	12.6	4.91	UG_L	25	3
MW09-26DA	ACENAPHTHENE					UG_L	1	0
MW09-26S	ACENAPHTHENE					UG_L	20	0
MW09-27D	ACENAPHTHENE					UG_L	20	0
MW09-27S	ACENAPHTHENE					UG_L	20	0
MW09-02S	ACENAPHTHYLENE					UG_L	22	0
MW09-03D	ACENAPHTHYLENE					UG_L	22	0
MW09-07S	ACENAPHTHYLENE	10/20/2004 0:00	MW09-07S-NWG-102004	9.8	4.4	UG_L	25	7
MW09-08DA	ACENAPHTHYLENE	10/5/2011 10:38	MW09-08DA-100511	0.21 J	0.21	UG_L	15	1
MW09-08S	ACENAPHTHYLENE	9/26/2005 16:55	MW09-08S-20050926	0.15 J	0.15	UG_L	22	1
MW09-09DA	ACENAPHTHYLENE					UG_L	16	0
MW09-09S	ACENAPHTHYLENE					UG_L	26	0
MW09-10D	ACENAPHTHYLENE					UG_L	22	0
MW09-10S	ACENAPHTHYLENE	12/20/2005 11:40	MW09-10S-20051220	0.57	0.57	UG_L	22	1
MW09-11S	ACENAPHTHYLENE					UG_L	21	0
MW09-14D	ACENAPHTHYLENE	3/6/2006 0:00	MW09-14D_Q106	0.29 J	0.24	UG_L	24	2
MW09-14IA	ACENAPHTHYLENE					UG_L	13	0
MW09-17I	ACENAPHTHYLENE					UG_L	19	0
MW09-20D	ACENAPHTHYLENE					UG_L	24	0
MW09-20I	ACENAPHTHYLENE	6/17/2004 0:00	MW09-20I-NWG-061704	4.3	1.9	UG_L	39	7
MW09-21D	ACENAPHTHYLENE	3/17/2005 0:00	MW09-21D-031705	0.38 J	0.38	UG_L	22	1
MW09-21S	ACENAPHTHYLENE	3/6/2006 0:00	MW09-21S_Q106	0.17 J	0.096	UG_L	32	3
MW09-23D	ACENAPHTHYLENE					UG_L	22	0
MW09-23S	ACENAPHTHYLENE	9/26/2005 14:55	MW09-23S-20050926	0.29	0.21	UG_L	22	3
MW09-24D	ACENAPHTHYLENE	9/28/2005 9:54	MW09-24D-20050928	0.12 J	0.12	UG_L	22	1
MW09-24S	ACENAPHTHYLENE	6/16/2004 0:00	MW09-24S-NWG-061604	0.56	0.29	UG_L	22	4
MW09-25S	ACENAPHTHYLENE	12/19/2005 12:30	MW09-25S-20051219	5.9	3.1	UG_L	25	2
MW09-26DA	ACENAPHTHYLENE					UG_L	1	0
MW09-26S	ACENAPHTHYLENE					UG_L	20	0
MW09-27D	ACENAPHTHYLENE					UG_L	20	0
MW09-27S	ACENAPHTHYLENE					UG_L	20	0
MW09-02S	ANTHRACENE					UG_L	22	0
MW09-03D	ANTHRACENE					UG_L	22	0
MW09-07S	ANTHRACENE	3/6/2006 0:00	MW09-07S_Q106	0.42 J	0.15	UG_L	25	6
MW09-08DA	ANTHRACENE	10/5/2011 10:38	MW09-08DA-100511	0.2 J	0.2	UG_L	15	1
MW09-08S	ANTHRACENE	12/5/2003 0:00	MW09-08S-NWG-120503	0.04 J	0.04	UG_L	22	1
MW09-09DA	ANTHRACENE	10/20/2009 11:20	MW09-09DA-102009	0.06 J	0.06	UG_L	16	1
MW09-09S	ANTHRACENE	9/7/2016 10:30	MW09-09S-ME45-1	0.15	0.09	UG_L	26	2
MW09-10D	ANTHRACENE					UG_L	22	0
MW09-10S	ANTHRACENE					UG_L	22	0
MW09-11S	ANTHRACENE					UG_L	22	0
MW09-14D	ANTHRACENE					UG_L	24	0
MW09-14IA	ANTHRACENE					UG_L	13	0
MW09-17I	ANTHRACENE	8/5/2009 14:35	MW09-17I-080509	0.18	0.15	UG_L	19	2
MW09-20D	ANTHRACENE					UG_L	24	0
MW09-20I	ANTHRACENE	3/1/2006 0:00	MW09-20I_Q106	0.97 J	0.6	UG_L	39	4
MW09-21D	ANTHRACENE					UG_L	22	0
MW09-21S	ANTHRACENE					UG_L	32	0
MW09-23D	ANTHRACENE					UG_L	22	0
MW09-23S	ANTHRACENE	3/8/2007 0:00	MW09-23S_20070308	1.1	0.32	UG_L	22	10
MW09-24D	ANTHRACENE					UG_L	22	0
MW09-24S	ANTHRACENE	3/6/2007 0:00	MW09-24S_20070306	0.12 J	0.12	UG_L	22	1
MW09-25S	ANTHRACENE	9/9/2015 15:05	MW09-25S-090915-1	0.11	0.076	UG_L	25	5
MW09-26DA	ANTHRACENE					UG_L	1	0
MW09-26S	ANTHRACENE					UG_L	20	0
MW09-27D	ANTHRACENE					UG_L	20	0
MW09-27S	ANTHRACENE	7/12/2010 16:00	MW09-27S-071210	0.04 J	0.04	UG_L	20	1
MW09-02S	BENZO(A)ANTHRACENE					UG_L	22	0
MW09-03D	BENZO(A)ANTHRACENE	6/16/2004 0:00	MW09-03D-NWG-061604	0.03 J	0.03	UG_L	22	1
MW09-07S	BENZO(A)ANTHRACENE	9/27/2005 13:43	MW09-07S-20050927	0.098 J	0.098	UG_L	25	1
MW09-08DA	BENZO(A)ANTHRACENE	10/5/2011 10:38	MW09-08DA-100511	0.24 J	0.15	UG_L	15	4
MW09-08S	BENZO(A)ANTHRACENE	11/7/2007 12:00	MW09-08S_20071107	0.12 J	0.086	UG_L	22	2
MW09-09DA	BENZO(A)ANTHRACENE	7/13/2011 10:20:00 AM 3/25/2013 2:45:00 PM		0.12 JJ	1	UG_L	16	3
MW09-09S	BENZO(A)ANTHRACENE	9/7/2016 10:30	MW09-09S-ME45-1	0.23	0.18	UG_L	26	2
MW09-10D	BENZO(A)ANTHRACENE					UG_L	22	0
MW09-10S	BENZO(A)ANTHRACENE					UG_L	22	0
MW09-11S	BENZO(A)ANTHRACENE					UG_L	22	0
MW09-14D	BENZO(A)ANTHRACENE					UG_L	24	0
MW09-14IA	BENZO(A)ANTHRACENE	10/20/2009 11:15	MW09-14IA-102009	0.05 J	0.05	UG_L	13	1
MW09-17I	BENZO(A)ANTHRACENE	8/5/2009 14:35	MW09-17I-080509	0.14	0.14	UG_L	19	1
MW09-20D	BENZO(A)ANTHRACENE	6/19/2007 10:15	MW09-20D_20070619	0.091 J	0.091	UG_L	24	1
MW09-20I	BENZO(A)ANTHRACENE	9/8/2016 10:10	MW09-20I-ME45-1	0.41	0.23	UG_L	39	2
MW09-21D	BENZO(A)ANTHRACENE	9/28/2005 14:45	MW09-21D-20050928	0.079 J	0.079	UG_L	22	1
MW09-21S	BENZO(A)ANTHRACENE	10/4/2011 14:22	MW09-21S-100411	0.19 J	0.19	UG_L	32	1
MW09-23D	BENZO(A)ANTHRACENE					UG_L	22	0
MW09-23S	BENZO(A)ANTHRACENE					UG_L	22	0
MW09-24D	BENZO(A)ANTHRACENE					UG_L	22	0
MW09-24S	BENZO(A)ANTHRACENE					UG_L	22	0
MW09-25S	BENZO(A)ANTHRACENE					UG_L	25	0
MW09-26DA	BENZO(A)ANTHRACENE					UG_L	1	0
MW09-26S	BENZO(A)ANTHRACENE	3/24/2011 12:49	MW09-26S-032411	0.12 J	0.081	UG_L	20	3
MW09-27D	BENZO(A)ANTHRACENE	7/13/2011 8:46	MW09-27D-071311	0.12 J	0.085	UG_L	20	2
MW09-27S	BENZO(A)ANTHRACENE	7/13/2011 13:18	MW09-27S-071311	0.13 J	0.1	UG_L	20	4
MW09-02S	BENZO(A)PYRENE					UG_L	22	0
MW09-03D	BENZO(A)PYRENE	6/15/2005 0:00	MW09-03D	0.039 J	0.039	UG_L	22	1
MW09-07S	BENZO(A)PYRENE	3/6/2006 0:00	MW09-07S_Q106	0.12 J	0.1	UG_L	25	2
MW09-08DA	BENZO(A)PYRENE	3/22/2010 2:57	MW09-08DA-032210	0.2 J	0.16	UG_L	15	3
MW09-08S	BENZO(A)PYRENE					UG_L	22	0
MW09-09DA	BENZO(A)PYRENE	7/13/2011 10:20	MW09-09DA-071311	0.08 J	0.08	UG_L	16	2
MW09-09S	BENZO(A)PYRENE	9/7/2016 10:30	MW09-09S-ME45-1	0.21	0.14	UG_L	26	2
MW09-10D	BENZO(A)PYRENE					UG_L	22	0
MW09-10S	BENZO(A)PYRENE					UG_L	22	0
MW09-11S	BENZO(A)PYRENE					UG_L	22	0
MW09-14D	BENZO(A)PYRENE					UG_L	24	0
MW09-14IA	BENZO(A)PYRENE					UG_L	13	0
MW09-17I	BENZO(A)PYRENE	3/22/2010 1:43	MW09-17I-032210	0.1 J	0.1	UG_L	19	1
MW09-20D	BENZO(A)PYRENE					UG_L	24	0
MW09-20I	BENZO(A)PYRENE	9/8/2016 10:10	MW09-20I-ME45-1	0.43	0.43	UG_L	39	1
MW09-21D	BENZO(A)PYRENE					UG_L	22	0
MW09-21S	BENZO(A)PYRENE	10/4/2011 14:22	MW09-21S-100411	0.28 J	0.17	UG_L	32	3
MW09-23D	BENZO(A)PYRENE	3/23/2005 0:00	MW09-23D-032305	0.073 J	0.073	UG_L	22	1
MW09-23S	BENZO(A)PYRENE	3/23/2005 0:00	MW09-23S-032305	0.051 J	0.051	UG_L	22	1
MW09-24D	BENZO(A)PYRENE					UG_L	22	0
MW09-24S	BENZO(A)PYRENE					UG_L	22	0
MW09-25S	BENZO(A)PYRENE	6/14/2005 0:00	MW09-25S	0.014 J	0.014	UG_L	25	1
MW09-26DA	BENZO(A)PYRENE					UG_L	1	0
MW09-26S	BENZO(A)PYRENE	3/25/2010 11:10	MW09-26S-032510	0.1 J	0.1	UG_L	20	1

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-27D	BENZO(A)PYRENE	7/13/2011 8:46	MW09-27D-071311	0.081 J	0.081	UG_L	20	1
MW09-27S	BENZO(A)PYRENE	3/25/2010 10:50:00 AM 7/12/2010 4:00:00 PM		0.09 JJ	0.089	UG_L	20	3
MW09-02S	BENZO(B)FLUORANTHENE					UG_L	22	0
MW09-03D	BENZO(B)FLUORANTHENE					UG_L	22	0
MW09-07S	BENZO(B)FLUORANTHENE	3/6/2006 0:00	MW09-07S_Q106	0.096 J	0.096	UG_L	25	1
MW09-08DA	BENZO(B)FLUORANTHENE	10/5/2011 10:38	MW09-08DA-100511	0.29	0.25	UG_L	15	2
MW09-08S	BENZO(B)FLUORANTHENE					UG_L	22	0
MW09-09DA	BENZO(B)FLUORANTHENE	7/13/2011 10:20	MW09-09DA-071311	0.12 J	0.12	UG_L	16	1
MW09-09S	BENZO(B)FLUORANTHENE	9/7/2016 10:30	MW09-09S-ME45-1	0.26	0.26	UG_L	26	1
MW09-10D	BENZO(B)FLUORANTHENE					UG_L	22	0
MW09-10S	BENZO(B)FLUORANTHENE					UG_L	22	0
MW09-11S	BENZO(B)FLUORANTHENE					UG_L	22	0
MW09-14D	BENZO(B)FLUORANTHENE					UG_L	24	0
MW09-14IA	BENZO(B)FLUORANTHENE					UG_L	13	0
MW09-17I	BENZO(B)FLUORANTHENE	8/5/2009 14:35	MW09-17I-080509	0.12	0.12	UG_L	19	1
MW09-20D	BENZO(B)FLUORANTHENE	6/19/2007 10:15	MW09-20D_20070619	0.091 J	0.091	UG_L	24	1
MW09-20I	BENZO(B)FLUORANTHENE	9/8/2016 10:10	MW09-20I-ME45-1	0.5	0.5	UG_L	39	1
MW09-21D	BENZO(B)FLUORANTHENE					UG_L	22	0
MW09-21S	BENZO(B)FLUORANTHENE	10/4/2011 14:22	MW09-21S-100411	0.38	0.19	UG_L	32	3
MW09-23D	BENZO(B)FLUORANTHENE					UG_L	22	0
MW09-23S	BENZO(B)FLUORANTHENE					UG_L	22	0
MW09-24D	BENZO(B)FLUORANTHENE					UG_L	22	0
MW09-24S	BENZO(B)FLUORANTHENE					UG_L	22	0
MW09-25S	BENZO(B)FLUORANTHENE					UG_L	25	0
MW09-26DA	BENZO(B)FLUORANTHENE					UG_L	1	0
MW09-26S	BENZO(B)FLUORANTHENE	1/30/2008 0:00	MW09-26S-013008	0.07 J	0.07	UG_L	20	1
MW09-27D	BENZO(B)FLUORANTHENE	7/13/2011 8:46	MW09-27D-071311	0.12 J	0.12	UG_L	20	1
MW09-27S	BENZO(B)FLUORANTHENE	7/12/2010 16:00	MW09-27S-071210	0.1 J	0.1	UG_L	20	1
MW09-02S	BENZO(G,H,I)PERYLENE	3/2/2006 0:00	MW09-02S_Q106	0.046 J	0.046	UG_L	22	1
MW09-03D	BENZO(G,H,I)PERYLENE					UG_L	22	0
MW09-07S	BENZO(G,H,I)PERYLENE	3/6/2006 0:00	MW09-07S_Q106	0.41 J	0.26	UG_L	25	2
MW09-08DA	BENZO(G,H,I)PERYLENE	10/5/2011 10:38	MW09-08DA-100511	0.19 J	0.13	UG_L	15	3
MW09-08S	BENZO(G,H,I)PERYLENE					UG_L	22	0
MW09-09DA	BENZO(G,H,I)PERYLENE	10/20/2009 11:20	MW09-09DA-102009	0.1 J	0.1	UG_L	16	1
MW09-09S	BENZO(G,H,I)PERYLENE	9/7/2016 10:30	MW09-09S-ME45-1	0.22	0.22	UG_L	26	1
MW09-10D	BENZO(G,H,I)PERYLENE					UG_L	22	0
MW09-10S	BENZO(G,H,I)PERYLENE					UG_L	22	0
MW09-11S	BENZO(G,H,I)PERYLENE					UG_L	22	0
MW09-14D	BENZO(G,H,I)PERYLENE					UG_L	24	0
MW09-14IA	BENZO(G,H,I)PERYLENE	10/20/2009 11:15	MW09-14IA-102009	0.08 J	0.08	UG_L	13	1
MW09-17I	BENZO(G,H,I)PERYLENE	8/5/2009 14:35	MW09-17I-080509	0.11	0.09	UG_L	19	2
MW09-20D	BENZO(G,H,I)PERYLENE					UG_L	24	0
MW09-20I	BENZO(G,H,I)PERYLENE	9/8/2016 10:10	MW09-20I-ME45-1	0.45	0.28	UG_L	39	2
MW09-21D	BENZO(G,H,I)PERYLENE					UG_L	22	0
MW09-21S	BENZO(G,H,I)PERYLENE	10/4/2011 14:22	MW09-21S-100411	0.34 J	0.34	UG_L	32	1
MW09-23D	BENZO(G,H,I)PERYLENE					UG_L	22	0
MW09-23S	BENZO(G,H,I)PERYLENE	6/18/2007 12:10	MW09-23S_20070618	0.028 J	0.028	UG_L	22	1
MW09-24D	BENZO(G,H,I)PERYLENE					UG_L	22	0
MW09-24S	BENZO(G,H,I)PERYLENE					UG_L	22	0
MW09-25S	BENZO(G,H,I)PERYLENE	6/20/2007 12:45	MW09-25S_20070620	0.029 J	0.029	UG_L	25	1
MW09-26DA	BENZO(G,H,I)PERYLENE					UG_L	1	0
MW09-26S	BENZO(G,H,I)PERYLENE					UG_L	20	0
MW09-27D	BENZO(G,H,I)PERYLENE					UG_L	20	0
MW09-27S	BENZO(G,H,I)PERYLENE	7/12/2010 16:00	MW09-27S-071210	0.1 J	0.1	UG_L	20	1
MW09-02S	BENZO(K)FLUORANTHENE	6/15/2005 0:00	MW09-02S	0.026 J	0.025	UG_L	22	2
MW09-03D	BENZO(K)FLUORANTHENE					UG_L	22	0
MW09-07S	BENZO(K)FLUORANTHENE					UG_L	25	0
MW09-08DA	BENZO(K)FLUORANTHENE	10/5/2011 10:38	MW09-08DA-100511	0.22 J	0.22	UG_L	15	1
MW09-08S	BENZO(K)FLUORANTHENE					UG_L	22	0
MW09-09DA	BENZO(K)FLUORANTHENE					UG_L	16	0
MW09-09S	BENZO(K)FLUORANTHENE	9/7/2016 10:30	MW09-09S-ME45-1	0.22	0.22	UG_L	26	1
MW09-10D	BENZO(K)FLUORANTHENE					UG_L	22	0
MW09-10S	BENZO(K)FLUORANTHENE					UG_L	22	0
MW09-11S	BENZO(K)FLUORANTHENE	6/14/2005 0:00	MW09-11S	0.037 J	0.037	UG_L	22	1
MW09-14D	BENZO(K)FLUORANTHENE					UG_L	24	0
MW09-14IA	BENZO(K)FLUORANTHENE					UG_L	13	0
MW09-17I	BENZO(K)FLUORANTHENE	8/5/2009 14:35	MW09-17I-080509	0.11	0.11	UG_L	19	1
MW09-20D	BENZO(K)FLUORANTHENE	10/20/2004 0:00	MW09-20D-NWG-102004	0.029 J	0.028	UG_L	24	2
MW09-20I	BENZO(K)FLUORANTHENE	9/8/2016 10:10	MW09-20I-ME45-1	0.44	0.25	UG_L	39	3
MW09-21D	BENZO(K)FLUORANTHENE	3/17/2005 0:00	MW09-21D-031705	0.28 J	0.28	UG_L	22	1
MW09-21S	BENZO(K)FLUORANTHENE	10/4/2011 14:22	MW09-21S-100411	0.28 J	0.17	UG_L	32	2
MW09-23D	BENZO(K)FLUORANTHENE					UG_L	22	0
MW09-23S	BENZO(K)FLUORANTHENE					UG_L	22	0
MW09-24D	BENZO(K)FLUORANTHENE					UG_L	22	0
MW09-24S	BENZO(K)FLUORANTHENE					UG_L	22	0
MW09-25S	BENZO(K)FLUORANTHENE	6/14/2005 0:00	MW09-25S	0.03 J	0.03	UG_L	25	1
MW09-26DA	BENZO(K)FLUORANTHENE					UG_L	1	0
MW09-26S	BENZO(K)FLUORANTHENE					UG_L	20	0
MW09-27D	BENZO(K)FLUORANTHENE					UG_L	20	0
MW09-27S	BENZO(K)FLUORANTHENE	7/12/2010 16:00	MW09-27S-071210	0.08 J	0.08	UG_L	20	1
MW09-02S	BENZOIC ACID					UG_L	5	0
MW09-03D	BENZOIC ACID					UG_L	5	0
MW09-07S	BENZOIC ACID					UG_L	5	0
MW09-08S	BENZOIC ACID					UG_L	5	0
MW09-09S	BENZOIC ACID					UG_L	5	0
MW09-10D	BENZOIC ACID					UG_L	5	0
MW09-10S	BENZOIC ACID					UG_L	5	0
MW09-11S	BENZOIC ACID					UG_L	5	0
MW09-14D	BENZOIC ACID					UG_L	6	0
MW09-20D	BENZOIC ACID					UG_L	5	0
MW09-20I	BENZOIC ACID	11/3/2006 9:00	MW09-20I-20061103	17.7	9.62	UG_L	6	6
MW09-21D	BENZOIC ACID					UG_L	5	0
MW09-21S	BENZOIC ACID					UG_L	5	0
MW09-23D	BENZOIC ACID					UG_L	5	0
MW09-23S	BENZOIC ACID					UG_L	5	0
MW09-24D	BENZOIC ACID					UG_L	5	0
MW09-24S	BENZOIC ACID					UG_L	5	0
MW09-25S	BENZOIC ACID					UG_L	5	0
MW09-02S	BENZYL ALCOHOL					UG_L	5	0
MW09-03D	BENZYL ALCOHOL					UG_L	4	0
MW09-07S	BENZYL ALCOHOL					UG_L	5	0
MW09-08S	BENZYL ALCOHOL					UG_L	5	0
MW09-09S	BENZYL ALCOHOL					UG_L	5	0
MW09-10D	BENZYL ALCOHOL					UG_L	5	0
MW09-10S	BENZYL ALCOHOL					UG_L	5	0
MW09-11S	BENZYL ALCOHOL					UG_L	5	0
MW09-14D	BENZYL ALCOHOL					UG_L	5	0
MW09-20D	BENZYL ALCOHOL					UG_L	4	0
MW09-20I	BENZYL ALCOHOL					UG_L	6	0
MW09-21D	BENZYL ALCOHOL					UG_L	5	0
MW09-21S	BENZYL ALCOHOL					UG_L	5	0
MW09-23D	BENZYL ALCOHOL					UG_L	5	0
MW09-23S	BENZYL ALCOHOL					UG_L	5	0
MW09-24D	BENZYL ALCOHOL					UG_L	5	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-24S	BENZYL ALCOHOL					UG_L	5	0
MW09-25S	BENZYL ALCOHOL					UG_L	5	0
MW09-02S	BIS(2-CHLOROETHOXY)METHANE					UG_L	21	0
MW09-03D	BIS(2-CHLOROETHOXY)METHANE					UG_L	21	0
MW09-07S	BIS(2-CHLOROETHOXY)METHANE					UG_L	25	0
MW09-08DA	BIS(2-CHLOROETHOXY)METHANE					UG_L	15	0
MW09-08S	BIS(2-CHLOROETHOXY)METHANE					UG_L	22	0
MW09-09DA	BIS(2-CHLOROETHOXY)METHANE					UG_L	15	0
MW09-09S	BIS(2-CHLOROETHOXY)METHANE					UG_L	24	0
MW09-10D	BIS(2-CHLOROETHOXY)METHANE					UG_L	22	0
MW09-10S	BIS(2-CHLOROETHOXY)METHANE					UG_L	22	0
MW09-11S	BIS(2-CHLOROETHOXY)METHANE					UG_L	22	0
MW09-14D	BIS(2-CHLOROETHOXY)METHANE					UG_L	24	0
MW09-14IA	BIS(2-CHLOROETHOXY)METHANE					UG_L	16	0
MW09-17I	BIS(2-CHLOROETHOXY)METHANE					UG_L	22	0
MW09-20D	BIS(2-CHLOROETHOXY)METHANE					UG_L	24	0
MW09-20I	BIS(2-CHLOROETHOXY)METHANE					UG_L	45	0
MW09-21D	BIS(2-CHLOROETHOXY)METHANE					UG_L	22	0
MW09-21S	BIS(2-CHLOROETHOXY)METHANE					UG_L	34	0
MW09-23D	BIS(2-CHLOROETHOXY)METHANE					UG_L	22	0
MW09-23S	BIS(2-CHLOROETHOXY)METHANE					UG_L	22	0
MW09-24D	BIS(2-CHLOROETHOXY)METHANE					UG_L	22	0
MW09-24S	BIS(2-CHLOROETHOXY)METHANE					UG_L	22	0
MW09-25S	BIS(2-CHLOROETHOXY)METHANE					UG_L	25	0
MW09-26DA	BIS(2-CHLOROETHOXY)METHANE					UG_L	1	0
MW09-26S	BIS(2-CHLOROETHOXY)METHANE					UG_L	19	0
MW09-27D	BIS(2-CHLOROETHOXY)METHANE					UG_L	20	0
MW09-27S	BIS(2-CHLOROETHOXY)METHANE					UG_L	20	0
MW09-02S	BIS(2-CHLOROETHYL)ETHER					UG_L	21	0
MW09-03D	BIS(2-CHLOROETHYL)ETHER	12/3/2001 12:00:00 AM 3/1/2002 12:00:00 AM 6/11/2002 12:00:00 AM 1/17/2003 12:00:00 AM 6/26/2003 12:00:00 AM 9/10/2003 12:00:00 AM		3 JJJ	2.4	UG_L	21	17
MW09-07S	BIS(2-CHLOROETHYL)ETHER	11/2/2006 9:20	MW09-07S-20061102	1.9 J	1.5	UG_L	25	4
MW09-08DA	BIS(2-CHLOROETHYL)ETHER					UG_L	15	0
MW09-08S	BIS(2-CHLOROETHYL)ETHER					UG_L	22	0
MW09-09DA	BIS(2-CHLOROETHYL)ETHER					UG_L	15	0
MW09-09S	BIS(2-CHLOROETHYL)ETHER	11/3/2006 13:00	MW09-09S-20061103	0.54 J	0.54	UG_L	24	1
MW09-10D	BIS(2-CHLOROETHYL)ETHER					UG_L	22	0
MW09-10S	BIS(2-CHLOROETHYL)ETHER					UG_L	22	0
MW09-11S	BIS(2-CHLOROETHYL)ETHER					UG_L	21	0
MW09-14D	BIS(2-CHLOROETHYL)ETHER					UG_L	24	0
MW09-14IA	BIS(2-CHLOROETHYL)ETHER	9/25/2012 14:29	MW09-14IA-092512	1.3 J	1.3	UG_L	16	1
MW09-17I	BIS(2-CHLOROETHYL)ETHER	2/10/2008 0:00	MW09-17I-021008	1.4 J	1.2	UG_L	22	4
MW09-20D	BIS(2-CHLOROETHYL)ETHER					UG_L	24	0
MW09-20I	BIS(2-CHLOROETHYL)ETHER					UG_L	45	0
MW09-21D	BIS(2-CHLOROETHYL)ETHER					UG_L	22	0
MW09-21S	BIS(2-CHLOROETHYL)ETHER	6/11/2002 0:00	MW09-21S-NWG-061102	12	6.5	UG_L	34	29
MW09-23D	BIS(2-CHLOROETHYL)ETHER					UG_L	22	0
MW09-23S	BIS(2-CHLOROETHYL)ETHER					UG_L	22	0
MW09-24D	BIS(2-CHLOROETHYL)ETHER					UG_L	22	0
MW09-24S	BIS(2-CHLOROETHYL)ETHER					UG_L	22	0
MW09-25S	BIS(2-CHLOROETHYL)ETHER					UG_L	25	0
MW09-26DA	BIS(2-CHLOROETHYL)ETHER					UG_L	1	0
MW09-26S	BIS(2-CHLOROETHYL)ETHER					UG_L	19	0
MW09-27D	BIS(2-CHLOROETHYL)ETHER					UG_L	20	0
MW09-27S	BIS(2-CHLOROETHYL)ETHER					UG_L	20	0
MW09-02S	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-03D	BIS(2-CHLOROISOPROPYL)ETHER	11/2/2006 13:35	MW09-03D-20061102	1.6 J	1.2	UG_L	4	2
MW09-07S	BIS(2-CHLOROISOPROPYL)ETHER	11/2/2006 9:20	MW09-07S-20061102	1.2 J	1.2	UG_L	4	1
MW09-08S	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-09S	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-10D	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-10S	BIS(2-CHLOROISOPROPYL)ETHER	3/8/2007 0:00	MW09-10S_20070308	4.9 J	4.3	UG_L	4	3
MW09-11S	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-14D	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-20D	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-20I	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-21D	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-21S	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-23D	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-23S	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-24D	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-24S	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-25S	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0
MW09-02S	BIS(2-ETHYLHEXYL)PHTHALATE	6/15/2005 0:00	MW09-02S	47.6	10.9	UG_L	21	5
MW09-03D	BIS(2-ETHYLHEXYL)PHTHALATE	3/17/2005 0:00	MW09-03D-031705	2.1 J	1.6	UG_L	21	4
MW09-07S	BIS(2-ETHYLHEXYL)PHTHALATE	9/17/2003 0:00	MW09-07S-NWG-091703	38	8.2	UG_L	25	7
MW09-08DA	BIS(2-ETHYLHEXYL)PHTHALATE					UG_L	15	0
MW09-08S	BIS(2-ETHYLHEXYL)PHTHALATE	3/8/2007 0:00	MW09-08S_20070308	6.4	6.4	UG_L	22	1
MW09-09DA	BIS(2-ETHYLHEXYL)PHTHALATE	9/16/2015 16:05	MW09-09DA-091615-1	0.34 J	0.34	UG_L	15	1
MW09-09S	BIS(2-ETHYLHEXYL)PHTHALATE	3/21/2005 0:00	MW09-09S-032105	2.2 J	1.2	UG_L	26	4
MW09-10D	BIS(2-ETHYLHEXYL)PHTHALATE	6/4/2002 0:00	MW09-10D-NWG-060402	27	14	UG_L	22	2
MW09-10S	BIS(2-ETHYLHEXYL)PHTHALATE	6/4/2002 0:00	MW09-10S-NWG-060402	57	14	UG_L	22	5
MW09-11S	BIS(2-ETHYLHEXYL)PHTHALATE	3/7/2007 0:00	MW09-11S_20070307	3.9 J	2.1	UG_L	22	4
MW09-14D	BIS(2-ETHYLHEXYL)PHTHALATE	9/17/2003 0:00	MW09-14D-NWG-091703	49	10	UG_L	24	6
MW09-14IA	BIS(2-ETHYLHEXYL)PHTHALATE	10/5/2011 9:38	MW09-14IA-100511	2.9 J	1.1	UG_L	16	3
MW09-17I	BIS(2-ETHYLHEXYL)PHTHALATE	9/20/2010 4:15	MW09-17I-092010	3.6 J	1.4	UG_L	22	4
MW09-20D	BIS(2-ETHYLHEXYL)PHTHALATE	9/15/2003 0:00	MW09-20D-NWG-091503	20 J	7.1	UG_L	24	3
MW09-20I	BIS(2-ETHYLHEXYL)PHTHALATE	9/15/2003 0:00	MW09-20I-NWG-091503	37 J	5.2	UG_L	44	11
MW09-21D	BIS(2-ETHYLHEXYL)PHTHALATE	3/7/2007 0:00	MW09-21D_20070307	21.1	9.45	UG_L	22	4
MW09-21S	BIS(2-ETHYLHEXYL)PHTHALATE	6/15/2005 0:00	MW09-21S	39.8	8.62	UG_L	34	8
MW09-23D	BIS(2-ETHYLHEXYL)PHTHALATE	6/7/2002 0:00	MW09-23D-NWG-060702	59 J	17	UG_L	22	5
MW09-23S	BIS(2-ETHYLHEXYL)PHTHALATE	6/7/2002 0:00	MW09-23S-NWG-060702	46 J	13	UG_L	22	4
MW09-24D	BIS(2-ETHYLHEXYL)PHTHALATE	9/9/2002 0:00	MW09-24D-NWG-090902	8	5	UG_L	22	2
MW09-24S	BIS(2-ETHYLHEXYL)PHTHALATE	3/17/2005 0:00	MW09-24S-031705	2.2 J	1.6	UG_L	22	4
MW09-25S	BIS(2-ETHYLHEXYL)PHTHALATE	3/7/2007 0:00	MW09-25S_20070307	56.5	19.6	UG_L	25	3
MW09-26DA	BIS(2-ETHYLHEXYL)PHTHALATE					UG_L	1	0
MW09-26S	BIS(2-ETHYLHEXYL)PHTHALATE	9/23/2010 3:50	MW09-26S-092310	2.7 J	2.7	UG_L	19	1
MW09-27D	BIS(2-ETHYLHEXYL)PHTHALATE	9/20/2010 10:55	MW09-27D-092010	4.3 J	3.2	UG_L	20	2
MW09-27S	BIS(2-ETHYLHEXYL)PHTHALATE	9/20/2010 2:55	MW09-27S-092010	8.1 J	8.1	UG_L	20	1
MW09-02S	BUTYLBENZYLPHTHALATE					UG_L	21	0
MW09-03D	BUTYLBENZYLPHTHALATE	3/6/2007 0:00	MW09-03D_20070306	1.9 J	1.9	UG_L	21	1
MW09-07S	BUTYLBENZYLPHTHALATE	6/18/2007 11:55	MW09-07S_20070618	2.1 J	2.1	UG_L	25	1
MW09-08DA	BUTYLBENZYLPHTHALATE					UG_L	15	0
MW09-08S	BUTYLBENZYLPHTHALATE					UG_L	22	0
MW09-09DA	BUTYLBENZYLPHTHALATE					UG_L	15	0
MW09-09S	BUTYLBENZYLPHTHALATE					UG_L	24	0
MW09-10D	BUTYLBENZYLPHTHALATE	6/18/2007 13:30	MW09-10D_20070618	1.7 J	1.7	UG_L	22	1
MW09-10S	BUTYLBENZYLPHTHALATE	6/18/2007 15:30	MW09-10S_20070618	2.1 J	2.1	UG_L	22	1
MW09-11S	BUTYLBENZYLPHTHALATE					UG_L	22	0
MW09-14D	BUTYLBENZYLPHTHALATE	6/18/2007 13:40	MW09-14D_20070618	1.8 J	1.8	UG_L	24	1
MW09-14IA	BUTYLBENZYLPHTHALATE					UG_L	16	0
MW09-17I	BUTYLBENZYLPHTHALATE	2/10/2008 0:00	MW09-17I-021008	0.68 J	0.68	UG_L	22	1
MW09-20D	BUTYLBENZYLPHTHALATE	3/6/2007 0:00	MW09-20D_20070306	0.61 J	0.61	UG_L	24	1

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-20I	BUTYLBENZYLPHTHALATE	5/7/2008 15:52	MW09-20I-050708	0.49 J	0.49	UG_L	45	1
MW09-21D	BUTYLBENZYLPHTHALATE					UG_L	22	0
MW09-21S	BUTYLBENZYLPHTHALATE	5/5/2008 15:15	MW09-21S-050508	0.3 J	0.3	UG_L	34	1
MW09-23D	BUTYLBENZYLPHTHALATE	6/18/2007 14:35	MW09-23D_20070618	1.8 J	1.8	UG_L	22	1
MW09-23S	BUTYLBENZYLPHTHALATE	6/18/2007 12:10	MW09-23S_20070618	1.8 J	1.8	UG_L	22	1
MW09-24D	BUTYLBENZYLPHTHALATE					UG_L	22	0
MW09-24S	BUTYLBENZYLPHTHALATE					UG_L	22	0
MW09-25S	BUTYLBENZYLPHTHALATE					UG_L	25	0
MW09-26DA	BUTYLBENZYLPHTHALATE					UG_L	1	0
MW09-26S	BUTYLBENZYLPHTHALATE					UG_L	19	0
MW09-27D	BUTYLBENZYLPHTHALATE					UG_L	20	0
MW09-27S	BUTYLBENZYLPHTHALATE					UG_L	20	0
MW09-02S	CARBAZOLE					UG_L	21	0
MW09-03D	CARBAZOLE					UG_L	21	0
MW09-07S	CARBAZOLE	1/21/2003 0:00	MW09-07S-NWG-012103	12	6.7	UG_L	25	21
MW09-08DA	CARBAZOLE					UG_L	15	0
MW09-08S	CARBAZOLE					UG_L	22	0
MW09-09DA	CARBAZOLE					UG_L	15	0
MW09-09S	CARBAZOLE					UG_L	24	0
MW09-10D	CARBAZOLE					UG_L	22	0
MW09-10S	CARBAZOLE					UG_L	22	0
MW09-11S	CARBAZOLE					UG_L	22	0
MW09-14D	CARBAZOLE					UG_L	24	0
MW09-14IA	CARBAZOLE					UG_L	16	0
MW09-17I	CARBAZOLE	2/10/2008 0:00	MW09-17I-021008	11	8.3	UG_L	22	22
MW09-20D	CARBAZOLE					UG_L	24	0
MW09-20I	CARBAZOLE					UG_L	45	0
MW09-21D	CARBAZOLE					UG_L	22	0
MW09-21S	CARBAZOLE					UG_L	33	0
MW09-23D	CARBAZOLE					UG_L	22	0
MW09-23S	CARBAZOLE					UG_L	22	0
MW09-23D	CARBAZOLE					UG_L	22	0
MW09-23S	CARBAZOLE					UG_L	22	0
MW09-24D	CARBAZOLE					UG_L	22	0
MW09-24S	CARBAZOLE					UG_L	22	0
MW09-25S	CARBAZOLE					UG_L	25	0
MW09-26DA	CARBAZOLE					UG_L	1	0
MW09-26S	CARBAZOLE					UG_L	19	0
MW09-27D	CARBAZOLE					UG_L	20	0
MW09-27S	CARBAZOLE					UG_L	20	0
MW09-02S	CHRYSENE	3/17/2005 0:00	MW09-02S-031705	0.066 J	0.059	UG_L	22	2
MW09-03D	CHRYSENE	3/17/2005 0:00	MW09-03D-031705	0.087 J	0.087	UG_L	22	1
MW09-07S	CHRYSENE	9/27/2005 13:43	MW09-07S-20050927	0.2	0.1	UG_L	25	2
MW09-08DA	CHRYSENE	10/5/2011 10:38	MW09-08DA-100511	0.12 J	0.08	UG_L	15	3
MW09-08S	CHRYSENE					UG_L	22	0
MW09-09DA	CHRYSENE	10/20/2009 11:20	MW09-09DA-102009	0.07 J	0.07	UG_L	16	1
MW09-09S	CHRYSENE	9/7/2016 10:30	MW09-09S-ME45-1	0.22	0.22	UG_L	26	1
MW09-10D	CHRYSENE	12/20/2005 10:20	MW09-10D-20051220	0.14 J	0.14	UG_L	22	1
MW09-10S	CHRYSENE					UG_L	22	0
MW09-11S	CHRYSENE	3/1/2006 0:00	MW09-11S_Q106	3.3 J	1.1	UG_L	22	3
MW09-14D	CHRYSENE					UG_L	24	0
MW09-14IA	CHRYSENE	10/20/2009 11:15	MW09-14IA-102009	0.05 J	0.05	UG_L	13	1
MW09-17I	CHRYSENE					UG_L	19	0
MW09-20D	CHRYSENE	6/19/2007 10:15	MW09-20D_20070619	0.079 J	0.079	UG_L	24	1
MW09-20I	CHRYSENE	9/8/2016 10:10	MW09-20I-ME45-1	0.42	0.23	UG_L	39	2
MW09-21D	CHRYSENE					UG_L	22	0
MW09-21S	CHRYSENE	10/4/2011 14:22	MW09-21S-100411	0.08 J	0.08	UG_L	32	1
MW09-23D	CHRYSENE					UG_L	22	0
MW09-23S	CHRYSENE	6/18/2007 12:10	MW09-23S_20070618	0.11 J	0.11	UG_L	22	1
MW09-24D	CHRYSENE					UG_L	22	0
MW09-24S	CHRYSENE					UG_L	22	0
MW09-25S	CHRYSENE					UG_L	25	0
MW09-26DA	CHRYSENE					UG_L	1	0
MW09-26S	CHRYSENE	1/30/2008 0:00	MW09-26S-013008	0.06	0.06	UG_L	20	1
MW09-27D	CHRYSENE	7/12/2010 16:00	MW09-27D-071210	0.06 J	0.06	UG_L	20	1
MW09-27S	CHRYSENE	7/12/2010 16:00	MW09-27S-071210	0.08 J	0.078	UG_L	20	2
MW09-02S	CRESOLS					UG_L	1	0
MW09-03D	CRESOLS					UG_L	1	0
MW09-07S	CRESOLS					UG_L	1	0
MW09-08S	CRESOLS					UG_L	1	0
MW09-09S	CRESOLS					UG_L	1	0
MW09-10D	CRESOLS					UG_L	1	0
MW09-10S	CRESOLS					UG_L	1	0
MW09-11S	CRESOLS					UG_L	1	0
MW09-14D	CRESOLS					UG_L	1	0
MW09-20D	CRESOLS					UG_L	1	0
MW09-20I	CRESOLS					UG_L	1	0
MW09-21D	CRESOLS					UG_L	1	0
MW09-21S	CRESOLS					UG_L	1	0
MW09-23D	CRESOLS					UG_L	1	0
MW09-23S	CRESOLS					UG_L	1	0
MW09-24D	CRESOLS					UG_L	1	0
MW09-24S	CRESOLS					UG_L	1	0
MW09-25S	CRESOLS					UG_L	1	0
MW09-02S	DIBENZ(A,H)ANTHRACENE					UG_L	22	0
MW09-03D	DIBENZ(A,H)ANTHRACENE					UG_L	22	0
MW09-07S	DIBENZ(A,H)ANTHRACENE					UG_L	25	0
MW09-08DA	DIBENZ(A,H)ANTHRACENE	10/5/2011 10:38	MW09-08DA-100511	0.28 J	0.24	UG_L	15	2
MW09-08S	DIBENZ(A,H)ANTHRACENE	3/21/2005 0:00	MW09-08S-032105	0.1 J	0.1	UG_L	22	1
MW09-09DA	DIBENZ(A,H)ANTHRACENE	10/20/2009 11:20	MW09-09DA-102009	0.1 J	0.1	UG_L	16	1
MW09-09S	DIBENZ(A,H)ANTHRACENE	9/7/2016 10:30	MW09-09S-ME45-1	0.21	0.21	UG_L	26	1
MW09-10D	DIBENZ(A,H)ANTHRACENE					UG_L	22	0
MW09-10S	DIBENZ(A,H)ANTHRACENE					UG_L	22	0
MW09-11S	DIBENZ(A,H)ANTHRACENE					UG_L	22	0
MW09-14D	DIBENZ(A,H)ANTHRACENE					UG_L	24	0
MW09-14IA	DIBENZ(A,H)ANTHRACENE	10/20/2009 11:15	MW09-14IA-102009	0.1 J	0.1	UG_L	13	1
MW09-17I	DIBENZ(A,H)ANTHRACENE	10/21/2009 12:10	MW09-17I-102109	0.08 J	0.08	UG_L	19	1
MW09-20D	DIBENZ(A,H)ANTHRACENE					UG_L	24	0
MW09-20I	DIBENZ(A,H)ANTHRACENE	9/8/2016 10:10	MW09-20I-ME45-1	0.42	0.26	UG_L	39	2
MW09-21D	DIBENZ(A,H)ANTHRACENE					UG_L	22	0
MW09-21S	DIBENZ(A,H)ANTHRACENE	10/4/2011 14:22	MW09-21S-100411	0.37 J	0.37	UG_L	32	1
MW09-23D	DIBENZ(A,H)ANTHRACENE					UG_L	22	0
MW09-23S	DIBENZ(A,H)ANTHRACENE					UG_L	22	0
MW09-24D	DIBENZ(A,H)ANTHRACENE					UG_L	22	0
MW09-24S	DIBENZ(A,H)ANTHRACENE	3/17/2005 0:00	MW09-24S-031705	0.32 J	0.32	UG_L	22	1
MW09-25S	DIBENZ(A,H)ANTHRACENE	3/21/2005 0:00	MW09-25S-032105	0.085 J	0.085	UG_L	25	1
MW09-26DA	DIBENZ(A,H)ANTHRACENE					UG_L	1	0
MW09-26S	DIBENZ(A,H)ANTHRACENE					UG_L	20	0
MW09-27D	DIBENZ(A,H)ANTHRACENE	7/12/2010 16:00	MW09-27D-071210	0.2 J	0.2	UG_L	20	1
MW09-27S	DIBENZ(A,H)ANTHRACENE	7/12/2010 16:00	MW09-27S-071210	0.2	0.2	UG_L	20	1
MW09-02S	DIBENZOFURAN					UG_L	20	0
MW09-03D	DIBENZOFURAN					UG_L	21	0
MW09-07S	DIBENZOFURAN					UG_L	25	0
MW09-08DA	DIBENZOFURAN					UG_L	15	0
MW09-08S	DIBENZOFURAN					UG_L	22	0
MW09-09DA	DIBENZOFURAN					UG_L	15	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-09S	DIBENZOFURAN					UG_L	24	0
MW09-10D	DIBENZOFURAN					UG_L	22	0
MW09-10S	DIBENZOFURAN					UG_L	22	0
MW09-11S	DIBENZOFURAN					UG_L	22	0
MW09-14D	DIBENZOFURAN					UG_L	24	0
MW09-14IA	DIBENZOFURAN					UG_L	16	0
MW09-17I	DIBENZOFURAN	9/20/2010 4:15	MW09-17I-092010	2.5 J	1.3	UG_L	22	5
MW09-20D	DIBENZOFURAN					UG_L	24	0
MW09-20I	DIBENZOFURAN					UG_L	45	0
MW09-21D	DIBENZOFURAN					UG_L	22	0
MW09-21S	DIBENZOFURAN					UG_L	34	0
MW09-23D	DIBENZOFURAN					UG_L	22	0
MW09-23S	DIBENZOFURAN					UG_L	22	0
MW09-24D	DIBENZOFURAN					UG_L	22	0
MW09-24S	DIBENZOFURAN					UG_L	22	0
MW09-25S	DIBENZOFURAN					UG_L	25	0
MW09-26DA	DIBENZOFURAN					UG_L	1	0
MW09-26S	DIBENZOFURAN					UG_L	19	0
MW09-27D	DIBENZOFURAN					UG_L	20	0
MW09-27S	DIBENZOFURAN					UG_L	20	0
MW09-02S	DIETHYLPHTHALATE					UG_L	21	0
MW09-03D	DIETHYLPHTHALATE					UG_L	21	0
MW09-07S	DIETHYLPHTHALATE					UG_L	25	0
MW09-08DA	DIETHYLPHTHALATE					UG_L	15	0
MW09-08S	DIETHYLPHTHALATE					UG_L	22	0
MW09-09DA	DIETHYLPHTHALATE					UG_L	15	0
MW09-09S	DIETHYLPHTHALATE					UG_L	24	0
MW09-10D	DIETHYLPHTHALATE					UG_L	22	0
MW09-10S	DIETHYLPHTHALATE					UG_L	22	0
MW09-11S	DIETHYLPHTHALATE					UG_L	22	0
MW09-14D	DIETHYLPHTHALATE					UG_L	24	0
MW09-14IA	DIETHYLPHTHALATE	12/15/2010 10:10	MW09-14IA-121510	3.2 J	2.2	UG_L	16	12
MW09-17I	DIETHYLPHTHALATE	9/28/2011 10:19	MW09-17I-092811	2.4 J	1.2	UG_L	22	3
MW09-20D	DIETHYLPHTHALATE	6/19/2007 10:15	MW09-20D_20070619	175	175	UG_L	24	1
MW09-20I	DIETHYLPHTHALATE					UG_L	45	0
MW09-21D	DIETHYLPHTHALATE					UG_L	22	0
MW09-21S	DIETHYLPHTHALATE	9/30/2008 10:15	MW09-21S-093008	0.33 J	0.33	UG_L	34	1
MW09-23D	DIETHYLPHTHALATE					UG_L	22	0
MW09-23S	DIETHYLPHTHALATE					UG_L	22	0
MW09-24D	DIETHYLPHTHALATE					UG_L	22	0
MW09-24S	DIETHYLPHTHALATE					UG_L	22	0
MW09-25S	DIETHYLPHTHALATE					UG_L	25	0
MW09-26DA	DIETHYLPHTHALATE					UG_L	1	0
MW09-26S	DIETHYLPHTHALATE					UG_L	19	0
MW09-27D	DIETHYLPHTHALATE					UG_L	20	0
MW09-27S	DIETHYLPHTHALATE					UG_L	20	0
MW09-02S	DIMETHYL PHTHALATE					UG_L	21	0
MW09-03D	DIMETHYL PHTHALATE					UG_L	21	0
MW09-07S	DIMETHYL PHTHALATE					UG_L	25	0
MW09-08DA	DIMETHYL PHTHALATE					UG_L	15	0
MW09-08S	DIMETHYL PHTHALATE					UG_L	22	0
MW09-09DA	DIMETHYL PHTHALATE					UG_L	15	0
MW09-09S	DIMETHYL PHTHALATE					UG_L	24	0
MW09-10D	DIMETHYL PHTHALATE					UG_L	22	0
MW09-10S	DIMETHYL PHTHALATE					UG_L	22	0
MW09-11S	DIMETHYL PHTHALATE					UG_L	22	0
MW09-14D	DIMETHYL PHTHALATE	9/11/2015 12:30	MW09-14D-091115-1	2 J	2	UG_L	24	1
MW09-14IA	DIMETHYL PHTHALATE	9/18/2015 11:35	MW09-14IA-091815-1	1.4 J	1.4	UG_L	16	1
MW09-17I	DIMETHYL PHTHALATE	9/18/2015 11:55	MW09-17I-091815-1	1.7 J	1.7	UG_L	22	1
MW09-20D	DIMETHYL PHTHALATE	9/11/2015 11:50	MW09-20D-091115-1	1.9 J	1.9	UG_L	24	1
MW09-20I	DIMETHYL PHTHALATE	9/18/2015 10:30	MW09-20I-091815-1	1.4 J	1.4	UG_L	45	1
MW09-21D	DIMETHYL PHTHALATE					UG_L	22	0
MW09-21S	DIMETHYL PHTHALATE					UG_L	34	0
MW09-23D	DIMETHYL PHTHALATE					UG_L	22	0
MW09-23S	DIMETHYL PHTHALATE					UG_L	22	0
MW09-24D	DIMETHYL PHTHALATE					UG_L	22	0
MW09-24S	DIMETHYL PHTHALATE					UG_L	22	0
MW09-25S	DIMETHYL PHTHALATE	9/9/2015 15:05	MW09-25S-090915-1	3.8 J	3.8	UG_L	25	1
MW09-26DA	DIMETHYL PHTHALATE					UG_L	1	0
MW09-26S	DIMETHYL PHTHALATE					UG_L	19	0
MW09-27D	DIMETHYL PHTHALATE					UG_L	20	0
MW09-27S	DIMETHYL PHTHALATE					UG_L	20	0
MW09-02S	DI-N-BUTYLPHTHALATE					UG_L	21	0
MW09-03D	DI-N-BUTYLPHTHALATE	12/3/2001 0:00	MW09-03D-NWG-120301	1 J	1	UG_L	21	1
MW09-07S	DI-N-BUTYLPHTHALATE	2/27/2002 0:00	MW09-07S-NWG-022702	1 J	0.99	UG_L	25	2
MW09-08DA	DI-N-BUTYLPHTHALATE					UG_L	15	0
MW09-08S	DI-N-BUTYLPHTHALATE					UG_L	22	0
MW09-09DA	DI-N-BUTYLPHTHALATE					UG_L	15	0
MW09-09S	DI-N-BUTYLPHTHALATE					UG_L	24	0
MW09-10D	DI-N-BUTYLPHTHALATE	6/18/2007 13:30	MW09-10D_20070618	1.6 J	1.6	UG_L	22	1
MW09-10S	DI-N-BUTYLPHTHALATE	12/4/2001 0:00	MW09-10S-NWG-120401	1 J	1	UG_L	22	1
MW09-11S	DI-N-BUTYLPHTHALATE	12/4/2001 0:00	MW09-11S-NWG-120401	1 J	1	UG_L	22	1
MW09-14D	DI-N-BUTYLPHTHALATE	6/18/2007 13:40	MW09-14D_20070618	1.2 J	1.2	UG_L	24	1
MW09-14IA	DI-N-BUTYLPHTHALATE	9/23/2010 3:12	MW09-14IA-092310	3.9 J	3.9	UG_L	16	1
MW09-17I	DI-N-BUTYLPHTHALATE	2/10/2008 0:00	MW09-17I-021008	1.1 J	0.85	UG_L	22	2
MW09-20D	DI-N-BUTYLPHTHALATE					UG_L	24	0
MW09-20I	DI-N-BUTYLPHTHALATE					UG_L	45	0
MW09-21D	DI-N-BUTYLPHTHALATE					UG_L	22	0
MW09-21S	DI-N-BUTYLPHTHALATE	5/5/2008 15:15	MW09-21S-050508	0.59 J	0.59	UG_L	34	1
MW09-23D	DI-N-BUTYLPHTHALATE					UG_L	22	0
MW09-23S	DI-N-BUTYLPHTHALATE					UG_L	22	0
MW09-24D	DI-N-BUTYLPHTHALATE	12/5/2001 0:00	MW09-24D-NWG-120501	1 J	1	UG_L	22	1
MW09-24S	DI-N-BUTYLPHTHALATE					UG_L	22	0
MW09-25S	DI-N-BUTYLPHTHALATE	12/4/2001 12:00:00 AM 2/27/2002 12:00:00 AM		1 JJ	1	UG_L	25	2
MW09-26DA	DI-N-BUTYLPHTHALATE					UG_L	1	0
MW09-26S	DI-N-BUTYLPHTHALATE	9/23/2010 3:50	MW09-26S-092310	3.3 J	2.3	UG_L	19	2
MW09-27D	DI-N-BUTYLPHTHALATE					UG_L	20	0
MW09-27S	DI-N-BUTYLPHTHALATE					UG_L	20	0
MW09-02S	DI-N-OCTYLPHTHALATE					UG_L	21	0
MW09-03D	DI-N-OCTYLPHTHALATE					UG_L	21	0
MW09-07S	DI-N-OCTYLPHTHALATE					UG_L	25	0
MW09-08DA	DI-N-OCTYLPHTHALATE					UG_L	15	0
MW09-08S	DI-N-OCTYLPHTHALATE					UG_L	22	0
MW09-09DA	DI-N-OCTYLPHTHALATE					UG_L	15	0
MW09-09S	DI-N-OCTYLPHTHALATE					UG_L	24	0
MW09-10D	DI-N-OCTYLPHTHALATE					UG_L	22	0
MW09-10S	DI-N-OCTYLPHTHALATE					UG_L	22	0
MW09-11S	DI-N-OCTYLPHTHALATE					UG_L	22	0
MW09-14D	DI-N-OCTYLPHTHALATE	6/12/2002 0:00	MW09-14D-NWG-061202	2 J	2	UG_L	24	1
MW09-14IA	DI-N-OCTYLPHTHALATE					UG_L	16	0
MW09-17I	DI-N-OCTYLPHTHALATE	2/10/2008 0:00	MW09-17I-021008	0.48 J	0.43	UG_L	22	2
MW09-20D	DI-N-OCTYLPHTHALATE					UG_L	24	0
MW09-20I	DI-N-OCTYLPHTHALATE					UG_L	45	0
MW09-21D	DI-N-OCTYLPHTHALATE					UG_L	22	0

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-21S	DI-N-OCTYLPHTHALATE					UG_L	34	0
MW09-23D	DI-N-OCTYLPHTHALATE					UG_L	22	0
MW09-23S	DI-N-OCTYLPHTHALATE					UG_L	22	0
MW09-24D	DI-N-OCTYLPHTHALATE					UG_L	22	0
MW09-24S	DI-N-OCTYLPHTHALATE					UG_L	22	0
MW09-25S	DI-N-OCTYLPHTHALATE					UG_L	25	0
MW09-26DA	DI-N-OCTYLPHTHALATE					UG_L	1	0
MW09-26S	DI-N-OCTYLPHTHALATE					UG_L	19	0
MW09-27D	DI-N-OCTYLPHTHALATE					UG_L	20	0
MW09-27S	DI-N-OCTYLPHTHALATE					UG_L	20	0
MW09-02S	FLUORANTHENE					UG_L	22	0
MW09-03D	FLUORANTHENE					UG_L	22	0
MW09-07S	FLUORANTHENE	3/23/2005 0:00	MW09-07S-032305	0.38 J	0.12	UG_L	25	8
MW09-08DA	FLUORANTHENE	10/5/2011 10:38	MW09-08DA-100511	0.26 J	0.26	UG_L	15	1
MW09-08S	FLUORANTHENE	8/12/2004 0:00	MW09-08S-NWG-081204	0.21 J	0.21	UG_L	22	1
MW09-09DA	FLUORANTHENE	10/20/2009 11:20	MW09-09DA-102009	0.08 J	0.08	UG_L	16	1
MW09-09S	FLUORANTHENE	9/7/2016 10:30	MW09-09S-ME45-1	0.21	0.12	UG_L	26	2
MW09-10D	FLUORANTHENE					UG_L	22	0
MW09-10S	FLUORANTHENE					UG_L	22	0
MW09-11S	FLUORANTHENE					UG_L	22	0
MW09-14D	FLUORANTHENE	3/23/2004 0:00	MW09-14D-NWG-032304	0.09 J	0.09	UG_L	24	1
MW09-14IA	FLUORANTHENE	3/23/2011 10:49	MW09-14IA-032311	0.093 J	0.093	UG_L	13	1
MW09-17I	FLUORANTHENE	8/5/2009 14:35	MW09-17I-080509	0.13	0.13	UG_L	19	1
MW09-20D	FLUORANTHENE					UG_L	24	0
MW09-20I	FLUORANTHENE	9/8/2016 10:10	MW09-20I-ME45-1	0.37	0.2	UG_L	39	2
MW09-21D	FLUORANTHENE	11/9/2007 12:00	MW09-21D_20071109	0.022 J	0.022	UG_L	22	1
MW09-21S	FLUORANTHENE	3/6/2006 0:00	MW09-21S_Q106	0.11 J	0.11	UG_L	32	1
MW09-23D	FLUORANTHENE					UG_L	22	0
MW09-23S	FLUORANTHENE	12/6/2001 0:00	MW09-23S-NWG-120601	2 J	1.2	UG_L	22	19
MW09-24D	FLUORANTHENE	11/8/2007 12:00	MW09-24D_20071108	0.034 J	0.034	UG_L	22	1
MW09-24S	FLUORANTHENE	3/6/2007 0:00	MW09-24S_20070306	0.07 J	0.07	UG_L	22	1
MW09-25S	FLUORANTHENE	2/27/2002 0:00	MW09-25S-NWG-022702	0.17	0.1	UG_L	25	7
MW09-26DA	FLUORANTHENE					UG_L	1	0
MW09-26S	FLUORANTHENE					UG_L	20	0
MW09-27D	FLUORANTHENE					UG_L	20	0
MW09-27S	FLUORANTHENE	12/15/2010 13:43	MW09-27S-121510	0.12 J	0.095	UG_L	20	2
MW09-02S	FLUORENE					UG_L	22	0
MW09-03D	FLUORENE					UG_L	22	0
MW09-07S	FLUORENE	3/6/2006 0:00	MW09-07S_Q106	4.4 J	2.4	UG_L	25	24
MW09-08DA	FLUORENE	10/5/2011 10:38	MW09-08DA-100511	0.23 J	0.23	UG_L	15	1
MW09-08S	FLUORENE	3/21/2005 0:00	MW09-08S-032105	0.053 J	0.053	UG_L	22	1
MW09-09DA	FLUORENE	10/20/2009 11:20	MW09-09DA-102009	0.07 J	0.07	UG_L	16	1
MW09-09S	FLUORENE	9/26/2005 15:00	MW09-09S-20050926	0.35 J	0.21	UG_L	26	3
MW09-10D	FLUORENE	9/26/2005 14:51	MW09-10D-20050926	0.22 J	0.22	UG_L	22	1
MW09-10S	FLUORENE	3/21/2005 0:00	MW09-10S-032105	0.052 J	0.052	UG_L	22	1
MW09-11S	FLUORENE	3/7/2007 0:00	MW09-11S_20070307	3.8	2.1	UG_L	22	4
MW09-14D	FLUORENE	9/27/2005 15:55	MW09-14D-20050927	0.27 J	0.27	UG_L	24	1
MW09-14IA	FLUORENE					UG_L	13	0
MW09-17I	FLUORENE	3/28/2013 10:25	MW09-17I-032813-1	1.1	0.56	UG_L	19	18
MW09-20D	FLUORENE					UG_L	24	0
MW09-20I	FLUORENE	10/20/2004 0:00	MW09-20I-NWG-102004	0.37 J	0.16	UG_L	39	6
MW09-21D	FLUORENE					UG_L	22	0
MW09-21S	FLUORENE					UG_L	32	0
MW09-23D	FLUORENE					UG_L	22	0
MW09-23S	FLUORENE	11/13/2007 12:00	MW09-23S_20071113	0.027 J	0.027	UG_L	22	1
MW09-24D	FLUORENE	6/14/2007 9:45	MW09-24D_20070614	0.041 J	0.041	UG_L	22	1
MW09-24S	FLUORENE	6/16/2004 0:00	MW09-24S-NWG-061604	0.13 J	0.11	UG_L	22	5
MW09-25S	FLUORENE	9/26/2005 17:30	MW09-25S-20050926	7.8	2.5	UG_L	25	7
MW09-26DA	FLUORENE					UG_L	1	0
MW09-26S	FLUORENE					UG_L	20	0
MW09-27D	FLUORENE					UG_L	20	0
MW09-27S	FLUORENE					UG_L	20	0
MW09-02S	HEXACHLOROBUTADIENE					UG_L	21	0
MW09-03D	HEXACHLOROBUTADIENE					UG_L	21	0
MW09-07S	HEXACHLOROBUTADIENE					UG_L	25	0
MW09-08DA	HEXACHLOROBUTADIENE					UG_L	15	0
MW09-08S	HEXACHLOROBUTADIENE					UG_L	22	0
MW09-09DA	HEXACHLOROBUTADIENE					UG_L	15	0
MW09-09S	HEXACHLOROBUTADIENE					UG_L	24	0
MW09-10D	HEXACHLOROBUTADIENE					UG_L	22	0
MW09-10S	HEXACHLOROBUTADIENE					UG_L	22	0
MW09-11S	HEXACHLOROBUTADIENE					UG_L	21	0
MW09-14D	HEXACHLOROBUTADIENE					UG_L	24	0
MW09-14IA	HEXACHLOROBUTADIENE					UG_L	16	0
MW09-17I	HEXACHLOROBUTADIENE					UG_L	22	0
MW09-20D	HEXACHLOROBUTADIENE					UG_L	24	0
MW09-20I	HEXACHLOROBUTADIENE					UG_L	45	0
MW09-21D	HEXACHLOROBUTADIENE					UG_L	22	0
MW09-21S	HEXACHLOROBUTADIENE					UG_L	34	0
MW09-23D	HEXACHLOROBUTADIENE					UG_L	22	0
MW09-23S	HEXACHLOROBUTADIENE					UG_L	22	0
MW09-24D	HEXACHLOROBUTADIENE					UG_L	22	0
MW09-24S	HEXACHLOROBUTADIENE					UG_L	22	0
MW09-25S	HEXACHLOROBUTADIENE					UG_L	25	0
MW09-26DA	HEXACHLOROBUTADIENE					UG_L	1	0
MW09-26S	HEXACHLOROBUTADIENE					UG_L	19	0
MW09-27D	HEXACHLOROBUTADIENE					UG_L	20	0
MW09-27S	HEXACHLOROBUTADIENE					UG_L	20	0
MW09-02S	HEXACHLOROCYCLOPENTADIENE					UG_L	21	0
MW09-03D	HEXACHLOROCYCLOPENTADIENE					UG_L	21	0
MW09-07S	HEXACHLOROCYCLOPENTADIENE					UG_L	25	0
MW09-08DA	HEXACHLOROCYCLOPENTADIENE					UG_L	15	0
MW09-08S	HEXACHLOROCYCLOPENTADIENE					UG_L	22	0
MW09-09DA	HEXACHLOROCYCLOPENTADIENE					UG_L	15	0
MW09-09S	HEXACHLOROCYCLOPENTADIENE					UG_L	24	0
MW09-10D	HEXACHLOROCYCLOPENTADIENE					UG_L	22	0
MW09-10S	HEXACHLOROCYCLOPENTADIENE					UG_L	22	0
MW09-11S	HEXACHLOROCYCLOPENTADIENE					UG_L	21	0
MW09-14D	HEXACHLOROCYCLOPENTADIENE					UG_L	24	0
MW09-14IA	HEXACHLOROCYCLOPENTADIENE					UG_L	16	0
MW09-17I	HEXACHLOROCYCLOPENTADIENE					UG_L	22	0
MW09-20D	HEXACHLOROCYCLOPENTADIENE					UG_L	24	0
MW09-20I	HEXACHLOROCYCLOPENTADIENE					UG_L	44	0
MW09-21D	HEXACHLOROCYCLOPENTADIENE					UG_L	22	0
MW09-21S	HEXACHLOROCYCLOPENTADIENE					UG_L	34	0
MW09-23D	HEXACHLOROCYCLOPENTADIENE					UG_L	22	0
MW09-23S	HEXACHLOROCYCLOPENTADIENE					UG_L	22	0
MW09-24D	HEXACHLOROCYCLOPENTADIENE					UG_L	22	0
MW09-24S	HEXACHLOROCYCLOPENTADIENE					UG_L	22	0
MW09-25S	HEXACHLOROCYCLOPENTADIENE					UG_L	25	0
MW09-26DA	HEXACHLOROCYCLOPENTADIENE					UG_L	1	0
MW09-26S	HEXACHLOROCYCLOPENTADIENE					UG_L	19	0
MW09-27D	HEXACHLOROCYCLOPENTADIENE					UG_L	20	0
MW09-27S	HEXACHLOROCYCLOPENTADIENE					UG_L	20	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-02S	HEXACHLOROETHANE					UG_L	21	0
MW09-03D	HEXACHLOROETHANE					UG_L	21	0
MW09-07S	HEXACHLOROETHANE					UG_L	25	0
MW09-08DA	HEXACHLOROETHANE					UG_L	15	0
MW09-08S	HEXACHLOROETHANE					UG_L	22	0
MW09-09DA	HEXACHLOROETHANE					UG_L	15	0
MW09-09S	HEXACHLOROETHANE					UG_L	24	0
MW09-10D	HEXACHLOROETHANE					UG_L	22	0
MW09-10S	HEXACHLOROETHANE					UG_L	22	0
MW09-11S	HEXACHLOROETHANE					UG_L	21	0
MW09-14D	HEXACHLOROETHANE					UG_L	24	0
MW09-14IA	HEXACHLOROETHANE					UG_L	16	0
MW09-17I	HEXACHLOROETHANE					UG_L	22	0
MW09-20D	HEXACHLOROETHANE					UG_L	24	0
MW09-20I	HEXACHLOROETHANE					UG_L	45	0
MW09-21D	HEXACHLOROETHANE					UG_L	22	0
MW09-21S	HEXACHLOROETHANE					UG_L	34	0
MW09-23D	HEXACHLOROETHANE					UG_L	22	0
MW09-23S	HEXACHLOROETHANE					UG_L	22	0
MW09-24D	HEXACHLOROETHANE					UG_L	22	0
MW09-24S	HEXACHLOROETHANE					UG_L	22	0
MW09-25S	HEXACHLOROETHANE					UG_L	25	0
MW09-26DA	HEXACHLOROETHANE					UG_L	1	0
MW09-26S	HEXACHLOROETHANE					UG_L	19	0
MW09-27D	HEXACHLOROETHANE					UG_L	20	0
MW09-27S	HEXACHLOROETHANE					UG_L	20	0
MW09-02S	INDENO(1,2,3-CD)PYRENE	3/2/2006 0:00	MW09-02S_Q106	0.043 J	0.033	UG_L	22	2
MW09-03D	INDENO(1,2,3-CD)PYRENE					UG_L	22	0
MW09-07S	INDENO(1,2,3-CD)PYRENE	6/18/2007 11:55	MW09-07S_20070618	0.45	0.4	UG_L	25	2
MW09-08DA	INDENO(1,2,3-CD)PYRENE	3/22/2010 2:57	MW09-08DA-032210	0.3	0.24	UG_L	15	3
MW09-08S	INDENO(1,2,3-CD)PYRENE					UG_L	22	0
MW09-09DA	INDENO(1,2,3-CD)PYRENE	7/13/2011 10:20	MW09-09DA-071311	0.17 J	0.17	UG_L	16	1
MW09-09S	INDENO(1,2,3-CD)PYRENE	9/7/2016 10:30	MW09-09S-ME45-1	0.19	0.19	UG_L	26	1
MW09-10D	INDENO(1,2,3-CD)PYRENE					UG_L	22	0
MW09-10S	INDENO(1,2,3-CD)PYRENE	3/21/2005 0:00	MW09-10S-032105	0.033 J	0.033	UG_L	22	1
MW09-11S	INDENO(1,2,3-CD)PYRENE					UG_L	22	0
MW09-14D	INDENO(1,2,3-CD)PYRENE	3/23/2005 0:00	MW09-14D-032305	0.034 J	0.034	UG_L	24	1
MW09-14IA	INDENO(1,2,3-CD)PYRENE					UG_L	13	0
MW09-17I	INDENO(1,2,3-CD)PYRENE	8/5/2009 14:35	MW09-17I-080509	0.11	0.11	UG_L	19	1
MW09-20D	INDENO(1,2,3-CD)PYRENE	3/17/2005 0:00	MW09-20D-031705	0.032 J	0.032	UG_L	24	1
MW09-20I	INDENO(1,2,3-CD)PYRENE	9/8/2016 10:10	MW09-20I-ME45-1	0.4	0.21	UG_L	39	3
MW09-21D	INDENO(1,2,3-CD)PYRENE					UG_L	22	0
MW09-21S	INDENO(1,2,3-CD)PYRENE	10/4/2011 14:22	MW09-21S-100411	0.35 J	0.35	UG_L	32	1
MW09-23D	INDENO(1,2,3-CD)PYRENE	3/23/2005 0:00	MW09-23D-032305	0.07 J	0.07	UG_L	22	1
MW09-23S	INDENO(1,2,3-CD)PYRENE					UG_L	22	0
MW09-24D	INDENO(1,2,3-CD)PYRENE					UG_L	22	0
MW09-24S	INDENO(1,2,3-CD)PYRENE					UG_L	22	0
MW09-25S	INDENO(1,2,3-CD)PYRENE	11/8/2007 12:00	MW09-25S_20071108	0.033 J	0.033	UG_L	25	1
MW09-26DA	INDENO(1,2,3-CD)PYRENE					UG_L	1	0
MW09-26S	INDENO(1,2,3-CD)PYRENE	7/15/2010 12:10	MW09-26S-071510	0.2	0.2	UG_L	20	1
MW09-27D	INDENO(1,2,3-CD)PYRENE	7/12/2010 16:00	MW09-27D-071210	0.2 J	0.19	UG_L	20	2
MW09-27S	INDENO(1,2,3-CD)PYRENE	7/12/2010 16:00	MW09-27S-071210	0.2	0.19	UG_L	20	2
MW09-02S	ISOPHORONE					UG_L	21	0
MW09-03D	ISOPHORONE					UG_L	21	0
MW09-07S	ISOPHORONE					UG_L	25	0
MW09-08DA	ISOPHORONE					UG_L	15	0
MW09-08S	ISOPHORONE					UG_L	22	0
MW09-09DA	ISOPHORONE					UG_L	15	0
MW09-09S	ISOPHORONE					UG_L	24	0
MW09-10D	ISOPHORONE					UG_L	22	0
MW09-10S	ISOPHORONE					UG_L	22	0
MW09-11S	ISOPHORONE					UG_L	22	0
MW09-14D	ISOPHORONE					UG_L	24	0
MW09-14IA	ISOPHORONE					UG_L	16	0
MW09-17I	ISOPHORONE					UG_L	22	0
MW09-20D	ISOPHORONE					UG_L	24	0
MW09-20I	ISOPHORONE					UG_L	45	0
MW09-21D	ISOPHORONE					UG_L	22	0
MW09-21S	ISOPHORONE					UG_L	34	0
MW09-23D	ISOPHORONE					UG_L	22	0
MW09-23S	ISOPHORONE					UG_L	22	0
MW09-24D	ISOPHORONE					UG_L	22	0
MW09-24S	ISOPHORONE					UG_L	22	0
MW09-25S	ISOPHORONE					UG_L	25	0
MW09-26DA	ISOPHORONE					UG_L	1	0
MW09-26S	ISOPHORONE					UG_L	19	0
MW09-27D	ISOPHORONE					UG_L	20	0
MW09-27S	ISOPHORONE					UG_L	20	0
MW09-02S	NAPHTHALENE					UG_L	22	0
MW09-03D	NAPHTHALENE					UG_L	22	0
MW09-07S	NAPHTHALENE	6/14/2005 0:00	MW09-07S	27.4	18.4	UG_L	25	25
MW09-08DA	NAPHTHALENE	10/5/2011 10:38	MW09-08DA-100511	0.2	0.13	UG_L	15	3
MW09-08S	NAPHTHALENE					UG_L	22	0
MW09-09DA	NAPHTHALENE	8/7/2009 9:22	MW09-09DA-080709	0.29	0.15	UG_L	16	7
MW09-09S	NAPHTHALENE	12/15/2005 1:05	MW09-09S-20051215	0.18 J	0.18	UG_L	26	1
MW09-10D	NAPHTHALENE					UG_L	22	0
MW09-10S	NAPHTHALENE	6/4/2002 0:00	MW09-10S-NWG-060402	0.51	0.35	UG_L	22	8
MW09-11S	NAPHTHALENE	2/27/2002 0:00	MW09-11S-NWG-022702	1 J	1	UG_L	22	1
MW09-14D	NAPHTHALENE	9/27/2005 15:55	MW09-14D-20050927	2	2	UG_L	24	1
MW09-14IA	NAPHTHALENE	9/16/2016 10:00	MW09-14IA-ME45-1	14 J	7.2	UG_L	13	13
MW09-17I	NAPHTHALENE	7/17/2008 2:00:00 PM 4/1/2009 9:45:00 AM		20 J	15	UG_L	22	22
MW09-20D	NAPHTHALENE					UG_L	24	0
MW09-20I	NAPHTHALENE	9/30/2013 14:45	MW09-20I-093013	0.093 J	0.083	UG_L	39	2
MW09-21D	NAPHTHALENE	11/9/2007 12:00	MW09-21D_20071109	1.1	0.5	UG_L	22	5
MW09-21S	NAPHTHALENE	3/6/2006 0:00	MW09-21S_Q106	0.11 J	0.1	UG_L	32	2
MW09-23D	NAPHTHALENE					UG_L	22	0
MW09-23S	NAPHTHALENE	3/23/2004 0:00	MW09-23S-NWG-032304	0.9 J	0.48	UG_L	22	5
MW09-24D	NAPHTHALENE	3/6/2006 0:00	MW09-24D_Q106	0.14 J	0.14	UG_L	22	1
MW09-24S	NAPHTHALENE	3/6/2006 0:00	MW09-24S_Q106	0.14 J	0.088	UG_L	22	3
MW09-25S	NAPHTHALENE	12/4/2001 0:00	MW09-25S-NWG-120401	2 J	0.84	UG_L	25	16
MW09-26DA	NAPHTHALENE					UG_L	1	0
MW09-26S	NAPHTHALENE					UG_L	20	0
MW09-27D	NAPHTHALENE	3/29/2012 9:20	MW09-27D-032912	0.11	0.11	UG_L	20	2
MW09-27S	NAPHTHALENE	9/25/2008 15:00	MW09-27S-092508	0.33	0.19	UG_L	20	4
MW09-02S	NITROBENZENE					UG_L	21	0
MW09-03D	NITROBENZENE					UG_L	21	0
MW09-07S	NITROBENZENE					UG_L	25	0
MW09-08DA	NITROBENZENE					UG_L	15	0
MW09-08S	NITROBENZENE					UG_L	22	0
MW09-09DA	NITROBENZENE					UG_L	15	0
MW09-09S	NITROBENZENE					UG_L	24	0
MW09-10D	NITROBENZENE					UG_L	22	0
MW09-10S	NITROBENZENE					UG_L	22	0
MW09-11S	NITROBENZENE					UG_L	21	0

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-14D	NITROBENZENE					UG_L	24	0
MW09-14IA	NITROBENZENE					UG_L	16	0
MW09-17I	NITROBENZENE					UG_L	22	0
MW09-20D	NITROBENZENE					UG_L	24	0
MW09-20I	NITROBENZENE					UG_L	45	0
MW09-21D	NITROBENZENE					UG_L	22	0
MW09-21S	NITROBENZENE					UG_L	34	0
MW09-23D	NITROBENZENE					UG_L	22	0
MW09-23S	NITROBENZENE					UG_L	22	0
MW09-24D	NITROBENZENE					UG_L	22	0
MW09-24S	NITROBENZENE					UG_L	20	0
MW09-25S	NITROBENZENE					UG_L	25	0
MW09-26DA	NITROBENZENE					UG_L	1	0
MW09-26S	NITROBENZENE					UG_L	19	0
MW09-27D	NITROBENZENE					UG_L	20	0
MW09-27S	NITROBENZENE					UG_L	20	0
MW09-02S	N-NITROSODINPROPYLAMINE					UG_L	21	0
MW09-03D	N-NITROSODINPROPYLAMINE					UG_L	21	0
MW09-07S	N-NITROSODINPROPYLAMINE					UG_L	25	0
MW09-08DA	N-NITROSODINPROPYLAMINE					UG_L	15	0
MW09-08S	N-NITROSODINPROPYLAMINE					UG_L	22	0
MW09-09DA	N-NITROSODINPROPYLAMINE					UG_L	15	0
MW09-09S	N-NITROSODINPROPYLAMINE					UG_L	24	0
MW09-10D	N-NITROSODINPROPYLAMINE					UG_L	22	0
MW09-10S	N-NITROSODINPROPYLAMINE					UG_L	22	0
MW09-11S	N-NITROSODINPROPYLAMINE					UG_L	22	0
MW09-14D	N-NITROSODINPROPYLAMINE					UG_L	24	0
MW09-14IA	N-NITROSODINPROPYLAMINE					UG_L	16	0
MW09-17I	N-NITROSODINPROPYLAMINE					UG_L	22	0
MW09-20D	N-NITROSODINPROPYLAMINE					UG_L	24	0
MW09-20I	N-NITROSODINPROPYLAMINE					UG_L	45	0
MW09-21D	N-NITROSODINPROPYLAMINE					UG_L	22	0
MW09-21S	N-NITROSODINPROPYLAMINE					UG_L	34	0
MW09-23D	N-NITROSODINPROPYLAMINE					UG_L	22	0
MW09-23S	N-NITROSODINPROPYLAMINE					UG_L	22	0
MW09-24D	N-NITROSODINPROPYLAMINE					UG_L	22	0
MW09-24S	N-NITROSODINPROPYLAMINE					UG_L	22	0
MW09-25S	N-NITROSODINPROPYLAMINE					UG_L	25	0
MW09-26DA	N-NITROSODINPROPYLAMINE					UG_L	1	0
MW09-26S	N-NITROSODINPROPYLAMINE					UG_L	19	0
MW09-27D	N-NITROSODINPROPYLAMINE					UG_L	20	0
MW09-27S	N-NITROSODINPROPYLAMINE					UG_L	20	0
MW09-02S	N-NITROSODIPHENYLAMINE					UG_L	21	0
MW09-03D	N-NITROSODIPHENYLAMINE					UG_L	21	0
MW09-07S	N-NITROSODIPHENYLAMINE					UG_L	25	0
MW09-08DA	N-NITROSODIPHENYLAMINE					UG_L	15	0
MW09-08S	N-NITROSODIPHENYLAMINE					UG_L	22	0
MW09-09DA	N-NITROSODIPHENYLAMINE					UG_L	15	0
MW09-09S	N-NITROSODIPHENYLAMINE					UG_L	24	0
MW09-10D	N-NITROSODIPHENYLAMINE					UG_L	22	0
MW09-10S	N-NITROSODIPHENYLAMINE					UG_L	22	0
MW09-11S	N-NITROSODIPHENYLAMINE					UG_L	22	0
MW09-14D	N-NITROSODIPHENYLAMINE					UG_L	24	0
MW09-14IA	N-NITROSODIPHENYLAMINE					UG_L	16	0
MW09-17I	N-NITROSODIPHENYLAMINE	9/25/2008 13:33	MW09-17I-092508	0.67 J	0.67	UG_L	22	1
MW09-20D	N-NITROSODIPHENYLAMINE					UG_L	24	0
MW09-20I	N-NITROSODIPHENYLAMINE					UG_L	45	0
MW09-21D	N-NITROSODIPHENYLAMINE					UG_L	22	0
MW09-21S	N-NITROSODIPHENYLAMINE					UG_L	34	0
MW09-23D	N-NITROSODIPHENYLAMINE					UG_L	21	0
MW09-23S	N-NITROSODIPHENYLAMINE					UG_L	21	0
MW09-24D	N-NITROSODIPHENYLAMINE					UG_L	21	0
MW09-24S	N-NITROSODIPHENYLAMINE					UG_L	21	0
MW09-25S	N-NITROSODIPHENYLAMINE					UG_L	24	0
MW09-26DA	N-NITROSODIPHENYLAMINE					UG_L	1	0
MW09-26S	N-NITROSODIPHENYLAMINE					UG_L	19	0
MW09-27D	N-NITROSODIPHENYLAMINE					UG_L	20	0
MW09-27S	N-NITROSODIPHENYLAMINE					UG_L	20	0
MW09-02S	PHENANTHRENE	3/2/2006 0:00	MW09-02S_Q106	0.26	0.2	UG_L	22	2
MW09-03D	PHENANTHRENE	3/6/2007 0:00	MW09-03D_20070306	0.25	0.25	UG_L	22	1
MW09-07S	PHENANTHRENE	10/20/2004 0:00	MW09-07S-NWG-102004	11.5	3.75	UG_L	25	15
MW09-08DA	PHENANTHRENE	10/5/2011 10:38	MW09-08DA-100511	0.27 J	0.27	UG_L	15	1
MW09-08S	PHENANTHRENE	3/8/2007 0:00	MW09-08S_20070308	0.4	0.17	UG_L	22	6
MW09-09DA	PHENANTHRENE	8/7/2009 9:22	MW09-09DA-080709	0.15	0.1	UG_L	16	4
MW09-09S	PHENANTHRENE	3/8/2007 0:00	MW09-09S_20070308	0.32	0.2	UG_L	26	5
MW09-10D	PHENANTHRENE	3/21/2005 0:00	MW09-10D-032105	0.15 J	0.12	UG_L	22	3
MW09-10S	PHENANTHRENE	9/26/2005 14:21	MW09-10S-20050926	0.48	0.23	UG_L	22	4
MW09-11S	PHENANTHRENE	3/7/2007 0:00	MW09-11S_20070307	0.34	0.17	UG_L	22	4
MW09-14D	PHENANTHRENE	9/27/2005 15:55	MW09-14D-20050927	0.97	0.33	UG_L	24	4
MW09-14IA	PHENANTHRENE	3/23/2011 10:49	MW09-14IA-032311	0.075 J	0.075	UG_L	13	1
MW09-17I	PHENANTHRENE	8/5/2009 14:35	MW09-17I-080509	0.12	0.12	UG_L	19	1
MW09-20D	PHENANTHRENE	3/6/2007 0:00	MW09-20D_20070306	0.093 J	0.093	UG_L	24	1
MW09-20I	PHENANTHRENE	6/20/2007 12:25	MW09-20I_20070620	0.64	0.36	UG_L	39	7
MW09-21D	PHENANTHRENE	9/28/2005 14:45	MW09-21D-20050928	0.33	0.23	UG_L	22	2
MW09-21S	PHENANTHRENE	10/14/2009 15:55	MW09-21S-101409	0.2 J	0.13	UG_L	32	4
MW09-23D	PHENANTHRENE	3/7/2007 0:00	MW09-23D_20070307	0.28	0.17	UG_L	22	2
MW09-23S	PHENANTHRENE	9/26/2005 14:55	MW09-23S-20050926	0.51	0.19	UG_L	22	7
MW09-24D	PHENANTHRENE	10/21/2004 0:00	MW09-24D-NWG-102104	0.29	0.22	UG_L	22	4
MW09-24S	PHENANTHRENE	3/6/2007 0:00	MW09-24S_20070306	0.41	0.41	UG_L	22	1
MW09-25S	PHENANTHRENE	6/10/2002 0:00	MW09-25S-NWG-061002	1.8	0.45	UG_L	25	11
MW09-26DA	PHENANTHRENE					UG_L	1	0
MW09-26S	PHENANTHRENE					UG_L	20	0
MW09-27D	PHENANTHRENE					UG_L	20	0
MW09-27S	PHENANTHRENE	12/15/2010 13:43	MW09-27S-121510	0.13 J	0.092	UG_L	20	2
MW09-02S	PHENOL					UG_L	21	0
MW09-03D	PHENOL					UG_L	20	0
MW09-07S	PHENOL					UG_L	25	0
MW09-08DA	PHENOL	3/27/2012 9:47	MW09-08DA-032712	1.2 J	1.2	UG_L	13	1
MW09-08S	PHENOL					UG_L	22	0
MW09-09DA	PHENOL					UG_L	14	0
MW09-09S	PHENOL	1/20/2003 0:00	MW09-09S-NWG-012003	32	21.7	UG_L	24	2
MW09-10D	PHENOL					UG_L	22	0
MW09-10S	PHENOL					UG_L	22	0
MW09-11S	PHENOL					UG_L	21	0
MW09-14D	PHENOL					UG_L	23	0
MW09-14IA	PHENOL	3/28/2012 10:05	MW09-14IA-032812	2.6 J	2.6	UG_L	15	1
MW09-17I	PHENOL	9/25/2008 1:33:00 PM 3/29/2012 1:30:00 PM		1.3 JJ	1.2	UG_L	21	5
MW09-20D	PHENOL					UG_L	23	0
MW09-20I	PHENOL	3/30/2012 9:45	MW09-20I-033012	2.9 J	2.2	UG_L	44	2
MW09-21D	PHENOL					UG_L	22	0
MW09-21S	PHENOL	9/30/2008 10:15	MW09-21S-093008	1 J	1	UG_L	33	1
MW09-23D	PHENOL					UG_L	22	0
MW09-23S	PHENOL					UG_L	22	0
MW09-24D	PHENOL					UG_L	22	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-24S	PHENOL					UG_L	22	0
MW09-25S	PHENOL					UG_L	25	0
MW09-26DA	PHENOL					UG_L	1	0
MW09-26S	PHENOL	3/29/2012 10:52	MW09-26S-032912	2.8 J	1.6	UG_L	18	2
MW09-27D	PHENOL	4/28/2008 15:00	MW09-27D-042808	1.2 J	1.1	UG_L	19	3
MW09-27S	PHENOL	3/29/2012 10:15	MW09-27S-032912	1.6 J	1.2	UG_L	19	2
MW09-02S	PYRENE	10/19/2004 0:00	MW09-02S-NWG-101904	0.056 J	0.056	UG_L	22	1
MW09-03D	PYRENE	6/14/2007 12:20	MW09-03D_20070614	0.14 J	0.089	UG_L	22	2
MW09-07S	PYRENE	12/19/2005 12:26	MW09-07S-20051219	2.5	0.84	UG_L	25	6
MW09-08DA	PYRENE	10/5/2011 10:38	MW09-08DA-100511	0.24 J	0.24	UG_L	15	1
MW09-08S	PYRENE	8/12/2004 0:00	MW09-08S-NWG-081204	0.079 J	0.079	UG_L	22	1
MW09-09DA	PYRENE	3/25/2013 14:45	MW09-09DA-032513-1	0.13 J	0.11	UG_L	16	2
MW09-09S	PYRENE	9/7/2016 10:30	MW09-09S-ME45-1	0.2 J	0.11	UG_L	26	3
MW09-10D	PYRENE	11/7/2007 12:00	MW09-10D_20071107	0.034 J	0.034	UG_L	22	1
MW09-10S	PYRENE	11/8/2007 12:00	MW09-10S_20071108	0.03 J	0.03	UG_L	22	1
MW09-11S	PYRENE	3/1/2006 0:00	MW09-11S_Q106	0.22 J	0.14	UG_L	22	2
MW09-14D	PYRENE	12/19/2005 2:04	MW09-14D-20051219	0.38 J	0.18	UG_L	24	4
MW09-14IA	PYRENE	3/23/2011 10:49	MW09-14IA-032311	0.07 J	0.07	UG_L	13	1
MW09-17I	PYRENE	8/5/2009 14:35	MW09-17I-080509	0.11	0.11	UG_L	19	1
MW09-20D	PYRENE	6/19/2007 10:15	MW09-20D_20070619	0.32 J	0.21	UG_L	24	4
MW09-20I	PYRENE	3/1/2006 0:00	MW09-20I_Q106	10.3 J	2.78	UG_L	39	8
MW09-21D	PYRENE	3/17/2005 0:00	MW09-21D-031705	3.3 J	0.81	UG_L	22	5
MW09-21S	PYRENE	3/17/2005 0:00	MW09-21S-031705	2.8 J	0.96	UG_L	32	4
MW09-23D	PYRENE	12/20/2005 2:25	MW09-23D-20051220	0.17 J	0.16	UG_L	22	2
MW09-23S	PYRENE	3/23/2004 0:00	MW09-23S-NWG-032304	0.9 J	0.59	UG_L	22	19
MW09-24D	PYRENE	3/6/2006 0:00	MW09-24D_Q106	2.2 J	0.58	UG_L	22	5
MW09-24S	PYRENE	6/14/2007 9:00	MW09-24S_20070614	0.26 J	0.17	UG_L	22	3
MW09-25S	PYRENE	12/19/2005 12:30	MW09-25S-20051219	1.5	0.44	UG_L	25	4
MW09-26DA	PYRENE					UG_L	1	0
MW09-26S	PYRENE	1/30/2008 0:00	MW09-26S-013008	0.09	0.09	UG_L	20	1
MW09-27D	PYRENE					UG_L	20	0
MW09-27S	PYRENE	12/15/2010 13:43	MW09-27S-121510	0.14 J	0.11	UG_L	20	3
VOCs				VOCs				
MW09-02S	1,1,1-TRICHLOROETHANE					UG_L	34	0
MW09-03D	1,1,1-TRICHLOROETHANE					UG_L	36	0
MW09-07S	1,1,1-TRICHLOROETHANE					UG_L	34	0
MW09-08DA	1,1,1-TRICHLOROETHANE					UG_L	17	0
MW09-08S	1,1,1-TRICHLOROETHANE					UG_L	45	0
MW09-09DA	1,1,1-TRICHLOROETHANE					UG_L	17	0
MW09-09S	1,1,1-TRICHLOROETHANE					UG_L	46	0
MW09-10D	1,1,1-TRICHLOROETHANE					UG_L	33	0
MW09-10S	1,1,1-TRICHLOROETHANE					UG_L	34	0
MW09-11S	1,1,1-TRICHLOROETHANE					UG_L	43	0
MW09-14D	1,1,1-TRICHLOROETHANE					UG_L	33	0
MW09-14IA	1,1,1-TRICHLOROETHANE					UG_L	16	0
MW09-17I	1,1,1-TRICHLOROETHANE					UG_L	22	0
MW09-20D	1,1,1-TRICHLOROETHANE					UG_L	44	0
MW09-20I	1,1,1-TRICHLOROETHANE	3/18/2010 10:10	MW09-20I-031810	1400	1400	UG_L	43	1
MW09-21D	1,1,1-TRICHLOROETHANE					UG_L	35	0
MW09-21S	1,1,1-TRICHLOROETHANE					UG_L	36	0
MW09-23D	1,1,1-TRICHLOROETHANE					UG_L	34	0
MW09-23S	1,1,1-TRICHLOROETHANE					UG_L	34	0
MW09-24D	1,1,1-TRICHLOROETHANE					UG_L	34	0
MW09-24S	1,1,1-TRICHLOROETHANE					UG_L	34	0
MW09-25S	1,1,1-TRICHLOROETHANE					UG_L	44	0
MW09-26DA	1,1,1-TRICHLOROETHANE					UG_L	2	0
MW09-26S	1,1,1-TRICHLOROETHANE					UG_L	21	0
MW09-27D	1,1,1-TRICHLOROETHANE					UG_L	20	0
MW09-27S	1,1,1-TRICHLOROETHANE					UG_L	21	0
MW09-02S	1,1,2,2-TETRACHLOROETHANE					UG_L	34	0
MW09-03D	1,1,2,2-TETRACHLOROETHANE					UG_L	36	0
MW09-07S	1,1,2,2-TETRACHLOROETHANE					UG_L	34	0
MW09-08DA	1,1,2,2-TETRACHLOROETHANE	9/30/2013 13:30	MW09-08DA-093013	23	23	UG_L	17	1
MW09-08S	1,1,2,2-TETRACHLOROETHANE	5/6/2003 0:00	MW09-08S-NWG-050603	1.88	1.88	UG_L	45	1
MW09-09DA	1,1,2,2-TETRACHLOROETHANE					UG_L	17	0
MW09-09S	1,1,2,2-TETRACHLOROETHANE	10/20/2009 9:14	MW09-09S-102009	0.4 J	0.4	UG_L	46	1
MW09-10D	1,1,2,2-TETRACHLOROETHANE					UG_L	33	0
MW09-10S	1,1,2,2-TETRACHLOROETHANE	3/22/2004 0:00	MW09-10S-NWG-032204	1.16	1.16	UG_L	34	1
MW09-11S	1,1,2,2-TETRACHLOROETHANE					UG_L	43	0
MW09-14D	1,1,2,2-TETRACHLOROETHANE	12/7/2001 0:00	MW09-14D-NWG-120701	3.16	3.16	UG_L	33	1
MW09-14IA	1,1,2,2-TETRACHLOROETHANE					UG_L	16	0
MW09-17I	1,1,2,2-TETRACHLOROETHANE					UG_L	22	0
MW09-20D	1,1,2,2-TETRACHLOROETHANE	9/28/2005 13:20	MW09-20D-20050928	4.3	4.3	UG_L	44	1
MW09-20I	1,1,2,2-TETRACHLOROETHANE	6/5/2002 0:00	MW09-20I-NWG-060502	240000 J	105000	UG_L	45	44
MW09-21D	1,1,2,2-TETRACHLOROETHANE	12/5/2001 0:00	MW09-21D-NWG-120501	280	100	UG_L	35	3
MW09-21S	1,1,2,2-TETRACHLOROETHANE					UG_L	36	0
MW09-23D	1,1,2,2-TETRACHLOROETHANE					UG_L	34	0
MW09-23S	1,1,2,2-TETRACHLOROETHANE					UG_L	34	0
MW09-24D	1,1,2,2-TETRACHLOROETHANE					UG_L	34	0
MW09-24S	1,1,2,2-TETRACHLOROETHANE					UG_L	34	0
MW09-25S	1,1,2,2-TETRACHLOROETHANE					UG_L	44	0
MW09-26DA	1,1,2,2-TETRACHLOROETHANE					UG_L	2	0
MW09-26S	1,1,2,2-TETRACHLOROETHANE	1/30/2008 0:00	MW09-26S-013008	9	9	UG_L	21	1
MW09-27D	1,1,2,2-TETRACHLOROETHANE					UG_L	20	0
MW09-27S	1,1,2,2-TETRACHLOROETHANE					UG_L	21	0
MW09-02S	1,1,2-TRICHLOROETHANE					UG_L	34	0
MW09-03D	1,1,2-TRICHLOROETHANE					UG_L	36	0
MW09-07S	1,1,2-TRICHLOROETHANE	9/17/2003 0:00	MW09-07S-NWG-091703	0.5 J	0.5	UG_L	34	1
MW09-08DA	1,1,2-TRICHLOROETHANE					UG_L	17	0
MW09-08S	1,1,2-TRICHLOROETHANE					UG_L	45	0
MW09-09DA	1,1,2-TRICHLOROETHANE					UG_L	17	0
MW09-09S	1,1,2-TRICHLOROETHANE	7/12/2011 10:45	MW09-09S-071211	3.6	1.4	UG_L	46	11
MW09-10D	1,1,2-TRICHLOROETHANE					UG_L	33	0
MW09-10S	1,1,2-TRICHLOROETHANE					UG_L	34	0
MW09-11S	1,1,2-TRICHLOROETHANE					UG_L	43	0
MW09-14D	1,1,2-TRICHLOROETHANE					UG_L	33	0
MW09-14IA	1,1,2-TRICHLOROETHANE					UG_L	16	0
MW09-17I	1,1,2-TRICHLOROETHANE					UG_L	22	0
MW09-20D	1,1,2-TRICHLOROETHANE					UG_L	44	0
MW09-20I	1,1,2-TRICHLOROETHANE	6/5/2002 0:00	MW09-20I-NWG-060502	38000 J	4200	UG_L	45	40
MW09-21D	1,1,2-TRICHLOROETHANE	12/5/2001 0:00	MW09-21D-NWG-120501	3.94	2.05	UG_L	35	2
MW09-21S	1,1,2-TRICHLOROETHANE					UG_L	36	0
MW09-23D	1,1,2-TRICHLOROETHANE					UG_L	34	0
MW09-23S	1,1,2-TRICHLOROETHANE					UG_L	34	0
MW09-24D	1,1,2-TRICHLOROETHANE					UG_L	34	0
MW09-24S	1,1,2-TRICHLOROETHANE					UG_L	34	0
MW09-25S	1,1,2-TRICHLOROETHANE					UG_L	44	0
MW09-26DA	1,1,2-TRICHLOROETHANE					UG_L	2	0
MW09-26S	1,1,2-TRICHLOROETHANE					UG_L	21	0
MW09-27D	1,1,2-TRICHLOROETHANE					UG_L	20	0
MW09-27S	1,1,2-TRICHLOROETHANE					UG_L	21	0
MW09-02S	1,1-DICHLOROETHANE					UG_L	34	0
MW09-03D	1,1-DICHLOROETHANE					UG_L	36	0
MW09-07S	1,1-DICHLOROETHANE					UG_L	34	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-08DA	1,1-DICHLOROETHANE					UG_L	17	0
MW09-08S	1,1-DICHLOROETHANE	3/23/2004 0:00	MW09-08S-NWG-032304	0.22 J	0.19	UG_L	45	5
MW09-09DA	1,1-DICHLOROETHANE					UG_L	17	0
MW09-09S	1,1-DICHLOROETHANE					UG_L	46	0
MW09-10D	1,1-DICHLOROETHANE					UG_L	33	0
MW09-10S	1,1-DICHLOROETHANE	3/22/2004 0:00	MW09-10S-NWG-032204	0.13 J	0.13	UG_L	34	1
MW09-11S	1,1-DICHLOROETHANE					UG_L	43	0
MW09-14D	1,1-DICHLOROETHANE	9/9/2002 0:00	MW09-14D-NWG-090902	0.12 J	0.11	UG_L	33	4
MW09-14IA	1,1-DICHLOROETHANE					UG_L	16	0
MW09-17I	1,1-DICHLOROETHANE					UG_L	22	0
MW09-20D	1,1-DICHLOROETHANE					UG_L	44	0
MW09-20I	1,1-DICHLOROETHANE	3/18/2010 10:10	MW09-20I-031810	2000	1000	UG_L	43	2
MW09-21D	1,1-DICHLOROETHANE					UG_L	35	0
MW09-21S	1,1-DICHLOROETHANE	9/11/2002 0:00	MW09-21S-NWG-091102	0.24 J	0.18	UG_L	36	6
MW09-23D	1,1-DICHLOROETHANE					UG_L	34	0
MW09-23S	1,1-DICHLOROETHANE					UG_L	34	0
MW09-24D	1,1-DICHLOROETHANE					UG_L	34	0
MW09-24S	1,1-DICHLOROETHANE					UG_L	34	0
MW09-25S	1,1-DICHLOROETHANE					UG_L	44	0
MW09-26DA	1,1-DICHLOROETHANE					UG_L	2	0
MW09-26S	1,1-DICHLOROETHANE					UG_L	21	0
MW09-27D	1,1-DICHLOROETHANE					UG_L	20	0
MW09-27S	1,1-DICHLOROETHANE					UG_L	21	0
MW09-02S	1,1-DICHLOROETHENE					UG_L	34	0
MW09-03D	1,1-DICHLOROETHENE	3/6/2007 0:00	MW09-03D_20070306	1.2	0.64	UG_L	36	12
MW09-07S	1,1-DICHLOROETHENE					UG_L	34	0
MW09-08DA	1,1-DICHLOROETHENE	9/30/2013 13:30	MW09-08DA-093013	1.7	1.7	UG_L	17	1
MW09-08S	1,1-DICHLOROETHENE					UG_L	45	0
MW09-09DA	1,1-DICHLOROETHENE	8/7/2009 9:22	MW09-09DA-080709	1.3	0.8	UG_L	17	3
MW09-09S	1,1-DICHLOROETHENE	1/8/2010 10:00	MW09-09S-010810	9 J	2.57	UG_L	46	29
MW09-10D	1,1-DICHLOROETHENE					UG_L	33	0
MW09-10S	1,1-DICHLOROETHENE					UG_L	34	0
MW09-11S	1,1-DICHLOROETHENE					UG_L	43	0
MW09-14D	1,1-DICHLOROETHENE					UG_L	33	0
MW09-14IA	1,1-DICHLOROETHENE					UG_L	16	0
MW09-17I	1,1-DICHLOROETHENE					UG_L	22	0
MW09-20D	1,1-DICHLOROETHENE					UG_L	44	0
MW09-20I	1,1-DICHLOROETHENE	6/5/2002 0:00	MW09-20I-NWG-060502	6400 J	685	UG_L	44	34
MW09-21D	1,1-DICHLOROETHENE	9/17/2003 0:00	MW09-21D-NWG-091703	32	3	UG_L	35	25
MW09-21S	1,1-DICHLOROETHENE					UG_L	36	0
MW09-23D	1,1-DICHLOROETHENE					UG_L	34	0
MW09-23S	1,1-DICHLOROETHENE					UG_L	34	0
MW09-24D	1,1-DICHLOROETHENE					UG_L	34	0
MW09-24S	1,1-DICHLOROETHENE					UG_L	34	0
MW09-25S	1,1-DICHLOROETHENE					UG_L	44	0
MW09-26DA	1,1-DICHLOROETHENE					UG_L	2	0
MW09-26S	1,1-DICHLOROETHENE					UG_L	21	0
MW09-27D	1,1-DICHLOROETHENE					UG_L	20	0
MW09-27S	1,1-DICHLOROETHENE					UG_L	21	0
MW09-02S	1,2-DICHLOROETHANE					UG_L	34	0
MW09-03D	1,2-DICHLOROETHANE	12/3/2001 0:00	MW09-03D-NWG-120301	1.28	0.808	UG_L	36	15
MW09-07S	1,2-DICHLOROETHANE					UG_L	34	0
MW09-08DA	1,2-DICHLOROETHANE	1/7/2010 1:44:00 AM 7/14/2010 11:00:00 AM		0.8 JJ	0.76	UG_L	17	5
MW09-08S	1,2-DICHLOROETHANE	1/20/2003 0:00	MW09-08S-NWG-012003	0.33 J	0.29	UG_L	45	6
MW09-09DA	1,2-DICHLOROETHANE					UG_L	17	0
MW09-09S	1,2-DICHLOROETHANE	9/10/2003 0:00	MW09-09S-NWG-091003	2.56	1.6	UG_L	46	32
MW09-10D	1,2-DICHLOROETHANE					UG_L	33	0
MW09-10S	1,2-DICHLOROETHANE					UG_L	34	0
MW09-11S	1,2-DICHLOROETHANE					UG_L	43	0
MW09-14D	1,2-DICHLOROETHANE					UG_L	33	0
MW09-14IA	1,2-DICHLOROETHANE	3/28/2012 10:05	MW09-14IA-032812	4.2	3.2	UG_L	16	13
MW09-17I	1,2-DICHLOROETHANE					UG_L	22	0
MW09-20D	1,2-DICHLOROETHANE					UG_L	44	0
MW09-20I	1,2-DICHLOROETHANE	9/28/2005 10:05	MW09-20I-20050928	26.3 J	13.5	UG_L	43	8
MW09-21D	1,2-DICHLOROETHANE					UG_L	35	0
MW09-21S	1,2-DICHLOROETHANE	6/19/2007 13:35	MW09-21S_20070619	0.66 J	0.56	UG_L	36	4
MW09-23D	1,2-DICHLOROETHANE					UG_L	34	0
MW09-23S	1,2-DICHLOROETHANE					UG_L	34	0
MW09-24D	1,2-DICHLOROETHANE					UG_L	34	0
MW09-24S	1,2-DICHLOROETHANE					UG_L	34	0
MW09-25S	1,2-DICHLOROETHANE					UG_L	44	0
MW09-26DA	1,2-DICHLOROETHANE					UG_L	2	0
MW09-26S	1,2-DICHLOROETHANE					UG_L	21	0
MW09-27D	1,2-DICHLOROETHANE	9/25/2008 10:00	MW09-27D-092508	2.8	1.9	UG_L	20	13
MW09-27S	1,2-DICHLOROETHANE					UG_L	21	0
MW09-02S	1,2-DICHLOROETHENE, TOTAL	11/7/2007 12:00	MW09-02S_20071107	2.7	1.16	UG_L	31	7
MW09-03D	1,2-DICHLOROETHENE, TOTAL	6/11/2002 12:00:00 AM 12/8/2003 12:00:00 AM		150	111.6	UG_L	31	31
MW09-07S	1,2-DICHLOROETHENE, TOTAL	11/9/2007 12:00	MW09-07S_20071109	1.16	0.58	UG_L	30	9
MW09-08DA	1,2-DICHLOROETHENE, TOTAL	9/23/2010 10:25	MW09-08DA-092310	2.6	2.2	UG_L	12	11
MW09-08S	1,2-DICHLOROETHENE, TOTAL	12/4/2001 0:00	MW09-08S-NWG-120401	6.51	3.66	UG_L	40	40
MW09-09DA	1,2-DICHLOROETHENE, TOTAL	8/7/2009 9:22	MW09-09DA-080709	32.1	20.11	UG_L	12	12
MW09-09S	1,2-DICHLOROETHENE, TOTAL	1/8/2010 10:00	MW09-09S-010810	2060	559.29	UG_L	40	40
MW09-10D	1,2-DICHLOROETHENE, TOTAL	5/2/2003 0:00	MW09-10D-NWG-050203	0.18	0.18	UG_L	31	1
MW09-10S	1,2-DICHLOROETHENE, TOTAL	10/20/2009 15:18	MW09-10S-102009	2	0.64	UG_L	31	7
MW09-11S	1,2-DICHLOROETHENE, TOTAL	9/10/2003 0:00	MW09-11S-NWG-091003	1.37	0.827	UG_L	40	15
MW09-14D	1,2-DICHLOROETHENE, TOTAL	10/20/2009 9:35	MW09-14D-102009	1	0.56	UG_L	30	5
MW09-14IA	1,2-DICHLOROETHENE, TOTAL	10/20/2009 11:15	MW09-14IA-102009	27.4	14.2	UG_L	12	12
MW09-17I	1,2-DICHLOROETHENE, TOTAL					UG_L	18	0
MW09-20D	1,2-DICHLOROETHENE, TOTAL	9/28/2005 13:20	MW09-20D-20050928	3.7	0.947	UG_L	40	12
MW09-20I	1,2-DICHLOROETHENE, TOTAL	3/30/2011 10:10	MW09-20I-033011	290000	64100	UG_L	40	40
MW09-21D	1,2-DICHLOROETHENE, TOTAL	12/5/2001 0:00	MW09-21D-NWG-120501	1208.86	628.786	UG_L	31	31
MW09-21S	1,2-DICHLOROETHENE, TOTAL	11/9/2007 12:00	MW09-21S_20071109	1.6	0.71	UG_L	31	7
MW09-23D	1,2-DICHLOROETHENE, TOTAL					UG_L	30	0
MW09-23S	1,2-DICHLOROETHENE, TOTAL					UG_L	30	0
MW09-24D	1,2-DICHLOROETHENE, TOTAL					UG_L	31	0
MW09-24S	1,2-DICHLOROETHENE, TOTAL	3/23/2010 2:50	MW09-24S-032310	0.3	0.27	UG_L	31	2
MW09-25S	1,2-DICHLOROETHENE, TOTAL	7/23/2008 10:00	MW09-25S-072308	0.68	0.44	UG_L	40	4
MW09-26S	1,2-DICHLOROETHENE, TOTAL					UG_L	18	0
MW09-27D	1,2-DICHLOROETHENE, TOTAL	9/20/2010 10:55	MW09-27D-092010	1.8	1.1	UG_L	18	16
MW09-27S	1,2-DICHLOROETHENE, TOTAL					UG_L	18	0
MW09-02S	1,2-DICHLOROPROPANE					UG_L	34	0
MW09-03D	1,2-DICHLOROPROPANE					UG_L	36	0
MW09-07S	1,2-DICHLOROPROPANE					UG_L	34	0
MW09-08DA	1,2-DICHLOROPROPANE	3/26/2013 15:25	MW09-08DA-032613-1	1	1	UG_L	17	1
MW09-08S	1,2-DICHLOROPROPANE					UG_L	45	0
MW09-09DA	1,2-DICHLOROPROPANE					UG_L	17	0
MW09-09S	1,2-DICHLOROPROPANE	1/12/2004 0:00	MW09-09S-NWG-011204	0.18 J	0.17	UG_L	46	2
MW09-10D	1,2-DICHLOROPROPANE					UG_L	33	0
MW09-10S	1,2-DICHLOROPROPANE					UG_L	34	0
MW09-11S	1,2-DICHLOROPROPANE					UG_L	43	0
MW09-14D	1,2-DICHLOROPROPANE					UG_L	33	0
MW09-14IA	1,2-DICHLOROPROPANE	3/28/2012 10:05	MW09-14IA-032812	2.2	1.2	UG_L	16	4
MW09-17I	1,2-DICHLOROPROPANE					UG_L	22	0
MW09-20D	1,2-DICHLOROPROPANE					UG_L	44	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-20I	1,2-DICHLOROPROPANE					UG_L	43	0
MW09-21D	1,2-DICHLOROPROPANE					UG_L	35	0
MW09-21S	1,2-DICHLOROPROPANE					UG_L	36	0
MW09-23D	1,2-DICHLOROPROPANE					UG_L	34	0
MW09-23S	1,2-DICHLOROPROPANE					UG_L	34	0
MW09-24D	1,2-DICHLOROPROPANE					UG_L	34	0
MW09-24S	1,2-DICHLOROPROPANE					UG_L	34	0
MW09-25S	1,2-DICHLOROPROPANE					UG_L	44	0
MW09-26DA	1,2-DICHLOROPROPANE					UG_L	2	0
MW09-26S	1,2-DICHLOROPROPANE					UG_L	21	0
MW09-27D	1,2-DICHLOROPROPANE	4/28/2008 3:00:00 PM 7/17/2008 9:50:00 AM 9/25/2008 10:00:00 AM		3.8	2.4	UG_L	20	13
MW09-27S	1,2-DICHLOROPROPANE					UG_L	21	0
MW09-02S	2-BUTANONE					UG_L	27	0
MW09-03D	2-BUTANONE					UG_L	28	0
MW09-07S	2-BUTANONE	3/18/2004 0:00	MW09-07S-NWG-031804	1.02 J	1.02	UG_L	26	1
MW09-08DA	2-BUTANONE					UG_L	15	0
MW09-08S	2-BUTANONE					UG_L	37	0
MW09-09DA	2-BUTANONE					UG_L	15	0
MW09-09S	2-BUTANONE					UG_L	35	0
MW09-10D	2-BUTANONE					UG_L	24	0
MW09-10S	2-BUTANONE					UG_L	25	0
MW09-11S	2-BUTANONE					UG_L	34	0
MW09-14D	2-BUTANONE					UG_L	24	0
MW09-14IA	2-BUTANONE					UG_L	14	0
MW09-17I	2-BUTANONE					UG_L	20	0
MW09-20D	2-BUTANONE					UG_L	35	0
MW09-20I	2-BUTANONE					UG_L	36	0
MW09-21D	2-BUTANONE	3/17/2004 0:00	MW09-21D-NWG-031704	1.59 J	1.59	UG_L	26	1
MW09-21S	2-BUTANONE	8/11/2004 0:00	MW09-21S-NWG-081104	20.8 J	20.8	UG_L	27	1
MW09-23D	2-BUTANONE					UG_L	25	0
MW09-23S	2-BUTANONE					UG_L	25	0
MW09-24D	2-BUTANONE					UG_L	25	0
MW09-24S	2-BUTANONE					UG_L	25	0
MW09-25S	2-BUTANONE					UG_L	35	0
MW09-26DA	2-BUTANONE					UG_L	2	0
MW09-26S	2-BUTANONE					UG_L	20	0
MW09-27D	2-BUTANONE					UG_L	19	0
MW09-27S	2-BUTANONE					UG_L	20	0
MW09-02S	2-HEXANONE					UG_L	30	0
MW09-03D	2-HEXANONE					UG_L	32	0
MW09-07S	2-HEXANONE	12/19/2005 12:26	MW09-07S-20051219	1.6 J	1.6	UG_L	29	1
MW09-08DA	2-HEXANONE					UG_L	17	0
MW09-08S	2-HEXANONE					UG_L	42	0
MW09-09DA	2-HEXANONE					UG_L	17	0
MW09-09S	2-HEXANONE					UG_L	41	0
MW09-10D	2-HEXANONE					UG_L	28	0
MW09-10S	2-HEXANONE	12/20/2005 11:40	MW09-10S-20051220	2.5 J	2.5	UG_L	29	1
MW09-11S	2-HEXANONE					UG_L	38	0
MW09-14D	2-HEXANONE	6/14/2005 0:00	MW09-14D	4.3 J	4	UG_L	28	3
MW09-14IA	2-HEXANONE					UG_L	16	0
MW09-17I	2-HEXANONE					UG_L	22	0
MW09-20D	2-HEXANONE					UG_L	39	0
MW09-20I	2-HEXANONE					UG_L	41	0
MW09-21D	2-HEXANONE					UG_L	32	0
MW09-21S	2-HEXANONE	6/15/2005 0:00	MW09-21S	11.9 J	9.86	UG_L	32	5
MW09-23D	2-HEXANONE					UG_L	29	0
MW09-23S	2-HEXANONE					UG_L	29	0
MW09-24D	2-HEXANONE					UG_L	29	0
MW09-24S	2-HEXANONE					UG_L	29	0
MW09-25S	2-HEXANONE	9/10/2002 0:00	MW09-25S-NWG-091002	12 J	12	UG_L	41	1
MW09-26DA	2-HEXANONE					UG_L	2	0
MW09-26S	2-HEXANONE					UG_L	21	0
MW09-27D	2-HEXANONE					UG_L	20	0
MW09-27S	2-HEXANONE					UG_L	21	0
MW09-02S	4-METHYL-2-PENTANONE					UG_L	33	0
MW09-03D	4-METHYL-2-PENTANONE					UG_L	35	0
MW09-07S	4-METHYL-2-PENTANONE					UG_L	32	0
MW09-08DA	4-METHYL-2-PENTANONE					UG_L	17	0
MW09-08S	4-METHYL-2-PENTANONE					UG_L	44	0
MW09-09DA	4-METHYL-2-PENTANONE					UG_L	17	0
MW09-09S	4-METHYL-2-PENTANONE					UG_L	44	0
MW09-10D	4-METHYL-2-PENTANONE					UG_L	31	0
MW09-10S	4-METHYL-2-PENTANONE					UG_L	32	0
MW09-11S	4-METHYL-2-PENTANONE					UG_L	41	0
MW09-14D	4-METHYL-2-PENTANONE	9/17/2003 0:00	MW09-14D-NWG-091703	5.04	2.28	UG_L	31	8
MW09-14IA	4-METHYL-2-PENTANONE					UG_L	16	0
MW09-17I	4-METHYL-2-PENTANONE					UG_L	22	0
MW09-20D	4-METHYL-2-PENTANONE					UG_L	42	0
MW09-20I	4-METHYL-2-PENTANONE	9/27/2012 10:38	MW09-20I-092712	2.3 J	2.3	UG_L	43	1
MW09-21D	4-METHYL-2-PENTANONE					UG_L	34	0
MW09-21S	4-METHYL-2-PENTANONE	12/8/2003 0:00	MW09-21S-NWG-120803	130	59.6	UG_L	35	5
MW09-23D	4-METHYL-2-PENTANONE					UG_L	32	0
MW09-23S	4-METHYL-2-PENTANONE					UG_L	32	0
MW09-24D	4-METHYL-2-PENTANONE					UG_L	32	0
MW09-24S	4-METHYL-2-PENTANONE					UG_L	32	0
MW09-25S	4-METHYL-2-PENTANONE	9/9/2015 15:05	MW09-25S-090915-1	9.8	3.8	UG_L	43	5
MW09-26DA	4-METHYL-2-PENTANONE					UG_L	2	0
MW09-26S	4-METHYL-2-PENTANONE					UG_L	21	0
MW09-27D	4-METHYL-2-PENTANONE	1/30/2008 0:00	MW09-27D-013008	290	130	UG_L	20	5
MW09-27S	4-METHYL-2-PENTANONE					UG_L	21	0
MW09-02S	ACETONE	3/1/2002 0:00	MW09-02S-NWG-030102	390 J	170	UG_L	30	3
MW09-03D	ACETONE	12/3/2001 0:00	MW09-03D-NWG-120301	5.82 T	5.82	UG_L	29	1
MW09-07S	ACETONE	3/6/2006 0:00	MW09-07S_Q106	23.3	12.2	UG_L	27	7
MW09-08DA	ACETONE					UG_L	15	0
MW09-08S	ACETONE	6/19/2007 13:40	MW09-08S_20070619	8.199999	4.24625	UG_L	38	8
MW09-09DA	ACETONE	10/6/2011 9:45	MW09-09DA-100611	6.4 J	6.2	UG_L	15	2
MW09-09S	ACETONE	12/5/2001 0:00	MW09-09S-NWG-120501	21 T	7.31	UG_L	38	8
MW09-10D	ACETONE					UG_L	24	0
MW09-10S	ACETONE	6/18/2007 15:30	MW09-10S_20070618	6.5 J	4.18	UG_L	26	6
MW09-11S	ACETONE	12/4/2001 0:00	MW09-11S-NWG-120401	18 T	10.2	UG_L	35	3
MW09-14D	ACETONE	6/18/2007 13:40	MW09-14D_20070618	6.4 J	5.3	UG_L	24	3
MW09-14IA	ACETONE	1/7/2010 10:10	MW09-14IA-010710	13	7.4	UG_L	14	7
MW09-17I	ACETONE	10/21/2009 12:10	MW09-17I-102109	10 J	4	UG_L	20	6
MW09-20D	ACETONE	1/16/2003 0:00	MW09-20D-NWG-011603	6.76 J	4.67	UG_L	36	4
MW09-20I	ACETONE	12/4/2001 0:00	MW09-201-NWG-120401	100000 J	25000	UG_L	36	4
MW09-21D	ACETONE	2/28/2002 12:00:00 AM 6/11/2002 12:00:00 AM		14 JJ	7.73	UG_L	30	8
MW09-21S	ACETONE	6/22/2004 0:00	MW09-21S-NWG-062204	15.9 J	6.96	UG_L	30	15
MW09-23D	ACETONE	10/4/2011 14:40	MW09-23D-100411	2.7 J	2.7	UG_L	25	1
MW09-23S	ACETONE	3/19/2010 10:20	MW09-23S-031910	4 J	2.51	UG_L	26	4
MW09-24D	ACETONE	6/14/2007 9:45	MW09-24D_20070614	5.4 J	4.6	UG_L	25	4
MW09-24S	ACETONE	9/30/2011 10:10	MW09-24S-093011	7.9	4.08	UG_L	26	4
MW09-25S	ACETONE	12/15/2010 15:25	MW09-25S-121510	83 J	17.4	UG_L	34	7
MW09-26DA	ACETONE					UG_L	2	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-26S	ACETONE	10/6/2011 9:38	MW09-26S-100611	5 J	5	UG_L	20	1
MW09-27D	ACETONE	10/13/2009 15:07	MW09-27D-101309	4 J	4	UG_L	19	1
MW09-27S	ACETONE	10/13/2009 15:30	MW09-27S-101309	4 J	4	UG_L	20	1
MW09-02S	BENZENE					UG_L	34	0
MW09-03D	BENZENE	12/3/2001 0:00	MW09-03D-NWG-120301	0.33 J	0.24	UG_L	36	8
MW09-07S	BENZENE	2/27/2002 0:00	MW09-07S-NWG-022702	69	20.8	UG_L	34	33
MW09-08DA	BENZENE					UG_L	17	0
MW09-08S	BENZENE	5/6/2003 0:00	MW09-08S-NWG-050603	1.56	1.09	UG_L	45	43
MW09-09DA	BENZENE	9/7/2016 14:05	MW09-09DA-ME45-1	5.4	5.4	UG_L	17	1
MW09-09S	BENZENE	9/16/2015 14:50	MW09-09S-091615-1	11	7.28	UG_L	46	44
MW09-10D	BENZENE					UG_L	33	0
MW09-10S	BENZENE	3/25/2009 9:49	MW09-10S-032509	3.5	2.43	UG_L	34	34
MW09-11S	BENZENE	3/23/2010 2:13	MW09-11S-032310	9 J	1.87	UG_L	43	31
MW09-14D	BENZENE	9/24/2014 11:30	MW09-14D-092514-1	3.3	2.06	UG_L	33	33
MW09-14IA	BENZENE	7/15/2010 17:40	MW09-14IA-071510	64	49	UG_L	16	16
MW09-17I	BENZENE	4/1/2009 9:45	MW09-17I-040109	27	21	UG_L	22	22
MW09-20D	BENZENE	7/1/2003 0:00	MW09-20D-NWG-070103	0.55 J	0.55	UG_L	44	1
MW09-20I	BENZENE	7/1/2003 0:00	MW09-20I-NWG-070103	2100 J	290	UG_L	44	14
MW09-21D	BENZENE	10/21/2004 0:00	MW09-21D-NWG-102104	11.3	4.64	UG_L	35	33
MW09-21S	BENZENE	12/5/2001 0:00	MW09-21S-NWG-120501	25	14.3	UG_L	36	36
MW09-23D	BENZENE	5/5/2003 0:00	MW09-23D-NWG-050503	0.52 J	0.52	UG_L	34	1
MW09-23S	BENZENE	1/14/2003 0:00	MW09-23S-NWG-011403	0.15 J	0.13	UG_L	31	3
MW09-24D	BENZENE	9/9/2002 0:00	MW09-24D-NWG-090902	0.86 J	0.69	UG_L	34	26
MW09-24S	BENZENE	12/4/2003 0:00	MW09-24S-NWG-120403	0.62 J	0.4	UG_L	34	12
MW09-25S	BENZENE	7/15/2010 12:00	MW09-25S-071510	100 J	16.5	UG_L	44	43
MW09-26DA	BENZENE					UG_L	2	0
MW09-26S	BENZENE					UG_L	21	0
MW09-27D	BENZENE					UG_L	20	0
MW09-27S	BENZENE					UG_L	21	0
MW09-02S	BROMODICHLOROMETHANE					UG_L	34	0
MW09-03D	BROMODICHLOROMETHANE					UG_L	36	0
MW09-07S	BROMODICHLOROMETHANE					UG_L	34	0
MW09-08DA	BROMODICHLOROMETHANE					UG_L	17	0
MW09-08S	BROMODICHLOROMETHANE					UG_L	45	0
MW09-09DA	BROMODICHLOROMETHANE					UG_L	17	0
MW09-09S	BROMODICHLOROMETHANE					UG_L	46	0
MW09-10D	BROMODICHLOROMETHANE					UG_L	33	0
MW09-10S	BROMODICHLOROMETHANE					UG_L	34	0
MW09-11S	BROMODICHLOROMETHANE					UG_L	43	0
MW09-14D	BROMODICHLOROMETHANE					UG_L	33	0
MW09-14IA	BROMODICHLOROMETHANE					UG_L	16	0
MW09-17I	BROMODICHLOROMETHANE					UG_L	22	0
MW09-20D	BROMODICHLOROMETHANE					UG_L	44	0
MW09-20I	BROMODICHLOROMETHANE	3/18/2010 10:10	MW09-20I-031810	1400	735	UG_L	43	2
MW09-21D	BROMODICHLOROMETHANE	6/20/2007 14:55	MW09-21D_20070620	1.5 J	1.5	UG_L	35	1
MW09-21S	BROMODICHLOROMETHANE					UG_L	36	0
MW09-23D	BROMODICHLOROMETHANE					UG_L	34	0
MW09-23S	BROMODICHLOROMETHANE					UG_L	34	0
MW09-24D	BROMODICHLOROMETHANE					UG_L	34	0
MW09-24S	BROMODICHLOROMETHANE					UG_L	34	0
MW09-25S	BROMODICHLOROMETHANE					UG_L	44	0
MW09-26DA	BROMODICHLOROMETHANE					UG_L	2	0
MW09-26S	BROMODICHLOROMETHANE					UG_L	21	0
MW09-27D	BROMODICHLOROMETHANE					UG_L	20	0
MW09-27S	BROMODICHLOROMETHANE					UG_L	21	0
MW09-02S	BROMOFORM	9/10/2002 0:00	MW09-02S-NWG-091002	0.78 J	0.78	UG_L	33	1
MW09-03D	BROMOFORM					UG_L	35	0
MW09-07S	BROMOFORM					UG_L	32	0
MW09-08DA	BROMOFORM					UG_L	17	0
MW09-08S	BROMOFORM					UG_L	44	0
MW09-09DA	BROMOFORM					UG_L	17	0
MW09-09S	BROMOFORM					UG_L	45	0
MW09-10D	BROMOFORM					UG_L	32	0
MW09-10S	BROMOFORM					UG_L	33	0
MW09-11S	BROMOFORM					UG_L	41	0
MW09-14D	BROMOFORM					UG_L	31	0
MW09-14IA	BROMOFORM					UG_L	16	0
MW09-17I	BROMOFORM					UG_L	22	0
MW09-20D	BROMOFORM					UG_L	42	0
MW09-20I	BROMOFORM	3/18/2010 10:10	MW09-20I-031810	320 J	320	UG_L	44	1
MW09-21D	BROMOFORM					UG_L	34	0
MW09-21S	BROMOFORM					UG_L	34	0
MW09-23D	BROMOFORM					UG_L	32	0
MW09-23S	BROMOFORM					UG_L	32	0
MW09-24D	BROMOFORM					UG_L	32	0
MW09-24S	BROMOFORM					UG_L	32	0
MW09-25S	BROMOFORM					UG_L	42	0
MW09-26DA	BROMOFORM					UG_L	2	0
MW09-26S	BROMOFORM					UG_L	21	0
MW09-27D	BROMOFORM					UG_L	20	0
MW09-27S	BROMOFORM					UG_L	21	0
MW09-02S	BROMOMETHANE					UG_L	34	0
MW09-03D	BROMOMETHANE					UG_L	36	0
MW09-07S	BROMOMETHANE	11/9/2007 12:00	MW09-07S_20071109	8.9 J	8.9	UG_L	34	1
MW09-08DA	BROMOMETHANE					UG_L	17	0
MW09-08S	BROMOMETHANE					UG_L	45	0
MW09-09DA	BROMOMETHANE					UG_L	17	0
MW09-09S	BROMOMETHANE					UG_L	45	0
MW09-10D	BROMOMETHANE					UG_L	33	0
MW09-10S	BROMOMETHANE					UG_L	34	0
MW09-11S	BROMOMETHANE					UG_L	43	0
MW09-14D	BROMOMETHANE	11/9/2007 12:00	MW09-14D_20071109	9.1	9.1	UG_L	33	1
MW09-14IA	BROMOMETHANE					UG_L	16	0
MW09-17I	BROMOMETHANE					UG_L	22	0
MW09-20D	BROMOMETHANE					UG_L	44	0
MW09-20I	BROMOMETHANE					UG_L	43	0
MW09-21D	BROMOMETHANE	11/9/2007 12:00	MW09-21D_20071109	20.6	20.6	UG_L	35	1
MW09-21S	BROMOMETHANE					UG_L	36	0
MW09-23D	BROMOMETHANE	11/13/2007 12:00	MW09-23D_20071113	5 J	5	UG_L	34	1
MW09-23S	BROMOMETHANE	11/13/2007 12:00	MW09-23S_20071113	0.97 J	0.97	UG_L	34	1
MW09-24D	BROMOMETHANE	9/24/2008 15:18	MW09-24D-092408	0.5 J	0.5	UG_L	34	1
MW09-24S	BROMOMETHANE					UG_L	34	0
MW09-25S	BROMOMETHANE					UG_L	44	0
MW09-26DA	BROMOMETHANE					UG_L	2	0
MW09-26S	BROMOMETHANE					UG_L	21	0
MW09-27D	BROMOMETHANE					UG_L	20	0
MW09-27S	BROMOMETHANE					UG_L	21	0
MW09-02S	CARBON DISULFIDE	6/14/2007 11:30	MW09-02S_20070614	0.52 J	0.52	UG_L	34	1
MW09-03D	CARBON DISULFIDE	6/14/2007 12:20	MW09-03D_20070614	0.47 J	0.31	UG_L	36	2
MW09-07S	CARBON DISULFIDE	3/18/2010 10:35	MW09-07S-031810	0.5 J	0.47	UG_L	34	2
MW09-08DA	CARBON DISULFIDE	3/22/2010 2:57	MW09-08DA-032210	0.5 J	0.5	UG_L	17	1
MW09-08S	CARBON DISULFIDE	9/30/2013 13:10	MW09-08S-093013	0.26 J	0.26	UG_L	45	1
MW09-09DA	CARBON DISULFIDE	1/11/2010 2:05	MW09-09DA-011110	0.3 J	0.3	UG_L	17	1
MW09-09S	CARBON DISULFIDE	3/22/2010 1:06	MW09-09S-032210	14	7.1	UG_L	46	2

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-10D	CARBON DISULFIDE	6/18/2007 13:30	MW09-10D_20070618	0.45 J	0.45	UG_L	33	1
MW09-10S	CARBON DISULFIDE	6/18/2007 15:30	MW09-10S_20070618	0.45 J	0.45	UG_L	34	1
MW09-11S	CARBON DISULFIDE					UG_L	43	0
MW09-14D	CARBON DISULFIDE	6/18/2007 13:40	MW09-14D_20070618	0.43 J	0.43	UG_L	33	1
MW09-14IA	CARBON DISULFIDE					UG_L	16	0
MW09-17I	CARBON DISULFIDE					UG_L	22	0
MW09-20D	CARBON DISULFIDE					UG_L	44	0
MW09-20I	CARBON DISULFIDE	3/18/2010 10:10	MW09-20I-031810	1600	134	UG_L	44	14
MW09-21D	CARBON DISULFIDE	12/20/2005 9:40	MW09-21D-20051220	1.2 J	0.77	UG_L	35	2
MW09-21S	CARBON DISULFIDE	11/9/2007 12:00	MW09-21S_20071109	6.2 J	1.43	UG_L	36	9
MW09-23D	CARBON DISULFIDE	3/19/2010 10:25	MW09-23D-031910	0.6 J	0.6	UG_L	34	1
MW09-23S	CARBON DISULFIDE	3/19/2010 10:20	MW09-23S-031910	0.8 J	0.55	UG_L	34	4
MW09-24D	CARBON DISULFIDE	6/14/2007 9:45	MW09-24D_20070614	0.54 J	0.42	UG_L	34	2
MW09-24S	CARBON DISULFIDE	6/14/2007 9:00	MW09-24S_20070614	0.6 J	0.6	UG_L	34	1
MW09-25S	CARBON DISULFIDE					UG_L	44	0
MW09-26DA	CARBON DISULFIDE					UG_L	2	0
MW09-26S	CARBON DISULFIDE					UG_L	21	0
MW09-27D	CARBON DISULFIDE					UG_L	20	0
MW09-27S	CARBON DISULFIDE					UG_L	21	0
MW09-02S	CARBON TETRACHLORIDE	12/8/2003 0:00	MW09-02S-NWG-120803	0.24 J	0.24	UG_L	34	1
MW09-03D	CARBON TETRACHLORIDE					UG_L	36	0
MW09-07S	CARBON TETRACHLORIDE					UG_L	34	0
MW09-08DA	CARBON TETRACHLORIDE					UG_L	17	0
MW09-08S	CARBON TETRACHLORIDE					UG_L	45	0
MW09-09DA	CARBON TETRACHLORIDE					UG_L	17	0
MW09-09S	CARBON TETRACHLORIDE					UG_L	46	0
MW09-10D	CARBON TETRACHLORIDE					UG_L	33	0
MW09-10S	CARBON TETRACHLORIDE					UG_L	34	0
MW09-11S	CARBON TETRACHLORIDE					UG_L	43	0
MW09-14D	CARBON TETRACHLORIDE					UG_L	33	0
MW09-14IA	CARBON TETRACHLORIDE					UG_L	16	0
MW09-17I	CARBON TETRACHLORIDE					UG_L	22	0
MW09-20D	CARBON TETRACHLORIDE					UG_L	44	0
MW09-20I	CARBON TETRACHLORIDE	3/18/2010 10:10	MW09-20I-031810	720 J	720	UG_L	43	1
MW09-21D	CARBON TETRACHLORIDE					UG_L	35	0
MW09-21S	CARBON TETRACHLORIDE					UG_L	36	0
MW09-23D	CARBON TETRACHLORIDE					UG_L	34	0
MW09-23S	CARBON TETRACHLORIDE					UG_L	34	0
MW09-24D	CARBON TETRACHLORIDE					UG_L	34	0
MW09-24S	CARBON TETRACHLORIDE					UG_L	34	0
MW09-25S	CARBON TETRACHLORIDE					UG_L	44	0
MW09-26DA	CARBON TETRACHLORIDE					UG_L	2	0
MW09-26S	CARBON TETRACHLORIDE					UG_L	21	0
MW09-27D	CARBON TETRACHLORIDE					UG_L	20	0
MW09-27S	CARBON TETRACHLORIDE					UG_L	21	0
MW09-02S	CHLOROBENZENE	9/10/2002 0:00	MW09-02S-NWG-091002	0.13 J	0.13	UG_L	34	1
MW09-03D	CHLOROBENZENE					UG_L	36	0
MW09-07S	CHLOROBENZENE	2/27/2002 0:00	MW09-07S-NWG-022702	2 J	1.05	UG_L	34	23
MW09-08DA	CHLOROBENZENE					UG_L	17	0
MW09-08S	CHLOROBENZENE					UG_L	45	0
MW09-09DA	CHLOROBENZENE					UG_L	17	0
MW09-09S	CHLOROBENZENE	11/7/2007 12:00	MW09-09S_20071107	0.97 J	0.5	UG_L	45	17
MW09-10D	CHLOROBENZENE					UG_L	33	0
MW09-10S	CHLOROBENZENE	9/25/2012 10:53	MW09-10S-092512	0.53 J	0.35	UG_L	34	10
MW09-11S	CHLOROBENZENE	9/23/2010 10:30	MW09-11S-092310	310	83.7	UG_L	43	43
MW09-14D	CHLOROBENZENE					UG_L	33	0
MW09-14IA	CHLOROBENZENE	10/20/2009 11:15	MW09-14IA-102009	0.8 J	0.72	UG_L	16	3
MW09-17I	CHLOROBENZENE	3/28/2013 10:25	MW09-17I-032813-1	2.9	2.2	UG_L	22	21
MW09-20D	CHLOROBENZENE	7/23/2008 11:55	MW09-20D-072308	0.83 J	0.83	UG_L	44	1
MW09-20I	CHLOROBENZENE	3/18/2010 10:10	MW09-20I-031810	1600	800	UG_L	45	2
MW09-21D	CHLOROBENZENE	10/21/2004 0:00	MW09-21D-NWG-102104	166	58.3	UG_L	35	34
MW09-21S	CHLOROBENZENE	11/9/2007 12:00	MW09-21S_20071109	0.9 J	0.51	UG_L	34	2
MW09-23D	CHLOROBENZENE					UG_L	34	0
MW09-23S	CHLOROBENZENE	12/4/2003 0:00	MW09-23S-NWG-120403	1.6	0.59	UG_L	32	9
MW09-24D	CHLOROBENZENE					UG_L	34	0
MW09-24S	CHLOROBENZENE	6/14/2007 9:00	MW09-24S_20070614	0.35 J	0.35	UG_L	34	1
MW09-25S	CHLOROBENZENE	7/15/2010 12:00	MW09-25S-071510	460 J	32.2	UG_L	44	43
MW09-26DA	CHLOROBENZENE					UG_L	2	0
MW09-26S	CHLOROBENZENE					UG_L	21	0
MW09-27D	CHLOROBENZENE					UG_L	20	0
MW09-27S	CHLOROBENZENE					UG_L	21	0
MW09-02S	CHLOROETHANE					UG_L	34	0
MW09-03D	CHLOROETHANE					UG_L	36	0
MW09-07S	CHLOROETHANE	3/18/2004 0:00	MW09-07S-NWG-031804	1.39	1.01	UG_L	34	3
MW09-08DA	CHLOROETHANE					UG_L	17	0
MW09-08S	CHLOROETHANE	1/20/2003 0:00	MW09-08S-NWG-012003	1.06	0.62	UG_L	45	5
MW09-09DA	CHLOROETHANE					UG_L	17	0
MW09-09S	CHLOROETHANE					UG_L	46	0
MW09-10D	CHLOROETHANE					UG_L	33	0
MW09-10S	CHLOROETHANE	3/22/2004 0:00	MW09-10S-NWG-032204	0.41 J	0.41	UG_L	34	1
MW09-11S	CHLOROETHANE					UG_L	41	0
MW09-14D	CHLOROETHANE	10/20/2009 9:35	MW09-14D-102009	2 J	1	UG_L	33	11
MW09-14IA	CHLOROETHANE	12/15/2010 10:10	MW09-14IA-121510	0.61 J	0.61	UG_L	16	1
MW09-17I	CHLOROETHANE					UG_L	22	0
MW09-20D	CHLOROETHANE					UG_L	44	0
MW09-20I	CHLOROETHANE	3/18/2010 10:10	MW09-20I-031810	2300	2300	UG_L	42	1
MW09-21D	CHLOROETHANE					UG_L	35	0
MW09-21S	CHLOROETHANE					UG_L	36	0
MW09-23D	CHLOROETHANE	11/13/2007 12:00	MW09-23D_20071113	16.8	16.8	UG_L	33	1
MW09-23S	CHLOROETHANE	11/13/2007 12:00	MW09-23S_20071113	3.5	3.5	UG_L	33	1
MW09-24D	CHLOROETHANE					UG_L	34	0
MW09-24S	CHLOROETHANE					UG_L	34	0
MW09-25S	CHLOROETHANE					UG_L	43	0
MW09-26DA	CHLOROETHANE					UG_L	2	0
MW09-26S	CHLOROETHANE					UG_L	21	0
MW09-27D	CHLOROETHANE					UG_L	20	0
MW09-27S	CHLOROETHANE					UG_L	21	0
MW09-02S	CHLOROFORM	12/8/2003 0:00	MW09-02S-NWG-120803	0.85 J	0.85	UG_L	34	1
MW09-03D	CHLOROFORM					UG_L	36	0
MW09-07S	CHLOROFORM	5/5/2003 0:00	MW09-07S-NWG-050503	2.01 J	2.01	UG_L	34	1
MW09-08DA	CHLOROFORM					UG_L	17	0
MW09-08S	CHLOROFORM	5/6/2003 0:00	MW09-08S-NWG-050603	0.18 J	0.15	UG_L	45	3
MW09-09DA	CHLOROFORM					UG_L	17	0
MW09-09S	CHLOROFORM					UG_L	46	0
MW09-10D	CHLOROFORM					UG_L	33	0
MW09-10S	CHLOROFORM					UG_L	34	0
MW09-11S	CHLOROFORM	5/7/2003 0:00	MW09-11S-NWG-050703	0.11 J	0.11	UG_L	43	1
MW09-14D	CHLOROFORM					UG_L	33	0
MW09-14IA	CHLOROFORM					UG_L	16	0
MW09-17I	CHLOROFORM					UG_L	22	0
MW09-20D	CHLOROFORM					UG_L	44	0
MW09-20I	CHLOROFORM	3/18/2010 10:10	MW09-20I-031810	2100	255	UG_L	45	19
MW09-21D	CHLOROFORM					UG_L	35	0
MW09-21S	CHLOROFORM					UG_L	36	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-23D	CHLOROFORM					UG_L	34	0
MW09-23S	CHLOROFORM					UG_L	34	0
MW09-24D	CHLOROFORM	12/4/2003 0:00	MW09-24D-NWG-120403	0.17 J	0.17	UG_L	34	1
MW09-24S	CHLOROFORM					UG_L	34	0
MW09-25S	CHLOROFORM					UG_L	44	0
MW09-26DA	CHLOROFORM					UG_L	2	0
MW09-26S	CHLOROFORM					UG_L	21	0
MW09-27D	CHLOROFORM					UG_L	20	0
MW09-27S	CHLOROFORM					UG_L	21	0
MW09-02S	CHLOROMETHANE					UG_L	34	0
MW09-03D	CHLOROMETHANE					UG_L	36	0
MW09-07S	CHLOROMETHANE	12/4/2003 0:00	MW09-07S-NWG-120403	0.13 J	0.13	UG_L	34	1
MW09-08DA	CHLOROMETHANE					UG_L	17	0
MW09-08S	CHLOROMETHANE	7/14/2010 11:02	MW09-08S-071410	1 J	1	UG_L	45	1
MW09-09DA	CHLOROMETHANE					UG_L	17	0
MW09-09S	CHLOROMETHANE					UG_L	46	0
MW09-10D	CHLOROMETHANE	3/25/2009 10:21	MW09-10D-032509	2.1 J	2.1	UG_L	33	1
MW09-10S	CHLOROMETHANE					UG_L	34	0
MW09-11S	CHLOROMETHANE	7/15/2010 14:30	MW09-11S-071510	0.4 J	0.4	UG_L	43	1
MW09-14D	CHLOROMETHANE					UG_L	33	0
MW09-14IA	CHLOROMETHANE					UG_L	16	0
MW09-17I	CHLOROMETHANE					UG_L	22	0
MW09-20D	CHLOROMETHANE					UG_L	44	0
MW09-20I	CHLOROMETHANE	3/18/2010 10:10	MW09-20I-031810	2000	1160	UG_L	43	2
MW09-21D	CHLOROMETHANE	11/9/2007 12:00	MW09-21D_20071109	8.7 J	5.88	UG_L	35	2
MW09-21S	CHLOROMETHANE					UG_L	36	0
MW09-23D	CHLOROMETHANE	11/13/2007 12:00	MW09-23D_20071113	14.8	14.8	UG_L	34	1
MW09-23S	CHLOROMETHANE					UG_L	34	0
MW09-24D	CHLOROMETHANE					UG_L	34	0
MW09-24S	CHLOROMETHANE					UG_L	34	0
MW09-25S	CHLOROMETHANE					UG_L	44	0
MW09-26DA	CHLOROMETHANE					UG_L	2	0
MW09-26S	CHLOROMETHANE	3/30/2009 14:45	MW09-26S-033009	3	1.7	UG_L	21	2
MW09-27D	CHLOROMETHANE					UG_L	20	0
MW09-27S	CHLOROMETHANE	7/12/2010 16:00	MW09-27S-071210	0.5 J	0.5	UG_L	21	1
MW09-02S	CIS-1,2-DICHLOROETHENE	11/7/2007 12:00	MW09-02S_20071107	2.7	1.03	UG_L	34	10
MW09-03D	CIS-1,2-DICHLOROETHENE	6/11/2002 12:00:00 AM 12/8/2003 12:00:00 AM		150 J	104	UG_L	36	36
MW09-07S	CIS-1,2-DICHLOROETHENE	9/7/2016 14:30	MW09-07S-ME45-1	9.6	2.6	UG_L	33	4
MW09-08DA	CIS-1,2-DICHLOROETHENE	9/30/2013 13:30	MW09-08DA-093013	84	7.6	UG_L	17	15
MW09-08S	CIS-1,2-DICHLOROETHENE	12/4/2001 0:00	MW09-08S-NWG-120401	6.08	3.37	UG_L	45	44
MW09-09DA	CIS-1,2-DICHLOROETHENE	8/7/2009 9:22	MW09-09DA-080709	29	17	UG_L	17	16
MW09-09S	CIS-1,2-DICHLOROETHENE	1/8/2010 10:00	MW09-09S-010810	2000	572	UG_L	45	45
MW09-10D	CIS-1,2-DICHLOROETHENE	5/2/2003 0:00	MW09-10D-NWG-050203	0.18 J	0.18	UG_L	33	1
MW09-10S	CIS-1,2-DICHLOROETHENE	10/20/2009 15:18	MW09-10S-102009	2	0.56	UG_L	34	7
MW09-11S	CIS-1,2-DICHLOROETHENE	3/21/2005 12:00:00 AM 12/10/2008 1:15:00 PM		1.3 J	0.811	UG_L	43	16
MW09-14D	CIS-1,2-DICHLOROETHENE	10/20/2009 9:35	MW09-14D-102009	1	0.59	UG_L	32	4
MW09-14IA	CIS-1,2-DICHLOROETHENE	10/20/2009 11:15	MW09-14IA-102009	27	12	UG_L	16	15
MW09-17I	CIS-1,2-DICHLOROETHENE					UG_L	22	0
MW09-20D	CIS-1,2-DICHLOROETHENE	9/28/2005 13:20	MW09-20D-20050928	2.3	0.65	UG_L	44	11
MW09-20I	CIS-1,2-DICHLOROETHENE	3/30/2011 10:10	MW09-20I-033011	150000	41800	UG_L	45	45
MW09-21D	CIS-1,2-DICHLOROETHENE	12/5/2001 0:00	MW09-21D-NWG-120501	1200	587	UG_L	35	35
MW09-21S	CIS-1,2-DICHLOROETHENE	11/9/2007 12:00	MW09-21S_20071109	1.6	0.67	UG_L	36	8
MW09-23D	CIS-1,2-DICHLOROETHENE					UG_L	33	0
MW09-23S	CIS-1,2-DICHLOROETHENE					UG_L	33	0
MW09-24D	CIS-1,2-DICHLOROETHENE					UG_L	34	0
MW09-24S	CIS-1,2-DICHLOROETHENE	3/23/2010 2:50	MW09-24S-032310	0.3 J	0.27	UG_L	34	2
MW09-25S	CIS-1,2-DICHLOROETHENE	7/23/2008 10:00	MW09-25S-072308	0.68 J	0.43	UG_L	44	5
MW09-26DA	CIS-1,2-DICHLOROETHENE					UG_L	2	0
MW09-26S	CIS-1,2-DICHLOROETHENE					UG_L	21	0
MW09-27D	CIS-1,2-DICHLOROETHENE	9/10/2015 9:45	MW09-27D-091015-1	2.2	1.2	UG_L	20	18
MW09-27S	CIS-1,2-DICHLOROETHENE					UG_L	21	0
MW09-02S	CIS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-03D	CIS-1,3-DICHLOROPROPENE					UG_L	36	0
MW09-07S	CIS-1,3-DICHLOROPROPENE	6/3/2002 0:00	MW09-07S-NWG-060302	0.13	0.13	UG_L	34	1
MW09-08DA	CIS-1,3-DICHLOROPROPENE					UG_L	17	0
MW09-08S	CIS-1,3-DICHLOROPROPENE					UG_L	45	0
MW09-09DA	CIS-1,3-DICHLOROPROPENE					UG_L	17	0
MW09-09S	CIS-1,3-DICHLOROPROPENE					UG_L	46	0
MW09-10D	CIS-1,3-DICHLOROPROPENE					UG_L	33	0
MW09-10S	CIS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-11S	CIS-1,3-DICHLOROPROPENE					UG_L	43	0
MW09-14D	CIS-1,3-DICHLOROPROPENE					UG_L	33	0
MW09-14IA	CIS-1,3-DICHLOROPROPENE					UG_L	16	0
MW09-17I	CIS-1,3-DICHLOROPROPENE					UG_L	22	0
MW09-20D	CIS-1,3-DICHLOROPROPENE					UG_L	44	0
MW09-20I	CIS-1,3-DICHLOROPROPENE	3/18/2010 10:10	MW09-20I-031810	1000	1000	UG_L	43	1
MW09-21D	CIS-1,3-DICHLOROPROPENE					UG_L	35	0
MW09-21S	CIS-1,3-DICHLOROPROPENE	9/30/2008 10:15	MW09-21S-093008	5.6	5.6	UG_L	36	1
MW09-23D	CIS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-23S	CIS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-24D	CIS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-24S	CIS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-25S	CIS-1,3-DICHLOROPROPENE					UG_L	44	0
MW09-26DA	CIS-1,3-DICHLOROPROPENE					UG_L	2	0
MW09-26S	CIS-1,3-DICHLOROPROPENE					UG_L	21	0
MW09-27D	CIS-1,3-DICHLOROPROPENE					UG_L	20	0
MW09-27S	CIS-1,3-DICHLOROPROPENE					UG_L	21	0
MW09-02S	DIBROMOCHLOROMETHANE	9/10/2002 0:00	MW09-02S-NWG-091002	0.32 J	0.32	UG_L	34	1
MW09-03D	DIBROMOCHLOROMETHANE	5/1/2003 0:00	MW09-03D-NWG-050103	0.27 J	0.22	UG_L	36	2
MW09-07S	DIBROMOCHLOROMETHANE					UG_L	34	0
MW09-08DA	DIBROMOCHLOROMETHANE					UG_L	17	0
MW09-08S	DIBROMOCHLOROMETHANE					UG_L	45	0
MW09-09DA	DIBROMOCHLOROMETHANE					UG_L	17	0
MW09-09S	DIBROMOCHLOROMETHANE					UG_L	46	0
MW09-10D	DIBROMOCHLOROMETHANE					UG_L	33	0
MW09-10S	DIBROMOCHLOROMETHANE					UG_L	34	0
MW09-11S	DIBROMOCHLOROMETHANE					UG_L	43	0
MW09-14D	DIBROMOCHLOROMETHANE					UG_L	33	0
MW09-14IA	DIBROMOCHLOROMETHANE					UG_L	16	0
MW09-17I	DIBROMOCHLOROMETHANE					UG_L	22	0
MW09-20D	DIBROMOCHLOROMETHANE					UG_L	44	0
MW09-20I	DIBROMOCHLOROMETHANE	3/18/2010 10:10	MW09-20I-031810	650 J	410	UG_L	45	2
MW09-21D	DIBROMOCHLOROMETHANE					UG_L	35	0
MW09-21S	DIBROMOCHLOROMETHANE					UG_L	36	0
MW09-23D	DIBROMOCHLOROMETHANE					UG_L	34	0
MW09-23S	DIBROMOCHLOROMETHANE					UG_L	34	0
MW09-24D	DIBROMOCHLOROMETHANE					UG_L	34	0
MW09-24S	DIBROMOCHLOROMETHANE					UG_L	34	0
MW09-25S	DIBROMOCHLOROMETHANE					UG_L	44	0
MW09-26DA	DIBROMOCHLOROMETHANE					UG_L	2	0
MW09-26S	DIBROMOCHLOROMETHANE					UG_L	21	0
MW09-27D	DIBROMOCHLOROMETHANE					UG_L	20	0
MW09-27S	DIBROMOCHLOROMETHANE					UG_L	21	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-02S	ETHYLBENZENE					UG_L	34	0
MW09-03D	ETHYLBENZENE					UG_L	36	0
MW09-07S	ETHYLBENZENE	6/3/2002 0:00	MW09-07S-NWG-060302	1.99 J	0.658	UG_L	34	19
MW09-08DA	ETHYLBENZENE					UG_L	17	0
MW09-08S	ETHYLBENZENE					UG_L	45	0
MW09-09DA	ETHYLBENZENE					UG_L	17	0
MW09-09S	ETHYLBENZENE					UG_L	44	0
MW09-10D	ETHYLBENZENE					UG_L	33	0
MW09-10S	ETHYLBENZENE					UG_L	34	0
MW09-11S	ETHYLBENZENE	12/4/2001 0:00	MW09-11S-NWG-120401	0.27 J	0.27	UG_L	43	1
MW09-14D	ETHYLBENZENE					UG_L	33	0
MW09-14IA	ETHYLBENZENE	3/28/2013 10:25	MW09-14IA-032813-1	5.1	4.3	UG_L	16	16
MW09-17I	ETHYLBENZENE					UG_L	22	0
MW09-20D	ETHYLBENZENE					UG_L	44	0
MW09-20I	ETHYLBENZENE	3/18/2010 10:10	MW09-20I-031810	1400	700	UG_L	45	2
MW09-21D	ETHYLBENZENE	9/28/2005 14:45	MW09-21D-20050928	3.5 J	1.6	UG_L	35	22
MW09-21S	ETHYLBENZENE	5/5/2008 15:15	MW09-21S-050508	0.37 J	0.23	UG_L	35	11
MW09-23D	ETHYLBENZENE					UG_L	34	0
MW09-23S	ETHYLBENZENE					UG_L	31	0
MW09-24D	ETHYLBENZENE					UG_L	34	0
MW09-24S	ETHYLBENZENE					UG_L	34	0
MW09-25S	ETHYLBENZENE	2/27/2002 12:00:00 AM 6/10/2002 12:00:00 AM		4 JJ	1.81	UG_L	44	11
MW09-26DA	ETHYLBENZENE					UG_L	2	0
MW09-26S	ETHYLBENZENE					UG_L	21	0
MW09-27D	ETHYLBENZENE					UG_L	20	0
MW09-27S	ETHYLBENZENE					UG_L	21	0
MW09-02S	M- AND P-XYLENE					UG_L	5	0
MW09-03D	M- AND P-XYLENE					UG_L	5	0
MW09-07S	M- AND P-XYLENE	6/3/2002 0:00	MW09-07S-NWG-060302	14	14	UG_L	4	2
MW09-08DA	M- AND P-XYLENE					UG_L	5	0
MW09-08S	M- AND P-XYLENE					UG_L	7	0
MW09-09DA	M- AND P-XYLENE					UG_L	5	0
MW09-09S	M- AND P-XYLENE					UG_L	7	0
MW09-10D	M- AND P-XYLENE					UG_L	5	0
MW09-10S	M- AND P-XYLENE	12/4/2001 0:00	MW09-10S-NWG-120401	0.82 J	0.62	UG_L	6	2
MW09-11S	M- AND P-XYLENE	2/27/2002 0:00	MW09-11S-NWG-022702	3 J	1.6	UG_L	7	2
MW09-14D	M- AND P-XYLENE					UG_L	4	0
MW09-14IA	M- AND P-XYLENE	7/15/2010 17:40	MW09-14IA-071510	8 J	6	UG_L	4	4
MW09-17I	M- AND P-XYLENE	3/22/2010 1:43	MW09-17I-032210	1 J	0.9	UG_L	4	4
MW09-20D	M- AND P-XYLENE					UG_L	8	0
MW09-20I	M- AND P-XYLENE	3/18/2010 10:10	MW09-20I-031810	3000	2000	UG_L	8	2
MW09-21D	M- AND P-XYLENE	12/5/2001 0:00	MW09-21D-NWG-120501	1.87 J	1.44	UG_L	4	2
MW09-21S	M- AND P-XYLENE	12/5/2001 0:00	MW09-21S-NWG-120501	0.22 J	0.22	UG_L	5	1
MW09-23D	M- AND P-XYLENE					UG_L	5	0
MW09-23S	M- AND P-XYLENE					UG_L	4	0
MW09-24D	M- AND P-XYLENE					UG_L	6	0
MW09-24S	M- AND P-XYLENE					UG_L	6	0
MW09-25S	M- AND P-XYLENE	7/15/2010 12:00	MW09-25S-071510	15 J	7.05	UG_L	6	3
MW09-26S	M- AND P-XYLENE					UG_L	4	0
MW09-27D	M- AND P-XYLENE					UG_L	4	0
MW09-27S	M- AND P-XYLENE					UG_L	4	0
MW09-02S	METHYLENE CHLORIDE					UG_L	34	0
MW09-03D	METHYLENE CHLORIDE					UG_L	36	0
MW09-07S	METHYLENE CHLORIDE	11/9/2007 12:00	MW09-07S_20071109	0.51 J	0.51	UG_L	34	1
MW09-08DA	METHYLENE CHLORIDE					UG_L	17	0
MW09-08S	METHYLENE CHLORIDE					UG_L	45	0
MW09-09DA	METHYLENE CHLORIDE					UG_L	17	0
MW09-09S	METHYLENE CHLORIDE					UG_L	46	0
MW09-10D	METHYLENE CHLORIDE					UG_L	33	0
MW09-10S	METHYLENE CHLORIDE					UG_L	34	0
MW09-11S	METHYLENE CHLORIDE					UG_L	43	0
MW09-14D	METHYLENE CHLORIDE					UG_L	33	0
MW09-14IA	METHYLENE CHLORIDE					UG_L	16	0
MW09-17I	METHYLENE CHLORIDE	9/25/2008 13:33	MW09-17I-092508	55 J	55	UG_L	22	1
MW09-20D	METHYLENE CHLORIDE					UG_L	44	0
MW09-20I	METHYLENE CHLORIDE	5/6/2003 0:00	MW09-20I-NWG-050603	1900 J	323	UG_L	44	14
MW09-21D	METHYLENE CHLORIDE	3/7/2007 0:00	MW09-21D_20070307	2 J	1.5	UG_L	35	3
MW09-21S	METHYLENE CHLORIDE					UG_L	36	0
MW09-23D	METHYLENE CHLORIDE					UG_L	34	0
MW09-23S	METHYLENE CHLORIDE					UG_L	34	0
MW09-24D	METHYLENE CHLORIDE					UG_L	34	0
MW09-24S	METHYLENE CHLORIDE					UG_L	34	0
MW09-25S	METHYLENE CHLORIDE					UG_L	44	0
MW09-26DA	METHYLENE CHLORIDE					UG_L	2	0
MW09-26S	METHYLENE CHLORIDE					UG_L	21	0
MW09-27D	METHYLENE CHLORIDE					UG_L	20	0
MW09-27S	METHYLENE CHLORIDE					UG_L	21	0
MW09-02S	O-XYLENE					UG_L	5	0
MW09-03D	O-XYLENE					UG_L	5	0
MW09-07S	O-XYLENE	6/3/2002 0:00	MW09-07S-NWG-060302	7.54	4.39	UG_L	4	4
MW09-08DA	O-XYLENE					UG_L	5	0
MW09-08S	O-XYLENE					UG_L	7	0
MW09-09DA	O-XYLENE					UG_L	5	0
MW09-09S	O-XYLENE					UG_L	7	0
MW09-10D	O-XYLENE					UG_L	5	0
MW09-10S	O-XYLENE	12/4/2001 0:00	MW09-10S-NWG-120401	0.38 J	0.27	UG_L	6	2
MW09-11S	O-XYLENE					UG_L	7	0
MW09-14D	O-XYLENE					UG_L	4	0
MW09-14IA	O-XYLENE	10/20/2009 11:15:00 AM 1/7/2010 10:10:00 AM 3/18/2010 9:53:00 AM 7/15/2010 5:40:00 PM		6 J	6	UG_L	4	4
MW09-17I	O-XYLENE	3/22/2010 1:43	MW09-17I-032210	1	0.9	UG_L	4	4
MW09-20D	O-XYLENE					UG_L	8	0
MW09-20I	O-XYLENE	3/18/2010 10:10	MW09-20I-031810	1400	700	UG_L	8	2
MW09-21D	O-XYLENE	12/5/2001 0:00	MW09-21D-NWG-120501	1.18	1.18	UG_L	4	1
MW09-21S	O-XYLENE	12/5/2001 0:00	MW09-21S-NWG-120501	0.16 J	0.16	UG_L	5	1
MW09-23D	O-XYLENE					UG_L	5	0
MW09-23S	O-XYLENE					UG_L	4	0
MW09-24D	O-XYLENE	12/5/2001 0:00	MW09-24D-NWG-120501	0.12 J	0.12	UG_L	6	1
MW09-24S	O-XYLENE	3/23/2010 2:50	MW09-24S-032310	0.4 J	0.27	UG_L	6	2
MW09-25S	O-XYLENE	12/4/2001 0:00	MW09-25S-NWG-120401	0.28 J	0.28	UG_L	6	1
MW09-26S	O-XYLENE					UG_L	4	0
MW09-27D	O-XYLENE					UG_L	4	0
MW09-27S	O-XYLENE					UG_L	4	0
MW09-02S	STYRENE					UG_L	34	0
MW09-03D	STYRENE					UG_L	36	0
MW09-07S	STYRENE	6/3/2002 0:00	MW09-07S-NWG-060302	0.39	0.39	UG_L	34	1
MW09-08DA	STYRENE					UG_L	17	0
MW09-08S	STYRENE					UG_L	45	0
MW09-09DA	STYRENE					UG_L	17	0
MW09-09S	STYRENE					UG_L	45	0
MW09-10D	STYRENE					UG_L	33	0
MW09-10S	STYRENE					UG_L	34	0
MW09-11S	STYRENE					UG_L	43	0
MW09-14D	STYRENE					UG_L	33	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-14IA	STYRENE	9/16/2016 10:00	MW09-14IA-ME45-1	1.5 J	1.5	UG_L	16	1
MW09-17I	STYRENE					UG_L	22	0
MW09-20D	STYRENE					UG_L	44	0
MW09-20I	STYRENE	3/18/2010 10:10	MW09-20I-031810	1200	600	UG_L	45	2
MW09-21D	STYRENE					UG_L	35	0
MW09-21S	STYRENE					UG_L	34	0
MW09-23D	STYRENE	11/13/2007 12:00	MW09-23D_20071113	9.3 J	9.3	UG_L	34	1
MW09-23S	STYRENE	11/13/2007 12:00	MW09-23S_20071113	1.5 J	0.82	UG_L	32	2
MW09-24D	STYRENE					UG_L	34	0
MW09-24S	STYRENE					UG_L	34	0
MW09-25S	STYRENE	9/10/2002 0:00	MW09-25S-NWG-091002	0.2 J	0.2	UG_L	44	1
MW09-26DA	STYRENE					UG_L	2	0
MW09-26S	STYRENE					UG_L	21	0
MW09-27D	STYRENE					UG_L	20	0
MW09-27S	STYRENE					UG_L	21	0
MW09-02S	TETRACHLOROETHENE					UG_L	34	0
MW09-03D	TETRACHLOROETHENE					UG_L	36	0
MW09-07S	TETRACHLOROETHENE					UG_L	34	0
MW09-08DA	TETRACHLOROETHENE	9/30/2013 13:30	MW09-08DA-093013	1.5	1.5	UG_L	17	1
MW09-08S	TETRACHLOROETHENE					UG_L	45	0
MW09-09DA	TETRACHLOROETHENE					UG_L	17	0
MW09-09S	TETRACHLOROETHENE					UG_L	46	0
MW09-10D	TETRACHLOROETHENE					UG_L	33	0
MW09-10S	TETRACHLOROETHENE					UG_L	34	0
MW09-11S	TETRACHLOROETHENE	3/23/2004 0:00	MW09-11S-NWG-032304	0.15 J	0.15	UG_L	43	1
MW09-14D	TETRACHLOROETHENE					UG_L	33	0
MW09-14IA	TETRACHLOROETHENE					UG_L	16	0
MW09-17I	TETRACHLOROETHENE					UG_L	22	0
MW09-20D	TETRACHLOROETHENE					UG_L	44	0
MW09-20I	TETRACHLOROETHENE	3/30/2011 10:10	MW09-20I-033011	6600	705	UG_L	44	24
MW09-21D	TETRACHLOROETHENE	9/11/2002 0:00	MW09-21D-NWG-091102	0.1 J	0.1	UG_L	35	1
MW09-21S	TETRACHLOROETHENE					UG_L	36	0
MW09-23D	TETRACHLOROETHENE					UG_L	34	0
MW09-23S	TETRACHLOROETHENE					UG_L	34	0
MW09-24D	TETRACHLOROETHENE					UG_L	34	0
MW09-24S	TETRACHLOROETHENE					UG_L	34	0
MW09-25S	TETRACHLOROETHENE					UG_L	44	0
MW09-26DA	TETRACHLOROETHENE					UG_L	2	0
MW09-26S	TETRACHLOROETHENE					UG_L	21	0
MW09-27D	TETRACHLOROETHENE					UG_L	20	0
MW09-27S	TETRACHLOROETHENE					UG_L	21	0
MW09-02S	TOLUENE					UG_L	34	0
MW09-03D	TOLUENE					UG_L	36	0
MW09-07S	TOLUENE	6/3/2002 0:00	MW09-07S-NWG-060302	5.45	1.32	UG_L	34	21
MW09-08DA	TOLUENE					UG_L	17	0
MW09-08S	TOLUENE	12/4/2001 0:00	MW09-08S-NWG-120401	1 T	0.41	UG_L	45	3
MW09-09DA	TOLUENE					UG_L	17	0
MW09-09S	TOLUENE	3/22/2010 1:06	MW09-09S-032210	0.3 J	0.18	UG_L	44	4
MW09-10D	TOLUENE					UG_L	33	0
MW09-10S	TOLUENE	12/4/2001 0:00	MW09-10S-NWG-120401	1 T	0.32	UG_L	34	6
MW09-11S	TOLUENE	12/4/2001 0:00	MW09-11S-NWG-120401	1 T	0.7	UG_L	43	2
MW09-14D	TOLUENE	12/7/2001 12:00:00 AM 5/5/2003 12:00:00 AM		0.19 JJ	0.18	UG_L	33	4
MW09-14IA	TOLUENE	8/6/2009 10:00	MW09-14IA-080609	19	12	UG_L	16	16
MW09-17I	TOLUENE	3/22/2010 1:43	MW09-17I-032210	0.4 J	0.32	UG_L	22	3
MW09-20D	TOLUENE	5/6/2003 0:00	MW09-20D-NWG-050603	0.16 J	0.16	UG_L	44	1
MW09-20I	TOLUENE	3/18/2010 10:10	MW09-20I-031810	1900	222	UG_L	45	16
MW09-21D	TOLUENE	12/5/2001 0:00	MW09-21D-NWG-120501	64	14.4	UG_L	35	34
MW09-21S	TOLUENE	12/5/2001 0:00	MW09-21S-NWG-120501	2.55	1.02	UG_L	36	27
MW09-23D	TOLUENE					UG_L	34	0
MW09-23S	TOLUENE					UG_L	31	0
MW09-24D	TOLUENE	9/15/2003 0:00	MW09-24D-NWG-091503	0.19 J	0.17	UG_L	34	3
MW09-24S	TOLUENE					UG_L	34	0
MW09-25S	TOLUENE	7/15/2010 12:00	MW09-25S-071510	3 J	0.74	UG_L	44	11
MW09-26DA	TOLUENE					UG_L	2	0
MW09-26S	TOLUENE					UG_L	21	0
MW09-27D	TOLUENE	9/29/2011 10:08	MW09-27D-092911	0.39 J	0.39	UG_L	20	1
MW09-27S	TOLUENE					UG_L	21	0
MW09-02S	TRANS-1,2-DICHLOROETHENE					UG_L	34	0
MW09-03D	TRANS-1,2-DICHLOROETHENE	6/14/2007 12:20	MW09-03D_20070614	1.9	0.85	UG_L	36	10
MW09-07S	TRANS-1,2-DICHLOROETHENE	6/16/2004 0:00	MW09-07S-NWG-061604	1.1 J	0.49	UG_L	33	9
MW09-08DA	TRANS-1,2-DICHLOROETHENE	9/30/2013 13:30	MW09-08DA-093013	39	39	UG_L	17	1
MW09-08S	TRANS-1,2-DICHLOROETHENE	11/7/2007 12:00	MW09-08S_20071107	0.58 J	0.35	UG_L	45	14
MW09-09DA	TRANS-1,2-DICHLOROETHENE	8/7/2009 9:22	MW09-09DA-080709	3.1	1.2	UG_L	17	11
MW09-09S	TRANS-1,2-DICHLOROETHENE	1/8/2010 10:00	MW09-09S-010810	60	16.7	UG_L	45	44
MW09-10D	TRANS-1,2-DICHLOROETHENE					UG_L	33	0
MW09-10S	TRANS-1,2-DICHLOROETHENE	3/22/2004 0:00	MW09-10S-NWG-032204	0.53 J	0.53	UG_L	34	1
MW09-11S	TRANS-1,2-DICHLOROETHENE	9/10/2003 0:00	MW09-11S-NWG-091003	0.19 J	0.19	UG_L	43	1
MW09-14D	TRANS-1,2-DICHLOROETHENE	11/9/2007 12:00	MW09-14D_20071109	0.44 J	0.44	UG_L	32	1
MW09-14IA	TRANS-1,2-DICHLOROETHENE	10/20/2009 11:15:00 AM 7/15/2010 5:40:00 PM		0.4 JJ	0.4	UG_L	16	2
MW09-17I	TRANS-1,2-DICHLOROETHENE					UG_L	22	0
MW09-20D	TRANS-1,2-DICHLOROETHENE	9/28/2005 13:20	MW09-20D-20050928	1.4	0.598	UG_L	44	8
MW09-20I	TRANS-1,2-DICHLOROETHENE	3/30/2011 10:10	MW09-20I-033011	140000	21200	UG_L	45	45
MW09-21D	TRANS-1,2-DICHLOROETHENE	10/5/2011 14:32	MW09-21D-100511	24	10.5	UG_L	35	33
MW09-21S	TRANS-1,2-DICHLOROETHENE					UG_L	36	0
MW09-23D	TRANS-1,2-DICHLOROETHENE					UG_L	33	0
MW09-23S	TRANS-1,2-DICHLOROETHENE					UG_L	33	0
MW09-24D	TRANS-1,2-DICHLOROETHENE					UG_L	34	0
MW09-24S	TRANS-1,2-DICHLOROETHENE					UG_L	34	0
MW09-25S	TRANS-1,2-DICHLOROETHENE					UG_L	44	0
MW09-26DA	TRANS-1,2-DICHLOROETHENE					UG_L	2	0
MW09-26S	TRANS-1,2-DICHLOROETHENE					UG_L	21	0
MW09-27D	TRANS-1,2-DICHLOROETHENE					UG_L	20	0
MW09-27S	TRANS-1,2-DICHLOROETHENE					UG_L	21	0
MW09-02S	TRANS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-03D	TRANS-1,3-DICHLOROPROPENE					UG_L	36	0
MW09-07S	TRANS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-08DA	TRANS-1,3-DICHLOROPROPENE					UG_L	17	0
MW09-08S	TRANS-1,3-DICHLOROPROPENE					UG_L	45	0
MW09-09DA	TRANS-1,3-DICHLOROPROPENE					UG_L	17	0
MW09-09S	TRANS-1,3-DICHLOROPROPENE					UG_L	46	0
MW09-10D	TRANS-1,3-DICHLOROPROPENE					UG_L	33	0
MW09-10S	TRANS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-11S	TRANS-1,3-DICHLOROPROPENE					UG_L	43	0
MW09-14D	TRANS-1,3-DICHLOROPROPENE					UG_L	33	0
MW09-14IA	TRANS-1,3-DICHLOROPROPENE					UG_L	16	0
MW09-17I	TRANS-1,3-DICHLOROPROPENE					UG_L	22	0
MW09-20D	TRANS-1,3-DICHLOROPROPENE					UG_L	44	0
MW09-20I	TRANS-1,3-DICHLOROPROPENE	3/18/2010 10:10	MW09-20I-031810	720 J	720	UG_L	43	1
MW09-21D	TRANS-1,3-DICHLOROPROPENE					UG_L	35	0
MW09-21S	TRANS-1,3-DICHLOROPROPENE	9/28/2005 11:49	MW09-21S-20050928	3.9	3.9	UG_L	36	1
MW09-23D	TRANS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-23S	TRANS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-24D	TRANS-1,3-DICHLOROPROPENE					UG_L	34	0

TABLE F-1
SUMMARY OF DESCRIPTIVE STATISTICS FOR MONITORING WELLS AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
MW09-24S	TRANS-1,3-DICHLOROPROPENE					UG_L	34	0
MW09-25S	TRANS-1,3-DICHLOROPROPENE					UG_L	44	0
MW09-26DA	TRANS-1,3-DICHLOROPROPENE					UG_L	2	0
MW09-26S	TRANS-1,3-DICHLOROPROPENE					UG_L	21	0
MW09-27D	TRANS-1,3-DICHLOROPROPENE					UG_L	20	0
MW09-27S	TRANS-1,3-DICHLOROPROPENE					UG_L	21	0
MW09-02S	TRICHLOROETHENE	9/10/2002 0:00	MW09-02S-NWG-091002	0.16 J	0.14	UG_L	34	2
MW09-03D	TRICHLOROETHENE	3/17/2004 0:00	MW09-03D-NWG-031704	7.3	5.47	UG_L	36	34
MW09-07S	TRICHLOROETHENE	12/7/2001 0:00	MW09-07S-NWG-120701	3.82	2.27	UG_L	34	2
MW09-08DA	TRICHLOROETHENE	9/30/2013 13:30	MW09-08DA-093013	0.97 J	0.45	UG_L	17	9
MW09-08S	TRICHLOROETHENE	12/4/2001 0:00	MW09-08S-NWG-120401	6.28	1.45	UG_L	45	9
MW09-09DA	TRICHLOROETHENE	8/7/2009 9:22	MW09-09DA-080709	65	13	UG_L	17	14
MW09-09S	TRICHLOROETHENE	9/25/2008 15:10	MW09-09S-092508	4.6	0.95	UG_L	46	15
MW09-10D	TRICHLOROETHENE	3/8/2007 0:00	MW09-10D_20070308	0.8 J	0.8	UG_L	33	1
MW09-10S	TRICHLOROETHENE	3/22/2004 0:00	MW09-10S-NWG-032204	21	21	UG_L	34	1
MW09-11S	TRICHLOROETHENE	9/27/2012 9:25	MW09-11S-092712	1.1	0.68	UG_L	43	8
MW09-14D	TRICHLOROETHENE	12/7/2001 0:00	MW09-14D-NWG-120701	2.16	1.49	UG_L	34	3
MW09-14IA	TRICHLOROETHENE	9/18/2015 11:35	MW09-14IA-091815-1	17	4.7	UG_L	16	4
MW09-17I	TRICHLOROETHENE					UG_L	22	0
MW09-20D	TRICHLOROETHENE	9/28/2005 13:20	MW09-20D-20050928	73.9	7.39	UG_L	45	13
MW09-20I	TRICHLOROETHENE	3/26/2009 9:36	MW09-20I-032609	1200000	417000	UG_L	45	45
MW09-21D	TRICHLOROETHENE	12/5/2001 0:00	MW09-21D-NWG-120501	500	162	UG_L	35	35
MW09-21S	TRICHLOROETHENE	11/9/2007 12:00	MW09-21S_20071109	0.7 J	0.52	UG_L	36	3
MW09-23D	TRICHLOROETHENE	7/1/2003 0:00	MW09-23D-NWG-070103	1.67	0.7	UG_L	34	3
MW09-23S	TRICHLOROETHENE					UG_L	34	0
MW09-24D	TRICHLOROETHENE	9/9/2016 9:35	MW09-24D-ME45-1	1.4 J	0.8	UG_L	34	2
MW09-24S	TRICHLOROETHENE					UG_L	34	0
MW09-25S	TRICHLOROETHENE	3/23/2010 2:10:00 AM 9/9/2016 11:10:00 AM		1 J	0.73	UG_L	44	4
MW09-26DA	TRICHLOROETHENE					UG_L	2	0
MW09-26S	TRICHLOROETHENE					UG_L	21	0
MW09-27D	TRICHLOROETHENE					UG_L	20	0
MW09-27S	TRICHLOROETHENE					UG_L	21	0
MW09-02S	VINYL CHLORIDE	11/7/2007 12:00	MW09-02S_20071107	0.71 J	0.43	UG_L	34	5
MW09-03D	VINYL CHLORIDE	9/27/2005 16:36	MW09-03D-20050927	29.9	16.6	UG_L	36	36
MW09-07S	VINYL CHLORIDE	3/18/2004 0:00	MW09-07S-NWG-031804	0.57 J	0.37	UG_L	34	2
MW09-08DA	VINYL CHLORIDE	9/30/2013 13:30	MW09-08DA-093013	27	3.5	UG_L	17	12
MW09-08S	VINYL CHLORIDE	5/6/2003 0:00	MW09-08S-NWG-050603	37	14.6	UG_L	45	45
MW09-09DA	VINYL CHLORIDE	3/28/2011 3:12	MW09-09DA-032811	6.4	4.8	UG_L	17	16
MW09-09S	VINYL CHLORIDE	9/25/2012 14:00	MW09-09S-092512	1500	468	UG_L	46	46
MW09-10D	VINYL CHLORIDE					UG_L	33	0
MW09-10S	VINYL CHLORIDE	10/20/2009 15:18	MW09-10S-102009	3 J	1.4	UG_L	34	21
MW09-11S	VINYL CHLORIDE	3/1/2006 0:00	MW09-11S_Q106	1.4 J	0.92	UG_L	43	8
MW09-14D	VINYL CHLORIDE	10/20/2009 9:35	MW09-14D-102009	2 J	0.69	UG_L	33	13
MW09-14IA	VINYL CHLORIDE	10/20/2009 11:15	MW09-14IA-102009	160 J	74	UG_L	16	15
MW09-17I	VINYL CHLORIDE	5/6/2008 15:30	MW09-17I-050608	0.39 J	0.39	UG_L	22	1
MW09-20D	VINYL CHLORIDE	3/6/2007 0:00	MW09-20D_20070306	6.2	1.9	UG_L	44	33
MW09-20I	VINYL CHLORIDE	6/5/2002 0:00	MW09-20I-NWG-060502	17000 J	4980	UG_L	45	42
MW09-21D	VINYL CHLORIDE	10/21/2004 0:00	MW09-21D-NWG-102104	234	116	UG_L	35	35
MW09-21S	VINYL CHLORIDE	5/7/2003 0:00	MW09-21S-NWG-050703	1.34	0.77	UG_L	36	7
MW09-23D	VINYL CHLORIDE	10/10/2013 12:15	MW09-23D-101013	0.77 J	0.59	UG_L	34	4
MW09-23S	VINYL CHLORIDE	9/8/2016 10:10	MW09-23S-ME45-1	1.1 J	1.1	UG_L	34	1
MW09-24D	VINYL CHLORIDE	3/24/2010 12:04	MW09-24D-032410	0.5 J	0.34	UG_L	34	6
MW09-24S	VINYL CHLORIDE	3/18/2004 0:00	MW09-24S-NWG-031804	0.28 J	0.28	UG_L	34	1
MW09-25S	VINYL CHLORIDE	3/29/2012 11:58	MW09-25S-032912	1 J	0.48	UG_L	44	6
MW09-26DA	VINYL CHLORIDE					UG_L	2	0
MW09-26S	VINYL CHLORIDE					UG_L	21	0
MW09-27D	VINYL CHLORIDE	1/30/2008 12:00:00 AM 4/28/2008 3:00:00 PM 7/17/2008 9:50:00 AM 9/25/2008 10:00:00 AM 4/1/2009 9:56:00 AM		1.2 J	0.9	UG_L	20	15
MW09-27S	VINYL CHLORIDE					UG_L	21	0
MW09-02S	XYLENES, TOTAL					UG_L	12	0
MW09-03D	XYLENES, TOTAL					UG_L	13	0
MW09-07S	XYLENES, TOTAL	6/3/2002 0:00	MW09-07S-NWG-060302	21.54	5.464	UG_L	11	10
MW09-08DA	XYLENES, TOTAL					UG_L	16	0
MW09-08S	XYLENES, TOTAL					UG_L	18	0
MW09-09DA	XYLENES, TOTAL					UG_L	16	0
MW09-09S	XYLENES, TOTAL					UG_L	18	0
MW09-10D	XYLENES, TOTAL					UG_L	11	0
MW09-10S	XYLENES, TOTAL	12/4/2001 0:00	MW09-10S-NWG-120401	1.2	0.89	UG_L	12	2
MW09-11S	XYLENES, TOTAL	2/27/2002 0:00	MW09-11S-NWG-022702	3	1.6	UG_L	17	2
MW09-14D	XYLENES, TOTAL					UG_L	10	0
MW09-14IA	XYLENES, TOTAL	3/28/2013 10:25	MW09-14IA-032813-1	22	15	UG_L	15	15
MW09-17I	XYLENES, TOTAL	3/28/2013 10:25	MW09-17I-032813-1	2.1 J	1.8	UG_L	15	11
MW09-20D	XYLENES, TOTAL					UG_L	18	0
MW09-20I	XYLENES, TOTAL	3/18/2010 10:10	MW09-20I-031810	4400	2200	UG_L	19	2
MW09-21D	XYLENES, TOTAL	12/5/2001 0:00	MW09-21D-NWG-120501	3.05	1.75	UG_L	12	3
MW09-21S	XYLENES, TOTAL	12/5/2001 0:00	MW09-21S-NWG-120501	0.38	0.38	UG_L	13	1
MW09-23D	XYLENES, TOTAL					UG_L	11	0
MW09-23S	XYLENES, TOTAL					UG_L	11	0
MW09-24D	XYLENES, TOTAL	12/5/2001 0:00	MW09-24D-NWG-120501	0.12	0.12	UG_L	12	1
MW09-24S	XYLENES, TOTAL	3/23/2010 2:50	MW09-24S-032310	0.4 J	0.27	UG_L	12	2
MW09-25S	XYLENES, TOTAL	7/15/2010 12:00	MW09-25S-071510	15 J	3.58	UG_L	17	7
MW09-26DA	XYLENES, TOTAL					UG_L	2	0
MW09-26S	XYLENES, TOTAL					UG_L	14	0
MW09-27D	XYLENES, TOTAL					UG_L	13	0
MW09-27S	XYLENES, TOTAL					UG_L	14	0

Notes:
U = Not Detected; UJ = Detection Limit Approximate; J = Quantitation Approximate; R = Rejected
(1) If sample was not detected, one half of detection limit was used in calculation of average concentration.
Maximum value presented when original and duplilcate samples were analyzed
Parameters that have been detected in at least one sample since ME01 are included on the table

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
Wet Chemistry									
P09-06B	SULFIDE	10/16/2012 15:04	P09-06B-101612	0.77	0.49	MG_L	5	2	40.00
P09-07B	SULFIDE	9/22/2014 14:30	P09-07B-092214-1	11	6.2	MG_L	5	2	40.00
P09-08B	SULFIDE	9/22/2014 13:50	P09-08B-092214-1	11	11	MG_L	5	1	20.00
P09-09	SULFIDE	10/1/2013 12:00	P09-09-100213	2.2	2.2	MG_L	1	1	100.00
P09-10	SULFIDE	10/1/2013 11:30	P09-10-100113	0.7 J	0.7	MG_L	1	1	100.00
P09-11B	SULFIDE	10/15/2013 10:30	P09-11B-101513	0.8 J	0.8	MG_L	5	1	20.00
P09-12B	SULFIDE	9/22/2014 13:30	P09-12B-092214-1	24	13	MG_L	4	2	50.00
Metals, Dissolved									
P09-01	ALUMINUM	4/29/2003 0:00	P09-01-NWG-042903	169000	17300	UG_L	34	14	41.18
P09-02A	ALUMINUM	9/15/2016 11:35	P09-02A-ME45-1-F	14800	5110	UG_L	7	3	42.86
P09-03A	ALUMINUM	10/15/2013 13:00	P09-03A-101513	195 J	195	UG_L	5	1	20.00
P09-04A	ALUMINUM	10/10/2011 16:18	P09-04A-101011	293 J	234	UG_L	6	2	33.33
P09-06B	ALUMINUM	9/13/2016 10:50	P09-06B-ME45-1-F	3960	2520	UG_L	3	3	100.00
P09-07B	ALUMINUM	10/3/2013 11:09	P09-07B-100313	252 J	252	UG_L	2	1	50.00
P09-08B	ALUMINUM	10/16/2012 15:57	P09-08B-101612	188000	67200	UG_L	3	3	100.00
P09-09	ALUMINUM	1/15/2003 0:00	P09-09-NWG-011503	14200 J	2690	UG_L	33	11	33.33
P09-10	ALUMINUM	1/23/2002 0:00	P09-10-NWG-012302	302000	34300	UG_L	33	10	30.30
P09-11B	ALUMINUM	9/16/2016 13:45	P09-11B-ME45-1-F	3680	2060	UG_L	4	2	50.00
P09-12B	ALUMINUM	9/8/2015 10:40	P09-12B-090815-1-F	516	280	UG_L	2	2	100.00
P09-01	ANTIMONY	1/28/2002 0:00	P09-01-NWG-012802	308	59.4	UG_L	34	7	20.59
P09-02A	ANTIMONY	9/15/2016 11:35	P09-02A-ME45-1-F	18.6 J	6.43	UG_L	7	3	42.86
P09-03A	ANTIMONY	10/11/2011 11:35	P09-03A-101111	0.48 J	0.41	UG_L	5	2	40.00
P09-04A	ANTIMONY	10/10/2011 16:18	P09-04A-101011	0.79 J	0.67	UG_L	6	2	33.33
P09-06B	ANTIMONY	9/13/2016 10:50	P09-06B-ME45-1-F	18.3 J	18.3	UG_L	3	1	33.33
P09-07B	ANTIMONY					UG_L	2	0	0.00
P09-08B	ANTIMONY	9/15/2016 12:30	P09-08B-ME45-1-F	9.4 J	9.4	UG_L	3	1	33.33
P09-09	ANTIMONY	9/12/2016 10:45	P09-09-ME45-1-F	16.4 J	4.26	UG_L	33	5	15.15
P09-10	ANTIMONY	9/12/2016 11:50	P09-10-ME45-1-F	9 J	3.5	UG_L	33	4	12.12
P09-11B	ANTIMONY	9/16/2016 13:45	P09-11B-ME45-1-F	18.4 J	18.4	UG_L	4	1	25.00
P09-12B	ANTIMONY					UG_L	2	0	0.00
P09-01	ARSENIC	12/2/2003 0:00	P09-01-NWG-120203	36.8	16	UG_L	34	14	41.18
P09-02A	ARSENIC	9/15/2015 14:20	P09-02A-091515-1-F	21.5 J-	12.1	UG_L	7	6	85.71
P09-03A	ARSENIC	9/22/2010 11:53	P09-03A-092210	16 J	10	UG_L	5	5	100.00
P09-04A	ARSENIC	9/22/2010 11:43	P09-04A-092210	15.9 J	12.1	UG_L	6	3	50.00
P09-06B	ARSENIC	9/13/2016 10:50	P09-06B-ME45-1-F	22.2 J	16	UG_L	3	2	66.67
P09-07B	ARSENIC	9/9/2015 10:30	P09-07B-090915-1-F	37.6 J	25.3	UG_L	2	2	100.00
P09-08B	ARSENIC	10/16/2012 15:57	P09-08B-101612	176	92.3	UG_L	3	2	66.67
P09-09	ARSENIC	6/19/2007 15:40	P09-09_20070619	42.6 J	12.9	UG_L	33	15	45.45
P09-10	ARSENIC	1/23/2002 0:00	P09-10-NWG-012302	188	24	UG_L	33	11	33.33
P09-11B	ARSENIC	10/17/2012 15:17	P09-11B-101712	32.7 J	21.5	UG_L	4	2	50.00
P09-12B	ARSENIC	9/13/2016 11:10	P09-12B-ME45-1-F	0.2 J-	0.2	UG_L	2	1	50.00
P09-01	BARIUM	1/28/2002 0:00	P09-01-NWG-012802	279	279	UG_L	2	1	50.00
P09-09	BARIUM	1/23/2002 0:00	P09-09-NWG-012302	5.5 J	5.5	UG_L	1	1	100.00
P09-10	BARIUM	1/23/2002 0:00	P09-10-NWG-012302	775	775	UG_L	1	1	100.00
P09-01	BERYLLIUM	4/29/2003 0:00	P09-01-NWG-042903	31.7 J	9.1	UG_L	34	6	17.65
P09-02A	BERYLLIUM	10/11/2011 10:20	P09-02A-101111	0.04 J	0.04	UG_L	7	1	14.29
P09-03A	BERYLLIUM					UG_L	5	0	0.00
P09-04A	BERYLLIUM	10/10/2011 16:18	P09-04A-101011	0.17 J	0.17	UG_L	6	1	16.67
P09-06B	BERYLLIUM	10/3/2013 12:45	P09-06B-100313	0.06 J	0.06	UG_L	3	1	33.33
P09-07B	BERYLLIUM					UG_L	2	0	0.00
P09-08B	BERYLLIUM	10/16/2012 15:57	P09-08B-101612	16 J	16	UG_L	3	1	33.33
P09-09	BERYLLIUM	6/19/2007 15:40	P09-09_20070619	19.4	10.8	UG_L	33	3	9.09
P09-10	BERYLLIUM	1/23/2002 0:00	P09-10-NWG-012302	38.3	17.4	UG_L	33	3	9.09
P09-11B	BERYLLIUM					UG_L	4	0	0.00
P09-12B	BERYLLIUM					UG_L	2	0	0.00
P09-01	CADMIUM					UG_L	2	0	0.00
P09-09	CADMIUM					UG_L	1	0	0.00
P09-10	CADMIUM					UG_L	1	0	0.00
P09-01	CALCIUM	1/28/2002 0:00	P09-01-NWG-012802	356000	302000	UG_L	2	2	100.00
P09-09	CALCIUM	1/23/2002 0:00	P09-09-NWG-012302	82800	82800	UG_L	1	1	100.00
P09-10	CALCIUM	1/23/2002 0:00	P09-10-NWG-012302	97300	97300	UG_L	1	1	100.00
P09-01	CHROMIUM, TOTAL	1/28/2002 0:00	P09-01-NWG-012802	29200	2440	UG_L	34	15	44.12
P09-02A	CHROMIUM, TOTAL	9/15/2016 11:35	P09-02A-ME45-1-F	607	607	UG_L	7	1	14.29
P09-03A	CHROMIUM, TOTAL					UG_L	5	0	0.00
P09-04A	CHROMIUM, TOTAL					UG_L	6	0	0.00
P09-06B	CHROMIUM, TOTAL	10/3/2013 12:45	P09-06B-100313	403	156	UG_L	3	3	100.00
P09-07B	CHROMIUM, TOTAL	10/3/2013 11:09	P09-07B-100313	52.3	52.3	UG_L	2	1	50.00
P09-08B	CHROMIUM, TOTAL	10/16/2012 15:57	P09-08B-101612	1580	762	UG_L	3	3	100.00
P09-09	CHROMIUM, TOTAL	1/15/2003 0:00	P09-09-NWG-011503	126 J	24.3	UG_L	33	11	33.33
P09-10	CHROMIUM, TOTAL	1/23/2002 0:00	P09-10-NWG-012302	1230	110	UG_L	33	15	45.45
P09-11B	CHROMIUM, TOTAL	9/16/2016 13:45	P09-11B-ME45-1-F	52.8 J	52.8	UG_L	4	1	25.00
P09-12B	CHROMIUM, TOTAL	9/13/2016 11:10	P09-12B-ME45-1-F	1.1 J-	1.1	UG_L	2	1	50.00
P09-01	COBALT					UG_L	2	0	0.00
P09-09	COBALT					UG_L	1	0	0.00
P09-10	COBALT	1/23/2002 0:00	P09-10-NWG-012302	328	328	UG_L	1	1	100.00
P09-01	COPPER	4/29/2003 0:00	P09-01-NWG-042903	781 J	132	UG_L	34	12	35.29
P09-02A	COPPER	9/15/2016 11:35	P09-02A-ME45-1-F	192	98.8	UG_L	7	2	28.57
P09-03A	COPPER	9/16/2015 14:30	P09-03A-091515-1-F	24.5 J	14.4	UG_L	5	2	40.00
P09-04A	COPPER	10/10/2011 16:18	P09-04A-101011	19	13	UG_L	6	2	33.33
P09-06B	COPPER	9/9/2015 11:00	P09-06B-090915-1-F	33.3 J	23.3	UG_L	3	2	66.67
P09-07B	COPPER					UG_L	2	0	0.00
P09-08B	COPPER	10/16/2012 15:57	P09-08B-101612	436	436	UG_L	3	1	33.33
P09-09	COPPER	1/15/2003 0:00	P09-09-NWG-011503	146 J	30.8	UG_L	33	8	24.24
P09-10	COPPER	1/23/2002 0:00	P09-10-NWG-012302	1400	180	UG_L	33	8	24.24
P09-11B	COPPER	9/9/2015 12:20	P09-11B-090915-1-F	88.6 J	88.6	UG_L	4	1	25.00
P09-12B	COPPER	9/13/2016 11:10	P09-12B-ME45-1-F	0.44 J	0.44	UG_L	2	1	50.00
P09-01	IRON	1/28/2002 0:00	P09-01-NWG-012802	734000	67000	UG_L	34	31	91.18
P09-02A	IRON	9/15/2016 11:35	P09-02A-ME45-1-F	65000	25300	UG_L	7	5	71.43
P09-03A	IRON	9/16/2015 14:30	P09-03A-091515-1-F	1190 J+	819	UG_L	5	4	80.00
P09-04A	IRON	9/22/2010 11:43	P09-04A-092210	949	835	UG_L	6	2	33.33
P09-06B	IRON	10/3/2013 12:45	P09-06B-100313	57000	29000	UG_L	3	2	66.67
P09-07B	IRON	10/3/2013 11:09	P09-07B-100313	44900	44900	UG_L	2	1	50.00
P09-08B	IRON	10/16/2012 15:57	P09-08B-101612	488000	180000	UG_L	3	3	100.00
P09-09	IRON	4/24/2008 18:00	P09-09-042408	156000	40900	UG_L	33	30	90.91
P09-10	IRON	1/23/2002 0:00	P09-10-NWG-012302	418000	28600	UG_L	33	24	72.73
P09-11B	IRON	10/15/2013 10:30	P09-11B-101513	1940	1840	UG_L	4	3	75.00
P09-12B	IRON	9/13/2016 11:10	P09-12B-ME45-1-F	18600	17000	UG_L	2	2	100.00
P09-01	LEAD	4/29/2003 0:00	P09-01-NWG-042903	830 J	115	UG_L	34	10	29.41
P09-02A	LEAD	9/15/2016 11:35	P09-02A-ME45-1-F	104	52.4	UG_L	7	2	28.57
P09-03A	LEAD	10/11/2011 11:35	P09-03A-101111	0.18 J	0.18	UG_L	5	1	20.00
P09-04A	LEAD	10/10/2011 16:18	P09-04A-101011	3.3	3.3	UG_L	6	1	16.67
P09-06B	LEAD	9/9/2015 11:00	P09-06B-090915-1-F	14 J	8.4	UG_L	3	2	66.67
P09-07B	LEAD					UG_L	2	0	0.00
P09-08B	LEAD	10/16/2012 15:57	P09-08B-101612	331	179	UG_L	3	2	66.67
P09-09	LEAD	1/15/2003 0:00	P09-09-NWG-011503	150 J	38.5	UG_L	33	9	27.27
P09-10	LEAD	1/23/2002 0:00	P09-10-NWG-012302	560	95.4	UG_L	33	7	21.21
P09-11B	LEAD					UG_L	4	0	0.00
P09-12B	LEAD	9/13/2016 11:10	P09-12B-ME45-1-F	0.17 J	0.17	UG_L	2	1	50.00
P09-01	MAGNESIUM	1/28/2002 0:00	P09-01-NWG-012802	870000	851000	UG_L	2	2	100.00
P09-09	MAGNESIUM	1/23/2002 0:00	P09-09-NWG-012302	165000	165000	UG_L	1	1	100.00
P09-10	MAGNESIUM	1/23/2002 0:00	P09-10-NWG-012302	75700	75700	UG_L	1	1	100.00
P09-01	MANGANESE	4/29/2003 0:00	P09-01-NWG-042903	9170 J	2970	UG_L	34	34	100.00
P09-02A	MANGANESE	3/29/2011 12:04	P09-02A-032911	821 J	300	UG_L	7	7	100.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P09-03A	MANGANESE	9/16/2015 14:30	P09-03A-091515-1-F	509	112	UG_L	5	5	100.00
P09-04A	MANGANESE	10/10/2011 16:18	P09-04A-101011	29.3	17.6	UG_L	6	3	50.00
P09-06B	MANGANESE	10/3/2013 12:45	P09-06B-100313	503	273	UG_L	3	3	100.00
P09-07B	MANGANESE	10/3/2013 11:09	P09-07B-100313	728	399	UG_L	2	2	100.00
P09-08B	MANGANESE	10/16/2012 15:57	P09-08B-101612	4210	2470	UG_L	3	3	100.00
P09-09	MANGANESE	9/22/2010 3:30	P09-09-092210	3300	840	UG_L	33	33	100.00
P09-10	MANGANESE	1/23/2002 0:00	P09-10-NWG-012302	3040	286	UG_L	33	33	100.00
P09-11B	MANGANESE	9/16/2016 13:45	P09-11B-ME45-1-F	752	468	UG_L	4	2	50.00
P09-12B	MANGANESE	9/8/2015 10:40	P09-12B-090815-1-F	17300	9280	UG_L	2	2	100.00
P09-01	MERCURY	9/8/2003 0:00	P09-01-NWG-090803	0.71 J	0.34	UG_L	34	3	8.82
P09-02A	MERCURY	9/15/2016 11:35	P09-02A-ME45-1-F	0.14 J	0.08	UG_L	7	2	28.57
P09-03A	MERCURY	10/11/2011 11:35	P09-03A-101111	0.02 J	0.02	UG_L	5	1	20.00
P09-04A	MERCURY					UG_L	6	0	0.00
P09-06B	MERCURY					UG_L	3	0	0.00
P09-07B	MERCURY					UG_L	2	0	0.00
P09-08B	MERCURY	10/16/2012 15:57	P09-08B-101612	0.6	0.34	UG_L	3	2	66.67
P09-09	MERCURY	1/15/2003 0:00	P09-09-NWG-011503	0.37 J	0.26	UG_L	33	3	9.09
P09-10	MERCURY	1/23/2002 0:00	P09-10-NWG-012302	0.74	0.41	UG_L	31	2	6.45
P09-11B	MERCURY					UG_L	4	0	0.00
P09-12B	MERCURY	9/8/2015 10:40	P09-12B-090815-1-F	0.073 J-	0.073	UG_L	2	1	50.00
P09-01	NICKEL	1/28/2002 0:00	P09-01-NWG-012802	2900	467	UG_L	34	28	82.35
P09-02A	NICKEL	9/15/2016 11:35	P09-02A-ME45-1-F	203	54	UG_L	7	5	71.43
P09-03A	NICKEL	10/15/2013 13:00	P09-03A-101513	33.5	21.9	UG_L	5	4	80.00
P09-04A	NICKEL	10/15/2013 9:25	P09-04A-101513	36.4	19.4	UG_L	6	6	100.00
P09-06B	NICKEL	10/3/2013 12:45	P09-06B-100313	132	64.9	UG_L	3	3	100.00
P09-07B	NICKEL	10/3/2013 11:09	P09-07B-100313	150	150	UG_L	2	1	50.00
P09-08B	NICKEL	10/16/2012 15:57	P09-08B-101612	1910	896	UG_L	3	3	100.00
P09-09	NICKEL	10/26/2004 0:00	P09-09-NWG-102604	622	72.8	UG_L	33	23	69.70
P09-10	NICKEL	1/23/2002 0:00	P09-10-NWG-012302	3050	184	UG_L	33	30	90.91
P09-11B	NICKEL	9/16/2016 13:45	P09-11B-ME45-1-F	55.8	33.2	UG_L	4	4	100.00
P09-12B	NICKEL	9/8/2015 10:40	P09-12B-090815-1-F	12500	6250	UG_L	2	2	100.00
P09-01	POTASSIUM	1/28/2002 0:00	P09-01-NWG-012802	274000	261000	UG_L	2	2	100.00
P09-09	POTASSIUM	1/23/2002 0:00	P09-09-NWG-012302	54600	54600	UG_L	1	1	100.00
P09-10	POTASSIUM	1/23/2002 0:00	P09-10-NWG-012302	42800	42800	UG_L	1	1	100.00
P09-01	SELENIUM					UG_L	2	0	0.00
P09-09	SELENIUM					UG_L	1	0	0.00
P09-10	SELENIUM					UG_L	1	0	0.00
P09-01	SILVER	1/28/2002 0:00	P09-01-NWG-012802	166	166	UG_L	2	1	50.00
P09-09	SILVER					UG_L	1	0	0.00
P09-10	SILVER					UG_L	1	0	0.00
P09-01	SODIUM	2/26/2002 0:00	P09-01-NWG-022602	7770000 J	7230000	UG_L	2	2	100.00
P09-09	SODIUM					UG_L	1	0	0.00
P09-10	SODIUM	1/23/2002 0:00	P09-10-NWG-012302	211000 J	211000	UG_L	1	1	100.00
P09-01	VANADIUM	1/28/2002 0:00	P09-01-NWG-012802	353	353	UG_L	2	1	50.00
P09-09	VANADIUM					UG_L	1	0	0.00
P09-10	VANADIUM	1/23/2002 0:00	P09-10-NWG-012302	923	923	UG_L	1	1	100.00
P09-01	ZINC	4/29/2003 0:00	P09-01-NWG-042903	3350 J	391	UG_L	34	15	44.12
P09-02A	ZINC	9/15/2016 11:35	P09-02A-ME45-1-F	489	178	UG_L	7	3	42.86
P09-03A	ZINC	9/16/2015 14:30	P09-03A-091515-1-F	119 J	73.7	UG_L	5	3	60.00
P09-04A	ZINC	9/15/2016 10:45	P09-04A-ME45-1-F	240	112	UG_L	6	3	50.00
P09-06B	ZINC	9/13/2016 10:50	P09-06B-ME45-1-F	405	209	UG_L	3	2	66.67
P09-07B	ZINC					UG_L	2	0	0.00
P09-08B	ZINC	10/16/2012 15:57	P09-08B-101612	1410	662	UG_L	3	3	100.00
P09-09	ZINC	1/15/2003 0:00	P09-09-NWG-011503	304 J	68.1	UG_L	33	12	36.36
P09-10	ZINC	1/23/2002 0:00	P09-10-NWG-012302	1320	127	UG_L	33	14	42.42
P09-11B	ZINC	9/16/2016 13:45	P09-11B-ME45-1-F	156	85.1	UG_L	4	2	50.00
P09-12B	ZINC	9/8/2015 10:40	P09-12B-090815-1-F	33.9 J	25.4	UG_L	2	2	100.00
Metals									
P09-01	ALUMINUM	1/28/2002 0:00	P09-01-NWG-012802	601000	106000	UG_L	34	33	97.06
P09-02A	ALUMINUM	9/14/2016 13:35	P09-02A-ME45-1	99500	22200	UG_L	7	5	71.43
P09-03A	ALUMINUM	9/16/2015 14:30	P09-03A-091515-1	5690 J	1770	UG_L	5	5	100.00
P09-04A	ALUMINUM	9/16/2015 14:05	P09-04A-091515-1	2640 J	1350	UG_L	6	4	66.67
P09-06B	ALUMINUM	10/16/2012 15:04	P09-06B-101612	52100	24600	UG_L	4	4	100.00
P09-07B	ALUMINUM	9/13/2016 10:40	P09-07B-ME45-1	130000	91100	UG_L	4	4	100.00
P09-08B	ALUMINUM	9/13/2016 11:00	P09-08B-ME45-1	129000	35400	UG_L	4	4	100.00
P09-09	ALUMINUM	3/29/2011 14:06	P09-09-033011	150000	20000	UG_L	33	31	93.94
P09-10	ALUMINUM	1/23/2002 0:00	P09-10-NWG-012302	1080000	51600	UG_L	33	28	84.85
P09-11B	ALUMINUM	9/16/2016 13:45	P09-11B-ME45-1	3630	1440	UG_L	4	3	75.00
P09-12B	ALUMINUM	10/14/2013 2:00:00 PM10/16/2012 4:00:00 PM		622000	314000	UG_L	4	4	100.00
P09-01	ANTIMONY	9/5/2002 0:00	P09-01-NWG-090502	700 J	97.9	UG_L	33	9	27.27
P09-02A	ANTIMONY	9/14/2016 13:35	P09-02A-ME45-1	16.6 J	5.74	UG_L	7	3	42.86
P09-03A	ANTIMONY	10/11/2011 11:35	P09-03A-101111	0.59 J	0.54	UG_L	5	2	40.00
P09-04A	ANTIMONY	10/10/2011 16:18	P09-04A-101011	0.73 J	0.64	UG_L	6	2	33.33
P09-06B	ANTIMONY	9/13/2016 10:50	P09-06B-ME45-1	20.1 J	11.4	UG_L	4	2	50.00
P09-07B	ANTIMONY	9/13/2016 10:40	P09-07B-ME45-1	10.7 J	6.7	UG_L	4	2	50.00
P09-08B	ANTIMONY					UG_L	4	0	0.00
P09-09	ANTIMONY	6/6/2002 0:00	P09-09-NWG-060602	35.9	10.5	UG_L	33	7	21.21
P09-10	ANTIMONY	6/10/2002 0:00	P09-10-NWG-061002	24.7	8.57	UG_L	33	4	12.12
P09-11B	ANTIMONY	9/16/2016 13:45	P09-11B-ME45-1	20.2 J	20.2	UG_L	4	1	25.00
P09-12B	ANTIMONY	10/14/2013 14:00	P09-12B-101413	9.2	9.2	UG_L	4	1	25.00
P09-01	ARSENIC	6/19/2007 17:15	P09-01_20070619	187 J	67.4	UG_L	33	28	84.85
P09-02A	ARSENIC	9/26/2012 15:09	P09-02A-092612	31.4 J	16.7	UG_L	7	7	100.00
P09-03A	ARSENIC	9/16/2015 14:30	P09-03A-091515-1	16.8 J-	11.9	UG_L	5	5	100.00
P09-04A	ARSENIC	9/16/2015 14:05	P09-04A-091515-1	16.5 J-	13.9	UG_L	6	4	66.67
P09-06B	ARSENIC	10/16/2012 15:04	P09-06B-101612	96.1 J	35.6	UG_L	4	4	100.00
P09-07B	ARSENIC	9/13/2016 10:40	P09-07B-ME45-1	113	90	UG_L	4	4	100.00
P09-08B	ARSENIC	9/8/2015 11:20	P09-08B-090815-1	81.1 J	32.4	UG_L	4	4	100.00
P09-09	ARSENIC	9/27/2005 9:32	P09-09-20050927	348	77.1	UG_L	33	25	75.76
P09-10	ARSENIC	1/23/2002 0:00	P09-10-NWG-012302	339	58.6	UG_L	33	13	39.39
P09-11B	ARSENIC	10/17/2012 15:17	P09-11B-101712	31.6 J	23.3	UG_L	4	2	50.00
P09-12B	ARSENIC	10/16/2012 16:00	P09-12B-101612	633	295	UG_L	4	4	100.00
P09-01	BARIUM	1/28/2002 0:00	P09-01-NWG-012802	1340	731	UG_L	2	2	100.00
P09-09	BARIUM					UG_L	1	0	0.00
P09-10	BARIUM	1/23/2002 0:00	P09-10-NWG-012302	1920	1920	UG_L	1	1	100.00
P09-01	BERYLLIUM	11/6/2007 12:00	P09-01_20071106	66.8	17.3	UG_L	34	28	82.35
P09-02A	BERYLLIUM	9/14/2016 13:35	P09-02A-ME45-1	20.5 J	7.07	UG_L	7	3	42.86
P09-03A	BERYLLIUM	10/15/2013 13:00	P09-03A-101513	0.13 J	0.095	UG_L	5	2	40.00
P09-04A	BERYLLIUM					UG_L	6	0	0.00
P09-06B	BERYLLIUM	9/13/2016 10:50	P09-06B-ME45-1	6.6 J	3.6	UG_L	4	2	50.00
P09-07B	BERYLLIUM	9/13/2016 10:40	P09-07B-ME45-1	20.3 J	15	UG_L	4	2	50.00
P09-08B	BERYLLIUM	9/13/2016 11:00	P09-08B-ME45-1	28.9	14.6	UG_L	4	2	50.00
P09-09	BERYLLIUM	6/19/2007 15:40	P09-09_20070619	20.2	5.73	UG_L	33	20	60.61
P09-10	BERYLLIUM	1/23/2002 0:00	P09-10-NWG-012302	46.4	8.36	UG_L	33	12	36.36
P09-11B	BERYLLIUM					UG_L	4	0	0.00
P09-12B	BERYLLIUM	10/14/2013 14:00	P09-12B-101413	56.4	54.5	UG_L	4	2	50.00
P09-01	CADMIUM					UG_L	2	0	0.00
P09-09	CADMIUM					UG_L	1	0	0.00
P09-10	CADMIUM					UG_L	1	0	0.00
P09-01	CALCIUM	1/28/2002 0:00	P09-01-NWG-012802	383000	312000	UG_L	2	2	100.00
P09-09	CALCIUM	1/23/2002 0:00	P09-09-NWG-012302	103000	103000	UG_L	1	1	100.00
P09-10	CALCIUM	1/23/2002 0:00	P09-10-NWG-012302	131000	131000	UG_L	1	1	100.00
P09-01	CHROMIUM, TOTAL	3/18/2010 3:25	P09-01-031810	56800	6030	UG_L	34	33	97.06
P09-02A	CHROMIUM, TOTAL	9/14/2016 13:35	P09-02A-ME45-1	4040	1430	UG_L	7	3	42.86
P09-03A	CHROMIUM, TOTAL	9/16/2015 14:30	P09-03A-091515-1	473	139	UG_L	5	4	80.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P09-04A	CHROMIUM, TOTAL	9/16/2015 14:05	P09-04A-091515-1	208	94.7	UG_L	6	3	50.00
P09-06B	CHROMIUM, TOTAL	10/3/2013 12:45	P09-06B-100313	6270	2080	UG_L	4	4	100.00
P09-07B	CHROMIUM, TOTAL	10/3/2013 11:09	P09-07B-100313	31600	13900	UG_L	4	3	75.00
P09-08B	CHROMIUM, TOTAL	9/13/2016 11:00	P09-08B-ME45-1	2490	1360	UG_L	4	4	100.00
P09-09	CHROMIUM, TOTAL	9/26/2012 14:20	P09-09-092612	6700	1120	UG_L	33	31	93.94
P09-10	CHROMIUM, TOTAL	4/22/2008 14:40	P09-10-042208	6510	905	UG_L	33	27	81.82
P09-11B	CHROMIUM, TOTAL	9/9/2015 12:20	P09-11B-090915-1	378	207	UG_L	4	2	50.00
P09-12B	CHROMIUM, TOTAL	10/14/2013 14:00	P09-12B-101413	3810	1930	UG_L	4	4	100.00
P09-01	COBALT	1/28/2002 0:00	P09-01-NWG-012802	288	288	UG_L	2	1	50.00
P09-09	COBALT					UG_L	1	0	0.00
P09-10	COBALT	1/23/2002 0:00	P09-10-NWG-012302	431	431	UG_L	1	1	100.00
P09-01	COPPER	3/18/2010 3:25	P09-01-031810	2020	372	UG_L	34	32	94.12
P09-02A	COPPER	9/14/2016 13:35	P09-02A-ME45-1	918	206	UG_L	7	5	71.43
P09-03A	COPPER	9/16/2015 14:30	P09-03A-091515-1	63.4 J	21.5	UG_L	5	4	80.00
P09-04A	COPPER	9/16/2015 14:05	P09-04A-091515-1	51.2 J	25	UG_L	6	3	50.00
P09-06B	COPPER	10/16/2012 15:04	P09-06B-101612	677	276	UG_L	4	4	100.00
P09-07B	COPPER	10/16/2012 15:49	P09-07B-101612	807	591	UG_L	4	3	75.00
P09-08B	COPPER	10/15/2013 12:10	P09-08B-101513	25.3	25.2	UG_L	4	2	50.00
P09-09	COPPER	3/29/2011 14:06	P09-09-033011	2860 J	295	UG_L	33	30	90.91
P09-10	COPPER	1/23/2002 0:00	P09-10-NWG-012302	1180	129	UG_L	33	18	54.55
P09-11B	COPPER					UG_L	4	0	0.00
P09-12B	COPPER	10/16/2012 16:00	P09-12B-101612	3170	1350	UG_L	4	4	100.00
P09-01	IRON	1/28/2002 0:00	P09-01-NWG-012802	2240000	408558.5	UG_L	34	34	100.00
P09-02A	IRON	9/14/2016 13:35	P09-02A-ME45-1	672000	120000	UG_L	7	7	100.00
P09-03A	IRON	9/16/2015 14:30	P09-03A-091515-1	91200	20100	UG_L	5	5	100.00
P09-04A	IRON	9/16/2015 14:05	P09-04A-091515-1	8940 J	4000	UG_L	6	4	66.67
P09-06B	IRON	10/16/2012 15:04	P09-06B-101612	197000	96300	UG_L	4	4	100.00
P09-07B	IRON	10/3/2013 11:09	P09-07B-100313	460000	356000	UG_L	4	3	75.00
P09-08B	IRON	10/15/2013 12:10	P09-08B-101513	349000	155000	UG_L	4	4	100.00
P09-09	IRON	9/9/2015 12:00	P09-09-090915-1	2200000	384000	UG_L	33	33	100.00
P09-10	IRON	1/23/2002 0:00	P09-10-NWG-012302	1910000	137000	UG_L	33	33	100.00
P09-11B	IRON	10/15/2013 10:30	P09-11B-101513	1970	1910	UG_L	4	3	75.00
P09-12B	IRON	10/16/2012 16:00	P09-12B-101612	1770000	807000	UG_L	4	4	100.00
P09-01	LEAD	4/29/2003 0:00	P09-01-NWG-042903	976 J	178	UG_L	34	31	91.18
P09-02A	LEAD	9/14/2016 13:35	P09-02A-ME45-1	712	247	UG_L	7	3	42.86
P09-03A	LEAD	10/15/2013 13:00	P09-03A-101513	4.8	2.1	UG_L	5	3	60.00
P09-04A	LEAD	9/12/2016 12:00	P09-04A-ME45-1	9.5 J	5.4	UG_L	6	2	33.33
P09-06B	LEAD	10/16/2012 15:04	P09-06B-101612	626	283	UG_L	4	4	100.00
P09-07B	LEAD	9/13/2016 10:40	P09-07B-ME45-1	441	353	UG_L	4	3	75.00
P09-08B	LEAD	9/13/2016 11:00	P09-08B-ME45-1	321	164	UG_L	4	2	50.00
P09-09	LEAD	4/6/2009 12:13	P09-09-040609	1050	165	UG_L	33	24	72.73
P09-10	LEAD	1/23/2002 0:00	P09-10-NWG-012302	555	66.5	UG_L	33	19	57.58
P09-11B	LEAD					UG_L	4	0	0.00
P09-12B	LEAD	10/16/2012 16:00	P09-12B-101612	2570	1220	UG_L	4	4	100.00
P09-01	MAGNESIUM	1/28/2002 0:00	P09-01-NWG-012802	1090000	952000	UG_L	2	2	100.00
P09-09	MAGNESIUM	1/23/2002 0:00	P09-09-NWG-012302	205000	205000	UG_L	1	1	100.00
P09-10	MAGNESIUM	1/23/2002 0:00	P09-10-NWG-012302	337000	337000	UG_L	1	1	100.00
P09-01	MANGANESE	11/6/2007 12:00	P09-01_20071106	21900	6340	UG_L	34	34	100.00
P09-02A	MANGANESE	9/14/2016 13:35	P09-02A-ME45-1	4120	872	UG_L	7	7	100.00
P09-03A	MANGANESE	9/16/2015 14:30	P09-03A-091515-1	451	118	UG_L	5	5	100.00
P09-04A	MANGANESE	9/16/2015 14:05	P09-04A-091515-1	67.7 J	34.2	UG_L	6	5	83.33
P09-06B	MANGANESE	10/16/2012 15:04	P09-06B-101612	1470	863	UG_L	4	4	100.00
P09-07B	MANGANESE	9/13/2016 10:40	P09-07B-ME45-1	4700	2780	UG_L	4	4	100.00
P09-08B	MANGANESE	9/13/2016 11:00	P09-08B-ME45-1	3060	2040	UG_L	4	4	100.00
P09-09	MANGANESE	9/9/2015 12:00	P09-09-090915-1	11700	1600	UG_L	33	33	100.00
P09-10	MANGANESE	1/23/2002 0:00	P09-10-NWG-012302	14800	824	UG_L	33	33	100.00
P09-11B	MANGANESE	9/16/2016 13:45	P09-11B-ME45-1	859	372	UG_L	4	3	75.00
P09-12B	MANGANESE	10/16/2012 16:00	P09-12B-101612	13900	8150	UG_L	4	4	100.00
P09-01	MERCURY	9/5/2002 0:00	P09-01-NWG-090502	0.54 J	0.18	UG_L	33	14	42.42
P09-02A	MERCURY	9/22/2010 10:53	P09-02A-092210	0.14 J	0.14	UG_L	7	1	14.29
P09-03A	MERCURY	9/16/2015 14:30	P09-03A-091515-1	0.074 J	0.074	UG_L	5	1	20.00
P09-04A	MERCURY	9/16/2015 14:05	P09-04A-091515-1	0.063 J	0.063	UG_L	6	1	16.67
P09-06B	MERCURY	10/16/2012 15:04	P09-06B-101612	0.64	0.64	UG_L	4	1	25.00
P09-07B	MERCURY	10/16/2012 15:49	P09-07B-101612	0.91	0.63	UG_L	4	3	75.00
P09-08B	MERCURY	9/8/2015 11:20	P09-08B-090815-1	0.062 J-	0.051	UG_L	4	2	50.00
P09-09	MERCURY	9/9/2015 12:00	P09-09-090915-1	5 J-	0.79	UG_L	32	18	56.25
P09-10	MERCURY	9/8/2015 12:30	P09-10-090815-1	9.3 J-	1.8	UG_L	32	8	25.00
P09-11B	MERCURY					UG_L	4	0	0.00
P09-12B	MERCURY	10/14/2013 14:00	P09-12B-101413	11.6	5.7	UG_L	4	3	75.00
P09-01	NICKEL	11/6/2007 12:00	P09-01_20071106	8630	1330	UG_L	34	33	97.06
P09-02A	NICKEL	9/14/2016 13:35	P09-02A-ME45-1	1130	193	UG_L	7	7	100.00
P09-03A	NICKEL	9/16/2015 14:30	P09-03A-091515-1	264 J	77	UG_L	5	5	100.00
P09-04A	NICKEL	9/16/2015 14:05	P09-04A-091515-1	111 J	44.3	UG_L	6	6	100.00
P09-06B	NICKEL	10/3/2013 12:45	P09-06B-100313	1410	782	UG_L	4	4	100.00
P09-07B	NICKEL	10/3/2013 11:09	P09-07B-100313	5250	2780	UG_L	4	4	100.00
P09-08B	NICKEL	10/15/2013 12:10	P09-08B-101513	2740	1300	UG_L	4	4	100.00
P09-09	NICKEL	4/6/2009 12:13	P09-09-040609	1680	219	UG_L	33	31	93.94
P09-10	NICKEL	1/23/2002 0:00	P09-10-NWG-012302	2320	183	UG_L	33	26	78.79
P09-11B	NICKEL	9/9/2015 12:20	P09-11B-090915-1	66.7	41.2	UG_L	4	4	100.00
P09-12B	NICKEL	9/8/2015 10:40	P09-12B-090815-1	4220	2490	UG_L	4	4	100.00
P09-01	POTASSIUM	1/28/2002 0:00	P09-01-NWG-012802	368000	305000	UG_L	2	2	100.00
P09-09	POTASSIUM	1/23/2002 0:00	P09-09-NWG-012302	60700	60700	UG_L	1	1	100.00
P09-10	POTASSIUM	1/23/2002 0:00	P09-10-NWG-012302	71500 J	71500	UG_L	1	1	100.00
P09-01	SELENIUM					UG_L	2	0	0.00
P09-09	SELENIUM					UG_L	1	0	0.00
P09-10	SELENIUM					UG_L	1	0	0.00
P09-01	SILVER					UG_L	2	0	0.00
P09-09	SILVER					UG_L	1	0	0.00
P09-10	SILVER					UG_L	1	0	0.00
P09-01	SODIUM	2/26/2002 0:00	P09-01-NWG-022602	8220000 J	7440000	UG_L	2	2	100.00
P09-09	SODIUM	1/23/2002 0:00	P09-09-NWG-012302	1850000 J	1850000	UG_L	1	1	100.00
P09-10	SODIUM	1/23/2002 0:00	P09-10-NWG-012302	165000 J	165000	UG_L	1	1	100.00
P09-01	VANADIUM	1/28/2002 0:00	P09-01-NWG-012802	1430	1430	UG_L	2	1	50.00
P09-09	VANADIUM					UG_L	1	0	0.00
P09-10	VANADIUM	1/23/2002 0:00	P09-10-NWG-012302	1560	1560	UG_L	1	1	100.00
P09-01	ZINC	1/28/2002 0:00	P09-01-NWG-012802	4840	1070	UG_L	34	33	97.06
P09-02A	ZINC	9/14/2016 13:35	P09-02A-ME45-1	3550	915	UG_L	7	4	57.14
P09-03A	ZINC	9/16/2015 14:30	P09-03A-091515-1	3520 J	1070	UG_L	5	4	80.00
P09-04A	ZINC	9/12/2016 12:00	P09-04A-ME45-1	3080	835	UG_L	6	4	66.67
P09-06B	ZINC	9/13/2016 10:50	P09-06B-ME45-1	138000	35000	UG_L	4	4	100.00
P09-07B	ZINC	9/13/2016 10:40	P09-07B-ME45-1	42700	11300	UG_L	4	4	100.00
P09-08B	ZINC	9/13/2016 11:00	P09-08B-ME45-1	39800	13300	UG_L	4	3	75.00
P09-09	ZINC	4/6/2009 12:13	P09-09-040609	2910	491	UG_L	33	31	93.94
P09-10	ZINC	9/8/2015 12:30	P09-10-090815-1	2820	295	UG_L	33	25	75.76
P09-11B	ZINC	9/16/2016 13:45	P09-11B-ME45-1	160	90.9	UG_L	4	2	50.00
P09-12B	ZINC	10/16/2012 16:00	P09-12B-101612	9160	4240	UG_L	4	4	100.00
PCBs				PCBs					
P09-01	AROCLOR-1016					UG_L	30	0	0.00
P09-02A	AROCLOR-1016					UG_L	4	0	0.00
P09-09	AROCLOR-1016					UG_L	30	0	0.00
P09-10	AROCLOR-1016					UG_L	30	0	0.00
P09-11B	AROCLOR-1016					UG_L	2	0	0.00
P09-01	AROCLOR-1221					UG_L	30	0	0.00
P09-02A	AROCLOR-1221					UG_L	4	0	0.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P09-09	AROCLOR-1221					UG_L	30	0	0.00
P09-10	AROCLOR-1221					UG_L	30	0	0.00
P09-11B	AROCLOR-1221					UG_L	2	0	0.00
P09-01	AROCLOR-1232					UG_L	30	0	0.00
P09-02A	AROCLOR-1232					UG_L	4	0	0.00
P09-09	AROCLOR-1232					UG_L	30	0	0.00
P09-10	AROCLOR-1232					UG_L	30	0	0.00
P09-11B	AROCLOR-1232					UG_L	2	0	0.00
P09-01	AROCLOR-1242					UG_L	30	0	0.00
P09-02A	AROCLOR-1242					UG_L	4	0	0.00
P09-09	AROCLOR-1242					UG_L	30	0	0.00
P09-10	AROCLOR-1242					UG_L	30	0	0.00
P09-11B	AROCLOR-1242					UG_L	2	0	0.00
P09-01	AROCLOR-1248					UG_L	30	0	0.00
P09-02A	AROCLOR-1248					UG_L	4	0	0.00
P09-09	AROCLOR-1248					UG_L	30	0	0.00
P09-10	AROCLOR-1248					UG_L	30	0	0.00
P09-11B	AROCLOR-1248					UG_L	2	0	0.00
P09-01	AROCLOR-1254					UG_L	30	0	0.00
P09-02A	AROCLOR-1254					UG_L	4	0	0.00
P09-09	AROCLOR-1254					UG_L	30	0	0.00
P09-10	AROCLOR-1254					UG_L	30	0	0.00
P09-11B	AROCLOR-1254					UG_L	2	0	0.00
P09-01	AROCLOR-1260	1/15/2003 0:00	P09-01-NWG-011503	1.2	0.42	UG_L	30	3	10.00
P09-02A	AROCLOR-1260					UG_L	4	0	0.00
P09-09	AROCLOR-1260	11/6/2006 16:00	P09-09-20061106	0.93	0.4	UG_L	30	4	13.33
P09-10	AROCLOR-1260	6/7/2005 0:00	P09-10	0.19 J	0.12	UG_L	30	3	10.00
P09-11B	AROCLOR-1260					UG_L	2	0	0.00
P09-01	POLYCHLORINATED BIPHENYLS (PCBS)	1/15/2003 0:00	P09-01-NWG-011503	1.2	0.42	UG_L	28	3	10.71
P09-02A	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	3	0	0.00
P09-09	POLYCHLORINATED BIPHENYLS (PCBS)	11/6/2006 16:00	P09-09-20061106	0.93	0.4	UG_L	28	4	14.29
P09-10	POLYCHLORINATED BIPHENYLS (PCBS)	6/7/2005 0:00	P09-10	0.19	0.12	UG_L	28	3	10.71
P09-11B	POLYCHLORINATED BIPHENYLS (PCBS)					UG_L	1	0	0.00
Pesticides				Pesticides					
P09-01	4,4-DDD					UG_L	18	0	0.00
P09-09	4,4-DDD					UG_L	16	0	0.00
P09-10	4,4-DDD					UG_L	21	0	0.00
P09-11B	4,4-DDD					UG_L	2	0	0.00
P09-01	4,4-DDE					UG_L	18	0	0.00
P09-09	4,4-DDE					UG_L	16	0	0.00
P09-10	4,4-DDE					UG_L	21	0	0.00
P09-11B	4,4-DDE					UG_L	2	0	0.00
P09-01	4,4-DDT					UG_L	18	0	0.00
P09-09	4,4-DDT					UG_L	16	0	0.00
P09-10	4,4-DDT	6/15/2004 0:00	P09-10-NWG-061504	0.0073 J	0.0073	UG_L	21	1	4.76
P09-11B	4,4-DDT					UG_L	2	0	0.00
P09-01	ALDRIN					UG_L	18	0	0.00
P09-09	ALDRIN					UG_L	16	0	0.00
P09-10	ALDRIN					UG_L	21	0	0.00
P09-11B	ALDRIN					UG_L	2	0	0.00
P09-01	ALPHA-BHC					UG_L	18	0	0.00
P09-09	ALPHA-BHC					UG_L	16	0	0.00
P09-10	ALPHA-BHC					UG_L	21	0	0.00
P09-11B	ALPHA-BHC					UG_L	2	0	0.00
P09-01	ALPHA-CHLORDANE					UG_L	18	0	0.00
P09-09	ALPHA-CHLORDANE					UG_L	16	0	0.00
P09-10	ALPHA-CHLORDANE					UG_L	21	0	0.00
P09-11B	ALPHA-CHLORDANE					UG_L	2	0	0.00
P09-01	BETA-BHC					UG_L	18	0	0.00
P09-09	BETA-BHC					UG_L	16	0	0.00
P09-10	BETA-BHC					UG_L	21	0	0.00
P09-11B	BETA-BHC					UG_L	2	0	0.00
P09-01	DELTA-BHC					UG_L	18	0	0.00
P09-09	DELTA-BHC					UG_L	16	0	0.00
P09-10	DELTA-BHC					UG_L	21	0	0.00
P09-11B	DELTA-BHC					UG_L	2	0	0.00
P09-01	DIELDRIN					UG_L	18	0	0.00
P09-09	DIELDRIN					UG_L	16	0	0.00
P09-10	DIELDRIN	1/23/2002 0:00	P09-10-NWG-012302	0.0053 J	0.0053	UG_L	21	1	4.76
P09-11B	DIELDRIN					UG_L	2	0	0.00
P09-01	ENDOSULFAN I					UG_L	18	0	0.00
P09-09	ENDOSULFAN I					UG_L	16	0	0.00
P09-10	ENDOSULFAN I					UG_L	21	0	0.00
P09-11B	ENDOSULFAN I					UG_L	2	0	0.00
P09-01	ENDOSULFAN II					UG_L	18	0	0.00
P09-09	ENDOSULFAN II					UG_L	16	0	0.00
P09-10	ENDOSULFAN II					UG_L	21	0	0.00
P09-11B	ENDOSULFAN II					UG_L	2	0	0.00
P09-01	ENDOSULFAN SULFATE					UG_L	17	0	0.00
P09-09	ENDOSULFAN SULFATE					UG_L	15	0	0.00
P09-10	ENDOSULFAN SULFATE					UG_L	20	0	0.00
P09-11B	ENDOSULFAN SULFATE					UG_L	2	0	0.00
P09-01	ENDRIN					UG_L	18	0	0.00
P09-09	ENDRIN					UG_L	16	0	0.00
P09-10	ENDRIN					UG_L	21	0	0.00
P09-11B	ENDRIN					UG_L	2	0	0.00
P09-01	ENDRIN KETONE					UG_L	18	0	0.00
P09-09	ENDRIN KETONE					UG_L	16	0	0.00
P09-10	ENDRIN KETONE					UG_L	21	0	0.00
P09-11B	ENDRIN KETONE					UG_L	2	0	0.00
P09-01	HEPTACHLOR	3/14/2007 0:00	P09-01_20070314	0.013 J	0.013	UG_L	18	1	5.56
P09-09	HEPTACHLOR					UG_L	16	0	0.00
P09-10	HEPTACHLOR					UG_L	21	0	0.00
P09-11B	HEPTACHLOR					UG_L	2	0	0.00
P09-01	HEPTACHLOR EPOXIDE					UG_L	18	0	0.00
P09-09	HEPTACHLOR EPOXIDE					UG_L	16	0	0.00
P09-10	HEPTACHLOR EPOXIDE	9/8/2003 0:00	P09-10-NWG-090803	0.005 J	0.005	UG_L	21	1	4.76
P09-11B	HEPTACHLOR EPOXIDE					UG_L	2	0	0.00
P09-01	HEXACHLOROBENZENE	6/25/2003 0:00	P09-01-NWG-062503	0.0071	0.0066	UG_L	15	2	13.33
P09-04A	HEXACHLOROBENZENE					UG_L	1	0	0.00
P09-06B	HEXACHLOROBENZENE					UG_L	1	0	0.00
P09-08B	HEXACHLOROBENZENE					UG_L	1	0	0.00
P09-09	HEXACHLOROBENZENE	3/14/2007 0:00	P09-09_20070314	0.0096 J	0.0096	UG_L	15	1	6.67
P09-10	HEXACHLOROBENZENE					UG_L	19	0	0.00
P09-11B	HEXACHLOROBENZENE					UG_L	3	0	0.00
P09-12B	HEXACHLOROBENZENE					UG_L	1	0	0.00
P09-01	LINDANE					UG_L	18	0	0.00
P09-09	LINDANE					UG_L	16	0	0.00
P09-10	LINDANE					UG_L	21	0	0.00
P09-11B	LINDANE					UG_L	2	0	0.00
P09-01	METHOXYCHLOR					UG_L	18	0	0.00
P09-09	METHOXYCHLOR					UG_L	16	0	0.00
P09-10	METHOXYCHLOR					UG_L	21	0	0.00
P09-11B	METHOXYCHLOR					UG_L	2	0	0.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
SVOCs				SVOCs					
P09-01	1,2,4-TRICHLOROBENZENE					UG_L	12	0	0.00
P09-04A	1,2,4-TRICHLOROBENZENE					UG_L	1	0	0.00
P09-06B	1,2,4-TRICHLOROBENZENE					UG_L	1	0	0.00
P09-08B	1,2,4-TRICHLOROBENZENE					UG_L	1	0	0.00
P09-09	1,2,4-TRICHLOROBENZENE					UG_L	15	0	0.00
P09-10	1,2,4-TRICHLOROBENZENE					UG_L	20	0	0.00
P09-11B	1,2,4-TRICHLOROBENZENE					UG_L	3	0	0.00
P09-12B	1,2,4-TRICHLOROBENZENE					UG_L	1	0	0.00
P09-01	1,2-DICHLOROBENZENE					UG_L	12	0	0.00
P09-04A	1,2-DICHLOROBENZENE					UG_L	1	0	0.00
P09-06B	1,2-DICHLOROBENZENE					UG_L	1	0	0.00
P09-08B	1,2-DICHLOROBENZENE					UG_L	1	0	0.00
P09-09	1,2-DICHLOROBENZENE					UG_L	15	0	0.00
P09-10	1,2-DICHLOROBENZENE					UG_L	20	0	0.00
P09-11B	1,2-DICHLOROBENZENE					UG_L	3	0	0.00
P09-12B	1,2-DICHLOROBENZENE					UG_L	1	0	0.00
P09-01	1,3-DICHLOROBENZENE					UG_L	12	0	0.00
P09-04A	1,3-DICHLOROBENZENE					UG_L	1	0	0.00
P09-06B	1,3-DICHLOROBENZENE					UG_L	1	0	0.00
P09-08B	1,3-DICHLOROBENZENE					UG_L	1	0	0.00
P09-09	1,3-DICHLOROBENZENE					UG_L	15	0	0.00
P09-10	1,3-DICHLOROBENZENE					UG_L	20	0	0.00
P09-11B	1,3-DICHLOROBENZENE					UG_L	3	0	0.00
P09-12B	1,3-DICHLOROBENZENE					UG_L	1	0	0.00
P09-01	1,4-DICHLOROBENZENE					UG_L	12	0	0.00
P09-04A	1,4-DICHLOROBENZENE					UG_L	1	0	0.00
P09-06B	1,4-DICHLOROBENZENE					UG_L	1	0	0.00
P09-08B	1,4-DICHLOROBENZENE					UG_L	1	0	0.00
P09-09	1,4-DICHLOROBENZENE					UG_L	15	0	0.00
P09-10	1,4-DICHLOROBENZENE					UG_L	20	0	0.00
P09-11B	1,4-DICHLOROBENZENE					UG_L	3	0	0.00
P09-12B	1,4-DICHLOROBENZENE					UG_L	1	0	0.00
P09-10	1-METHYLNAPHTHALENE					UG_L	2	0	0.00
P09-01	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	11	0	0.00
P09-04A	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	1	0	0.00
P09-06B	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	1	0	0.00
P09-08B	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	1	0	0.00
P09-09	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	11	0	0.00
P09-10	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	16	0	0.00
P09-11B	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	1	0	0.00
P09-12B	2,2'-OXYBIS(1-CHLOROPROPANE)					UG_L	1	0	0.00
P09-01	2,4,6-TRICHLOROPHENOL					UG_L	7	0	0.00
P09-04A	2,4,6-TRICHLOROPHENOL					UG_L	1	0	0.00
P09-06B	2,4,6-TRICHLOROPHENOL					UG_L	1	0	0.00
P09-08B	2,4,6-TRICHLOROPHENOL					UG_L	1	0	0.00
P09-09	2,4,6-TRICHLOROPHENOL					UG_L	15	0	0.00
P09-10	2,4,6-TRICHLOROPHENOL					UG_L	20	0	0.00
P09-11B	2,4,6-TRICHLOROPHENOL					UG_L	3	0	0.00
P09-12B	2,4,6-TRICHLOROPHENOL					UG_L	1	0	0.00
P09-01	2,4-DICHLOROPHENOL					UG_L	7	0	0.00
P09-04A	2,4-DICHLOROPHENOL					UG_L	1	0	0.00
P09-06B	2,4-DICHLOROPHENOL					UG_L	1	0	0.00
P09-08B	2,4-DICHLOROPHENOL					UG_L	1	0	0.00
P09-09	2,4-DICHLOROPHENOL					UG_L	15	0	0.00
P09-10	2,4-DICHLOROPHENOL					UG_L	20	0	0.00
P09-11B	2,4-DICHLOROPHENOL					UG_L	3	0	0.00
P09-12B	2,4-DICHLOROPHENOL					UG_L	1	0	0.00
P09-01	2,4-DIMETHYLPHENOL					UG_L	4	0	0.00
P09-04A	2,4-DIMETHYLPHENOL					UG_L	1	0	0.00
P09-06B	2,4-DIMETHYLPHENOL					UG_L	1	0	0.00
P09-08B	2,4-DIMETHYLPHENOL					UG_L	1	0	0.00
P09-09	2,4-DIMETHYLPHENOL					UG_L	12	0	0.00
P09-10	2,4-DIMETHYLPHENOL					UG_L	15	0	0.00
P09-11B	2,4-DIMETHYLPHENOL					UG_L	3	0	0.00
P09-12B	2,4-DIMETHYLPHENOL					UG_L	1	0	0.00
P09-01	2,4-DINITROPHENOL					UG_L	7	0	0.00
P09-04A	2,4-DINITROPHENOL					UG_L	1	0	0.00
P09-06B	2,4-DINITROPHENOL					UG_L	1	0	0.00
P09-08B	2,4-DINITROPHENOL					UG_L	1	0	0.00
P09-09	2,4-DINITROPHENOL					UG_L	15	0	0.00
P09-10	2,4-DINITROPHENOL					UG_L	20	0	0.00
P09-11B	2,4-DINITROPHENOL					UG_L	3	0	0.00
P09-12B	2,4-DINITROPHENOL					UG_L	1	0	0.00
P09-01	2,4-DINITROTOLUENE					UG_L	12	0	0.00
P09-04A	2,4-DINITROTOLUENE					UG_L	1	0	0.00
P09-06B	2,4-DINITROTOLUENE					UG_L	1	0	0.00
P09-08B	2,4-DINITROTOLUENE					UG_L	1	0	0.00
P09-09	2,4-DINITROTOLUENE					UG_L	14	0	0.00
P09-10	2,4-DINITROTOLUENE					UG_L	20	0	0.00
P09-11B	2,4-DINITROTOLUENE					UG_L	3	0	0.00
P09-12B	2,4-DINITROTOLUENE					UG_L	1	0	0.00
P09-01	2,6-DINITROTOLUENE					UG_L	12	0	0.00
P09-04A	2,6-DINITROTOLUENE					UG_L	1	0	0.00
P09-06B	2,6-DINITROTOLUENE					UG_L	1	0	0.00
P09-08B	2,6-DINITROTOLUENE					UG_L	1	0	0.00
P09-09	2,6-DINITROTOLUENE					UG_L	14	0	0.00
P09-10	2,6-DINITROTOLUENE					UG_L	20	0	0.00
P09-11B	2,6-DINITROTOLUENE					UG_L	3	0	0.00
P09-12B	2,6-DINITROTOLUENE					UG_L	1	0	0.00
P09-01	2-CHLORONAPHTHALENE					UG_L	12	0	0.00
P09-04A	2-CHLORONAPHTHALENE					UG_L	1	0	0.00
P09-06B	2-CHLORONAPHTHALENE					UG_L	1	0	0.00
P09-08B	2-CHLORONAPHTHALENE					UG_L	1	0	0.00
P09-09	2-CHLORONAPHTHALENE					UG_L	15	0	0.00
P09-10	2-CHLORONAPHTHALENE					UG_L	20	0	0.00
P09-11B	2-CHLORONAPHTHALENE					UG_L	3	0	0.00
P09-12B	2-CHLORONAPHTHALENE					UG_L	1	0	0.00
P09-01	2-CHLOROPHENOL					UG_L	7	0	0.00
P09-04A	2-CHLOROPHENOL					UG_L	1	0	0.00
P09-06B	2-CHLOROPHENOL					UG_L	1	0	0.00
P09-08B	2-CHLOROPHENOL					UG_L	1	0	0.00
P09-09	2-CHLOROPHENOL					UG_L	15	0	0.00
P09-10	2-CHLOROPHENOL					UG_L	20	0	0.00
P09-11B	2-CHLOROPHENOL					UG_L	3	0	0.00
P09-12B	2-CHLOROPHENOL					UG_L	1	0	0.00
P09-01	2-METHYLNAPHTHALENE	3/14/2007 0:00	P09-01_20070314	0.067 J	0.067	UG_L	17	1	5.88
P09-04A	2-METHYLNAPHTHALENE					UG_L	1	0	0.00
P09-06B	2-METHYLNAPHTHALENE					UG_L	1	0	0.00
P09-08B	2-METHYLNAPHTHALENE					UG_L	1	0	0.00
P09-09	2-METHYLNAPHTHALENE					UG_L	18	0	0.00
P09-10	2-METHYLNAPHTHALENE	3/14/2007 0:00	P09-10_20070314	0.064 J	0.055	UG_L	21	2	9.52
P09-11B	2-METHYLNAPHTHALENE					UG_L	3	0	0.00
P09-12B	2-METHYLNAPHTHALENE					UG_L	1	0	0.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P09-01	2-METHYLPHENOL					UG_L	7	0	0.00
P09-04A	2-METHYLPHENOL					UG_L	1	0	0.00
P09-06B	2-METHYLPHENOL					UG_L	1	0	0.00
P09-08B	2-METHYLPHENOL					UG_L	1	0	0.00
P09-09	2-METHYLPHENOL					UG_L	15	0	0.00
P09-10	2-METHYLPHENOL					UG_L	20	0	0.00
P09-11B	2-METHYLPHENOL					UG_L	3	0	0.00
P09-12B	2-METHYLPHENOL					UG_L	1	0	0.00
P09-01	2-NITROANILINE					UG_L	12	0	0.00
P09-04A	2-NITROANILINE					UG_L	1	0	0.00
P09-06B	2-NITROANILINE					UG_L	1	0	0.00
P09-08B	2-NITROANILINE					UG_L	1	0	0.00
P09-09	2-NITROANILINE					UG_L	14	0	0.00
P09-10	2-NITROANILINE					UG_L	20	0	0.00
P09-11B	2-NITROANILINE					UG_L	3	0	0.00
P09-12B	2-NITROANILINE					UG_L	1	0	0.00
P09-01	2-NITROPHENOL					UG_L	8	0	0.00
P09-04A	2-NITROPHENOL					UG_L	1	0	0.00
P09-06B	2-NITROPHENOL					UG_L	1	0	0.00
P09-08B	2-NITROPHENOL					UG_L	1	0	0.00
P09-09	2-NITROPHENOL					UG_L	15	0	0.00
P09-10	2-NITROPHENOL					UG_L	20	0	0.00
P09-11B	2-NITROPHENOL					UG_L	3	0	0.00
P09-12B	2-NITROPHENOL					UG_L	1	0	0.00
P09-01	3- AND 4-METHYLPHENOL	3/14/2007 0:00	P09-01_20070314	7.7 J	6.4	UG_L	4	2	50.00
P09-09	3- AND 4-METHYLPHENOL	3/14/2007 0:00	P09-09_20070314	7.8 J	7.8	UG_L	8	1	12.50
P09-10	3- AND 4-METHYLPHENOL					UG_L	10	0	0.00
P09-11B	3- AND 4-METHYLPHENOL					UG_L	1	0	0.00
P09-01	3,3-DICHLOROBENZIDINE					UG_L	11	0	0.00
P09-04A	3,3-DICHLOROBENZIDINE					UG_L	1	0	0.00
P09-06B	3,3-DICHLOROBENZIDINE					UG_L	1	0	0.00
P09-08B	3,3-DICHLOROBENZIDINE					UG_L	1	0	0.00
P09-09	3,3-DICHLOROBENZIDINE					UG_L	14	0	0.00
P09-10	3,3-DICHLOROBENZIDINE					UG_L	19	0	0.00
P09-11B	3,3-DICHLOROBENZIDINE					UG_L	3	0	0.00
P09-12B	3,3-DICHLOROBENZIDINE					UG_L	1	0	0.00
P09-01	3-NITROANILINE					UG_L	12	0	0.00
P09-04A	3-NITROANILINE					UG_L	1	0	0.00
P09-06B	3-NITROANILINE					UG_L	1	0	0.00
P09-08B	3-NITROANILINE					UG_L	1	0	0.00
P09-09	3-NITROANILINE					UG_L	14	0	0.00
P09-10	3-NITROANILINE					UG_L	20	0	0.00
P09-11B	3-NITROANILINE					UG_L	3	0	0.00
P09-12B	3-NITROANILINE					UG_L	1	0	0.00
P09-01	4,6-DINITRO-2-METHYLPHENOL					UG_L	8	0	0.00
P09-04A	4,6-DINITRO-2-METHYLPHENOL					UG_L	1	0	0.00
P09-06B	4,6-DINITRO-2-METHYLPHENOL					UG_L	1	0	0.00
P09-08B	4,6-DINITRO-2-METHYLPHENOL					UG_L	1	0	0.00
P09-09	4,6-DINITRO-2-METHYLPHENOL					UG_L	15	0	0.00
P09-10	4,6-DINITRO-2-METHYLPHENOL					UG_L	20	0	0.00
P09-11B	4,6-DINITRO-2-METHYLPHENOL					UG_L	3	0	0.00
P09-12B	4,6-DINITRO-2-METHYLPHENOL					UG_L	1	0	0.00
P09-01	4-BROMOPHENYL-PHENYLETHER					UG_L	12	0	0.00
P09-04A	4-BROMOPHENYL-PHENYLETHER					UG_L	1	0	0.00
P09-06B	4-BROMOPHENYL-PHENYLETHER					UG_L	1	0	0.00
P09-08B	4-BROMOPHENYL-PHENYLETHER					UG_L	1	0	0.00
P09-09	4-BROMOPHENYL-PHENYLETHER					UG_L	15	0	0.00
P09-10	4-BROMOPHENYL-PHENYLETHER					UG_L	20	0	0.00
P09-11B	4-BROMOPHENYL-PHENYLETHER					UG_L	3	0	0.00
P09-12B	4-BROMOPHENYL-PHENYLETHER					UG_L	1	0	0.00
P09-01	4-CHLORO-3-METHYLPHENOL					UG_L	7	0	0.00
P09-04A	4-CHLORO-3-METHYLPHENOL					UG_L	1	0	0.00
P09-06B	4-CHLORO-3-METHYLPHENOL					UG_L	1	0	0.00
P09-08B	4-CHLORO-3-METHYLPHENOL					UG_L	1	0	0.00
P09-09	4-CHLORO-3-METHYLPHENOL					UG_L	15	0	0.00
P09-10	4-CHLORO-3-METHYLPHENOL					UG_L	20	0	0.00
P09-11B	4-CHLORO-3-METHYLPHENOL					UG_L	3	0	0.00
P09-12B	4-CHLORO-3-METHYLPHENOL					UG_L	1	0	0.00
P09-01	4-CHLOROANILINE					UG_L	11	0	0.00
P09-04A	4-CHLOROANILINE					UG_L	1	0	0.00
P09-06B	4-CHLOROANILINE					UG_L	1	0	0.00
P09-08B	4-CHLOROANILINE					UG_L	1	0	0.00
P09-09	4-CHLOROANILINE					UG_L	14	0	0.00
P09-10	4-CHLOROANILINE					UG_L	19	0	0.00
P09-11B	4-CHLOROANILINE					UG_L	3	0	0.00
P09-12B	4-CHLOROANILINE					UG_L	1	0	0.00
P09-01	4-CHLOROPHENYL-PHENYLETHER					UG_L	12	0	0.00
P09-04A	4-CHLOROPHENYL-PHENYLETHER					UG_L	1	0	0.00
P09-06B	4-CHLOROPHENYL-PHENYLETHER					UG_L	1	0	0.00
P09-08B	4-CHLOROPHENYL-PHENYLETHER					UG_L	1	0	0.00
P09-09	4-CHLOROPHENYL-PHENYLETHER					UG_L	15	0	0.00
P09-10	4-CHLOROPHENYL-PHENYLETHER					UG_L	20	0	0.00
P09-11B	4-CHLOROPHENYL-PHENYLETHER					UG_L	3	0	0.00
P09-12B	4-CHLOROPHENYL-PHENYLETHER					UG_L	1	0	0.00
P09-01	4-METHYLPHENOL					UG_L	5	0	0.00
P09-04A	4-METHYLPHENOL					UG_L	1	0	0.00
P09-06B	4-METHYLPHENOL					UG_L	1	0	0.00
P09-08B	4-METHYLPHENOL					UG_L	1	0	0.00
P09-09	4-METHYLPHENOL	6/25/2003 0:00	P09-09-NWG-062503	3 J	2	UG_L	6	2	33.33
P09-10	4-METHYLPHENOL	3/16/2004 0:00	P09-10-NWG-031604	1 J	1	UG_L	9	1	11.11
P09-11B	4-METHYLPHENOL					UG_L	2	0	0.00
P09-12B	4-METHYLPHENOL					UG_L	1	0	0.00
P09-01	4-NITROANILINE					UG_L	12	0	0.00
P09-04A	4-NITROANILINE					UG_L	1	0	0.00
P09-06B	4-NITROANILINE					UG_L	1	0	0.00
P09-08B	4-NITROANILINE					UG_L	1	0	0.00
P09-09	4-NITROANILINE					UG_L	14	0	0.00
P09-10	4-NITROANILINE					UG_L	20	0	0.00
P09-11B	4-NITROANILINE					UG_L	3	0	0.00
P09-12B	4-NITROANILINE					UG_L	1	0	0.00
P09-01	4-NITROPHENOL					UG_L	7	0	0.00
P09-04A	4-NITROPHENOL					UG_L	1	0	0.00
P09-06B	4-NITROPHENOL					UG_L	1	0	0.00
P09-08B	4-NITROPHENOL					UG_L	1	0	0.00
P09-09	4-NITROPHENOL					UG_L	15	0	0.00
P09-10	4-NITROPHENOL					UG_L	20	0	0.00
P09-11B	4-NITROPHENOL					UG_L	3	0	0.00
P09-12B	4-NITROPHENOL					UG_L	1	0	0.00
P09-01	ACENAPHTHENE	9/27/2005 9:00	P09-01-20050927	0.11 J	0.11	UG_L	17	1	5.88
P09-04A	ACENAPHTHENE					UG_L	1	0	0.00
P09-06B	ACENAPHTHENE					UG_L	1	0	0.00
P09-08B	ACENAPHTHENE					UG_L	1	0	0.00
P09-09	ACENAPHTHENE					UG_L	18	0	0.00
P09-10	ACENAPHTHENE	9/27/2005 9:12	P09-10-20050927	0.044 J	0.044	UG_L	21	1	4.76
P09-11B	ACENAPHTHENE					UG_L	3	0	0.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P09-12B	ACENAPHTHENE					UG_L	1	0	0.00
P09-01	ACENAPHTHYLENE					UG_L	17	0	0.00
P09-04A	ACENAPHTHYLENE					UG_L	1	0	0.00
P09-06B	ACENAPHTHYLENE					UG_L	1	0	0.00
P09-08B	ACENAPHTHYLENE					UG_L	1	0	0.00
P09-09	ACENAPHTHYLENE	9/27/2005 9:32	P09-09-20050927	1.1	0.67	UG_L	18	2	11.11
P09-10	ACENAPHTHYLENE	9/27/2005 9:12	P09-10-20050927	0.055 J	0.055	UG_L	21	1	4.76
P09-11B	ACENAPHTHYLENE					UG_L	3	0	0.00
P09-12B	ACENAPHTHYLENE					UG_L	1	0	0.00
P09-01	ANTHRACENE					UG_L	17	0	0.00
P09-04A	ANTHRACENE					UG_L	1	0	0.00
P09-06B	ANTHRACENE					UG_L	1	0	0.00
P09-08B	ANTHRACENE					UG_L	1	0	0.00
P09-09	ANTHRACENE	9/8/2003 0:00	P09-09-NWG-090803	0.03 J	0.03	UG_L	18	1	5.56
P09-10	ANTHRACENE	3/14/2007 0:00	P09-10_20070314	0.18 J	0.09	UG_L	21	3	14.29
P09-11B	ANTHRACENE					UG_L	3	0	0.00
P09-12B	ANTHRACENE					UG_L	1	0	0.00
P09-01	BENZO(A)ANTHRACENE	9/27/2005 9:00	P09-01-20050927	0.38	0.2	UG_L	17	2	11.76
P09-04A	BENZO(A)ANTHRACENE					UG_L	1	0	0.00
P09-06B	BENZO(A)ANTHRACENE					UG_L	1	0	0.00
P09-08B	BENZO(A)ANTHRACENE					UG_L	1	0	0.00
P09-09	BENZO(A)ANTHRACENE	10/26/2004 0:00	P09-09-NWG-102604	0.18	0.12	UG_L	18	2	11.11
P09-10	BENZO(A)ANTHRACENE	3/14/2007 0:00	P09-10_20070314	0.56	0.21	UG_L	21	8	38.10
P09-11B	BENZO(A)ANTHRACENE					UG_L	3	0	0.00
P09-12B	BENZO(A)ANTHRACENE					UG_L	1	0	0.00
P09-01	BENZO(A)PYRENE					UG_L	17	0	0.00
P09-04A	BENZO(A)PYRENE					UG_L	1	0	0.00
P09-06B	BENZO(A)PYRENE					UG_L	1	0	0.00
P09-08B	BENZO(A)PYRENE					UG_L	1	0	0.00
P09-09	BENZO(A)PYRENE	10/26/2004 0:00	P09-09-NWG-102604	0.34 J	0.34	UG_L	18	1	5.56
P09-10	BENZO(A)PYRENE	3/10/2004 12:00:00 AM9/12/2016 11:50:00 AM		0.26 J	0.16	UG_L	21	6	28.57
P09-11B	BENZO(A)PYRENE					UG_L	3	0	0.00
P09-12B	BENZO(A)PYRENE					UG_L	1	0	0.00
P09-01	BENZO(B)FLUORANTHENE	9/27/2005 9:00	P09-01-20050927	0.25	0.25	UG_L	17	1	5.88
P09-04A	BENZO(B)FLUORANTHENE					UG_L	1	0	0.00
P09-06B	BENZO(B)FLUORANTHENE					UG_L	1	0	0.00
P09-08B	BENZO(B)FLUORANTHENE					UG_L	1	0	0.00
P09-09	BENZO(B)FLUORANTHENE	10/26/2004 0:00	P09-09-NWG-102604	0.22	0.2	UG_L	18	2	11.11
P09-10	BENZO(B)FLUORANTHENE	9/12/2016 11:50	P09-10-ME45-1	0.41	0.26	UG_L	21	3	14.29
P09-11B	BENZO(B)FLUORANTHENE					UG_L	3	0	0.00
P09-12B	BENZO(B)FLUORANTHENE					UG_L	1	0	0.00
P09-01	BENZO(G,H,I)PERYLENE	12/13/2005 12:00	P09-01-20051213	0.03 J	0.03	UG_L	17	1	5.88
P09-04A	BENZO(G,H,I)PERYLENE					UG_L	1	0	0.00
P09-06B	BENZO(G,H,I)PERYLENE					UG_L	1	0	0.00
P09-08B	BENZO(G,H,I)PERYLENE					UG_L	1	0	0.00
P09-09	BENZO(G,H,I)PERYLENE	6/19/2007 15:40	P09-09_20070619	0.3	0.17	UG_L	18	4	22.22
P09-10	BENZO(G,H,I)PERYLENE	9/12/2016 11:50	P09-10-ME45-1	0.23	0.16	UG_L	21	3	14.29
P09-11B	BENZO(G,H,I)PERYLENE					UG_L	3	0	0.00
P09-12B	BENZO(G,H,I)PERYLENE					UG_L	1	0	0.00
P09-01	BENZO(K)FLUORANTHENE					UG_L	17	0	0.00
P09-04A	BENZO(K)FLUORANTHENE					UG_L	1	0	0.00
P09-06B	BENZO(K)FLUORANTHENE					UG_L	1	0	0.00
P09-08B	BENZO(K)FLUORANTHENE					UG_L	1	0	0.00
P09-09	BENZO(K)FLUORANTHENE	10/26/2004 0:00	P09-09-NWG-102604	0.24	0.24	UG_L	18	1	5.56
P09-10	BENZO(K)FLUORANTHENE	3/14/2007 0:00	P09-10_20070314	0.4	0.16	UG_L	21	6	28.57
P09-11B	BENZO(K)FLUORANTHENE					UG_L	3	0	0.00
P09-12B	BENZO(K)FLUORANTHENE					UG_L	1	0	0.00
P09-01	BENZOIC ACID					UG_L	2	0	0.00
P09-09	BENZOIC ACID	6/15/2004 0:00	P09-09-NWG-061504	24.7 J	24.7	UG_L	1	1	100.00
P09-10	BENZOIC ACID	6/15/2004 0:00	P09-10-NWG-061504	13.5 J	13.5	UG_L	2	1	50.00
P09-01	BENZYL ALCOHOL					UG_L	1	0	0.00
P09-09	BENZYL ALCOHOL					UG_L	1	0	0.00
P09-10	BENZYL ALCOHOL					UG_L	2	0	0.00
P09-01	BIS(2-CHLOROETHOXY)METHANE					UG_L	12	0	0.00
P09-04A	BIS(2-CHLOROETHOXY)METHANE					UG_L	1	0	0.00
P09-06B	BIS(2-CHLOROETHOXY)METHANE					UG_L	1	0	0.00
P09-08B	BIS(2-CHLOROETHOXY)METHANE					UG_L	1	0	0.00
P09-09	BIS(2-CHLOROETHOXY)METHANE					UG_L	15	0	0.00
P09-10	BIS(2-CHLOROETHOXY)METHANE					UG_L	20	0	0.00
P09-11B	BIS(2-CHLOROETHOXY)METHANE					UG_L	3	0	0.00
P09-12B	BIS(2-CHLOROETHOXY)METHANE					UG_L	1	0	0.00
P09-01	BIS(2-CHLOROETHYL)ETHER					UG_L	12	0	0.00
P09-04A	BIS(2-CHLOROETHYL)ETHER					UG_L	1	0	0.00
P09-06B	BIS(2-CHLOROETHYL)ETHER					UG_L	1	0	0.00
P09-08B	BIS(2-CHLOROETHYL)ETHER					UG_L	1	0	0.00
P09-09	BIS(2-CHLOROETHYL)ETHER					UG_L	15	0	0.00
P09-10	BIS(2-CHLOROETHYL)ETHER					UG_L	20	0	0.00
P09-11B	BIS(2-CHLOROETHYL)ETHER					UG_L	3	0	0.00
P09-12B	BIS(2-CHLOROETHYL)ETHER					UG_L	1	0	0.00
P09-01	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	1	0	0.00
P09-09	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0	0.00
P09-10	BIS(2-CHLOROISOPROPYL)ETHER					UG_L	4	0	0.00
P09-01	BIS(2-ETHYLHEXYL)PHTHALATE	6/25/2003 0:00	P09-01-NWG-062503	3 J	1.9	UG_L	14	2	14.29
P09-04A	BIS(2-ETHYLHEXYL)PHTHALATE	9/12/2016 12:00	P09-04A-ME45-1	0.4 J	0.4	UG_L	1	1	100.00
P09-06B	BIS(2-ETHYLHEXYL)PHTHALATE	9/13/2016 10:50	P09-06B-ME45-1	0.44 J	0.44	UG_L	1	1	100.00
P09-08B	BIS(2-ETHYLHEXYL)PHTHALATE	9/13/2016 11:00	P09-08B-ME45-1	0.45 J	0.45	UG_L	1	1	100.00
P09-09	BIS(2-ETHYLHEXYL)PHTHALATE	11/7/2007 12:00	P09-09_20071107	161 J	54.8	UG_L	15	3	20.00
P09-10	BIS(2-ETHYLHEXYL)PHTHALATE	3/8/2006 0:00	P09-10_Q106	12.6 J	5.04	UG_L	20	3	15.00
P09-11B	BIS(2-ETHYLHEXYL)PHTHALATE	10/17/2012 15:17	P09-11B-101712	2.3 J	1.2	UG_L	3	2	66.67
P09-12B	BIS(2-ETHYLHEXYL)PHTHALATE	9/13/2016 11:10	P09-12B-ME45-1	0.43 J	0.43	UG_L	1	1	100.00
P09-01	BUTYLBENZYLPHTHALATE					UG_L	12	0	0.00
P09-04A	BUTYLBENZYLPHTHALATE					UG_L	1	0	0.00
P09-06B	BUTYLBENZYLPHTHALATE					UG_L	1	0	0.00
P09-08B	BUTYLBENZYLPHTHALATE					UG_L	1	0	0.00
P09-09	BUTYLBENZYLPHTHALATE	11/6/2006 16:00	P09-09-20061106	1.1 J	1.1	UG_L	15	1	6.67
P09-10	BUTYLBENZYLPHTHALATE	9/12/2016 11:50	P09-10-ME45-1	1.2 J	1.2	UG_L	20	1	5.00
P09-11B	BUTYLBENZYLPHTHALATE					UG_L	3	0	0.00
P09-12B	BUTYLBENZYLPHTHALATE					UG_L	1	0	0.00
P09-01	CARBAZOLE					UG_L	12	0	0.00
P09-04A	CARBAZOLE					UG_L	1	0	0.00
P09-06B	CARBAZOLE					UG_L	1	0	0.00
P09-08B	CARBAZOLE					UG_L	1	0	0.00
P09-09	CARBAZOLE					UG_L	15	0	0.00
P09-10	CARBAZOLE					UG_L	20	0	0.00
P09-11B	CARBAZOLE					UG_L	3	0	0.00
P09-12B	CARBAZOLE					UG_L	1	0	0.00
P09-01	CHRYSENE	4/29/2003 0:00	P09-01-NWG-042903	0.06	0.06	UG_L	17	1	5.88
P09-04A	CHRYSENE					UG_L	1	0	0.00
P09-06B	CHRYSENE					UG_L	1	0	0.00
P09-08B	CHRYSENE					UG_L	1	0	0.00
P09-09	CHRYSENE	9/8/2003 12:00:00 AM12/2/2003 12:00:00 AM		0.03 JJ	0.03	UG_L	18	2	11.11
P09-10	CHRYSENE	9/12/2016 11:50	P09-10-ME45-1	0.3	0.15	UG_L	21	6	28.57
P09-11B	CHRYSENE					UG_L	3	0	0.00
P09-12B	CHRYSENE	9/13/2016 11:10	P09-12B-ME45-1	0.13	0.13	UG_L	1	1	100.00
P09-09	CRESOLS	6/15/2004 0:00	P09-09-NWG-061504	28.1	28.1	UG_L	1	1	100.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P09-10	CRESOLS					UG_L	1	0	0.00
P09-01	DIBENZ(A,H)ANTHRACENE					UG_L	17	0	0.00
P09-04A	DIBENZ(A,H)ANTHRACENE					UG_L	1	0	0.00
P09-06B	DIBENZ(A,H)ANTHRACENE					UG_L	1	0	0.00
P09-08B	DIBENZ(A,H)ANTHRACENE					UG_L	1	0	0.00
P09-09	DIBENZ(A,H)ANTHRACENE	10/26/2004 0:00	P09-09-NWG-102604	0.4	0.4	UG_L	18	1	5.56
P09-10	DIBENZ(A,H)ANTHRACENE	3/14/2007 0:00	P09-10_20070314	0.068 J	0.068	UG_L	21	1	4.76
P09-11B	DIBENZ(A,H)ANTHRACENE					UG_L	3	0	0.00
P09-12B	DIBENZ(A,H)ANTHRACENE					UG_L	1	0	0.00
P09-01	DIBENZOFURAN					UG_L	12	0	0.00
P09-04A	DIBENZOFURAN					UG_L	1	0	0.00
P09-06B	DIBENZOFURAN					UG_L	1	0	0.00
P09-08B	DIBENZOFURAN					UG_L	1	0	0.00
P09-09	DIBENZOFURAN					UG_L	15	0	0.00
P09-10	DIBENZOFURAN					UG_L	20	0	0.00
P09-11B	DIBENZOFURAN					UG_L	3	0	0.00
P09-12B	DIBENZOFURAN					UG_L	1	0	0.00
P09-01	DIETHYLPHTHALATE	11/6/2006 14:50	P09-01-20061106	1.1 J	1.1	UG_L	13	1	7.69
P09-04A	DIETHYLPHTHALATE					UG_L	1	0	0.00
P09-06B	DIETHYLPHTHALATE					UG_L	1	0	0.00
P09-08B	DIETHYLPHTHALATE					UG_L	1	0	0.00
P09-09	DIETHYLPHTHALATE					UG_L	15	0	0.00
P09-10	DIETHYLPHTHALATE	11/6/2006 15:45	P09-10-20061106	1.1 J	1.1	UG_L	20	1	5.00
P09-11B	DIETHYLPHTHALATE					UG_L	3	0	0.00
P09-12B	DIETHYLPHTHALATE					UG_L	1	0	0.00
P09-01	DIMETHYL PHTHALATE					UG_L	12	0	0.00
P09-04A	DIMETHYL PHTHALATE					UG_L	1	0	0.00
P09-06B	DIMETHYL PHTHALATE					UG_L	1	0	0.00
P09-08B	DIMETHYL PHTHALATE					UG_L	1	0	0.00
P09-09	DIMETHYL PHTHALATE					UG_L	15	0	0.00
P09-10	DIMETHYL PHTHALATE					UG_L	20	0	0.00
P09-11B	DIMETHYL PHTHALATE					UG_L	3	0	0.00
P09-12B	DIMETHYL PHTHALATE					UG_L	1	0	0.00
P09-01	DI-N-BUTYLPHTHALATE					UG_L	12	0	0.00
P09-04A	DI-N-BUTYLPHTHALATE					UG_L	1	0	0.00
P09-06B	DI-N-BUTYLPHTHALATE					UG_L	1	0	0.00
P09-08B	DI-N-BUTYLPHTHALATE					UG_L	1	0	0.00
P09-09	DI-N-BUTYLPHTHALATE	3/14/2007 0:00	P09-09_20070314	1.4 J	1.4	UG_L	15	1	6.67
P09-10	DI-N-BUTYLPHTHALATE	3/14/2007 0:00	P09-10_20070314	1.5 J	1.5	UG_L	20	1	5.00
P09-11B	DI-N-BUTYLPHTHALATE	10/17/2012 15:17	P09-11B-101712	8.1 J	8.1	UG_L	3	1	33.33
P09-12B	DI-N-BUTYLPHTHALATE					UG_L	1	0	0.00
P09-01	DI-N-OCTYLPHTHALATE	12/2/2003 0:00	P09-01-NWG-120203	1 J	1	UG_L	12	1	8.33
P09-04A	DI-N-OCTYLPHTHALATE					UG_L	1	0	0.00
P09-06B	DI-N-OCTYLPHTHALATE					UG_L	1	0	0.00
P09-08B	DI-N-OCTYLPHTHALATE					UG_L	1	0	0.00
P09-09	DI-N-OCTYLPHTHALATE	3/14/2007 0:00	P09-09_20070314	5.7 J	5.7	UG_L	15	1	6.67
P09-10	DI-N-OCTYLPHTHALATE					UG_L	20	0	0.00
P09-11B	DI-N-OCTYLPHTHALATE					UG_L	3	0	0.00
P09-12B	DI-N-OCTYLPHTHALATE					UG_L	1	0	0.00
P09-01	FLUORANTHENE	3/16/2004 0:00	P09-01-NWG-031604	0.1	0.1	UG_L	17	1	5.88
P09-04A	FLUORANTHENE					UG_L	1	0	0.00
P09-06B	FLUORANTHENE					UG_L	1	0	0.00
P09-08B	FLUORANTHENE					UG_L	1	0	0.00
P09-09	FLUORANTHENE	10/26/2004 0:00	P09-09-NWG-102604	0.71 J	0.28	UG_L	18	7	38.89
P09-10	FLUORANTHENE	9/27/2005 9:12:00 AM9/12/2016 11:50:00 AM		0.64 J	0.36	UG_L	21	9	42.86
P09-11B	FLUORANTHENE					UG_L	3	0	0.00
P09-12B	FLUORANTHENE					UG_L	1	0	0.00
P09-01	FLUORENE					UG_L	17	0	0.00
P09-04A	FLUORENE					UG_L	1	0	0.00
P09-06B	FLUORENE					UG_L	1	0	0.00
P09-08B	FLUORENE	9/13/2016 11:00	P09-08B-ME45-1	0.11	0.11	UG_L	1	1	100.00
P09-09	FLUORENE					UG_L	18	0	0.00
P09-10	FLUORENE	11/6/2006 15:45	P09-10-20061106	0.18 J	0.18	UG_L	21	1	4.76
P09-11B	FLUORENE					UG_L	3	0	0.00
P09-12B	FLUORENE					UG_L	1	0	0.00
P09-01	HEXACHLOROBUTADIENE					UG_L	12	0	0.00
P09-04A	HEXACHLOROBUTADIENE					UG_L	1	0	0.00
P09-06B	HEXACHLOROBUTADIENE					UG_L	1	0	0.00
P09-08B	HEXACHLOROBUTADIENE					UG_L	1	0	0.00
P09-09	HEXACHLOROBUTADIENE					UG_L	15	0	0.00
P09-10	HEXACHLOROBUTADIENE					UG_L	20	0	0.00
P09-11B	HEXACHLOROBUTADIENE					UG_L	3	0	0.00
P09-12B	HEXACHLOROBUTADIENE					UG_L	1	0	0.00
P09-01	HEXACHLOROCYCLOPENTADIENE					UG_L	12	0	0.00
P09-04A	HEXACHLOROCYCLOPENTADIENE					UG_L	1	0	0.00
P09-06B	HEXACHLOROCYCLOPENTADIENE					UG_L	1	0	0.00
P09-08B	HEXACHLOROCYCLOPENTADIENE					UG_L	1	0	0.00
P09-09	HEXACHLOROCYCLOPENTADIENE					UG_L	15	0	0.00
P09-10	HEXACHLOROCYCLOPENTADIENE					UG_L	20	0	0.00
P09-11B	HEXACHLOROCYCLOPENTADIENE					UG_L	3	0	0.00
P09-12B	HEXACHLOROCYCLOPENTADIENE					UG_L	1	0	0.00
P09-01	HEXACHLOROETHANE					UG_L	12	0	0.00
P09-04A	HEXACHLOROETHANE					UG_L	1	0	0.00
P09-06B	HEXACHLOROETHANE					UG_L	1	0	0.00
P09-08B	HEXACHLOROETHANE					UG_L	1	0	0.00
P09-09	HEXACHLOROETHANE					UG_L	15	0	0.00
P09-10	HEXACHLOROETHANE					UG_L	20	0	0.00
P09-11B	HEXACHLOROETHANE					UG_L	3	0	0.00
P09-12B	HEXACHLOROETHANE					UG_L	1	0	0.00
P09-01	INDENO(1,2,3-CD)PYRENE	6/19/2007 17:15	P09-01_20070619	0.078 J	0.049	UG_L	17	2	11.76
P09-04A	INDENO(1,2,3-CD)PYRENE					UG_L	1	0	0.00
P09-06B	INDENO(1,2,3-CD)PYRENE					UG_L	1	0	0.00
P09-08B	INDENO(1,2,3-CD)PYRENE					UG_L	1	0	0.00
P09-09	INDENO(1,2,3-CD)PYRENE	9/27/2005 9:32	P09-09-20050927	0.69	0.55	UG_L	18	2	11.11
P09-10	INDENO(1,2,3-CD)PYRENE	9/27/2005 9:12	P09-10-20050927	0.24	0.16	UG_L	21	5	23.81
P09-11B	INDENO(1,2,3-CD)PYRENE					UG_L	3	0	0.00
P09-12B	INDENO(1,2,3-CD)PYRENE					UG_L	1	0	0.00
P09-01	ISOPHORONE					UG_L	12	0	0.00
P09-04A	ISOPHORONE					UG_L	1	0	0.00
P09-06B	ISOPHORONE					UG_L	1	0	0.00
P09-08B	ISOPHORONE					UG_L	1	0	0.00
P09-09	ISOPHORONE					UG_L	15	0	0.00
P09-10	ISOPHORONE					UG_L	20	0	0.00
P09-11B	ISOPHORONE					UG_L	3	0	0.00
P09-12B	ISOPHORONE					UG_L	1	0	0.00
P09-01	NAPHTHALENE					UG_L	17	0	0.00
P09-04A	NAPHTHALENE					UG_L	1	0	0.00
P09-06B	NAPHTHALENE					UG_L	1	0	0.00
P09-08B	NAPHTHALENE					UG_L	1	0	0.00
P09-09	NAPHTHALENE					UG_L	18	0	0.00
P09-10	NAPHTHALENE	11/6/2006 15:45	P09-10-20061106	0.17 J	0.17	UG_L	21	1	4.76
P09-11B	NAPHTHALENE					UG_L	3	0	0.00
P09-12B	NAPHTHALENE					UG_L	1	0	0.00
P09-01	NITROBENZENE					UG_L	11	0	0.00
P09-04A	NITROBENZENE					UG_L	1	0	0.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P09-06B	NITROBENZENE					UG_L	1	0	0.00
P09-08B	NITROBENZENE					UG_L	1	0	0.00
P09-09	NITROBENZENE					UG_L	14	0	0.00
P09-10	NITROBENZENE					UG_L	20	0	0.00
P09-11B	NITROBENZENE					UG_L	3	0	0.00
P09-12B	NITROBENZENE					UG_L	1	0	0.00
P09-01	N-NITROSODINPROPYLAMINE					UG_L	12	0	0.00
P09-04A	N-NITROSODINPROPYLAMINE					UG_L	1	0	0.00
P09-06B	N-NITROSODINPROPYLAMINE					UG_L	1	0	0.00
P09-08B	N-NITROSODINPROPYLAMINE					UG_L	1	0	0.00
P09-09	N-NITROSODINPROPYLAMINE					UG_L	15	0	0.00
P09-10	N-NITROSODINPROPYLAMINE					UG_L	20	0	0.00
P09-11B	N-NITROSODINPROPYLAMINE					UG_L	3	0	0.00
P09-12B	N-NITROSODINPROPYLAMINE					UG_L	1	0	0.00
P09-01	N-NITROSODIPHENYLAMINE					UG_L	12	0	0.00
P09-04A	N-NITROSODIPHENYLAMINE					UG_L	1	0	0.00
P09-06B	N-NITROSODIPHENYLAMINE					UG_L	1	0	0.00
P09-08B	N-NITROSODIPHENYLAMINE					UG_L	1	0	0.00
P09-09	N-NITROSODIPHENYLAMINE					UG_L	15	0	0.00
P09-10	N-NITROSODIPHENYLAMINE					UG_L	20	0	0.00
P09-11B	N-NITROSODIPHENYLAMINE					UG_L	3	0	0.00
P09-12B	N-NITROSODIPHENYLAMINE					UG_L	1	0	0.00
P09-01	PHENANTHRENE	10/26/2004 0:00	P09-01-NWG-102604	0.09 J	0.09	UG_L	17	1	5.88
P09-04A	PHENANTHRENE					UG_L	1	0	0.00
P09-06B	PHENANTHRENE	9/13/2016 10:50	P09-06B-ME45-1	0.12	0.12	UG_L	1	1	100.00
P09-08B	PHENANTHRENE	9/13/2016 11:00	P09-08B-ME45-1	0.1	0.1	UG_L	1	1	100.00
P09-09	PHENANTHRENE	6/19/2007 15:40	P09-09_20070619	0.73	0.49	UG_L	18	4	22.22
P09-10	PHENANTHRENE	3/14/2007 0:00	P09-10_20070314	10	1.9	UG_L	21	7	33.33
P09-11B	PHENANTHRENE					UG_L	3	0	0.00
P09-12B	PHENANTHRENE					UG_L	1	0	0.00
P09-01	PHENOL					UG_L	7	0	0.00
P09-04A	PHENOL					UG_L	1	0	0.00
P09-06B	PHENOL					UG_L	1	0	0.00
P09-08B	PHENOL					UG_L	1	0	0.00
P09-09	PHENOL					UG_L	15	0	0.00
P09-10	PHENOL					UG_L	20	0	0.00
P09-11B	PHENOL					UG_L	3	0	0.00
P09-12B	PHENOL					UG_L	1	0	0.00
P09-01	PYRENE	3/14/2007 0:00	P09-01_20070314	0.14 J	0.1	UG_L	17	3	17.65
P09-04A	PYRENE					UG_L	1	0	0.00
P09-06B	PYRENE	9/13/2016 10:50	P09-06B-ME45-1	0.13	0.13	UG_L	1	1	100.00
P09-08B	PYRENE					UG_L	1	0	0.00
P09-09	PYRENE	11/7/2007 12:00	P09-09_20071107	0.2 J	0.14	UG_L	18	3	16.67
P09-10	PYRENE	10/26/2004 0:00	P09-10-NWG-102604	0.85 J	0.47	UG_L	21	8	38.10
P09-11B	PYRENE					UG_L	3	0	0.00
P09-12B	PYRENE					UG_L	1	0	0.00
SVOCs, SIM				SVOCs, SIM					
P09-01	2,4,5-TRICHLOROPHENOL					UG_L	10	0	0.00
P09-04A	2,4,5-TRICHLOROPHENOL					UG_L	1	0	0.00
P09-06B	2,4,5-TRICHLOROPHENOL					UG_L	1	0	0.00
P09-08B	2,4,5-TRICHLOROPHENOL					UG_L	1	0	0.00
P09-09	2,4,5-TRICHLOROPHENOL					UG_L	15	0	0.00
P09-10	2,4,5-TRICHLOROPHENOL	8/10/2004 0:00	P09-10-NWG-081004	0.24 J	0.24	UG_L	20	1	5.00
P09-11B	2,4,5-TRICHLOROPHENOL	10/15/2013 10:30	P09-11B-101513	0.085 J	0.085	UG_L	3	1	33.33
P09-12B	2,4,5-TRICHLOROPHENOL					UG_L	1	0	0.00
P09-01	PENTACHLOROPHENOL					UG_L	10	0	0.00
P09-04A	PENTACHLOROPHENOL					UG_L	1	0	0.00
P09-06B	PENTACHLOROPHENOL					UG_L	1	0	0.00
P09-08B	PENTACHLOROPHENOL					UG_L	1	0	0.00
P09-09	PENTACHLOROPHENOL					UG_L	15	0	0.00
P09-10	PENTACHLOROPHENOL	8/10/2004 0:00	P09-10-NWG-081004	1.9	1.9	UG_L	20	1	5.00
P09-11B	PENTACHLOROPHENOL					UG_L	3	0	0.00
P09-12B	PENTACHLOROPHENOL					UG_L	1	0	0.00
VOCs				VOCs					
P09-01	1,1,1-TRICHLOROETHANE					UG_L	27	0	0.00
P09-02A	1,1,1-TRICHLOROETHANE					UG_L	6	0	0.00
P09-03A	1,1,1-TRICHLOROETHANE					UG_L	5	0	0.00
P09-04A	1,1,1-TRICHLOROETHANE					UG_L	5	0	0.00
P09-06B	1,1,1-TRICHLOROETHANE					UG_L	5	0	0.00
P09-07B	1,1,1-TRICHLOROETHANE					UG_L	5	0	0.00
P09-08B	1,1,1-TRICHLOROETHANE					UG_L	5	0	0.00
P09-09	1,1,1-TRICHLOROETHANE					UG_L	30	0	0.00
P09-10	1,1,1-TRICHLOROETHANE					UG_L	31	0	0.00
P09-11B	1,1,1-TRICHLOROETHANE					UG_L	5	0	0.00
P09-12B	1,1,1-TRICHLOROETHANE					UG_L	5	0	0.00
P09-01	1,1,2,2-TETRACHLOROETHANE					UG_L	28	0	0.00
P09-02A	1,1,2,2-TETRACHLOROETHANE					UG_L	6	0	0.00
P09-03A	1,1,2,2-TETRACHLOROETHANE					UG_L	5	0	0.00
P09-04A	1,1,2,2-TETRACHLOROETHANE					UG_L	5	0	0.00
P09-06B	1,1,2,2-TETRACHLOROETHANE					UG_L	5	0	0.00
P09-07B	1,1,2,2-TETRACHLOROETHANE					UG_L	5	0	0.00
P09-08B	1,1,2,2-TETRACHLOROETHANE					UG_L	5	0	0.00
P09-09	1,1,2,2-TETRACHLOROETHANE					UG_L	30	0	0.00
P09-10	1,1,2,2-TETRACHLOROETHANE					UG_L	31	0	0.00
P09-11B	1,1,2,2-TETRACHLOROETHANE					UG_L	5	0	0.00
P09-12B	1,1,2,2-TETRACHLOROETHANE					UG_L	5	0	0.00
P09-01	1,1,2-TRICHLOROETHANE					UG_L	28	0	0.00
P09-02A	1,1,2-TRICHLOROETHANE					UG_L	6	0	0.00
P09-03A	1,1,2-TRICHLOROETHANE					UG_L	5	0	0.00
P09-04A	1,1,2-TRICHLOROETHANE					UG_L	5	0	0.00
P09-06B	1,1,2-TRICHLOROETHANE					UG_L	5	0	0.00
P09-07B	1,1,2-TRICHLOROETHANE					UG_L	5	0	0.00
P09-08B	1,1,2-TRICHLOROETHANE					UG_L	5	0	0.00
P09-09	1,1,2-TRICHLOROETHANE					UG_L	30	0	0.00
P09-10	1,1,2-TRICHLOROETHANE					UG_L	31	0	0.00
P09-11B	1,1,2-TRICHLOROETHANE					UG_L	5	0	0.00
P09-12B	1,1,2-TRICHLOROETHANE					UG_L	5	0	0.00
P09-01	1,1-DICHLOROETHANE					UG_L	27	0	0.00
P09-02A	1,1-DICHLOROETHANE					UG_L	6	0	0.00
P09-03A	1,1-DICHLOROETHANE					UG_L	5	0	0.00
P09-04A	1,1-DICHLOROETHANE					UG_L	5	0	0.00
P09-06B	1,1-DICHLOROETHANE					UG_L	5	0	0.00
P09-07B	1,1-DICHLOROETHANE					UG_L	5	0	0.00
P09-08B	1,1-DICHLOROETHANE					UG_L	5	0	0.00
P09-09	1,1-DICHLOROETHANE					UG_L	30	0	0.00
P09-10	1,1-DICHLOROETHANE					UG_L	31	0	0.00
P09-11B	1,1-DICHLOROETHANE					UG_L	5	0	0.00
P09-12B	1,1-DICHLOROETHANE					UG_L	5	0	0.00
P09-01	1,1-DICHLOROETHENE					UG_L	28	0	0.00
P09-02A	1,1-DICHLOROETHENE					UG_L	6	0	0.00
P09-03A	1,1-DICHLOROETHENE					UG_L	5	0	0.00
P09-04A	1,1-DICHLOROETHENE					UG_L	5	0	0.00
P09-06B	1,1-DICHLOROETHENE					UG_L	5	0	0.00
P09-07B	1,1-DICHLOROETHENE					UG_L	5	0	0.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P09-08B	1,1-DICHLOROETHENE					UG_L	5	0	0.00
P09-09	1,1-DICHLOROETHENE					UG_L	30	0	0.00
P09-10	1,1-DICHLOROETHENE					UG_L	31	0	0.00
P09-11B	1,1-DICHLOROETHENE					UG_L	5	0	0.00
P09-12B	1,1-DICHLOROETHENE					UG_L	5	0	0.00
P09-01	1,2-DICHLOROETHANE					UG_L	28	0	0.00
P09-02A	1,2-DICHLOROETHANE					UG_L	6	0	0.00
P09-03A	1,2-DICHLOROETHANE					UG_L	5	0	0.00
P09-04A	1,2-DICHLOROETHANE					UG_L	5	0	0.00
P09-06B	1,2-DICHLOROETHANE					UG_L	5	0	0.00
P09-07B	1,2-DICHLOROETHANE					UG_L	5	0	0.00
P09-08B	1,2-DICHLOROETHANE					UG_L	5	0	0.00
P09-09	1,2-DICHLOROETHANE					UG_L	30	0	0.00
P09-10	1,2-DICHLOROETHANE					UG_L	31	0	0.00
P09-11B	1,2-DICHLOROETHANE					UG_L	5	0	0.00
P09-12B	1,2-DICHLOROETHANE					UG_L	5	0	0.00
P09-01	1,2-DICHLOROETHENE, TOTAL					UG_L	26	0	0.00
P09-02A	1,2-DICHLOROETHENE, TOTAL	3/29/2011 12:04	P09-02A-032911	0.42 J	0.42	UG_L	4	1	25.00
P09-03A	1,2-DICHLOROETHENE, TOTAL					UG_L	3	0	0.00
P09-04A	1,2-DICHLOROETHENE, TOTAL					UG_L	3	0	0.00
P09-06B	1,2-DICHLOROETHENE, TOTAL					UG_L	1	0	0.00
P09-07B	1,2-DICHLOROETHENE, TOTAL					UG_L	1	0	0.00
P09-08B	1,2-DICHLOROETHENE, TOTAL					UG_L	1	0	0.00
P09-09	1,2-DICHLOROETHENE, TOTAL					UG_L	28	0	0.00
P09-10	1,2-DICHLOROETHENE, TOTAL	12/2/2003 0:00	P09-10-NWG-120203	0.2	0.17	UG_L	29	2	6.90
P09-11B	1,2-DICHLOROETHENE, TOTAL					UG_L	1	0	0.00
P09-12B	1,2-DICHLOROETHENE, TOTAL					UG_L	1	0	0.00
P09-01	1,2-DICHLOROPROPANE					UG_L	27	0	0.00
P09-02A	1,2-DICHLOROPROPANE					UG_L	6	0	0.00
P09-03A	1,2-DICHLOROPROPANE					UG_L	5	0	0.00
P09-04A	1,2-DICHLOROPROPANE					UG_L	5	0	0.00
P09-06B	1,2-DICHLOROPROPANE					UG_L	5	0	0.00
P09-07B	1,2-DICHLOROPROPANE					UG_L	5	0	0.00
P09-08B	1,2-DICHLOROPROPANE					UG_L	5	0	0.00
P09-09	1,2-DICHLOROPROPANE					UG_L	30	0	0.00
P09-10	1,2-DICHLOROPROPANE					UG_L	31	0	0.00
P09-11B	1,2-DICHLOROPROPANE					UG_L	5	0	0.00
P09-12B	1,2-DICHLOROPROPANE					UG_L	5	0	0.00
P09-01	2-BUTANONE	3/18/2010 3:25	P09-01-031810	5	3.15	UG_L	24	3	12.50
P09-02A	2-BUTANONE					UG_L	6	0	0.00
P09-03A	2-BUTANONE					UG_L	5	0	0.00
P09-04A	2-BUTANONE					UG_L	5	0	0.00
P09-06B	2-BUTANONE					UG_L	4	0	0.00
P09-07B	2-BUTANONE	10/3/2013 11:09	P09-07B-100313	15 J	15	UG_L	4	1	25.00
P09-08B	2-BUTANONE	10/3/2013 12:10	P09-08B-100313	43 J	43	UG_L	4	1	25.00
P09-09	2-BUTANONE	10/1/2008 15:35	P09-09-100108	5.2 J	3.61	UG_L	26	7	26.92
P09-10	2-BUTANONE	10/1/2008 15:15	P09-10-100108	0.93 J	0.93	UG_L	26	1	3.85
P09-11B	2-BUTANONE					UG_L	4	0	0.00
P09-12B	2-BUTANONE	10/14/2013 14:00	P09-12B-101413	16	16	UG_L	4	1	25.00
P09-01	2-HEXANONE					UG_L	26	0	0.00
P09-02A	2-HEXANONE					UG_L	6	0	0.00
P09-03A	2-HEXANONE					UG_L	5	0	0.00
P09-04A	2-HEXANONE					UG_L	5	0	0.00
P09-06B	2-HEXANONE					UG_L	5	0	0.00
P09-07B	2-HEXANONE					UG_L	5	0	0.00
P09-08B	2-HEXANONE					UG_L	5	0	0.00
P09-09	2-HEXANONE	10/1/2008 15:35	P09-09-100108	2.6 J	2.4	UG_L	27	2	7.41
P09-10	2-HEXANONE					UG_L	28	0	0.00
P09-11B	2-HEXANONE					UG_L	5	0	0.00
P09-12B	2-HEXANONE					UG_L	5	0	0.00
P09-01	4-METHYL-2-PENTANONE					UG_L	27	0	0.00
P09-02A	4-METHYL-2-PENTANONE					UG_L	6	0	0.00
P09-03A	4-METHYL-2-PENTANONE					UG_L	5	0	0.00
P09-04A	4-METHYL-2-PENTANONE					UG_L	5	0	0.00
P09-06B	4-METHYL-2-PENTANONE					UG_L	5	0	0.00
P09-07B	4-METHYL-2-PENTANONE					UG_L	5	0	0.00
P09-08B	4-METHYL-2-PENTANONE					UG_L	5	0	0.00
P09-09	4-METHYL-2-PENTANONE	3/16/2004 0:00	P09-09-NWG-031604	1.1 J	1.1	UG_L	30	1	3.33
P09-10	4-METHYL-2-PENTANONE					UG_L	30	0	0.00
P09-11B	4-METHYL-2-PENTANONE					UG_L	5	0	0.00
P09-12B	4-METHYL-2-PENTANONE					UG_L	5	0	0.00
P09-01	ACETONE	8/10/2004 0:00	P09-01-NWG-081004	40.3	13.4	UG_L	24	7	29.17
P09-02A	ACETONE	10/11/2011 10:20	P09-02A-101111	3.2 J	2.9	UG_L	6	2	33.33
P09-03A	ACETONE	10/15/2013 13:00	P09-03A-101513	9.1 J	6.8	UG_L	5	2	40.00
P09-04A	ACETONE	10/10/2011 16:18	P09-04A-101011	9.5	9.5	UG_L	5	1	20.00
P09-06B	ACETONE	9/22/2014 14:00	P09-06B-092214-1	23	15	UG_L	5	2	40.00
P09-07B	ACETONE	10/3/2013 11:09	P09-07B-100313	35 J	35	UG_L	4	1	25.00
P09-08B	ACETONE	10/3/2013 12:10	P09-08B-100313	200 J	100	UG_L	4	2	50.00
P09-09	ACETONE	3/14/2007 0:00	P09-09_20070314	70.3 J	23	UG_L	27	17	62.96
P09-10	ACETONE	9/8/2003 0:00	P09-10-NWG-090803	15 J	5.5	UG_L	27	9	33.33
P09-11B	ACETONE					UG_L	4	0	0.00
P09-12B	ACETONE	10/14/2013 14:00	P09-12B-101413	370	130	UG_L	4	3	75.00
P09-01	BENZENE					UG_L	28	0	0.00
P09-02A	BENZENE					UG_L	6	0	0.00
P09-03A	BENZENE					UG_L	5	0	0.00
P09-04A	BENZENE					UG_L	5	0	0.00
P09-06B	BENZENE					UG_L	5	0	0.00
P09-07B	BENZENE					UG_L	5	0	0.00
P09-08B	BENZENE					UG_L	5	0	0.00
P09-09	BENZENE					UG_L	30	0	0.00
P09-10	BENZENE	12/2/2003 0:00	P09-10-NWG-120203	28 J	5.33	UG_L	31	30	96.77
P09-11B	BENZENE					UG_L	5	0	0.00
P09-12B	BENZENE					UG_L	5	0	0.00
P09-01	BROMODICHLOROMETHANE					UG_L	27	0	0.00
P09-02A	BROMODICHLOROMETHANE					UG_L	6	0	0.00
P09-03A	BROMODICHLOROMETHANE					UG_L	5	0	0.00
P09-04A	BROMODICHLOROMETHANE					UG_L	5	0	0.00
P09-06B	BROMODICHLOROMETHANE					UG_L	5	0	0.00
P09-07B	BROMODICHLOROMETHANE					UG_L	5	0	0.00
P09-08B	BROMODICHLOROMETHANE					UG_L	5	0	0.00
P09-09	BROMODICHLOROMETHANE					UG_L	30	0	0.00
P09-10	BROMODICHLOROMETHANE					UG_L	31	0	0.00
P09-11B	BROMODICHLOROMETHANE					UG_L	5	0	0.00
P09-12B	BROMODICHLOROMETHANE					UG_L	5	0	0.00
P09-01	BROMOFORM					UG_L	27	0	0.00
P09-02A	BROMOFORM					UG_L	6	0	0.00
P09-03A	BROMOFORM					UG_L	5	0	0.00
P09-04A	BROMOFORM					UG_L	5	0	0.00
P09-06B	BROMOFORM					UG_L	5	0	0.00
P09-07B	BROMOFORM					UG_L	5	0	0.00
P09-08B	BROMOFORM					UG_L	5	0	0.00
P09-09	BROMOFORM					UG_L	30	0	0.00
P09-10	BROMOFORM					UG_L	31	0	0.00
P09-11B	BROMOFORM					UG_L	5	0	0.00
P09-12B	BROMOFORM					UG_L	5	0	0.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P09-01	BROMOMETHANE					UG_L	27	0	0.00
P09-02A	BROMOMETHANE					UG_L	6	0	0.00
P09-03A	BROMOMETHANE					UG_L	5	0	0.00
P09-04A	BROMOMETHANE					UG_L	5	0	0.00
P09-06B	BROMOMETHANE					UG_L	5	0	0.00
P09-07B	BROMOMETHANE					UG_L	5	0	0.00
P09-08B	BROMOMETHANE					UG_L	5	0	0.00
P09-09	BROMOMETHANE					UG_L	30	0	0.00
P09-10	BROMOMETHANE					UG_L	31	0	0.00
P09-11B	BROMOMETHANE					UG_L	5	0	0.00
P09-12B	BROMOMETHANE					UG_L	5	0	0.00
P09-01	CARBON DISULFIDE	3/18/2010 3:25	P09-01-031810	6	3.3	UG_L	27	5	18.52
P09-02A	CARBON DISULFIDE					UG_L	6	0	0.00
P09-03A	CARBON DISULFIDE					UG_L	5	0	0.00
P09-04A	CARBON DISULFIDE					UG_L	5	0	0.00
P09-06B	CARBON DISULFIDE	10/3/2013 12:45	P09-06B-100313	0.62 J	0.6	UG_L	5	2	40.00
P09-07B	CARBON DISULFIDE	10/3/2013 11:09	P09-07B-100313	1.4	1.4	UG_L	5	1	20.00
P09-08B	CARBON DISULFIDE	9/22/2014 13:50	P09-08B-092214-1	1	1	UG_L	5	1	20.00
P09-09	CARBON DISULFIDE	9/27/2005 9:32	P09-09-20050927	9.4	2.63	UG_L	30	16	53.33
P09-10	CARBON DISULFIDE	10/14/2009 11:25	P09-10-101409	2	0.9	UG_L	31	3	9.68
P09-11B	CARBON DISULFIDE					UG_L	5	0	0.00
P09-12B	CARBON DISULFIDE					UG_L	5	0	0.00
P09-01	CARBON TETRACHLORIDE					UG_L	27	0	0.00
P09-02A	CARBON TETRACHLORIDE					UG_L	6	0	0.00
P09-03A	CARBON TETRACHLORIDE					UG_L	5	0	0.00
P09-04A	CARBON TETRACHLORIDE					UG_L	5	0	0.00
P09-06B	CARBON TETRACHLORIDE					UG_L	5	0	0.00
P09-07B	CARBON TETRACHLORIDE					UG_L	5	0	0.00
P09-08B	CARBON TETRACHLORIDE					UG_L	5	0	0.00
P09-09	CARBON TETRACHLORIDE					UG_L	30	0	0.00
P09-10	CARBON TETRACHLORIDE					UG_L	31	0	0.00
P09-11B	CARBON TETRACHLORIDE					UG_L	5	0	0.00
P09-12B	CARBON TETRACHLORIDE					UG_L	5	0	0.00
P09-01	CHLOROBENZENE					UG_L	27	0	0.00
P09-02A	CHLOROBENZENE					UG_L	6	0	0.00
P09-03A	CHLOROBENZENE					UG_L	5	0	0.00
P09-04A	CHLOROBENZENE					UG_L	5	0	0.00
P09-06B	CHLOROBENZENE					UG_L	5	0	0.00
P09-07B	CHLOROBENZENE					UG_L	5	0	0.00
P09-08B	CHLOROBENZENE					UG_L	5	0	0.00
P09-09	CHLOROBENZENE					UG_L	30	0	0.00
P09-10	CHLOROBENZENE					UG_L	31	0	0.00
P09-11B	CHLOROBENZENE					UG_L	5	0	0.00
P09-12B	CHLOROBENZENE					UG_L	5	0	0.00
P09-01	CHLOROETHANE					UG_L	27	0	0.00
P09-02A	CHLOROETHANE					UG_L	6	0	0.00
P09-03A	CHLOROETHANE					UG_L	5	0	0.00
P09-04A	CHLOROETHANE					UG_L	5	0	0.00
P09-06B	CHLOROETHANE					UG_L	5	0	0.00
P09-07B	CHLOROETHANE					UG_L	5	0	0.00
P09-08B	CHLOROETHANE					UG_L	5	0	0.00
P09-09	CHLOROETHANE	3/16/2004 0:00	P09-09-NWG-031604	0.32 J	0.28	UG_L	30	2	6.67
P09-10	CHLOROETHANE	12/2/2003 0:00	P09-10-NWG-120203	0.7 J	0.44	UG_L	31	4	12.90
P09-11B	CHLOROETHANE					UG_L	5	0	0.00
P09-12B	CHLOROETHANE					UG_L	5	0	0.00
P09-01	CHLOROFORM					UG_L	28	0	0.00
P09-02A	CHLOROFORM					UG_L	6	0	0.00
P09-03A	CHLOROFORM					UG_L	5	0	0.00
P09-04A	CHLOROFORM					UG_L	5	0	0.00
P09-06B	CHLOROFORM					UG_L	5	0	0.00
P09-07B	CHLOROFORM					UG_L	5	0	0.00
P09-08B	CHLOROFORM					UG_L	5	0	0.00
P09-09	CHLOROFORM					UG_L	30	0	0.00
P09-10	CHLOROFORM					UG_L	31	0	0.00
P09-11B	CHLOROFORM					UG_L	5	0	0.00
P09-12B	CHLOROFORM					UG_L	5	0	0.00
P09-01	CHLOROMETHANE					UG_L	27	0	0.00
P09-02A	CHLOROMETHANE					UG_L	6	0	0.00
P09-03A	CHLOROMETHANE					UG_L	5	0	0.00
P09-04A	CHLOROMETHANE					UG_L	5	0	0.00
P09-06B	CHLOROMETHANE					UG_L	5	0	0.00
P09-07B	CHLOROMETHANE					UG_L	5	0	0.00
P09-08B	CHLOROMETHANE					UG_L	5	0	0.00
P09-09	CHLOROMETHANE					UG_L	30	0	0.00
P09-10	CHLOROMETHANE					UG_L	31	0	0.00
P09-11B	CHLOROMETHANE					UG_L	5	0	0.00
P09-12B	CHLOROMETHANE					UG_L	5	0	0.00
P09-01	CIS-1,2-DICHLOROETHENE					UG_L	28	0	0.00
P09-02A	CIS-1,2-DICHLOROETHENE	3/29/2011 12:04	P09-02A-032911	0.42 J	0.42	UG_L	6	1	16.67
P09-03A	CIS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-04A	CIS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-06B	CIS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-07B	CIS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-08B	CIS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-09	CIS-1,2-DICHLOROETHENE					UG_L	30	0	0.00
P09-10	CIS-1,2-DICHLOROETHENE	12/2/2003 0:00	P09-10-NWG-120203	0.2 J	0.17	UG_L	31	2	6.45
P09-11B	CIS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-12B	CIS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-01	CIS-1,3-DICHLOROPROPENE					UG_L	27	0	0.00
P09-02A	CIS-1,3-DICHLOROPROPENE					UG_L	6	0	0.00
P09-03A	CIS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-04A	CIS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-06B	CIS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-07B	CIS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-08B	CIS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-09	CIS-1,3-DICHLOROPROPENE					UG_L	30	0	0.00
P09-10	CIS-1,3-DICHLOROPROPENE					UG_L	31	0	0.00
P09-11B	CIS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-12B	CIS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-01	DIBROMOCHLOROMETHANE					UG_L	27	0	0.00
P09-02A	DIBROMOCHLOROMETHANE					UG_L	6	0	0.00
P09-03A	DIBROMOCHLOROMETHANE					UG_L	5	0	0.00
P09-04A	DIBROMOCHLOROMETHANE					UG_L	5	0	0.00
P09-06B	DIBROMOCHLOROMETHANE					UG_L	5	0	0.00
P09-07B	DIBROMOCHLOROMETHANE					UG_L	5	0	0.00
P09-08B	DIBROMOCHLOROMETHANE					UG_L	5	0	0.00
P09-09	DIBROMOCHLOROMETHANE					UG_L	30	0	0.00
P09-10	DIBROMOCHLOROMETHANE					UG_L	31	0	0.00
P09-11B	DIBROMOCHLOROMETHANE					UG_L	5	0	0.00
P09-12B	DIBROMOCHLOROMETHANE					UG_L	5	0	0.00
P09-01	ETHYLBENZENE					UG_L	27	0	0.00
P09-02A	ETHYLBENZENE					UG_L	6	0	0.00
P09-03A	ETHYLBENZENE					UG_L	5	0	0.00
P09-04A	ETHYLBENZENE					UG_L	5	0	0.00
P09-06B	ETHYLBENZENE					UG_L	5	0	0.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P09-07B	ETHYLBENZENE					UG_L	5	0	0.00
P09-08B	ETHYLBENZENE					UG_L	5	0	0.00
P09-09	ETHYLBENZENE	5/1/2003 0:00	P09-09-NWG-050103	0.62 J	0.62	UG_L	30	1	3.33
P09-10	ETHYLBENZENE					UG_L	31	0	0.00
P09-11B	ETHYLBENZENE					UG_L	5	0	0.00
P09-12B	ETHYLBENZENE					UG_L	5	0	0.00
P09-01	M- AND P-XYLENE					UG_L	3	0	0.00
P09-02A	M- AND P-XYLENE					UG_L	1	0	0.00
P09-03A	M- AND P-XYLENE					UG_L	1	0	0.00
P09-04A	M- AND P-XYLENE					UG_L	1	0	0.00
P09-06B	M- AND P-XYLENE					UG_L	1	0	0.00
P09-07B	M- AND P-XYLENE					UG_L	1	0	0.00
P09-08B	M- AND P-XYLENE					UG_L	1	0	0.00
P09-09	M- AND P-XYLENE					UG_L	3	0	0.00
P09-10	M- AND P-XYLENE					UG_L	3	0	0.00
P09-11B	M- AND P-XYLENE					UG_L	1	0	0.00
P09-12B	M- AND P-XYLENE					UG_L	1	0	0.00
P09-01	METHYLENE CHLORIDE					UG_L	27	0	0.00
P09-02A	METHYLENE CHLORIDE					UG_L	6	0	0.00
P09-03A	METHYLENE CHLORIDE					UG_L	5	0	0.00
P09-04A	METHYLENE CHLORIDE					UG_L	5	0	0.00
P09-06B	METHYLENE CHLORIDE					UG_L	5	0	0.00
P09-07B	METHYLENE CHLORIDE					UG_L	5	0	0.00
P09-08B	METHYLENE CHLORIDE					UG_L	5	0	0.00
P09-09	METHYLENE CHLORIDE					UG_L	30	0	0.00
P09-10	METHYLENE CHLORIDE	6/19/2007 15:20	P09-10_20070619	1.1 J	1.1	UG_L	31	1	3.23
P09-11B	METHYLENE CHLORIDE					UG_L	5	0	0.00
P09-12B	METHYLENE CHLORIDE					UG_L	5	0	0.00
P09-01	O-XYLENE					UG_L	3	0	0.00
P09-02A	O-XYLENE					UG_L	1	0	0.00
P09-03A	O-XYLENE					UG_L	1	0	0.00
P09-04A	O-XYLENE					UG_L	1	0	0.00
P09-06B	O-XYLENE					UG_L	1	0	0.00
P09-07B	O-XYLENE					UG_L	1	0	0.00
P09-08B	O-XYLENE					UG_L	1	0	0.00
P09-09	O-XYLENE					UG_L	3	0	0.00
P09-10	O-XYLENE					UG_L	3	0	0.00
P09-11B	O-XYLENE					UG_L	1	0	0.00
P09-12B	O-XYLENE					UG_L	1	0	0.00
P09-01	STYRENE					UG_L	27	0	0.00
P09-02A	STYRENE					UG_L	6	0	0.00
P09-03A	STYRENE					UG_L	5	0	0.00
P09-04A	STYRENE					UG_L	5	0	0.00
P09-06B	STYRENE					UG_L	5	0	0.00
P09-07B	STYRENE					UG_L	5	0	0.00
P09-08B	STYRENE					UG_L	5	0	0.00
P09-09	STYRENE					UG_L	30	0	0.00
P09-10	STYRENE					UG_L	31	0	0.00
P09-11B	STYRENE					UG_L	5	0	0.00
P09-12B	STYRENE					UG_L	5	0	0.00
P09-01	TETRACHLOROETHENE					UG_L	28	0	0.00
P09-02A	TETRACHLOROETHENE					UG_L	6	0	0.00
P09-03A	TETRACHLOROETHENE					UG_L	5	0	0.00
P09-04A	TETRACHLOROETHENE					UG_L	5	0	0.00
P09-06B	TETRACHLOROETHENE					UG_L	5	0	0.00
P09-07B	TETRACHLOROETHENE					UG_L	5	0	0.00
P09-08B	TETRACHLOROETHENE					UG_L	5	0	0.00
P09-09	TETRACHLOROETHENE					UG_L	30	0	0.00
P09-10	TETRACHLOROETHENE					UG_L	31	0	0.00
P09-11B	TETRACHLOROETHENE	10/17/2012 15:17	P09-11B-101712	1.5	1.5	UG_L	5	1	20.00
P09-12B	TETRACHLOROETHENE					UG_L	5	0	0.00
P09-01	TOLUENE	6/25/2003 0:00	P09-01-NWG-062503	0.39 J	0.39	UG_L	27	1	3.70
P09-02A	TOLUENE					UG_L	6	0	0.00
P09-03A	TOLUENE					UG_L	5	0	0.00
P09-04A	TOLUENE					UG_L	5	0	0.00
P09-06B	TOLUENE	9/22/2014 14:00	P09-06B-092214-1	1.2	1.2	UG_L	5	1	20.00
P09-07B	TOLUENE	9/22/2014 14:30	P09-07B-092214-1	2.2	2.2	UG_L	5	1	20.00
P09-08B	TOLUENE					UG_L	5	0	0.00
P09-09	TOLUENE	5/1/2003 0:00	P09-09-NWG-050103	29	7.4	UG_L	30	4	13.33
P09-10	TOLUENE	6/7/2005 0:00	P09-10	2 J	1.1	UG_L	31	2	6.45
P09-11B	TOLUENE					UG_L	5	0	0.00
P09-12B	TOLUENE					UG_L	5	0	0.00
P09-01	TRANS-1,2-DICHLOROETHENE					UG_L	28	0	0.00
P09-02A	TRANS-1,2-DICHLOROETHENE					UG_L	6	0	0.00
P09-03A	TRANS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-04A	TRANS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-06B	TRANS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-07B	TRANS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-08B	TRANS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-09	TRANS-1,2-DICHLOROETHENE					UG_L	30	0	0.00
P09-10	TRANS-1,2-DICHLOROETHENE					UG_L	31	0	0.00
P09-11B	TRANS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-12B	TRANS-1,2-DICHLOROETHENE					UG_L	5	0	0.00
P09-01	TRANS-1,3-DICHLOROPROPENE					UG_L	27	0	0.00
P09-02A	TRANS-1,3-DICHLOROPROPENE					UG_L	6	0	0.00
P09-03A	TRANS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-04A	TRANS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-06B	TRANS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-07B	TRANS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-08B	TRANS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-09	TRANS-1,3-DICHLOROPROPENE					UG_L	30	0	0.00
P09-10	TRANS-1,3-DICHLOROPROPENE					UG_L	31	0	0.00
P09-11B	TRANS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-12B	TRANS-1,3-DICHLOROPROPENE					UG_L	5	0	0.00
P09-01	TRICHLOROETHENE					UG_L	28	0	0.00
P09-02A	TRICHLOROETHENE					UG_L	6	0	0.00
P09-03A	TRICHLOROETHENE					UG_L	5	0	0.00
P09-04A	TRICHLOROETHENE					UG_L	5	0	0.00
P09-06B	TRICHLOROETHENE					UG_L	5	0	0.00
P09-07B	TRICHLOROETHENE					UG_L	5	0	0.00
P09-08B	TRICHLOROETHENE					UG_L	5	0	0.00
P09-09	TRICHLOROETHENE					UG_L	30	0	0.00
P09-10	TRICHLOROETHENE					UG_L	31	0	0.00
P09-11B	TRICHLOROETHENE					UG_L	5	0	0.00
P09-12B	TRICHLOROETHENE					UG_L	5	0	0.00
P09-01	VINYL CHLORIDE					UG_L	28	0	0.00
P09-02A	VINYL CHLORIDE					UG_L	6	0	0.00
P09-03A	VINYL CHLORIDE					UG_L	5	0	0.00
P09-04A	VINYL CHLORIDE					UG_L	5	0	0.00
P09-06B	VINYL CHLORIDE					UG_L	5	0	0.00
P09-07B	VINYL CHLORIDE					UG_L	5	0	0.00
P09-08B	VINYL CHLORIDE					UG_L	5	0	0.00
P09-09	VINYL CHLORIDE					UG_L	30	0	0.00
P09-10	VINYL CHLORIDE	12/2/2003 0:00	P09-10-NWG-120203	35	7.36	UG_L	31	28	90.32
P09-11B	VINYL CHLORIDE					UG_L	5	0	0.00

TABLE F-2
SUMMARY OF DESCRIPTIVE STATISTICS FOR PIEZOMETER AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
13 OF 13

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected	Percent Detects
P09-12B	VINYL CHLORIDE					UG_L	5	0	0.00
P09-01	XYLENES, TOTAL					UG_L	8	0	0.00
P09-02A	XYLENES, TOTAL					UG_L	6	0	0.00
P09-03A	XYLENES, TOTAL					UG_L	5	0	0.00
P09-04A	XYLENES, TOTAL					UG_L	5	0	0.00
P09-06B	XYLENES, TOTAL					UG_L	5	0	0.00
P09-07B	XYLENES, TOTAL	9/22/2014 14:30	P09-07B-092214-1	1.8	1.8	UG_L	5	1	20.00
P09-08B	XYLENES, TOTAL					UG_L	5	0	0.00
P09-09	XYLENES, TOTAL					UG_L	8	0	0.00
P09-10	XYLENES, TOTAL					UG_L	8	0	0.00
P09-11B	XYLENES, TOTAL					UG_L	5	0	0.00
P09-12B	XYLENES, TOTAL					UG_L	5	0	0.00

Notes:
U = Not Detected; UJ = Detection Limit Approximate; J = Quantitation Approximate; R = Rejected
(1) If sample was not detected, one half of detection limit was used in calculation of average concentration.
Maximum value presented when original and duplilcate samples were analyzed
Parameters that have been detected in at least one sample since ME01 are included on the table

TABLE F-3
SUMMARY OF DESCRIPTIVE STATISTICS FOR SHALLOW SEDIMENT AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
SED09-01	ALUMINUM	10/11/2013 8:00	SED09-01-101113	8910	4780	MG_KG	33	33
SED09-02A	ALUMINUM	9/12/2016 10:35	SED09-02A-ME45-1	5200	5200	MG_KG	1	1
SED09-03A	ALUMINUM	9/12/2016 11:15	SED09-03A-ME45-1	3830	3830	MG_KG	1	1
SED09-04A	ALUMINUM	9/12/2016 11:40	SED09-04A-ME45-1	3690	3380	MG_KG	2	2
SED09-05A	ALUMINUM	9/13/2016 10:35	SED09-05A-ME45-1	4590	4590	MG_KG	1	1
SED09-06B	ALUMINUM	9/26/2016 11:10	SED09-06B-ME45-1	5080	3750	MG_KG	3	3
SED09-07B	ALUMINUM	10/3/2013 13:40	SED09-07B-100313	4130	3710	MG_KG	3	3
SED09-08B	ALUMINUM	10/3/2013 12:00	SED09-08B-100313	11700	7460	MG_KG	4	4
SED09-09	ALUMINUM	10/19/2009 15:20	SED09-09-101909	15700	8850	MG_KG	35	35
SED09-10	ALUMINUM	12/13/2005 12:40	SED09-10-20051213	13400	7090	MG_KG	33	33
SED09-11B	ALUMINUM	9/13/2016 10:50	SED09-11B-ME45-1	3770	3220	MG_KG	3	3
SED09-12B	ALUMINUM	10/14/2013 11:00	SED09-12B-101413	7480	5170	MG_KG	3	3
SED09-01	ANTIMONY	9/4/2002 0:00	SED09-01-NSD-090402	6.3 J	2.2	MG_KG	32	6
SED09-02A	ANTIMONY					MG_KG	1	0
SED09-03A	ANTIMONY					MG_KG	1	0
SED09-04A	ANTIMONY					MG_KG	2	0
SED09-05A	ANTIMONY					MG_KG	1	0
SED09-06B	ANTIMONY	10/15/2013 12:30	SED09-06B-101513	0.18 J	0.18	MG_KG	3	1
SED09-07B	ANTIMONY	10/3/2013 13:40	SED09-07B-100313	0.14 J	0.14	MG_KG	3	1
SED09-08B	ANTIMONY	9/8/2015 10:45	SED09-08B-090815-1	0.64 J	0.35	MG_KG	4	2
SED09-09	ANTIMONY	9/5/2002 0:00	SED09-09-NSD-090502	14 J	3.65	MG_KG	33	9
SED09-10	ANTIMONY	9/4/2002 0:00	SED09-10-NSD-090402	3.9 J	1.5	MG_KG	30	5
SED09-11B	ANTIMONY	10/15/2013 11:30	SED09-011B-101513	0.07 J	0.07	MG_KG	3	1
SED09-12B	ANTIMONY	10/14/2013 11:00	SED09-12B-101413	0.17 J	0.17	MG_KG	3	1
SED09-01	ARSENIC	4/30/2003 0:00	SED09-01-NSD-043003	7.7	4.31	MG_KG	32	27
SED09-02A	ARSENIC	9/12/2016 10:35	SED09-02A-ME45-1	4.2 J	4.2	MG_KG	1	1
SED09-03A	ARSENIC	9/12/2016 11:15	SED09-03A-ME45-1	2.9 J	2.9	MG_KG	1	1
SED09-04A	ARSENIC	9/9/2015 9:35	SED09-04A-090915-1	2.7	2.5	MG_KG	2	2
SED09-05A	ARSENIC	9/13/2016 10:35	SED09-05A-ME45-1	3.2 J	3.2	MG_KG	1	1
SED09-06B	ARSENIC	9/26/2016 11:10	SED09-06B-ME45-1	7.7	5	MG_KG	3	3
SED09-07B	ARSENIC	9/26/2016 11:00	SED09-07B-ME45-1	4.7	3.3	MG_KG	3	3
SED09-08B	ARSENIC	10/3/2013 12:00	SED09-08B-100313	7.7	6.6	MG_KG	4	4
SED09-09	ARSENIC	1/15/2003 0:00	SED09-09-NSD-011503	16 J	8.42	MG_KG	34	30
SED09-10	ARSENIC	4/22/2008 15:44	SED09-10-042208	25	4.9	MG_KG	32	27
SED09-11B	ARSENIC	10/17/2012 15:59	SED09-11B-101712	2.8 J	1.8	MG_KG	3	3
SED09-12B	ARSENIC	9/26/2016 10:15	SED09-12B-ME45-1	4.9	4.5	MG_KG	3	3
SED09-01	BARIUM	12/11/2001 0:00	SED09-01-NSD-121101	22.7	22.7	MG_KG	2	1
SED09-09	BARIUM	1/23/2002 0:00	SED09-09-NSD-012302	24.5 J	24.5	MG_KG	2	1
SED09-10	BARIUM	1/23/2002 0:00	SED09-10-NSD-012302	8.7 J	8.7	MG_KG	2	1
SED09-01	BERYLLIUM	3/8/2006 0:00	SED09-01_Q106	0.71	0.46	MG_KG	33	25
SED09-02A	BERYLLIUM	9/12/2016 10:35	SED09-02A-ME45-1	0.45	0.45	MG_KG	1	1
SED09-03A	BERYLLIUM	9/12/2016 11:15	SED09-03A-ME45-1	0.34	0.34	MG_KG	1	1
SED09-04A	BERYLLIUM	9/12/2016 11:40	SED09-04A-ME45-1	0.3	0.3	MG_KG	2	1
SED09-05A	BERYLLIUM	9/13/2016 10:35	SED09-05A-ME45-1	0.39	0.39	MG_KG	1	1
SED09-06B	BERYLLIUM	9/26/2016 11:10	SED09-06B-ME45-1	0.56 J	0.39	MG_KG	3	3
SED09-07B	BERYLLIUM	10/3/2013 1:40:00 PM9/26/2016 11:00:00 AM		0.34 J	0.33	MG_KG	3	3
SED09-08B	BERYLLIUM	10/3/2013 12:00	SED09-08B-100313	0.94	0.65	MG_KG	4	4
SED09-09	BERYLLIUM	9/8/2003 0:00	SED09-09-NSD-090803	1.4 J	0.89	MG_KG	35	28
SED09-10	BERYLLIUM	12/13/2005 12:40	SED09-10-20051213	1.1	0.58	MG_KG	33	24
SED09-11B	BERYLLIUM	9/13/2016 10:50	SED09-11B-ME45-1	1.4	0.66	MG_KG	3	3
SED09-12B	BERYLLIUM	10/14/2013 11:00	SED09-12B-101413	0.58	0.45	MG_KG	3	3
SED09-01	CADMIUM	12/11/2001 0:00	SED09-01-NSD-121101	0.66 J	0.66	MG_KG	2	1
SED09-09	CADMIUM	2/26/2002 0:00	SED09-09-NSO-022602	2	2	MG_KG	1	1
SED09-10	CADMIUM					MG_KG	1	0
SED09-01	CALCIUM	12/11/2001 0:00	SED09-01-NSD-121101	1230 J	1030	MG_KG	3	2
SED09-09	CALCIUM	1/23/2002 0:00	SED09-09-NSD-012302	3570 J	2870	MG_KG	3	2
SED09-10	CALCIUM	1/23/2002 0:00	SED09-10-NSD-012302	651 J	627	MG_KG	2	2
SED09-01	CHROMIUM, TOTAL	9/27/2005 9:30	SED09-01-20050927	51.1	12.7	MG_KG	33	32
SED09-02A	CHROMIUM, TOTAL	9/12/2016 10:35	SED09-02A-ME45-1	18.1 J	18.1	MG_KG	1	1
SED09-03A	CHROMIUM, TOTAL	9/12/2016 11:15	SED09-03A-ME45-1	12.9 J	12.9	MG_KG	1	1
SED09-04A	CHROMIUM, TOTAL	9/12/2016 11:40	SED09-04A-ME45-1	10 J	9.2	MG_KG	2	2
SED09-05A	CHROMIUM, TOTAL	9/13/2016 10:35	SED09-05A-ME45-1	15.3 J	15.3	MG_KG	1	1
SED09-06B	CHROMIUM, TOTAL	9/26/2016 11:10	SED09-06B-ME45-1	19.1 J	12.6	MG_KG	3	3
SED09-07B	CHROMIUM, TOTAL	10/3/2013 13:40	SED09-07B-100313	13.3	11.3	MG_KG	3	3
SED09-08B	CHROMIUM, TOTAL	10/3/2013 12:00	SED09-08B-100313	30	20.1	MG_KG	4	4
SED09-09	CHROMIUM, TOTAL	10/19/2009 15:20	SED09-09-101909	61.3	28.7	MG_KG	35	35
SED09-10	CHROMIUM, TOTAL	6/7/2005 15:30	SED09-010	34.1	12.1	MG_KG	33	32
SED09-11B	CHROMIUM, TOTAL	10/15/2013 11:30	SED09-011B-101513	19.7	14.8	MG_KG	3	3
SED09-12B	CHROMIUM, TOTAL	10/14/2013 11:00	SED09-12B-101413	16.6	13.2	MG_KG	3	3
SED09-01	COBALT	12/11/2001 0:00	SED09-01-NSD-121101	4.3	4.3	MG_KG	2	1
SED09-09	COBALT					MG_KG	1	0
SED09-10	COBALT					MG_KG	1	0
SED09-01	COPPER	9/26/2012 12:00	SED09-01-092612	76.8 J	17.6	MG_KG	33	32
SED09-02A	COPPER	9/12/2016 10:35	SED09-02A-ME45-1	30.2 J	30.2	MG_KG	1	1
SED09-03A	COPPER	9/12/2016 11:15	SED09-03A-ME45-1	16.9 J	16.9	MG_KG	1	1
SED09-04A	COPPER	9/9/2015 9:35	SED09-04A-090915-1	13.8	12.8	MG_KG	2	2
SED09-05A	COPPER	9/13/2016 10:35	SED09-05A-ME45-1	23.7 J	23.7	MG_KG	1	1
SED09-06B	COPPER	9/26/2016 11:10	SED09-06B-ME45-1	77 J	44.4	MG_KG	3	3
SED09-07B	COPPER	9/26/2016 11:00	SED09-07B-ME45-1	33.4 J	24.2	MG_KG	3	3
SED09-08B	COPPER	9/26/2016 10:40	SED09-08B-ME45-1	62.5 J	35.7	MG_KG	4	4
SED09-09	COPPER	9/8/2015 9:00	SED09-09-090815-1	91	47.7	MG_KG	35	35
SED09-10	COPPER	9/12/2016 9:30	SED09-10-ME45-1	65.5 J	19.2	MG_KG	32	31
SED09-11B	COPPER	10/17/2012 15:59	SED09-11B-101712	20.8	17.4	MG_KG	3	3
SED09-12B	COPPER	9/26/2016 10:15	SED09-12B-ME45-1	27.8 J	24.2	MG_KG	3	3
SED09-01	IRON	9/27/2005 9:30	SED09-01-20050927	30400	10800	MG_KG	33	33
SED09-02A	IRON	9/12/2016 10:35	SED09-02A-ME45-1	9360 J	9360	MG_KG	1	1
SED09-03A	IRON	9/12/2016 11:15	SED09-03A-ME45-1	8250 J	8250	MG_KG	1	1
SED09-04A	IRON	9/12/2016 11:40	SED09-04A-ME45-1	7260 J	7180	MG_KG	2	2
SED09-05A	IRON	9/13/2016 10:35	SED09-05A-ME45-1	9040 J	9040	MG_KG	1	1
SED09-06B	IRON	9/26/2016 11:10	SED09-06B-ME45-1	16500 J	10900	MG_KG	3	3
SED09-07B	IRON	10/3/2013 13:40	SED09-07B-100313	9920	9090	MG_KG	3	3
SED09-08B	IRON	10/3/2013 12:00	SED09-08B-100313	23200	18000	MG_KG	4	4
SED09-09	IRON	10/19/2009 15:20	SED09-09-101909	32000	23200	MG_KG	35	35
SED09-10	IRON	9/12/2016 9:30	SED09-10-ME45-1	22900 J	10000	MG_KG	33	33
SED09-11B	IRON	9/13/2016 10:50	SED09-11B-ME45-1	8850 J	7780	MG_KG	3	3
SED09-12B	IRON	10/14/2013 11:00	SED09-12B-101413	16400	12700	MG_KG	3	3
SED09-01	LEAD	11/6/2006 16:00	SED09-01-20061106	27	12.6	MG_KG	33	31
SED09-02A	LEAD	9/12/2016 10:35	SED09-02A-ME45-1	15.8 J	15.8	MG_KG	1	1
SED09-03A	LEAD	9/12/2016 11:15	SED09-03A-ME45-1	11.3 J	11.3	MG_KG	1	1
SED09-04A	LEAD	9/9/2015 9:35	SED09-04A-090915-1	8.2 J	8.1	MG_KG	2	2
SED09-05A	LEAD	9/13/2016 10:35	SED09-05A-ME45-1	13.3 J	13.3	MG_KG	1	1
SED09-06B	LEAD	9/26/2016 11:10	SED09-06B-ME45-1	33.2 J	20.4	MG_KG	3	3
SED09-07B	LEAD	10/3/2013 13:40	SED09-07B-100313	17.9	17.6	MG_KG	3	3
SED09-08B	LEAD	9/26/2016 10:40	SED09-08B-ME45-1	43 J	26.1	MG_KG	4	4
SED09-09	LEAD	9/8/2015 9:00	SED09-09-090815-1	83.1 J	43.1	MG_KG	35	35
SED09-10	LEAD	9/12/2016 9:30	SED09-10-ME45-1	50 J	16.3	MG_KG	33	32
SED09-11B	LEAD	10/17/2012 15:59	SED09-11B-101712	18.4	13.4	MG_KG	3	3

TABLE F-3
SUMMARY OF DESCRIPTIVE STATISTICS FOR SHALLOW SEDIMENT AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
SED09-12B	LEAD	10/14/2013 11:00	SED09-12B-101413	23.5	20.2	MG_KG	3	3
SED09-01	MAGNESIUM	12/11/2001 0:00	SED09-01-NSD-121101	2230	1780	MG_KG	3	3
SED09-09	MAGNESIUM	1/23/2002 0:00	SED09-09-NSD-012302	4150 J	3910	MG_KG	3	3
SED09-10	MAGNESIUM	2/26/2002 0:00	SED09-10-NSO-022602	1580 J	1540	MG_KG	2	2
SED09-01	MANGANESE	9/21/2010 1:25	SED09-01-092110	308 J	127	MG_KG	33	33
SED09-02A	MANGANESE	9/12/2016 10:35	SED09-02A-ME45-1	83.5	83.5	MG_KG	1	1
SED09-03A	MANGANESE	9/12/2016 11:15	SED09-03A-ME45-1	65.4	65.4	MG_KG	1	1
SED09-04A	MANGANESE	9/12/2016 11:40	SED09-04A-ME45-1	70.3	62.6	MG_KG	2	2
SED09-05A	MANGANESE	9/13/2016 10:35	SED09-05A-ME45-1	78	78	MG_KG	1	1
SED09-06B	MANGANESE	10/16/2012 14:14	SED09-06B-101612	137	132	MG_KG	3	3
SED09-07B	MANGANESE	10/3/2013 13:40	SED09-07B-100313	75.7 J	70.8	MG_KG	3	3
SED09-08B	MANGANESE	10/3/2013 12:00	SED09-08B-100313	180 J	132	MG_KG	4	4
SED09-09	MANGANESE	10/19/2009 15:20	SED09-09-101909	368	210	MG_KG	35	35
SED09-10	MANGANESE	6/7/2005 15:30	SED09-010	202	76.690909	MG_KG	33	33
SED09-11B	MANGANESE	10/17/2012 15:59	SED09-11B-101712	119	114	MG_KG	3	3
SED09-12B	MANGANESE	10/14/2013 11:00	SED09-12B-101413	140 J	99.7	MG_KG	3	3
SED09-01	MERCURY	6/7/2005 12:30		0.14	0.039	MG_KG	33	15
SED09-02A	MERCURY	9/12/2016 10:35	SED09-02A-ME45-1	0.072 J	0.072	MG_KG	1	1
SED09-03A	MERCURY	9/12/2016 11:15	SED09-03A-ME45-1	0.047 J-	0.047	MG_KG	1	1
SED09-04A	MERCURY	9/12/2016 11:40	SED09-04A-ME45-1	0.031 J-	0.031	MG_KG	2	2
SED09-05A	MERCURY	9/13/2016 10:35	SED09-05A-ME45-1	0.049 J-	0.049	MG_KG	1	1
SED09-06B	MERCURY	10/16/2012 14:14	SED09-06B-101612	0.21	0.12	MG_KG	3	3
SED09-07B	MERCURY	9/26/2016 11:00	SED09-07B-ME45-1	0.064	0.056	MG_KG	3	3
SED09-08B	MERCURY	10/16/2012 13:39	SED09-08B-101612	0.098	0.078	MG_KG	4	3
SED09-09	MERCURY	6/7/2005 15:00	SED09-09	0.39	0.22	MG_KG	35	29
SED09-10	MERCURY	6/7/2005 15:30	SED09-010	0.17	0.068	MG_KG	32	20
SED09-11B	MERCURY	10/17/2012 15:59	SED09-11B-101712	0.039 J	0.03	MG_KG	3	2
SED09-12B	MERCURY	10/16/2012 13:24	SED09-12B-101612	0.077	0.071	MG_KG	3	3
SED09-01	NICKEL	9/27/2005 9:30	SED09-01-20050927	25.3	13.3	MG_KG	33	32
SED09-02A	NICKEL	9/12/2016 10:35	SED09-02A-ME45-1	9.1	9.1	MG_KG	1	1
SED09-03A	NICKEL	9/12/2016 11:15	SED09-03A-ME45-1	6.1	6.1	MG_KG	1	1
SED09-04A	NICKEL	9/12/2016 11:40	SED09-04A-ME45-1	5.7	5.2	MG_KG	2	2
SED09-05A	NICKEL	9/13/2016 10:35	SED09-05A-ME45-1	8	8	MG_KG	1	1
SED09-06B	NICKEL	9/26/2016 11:10	SED09-06B-ME45-1	13.2 J	8.67	MG_KG	3	3
SED09-07B	NICKEL	10/3/2013 13:40	SED09-07B-100313	8.3	7.7	MG_KG	3	3
SED09-08B	NICKEL	9/26/2016 10:40	SED09-08B-ME45-1	25.4 J	16.5	MG_KG	4	4
SED09-09	NICKEL	10/19/2009 15:20	SED09-09-101909	24.7	17.4	MG_KG	34	33
SED09-10	NICKEL	6/10/2002 0:00	SED09-10-NSD-061002	34.8 J	10.6	MG_KG	32	31
SED09-11B	NICKEL	10/15/2013 11:30	SED09-011B-101513	12.6	10.8	MG_KG	3	3
SED09-12B	NICKEL	10/14/2013 11:00	SED09-12B-101413	13.4	10.2	MG_KG	3	3
SED09-01	POTASSIUM	12/11/2001 0:00	SED09-01-NSD-121101	1010	891	MG_KG	2	2
SED09-09	POTASSIUM	1/23/2002 0:00	SED09-09-NSD-012302	2400 J	2030	MG_KG	2	2
SED09-10	POTASSIUM	1/23/2002 0:00	SED09-10-NSD-012302	526 J	526	MG_KG	2	1
SED09-01	SELENIUM					MG_KG	1	0
SED09-01	SILVER					MG_KG	1	0
SED09-01	SODIUM	12/11/2001 0:00	SED09-01-NSD-121101	2840	2750	MG_KG	2	2
SED09-09	SODIUM	1/23/2002 0:00	SED09-09-NSD-012302	4990 J	3550	MG_KG	2	2
SED09-10	SODIUM					MG_KG	1	0
SED09-01	THALLIUM					MG_KG	1	0
SED09-01	VANADIUM	12/11/2001 0:00	SED09-01-NSD-121101	13.6	13.6	MG_KG	2	1
SED09-09	VANADIUM	1/23/2002 0:00	SED09-09-NSD-012302	32.2 J	29.3	MG_KG	2	2
SED09-10	VANADIUM	1/23/2002 0:00	SED09-10-NSD-012302	13.4 J	13.4	MG_KG	2	1
SED09-01	ZINC	3/28/2011 11:13	SED09-01-032811	305	66	MG_KG	33	30
SED09-02A	ZINC	9/12/2016 10:35	SED09-02A-ME45-1	60.2 J	60.2	MG_KG	1	1
SED09-03A	ZINC	9/12/2016 11:15	SED09-03A-ME45-1	33.3 J	33.3	MG_KG	1	1
SED09-04A	ZINC	9/9/2015 9:35	SED09-04A-090915-1	29.3 J,EB	27.3	MG_KG	2	2
SED09-05A	ZINC	9/13/2016 10:35	SED09-05A-ME45-1	47.3 J	47.3	MG_KG	1	1
SED09-06B	ZINC	9/26/2016 11:10	SED09-06B-ME45-1	120 J	74.7	MG_KG	3	3
SED09-07B	ZINC	10/16/2012 13:53	SED09-07B-101612	62	60	MG_KG	3	3
SED09-08B	ZINC	9/26/2016 10:40	SED09-08B-ME45-1	192 J	107	MG_KG	4	4
SED09-09	ZINC	9/8/2015 9:00	SED09-09-090815-1	263 J,EB	137	MG_KG	35	35
SED09-10	ZINC	3/16/2010 2:49	SED09-10-031610	197	47.6	MG_KG	31	30
SED09-11B	ZINC	9/13/2016 10:50	SED09-11B-ME45-1	76.1 J	59.9	MG_KG	3	3
SED09-12B	ZINC	10/16/2012 13:24	SED09-12B-101612	68	63.8	MG_KG	3	3
SED09-01	AROCLOR-1242					UG_KG	35	0
SED09-02A	AROCLOR-1242					UG_KG	7	0
SED09-06B	AROCLOR-1242					UG_KG	2	0
SED09-07B	AROCLOR-1242					UG_KG	2	0
SED09-08B	AROCLOR-1242					UG_KG	2	0
SED09-09	AROCLOR-1242	3/22/2005 0:00	SED09-09-032205	73.4 J	73.4	UG_KG	34	1
SED09-10	AROCLOR-1242					UG_KG	34	0
SED09-11B	AROCLOR-1242					UG_KG	2	0
SED09-01	AROCLOR-1248	9/27/2005 9:30	SED09-01-20050927	16.8 J	15.5	UG_KG	35	2
SED09-02A	AROCLOR-1248					UG_KG	7	0
SED09-06B	AROCLOR-1248					UG_KG	2	0
SED09-07B	AROCLOR-1248					UG_KG	2	0
SED09-08B	AROCLOR-1248					UG_KG	2	0
SED09-09	AROCLOR-1248	11/6/2007 12:00	SED09-09_20071106	37.8 J	18.7	UG_KG	34	4
SED09-10	AROCLOR-1248					UG_KG	34	0
SED09-11B	AROCLOR-1248					UG_KG	2	0
SED09-01	AROCLOR-1254					UG_KG	35	0
SED09-02A	AROCLOR-1254					UG_KG	7	0
SED09-06B	AROCLOR-1254					UG_KG	2	0
SED09-07B	AROCLOR-1254					UG_KG	2	0
SED09-08B	AROCLOR-1254					UG_KG	2	0
SED09-09	AROCLOR-1254	1/15/2003 0:00	SED09-09-NSD-011503	180 J	106	UG_KG	34	5
SED09-10	AROCLOR-1254	9/8/2015 9:30	SED09-10-090815-1	79 J	79	UG_KG	34	1
SED09-11B	AROCLOR-1254					UG_KG	2	0
SED09-01	AROCLOR-1260	12/11/2001 0:00	SED09-01-NSD-121101	1600 J	311	UG_KG	35	33
SED09-02A	AROCLOR-1260	9/21/2010 10:20	SED09-02A-092110	23 J	23	UG_KG	7	1
SED09-06B	AROCLOR-1260	10/15/2013 12:30	SED09-06B-101513	28 J	28	UG_KG	2	1
SED09-07B	AROCLOR-1260	10/3/2013 13:40	SED09-07B-100313	24	24	UG_KG	2	1
SED09-08B	AROCLOR-1260					UG_KG	2	0
SED09-09	AROCLOR-1260	1/15/2003 12:00:00 AM10/26/2004 12:00:00 AM		270 J	128	UG_KG	34	32
SED09-10	AROCLOR-1260	9/21/2010 1:00	SED09-10-092110	430	99	UG_KG	34	24
SED09-11B	AROCLOR-1260	10/15/2013 11:30	SED09-011B-101513	130 J	100	UG_KG	2	2
SED09-01	POLYCHLORINATED BIPHENYLS (PCBS)	12/11/2001 0:00	SED09-01-NSD-121101	1600	336	UG_KG	31	30
SED09-02A	POLYCHLORINATED BIPHENYLS (PCBS)	9/21/2010 10:20	SED09-02A-092110	23 J	23	UG_KG	4	1
SED09-06B	POLYCHLORINATED BIPHENYLS (PCBS)					UG_KG	1	0
SED09-07B	POLYCHLORINATED BIPHENYLS (PCBS)					UG_KG	1	0
SED09-08B	POLYCHLORINATED BIPHENYLS (PCBS)					UG_KG	1	0
SED09-09	POLYCHLORINATED BIPHENYLS (PCBS)	1/15/2003 0:00	SED09-09-NSD-011503	450	156.4	UG_KG	31	29
SED09-10	POLYCHLORINATED BIPHENYLS (PCBS)	9/21/2010 1:00	SED09-10-092110	430	105	UG_KG	31	21
SED09-11B	POLYCHLORINATED BIPHENYLS (PCBS)	10/17/2012 15:59	SED09-11B-101712	78 J	78	UG_KG	1	1
SED09-07B	4,4-DDD	10/3/2013 13:40	SED09-07B-100313	4.1 J	4.1	UG_KG	2	1
SED09-09	4,4-DDD	3/8/2006 0:00	SED09-09_Q106	4.4 J	3.6	UG_KG	34	2
SED09-10	4,4-DDD	10/19/2009 15:47	SED09-10-101909	3.4 J	2.1	UG_KG	34	4

TABLE F-3
SUMMARY OF DESCRIPTIVE STATISTICS FOR SHALLOW SEDIMENT AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
SED09-11B	4,4-DDD	10/17/2012 15:59	SED09-11B-101712	4.8	4.8	UG_KG	2	1
SED09-07B	4,4-DDE					UG_KG	2	0
SED09-09	4,4-DDE	1/15/2003 0:00	SED09-09-NSD-011503	12 J	5.2	UG_KG	34	16
SED09-10	4,4-DDE	9/21/2010 1:00	SED09-10-092110	5.6	4.2	UG_KG	34	2
SED09-11B	4,4-DDE	10/15/2013 11:30	SED09-011B-101513	1.1 J	1.1	UG_KG	2	1
SED09-07B	4,4-DDT	10/3/2013 13:40	SED09-07B-100313	8.2 J	8.2	UG_KG	2	1
SED09-09	4,4-DDT	12/13/2005 12:30	SED09-09-20051213	68.8 J	22.3	UG_KG	34	4
SED09-10	4,4-DDT	9/26/2012 11:25	SED09-10-092612	15 J	15	UG_KG	34	1
SED09-11B	4,4-DDT	10/17/2012 15:59	SED09-11B-101712	4.6 J	4.6	UG_KG	2	1
SED09-06B	ALDRIN					UG_KG	2	0
SED09-07B	ALDRIN					UG_KG	2	0
SED09-09	ALDRIN					UG_KG	34	0
SED09-10	ALDRIN					UG_KG	34	0
SED09-07B	ALPHA-CHLORDANE					UG_KG	2	0
SED09-09	ALPHA-CHLORDANE					UG_KG	34	0
SED09-10	ALPHA-CHLORDANE	1/15/2003 0:00	SED09-10-NSD-011503	2.9	1.9	UG_KG	34	2
SED09-06B	BETA-BHC					UG_KG	2	0
SED09-09	BETA-BHC					UG_KG	33	0
SED09-10	BETA-BHC	6/24/2003 0:00	SED09-10-NSD-062403	7.6 J	4.6	UG_KG	34	2
SED09-06B	DELTA-BHC					UG_KG	2	0
SED09-07B	DELTA-BHC					UG_KG	2	0
SED09-09	DELTA-BHC	9/21/2010 12:45	SED09-09-092110	0.9 J	0.83	UG_KG	33	2
SED09-10	DELTA-BHC	10/10/2011 14:50	SED09-10-101011	2.4 J	2.4	UG_KG	33	1
SED09-07B	DIELDRIN					UG_KG	2	0
SED09-09	DIELDRIN					UG_KG	34	0
SED09-10	DIELDRIN	9/8/2015 9:30	SED09-10-090815-1	2.9 J	2.9	UG_KG	34	1
SED09-11B	DIELDRIN					UG_KG	2	0
SED09-07B	ENDOSULFAN I					UG_KG	2	0
SED09-09	ENDOSULFAN I	12/13/2005 12:30	SED09-09-20051213	2 J	2	UG_KG	34	1
SED09-10	ENDOSULFAN I	3/16/2010 2:49	SED09-10-031610	42 J	42	UG_KG	34	1
SED09-11B	ENDOSULFAN I					UG_KG	2	0
SED09-06B	ENDOSULFAN II					UG_KG	2	0
SED09-07B	ENDOSULFAN II					UG_KG	2	0
SED09-09	ENDOSULFAN II	9/21/2010 12:45	SED09-09-092110	1.6 J	1.4	UG_KG	34	3
SED09-10	ENDOSULFAN II	3/16/2010 2:49	SED09-10-031610	5.9 J	3.6	UG_KG	34	4
SED09-06B	ENDOSULFAN SULFATE					UG_KG	2	0
SED09-09	ENDOSULFAN SULFATE	3/16/2010 3:13	SED09-09-031610	6 J	4.4	UG_KG	34	3
SED09-10	ENDOSULFAN SULFATE	3/16/2010 2:49	SED09-10-031610	17 J	17	UG_KG	34	1
SED09-06B	ENDRIN					UG_KG	2	0
SED09-07B	ENDRIN					UG_KG	2	0
SED09-09	ENDRIN					UG_KG	34	0
SED09-10	ENDRIN					UG_KG	34	0
SED09-07B	ENDRIN ALDEHYDE					UG_KG	2	0
SED09-09	ENDRIN ALDEHYDE	9/8/2015 9:00	SED09-09-090815-1	3.5 J	2.3	UG_KG	32	2
SED09-10	ENDRIN ALDEHYDE	4/6/2009 11:35	SED09-10-040609	140	73	UG_KG	34	2
SED09-11B	ENDRIN ALDEHYDE					UG_KG	2	0
SED09-06B	ENDRIN KETONE					UG_KG	2	0
SED09-07B	ENDRIN KETONE					UG_KG	2	0
SED09-09	ENDRIN KETONE	10/10/2011 14:00	SED09-09-101011	10 J	7.7	UG_KG	34	4
SED09-10	ENDRIN KETONE	10/10/2011 14:50	SED09-10-101011	22 J	13	UG_KG	34	3
SED09-06B	HEPTACHLOR					UG_KG	2	0
SED09-07B	HEPTACHLOR					UG_KG	2	0
SED09-09	HEPTACHLOR					UG_KG	34	0
SED09-10	HEPTACHLOR					UG_KG	34	0
SED09-06B	HEPTACHLOR EPOXIDE					UG_KG	2	0
SED09-09	HEPTACHLOR EPOXIDE	10/10/2011 14:00	SED09-09-101011	2.8 J	2	UG_KG	33	2
SED09-10	HEPTACHLOR EPOXIDE	10/10/2011 14:50	SED09-10-101011	2.1 J	2.1	UG_KG	33	1
SED09-06B	LINDANE					UG_KG	2	0
SED09-07B	LINDANE					UG_KG	2	0
SED09-09	LINDANE	9/12/2016 10:00	SED09-09-ME45-1	2.1 J	1.4	UG_KG	34	2
SED09-10	LINDANE	3/16/2010 2:49	SED09-10-031610	48	19	UG_KG	34	4
SED09-06B	METHOXYCHLOR					UG_KG	2	0
SED09-07B	METHOXYCHLOR					UG_KG	2	0
SED09-09	METHOXYCHLOR	10/10/2011 14:00	SED09-09-101011	22 J	22	UG_KG	34	1
SED09-10	METHOXYCHLOR	10/10/2011 14:50	SED09-10-101011	78 J	78	UG_KG	34	1
SED09-06B	TRANS-CHLORDANE					UG_KG	1	0
SED09-07B	TRANS-CHLORDANE					UG_KG	1	0
SED09-09	TRANS-CHLORDANE	1/15/2003 0:00	SED09-09-NSD-011503	8.5 J	5.3	UG_KG	33	7
SED09-10	TRANS-CHLORDANE	1/15/2003 0:00	SED09-10-NSD-011503	4.4 J	4.4	UG_KG	33	1
SED09-01	4,4-DDD	10/11/2011 13:25	SED09-01-101111	26 J	14	UG_KG	35	5
SED09-02A	4,4-DDD					UG_KG	2	0
SED09-06B	4,4-DDD	10/15/2013 12:30	SED09-06B-101513	3.6 J	3.6	UG_KG	2	1
SED09-08B	4,4-DDD					UG_KG	2	0
SED09-12B	4,4-DDD	10/14/2013 11:00	SED09-12B-101413	4.7 J	4.7	UG_KG	2	1
SED09-01	4,4-DDE	10/11/2013 8:00	SED09-01-101113	4.2 J	2.4	UG_KG	35	7
SED09-02A	4,4-DDE					UG_KG	2	0
SED09-06B	4,4-DDE	10/15/2013 12:30	SED09-06B-101513	1.4 J	1.4	UG_KG	2	1
SED09-08B	4,4-DDE					UG_KG	2	0
SED09-12B	4,4-DDE	10/14/2013 11:00	SED09-12B-101413	2.1 J	2.1	UG_KG	2	1
SED09-01	4,4-DDT	12/11/2001 0:00	SED09-01-NSD-121101	62 J	19	UG_KG	34	5
SED09-02A	4,4-DDT					UG_KG	2	0
SED09-06B	4,4-DDT					UG_KG	2	0
SED09-08B	4,4-DDT					UG_KG	2	0
SED09-12B	4,4-DDT	10/14/2013 11:00	SED09-12B-101413	8.6	8.6	UG_KG	2	1
SED09-01	ALDRIN	10/11/2011 13:25	SED09-01-101111	0.97 J	0.69	UG_KG	35	2
SED09-02A	ALDRIN					UG_KG	2	0
SED09-08B	ALDRIN					UG_KG	2	0
SED09-11B	ALDRIN					UG_KG	2	0
SED09-12B	ALDRIN					UG_KG	2	0
SED09-01	ALPHA-CHLORDANE	6/6/2002 0:00	SED09-01-NSD-060602	21	8.2	UG_KG	35	3
SED09-02A	ALPHA-CHLORDANE					UG_KG	2	0
SED09-06B	ALPHA-CHLORDANE					UG_KG	2	0
SED09-08B	ALPHA-CHLORDANE					UG_KG	2	0
SED09-11B	ALPHA-CHLORDANE					UG_KG	2	0
SED09-12B	ALPHA-CHLORDANE					UG_KG	2	0
SED09-12B	AROCLOR-1242					UG_KG	2	0
SED09-12B	AROCLOR-1248					UG_KG	2	0
SED09-12B	AROCLOR-1254					UG_KG	2	0
SED09-12B	AROCLOR-1260	10/16/2012 13:24	SED09-12B-101612	15 J	15	UG_KG	2	1
SED09-01	BETA-BHC					UG_KG	35	0
SED09-02A	BETA-BHC	9/8/2015 12:30	SED09-02A-090815-1	0.7 J	0.7	UG_KG	2	1
SED09-07B	BETA-BHC					UG_KG	2	0
SED09-08B	BETA-BHC					UG_KG	2	0
SED09-11B	BETA-BHC	10/17/2012 15:59	SED09-11B-101712	1.2 J	1.2	UG_KG	2	1
SED09-12B	BETA-BHC					UG_KG	2	0
SED09-01	DELTA-BHC	9/21/2010 1:25	SED09-01-092110	1 J	1	UG_KG	34	1
SED09-02A	DELTA-BHC					UG_KG	2	0

TABLE F-3
SUMMARY OF DESCRIPTIVE STATISTICS FOR SHALLOW SEDIMENT AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
SED09-08B	DELTA-BHC					UG_KG	2	0
SED09-11B	DELTA-BHC					UG_KG	2	0
SED09-12B	DELTA-BHC					UG_KG	2	0
SED09-01	DIELDRIN	10/19/2009 16:15	SED09-01-101909	10	10	UG_KG	35	1
SED09-02A	DIELDRIN					UG_KG	2	0
SED09-06B	DIELDRIN					UG_KG	2	0
SED09-08B	DIELDRIN					UG_KG	2	0
SED09-12B	DIELDRIN					UG_KG	2	0
SED09-01	ENDOSULFAN I					UG_KG	35	0
SED09-02A	ENDOSULFAN I					UG_KG	2	0
SED09-06B	ENDOSULFAN I					UG_KG	2	0
SED09-08B	ENDOSULFAN I					UG_KG	2	0
SED09-12B	ENDOSULFAN I					UG_KG	2	0
SED09-01	ENDOSULFAN II	10/19/2009 16:15	SED09-01-101909	6.1 J	3.7	UG_KG	35	4
SED09-02A	ENDOSULFAN II					UG_KG	2	0
SED09-08B	ENDOSULFAN II					UG_KG	2	0
SED09-11B	ENDOSULFAN II					UG_KG	2	0
SED09-12B	ENDOSULFAN II					UG_KG	2	0
SED09-01	ENDOSULFAN SULFATE	3/18/2010 3:35	SED09-01-031810	11	11	UG_KG	35	2
SED09-02A	ENDOSULFAN SULFATE					UG_KG	2	0
SED09-07B	ENDOSULFAN SULFATE					UG_KG	2	0
SED09-08B	ENDOSULFAN SULFATE					UG_KG	2	0
SED09-11B	ENDOSULFAN SULFATE					UG_KG	2	0
SED09-12B	ENDOSULFAN SULFATE					UG_KG	2	0
SED09-01	ENDRIN	9/4/2002 0:00	SED09-01-NSD-090402	5.4	5.4	UG_KG	33	1
SED09-02A	ENDRIN					UG_KG	2	0
SED09-08B	ENDRIN					UG_KG	2	0
SED09-11B	ENDRIN					UG_KG	2	0
SED09-12B	ENDRIN					UG_KG	2	0
SED09-01	ENDRIN ALDEHYDE	2/26/2002 0:00	SED09-01-NSO-022602	27 J	9.7	UG_KG	33	4
SED09-02A	ENDRIN ALDEHYDE					UG_KG	2	0
SED09-06B	ENDRIN ALDEHYDE					UG_KG	2	0
SED09-08B	ENDRIN ALDEHYDE					UG_KG	2	0
SED09-12B	ENDRIN ALDEHYDE					UG_KG	2	0
SED09-01	ENDRIN KETONE	10/11/2011 13:25	SED09-01-101111	25 J	18	UG_KG	34	2
SED09-02A	ENDRIN KETONE					UG_KG	2	0
SED09-08B	ENDRIN KETONE					UG_KG	2	0
SED09-11B	ENDRIN KETONE					UG_KG	2	0
SED09-12B	ENDRIN KETONE					UG_KG	2	0
SED09-01	HEPTACHLOR	6/6/2002 0:00	SED09-01-NSD-060602	7.6	7.6	UG_KG	35	1
SED09-02A	HEPTACHLOR					UG_KG	2	0
SED09-08B	HEPTACHLOR					UG_KG	2	0
SED09-11B	HEPTACHLOR					UG_KG	2	0
SED09-12B	HEPTACHLOR					UG_KG	2	0
SED09-01	HEPTACHLOR EPOXIDE	10/11/2011 13:25	SED09-01-101111	2.4 J	2.4	UG_KG	34	1
SED09-02A	HEPTACHLOR EPOXIDE					UG_KG	2	0
SED09-07B	HEPTACHLOR EPOXIDE					UG_KG	2	0
SED09-08B	HEPTACHLOR EPOXIDE					UG_KG	2	0
SED09-11B	HEPTACHLOR EPOXIDE					UG_KG	2	0
SED09-12B	HEPTACHLOR EPOXIDE					UG_KG	2	0
SED09-01	LINDANE	10/19/2009 16:15	SED09-01-101909	0.47 J	0.47	UG_KG	35	1
SED09-02A	LINDANE					UG_KG	2	0
SED09-08B	LINDANE					UG_KG	2	0
SED09-11B	LINDANE					UG_KG	2	0
SED09-12B	LINDANE					UG_KG	2	0
SED09-01	METHOXYCHLOR					UG_KG	35	0
SED09-02A	METHOXYCHLOR	9/12/2016 10:35	SED09-02A-ME45-1	2.3 J	2.3	UG_KG	2	1
SED09-08B	METHOXYCHLOR					UG_KG	2	0
SED09-11B	METHOXYCHLOR					UG_KG	2	0
SED09-12B	METHOXYCHLOR					UG_KG	2	0
SED09-12B	POLYCHLORINATED BIPHENYLS (PCBS)	10/16/2012 13:24	SED09-12B-101612	15 J	15	UG_KG	1	1
SED09-01	TRANS-CHLORDANE	6/6/2002 0:00	SED09-01-NSD-060602	29 J	8.5	UG_KG	34	6
SED09-02A	TRANS-CHLORDANE					UG_KG	2	0
SED09-08B	TRANS-CHLORDANE					UG_KG	1	0
SED09-11B	TRANS-CHLORDANE					UG_KG	1	0
SED09-12B	TRANS-CHLORDANE					UG_KG	1	0
SED09-01	2,4-DIMETHYLPHENOL					UG_KG	21	0
SED09-09	2,4-DIMETHYLPHENOL					UG_KG	22	0
SED09-10	2,4-DIMETHYLPHENOL					UG_KG	22	0
SED09-01	2,4-DINITROPHENOL	6/25/2003 0:00	SED09-01-NSD-062503	150 J	150	UG_KG	22	1
SED09-09	2,4-DINITROPHENOL					UG_KG	22	0
SED09-10	2,4-DINITROPHENOL					UG_KG	22	0
SED09-01	2-METHYLNAPHTHALENE	3/8/2006 0:00	SED09-01_Q106	44.3 J	15	UG_KG	33	9
SED09-02A	2-METHYLNAPHTHALENE					UG_KG	2	0
SED09-03A	2-METHYLNAPHTHALENE					UG_KG	1	0
SED09-04A	2-METHYLNAPHTHALENE					UG_KG	1	0
SED09-05A	2-METHYLNAPHTHALENE					UG_KG	1	0
SED09-06B	2-METHYLNAPHTHALENE					UG_KG	4	0
SED09-08B	2-METHYLNAPHTHALENE					UG_KG	4	0
SED09-12B	2-METHYLNAPHTHALENE					UG_KG	3	0
SED09-01	3,3-DICHLOROBENZIDINE					UG_KG	21	0
SED09-09	3,3-DICHLOROBENZIDINE					UG_KG	21	0
SED09-10	3,3-DICHLOROBENZIDINE					UG_KG	21	0
SED09-01	4-BROMOPHENYL-PHENYLETHER					UG_KG	22	0
SED09-09	4-BROMOPHENYL-PHENYLETHER					UG_KG	22	0
SED09-10	4-BROMOPHENYL-PHENYLETHER	3/7/2007 0:00	SED09-10_20070307	142 J	142	UG_KG	22	1
SED09-01	4-METHYLPHENOL	6/25/2003 0:00	SED09-01-NSD-062503	380 J	380	UG_KG	10	1
SED09-09	4-METHYLPHENOL	6/26/2003 0:00	SED09-09-NSD-062603	160 J	160	UG_KG	10	1
SED09-10	4-METHYLPHENOL					UG_KG	10	0
SED09-01	ACENAPHTHENE	3/8/2006 0:00	SED09-01_Q106	280	34.8	UG_KG	34	12
SED09-02A	ACENAPHTHENE					UG_KG	2	0
SED09-03A	ACENAPHTHENE					UG_KG	1	0
SED09-04A	ACENAPHTHENE					UG_KG	1	0
SED09-05A	ACENAPHTHENE					UG_KG	1	0
SED09-06B	ACENAPHTHENE	10/16/2012 14:14	SED09-06B-101612	25	18	UG_KG	4	3
SED09-08B	ACENAPHTHENE	9/8/2015 10:45	SED09-08B-090815-1	6.8	6.8	UG_KG	4	1
SED09-12B	ACENAPHTHENE	10/16/2012 13:24	SED09-12B-101612	7.9	5.5	UG_KG	3	3
SED09-01	ACENAPHTHYLENE	4/23/2008 16:05	SED09-01-042308	19 J	8.4	UG_KG	33	7
SED09-02A	ACENAPHTHYLENE					UG_KG	2	0
SED09-03A	ACENAPHTHYLENE					UG_KG	1	0
SED09-04A	ACENAPHTHYLENE					UG_KG	1	0
SED09-05A	ACENAPHTHYLENE					UG_KG	1	0
SED09-06B	ACENAPHTHYLENE	10/15/2013 12:30	SED09-06B-101513	7.2 J	6	UG_KG	4	2
SED09-08B	ACENAPHTHYLENE	10/16/2012 13:39	SED09-08B-101612	7.5	6.4	UG_KG	4	2
SED09-12B	ACENAPHTHYLENE	10/16/2012 13:24	SED09-12B-101612	8.4	7.6	UG_KG	3	2
SED09-01	ANTHRACENE	12/11/2001 0:00	SED09-01-NSD-121101	57	15.3	UG_KG	33	25
SED09-02A	ANTHRACENE					UG_KG	2	0

TABLE F-3
SUMMARY OF DESCRIPTIVE STATISTICS FOR SHALLOW SEDIMENT AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
SED09-03A	ANTHRACENE					UG_KG	1	0
SED09-04A	ANTHRACENE					UG_KG	1	0
SED09-05A	ANTHRACENE					UG_KG	1	0
SED09-06B	ANTHRACENE	10/16/2012 14:14	SED09-06B-101612	51	31	UG_KG	4	3
SED09-08B	ANTHRACENE	10/16/2012 13:39	SED09-08B-101612	20	16	UG_KG	4	3
SED09-11B	ANTHRACENE	10/17/2012 15:59	SED09-11B-101712	26	14	UG_KG	3	3
SED09-12B	ANTHRACENE	10/16/2012 13:24	SED09-12B-101612	23	14	UG_KG	3	3
SED09-01	BENZO(A)ANTHRACENE	12/11/2001 0:00	SED09-01-NSD-121101	420 J	66.8	UG_KG	34	30
SED09-02A	BENZO(A)ANTHRACENE	9/12/2016 10:35	SED09-02A-ME45-1	14	14	UG_KG	2	2
SED09-03A	BENZO(A)ANTHRACENE	9/12/2016 11:15	SED09-03A-ME45-1	6.3	6.3	UG_KG	1	1
SED09-04A	BENZO(A)ANTHRACENE	9/12/2016 11:40	SED09-04A-ME45-1	4.3	4.3	UG_KG	1	1
SED09-05A	BENZO(A)ANTHRACENE	9/13/2016 10:35	SED09-05A-ME45-1	9.5	9.5	UG_KG	1	1
SED09-06B	BENZO(A)ANTHRACENE	10/16/2012 14:14	SED09-06B-101612	130	92	UG_KG	4	3
SED09-08B	BENZO(A)ANTHRACENE	10/16/2012 13:39	SED09-08B-101612	69	44	UG_KG	4	4
SED09-12B	BENZO(A)ANTHRACENE	10/16/2012 13:24	SED09-12B-101612	74	50	UG_KG	3	3
SED09-01	BENZO(A)PYRENE	12/11/2001 0:00	SED09-01-NSD-121101	430 J	66.1	UG_KG	34	30
SED09-02A	BENZO(A)PYRENE	9/12/2016 10:35	SED09-02A-ME45-1	14	13	UG_KG	2	2
SED09-03A	BENZO(A)PYRENE	9/12/2016 11:15	SED09-03A-ME45-1	7.2	7.2	UG_KG	1	1
SED09-04A	BENZO(A)PYRENE	9/12/2016 11:40	SED09-04A-ME45-1	5.3	5.3	UG_KG	1	1
SED09-05A	BENZO(A)PYRENE	9/13/2016 10:35	SED09-05A-ME45-1	10	10	UG_KG	1	1
SED09-06B	BENZO(A)PYRENE	10/16/2012 14:14	SED09-06B-101612	120	80	UG_KG	4	3
SED09-08B	BENZO(A)PYRENE	10/16/2012 13:39	SED09-08B-101612	57	39	UG_KG	4	4
SED09-12B	BENZO(A)PYRENE	10/16/2012 13:24	SED09-12B-101612	60	44	UG_KG	3	3
SED09-01	BENZO(B)FLUORANTHENE	12/11/2001 0:00	SED09-01-NSD-121101	410 J	72.5	UG_KG	34	27
SED09-02A	BENZO(B)FLUORANTHENE	9/12/2016 10:35	SED09-02A-ME45-1	27	23	UG_KG	2	2
SED09-03A	BENZO(B)FLUORANTHENE	9/12/2016 11:15	SED09-03A-ME45-1	15	15	UG_KG	1	1
SED09-04A	BENZO(B)FLUORANTHENE	9/12/2016 11:40	SED09-04A-ME45-1	11	11	UG_KG	1	1
SED09-05A	BENZO(B)FLUORANTHENE	9/13/2016 10:35	SED09-05A-ME45-1	17	17	UG_KG	1	1
SED09-06B	BENZO(B)FLUORANTHENE	10/16/2012 14:14	SED09-06B-101612	170	130	UG_KG	4	3
SED09-08B	BENZO(B)FLUORANTHENE	10/16/2012 13:39	SED09-08B-101612	88	64	UG_KG	4	4
SED09-11B	BENZO(B)FLUORANTHENE	10/17/2012 15:59	SED09-11B-101712	78	63	UG_KG	3	2
SED09-12B	BENZO(B)FLUORANTHENE	10/16/2012 13:24	SED09-12B-101612	93	66	UG_KG	3	3
SED09-01	BENZO(G,H,I)PERYLENE	11/6/2007 12:00	SED09-01_20071106	188	45.6	UG_KG	34	27
SED09-02A	BENZO(G,H,I)PERYLENE	9/12/2016 10:35	SED09-02A-ME45-1	12	11	UG_KG	2	2
SED09-03A	BENZO(G,H,I)PERYLENE	9/12/2016 11:15	SED09-03A-ME45-1	6.3	6.3	UG_KG	1	1
SED09-04A	BENZO(G,H,I)PERYLENE	9/12/2016 11:40	SED09-04A-ME45-1	5.2	5.2	UG_KG	1	1
SED09-05A	BENZO(G,H,I)PERYLENE	9/13/2016 10:35	SED09-05A-ME45-1	10	10	UG_KG	1	1
SED09-06B	BENZO(G,H,I)PERYLENE	10/16/2012 14:14	SED09-06B-101612	83	51	UG_KG	4	3
SED09-08B	BENZO(G,H,I)PERYLENE	10/16/2012 13:39	SED09-08B-101612	43	29	UG_KG	4	4
SED09-11B	BENZO(G,H,I)PERYLENE	10/17/2012 15:59	SED09-11B-101712	40	25	UG_KG	3	3
SED09-12B	BENZO(G,H,I)PERYLENE	10/16/2012 13:24	SED09-12B-101612	44	29	UG_KG	3	3
SED09-01	BENZO(K)FLUORANTHENE	12/11/2001 0:00	SED09-01-NSD-121101	390 J	42.8	UG_KG	34	27
SED09-02A	BENZO(K)FLUORANTHENE	9/12/2016 10:35	SED09-02A-ME45-1	11	9.8	UG_KG	2	2
SED09-03A	BENZO(K)FLUORANTHENE	9/12/2016 11:15	SED09-03A-ME45-1	5.7	5.7	UG_KG	1	1
SED09-04A	BENZO(K)FLUORANTHENE	9/12/2016 11:40	SED09-04A-ME45-1	4.6	4.6	UG_KG	1	1
SED09-05A	BENZO(K)FLUORANTHENE	9/13/2016 10:35	SED09-05A-ME45-1	8.4	8.4	UG_KG	1	1
SED09-06B	BENZO(K)FLUORANTHENE	10/16/2012 14:14	SED09-06B-101612	67	41	UG_KG	4	3
SED09-08B	BENZO(K)FLUORANTHENE	10/16/2012 13:39	SED09-08B-101612	33	29	UG_KG	4	3
SED09-11B	BENZO(K)FLUORANTHENE	10/17/2012 15:59	SED09-11B-101712	33	20	UG_KG	3	3
SED09-12B	BENZO(K)FLUORANTHENE	10/16/2012 13:24	SED09-12B-101612	35	28	UG_KG	3	3
SED09-01	BENZOIC ACID	6/6/2002 0:00	SED09-01-NSD-060602	59 J	59	UG_KG	4	1
SED09-09	BENZOIC ACID	6/6/2002 0:00	SED09-09-NSD-060602	380 J	380	UG_KG	4	1
SED09-10	BENZOIC ACID					UG_KG	4	0
SED09-01	BIS(2-ETHYLHEXYL)PHTHALATE	6/6/2002 0:00	SED09-01-NSD-060602	3500	768	UG_KG	22	6
SED09-09	BIS(2-ETHYLHEXYL)PHTHALATE	1/15/2003 0:00	SED09-09-NSD-011503	750	248	UG_KG	22	8
SED09-10	BIS(2-ETHYLHEXYL)PHTHALATE	6/24/2003 0:00	SED09-10-NSD-062403	1200 J	378	UG_KG	22	7
SED09-01	BUTYLBENZYLPHTHALATE	6/19/2007 17:20	SED09-01_20070619	149 J	95.7	UG_KG	22	2
SED09-09	BUTYLBENZYLPHTHALATE	3/7/2007 0:00	SED09-09_20070307	165 J	165	UG_KG	22	1
SED09-10	BUTYLBENZYLPHTHALATE	6/15/2004 0:00	SED09-010-NSD-061504	38.9 J	38.9	UG_KG	22	1
SED09-01	CARBAZOLE					UG_KG	22	0
SED09-09	CARBAZOLE	3/16/2004 0:00	SED09-09-NSD-031604	91 J	90	UG_KG	22	2
SED09-10	CARBAZOLE	12/3/2003 0:00	SED09-10-NSO-120303	340	145	UG_KG	22	12
SED09-01	CHRYSENE	12/11/2001 0:00	SED09-01-NSD-121101	470 J	67.4	UG_KG	34	27
SED09-02A	CHRYSENE	9/12/2016 10:35	SED09-02A-ME45-1	22	20	UG_KG	2	2
SED09-03A	CHRYSENE	9/12/2016 11:15	SED09-03A-ME45-1	8.2	8.2	UG_KG	1	1
SED09-04A	CHRYSENE	9/12/2016 11:40	SED09-04A-ME45-1	6.6	6.6	UG_KG	1	1
SED09-05A	CHRYSENE	9/13/2016 10:35	SED09-05A-ME45-1	11	11	UG_KG	1	1
SED09-06B	CHRYSENE	10/16/2012 14:14	SED09-06B-101612	190	120	UG_KG	4	3
SED09-08B	CHRYSENE	9/26/2016 10:40	SED09-08B-ME45-1	77 J	66	UG_KG	4	3
SED09-12B	CHRYSENE	10/16/2012 13:24	SED09-12B-101612	74	53	UG_KG	3	3
SED09-01	DIBENZ(A,H)ANTHRACENE	11/6/2007 12:00	SED09-01_20071106	45.4 J	14.7	UG_KG	33	14
SED09-02A	DIBENZ(A,H)ANTHRACENE					UG_KG	2	0
SED09-03A	DIBENZ(A,H)ANTHRACENE					UG_KG	1	0
SED09-04A	DIBENZ(A,H)ANTHRACENE					UG_KG	1	0
SED09-05A	DIBENZ(A,H)ANTHRACENE	9/13/2016 10:35	SED09-05A-ME45-1	5.2	5.2	UG_KG	1	1
SED09-06B	DIBENZ(A,H)ANTHRACENE	10/16/2012 14:14	SED09-06B-101612	23	18	UG_KG	4	3
SED09-08B	DIBENZ(A,H)ANTHRACENE	10/3/2013 12:00	SED09-08B-100313	19 J	12	UG_KG	4	4
SED09-12B	DIBENZ(A,H)ANTHRACENE	10/14/2013 11:00:00 AM10/16/2012 1:24:00 PM		12 J	10	UG_KG	3	3
SED09-01	DIBENZOFURAN					UG_KG	22	0
SED09-09	DIBENZOFURAN					UG_KG	22	0
SED09-10	DIBENZOFURAN	6/7/2005 15:30	SED09-010	113 J	70.7	UG_KG	22	9
SED09-01	FLUORANTHENE	12/11/2001 0:00	SED09-01-NSD-121101	960 J	138	UG_KG	34	34
SED09-02A	FLUORANTHENE	9/12/2016 10:35	SED09-02A-ME45-1	29	28	UG_KG	2	2
SED09-03A	FLUORANTHENE	9/12/2016 11:15	SED09-03A-ME45-1	14	14	UG_KG	1	1
SED09-04A	FLUORANTHENE	9/12/2016 11:40	SED09-04A-ME45-1	9.8	9.8	UG_KG	1	1
SED09-05A	FLUORANTHENE	9/13/2016 10:35	SED09-05A-ME45-1	14	14	UG_KG	1	1
SED09-06B	FLUORANTHENE	10/16/2012 14:14	SED09-06B-101612	390	210	UG_KG	4	4
SED09-08B	FLUORANTHENE	10/16/2012 13:39	SED09-08B-101612	120	85	UG_KG	4	4
SED09-11B	FLUORANTHENE	10/17/2012 15:59	SED09-11B-101712	170	91	UG_KG	3	3
SED09-12B	FLUORANTHENE	10/16/2012 13:24	SED09-12B-101612	130	94	UG_KG	3	3
SED09-01	FLUORENE	9/27/2005 9:30	SED09-01-20050927	230	31.9	UG_KG	34	15
SED09-02A	FLUORENE					UG_KG	2	0
SED09-03A	FLUORENE					UG_KG	1	0
SED09-04A	FLUORENE					UG_KG	1	0
SED09-05A	FLUORENE					UG_KG	1	0
SED09-06B	FLUORENE	10/16/2012 14:14	SED09-06B-101612	32	19	UG_KG	4	2
SED09-08B	FLUORENE	10/16/2012 13:39	SED09-08B-101612	7.9	7.4	UG_KG	4	2
SED09-12B	FLUORENE	10/16/2012 13:24	SED09-12B-101612	11	8.4	UG_KG	3	2
SED09-01	HEXACHLOROCYCLOPENTADIENE					UG_KG	20	0
SED09-09	HEXACHLOROCYCLOPENTADIENE					UG_KG	20	0
SED09-10	HEXACHLOROCYCLOPENTADIENE					UG_KG	19	0
SED09-01	INDENO(1,2,3-CD)PYRENE	12/11/2001 0:00	SED09-01-NSD-121101	310 J	45.4	UG_KG	34	30
SED09-02A	INDENO(1,2,3-CD)PYRENE	9/12/2016 10:35	SED09-02A-ME45-1	11	9.7	UG_KG	2	2
SED09-03A	INDENO(1,2,3-CD)PYRENE	9/12/2016 11:15	SED09-03A-ME45-1	5.5	5.5	UG_KG	1	1
SED09-04A	INDENO(1,2,3-CD)PYRENE	9/12/2016 11:40	SED09-04A-ME45-1	4.4	4.4	UG_KG	1	1
SED09-05A	INDENO(1,2,3-CD)PYRENE	9/13/2016 10:35	SED09-05A-ME45-1	8.9	8.9	UG_KG	1	1
SED09-06B	INDENO(1,2,3-CD)PYRENE	10/16/2012 14:14	SED09-06B-101612	71	69	UG_KG	4	2

TABLE F-3
SUMMARY OF DESCRIPTIVE STATISTICS FOR SHALLOW SEDIMENT AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
SED09-08B	INDENO(1,2,3-CD)PYRENE	9/26/2016 10:40	SED09-08B-ME45-1	50 J	35	UG_KG	4	4
SED09-11B	INDENO(1,2,3-CD)PYRENE	10/17/2012 15:59	SED09-11B-101712	35	30	UG_KG	3	2
SED09-12B	INDENO(1,2,3-CD)PYRENE	10/14/2013 11:00	SED09-12B-101413	44 J	40	UG_KG	3	3
SED09-01	NAPHTHALENE	3/22/2005 0:00	SED09-01-032205	22.2 J	8.39	UG_KG	34	11
SED09-02A	NAPHTHALENE					UG_KG	2	0
SED09-03A	NAPHTHALENE					UG_KG	1	0
SED09-04A	NAPHTHALENE					UG_KG	1	0
SED09-05A	NAPHTHALENE					UG_KG	1	0
SED09-06B	NAPHTHALENE					UG_KG	4	0
SED09-08B	NAPHTHALENE					UG_KG	4	0
SED09-12B	NAPHTHALENE					UG_KG	3	0
SED09-01	PENTACHLOROPHENOL					UG_KG	20	0
SED09-09	PENTACHLOROPHENOL					UG_KG	20	0
SED09-10	PENTACHLOROPHENOL					UG_KG	20	0
SED09-01	PHENANTHRENE	12/11/2001 0:00	SED09-01-NSD-121101	390 J	94.9	UG_KG	34	30
SED09-02A	PHENANTHRENE	9/8/2015 12:30	SED09-02A-090815-1	11	9.8	UG_KG	2	2
SED09-03A	PHENANTHRENE	9/12/2016 11:15	SED09-03A-ME45-1	4.6	4.6	UG_KG	1	1
SED09-04A	PHENANTHRENE					UG_KG	1	0
SED09-05A	PHENANTHRENE	9/13/2016 10:35	SED09-05A-ME45-1	5.9	5.9	UG_KG	1	1
SED09-06B	PHENANTHRENE	10/16/2012 14:14	SED09-06B-101612	330	140	UG_KG	4	3
SED09-08B	PHENANTHRENE	10/16/2012 1:39:00 PM9/8/2015 10:45:00 AM		60 J	42	UG_KG	4	4
SED09-11B	PHENANTHRENE	10/17/2012 15:59	SED09-11B-101712	110	57	UG_KG	3	3
SED09-12B	PHENANTHRENE	10/16/2012 13:24	SED09-12B-101612	84	58	UG_KG	3	3
SED09-01	PYRENE	3/22/2005 0:00	SED09-01-032205	1110 J	166	UG_KG	34	31
SED09-02A	PYRENE	9/12/2016 10:35	SED09-02A-ME45-1	25	24	UG_KG	2	2
SED09-03A	PYRENE	9/12/2016 11:15	SED09-03A-ME45-1	13	13	UG_KG	1	1
SED09-04A	PYRENE	9/12/2016 11:40	SED09-04A-ME45-1	7.9	7.9	UG_KG	1	1
SED09-05A	PYRENE	9/13/2016 10:35	SED09-05A-ME45-1	13	13	UG_KG	1	1
SED09-06B	PYRENE	10/16/2012 14:14	SED09-06B-101612	350	180	UG_KG	4	4
SED09-07B	PYRENE	10/16/2012 13:53	SED09-07B-101612	90	76	UG_KG	3	3
SED09-08B	PYRENE	10/16/2012 1:39:00 PM9/26/2016 10:40:00 AM		110 J	78	UG_KG	4	4
SED09-11B	PYRENE	10/17/2012 15:59	SED09-11B-101712	130	70	UG_KG	3	3
SED09-12B	PYRENE	10/16/2012 13:24	SED09-12B-101612	120	85	UG_KG	3	3
SED09-07B	2-METHYLNAPHTHALENE					UG_KG	3	0
SED09-09	2-METHYLNAPHTHALENE	11/6/2007 12:00	SED09-09_20071106	56.6 J	21.8	UG_KG	34	11
SED09-10	2-METHYLNAPHTHALENE	12/3/2003 0:00	SED09-10-NSO-120303	1000 J	145	UG_KG	35	17
SED09-11B	2-METHYLNAPHTHALENE					UG_KG	3	0
SED09-07B	ACENAPHTHENE					UG_KG	3	0
SED09-09	ACENAPHTHENE	3/8/2006 0:00	SED09-09_Q106	197	53.8	UG_KG	34	14
SED09-10	ACENAPHTHENE	9/21/2010 1:00	SED09-10-092110	1500 J	267	UG_KG	35	22
SED09-11B	ACENAPHTHENE	10/17/2012 15:59	SED09-11B-101712	7.7	7.3	UG_KG	3	2
SED09-07B	ACENAPHTHYLENE	10/16/2012 13:53	SED09-07B-101612	6.7	6.7	UG_KG	3	1
SED09-09	ACENAPHTHYLENE	8/10/2004 0:00	SED09-09-NSD-081004	37.1 J	17.1	UG_KG	34	6
SED09-10	ACENAPHTHYLENE	9/26/2012 11:25	SED09-10-092612	36	24	UG_KG	35	5
SED09-11B	ACENAPHTHYLENE	10/17/2012 15:59	SED09-11B-101712	5.2	5.2	UG_KG	3	1
SED09-07B	ANTHRACENE	10/16/2012 13:53	SED09-07B-101612	14	9	UG_KG	3	3
SED09-09	ANTHRACENE	3/28/2011 10:19	SED09-09-032811	140	44	UG_KG	34	25
SED09-10	ANTHRACENE	3/16/2010 2:49	SED09-10-031610	3500	495	UG_KG	35	29
SED09-07B	BENZO(A)ANTHRACENE	10/16/2012 13:53	SED09-07B-101612	45	36	UG_KG	3	3
SED09-09	BENZO(A)ANTHRACENE	3/28/2011 10:19	SED09-09-032811	430	145	UG_KG	34	30
SED09-10	BENZO(A)ANTHRACENE	3/16/2010 2:49	SED09-10-031610	6800	954	UG_KG	35	32
SED09-11B	BENZO(A)ANTHRACENE	10/17/2012 15:59	SED09-11B-101712	72	52	UG_KG	3	2
SED09-07B	BENZO(A)PYRENE	10/16/2012 13:53	SED09-07B-101612	44	38	UG_KG	3	3
SED09-09	BENZO(A)PYRENE	3/28/2011 10:19	SED09-09-032811	390	145	UG_KG	34	30
SED09-10	BENZO(A)PYRENE	3/16/2010 2:49	SED09-10-031610	4700	697	UG_KG	35	31
SED09-11B	BENZO(A)PYRENE	10/17/2012 15:59	SED09-11B-101712	57	35	UG_KG	3	3
SED09-07B	BENZO(B)FLUORANTHENE	10/3/2013 13:40	SED09-07B-100313	83 J	70	UG_KG	3	3
SED09-09	BENZO(B)FLUORANTHENE	3/28/2011 10:19	SED09-09-032811	560	171	UG_KG	34	30
SED09-10	BENZO(B)FLUORANTHENE	3/16/2010 2:49	SED09-10-031610	6400	846	UG_KG	35	33
SED09-07B	BENZO(G,H,I)PERYLENE	10/16/2012 13:53	SED09-07B-101612	33	28	UG_KG	3	3
SED09-09	BENZO(G,H,I)PERYLENE	3/28/2011 10:19:00 AM1/15/2003 12:00:00 AM		230 JJ	95.6	UG_KG	34	30
SED09-10	BENZO(G,H,I)PERYLENE	9/4/2002 0:00	SED09-10-NSD-090402	2800 J	433	UG_KG	35	31
SED09-07B	BENZO(K)FLUORANTHENE	10/16/2012 13:53	SED09-07B-101612	30	22	UG_KG	3	3
SED09-09	BENZO(K)FLUORANTHENE	10/2/2013 9:30	SED09-09-100213	250 J	92.8	UG_KG	34	27
SED09-10	BENZO(K)FLUORANTHENE	9/21/2010 1:00	SED09-10-092110	2000	341	UG_KG	35	31
SED09-07B	CHRYSENE	10/16/2012 13:53	SED09-07B-101612	68	49	UG_KG	3	3
SED09-09	CHRYSENE	10/10/2011 14:00	SED09-09-101011	440 J	139	UG_KG	34	28
SED09-10	CHRYSENE	9/4/2002 0:00	SED09-10-NSD-090402	6300 J	919	UG_KG	35	31
SED09-11B	CHRYSENE	10/17/2012 15:59	SED09-11B-101712	72	39	UG_KG	3	3
SED09-07B	DIBENZ(A,H)ANTHRACENE	10/3/2013 13:40	SED09-07B-100313	17 J	11	UG_KG	3	3
SED09-09	DIBENZ(A,H)ANTHRACENE	3/22/2005 0:00	SED09-09-032205	286 J	51.7	UG_KG	34	16
SED09-10	DIBENZ(A,H)ANTHRACENE	3/16/2010 2:49	SED09-10-031610	900 J	180	UG_KG	35	18
SED09-11B	DIBENZ(A,H)ANTHRACENE	10/15/2013 11:30	SED09-011B-101513	14 J	11	UG_KG	3	3
SED09-07B	FLUORANTHENE	10/16/2012 13:53	SED09-07B-101612	110	79	UG_KG	3	3
SED09-09	FLUORANTHENE	3/28/2011 10:19	SED09-09-032811	1100	344	UG_KG	34	34
SED09-10	FLUORANTHENE	3/16/2010 2:49:00 AM9/4/2002 12:00:00 AM		16000 J	2350	UG_KG	35	34
SED09-07B	FLUORENE					UG_KG	3	0
SED09-09	FLUORENE	9/27/2005 9:32	SED09-09-20050927	194	46.6	UG_KG	34	24
SED09-10	FLUORENE	9/4/2002 0:00	SED09-10-NSD-090402	2500 J	397	UG_KG	35	26
SED09-11B	FLUORENE	10/17/2012 15:59	SED09-11B-101712	8.8	7.2	UG_KG	3	2
SED09-07B	INDENO(1,2,3-CD)PYRENE	9/26/2016 11:00	SED09-07B-ME45-1	37	31	UG_KG	3	3
SED09-09	INDENO(1,2,3-CD)PYRENE	3/16/2010 3:13	SED09-09-031610	290	96.2	UG_KG	34	30
SED09-10	INDENO(1,2,3-CD)PYRENE	9/21/2010 1:00	SED09-10-092110	2000	370	UG_KG	35	30
SED09-07B	NAPHTHALENE					UG_KG	3	0
SED09-09	NAPHTHALENE	12/3/2003 0:00	SED09-09-NSO-120303	47 J	17	UG_KG	34	12
SED09-10	NAPHTHALENE	3/16/2010 2:49	SED09-10-031610	1100 J	187	UG_KG	35	16
SED09-11B	NAPHTHALENE					UG_KG	3	0
SED09-07B	PHENANTHRENE	10/16/2012 13:53	SED09-07B-101612	46	37	UG_KG	3	3
SED09-09	PHENANTHRENE	3/28/2011 10:19	SED09-09-032811	710	229	UG_KG	34	32
SED09-10	PHENANTHRENE	9/4/2002 0:00	SED09-10-NSD-090402	18570 J	2120	UG_KG	35	33
SED09-09	PYRENE	3/22/2005 0:00	SED09-09-032205	1140 J	318	UG_KG	34	32
SED09-10	PYRENE	9/4/2002 0:00	SED09-10-NSD-090402	12190 J	1790	UG_KG	35	33
SED09-01	1,1,1-TRICHLOROETHANE					UG_KG	23	0
SED09-02A	1,1,1-TRICHLOROETHANE					UG_KG	1	0
SED09-03A	1,1,1-TRICHLOROETHANE					UG_KG	1	0
SED09-04A	1,1,1-TRICHLOROETHANE					UG_KG	1	0
SED09-05A	1,1,1-TRICHLOROETHANE					UG_KG	2	0
SED09-06B	1,1,1-TRICHLOROETHANE					UG_KG	4	0
SED09-07B	1,1,1-TRICHLOROETHANE					UG_KG	4	0
SED09-08B	1,1,1-TRICHLOROETHANE					UG_KG	4	0
SED09-09	1,1,1-TRICHLOROETHANE					UG_KG	23	0
SED09-10	1,1,1-TRICHLOROETHANE					UG_KG	23	0
SED09-11B	1,1,1-TRICHLOROETHANE					UG_KG	4	0
SED09-12B	1,1,1-TRICHLOROETHANE					UG_KG	4	0
SED09-01	1,1,2,2-TETRACHLOROETHANE					UG_KG	23	0
SED09-02A	1,1,2,2-TETRACHLOROETHANE					UG_KG	1	0
SED09-03A	1,1,2,2-TETRACHLOROETHANE					UG_KG	1	0

TABLE F-3
SUMMARY OF DESCRIPTIVE STATISTICS FOR SHALLOW SEDIMENT AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
SED09-04A	1,1,2,2-TETRACHLOROETHANE					UG_KG	1	0
SED09-05A	1,1,2,2-TETRACHLOROETHANE					UG_KG	2	0
SED09-06B	1,1,2,2-TETRACHLOROETHANE					UG_KG	4	0
SED09-07B	1,1,2,2-TETRACHLOROETHANE					UG_KG	4	0
SED09-08B	1,1,2,2-TETRACHLOROETHANE					UG_KG	4	0
SED09-09	1,1,2,2-TETRACHLOROETHANE					UG_KG	23	0
SED09-10	1,1,2,2-TETRACHLOROETHANE					UG_KG	23	0
SED09-11B	1,1,2,2-TETRACHLOROETHANE					UG_KG	4	0
SED09-12B	1,1,2,2-TETRACHLOROETHANE					UG_KG	4	0
SED09-01	1,1,2-TRICHLOROETHANE					UG_KG	23	0
SED09-02A	1,1,2-TRICHLOROETHANE					UG_KG	1	0
SED09-03A	1,1,2-TRICHLOROETHANE					UG_KG	1	0
SED09-04A	1,1,2-TRICHLOROETHANE					UG_KG	1	0
SED09-05A	1,1,2-TRICHLOROETHANE					UG_KG	2	0
SED09-06B	1,1,2-TRICHLOROETHANE					UG_KG	4	0
SED09-07B	1,1,2-TRICHLOROETHANE					UG_KG	4	0
SED09-08B	1,1,2-TRICHLOROETHANE					UG_KG	4	0
SED09-09	1,1,2-TRICHLOROETHANE					UG_KG	23	0
SED09-10	1,1,2-TRICHLOROETHANE					UG_KG	23	0
SED09-11B	1,1,2-TRICHLOROETHANE					UG_KG	4	0
SED09-12B	1,1,2-TRICHLOROETHANE					UG_KG	4	0
SED09-01	1,1-DICHLOROETHANE					UG_KG	23	0
SED09-02A	1,1-DICHLOROETHANE					UG_KG	1	0
SED09-03A	1,1-DICHLOROETHANE					UG_KG	1	0
SED09-04A	1,1-DICHLOROETHANE					UG_KG	1	0
SED09-05A	1,1-DICHLOROETHANE					UG_KG	2	0
SED09-06B	1,1-DICHLOROETHANE					UG_KG	4	0
SED09-07B	1,1-DICHLOROETHANE					UG_KG	4	0
SED09-08B	1,1-DICHLOROETHANE					UG_KG	4	0
SED09-09	1,1-DICHLOROETHANE					UG_KG	23	0
SED09-10	1,1-DICHLOROETHANE					UG_KG	23	0
SED09-11B	1,1-DICHLOROETHANE					UG_KG	4	0
SED09-12B	1,1-DICHLOROETHANE					UG_KG	4	0
SED09-01	1,1-DICHLOROETHENE					UG_KG	23	0
SED09-02A	1,1-DICHLOROETHENE					UG_KG	1	0
SED09-03A	1,1-DICHLOROETHENE					UG_KG	1	0
SED09-04A	1,1-DICHLOROETHENE					UG_KG	1	0
SED09-05A	1,1-DICHLOROETHENE					UG_KG	2	0
SED09-06B	1,1-DICHLOROETHENE					UG_KG	4	0
SED09-07B	1,1-DICHLOROETHENE					UG_KG	4	0
SED09-08B	1,1-DICHLOROETHENE					UG_KG	4	0
SED09-09	1,1-DICHLOROETHENE					UG_KG	23	0
SED09-10	1,1-DICHLOROETHENE					UG_KG	23	0
SED09-11B	1,1-DICHLOROETHENE					UG_KG	4	0
SED09-12B	1,1-DICHLOROETHENE					UG_KG	4	0
SED09-01	1,2-DICHLOROETHANE					UG_KG	23	0
SED09-02A	1,2-DICHLOROETHANE					UG_KG	1	0
SED09-03A	1,2-DICHLOROETHANE					UG_KG	1	0
SED09-04A	1,2-DICHLOROETHANE					UG_KG	1	0
SED09-05A	1,2-DICHLOROETHANE					UG_KG	2	0
SED09-06B	1,2-DICHLOROETHANE					UG_KG	4	0
SED09-07B	1,2-DICHLOROETHANE					UG_KG	4	0
SED09-08B	1,2-DICHLOROETHANE					UG_KG	4	0
SED09-09	1,2-DICHLOROETHANE					UG_KG	23	0
SED09-10	1,2-DICHLOROETHANE					UG_KG	23	0
SED09-11B	1,2-DICHLOROETHANE					UG_KG	4	0
SED09-12B	1,2-DICHLOROETHANE					UG_KG	4	0
SED09-01	1,2-DICHLOROPROPANE					UG_KG	23	0
SED09-02A	1,2-DICHLOROPROPANE					UG_KG	1	0
SED09-03A	1,2-DICHLOROPROPANE					UG_KG	1	0
SED09-04A	1,2-DICHLOROPROPANE					UG_KG	1	0
SED09-05A	1,2-DICHLOROPROPANE					UG_KG	2	0
SED09-06B	1,2-DICHLOROPROPANE					UG_KG	4	0
SED09-07B	1,2-DICHLOROPROPANE					UG_KG	4	0
SED09-08B	1,2-DICHLOROPROPANE					UG_KG	4	0
SED09-09	1,2-DICHLOROPROPANE					UG_KG	23	0
SED09-10	1,2-DICHLOROPROPANE					UG_KG	23	0
SED09-11B	1,2-DICHLOROPROPANE					UG_KG	4	0
SED09-12B	1,2-DICHLOROPROPANE					UG_KG	4	0
SED09-01	2-BUTANONE	12/11/2001 0:00	SED09-01-NSD-121101	220 T	110	UG_KG	22	2
SED09-02A	2-BUTANONE					UG_KG	1	0
SED09-03A	2-BUTANONE					UG_KG	1	0
SED09-04A	2-BUTANONE					UG_KG	1	0
SED09-05A	2-BUTANONE					UG_KG	2	0
SED09-06B	2-BUTANONE					UG_KG	3	0
SED09-07B	2-BUTANONE					UG_KG	3	0
SED09-08B	2-BUTANONE					UG_KG	3	0
SED09-09	2-BUTANONE	1/15/2003 0:00	SED09-09-NSD-011503	22	8.9	UG_KG	23	10
SED09-10	2-BUTANONE	3/16/2004 0:00	SED09-10-NSD-031604	5 J	3	UG_KG	22	5
SED09-11B	2-BUTANONE	9/9/2015 11:35	SED09-11B-090915-1	19 J	19	UG_KG	3	1
SED09-12B	2-BUTANONE					UG_KG	3	0
SED09-01	2-HEXANONE					UG_KG	23	0
SED09-02A	2-HEXANONE					UG_KG	1	0
SED09-03A	2-HEXANONE					UG_KG	1	0
SED09-04A	2-HEXANONE					UG_KG	1	0
SED09-05A	2-HEXANONE					UG_KG	2	0
SED09-06B	2-HEXANONE					UG_KG	4	0
SED09-07B	2-HEXANONE					UG_KG	4	0
SED09-08B	2-HEXANONE					UG_KG	4	0
SED09-09	2-HEXANONE					UG_KG	23	0
SED09-10	2-HEXANONE					UG_KG	23	0
SED09-11B	2-HEXANONE					UG_KG	4	0
SED09-12B	2-HEXANONE					UG_KG	4	0
SED09-01	4-METHYL-2-PENTANONE					UG_KG	23	0
SED09-02A	4-METHYL-2-PENTANONE					UG_KG	1	0
SED09-03A	4-METHYL-2-PENTANONE					UG_KG	1	0
SED09-04A	4-METHYL-2-PENTANONE					UG_KG	1	0
SED09-05A	4-METHYL-2-PENTANONE					UG_KG	2	0
SED09-06B	4-METHYL-2-PENTANONE					UG_KG	4	0
SED09-07B	4-METHYL-2-PENTANONE					UG_KG	4	0
SED09-08B	4-METHYL-2-PENTANONE					UG_KG	4	0
SED09-09	4-METHYL-2-PENTANONE					UG_KG	23	0
SED09-10	4-METHYL-2-PENTANONE					UG_KG	23	0
SED09-11B	4-METHYL-2-PENTANONE					UG_KG	4	0
SED09-12B	4-METHYL-2-PENTANONE					UG_KG	4	0
SED09-01	ACETONE	6/6/2002 0:00	SED09-01-NSD-060602	430 T	86.1	UG_KG	22	7
SED09-02A	ACETONE					UG_KG	1	0

TABLE F-3
SUMMARY OF DESCRIPTIVE STATISTICS FOR SHALLOW SEDIMENT AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
SED09-03A	ACETONE					UG_KG	1	0
SED09-04A	ACETONE					UG_KG	1	0
SED09-05A	ACETONE					UG_KG	2	0
SED09-06B	ACETONE					UG_KG	3	0
SED09-07B	ACETONE	9/8/2015 11:05	SED09-07B-090815-1	18	18	UG_KG	3	1
SED09-08B	ACETONE	9/8/2015 10:45	SED09-08B-090815-1	59 J	34	UG_KG	3	2
SED09-09	ACETONE	6/6/2002 0:00	SED09-09-NSD-060602	910 T	183	UG_KG	22	12
SED09-10	ACETONE	6/10/2002 0:00	SED09-10-NSD-061002	250 T	77.9	UG_KG	22	7
SED09-11B	ACETONE	9/9/2015 11:35	SED09-11B-090915-1	54	35	UG_KG	3	2
SED09-12B	ACETONE	9/26/2016 10:15	SED09-12B-ME45-1	20 J	13	UG_KG	3	2
SED09-01	BENZENE					UG_KG	23	0
SED09-02A	BENZENE					UG_KG	1	0
SED09-03A	BENZENE					UG_KG	1	0
SED09-04A	BENZENE					UG_KG	1	0
SED09-05A	BENZENE					UG_KG	2	0
SED09-06B	BENZENE					UG_KG	4	0
SED09-07B	BENZENE					UG_KG	4	0
SED09-08B	BENZENE					UG_KG	4	0
SED09-09	BENZENE	9/27/2005 9:32	SED09-09-20050927	0.25 J	0.25	UG_KG	23	1
SED09-10	BENZENE	11/6/2007 12:00	SED09-10_20071106	6.1 J	1.9	UG_KG	23	7
SED09-11B	BENZENE					UG_KG	4	0
SED09-12B	BENZENE					UG_KG	4	0
SED09-01	BROMODICHLOROMETHANE					UG_KG	23	0
SED09-02A	BROMODICHLOROMETHANE					UG_KG	1	0
SED09-03A	BROMODICHLOROMETHANE					UG_KG	1	0
SED09-04A	BROMODICHLOROMETHANE					UG_KG	1	0
SED09-05A	BROMODICHLOROMETHANE					UG_KG	2	0
SED09-06B	BROMODICHLOROMETHANE					UG_KG	4	0
SED09-07B	BROMODICHLOROMETHANE					UG_KG	4	0
SED09-08B	BROMODICHLOROMETHANE					UG_KG	4	0
SED09-09	BROMODICHLOROMETHANE					UG_KG	23	0
SED09-10	BROMODICHLOROMETHANE					UG_KG	23	0
SED09-11B	BROMODICHLOROMETHANE					UG_KG	4	0
SED09-12B	BROMODICHLOROMETHANE					UG_KG	4	0
SED09-01	BROMOFORM					UG_KG	23	0
SED09-02A	BROMOFORM					UG_KG	1	0
SED09-03A	BROMOFORM					UG_KG	1	0
SED09-04A	BROMOFORM					UG_KG	1	0
SED09-05A	BROMOFORM					UG_KG	2	0
SED09-06B	BROMOFORM					UG_KG	4	0
SED09-07B	BROMOFORM					UG_KG	4	0
SED09-08B	BROMOFORM					UG_KG	4	0
SED09-09	BROMOFORM					UG_KG	23	0
SED09-10	BROMOFORM					UG_KG	23	0
SED09-11B	BROMOFORM					UG_KG	4	0
SED09-12B	BROMOFORM					UG_KG	4	0
SED09-01	BROMOMETHANE	12/13/2005 12:30	SED09-01-20051213	5	5	UG_KG	23	1
SED09-02A	BROMOMETHANE					UG_KG	1	0
SED09-03A	BROMOMETHANE					UG_KG	1	0
SED09-04A	BROMOMETHANE					UG_KG	1	0
SED09-05A	BROMOMETHANE					UG_KG	2	0
SED09-06B	BROMOMETHANE					UG_KG	4	0
SED09-07B	BROMOMETHANE					UG_KG	4	0
SED09-08B	BROMOMETHANE					UG_KG	4	0
SED09-09	BROMOMETHANE					UG_KG	23	0
SED09-10	BROMOMETHANE					UG_KG	23	0
SED09-11B	BROMOMETHANE					UG_KG	4	0
SED09-12B	BROMOMETHANE					UG_KG	4	0
SED09-01	CARBON DISULFIDE	12/11/2001 0:00	SED09-01-NSD-121101	100 J	10.1	UG_KG	23	17
SED09-02A	CARBON DISULFIDE					UG_KG	1	0
SED09-03A	CARBON DISULFIDE					UG_KG	1	0
SED09-04A	CARBON DISULFIDE					UG_KG	1	0
SED09-05A	CARBON DISULFIDE					UG_KG	2	0
SED09-06B	CARBON DISULFIDE	9/26/2016 11:10	SED09-06B-ME45-1	16	12	UG_KG	4	2
SED09-07B	CARBON DISULFIDE	10/16/2012 13:53	SED09-07B-101612	54 J	21	UG_KG	4	4
SED09-08B	CARBON DISULFIDE	9/8/2015 10:45	SED09-08B-090815-1	20 J	15	UG_KG	4	3
SED09-09	CARBON DISULFIDE	1/23/2002 0:00	SED09-09-NSD-012302	140 J	15.5	UG_KG	23	19
SED09-10	CARBON DISULFIDE	6/24/2003 0:00	SED09-10-NSD-062403	17 J	5.92	UG_KG	24	18
SED09-11B	CARBON DISULFIDE	9/9/2015 11:35	SED09-11B-090915-1	3.8 J	3.8	UG_KG	4	1
SED09-12B	CARBON DISULFIDE	10/14/2013 11:00	SED09-12B-101413	14 J	10	UG_KG	4	3
SED09-01	CARBON TETRACHLORIDE					UG_KG	23	0
SED09-02A	CARBON TETRACHLORIDE					UG_KG	1	0
SED09-03A	CARBON TETRACHLORIDE					UG_KG	1	0
SED09-04A	CARBON TETRACHLORIDE					UG_KG	1	0
SED09-05A	CARBON TETRACHLORIDE					UG_KG	2	0
SED09-06B	CARBON TETRACHLORIDE					UG_KG	4	0
SED09-07B	CARBON TETRACHLORIDE					UG_KG	4	0
SED09-08B	CARBON TETRACHLORIDE					UG_KG	4	0
SED09-09	CARBON TETRACHLORIDE					UG_KG	23	0
SED09-10	CARBON TETRACHLORIDE					UG_KG	23	0
SED09-11B	CARBON TETRACHLORIDE					UG_KG	4	0
SED09-12B	CARBON TETRACHLORIDE					UG_KG	4	0
SED09-01	CHLOROBENZENE					UG_KG	23	0
SED09-02A	CHLOROBENZENE					UG_KG	1	0
SED09-03A	CHLOROBENZENE					UG_KG	1	0
SED09-04A	CHLOROBENZENE					UG_KG	1	0
SED09-05A	CHLOROBENZENE					UG_KG	2	0
SED09-06B	CHLOROBENZENE					UG_KG	4	0
SED09-07B	CHLOROBENZENE					UG_KG	4	0
SED09-08B	CHLOROBENZENE					UG_KG	4	0
SED09-09	CHLOROBENZENE					UG_KG	23	0
SED09-10	CHLOROBENZENE					UG_KG	23	0
SED09-11B	CHLOROBENZENE					UG_KG	4	0
SED09-12B	CHLOROBENZENE					UG_KG	4	0
SED09-01	CHLOROETHANE					UG_KG	23	0
SED09-02A	CHLOROETHANE					UG_KG	1	0
SED09-03A	CHLOROETHANE					UG_KG	1	0
SED09-04A	CHLOROETHANE					UG_KG	1	0
SED09-05A	CHLOROETHANE					UG_KG	2	0
SED09-06B	CHLOROETHANE					UG_KG	4	0
SED09-07B	CHLOROETHANE					UG_KG	4	0
SED09-08B	CHLOROETHANE					UG_KG	4	0
SED09-09	CHLOROETHANE					UG_KG	23	0
SED09-10	CHLOROETHANE					UG_KG	23	0
SED09-11B	CHLOROETHANE					UG_KG	4	0
SED09-12B	CHLOROETHANE					UG_KG	4	0
SED09-01	CHLOROFORM					UG_KG	23	0

TABLE F-3
SUMMARY OF DESCRIPTIVE STATISTICS FOR SHALLOW SEDIMENT AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
SED09-02A	CHLOROFORM					UG_KG	1	0
SED09-03A	CHLOROFORM					UG_KG	1	0
SED09-04A	CHLOROFORM					UG_KG	1	0
SED09-05A	CHLOROFORM					UG_KG	2	0
SED09-06B	CHLOROFORM					UG_KG	4	0
SED09-07B	CHLOROFORM					UG_KG	4	0
SED09-08B	CHLOROFORM					UG_KG	4	0
SED09-09	CHLOROFORM					UG_KG	23	0
SED09-10	CHLOROFORM					UG_KG	23	0
SED09-11B	CHLOROFORM					UG_KG	4	0
SED09-12B	CHLOROFORM					UG_KG	4	0
SED09-01	CHLOROMETHANE	12/11/2001 0:00	SED09-01-NSD-121101	98 T	49	UG_KG	23	2
SED09-02A	CHLOROMETHANE					UG_KG	1	0
SED09-03A	CHLOROMETHANE					UG_KG	1	0
SED09-04A	CHLOROMETHANE					UG_KG	1	0
SED09-05A	CHLOROMETHANE					UG_KG	2	0
SED09-06B	CHLOROMETHANE					UG_KG	4	0
SED09-07B	CHLOROMETHANE					UG_KG	4	0
SED09-08B	CHLOROMETHANE					UG_KG	4	0
SED09-09	CHLOROMETHANE	10/26/2004 0:00	SED09-09-NSD-102604	0.93 J	0.71	UG_KG	23	2
SED09-10	CHLOROMETHANE					UG_KG	23	0
SED09-11B	CHLOROMETHANE					UG_KG	4	0
SED09-12B	CHLOROMETHANE					UG_KG	4	0
SED09-01	CIS-1,2-DICHLOROETHENE					UG_KG	23	0
SED09-02A	CIS-1,2-DICHLOROETHENE					UG_KG	1	0
SED09-03A	CIS-1,2-DICHLOROETHENE					UG_KG	1	0
SED09-04A	CIS-1,2-DICHLOROETHENE					UG_KG	1	0
SED09-05A	CIS-1,2-DICHLOROETHENE					UG_KG	2	0
SED09-06B	CIS-1,2-DICHLOROETHENE					UG_KG	4	0
SED09-07B	CIS-1,2-DICHLOROETHENE					UG_KG	4	0
SED09-08B	CIS-1,2-DICHLOROETHENE					UG_KG	4	0
SED09-09	CIS-1,2-DICHLOROETHENE					UG_KG	23	0
SED09-10	CIS-1,2-DICHLOROETHENE					UG_KG	23	0
SED09-11B	CIS-1,2-DICHLOROETHENE					UG_KG	4	0
SED09-12B	CIS-1,2-DICHLOROETHENE					UG_KG	4	0
SED09-01	CIS-1,3-DICHLOROPROPENE					UG_KG	23	0
SED09-02A	CIS-1,3-DICHLOROPROPENE					UG_KG	1	0
SED09-03A	CIS-1,3-DICHLOROPROPENE					UG_KG	1	0
SED09-04A	CIS-1,3-DICHLOROPROPENE					UG_KG	1	0
SED09-05A	CIS-1,3-DICHLOROPROPENE					UG_KG	2	0
SED09-06B	CIS-1,3-DICHLOROPROPENE					UG_KG	4	0
SED09-07B	CIS-1,3-DICHLOROPROPENE					UG_KG	4	0
SED09-08B	CIS-1,3-DICHLOROPROPENE					UG_KG	4	0
SED09-09	CIS-1,3-DICHLOROPROPENE					UG_KG	23	0
SED09-10	CIS-1,3-DICHLOROPROPENE					UG_KG	23	0
SED09-11B	CIS-1,3-DICHLOROPROPENE					UG_KG	4	0
SED09-12B	CIS-1,3-DICHLOROPROPENE					UG_KG	4	0
SED09-01	DIBROMOCHLOROMETHANE					UG_KG	23	0
SED09-02A	DIBROMOCHLOROMETHANE					UG_KG	1	0
SED09-03A	DIBROMOCHLOROMETHANE					UG_KG	1	0
SED09-04A	DIBROMOCHLOROMETHANE					UG_KG	1	0
SED09-05A	DIBROMOCHLOROMETHANE					UG_KG	2	0
SED09-06B	DIBROMOCHLOROMETHANE					UG_KG	4	0
SED09-07B	DIBROMOCHLOROMETHANE					UG_KG	4	0
SED09-08B	DIBROMOCHLOROMETHANE					UG_KG	4	0
SED09-09	DIBROMOCHLOROMETHANE					UG_KG	23	0
SED09-10	DIBROMOCHLOROMETHANE					UG_KG	23	0
SED09-11B	DIBROMOCHLOROMETHANE					UG_KG	4	0
SED09-12B	DIBROMOCHLOROMETHANE					UG_KG	4	0
SED09-01	ETHYLBENZENE					UG_KG	23	0
SED09-02A	ETHYLBENZENE					UG_KG	1	0
SED09-03A	ETHYLBENZENE					UG_KG	1	0
SED09-04A	ETHYLBENZENE					UG_KG	1	0
SED09-05A	ETHYLBENZENE					UG_KG	2	0
SED09-06B	ETHYLBENZENE					UG_KG	4	0
SED09-07B	ETHYLBENZENE					UG_KG	4	0
SED09-08B	ETHYLBENZENE					UG_KG	4	0
SED09-09	ETHYLBENZENE					UG_KG	23	0
SED09-10	ETHYLBENZENE					UG_KG	23	0
SED09-11B	ETHYLBENZENE					UG_KG	4	0
SED09-12B	ETHYLBENZENE					UG_KG	4	0
SED09-01	METHYLENE CHLORIDE					UG_KG	23	0
SED09-02A	METHYLENE CHLORIDE					UG_KG	1	0
SED09-03A	METHYLENE CHLORIDE					UG_KG	1	0
SED09-04A	METHYLENE CHLORIDE					UG_KG	1	0
SED09-05A	METHYLENE CHLORIDE					UG_KG	2	0
SED09-06B	METHYLENE CHLORIDE					UG_KG	4	0
SED09-07B	METHYLENE CHLORIDE					UG_KG	4	0
SED09-08B	METHYLENE CHLORIDE	9/8/2015 10:45	SED09-08B-090815-1	100 J	100	UG_KG	4	1
SED09-09	METHYLENE CHLORIDE					UG_KG	23	0
SED09-10	METHYLENE CHLORIDE					UG_KG	24	0
SED09-11B	METHYLENE CHLORIDE					UG_KG	4	0
SED09-12B	METHYLENE CHLORIDE					UG_KG	4	0
SED09-01	STYRENE					UG_KG	23	0
SED09-02A	STYRENE					UG_KG	1	0
SED09-03A	STYRENE					UG_KG	1	0
SED09-04A	STYRENE					UG_KG	1	0
SED09-05A	STYRENE					UG_KG	2	0
SED09-06B	STYRENE					UG_KG	4	0
SED09-07B	STYRENE					UG_KG	4	0
SED09-08B	STYRENE					UG_KG	4	0
SED09-09	STYRENE					UG_KG	23	0
SED09-10	STYRENE					UG_KG	23	0
SED09-11B	STYRENE					UG_KG	4	0
SED09-12B	STYRENE					UG_KG	4	0
SED09-01	TETRACHLOROETHENE	12/2/2003 0:00	SED09-01-NSO-120203	1 J	1	UG_KG	23	1
SED09-02A	TETRACHLOROETHENE					UG_KG	1	0
SED09-03A	TETRACHLOROETHENE					UG_KG	1	0
SED09-04A	TETRACHLOROETHENE					UG_KG	1	0
SED09-05A	TETRACHLOROETHENE					UG_KG	2	0
SED09-06B	TETRACHLOROETHENE	9/26/2016 11:10	SED09-06B-ME45-1	5.3 J	5.3	UG_KG	4	1
SED09-07B	TETRACHLOROETHENE					UG_KG	4	0
SED09-08B	TETRACHLOROETHENE	9/26/2016 10:40	SED09-08B-ME45-1	3.3 J	3.3	UG_KG	4	1
SED09-09	TETRACHLOROETHENE	12/3/2003 0:00	SED09-09-NSO-120303	6 J	6	UG_KG	23	1
SED09-10	TETRACHLOROETHENE	12/3/2003 0:00	SED09-10-NSO-120303	0.9 J	0.9	UG_KG	23	1
SED09-11B	TETRACHLOROETHENE					UG_KG	4	0
SED09-12B	TETRACHLOROETHENE	9/26/2016 10:15	SED09-12B-ME45-1	2.5 J	2.5	UG_KG	4	1

TABLE F-3
SUMMARY OF DESCRIPTIVE STATISTICS FOR SHALLOW SEDIMENT AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND
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Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
SED09-01	TOLUENE					UG_KG	23	0
SED09-02A	TOLUENE					UG_KG	1	0
SED09-03A	TOLUENE					UG_KG	1	0
SED09-04A	TOLUENE					UG_KG	1	0
SED09-05A	TOLUENE					UG_KG	2	0
SED09-06B	TOLUENE					UG_KG	4	0
SED09-07B	TOLUENE					UG_KG	4	0
SED09-08B	TOLUENE					UG_KG	4	0
SED09-09	TOLUENE					UG_KG	23	0
SED09-10	TOLUENE	6/20/2007 9:45	SED09-10_20070620	0.5 J	0.42	UG_KG	23	2
SED09-11B	TOLUENE					UG_KG	4	0
SED09-12B	TOLUENE					UG_KG	4	0
SED09-01	TRANS-1,2-DICHLOROETHENE					UG_KG	23	0
SED09-02A	TRANS-1,2-DICHLOROETHENE					UG_KG	1	0
SED09-03A	TRANS-1,2-DICHLOROETHENE					UG_KG	1	0
SED09-04A	TRANS-1,2-DICHLOROETHENE					UG_KG	1	0
SED09-05A	TRANS-1,2-DICHLOROETHENE					UG_KG	2	0
SED09-06B	TRANS-1,2-DICHLOROETHENE					UG_KG	4	0
SED09-07B	TRANS-1,2-DICHLOROETHENE					UG_KG	4	0
SED09-08B	TRANS-1,2-DICHLOROETHENE					UG_KG	4	0
SED09-09	TRANS-1,2-DICHLOROETHENE					UG_KG	23	0
SED09-10	TRANS-1,2-DICHLOROETHENE					UG_KG	23	0
SED09-11B	TRANS-1,2-DICHLOROETHENE					UG_KG	4	0
SED09-12B	TRANS-1,2-DICHLOROETHENE					UG_KG	4	0
SED09-01	TRANS-1,3-DICHLOROPROPENE					UG_KG	23	0
SED09-02A	TRANS-1,3-DICHLOROPROPENE					UG_KG	1	0
SED09-03A	TRANS-1,3-DICHLOROPROPENE					UG_KG	1	0
SED09-04A	TRANS-1,3-DICHLOROPROPENE					UG_KG	1	0
SED09-05A	TRANS-1,3-DICHLOROPROPENE					UG_KG	2	0
SED09-06B	TRANS-1,3-DICHLOROPROPENE					UG_KG	4	0
SED09-07B	TRANS-1,3-DICHLOROPROPENE					UG_KG	4	0
SED09-08B	TRANS-1,3-DICHLOROPROPENE					UG_KG	4	0
SED09-09	TRANS-1,3-DICHLOROPROPENE					UG_KG	23	0
SED09-10	TRANS-1,3-DICHLOROPROPENE					UG_KG	23	0
SED09-11B	TRANS-1,3-DICHLOROPROPENE					UG_KG	4	0
SED09-12B	TRANS-1,3-DICHLOROPROPENE					UG_KG	4	0
SED09-01	TRICHLOROETHENE					UG_KG	23	0
SED09-02A	TRICHLOROETHENE					UG_KG	1	0
SED09-03A	TRICHLOROETHENE					UG_KG	1	0
SED09-04A	TRICHLOROETHENE					UG_KG	1	0
SED09-05A	TRICHLOROETHENE					UG_KG	2	0
SED09-06B	TRICHLOROETHENE					UG_KG	4	0
SED09-07B	TRICHLOROETHENE					UG_KG	4	0
SED09-08B	TRICHLOROETHENE					UG_KG	4	0
SED09-09	TRICHLOROETHENE					UG_KG	23	0
SED09-10	TRICHLOROETHENE					UG_KG	23	0
SED09-11B	TRICHLOROETHENE	10/17/2012 15:59	SED09-11B-101712	48 J	48	UG_KG	4	1
SED09-12B	TRICHLOROETHENE					UG_KG	4	0
SED09-01	VINYL CHLORIDE					UG_KG	23	0
SED09-02A	VINYL CHLORIDE					UG_KG	1	0
SED09-03A	VINYL CHLORIDE					UG_KG	1	0
SED09-04A	VINYL CHLORIDE					UG_KG	1	0
SED09-05A	VINYL CHLORIDE					UG_KG	2	0
SED09-06B	VINYL CHLORIDE					UG_KG	4	0
SED09-07B	VINYL CHLORIDE					UG_KG	4	0
SED09-08B	VINYL CHLORIDE					UG_KG	4	0
SED09-09	VINYL CHLORIDE					UG_KG	23	0
SED09-10	VINYL CHLORIDE	12/3/2003 0:00	SED09-10-NSO-120303	1 J	0.97	UG_KG	23	2
SED09-11B	VINYL CHLORIDE					UG_KG	4	0
SED09-12B	VINYL CHLORIDE					UG_KG	4	0

Notes:
U = Not Detected; UJ = Detection Limit Approximate; J = Quantitation Approximate; R = Rejected
(1) If sample was not detected, one half of detection limit was used in calculation of average concentration.
Maximum value presented when original and duplilcate samples were analyzed
Shallow sediment depths are presented
Parameters that have been detected in at least one sample since ME01 are included on the table

TABLE F-4
SUMMARY OF DESCRIPTIVE STATISTICS FOR TISSUE AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
Lipids								
ET09-03	LIPIDS	10/1/2013 11:30	ET09-03-100113	0.9	0.36	PCT	11	11
ET09-04	LIPIDS	10/1/2013 11:01	ET09-04-100113	1.1	0.48	PCT	11	11
ET09-05	LIPIDS	5/5/2010 12:10	ET09-05-050510	0.7	0.28	PCT	11	11
ET09-06	LIPIDS	10/1/2013 16:05	ET09-06-100113	0.9	0.3	PCT	11	11
ET09-07	LIPIDS	5/5/2010 11:20	ET09-07-050510	0.49	0.25	PCT	4	4
ET09-08	LIPIDS	5/5/2010 11:50	ET09-08-050510	0.52	0.23	PCT	4	4
ET09-09	LIPIDS	10/3/2013 14:00	ET09-09-100313	0.82	0.27	PCT	6	6
ET09-10	LIPIDS	10/3/2013 11:00	ET09-10-100313	0.4	0.14	PCT	6	6
ET09-11	LIPIDS	10/15/2013 11:00	ET09-11-101513	0.97	0.38	PCT	6	6
ET09-12	LIPIDS	10/3/2013 12:00	ET09-12-100313	0.65	0.24	PCT	6	6
Metals								
ET09-03	ALUMINUM	10/1/2013 11:30	ET09-03-100113	166 J	44.8	MG_KG	11	11
ET09-04	ALUMINUM	10/1/2013 11:01	ET09-04-100113	133 J	35.3	MG_KG	11	11
ET09-05	ALUMINUM	9/9/2015 10:35	ET09-05-090915-1	146	22.9	MG_KG	11	11
ET09-06	ALUMINUM	9/16/2016 12:45	ET09-06-ME45-1	42.6 J	12.8	MG_KG	11	11
ET09-07	ALUMINUM	9/15/2015 15:15	ET09-07-091515-1	54.2	34.1	MG_KG	4	4
ET09-08	ALUMINUM	12/14/2016 13:40	ET09-08-ME45R-1	144	55.4	MG_KG	4	4
ET09-09	ALUMINUM	9/9/2015 12:45	ET09-09-090915-1	27.2	13.1	MG_KG	6	6
ET09-10	ALUMINUM	10/3/2013 11:00	ET09-10-100313	1360 J	244	MG_KG	6	6
ET09-11	ALUMINUM	10/15/2012 14:30	ET09-11-101512	21.8	13.2	MG_KG	6	6
ET09-12	ALUMINUM	10/3/2013 12:00	ET09-12-100313	77.5 J	24	MG_KG	6	6
ET09-03	ANTIMONY	9/22/2014 12:45	ET09-03-092214-1	0.24 J	0.24	MG_KG	11	1
ET09-04	ANTIMONY	12/5/2007 0:00	ET09-04-12052007	0.75	0.69	MG_KG	11	2
ET09-05	ANTIMONY	9/9/2015 10:35	ET09-05-090915-1	0.36 J	0.25	MG_KG	11	2
ET09-06	ANTIMONY	9/9/2015 10:15	ET09-06-090915-1	0.45 J	0.41	MG_KG	11	2
ET09-07	ANTIMONY					MG_KG	4	0
ET09-08	ANTIMONY					MG_KG	4	0
ET09-09	ANTIMONY	9/9/2015 12:45	ET09-09-090915-1	0.48 J	0.36	MG_KG	6	2
ET09-10	ANTIMONY	9/9/2015 12:30	ET09-10-090915-1	0.44 J	0.4	MG_KG	6	2
ET09-11	ANTIMONY	9/9/2015 11:35	ET09-11-090915-1	0.42 J	0.42	MG_KG	6	1
ET09-12	ANTIMONY	9/9/2015 12:15	ET09-12-090915-1	0.31 J	0.31	MG_KG	6	1
ET09-03	ARSENIC	10/1/2013 11:30	ET09-03-100113	3.52 J	2.22	MG_KG	11	10
ET09-04	ARSENIC	10/1/2013 11:01	ET09-04-100113	5.17	2.65	MG_KG	11	10
ET09-05	ARSENIC	9/9/2015 10:35	ET09-05-090915-1	3.3	2.39	MG_KG	11	10
ET09-06	ARSENIC	10/1/2013 16:05	ET09-06-100113	4.73	2.47	MG_KG	11	10
ET09-07	ARSENIC	9/15/2016 11:00	ET09-07-ME45-1	3.7	2.6	MG_KG	4	4
ET09-08	ARSENIC	9/15/2015 14:30	ET09-08-091515-1	4.1	2.8	MG_KG	4	4
ET09-09	ARSENIC	10/3/2013 14:00	ET09-09-100313	4.56	3.23	MG_KG	6	6
ET09-10	ARSENIC	9/9/2015 12:30	ET09-10-090915-1	3.9	2.97	MG_KG	6	6
ET09-11	ARSENIC	10/15/2013 11:00	ET09-11-101513	3.61 J	2.92	MG_KG	6	6
ET09-12	ARSENIC	9/24/2014 14:20	ET09-12-092414-1	3.4	2.84	MG_KG	6	6
ET09-03	BARIUM	10/1/2013 11:30	ET09-03-100113	0.608 J	0.376	MG_KG	9	3
ET09-04	BARIUM	10/1/2013 11:01	ET09-04-100113	0.737 J	0.288	MG_KG	9	3
ET09-05	BARIUM	10/1/2013 15:05	ET09-05-100113	0.222 J	0.138	MG_KG	9	2
ET09-06	BARIUM	10/1/2013 16:05	ET09-06-100113	0.131 J	0.0955	MG_KG	9	2
ET09-07	BARIUM					MG_KG	4	0
ET09-08	BARIUM					MG_KG	4	0
ET09-09	BARIUM	10/3/2013 14:00	ET09-09-100313	0.0856 J	0.0856	MG_KG	6	1
ET09-10	BARIUM	10/3/2013 11:00	ET09-10-100313	6.05	6.05	MG_KG	6	1
ET09-11	BARIUM	10/15/2013 11:00	ET09-11-101513	0.0863 J	0.0863	MG_KG	6	1
ET09-12	BARIUM	10/3/2013 12:00	ET09-12-100313	0.476 J	0.476	MG_KG	6	1
ET09-03	BERYLLIUM	9/14/2015 12:35	ET09-03-091415-1	0.014 J	0.0067	MG_KG	11	4
ET09-04	BERYLLIUM	9/22/2014 13:00	ET09-04-092214-1	0.0074 J	0.0048	MG_KG	11	4
ET09-05	BERYLLIUM	9/9/2015 10:35	ET09-05-090915-1	0.018 J	0.0069	MG_KG	11	4
ET09-06	BERYLLIUM	9/9/2015 10:15	ET09-06-090915-1	0.0066 J	0.0049	MG_KG	11	3
ET09-07	BERYLLIUM	9/15/2015 15:15	ET09-07-091515-1	0.0072 J	0.0072	MG_KG	4	1
ET09-08	BERYLLIUM	9/15/2015 14:30	ET09-08-091515-1	0.0023 J	0.0023	MG_KG	4	1
ET09-09	BERYLLIUM	9/9/2015 12:45	ET09-09-090915-1	0.03 J	0.013	MG_KG	6	3
ET09-10	BERYLLIUM	10/3/2013 11:00	ET09-10-100313	0.111 J	0.0388	MG_KG	6	4
ET09-11	BERYLLIUM	9/23/2014 12:45	ET09-11-092314-1	0.0065 J	0.0046	MG_KG	6	3
ET09-12	BERYLLIUM	9/9/2015 12:15	ET09-12-090915-1	0.013 J	0.0071	MG_KG	6	3
ET09-03	CADMIUM	9/22/2014 12:45	ET09-03-092214-1	0.23	0.165	MG_KG	9	9
ET09-04	CADMIUM	10/1/2013 11:01	ET09-04-100113	0.202 J	0.131	MG_KG	9	9
ET09-05	CADMIUM	10/1/2013 15:05	ET09-05-100113	0.0873 J	0.0763	MG_KG	9	8
ET09-06	CADMIUM	5/5/2010 12:20	ET09-06-050510	0.22	0.107	MG_KG	9	9
ET09-07	CADMIUM	5/5/2010 11:20	ET09-07-050510	0.63	0.47	MG_KG	4	4
ET09-08	CADMIUM	5/5/2010 11:50	ET09-08-050510	0.68	0.3	MG_KG	4	4
ET09-09	CADMIUM	10/3/2013 14:00	ET09-09-100313	0.142 J	0.0947	MG_KG	6	6
ET09-10	CADMIUM	10/3/2013 11:00	ET09-10-100313	0.206 J	0.119	MG_KG	6	6
ET09-11	CADMIUM	10/15/2013 11:00	ET09-11-101513	0.12 J	0.094	MG_KG	6	6
ET09-12	CADMIUM	9/9/2015 12:15	ET09-12-090915-1	0.14 J	0.0903	MG_KG	6	6
ET09-03	CALCIUM	9/14/2016 0:00	ET09-03-ME45-1	2300 J	709	MG_KG	9	9
ET09-04	CALCIUM	10/1/2013 11:01	ET09-04-100113	2670 J	1130	MG_KG	9	9
ET09-05	CALCIUM	9/16/2016 12:30	ET09-05-ME45-1	1990 J	758	MG_KG	9	9
ET09-06	CALCIUM	9/16/2016 12:45	ET09-06-ME45-1	1420 J	570	MG_KG	9	9
ET09-07	CALCIUM	9/15/2016 11:00	ET09-07-ME45-1	2430 J	1050	MG_KG	4	4
ET09-08	CALCIUM	9/15/2016 11:45	ET09-08-ME45-1	2540 J	1120	MG_KG	4	4
ET09-09	CALCIUM	9/15/2016 11:30	ET09-09-ME45-1	3020 J	981	MG_KG	6	6
ET09-10	CALCIUM	9/15/2016 11:15	ET09-10-ME45-1	4300 J	1370	MG_KG	6	6
ET09-11	CALCIUM	9/13/2016 11:10	ET09-11B-ME45-1	4380 J	1210	MG_KG	6	6
ET09-12	CALCIUM	9/15/2016 10:50	ET09-12-ME45-1	3310 J	1160	MG_KG	6	6
ET09-03	CHROMIUM, TOTAL	12/5/2007 0:00	ET09-03-12052007	0.59 J	0.28	MG_KG	11	5
ET09-04	CHROMIUM, TOTAL	9/14/2016 12:00:00 AM12/14/2016 2:20:00 PM		1.1	0.48	MG_KG	11	7
ET09-05	CHROMIUM, TOTAL	9/9/2015 10:35	ET09-05-090915-1	1.1	0.32	MG_KG	11	6
ET09-06	CHROMIUM, TOTAL	3/18/2009 11:45	ET09-06-031809	0.29 J	0.17	MG_KG	11	5
ET09-07	CHROMIUM, TOTAL	12/14/2016 13:10	ET09-07-ME45R-1	1.1	0.6	MG_KG	4	2
ET09-08	CHROMIUM, TOTAL	12/14/2016 13:40	ET09-08-ME45R-1	1.4	0.87	MG_KG	4	3
ET09-09	CHROMIUM, TOTAL	10/15/2012 14:20	ET09-09-101512	0.36 J	0.36	MG_KG	6	1
ET09-10	CHROMIUM, TOTAL	10/3/2013 11:00	ET09-10-100313	9.37	4.74	MG_KG	6	2
ET09-11	CHROMIUM, TOTAL	9/13/2016 11:10	ET09-11B-ME45-1	1.6	0.93	MG_KG	6	2
ET09-12	CHROMIUM, TOTAL	9/15/2016 10:50	ET09-12-ME45-1	1	0.57	MG_KG	6	2
ET09-03	COBALT	10/15/2012 12:00	ET09-03-101512	0.14 J	0.095	MG_KG	9	3
ET09-04	COBALT	12/14/2016 14:20	ET09-04-ME45R-1	0.26 J	0.12	MG_KG	9	5
ET09-05	COBALT	12/13/2016 14:00	ET09-05-ME45R-1	0.18 J	0.086	MG_KG	9	4
ET09-06	COBALT	12/13/2016 10:55	ET09-06-ME45R-1	0.13 J	0.081	MG_KG	9	4
ET09-07	COBALT	12/14/2016 13:10	ET09-07-ME45R-1	0.057 J	0.047	MG_KG	4	2
ET09-08	COBALT	12/14/2016 13:40	ET09-08-ME45R-1	0.14 J	0.1	MG_KG	4	2
ET09-09	COBALT	12/13/2016 12:50	ET09-09-ME45R-1	0.14 J	0.13	MG_KG	6	2
ET09-10	COBALT	10/3/2013 11:00	ET09-10-100313	1.01	0.427	MG_KG	6	3
ET09-11	COBALT	12/13/2016 13:30	ET09-11-ME45R-1	0.059 J	0.057	MG_KG	6	2
ET09-12	COBALT	10/15/2012 13:40	ET09-12-101512	0.23 J	0.19	MG_KG	6	2
ET09-03	COPPER	10/1/2013 11:30	ET09-03-100113	3.58	2.34	MG_KG	11	7
ET09-04	COPPER	12/14/2016 14:20	ET09-04-ME45R-1	6.4	2.61	MG_KG	11	8
ET09-05	COPPER	9/9/2015 10:35	ET09-05-090915-1	2.8	1.64	MG_KG	11	7
ET09-06	COPPER	9/9/2015 10:15	ET09-06-090915-1	4.2	1.98	MG_KG	11	7
ET09-07	COPPER	9/15/2015 15:15	ET09-07-091515-1	6.3	4.1	MG_KG	4	2
ET09-08	COPPER	9/15/2015 14:30	ET09-08-091515-1	6.9	3.8	MG_KG	4	4
ET09-09	COPPER	10/15/2012 14:20	ET09-09-101512	3.1	2.39	MG_KG	6	5
ET09-10	COPPER	10/3/2013 11:00	ET09-10-100313	9.48	6.45	MG_KG	6	4
ET09-11	COPPER	9/23/2014 12:45	ET09-11-092314-1	4.2	2.6	MG_KG	6	4
ET09-12	COPPER	9/9/2015 12:15	ET09-12-090915-1	7.2	3.66	MG_KG	6	6
ET09-03	IRON	10/1/2013 11:30	ET09-03-100113	542 J	193	MG_KG	11	11
ET09-04	IRON	10/1/2013 11:01	ET09-04-100113	616 J	171	MG_KG	11	11
ET09-05	IRON	9/9/2015 10:35	ET09-05-090915-1	502	93.6	MG_KG	11	11
ET09-06	IRON	9/16/2016 12:45	ET09-06-ME45-1	178 J	59.8	MG_KG	11	11
ET09-07	IRON	9/15/2015 15:15	ET09-07-091515-1	208	137	MG_KG	4	4
ET09-08	IRON	12/14/2016 13:40	ET09-08-ME45R-1	390	162	MG_KG	4	4
ET09-09	IRON	9/9/2015 12:45	ET09-09-090915-1	94.3	49.8	MG_KG	6	6
ET09-10	IRON	10/3/2013 11:00	ET09-10-100313	3160 J	620	MG_KG	6	6
ET09-11	IRON	9/9/2015 11:35	ET09-11-090915-1	64.1	49.9	MG_KG	6	6
ET09-12	IRON	10/3/2013 12:00	ET09-12-100313	205 J	84	MG_KG	6	6
ET09-03	LEAD	10/1/2013 11:30	ET09-03-100113	1.19 J	0.573	MG_KG	11	6

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
ET09-04	LEAD	12/14/2016 14:20	ET09-04-ME45R-1	1.2	0.626	MG_KG	11	5
ET09-05	LEAD	9/9/2015 10:35	ET09-05-090915-1	1.2	0.67	MG_KG	11	2
ET09-06	LEAD	9/16/2016 12:45	ET09-06-ME45-1	0.25 J	0.18	MG_KG	11	3
ET09-07	LEAD	9/15/2015 15:15	ET09-07-091515-1	0.39 J	0.3	MG_KG	4	3
ET09-08	LEAD	12/14/2016 13:40	ET09-08-ME45R-1	0.88	0.56	MG_KG	4	2
ET09-09	LEAD	9/9/2015 12:45	ET09-09-090915-1	0.21 J	0.17	MG_KG	6	4
ET09-10	LEAD	10/3/2013 11:00	ET09-10-100313	6.9	2	MG_KG	6	4
ET09-11	LEAD	9/23/2014 12:45	ET09-11-092314-1	0.18 J	0.16	MG_KG	6	2
ET09-12	LEAD	10/3/2013 12:00	ET09-12-100313	0.689 J	0.372	MG_KG	6	4
ET09-03	MAGNESIUM	12/14/2016 12:30	ET09-03-ME45R-1	1010	821	MG_KG	9	9
ET09-04	MAGNESIUM	12/14/2016 14:20	ET09-04-ME45R-1	1250	858	MG_KG	9	9
ET09-05	MAGNESIUM	12/13/2016 14:00	ET09-05-ME45R-1	1040	890	MG_KG	9	9
ET09-06	MAGNESIUM	12/13/2016 10:55	ET09-06-ME45R-1	927	827	MG_KG	9	9
ET09-07	MAGNESIUM	12/14/2016 13:10	ET09-07-ME45R-1	941	868	MG_KG	4	4
ET09-08	MAGNESIUM	9/15/2015 14:30	ET09-08-091515-1	1050	957	MG_KG	4	4
ET09-09	MAGNESIUM	9/15/2016 11:30	ET09-09-ME45-1	950	890	MG_KG	6	6
ET09-10	MAGNESIUM	10/3/2013 11:00	ET09-10-100313	1150	993	MG_KG	6	6
ET09-11	MAGNESIUM	12/13/2016 13:30	ET09-11-ME45R-1	967	893	MG_KG	6	6
ET09-12	MAGNESIUM	9/9/2015 12:15	ET09-12-090915-1	1030	913	MG_KG	6	6
ET09-03	MANGANESE	10/1/2013 11:30	ET09-03-100113	29.4 J	12.2	MG_KG	11	9
ET09-04	MANGANESE	10/1/2013 11:01	ET09-04-100113	46 J	16.5	MG_KG	11	11
ET09-05	MANGANESE	9/9/2015 10:35	ET09-05-090915-1	10.4	6.76	MG_KG	11	11
ET09-06	MANGANESE	9/16/2016 12:45	ET09-06-ME45-1	29.9	9.1	MG_KG	11	11
ET09-07	MANGANESE	9/15/2016 11:00	ET09-07-ME45-1	10.4	4.98	MG_KG	4	4
ET09-08	MANGANESE	5/5/2010 11:50	ET09-08-050510	8.4	5.5	MG_KG	4	4
ET09-09	MANGANESE	9/9/2015 12:45	ET09-09-090915-1	13.6	7.82	MG_KG	6	6
ET09-10	MANGANESE	10/3/2013 11:00	ET09-10-100313	31 J	12	MG_KG	6	6
ET09-11	MANGANESE	9/13/2016 11:10	ET09-11B-ME45-1	12.7	9.96	MG_KG	6	6
ET09-12	MANGANESE	9/9/2015 12:15	ET09-12-090915-1	15.4	8.75	MG_KG	6	6
ET09-03	MERCURY	9/14/2016 0:00	ET09-03-ME45-1	0.012 J	0.00862	MG_KG	11	9
ET09-04	MERCURY	10/1/2013 11:01	ET09-04-100113	0.0111 J	0.0078	MG_KG	11	9
ET09-05	MERCURY	5/11/2011 11:50	ET09-05-051111	0.015 J	0.0081	MG_KG	11	8
ET09-06	MERCURY	10/1/2013 16:05	ET09-06-100113	0.0114 J	0.00825	MG_KG	11	8
ET09-07	MERCURY	9/15/2016 11:00	ET09-07-ME45-1	0.015 J	0.012	MG_KG	4	4
ET09-08	MERCURY	12/14/2016 13:40	ET09-08-ME45R-1	0.014 J	0.013	MG_KG	4	3
ET09-09	MERCURY	10/15/2012 14:20	ET09-09-101512	0.059	0.017	MG_KG	6	6
ET09-10	MERCURY	9/15/2016 11:15	ET09-10-ME45-1	0.028 J	0.0146	MG_KG	6	6
ET09-11	MERCURY	10/15/2013 11:00:00 AM9/13/2016 11:10:00 AM		0.012 JJ-	0.0098	MG_KG	6	6
ET09-12	MERCURY	9/15/2016 10:50	ET09-12-ME45-1	0.012 J	0.0087	MG_KG	6	5
ET09-03	NICKEL	10/1/2013 11:30	ET09-03-100113	1.04 J	0.347	MG_KG	11	6
ET09-04	NICKEL	9/14/2016 0:00	ET09-04-ME45-1	0.98 J	0.422	MG_KG	11	7
ET09-05	NICKEL	9/16/2016 12:30	ET09-05-ME45-1	0.94 J	0.389	MG_KG	11	8
ET09-06	NICKEL	12/13/2016 10:55	ET09-06-ME45R-1	0.59 J	0.23	MG_KG	11	6
ET09-07	NICKEL	12/14/2016 13:10	ET09-07-ME45R-1	0.45 J	0.32	MG_KG	4	3
ET09-08	NICKEL	12/14/2016 13:40	ET09-08-ME45R-1	0.65 J	0.46	MG_KG	4	3
ET09-09	NICKEL	9/15/2016 11:30	ET09-09-ME45-1	0.74 J	0.63	MG_KG	6	3
ET09-10	NICKEL	10/3/2013 11:00	ET09-10-100313	5.52	1.92	MG_KG	6	4
ET09-11	NICKEL	9/13/2016 11:10	ET09-11B-ME45-1	0.76 J	0.291	MG_KG	6	4
ET09-12	NICKEL	9/15/2016 10:50	ET09-12-ME45-1	0.84 J	0.623	MG_KG	6	4
ET09-03	POTASSIUM	5/5/2010 11:00	ET09-03-050510	1430	1170	MG_KG	9	9
ET09-04	POTASSIUM	10/1/2013 11:01	ET09-04-100113	1630	1330	MG_KG	9	9
ET09-05	POTASSIUM	9/23/2014 13:26	ET09-05-092314-1	1530	1320	MG_KG	9	9
ET09-06	POTASSIUM	9/22/2014 14:00	ET09-06-092214-1	1600	1330	MG_KG	9	9
ET09-07	POTASSIUM	9/15/2016 11:00	ET09-07-ME45-1	1340	1070	MG_KG	4	4
ET09-08	POTASSIUM	9/15/2016 11:45	ET09-08-ME45-1	1220	1020	MG_KG	4	4
ET09-09	POTASSIUM	10/15/2012 14:20	ET09-09-101512	1900	1460	MG_KG	6	6
ET09-10	POTASSIUM	10/15/2012 13:55	ET09-10-101512	1590	1340	MG_KG	6	6
ET09-11	POTASSIUM	9/23/2014 12:45	ET09-11-092314-1	1720	1290	MG_KG	6	6
ET09-12	POTASSIUM	10/15/2012 13:40	ET09-12-101512	2140	1520	MG_KG	6	6
ET09-03	SELENIUM	9/14/2016 0:00	ET09-03-ME45-1	0.67 J	0.46	MG_KG	9	4
ET09-04	SELENIUM	12/14/2016 14:20	ET09-04-ME45R-1	1.2 J	0.63	MG_KG	9	3
ET09-05	SELENIUM	12/13/2016 14:00	ET09-05-ME45R-1	0.64 J	0.48	MG_KG	9	4
ET09-06	SELENIUM	12/13/2016 10:55	ET09-06-ME45R-1	0.62 J	0.53	MG_KG	9	3
ET09-07	SELENIUM					MG_KG	4	0
ET09-08	SELENIUM	12/14/2016 13:40	ET09-08-ME45R-1	0.71 J	0.71	MG_KG	4	1
ET09-09	SELENIUM	9/15/2016 11:30	ET09-09-ME45-1	0.54 J	0.54	MG_KG	6	1
ET09-10	SELENIUM	9/9/2015 12:30	ET09-10-090915-1	0.7 J	0.64	MG_KG	6	2
ET09-11	SELENIUM	9/13/2016 11:10	ET09-11B-ME45-1	0.78 J	0.66	MG_KG	6	2
ET09-12	SELENIUM	12/13/2016 11:40	ET09-12-ME45R-1	0.56 J	0.56	MG_KG	6	1
ET09-03	SILVER	9/14/2015 12:35	ET09-03-091415-1	0.15 J	0.12	MG_KG	9	5
ET09-04	SILVER	9/22/2014 13:00	ET09-04-092214-1	0.2 J	0.12	MG_KG	9	5
ET09-05	SILVER	9/23/2014 13:26	ET09-05-092314-1	0.11 J	0.079	MG_KG	9	5
ET09-06	SILVER	9/22/2014 2:00:00 PM9/9/2015 10:15:00 AM		0.11 JJ	0.086	MG_KG	9	5
ET09-07	SILVER	5/5/2010 11:20	ET09-07-050510	1.3	0.96	MG_KG	4	4
ET09-08	SILVER	9/15/2015 14:30	ET09-08-091515-1	1.2	0.68	MG_KG	4	4
ET09-09	SILVER	9/9/2015 12:45	ET09-09-090915-1	0.26 J	0.14	MG_KG	6	4
ET09-10	SILVER	9/9/2015 12:30	ET09-10-090915-1	0.26 J	0.17	MG_KG	6	3
ET09-11	SILVER	9/9/2015 11:35	ET09-11-090915-1	0.26 J	0.18	MG_KG	6	4
ET09-12	SILVER	9/24/2014 14:20	ET09-12-092414-1	0.17 J	0.12	MG_KG	6	4
ET09-03	SODIUM	12/14/2016 12:30	ET09-03-ME45R-1	7570	6320	MG_KG	9	8
ET09-04	SODIUM	12/14/2016 14:20	ET09-04-ME45R-1	9130	6610	MG_KG	9	8
ET09-05	SODIUM	12/13/2016 14:00	ET09-05-ME45R-1	7500	6700	MG_KG	9	8
ET09-06	SODIUM	10/15/2012 13:00	ET09-06-101512	7140	6550	MG_KG	9	8
ET09-07	SODIUM	12/14/2016 13:10	ET09-07-ME45R-1	7160	6450	MG_KG	4	3
ET09-08	SODIUM	9/15/2015 14:30	ET09-08-091515-1	7530	6880	MG_KG	4	3
ET09-09	SODIUM	9/23/2014 12:15	ET09-09-092314-1	7670	6740	MG_KG	6	5
ET09-10	SODIUM	10/15/2012 13:55	ET09-10-101512	6930	6230	MG_KG	6	5
ET09-11	SODIUM	12/13/2016 13:30	ET09-11-ME45R-1	7470	6800	MG_KG	6	5
ET09-12	SODIUM	9/24/2014 14:20	ET09-12-092414-1	7670	6360	MG_KG	6	5
ET09-03	VANADIUM	10/15/2012 12:00	ET09-03-101512	0.89 J	0.56	MG_KG	9	3
ET09-04	VANADIUM	9/14/2015 14:00	ET09-04-091415-1	0.35 J	0.2	MG_KG	9	4
ET09-05	VANADIUM	9/9/2015 10:35	ET09-05-090915-1	0.58 J	0.24	MG_KG	9	4
ET09-06	VANADIUM	9/9/2015 10:15	ET09-06-090915-1	0.28 J	0.16	MG_KG	9	3
ET09-07	VANADIUM	9/15/2015 15:15	ET09-07-091515-1	0.49 J	0.34	MG_KG	4	2
ET09-08	VANADIUM	9/15/2015 14:30	ET09-08-091515-1	0.27 J	0.27	MG_KG	4	1
ET09-09	VANADIUM	9/9/2015 12:45	ET09-09-090915-1	0.52 J	0.33	MG_KG	6	2
ET09-10	VANADIUM	10/3/2013 11:00	ET09-10-100313	4.01	1.5	MG_KG	6	3
ET09-11	VANADIUM	9/9/2015 11:35	ET09-11-090915-1	0.3 J	0.22	MG_KG	6	2
ET09-12	VANADIUM	9/9/2015 12:15	ET09-12-090915-1	0.22 J	0.16	MG_KG	6	2
ET09-03	ZINC	10/15/2012 12:00	ET09-03-101512	12.6 J	7.55	MG_KG	11	11
ET09-04	ZINC	9/14/2016 0:00	ET09-04-ME45-1	15 J	8	MG_KG	11	11
ET09-05	ZINC	9/9/2015 10:35	ET09-05-090915-1	24.2	11.3	MG_KG	11	11
ET09-06	ZINC	12/13/2016 10:55	ET09-06-ME45R-1	14.6	7.1	MG_KG	11	11
ET09-07	ZINC	9/15/2015 15:15	ET09-07-091515-1	9.9	7.6	MG_KG	4	4
ET09-08	ZINC	9/15/2015 14:30	ET09-08-091515-1	10.5	7.93	MG_KG	4	4
ET09-09	ZINC	10/15/2012 14:20	ET09-09-101512	17 J	11.4	MG_KG	6	6
ET09-10	ZINC	10/3/2013 11:00	ET09-10-100313	29.2 J	20.9	MG_KG	6	6
ET09-11	ZINC	9/23/2014 12:45	ET09-11-092314-1	18.5	8.51	MG_KG	6	6
ET09-12	ZINC	10/15/2012 13:40	ET09-12-101512	26.8 J	17.4	MG_KG	6	6
PCBs								
ET09-03	DECACHLOROBIPHENYL	12/14/2016 12:30	ET09-03-ME45R-1	0.26 J	0.26	UG_KG	11	1
ET09-04	DECACHLOROBIPHENYL					UG_KG	11	0
ET09-05	DECACHLOROBIPHENYL	12/13/2016 14:00	ET09-05-ME45R-1	0.38 J	0.38	UG_KG	11	1
ET09-06	DECACHLOROBIPHENYL	9/16/2016 12:45	ET09-06-ME45-1	2	2	UG_KG	11	1
ET09-07	DECACHLOROBIPHENYL					UG_KG	4	0
ET09-08	DECACHLOROBIPHENYL					UG_KG	4	0
ET09-09	DECACHLOROBIPHENYL					UG_KG	6	0
ET09-10	DECACHLOROBIPHENYL	12/13/2016 12:25	ET09-10-ME45R-1	0.2 J	0.2	UG_KG	6	1
ET09-11	DECACHLOROBIPHENYL					UG_KG	6	0
ET09-12	DECACHLOROBIPHENYL					UG_KG	6	0
ET09-03	DICHLOROBIPHENYL	12/5/2007 0:00	ET09-03-12052007	2.3	2	UG_KG	11	2
ET09-04	DICHLOROBIPHENYL	12/5/2007 0:00	ET09-04-12052007	2.2	0.92	UG_KG	11	5
ET09-05	DICHLOROBIPHENYL	12/5/2007 0:00	ET09-05-12052007	1.5 J	1	UG_KG	11	2

TABLE F-4
SUMMARY OF DESCRIPTIVE STATISTICS FOR TISSUE AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
ET09-06	DICHLOROBIPHENYL	12/5/2007 0:00	ET09-06-12052007	1.9	0.83	UG_KG	11	4
ET09-07	DICHLOROBIPHENYL	9/15/2016 11:00	ET09-07-ME45-1	0.31 J	0.31	UG_KG	4	1
ET09-08	DICHLOROBIPHENYL	9/15/2016 11:45	ET09-08-ME45-1	0.25 J	0.23	UG_KG	4	2
ET09-09	DICHLOROBIPHENYL					UG_KG	6	0
ET09-10	DICHLOROBIPHENYL					UG_KG	6	0
ET09-11	DICHLOROBIPHENYL	9/13/2016 11:10	ET09-11B-ME45-1	0.22 J-	0.22	UG_KG	6	1
ET09-12	DICHLOROBIPHENYL					UG_KG	6	0
ET09-03	HEPTACHLOROBIPHENYL	12/5/2007 0:00	ET09-03-12052007	20	8.2	UG_KG	11	10
ET09-04	HEPTACHLOROBIPHENYL	10/15/2012 12:15	ET09-04-101512	9.4 J	5.1	UG_KG	11	10
ET09-05	HEPTACHLOROBIPHENYL	12/5/2007 0:00	ET09-05-12052007	7.7 J	2.7	UG_KG	11	10
ET09-06	HEPTACHLOROBIPHENYL	9/16/2016 12:45	ET09-06-ME45-1	11	5.3	UG_KG	11	9
ET09-07	HEPTACHLOROBIPHENYL	5/5/2010 11:20	ET09-07-050510	3.8	1.6	UG_KG	4	4
ET09-08	HEPTACHLOROBIPHENYL	5/5/2010 11:50	ET09-08-050510	7.4	2.8	UG_KG	4	3
ET09-09	HEPTACHLOROBIPHENYL	10/3/2013 14:00	ET09-09-100313	1.5	1	UG_KG	6	3
ET09-10	HEPTACHLOROBIPHENYL	12/13/2016 12:25	ET09-10-ME45R-1	0.21 J-	0.21	UG_KG	6	1
ET09-11	HEPTACHLOROBIPHENYL	9/9/2015 11:35	ET09-11-090915-1	44	9.8	UG_KG	6	5
ET09-12	HEPTACHLOROBIPHENYL	10/15/2012 13:40	ET09-12-101512	1.5	0.69	UG_KG	6	4
ET09-03	HEXACHLOROBIPHENYL	12/5/2007 0:00	ET09-03-12052007	80	26	UG_KG	11	11
ET09-04	HEXACHLOROBIPHENYL	12/5/2007 0:00	ET09-04-12052007	46	18	UG_KG	11	11
ET09-05	HEXACHLOROBIPHENYL	12/5/2007 0:00	ET09-05-12052007	39	13	UG_KG	11	10
ET09-06	HEXACHLOROBIPHENYL	9/16/2016 12:45	ET09-06-ME45-1	53	19	UG_KG	11	11
ET09-07	HEXACHLOROBIPHENYL	5/5/2010 11:20	ET09-07-050510	19	7.2	UG_KG	4	4
ET09-08	HEXACHLOROBIPHENYL	5/5/2010 11:50	ET09-08-050510	37	14	UG_KG	4	3
ET09-09	HEXACHLOROBIPHENYL	9/9/2015 12:45	ET09-09-090915-1	6.2	2.7	UG_KG	6	6
ET09-10	HEXACHLOROBIPHENYL	10/15/2012 13:55	ET09-10-101512	0.65 J	0.6	UG_KG	6	3
ET09-11	HEXACHLOROBIPHENYL	9/9/2015 11:35	ET09-11-090915-1	46	15	UG_KG	6	5
ET09-12	HEXACHLOROBIPHENYL	10/15/2012 13:40	ET09-12-101512	1.9	0.99	UG_KG	6	4
ET09-03	NONACHLOROBIPHENYL					UG_KG	11	0
ET09-04	NONACHLOROBIPHENYL					UG_KG	11	0
ET09-05	NONACHLOROBIPHENYL					UG_KG	11	0
ET09-06	NONACHLOROBIPHENYL	9/16/2016 12:45	ET09-06-ME45-1	0.49 J	0.49	UG_KG	11	1
ET09-07	NONACHLOROBIPHENYL					UG_KG	4	0
ET09-08	NONACHLOROBIPHENYL					UG_KG	4	0
ET09-09	NONACHLOROBIPHENYL					UG_KG	6	0
ET09-10	NONACHLOROBIPHENYL					UG_KG	6	0
ET09-11	NONACHLOROBIPHENYL					UG_KG	6	0
ET09-12	NONACHLOROBIPHENYL					UG_KG	6	0
ET09-03	OCTACHLOROBIPHENYL	10/1/2013 11:30	ET09-03-100113	2.6	2.6	UG_KG	11	1
ET09-04	OCTACHLOROBIPHENYL	9/14/2016 0:00	ET09-04-ME45-1	0.87 J	0.61	UG_KG	11	2
ET09-05	OCTACHLOROBIPHENYL					UG_KG	11	0
ET09-06	OCTACHLOROBIPHENYL	9/16/2016 12:45	ET09-06-ME45-1	1.2	1.2	UG_KG	11	1
ET09-07	OCTACHLOROBIPHENYL					UG_KG	4	0
ET09-08	OCTACHLOROBIPHENYL					UG_KG	4	0
ET09-09	OCTACHLOROBIPHENYL					UG_KG	6	0
ET09-10	OCTACHLOROBIPHENYL					UG_KG	6	0
ET09-11	OCTACHLOROBIPHENYL	9/9/2015 11:35	ET09-11-090915-1	7.5	7.5	UG_KG	6	1
ET09-12	OCTACHLOROBIPHENYL					UG_KG	6	0
ET09-03	PENTACHLOROBIPHENYL	12/5/2007 0:00	ET09-03-12052007	30	10	UG_KG	11	10
ET09-04	PENTACHLOROBIPHENYL	12/5/2007 0:00	ET09-04-12052007	22	8.1	UG_KG	11	10
ET09-05	PENTACHLOROBIPHENYL	12/5/2007 0:00	ET09-05-12052007	17	6.4	UG_KG	11	9
ET09-06	PENTACHLOROBIPHENYL	9/16/2016 12:45	ET09-06-ME45-1	72	13	UG_KG	11	10
ET09-07	PENTACHLOROBIPHENYL	5/5/2010 11:20	ET09-07-050510	8.4	4.3	UG_KG	4	3
ET09-08	PENTACHLOROBIPHENYL	5/5/2010 11:50	ET09-08-050510	12	4.5	UG_KG	4	3
ET09-09	PENTACHLOROBIPHENYL	9/9/2015 12:45	ET09-09-090915-1	3.9	2.3	UG_KG	6	3
ET09-10	PENTACHLOROBIPHENYL	12/13/2016 12:25	ET09-10-ME45R-1	0.18 J-	0.16	UG_KG	6	2
ET09-11	PENTACHLOROBIPHENYL	9/9/2015 11:35	ET09-11-090915-1	12	5.3	UG_KG	6	5
ET09-12	PENTACHLOROBIPHENYL	9/15/2016 10:50	ET09-12-ME45-1	0.72	0.58	UG_KG	6	2
ET09-03	POLYCHLORINATED BIPHENYLS (PCBS)	12/5/2007 0:00	ET09-03-12052007	140	41	UG_KG	7	7
ET09-04	POLYCHLORINATED BIPHENYLS (PCBS)	12/5/2007 0:00	ET09-04-12052007	84	30	UG_KG	7	7
ET09-05	POLYCHLORINATED BIPHENYLS (PCBS)	12/5/2007 0:00	ET09-05-12052007	67	18	UG_KG	7	6
ET09-06	POLYCHLORINATED BIPHENYLS (PCBS)	9/16/2016 12:45	ET09-06-ME45-1	180	49	UG_KG	7	7
ET09-07	POLYCHLORINATED BIPHENYLS (PCBS)	12/14/2016 13:10	ET09-07-ME45R-1	9.4	6	UG_KG	3	3
ET09-08	POLYCHLORINATED BIPHENYLS (PCBS)	9/15/2016 11:45	ET09-08-ME45-1	3.9	3.7	UG_KG	3	2
ET09-09	POLYCHLORINATED BIPHENYLS (PCBS)	9/9/2015 12:45	ET09-09-090915-1	12	4.5	UG_KG	6	6
ET09-10	POLYCHLORINATED BIPHENYLS (PCBS)	12/13/2016 12:25	ET09-10-ME45R-1	1.2 J-	0.66	UG_KG	6	4
ET09-11	POLYCHLORINATED BIPHENYLS (PCBS)	9/9/2015 11:35	ET09-11-090915-1	110	32	UG_KG	6	5
ET09-12	POLYCHLORINATED BIPHENYLS (PCBS)	10/15/2012 13:40	ET09-12-101512	3.9	2.1	UG_KG	6	4
ET09-03	TETRACHLOROBIPHENYL	5/5/2010 11:00	ET09-03-050510	4.7	2	UG_KG	11	7
ET09-04	TETRACHLOROBIPHENYL	5/5/2010 11:10	ET09-04-050510	5.6	1.7	UG_KG	11	9
ET09-05	TETRACHLOROBIPHENYL	5/5/2010 12:10	ET09-05-050510	5.4	2.4	UG_KG	11	5
ET09-06	TETRACHLOROBIPHENYL	9/16/2016 12:45	ET09-06-ME45-1	32	5.8	UG_KG	11	7
ET09-07	TETRACHLOROBIPHENYL	5/5/2010 11:20	ET09-07-050510	3.4	1.3	UG_KG	4	3
ET09-08	TETRACHLOROBIPHENYL	5/5/2010 11:50	ET09-08-050510	4	2	UG_KG	4	2
ET09-09	TETRACHLOROBIPHENYL	10/3/2013 14:00	ET09-09-100313	0.58 J	0.36	UG_KG	6	3
ET09-10	TETRACHLOROBIPHENYL					UG_KG	6	0
ET09-11	TETRACHLOROBIPHENYL	9/9/2015 11:35	ET09-11-090915-1	1.3	0.74	UG_KG	6	4
ET09-12	TETRACHLOROBIPHENYL	9/15/2016 10:50	ET09-12-ME45-1	0.16 J	0.16	UG_KG	6	1
ET09-03	TRICHLOROBIPHENYL	9/14/2016 0:00	ET09-03-ME45-1	0.55 J	0.41	UG_KG	11	2
ET09-04	TRICHLOROBIPHENYL	5/5/2010 11:10	ET09-04-050510	0.9	0.3	UG_KG	11	5
ET09-05	TRICHLOROBIPHENYL	5/5/2010 12:10	ET09-05-050510	0.99	0.39	UG_KG	11	4
ET09-06	TRICHLOROBIPHENYL	9/16/2016 12:45	ET09-06-ME45-1	4.1	1.5	UG_KG	11	3
ET09-07	TRICHLOROBIPHENYL					UG_KG	4	0
ET09-08	TRICHLOROBIPHENYL	9/15/2016 11:45	ET09-08-ME45-1	0.075 J	0.065	UG_KG	4	2
ET09-09	TRICHLOROBIPHENYL	9/9/2015 12:45	ET09-09-090915-1	0.26 J	0.18	UG_KG	6	2
ET09-10	TRICHLOROBIPHENYL					UG_KG	6	0
ET09-11	TRICHLOROBIPHENYL	9/9/2015 11:35	ET09-11-090915-1	0.5	0.23	UG_KG	6	3
ET09-12	TRICHLOROBIPHENYL	9/15/2016 10:50	ET09-12-ME45-1	0.13 J	0.13	UG_KG	6	1
Pesticides								
ET09-03	4,4-DDD	9/14/2015 12:35	ET09-03-091415-1	12 J	7.9	UG_KG	9	2
ET09-04	4,4-DDD	10/15/2012 12:15	ET09-04-101512	8.9 J	8.9	UG_KG	10	1
ET09-05	4,4-DDD	10/15/2012 12:40	ET09-05-101512	7.6 J	7.6	UG_KG	10	1
ET09-06	4,4-DDD	10/15/2012 13:00	ET09-06-101512	12 J	12	UG_KG	10	1
ET09-07	4,4-DDD	9/15/2015 15:15	ET09-07-091515-1	17 J	17	UG_KG	3	1
ET09-08	4,4-DDD					UG_KG	3	0
ET09-09	4,4-DDD					UG_KG	5	0
ET09-10	4,4-DDD					UG_KG	5	0
ET09-11	4,4-DDD	9/9/2015 11:35	ET09-11-090915-1	5.7 J	5.6	UG_KG	5	2
ET09-12	4,4-DDD					UG_KG	5	0
ET09-03	4,4-DDE	12/5/2007 0:00	ET09-03-12052007	4.7 J	3.7	UG_KG	10	3
ET09-04	4,4-DDE	10/1/2013 11:01	ET09-04-100113	2.7 J	2.7	UG_KG	10	1
ET09-05	4,4-DDE					UG_KG	10	0
ET09-06	4,4-DDE	10/1/2013 16:05	ET09-06-100113	1.9 J	1.9	UG_KG	10	1
ET09-07	4,4-DDE					UG_KG	3	0
ET09-08	4,4-DDE					UG_KG	3	0
ET09-09	4,4-DDE	10/3/2013 14:00	ET09-09-100313	1.7 J	1.7	UG_KG	5	1
ET09-10	4,4-DDE	10/3/2013 11:00	ET09-10-100313	0.87 J	0.87	UG_KG	5	1
ET09-11	4,4-DDE	10/15/2013 11:00	ET09-11-101513	1.6 J	1.6	UG_KG	5	1
ET09-12	4,4-DDE	10/3/2013 12:00	ET09-12-100313	0.72 J	0.72	UG_KG	5	1
ET09-03	4,4-DDT	12/5/2007 0:00	ET09-03-12052007	5.9 J	5.7	UG_KG	10	2
ET09-04	4,4-DDT	12/5/2007 0:00	ET09-04-12052007	11 J	7.9	UG_KG	10	2
ET09-05	4,4-DDT	12/5/2007 0:00	ET09-05-12052007	7.4 J	7.4	UG_KG	10	1
ET09-06	4,4-DDT	12/5/2007 0:00	ET09-06-12052007	7 J	5.3	UG_KG	10	2
ET09-07	4,4-DDT	9/15/2015 15:15	ET09-07-091515-1	6.5 J	6.5	UG_KG	3	1
ET09-08	4,4-DDT					UG_KG	3	0
ET09-09	4,4-DDT					UG_KG	5	0
ET09-10	4,4-DDT	10/3/2013 11:00	ET09-10-100313	1.5 J	1.5	UG_KG	5	1
ET09-11	4,4-DDT					UG_KG	5	0
ET09-12	4,4-DDT	9/9/2015 12:15	ET09-12-090915-1	0.63 J	0.63	UG_KG	5	1
ET09-03	ALDRIN	5/11/2011 11:05	ET09-03-051111	10 J	4.2	UG_KG	10	3
ET09-04	ALDRIN	5/11/2011 11:20	ET09-04-051111	8.5 J	4.3	UG_KG	10	3
ET09-05	ALDRIN	5/11/2011 11:50	ET09-05-051111	28	28	UG_KG	10	1
ET09-06	ALDRIN	9/9/2015 10:15	ET09-06-090915-1	5.6 J	3.2	UG_KG	10	3
ET09-07	ALDRIN					UG_KG	3	0

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
ET09-08	ALDRIN					UG_KG	3	0
ET09-09	ALDRIN	10/3/2013 14:00	ET09-09-100313	0.7 J	0.7	UG_KG	5	1
ET09-10	ALDRIN	10/3/2013 11:00	ET09-10-100313	0.64 J	0.64	UG_KG	5	1
ET09-11	ALDRIN	9/9/2015 11:35	ET09-11-090915-1	1.1 J	0.73	UG_KG	5	2
ET09-12	ALDRIN					UG_KG	5	0
ET09-03	ALPHA-BHC	5/5/2010 11:00	ET09-03-050510	4.9 J	3.2	UG_KG	10	2
ET09-04	ALPHA-BHC	10/15/2012 12:15	ET09-04-101512	6.7 J	6.7	UG_KG	10	1
ET09-05	ALPHA-BHC	10/15/2012 12:40	ET09-05-101512	2.2 J	1.5	UG_KG	10	2
ET09-06	ALPHA-BHC	10/15/2012 13:00	ET09-06-101512	3.9 J	2.2	UG_KG	10	2
ET09-07	ALPHA-BHC	9/15/2015 15:15	ET09-07-091515-1	1.1 J	1.1	UG_KG	3	1
ET09-08	ALPHA-BHC					UG_KG	3	0
ET09-09	ALPHA-BHC	10/15/2012 14:20	ET09-09-101512	2.4 J	2.4	UG_KG	5	1
ET09-10	ALPHA-BHC	10/15/2012 13:55	ET09-10-101512	3.2 J	3.2	UG_KG	5	1
ET09-11	ALPHA-BHC	10/15/2012 14:30	ET09-11-101512	16 J	8.3	UG_KG	5	2
ET09-12	ALPHA-BHC	10/15/2012 13:40	ET09-12-101512	2.2 J	1.3	UG_KG	5	2
ET09-03	ALPHA-CHLORDANE	9/14/2015 12:35	ET09-03-091415-1	1 J	1	UG_KG	10	1
ET09-04	ALPHA-CHLORDANE	10/15/2012 12:15	ET09-04-101512	9.4 J	9.4	UG_KG	10	1
ET09-05	ALPHA-CHLORDANE	12/5/2007 0:00	ET09-05-12052007	2 J	1.5	UG_KG	10	3
ET09-06	ALPHA-CHLORDANE	5/5/2010 12:20	ET09-06-050510	24 J	9.8	UG_KG	10	3
ET09-07	ALPHA-CHLORDANE	9/15/2015 15:15	ET09-07-091515-1	3.9 J	3.9	UG_KG	3	1
ET09-08	ALPHA-CHLORDANE					UG_KG	3	0
ET09-09	ALPHA-CHLORDANE	10/15/2012 14:20	ET09-09-101512	6.2 J	3.5	UG_KG	5	2
ET09-10	ALPHA-CHLORDANE	10/15/2012 13:55	ET09-10-101512	3.8 J	2.4	UG_KG	5	3
ET09-11	ALPHA-CHLORDANE	10/15/2012 14:30	ET09-11-101512	8.8 J	8.8	UG_KG	5	1
ET09-12	ALPHA-CHLORDANE	10/15/2012 13:40	ET09-12-101512	4 J	2.4	UG_KG	5	3
ET09-03	BETA-BHC	10/15/2012 12:00	ET09-03-101512	3.6 J	2.3	UG_KG	10	2
ET09-04	BETA-BHC	10/15/2012 12:15	ET09-04-101512	5.3 J	5.3	UG_KG	10	1
ET09-05	BETA-BHC	10/15/2012 12:40	ET09-05-101512	1.7 J	1.7	UG_KG	10	1
ET09-06	BETA-BHC	10/15/2012 13:00	ET09-06-101512	3.4 J	3.4	UG_KG	10	1
ET09-07	BETA-BHC					UG_KG	3	0
ET09-08	BETA-BHC	5/5/2010 11:50	ET09-08-050510	11	6.2	UG_KG	3	2
ET09-09	BETA-BHC	10/15/2012 14:20	ET09-09-101512	2.1 J	2.1	UG_KG	5	1
ET09-10	BETA-BHC	10/15/2012 13:55	ET09-10-101512	3.2 J	2.3	UG_KG	5	2
ET09-11	BETA-BHC	10/15/2012 14:30	ET09-11-101512	4.2 J	4.2	UG_KG	5	1
ET09-12	BETA-BHC					UG_KG	5	0
ET09-03	DELTA-BHC	5/5/2010 11:00	ET09-03-050510	12 J	7.6	UG_KG	9	3
ET09-04	DELTA-BHC	5/11/2011 11:20	ET09-04-051111	12 J	9.7	UG_KG	10	3
ET09-05	DELTA-BHC	5/11/2011 11:50	ET09-05-051111	21 J	9.6	UG_KG	10	4
ET09-06	DELTA-BHC	5/5/2010 12:20	ET09-06-050510	8	4.9	UG_KG	10	2
ET09-07	DELTA-BHC	5/5/2010 11:20	ET09-07-050510	9.5 J	5.4	UG_KG	3	2
ET09-08	DELTA-BHC	5/5/2010 11:50	ET09-08-050510	8.9 J	5.5	UG_KG	3	2
ET09-09	DELTA-BHC	10/15/2012 14:20	ET09-09-101512	3.1 J	2.1	UG_KG	5	2
ET09-10	DELTA-BHC	10/15/2012 13:55	ET09-10-101512	3.5 J	3.1	UG_KG	5	2
ET09-11	DELTA-BHC	10/15/2012 14:30	ET09-11-101512	4.2 J	4.2	UG_KG	5	1
ET09-12	DELTA-BHC	10/15/2012 13:40	ET09-12-101512	2.9 J	2.6	UG_KG	5	2
ET09-03	DIELDRIN					UG_KG	10	0
ET09-04	DIELDRIN	5/11/2011 11:20	ET09-04-051111	7.7 J	4.2	UG_KG	10	3
ET09-05	DIELDRIN	5/11/2011 11:50	ET09-05-051111	12 J	12	UG_KG	10	1
ET09-06	DIELDRIN					UG_KG	10	0
ET09-07	DIELDRIN					UG_KG	3	0
ET09-08	DIELDRIN					UG_KG	3	0
ET09-09	DIELDRIN					UG_KG	5	0
ET09-10	DIELDRIN					UG_KG	5	0
ET09-11	DIELDRIN					UG_KG	5	0
ET09-12	DIELDRIN					UG_KG	5	0
ET09-03	ENDOSULFAN I					UG_KG	10	0
ET09-04	ENDOSULFAN I	12/5/2007 0:00	ET09-04-12052007	2.4 J	1.6	UG_KG	10	2
ET09-05	ENDOSULFAN I	12/5/2007 0:00	ET09-05-12052007	2.4 J	2.4	UG_KG	10	1
ET09-06	ENDOSULFAN I	10/1/2013 16:05	ET09-06-100113	1.1 J	1.1	UG_KG	10	1
ET09-07	ENDOSULFAN I	9/15/2015 15:15	ET09-07-091515-1	0.9 J	0.9	UG_KG	3	1
ET09-08	ENDOSULFAN I					UG_KG	3	0
ET09-09	ENDOSULFAN I					UG_KG	5	0
ET09-10	ENDOSULFAN I	10/3/2013 11:00	ET09-10-100313	1.4 J	1.4	UG_KG	5	1
ET09-11	ENDOSULFAN I	10/15/2013 11:00	ET09-11-101513	0.51 J	0.51	UG_KG	5	1
ET09-12	ENDOSULFAN I	10/3/2013 12:00	ET09-12-100313	0.58 J	0.58	UG_KG	5	1
ET09-03	ENDOSULFAN II					UG_KG	10	0
ET09-04	ENDOSULFAN II					UG_KG	10	0
ET09-05	ENDOSULFAN II					UG_KG	10	0
ET09-06	ENDOSULFAN II					UG_KG	10	0
ET09-07	ENDOSULFAN II					UG_KG	3	0
ET09-08	ENDOSULFAN II					UG_KG	3	0
ET09-09	ENDOSULFAN II					UG_KG	5	0
ET09-10	ENDOSULFAN II	10/3/2013 11:00	ET09-10-100313	0.66 J	0.66	UG_KG	5	1
ET09-11	ENDOSULFAN II					UG_KG	5	0
ET09-12	ENDOSULFAN II					UG_KG	5	0
ET09-03	ENDOSULFAN SULFATE	10/15/2012 12:00	ET09-03-101512	4.1 J	4.1	UG_KG	10	1
ET09-04	ENDOSULFAN SULFATE	10/15/2012 12:15	ET09-04-101512	11 J	11	UG_KG	10	1
ET09-05	ENDOSULFAN SULFATE					UG_KG	10	0
ET09-06	ENDOSULFAN SULFATE	10/15/2012 13:00	ET09-06-101512	6.3 J	6.3	UG_KG	10	1
ET09-07	ENDOSULFAN SULFATE	9/15/2015 15:15	ET09-07-091515-1	3.2 J	3.2	UG_KG	3	1
ET09-08	ENDOSULFAN SULFATE					UG_KG	3	0
ET09-09	ENDOSULFAN SULFATE					UG_KG	5	0
ET09-10	ENDOSULFAN SULFATE					UG_KG	5	0
ET09-11	ENDOSULFAN SULFATE	10/15/2012 14:30	ET09-11-101512	4.5 J	4.5	UG_KG	5	1
ET09-12	ENDOSULFAN SULFATE					UG_KG	5	0
ET09-03	ENDRIN	9/14/2015 12:35	ET09-03-091415-1	3.5 J	3.5	UG_KG	10	1
ET09-04	ENDRIN					UG_KG	10	0
ET09-05	ENDRIN					UG_KG	10	0
ET09-06	ENDRIN					UG_KG	10	0
ET09-07	ENDRIN	9/15/2015 15:15	ET09-07-091515-1	3.1 J	3.1	UG_KG	3	1
ET09-08	ENDRIN					UG_KG	3	0
ET09-09	ENDRIN	10/15/2012 14:20	ET09-09-101512	3.4 J	3.4	UG_KG	5	1
ET09-10	ENDRIN	9/9/2015 12:30	ET09-10-090915-1	5.6 J	5.6	UG_KG	5	1
ET09-11	ENDRIN					UG_KG	5	0
ET09-12	ENDRIN	9/9/2015 12:15	ET09-12-090915-1	3 J	3	UG_KG	5	1
ET09-03	ENDRIN ALDEHYDE					UG_KG	10	0
ET09-04	ENDRIN ALDEHYDE	10/15/2012 12:15	ET09-04-101512	4 J	2	UG_KG	10	2
ET09-05	ENDRIN ALDEHYDE					UG_KG	10	0
ET09-06	ENDRIN ALDEHYDE	12/5/2007 0:00	ET09-06-12052007	3.4	3.4	UG_KG	10	1
ET09-07	ENDRIN ALDEHYDE					UG_KG	3	0
ET09-08	ENDRIN ALDEHYDE					UG_KG	3	0
ET09-09	ENDRIN ALDEHYDE					UG_KG	5	0
ET09-10	ENDRIN ALDEHYDE					UG_KG	5	0
ET09-11	ENDRIN ALDEHYDE					UG_KG	5	0
ET09-12	ENDRIN ALDEHYDE					UG_KG	5	0
ET09-03	ENDRIN KETONE					UG_KG	10	0
ET09-04	ENDRIN KETONE					UG_KG	10	0
ET09-05	ENDRIN KETONE	5/11/2011 11:50	ET09-05-051111	8.2 J	8.2	UG_KG	10	1
ET09-06	ENDRIN KETONE					UG_KG	10	0
ET09-07	ENDRIN KETONE					UG_KG	3	0
ET09-08	ENDRIN KETONE					UG_KG	3	0
ET09-09	ENDRIN KETONE					UG_KG	5	0
ET09-10	ENDRIN KETONE					UG_KG	5	0
ET09-11	ENDRIN KETONE					UG_KG	5	0
ET09-12	ENDRIN KETONE					UG_KG	5	0
ET09-03	HEPTACHLOR	5/5/2010 11:00	ET09-03-050510	6.3 J	6.3	UG_KG	9	1
ET09-04	HEPTACHLOR	5/11/2011 11:20	ET09-04-051111	9.8 J	6.7	UG_KG	10	2
ET09-05	HEPTACHLOR	5/11/2011 11:50	ET09-05-051111	27 J	27	UG_KG	10	1
ET09-06	HEPTACHLOR					UG_KG	10	0
ET09-07	HEPTACHLOR	9/15/2015 15:15	ET09-07-091515-1	1.7 J	1.7	UG_KG	3	1
ET09-08	HEPTACHLOR					UG_KG	3	0
ET09-09	HEPTACHLOR					UG_KG	5	0
ET09-10	HEPTACHLOR	10/3/2013 11:00	ET09-10-100313	1.4 J	1.4	UG_KG	5	1

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
ET09-11	HEPTACHLOR	10/15/2012 14:30	ET09-11-101512	2.1 J	2.1	UG_KG	5	1
ET09-12	HEPTACHLOR					UG_KG	5	0
ET09-03	HEPTACHLOR EPOXIDE	10/1/2013 11:30	ET09-03-100113	1.1 J	1.1	UG_KG	10	1
ET09-04	HEPTACHLOR EPOXIDE	10/1/2013 11:01	ET09-04-100113	1.3 J	1.3	UG_KG	10	1
ET09-05	HEPTACHLOR EPOXIDE					UG_KG	10	0
ET09-06	HEPTACHLOR EPOXIDE					UG_KG	10	0
ET09-07	HEPTACHLOR EPOXIDE					UG_KG	3	0
ET09-08	HEPTACHLOR EPOXIDE	9/15/2015 14:30	ET09-08-091515-1	1.3 J	1.3	UG_KG	3	1
ET09-09	HEPTACHLOR EPOXIDE					UG_KG	5	0
ET09-10	HEPTACHLOR EPOXIDE	9/9/2015 12:30	ET09-10-090915-1	1.2 J	1.2	UG_KG	5	1
ET09-11	HEPTACHLOR EPOXIDE	10/15/2013 11:00	ET09-11-101513	0.51 J	0.51	UG_KG	5	1
ET09-12	HEPTACHLOR EPOXIDE	9/9/2015 12:15	ET09-12-090915-1	3.4 J	2.1	UG_KG	5	3
ET09-03	LINDANE	5/5/2010 11:00	ET09-03-050510	6.6 J	6.6	UG_KG	10	1
ET09-04	LINDANE	5/5/2010 11:10	ET09-04-050510	5.2	5.2	UG_KG	10	1
ET09-05	LINDANE	5/5/2010 12:10	ET09-05-050510	6.4 J	6.4	UG_KG	10	1
ET09-06	LINDANE	9/9/2015 10:15	ET09-06-090915-1	1.4 J	1.4	UG_KG	10	1
ET09-07	LINDANE					UG_KG	3	0
ET09-08	LINDANE	5/5/2010 11:50	ET09-08-050510	5	5	UG_KG	3	1
ET09-09	LINDANE	9/9/2015 12:45	ET09-09-090915-1	0.9 J	0.9	UG_KG	5	1
ET09-10	LINDANE	10/15/2012 13:55	ET09-10-101512	3.9 J	2.3	UG_KG	5	2
ET09-11	LINDANE					UG_KG	5	0
ET09-12	LINDANE					UG_KG	5	0
ET09-03	METHOXYCHLOR	10/1/2013 11:30	ET09-03-100113	4.3 J	4.3	UG_KG	10	1
ET09-04	METHOXYCHLOR	10/1/2013 11:01	ET09-04-100113	4.6 J	4.6	UG_KG	10	1
ET09-05	METHOXYCHLOR					UG_KG	10	0
ET09-06	METHOXYCHLOR	10/1/2013 16:05	ET09-06-100113	3.6 J	3.6	UG_KG	10	1
ET09-07	METHOXYCHLOR					UG_KG	3	0
ET09-08	METHOXYCHLOR					UG_KG	3	0
ET09-09	METHOXYCHLOR					UG_KG	5	0
ET09-10	METHOXYCHLOR					UG_KG	5	0
ET09-11	METHOXYCHLOR					UG_KG	5	0
ET09-12	METHOXYCHLOR					UG_KG	5	0
ET09-03	TRANS-CHLORDANE	5/5/2010 11:00	ET09-03-050510	8.9 J	5.5	UG_KG	10	3
ET09-04	TRANS-CHLORDANE	10/1/2013 11:01	ET09-04-100113	5.9	4	UG_KG	10	2
ET09-05	TRANS-CHLORDANE	5/5/2010 12:10	ET09-05-050510	7.4 J	3.3	UG_KG	10	3
ET09-06	TRANS-CHLORDANE	10/1/2013 16:05	ET09-06-100113	7.1	7.1	UG_KG	10	1
ET09-07	TRANS-CHLORDANE	5/5/2010 11:20	ET09-07-050510	3.9 J	2.5	UG_KG	3	2
ET09-08	TRANS-CHLORDANE					UG_KG	3	0
ET09-09	TRANS-CHLORDANE	10/15/2012 14:20	ET09-09-101512	4.8 J	3.4	UG_KG	5	3
ET09-10	TRANS-CHLORDANE	10/15/2012 13:55	ET09-10-101512	2.7 J	2.7	UG_KG	5	1
ET09-11	TRANS-CHLORDANE	10/15/2013 11:00	ET09-11-101513	7.3	5.2	UG_KG	5	2
ET09-12	TRANS-CHLORDANE					UG_KG	5	0
SVOCs								
ET09-03	1,4-DICHLOROBENZENE					UG_KG	10	0
ET09-04	1,4-DICHLOROBENZENE					UG_KG	10	0
ET09-05	1,4-DICHLOROBENZENE	5/6/2008 0:00	ET09-05-050608	140 J	140	UG_KG	10	1
ET09-06	1,4-DICHLOROBENZENE					UG_KG	10	0
ET09-07	1,4-DICHLOROBENZENE					UG_KG	3	0
ET09-08	1,4-DICHLOROBENZENE					UG_KG	3	0
ET09-09	1,4-DICHLOROBENZENE					UG_KG	5	0
ET09-10	1,4-DICHLOROBENZENE					UG_KG	5	0
ET09-11	1,4-DICHLOROBENZENE					UG_KG	5	0
ET09-12	1,4-DICHLOROBENZENE					UG_KG	5	0
ET09-03	2-METHYLPHENOL					UG_KG	10	0
ET09-04	2-METHYLPHENOL	10/1/2013 11:01	ET09-04-100113	85 J	85	UG_KG	10	1
ET09-05	2-METHYLPHENOL					UG_KG	10	0
ET09-06	2-METHYLPHENOL					UG_KG	10	0
ET09-07	2-METHYLPHENOL					UG_KG	3	0
ET09-08	2-METHYLPHENOL					UG_KG	3	0
ET09-09	2-METHYLPHENOL					UG_KG	5	0
ET09-10	2-METHYLPHENOL					UG_KG	5	0
ET09-11	2-METHYLPHENOL	10/15/2013 11:00	ET09-11-101513	74 J	74	UG_KG	5	1
ET09-12	2-METHYLPHENOL					UG_KG	5	0
ET09-03	4-METHYLPHENOL					UG_KG	10	0
ET09-04	4-METHYLPHENOL					UG_KG	10	0
ET09-05	4-METHYLPHENOL	3/18/2009 12:00	ET09-05-031809	73 J	73	UG_KG	10	1
ET09-06	4-METHYLPHENOL					UG_KG	10	0
ET09-07	4-METHYLPHENOL					UG_KG	3	0
ET09-08	4-METHYLPHENOL					UG_KG	3	0
ET09-09	4-METHYLPHENOL					UG_KG	5	0
ET09-10	4-METHYLPHENOL					UG_KG	5	0
ET09-11	4-METHYLPHENOL					UG_KG	5	0
ET09-12	4-METHYLPHENOL					UG_KG	5	0
ET09-03	BIS(2-ETHYLHEXYL)PHTHALATE	10/1/2013 11:30	ET09-03-100113	620 J	240	UG_KG	10	5
ET09-04	BIS(2-ETHYLHEXYL)PHTHALATE	10/1/2013 11:01	ET09-04-100113	390 J	280	UG_KG	10	2
ET09-05	BIS(2-ETHYLHEXYL)PHTHALATE	5/5/2010 12:10	ET09-05-050510	190 J	160	UG_KG	10	2
ET09-06	BIS(2-ETHYLHEXYL)PHTHALATE	3/18/2009 11:45	ET09-06-031809	560	390	UG_KG	10	3
ET09-07	BIS(2-ETHYLHEXYL)PHTHALATE	5/5/2010 11:20	ET09-07-050510	310 J	310	UG_KG	3	1
ET09-08	BIS(2-ETHYLHEXYL)PHTHALATE	5/5/2010 11:50	ET09-08-050510	320 J	230	UG_KG	3	2
ET09-09	BIS(2-ETHYLHEXYL)PHTHALATE					UG_KG	5	0
ET09-10	BIS(2-ETHYLHEXYL)PHTHALATE	9/9/2015 12:30	ET09-10-090915-1	57 J	57	UG_KG	4	1
ET09-11	BIS(2-ETHYLHEXYL)PHTHALATE					UG_KG	5	0
ET09-12	BIS(2-ETHYLHEXYL)PHTHALATE	9/9/2015 12:15	ET09-12-090915-1	100 J	100	UG_KG	5	1
ET09-03	BUTYLBENZYLPHTHALATE					UG_KG	10	0
ET09-04	BUTYLBENZYLPHTHALATE					UG_KG	10	0
ET09-05	BUTYLBENZYLPHTHALATE					UG_KG	10	0
ET09-06	BUTYLBENZYLPHTHALATE	9/9/2015 10:15	ET09-06-090915-1	85 J	85	UG_KG	10	1
ET09-07	BUTYLBENZYLPHTHALATE					UG_KG	3	0
ET09-08	BUTYLBENZYLPHTHALATE					UG_KG	3	0
ET09-09	BUTYLBENZYLPHTHALATE					UG_KG	5	0
ET09-10	BUTYLBENZYLPHTHALATE					UG_KG	5	0
ET09-11	BUTYLBENZYLPHTHALATE					UG_KG	5	0
ET09-12	BUTYLBENZYLPHTHALATE					UG_KG	5	0
ET09-03	DIMETHYL PHTHALATE					UG_KG	10	0
ET09-04	DIMETHYL PHTHALATE					UG_KG	10	0
ET09-05	DIMETHYL PHTHALATE	5/5/2010 12:10	ET09-05-050510	41 J	41	UG_KG	10	1
ET09-06	DIMETHYL PHTHALATE	5/5/2010 12:20	ET09-06-050510	77 J	77	UG_KG	10	1
ET09-07	DIMETHYL PHTHALATE					UG_KG	3	0
ET09-08	DIMETHYL PHTHALATE					UG_KG	3	0
ET09-09	DIMETHYL PHTHALATE					UG_KG	5	0
ET09-10	DIMETHYL PHTHALATE					UG_KG	5	0
ET09-11	DIMETHYL PHTHALATE					UG_KG	5	0
ET09-12	DIMETHYL PHTHALATE					UG_KG	5	0
ET09-03	DI-N-BUTYLPHTHALATE					UG_KG	10	0
ET09-04	DI-N-BUTYLPHTHALATE					UG_KG	10	0
ET09-05	DI-N-BUTYLPHTHALATE					UG_KG	10	0
ET09-06	DI-N-BUTYLPHTHALATE					UG_KG	10	0
ET09-07	DI-N-BUTYLPHTHALATE					UG_KG	3	0
ET09-08	DI-N-BUTYLPHTHALATE					UG_KG	3	0
ET09-09	DI-N-BUTYLPHTHALATE					UG_KG	5	0
ET09-10	DI-N-BUTYLPHTHALATE					UG_KG	5	0
ET09-11	DI-N-BUTYLPHTHALATE	9/23/2014 12:45	ET09-11-092314-1	48 J	48	UG_KG	5	1
ET09-12	DI-N-BUTYLPHTHALATE					UG_KG	5	0
ET09-03	NITROBENZENE	10/1/2013 11:30	ET09-03-100113	220	220	UG_KG	10	1
ET09-04	NITROBENZENE					UG_KG	10	0
ET09-05	NITROBENZENE					UG_KG	10	0
ET09-06	NITROBENZENE					UG_KG	10	0
ET09-07	NITROBENZENE					UG_KG	3	0
ET09-08	NITROBENZENE					UG_KG	3	0
ET09-09	NITROBENZENE					UG_KG	5	0
ET09-10	NITROBENZENE					UG_KG	5	0
ET09-11	NITROBENZENE					UG_KG	5	0
ET09-12	NITROBENZENE					UG_KG	5	0

TABLE F-4
SUMMARY OF DESCRIPTIVE STATISTICS FOR TISSUE AT SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
ET09-03	PHENOL					UG_KG	10	0
ET09-04	PHENOL	10/1/2013 11:01	ET09-04-100113	100 J	83	UG_KG	10	2
ET09-05	PHENOL	10/15/2012 12:40	ET09-05-101512	38 J	38	UG_KG	10	1
ET09-06	PHENOL	10/15/2012 13:00	ET09-06-101512	42 J	42	UG_KG	10	1
ET09-07	PHENOL					UG_KG	3	0
ET09-08	PHENOL					UG_KG	3	0
ET09-09	PHENOL	10/15/2012 14:20	ET09-09-101512	47 J	47	UG_KG	5	1
ET09-10	PHENOL					UG_KG	5	0
ET09-11	PHENOL	10/15/2012 14:30	ET09-11-101512	45 J	45	UG_KG	5	1
ET09-12	PHENOL	9/24/2014 14:20	ET09-12-092414-1	87 J	87	UG_KG	5	1
SVOCs, SIM								
ET09-03	2-METHYLNAPHTHALENE	10/1/2013 11:30	ET09-03-100113	37	20	UG_KG	10	8
ET09-04	2-METHYLNAPHTHALENE	5/5/2010 11:10	ET09-04-050510	55	25	UG_KG	10	10
ET09-05	2-METHYLNAPHTHALENE	5/5/2010 12:10	ET09-05-050510	41 J	21	UG_KG	10	7
ET09-06	2-METHYLNAPHTHALENE	5/5/2010 12:20	ET09-06-050510	44	19	UG_KG	10	9
ET09-07	2-METHYLNAPHTHALENE	5/5/2010 11:20	ET09-07-050510	29	29	UG_KG	3	1
ET09-08	2-METHYLNAPHTHALENE	5/5/2010 11:50	ET09-08-050510	27	27	UG_KG	3	1
ET09-09	2-METHYLNAPHTHALENE	10/3/2013 14:00	ET09-09-100313	29	18	UG_KG	5	3
ET09-10	2-METHYLNAPHTHALENE	10/3/2013 11:00	ET09-10-100313	11	11	UG_KG	5	1
ET09-11	2-METHYLNAPHTHALENE	10/15/2013 11:00	ET09-11-101513	35	16	UG_KG	5	4
ET09-12	2-METHYLNAPHTHALENE	10/3/2013 12:00	ET09-12-100313	17	17	UG_KG	5	1
ET09-03	ACENAPHTHENE	5/11/2011 11:05	ET09-03-051111	29	16	UG_KG	10	8
ET09-04	ACENAPHTHENE	5/11/2011 11:20	ET09-04-051111	50 J	21	UG_KG	10	9
ET09-05	ACENAPHTHENE	5/6/2008 0:00	ET09-05-050608	30 J	19	UG_KG	10	6
ET09-06	ACENAPHTHENE	10/1/2013 16:05	ET09-06-100113	32	18	UG_KG	10	9
ET09-07	ACENAPHTHENE	5/5/2010 11:20	ET09-07-050510	13	13	UG_KG	3	1
ET09-08	ACENAPHTHENE	5/5/2010 11:50	ET09-08-050510	14	9.5	UG_KG	3	2
ET09-09	ACENAPHTHENE	10/3/2013 14:00	ET09-09-100313	20	14	UG_KG	5	3
ET09-10	ACENAPHTHENE	10/3/2013 11:00	ET09-10-100313	5.1 J	5.1	UG_KG	5	1
ET09-11	ACENAPHTHENE	10/15/2013 11:00	ET09-11-101513	16	11	UG_KG	5	4
ET09-12	ACENAPHTHENE	10/3/2013 12:00	ET09-12-100313	5.2 J	5.2	UG_KG	5	1
ET09-03	ACENAPHTHYLENE	5/11/2011 11:05	ET09-03-051111	8.2	5.4	UG_KG	10	5
ET09-04	ACENAPHTHYLENE	5/11/2011 11:20	ET09-04-051111	15 J	7.2	UG_KG	10	7
ET09-05	ACENAPHTHYLENE	5/11/2011 11:50	ET09-05-051111	6.7	5	UG_KG	10	5
ET09-06	ACENAPHTHYLENE	9/22/2014 14:00	ET09-06-092214-1	15	6.8	UG_KG	10	5
ET09-07	ACENAPHTHYLENE					UG_KG	3	0
ET09-08	ACENAPHTHYLENE					UG_KG	3	0
ET09-09	ACENAPHTHYLENE	9/9/2015 12:45	ET09-09-090915-1	6	5	UG_KG	5	2
ET09-10	ACENAPHTHYLENE					UG_KG	5	0
ET09-11	ACENAPHTHYLENE	10/15/2013 11:00	ET09-11-101513	7	6.2	UG_KG	5	2
ET09-12	ACENAPHTHYLENE	10/3/2013 12:00	ET09-12-100313	4.4 J	4.4	UG_KG	5	1
ET09-03	ANTHRACENE	10/1/2013 11:30	ET09-03-100113	5.7 J	5.7	UG_KG	10	1
ET09-04	ANTHRACENE	9/14/2015 14:00	ET09-04-091415-1	21	9.6	UG_KG	10	4
ET09-05	ANTHRACENE	5/5/2010 12:10	ET09-05-050510	5.1	5.1	UG_KG	10	1
ET09-06	ANTHRACENE	10/1/2013 16:05	ET09-06-100113	5 J	5	UG_KG	10	1
ET09-07	ANTHRACENE					UG_KG	3	0
ET09-08	ANTHRACENE					UG_KG	3	0
ET09-09	ANTHRACENE	10/3/2013 14:00	ET09-09-100313	3 J	3	UG_KG	5	1
ET09-10	ANTHRACENE	10/3/2013 11:00	ET09-10-100313	3.6 J	3.6	UG_KG	5	1
ET09-11	ANTHRACENE	10/15/2013 11:00	ET09-11-101513	6 J	6	UG_KG	5	1
ET09-12	ANTHRACENE					UG_KG	5	0
ET09-03	BENZO(A)ANTHRACENE	10/1/2013 11:30	ET09-03-100113	7 J	6.1	UG_KG	10	2
ET09-04	BENZO(A)ANTHRACENE	12/5/2007 0:00	ET09-04-12052007	6	5	UG_KG	10	2
ET09-05	BENZO(A)ANTHRACENE	12/5/2007 0:00	ET09-05-12052007	6.6	6.6	UG_KG	10	1
ET09-06	BENZO(A)ANTHRACENE	12/5/2007 0:00	ET09-06-12052007	5.1	5.1	UG_KG	10	1
ET09-07	BENZO(A)ANTHRACENE					UG_KG	3	0
ET09-08	BENZO(A)ANTHRACENE					UG_KG	3	0
ET09-09	BENZO(A)ANTHRACENE					UG_KG	5	0
ET09-10	BENZO(A)ANTHRACENE	10/3/2013 11:00	ET09-10-100313	13	13	UG_KG	5	1
ET09-11	BENZO(A)ANTHRACENE					UG_KG	5	0
ET09-12	BENZO(A)ANTHRACENE					UG_KG	5	0
ET09-03	BENZO(A)PYRENE	10/1/2013 11:30	ET09-03-100113	6.1 J	6.1	UG_KG	10	1
ET09-04	BENZO(A)PYRENE	10/1/2013 11:01	ET09-04-100113	2.8 J	2.8	UG_KG	10	1
ET09-05	BENZO(A)PYRENE					UG_KG	10	0
ET09-06	BENZO(A)PYRENE					UG_KG	10	0
ET09-07	BENZO(A)PYRENE					UG_KG	3	0
ET09-08	BENZO(A)PYRENE					UG_KG	3	0
ET09-09	BENZO(A)PYRENE					UG_KG	5	0
ET09-10	BENZO(A)PYRENE	10/3/2013 11:00	ET09-10-100313	14	14	UG_KG	5	1
ET09-11	BENZO(A)PYRENE					UG_KG	5	0
ET09-12	BENZO(A)PYRENE					UG_KG	5	0
ET09-03	BENZO(B)FLUORANTHENE	10/1/2013 11:30	ET09-03-100113	7.7 J	7.7	UG_KG	10	1
ET09-04	BENZO(B)FLUORANTHENE	10/1/2013 11:01	ET09-04-100113	4.8 J	4.8	UG_KG	10	1
ET09-05	BENZO(B)FLUORANTHENE					UG_KG	10	0
ET09-06	BENZO(B)FLUORANTHENE					UG_KG	10	0
ET09-07	BENZO(B)FLUORANTHENE					UG_KG	3	0
ET09-08	BENZO(B)FLUORANTHENE					UG_KG	3	0
ET09-09	BENZO(B)FLUORANTHENE					UG_KG	5	0
ET09-10	BENZO(B)FLUORANTHENE	10/3/2013 11:00	ET09-10-100313	27	27	UG_KG	5	1
ET09-11	BENZO(B)FLUORANTHENE	10/15/2013 11:00	ET09-11-101513	3.1 J	3.1	UG_KG	5	1
ET09-12	BENZO(B)FLUORANTHENE					UG_KG	5	0
ET09-03	BENZO(G,H,I)PERYLENE					UG_KG	10	0
ET09-04	BENZO(G,H,I)PERYLENE					UG_KG	10	0
ET09-05	BENZO(G,H,I)PERYLENE					UG_KG	10	0
ET09-06	BENZO(G,H,I)PERYLENE					UG_KG	10	0
ET09-07	BENZO(G,H,I)PERYLENE					UG_KG	3	0
ET09-08	BENZO(G,H,I)PERYLENE					UG_KG	3	0
ET09-09	BENZO(G,H,I)PERYLENE					UG_KG	5	0
ET09-10	BENZO(G,H,I)PERYLENE	10/3/2013 11:00	ET09-10-100313	5.4 J	5.4	UG_KG	5	1
ET09-11	BENZO(G,H,I)PERYLENE					UG_KG	5	0
ET09-12	BENZO(G,H,I)PERYLENE					UG_KG	5	0
ET09-03	BENZO(K)FLUORANTHENE	10/1/2013 11:30	ET09-03-100113	4.3 J	4.3	UG_KG	10	1
ET09-04	BENZO(K)FLUORANTHENE	10/1/2013 11:01	ET09-04-100113	2.7 J	2.7	UG_KG	10	1
ET09-05	BENZO(K)FLUORANTHENE					UG_KG	10	0
ET09-06	BENZO(K)FLUORANTHENE	10/1/2013 16:05	ET09-06-100113	3.5 J	3.5	UG_KG	10	1
ET09-07	BENZO(K)FLUORANTHENE					UG_KG	3	0
ET09-08	BENZO(K)FLUORANTHENE					UG_KG	3	0
ET09-09	BENZO(K)FLUORANTHENE	10/3/2013 14:00	ET09-09-100313	2.9 J	2.9	UG_KG	5	1
ET09-10	BENZO(K)FLUORANTHENE	10/3/2013 11:00	ET09-10-100313	16	16	UG_KG	5	1
ET09-11	BENZO(K)FLUORANTHENE	10/15/2013 11:00	ET09-11-101513	3.2 J	3.2	UG_KG	5	1
ET09-12	BENZO(K)FLUORANTHENE					UG_KG	5	0
ET09-03	CHRYSENE	10/1/2013 11:30	ET09-03-100113	8.1 J	8.1	UG_KG	10	1
ET09-04	CHRYSENE	10/1/2013 11:01	ET09-04-100113	5 J	5	UG_KG	10	1
ET09-05	CHRYSENE	10/1/2013 15:05	ET09-05-100113	1.6 J	1.6	UG_KG	10	1
ET09-06	CHRYSENE	10/1/2013 16:05	ET09-06-100113	3.8 J	3.8	UG_KG	10	1
ET09-07	CHRYSENE					UG_KG	3	0
ET09-08	CHRYSENE					UG_KG	3	0
ET09-09	CHRYSENE	10/3/2013 14:00	ET09-09-100313	3 J	3	UG_KG	5	1
ET09-10	CHRYSENE	10/3/2013 11:00	ET09-10-100313	14	14	UG_KG	5	1
ET09-11	CHRYSENE	10/15/2013 11:00	ET09-11-101513	3.6 J	3.6	UG_KG	5	1
ET09-12	CHRYSENE	10/3/2013 12:00	ET09-12-100313	2.9 J	2.9	UG_KG	5	1
ET09-03	DIBENZ(A,H)ANTHRACENE					UG_KG	10	0
ET09-04	DIBENZ(A,H)ANTHRACENE					UG_KG	10	0
ET09-05	DIBENZ(A,H)ANTHRACENE					UG_KG	10	0
ET09-06	DIBENZ(A,H)ANTHRACENE					UG_KG	10	0
ET09-07	DIBENZ(A,H)ANTHRACENE					UG_KG	3	0
ET09-08	DIBENZ(A,H)ANTHRACENE					UG_KG	3	0
ET09-09	DIBENZ(A,H)ANTHRACENE					UG_KG	5	0
ET09-10	DIBENZ(A,H)ANTHRACENE	10/3/2013 11:00	ET09-10-100313	2.8 J	2.8	UG_KG	5	1
ET09-11	DIBENZ(A,H)ANTHRACENE					UG_KG	5	0
ET09-12	DIBENZ(A,H)ANTHRACENE					UG_KG	5	0
ET09-03	FLUORANTHENE	5/11/2011 11:05	ET09-03-051111	38	18	UG_KG	10	8
ET09-04	FLUORANTHENE	5/11/2011 11:20	ET09-04-051111	42	20	UG_KG	10	8

Location ID	Parameter	Sample Collection Date(s) of Highest Concentration	Sample ID with Hightest Concentration	Sample Result for Highest Concentration	Average of All Results[(1)]	Units	Number of Samples	Number Detected
ET09-05	FLUORANTHENE	5/5/2010 12:10	ET09-05-050510	47 J	17	UG_KG	10	7
ET09-06	FLUORANTHENE	12/5/2007 0:00	ET09-06-12052007	27	16	UG_KG	10	7
ET09-07	FLUORANTHENE	5/5/2010 11:20	ET09-07-050510	19	19	UG_KG	3	1
ET09-08	FLUORANTHENE	5/5/2010 11:50	ET09-08-050510	15	15	UG_KG	3	1
ET09-09	FLUORANTHENE	10/3/2013 14:00	ET09-09-100313	13	7.9	UG_KG	5	3
ET09-10	FLUORANTHENE	10/3/2013 11:00	ET09-10-100313	27	27	UG_KG	5	1
ET09-11	FLUORANTHENE	10/15/2013 11:00	ET09-11-101513	21	15	UG_KG	5	2
ET09-12	FLUORANTHENE	10/3/2013 12:00	ET09-12-100313	8.7	8.7	UG_KG	5	1
ET09-03	FLUORENE	5/11/2011 11:05	ET09-03-051111	21	11	UG_KG	10	6
ET09-04	FLUORENE	5/11/2011 11:20	ET09-04-051111	32 J	13	UG_KG	10	8
ET09-05	FLUORENE	5/5/2010 12:10	ET09-05-050510	18 J	11	UG_KG	10	6
ET09-06	FLUORENE	5/5/2010 12:20	ET09-06-050510	14	9.9	UG_KG	10	8
ET09-07	FLUORENE	5/5/2010 11:20	ET09-07-050510	8.5	8.5	UG_KG	3	1
ET09-08	FLUORENE	5/5/2010 11:50	ET09-08-050510	7.9	7.9	UG_KG	3	1
ET09-09	FLUORENE	9/9/2015 12:45	ET09-09-090915-1	11	9.1	UG_KG	5	2
ET09-10	FLUORENE					UG_KG	5	0
ET09-11	FLUORENE	10/15/2013 11:00	ET09-11-101513	13	8.7	UG_KG	5	3
ET09-12	FLUORENE					UG_KG	5	0
ET09-03	INDENO(1,2,3-CD)PYRENE					UG_KG	10	0
ET09-04	INDENO(1,2,3-CD)PYRENE					UG_KG	10	0
ET09-05	INDENO(1,2,3-CD)PYRENE					UG_KG	10	0
ET09-06	INDENO(1,2,3-CD)PYRENE	10/1/2013 16:05	ET09-06-100113	4.3 J	4.3	UG_KG	10	1
ET09-07	INDENO(1,2,3-CD)PYRENE					UG_KG	3	0
ET09-08	INDENO(1,2,3-CD)PYRENE					UG_KG	3	0
ET09-09	INDENO(1,2,3-CD)PYRENE	10/3/2013 14:00	ET09-09-100313	3 J	3	UG_KG	5	1
ET09-10	INDENO(1,2,3-CD)PYRENE	10/3/2013 11:00	ET09-10-100313	9.5	9.5	UG_KG	5	1
ET09-11	INDENO(1,2,3-CD)PYRENE	10/15/2013 11:00	ET09-11-101513	4 J	4	UG_KG	5	1
ET09-12	INDENO(1,2,3-CD)PYRENE					UG_KG	5	0
ET09-03	NAPHTHALENE	5/11/2011 11:05:00 AM12/5/2007 12:00:00 AM		49	30	UG_KG	10	9
ET09-04	NAPHTHALENE	5/5/2010 11:10	ET09-04-050510	81	41	UG_KG	10	10
ET09-05	NAPHTHALENE	5/5/2010 12:10	ET09-05-050510	71 J	40	UG_KG	10	6
ET09-06	NAPHTHALENE	5/5/2010 12:20	ET09-06-050510	88	35	UG_KG	10	9
ET09-07	NAPHTHALENE	5/5/2010 11:20	ET09-07-050510	59	34	UG_KG	3	2
ET09-08	NAPHTHALENE	5/5/2010 11:50	ET09-08-050510	66	66	UG_KG	3	1
ET09-09	NAPHTHALENE	10/3/2013 14:00	ET09-09-100313	39	27	UG_KG	5	3
ET09-10	NAPHTHALENE	10/3/2013 11:00	ET09-10-100313	3.6 J	3.6	UG_KG	5	1
ET09-11	NAPHTHALENE	10/15/2013 11:00	ET09-11-101513	39	22	UG_KG	5	4
ET09-12	NAPHTHALENE					UG_KG	5	0
ET09-03	PHENANTHRENE	5/11/2011 11:05	ET09-03-051111	56	27	UG_KG	10	9
ET09-04	PHENANTHRENE	5/11/2011 11:20	ET09-04-051111	61	34	UG_KG	10	9
ET09-05	PHENANTHRENE	5/11/2011 11:50	ET09-05-051111	69	35	UG_KG	10	6
ET09-06	PHENANTHRENE	5/5/2010 12:20	ET09-06-050510	60	30	UG_KG	10	9
ET09-07	PHENANTHRENE	5/5/2010 11:20	ET09-07-050510	35	22	UG_KG	3	2
ET09-08	PHENANTHRENE	5/5/2010 11:50	ET09-08-050510	34	25	UG_KG	3	2
ET09-09	PHENANTHRENE	9/9/2015 12:45	ET09-09-090915-1	37	23	UG_KG	5	3
ET09-10	PHENANTHRENE	10/3/2013 11:00	ET09-10-100313	9.9	9.9	UG_KG	5	1
ET09-11	PHENANTHRENE	10/15/2013 11:00	ET09-11-101513	36	21	UG_KG	5	3
ET09-12	PHENANTHRENE	9/9/2015 12:15	ET09-12-090915-1	12 J	12	UG_KG	5	1
ET09-03	PYRENE	5/11/2011 11:05	ET09-03-051111	35	18	UG_KG	10	8
ET09-04	PYRENE	5/11/2011 11:20	ET09-04-051111	38 J	20	UG_KG	10	8
ET09-05	PYRENE	5/5/2010 12:10	ET09-05-050510	35 J	17	UG_KG	10	7
ET09-06	PYRENE	5/5/2010 12:20	ET09-06-050510	28	17	UG_KG	10	7
ET09-07	PYRENE	5/5/2010 11:20	ET09-07-050510	18	18	UG_KG	3	1
ET09-08	PYRENE	9/15/2015 14:30	ET09-08-091515-1	58 J	39	UG_KG	3	2
ET09-09	PYRENE	10/3/2013 14:00	ET09-09-100313	16	9.4	UG_KG	5	3
ET09-10	PYRENE	10/3/2013 11:00	ET09-10-100313	27	27	UG_KG	5	1
ET09-11	PYRENE	10/15/2013 11:00	ET09-11-101513	19	16	UG_KG	5	2
ET09-12	PYRENE	9/9/2015 12:15	ET09-12-090915-1	14 J	10	UG_KG	5	2

U = Not Detected; UJ = Detection Limit Approximate; J = Quantitation Approximate; R = Rejected
(1) If sample was not detected, one half of detection limit was used in calculation of average concentration.
Maximum value presented when original and duplilcate samples were analyzed
Parameters that have been detected in at least one sample since ME01 are included on the table

Mann Kendall Trend Analyses

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
Dissolved						
MW09-02S	ALUMINUM	34	51	0.7472	1.645	Not Significant
MW09-02S	ANTIMONY	34	-91	-1.355	1.645	Not Significant
MW09-02S	ARSENIC	34	-50	-0.7506	1.645	Not Significant
MW09-02S	BARIUM	2	---	---	NA	NA
MW09-02S	BERYLLIUM	34	-10	-0.1364	1.645	Not Significant
MW09-02S	CADMIUM	2	---	---	NA	NA
MW09-02S	CALCIUM	2	---	---	NA	NA
MW09-02S	CHROMIUM, TOTAL	34	-85	-1.264	1.645	Not Significant
MW09-02S	COBALT	2	---	---	NA	NA
MW09-02S	COPPER	34	-33	-0.4797	1.645	Not Significant
MW09-02S	IRON	34	65	0.9559	1.645	Not Significant
MW09-02S	LEAD	34	-29	-0.4260	1.645	Not Significant
MW09-02S	MAGNESIUM	2	---	---	NA	NA
MW09-02S	MANGANESE	34	-16	-0.2225	1.645	Not Significant
MW09-02S	MERCURY	32	-42	-0.6942	1.645	Not Significant
MW09-02S	NICKEL	34	-19	-0.2700	1.645	Not Significant
MW09-02S	POTASSIUM	2	---	---	NA	NA
MW09-02S	SELENIUM	2	---	---	NA	NA
MW09-02S	SILVER	2	---	---	NA	NA
MW09-02S	SODIUM	2	---	---	NA	NA
MW09-02S	VANADIUM	2	---	---	NA	NA
MW09-02S	ZINC	34	-23	-0.3265	1.645	Not Significant
MW09-03D	ALUMINUM	34	24	0.3448	1.645	Not Significant
MW09-03D	ANTIMONY	34	-86	-1.286	1.645	Not Significant
MW09-03D	ARSENIC	34	-88	-1.342	1.645	Not Significant
MW09-03D	BARIUM	2	---	---	NA	NA
MW09-03D	BERYLLIUM	34	-10	-0.1364	1.645	Not Significant
MW09-03D	CADMIUM	2	---	---	NA	NA
MW09-03D	CALCIUM	2	---	---	NA	NA
MW09-03D	CHROMIUM, TOTAL	34	-71	-1.053	1.645	Not Significant
MW09-03D	COBALT	2	---	---	NA	NA
MW09-03D	COPPER	34	-5	-0.06077	1.645	Not Significant
MW09-03D	IRON	34	-239	-3.528	1.645	Downward Trend
MW09-03D	LEAD	34	-54	-0.8020	1.645	Not Significant
MW09-03D	MAGNESIUM	2	---	---	NA	NA
MW09-03D	MANGANESE	34	-317	-4.687	1.645	Downward Trend
MW09-03D	MERCURY	32	-22	-0.3550	1.645	Not Significant
MW09-03D	NICKEL	34	-200	-2.962	1.645	Downward Trend
MW09-03D	POTASSIUM	2	---	---	NA	NA
MW09-03D	SELENIUM	2	---	---	NA	NA
MW09-03D	SILVER	2	---	---	NA	NA
MW09-03D	SODIUM	2	---	---	NA	NA
MW09-03D	VANADIUM	2	---	---	NA	NA
MW09-03D	ZINC	34	-114	-1.678	1.645	Downward Trend
MW09-07S	ALUMINUM	34	37	0.5384	1.645	Not Significant
MW09-07S	ANTIMONY	34	-42	-0.6201	1.645	Not Significant
MW09-07S	ARSENIC	34	-126	-1.854	1.645	Downward Trend
MW09-07S	BARIUM	2	---	---	NA	NA
MW09-07S	BERYLLIUM	34	3	0.03012	1.645	Not Significant
MW09-07S	CADMIUM	2	---	---	NA	NA
MW09-07S	CALCIUM	2	---	---	NA	NA
MW09-07S	CHROMIUM, TOTAL	34	-41	-0.6044	1.645	Not Significant
MW09-07S	COBALT	2	---	---	NA	NA
MW09-07S	COPPER	34	-1	0	1.645	Not Significant
MW09-07S	IRON	34	-379	-5.614	1.645	Downward Trend
MW09-07S	LEAD	34	-81	-1.209	1.645	Not Significant
MW09-07S	MAGNESIUM	2	---	---	NA	NA
MW09-07S	MANGANESE	34	-346	-5.118	1.645	Downward Trend
MW09-07S	MERCURY	33	-34	-0.5212	1.645	Not Significant
MW09-07S	NICKEL	34	-133	-1.986	1.645	Downward Trend
MW09-07S	POTASSIUM	2	---	---	NA	NA
MW09-07S	SELENIUM	2	---	---	NA	NA
MW09-07S	SILVER	2	---	---	NA	NA
MW09-07S	SODIUM	2	---	---	NA	NA
MW09-07S	VANADIUM	2	---	---	NA	NA
MW09-07S	ZINC	34	-5	-0.05934	1.645	Not Significant
MW09-08DA	ALUMINUM	15	-31	-1.537	1.645	Not Significant
MW09-08DA	ANTIMONY	15	-31	-1.546	1.645	Not Significant
MW09-08DA	ARSENIC	15	-9	-0.3992	1.645	Not Significant
MW09-08DA	BARIUM	0	---	---	NA	NA
MW09-08DA	BERYLLIUM	15	14	0.6500	1.645	Not Significant
MW09-08DA	CADMIUM	0	---	---	NA	NA
MW09-08DA	CALCIUM	0	---	---	NA	NA
MW09-08DA	CHROMIUM, TOTAL	15	-15	-0.7032	1.645	Not Significant
MW09-08DA	COBALT	0	---	---	NA	NA
MW09-08DA	COPPER	15	-13	-0.6164	1.645	Not Significant
MW09-08DA	IRON	15	-29	-1.392	1.645	Not Significant
MW09-08DA	LEAD	15	-37	-1.824	1.645	Downward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-08DA	MAGNESIUM	0	---	---	NA	NA
MW09-08DA	MANGANESE	15	-50	-2.428	1.645	Downward Trend
MW09-08DA	MERCURY	15	-43	-2.231	1.645	Downward Trend
MW09-08DA	NICKEL	15	-37	-1.811	1.645	Downward Trend
MW09-08DA	POTASSIUM	0	---	---	NA	NA
MW09-08DA	SELENIUM	0	---	---	NA	NA
MW09-08DA	SILVER	0	---	---	NA	NA
MW09-08DA	SODIUM	0	---	---	NA	NA
MW09-08DA	VANADIUM	0	---	---	NA	NA
MW09-08DA	ZINC	15	-29	-1.423	1.645	Not Significant
MW09-08S	ALUMINUM	42	95	1.027	1.645	Not Significant
MW09-08S	ANTIMONY	43	-209	-2.199	1.645	Downward Trend
MW09-08S	ARSENIC	43	12	0.1154	1.645	Not Significant
MW09-08S	BARIUM	2	---	---	NA	NA
MW09-08S	BERYLLIUM	43	-107	-1.125	1.645	Not Significant
MW09-08S	CADMIUM	2	---	---	NA	NA
MW09-08S	CALCIUM	2	---	---	NA	NA
MW09-08S	CHROMIUM, TOTAL	43	-203	-2.126	1.645	Downward Trend
MW09-08S	COBALT	2	---	---	NA	NA
MW09-08S	COPPER	43	-86	-0.9080	1.645	Not Significant
MW09-08S	IRON	43	635	6.636	1.645	Upward Trend
MW09-08S	LEAD	43	-226	-2.396	1.645	Downward Trend
MW09-08S	MAGNESIUM	2	---	---	NA	NA
MW09-08S	MANGANESE	43	16	0.1571	1.645	Not Significant
MW09-08S	MERCURY	41	-5	-0.04662	1.645	Not Significant
MW09-08S	NICKEL	43	-204	-2.137	1.645	Downward Trend
MW09-08S	POTASSIUM	2	---	---	NA	NA
MW09-08S	SELENIUM	2	---	---	NA	NA
MW09-08S	SILVER	2	---	---	NA	NA
MW09-08S	SODIUM	2	---	---	NA	NA
MW09-08S	VANADIUM	2	---	---	NA	NA
MW09-08S	ZINC	43	-37	-0.3771	1.645	Not Significant
MW09-09DA	ALUMINUM	16	-97	-4.327	1.645	Downward Trend
MW09-09DA	ANTIMONY	16	-42	-1.921	1.645	Downward Trend
MW09-09DA	ARSENIC	16	1	0	1.645	Not Significant
MW09-09DA	BARIUM	0	---	---	NA	NA
MW09-09DA	BERYLLIUM	16	-19	-0.8597	1.645	Not Significant
MW09-09DA	CADMIUM	0	---	---	NA	NA
MW09-09DA	CALCIUM	0	---	---	NA	NA
MW09-09DA	CHROMIUM, TOTAL	16	-17	-0.7280	1.645	Not Significant
MW09-09DA	COBALT	0	---	---	NA	NA
MW09-09DA	COPPER	16	-19	-0.8253	1.645	Not Significant
MW09-09DA	IRON	16	84	3.770	1.645	Upward Trend
MW09-09DA	LEAD	16	-47	-2.120	1.645	Downward Trend
MW09-09DA	MAGNESIUM	0	---	---	NA	NA
MW09-09DA	MANGANESE	16	103	4.609	1.645	Upward Trend
MW09-09DA	MERCURY	16	-43	-2.053	1.645	Downward Trend
MW09-09DA	NICKEL	16	-68	-3.058	1.645	Downward Trend
MW09-09DA	POTASSIUM	0	---	---	NA	NA
MW09-09DA	SELENIUM	0	---	---	NA	NA
MW09-09DA	SILVER	0	---	---	NA	NA
MW09-09DA	SODIUM	0	---	---	NA	NA
MW09-09DA	VANADIUM	0	---	---	NA	NA
MW09-09DA	ZINC	16	-36	-1.598	1.645	Not Significant
MW09-09S	ALUMINUM	42	7	0.06577	1.645	Not Significant
MW09-09S	ANTIMONY	43	-222	-2.340	1.645	Downward Trend
MW09-09S	ARSENIC	43	-110	-1.164	1.645	Not Significant
MW09-09S	BARIUM	2	---	---	NA	NA
MW09-09S	BERYLLIUM	43	-126	-1.324	1.645	Not Significant
MW09-09S	CADMIUM	2	---	---	NA	NA
MW09-09S	CALCIUM	2	---	---	NA	NA
MW09-09S	CHROMIUM, TOTAL	43	-200	-2.095	1.645	Downward Trend
MW09-09S	COBALT	2	---	---	NA	NA
MW09-09S	COPPER	43	-131	-1.388	1.645	Not Significant
MW09-09S	IRON	43	-27	-0.2721	1.645	Not Significant
MW09-09S	LEAD	43	-171	-1.817	1.645	Downward Trend
MW09-09S	MAGNESIUM	2	---	---	NA	NA
MW09-09S	MANGANESE	43	-515	-5.380	1.645	Downward Trend
MW09-09S	MERCURY	42	-6	-0.05647	1.645	Not Significant
MW09-09S	NICKEL	43	-135	-1.430	1.645	Not Significant
MW09-09S	POTASSIUM	2	---	---	NA	NA
MW09-09S	SELENIUM	2	---	---	NA	NA
MW09-09S	SILVER	2	---	---	NA	NA
MW09-09S	SODIUM	2	---	---	NA	NA
MW09-09S	VANADIUM	2	---	---	NA	NA
MW09-09S	ZINC	43	70	0.7248	1.645	Not Significant
MW09-10D	ALUMINUM	32	81	1.315	1.645	Not Significant
MW09-10D	ANTIMONY	32	-59	-0.9579	1.645	Not Significant
MW09-10D	ARSENIC	32	69	1.105	1.645	Not Significant

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-10D	BARIUM	2	---	---	NA	NA
MW09-10D	BERYLLIUM	32	25	0.3989	1.645	Not Significant
MW09-10D	CADMIUM	2	---	---	NA	NA
MW09-10D	CALCIUM	2	---	---	NA	NA
MW09-10D	CHROMIUM, TOTAL	32	-54	-0.8749	1.645	Not Significant
MW09-10D	COBALT	2	---	---	NA	NA
MW09-10D	COPPER	32	21	0.3341	1.645	Not Significant
MW09-10D	IRON	32	110	1.768	1.645	Upward Trend
MW09-10D	LEAD	32	15	0.2340	1.645	Not Significant
MW09-10D	MAGNESIUM	2	---	---	NA	NA
MW09-10D	MANGANESE	32	149	2.402	1.645	Upward Trend
MW09-10D	MERCURY	31	39	0.6831	1.645	Not Significant
MW09-10D	NICKEL	32	-11	-0.1671	1.645	Not Significant
MW09-10D	POTASSIUM	2	---	---	NA	NA
MW09-10D	SELENIUM	2	---	---	NA	NA
MW09-10D	SILVER	2	---	---	NA	NA
MW09-10D	SODIUM	2	---	---	NA	NA
MW09-10D	VANADIUM	2	---	---	NA	NA
MW09-10D	ZINC	32	29	0.4547	1.645	Not Significant
MW09-10S	ALUMINUM	35	21	0.2893	1.645	Not Significant
MW09-10S	ANTIMONY	35	-70	-0.9978	1.645	Not Significant
MW09-10S	ARSENIC	35	51	0.7104	1.645	Not Significant
MW09-10S	BARIUM	2	---	---	NA	NA
MW09-10S	BERYLLIUM	35	9	0.1159	1.645	Not Significant
MW09-10S	CADMIUM	2	---	---	NA	NA
MW09-10S	CALCIUM	2	---	---	NA	NA
MW09-10S	CHROMIUM, TOTAL	35	-57	-0.8064	1.645	Not Significant
MW09-10S	COBALT	2	---	---	NA	NA
MW09-10S	COPPER	35	-51	-0.7263	1.645	Not Significant
MW09-10S	IRON	35	-191	-2.699	1.645	Downward Trend
MW09-10S	LEAD	35	-45	-0.6397	1.645	Not Significant
MW09-10S	MAGNESIUM	2	---	---	NA	NA
MW09-10S	MANGANESE	35	-301	-4.262	1.645	Downward Trend
MW09-10S	MERCURY	35	-15	-0.2085	1.645	Not Significant
MW09-10S	NICKEL	35	-103	-1.469	1.645	Not Significant
MW09-10S	POTASSIUM	2	---	---	NA	NA
MW09-10S	SELENIUM	2	---	---	NA	NA
MW09-10S	SILVER	2	---	---	NA	NA
MW09-10S	SODIUM	2	---	---	NA	NA
MW09-10S	VANADIUM	2	---	---	NA	NA
MW09-10S	ZINC	35	-89	-1.252	1.645	Not Significant
MW09-11S	ALUMINUM	42	19	0.1970	1.645	Not Significant
MW09-11S	ANTIMONY	43	-160	-1.681	1.645	Downward Trend
MW09-11S	ARSENIC	43	-128	-1.353	1.645	Not Significant
MW09-11S	BARIUM	2	---	---	NA	NA
MW09-11S	BERYLLIUM	43	-111	-1.167	1.645	Not Significant
MW09-11S	CADMIUM	2	---	---	NA	NA
MW09-11S	CALCIUM	2	---	---	NA	NA
MW09-11S	CHROMIUM, TOTAL	43	-124	-1.301	1.645	Not Significant
MW09-11S	COBALT	2	---	---	NA	NA
MW09-11S	COPPER	43	-52	-0.5445	1.645	Not Significant
MW09-11S	IRON	43	-198	-2.062	1.645	Downward Trend
MW09-11S	LEAD	43	-190	-2.011	1.645	Downward Trend
MW09-11S	MAGNESIUM	2	---	---	NA	NA
MW09-11S	MANGANESE	43	-359	-3.747	1.645	Downward Trend
MW09-11S	MERCURY	42	-63	-0.7036	1.645	Not Significant
MW09-11S	NICKEL	43	-33	-0.3350	1.645	Not Significant
MW09-11S	POTASSIUM	2	---	---	NA	NA
MW09-11S	SELENIUM	2	---	---	NA	NA
MW09-11S	SILVER	2	---	---	NA	NA
MW09-11S	SODIUM	2	---	---	NA	NA
MW09-11S	VANADIUM	2	---	---	NA	NA
MW09-11S	ZINC	43	61	0.6279	1.645	Not Significant
MW09-14D	ALUMINUM	32	75	1.222	1.645	Not Significant
MW09-14D	ANTIMONY	32	-44	-0.7138	1.645	Not Significant
MW09-14D	ARSENIC	32	-10	-0.1478	1.645	Not Significant
MW09-14D	BARIUM	2	---	---	NA	NA
MW09-14D	BERYLLIUM	32	15	0.2326	1.645	Not Significant
MW09-14D	CADMIUM	2	---	---	NA	NA
MW09-14D	CALCIUM	2	---	---	NA	NA
MW09-14D	CHROMIUM, TOTAL	32	-34	-0.5474	1.645	Not Significant
MW09-14D	COBALT	2	---	---	NA	NA
MW09-14D	COPPER	32	31	0.5099	1.645	Not Significant
MW09-14D	IRON	32	-168	-2.710	1.645	Downward Trend
MW09-14D	LEAD	32	-41	-0.6738	1.645	Not Significant
MW09-14D	MAGNESIUM	2	---	---	NA	NA
MW09-14D	MANGANESE	32	-322	-5.210	1.645	Downward Trend
MW09-14D	MERCURY	31	7	0.1051	1.645	Not Significant
MW09-14D	NICKEL	32	-46	-0.7517	1.645	Not Significant

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-14D	POTASSIUM	2	---	---	NA	NA
MW09-14D	SELENIUM	2	---	---	NA	NA
MW09-14D	SILVER	2	---	---	NA	NA
MW09-14D	SODIUM	2	---	---	NA	NA
MW09-14D	VANADIUM	2	---	---	NA	NA
MW09-14D	ZINC	32	51	0.8144	1.645	Not Significant
MW09-14IA	ALUMINUM	16	-78	-3.529	1.645	Downward Trend
MW09-14IA	ANTIMONY	16	-38	-1.698	1.645	Downward Trend
MW09-14IA	ARSENIC	16	90	4.007	1.645	Upward Trend
MW09-14IA	BARIUM	0	---	---	NA	NA
MW09-14IA	BERYLLIUM	16	-27	-1.223	1.645	Not Significant
MW09-14IA	CADMIUM	0	---	---	NA	NA
MW09-14IA	CALCIUM	0	---	---	NA	NA
MW09-14IA	CHROMIUM, TOTAL	16	10	0.4091	1.645	Not Significant
MW09-14IA	COBALT	0	---	---	NA	NA
MW09-14IA	COPPER	16	-21	-0.9119	1.645	Not Significant
MW09-14IA	IRON	16	86	3.827	1.645	Upward Trend
MW09-14IA	LEAD	16	-67	-3.041	1.645	Downward Trend
MW09-14IA	MAGNESIUM	0	---	---	NA	NA
MW09-14IA	MANGANESE	16	-95	-4.236	1.645	Downward Trend
MW09-14IA	MERCURY	16	-48	-2.249	1.645	Downward Trend
MW09-14IA	NICKEL	16	-21	-0.9057	1.645	Not Significant
MW09-14IA	POTASSIUM	0	---	---	NA	NA
MW09-14IA	SELENIUM	0	---	---	NA	NA
MW09-14IA	SILVER	0	---	---	NA	NA
MW09-14IA	SODIUM	0	---	---	NA	NA
MW09-14IA	VANADIUM	0	---	---	NA	NA
MW09-14IA	ZINC	16	-36	-1.576	1.645	Not Significant
MW09-17I	ALUMINUM	20	0	0	NA	No Trend
MW09-17I	ANTIMONY	20	-105	-3.431	1.645	Downward Trend
MW09-17I	ARSENIC	20	8	0.2321	1.645	Not Significant
MW09-17I	BARIUM	0	---	---	NA	NA
MW09-17I	BERYLLIUM	20	-106	-3.509	1.645	Downward Trend
MW09-17I	CADMIUM	0	---	---	NA	NA
MW09-17I	CALCIUM	0	---	---	NA	NA
MW09-17I	CHROMIUM, TOTAL	20	-31	-0.9790	1.645	Not Significant
MW09-17I	COBALT	0	---	---	NA	NA
MW09-17I	COPPER	20	-27	-0.8770	1.645	Not Significant
MW09-17I	IRON	20	-155	-4.999	1.645	Downward Trend
MW09-17I	LEAD	20	-102	-3.353	1.645	Downward Trend
MW09-17I	MAGNESIUM	0	---	---	NA	NA
MW09-17I	MANGANESE	20	-148	-4.769	1.645	Downward Trend
MW09-17I	MERCURY	20	5	0.1358	1.645	Not Significant
MW09-17I	NICKEL	20	-17	-0.5207	1.645	Not Significant
MW09-17I	POTASSIUM	0	---	---	NA	NA
MW09-17I	SELENIUM	0	---	---	NA	NA
MW09-17I	SILVER	0	---	---	NA	NA
MW09-17I	SODIUM	0	---	---	NA	NA
MW09-17I	VANADIUM	0	---	---	NA	NA
MW09-17I	ZINC	20	-50	-1.599	1.645	Not Significant
MW09-20D	ALUMINUM	44	69	0.6935	1.645	Not Significant
MW09-20D	ANTIMONY	44	-231	-2.353	1.645	Downward Trend
MW09-20D	ARSENIC	44	212	2.149	1.645	Upward Trend
MW09-20D	BARIUM	2	---	---	NA	NA
MW09-20D	BERYLLIUM	44	-125	-1.268	1.645	Not Significant
MW09-20D	CADMIUM	2	---	---	NA	NA
MW09-20D	CALCIUM	2	---	---	NA	NA
MW09-20D	CHROMIUM, TOTAL	44	-42	-0.4190	1.645	Not Significant
MW09-20D	COBALT	2	---	---	NA	NA
MW09-20D	COPPER	44	-96	-0.9737	1.645	Not Significant
MW09-20D	IRON	44	706	7.131	1.645	Upward Trend
MW09-20D	LEAD	44	-166	-1.692	1.645	Downward Trend
MW09-20D	MAGNESIUM	2	---	---	NA	NA
MW09-20D	MANGANESE	44	697	7.047	1.645	Upward Trend
MW09-20D	MERCURY	43	-7	-0.06524	1.645	Not Significant
MW09-20D	NICKEL	44	-158	-1.608	1.645	Not Significant
MW09-20D	POTASSIUM	2	---	---	NA	NA
MW09-20D	SELENIUM	2	---	---	NA	NA
MW09-20D	SILVER	2	---	---	NA	NA
MW09-20D	SODIUM	2	---	---	NA	NA
MW09-20D	VANADIUM	2	---	---	NA	NA
MW09-20D	ZINC	44	55	0.5468	1.645	Not Significant
MW09-20I	ALUMINUM	43	51	0.5273	1.645	Not Significant
MW09-20I	ANTIMONY	43	-253	-2.667	1.645	Downward Trend
MW09-20I	ARSENIC	43	-188	-1.961	1.645	Downward Trend
MW09-20I	BARIUM	2	---	---	NA	NA
MW09-20I	BERYLLIUM	43	-146	-1.526	1.645	Not Significant
MW09-20I	CADMIUM	2	---	---	NA	NA
MW09-20I	CALCIUM	2	---	---	NA	NA

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-20I	CHROMIUM, TOTAL	43	-171	-1.782	1.645	Downward Trend
MW09-20I	COBALT	2	---	---	NA	NA
MW09-20I	COPPER	43	-179	-1.887	1.645	Downward Trend
MW09-20I	IRON	43	82	0.8478	1.645	Not Significant
MW09-20I	LEAD	43	-102	-1.079	1.645	Not Significant
MW09-20I	MAGNESIUM	2	---	---	NA	NA
MW09-20I	MANGANESE	43	259	2.700	1.645	Upward Trend
MW09-20I	MERCURY	42	-18	-0.1899	1.645	Not Significant
MW09-20I	NICKEL	43	-85	-0.8860	1.645	Not Significant
MW09-20I	POTASSIUM	2	---	---	NA	NA
MW09-20I	SELENIUM	2	---	---	NA	NA
MW09-20I	SILVER	2	---	---	NA	NA
MW09-20I	SODIUM	2	---	---	NA	NA
MW09-20I	VANADIUM	2	---	---	NA	NA
MW09-20I	ZINC	43	4	0.03147	1.645	Not Significant
MW09-21D	ALUMINUM	32	-266	-4.303	1.645	Downward Trend
MW09-21D	ANTIMONY	33	-60	-0.9347	1.645	Not Significant
MW09-21D	ARSENIC	33	-116	-1.831	1.645	Downward Trend
MW09-21D	BARIUM	2	---	---	NA	NA
MW09-21D	BERYLLIUM	33	-6	-0.07924	1.645	Not Significant
MW09-21D	CADMIUM	2	---	---	NA	NA
MW09-21D	CALCIUM	2	---	---	NA	NA
MW09-21D	CHROMIUM, TOTAL	33	-47	-0.7319	1.645	Not Significant
MW09-21D	COBALT	2	---	---	NA	NA
MW09-21D	COPPER	33	-8	-0.1122	1.645	Not Significant
MW09-21D	IRON	33	87	1.333	1.645	Not Significant
MW09-21D	LEAD	33	-66	-1.035	1.645	Not Significant
MW09-21D	MAGNESIUM	2	---	---	NA	NA
MW09-21D	MANGANESE	33	52	0.7904	1.645	Not Significant
MW09-21D	MERCURY	31	7	0.1049	1.645	Not Significant
MW09-21D	NICKEL	33	-94	-1.464	1.645	Not Significant
MW09-21D	POTASSIUM	2	---	---	NA	NA
MW09-21D	SELENIUM	2	---	---	NA	NA
MW09-21D	SILVER	2	---	---	NA	NA
MW09-21D	SODIUM	2	---	---	NA	NA
MW09-21D	VANADIUM	2	---	---	NA	NA
MW09-21D	ZINC	33	26	0.3899	1.645	Not Significant
MW09-21S	ALUMINUM	34	159	2.368	1.645	Upward Trend
MW09-21S	ANTIMONY	35	-26	-0.3600	1.645	Not Significant
MW09-21S	ARSENIC	35	137	1.935	1.645	Upward Trend
MW09-21S	BARIUM	2	---	---	NA	NA
MW09-21S	BERYLLIUM	35	85	1.204	1.645	Not Significant
MW09-21S	CADMIUM	2	---	---	NA	NA
MW09-21S	CALCIUM	2	---	---	NA	NA
MW09-21S	CHROMIUM, TOTAL	35	-1	0	1.645	Not Significant
MW09-21S	COBALT	2	---	---	NA	NA
MW09-21S	COPPER	35	-39	-0.5551	1.645	Not Significant
MW09-21S	IRON	35	269	3.808	1.645	Upward Trend
MW09-21S	LEAD	35	-36	-0.5065	1.645	Not Significant
MW09-21S	MAGNESIUM	2	---	---	NA	NA
MW09-21S	MANGANESE	35	-403	-5.710	1.645	Downward Trend
MW09-21S	MERCURY	33	6	0.08074	1.645	Not Significant
MW09-21S	NICKEL	35	-2	-0.01436	1.645	Not Significant
MW09-21S	POTASSIUM	2	---	---	NA	NA
MW09-21S	SELENIUM	2	---	---	NA	NA
MW09-21S	SILVER	2	---	---	NA	NA
MW09-21S	SODIUM	2	---	---	NA	NA
MW09-21S	VANADIUM	2	---	---	NA	NA
MW09-21S	ZINC	35	76	1.076	1.645	Not Significant
MW09-23D	ALUMINUM	33	54	0.8438	1.645	Not Significant
MW09-23D	ANTIMONY	33	1	0	1.645	Not Significant
MW09-23D	ARSENIC	33	-170	-2.629	1.645	Downward Trend
MW09-23D	BARIUM	2	---	---	NA	NA
MW09-23D	BERYLLIUM	33	43	0.6625	1.645	Not Significant
MW09-23D	CADMIUM	2	---	---	NA	NA
MW09-23D	CALCIUM	2	---	---	NA	NA
MW09-23D	CHROMIUM, TOTAL	33	83	1.298	1.645	Not Significant
MW09-23D	COBALT	2	---	---	NA	NA
MW09-23D	COPPER	33	-4	-0.04748	1.645	Not Significant
MW09-23D	IRON	33	-353	-5.455	1.645	Downward Trend
MW09-23D	LEAD	33	54	0.8448	1.645	Not Significant
MW09-23D	MAGNESIUM	2	---	---	NA	NA
MW09-23D	MANGANESE	33	-374	-5.781	1.645	Downward Trend
MW09-23D	MERCURY	32	36	0.5910	1.645	Not Significant
MW09-23D	NICKEL	33	10	0.1423	1.645	Not Significant
MW09-23D	POTASSIUM	2	---	---	NA	NA
MW09-23D	SELENIUM	2	---	---	NA	NA
MW09-23D	SILVER	2	---	---	NA	NA
MW09-23D	SODIUM	2	---	---	NA	NA

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-23D	VANADIUM	2	---	---	NA	NA
MW09-23D	ZINC	33	-16	-0.2326	1.645	Not Significant
MW09-23S	ALUMINUM	35	70	0.9927	1.645	Not Significant
MW09-23S	ANTIMONY	35	-7	-0.08677	1.645	Not Significant
MW09-23S	ARSENIC	35	-87	-1.230	1.645	Not Significant
MW09-23S	BARIUM	2	---	---	NA	NA
MW09-23S	BERYLLIUM	35	83	1.181	1.645	Not Significant
MW09-23S	CADMIUM	1	---	---	NA	NA
MW09-23S	CALCIUM	2	---	---	NA	NA
MW09-23S	CHROMIUM, TOTAL	35	-47	-0.6681	1.645	Not Significant
MW09-23S	COBALT	2	---	---	NA	NA
MW09-23S	COPPER	35	-135	-1.937	1.645	Downward Trend
MW09-23S	IRON	35	-344	-4.872	1.645	Downward Trend
MW09-23S	LEAD	35	56	0.7869	1.645	Not Significant
MW09-23S	MAGNESIUM	2	---	---	NA	NA
MW09-23S	MANGANESE	35	-152	-2.145	1.645	Downward Trend
MW09-23S	MERCURY	34	-11	-0.1509	1.645	Not Significant
MW09-23S	NICKEL	35	-7	-0.08633	1.645	Not Significant
MW09-23S	POTASSIUM	2	---	---	NA	NA
MW09-23S	SELENIUM	2	---	---	NA	NA
MW09-23S	SILVER	2	---	---	NA	NA
MW09-23S	SODIUM	2	---	---	NA	NA
MW09-23S	VANADIUM	2	---	---	NA	NA
MW09-23S	ZINC	35	102	1.453	1.645	Not Significant
MW09-24D	ALUMINUM	35	53	0.7497	1.645	Not Significant
MW09-24D	ANTIMONY	35	-63	-0.8965	1.645	Not Significant
MW09-24D	ARSENIC	35	267	3.778	1.645	Upward Trend
MW09-24D	BARIUM	2	---	---	NA	NA
MW09-24D	BERYLLIUM	35	4	0.04343	1.645	Not Significant
MW09-24D	CADMIUM	2	---	---	NA	NA
MW09-24D	CALCIUM	2	---	---	NA	NA
MW09-24D	CHROMIUM, TOTAL	35	-2	-0.01435	1.645	Not Significant
MW09-24D	COBALT	2	---	---	NA	NA
MW09-24D	COPPER	35	-4	-0.04357	1.645	Not Significant
MW09-24D	IRON	35	431	6.108	1.645	Upward Trend
MW09-24D	LEAD	35	-53	-0.7597	1.645	Not Significant
MW09-24D	MAGNESIUM	2	---	---	NA	NA
MW09-24D	MANGANESE	35	428	6.065	1.645	Upward Trend
MW09-24D	MERCURY	34	-32	-0.4738	1.645	Not Significant
MW09-24D	NICKEL	35	-20	-0.2746	1.645	Not Significant
MW09-24D	POTASSIUM	2	---	---	NA	NA
MW09-24D	SELENIUM	2	---	---	NA	NA
MW09-24D	SILVER	2	---	---	NA	NA
MW09-24D	SODIUM	2	---	---	NA	NA
MW09-24D	VANADIUM	2	---	---	NA	NA
MW09-24D	ZINC	35	25	0.3415	1.645	Not Significant
MW09-24S	ALUMINUM	33	59	0.9181	1.645	Not Significant
MW09-24S	ANTIMONY	33	-97	-1.520	1.645	Not Significant
MW09-24S	ARSENIC	33	28	0.4296	1.645	Not Significant
MW09-24S	BARIUM	2	---	---	NA	NA
MW09-24S	BERYLLIUM	33	5	0.06341	1.645	Not Significant
MW09-24S	CADMIUM	2	---	---	NA	NA
MW09-24S	CALCIUM	2	---	---	NA	NA
MW09-24S	CHROMIUM, TOTAL	33	-12	-0.1732	1.645	Not Significant
MW09-24S	COBALT	2	---	---	NA	NA
MW09-24S	COPPER	33	-19	-0.2848	1.645	Not Significant
MW09-24S	IRON	33	-128	-1.968	1.645	Downward Trend
MW09-24S	LEAD	33	-52	-0.8122	1.645	Not Significant
MW09-24S	MAGNESIUM	2	---	---	NA	NA
MW09-24S	MANGANESE	33	-154	-2.371	1.645	Downward Trend
MW09-24S	MERCURY	32	-47	-0.7767	1.645	Not Significant
MW09-24S	NICKEL	33	-42	-0.6457	1.645	Not Significant
MW09-24S	POTASSIUM	2	---	---	NA	NA
MW09-24S	SELENIUM	2	---	---	NA	NA
MW09-24S	SILVER	2	---	---	NA	NA
MW09-24S	SODIUM	2	---	---	NA	NA
MW09-24S	VANADIUM	2	---	---	NA	NA
MW09-24S	ZINC	33	-42	-0.6389	1.645	Not Significant
MW09-25S	ALUMINUM	41	67	0.7475	1.645	Not Significant
MW09-25S	ANTIMONY	42	-221	-2.407	1.645	Downward Trend
MW09-25S	ARSENIC	42	-91	-0.9958	1.645	Not Significant
MW09-25S	BARIUM	2	---	---	NA	NA
MW09-25S	BERYLLIUM	42	-83	-0.9019	1.645	Not Significant
MW09-25S	CADMIUM	2	---	---	NA	NA
MW09-25S	CALCIUM	2	---	---	NA	NA
MW09-25S	CHROMIUM, TOTAL	42	-50	-0.5366	1.645	Not Significant
MW09-25S	COBALT	2	---	---	NA	NA
MW09-25S	COPPER	42	-7	-0.06647	1.645	Not Significant
MW09-25S	IRON	42	-460	-4.975	1.645	Downward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-25S	LEAD	42	-88	-0.9607	1.645	Not Significant
MW09-25S	MAGNESIUM	2	---	---	NA	NA
MW09-25S	MANGANESE	42	-64	-0.6828	1.645	Not Significant
MW09-25S	MERCURY	41	49	0.5677	1.645	Not Significant
MW09-25S	NICKEL	42	47	0.5026	1.645	Not Significant
MW09-25S	POTASSIUM	2	---	---	NA	NA
MW09-25S	SELENIUM	2	---	---	NA	NA
MW09-25S	SILVER	2	---	---	NA	NA
MW09-25S	SODIUM	2	---	---	NA	NA
MW09-25S	VANADIUM	2	---	---	NA	NA
MW09-25S	ZINC	42	66	0.7050	1.645	Not Significant
MW09-26DA	ALUMINUM	1	---	---	NA	NA
MW09-26DA	ANTIMONY	1	---	---	NA	NA
MW09-26DA	ARSENIC	1	---	---	NA	NA
MW09-26DA	BARIUM	0	---	---	NA	NA
MW09-26DA	BERYLLIUM	1	---	---	NA	NA
MW09-26DA	CADMIUM	0	---	---	NA	NA
MW09-26DA	CALCIUM	0	---	---	NA	NA
MW09-26DA	CHROMIUM, TOTAL	1	---	---	NA	NA
MW09-26DA	COBALT	0	---	---	NA	NA
MW09-26DA	COPPER	1	---	---	NA	NA
MW09-26DA	IRON	1	---	---	NA	NA
MW09-26DA	LEAD	1	---	---	NA	NA
MW09-26DA	MAGNESIUM	0	---	---	NA	NA
MW09-26DA	MANGANESE	1	---	---	NA	NA
MW09-26DA	MERCURY	1	---	---	NA	NA
MW09-26DA	NICKEL	1	---	---	NA	NA
MW09-26DA	POTASSIUM	0	---	---	NA	NA
MW09-26DA	SELENIUM	0	---	---	NA	NA
MW09-26DA	SILVER	0	---	---	NA	NA
MW09-26DA	SODIUM	0	---	---	NA	NA
MW09-26DA	VANADIUM	0	---	---	NA	NA
MW09-26DA	ZINC	1	---	---	NA	NA
MW09-26S	ALUMINUM	20	-4	-0.09830	1.645	Not Significant
MW09-26S	ANTIMONY	20	-112	-3.685	1.645	Downward Trend
MW09-26S	ARSENIC	20	-18	-0.5605	1.645	Not Significant
MW09-26S	BARIUM	0	---	---	NA	NA
MW09-26S	BERYLLIUM	20	-106	-3.509	1.645	Downward Trend
MW09-26S	CADMIUM	0	---	---	NA	NA
MW09-26S	CALCIUM	0	---	---	NA	NA
MW09-26S	CHROMIUM, TOTAL	20	-3	-0.06518	1.645	Not Significant
MW09-26S	COBALT	0	---	---	NA	NA
MW09-26S	COPPER	20	8	0.2282	1.645	Not Significant
MW09-26S	IRON	20	-23	-0.7234	1.645	Not Significant
MW09-26S	LEAD	20	-100	-3.238	1.645	Downward Trend
MW09-26S	MAGNESIUM	0	---	---	NA	NA
MW09-26S	MANGANESE	20	-71	-2.275	1.645	Downward Trend
MW09-26S	MERCURY	19	-1	0	1.645	Not Significant
MW09-26S	NICKEL	20	-71	-2.288	1.645	Downward Trend
MW09-26S	POTASSIUM	0	---	---	NA	NA
MW09-26S	SELENIUM	0	---	---	NA	NA
MW09-26S	SILVER	0	---	---	NA	NA
MW09-26S	SODIUM	0	---	---	NA	NA
MW09-26S	VANADIUM	0	---	---	NA	NA
MW09-26S	ZINC	20	18	0.5516	1.645	Not Significant
MW09-27D	ALUMINUM	21	1	0	1.645	Not Significant
MW09-27D	ANTIMONY	21	-137	-4.199	1.645	Downward Trend
MW09-27D	ARSENIC	21	27	0.7932	1.645	Not Significant
MW09-27D	BARIUM	0	---	---	NA	NA
MW09-27D	BERYLLIUM	21	-107	-3.285	1.645	Downward Trend
MW09-27D	CADMIUM	0	---	---	NA	NA
MW09-27D	CALCIUM	0	---	---	NA	NA
MW09-27D	CHROMIUM, TOTAL	21	-9	-0.2422	1.645	Not Significant
MW09-27D	COBALT	0	---	---	NA	NA
MW09-27D	COPPER	21	-24	-0.7069	1.645	Not Significant
MW09-27D	IRON	21	-17	-0.4834	1.645	Not Significant
MW09-27D	LEAD	21	-103	-3.119	1.645	Downward Trend
MW09-27D	MAGNESIUM	0	---	---	NA	NA
MW09-27D	MANGANESE	21	6	0.1510	1.645	Not Significant
MW09-27D	MERCURY	20	-9	-0.2716	1.645	Not Significant
MW09-27D	NICKEL	21	24	0.6966	1.645	Not Significant
MW09-27D	POTASSIUM	0	---	---	NA	NA
MW09-27D	SELENIUM	0	---	---	NA	NA
MW09-27D	SILVER	0	---	---	NA	NA
MW09-27D	SODIUM	0	---	---	NA	NA
MW09-27D	VANADIUM	0	---	---	NA	NA
MW09-27D	ZINC	21	40	1.178	1.645	Not Significant
MW09-27S	ALUMINUM	20	-38	-1.216	1.645	Not Significant
MW09-27S	ANTIMONY	20	-114	-3.708	1.645	Downward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-27S	ARSENIC	20	4	0.09891	1.645	Not Significant
MW09-27S	BARIUM	0	---	---	NA	NA
MW09-27S	BERYLLIUM	20	-95	-3.085	1.645	Downward Trend
MW09-27S	CADMIUM	0	---	---	NA	NA
MW09-27S	CALCIUM	0	---	---	NA	NA
MW09-27S	CHROMIUM, TOTAL	20	3	0.06518	1.645	Not Significant
MW09-27S	COBALT	0	---	---	NA	NA
MW09-27S	COPPER	20	3	0.06538	1.645	Not Significant
MW09-27S	IRON	20	-38	-1.200	1.645	Not Significant
MW09-27S	LEAD	20	-108	-3.539	1.645	Downward Trend
MW09-27S	MAGNESIUM	0	---	---	NA	NA
MW09-27S	MANGANESE	20	-50	-1.590	1.645	Not Significant
MW09-27S	MERCURY	19	-17	-0.5836	1.645	Not Significant
MW09-27S	NICKEL	20	-35	-1.109	1.645	Not Significant
MW09-27S	POTASSIUM	0	---	---	NA	NA
MW09-27S	SELENIUM	0	---	---	NA	NA
MW09-27S	SILVER	0	---	---	NA	NA
MW09-27S	SODIUM	0	---	---	NA	NA
MW09-27S	VANADIUM	0	---	---	NA	NA
MW09-27S	ZINC	20	-6	-0.1622	1.645	Not Significant
Total						
MW09-02S	PENTACHLOROPHENOL	23	-94	-2.551	1.645	Downward Trend
MW09-02S	ALUMINUM	35	-7	-0.08532	1.645	Not Significant
MW09-02S	ANTIMONY	35	-104	-1.489	1.645	Not Significant
MW09-02S	ARSENIC	35	-81	-1.179	1.645	Not Significant
MW09-02S	BARIUM	3	---	---	NA	NA
MW09-02S	BERYLLIUM	35	-34	-0.4787	1.645	Not Significant
MW09-02S	CADMIUM	3	---	---	NA	NA
MW09-02S	CALCIUM	3	---	---	NA	NA
MW09-02S	CHROMIUM, TOTAL	35	19	0.2583	1.645	Not Significant
MW09-02S	COBALT	3	---	---	NA	NA
MW09-02S	COPPER	35	-116	-1.653	1.645	Downward Trend
MW09-02S	IRON	35	29	0.3978	1.645	Not Significant
MW09-02S	LEAD	35	-89	-1.279	1.645	Not Significant
MW09-02S	MAGNESIUM	3	---	---	NA	NA
MW09-02S	MANGANESE	35	-11	-0.1420	1.645	Not Significant
MW09-02S	MERCURY	34	-32	-0.4808	1.645	Not Significant
MW09-02S	NICKEL	35	-100	-1.420	1.645	Not Significant
MW09-02S	POTASSIUM	3	---	---	NA	NA
MW09-02S	SELENIUM	3	---	---	NA	NA
MW09-02S	SILVER	3	---	---	NA	NA
MW09-02S	SODIUM	3	---	---	NA	NA
MW09-02S	VANADIUM	3	---	---	NA	NA
MW09-02S	ZINC	35	-4	-0.04264	1.645	Not Significant
MW09-02S	AROCLOR-1016	23	36	0.9470	1.645	Not Significant
MW09-02S	AROCLOR-1221	23	10	0.2421	1.645	Not Significant
MW09-02S	AROCLOR-1232	23	36	0.9470	1.645	Not Significant
MW09-02S	AROCLOR-1242	23	50	1.326	1.645	Not Significant
MW09-02S	AROCLOR-1248	23	36	0.9470	1.645	Not Significant
MW09-02S	AROCLOR-1254	23	36	0.9470	1.645	Not Significant
MW09-02S	AROCLOR-1260	23	28	0.7263	1.645	Not Significant
MW09-02S	POLYCHLORINATED BIPHENYLS (PCBS)	23	-109	-2.886	1.645	Downward Trend
MW09-02S	4,4-DDD	23	121	3.288	1.645	Upward Trend
MW09-02S	4,4-DDE	23	121	3.288	1.645	Upward Trend
MW09-02S	4,4-DDT	23	112	3.076	1.645	Upward Trend
MW09-02S	ALDRIN	23	131	3.526	1.645	Upward Trend
MW09-02S	ALPHA-BHC	23	131	3.526	1.645	Upward Trend
MW09-02S	ALPHA-CHLORDANE	23	123	3.285	1.645	Upward Trend
MW09-02S	DELTA-BHC	23	130	3.498	1.645	Upward Trend
MW09-02S	ENDOSULFAN I	23	131	3.526	1.645	Upward Trend
MW09-02S	ENDOSULFAN II	23	121	3.288	1.645	Upward Trend
MW09-02S	LINDANE	23	131	3.526	1.645	Upward Trend
MW09-02S	BETA-BHC	23	131	3.526	1.645	Upward Trend
MW09-02S	DIELDRIN	23	112	3.076	1.645	Upward Trend
MW09-02S	ENDOSULFAN SULFATE	23	121	3.288	1.645	Upward Trend
MW09-02S	ENDRIN	23	121	3.284	1.645	Upward Trend
MW09-02S	ENDRIN KETONE	23	121	3.288	1.645	Upward Trend
MW09-02S	HEPTACHLOR	23	124	3.314	1.645	Upward Trend
MW09-02S	HEPTACHLOR EPOXIDE	23	131	3.526	1.645	Upward Trend
MW09-02S	HEXACHLOROBENZENE	23	113	3.035	1.645	Upward Trend
MW09-02S	METHOXYCHLOR	23	38	1.040	1.645	Not Significant
MW09-02S	1,2,4-TRICHLOROBENZENE	22	38	1.123	1.645	Not Significant
MW09-02S	1,2-DICHLOROBENZENE	22	38	1.123	1.645	Not Significant
MW09-02S	1,3-DICHLOROBENZENE	22	38	1.123	1.645	Not Significant
MW09-02S	1,4-DICHLOROBENZENE	22	63	1.922	1.645	Upward Trend
MW09-02S	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-02S	2,2'-OXYBIS(1-CHLOROPROPANE)	18	44	1.756	1.645	Upward Trend
MW09-02S	2,4,5-TRICHLOROPHENOL	23	-107	-2.888	1.645	Downward Trend
MW09-02S	2,4,6-TRICHLOROPHENOL	22	93	2.763	1.645	Upward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-02S	2,4-DICHLOROPHENOL	22	109	3.267	1.645	Upward Trend
MW09-02S	2,4-DIMETHYLPHENOL	21	79	2.456	1.645	Upward Trend
MW09-02S	2,4-DINITROPHENOL	22	94	2.758	1.645	Upward Trend
MW09-02S	2,4-DINITROTOLUENE	22	93	2.763	1.645	Upward Trend
MW09-02S	2,6-DINITROTOLUENE	22	93	2.763	1.645	Upward Trend
MW09-02S	2-CHLORONAPHTHALENE	22	38	1.123	1.645	Not Significant
MW09-02S	2-CHLOROPHENOL	21	57	1.841	1.645	Upward Trend
MW09-02S	2-METHYLNAPHTHALENE	23	84	2.312	1.645	Upward Trend
MW09-02S	2-METHYLPHENOL	22	109	3.267	1.645	Upward Trend
MW09-02S	2-NITROANILINE	22	31	1.002	1.645	Not Significant
MW09-02S	2-NITROPHENOL	22	109	3.267	1.645	Upward Trend
MW09-02S	3- AND 4-METHYLPHENOL	11	-2	-0.09129	1.645	Not Significant
MW09-02S	3,3-DICHLOROBENZIDINE	20	44	1.502	1.645	Not Significant
MW09-02S	3-NITROANILINE	22	31	1.002	1.645	Not Significant
MW09-02S	4,6-DINITRO-2-METHYLPHENOL	21	42	1.513	1.645	Not Significant
MW09-02S	4-BROMOPHENYL-PHENYLETHER	22	38	1.123	1.645	Not Significant
MW09-02S	4-CHLORO-3-METHYLPHENOL	22	71	2.075	1.645	Upward Trend
MW09-02S	4-CHLOROANILINE	22	93	2.763	1.645	Upward Trend
MW09-02S	4-CHLOROPHENYL-PHENYLETHER	22	38	1.123	1.645	Not Significant
MW09-02S	4-METHYLPHENOL	10	-9	-9	21	Not Significant
MW09-02S	4-NITROANILINE	22	31	1.002	1.645	Not Significant
MW09-02S	4-NITROPHENOL	22	58	1.676	1.645	Upward Trend
MW09-02S	ACENAPHTHENE	23	68	1.855	1.645	Upward Trend
MW09-02S	ACENAPHTHYLENE	23	-137	-3.743	1.645	Downward Trend
MW09-02S	ANTHRACENE	23	98	2.702	1.645	Upward Trend
MW09-02S	BENZO(A)ANTHRACENE	23	112	3.099	1.645	Upward Trend
MW09-02S	BENZO(A)PYRENE	23	119	3.252	1.645	Upward Trend
MW09-02S	BENZO(B)FLUORANTHENE	23	112	3.006	1.645	Upward Trend
MW09-02S	BENZO(G,H,I)PERYLENE	23	71	1.896	1.645	Upward Trend
MW09-02S	BENZO(K)FLUORANTHENE	23	72	2.007	1.645	Upward Trend
MW09-02S	BENZOIC ACID	5	4	4	8	Not Significant
MW09-02S	BENZYL ALCOHOL	5	7	7	8	Not Significant
MW09-02S	BIS(2-CHLOROETHOXY)METHANE	22	38	1.123	1.645	Not Significant
MW09-02S	BIS(2-CHLOROETHYL)ETHER	22	74	2.212	1.645	Upward Trend
MW09-02S	BIS(2-CHLOROISOPROPYL)ETHER	4	3	3	6	Not Significant
MW09-02S	BIS(2-ETHYLHEXYL)PHTHALATE	22	-22	-0.5956	1.645	Not Significant
MW09-02S	BUTYLBENZYLPHTHALATE	22	64	1.890	1.645	Upward Trend
MW09-02S	CARBAZOLE	22	38	1.123	1.645	Not Significant
MW09-02S	CHRYSENE	23	102	2.811	1.645	Upward Trend
MW09-02S	CRESOLS	1	---	---	NA	NA
MW09-02S	DIBENZ(A,H)ANTHRACENE	23	89	2.433	1.645	Upward Trend
MW09-02S	DIBENZOFURAN	21	60	1.942	1.645	Upward Trend
MW09-02S	DIETHYLPHTHALATE	22	64	1.890	1.645	Upward Trend
MW09-02S	DIMETHYL PHTHALATE	22	64	1.890	1.645	Upward Trend
MW09-02S	DI-N-BUTYLPHTHALATE	22	93	2.758	1.645	Upward Trend
MW09-02S	DI-N-OCTYLPHTHALATE	22	64	1.890	1.645	Upward Trend
MW09-02S	FLUORANTHENE	23	110	3.046	1.645	Upward Trend
MW09-02S	FLUORENE	23	110	3.046	1.645	Upward Trend
MW09-02S	HEXACHLOROBUTADIENE	22	38	1.123	1.645	Not Significant
MW09-02S	HEXACHLOROCYCLOPENTADIENE	22	57	1.954	1.645	Upward Trend
MW09-02S	HEXACHLOROETHANE	22	74	2.212	1.645	Upward Trend
MW09-02S	INDENO(1,2,3-CD)PYRENE	23	55	1.504	1.645	Not Significant
MW09-02S	ISOPHORONE	22	38	1.123	1.645	Not Significant
MW09-02S	NAPHTHALENE	23	110	3.046	1.645	Upward Trend
MW09-02S	NITROBENZENE	22	38	1.123	1.645	Not Significant
MW09-02S	N-NITROSODINPROPYLAMINE	22	38	1.123	1.645	Not Significant
MW09-02S	N-NITROSODIPHENYLAMINE	22	38	1.123	1.645	Not Significant
MW09-02S	PHENANTHRENE	23	114	3.140	1.645	Upward Trend
MW09-02S	PHENOL	22	38	1.123	1.645	Not Significant
MW09-02S	PYRENE	23	119	3.319	1.645	Upward Trend
MW09-02S	1,1,1-TRICHLOROETHANE	35	-210	-3.269	1.645	Downward Trend
MW09-02S	1,1,2,2-TETRACHLOROETHANE	36	-293	-4.484	1.645	Downward Trend
MW09-02S	1,1,2-TRICHLOROETHANE	36	-227	-3.460	1.645	Downward Trend
MW09-02S	1,1-DICHLOROETHANE	35	-260	-4.197	1.645	Downward Trend
MW09-02S	1,1-DICHLOROETHENE	35	-206	-3.475	1.645	Downward Trend
MW09-02S	1,2-DICHLOROETHANE	36	-267	-3.957	1.645	Downward Trend
MW09-02S	1,2-DICHLOROETHENE, TOTAL	31	-101	-1.719	1.645	Downward Trend
MW09-02S	1,2-DICHLOROPROPANE	36	-175	-2.488	1.645	Downward Trend
MW09-02S	2-BUTANONE	29	-180	-4.022	1.645	Downward Trend
MW09-02S	2-HEXANONE	31	-199	-4.111	1.645	Downward Trend
MW09-02S	4-METHYL-2-PENTANONE	35	-297	-5.007	1.645	Downward Trend
MW09-02S	ACETONE	32	-160	-2.866	1.645	Downward Trend
MW09-02S	BENZENE	36	-207	-3.062	1.645	Downward Trend
MW09-02S	BROMODICHLOROMETHANE	35	-210	-3.269	1.645	Downward Trend
MW09-02S	BROMOFORM	34	-110	-1.739	1.645	Downward Trend
MW09-02S	BROMOMETHANE	35	-81	-1.277	1.645	Not Significant
MW09-02S	CARBON DISULFIDE	35	-208	-3.109	1.645	Downward Trend
MW09-02S	CARBON TETRACHLORIDE	35	-149	-2.309	1.645	Downward Trend
MW09-02S	CHLOROBENZENE	36	-209	-3.057	1.645	Downward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-02S	CHLOROETHANE	36	-207	-3.008	1.645	Downward Trend
MW09-02S	CHLOROFORM	36	-233	-3.406	1.645	Downward Trend
MW09-02S	CHLOROMETHANE	35	-170	-2.589	1.645	Downward Trend
MW09-02S	CIS-1,2-DICHLOROETHENE	34	-119	-1.806	1.645	Downward Trend
MW09-02S	CIS-1,3-DICHLOROPROPENE	35	-192	-3.069	1.645	Downward Trend
MW09-02S	DIBROMOCHLOROMETHANE	35	-121	-1.872	1.645	Downward Trend
MW09-02S	ETHYLBENZENE	36	-231	-3.678	1.645	Downward Trend
MW09-02S	M- AND P-XYLENE	5	-3	-3	8	Not Significant
MW09-02S	METHYLENE CHLORIDE	36	23	0.3093	1.645	Not Significant
MW09-02S	O-XYLENE	5	-3	-3	8	Not Significant
MW09-02S	STYRENE	35	-126	-1.868	1.645	Downward Trend
MW09-02S	TETRACHLOROETHENE	36	-209	-3.134	1.645	Downward Trend
MW09-02S	TOLUENE	36	-225	-3.582	1.645	Downward Trend
MW09-02S	TRANS-1,2-DICHLOROETHENE	34	-116	-1.926	1.645	Downward Trend
MW09-02S	TRANS-1,3-DICHLOROPROPENE	35	-185	-2.912	1.645	Downward Trend
MW09-02S	TRICHLOROETHENE	36	-185	-2.697	1.645	Downward Trend
MW09-02S	VINYL CHLORIDE	36	-151	-2.194	1.645	Downward Trend
MW09-02S	XYLENES, TOTAL	12	-14	-0.9498	1.645	Not Significant
MW09-03D	PENTACHLOROPHENOL	21	-86	-2.716	1.645	Downward Trend
MW09-03D	ALUMINUM	35	51	0.7198	1.645	Not Significant
MW09-03D	ANTIMONY	35	-115	-1.644	1.645	Not Significant
MW09-03D	ARSENIC	35	-50	-0.7172	1.645	Not Significant
MW09-03D	BARIUM	3	---	---	NA	NA
MW09-03D	BERYLLIUM	35	-15	-0.2030	1.645	Not Significant
MW09-03D	CADMIUM	3	---	---	NA	NA
MW09-03D	CALCIUM	3	---	---	NA	NA
MW09-03D	CHROMIUM, TOTAL	35	20	0.2735	1.645	Not Significant
MW09-03D	COBALT	3	---	---	NA	NA
MW09-03D	COPPER	35	-19	-0.2620	1.645	Not Significant
MW09-03D	IRON	35	-261	-3.693	1.645	Downward Trend
MW09-03D	LEAD	35	-72	-1.032	1.645	Not Significant
MW09-03D	MAGNESIUM	3	---	---	NA	NA
MW09-03D	MANGANESE	35	-312	-4.418	1.645	Downward Trend
MW09-03D	MERCURY	34	-40	-0.6025	1.645	Not Significant
MW09-03D	NICKEL	35	-301	-4.277	1.645	Downward Trend
MW09-03D	POTASSIUM	3	---	---	NA	NA
MW09-03D	SELENIUM	3	---	---	NA	NA
MW09-03D	SILVER	3	---	---	NA	NA
MW09-03D	SODIUM	3	---	---	NA	NA
MW09-03D	VANADIUM	3	---	---	NA	NA
MW09-03D	ZINC	35	-56	-0.7833	1.645	Not Significant
MW09-03D	AROCLOR-1016	22	28	0.7749	1.645	Not Significant
MW09-03D	AROCLOR-1221	22	3	0.05713	1.645	Not Significant
MW09-03D	AROCLOR-1232	22	28	0.7749	1.645	Not Significant
MW09-03D	AROCLOR-1242	22	40	1.119	1.645	Not Significant
MW09-03D	AROCLOR-1248	22	28	0.7749	1.645	Not Significant
MW09-03D	AROCLOR-1254	22	28	0.7749	1.645	Not Significant
MW09-03D	AROCLOR-1260	22	28	0.7749	1.645	Not Significant
MW09-03D	POLYCHLORINATED BIPHENYLS (PCBS)	23	-108	-2.856	1.645	Downward Trend
MW09-03D	4,4-DDD	23	112	3.040	1.645	Upward Trend
MW09-03D	4,4-DDE	23	112	3.040	1.645	Upward Trend
MW09-03D	4,4-DDT	23	103	2.826	1.645	Upward Trend
MW09-03D	ALDRIN	23	127	3.454	1.645	Upward Trend
MW09-03D	ALPHA-BHC	23	127	3.454	1.645	Upward Trend
MW09-03D	ALPHA-CHLORDANE	23	118	3.177	1.645	Upward Trend
MW09-03D	DELTA-BHC	23	126	3.425	1.645	Upward Trend
MW09-03D	ENDOSULFAN I	23	127	3.454	1.645	Upward Trend
MW09-03D	ENDOSULFAN II	23	112	3.040	1.645	Upward Trend
MW09-03D	LINDANE	23	127	3.454	1.645	Upward Trend
MW09-03D	BETA-BHC	23	127	3.454	1.645	Upward Trend
MW09-03D	DIELDRIN	23	103	2.826	1.645	Upward Trend
MW09-03D	ENDOSULFAN SULFATE	23	112	3.040	1.645	Upward Trend
MW09-03D	ENDRIN	23	112	3.037	1.645	Upward Trend
MW09-03D	ENDRIN KETONE	23	112	3.040	1.645	Upward Trend
MW09-03D	HEPTACHLOR	23	119	3.206	1.645	Upward Trend
MW09-03D	HEPTACHLOR EPOXIDE	23	127	3.454	1.645	Upward Trend
MW09-03D	HEXACHLOROBENZENE	23	114	3.061	1.645	Upward Trend
MW09-03D	METHOXYCHLOR	23	32	0.8875	1.645	Not Significant
MW09-03D	1,2,4-TRICHLOROBENZENE	22	29	0.8925	1.645	Not Significant
MW09-03D	1,2-DICHLOROBENZENE	22	29	0.8925	1.645	Not Significant
MW09-03D	1,3-DICHLOROBENZENE	22	29	0.8925	1.645	Not Significant
MW09-03D	1,4-DICHLOROBENZENE	22	29	0.8925	1.645	Not Significant
MW09-03D	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-03D	2,2'-OXYBIS(1-CHLOROPROPANE)	18	1	0	1.645	Not Significant
MW09-03D	2,4,5-TRICHLOROPHENOL	20	-80	-2.689	1.645	Downward Trend
MW09-03D	2,4,6-TRICHLOROPHENOL	21	88	2.846	1.645	Upward Trend
MW09-03D	2,4-DICHLOROPHENOL	21	88	2.846	1.645	Upward Trend
MW09-03D	2,4-DIMETHYLPHENOL	19	54	1.957	1.645	Upward Trend
MW09-03D	2,4-DINITROPHENOL	21	74	2.363	1.645	Upward Trend

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-03D	2,4-DINITROTOLUENE	22	97	2.911	1.645	Upward Trend
MW09-03D	2,6-DINITROTOLUENE	22	97	2.911	1.645	Upward Trend
MW09-03D	2-CHLORONAPHTHALENE	22	29	0.8925	1.645	Not Significant
MW09-03D	2-CHLOROPHENOL	20	42	1.573	1.645	Not Significant
MW09-03D	2-METHYLNAPHTHALENE	23	103	2.925	1.645	Upward Trend
MW09-03D	2-METHYLPHENOL	21	88	2.846	1.645	Upward Trend
MW09-03D	2-NITROANILINE	22	32	1.074	1.645	Not Significant
MW09-03D	2-NITROPHENOL	21	88	2.846	1.645	Upward Trend
MW09-03D	3- AND 4-METHYLPHENOL	9	12	12	18	Not Significant
MW09-03D	3,3-DICHLOROBENZIDINE	20	36	1.291	1.645	Not Significant
MW09-03D	3-NITROANILINE	22	32	1.074	1.645	Not Significant
MW09-03D	4,6-DINITRO-2-METHYLPHENOL	20	27	1.055	1.645	Not Significant
MW09-03D	4-BROMOPHENYL-PHENYLETHER	22	29	0.8925	1.645	Not Significant
MW09-03D	4-CHLORO-3-METHYLPHENOL	21	68	2.170	1.645	Upward Trend
MW09-03D	4-CHLOROANILINE	22	97	2.911	1.645	Upward Trend
MW09-03D	4-CHLOROPHENYL-PHENYLETHER	22	29	0.8925	1.645	Not Significant
MW09-03D	4-METHYLPHENOL	11	-10	-1.423	1.645	Not Significant
MW09-03D	4-NITROANILINE	22	32	1.074	1.645	Not Significant
MW09-03D	4-NITROPHENOL	21	57	1.801	1.645	Upward Trend
MW09-03D	ACENAPHTHENE	23	103	2.925	1.645	Upward Trend
MW09-03D	ACENAPHTHYLENE	23	-136	-3.802	1.645	Downward Trend
MW09-03D	ANTHRACENE	23	110	3.085	1.645	Upward Trend
MW09-03D	BENZO(A)ANTHRACENE	23	92	2.547	1.645	Upward Trend
MW09-03D	BENZO(A)PYRENE	23	95	2.611	1.645	Upward Trend
MW09-03D	BENZO(B)FLUORANTHENE	23	100	2.696	1.645	Upward Trend
MW09-03D	BENZO(G,H,I)PERYLENE	23	88	2.395	1.645	Upward Trend
MW09-03D	BENZO(K)FLUORANTHENE	23	94	2.662	1.645	Upward Trend
MW09-03D	BENZOIC ACID	5	4	4	8	Not Significant
MW09-03D	BENZYL ALCOHOL	4	3	3	6	Not Significant
MW09-03D	BIS(2-CHLOROETHOXY)METHANE	22	29	0.8925	1.645	Not Significant
MW09-03D	BIS(2-CHLOROETHYL)ETHER	22	-29	-0.8020	1.645	Not Significant
MW09-03D	BIS(2-CHLOROISOPROPYL)ETHER	4	0	0	NA	No Trend
MW09-03D	BIS(2-ETHYLHEXYL)PHTHALATE	22	-24	-0.6848	1.645	Not Significant
MW09-03D	BUTYLBENZYLPHTHALATE	22	46	1.372	1.645	Not Significant
MW09-03D	CARBAZOLE	22	29	0.8925	1.645	Not Significant
MW09-03D	CHRYSENE	23	88	2.448	1.645	Upward Trend
MW09-03D	CRESOLS	1	---	---	NA	NA
MW09-03D	DIBENZ(A,H)ANTHRACENE	23	84	2.338	1.645	Upward Trend
MW09-03D	DIBENZOFURAN	22	42	1.350	1.645	Not Significant
MW09-03D	DIETHYLPHTHALATE	22	57	1.747	1.645	Upward Trend
MW09-03D	DIMETHYL PHTHALATE	22	57	1.747	1.645	Upward Trend
MW09-03D	DI-N-BUTYLPHTHALATE	22	69	2.075	1.645	Upward Trend
MW09-03D	DI-N-OCTYLPHTHALATE	22	57	1.747	1.645	Upward Trend
MW09-03D	FLUORANTHENE	23	103	2.925	1.645	Upward Trend
MW09-03D	FLUORENE	23	103	2.925	1.645	Upward Trend
MW09-03D	HEXACHLOROBUTADIENE	22	29	0.8925	1.645	Not Significant
MW09-03D	HEXACHLOROCYCLOPENTADIENE	22	57	2.048	1.645	Upward Trend
MW09-03D	HEXACHLOROETHANE	22	29	0.8925	1.645	Not Significant
MW09-03D	INDENO(1,2,3-CD)PYRENE	23	84	2.338	1.645	Upward Trend
MW09-03D	ISOPHORONE	22	29	0.8925	1.645	Not Significant
MW09-03D	NAPHTHALENE	23	103	2.925	1.645	Upward Trend
MW09-03D	NITROBENZENE	22	29	0.8925	1.645	Not Significant
MW09-03D	N-NITROSODINPROPYLAMINE	22	29	0.8925	1.645	Not Significant
MW09-03D	N-NITROSODIPHENYLAMINE	22	29	0.8925	1.645	Not Significant
MW09-03D	PHENANTHRENE	23	112	3.107	1.645	Upward Trend
MW09-03D	PHENOL	21	24	0.8016	1.645	Not Significant
MW09-03D	PYRENE	23	53	1.475	1.645	Not Significant
MW09-03D	1,1,1-TRICHLOROETHANE	37	-255	-3.609	1.645	Downward Trend
MW09-03D	1,1,2,2-TETRACHLOROETHANE	38	-345	-4.792	1.645	Downward Trend
MW09-03D	1,1,2-TRICHLOROETHANE	38	-257	-3.606	1.645	Downward Trend
MW09-03D	1,1-DICHLOROETHANE	37	-309	-4.505	1.645	Downward Trend
MW09-03D	1,1-DICHLOROETHENE	37	-196	-2.638	1.645	Downward Trend
MW09-03D	1,2-DICHLOROETHANE	38	-323	-4.133	1.645	Downward Trend
MW09-03D	1,2-DICHLOROETHENE, TOTAL	31	-300	-5.088	1.645	Downward Trend
MW09-03D	1,2-DICHLOROPROPANE	38	-212	-2.778	1.645	Downward Trend
MW09-03D	2-BUTANONE	30	-199	-4.166	1.645	Downward Trend
MW09-03D	2-HEXANONE	33	-230	-4.296	1.645	Downward Trend
MW09-03D	4-METHYL-2-PENTANONE	37	-339	-5.225	1.645	Downward Trend
MW09-03D	ACETONE	31	-213	-4.065	1.645	Downward Trend
MW09-03D	BENZENE	38	35	0.4540	1.645	Not Significant
MW09-03D	BROMODICHLOROMETHANE	37	-255	-3.609	1.645	Downward Trend
MW09-03D	BROMOFORM	36	-155	-2.286	1.645	Downward Trend
MW09-03D	BROMOMETHANE	37	-119	-1.722	1.645	Downward Trend
MW09-03D	CARBON DISULFIDE	37	-206	-2.816	1.645	Downward Trend
MW09-03D	CARBON TETRACHLORIDE	37	-192	-2.782	1.645	Downward Trend
MW09-03D	CHLOROBENZENE	38	-287	-3.880	1.645	Downward Trend
MW09-03D	CHLOROETHANE	38	-262	-3.484	1.645	Downward Trend
MW09-03D	CHLOROFORM	38	-287	-3.880	1.645	Downward Trend
MW09-03D	CHLOROMETHANE	37	-220	-3.057	1.645	Downward Trend

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-03D	CIS-1,2-DICHLOROETHENE	36	-445	-6.055	1.645	Downward Trend
MW09-03D	CIS-1,3-DICHLOROPROPENE	37	-229	-3.352	1.645	Downward Trend
MW09-03D	DIBROMOCHLOROMETHANE	37	-117	-1.642	1.645	Not Significant
MW09-03D	ETHYLBENZENE	38	-275	-3.945	1.645	Downward Trend
MW09-03D	M- AND P-XYLENE	5	-3	-3	8	Not Significant
MW09-03D	METHYLENE CHLORIDE	38	-52	-0.6569	1.645	Not Significant
MW09-03D	O-XYLENE	5	-3	-3	8	Not Significant
MW09-03D	STYRENE	37	-159	-2.174	1.645	Downward Trend
MW09-03D	TETRACHLOROETHENE	38	-238	-3.288	1.645	Downward Trend
MW09-03D	TOLUENE	38	-275	-3.945	1.645	Downward Trend
MW09-03D	TRANS-1,2-DICHLOROETHENE	36	-156	-2.224	1.645	Downward Trend
MW09-03D	TRANS-1,3-DICHLOROPROPENE	37	-221	-3.189	1.645	Downward Trend
MW09-03D	TRICHLOROETHENE	38	-136	-1.699	1.645	Downward Trend
MW09-03D	VINYL CHLORIDE	38	-183	-2.291	1.645	Downward Trend
MW09-03D	XYLENES, TOTAL	13	-20	-1.239	1.645	Not Significant
MW09-07S	PENTACHLOROPHENOL	25	-107	-2.592	1.645	Downward Trend
MW09-07S	ALUMINUM	35	41	0.5740	1.645	Not Significant
MW09-07S	ANTIMONY	35	-95	-1.355	1.645	Not Significant
MW09-07S	ARSENIC	35	-24	-0.3270	1.645	Not Significant
MW09-07S	BARIUM	3	---	---	NA	NA
MW09-07S	BERYLLIUM	35	10	0.1303	1.645	Not Significant
MW09-07S	CADMIUM	3	---	---	NA	NA
MW09-07S	CALCIUM	3	---	---	NA	NA
MW09-07S	CHROMIUM, TOTAL	35	11	0.1445	1.645	Not Significant
MW09-07S	COBALT	3	---	---	NA	NA
MW09-07S	COPPER	35	-36	-0.5060	1.645	Not Significant
MW09-07S	IRON	35	-360	-5.101	1.645	Downward Trend
MW09-07S	LEAD	35	-47	-0.6724	1.645	Not Significant
MW09-07S	MAGNESIUM	3	---	---	NA	NA
MW09-07S	MANGANESE	35	-370	-5.243	1.645	Downward Trend
MW09-07S	MERCURY	35	3	0.02952	1.645	Not Significant
MW09-07S	NICKEL	35	-134	-1.933	1.645	Downward Trend
MW09-07S	POTASSIUM	3	---	---	NA	NA
MW09-07S	SELENIUM	3	---	---	NA	NA
MW09-07S	SILVER	3	---	---	NA	NA
MW09-07S	SODIUM	3	---	---	NA	NA
MW09-07S	VANADIUM	3	---	---	NA	NA
MW09-07S	ZINC	35	-1	0	1.645	Not Significant
MW09-07S	AROCLOR-1016	25	40	0.9332	1.645	Not Significant
MW09-07S	AROCLOR-1221	25	-5	-0.09519	1.645	Not Significant
MW09-07S	AROCLOR-1232	25	40	0.9332	1.645	Not Significant
MW09-07S	AROCLOR-1242	25	39	0.9165	1.645	Not Significant
MW09-07S	AROCLOR-1248	25	28	0.6510	1.645	Not Significant
MW09-07S	AROCLOR-1254	25	40	0.9332	1.645	Not Significant
MW09-07S	AROCLOR-1260	25	40	0.9332	1.645	Not Significant
MW09-07S	POLYCHLORINATED BIPHENYLS (PCBS)	23	-83	-2.204	1.645	Downward Trend
MW09-07S	4,4-DDD	25	89	2.114	1.645	Upward Trend
MW09-07S	4,4-DDE	25	89	2.114	1.645	Upward Trend
MW09-07S	4,4-DDT	25	89	2.114	1.645	Upward Trend
MW09-07S	ALDRIN	25	98	2.314	1.645	Upward Trend
MW09-07S	ALPHA-BHC	25	98	2.314	1.645	Upward Trend
MW09-07S	ALPHA-CHLORDANE	25	88	2.064	1.645	Upward Trend
MW09-07S	DELTA-BHC	25	97	2.289	1.645	Upward Trend
MW09-07S	ENDOSULFAN I	25	98	2.314	1.645	Upward Trend
MW09-07S	ENDOSULFAN II	25	89	2.114	1.645	Upward Trend
MW09-07S	LINDANE	25	98	2.314	1.645	Upward Trend
MW09-07S	BETA-BHC	24	89	2.223	1.645	Upward Trend
MW09-07S	DIELDRIN	25	82	1.963	1.645	Upward Trend
MW09-07S	ENDOSULFAN SULFATE	25	89	2.114	1.645	Upward Trend
MW09-07S	ENDRIN	25	89	2.112	1.645	Upward Trend
MW09-07S	ENDRIN KETONE	25	89	2.114	1.645	Upward Trend
MW09-07S	HEPTACHLOR	25	87	2.032	1.645	Upward Trend
MW09-07S	HEPTACHLOR EPOXIDE	24	90	2.235	1.645	Upward Trend
MW09-07S	HEXACHLOROBENZENE	26	172	3.789	1.645	Upward Trend
MW09-07S	METHOXYCHLOR	25	67	1.641	1.645	Not Significant
MW09-07S	1,2,4-TRICHLOROBENZENE	26	2	0.02308	1.645	Not Significant
MW09-07S	1,2-DICHLOROBENZENE	26	81	1.802	1.645	Upward Trend
MW09-07S	1,3-DICHLOROBENZENE	26	-1	0	1.645	Not Significant
MW09-07S	1,4-DICHLOROBENZENE	26	18	0.3790	1.645	Not Significant
MW09-07S	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-07S	2,2'-OXYBIS(1-CHLOROPROPANE)	21	3	0.06423	1.645	Not Significant
MW09-07S	2,4,5-TRICHLOROPHENOL	26	-174	-3.930	1.645	Downward Trend
MW09-07S	2,4,6-TRICHLOROPHENOL	26	45	1.017	1.645	Not Significant
MW09-07S	2,4-DICHLOROPHENOL	26	45	1.017	1.645	Not Significant
MW09-07S	2,4-DIMETHYLPHENOL	24	25	0.6182	1.645	Not Significant
MW09-07S	2,4-DINITROPHENOL	25	40	0.9736	1.645	Not Significant
MW09-07S	2,4-DINITROTOLUENE	26	42	0.9486	1.645	Not Significant
MW09-07S	2,6-DINITROTOLUENE	26	45	1.017	1.645	Not Significant
MW09-07S	2-CHLORONAPHTHALENE	26	5	0.09218	1.645	Not Significant

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-07S	2-CHLOROPHENOL	25	25	0.5892	1.645	Not Significant
MW09-07S	2-METHYLNAPHTHALENE	26	52	1.125	1.645	Not Significant
MW09-07S	2-METHYLPHENOL	26	45	1.017	1.645	Not Significant
MW09-07S	2-NITROANILINE	26	-40	-0.9524	1.645	Not Significant
MW09-07S	2-NITROPHENOL	26	45	1.017	1.645	Not Significant
MW09-07S	3- AND 4-METHYLPHENOL	11	-7	-0.5077	1.645	Not Significant
MW09-07S	3,3-DICHLOROBENZIDINE	23	85	2.337	1.645	Upward Trend
MW09-07S	3-NITROANILINE	26	-40	-0.9524	1.645	Not Significant
MW09-07S	4,6-DINITRO-2-METHYLPHENOL	24	-62	-1.711	1.645	Downward Trend
MW09-07S	4-BROMOPHENYL-PHENYLETHER	26	5	0.09218	1.645	Not Significant
MW09-07S	4-CHLORO-3-METHYLPHENOL	26	27	0.5958	1.645	Not Significant
MW09-07S	4-CHLOROANILINE	26	63	1.432	1.645	Not Significant
MW09-07S	4-CHLOROPHENYL-PHENYLETHER	26	5	0.09218	1.645	Not Significant
MW09-07S	4-METHYLPHENOL	14	-31	-2.317	1.645	Downward Trend
MW09-07S	4-NITROANILINE	26	5	0.09783	1.645	Not Significant
MW09-07S	4-NITROPHENOL	25	0	0	NA	No Trend
MW09-07S	ACENAPHTHENE	26	-97	-2.117	1.645	Downward Trend
MW09-07S	ACENAPHTHYLENE	26	-144	-3.229	1.645	Downward Trend
MW09-07S	ANTHRACENE	26	71	1.576	1.645	Not Significant
MW09-07S	BENZO(A)ANTHRACENE	26	103	2.337	1.645	Upward Trend
MW09-07S	BENZO(A)PYRENE	26	114	2.572	1.645	Upward Trend
MW09-07S	BENZO(B)FLUORANTHENE	26	56	1.246	1.645	Not Significant
MW09-07S	BENZO(G,H,I)PERYLENE	26	50	1.124	1.645	Not Significant
MW09-07S	BENZO(K)FLUORANTHENE	26	86	1.975	1.645	Upward Trend
MW09-07S	BENZOIC ACID	5	2	2	8	Not Significant
MW09-07S	BENZYL ALCOHOL	5	7	7	8	Not Significant
MW09-07S	BIS(2-CHLOROETHOXY)METHANE	26	18	0.3965	1.645	Not Significant
MW09-07S	BIS(2-CHLOROETHYL)ETHER	26	-16	-0.3449	1.645	Not Significant
MW09-07S	BIS(2-CHLOROISOPROPYL)ETHER	4	4	4	6	Not Significant
MW09-07S	BIS(2-ETHYLHEXYL)PHTHALATE	26	-59	-1.294	1.645	Not Significant
MW09-07S	BUTYLBENZYLPHTHALATE	26	-7	-0.1372	1.645	Not Significant
MW09-07S	CARBAZOLE	26	-246	-5.414	1.645	Downward Trend
MW09-07S	CHRYSENE	26	97	2.200	1.645	Upward Trend
MW09-07S	CRESOLS	1	---	---	NA	NA
MW09-07S	DIBENZ(A,H)ANTHRACENE	26	34	0.7760	1.645	Not Significant
MW09-07S	DIBENZOFURAN	26	62	1.410	1.645	Not Significant
MW09-07S	DIETHYLPHTHALATE	26	53	1.188	1.645	Not Significant
MW09-07S	DIMETHYL PHTHALATE	26	46	1.031	1.645	Not Significant
MW09-07S	DI-N-BUTYLPHTHALATE	26	11	0.2268	1.645	Not Significant
MW09-07S	DI-N-OCTYLPHTHALATE	26	14	0.2974	1.645	Not Significant
MW09-07S	FLUORANTHENE	26	38	0.8641	1.645	Not Significant
MW09-07S	FLUORENE	26	-59	-1.282	1.645	Not Significant
MW09-07S	HEXACHLOROBUTADIENE	26	-1	0	1.645	Not Significant
MW09-07S	HEXACHLOROCYCLOPENTADIENE	26	16	0.3974	1.645	Not Significant
MW09-07S	HEXACHLOROETHANE	26	-1	0	1.645	Not Significant
MW09-07S	INDENO(1,2,3-CD)PYRENE	26	97	2.195	1.645	Upward Trend
MW09-07S	ISOPHORONE	26	5	0.09218	1.645	Not Significant
MW09-07S	NAPHTHALENE	26	-104	-2.276	1.645	Downward Trend
MW09-07S	NITROBENZENE	26	18	0.3965	1.645	Not Significant
MW09-07S	N-NITROSODINPROPYLAMINE	26	5	0.09218	1.645	Not Significant
MW09-07S	N-NITROSODIPHENYLAMINE	26	18	0.3965	1.645	Not Significant
MW09-07S	PHENANTHRENE	26	69	1.533	1.645	Not Significant
MW09-07S	PHENOL	26	5	0.09218	1.645	Not Significant
MW09-07S	PYRENE	26	80	1.789	1.645	Upward Trend
MW09-07S	1,1,1-TRICHLOROETHANE	35	-189	-2.984	1.645	Downward Trend
MW09-07S	1,1,2,2-TETRACHLOROETHANE	36	-275	-4.282	1.645	Downward Trend
MW09-07S	1,1,2-TRICHLOROETHANE	36	-171	-2.651	1.645	Downward Trend
MW09-07S	1,1-DICHLOROETHANE	35	-241	-3.965	1.645	Downward Trend
MW09-07S	1,1-DICHLOROETHENE	35	-189	-3.271	1.645	Downward Trend
MW09-07S	1,2-DICHLOROETHANE	36	-247	-3.708	1.645	Downward Trend
MW09-07S	1,2-DICHLOROETHENE, TOTAL	30	27	0.4656	1.645	Not Significant
MW09-07S	1,2-DICHLOROPROPANE	36	-130	-1.865	1.645	Downward Trend
MW09-07S	2-BUTANONE	28	-135	-3.128	1.645	Downward Trend
MW09-07S	2-HEXANONE	30	-165	-3.527	1.645	Downward Trend
MW09-07S	4-METHYL-2-PENTANONE	34	-274	-4.903	1.645	Downward Trend
MW09-07S	ACETONE	29	-165	-3.244	1.645	Downward Trend
MW09-07S	BENZENE	36	-426	-5.794	1.645	Downward Trend
MW09-07S	BROMODICHLOROMETHANE	35	-189	-2.984	1.645	Downward Trend
MW09-07S	BROMOFORM	33	-102	-1.787	1.645	Downward Trend
MW09-07S	BROMOMETHANE	35	-46	-0.7122	1.645	Not Significant
MW09-07S	CARBON DISULFIDE	35	-176	-2.628	1.645	Downward Trend
MW09-07S	CARBON TETRACHLORIDE	35	-120	-1.962	1.645	Downward Trend
MW09-07S	CHLOROBENZENE	36	-398	-5.433	1.645	Downward Trend
MW09-07S	CHLOROETHANE	36	-190	-2.671	1.645	Downward Trend
MW09-07S	CHLOROFORM	36	-238	-3.520	1.645	Downward Trend
MW09-07S	CHLOROMETHANE	35	-153	-2.282	1.645	Downward Trend
MW09-07S	CIS-1,2-DICHLOROETHENE	33	-101	-1.640	1.645	Not Significant
MW09-07S	CIS-1,3-DICHLOROPROPENE	35	-152	-2.390	1.645	Downward Trend
MW09-07S	DIBROMOCHLOROMETHANE	35	-100	-1.632	1.645	Not Significant

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-07S	ETHYLBENZENE	36	-187	-2.555	1.645	Downward Trend
MW09-07S	M- AND P-XYLENE	4	-2	-2	6	Not Significant
MW09-07S	METHYLENE CHLORIDE	36	-75	-1.034	1.645	Not Significant
MW09-07S	O-XYLENE	4	-3	-3	6	Not Significant
MW09-07S	STYRENE	35	-76	-1.119	1.645	Not Significant
MW09-07S	TETRACHLOROETHENE	36	-160	-2.480	1.645	Downward Trend
MW09-07S	TOLUENE	36	-279	-3.803	1.645	Downward Trend
MW09-07S	TRANS-1,2-DICHLOROETHENE	33	74	1.171	1.645	Not Significant
MW09-07S	TRANS-1,3-DICHLOROPROPENE	35	-195	-3.054	1.645	Downward Trend
MW09-07S	TRICHLOROETHENE	36	-259	-3.739	1.645	Downward Trend
MW09-07S	VINYL CHLORIDE	36	-196	-2.934	1.645	Downward Trend
MW09-07S	XYLENES, TOTAL	11	-41	-3.186	1.645	Downward Trend
MW09-08DA	PENTACHLOROPHENOL	15	11	0.4994	1.645	Not Significant
MW09-08DA	ALUMINUM	15	-41	-1.991	1.645	Downward Trend
MW09-08DA	ANTIMONY	15	-33	-1.650	1.645	Downward Trend
MW09-08DA	ARSENIC	15	-4	-0.1486	1.645	Not Significant
MW09-08DA	BARIUM	0	---	---	NA	NA
MW09-08DA	BERYLLIUM	15	6	0.2483	1.645	Not Significant
MW09-08DA	CADMIUM	0	---	---	NA	NA
MW09-08DA	CALCIUM	0	---	---	NA	NA
MW09-08DA	CHROMIUM, TOTAL	15	-16	-0.7525	1.645	Not Significant
MW09-08DA	COBALT	0	---	---	NA	NA
MW09-08DA	COPPER	15	-27	-1.336	1.645	Not Significant
MW09-08DA	IRON	15	-69	-3.401	1.645	Downward Trend
MW09-08DA	LEAD	15	-21	-0.9988	1.645	Not Significant
MW09-08DA	MAGNESIUM	0	---	---	NA	NA
MW09-08DA	MANGANESE	15	-48	-2.336	1.645	Downward Trend
MW09-08DA	MERCURY	15	-54	-2.938	1.645	Downward Trend
MW09-08DA	NICKEL	15	-29	-1.409	1.645	Not Significant
MW09-08DA	POTASSIUM	0	---	---	NA	NA
MW09-08DA	SELENIUM	0	---	---	NA	NA
MW09-08DA	SILVER	0	---	---	NA	NA
MW09-08DA	SODIUM	0	---	---	NA	NA
MW09-08DA	VANADIUM	0	---	---	NA	NA
MW09-08DA	ZINC	15	-22	-1.062	1.645	Not Significant
MW09-08DA	AROCLOR-1016	15	-12	-0.5482	1.645	Not Significant
MW09-08DA	AROCLOR-1221	15	-18	-0.8500	1.645	Not Significant
MW09-08DA	AROCLOR-1232	15	-2	-0.04983	1.645	Not Significant
MW09-08DA	AROCLOR-1242	15	-16	-0.7475	1.645	Not Significant
MW09-08DA	AROCLOR-1248	15	-16	-0.7475	1.645	Not Significant
MW09-08DA	AROCLOR-1254	15	-2	-0.04983	1.645	Not Significant
MW09-08DA	AROCLOR-1260	15	-12	-0.5482	1.645	Not Significant
MW09-08DA	POLYCHLORINATED BIPHENYLS (PCBS)	12	3	0.1381	1.645	Not Significant
MW09-08DA	4,4-DDD	15	-13	-0.5968	1.645	Not Significant
MW09-08DA	4,4-DDE	15	-13	-0.5968	1.645	Not Significant
MW09-08DA	4,4-DDT	15	-13	-0.5968	1.645	Not Significant
MW09-08DA	ALDRIN	15	-13	-0.5988	1.645	Not Significant
MW09-08DA	ALPHA-BHC	15	-13	-0.5988	1.645	Not Significant
MW09-08DA	ALPHA-CHLORDANE	15	-13	-0.5988	1.645	Not Significant
MW09-08DA	DELTA-BHC	15	-23	-1.098	1.645	Not Significant
MW09-08DA	ENDOSULFAN I	15	-11	-0.4990	1.645	Not Significant
MW09-08DA	ENDOSULFAN II	15	-13	-0.5968	1.645	Not Significant
MW09-08DA	LINDANE	15	-13	-0.5988	1.645	Not Significant
MW09-08DA	BETA-BHC	15	-11	-0.4990	1.645	Not Significant
MW09-08DA	DIELDRIN	15	-13	-0.5968	1.645	Not Significant
MW09-08DA	ENDOSULFAN SULFATE	15	-13	-0.5968	1.645	Not Significant
MW09-08DA	ENDRIN	15	-13	-0.5968	1.645	Not Significant
MW09-08DA	ENDRIN KETONE	15	-13	-0.5968	1.645	Not Significant
MW09-08DA	HEPTACHLOR	15	-13	-0.5988	1.645	Not Significant
MW09-08DA	HEPTACHLOR EPOXIDE	15	-13	-0.5988	1.645	Not Significant
MW09-08DA	HEXACHLOROBENZENE	15	6	0.2504	1.645	Not Significant
MW09-08DA	METHOXYCHLOR	15	1	0	1.645	Not Significant
MW09-08DA	1,2,4-TRICHLOROBENZENE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	1,2-DICHLOROBENZENE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	1,3-DICHLOROBENZENE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	1,4-DICHLOROBENZENE	15	-45	-2.203	1.645	Downward Trend
MW09-08DA	1-METHYLNAPHTHALENE	0	---	---	NA	NA
MW09-08DA	2,2'-OXYBIS(1-CHLOROPROPANE)	1	---	---	NA	NA
MW09-08DA	2,4,5-TRICHLOROPHENOL	15	-48	-2.350	1.645	Downward Trend
MW09-08DA	2,4,6-TRICHLOROPHENOL	14	-42	-2.285	1.645	Downward Trend
MW09-08DA	2,4-DICHLOROPHENOL	14	-45	-2.433	1.645	Downward Trend
MW09-08DA	2,4-DIMETHYLPHENOL	14	-41	-2.203	1.645	Downward Trend
MW09-08DA	2,4-DINITROPHENOL	14	-36	-1.948	1.645	Downward Trend
MW09-08DA	2,4-DINITROTOLUENE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	2,6-DINITROTOLUENE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	2-CHLORONAPHTHALENE	15	-51	-2.503	1.645	Downward Trend
MW09-08DA	2-CHLOROPHENOL	14	-45	-2.433	1.645	Downward Trend
MW09-08DA	2-METHYLNAPHTHALENE	15	-14	-0.6858	1.645	Not Significant
MW09-08DA	2-METHYLPHENOL	14	-45	-2.433	1.645	Downward Trend

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-08DA	2-NITROANILINE	15	-44	-2.185	1.645	Downward Trend
MW09-08DA	2-NITROPHENOL	14	-42	-2.285	1.645	Downward Trend
MW09-08DA	3- AND 4-METHYLPHENOL	10	-9	-9	21	Not Significant
MW09-08DA	3,3-DICHLOROBENZIDINE	15	-27	-1.308	1.645	Not Significant
MW09-08DA	3-NITROANILINE	15	-41	-2.019	1.645	Downward Trend
MW09-08DA	4,6-DINITRO-2-METHYLPHENOL	14	-39	-2.132	1.645	Downward Trend
MW09-08DA	4-BROMOPHENYL-PHENYLETHER	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	4-CHLORO-3-METHYLPHENOL	14	-45	-2.433	1.645	Downward Trend
MW09-08DA	4-CHLOROANILINE	15	-45	-2.203	1.645	Downward Trend
MW09-08DA	4-CHLOROPHENYL-PHENYLETHER	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	4-METHYLPHENOL	4	-1	-1	6	Not Significant
MW09-08DA	4-NITROANILINE	15	-44	-2.185	1.645	Downward Trend
MW09-08DA	4-NITROPHENOL	14	-39	-2.132	1.645	Downward Trend
MW09-08DA	ACENAPHTHENE	15	-10	-0.4646	1.645	Not Significant
MW09-08DA	ACENAPHTHYLENE	15	-10	-0.4646	1.645	Not Significant
MW09-08DA	ANTHRACENE	15	-13	-0.6236	1.645	Not Significant
MW09-08DA	BENZO(A)ANTHRACENE	15	-8	-0.3613	1.645	Not Significant
MW09-08DA	BENZO(A)PYRENE	15	-15	-0.7217	1.645	Not Significant
MW09-08DA	BENZO(B)FLUORANTHENE	15	-10	-0.4646	1.645	Not Significant
MW09-08DA	BENZO(G,H,I)PERYLENE	15	-23	-1.191	1.645	Not Significant
MW09-08DA	BENZO(K)FLUORANTHENE	15	-10	-0.4646	1.645	Not Significant
MW09-08DA	BENZOIC ACID	0	---	---	NA	NA
MW09-08DA	BENZYL ALCOHOL	0	---	---	NA	NA
MW09-08DA	BIS(2-CHLOROETHOXY)METHANE	15	-45	-2.203	1.645	Downward Trend
MW09-08DA	BIS(2-CHLOROETHYL)ETHER	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
MW09-08DA	BIS(2-ETHYLHEXYL)PHTHALATE	15	-46	-2.243	1.645	Downward Trend
MW09-08DA	BUTYLBENZYLPHTHALATE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	CARBAZOLE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	CHRYSENE	15	1	0	1.645	Not Significant
MW09-08DA	CRESOLS	0	---	---	NA	NA
MW09-08DA	DIBENZ(A,H)ANTHRACENE	15	-29	-1.455	1.645	Not Significant
MW09-08DA	DIBENZOFURAN	15	-45	-2.203	1.645	Downward Trend
MW09-08DA	DIETHYLPHTHALATE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	DIMETHYL PHTHALATE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	DI-N-BUTYLPHTHALATE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	DI-N-OCTYLPHTHALATE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	FLUORANTHENE	15	-10	-0.4646	1.645	Not Significant
MW09-08DA	FLUORENE	15	-10	-0.4646	1.645	Not Significant
MW09-08DA	HEXACHLOROBUTADIENE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	HEXACHLOROCYCLOPENTADIENE	15	-27	-1.308	1.645	Not Significant
MW09-08DA	HEXACHLOROETHANE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	INDENO(1,2,3-CD)PYRENE	15	-13	-0.6164	1.645	Not Significant
MW09-08DA	ISOPHORONE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	NAPHTHALENE	15	-14	-0.6651	1.645	Not Significant
MW09-08DA	NITROBENZENE	15	-27	-1.308	1.645	Not Significant
MW09-08DA	N-NITROSODINPROPYLAMINE	15	-48	-2.368	1.645	Downward Trend
MW09-08DA	N-NITROSODIPHENYLAMINE	15	-47	-2.295	1.645	Downward Trend
MW09-08DA	PHENANTHRENE	15	-10	-0.4646	1.645	Not Significant
MW09-08DA	PHENOL	13	-41	-2.467	1.645	Downward Trend
MW09-08DA	PYRENE	15	-10	-0.4646	1.645	Not Significant
MW09-08DA	1,1,1-TRICHLOROETHANE	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	1,1,2,2-TETRACHLOROETHANE	17	-7	-0.2836	1.645	Not Significant
MW09-08DA	1,1,2-TRICHLOROETHANE	17	13	0.5638	1.645	Not Significant
MW09-08DA	1,1-DICHLOROETHANE	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	1,1-DICHLOROETHENE	17	-7	-0.2836	1.645	Not Significant
MW09-08DA	1,2-DICHLOROETHANE	17	-34	-1.487	1.645	Not Significant
MW09-08DA	1,2-DICHLOROETHENE, TOTAL	12	15	0.9826	1.645	Not Significant
MW09-08DA	1,2-DICHLOROPROPANE	17	29	1.293	1.645	Not Significant
MW09-08DA	2-BUTANONE	15	-15	-0.8087	1.645	Not Significant
MW09-08DA	2-HEXANONE	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	4-METHYL-2-PENTANONE	17	-52	-2.266	1.645	Downward Trend
MW09-08DA	ACETONE	15	-15	-0.8087	1.645	Not Significant
MW09-08DA	BENZENE	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	BROMODICHLOROMETHANE	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	BROMOFORM	17	21	0.9132	1.645	Not Significant
MW09-08DA	BROMOMETHANE	17	-4	-0.1564	1.645	Not Significant
MW09-08DA	CARBON DISULFIDE	17	-8	-0.3649	1.645	Not Significant
MW09-08DA	CARBON TETRACHLORIDE	17	21	0.9132	1.645	Not Significant
MW09-08DA	CHLOROBENZENE	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	CHLOROETHANE	17	-47	-2.089	1.645	Downward Trend
MW09-08DA	CHLOROFORM	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	CHLOROMETHANE	17	-39	-1.725	1.645	Downward Trend
MW09-08DA	CIS-1,2-DICHLOROETHENE	17	21	0.8321	1.645	Not Significant
MW09-08DA	CIS-1,3-DICHLOROPROPENE	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	DIBROMOCHLOROMETHANE	17	21	0.9132	1.645	Not Significant
MW09-08DA	ETHYLBENZENE	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	M- AND P-XYLENE	5	1	1	8	Not Significant
MW09-08DA	METHYLENE CHLORIDE	17	-47	-2.000	1.645	Downward Trend

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-08DA	O-XYLENE	5	1	1	8	Not Significant
MW09-08DA	STYRENE	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	TETRACHLOROETHENE	17	23	0.9882	1.645	Not Significant
MW09-08DA	TOLUENE	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	TRANS-1,2-DICHLOROETHENE	17	33	1.437	1.645	Not Significant
MW09-08DA	TRANS-1,3-DICHLOROPROPENE	17	-19	-0.8915	1.645	Not Significant
MW09-08DA	TRICHLOROETHENE	17	34	1.382	1.645	Not Significant
MW09-08DA	VINYL CHLORIDE	17	-19	-0.7550	1.645	Not Significant
MW09-08DA	XYLENES, TOTAL	16	-48	-2.270	1.645	Downward Trend
MW09-08S	PENTACHLOROPHENOL	23	-92	-2.479	1.645	Downward Trend
MW09-08S	ALUMINUM	44	98	0.9860	1.645	Not Significant
MW09-08S	ANTIMONY	44	-274	-2.792	1.645	Downward Trend
MW09-08S	ARSENIC	44	69	0.6895	1.645	Not Significant
MW09-08S	BARIUM	3	---	---	NA	NA
MW09-08S	BERYLLIUM	44	-81	-0.8180	1.645	Not Significant
MW09-08S	CADMIUM	3	---	---	NA	NA
MW09-08S	CALCIUM	3	---	---	NA	NA
MW09-08S	CHROMIUM, TOTAL	44	-62	-0.6193	1.645	Not Significant
MW09-08S	COBALT	3	---	---	NA	NA
MW09-08S	COPPER	44	-151	-1.546	1.645	Not Significant
MW09-08S	IRON	44	702	7.092	1.645	Upward Trend
MW09-08S	LEAD	44	-194	-1.983	1.645	Downward Trend
MW09-08S	MAGNESIUM	3	---	---	NA	NA
MW09-08S	MANGANESE	44	-49	-0.4856	1.645	Not Significant
MW09-08S	MERCURY	43	-56	-0.6016	1.645	Not Significant
MW09-08S	NICKEL	44	-296	-3.000	1.645	Downward Trend
MW09-08S	POTASSIUM	3	---	---	NA	NA
MW09-08S	SELENIUM	3	---	---	NA	NA
MW09-08S	SILVER	3	---	---	NA	NA
MW09-08S	SODIUM	3	---	---	NA	NA
MW09-08S	VANADIUM	3	---	---	NA	NA
MW09-08S	ZINC	44	-147	-1.478	1.645	Not Significant
MW09-08S	AROCLOR-1016	23	46	1.241	1.645	Not Significant
MW09-08S	AROCLOR-1221	23	18	0.4641	1.645	Not Significant
MW09-08S	AROCLOR-1232	23	46	1.241	1.645	Not Significant
MW09-08S	AROCLOR-1242	23	60	1.627	1.645	Not Significant
MW09-08S	AROCLOR-1248	23	46	1.241	1.645	Not Significant
MW09-08S	AROCLOR-1254	23	46	1.241	1.645	Not Significant
MW09-08S	AROCLOR-1260	23	46	1.241	1.645	Not Significant
MW09-08S	POLYCHLORINATED BIPHENYLS (PCBS)	23	-98	-2.628	1.645	Downward Trend
MW09-08S	4,4-DDD	23	105	2.862	1.645	Upward Trend
MW09-08S	4,4-DDE	23	105	2.862	1.645	Upward Trend
MW09-08S	4,4-DDT	23	105	2.862	1.645	Upward Trend
MW09-08S	ALDRIN	23	108	2.904	1.645	Upward Trend
MW09-08S	ALPHA-BHC	23	108	2.904	1.645	Upward Trend
MW09-08S	ALPHA-CHLORDANE	23	99	2.645	1.645	Upward Trend
MW09-08S	DELTA-BHC	23	105	2.821	1.645	Upward Trend
MW09-08S	ENDOSULFAN I	23	108	2.904	1.645	Upward Trend
MW09-08S	ENDOSULFAN II	23	108	2.958	1.645	Upward Trend
MW09-08S	LINDANE	23	108	2.904	1.645	Upward Trend
MW09-08S	BETA-BHC	23	119	3.173	1.645	Upward Trend
MW09-08S	DIELDRIN	23	96	2.645	1.645	Upward Trend
MW09-08S	ENDOSULFAN SULFATE	22	101	2.956	1.645	Upward Trend
MW09-08S	ENDRIN	23	103	2.804	1.645	Upward Trend
MW09-08S	ENDRIN KETONE	23	108	2.958	1.645	Upward Trend
MW09-08S	HEPTACHLOR	22	91	2.591	1.645	Upward Trend
MW09-08S	HEPTACHLOR EPOXIDE	23	108	2.904	1.645	Upward Trend
MW09-08S	HEXACHLOROBENZENE	23	102	2.728	1.645	Upward Trend
MW09-08S	METHOXYCHLOR	23	-12	-0.3320	1.645	Not Significant
MW09-08S	1,2,4-TRICHLOROBENZENE	23	26	0.7552	1.645	Not Significant
MW09-08S	1,2-DICHLOROBENZENE	23	26	0.7552	1.645	Not Significant
MW09-08S	1,3-DICHLOROBENZENE	23	26	0.7552	1.645	Not Significant
MW09-08S	1,4-DICHLOROBENZENE	23	26	0.7552	1.645	Not Significant
MW09-08S	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-08S	2,2'-OXYBIS(1-CHLOROPROPANE)	19	44	1.689	1.645	Upward Trend
MW09-08S	2,4,5-TRICHLOROPHENOL	23	-106	-2.839	1.645	Downward Trend
MW09-08S	2,4,6-TRICHLOROPHENOL	23	98	2.761	1.645	Upward Trend
MW09-08S	2,4-DICHLOROPHENOL	23	98	2.761	1.645	Upward Trend
MW09-08S	2,4-DIMETHYLPHENOL	21	68	2.134	1.645	Upward Trend
MW09-08S	2,4-DINITROPHENOL	22	99	2.931	1.645	Upward Trend
MW09-08S	2,4-DINITROTOLUENE	23	98	2.761	1.645	Upward Trend
MW09-08S	2,6-DINITROTOLUENE	23	83	2.314	1.645	Upward Trend
MW09-08S	2-CHLORONAPHTHALENE	23	26	0.7552	1.645	Not Significant
MW09-08S	2-CHLOROPHENOL	22	43	1.384	1.645	Not Significant
MW09-08S	2-METHYLNAPHTHALENE	23	86	2.419	1.645	Upward Trend
MW09-08S	2-METHYLPHENOL	23	98	2.761	1.645	Upward Trend
MW09-08S	2-NITROANILINE	23	-5	-0.1316	1.645	Not Significant
MW09-08S	2-NITROPHENOL	23	98	2.761	1.645	Upward Trend
MW09-08S	3- AND 4-METHYLPHENOL	11	2	0.08839	1.645	Not Significant

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-08S	3,3-DICHLOROBENZIDINE	20	15	0.5020	1.645	Not Significant
MW09-08S	3-NITROANILINE	23	-5	-0.1316	1.645	Not Significant
MW09-08S	4,6-DINITRO-2-METHYLPHENOL	21	1	0	1.645	Not Significant
MW09-08S	4-BROMOPHENYL-PHENYLETHER	23	26	0.7552	1.645	Not Significant
MW09-08S	4-CHLORO-3-METHYLPHENOL	23	86	2.391	1.645	Upward Trend
MW09-08S	4-CHLOROANILINE	23	98	2.761	1.645	Upward Trend
MW09-08S	4-CHLOROPHENYL-PHENYLETHER	23	26	0.7552	1.645	Not Significant
MW09-08S	4-METHYLPHENOL	11	-10	-1.423	1.645	Not Significant
MW09-08S	4-NITROANILINE	23	-5	-0.1316	1.645	Not Significant
MW09-08S	4-NITROPHENOL	23	69	1.877	1.645	Upward Trend
MW09-08S	ACENAPHTHENE	23	86	2.419	1.645	Upward Trend
MW09-08S	ACENAPHTHYLENE	23	-148	-4.114	1.645	Downward Trend
MW09-08S	ANTHRACENE	23	79	2.191	1.645	Upward Trend
MW09-08S	BENZO(A)ANTHRACENE	23	88	2.429	1.645	Upward Trend
MW09-08S	BENZO(A)PYRENE	23	94	2.591	1.645	Upward Trend
MW09-08S	BENZO(B)FLUORANTHENE	23	83	2.237	1.645	Upward Trend
MW09-08S	BENZO(G,H,I)PERYLENE	23	71	1.931	1.645	Upward Trend
MW09-08S	BENZO(K)FLUORANTHENE	23	77	2.180	1.645	Upward Trend
MW09-08S	BENZOIC ACID	5	2	2	8	Not Significant
MW09-08S	BENZYL ALCOHOL	5	7	7	8	Not Significant
MW09-08S	BIS(2-CHLOROETHOXY)METHANE	23	26	0.7552	1.645	Not Significant
MW09-08S	BIS(2-CHLOROETHYL)ETHER	23	26	0.7552	1.645	Not Significant
MW09-08S	BIS(2-CHLOROISOPROPYL)ETHER	4	3	3	6	Not Significant
MW09-08S	BIS(2-ETHYLHEXYL)PHTHALATE	23	2	0.02751	1.645	Not Significant
MW09-08S	BUTYLBENZYLPHTHALATE	23	40	1.153	1.645	Not Significant
MW09-08S	CARBAZOLE	23	26	0.7552	1.645	Not Significant
MW09-08S	CHRYSENE	23	67	1.863	1.645	Upward Trend
MW09-08S	CRESOLS	1	---	---	NA	NA
MW09-08S	DIBENZ(A,H)ANTHRACENE	23	64	1.803	1.645	Upward Trend
MW09-08S	DIBENZOFURAN	23	30	0.8773	1.645	Not Significant
MW09-08S	DIETHYLPHTHALATE	23	40	1.153	1.645	Not Significant
MW09-08S	DIMETHYL PHTHALATE	23	40	1.153	1.645	Not Significant
MW09-08S	DI-N-BUTYLPHTHALATE	23	40	1.153	1.645	Not Significant
MW09-08S	DI-N-OCTYLPHTHALATE	23	40	1.153	1.645	Not Significant
MW09-08S	FLUORANTHENE	23	91	2.540	1.645	Upward Trend
MW09-08S	FLUORENE	23	75	2.102	1.645	Upward Trend
MW09-08S	HEXACHLOROBUTADIENE	23	26	0.7552	1.645	Not Significant
MW09-08S	HEXACHLOROCYCLOPENTADIENE	23	21	0.6952	1.645	Not Significant
MW09-08S	HEXACHLOROETHANE	23	26	0.7552	1.645	Not Significant
MW09-08S	INDENO(1,2,3-CD)PYRENE	23	67	1.863	1.645	Upward Trend
MW09-08S	ISOPHORONE	23	26	0.7552	1.645	Not Significant
MW09-08S	NAPHTHALENE	23	86	2.419	1.645	Upward Trend
MW09-08S	NITROBENZENE	23	26	0.7552	1.645	Not Significant
MW09-08S	N-NITROSODINPROPYLAMINE	23	26	0.7552	1.645	Not Significant
MW09-08S	N-NITROSODIPHENYLAMINE	23	26	0.7552	1.645	Not Significant
MW09-08S	PHENANTHRENE	23	82	2.219	1.645	Upward Trend
MW09-08S	PHENOL	23	26	0.7552	1.645	Not Significant
MW09-08S	PYRENE	23	91	2.540	1.645	Upward Trend
MW09-08S	1,1,1-TRICHLOROETHANE	46	-382	-3.941	1.645	Downward Trend
MW09-08S	1,1,2,2-TETRACHLOROETHANE	47	-534	-5.493	1.645	Downward Trend
MW09-08S	1,1,2-TRICHLOROETHANE	47	-367	-3.802	1.645	Downward Trend
MW09-08S	1,1-DICHLOROETHANE	46	-266	-2.712	1.645	Downward Trend
MW09-08S	1,1-DICHLOROETHENE	46	-374	-4.065	1.645	Downward Trend
MW09-08S	1,2-DICHLOROETHANE	47	-389	-3.749	1.645	Downward Trend
MW09-08S	1,2-DICHLOROETHENE, TOTAL	40	-532	-6.189	1.645	Downward Trend
MW09-08S	1,2-DICHLOROPROPANE	47	-376	-3.617	1.645	Downward Trend
MW09-08S	2-BUTANONE	39	-322	-4.708	1.645	Downward Trend
MW09-08S	2-HEXANONE	43	-387	-4.933	1.645	Downward Trend
MW09-08S	4-METHYL-2-PENTANONE	46	-517	-5.792	1.645	Downward Trend
MW09-08S	ACETONE	40	-318	-3.987	1.645	Downward Trend
MW09-08S	BENZENE	47	-287	-2.645	1.645	Downward Trend
MW09-08S	BROMODICHLOROMETHANE	46	-382	-3.941	1.645	Downward Trend
MW09-08S	BROMOFORM	45	-242	-2.642	1.645	Downward Trend
MW09-08S	BROMOMETHANE	46	-166	-1.805	1.645	Downward Trend
MW09-08S	CARBON DISULFIDE	46	-448	-4.513	1.645	Downward Trend
MW09-08S	CARBON TETRACHLORIDE	46	-283	-3.009	1.645	Downward Trend
MW09-08S	CHLOROBENZENE	47	-419	-4.163	1.645	Downward Trend
MW09-08S	CHLOROETHANE	47	-318	-3.040	1.645	Downward Trend
MW09-08S	CHLOROFORM	47	-289	-2.796	1.645	Downward Trend
MW09-08S	CHLOROMETHANE	46	-346	-3.602	1.645	Downward Trend
MW09-08S	CIS-1,2-DICHLOROETHENE	45	-706	-6.901	1.645	Downward Trend
MW09-08S	CIS-1,3-DICHLOROPROPENE	46	-274	-2.915	1.645	Downward Trend
MW09-08S	DIBROMOCHLOROMETHANE	46	-243	-2.582	1.645	Downward Trend
MW09-08S	ETHYLBENZENE	47	-395	-4.118	1.645	Downward Trend
MW09-08S	M- AND P-XYLENE	7	-5	-5	13	Not Significant
MW09-08S	METHYLENE CHLORIDE	47	-14	-0.1224	1.645	Not Significant
MW09-08S	O-XYLENE	7	-5	-5	13	Not Significant
MW09-08S	STYRENE	46	-322	-3.175	1.645	Downward Trend
MW09-08S	TETRACHLOROETHENE	47	-342	-3.495	1.645	Downward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-08S	TOLUENE	47	-314	-3.185	1.645	Downward Trend
MW09-08S	TRANS-1,2-DICHLOROETHENE	45	-41	-0.4035	1.645	Not Significant
MW09-08S	TRANS-1,3-DICHLOROPROPENE	46	-263	-2.770	1.645	Downward Trend
MW09-08S	TRICHLOROETHENE	47	-392	-3.682	1.645	Downward Trend
MW09-08S	VINYL CHLORIDE	47	-741	-6.799	1.645	Downward Trend
MW09-08S	XYLENES, TOTAL	18	-54	-2.127	1.645	Downward Trend
MW09-09DA	PENTACHLOROPHENOL	16	3	0.09255	1.645	Not Significant
MW09-09DA	ALUMINUM	16	-88	-3.917	1.645	Downward Trend
MW09-09DA	ANTIMONY	16	-18	-0.7967	1.645	Not Significant
MW09-09DA	ARSENIC	16	15	0.6322	1.645	Not Significant
MW09-09DA	BARIUM	0	---	---	NA	NA
MW09-09DA	BERYLLIUM	16	-19	-0.8597	1.645	Not Significant
MW09-09DA	CADMIUM	0	---	---	NA	NA
MW09-09DA	CALCIUM	0	---	---	NA	NA
MW09-09DA	CHROMIUM, TOTAL	16	-21	-0.9082	1.645	Not Significant
MW09-09DA	COBALT	0	---	---	NA	NA
MW09-09DA	COPPER	16	-22	-0.9749	1.645	Not Significant
MW09-09DA	IRON	16	76	3.407	1.645	Upward Trend
MW09-09DA	LEAD	16	-44	-2.006	1.645	Downward Trend
MW09-09DA	MAGNESIUM	0	---	---	NA	NA
MW09-09DA	MANGANESE	16	99	4.417	1.645	Upward Trend
MW09-09DA	MERCURY	16	-80	-3.804	1.645	Downward Trend
MW09-09DA	NICKEL	16	-63	-2.843	1.645	Downward Trend
MW09-09DA	POTASSIUM	0	---	---	NA	NA
MW09-09DA	SELENIUM	0	---	---	NA	NA
MW09-09DA	SILVER	0	---	---	NA	NA
MW09-09DA	SODIUM	0	---	---	NA	NA
MW09-09DA	VANADIUM	0	---	---	NA	NA
MW09-09DA	ZINC	16	-47	-2.115	1.645	Downward Trend
MW09-09DA	AROCLOR-1016	15	-8	-0.3515	1.645	Not Significant
MW09-09DA	AROCLOR-1221	15	-8	-0.3527	1.645	Not Significant
MW09-09DA	AROCLOR-1232	15	0	0	NA	No Trend
MW09-09DA	AROCLOR-1242	15	-14	-0.6527	1.645	Not Significant
MW09-09DA	AROCLOR-1248	15	-14	-0.6527	1.645	Not Significant
MW09-09DA	AROCLOR-1254	15	0	0	NA	No Trend
MW09-09DA	AROCLOR-1260	15	-8	-0.3515	1.645	Not Significant
MW09-09DA	POLYCHLORINATED BIPHENYLS (PCBS)	12	6	0.3518	1.645	Not Significant
MW09-09DA	4,4-DDD	15	-16	-0.7469	1.645	Not Significant
MW09-09DA	4,4-DDE	15	-11	-0.4973	1.645	Not Significant
MW09-09DA	4,4-DDT	15	-16	-0.7469	1.645	Not Significant
MW09-09DA	ALDRIN	15	-13	-0.6053	1.645	Not Significant
MW09-09DA	ALPHA-BHC	15	-13	-0.6053	1.645	Not Significant
MW09-09DA	ALPHA-CHLORDANE	15	-13	-0.6053	1.645	Not Significant
MW09-09DA	DELTA-BHC	15	-16	-0.7615	1.645	Not Significant
MW09-09DA	ENDOSULFAN I	15	-11	-0.5044	1.645	Not Significant
MW09-09DA	ENDOSULFAN II	15	-16	-0.7469	1.645	Not Significant
MW09-09DA	LINDANE	15	-13	-0.6053	1.645	Not Significant
MW09-09DA	BETA-BHC	15	-11	-0.5044	1.645	Not Significant
MW09-09DA	DIELDRIN	15	-16	-0.7469	1.645	Not Significant
MW09-09DA	ENDOSULFAN SULFATE	15	-16	-0.7469	1.645	Not Significant
MW09-09DA	ENDRIN	15	-16	-0.7469	1.645	Not Significant
MW09-09DA	ENDRIN KETONE	15	-16	-0.7469	1.645	Not Significant
MW09-09DA	HEPTACHLOR	15	-13	-0.6053	1.645	Not Significant
MW09-09DA	HEPTACHLOR EPOXIDE	15	-13	-0.6053	1.645	Not Significant
MW09-09DA	HEXACHLOROBENZENE	16	23	1.002	1.645	Not Significant
MW09-09DA	METHOXYCHLOR	15	1	0	1.645	Not Significant
MW09-09DA	1,2,4-TRICHLOROBENZENE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	1,2-DICHLOROBENZENE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	1,3-DICHLOROBENZENE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	1,4-DICHLOROBENZENE	15	-55	-2.715	1.645	Downward Trend
MW09-09DA	1-METHYLNAPHTHALENE	0	---	---	NA	NA
MW09-09DA	2,2'-OXYBIS(1-CHLOROPROPANE)	2	---	---	NA	NA
MW09-09DA	2,4,5-TRICHLOROPHENOL	16	-59	-2.672	1.645	Downward Trend
MW09-09DA	2,4,6-TRICHLOROPHENOL	15	-63	-3.117	1.645	Downward Trend
MW09-09DA	2,4-DICHLOROPHENOL	15	-63	-3.117	1.645	Downward Trend
MW09-09DA	2,4-DIMETHYLPHENOL	15	-58	-2.848	1.645	Downward Trend
MW09-09DA	2,4-DINITROPHENOL	15	-47	-2.340	1.645	Downward Trend
MW09-09DA	2,4-DINITROTOLUENE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	2,6-DINITROTOLUENE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	2-CHLORONAPHTHALENE	15	-63	-3.117	1.645	Downward Trend
MW09-09DA	2-CHLOROPHENOL	15	-63	-3.117	1.645	Downward Trend
MW09-09DA	2-METHYLNAPHTHALENE	16	-21	-0.9242	1.645	Not Significant
MW09-09DA	2-METHYLPHENOL	15	-63	-3.117	1.645	Downward Trend
MW09-09DA	2-NITROANILINE	15	-51	-2.571	1.645	Downward Trend
MW09-09DA	2-NITROPHENOL	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	3- AND 4-METHYLPHENOL	10	-18	-18	21	Not Significant
MW09-09DA	3,3-DICHLOROBENZIDINE	15	-20	-0.9638	1.645	Not Significant
MW09-09DA	3-NITROANILINE	15	-47	-2.340	1.645	Downward Trend
MW09-09DA	4,6-DINITRO-2-METHYLPHENOL	15	-51	-2.571	1.645	Downward Trend

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-09DA	4-BROMOPHENYL-PHENYLETHER	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	4-CHLORO-3-METHYLPHENOL	15	-63	-3.117	1.645	Downward Trend
MW09-09DA	4-CHLOROANILINE	15	-55	-2.715	1.645	Downward Trend
MW09-09DA	4-CHLOROPHENYL-PHENYLETHER	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	4-METHYLPHENOL	5	-1	-1	8	Not Significant
MW09-09DA	4-NITROANILINE	15	-51	-2.571	1.645	Downward Trend
MW09-09DA	4-NITROPHENOL	15	-51	-2.571	1.645	Downward Trend
MW09-09DA	ACENAPHTHENE	16	-23	-1.014	1.645	Not Significant
MW09-09DA	ACENAPHTHYLENE	16	-21	-0.9242	1.645	Not Significant
MW09-09DA	ANTHRACENE	16	-21	-0.9242	1.645	Not Significant
MW09-09DA	BENZO(A)ANTHRACENE	16	-17	-0.7372	1.645	Not Significant
MW09-09DA	BENZO(A)PYRENE	16	-19	-0.8294	1.645	Not Significant
MW09-09DA	BENZO(B)FLUORANTHENE	16	-25	-1.106	1.645	Not Significant
MW09-09DA	BENZO(G,H,I)PERYLENE	16	-36	-1.638	1.645	Not Significant
MW09-09DA	BENZO(K)FLUORANTHENE	16	-21	-0.9242	1.645	Not Significant
MW09-09DA	BENZOIC ACID	0	---	---	NA	NA
MW09-09DA	BENZYL ALCOHOL	0	---	---	NA	NA
MW09-09DA	BIS(2-CHLOROETHOXY)METHANE	15	-55	-2.715	1.645	Downward Trend
MW09-09DA	BIS(2-CHLOROETHYL)ETHER	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
MW09-09DA	BIS(2-ETHYLHEXYL)PHTHALATE	15	-51	-2.487	1.645	Downward Trend
MW09-09DA	BUTYLBENZYLPHTHALATE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	CARBAZOLE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	CHRYSENE	16	-21	-0.9242	1.645	Not Significant
MW09-09DA	CRESOLS	0	---	---	NA	NA
MW09-09DA	DIBENZ(A,H)ANTHRACENE	16	-36	-1.638	1.645	Not Significant
MW09-09DA	DIBENZOFURAN	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	DIETHYLPHTHALATE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	DIMETHYL PHTHALATE	15	-39	-1.917	1.645	Downward Trend
MW09-09DA	DI-N-BUTYLPHTHALATE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	DI-N-OCTYLPHTHALATE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	FLUORANTHENE	16	-21	-0.9242	1.645	Not Significant
MW09-09DA	FLUORENE	16	-21	-0.9242	1.645	Not Significant
MW09-09DA	HEXACHLOROBUTADIENE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	HEXACHLOROCYCLOPENTADIENE	15	-20	-0.9638	1.645	Not Significant
MW09-09DA	HEXACHLOROETHANE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	INDENO(1,2,3-CD)PYRENE	16	-25	-1.106	1.645	Not Significant
MW09-09DA	ISOPHORONE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	NAPHTHALENE	16	-18	-0.7743	1.645	Not Significant
MW09-09DA	NITROBENZENE	15	-40	-1.958	1.645	Downward Trend
MW09-09DA	N-NITROSODINPROPYLAMINE	15	-59	-2.946	1.645	Downward Trend
MW09-09DA	N-NITROSODIPHENYLAMINE	15	-58	-2.848	1.645	Downward Trend
MW09-09DA	PHENANTHRENE	16	-7	-0.2765	1.645	Not Significant
MW09-09DA	PHENOL	14	-54	-2.991	1.645	Downward Trend
MW09-09DA	PYRENE	16	-14	-0.6001	1.645	Not Significant
MW09-09DA	1,1,1-TRICHLOROETHANE	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	1,1,2,2-TETRACHLOROETHANE	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	1,1,2-TRICHLOROETHANE	17	13	0.5638	1.645	Not Significant
MW09-09DA	1,1-DICHLOROETHANE	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	1,1-DICHLOROETHENE	17	-22	-1.024	1.645	Not Significant
MW09-09DA	1,2-DICHLOROETHANE	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	1,2-DICHLOROETHENE, TOTAL	12	-54	-3.634	1.645	Downward Trend
MW09-09DA	1,2-DICHLOROPROPANE	17	21	0.9132	1.645	Not Significant
MW09-09DA	2-BUTANONE	15	-15	-0.8087	1.645	Not Significant
MW09-09DA	2-HEXANONE	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	4-METHYL-2-PENTANONE	17	-52	-2.266	1.645	Downward Trend
MW09-09DA	ACETONE	15	-31	-1.661	1.645	Downward Trend
MW09-09DA	BENZENE	17	-15	-0.6867	1.645	Not Significant
MW09-09DA	BROMODICHLOROMETHANE	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	BROMOFORM	17	21	0.9132	1.645	Not Significant
MW09-09DA	BROMOMETHANE	17	-4	-0.1564	1.645	Not Significant
MW09-09DA	CARBON DISULFIDE	17	5	0.1962	1.645	Not Significant
MW09-09DA	CARBON TETRACHLORIDE	17	21	0.9132	1.645	Not Significant
MW09-09DA	CHLOROBENZENE	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	CHLOROETHANE	17	-47	-2.089	1.645	Downward Trend
MW09-09DA	CHLOROFORM	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	CHLOROMETHANE	17	-39	-1.725	1.645	Downward Trend
MW09-09DA	CIS-1,2-DICHLOROETHENE	17	-112	-4.633	1.645	Downward Trend
MW09-09DA	CIS-1,3-DICHLOROPROPENE	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	DIBROMOCHLOROMETHANE	17	21	0.9132	1.645	Not Significant
MW09-09DA	ETHYLBENZENE	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	M- AND P-XYLENE	5	1	1	8	Not Significant
MW09-09DA	METHYLENE CHLORIDE	17	-47	-2.000	1.645	Downward Trend
MW09-09DA	O-XYLENE	5	1	1	8	Not Significant
MW09-09DA	STYRENE	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	TETRACHLOROETHENE	17	7	0.2740	1.645	Not Significant
MW09-09DA	TOLUENE	17	-19	-0.8915	1.645	Not Significant
MW09-09DA	TRANS-1,2-DICHLOROETHENE	17	-35	-1.425	1.645	Not Significant
MW09-09DA	TRANS-1,3-DICHLOROPROPENE	17	-19	-0.8915	1.645	Not Significant

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-09DA	TRICHLOROETHENE	17	-117	-4.782	1.645	Downward Trend
MW09-09DA	VINYL CHLORIDE	17	-21	-0.8246	1.645	Not Significant
MW09-09DA	XYLENES, TOTAL	16	-48	-2.270	1.645	Downward Trend
MW09-09S	PENTACHLOROPHENOL	27	-139	-3.053	1.645	Downward Trend
MW09-09S	ALUMINUM	43	-15	-0.1481	1.645	Not Significant
MW09-09S	ANTIMONY	44	-318	-3.242	1.645	Downward Trend
MW09-09S	ARSENIC	44	-83	-0.8540	1.645	Not Significant
MW09-09S	BARIUM	3	---	---	NA	NA
MW09-09S	BERYLLIUM	44	-135	-1.374	1.645	Not Significant
MW09-09S	CADMIUM	3	---	---	NA	NA
MW09-09S	CALCIUM	3	---	---	NA	NA
MW09-09S	CHROMIUM, TOTAL	44	-91	-0.9139	1.645	Not Significant
MW09-09S	COBALT	3	---	---	NA	NA
MW09-09S	COPPER	44	-124	-1.274	1.645	Not Significant
MW09-09S	IRON	44	-111	-1.113	1.645	Not Significant
MW09-09S	LEAD	44	-198	-2.025	1.645	Downward Trend
MW09-09S	MAGNESIUM	3	---	---	NA	NA
MW09-09S	MANGANESE	44	-482	-4.866	1.645	Downward Trend
MW09-09S	MERCURY	43	9	0.08823	1.645	Not Significant
MW09-09S	NICKEL	44	-244	-2.514	1.645	Downward Trend
MW09-09S	POTASSIUM	3	---	---	NA	NA
MW09-09S	SELENIUM	3	---	---	NA	NA
MW09-09S	SILVER	3	---	---	NA	NA
MW09-09S	SODIUM	3	---	---	NA	NA
MW09-09S	VANADIUM	3	---	---	NA	NA
MW09-09S	ZINC	44	-11	-0.1014	1.645	Not Significant
MW09-09S	AROCLOR-1016	22	38	1.080	1.645	Not Significant
MW09-09S	AROCLOR-1221	22	11	0.2893	1.645	Not Significant
MW09-09S	AROCLOR-1232	22	38	1.080	1.645	Not Significant
MW09-09S	AROCLOR-1242	22	50	1.430	1.645	Not Significant
MW09-09S	AROCLOR-1248	22	38	1.080	1.645	Not Significant
MW09-09S	AROCLOR-1254	22	38	1.080	1.645	Not Significant
MW09-09S	AROCLOR-1260	22	38	1.080	1.645	Not Significant
MW09-09S	POLYCHLORINATED BIPHENYLS (PCBS)	23	-97	-2.597	1.645	Downward Trend
MW09-09S	4,4-DDD	23	144	3.931	1.645	Upward Trend
MW09-09S	4,4-DDE	23	104	2.831	1.645	Upward Trend
MW09-09S	4,4-DDT	23	96	2.640	1.645	Upward Trend
MW09-09S	ALDRIN	23	120	3.240	1.645	Upward Trend
MW09-09S	ALPHA-BHC	23	120	3.240	1.645	Upward Trend
MW09-09S	ALPHA-CHLORDANE	23	109	2.921	1.645	Upward Trend
MW09-09S	DELTA-BHC	23	117	3.158	1.645	Upward Trend
MW09-09S	ENDOSULFAN I	23	119	3.215	1.645	Upward Trend
MW09-09S	ENDOSULFAN II	23	109	2.972	1.645	Upward Trend
MW09-09S	LINDANE	23	119	3.215	1.645	Upward Trend
MW09-09S	BETA-BHC	23	119	3.215	1.645	Upward Trend
MW09-09S	DIELDRIN	23	136	3.751	1.645	Upward Trend
MW09-09S	ENDOSULFAN SULFATE	23	109	2.972	1.645	Upward Trend
MW09-09S	ENDRIN	23	103	2.799	1.645	Upward Trend
MW09-09S	ENDRIN KETONE	23	109	2.972	1.645	Upward Trend
MW09-09S	HEPTACHLOR	23	109	2.925	1.645	Upward Trend
MW09-09S	HEPTACHLOR EPOXIDE	23	124	3.326	1.645	Upward Trend
MW09-09S	HEXACHLOROBENZENE	27	179	3.776	1.645	Upward Trend
MW09-09S	METHOXYCHLOR	23	-1	0	1.645	Not Significant
MW09-09S	1,2,4-TRICHLOROBENZENE	25	-8	-0.1813	1.645	Not Significant
MW09-09S	1,2-DICHLOROBENZENE	25	-10	-0.2328	1.645	Not Significant
MW09-09S	1,3-DICHLOROBENZENE	25	-10	-0.2328	1.645	Not Significant
MW09-09S	1,4-DICHLOROBENZENE	25	7	0.1592	1.645	Not Significant
MW09-09S	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-09S	2,2'-OXYBIS(1-CHLOROPROPANE)	21	-14	-0.4531	1.645	Not Significant
MW09-09S	2,4,5-TRICHLOROPHENOL	27	-203	-4.392	1.645	Downward Trend
MW09-09S	2,4,6-TRICHLOROPHENOL	25	58	1.433	1.645	Not Significant
MW09-09S	2,4-DICHLOROPHENOL	25	58	1.433	1.645	Not Significant
MW09-09S	2,4-DIMETHYLPHENOL	24	42	1.083	1.645	Not Significant
MW09-09S	2,4-DINITROPHENOL	24	81	2.163	1.645	Upward Trend
MW09-09S	2,4-DINITROTOLUENE	25	56	1.384	1.645	Not Significant
MW09-09S	2,6-DINITROTOLUENE	25	45	1.095	1.645	Not Significant
MW09-09S	2-CHLORONAPHTHALENE	25	-6	-0.1294	1.645	Not Significant
MW09-09S	2-CHLOROPHENOL	24	14	0.3621	1.645	Not Significant
MW09-09S	2-METHYLNAPHTHALENE	27	0	0	NA	No Trend
MW09-09S	2-METHYLPHENOL	25	58	1.433	1.645	Not Significant
MW09-09S	2-NITROANILINE	25	-45	-1.382	1.645	Not Significant
MW09-09S	2-NITROPHENOL	25	58	1.433	1.645	Not Significant
MW09-09S	3- AND 4-METHYLPHENOL	11	-1	0	1.645	Not Significant
MW09-09S	3,3-DICHLOROBENZIDINE	23	47	1.352	1.645	Not Significant
MW09-09S	3-NITROANILINE	25	-45	-1.382	1.645	Not Significant
MW09-09S	4,6-DINITRO-2-METHYLPHENOL	23	-42	-1.513	1.645	Not Significant
MW09-09S	4-BROMOPHENYL-PHENYLETHER	25	-6	-0.1294	1.645	Not Significant
MW09-09S	4-CHLORO-3-METHYLPHENOL	25	39	0.9381	1.645	Not Significant
MW09-09S	4-CHLOROANILINE	25	69	1.731	1.645	Upward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-09S	4-CHLOROPHENYL-PHENYLETHER	25	-6	-0.1294	1.645	Not Significant
MW09-09S	4-METHYLPHENOL	13	-24	-1.730	1.645	Downward Trend
MW09-09S	4-NITROANILINE	25	-45	-1.382	1.645	Not Significant
MW09-09S	4-NITROPHENOL	25	27	0.6330	1.645	Not Significant
MW09-09S	ACENAPHTHENE	27	0	0	NA	No Trend
MW09-09S	ACENAPHTHYLENE	27	-230	-4.963	1.645	Downward Trend
MW09-09S	ANTHRACENE	27	86	1.837	1.645	Upward Trend
MW09-09S	BENZO(A)ANTHRACENE	27	110	2.363	1.645	Upward Trend
MW09-09S	BENZO(A)PYRENE	27	131	2.786	1.645	Upward Trend
MW09-09S	BENZO(B)FLUORANTHENE	27	80	1.684	1.645	Upward Trend
MW09-09S	BENZO(G,H,I)PERYLENE	27	58	1.226	1.645	Not Significant
MW09-09S	BENZO(K)FLUORANTHENE	27	104	2.254	1.645	Upward Trend
MW09-09S	BENZOIC ACID	5	4	4	8	Not Significant
MW09-09S	BENZYL ALCOHOL	5	7	7	8	Not Significant
MW09-09S	BIS(2-CHLOROETHOXY)METHANE	25	9	0.2123	1.645	Not Significant
MW09-09S	BIS(2-CHLOROETHYL)ETHER	25	-27	-0.6724	1.645	Not Significant
MW09-09S	BIS(2-CHLOROISOPROPYL)ETHER	4	5	5	6	Not Significant
MW09-09S	BIS(2-ETHYLHEXYL)PHTHALATE	27	-64	-1.342	1.645	Not Significant
MW09-09S	BUTYLBENZYLPHTHALATE	25	10	0.2235	1.645	Not Significant
MW09-09S	CARBAZOLE	25	-6	-0.1294	1.645	Not Significant
MW09-09S	CHRYSENE	27	94	2.016	1.645	Upward Trend
MW09-09S	CRESOLS	1	---	---	NA	NA
MW09-09S	DIBENZ(A,H)ANTHRACENE	27	44	0.9410	1.645	Not Significant
MW09-09S	DIBENZOFURAN	25	-1	0	1.645	Not Significant
MW09-09S	DIETHYLPHTHALATE	25	10	0.2235	1.645	Not Significant
MW09-09S	DIMETHYL PHTHALATE	25	44	1.074	1.645	Not Significant
MW09-09S	DI-N-BUTYLPHTHALATE	25	10	0.2235	1.645	Not Significant
MW09-09S	DI-N-OCTYLPHTHALATE	25	10	0.2235	1.645	Not Significant
MW09-09S	FLUORANTHENE	27	13	0.2639	1.645	Not Significant
MW09-09S	FLUORENE	27	9	0.1764	1.645	Not Significant
MW09-09S	HEXACHLOROBUTADIENE	25	-10	-0.2328	1.645	Not Significant
MW09-09S	HEXACHLOROCYCLOPENTADIENE	25	-3	-0.07374	1.645	Not Significant
MW09-09S	HEXACHLOROETHANE	25	-10	-0.2328	1.645	Not Significant
MW09-09S	INDENO(1,2,3-CD)PYRENE	27	94	2.016	1.645	Upward Trend
MW09-09S	ISOPHORONE	25	-6	-0.1294	1.645	Not Significant
MW09-09S	NAPHTHALENE	27	-6	-0.1096	1.645	Not Significant
MW09-09S	NITROBENZENE	25	9	0.2123	1.645	Not Significant
MW09-09S	N-NITROSODINPROPYLAMINE	25	-6	-0.1294	1.645	Not Significant
MW09-09S	N-NITROSODIPHENYLAMINE	25	9	0.2123	1.645	Not Significant
MW09-09S	PHENANTHRENE	27	104	2.197	1.645	Upward Trend
MW09-09S	PHENOL	25	-13	-0.2986	1.645	Not Significant
MW09-09S	PYRENE	27	78	1.685	1.645	Upward Trend
MW09-09S	1,1,1-TRICHLOROETHANE	47	-197	-1.895	1.645	Downward Trend
MW09-09S	1,1,2,2-TETRACHLOROETHANE	48	-309	-2.973	1.645	Downward Trend
MW09-09S	1,1,2-TRICHLOROETHANE	48	-76	-0.6874	1.645	Not Significant
MW09-09S	1,1-DICHLOROETHANE	47	-265	-2.644	1.645	Downward Trend
MW09-09S	1,1-DICHLOROETHENE	47	300	2.763	1.645	Upward Trend
MW09-09S	1,2-DICHLOROETHANE	48	46	0.4018	1.645	Not Significant
MW09-09S	1,2-DICHLOROETHENE, TOTAL	40	476	5.535	1.645	Upward Trend
MW09-09S	1,2-DICHLOROPROPANE	48	-187	-1.690	1.645	Downward Trend
MW09-09S	2-BUTANONE	37	-83	-1.239	1.645	Not Significant
MW09-09S	2-HEXANONE	42	-141	-1.752	1.645	Downward Trend
MW09-09S	4-METHYL-2-PENTANONE	46	-257	-2.814	1.645	Downward Trend
MW09-09S	ACETONE	40	-84	-1.049	1.645	Not Significant
MW09-09S	BENZENE	48	730	6.484	1.645	Upward Trend
MW09-09S	BROMODICHLOROMETHANE	47	-197	-1.895	1.645	Downward Trend
MW09-09S	BROMOFORM	46	-124	-1.252	1.645	Not Significant
MW09-09S	BROMOMETHANE	46	-30	-0.2957	1.645	Not Significant
MW09-09S	CARBON DISULFIDE	47	-198	-1.885	1.645	Downward Trend
MW09-09S	CARBON TETRACHLORIDE	47	-165	-1.610	1.645	Not Significant
MW09-09S	CHLOROBENZENE	47	75	0.6838	1.645	Not Significant
MW09-09S	CHLOROETHANE	48	-175	-1.619	1.645	Not Significant
MW09-09S	CHLOROFORM	48	-233	-2.167	1.645	Downward Trend
MW09-09S	CHLOROMETHANE	47	-127	-1.213	1.645	Not Significant
MW09-09S	CIS-1,2-DICHLOROETHENE	45	560	5.472	1.645	Upward Trend
MW09-09S	CIS-1,3-DICHLOROPROPENE	47	-121	-1.180	1.645	Not Significant
MW09-09S	DIBROMOCHLOROMETHANE	47	-141	-1.374	1.645	Not Significant
MW09-09S	ETHYLBENZENE	46	-203	-2.059	1.645	Downward Trend
MW09-09S	M- AND P-XYLENE	7	-3	-3	13	Not Significant
MW09-09S	METHYLENE CHLORIDE	48	185	1.662	1.645	Upward Trend
MW09-09S	O-XYLENE	7	-3	-3	13	Not Significant
MW09-09S	STYRENE	46	-162	-1.579	1.645	Not Significant
MW09-09S	TETRACHLOROETHENE	48	-220	-2.074	1.645	Downward Trend
MW09-09S	TOLUENE	46	-104	-1.018	1.645	Not Significant
MW09-09S	TRANS-1,2-DICHLOROETHENE	45	519	5.068	1.645	Upward Trend
MW09-09S	TRANS-1,3-DICHLOROPROPENE	47	-113	-1.095	1.645	Not Significant
MW09-09S	TRICHLOROETHENE	48	-164	-1.480	1.645	Not Significant
MW09-09S	VINYL CHLORIDE	48	783	6.953	1.645	Upward Trend
MW09-09S	XYLENES, TOTAL	18	28	1.057	1.645	Not Significant

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-10D	PENTACHLOROPHENOL	23	-70	-1.898	1.645	Downward Trend
MW09-10D	ALUMINUM	32	38	0.6042	1.645	Not Significant
MW09-10D	ANTIMONY	32	-96	-1.570	1.645	Not Significant
MW09-10D	ARSENIC	32	126	2.034	1.645	Upward Trend
MW09-10D	BARIUM	3	---	---	NA	NA
MW09-10D	BERYLLIUM	32	20	0.3146	1.645	Not Significant
MW09-10D	CADMIUM	3	---	---	NA	NA
MW09-10D	CALCIUM	3	---	---	NA	NA
MW09-10D	CHROMIUM, TOTAL	32	-43	-0.6898	1.645	Not Significant
MW09-10D	COBALT	3	---	---	NA	NA
MW09-10D	COPPER	32	-5	-0.06608	1.645	Not Significant
MW09-10D	IRON	32	7	0.09737	1.645	Not Significant
MW09-10D	LEAD	32	-11	-0.1652	1.645	Not Significant
MW09-10D	MAGNESIUM	3	---	---	NA	NA
MW09-10D	MANGANESE	32	63	1.007	1.645	Not Significant
MW09-10D	MERCURY	32	9	0.1379	1.645	Not Significant
MW09-10D	NICKEL	32	-29	-0.4621	1.645	Not Significant
MW09-10D	POTASSIUM	3	---	---	NA	NA
MW09-10D	SELENIUM	3	---	---	NA	NA
MW09-10D	SILVER	3	---	---	NA	NA
MW09-10D	SODIUM	3	---	---	NA	NA
MW09-10D	VANADIUM	3	---	---	NA	NA
MW09-10D	ZINC	32	-11	-0.1624	1.645	Not Significant
MW09-10D	AROCLOR-1016	23	16	0.4125	1.645	Not Significant
MW09-10D	AROCLOR-1221	23	-11	-0.2729	1.645	Not Significant
MW09-10D	AROCLOR-1232	23	16	0.4125	1.645	Not Significant
MW09-10D	AROCLOR-1242	23	28	0.7426	1.645	Not Significant
MW09-10D	AROCLOR-1248	23	16	0.4125	1.645	Not Significant
MW09-10D	AROCLOR-1254	23	16	0.4125	1.645	Not Significant
MW09-10D	AROCLOR-1260	23	16	0.4125	1.645	Not Significant
MW09-10D	POLYCHLORINATED BIPHENYLS (PCBS)	23	-115	-3.065	1.645	Downward Trend
MW09-10D	4,4-DDD	23	111	3.018	1.645	Upward Trend
MW09-10D	4,4-DDE	23	111	3.018	1.645	Upward Trend
MW09-10D	4,4-DDT	23	111	3.018	1.645	Upward Trend
MW09-10D	ALDRIN	23	119	3.212	1.645	Upward Trend
MW09-10D	ALPHA-BHC	23	119	3.212	1.645	Upward Trend
MW09-10D	ALPHA-CHLORDANE	23	111	2.972	1.645	Upward Trend
MW09-10D	DELTA-BHC	23	118	3.184	1.645	Upward Trend
MW09-10D	ENDOSULFAN I	23	119	3.212	1.645	Upward Trend
MW09-10D	ENDOSULFAN II	23	111	3.018	1.645	Upward Trend
MW09-10D	LINDANE	23	119	3.212	1.645	Upward Trend
MW09-10D	BETA-BHC	23	119	3.212	1.645	Upward Trend
MW09-10D	DIELDRIN	23	102	2.803	1.645	Upward Trend
MW09-10D	ENDOSULFAN SULFATE	23	111	3.018	1.645	Upward Trend
MW09-10D	ENDRIN	23	111	3.015	1.645	Upward Trend
MW09-10D	ENDRIN KETONE	23	111	3.018	1.645	Upward Trend
MW09-10D	HEPTACHLOR	23	112	3.001	1.645	Upward Trend
MW09-10D	HEPTACHLOR EPOXIDE	23	119	3.212	1.645	Upward Trend
MW09-10D	HEXACHLOROBENZENE	23	103	2.768	1.645	Upward Trend
MW09-10D	METHOXYCHLOR	23	21	0.5865	1.645	Not Significant
MW09-10D	1,2,4-TRICHLOROBENZENE	23	21	0.5555	1.645	Not Significant
MW09-10D	1,2-DICHLOROBENZENE	23	21	0.5555	1.645	Not Significant
MW09-10D	1,3-DICHLOROBENZENE	23	21	0.5555	1.645	Not Significant
MW09-10D	1,4-DICHLOROBENZENE	23	21	0.5555	1.645	Not Significant
MW09-10D	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-10D	2,2'-OXYBIS(1-CHLOROPROPANE)	19	22	0.8033	1.645	Not Significant
MW09-10D	2,4,5-TRICHLOROPHENOL	23	-116	-3.163	1.645	Downward Trend
MW09-10D	2,4,6-TRICHLOROPHENOL	23	81	2.271	1.645	Upward Trend
MW09-10D	2,4-DICHLOROPHENOL	23	81	2.271	1.645	Upward Trend
MW09-10D	2,4-DIMETHYLPHENOL	21	42	1.294	1.645	Not Significant
MW09-10D	2,4-DINITROPHENOL	23	94	2.587	1.645	Upward Trend
MW09-10D	2,4-DINITROTOLUENE	23	81	2.271	1.645	Upward Trend
MW09-10D	2,6-DINITROTOLUENE	23	65	1.798	1.645	Upward Trend
MW09-10D	2-CHLORONAPHTHALENE	23	21	0.5555	1.645	Not Significant
MW09-10D	2-CHLOROPHENOL	22	38	1.103	1.645	Not Significant
MW09-10D	2-METHYLNAPHTHALENE	23	63	1.761	1.645	Upward Trend
MW09-10D	2-METHYLPHENOL	23	81	2.271	1.645	Upward Trend
MW09-10D	2-NITROANILINE	23	-32	-0.9761	1.645	Not Significant
MW09-10D	2-NITROPHENOL	23	81	2.271	1.645	Upward Trend
MW09-10D	3- AND 4-METHYLPHENOL	11	-6	-0.4419	1.645	Not Significant
MW09-10D	3,3-DICHLOROBENZIDINE	22	28	0.8061	1.645	Not Significant
MW09-10D	3-NITROANILINE	23	-32	-0.9761	1.645	Not Significant
MW09-10D	4,6-DINITRO-2-METHYLPHENOL	21	-23	-0.8053	1.645	Not Significant
MW09-10D	4-BROMOPHENYL-PHENYLETHER	23	21	0.5555	1.645	Not Significant
MW09-10D	4-CHLORO-3-METHYLPHENOL	23	60	1.641	1.645	Not Significant
MW09-10D	4-CHLOROANILINE	23	81	2.271	1.645	Upward Trend
MW09-10D	4-CHLOROPHENYL-PHENYLETHER	23	21	0.5555	1.645	Not Significant
MW09-10D	4-METHYLPHENOL	11	-12	-1.296	1.645	Not Significant
MW09-10D	4-NITROANILINE	23	-32	-0.9761	1.645	Not Significant

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Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-10D	4-NITROPHENOL	23	37	0.9799	1.645	Not Significant
MW09-10D	ACENAPHTHENE	23	83	2.354	1.645	Upward Trend
MW09-10D	ACENAPHTHYLENE	23	-155	-4.374	1.645	Downward Trend
MW09-10D	ANTHRACENE	23	90	2.521	1.645	Upward Trend
MW09-10D	BENZO(A)ANTHRACENE	23	85	2.386	1.645	Upward Trend
MW09-10D	BENZO(A)PYRENE	23	92	2.551	1.645	Upward Trend
MW09-10D	BENZO(B)FLUORANTHENE	23	81	2.196	1.645	Upward Trend
MW09-10D	BENZO(G,H,I)PERYLENE	23	69	1.887	1.645	Upward Trend
MW09-10D	BENZO(K)FLUORANTHENE	23	75	2.136	1.645	Upward Trend
MW09-10D	BENZOIC ACID	5	-4	-4	8	Not Significant
MW09-10D	BENZYL ALCOHOL	5	6	6	8	Not Significant
MW09-10D	BIS(2-CHLOROETHOXY)METHANE	23	21	0.5555	1.645	Not Significant
MW09-10D	BIS(2-CHLOROETHYL)ETHER	23	21	0.5555	1.645	Not Significant
MW09-10D	BIS(2-CHLOROISOPROPYL)ETHER	4	1	1	6	Not Significant
MW09-10D	BIS(2-ETHYLHEXYL)PHTHALATE	23	-8	-0.1895	1.645	Not Significant
MW09-10D	BUTYLBENZYLPHTHALATE	23	42	1.132	1.645	Not Significant
MW09-10D	CARBAZOLE	23	21	0.5555	1.645	Not Significant
MW09-10D	CHRYSENE	23	85	2.386	1.645	Upward Trend
MW09-10D	CRESOLS	1	---	---	NA	NA
MW09-10D	DIBENZ(A,H)ANTHRACENE	23	65	1.818	1.645	Upward Trend
MW09-10D	DIBENZOFURAN	23	34	0.9304	1.645	Not Significant
MW09-10D	DIETHYLPHTHALATE	23	51	1.398	1.645	Not Significant
MW09-10D	DIMETHYL PHTHALATE	23	51	1.398	1.645	Not Significant
MW09-10D	DI-N-BUTYLPHTHALATE	23	42	1.132	1.645	Not Significant
MW09-10D	DI-N-OCTYLPHTHALATE	23	51	1.398	1.645	Not Significant
MW09-10D	FLUORANTHENE	23	83	2.354	1.645	Upward Trend
MW09-10D	FLUORENE	23	87	2.467	1.645	Upward Trend
MW09-10D	HEXACHLOROBUTADIENE	23	21	0.5555	1.645	Not Significant
MW09-10D	HEXACHLOROCYCLOPENTADIENE	23	-5	-0.1316	1.645	Not Significant
MW09-10D	HEXACHLOROETHANE	23	21	0.5555	1.645	Not Significant
MW09-10D	INDENO(1,2,3-CD)PYRENE	23	65	1.818	1.645	Upward Trend
MW09-10D	ISOPHORONE	23	21	0.5555	1.645	Not Significant
MW09-10D	NAPHTHALENE	23	83	2.354	1.645	Upward Trend
MW09-10D	NITROBENZENE	23	21	0.5555	1.645	Not Significant
MW09-10D	N-NITROSODINPROPYLAMINE	23	21	0.5555	1.645	Not Significant
MW09-10D	N-NITROSODIPHENYLAMINE	23	21	0.5555	1.645	Not Significant
MW09-10D	PHENANTHRENE	23	94	2.558	1.645	Upward Trend
MW09-10D	PHENOL	23	21	0.5555	1.645	Not Significant
MW09-10D	PYRENE	23	55	1.534	1.645	Not Significant
MW09-10D	1,1,1-TRICHLOROETHANE	34	-164	-2.727	1.645	Downward Trend
MW09-10D	1,1,2,2-TETRACHLOROETHANE	35	-249	-4.091	1.645	Downward Trend
MW09-10D	1,1,2-TRICHLOROETHANE	35	-179	-2.932	1.645	Downward Trend
MW09-10D	1,1-DICHLOROETHANE	34	-216	-3.761	1.645	Downward Trend
MW09-10D	1,1-DICHLOROETHENE	34	-164	-3.023	1.645	Downward Trend
MW09-10D	1,2-DICHLOROETHANE	35	-221	-3.487	1.645	Downward Trend
MW09-10D	1,2-DICHLOROETHENE, TOTAL	31	-128	-2.234	1.645	Downward Trend
MW09-10D	1,2-DICHLOROPROPANE	35	-118	-1.761	1.645	Downward Trend
MW09-10D	2-BUTANONE	26	-127	-3.590	1.645	Downward Trend
MW09-10D	2-HEXANONE	29	-159	-3.801	1.645	Downward Trend
MW09-10D	4-METHYL-2-PENTANONE	33	-247	-4.718	1.645	Downward Trend
MW09-10D	ACETONE	26	-103	-2.774	1.645	Downward Trend
MW09-10D	BENZENE	35	-203	-3.098	1.645	Downward Trend
MW09-10D	BROMODICHLOROMETHANE	34	-164	-2.727	1.645	Downward Trend
MW09-10D	BROMOFORM	33	-98	-1.716	1.645	Downward Trend
MW09-10D	BROMOMETHANE	34	-44	-0.7140	1.645	Not Significant
MW09-10D	CARBON DISULFIDE	34	-148	-2.328	1.645	Downward Trend
MW09-10D	CARBON TETRACHLORIDE	34	-117	-1.980	1.645	Downward Trend
MW09-10D	CHLOROBENZENE	35	-193	-3.043	1.645	Downward Trend
MW09-10D	CHLOROETHANE	35	-171	-2.576	1.645	Downward Trend
MW09-10D	CHLOROFORM	35	-193	-3.043	1.645	Downward Trend
MW09-10D	CHLOROMETHANE	34	-113	-1.764	1.645	Downward Trend
MW09-10D	CIS-1,2-DICHLOROETHENE	33	-112	-1.926	1.645	Downward Trend
MW09-10D	CIS-1,3-DICHLOROPROPENE	34	-188	-3.105	1.645	Downward Trend
MW09-10D	DIBROMOCHLOROMETHANE	34	-97	-1.639	1.645	Not Significant
MW09-10D	ETHYLBENZENE	35	-185	-3.196	1.645	Downward Trend
MW09-10D	M- AND P-XYLENE	5	-3	-3	8	Not Significant
MW09-10D	METHYLENE CHLORIDE	35	-6	-0.07357	1.645	Not Significant
MW09-10D	O-XYLENE	5	-3	-3	8	Not Significant
MW09-10D	STYRENE	34	-72	-1.115	1.645	Not Significant
MW09-10D	TETRACHLOROETHENE	35	-156	-2.502	1.645	Downward Trend
MW09-10D	TOLUENE	35	-185	-3.196	1.645	Downward Trend
MW09-10D	TRANS-1,2-DICHLOROETHENE	33	-68	-1.214	1.645	Not Significant
MW09-10D	TRANS-1,3-DICHLOROPROPENE	34	-183	-2.983	1.645	Downward Trend
MW09-10D	TRICHLOROETHENE	35	-230	-3.570	1.645	Downward Trend
MW09-10D	VINYL CHLORIDE	35	-199	-3.263	1.645	Downward Trend
MW09-10D	XYLENES, TOTAL	11	-10	-0.7483	1.645	Not Significant
MW09-10S	PENTACHLOROPHENOL	23	-93	-2.536	1.645	Downward Trend
MW09-10S	ALUMINUM	35	-30	-0.4149	1.645	Not Significant
MW09-10S	ANTIMONY	35	-166	-2.370	1.645	Downward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-10S	ARSENIC	35	137	1.933	1.645	Upward Trend
MW09-10S	BARIUM	3	---	---	NA	NA
MW09-10S	BERYLLIUM	35	-10	-0.1300	1.645	Not Significant
MW09-10S	CADMIUM	3	---	---	NA	NA
MW09-10S	CALCIUM	3	---	---	NA	NA
MW09-10S	CHROMIUM, TOTAL	35	90	1.270	1.645	Not Significant
MW09-10S	COBALT	3	---	---	NA	NA
MW09-10S	COPPER	35	-59	-0.8384	1.645	Not Significant
MW09-10S	IRON	35	-198	-2.799	1.645	Downward Trend
MW09-10S	LEAD	35	-104	-1.489	1.645	Not Significant
MW09-10S	MAGNESIUM	3	---	---	NA	NA
MW09-10S	MANGANESE	35	-294	-4.161	1.645	Downward Trend
MW09-10S	MERCURY	35	-20	-0.2824	1.645	Not Significant
MW09-10S	NICKEL	35	-140	-1.989	1.645	Downward Trend
MW09-10S	POTASSIUM	3	---	---	NA	NA
MW09-10S	SELENIUM	3	---	---	NA	NA
MW09-10S	SILVER	3	---	---	NA	NA
MW09-10S	SODIUM	3	---	---	NA	NA
MW09-10S	VANADIUM	3	---	---	NA	NA
MW09-10S	ZINC	35	-76	-1.065	1.645	Not Significant
MW09-10S	AROCLOR-1016	23	9	0.2160	1.645	Not Significant
MW09-10S	AROCLOR-1221	23	-17	-0.4294	1.645	Not Significant
MW09-10S	AROCLOR-1232	23	9	0.2160	1.645	Not Significant
MW09-10S	AROCLOR-1242	23	21	0.5399	1.645	Not Significant
MW09-10S	AROCLOR-1248	23	9	0.2160	1.645	Not Significant
MW09-10S	AROCLOR-1254	23	9	0.2160	1.645	Not Significant
MW09-10S	AROCLOR-1260	23	9	0.2160	1.645	Not Significant
MW09-10S	POLYCHLORINATED BIPHENYLS (PCBS)	23	-118	-3.123	1.645	Downward Trend
MW09-10S	4,4-DDD	23	109	2.963	1.645	Upward Trend
MW09-10S	4,4-DDE	23	109	2.963	1.645	Upward Trend
MW09-10S	4,4-DDT	23	109	2.963	1.645	Upward Trend
MW09-10S	ALDRIN	23	123	3.354	1.645	Upward Trend
MW09-10S	ALPHA-BHC	23	123	3.354	1.645	Upward Trend
MW09-10S	ALPHA-CHLORDANE	23	114	3.077	1.645	Upward Trend
MW09-10S	DELTA-BHC	23	122	3.325	1.645	Upward Trend
MW09-10S	ENDOSULFAN I	23	123	3.354	1.645	Upward Trend
MW09-10S	ENDOSULFAN II	23	109	2.963	1.645	Upward Trend
MW09-10S	LINDANE	23	123	3.354	1.645	Upward Trend
MW09-10S	BETA-BHC	23	123	3.354	1.645	Upward Trend
MW09-10S	DIELDRIN	23	100	2.748	1.645	Upward Trend
MW09-10S	ENDOSULFAN SULFATE	23	109	2.963	1.645	Upward Trend
MW09-10S	ENDRIN	23	109	2.960	1.645	Upward Trend
MW09-10S	ENDRIN KETONE	23	109	2.963	1.645	Upward Trend
MW09-10S	HEPTACHLOR	23	108	2.893	1.645	Upward Trend
MW09-10S	HEPTACHLOR EPOXIDE	23	123	3.354	1.645	Upward Trend
MW09-10S	HEXACHLOROBENZENE	23	113	3.040	1.645	Upward Trend
MW09-10S	METHOXYCHLOR	23	19	0.5278	1.645	Not Significant
MW09-10S	1,2,4-TRICHLOROBENZENE	23	28	0.7600	1.645	Not Significant
MW09-10S	1,2-DICHLOROBENZENE	23	28	0.7600	1.645	Not Significant
MW09-10S	1,3-DICHLOROBENZENE	23	28	0.7600	1.645	Not Significant
MW09-10S	1,4-DICHLOROBENZENE	23	28	0.7600	1.645	Not Significant
MW09-10S	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-10S	2,2'-OXYBIS(1-CHLOROPROPANE)	19	-21	-0.7093	1.645	Not Significant
MW09-10S	2,4,5-TRICHLOROPHENOL	23	-107	-2.895	1.645	Downward Trend
MW09-10S	2,4,6-TRICHLOROPHENOL	23	91	2.526	1.645	Upward Trend
MW09-10S	2,4-DICHLOROPHENOL	23	91	2.526	1.645	Upward Trend
MW09-10S	2,4-DIMETHYLPHENOL	21	55	1.696	1.645	Upward Trend
MW09-10S	2,4-DINITROPHENOL	23	112	3.114	1.645	Upward Trend
MW09-10S	2,4-DINITROTOLUENE	23	91	2.526	1.645	Upward Trend
MW09-10S	2,6-DINITROTOLUENE	23	73	2.009	1.645	Upward Trend
MW09-10S	2-CHLORONAPHTHALENE	23	28	0.7600	1.645	Not Significant
MW09-10S	2-CHLOROPHENOL	22	44	1.303	1.645	Not Significant
MW09-10S	2-METHYLNAPHTHALENE	23	51	1.419	1.645	Not Significant
MW09-10S	2-METHYLPHENOL	23	91	2.526	1.645	Upward Trend
MW09-10S	2-NITROANILINE	23	11	0.3055	1.645	Not Significant
MW09-10S	2-NITROPHENOL	23	91	2.526	1.645	Upward Trend
MW09-10S	3- AND 4-METHYLPHENOL	11	9	0.6972	1.645	Not Significant
MW09-10S	3,3-DICHLOROBENZIDINE	22	30	0.8816	1.645	Not Significant
MW09-10S	3-NITROANILINE	23	11	0.3055	1.645	Not Significant
MW09-10S	4,6-DINITRO-2-METHYLPHENOL	21	19	0.6365	1.645	Not Significant
MW09-10S	4-BROMOPHENYL-PHENYLETHER	23	28	0.7600	1.645	Not Significant
MW09-10S	4-CHLORO-3-METHYLPHENOL	23	73	1.994	1.645	Upward Trend
MW09-10S	4-CHLOROANILINE	23	91	2.526	1.645	Upward Trend
MW09-10S	4-CHLOROPHENYL-PHENYLETHER	23	28	0.7600	1.645	Not Significant
MW09-10S	4-METHYLPHENOL	11	-12	-1.296	1.645	Not Significant
MW09-10S	4-NITROANILINE	23	11	0.3055	1.645	Not Significant
MW09-10S	4-NITROPHENOL	23	62	1.678	1.645	Upward Trend
MW09-10S	ACENAPHTHENE	23	47	1.305	1.645	Not Significant
MW09-10S	ACENAPHTHYLENE	23	-138	-3.859	1.645	Downward Trend

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-10S	ANTHRACENE	23	105	2.983	1.645	Upward Trend
MW09-10S	BENZO(A)ANTHRACENE	23	100	2.788	1.645	Upward Trend
MW09-10S	BENZO(A)PYRENE	23	107	2.947	1.645	Upward Trend
MW09-10S	BENZO(B)FLUORANTHENE	23	96	2.587	1.645	Upward Trend
MW09-10S	BENZO(G,H,I)PERYLENE	23	84	2.285	1.645	Upward Trend
MW09-10S	BENZO(K)FLUORANTHENE	23	90	2.547	1.645	Upward Trend
MW09-10S	BENZOIC ACID	5	2	2	8	Not Significant
MW09-10S	BENZYL ALCOHOL	5	5	5	8	Not Significant
MW09-10S	BIS(2-CHLOROETHOXY)METHANE	23	28	0.7600	1.645	Not Significant
MW09-10S	BIS(2-CHLOROETHYL)ETHER	23	28	0.7600	1.645	Not Significant
MW09-10S	BIS(2-CHLOROISOPROPYL)ETHER	4	6	6	6	Upward Trend
MW09-10S	BIS(2-ETHYLHEXYL)PHTHALATE	23	-20	-0.5104	1.645	Not Significant
MW09-10S	BUTYLBENZYLPHTHALATE	23	38	1.033	1.645	Not Significant
MW09-10S	CARBAZOLE	23	28	0.7600	1.645	Not Significant
MW09-10S	CHRYSENE	23	80	2.225	1.645	Upward Trend
MW09-10S	CRESOLS	1	---	---	NA	NA
MW09-10S	DIBENZ(A,H)ANTHRACENE	23	80	2.225	1.645	Upward Trend
MW09-10S	DIBENZOFURAN	23	35	0.9773	1.645	Not Significant
MW09-10S	DIETHYLPHTHALATE	23	48	1.333	1.645	Not Significant
MW09-10S	DIMETHYL PHTHALATE	23	48	1.333	1.645	Not Significant
MW09-10S	DI-N-BUTYLPHTHALATE	23	59	1.620	1.645	Not Significant
MW09-10S	DI-N-OCTYLPHTHALATE	23	48	1.333	1.645	Not Significant
MW09-10S	FLUORANTHENE	23	98	2.821	1.645	Upward Trend
MW09-10S	FLUORENE	23	83	2.352	1.645	Upward Trend
MW09-10S	HEXACHLOROBUTADIENE	23	28	0.7600	1.645	Not Significant
MW09-10S	HEXACHLOROCYCLOPENTADIENE	23	39	1.203	1.645	Not Significant
MW09-10S	HEXACHLOROETHANE	23	28	0.7600	1.645	Not Significant
MW09-10S	INDENO(1,2,3-CD)PYRENE	23	62	1.707	1.645	Upward Trend
MW09-10S	ISOPHORONE	23	28	0.7600	1.645	Not Significant
MW09-10S	NAPHTHALENE	23	61	1.620	1.645	Not Significant
MW09-10S	NITROBENZENE	23	28	0.7600	1.645	Not Significant
MW09-10S	N-NITROSODINPROPYLAMINE	23	28	0.7600	1.645	Not Significant
MW09-10S	N-NITROSODIPHENYLAMINE	23	28	0.7600	1.645	Not Significant
MW09-10S	PHENANTHRENE	23	100	2.744	1.645	Upward Trend
MW09-10S	PHENOL	23	28	0.7600	1.645	Not Significant
MW09-10S	PYRENE	23	57	1.628	1.645	Not Significant
MW09-10S	1,1,1-TRICHLOROETHANE	35	-189	-2.984	1.645	Downward Trend
MW09-10S	1,1,2,2-TETRACHLOROETHANE	36	-280	-4.277	1.645	Downward Trend
MW09-10S	1,1,2-TRICHLOROETHANE	36	-205	-3.181	1.645	Downward Trend
MW09-10S	1,1-DICHLOROETHANE	35	-222	-3.574	1.645	Downward Trend
MW09-10S	1,1-DICHLOROETHENE	35	-189	-3.271	1.645	Downward Trend
MW09-10S	1,2-DICHLOROETHANE	36	-247	-3.708	1.645	Downward Trend
MW09-10S	1,2-DICHLOROETHENE, TOTAL	31	22	0.3602	1.645	Not Significant
MW09-10S	1,2-DICHLOROPROPANE	36	-144	-2.055	1.645	Downward Trend
MW09-10S	2-BUTANONE	27	-145	-3.761	1.645	Downward Trend
MW09-10S	2-HEXANONE	30	-173	-3.713	1.645	Downward Trend
MW09-10S	4-METHYL-2-PENTANONE	34	-272	-4.871	1.645	Downward Trend
MW09-10S	ACETONE	28	-96	-2.052	1.645	Downward Trend
MW09-10S	BENZENE	36	-70	-0.9447	1.645	Not Significant
MW09-10S	BROMODICHLOROMETHANE	35	-189	-2.984	1.645	Downward Trend
MW09-10S	BROMOFORM	34	-122	-2.024	1.645	Downward Trend
MW09-10S	BROMOMETHANE	35	-57	-0.8936	1.645	Not Significant
MW09-10S	CARBON DISULFIDE	35	-171	-2.568	1.645	Downward Trend
MW09-10S	CARBON TETRACHLORIDE	35	-142	-2.277	1.645	Downward Trend
MW09-10S	CHLOROBENZENE	36	-29	-0.3902	1.645	Not Significant
MW09-10S	CHLOROETHANE	36	-180	-2.587	1.645	Downward Trend
MW09-10S	CHLOROFORM	36	-219	-3.286	1.645	Downward Trend
MW09-10S	CHLOROMETHANE	35	-148	-2.252	1.645	Downward Trend
MW09-10S	CIS-1,2-DICHLOROETHENE	34	0	0	NA	No Trend
MW09-10S	CIS-1,3-DICHLOROPROPENE	35	-201	-3.191	1.645	Downward Trend
MW09-10S	DIBROMOCHLOROMETHANE	35	-122	-1.954	1.645	Downward Trend
MW09-10S	ETHYLBENZENE	36	-211	-3.436	1.645	Downward Trend
MW09-10S	M- AND P-XYLENE	6	1	1	11	Not Significant
MW09-10S	METHYLENE CHLORIDE	36	47	0.6515	1.645	Not Significant
MW09-10S	O-XYLENE	6	1	1	11	Not Significant
MW09-10S	STYRENE	35	-97	-1.439	1.645	Not Significant
MW09-10S	TETRACHLOROETHENE	36	-184	-2.802	1.645	Downward Trend
MW09-10S	TOLUENE	36	-81	-1.187	1.645	Not Significant
MW09-10S	TRANS-1,2-DICHLOROETHENE	34	-88	-1.455	1.645	Not Significant
MW09-10S	TRANS-1,3-DICHLOROPROPENE	35	-195	-3.054	1.645	Downward Trend
MW09-10S	TRICHLOROETHENE	36	-256	-3.787	1.645	Downward Trend
MW09-10S	VINYL CHLORIDE	36	-376	-5.158	1.645	Downward Trend
MW09-10S	XYLENES, TOTAL	12	-11	-0.7065	1.645	Not Significant
MW09-11S	PENTACHLOROPHENOL	22	-92	-2.649	1.645	Downward Trend
MW09-11S	ALUMINUM	42	38	0.4057	1.645	Not Significant
MW09-11S	ANTIMONY	43	-250	-2.621	1.645	Downward Trend
MW09-11S	ARSENIC	43	-107	-1.133	1.645	Not Significant
MW09-11S	BARIUM	3	---	---	NA	NA
MW09-11S	BERYLLIUM	43	-92	-0.9649	1.645	Not Significant

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-11S	CADMIUM	3	---	---	NA	NA
MW09-11S	CALCIUM	3	---	---	NA	NA
MW09-11S	CHROMIUM, TOTAL	43	-16	-0.1577	1.645	Not Significant
MW09-11S	COBALT	3	---	---	NA	NA
MW09-11S	COPPER	43	-110	-1.157	1.645	Not Significant
MW09-11S	IRON	43	-196	-2.041	1.645	Downward Trend
MW09-11S	LEAD	43	-151	-1.594	1.645	Not Significant
MW09-11S	MAGNESIUM	3	---	---	NA	NA
MW09-11S	MANGANESE	43	-383	-3.998	1.645	Downward Trend
MW09-11S	MERCURY	42	-57	-0.6358	1.645	Not Significant
MW09-11S	NICKEL	43	34	0.3454	1.645	Not Significant
MW09-11S	POTASSIUM	3	---	---	NA	NA
MW09-11S	SELENIUM	3	---	---	NA	NA
MW09-11S	SILVER	3	---	---	NA	NA
MW09-11S	SODIUM	3	---	---	NA	NA
MW09-11S	VANADIUM	3	---	---	NA	NA
MW09-11S	ZINC	43	184	1.916	1.645	Upward Trend
MW09-11S	AROCLOR-1016	45	-85	-0.8263	1.645	Not Significant
MW09-11S	AROCLOR-1221	45	-188	-1.840	1.645	Downward Trend
MW09-11S	AROCLOR-1232	45	-87	-0.8460	1.645	Not Significant
MW09-11S	AROCLOR-1242	45	-113	-1.104	1.645	Not Significant
MW09-11S	AROCLOR-1248	45	-117	-1.143	1.645	Not Significant
MW09-11S	AROCLOR-1254	45	-87	-0.8460	1.645	Not Significant
MW09-11S	AROCLOR-1260	45	-64	-0.6171	1.645	Not Significant
MW09-11S	POLYCHLORINATED BIPHENYLS (PCBS)	41	48	0.5283	1.645	Not Significant
MW09-11S	4,4-DDD	26	75	1.673	1.645	Upward Trend
MW09-11S	4,4-DDE	26	75	1.673	1.645	Upward Trend
MW09-11S	4,4-DDT	26	75	1.673	1.645	Upward Trend
MW09-11S	ALDRIN	26	83	1.833	1.645	Upward Trend
MW09-11S	ALPHA-BHC	26	83	1.833	1.645	Upward Trend
MW09-11S	ALPHA-CHLORDANE	26	70	1.536	1.645	Not Significant
MW09-11S	DELTA-BHC	26	82	1.810	1.645	Upward Trend
MW09-11S	ENDOSULFAN I	26	83	1.833	1.645	Upward Trend
MW09-11S	ENDOSULFAN II	26	75	1.673	1.645	Upward Trend
MW09-11S	LINDANE	26	83	1.833	1.645	Upward Trend
MW09-11S	BETA-BHC	26	83	1.833	1.645	Upward Trend
MW09-11S	DIELDRIN	26	70	1.572	1.645	Not Significant
MW09-11S	ENDOSULFAN SULFATE	26	75	1.673	1.645	Upward Trend
MW09-11S	ENDRIN	26	62	1.378	1.645	Not Significant
MW09-11S	ENDRIN KETONE	26	75	1.673	1.645	Upward Trend
MW09-11S	HEPTACHLOR	26	71	1.559	1.645	Not Significant
MW09-11S	HEPTACHLOR EPOXIDE	26	83	1.833	1.645	Upward Trend
MW09-11S	HEXACHLOROBENZENE	23	101	2.688	1.645	Upward Trend
MW09-11S	METHOXYCHLOR	26	62	1.422	1.645	Not Significant
MW09-11S	1,2,4-TRICHLOROBENZENE	23	12	0.2911	1.645	Not Significant
MW09-11S	1,2-DICHLOROBENZENE	23	59	1.544	1.645	Not Significant
MW09-11S	1,3-DICHLOROBENZENE	23	-99	-2.590	1.645	Downward Trend
MW09-11S	1,4-DICHLOROBENZENE	23	-116	-3.038	1.645	Downward Trend
MW09-11S	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-11S	2,2'-OXYBIS(1-CHLOROPROPANE)	18	48	1.917	1.645	Upward Trend
MW09-11S	2,4,5-TRICHLOROPHENOL	22	-93	-2.661	1.645	Downward Trend
MW09-11S	2,4,6-TRICHLOROPHENOL	23	113	3.161	1.645	Upward Trend
MW09-11S	2,4-DICHLOROPHENOL	23	146	3.974	1.645	Upward Trend
MW09-11S	2,4-DIMETHYLPHENOL	20	57	1.883	1.645	Upward Trend
MW09-11S	2,4-DINITROPHENOL	23	124	3.483	1.645	Upward Trend
MW09-11S	2,4-DINITROTOLUENE	23	113	3.161	1.645	Upward Trend
MW09-11S	2,6-DINITROTOLUENE	23	97	2.692	1.645	Upward Trend
MW09-11S	2-CHLORONAPHTHALENE	23	62	1.716	1.645	Upward Trend
MW09-11S	2-CHLOROPHENOL	21	71	2.248	1.645	Upward Trend
MW09-11S	2-METHYLNAPHTHALENE	23	20	0.5318	1.645	Not Significant
MW09-11S	2-METHYLPHENOL	22	104	3.088	1.645	Upward Trend
MW09-11S	2-NITROANILINE	23	37	1.179	1.645	Not Significant
MW09-11S	2-NITROPHENOL	22	104	3.088	1.645	Upward Trend
MW09-11S	3- AND 4-METHYLPHENOL	11	15	1.185	1.645	Not Significant
MW09-11S	3,3-DICHLOROBENZIDINE	19	53	1.903	1.645	Upward Trend
MW09-11S	3-NITROANILINE	23	37	1.179	1.645	Not Significant
MW09-11S	4,6-DINITRO-2-METHYLPHENOL	22	38	1.276	1.645	Not Significant
MW09-11S	4-BROMOPHENYL-PHENYLETHER	23	62	1.716	1.645	Upward Trend
MW09-11S	4-CHLORO-3-METHYLPHENOL	23	84	2.313	1.645	Upward Trend
MW09-11S	4-CHLOROANILINE	22	104	3.088	1.645	Upward Trend
MW09-11S	4-CHLOROPHENYL-PHENYLETHER	23	62	1.716	1.645	Upward Trend
MW09-11S	4-METHYLPHENOL	11	-10	-1.423	1.645	Not Significant
MW09-11S	4-NITROANILINE	23	37	1.179	1.645	Not Significant
MW09-11S	4-NITROPHENOL	23	67	1.828	1.645	Upward Trend
MW09-11S	ACENAPHTHENE	23	56	1.531	1.645	Not Significant
MW09-11S	ACENAPHTHYLENE	22	-123	-3.655	1.645	Downward Trend
MW09-11S	ANTHRACENE	23	111	3.090	1.645	Upward Trend
MW09-11S	BENZO(A)ANTHRACENE	23	105	2.927	1.645	Upward Trend
MW09-11S	BENZO(A)PYRENE	23	112	3.084	1.645	Upward Trend

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-11S	BENZO(B)FLUORANTHENE	23	101	2.721	1.645	Upward Trend
MW09-11S	BENZO(G,H,I)PERYLENE	23	89	2.421	1.645	Upward Trend
MW09-11S	BENZO(K)FLUORANTHENE	23	77	2.160	1.645	Upward Trend
MW09-11S	BENZOIC ACID	5	0	0	NA	No Trend
MW09-11S	BENZYL ALCOHOL	5	6	6	8	Not Significant
MW09-11S	BIS(2-CHLOROETHOXY)METHANE	23	62	1.716	1.645	Upward Trend
MW09-11S	BIS(2-CHLOROETHYL)ETHER	22	54	1.578	1.645	Not Significant
MW09-11S	BIS(2-CHLOROISOPROPYL)ETHER	4	5	5	6	Not Significant
MW09-11S	BIS(2-ETHYLHEXYL)PHTHALATE	23	17	0.4342	1.645	Not Significant
MW09-11S	BUTYLBENZYLPHTHALATE	23	80	2.200	1.645	Upward Trend
MW09-11S	CARBAZOLE	23	62	1.716	1.645	Upward Trend
MW09-11S	CHRYSENE	23	60	1.650	1.645	Upward Trend
MW09-11S	CRESOLS	1	---	---	NA	NA
MW09-11S	DIBENZ(A,H)ANTHRACENE	23	85	2.364	1.645	Upward Trend
MW09-11S	DIBENZOFURAN	23	85	2.364	1.645	Upward Trend
MW09-11S	DIETHYLPHTHALATE	23	80	2.200	1.645	Upward Trend
MW09-11S	DIMETHYL PHTHALATE	23	80	2.200	1.645	Upward Trend
MW09-11S	DI-N-BUTYLPHTHALATE	23	90	2.448	1.645	Upward Trend
MW09-11S	DI-N-OCTYLPHTHALATE	23	80	2.200	1.645	Upward Trend
MW09-11S	FLUORANTHENE	23	104	2.931	1.645	Upward Trend
MW09-11S	FLUORENE	23	114	3.159	1.645	Upward Trend
MW09-11S	HEXACHLOROBUTADIENE	22	54	1.578	1.645	Not Significant
MW09-11S	HEXACHLOROCYCLOPENTADIENE	22	59	2.110	1.645	Upward Trend
MW09-11S	HEXACHLOROETHANE	22	54	1.578	1.645	Not Significant
MW09-11S	INDENO(1,2,3-CD)PYRENE	23	85	2.364	1.645	Upward Trend
MW09-11S	ISOPHORONE	23	62	1.716	1.645	Upward Trend
MW09-11S	NAPHTHALENE	23	106	3.021	1.645	Upward Trend
MW09-11S	NITROBENZENE	22	54	1.578	1.645	Not Significant
MW09-11S	N-NITROSODINPROPYLAMINE	23	62	1.716	1.645	Upward Trend
MW09-11S	N-NITROSODIPHENYLAMINE	23	62	1.716	1.645	Upward Trend
MW09-11S	PHENANTHRENE	23	131	3.532	1.645	Upward Trend
MW09-11S	PHENOL	22	54	1.578	1.645	Not Significant
MW09-11S	PYRENE	23	79	2.213	1.645	Upward Trend
MW09-11S	1,1,1-TRICHLOROETHANE	44	-320	-3.557	1.645	Downward Trend
MW09-11S	1,1,2,2-TETRACHLOROETHANE	45	-450	-5.088	1.645	Downward Trend
MW09-11S	1,1,2-TRICHLOROETHANE	45	-330	-3.655	1.645	Downward Trend
MW09-11S	1,1-DICHLOROETHANE	44	-408	-4.826	1.645	Downward Trend
MW09-11S	1,1-DICHLOROETHENE	44	-312	-3.688	1.645	Downward Trend
MW09-11S	1,2-DICHLOROETHANE	45	-410	-4.381	1.645	Downward Trend
MW09-11S	1,2-DICHLOROETHENE, TOTAL	40	-95	-1.106	1.645	Not Significant
MW09-11S	1,2-DICHLOROPROPANE	45	-332	-3.405	1.645	Downward Trend
MW09-11S	2-BUTANONE	36	-260	-4.383	1.645	Downward Trend
MW09-11S	2-HEXANONE	39	-308	-4.607	1.645	Downward Trend
MW09-11S	4-METHYL-2-PENTANONE	43	-435	-5.494	1.645	Downward Trend
MW09-11S	ACETONE	37	-172	-2.587	1.645	Downward Trend
MW09-11S	BENZENE	45	46	0.4411	1.645	Not Significant
MW09-11S	BROMODICHLOROMETHANE	44	-328	-3.647	1.645	Downward Trend
MW09-11S	BROMOFORM	42	-218	-2.625	1.645	Downward Trend
MW09-11S	BROMOMETHANE	44	-136	-1.564	1.645	Not Significant
MW09-11S	CARBON DISULFIDE	44	-380	-4.119	1.645	Downward Trend
MW09-11S	CARBON TETRACHLORIDE	44	-250	-2.844	1.645	Downward Trend
MW09-11S	CHLOROBENZENE	45	-198	-1.927	1.645	Downward Trend
MW09-11S	CHLOROETHANE	43	-339	-3.815	1.645	Downward Trend
MW09-11S	CHLOROFORM	45	-335	-3.539	1.645	Downward Trend
MW09-11S	CHLOROMETHANE	44	-298	-3.281	1.645	Downward Trend
MW09-11S	CIS-1,2-DICHLOROETHENE	43	-218	-2.324	1.645	Downward Trend
MW09-11S	CIS-1,3-DICHLOROPROPENE	44	-236	-2.673	1.645	Downward Trend
MW09-11S	DIBROMOCHLOROMETHANE	44	-218	-2.479	1.645	Downward Trend
MW09-11S	ETHYLBENZENE	45	-301	-3.344	1.645	Downward Trend
MW09-11S	M- AND P-XYLENE	7	3	3	13	Not Significant
MW09-11S	METHYLENE CHLORIDE	45	23	0.2202	1.645	Not Significant
MW09-11S	O-XYLENE	7	-3	-3	13	Not Significant
MW09-11S	STYRENE	44	-260	-2.743	1.645	Downward Trend
MW09-11S	TETRACHLOROETHENE	45	-281	-3.026	1.645	Downward Trend
MW09-11S	TOLUENE	45	-346	-3.846	1.645	Downward Trend
MW09-11S	TRANS-1,2-DICHLOROETHENE	43	-148	-1.727	1.645	Downward Trend
MW09-11S	TRANS-1,3-DICHLOROPROPENE	44	-227	-2.547	1.645	Downward Trend
MW09-11S	TRICHLOROETHENE	45	-335	-3.392	1.645	Downward Trend
MW09-11S	VINYL CHLORIDE	45	-203	-2.154	1.645	Downward Trend
MW09-11S	XYLENES, TOTAL	17	-27	-1.123	1.645	Not Significant
MW09-14D	PENTACHLOROPHENOL	23	-112	-3.092	1.645	Downward Trend
MW09-14D	ALUMINUM	31	65	1.110	1.645	Not Significant
MW09-14D	ANTIMONY	31	-66	-1.128	1.645	Not Significant
MW09-14D	ARSENIC	31	-57	-0.9696	1.645	Not Significant
MW09-14D	BARIUM	2	---	---	NA	NA
MW09-14D	BERYLLIUM	31	11	0.1736	1.645	Not Significant
MW09-14D	CADMIUM	2	---	---	NA	NA
MW09-14D	CALCIUM	2	---	---	NA	NA
MW09-14D	CHROMIUM, TOTAL	31	19	0.3119	1.645	Not Significant

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-14D	COBALT	2	---	---	NA	NA
MW09-14D	COPPER	31	-25	-0.4256	1.645	Not Significant
MW09-14D	IRON	31	-149	-2.516	1.645	Downward Trend
MW09-14D	LEAD	31	-28	-0.4745	1.645	Not Significant
MW09-14D	MAGNESIUM	2	---	---	NA	NA
MW09-14D	MANGANESE	31	-307	-5.202	1.645	Downward Trend
MW09-14D	MERCURY	30	8	0.1299	1.645	Not Significant
MW09-14D	NICKEL	31	-104	-1.808	1.645	Downward Trend
MW09-14D	POTASSIUM	2	---	---	NA	NA
MW09-14D	SELENIUM	2	---	---	NA	NA
MW09-14D	SILVER	2	---	---	NA	NA
MW09-14D	SODIUM	2	---	---	NA	NA
MW09-14D	VANADIUM	2	---	---	NA	NA
MW09-14D	ZINC	31	4	0.05128	1.645	Not Significant
MW09-14D	AROCLOR-1016	22	81	2.412	1.645	Upward Trend
MW09-14D	AROCLOR-1221	22	59	1.749	1.645	Upward Trend
MW09-14D	AROCLOR-1232	22	81	2.412	1.645	Upward Trend
MW09-14D	AROCLOR-1242	22	97	2.894	1.645	Upward Trend
MW09-14D	AROCLOR-1248	22	81	2.412	1.645	Upward Trend
MW09-14D	AROCLOR-1254	22	81	2.412	1.645	Upward Trend
MW09-14D	AROCLOR-1260	22	81	2.412	1.645	Upward Trend
MW09-14D	POLYCHLORINATED BIPHENYLS (PCBS)	22	-75	-2.145	1.645	Downward Trend
MW09-14D	4,4-DDD	22	133	3.948	1.645	Upward Trend
MW09-14D	4,4-DDE	22	133	3.948	1.645	Upward Trend
MW09-14D	4,4-DDT	22	137	4.020	1.645	Upward Trend
MW09-14D	ALDRIN	22	135	4.003	1.645	Upward Trend
MW09-14D	ALPHA-BHC	22	135	4.003	1.645	Upward Trend
MW09-14D	ALPHA-CHLORDANE	22	126	3.692	1.645	Upward Trend
MW09-14D	DELTA-BHC	22	134	3.972	1.645	Upward Trend
MW09-14D	ENDOSULFAN I	22	135	4.003	1.645	Upward Trend
MW09-14D	ENDOSULFAN II	22	133	3.948	1.645	Upward Trend
MW09-14D	LINDANE	22	135	4.003	1.645	Upward Trend
MW09-14D	BETA-BHC	22	135	4.003	1.645	Upward Trend
MW09-14D	DIELDRIN	22	124	3.730	1.645	Upward Trend
MW09-14D	ENDOSULFAN SULFATE	22	133	3.948	1.645	Upward Trend
MW09-14D	ENDRIN	22	133	3.944	1.645	Upward Trend
MW09-14D	ENDRIN KETONE	22	133	3.948	1.645	Upward Trend
MW09-14D	HEPTACHLOR	22	127	3.725	1.645	Upward Trend
MW09-14D	HEPTACHLOR EPOXIDE	22	135	4.003	1.645	Upward Trend
MW09-14D	HEXACHLOROBENZENE	24	168	4.329	1.645	Upward Trend
MW09-14D	METHOXYCHLOR	22	16	0.5429	1.645	Not Significant
MW09-14D	1,2,4-TRICHLOROBENZENE	24	9	0.2177	1.645	Not Significant
MW09-14D	1,2-DICHLOROBENZENE	24	7	0.1631	1.645	Not Significant
MW09-14D	1,3-DICHLOROBENZENE	24	7	0.1631	1.645	Not Significant
MW09-14D	1,4-DICHLOROBENZENE	24	23	0.6126	1.645	Not Significant
MW09-14D	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-14D	2,2'-OXYBIS(1-CHLOROPROPANE)	20	18	0.6079	1.645	Not Significant
MW09-14D	2,4,5-TRICHLOROPHENOL	22	-146	-4.296	1.645	Downward Trend
MW09-14D	2,4,6-TRICHLOROPHENOL	23	58	1.599	1.645	Not Significant
MW09-14D	2,4-DICHLOROPHENOL	23	58	1.599	1.645	Not Significant
MW09-14D	2,4-DIMETHYLPHENOL	22	48	1.410	1.645	Not Significant
MW09-14D	2,4-DINITROPHENOL	23	72	2.047	1.645	Upward Trend
MW09-14D	2,4-DINITROTOLUENE	24	59	1.522	1.645	Not Significant
MW09-14D	2,6-DINITROTOLUENE	24	61	1.573	1.645	Not Significant
MW09-14D	2-CHLORONAPHTHALENE	24	11	0.2718	1.645	Not Significant
MW09-14D	2-CHLOROPHENOL	23	11	0.2932	1.645	Not Significant
MW09-14D	2-METHYLNAPHTHALENE	24	45	1.157	1.645	Not Significant
MW09-14D	2-METHYLPHENOL	23	58	1.599	1.645	Not Significant
MW09-14D	2-NITROANILINE	24	1	0	1.645	Not Significant
MW09-14D	2-NITROPHENOL	23	58	1.599	1.645	Not Significant
MW09-14D	3- AND 4-METHYLPHENOL	10	13	13	21	Not Significant
MW09-14D	3,3-DICHLOROBENZIDINE	22	67	2.104	1.645	Upward Trend
MW09-14D	3-NITROANILINE	24	1	0	1.645	Not Significant
MW09-14D	4,6-DINITRO-2-METHYLPHENOL	22	-3	-0.06902	1.645	Not Significant
MW09-14D	4-BROMOPHENYL-PHENYLETHER	24	11	0.2718	1.645	Not Significant
MW09-14D	4-CHLORO-3-METHYLPHENOL	23	45	1.227	1.645	Not Significant
MW09-14D	4-CHLOROANILINE	24	72	1.887	1.645	Upward Trend
MW09-14D	4-CHLOROPHENYL-PHENYLETHER	24	11	0.2718	1.645	Not Significant
MW09-14D	4-METHYLPHENOL	12	-9	-1.159	1.645	Not Significant
MW09-14D	4-NITROANILINE	24	1	0	1.645	Not Significant
MW09-14D	4-NITROPHENOL	22	34	0.9852	1.645	Not Significant
MW09-14D	ACENAPHTHENE	24	51	1.322	1.645	Not Significant
MW09-14D	ACENAPHTHYLENE	24	-164	-4.275	1.645	Downward Trend
MW09-14D	ANTHRACENE	24	115	2.985	1.645	Upward Trend
MW09-14D	BENZO(A)ANTHRACENE	24	116	3.019	1.645	Upward Trend
MW09-14D	BENZO(A)PYRENE	24	123	3.167	1.645	Upward Trend
MW09-14D	BENZO(B)FLUORANTHENE	24	100	2.553	1.645	Upward Trend
MW09-14D	BENZO(G,H,I)PERYLENE	24	84	2.179	1.645	Upward Trend
MW09-14D	BENZO(K)FLUORANTHENE	24	106	2.795	1.645	Upward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-14D	BENZOIC ACID	6	4	4	11	Not Significant
MW09-14D	BENZYL ALCOHOL	5	5	5	8	Not Significant
MW09-14D	BIS(2-CHLOROETHOXY)METHANE	24	25	0.6683	1.645	Not Significant
MW09-14D	BIS(2-CHLOROETHYL)ETHER	24	11	0.2718	1.645	Not Significant
MW09-14D	BIS(2-CHLOROISOPROPYL)ETHER	4	5	5	6	Not Significant
MW09-14D	BIS(2-ETHYLHEXYL)PHTHALATE	24	-8	-0.1767	1.645	Not Significant
MW09-14D	BUTYLBENZYLPHTHALATE	24	15	0.3680	1.645	Not Significant
MW09-14D	CARBAZOLE	24	11	0.2718	1.645	Not Significant
MW09-14D	CHRYSENE	24	96	2.494	1.645	Upward Trend
MW09-14D	CRESOLS	1	---	---	NA	NA
MW09-14D	DIBENZ(A,H)ANTHRACENE	24	76	2.030	1.645	Upward Trend
MW09-14D	DIBENZOFURAN	24	28	0.7348	1.645	Not Significant
MW09-14D	DIETHYLPHTHALATE	24	22	0.5614	1.645	Not Significant
MW09-14D	DIMETHYL PHTHALATE	24	22	0.5614	1.645	Not Significant
MW09-14D	DI-N-BUTYLPHTHALATE	24	15	0.3680	1.645	Not Significant
MW09-14D	DI-N-OCTYLPHTHALATE	24	31	0.7894	1.645	Not Significant
MW09-14D	FLUORANTHENE	24	81	2.149	1.645	Upward Trend
MW09-14D	FLUORENE	24	91	2.455	1.645	Upward Trend
MW09-14D	HEXACHLOROBUTADIENE	24	7	0.1631	1.645	Not Significant
MW09-14D	HEXACHLOROCYCLOPENTADIENE	24	16	0.4698	1.645	Not Significant
MW09-14D	HEXACHLOROETHANE	24	7	0.1631	1.645	Not Significant
MW09-14D	INDENO(1,2,3-CD)PYRENE	24	82	2.115	1.645	Upward Trend
MW09-14D	ISOPHORONE	24	11	0.2718	1.645	Not Significant
MW09-14D	NAPHTHALENE	24	69	1.798	1.645	Upward Trend
MW09-14D	NITROBENZENE	24	25	0.6683	1.645	Not Significant
MW09-14D	N-NITROSODINPROPYLAMINE	24	11	0.2718	1.645	Not Significant
MW09-14D	N-NITROSODIPHENYLAMINE	24	25	0.6683	1.645	Not Significant
MW09-14D	PHENANTHRENE	24	128	3.270	1.645	Upward Trend
MW09-14D	PHENOL	23	11	0.2932	1.645	Not Significant
MW09-14D	PYRENE	24	101	2.600	1.645	Upward Trend
MW09-14D	1,1,1-TRICHLOROETHANE	33	-159	-2.746	1.645	Downward Trend
MW09-14D	1,1,2,2-TETRACHLOROETHANE	34	-270	-4.506	1.645	Downward Trend
MW09-14D	1,1,2-TRICHLOROETHANE	34	-146	-2.532	1.645	Downward Trend
MW09-14D	1,1-DICHLOROETHANE	33	-102	-1.698	1.645	Downward Trend
MW09-14D	1,1-DICHLOROETHENE	33	-159	-3.039	1.645	Downward Trend
MW09-14D	1,2-DICHLOROETHANE	34	-212	-3.471	1.645	Downward Trend
MW09-14D	1,2-DICHLOROETHENE, TOTAL	30	-108	-1.965	1.645	Downward Trend
MW09-14D	1,2-DICHLOROPROPANE	34	-114	-1.787	1.645	Downward Trend
MW09-14D	2-BUTANONE	25	-125	-3.706	1.645	Downward Trend
MW09-14D	2-HEXANONE	28	-161	-3.629	1.645	Downward Trend
MW09-14D	4-METHYL-2-PENTANONE	32	-227	-3.934	1.645	Downward Trend
MW09-14D	ACETONE	25	-77	-2.019	1.645	Downward Trend
MW09-14D	BENZENE	34	-18	-0.2527	1.645	Not Significant
MW09-14D	BROMODICHLOROMETHANE	33	-159	-2.746	1.645	Downward Trend
MW09-14D	BROMOFORM	31	-95	-1.881	1.645	Downward Trend
MW09-14D	BROMOMETHANE	33	-29	-0.4907	1.645	Not Significant
MW09-14D	CARBON DISULFIDE	33	-133	-2.183	1.645	Downward Trend
MW09-14D	CARBON TETRACHLORIDE	33	-113	-2.082	1.645	Downward Trend
MW09-14D	CHLOROBENZENE	34	-192	-3.142	1.645	Downward Trend
MW09-14D	CHLOROETHANE	34	-93	-1.387	1.645	Not Significant
MW09-14D	CHLOROFORM	34	-192	-3.142	1.645	Downward Trend
MW09-14D	CHLOROMETHANE	33	-118	-1.938	1.645	Downward Trend
MW09-14D	CIS-1,2-DICHLOROETHENE	32	-122	-2.178	1.645	Downward Trend
MW09-14D	CIS-1,3-DICHLOROPROPENE	33	-185	-3.253	1.645	Downward Trend
MW09-14D	DIBROMOCHLOROMETHANE	33	-93	-1.710	1.645	Downward Trend
MW09-14D	ETHYLBENZENE	34	-188	-3.366	1.645	Downward Trend
MW09-14D	M- AND P-XYLENE	4	-3	-3	6	Not Significant
MW09-14D	METHYLENE CHLORIDE	34	6	0.07596	1.645	Not Significant
MW09-14D	O-XYLENE	4	-3	-3	6	Not Significant
MW09-14D	STYRENE	33	-59	-0.9532	1.645	Not Significant
MW09-14D	TETRACHLOROETHENE	34	-152	-2.637	1.645	Downward Trend
MW09-14D	TOLUENE	34	-57	-0.9203	1.645	Not Significant
MW09-14D	TRANS-1,2-DICHLOROETHENE	32	-100	-1.858	1.645	Downward Trend
MW09-14D	TRANS-1,3-DICHLOROPROPENE	33	-179	-3.096	1.645	Downward Trend
MW09-14D	TRICHLOROETHENE	35	-233	-3.488	1.645	Downward Trend
MW09-14D	VINYL CHLORIDE	34	-111	-1.697	1.645	Downward Trend
MW09-14D	XYLENES, TOTAL	10	-14	-14	21	Not Significant
MW09-14IA	PENTACHLOROPHENOL	12	11	0.7365	1.645	Not Significant
MW09-14IA	ALUMINUM	16	-99	-4.417	1.645	Downward Trend
MW09-14IA	ANTIMONY	16	-9	-0.3718	1.645	Not Significant
MW09-14IA	ARSENIC	16	69	3.065	1.645	Upward Trend
MW09-14IA	BARIUM	0	---	---	NA	NA
MW09-14IA	BERYLLIUM	16	-27	-1.223	1.645	Not Significant
MW09-14IA	CADMIUM	0	---	---	NA	NA
MW09-14IA	CALCIUM	0	---	---	NA	NA
MW09-14IA	CHROMIUM, TOTAL	16	13	0.5434	1.645	Not Significant
MW09-14IA	COBALT	0	---	---	NA	NA
MW09-14IA	COPPER	16	-30	-1.320	1.645	Not Significant
MW09-14IA	IRON	16	66	2.932	1.645	Upward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-14IA	LEAD	16	-70	-3.156	1.645	Downward Trend
MW09-14IA	MAGNESIUM	0	---	---	NA	NA
MW09-14IA	MANGANESE	16	-99	-4.417	1.645	Downward Trend
MW09-14IA	MERCURY	16	-71	-3.401	1.645	Downward Trend
MW09-14IA	NICKEL	16	-20	-0.8613	1.645	Not Significant
MW09-14IA	POTASSIUM	0	---	---	NA	NA
MW09-14IA	SELENIUM	0	---	---	NA	NA
MW09-14IA	SILVER	0	---	---	NA	NA
MW09-14IA	SODIUM	0	---	---	NA	NA
MW09-14IA	VANADIUM	0	---	---	NA	NA
MW09-14IA	ZINC	16	-71	-3.155	1.645	Downward Trend
MW09-14IA	AROCLOR-1016	15	-10	-0.4485	1.645	Not Significant
MW09-14IA	AROCLOR-1221	15	-3	-0.1003	1.645	Not Significant
MW09-14IA	AROCLOR-1232	15	-2	-0.04983	1.645	Not Significant
MW09-14IA	AROCLOR-1242	15	-18	-0.8472	1.645	Not Significant
MW09-14IA	AROCLOR-1248	15	-18	-0.8472	1.645	Not Significant
MW09-14IA	AROCLOR-1254	15	-2	-0.04983	1.645	Not Significant
MW09-14IA	AROCLOR-1260	15	-10	-0.4485	1.645	Not Significant
MW09-14IA	POLYCHLORINATED BIPHENYLS (PCBS)	12	4	0.2067	1.645	Not Significant
MW09-14IA	4,4-DDD	15	-11	-0.4977	1.645	Not Significant
MW09-14IA	4,4-DDE	15	-11	-0.4977	1.645	Not Significant
MW09-14IA	4,4-DDT	15	-11	-0.4977	1.645	Not Significant
MW09-14IA	ALDRIN	15	-18	-0.8472	1.645	Not Significant
MW09-14IA	ALPHA-BHC	15	-13	-0.5988	1.645	Not Significant
MW09-14IA	ALPHA-CHLORDANE	15	-13	-0.5988	1.645	Not Significant
MW09-14IA	DELTA-BHC	15	-25	-1.202	1.645	Not Significant
MW09-14IA	ENDOSULFAN I	15	-13	-0.5988	1.645	Not Significant
MW09-14IA	ENDOSULFAN II	15	-13	-0.5973	1.645	Not Significant
MW09-14IA	LINDANE	15	-13	-0.5988	1.645	Not Significant
MW09-14IA	BETA-BHC	15	-13	-0.5988	1.645	Not Significant
MW09-14IA	DIELDRIN	15	-13	-0.5973	1.645	Not Significant
MW09-14IA	ENDOSULFAN SULFATE	15	-13	-0.5973	1.645	Not Significant
MW09-14IA	ENDRIN	15	-13	-0.5973	1.645	Not Significant
MW09-14IA	ENDRIN KETONE	15	-13	-0.5973	1.645	Not Significant
MW09-14IA	HEPTACHLOR	15	-17	-0.7983	1.645	Not Significant
MW09-14IA	HEPTACHLOR EPOXIDE	15	-13	-0.5988	1.645	Not Significant
MW09-14IA	HEXACHLOROBENZENE	16	22	0.9749	1.645	Not Significant
MW09-14IA	METHOXYCHLOR	15	2	0.05021	1.645	Not Significant
MW09-14IA	1,2,4-TRICHLOROBENZENE	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	1,2-DICHLOROBENZENE	16	-61	-2.759	1.645	Downward Trend
MW09-14IA	1,3-DICHLOROBENZENE	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	1,4-DICHLOROBENZENE	16	-57	-2.553	1.645	Downward Trend
MW09-14IA	1-METHYLNAPHTHALENE	0	---	---	NA	NA
MW09-14IA	2,2'-OXYBIS(1-CHLOROPROPANE)	2	---	---	NA	NA
MW09-14IA	2,4,5-TRICHLOROPHENOL	13	-33	-2.031	1.645	Downward Trend
MW09-14IA	2,4,6-TRICHLOROPHENOL	16	-65	-2.943	1.645	Downward Trend
MW09-14IA	2,4-DICHLOROPHENOL	16	-65	-2.943	1.645	Downward Trend
MW09-14IA	2,4-DIMETHYLPHENOL	16	-61	-2.728	1.645	Downward Trend
MW09-14IA	2,4-DINITROPHENOL	16	-52	-2.359	1.645	Downward Trend
MW09-14IA	2,4-DINITROTOLUENE	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	2,6-DINITROTOLUENE	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	2-CHLORONAPHTHALENE	16	-65	-2.943	1.645	Downward Trend
MW09-14IA	2-CHLOROPHENOL	16	-65	-2.943	1.645	Downward Trend
MW09-14IA	2-METHYLNAPHTHALENE	13	9	0.5624	1.645	Not Significant
MW09-14IA	2-METHYLPHENOL	16	-48	-2.126	1.645	Downward Trend
MW09-14IA	2-NITROANILINE	16	-57	-2.623	1.645	Downward Trend
MW09-14IA	2-NITROPHENOL	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	3- AND 4-METHYLPHENOL	10	-16	-16	21	Not Significant
MW09-14IA	3,3-DICHLOROBENZIDINE	16	1	0	1.645	Not Significant
MW09-14IA	3-NITROANILINE	16	-52	-2.359	1.645	Downward Trend
MW09-14IA	4,6-DINITRO-2-METHYLPHENOL	16	-57	-2.623	1.645	Downward Trend
MW09-14IA	4-BROMOPHENYL-PHENYLETHER	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	4-CHLORO-3-METHYLPHENOL	16	-65	-2.943	1.645	Downward Trend
MW09-14IA	4-CHLOROANILINE	16	-55	-2.483	1.645	Downward Trend
MW09-14IA	4-CHLOROPHENYL-PHENYLETHER	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	4-METHYLPHENOL	6	-10	-10	11	Not Significant
MW09-14IA	4-NITROANILINE	16	-57	-2.623	1.645	Downward Trend
MW09-14IA	4-NITROPHENOL	16	-57	-2.623	1.645	Downward Trend
MW09-14IA	ACENAPHTHENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	ACENAPHTHYLENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	ANTHRACENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	BENZO(A)ANTHRACENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	BENZO(A)PYRENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	BENZO(B)FLUORANTHENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	BENZO(G,H,I)PERYLENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	BENZO(K)FLUORANTHENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	BENZOIC ACID	0	---	---	NA	NA
MW09-14IA	BENZYL ALCOHOL	0	---	---	NA	NA
MW09-14IA	BIS(2-CHLOROETHOXY)METHANE	16	-55	-2.483	1.645	Downward Trend

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-14IA	BIS(2-CHLOROETHYL)ETHER	16	-59	-2.667	1.645	Downward Trend
MW09-14IA	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
MW09-14IA	BIS(2-ETHYLHEXYL)PHTHALATE	16	-63	-2.800	1.645	Downward Trend
MW09-14IA	BUTYLBENZYLPHTHALATE	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	CARBAZOLE	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	CHRYSENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	CRESOLS	0	---	---	NA	NA
MW09-14IA	DIBENZ(A,H)ANTHRACENE	13	-13	-0.9123	1.645	Not Significant
MW09-14IA	DIBENZOFURAN	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	DIETHYLPHTHALATE	16	-18	-0.7738	1.645	Not Significant
MW09-14IA	DIMETHYL PHTHALATE	16	-63	-2.851	1.645	Downward Trend
MW09-14IA	DI-N-BUTYLPHTHALATE	16	-50	-2.281	1.645	Downward Trend
MW09-14IA	DI-N-OCTYLPHTHALATE	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	FLUORANTHENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	FLUORENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	HEXACHLOROBUTADIENE	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	HEXACHLOROCYCLOPENTADIENE	16	1	0	1.645	Not Significant
MW09-14IA	HEXACHLOROETHANE	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	INDENO(1,2,3-CD)PYRENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	ISOPHORONE	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	NAPHTHALENE	13	35	2.089	1.645	Upward Trend
MW09-14IA	NITROBENZENE	16	-37	-1.651	1.645	Downward Trend
MW09-14IA	N-NITROSODINPROPYLAMINE	16	-60	-2.747	1.645	Downward Trend
MW09-14IA	N-NITROSODIPHENYLAMINE	16	-59	-2.645	1.645	Downward Trend
MW09-14IA	PHENANTHRENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	PHENOL	15	-62	-3.097	1.645	Downward Trend
MW09-14IA	PYRENE	13	-5	-0.2831	1.645	Not Significant
MW09-14IA	1,1,1-TRICHLOROETHANE	16	-17	-0.8532	1.645	Not Significant
MW09-14IA	1,1,2,2-TETRACHLOROETHANE	16	-17	-0.8532	1.645	Not Significant
MW09-14IA	1,1,2-TRICHLOROETHANE	16	15	0.7249	1.645	Not Significant
MW09-14IA	1,1-DICHLOROETHANE	16	-17	-0.8532	1.645	Not Significant
MW09-14IA	1,1-DICHLOROETHENE	16	-17	-0.8532	1.645	Not Significant
MW09-14IA	1,2-DICHLOROETHANE	16	-31	-1.359	1.645	Not Significant
MW09-14IA	1,2-DICHLOROETHENE, TOTAL	12	-20	-1.317	1.645	Not Significant
MW09-14IA	1,2-DICHLOROPROPANE	16	29	1.334	1.645	Not Significant
MW09-14IA	2-BUTANONE	14	-13	-0.7564	1.645	Not Significant
MW09-14IA	2-HEXANONE	16	-17	-0.8532	1.645	Not Significant
MW09-14IA	4-METHYL-2-PENTANONE	16	-49	-2.310	1.645	Downward Trend
MW09-14IA	ACETONE	14	-56	-3.049	1.645	Downward Trend
MW09-14IA	BENZENE	16	-67	-2.989	1.645	Downward Trend
MW09-14IA	BROMODICHLOROMETHANE	16	-17	-0.8532	1.645	Not Significant
MW09-14IA	BROMOFORM	16	23	1.100	1.645	Not Significant
MW09-14IA	BROMOMETHANE	16	-3	-0.1119	1.645	Not Significant
MW09-14IA	CARBON DISULFIDE	16	-17	-0.8532	1.645	Not Significant
MW09-14IA	CARBON TETRACHLORIDE	16	23	1.100	1.645	Not Significant
MW09-14IA	CHLOROBENZENE	16	-26	-1.262	1.645	Not Significant
MW09-14IA	CHLOROETHANE	16	-42	-1.962	1.645	Downward Trend
MW09-14IA	CHLOROFORM	16	-17	-0.8532	1.645	Not Significant
MW09-14IA	CHLOROMETHANE	16	-37	-1.766	1.645	Downward Trend
MW09-14IA	CIS-1,2-DICHLOROETHENE	16	-70	-3.121	1.645	Downward Trend
MW09-14IA	CIS-1,3-DICHLOROPROPENE	16	-17	-0.8532	1.645	Not Significant
MW09-14IA	DIBROMOCHLOROMETHANE	16	23	1.100	1.645	Not Significant
MW09-14IA	ETHYLBENZENE	16	-37	-1.629	1.645	Not Significant
MW09-14IA	M- AND P-XYLENE	4	3	3	6	Not Significant
MW09-14IA	METHYLENE CHLORIDE	16	-45	-2.076	1.645	Downward Trend
MW09-14IA	O-XYLENE	4	0	0	NA	No Trend
MW09-14IA	STYRENE	16	-13	-0.6327	1.645	Not Significant
MW09-14IA	TETRACHLOROETHENE	16	11	0.5002	1.645	Not Significant
MW09-14IA	TOLUENE	16	-58	-2.584	1.645	Downward Trend
MW09-14IA	TRANS-1,2-DICHLOROETHENE	16	35	1.660	1.645	Upward Trend
MW09-14IA	TRANS-1,3-DICHLOROPROPENE	16	-17	-0.8532	1.645	Not Significant
MW09-14IA	TRICHLOROETHENE	16	14	0.6318	1.645	Not Significant
MW09-14IA	VINYL CHLORIDE	16	-68	-3.017	1.645	Downward Trend
MW09-14IA	XYLENES, TOTAL	15	50	2.456	1.645	Upward Trend
MW09-17I	PENTACHLOROPHENOL	19	55	1.946	1.645	Upward Trend
MW09-17I	ALUMINUM	20	-63	-2.033	1.645	Downward Trend
MW09-17I	ANTIMONY	20	-104	-3.396	1.645	Downward Trend
MW09-17I	ARSENIC	20	8	0.2321	1.645	Not Significant
MW09-17I	BARIUM	0	---	---	NA	NA
MW09-17I	BERYLLIUM	20	-106	-3.509	1.645	Downward Trend
MW09-17I	CADMIUM	0	---	---	NA	NA
MW09-17I	CALCIUM	0	---	---	NA	NA
MW09-17I	CHROMIUM, TOTAL	20	-34	-1.076	1.645	Not Significant
MW09-17I	COBALT	0	---	---	NA	NA
MW09-17I	COPPER	20	-24	-0.7558	1.645	Not Significant
MW09-17I	IRON	20	-156	-5.029	1.645	Downward Trend
MW09-17I	LEAD	20	-115	-3.751	1.645	Downward Trend
MW09-17I	MAGNESIUM	0	---	---	NA	NA
MW09-17I	MANGANESE	20	-156	-5.034	1.645	Downward Trend

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-17I	MERCURY	20	-7	-0.2037	1.645	Not Significant
MW09-17I	NICKEL	20	-24	-0.7550	1.645	Not Significant
MW09-17I	POTASSIUM	0	---	---	NA	NA
MW09-17I	SELENIUM	0	---	---	NA	NA
MW09-17I	SILVER	0	---	---	NA	NA
MW09-17I	SODIUM	0	---	---	NA	NA
MW09-17I	VANADIUM	0	---	---	NA	NA
MW09-17I	ZINC	20	-20	-0.6262	1.645	Not Significant
MW09-17I	AROCLOR-1016	20	-44	-1.402	1.645	Not Significant
MW09-17I	AROCLOR-1221	20	-40	-1.272	1.645	Not Significant
MW09-17I	AROCLOR-1232	20	-36	-1.141	1.645	Not Significant
MW09-17I	AROCLOR-1242	20	-56	-1.793	1.645	Downward Trend
MW09-17I	AROCLOR-1248	20	-56	-1.793	1.645	Downward Trend
MW09-17I	AROCLOR-1254	20	-36	-1.141	1.645	Not Significant
MW09-17I	AROCLOR-1260	20	-44	-1.402	1.645	Not Significant
MW09-17I	POLYCHLORINATED BIPHENYLS (PCBS)	18	-6	-0.1904	1.645	Not Significant
MW09-17I	4,4-DDD	20	-76	-2.442	1.645	Downward Trend
MW09-17I	4,4-DDE	20	-15	-0.4567	1.645	Not Significant
MW09-17I	4,4-DDT	20	20	0.6186	1.645	Not Significant
MW09-17I	ALDRIN	20	-85	-2.740	1.645	Downward Trend
MW09-17I	ALPHA-BHC	20	-77	-2.479	1.645	Downward Trend
MW09-17I	ALPHA-CHLORDANE	20	-35	-1.109	1.645	Not Significant
MW09-17I	DELTA-BHC	20	-85	-2.740	1.645	Downward Trend
MW09-17I	ENDOSULFAN I	20	-33	-1.044	1.645	Not Significant
MW09-17I	ENDOSULFAN II	20	-76	-2.442	1.645	Downward Trend
MW09-17I	LINDANE	20	-77	-2.479	1.645	Downward Trend
MW09-17I	BETA-BHC	20	-75	-2.414	1.645	Downward Trend
MW09-17I	DIELDRIN	20	6	0.1628	1.645	Not Significant
MW09-17I	ENDOSULFAN SULFATE	20	-76	-2.442	1.645	Downward Trend
MW09-17I	ENDRIN	20	-15	-0.4567	1.645	Not Significant
MW09-17I	ENDRIN KETONE	20	-76	-2.442	1.645	Downward Trend
MW09-17I	HEPTACHLOR	20	-35	-1.109	1.645	Not Significant
MW09-17I	HEPTACHLOR EPOXIDE	20	-17	-0.5227	1.645	Not Significant
MW09-17I	HEXACHLOROBENZENE	22	-56	-1.565	1.645	Not Significant
MW09-17I	METHOXYCHLOR	20	-61	-1.960	1.645	Downward Trend
MW09-17I	1,2,4-TRICHLOROBENZENE	22	-167	-4.762	1.645	Downward Trend
MW09-17I	1,2-DICHLOROBENZENE	22	-71	-2.008	1.645	Downward Trend
MW09-17I	1,3-DICHLOROBENZENE	22	-71	-2.008	1.645	Downward Trend
MW09-17I	1,4-DICHLOROBENZENE	22	-63	-1.774	1.645	Downward Trend
MW09-17I	1-METHYLNAPHTHALENE	0	---	---	NA	NA
MW09-17I	2,2'-OXYBIS(1-CHLOROPROPANE)	6	0	0	NA	No Trend
MW09-17I	2,4,5-TRICHLOROPHENOL	19	-111	-3.921	1.645	Downward Trend
MW09-17I	2,4,6-TRICHLOROPHENOL	22	-76	-2.141	1.645	Downward Trend
MW09-17I	2,4-DICHLOROPHENOL	22	-76	-2.141	1.645	Downward Trend
MW09-17I	2,4-DIMETHYLPHENOL	22	-67	-1.882	1.645	Downward Trend
MW09-17I	2,4-DINITROPHENOL	22	-32	-0.9078	1.645	Not Significant
MW09-17I	2,4-DINITROTOLUENE	22	-71	-2.008	1.645	Downward Trend
MW09-17I	2,6-DINITROTOLUENE	22	-71	-2.008	1.645	Downward Trend
MW09-17I	2-CHLORONAPHTHALENE	22	-76	-2.141	1.645	Downward Trend
MW09-17I	2-CHLOROPHENOL	22	-76	-2.141	1.645	Downward Trend
MW09-17I	2-METHYLNAPHTHALENE	22	8	0.1985	1.645	Not Significant
MW09-17I	2-METHYLPHENOL	22	-76	-2.141	1.645	Downward Trend
MW09-17I	2-NITROANILINE	22	-52	-1.473	1.645	Not Significant
MW09-17I	2-NITROPHENOL	22	-71	-2.008	1.645	Downward Trend
MW09-17I	3- AND 4-METHYLPHENOL	10	-13	-13	21	Not Significant
MW09-17I	3,3-DICHLOROBENZIDINE	22	37	1.047	1.645	Not Significant
MW09-17I	3-NITROANILINE	22	-47	-1.322	1.645	Not Significant
MW09-17I	4,6-DINITRO-2-METHYLPHENOL	22	-52	-1.473	1.645	Not Significant
MW09-17I	4-BROMOPHENYL-PHENYLETHER	22	-61	-1.719	1.645	Downward Trend
MW09-17I	4-CHLORO-3-METHYLPHENOL	22	-76	-2.141	1.645	Downward Trend
MW09-17I	4-CHLOROANILINE	22	-65	-1.831	1.645	Downward Trend
MW09-17I	4-CHLOROPHENYL-PHENYLETHER	22	-61	-1.719	1.645	Downward Trend
MW09-17I	4-METHYLPHENOL	12	-15	-1.011	1.645	Not Significant
MW09-17I	4-NITROANILINE	22	-52	-1.473	1.645	Not Significant
MW09-17I	4-NITROPHENOL	22	-52	-1.473	1.645	Not Significant
MW09-17I	ACENAPHTHENE	19	55	1.904	1.645	Upward Trend
MW09-17I	ACENAPHTHYLENE	19	-67	-2.464	1.645	Downward Trend
MW09-17I	ANTHRACENE	19	14	0.4699	1.645	Not Significant
MW09-17I	BENZO(A)ANTHRACENE	19	19	0.6598	1.645	Not Significant
MW09-17I	BENZO(A)PYRENE	19	24	0.8773	1.645	Not Significant
MW09-17I	BENZO(B)FLUORANTHENE	19	-37	-1.372	1.645	Not Significant
MW09-17I	BENZO(G,H,I)PERYLENE	19	-37	-1.372	1.645	Not Significant
MW09-17I	BENZO(K)FLUORANTHENE	19	19	0.6598	1.645	Not Significant
MW09-17I	BENZOIC ACID	0	---	---	NA	NA
MW09-17I	BENZYL ALCOHOL	0	---	---	NA	NA
MW09-17I	BIS(2-CHLOROETHOXY)METHANE	22	-63	-1.774	1.645	Downward Trend
MW09-17I	BIS(2-CHLOROETHYL)ETHER	22	0	0	NA	No Trend
MW09-17I	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
MW09-17I	BIS(2-ETHYLHEXYL)PHTHALATE	22	-4	-0.08549	1.645	Not Significant

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-17I	BUTYLBENZYLPHTHALATE	22	-117	-3.373	1.645	Downward Trend
MW09-17I	CARBAZOLE	22	-29	-0.7916	1.645	Not Significant
MW09-17I	CHRYSENE	19	23	0.8212	1.645	Not Significant
MW09-17I	CRESOLS	0	---	---	NA	NA
MW09-17I	DIBENZ(A,H)ANTHRACENE	19	-35	-1.335	1.645	Not Significant
MW09-17I	DIBENZOFURAN	22	-41	-1.149	1.645	Not Significant
MW09-17I	DIETHYLPHTHALATE	22	-91	-2.599	1.645	Downward Trend
MW09-17I	DIMETHYL PHTHALATE	22	-158	-4.542	1.645	Downward Trend
MW09-17I	DI-N-BUTYLPHTHALATE	22	-85	-2.426	1.645	Downward Trend
MW09-17I	DI-N-OCTYLPHTHALATE	22	-92	-2.615	1.645	Downward Trend
MW09-17I	FLUORANTHENE	19	-37	-1.372	1.645	Not Significant
MW09-17I	FLUORENE	19	67	2.315	1.645	Upward Trend
MW09-17I	HEXACHLOROBUTADIENE	22	-155	-4.477	1.645	Downward Trend
MW09-17I	HEXACHLOROCYCLOPENTADIENE	22	-94	-2.700	1.645	Downward Trend
MW09-17I	HEXACHLOROETHANE	22	-155	-4.477	1.645	Downward Trend
MW09-17I	INDENO(1,2,3-CD)PYRENE	19	19	0.6598	1.645	Not Significant
MW09-17I	ISOPHORONE	22	-155	-4.477	1.645	Downward Trend
MW09-17I	NAPHTHALENE	22	-100	-2.825	1.645	Downward Trend
MW09-17I	NITROBENZENE	22	-120	-3.490	1.645	Downward Trend
MW09-17I	N-NITROSODINPROPYLAMINE	22	-155	-4.477	1.645	Downward Trend
MW09-17I	N-NITROSODIPHENYLAMINE	22	-124	-3.523	1.645	Downward Trend
MW09-17I	PHENANTHRENE	19	19	0.6598	1.645	Not Significant
MW09-17I	PHENOL	21	-11	-0.3059	1.645	Not Significant
MW09-17I	PYRENE	19	19	0.6598	1.645	Not Significant
MW09-17I	1,1,1-TRICHLOROETHANE	22	-111	-3.348	1.645	Downward Trend
MW09-17I	1,1,2,2-TETRACHLOROETHANE	23	-105	-3.075	1.645	Downward Trend
MW09-17I	1,1,2-TRICHLOROETHANE	23	-93	-2.621	1.645	Downward Trend
MW09-17I	1,1-DICHLOROETHANE	22	-83	-2.636	1.645	Downward Trend
MW09-17I	1,1-DICHLOROETHENE	22	-111	-3.348	1.645	Downward Trend
MW09-17I	1,2-DICHLOROETHANE	23	-133	-3.725	1.645	Downward Trend
MW09-17I	1,2-DICHLOROETHENE, TOTAL	18	-56	-2.135	1.645	Downward Trend
MW09-17I	1,2-DICHLOROPROPANE	23	-75	-2.075	1.645	Downward Trend
MW09-17I	2-BUTANONE	21	-87	-2.922	1.645	Downward Trend
MW09-17I	2-HEXANONE	22	-83	-2.636	1.645	Downward Trend
MW09-17I	4-METHYL-2-PENTANONE	23	-143	-4.007	1.645	Downward Trend
MW09-17I	ACETONE	21	-36	-1.094	1.645	Not Significant
MW09-17I	BENZENE	23	-74	-1.942	1.645	Downward Trend
MW09-17I	BROMODICHLOROMETHANE	22	-111	-3.348	1.645	Downward Trend
MW09-17I	BROMOFORM	22	-61	-1.813	1.645	Downward Trend
MW09-17I	BROMOMETHANE	22	15	0.5451	1.645	Not Significant
MW09-17I	CARBON DISULFIDE	22	-83	-2.636	1.645	Downward Trend
MW09-17I	CARBON TETRACHLORIDE	22	-53	-1.571	1.645	Not Significant
MW09-17I	CHLOROBENZENE	23	-79	-2.086	1.645	Downward Trend
MW09-17I	CHLOROETHANE	23	-79	-2.365	1.645	Downward Trend
MW09-17I	CHLOROFORM	23	-125	-3.499	1.645	Downward Trend
MW09-17I	CHLOROMETHANE	22	-49	-1.590	1.645	Not Significant
MW09-17I	CIS-1,2-DICHLOROETHENE	22	-111	-3.348	1.645	Downward Trend
MW09-17I	CIS-1,3-DICHLOROPROPENE	22	-83	-2.636	1.645	Downward Trend
MW09-17I	DIBROMOCHLOROMETHANE	22	-61	-1.813	1.645	Downward Trend
MW09-17I	ETHYLBENZENE	23	-125	-3.499	1.645	Downward Trend
MW09-17I	M- AND P-XYLENE	4	3	3	6	Not Significant
MW09-17I	METHYLENE CHLORIDE	23	-55	-1.482	1.645	Not Significant
MW09-17I	O-XYLENE	4	-1	-1	6	Not Significant
MW09-17I	STYRENE	22	-111	-3.348	1.645	Downward Trend
MW09-17I	TETRACHLOROETHENE	23	-87	-2.412	1.645	Downward Trend
MW09-17I	TOLUENE	23	-117	-3.180	1.645	Downward Trend
MW09-17I	TRANS-1,2-DICHLOROETHENE	22	-61	-1.813	1.645	Downward Trend
MW09-17I	TRANS-1,3-DICHLOROPROPENE	22	-83	-2.636	1.645	Downward Trend
MW09-17I	TRICHLOROETHENE	23	-133	-3.725	1.645	Downward Trend
MW09-17I	VINYL CHLORIDE	23	-22	-0.5841	1.645	Not Significant
MW09-17I	XYLENES, TOTAL	15	-48	-2.356	1.645	Downward Trend
MW09-20D	PENTACHLOROPHENOL	22	-112	-3.312	1.645	Downward Trend
MW09-20D	ALUMINUM	44	22	0.2145	1.645	Not Significant
MW09-20D	ANTIMONY	44	-267	-2.722	1.645	Downward Trend
MW09-20D	ARSENIC	44	175	1.776	1.645	Upward Trend
MW09-20D	BARIUM	2	---	---	NA	NA
MW09-20D	BERYLLIUM	44	-128	-1.299	1.645	Not Significant
MW09-20D	CADMIUM	2	---	---	NA	NA
MW09-20D	CALCIUM	2	---	---	NA	NA
MW09-20D	CHROMIUM, TOTAL	44	-27	-0.2656	1.645	Not Significant
MW09-20D	COBALT	2	---	---	NA	NA
MW09-20D	COPPER	44	-170	-1.736	1.645	Downward Trend
MW09-20D	IRON	44	713	7.202	1.645	Upward Trend
MW09-20D	LEAD	44	-246	-2.503	1.645	Downward Trend
MW09-20D	MAGNESIUM	2	---	---	NA	NA
MW09-20D	MANGANESE	44	723	7.307	1.645	Upward Trend
MW09-20D	MERCURY	43	17	0.1762	1.645	Not Significant
MW09-20D	NICKEL	44	-266	-2.721	1.645	Downward Trend
MW09-20D	POTASSIUM	2	---	---	NA	NA

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-20D	SELENIUM	2	---	---	NA	NA
MW09-20D	SILVER	2	---	---	NA	NA
MW09-20D	SODIUM	2	---	---	NA	NA
MW09-20D	VANADIUM	2	---	---	NA	NA
MW09-20D	ZINC	44	-25	-0.2430	1.645	Not Significant
MW09-20D	AROCLOR-1016	21	56	1.740	1.645	Upward Trend
MW09-20D	AROCLOR-1221	21	29	0.8766	1.645	Not Significant
MW09-20D	AROCLOR-1232	21	56	1.740	1.645	Upward Trend
MW09-20D	AROCLOR-1242	21	68	2.119	1.645	Upward Trend
MW09-20D	AROCLOR-1248	21	56	1.740	1.645	Upward Trend
MW09-20D	AROCLOR-1254	21	56	1.740	1.645	Upward Trend
MW09-20D	AROCLOR-1260	21	56	1.740	1.645	Upward Trend
MW09-20D	POLYCHLORINATED BIPHENYLS (PCBS)	22	-77	-2.205	1.645	Downward Trend
MW09-20D	4,4-DDD	22	125	3.653	1.645	Upward Trend
MW09-20D	4,4-DDE	22	125	3.653	1.645	Upward Trend
MW09-20D	4,4-DDT	22	89	2.589	1.645	Upward Trend
MW09-20D	ALDRIN	22	127	3.707	1.645	Upward Trend
MW09-20D	ALPHA-BHC	22	127	3.707	1.645	Upward Trend
MW09-20D	ALPHA-CHLORDANE	22	118	3.405	1.645	Upward Trend
MW09-20D	DELTA-BHC	22	126	3.676	1.645	Upward Trend
MW09-20D	ENDOSULFAN I	22	127	3.707	1.645	Upward Trend
MW09-20D	ENDOSULFAN II	22	125	3.653	1.645	Upward Trend
MW09-20D	LINDANE	22	127	3.707	1.645	Upward Trend
MW09-20D	BETA-BHC	22	127	3.707	1.645	Upward Trend
MW09-20D	DIELDRIN	22	116	3.433	1.645	Upward Trend
MW09-20D	ENDOSULFAN SULFATE	22	125	3.653	1.645	Upward Trend
MW09-20D	ENDRIN	22	125	3.649	1.645	Upward Trend
MW09-20D	ENDRIN KETONE	22	125	3.653	1.645	Upward Trend
MW09-20D	HEPTACHLOR	22	119	3.437	1.645	Upward Trend
MW09-20D	HEPTACHLOR EPOXIDE	22	127	3.707	1.645	Upward Trend
MW09-20D	HEXACHLOROBENZENE	24	163	4.153	1.645	Upward Trend
MW09-20D	METHOXYCHLOR	22	36	1.113	1.645	Not Significant
MW09-20D	1,2,4-TRICHLOROBENZENE	24	-5	-0.1115	1.645	Not Significant
MW09-20D	1,2-DICHLOROBENZENE	24	-7	-0.1671	1.645	Not Significant
MW09-20D	1,3-DICHLOROBENZENE	24	-7	-0.1671	1.645	Not Significant
MW09-20D	1,4-DICHLOROBENZENE	24	10	0.2581	1.645	Not Significant
MW09-20D	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-20D	2,2'-OXYBIS(1-CHLOROPROPANE)	20	15	0.5003	1.645	Not Significant
MW09-20D	2,4,5-TRICHLOROPHENOL	22	-144	-4.164	1.645	Downward Trend
MW09-20D	2,4,6-TRICHLOROPHENOL	23	44	1.206	1.645	Not Significant
MW09-20D	2,4-DICHLOROPHENOL	23	44	1.206	1.645	Not Significant
MW09-20D	2,4-DIMETHYLPHENOL	22	33	0.9595	1.645	Not Significant
MW09-20D	2,4-DINITROPHENOL	23	67	1.906	1.645	Upward Trend
MW09-20D	2,4-DINITROTOLUENE	24	47	1.207	1.645	Not Significant
MW09-20D	2,6-DINITROTOLUENE	24	49	1.259	1.645	Not Significant
MW09-20D	2-CHLORONAPHTHALENE	24	-3	-0.05569	1.645	Not Significant
MW09-20D	2-CHLOROPHENOL	23	-5	-0.1207	1.645	Not Significant
MW09-20D	2-METHYLNAPHTHALENE	24	63	1.655	1.645	Upward Trend
MW09-20D	2-METHYLPHENOL	23	44	1.206	1.645	Not Significant
MW09-20D	2-NITROANILINE	24	-11	-0.2996	1.645	Not Significant
MW09-20D	2-NITROPHENOL	23	44	1.206	1.645	Not Significant
MW09-20D	3- AND 4-METHYLPHENOL	10	-11	-11	21	Not Significant
MW09-20D	3,3-DICHLOROBENZIDINE	22	46	1.482	1.645	Not Significant
MW09-20D	3-NITROANILINE	24	-11	-0.2996	1.645	Not Significant
MW09-20D	4,6-DINITRO-2-METHYLPHENOL	21	-10	-0.3455	1.645	Not Significant
MW09-20D	4-BROMOPHENYL-PHENYLETHER	24	-3	-0.05569	1.645	Not Significant
MW09-20D	4-CHLORO-3-METHYLPHENOL	23	30	0.8083	1.645	Not Significant
MW09-20D	4-CHLOROANILINE	24	60	1.568	1.645	Not Significant
MW09-20D	4-CHLOROPHENYL-PHENYLETHER	24	-3	-0.05569	1.645	Not Significant
MW09-20D	4-METHYLPHENOL	12	-9	-1.159	1.645	Not Significant
MW09-20D	4-NITROANILINE	24	-11	-0.2996	1.645	Not Significant
MW09-20D	4-NITROPHENOL	23	29	0.7775	1.645	Not Significant
MW09-20D	ACENAPHTHENE	24	63	1.655	1.645	Upward Trend
MW09-20D	ACENAPHTHYLENE	24	-171	-4.495	1.645	Downward Trend
MW09-20D	ANTHRACENE	24	106	2.770	1.645	Upward Trend
MW09-20D	BENZO(A)ANTHRACENE	24	108	2.809	1.645	Upward Trend
MW09-20D	BENZO(A)PYRENE	24	110	2.849	1.645	Upward Trend
MW09-20D	BENZO(B)FLUORANTHENE	24	80	2.038	1.645	Upward Trend
MW09-20D	BENZO(G,H,I)PERYLENE	24	77	2.010	1.645	Upward Trend
MW09-20D	BENZO(K)FLUORANTHENE	24	70	1.835	1.645	Upward Trend
MW09-20D	BENZOIC ACID	5	4	4	8	Not Significant
MW09-20D	BENZYL ALCOHOL	4	3	3	6	Not Significant
MW09-20D	BIS(2-CHLOROETHOXY)METHANE	24	12	0.3154	1.645	Not Significant
MW09-20D	BIS(2-CHLOROETHYL)ETHER	24	-3	-0.05569	1.645	Not Significant
MW09-20D	BIS(2-CHLOROISOPROPYL)ETHER	4	3	3	6	Not Significant
MW09-20D	BIS(2-ETHYLHEXYL)PHTHALATE	24	-32	-0.8162	1.645	Not Significant
MW09-20D	BUTYLBENZYLPHTHALATE	24	6	0.1339	1.645	Not Significant
MW09-20D	CARBAZOLE	24	-3	-0.05569	1.645	Not Significant
MW09-20D	CHRYSENE	24	88	2.284	1.645	Upward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-20D	CRESOLS	1	---	---	NA	NA
MW09-20D	DIBENZ(A,H)ANTHRACENE	24	69	1.855	1.645	Upward Trend
MW09-20D	DIBENZOFURAN	24	2	0.02870	1.645	Not Significant
MW09-20D	DIETHYLPHTHALATE	24	38	0.9910	1.645	Not Significant
MW09-20D	DIMETHYL PHTHALATE	24	15	0.3826	1.645	Not Significant
MW09-20D	DI-N-BUTYLPHTHALATE	24	14	0.3554	1.645	Not Significant
MW09-20D	DI-N-OCTYLPHTHALATE	24	14	0.3554	1.645	Not Significant
MW09-20D	FLUORANTHENE	24	83	2.260	1.645	Upward Trend
MW09-20D	FLUORENE	24	83	2.260	1.645	Upward Trend
MW09-20D	HEXACHLOROBUTADIENE	24	-7	-0.1671	1.645	Not Significant
MW09-20D	HEXACHLOROCYCLOPENTADIENE	24	4	0.09396	1.645	Not Significant
MW09-20D	HEXACHLOROETHANE	24	-7	-0.1671	1.645	Not Significant
MW09-20D	INDENO(1,2,3-CD)PYRENE	24	81	2.113	1.645	Upward Trend
MW09-20D	ISOPHORONE	24	-3	-0.05569	1.645	Not Significant
MW09-20D	NAPHTHALENE	24	63	1.655	1.645	Upward Trend
MW09-20D	NITROBENZENE	24	12	0.3154	1.645	Not Significant
MW09-20D	N-NITROSODINPROPYLAMINE	24	-3	-0.05569	1.645	Not Significant
MW09-20D	N-NITROSODIPHENYLAMINE	24	12	0.3154	1.645	Not Significant
MW09-20D	PHENANTHRENE	24	110	2.861	1.645	Upward Trend
MW09-20D	PHENOL	23	-5	-0.1207	1.645	Not Significant
MW09-20D	PYRENE	24	110	2.843	1.645	Upward Trend
MW09-20D	1,1,1-TRICHLOROETHANE	44	-348	-3.842	1.645	Downward Trend
MW09-20D	1,1,2,2-TETRACHLOROETHANE	45	-474	-5.218	1.645	Downward Trend
MW09-20D	1,1,2-TRICHLOROETHANE	45	-320	-3.547	1.645	Downward Trend
MW09-20D	1,1-DICHLOROETHANE	44	-432	-5.044	1.645	Downward Trend
MW09-20D	1,1-DICHLOROETHENE	44	-336	-3.921	1.645	Downward Trend
MW09-20D	1,2-DICHLOROETHANE	45	-432	-4.586	1.645	Downward Trend
MW09-20D	1,2-DICHLOROETHENE, TOTAL	40	-102	-1.186	1.645	Not Significant
MW09-20D	1,2-DICHLOROPROPANE	45	-360	-3.709	1.645	Downward Trend
MW09-20D	2-BUTANONE	36	-283	-4.674	1.645	Downward Trend
MW09-20D	2-HEXANONE	39	-331	-4.860	1.645	Downward Trend
MW09-20D	4-METHYL-2-PENTANONE	43	-424	-5.366	1.645	Downward Trend
MW09-20D	ACETONE	37	-338	-5.026	1.645	Downward Trend
MW09-20D	BENZENE	45	-268	-2.838	1.645	Downward Trend
MW09-20D	BROMODICHLOROMETHANE	44	-348	-3.842	1.645	Downward Trend
MW09-20D	BROMOFORM	42	-234	-2.864	1.645	Downward Trend
MW09-20D	BROMOMETHANE	44	-148	-1.749	1.645	Downward Trend
MW09-20D	CARBON DISULFIDE	44	-396	-4.278	1.645	Downward Trend
MW09-20D	CARBON TETRACHLORIDE	44	-276	-3.194	1.645	Downward Trend
MW09-20D	CHLOROBENZENE	45	-419	-4.446	1.645	Downward Trend
MW09-20D	CHLOROETHANE	45	-324	-3.438	1.645	Downward Trend
MW09-20D	CHLOROFORM	45	-384	-4.075	1.645	Downward Trend
MW09-20D	CHLOROMETHANE	44	-272	-3.002	1.645	Downward Trend
MW09-20D	CIS-1,2-DICHLOROETHENE	44	-204	-2.109	1.645	Downward Trend
MW09-20D	CIS-1,3-DICHLOROPROPENE	44	-252	-2.894	1.645	Downward Trend
MW09-20D	DIBROMOCHLOROMETHANE	44	-236	-2.729	1.645	Downward Trend
MW09-20D	ETHYLBENZENE	45	-364	-4.065	1.645	Downward Trend
MW09-20D	M- AND P-XYLENE	8	-8	-8	16	Not Significant
MW09-20D	METHYLENE CHLORIDE	45	48	0.4697	1.645	Not Significant
MW09-20D	O-XYLENE	8	-8	-8	16	Not Significant
MW09-20D	STYRENE	44	-280	-2.953	1.645	Downward Trend
MW09-20D	TETRACHLOROETHENE	45	-334	-3.703	1.645	Downward Trend
MW09-20D	TOLUENE	45	-322	-3.541	1.645	Downward Trend
MW09-20D	TRANS-1,2-DICHLOROETHENE	44	-187	-2.020	1.645	Downward Trend
MW09-20D	TRANS-1,3-DICHLOROPROPENE	44	-241	-2.735	1.645	Downward Trend
MW09-20D	TRICHLOROETHENE	46	-380	-3.687	1.645	Downward Trend
MW09-20D	VINYL CHLORIDE	45	31	0.2947	1.645	Not Significant
MW09-20D	XYLENES, TOTAL	18	-36	-1.405	1.645	Not Significant
MW09-20I	PENTACHLOROPHENOL	42	-332	-3.700	1.645	Downward Trend
MW09-20I	ALUMINUM	43	-12	-0.1153	1.645	Not Significant
MW09-20I	ANTIMONY	43	-316	-3.334	1.645	Downward Trend
MW09-20I	ARSENIC	43	19	0.1890	1.645	Not Significant
MW09-20I	BARIUM	2	---	---	NA	NA
MW09-20I	BERYLLIUM	43	-126	-1.318	1.645	Not Significant
MW09-20I	CADMIUM	2	---	---	NA	NA
MW09-20I	CALCIUM	2	---	---	NA	NA
MW09-20I	CHROMIUM, TOTAL	43	-183	-1.909	1.645	Downward Trend
MW09-20I	COBALT	2	---	---	NA	NA
MW09-20I	COPPER	43	-126	-1.336	1.645	Not Significant
MW09-20I	IRON	43	78	0.8060	1.645	Not Significant
MW09-20I	LEAD	43	-181	-1.922	1.645	Downward Trend
MW09-20I	MAGNESIUM	2	---	---	NA	NA
MW09-20I	MANGANESE	43	217	2.261	1.645	Upward Trend
MW09-20I	MERCURY	42	-13	-0.1355	1.645	Not Significant
MW09-20I	NICKEL	43	-155	-1.621	1.645	Not Significant
MW09-20I	POTASSIUM	2	---	---	NA	NA
MW09-20I	SELENIUM	2	---	---	NA	NA
MW09-20I	SILVER	2	---	---	NA	NA
MW09-20I	SODIUM	2	---	---	NA	NA

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-20I	VANADIUM	2	---	---	NA	NA
MW09-20I	ZINC	43	79	0.8189	1.645	Not Significant
MW09-20I	AROCLOR-1016	22	69	1.987	1.645	Upward Trend
MW09-20I	AROCLOR-1221	22	42	1.188	1.645	Not Significant
MW09-20I	AROCLOR-1232	22	69	1.987	1.645	Upward Trend
MW09-20I	AROCLOR-1242	22	83	2.396	1.645	Upward Trend
MW09-20I	AROCLOR-1248	22	69	1.987	1.645	Upward Trend
MW09-20I	AROCLOR-1254	22	69	1.987	1.645	Upward Trend
MW09-20I	AROCLOR-1260	22	69	1.987	1.645	Upward Trend
MW09-20I	POLYCHLORINATED BIPHENYLS (PCBS)	22	-83	-2.357	1.645	Downward Trend
MW09-20I	4,4-DDD	22	127	3.712	1.645	Upward Trend
MW09-20I	4,4-DDE	22	127	3.712	1.645	Upward Trend
MW09-20I	4,4-DDT	22	127	3.712	1.645	Upward Trend
MW09-20I	ALDRIN	22	123	3.543	1.645	Upward Trend
MW09-20I	ALPHA-BHC	22	123	3.543	1.645	Upward Trend
MW09-20I	ALPHA-CHLORDANE	22	114	3.257	1.645	Upward Trend
MW09-20I	DELTA-BHC	22	120	3.454	1.645	Upward Trend
MW09-20I	ENDOSULFAN I	22	122	3.516	1.645	Upward Trend
MW09-20I	ENDOSULFAN II	22	131	3.830	1.645	Upward Trend
MW09-20I	LINDANE	22	122	3.516	1.645	Upward Trend
MW09-20I	BETA-BHC	22	122	3.516	1.645	Upward Trend
MW09-20I	DIELDRIN	22	119	3.519	1.645	Upward Trend
MW09-20I	ENDOSULFAN SULFATE	22	131	3.830	1.645	Upward Trend
MW09-20I	ENDRIN	22	126	3.674	1.645	Upward Trend
MW09-20I	ENDRIN KETONE	22	131	3.830	1.645	Upward Trend
MW09-20I	HEPTACHLOR	22	114	3.262	1.645	Upward Trend
MW09-20I	HEPTACHLOR EPOXIDE	22	122	3.516	1.645	Upward Trend
MW09-20I	HEXACHLOROBENZENE	31	271	4.647	1.645	Upward Trend
MW09-20I	METHOXYCHLOR	22	29	0.8681	1.645	Not Significant
MW09-20I	1,2,4-TRICHLOROBENZENE	45	55	0.5381	1.645	Not Significant
MW09-20I	1,2-DICHLOROBENZENE	45	36	0.3538	1.645	Not Significant
MW09-20I	1,3-DICHLOROBENZENE	45	37	0.3641	1.645	Not Significant
MW09-20I	1,4-DICHLOROBENZENE	45	59	0.5893	1.645	Not Significant
MW09-20I	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-20I	2,2'-OXYBIS(1-CHLOROPROPANE)	24	-18	-0.4884	1.645	Not Significant
MW09-20I	2,4,5-TRICHLOROPHENOL	43	-569	-6.046	1.645	Downward Trend
MW09-20I	2,4,6-TRICHLOROPHENOL	45	-93	-0.9282	1.645	Not Significant
MW09-20I	2,4-DICHLOROPHENOL	45	-93	-0.9282	1.645	Not Significant
MW09-20I	2,4-DIMETHYLPHENOL	44	-59	-0.5923	1.645	Not Significant
MW09-20I	2,4-DINITROPHENOL	45	71	0.7237	1.645	Not Significant
MW09-20I	2,4-DINITROTOLUENE	45	-94	-0.9396	1.645	Not Significant
MW09-20I	2,6-DINITROTOLUENE	45	-88	-0.8783	1.645	Not Significant
MW09-20I	2-CHLORONAPHTHALENE	45	44	0.4346	1.645	Not Significant
MW09-20I	2-CHLOROPHENOL	45	44	0.4346	1.645	Not Significant
MW09-20I	2-METHYLNAPHTHALENE	39	-299	-3.670	1.645	Downward Trend
MW09-20I	2-METHYLPHENOL	45	-93	-0.9282	1.645	Not Significant
MW09-20I	2-NITROANILINE	45	130	1.349	1.645	Not Significant
MW09-20I	2-NITROPHENOL	45	-88	-0.8783	1.645	Not Significant
MW09-20I	3- AND 4-METHYLPHENOL	22	-9	-0.2275	1.645	Not Significant
MW09-20I	3,3-DICHLOROBENZIDINE	43	375	4.074	1.645	Upward Trend
MW09-20I	3-NITROANILINE	44	130	1.388	1.645	Not Significant
MW09-20I	4,6-DINITRO-2-METHYLPHENOL	43	104	1.153	1.645	Not Significant
MW09-20I	4-BROMOPHENYL-PHENYLETHER	45	49	0.4855	1.645	Not Significant
MW09-20I	4-CHLORO-3-METHYLPHENOL	45	-125	-1.244	1.645	Not Significant
MW09-20I	4-CHLOROANILINE	45	-69	-0.6887	1.645	Not Significant
MW09-20I	4-CHLOROPHENYL-PHENYLETHER	45	49	0.4855	1.645	Not Significant
MW09-20I	4-METHYLPHENOL	22	-38	-1.052	1.645	Not Significant
MW09-20I	4-NITROANILINE	45	130	1.349	1.645	Not Significant
MW09-20I	4-NITROPHENOL	45	-51	-0.5021	1.645	Not Significant
MW09-20I	ACENAPHTHENE	39	-299	-3.661	1.645	Downward Trend
MW09-20I	ACENAPHTHYLENE	39	-373	-4.572	1.645	Downward Trend
MW09-20I	ANTHRACENE	39	-13	-0.1472	1.645	Not Significant
MW09-20I	BENZO(A)ANTHRACENE	39	118	1.440	1.645	Not Significant
MW09-20I	BENZO(A)PYRENE	39	126	1.536	1.645	Not Significant
MW09-20I	BENZO(B)FLUORANTHENE	39	18	0.2129	1.645	Not Significant
MW09-20I	BENZO(G,H,I)PERYLENE	39	-25	-0.3076	1.645	Not Significant
MW09-20I	BENZO(K)FLUORANTHENE	39	144	1.762	1.645	Upward Trend
MW09-20I	BENZOIC ACID	6	9	9	11	Not Significant
MW09-20I	BENZYL ALCOHOL	6	9	9	11	Not Significant
MW09-20I	BIS(2-CHLOROETHOXY)METHANE	45	71	0.7115	1.645	Not Significant
MW09-20I	BIS(2-CHLOROETHYL)ETHER	45	49	0.4855	1.645	Not Significant
MW09-20I	BIS(2-CHLOROISOPROPYL)ETHER	4	3	3	6	Not Significant
MW09-20I	BIS(2-ETHYLHEXYL)PHTHALATE	44	-181	-1.832	1.645	Downward Trend
MW09-20I	BUTYLBENZYLPHTHALATE	45	-36	-0.3502	1.645	Not Significant
MW09-20I	CARBAZOLE	45	65	0.6408	1.645	Not Significant
MW09-20I	CHRYSENE	39	96	1.167	1.645	Not Significant
MW09-20I	CRESOLS	1	---	---	NA	NA
MW09-20I	DIBENZ(A,H)ANTHRACENE	39	-25	-0.3076	1.645	Not Significant
MW09-20I	DIBENZOFURAN	45	160	1.592	1.645	Not Significant

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-20I	DIETHYLPHTHALATE	45	-36	-0.3512	1.645	Not Significant
MW09-20I	DIMETHYL PHTHALATE	45	-41	-0.4011	1.645	Not Significant
MW09-20I	DI-N-BUTYLPHTHALATE	45	-36	-0.3512	1.645	Not Significant
MW09-20I	DI-N-OCTYLPHTHALATE	45	-36	-0.3512	1.645	Not Significant
MW09-20I	FLUORANTHENE	39	-120	-1.512	1.645	Not Significant
MW09-20I	FLUORENE	39	-106	-1.355	1.645	Not Significant
MW09-20I	HEXACHLOROBUTADIENE	45	53	0.5206	1.645	Not Significant
MW09-20I	HEXACHLOROCYCLOPENTADIENE	44	-205	-2.325	1.645	Downward Trend
MW09-20I	HEXACHLOROETHANE	45	53	0.5206	1.645	Not Significant
MW09-20I	INDENO(1,2,3-CD)PYRENE	39	120	1.464	1.645	Not Significant
MW09-20I	ISOPHORONE	45	65	0.6408	1.645	Not Significant
MW09-20I	NAPHTHALENE	39	-268	-3.288	1.645	Downward Trend
MW09-20I	NITROBENZENE	45	185	1.855	1.645	Upward Trend
MW09-20I	N-NITROSODINPROPYLAMINE	45	65	0.6408	1.645	Not Significant
MW09-20I	N-NITROSODIPHENYLAMINE	45	79	0.7827	1.645	Not Significant
MW09-20I	PHENANTHRENE	39	28	0.3324	1.645	Not Significant
MW09-20I	PHENOL	44	49	0.4963	1.645	Not Significant
MW09-20I	PYRENE	39	43	0.5144	1.645	Not Significant
MW09-20I	1,1,1-TRICHLOROETHANE	43	-170	-1.779	1.645	Downward Trend
MW09-20I	1,1,2,2-TETRACHLOROETHANE	46	-605	-5.721	1.645	Downward Trend
MW09-20I	1,1,2-TRICHLOROETHANE	46	-108	-1.013	1.645	Not Significant
MW09-20I	1,1-DICHLOROETHANE	43	-215	-2.270	1.645	Downward Trend
MW09-20I	1,1-DICHLOROETHENE	44	83	0.8298	1.645	Not Significant
MW09-20I	1,2-DICHLOROETHANE	44	-230	-2.331	1.645	Downward Trend
MW09-20I	1,2-DICHLOROETHENE, TOTAL	40	125	1.446	1.645	Not Significant
MW09-20I	1,2-DICHLOROPROPANE	44	-281	-2.843	1.645	Downward Trend
MW09-20I	2-BUTANONE	37	-154	-2.046	1.645	Downward Trend
MW09-20I	2-HEXANONE	41	-210	-2.395	1.645	Downward Trend
MW09-20I	4-METHYL-2-PENTANONE	44	-202	-2.068	1.645	Downward Trend
MW09-20I	ACETONE	36	-150	-2.064	1.645	Downward Trend
MW09-20I	BENZENE	45	-113	-1.100	1.645	Not Significant
MW09-20I	BROMODICHLOROMETHANE	43	-168	-1.758	1.645	Downward Trend
MW09-20I	BROMOFORM	44	-63	-0.6316	1.645	Not Significant
MW09-20I	BROMOMETHANE	43	-197	-2.069	1.645	Downward Trend
MW09-20I	CARBON DISULFIDE	44	-136	-1.371	1.645	Not Significant
MW09-20I	CARBON TETRACHLORIDE	43	-194	-2.033	1.645	Downward Trend
MW09-20I	CHLOROBENZENE	46	-136	-1.285	1.645	Not Significant
MW09-20I	CHLOROETHANE	43	-216	-2.265	1.645	Downward Trend
MW09-20I	CHLOROFORM	46	-154	-1.453	1.645	Not Significant
MW09-20I	CHLOROMETHANE	43	-207	-2.173	1.645	Downward Trend
MW09-20I	CIS-1,2-DICHLOROETHENE	45	135	1.313	1.645	Not Significant
MW09-20I	CIS-1,3-DICHLOROPROPENE	43	-164	-1.727	1.645	Downward Trend
MW09-20I	DIBROMOCHLOROMETHANE	45	-55	-0.5318	1.645	Not Significant
MW09-20I	ETHYLBENZENE	46	-131	-1.240	1.645	Not Significant
MW09-20I	M- AND P-XYLENE	8	4	4	16	Not Significant
MW09-20I	METHYLENE CHLORIDE	45	-31	-0.2940	1.645	Not Significant
MW09-20I	O-XYLENE	8	4	4	16	Not Significant
MW09-20I	STYRENE	45	-136	-1.327	1.645	Not Significant
MW09-20I	TETRACHLOROETHENE	45	-83	-0.8038	1.645	Not Significant
MW09-20I	TOLUENE	46	-129	-1.215	1.645	Not Significant
MW09-20I	TRANS-1,2-DICHLOROETHENE	45	4	0.02941	1.645	Not Significant
MW09-20I	TRANS-1,3-DICHLOROPROPENE	43	-170	-1.787	1.645	Downward Trend
MW09-20I	TRICHLOROETHENE	46	-198	-1.867	1.645	Downward Trend
MW09-20I	VINYL CHLORIDE	46	349	3.296	1.645	Upward Trend
MW09-20I	XYLENES, TOTAL	19	-34	-1.160	1.645	Not Significant
MW09-21D	PENTACHLOROPHENOL	22	-101	-2.967	1.645	Downward Trend
MW09-21D	ALUMINUM	32	-304	-4.917	1.645	Downward Trend
MW09-21D	ANTIMONY	33	-94	-1.474	1.645	Not Significant
MW09-21D	ARSENIC	33	-134	-2.119	1.645	Downward Trend
MW09-21D	BARIUM	2	---	---	NA	NA
MW09-21D	BERYLLIUM	33	-12	-0.1744	1.645	Not Significant
MW09-21D	CADMIUM	2	---	---	NA	NA
MW09-21D	CALCIUM	2	---	---	NA	NA
MW09-21D	CHROMIUM, TOTAL	33	-27	-0.4137	1.645	Not Significant
MW09-21D	COBALT	2	---	---	NA	NA
MW09-21D	COPPER	33	-95	-1.507	1.645	Not Significant
MW09-21D	IRON	33	7	0.09298	1.645	Not Significant
MW09-21D	LEAD	33	-98	-1.544	1.645	Not Significant
MW09-21D	MAGNESIUM	2	---	---	NA	NA
MW09-21D	MANGANESE	33	13	0.1860	1.645	Not Significant
MW09-21D	MERCURY	32	18	0.2830	1.645	Not Significant
MW09-21D	NICKEL	33	-164	-2.579	1.645	Downward Trend
MW09-21D	POTASSIUM	2	---	---	NA	NA
MW09-21D	SELENIUM	2	---	---	NA	NA
MW09-21D	SILVER	2	---	---	NA	NA
MW09-21D	SODIUM	2	---	---	NA	NA
MW09-21D	VANADIUM	2	---	---	NA	NA
MW09-21D	ZINC	33	49	0.7472	1.645	Not Significant
MW09-21D	AROCLOR-1016	22	83	2.435	1.645	Upward Trend

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-21D	AROCLOR-1221	22	55	1.585	1.645	Not Significant
MW09-21D	AROCLOR-1232	22	83	2.435	1.645	Upward Trend
MW09-21D	AROCLOR-1242	22	97	2.851	1.645	Upward Trend
MW09-21D	AROCLOR-1248	22	83	2.435	1.645	Upward Trend
MW09-21D	AROCLOR-1254	22	83	2.435	1.645	Upward Trend
MW09-21D	AROCLOR-1260	22	83	2.435	1.645	Upward Trend
MW09-21D	POLYCHLORINATED BIPHENYLS (PCBS)	22	-76	-2.175	1.645	Downward Trend
MW09-21D	4,4-DDD	22	132	3.861	1.645	Upward Trend
MW09-21D	4,4-DDE	22	132	3.861	1.645	Upward Trend
MW09-21D	4,4-DDT	22	131	3.830	1.645	Upward Trend
MW09-21D	ALDRIN	22	136	3.967	1.645	Upward Trend
MW09-21D	ALPHA-BHC	22	136	3.967	1.645	Upward Trend
MW09-21D	ALPHA-CHLORDANE	22	129	3.690	1.645	Upward Trend
MW09-21D	DELTA-BHC	22	133	3.877	1.645	Upward Trend
MW09-21D	ENDOSULFAN I	22	135	3.941	1.645	Upward Trend
MW09-21D	ENDOSULFAN II	22	139	4.058	1.645	Upward Trend
MW09-21D	LINDANE	22	135	3.941	1.645	Upward Trend
MW09-21D	BETA-BHC	22	139	4.012	1.645	Upward Trend
MW09-21D	DIELDRIN	22	124	3.670	1.645	Upward Trend
MW09-21D	ENDOSULFAN SULFATE	22	140	4.086	1.645	Upward Trend
MW09-21D	ENDRIN	22	131	3.823	1.645	Upward Trend
MW09-21D	ENDRIN KETONE	22	139	4.058	1.645	Upward Trend
MW09-21D	HEPTACHLOR	22	126	3.642	1.645	Upward Trend
MW09-21D	HEPTACHLOR EPOXIDE	22	135	3.941	1.645	Upward Trend
MW09-21D	HEXACHLOROBENZENE	22	124	3.616	1.645	Upward Trend
MW09-21D	METHOXYCHLOR	22	43	1.275	1.645	Not Significant
MW09-21D	1,2,4-TRICHLOROBENZENE	22	7	0.1984	1.645	Not Significant
MW09-21D	1,2-DICHLOROBENZENE	22	-44	-1.265	1.645	Not Significant
MW09-21D	1,3-DICHLOROBENZENE	22	7	0.1984	1.645	Not Significant
MW09-21D	1,4-DICHLOROBENZENE	22	-14	-0.4040	1.645	Not Significant
MW09-21D	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-21D	2,2'-OXYBIS(1-CHLOROPROPANE)	18	24	1.002	1.645	Not Significant
MW09-21D	2,4,5-TRICHLOROPHENOL	22	-106	-3.102	1.645	Downward Trend
MW09-21D	2,4,6-TRICHLOROPHENOL	22	99	3.003	1.645	Upward Trend
MW09-21D	2,4-DICHLOROPHENOL	22	62	1.829	1.645	Upward Trend
MW09-21D	2,4-DIMETHYLPHENOL	21	56	1.694	1.645	Upward Trend
MW09-21D	2,4-DINITROPHENOL	21	87	2.776	1.645	Upward Trend
MW09-21D	2,4-DINITROTOLUENE	22	99	3.003	1.645	Upward Trend
MW09-21D	2,6-DINITROTOLUENE	22	99	3.003	1.645	Upward Trend
MW09-21D	2-CHLORONAPHTHALENE	22	7	0.1984	1.645	Not Significant
MW09-21D	2-CHLOROPHENOL	22	4	0.09894	1.645	Not Significant
MW09-21D	2-METHYLNAPHTHALENE	22	66	2.015	1.645	Upward Trend
MW09-21D	2-METHYLPHENOL	22	115	3.347	1.645	Upward Trend
MW09-21D	2-NITROANILINE	22	11	0.3893	1.645	Not Significant
MW09-21D	2-NITROPHENOL	22	85	2.542	1.645	Upward Trend
MW09-21D	3- AND 4-METHYLPHENOL	11	-8	-0.6187	1.645	Not Significant
MW09-21D	3,3-DICHLOROBENZIDINE	19	5	0.1711	1.645	Not Significant
MW09-21D	3-NITROANILINE	22	11	0.3893	1.645	Not Significant
MW09-21D	4,6-DINITRO-2-METHYLPHENOL	21	11	0.3836	1.645	Not Significant
MW09-21D	4-BROMOPHENYL-PHENYLETHER	22	7	0.1984	1.645	Not Significant
MW09-21D	4-CHLORO-3-METHYLPHENOL	22	62	1.813	1.645	Upward Trend
MW09-21D	4-CHLOROANILINE	22	99	3.003	1.645	Upward Trend
MW09-21D	4-CHLOROPHENYL-PHENYLETHER	22	7	0.1984	1.645	Not Significant
MW09-21D	4-METHYLPHENOL	10	-3	-3	21	Not Significant
MW09-21D	4-NITROANILINE	22	11	0.3893	1.645	Not Significant
MW09-21D	4-NITROPHENOL	22	62	1.807	1.645	Upward Trend
MW09-21D	ACENAPHTHENE	22	85	2.646	1.645	Upward Trend
MW09-21D	ACENAPHTHYLENE	22	-129	-3.867	1.645	Downward Trend
MW09-21D	ANTHRACENE	22	122	3.825	1.645	Upward Trend
MW09-21D	BENZO(A)ANTHRACENE	22	110	3.310	1.645	Upward Trend
MW09-21D	BENZO(A)PYRENE	22	114	3.388	1.645	Upward Trend
MW09-21D	BENZO(B)FLUORANTHENE	22	103	2.985	1.645	Upward Trend
MW09-21D	BENZO(G,H,I)PERYLENE	22	91	2.668	1.645	Upward Trend
MW09-21D	BENZO(K)FLUORANTHENE	22	96	2.939	1.645	Upward Trend
MW09-21D	BENZOIC ACID	5	4	4	8	Not Significant
MW09-21D	BENZYL ALCOHOL	5	7	7	8	Not Significant
MW09-21D	BIS(2-CHLOROETHOXY)METHANE	22	7	0.1984	1.645	Not Significant
MW09-21D	BIS(2-CHLOROETHYL)ETHER	22	7	0.1984	1.645	Not Significant
MW09-21D	BIS(2-CHLOROISOPROPYL)ETHER	4	-3	-3	6	Not Significant
MW09-21D	BIS(2-ETHYLHEXYL)PHTHALATE	22	10	0.2616	1.645	Not Significant
MW09-21D	BUTYLBENZYLPHTHALATE	22	43	1.353	1.645	Not Significant
MW09-21D	CARBAZOLE	22	7	0.1984	1.645	Not Significant
MW09-21D	CHRYSENE	22	87	2.617	1.645	Upward Trend
MW09-21D	CRESOLS	1	---	---	NA	NA
MW09-21D	DIBENZ(A,H)ANTHRACENE	22	87	2.617	1.645	Upward Trend
MW09-21D	DIBENZOFURAN	22	18	0.5849	1.645	Not Significant
MW09-21D	DIETHYLPHTHALATE	22	43	1.353	1.645	Not Significant
MW09-21D	DIMETHYL PHTHALATE	22	43	1.353	1.645	Not Significant
MW09-21D	DI-N-BUTYLPHTHALATE	22	43	1.353	1.645	Not Significant

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-21D	DI-N-OCTYLPHTHALATE	22	43	1.353	1.645	Not Significant
MW09-21D	FLUORANTHENE	22	85	2.646	1.645	Upward Trend
MW09-21D	FLUORENE	22	115	3.665	1.645	Upward Trend
MW09-21D	HEXACHLOROBUTADIENE	22	7	0.1984	1.645	Not Significant
MW09-21D	HEXACHLOROCYCLOPENTADIENE	22	11	0.3893	1.645	Not Significant
MW09-21D	HEXACHLOROETHANE	22	7	0.1984	1.645	Not Significant
MW09-21D	INDENO(1,2,3-CD)PYRENE	22	87	2.617	1.645	Upward Trend
MW09-21D	ISOPHORONE	22	7	0.1984	1.645	Not Significant
MW09-21D	NAPHTHALENE	22	63	1.879	1.645	Upward Trend
MW09-21D	NITROBENZENE	22	7	0.1984	1.645	Not Significant
MW09-21D	N-NITROSODINPROPYLAMINE	22	7	0.1984	1.645	Not Significant
MW09-21D	N-NITROSODIPHENYLAMINE	22	7	0.1984	1.645	Not Significant
MW09-21D	PHENANTHRENE	22	108	3.221	1.645	Upward Trend
MW09-21D	PHENOL	22	4	0.09894	1.645	Not Significant
MW09-21D	PYRENE	22	87	2.607	1.645	Upward Trend
MW09-21D	1,1,1-TRICHLOROETHANE	35	-26	-0.3673	1.645	Not Significant
MW09-21D	1,1,2,2-TETRACHLOROETHANE	36	-177	-2.472	1.645	Downward Trend
MW09-21D	1,1,2-TRICHLOROETHANE	36	-65	-0.8970	1.645	Not Significant
MW09-21D	1,1-DICHLOROETHANE	35	-72	-1.059	1.645	Not Significant
MW09-21D	1,1-DICHLOROETHENE	35	-183	-2.591	1.645	Downward Trend
MW09-21D	1,2-DICHLOROETHANE	36	-85	-1.180	1.645	Not Significant
MW09-21D	1,2-DICHLOROETHENE, TOTAL	31	-255	-4.317	1.645	Downward Trend
MW09-21D	1,2-DICHLOROPROPANE	36	-31	-0.4174	1.645	Not Significant
MW09-21D	2-BUTANONE	27	-53	-1.132	1.645	Not Significant
MW09-21D	2-HEXANONE	32	-36	-0.6116	1.645	Not Significant
MW09-21D	4-METHYL-2-PENTANONE	35	-118	-1.797	1.645	Downward Trend
MW09-21D	ACETONE	31	-144	-2.457	1.645	Downward Trend
MW09-21D	BENZENE	36	-183	-2.481	1.645	Downward Trend
MW09-21D	BROMODICHLOROMETHANE	35	-27	-0.3815	1.645	Not Significant
MW09-21D	BROMOFORM	34	5	0.06180	1.645	Not Significant
MW09-21D	BROMOMETHANE	35	46	0.6730	1.645	Not Significant
MW09-21D	CARBON DISULFIDE	35	-58	-0.8294	1.645	Not Significant
MW09-21D	CARBON TETRACHLORIDE	35	-9	-0.1190	1.645	Not Significant
MW09-21D	CHLOROBENZENE	36	-102	-1.377	1.645	Not Significant
MW09-21D	CHLOROETHANE	36	-77	-1.072	1.645	Not Significant
MW09-21D	CHLOROFORM	36	-61	-0.8430	1.645	Not Significant
MW09-21D	CHLOROMETHANE	35	-51	-0.7332	1.645	Not Significant
MW09-21D	CIS-1,2-DICHLOROETHENE	35	-375	-5.312	1.645	Downward Trend
MW09-21D	CIS-1,3-DICHLOROPROPENE	35	-65	-0.9573	1.645	Not Significant
MW09-21D	DIBROMOCHLOROMETHANE	35	15	0.2082	1.645	Not Significant
MW09-21D	ETHYLBENZENE	36	-85	-1.147	1.645	Not Significant
MW09-21D	M- AND P-XYLENE	4	0	0	NA	No Trend
MW09-21D	METHYLENE CHLORIDE	36	27	0.3576	1.645	Not Significant
MW09-21D	O-XYLENE	4	-2	-2	6	Not Significant
MW09-21D	STYRENE	35	-21	-0.2911	1.645	Not Significant
MW09-21D	TETRACHLOROETHENE	36	-32	-0.4371	1.645	Not Significant
MW09-21D	TOLUENE	36	-515	-7.002	1.645	Downward Trend
MW09-21D	TRANS-1,2-DICHLOROETHENE	35	275	3.893	1.645	Upward Trend
MW09-21D	TRANS-1,3-DICHLOROPROPENE	35	-61	-0.8928	1.645	Not Significant
MW09-21D	TRICHLOROETHENE	36	-314	-4.267	1.645	Downward Trend
MW09-21D	VINYL CHLORIDE	36	180	2.442	1.645	Upward Trend
MW09-21D	XYLENES, TOTAL	12	12	0.7627	1.645	Not Significant
MW09-21S	PENTACHLOROPHENOL	33	-226	-3.601	1.645	Downward Trend
MW09-21S	ALUMINUM	34	103	1.520	1.645	Not Significant
MW09-21S	ANTIMONY	35	-16	-0.2170	1.645	Not Significant
MW09-21S	ARSENIC	35	95	1.338	1.645	Not Significant
MW09-21S	BARIUM	2	---	---	NA	NA
MW09-21S	BERYLLIUM	35	54	0.7603	1.645	Not Significant
MW09-21S	CADMIUM	2	---	---	NA	NA
MW09-21S	CALCIUM	2	---	---	NA	NA
MW09-21S	CHROMIUM, TOTAL	35	-44	-0.6123	1.645	Not Significant
MW09-21S	COBALT	2	---	---	NA	NA
MW09-21S	COPPER	35	0	0	NA	No Trend
MW09-21S	IRON	35	244	3.451	1.645	Upward Trend
MW09-21S	LEAD	35	-38	-0.5379	1.645	Not Significant
MW09-21S	MAGNESIUM	2	---	---	NA	NA
MW09-21S	MANGANESE	35	-402	-5.695	1.645	Downward Trend
MW09-21S	MERCURY	34	32	0.4771	1.645	Not Significant
MW09-21S	NICKEL	35	-48	-0.6766	1.645	Not Significant
MW09-21S	POTASSIUM	2	---	---	NA	NA
MW09-21S	SELENIUM	2	---	---	NA	NA
MW09-21S	SILVER	2	---	---	NA	NA
MW09-21S	SODIUM	2	---	---	NA	NA
MW09-21S	VANADIUM	2	---	---	NA	NA
MW09-21S	ZINC	35	88	1.242	1.645	Not Significant
MW09-21S	AROCLOR-1016	25	58	1.374	1.645	Not Significant
MW09-21S	AROCLOR-1221	25	9	0.1917	1.645	Not Significant
MW09-21S	AROCLOR-1232	25	58	1.374	1.645	Not Significant
MW09-21S	AROCLOR-1242	25	59	1.409	1.645	Not Significant

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-21S	AROCLOR-1248	25	47	1.117	1.645	Not Significant
MW09-21S	AROCLOR-1254	25	58	1.374	1.645	Not Significant
MW09-21S	AROCLOR-1260	25	58	1.374	1.645	Not Significant
MW09-21S	POLYCHLORINATED BIPHENYLS (PCBS)	22	-82	-2.327	1.645	Downward Trend
MW09-21S	4,4-DDD	25	119	2.839	1.645	Upward Trend
MW09-21S	4,4-DDE	25	119	2.839	1.645	Upward Trend
MW09-21S	4,4-DDT	25	119	2.839	1.645	Upward Trend
MW09-21S	ALDRIN	25	121	2.880	1.645	Upward Trend
MW09-21S	ALPHA-BHC	25	121	2.880	1.645	Upward Trend
MW09-21S	ALPHA-CHLORDANE	25	111	2.622	1.645	Upward Trend
MW09-21S	DELTA-BHC	25	114	2.711	1.645	Upward Trend
MW09-21S	ENDOSULFAN I	25	113	2.669	1.645	Upward Trend
MW09-21S	ENDOSULFAN II	25	121	2.888	1.645	Upward Trend
MW09-21S	LINDANE	25	120	2.857	1.645	Upward Trend
MW09-21S	BETA-BHC	25	120	2.857	1.645	Upward Trend
MW09-21S	DIELDRIN	25	111	2.669	1.645	Upward Trend
MW09-21S	ENDOSULFAN SULFATE	25	121	2.888	1.645	Upward Trend
MW09-21S	ENDRIN	25	118	2.811	1.645	Upward Trend
MW09-21S	ENDRIN KETONE	25	121	2.888	1.645	Upward Trend
MW09-21S	HEPTACHLOR	25	105	2.468	1.645	Upward Trend
MW09-21S	HEPTACHLOR EPOXIDE	25	120	2.857	1.645	Upward Trend
MW09-21S	HEXACHLOROBENZENE	27	221	4.690	1.645	Upward Trend
MW09-21S	METHOXYCHLOR	25	94	2.281	1.645	Upward Trend
MW09-21S	1,2,4-TRICHLOROBENZENE	34	76	1.180	1.645	Not Significant
MW09-21S	1,2-DICHLOROBENZENE	34	69	1.082	1.645	Not Significant
MW09-21S	1,3-DICHLOROBENZENE	34	69	1.082	1.645	Not Significant
MW09-21S	1,4-DICHLOROBENZENE	34	90	1.436	1.645	Not Significant
MW09-21S	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-21S	2,2'-OXYBIS(1-CHLOROPROPANE)	21	10	0.3433	1.645	Not Significant
MW09-21S	2,4,5-TRICHLOROPHENOL	33	-307	-4.857	1.645	Downward Trend
MW09-21S	2,4,6-TRICHLOROPHENOL	34	30	0.4447	1.645	Not Significant
MW09-21S	2,4-DICHLOROPHENOL	34	28	0.4139	1.645	Not Significant
MW09-21S	2,4-DIMETHYLPHENOL	32	-16	-0.2497	1.645	Not Significant
MW09-21S	2,4-DINITROPHENOL	33	61	0.9707	1.645	Not Significant
MW09-21S	2,4-DINITROTOLUENE	34	27	0.3990	1.645	Not Significant
MW09-21S	2,6-DINITROTOLUENE	34	30	0.4447	1.645	Not Significant
MW09-21S	2-CHLORONAPHTHALENE	34	73	1.146	1.645	Not Significant
MW09-21S	2-CHLOROPHENOL	34	86	1.336	1.645	Not Significant
MW09-21S	2-METHYLNAPHTHALENE	32	-128	-2.113	1.645	Downward Trend
MW09-21S	2-METHYLPHENOL	34	28	0.4139	1.645	Not Significant
MW09-21S	2-NITROANILINE	34	119	1.936	1.645	Upward Trend
MW09-21S	2-NITROPHENOL	34	30	0.4447	1.645	Not Significant
MW09-21S	3- AND 4-METHYLPHENOL	18	-67	-2.636	1.645	Downward Trend
MW09-21S	3,3-DICHLOROBENZIDINE	31	160	2.922	1.645	Upward Trend
MW09-21S	3-NITROANILINE	34	121	1.968	1.645	Upward Trend
MW09-21S	4,6-DINITRO-2-METHYLPHENOL	33	110	1.855	1.645	Upward Trend
MW09-21S	4-BROMOPHENYL-PHENYLETHER	34	75	1.178	1.645	Not Significant
MW09-21S	4-CHLORO-3-METHYLPHENOL	34	2	0.01522	1.645	Not Significant
MW09-21S	4-CHLOROANILINE	34	43	0.6475	1.645	Not Significant
MW09-21S	4-CHLOROPHENYL-PHENYLETHER	34	75	1.178	1.645	Not Significant
MW09-21S	4-METHYLPHENOL	15	9	0.5719	1.645	Not Significant
MW09-21S	4-NITROANILINE	34	119	1.936	1.645	Upward Trend
MW09-21S	4-NITROPHENOL	33	26	0.3979	1.645	Not Significant
MW09-21S	ACENAPHTHENE	32	-142	-2.345	1.645	Downward Trend
MW09-21S	ACENAPHTHYLENE	32	-315	-5.222	1.645	Downward Trend
MW09-21S	ANTHRACENE	32	60	0.9798	1.645	Not Significant
MW09-21S	BENZO(A)ANTHRACENE	32	139	2.291	1.645	Upward Trend
MW09-21S	BENZO(A)PYRENE	32	187	3.072	1.645	Upward Trend
MW09-21S	BENZO(B)FLUORANTHENE	32	114	1.864	1.645	Upward Trend
MW09-21S	BENZO(G,H,I)PERYLENE	32	77	1.268	1.645	Not Significant
MW09-21S	BENZO(K)FLUORANTHENE	32	160	2.670	1.645	Upward Trend
MW09-21S	BENZOIC ACID	5	4	4	8	Not Significant
MW09-21S	BENZYL ALCOHOL	5	7	7	8	Not Significant
MW09-21S	BIS(2-CHLOROETHOXY)METHANE	34	94	1.500	1.645	Not Significant
MW09-21S	BIS(2-CHLOROETHYL)ETHER	34	-335	-4.961	1.645	Downward Trend
MW09-21S	BIS(2-CHLOROISOPROPYL)ETHER	4	5	5	6	Not Significant
MW09-21S	BIS(2-ETHYLHEXYL)PHTHALATE	34	-112	-1.665	1.645	Downward Trend
MW09-21S	BUTYLBENZYLPHTHALATE	34	30	0.4454	1.645	Not Significant
MW09-21S	CARBAZOLE	33	65	1.059	1.645	Not Significant
MW09-21S	CHRYSENE	32	102	1.677	1.645	Upward Trend
MW09-21S	CRESOLS	1	---	---	NA	NA
MW09-21S	DIBENZ(A,H)ANTHRACENE	32	55	0.9145	1.645	Not Significant
MW09-21S	DIBENZOFURAN	34	126	1.965	1.645	Upward Trend
MW09-21S	DIETHYLPHTHALATE	34	23	0.3383	1.645	Not Significant
MW09-21S	DIMETHYL PHTHALATE	34	46	0.6924	1.645	Not Significant
MW09-21S	DI-N-BUTYLPHTHALATE	34	25	0.3691	1.645	Not Significant
MW09-21S	DI-N-OCTYLPHTHALATE	34	46	0.6924	1.645	Not Significant
MW09-21S	FLUORANTHENE	32	-25	-0.4118	1.645	Not Significant
MW09-21S	FLUORENE	32	-27	-0.4464	1.645	Not Significant

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-21S	HEXACHLOROBUTADIENE	34	70	1.086	1.645	Not Significant
MW09-21S	HEXACHLOROCYCLOPENTADIENE	34	-121	-2.043	1.645	Downward Trend
MW09-21S	HEXACHLOROETHANE	34	70	1.086	1.645	Not Significant
MW09-21S	INDENO(1,2,3-CD)PYRENE	32	135	2.237	1.645	Upward Trend
MW09-21S	ISOPHORONE	34	76	1.181	1.645	Not Significant
MW09-21S	NAPHTHALENE	32	-156	-2.577	1.645	Downward Trend
MW09-21S	NITROBENZENE	34	136	2.153	1.645	Upward Trend
MW09-21S	N-NITROSODINPROPYLAMINE	34	76	1.181	1.645	Not Significant
MW09-21S	N-NITROSODIPHENYLAMINE	34	93	1.465	1.645	Not Significant
MW09-21S	PHENANTHRENE	32	129	2.124	1.645	Upward Trend
MW09-21S	PHENOL	33	53	0.8508	1.645	Not Significant
MW09-21S	PYRENE	32	65	1.061	1.645	Not Significant
MW09-21S	1,1,1-TRICHLOROETHANE	36	-207	-3.118	1.645	Downward Trend
MW09-21S	1,1,2,2-TETRACHLOROETHANE	37	-291	-4.316	1.645	Downward Trend
MW09-21S	1,1,2-TRICHLOROETHANE	37	-198	-2.975	1.645	Downward Trend
MW09-21S	1,1-DICHLOROETHANE	36	-78	-1.109	1.645	Not Significant
MW09-21S	1,1-DICHLOROETHENE	36	-203	-3.322	1.645	Downward Trend
MW09-21S	1,2-DICHLOROETHANE	37	-262	-3.633	1.645	Downward Trend
MW09-21S	1,2-DICHLOROETHENE, TOTAL	31	-52	-0.8744	1.645	Not Significant
MW09-21S	1,2-DICHLOROPROPANE	37	-144	-1.978	1.645	Downward Trend
MW09-21S	2-BUTANONE	28	-166	-3.867	1.645	Downward Trend
MW09-21S	2-HEXANONE	32	-231	-4.100	1.645	Downward Trend
MW09-21S	4-METHYL-2-PENTANONE	36	-263	-3.947	1.645	Downward Trend
MW09-21S	ACETONE	31	-220	-3.778	1.645	Downward Trend
MW09-21S	BENZENE	37	-488	-6.379	1.645	Downward Trend
MW09-21S	BROMODICHLOROMETHANE	36	-207	-3.118	1.645	Downward Trend
MW09-21S	BROMOFORM	34	-116	-1.926	1.645	Downward Trend
MW09-21S	BROMOMETHANE	36	-47	-0.7178	1.645	Not Significant
MW09-21S	CARBON DISULFIDE	36	-124	-1.724	1.645	Downward Trend
MW09-21S	CARBON TETRACHLORIDE	36	-109	-1.655	1.645	Downward Trend
MW09-21S	CHLOROBENZENE	35	-205	-3.111	1.645	Downward Trend
MW09-21S	CHLOROETHANE	37	-198	-2.776	1.645	Downward Trend
MW09-21S	CHLOROFORM	37	-239	-3.428	1.645	Downward Trend
MW09-21S	CHLOROMETHANE	36	-156	-2.290	1.645	Downward Trend
MW09-21S	CIS-1,2-DICHLOROETHENE	36	-126	-1.756	1.645	Downward Trend
MW09-21S	CIS-1,3-DICHLOROPROPENE	36	-182	-2.802	1.645	Downward Trend
MW09-21S	DIBROMOCHLOROMETHANE	36	-116	-1.796	1.645	Downward Trend
MW09-21S	ETHYLBENZENE	36	20	0.2673	1.645	Not Significant
MW09-21S	M- AND P-XYLENE	5	2	2	8	Not Significant
MW09-21S	METHYLENE CHLORIDE	37	10	0.1208	1.645	Not Significant
MW09-21S	O-XYLENE	5	2	2	8	Not Significant
MW09-21S	STYRENE	34	-117	-1.810	1.645	Downward Trend
MW09-21S	TETRACHLOROETHENE	37	-178	-2.623	1.645	Downward Trend
MW09-21S	TOLUENE	37	-336	-4.398	1.645	Downward Trend
MW09-21S	TRANS-1,2-DICHLOROETHENE	36	-116	-1.796	1.645	Downward Trend
MW09-21S	TRANS-1,3-DICHLOROPROPENE	36	-183	-2.757	1.645	Downward Trend
MW09-21S	TRICHLOROETHENE	37	-209	-2.858	1.645	Downward Trend
MW09-21S	VINYL CHLORIDE	37	-177	-2.486	1.645	Downward Trend
MW09-21S	XYLENES, TOTAL	13	-16	-0.9616	1.645	Not Significant
MW09-23D	PENTACHLOROPHENOL	22	-97	-2.848	1.645	Downward Trend
MW09-23D	ALUMINUM	33	26	0.3954	1.645	Not Significant
MW09-23D	ANTIMONY	33	-24	-0.3645	1.645	Not Significant
MW09-23D	ARSENIC	33	-171	-2.642	1.645	Downward Trend
MW09-23D	BARIUM	2	---	---	NA	NA
MW09-23D	BERYLLIUM	33	40	0.6155	1.645	Not Significant
MW09-23D	CADMIUM	2	---	---	NA	NA
MW09-23D	CALCIUM	2	---	---	NA	NA
MW09-23D	CHROMIUM, TOTAL	33	79	1.228	1.645	Not Significant
MW09-23D	COBALT	2	---	---	NA	NA
MW09-23D	COPPER	33	-21	-0.3149	1.645	Not Significant
MW09-23D	IRON	33	-331	-5.115	1.645	Downward Trend
MW09-23D	LEAD	33	17	0.2535	1.645	Not Significant
MW09-23D	MAGNESIUM	2	---	---	NA	NA
MW09-23D	MANGANESE	33	-393	-6.075	1.645	Downward Trend
MW09-23D	MERCURY	33	24	0.3704	1.645	Not Significant
MW09-23D	NICKEL	33	-53	-0.8244	1.645	Not Significant
MW09-23D	POTASSIUM	2	---	---	NA	NA
MW09-23D	SELENIUM	2	---	---	NA	NA
MW09-23D	SILVER	2	---	---	NA	NA
MW09-23D	SODIUM	2	---	---	NA	NA
MW09-23D	VANADIUM	2	---	---	NA	NA
MW09-23D	ZINC	33	45	0.6827	1.645	Not Significant
MW09-23D	AROCLOR-1016	22	57	1.675	1.645	Upward Trend
MW09-23D	AROCLOR-1221	22	29	0.8277	1.645	Not Significant
MW09-23D	AROCLOR-1232	22	57	1.675	1.645	Upward Trend
MW09-23D	AROCLOR-1242	22	71	2.094	1.645	Upward Trend
MW09-23D	AROCLOR-1248	22	57	1.675	1.645	Upward Trend
MW09-23D	AROCLOR-1254	22	57	1.675	1.645	Upward Trend
MW09-23D	AROCLOR-1260	22	57	1.675	1.645	Upward Trend

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Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-23D	POLYCHLORINATED BIPHENYLS (PCBS)	22	-81	-2.319	1.645	Downward Trend
MW09-23D	4,4-DDD	22	138	4.042	1.645	Upward Trend
MW09-23D	4,4-DDE	22	138	4.042	1.645	Upward Trend
MW09-23D	4,4-DDT	22	138	4.042	1.645	Upward Trend
MW09-23D	ALDRIN	22	140	4.097	1.645	Upward Trend
MW09-23D	ALPHA-BHC	22	140	4.097	1.645	Upward Trend
MW09-23D	ALPHA-CHLORDANE	22	131	3.789	1.645	Upward Trend
MW09-23D	DELTA-BHC	22	139	4.065	1.645	Upward Trend
MW09-23D	ENDOSULFAN I	22	140	4.097	1.645	Upward Trend
MW09-23D	ENDOSULFAN II	22	138	4.042	1.645	Upward Trend
MW09-23D	LINDANE	22	140	4.097	1.645	Upward Trend
MW09-23D	BETA-BHC	22	140	4.097	1.645	Upward Trend
MW09-23D	DIELDRIN	22	129	3.828	1.645	Upward Trend
MW09-23D	ENDOSULFAN SULFATE	22	138	4.042	1.645	Upward Trend
MW09-23D	ENDRIN	22	138	4.038	1.645	Upward Trend
MW09-23D	ENDRIN KETONE	22	138	4.042	1.645	Upward Trend
MW09-23D	HEPTACHLOR	22	132	3.821	1.645	Upward Trend
MW09-23D	HEPTACHLOR EPOXIDE	22	140	4.097	1.645	Upward Trend
MW09-23D	HEXACHLOROBENZENE	22	140	4.097	1.645	Upward Trend
MW09-23D	METHOXYCHLOR	22	57	1.741	1.645	Upward Trend
MW09-23D	1,2,4-TRICHLOROBENZENE	22	34	1.087	1.645	Not Significant
MW09-23D	1,2-DICHLOROBENZENE	22	34	1.087	1.645	Not Significant
MW09-23D	1,3-DICHLOROBENZENE	22	34	1.087	1.645	Not Significant
MW09-23D	1,4-DICHLOROBENZENE	22	34	1.087	1.645	Not Significant
MW09-23D	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-23D	2,2'-OXYBIS(1-CHLOROPROPANE)	18	42	1.865	1.645	Upward Trend
MW09-23D	2,4,5-TRICHLOROPHENOL	22	-115	-3.406	1.645	Downward Trend
MW09-23D	2,4,6-TRICHLOROPHENOL	22	103	3.163	1.645	Upward Trend
MW09-23D	2,4-DICHLOROPHENOL	22	103	3.163	1.645	Upward Trend
MW09-23D	2,4-DIMETHYLPHENOL	21	74	2.360	1.645	Upward Trend
MW09-23D	2,4-DINITROPHENOL	22	78	2.300	1.645	Upward Trend
MW09-23D	2,4-DINITROTOLUENE	22	103	3.163	1.645	Upward Trend
MW09-23D	2,6-DINITROTOLUENE	22	103	3.163	1.645	Upward Trend
MW09-23D	2-CHLORONAPHTHALENE	22	34	1.087	1.645	Not Significant
MW09-23D	2-CHLOROPHENOL	22	34	1.087	1.645	Not Significant
MW09-23D	2-METHYLNAPHTHALENE	22	123	3.789	1.645	Upward Trend
MW09-23D	2-METHYLPHENOL	22	103	3.163	1.645	Upward Trend
MW09-23D	2-NITROANILINE	22	-5	-0.1695	1.645	Not Significant
MW09-23D	2-NITROPHENOL	22	103	3.163	1.645	Upward Trend
MW09-23D	3- AND 4-METHYLPHENOL	11	2	0.1007	1.645	Not Significant
MW09-23D	3,3-DICHLOROBENZIDINE	19	23	0.8654	1.645	Not Significant
MW09-23D	3-NITROANILINE	22	-5	-0.1695	1.645	Not Significant
MW09-23D	4,6-DINITRO-2-METHYLPHENOL	20	-1	0	1.645	Not Significant
MW09-23D	4-BROMOPHENYL-PHENYLETHER	22	34	1.087	1.645	Not Significant
MW09-23D	4-CHLORO-3-METHYLPHENOL	22	84	2.520	1.645	Upward Trend
MW09-23D	4-CHLOROANILINE	22	103	3.163	1.645	Upward Trend
MW09-23D	4-CHLOROPHENYL-PHENYLETHER	22	34	1.087	1.645	Not Significant
MW09-23D	4-METHYLPHENOL	10	0	0	NA	No Trend
MW09-23D	4-NITROANILINE	22	-5	-0.1695	1.645	Not Significant
MW09-23D	4-NITROPHENOL	22	72	2.107	1.645	Upward Trend
MW09-23D	ACENAPHTHENE	22	123	3.789	1.645	Upward Trend
MW09-23D	ACENAPHTHYLENE	22	-122	-3.649	1.645	Downward Trend
MW09-23D	ANTHRACENE	22	130	3.944	1.645	Upward Trend
MW09-23D	BENZO(A)ANTHRACENE	22	118	3.529	1.645	Upward Trend
MW09-23D	BENZO(A)PYRENE	22	129	3.790	1.645	Upward Trend
MW09-23D	BENZO(B)FLUORANTHENE	22	114	3.279	1.645	Upward Trend
MW09-23D	BENZO(G,H,I)PERYLENE	22	102	2.968	1.645	Upward Trend
MW09-23D	BENZO(K)FLUORANTHENE	22	108	3.288	1.645	Upward Trend
MW09-23D	BENZOIC ACID	5	2	2	8	Not Significant
MW09-23D	BENZYL ALCOHOL	5	7	7	8	Not Significant
MW09-23D	BIS(2-CHLOROETHOXY)METHANE	22	34	1.087	1.645	Not Significant
MW09-23D	BIS(2-CHLOROETHYL)ETHER	22	34	1.087	1.645	Not Significant
MW09-23D	BIS(2-CHLOROISOPROPYL)ETHER	4	3	3	6	Not Significant
MW09-23D	BIS(2-ETHYLHEXYL)PHTHALATE	22	62	1.780	1.645	Upward Trend
MW09-23D	BUTYLBENZYLPHTHALATE	22	40	1.217	1.645	Not Significant
MW09-23D	CARBAZOLE	22	34	1.087	1.645	Not Significant
MW09-23D	CHRYSENE	22	98	2.926	1.645	Upward Trend
MW09-23D	CRESOLS	1	---	---	NA	NA
MW09-23D	DIBENZ(A,H)ANTHRACENE	22	98	2.926	1.645	Upward Trend
MW09-23D	DIBENZOFURAN	22	41	1.320	1.645	Not Significant
MW09-23D	DIETHYLPHTHALATE	22	50	1.572	1.645	Not Significant
MW09-23D	DIMETHYL PHTHALATE	22	50	1.572	1.645	Not Significant
MW09-23D	DI-N-BUTYLPHTHALATE	22	50	1.572	1.645	Not Significant
MW09-23D	DI-N-OCTYLPHTHALATE	22	50	1.572	1.645	Not Significant
MW09-23D	FLUORANTHENE	22	123	3.789	1.645	Upward Trend
MW09-23D	FLUORENE	22	123	3.789	1.645	Upward Trend
MW09-23D	HEXACHLOROBUTADIENE	22	34	1.087	1.645	Not Significant
MW09-23D	HEXACHLOROCYCLOPENTADIENE	22	-5	-0.1695	1.645	Not Significant
MW09-23D	HEXACHLOROETHANE	22	34	1.087	1.645	Not Significant

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-23D	INDENO(1,2,3-CD)PYRENE	22	100	2.975	1.645	Upward Trend
MW09-23D	ISOPHORONE	22	34	1.087	1.645	Not Significant
MW09-23D	NAPHTHALENE	22	123	3.789	1.645	Upward Trend
MW09-23D	NITROBENZENE	22	34	1.087	1.645	Not Significant
MW09-23D	N-NITROSODINPROPYLAMINE	22	34	1.087	1.645	Not Significant
MW09-23D	N-NITROSODIPHENYLAMINE	21	28	0.9395	1.645	Not Significant
MW09-23D	PHENANTHRENE	22	131	3.898	1.645	Upward Trend
MW09-23D	PHENOL	22	34	1.087	1.645	Not Significant
MW09-23D	PYRENE	22	101	3.062	1.645	Upward Trend
MW09-23D	1,1,1-TRICHLOROETHANE	34	-137	-2.238	1.645	Downward Trend
MW09-23D	1,1,2,2-TETRACHLOROETHANE	35	-221	-3.558	1.645	Downward Trend
MW09-23D	1,1,2-TRICHLOROETHANE	35	-155	-2.484	1.645	Downward Trend
MW09-23D	1,1-DICHLOROETHANE	34	-187	-3.183	1.645	Downward Trend
MW09-23D	1,1-DICHLOROETHENE	34	-141	-2.520	1.645	Downward Trend
MW09-23D	1,2-DICHLOROETHANE	35	-195	-3.029	1.645	Downward Trend
MW09-23D	1,2-DICHLOROETHENE, TOTAL	30	-136	-2.482	1.645	Downward Trend
MW09-23D	1,2-DICHLOROPROPANE	35	-97	-1.436	1.645	Not Significant
MW09-23D	2-BUTANONE	26	-110	-2.972	1.645	Downward Trend
MW09-23D	2-HEXANONE	29	-139	-3.197	1.645	Downward Trend
MW09-23D	4-METHYL-2-PENTANONE	33	-223	-4.130	1.645	Downward Trend
MW09-23D	ACETONE	26	-97	-2.512	1.645	Downward Trend
MW09-23D	BENZENE	35	-139	-2.087	1.645	Downward Trend
MW09-23D	BROMODICHLOROMETHANE	34	-137	-2.238	1.645	Downward Trend
MW09-23D	BROMOFORM	32	-77	-1.370	1.645	Not Significant
MW09-23D	BROMOMETHANE	34	-13	-0.2005	1.645	Not Significant
MW09-23D	CARBON DISULFIDE	34	-130	-2.029	1.645	Downward Trend
MW09-23D	CARBON TETRACHLORIDE	34	-93	-1.539	1.645	Not Significant
MW09-23D	CHLOROBENZENE	35	-167	-2.592	1.645	Downward Trend
MW09-23D	CHLOROETHANE	34	-142	-2.237	1.645	Downward Trend
MW09-23D	CHLOROFORM	35	-165	-2.561	1.645	Downward Trend
MW09-23D	CHLOROMETHANE	34	-98	-1.558	1.645	Not Significant
MW09-23D	CIS-1,2-DICHLOROETHENE	33	-138	-2.339	1.645	Downward Trend
MW09-23D	CIS-1,3-DICHLOROPROPENE	34	-154	-2.540	1.645	Downward Trend
MW09-23D	DIBROMOCHLOROMETHANE	34	-73	-1.205	1.645	Not Significant
MW09-23D	ETHYLBENZENE	35	-163	-2.741	1.645	Downward Trend
MW09-23D	M- AND P-XYLENE	5	-5	-5	8	Not Significant
MW09-23D	METHYLENE CHLORIDE	35	56	0.8060	1.645	Not Significant
MW09-23D	O-XYLENE	5	-5	-5	8	Not Significant
MW09-23D	STYRENE	34	-55	-0.8438	1.645	Not Significant
MW09-23D	TETRACHLOROETHENE	35	-135	-2.124	1.645	Downward Trend
MW09-23D	TOLUENE	35	-163	-2.741	1.645	Downward Trend
MW09-23D	TRANS-1,2-DICHLOROETHENE	33	-77	-1.319	1.645	Not Significant
MW09-23D	TRANS-1,3-DICHLOROPROPENE	34	-149	-2.426	1.645	Downward Trend
MW09-23D	TRICHLOROETHENE	35	-183	-2.736	1.645	Downward Trend
MW09-23D	VINYL CHLORIDE	35	-187	-2.945	1.645	Downward Trend
MW09-23D	XYLENES, TOTAL	11	-15	-1.152	1.645	Not Significant
MW09-23S	PENTACHLOROPHENOL	22	-91	-2.713	1.645	Downward Trend
MW09-23S	ALUMINUM	35	148	2.108	1.645	Upward Trend
MW09-23S	ANTIMONY	35	-22	-0.3038	1.645	Not Significant
MW09-23S	ARSENIC	35	-89	-1.253	1.645	Not Significant
MW09-23S	BARIUM	2	---	---	NA	NA
MW09-23S	BERYLLIUM	35	83	1.181	1.645	Not Significant
MW09-23S	CADMIUM	1	---	---	NA	NA
MW09-23S	CALCIUM	2	---	---	NA	NA
MW09-23S	CHROMIUM, TOTAL	35	55	0.7704	1.645	Not Significant
MW09-23S	COBALT	2	---	---	NA	NA
MW09-23S	COPPER	35	-153	-2.187	1.645	Downward Trend
MW09-23S	IRON	35	-361	-5.114	1.645	Downward Trend
MW09-23S	LEAD	35	29	0.3994	1.645	Not Significant
MW09-23S	MAGNESIUM	2	---	---	NA	NA
MW09-23S	MANGANESE	35	-222	-3.139	1.645	Downward Trend
MW09-23S	MERCURY	35	-20	-0.2750	1.645	Not Significant
MW09-23S	NICKEL	35	-5	-0.05779	1.645	Not Significant
MW09-23S	POTASSIUM	2	---	---	NA	NA
MW09-23S	SELENIUM	2	---	---	NA	NA
MW09-23S	SILVER	2	---	---	NA	NA
MW09-23S	SODIUM	2	---	---	NA	NA
MW09-23S	VANADIUM	2	---	---	NA	NA
MW09-23S	ZINC	35	146	2.086	1.645	Upward Trend
MW09-23S	AROCLOR-1016	22	38	1.079	1.645	Not Significant
MW09-23S	AROCLOR-1221	22	12	0.3187	1.645	Not Significant
MW09-23S	AROCLOR-1232	22	38	1.079	1.645	Not Significant
MW09-23S	AROCLOR-1242	22	52	1.488	1.645	Not Significant
MW09-23S	AROCLOR-1248	22	38	1.079	1.645	Not Significant
MW09-23S	AROCLOR-1254	22	38	1.079	1.645	Not Significant
MW09-23S	AROCLOR-1260	22	38	1.079	1.645	Not Significant
MW09-23S	POLYCHLORINATED BIPHENYLS (PCBS)	22	-91	-2.570	1.645	Downward Trend
MW09-23S	4,4-DDD	23	140	3.819	1.645	Upward Trend
MW09-23S	4,4-DDE	23	140	3.819	1.645	Upward Trend

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-23S	4,4-DDT	23	140	3.819	1.645	Upward Trend
MW09-23S	ALDRIN	23	133	3.581	1.645	Upward Trend
MW09-23S	ALPHA-BHC	23	133	3.581	1.645	Upward Trend
MW09-23S	ALPHA-CHLORDANE	23	125	3.339	1.645	Upward Trend
MW09-23S	DELTA-BHC	23	135	3.632	1.645	Upward Trend
MW09-23S	ENDOSULFAN I	23	133	3.581	1.645	Upward Trend
MW09-23S	ENDOSULFAN II	23	140	3.819	1.645	Upward Trend
MW09-23S	LINDANE	23	133	3.581	1.645	Upward Trend
MW09-23S	BETA-BHC	23	133	3.581	1.645	Upward Trend
MW09-23S	DIELDRIN	23	131	3.613	1.645	Upward Trend
MW09-23S	ENDOSULFAN SULFATE	23	140	3.819	1.645	Upward Trend
MW09-23S	ENDRIN	23	140	3.815	1.645	Upward Trend
MW09-23S	ENDRIN KETONE	23	140	3.819	1.645	Upward Trend
MW09-23S	HEPTACHLOR	23	126	3.368	1.645	Upward Trend
MW09-23S	HEPTACHLOR EPOXIDE	23	133	3.581	1.645	Upward Trend
MW09-23S	HEXACHLOROBENZENE	22	131	3.780	1.645	Upward Trend
MW09-23S	METHOXYCHLOR	23	72	2.037	1.645	Upward Trend
MW09-23S	1,2,4-TRICHLOROBENZENE	22	12	0.3628	1.645	Not Significant
MW09-23S	1,2-DICHLOROBENZENE	22	12	0.3628	1.645	Not Significant
MW09-23S	1,3-DICHLOROBENZENE	22	12	0.3628	1.645	Not Significant
MW09-23S	1,4-DICHLOROBENZENE	22	12	0.3628	1.645	Not Significant
MW09-23S	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-23S	2,2'-OXYBIS(1-CHLOROPROPANE)	18	17	0.7285	1.645	Not Significant
MW09-23S	2,4,5-TRICHLOROPHENOL	22	-113	-3.376	1.645	Downward Trend
MW09-23S	2,4,6-TRICHLOROPHENOL	22	86	2.595	1.645	Upward Trend
MW09-23S	2,4-DICHLOROPHENOL	22	86	2.595	1.645	Upward Trend
MW09-23S	2,4-DIMETHYLPHENOL	21	67	2.128	1.645	Upward Trend
MW09-23S	2,4-DINITROPHENOL	22	76	2.248	1.645	Upward Trend
MW09-23S	2,4-DINITROTOLUENE	22	86	2.595	1.645	Upward Trend
MW09-23S	2,6-DINITROTOLUENE	22	86	2.595	1.645	Upward Trend
MW09-23S	2-CHLORONAPHTHALENE	22	12	0.3628	1.645	Not Significant
MW09-23S	2-CHLOROPHENOL	22	12	0.3628	1.645	Not Significant
MW09-23S	2-METHYLNAPHTHALENE	22	128	4.003	1.645	Upward Trend
MW09-23S	2-METHYLPHENOL	22	86	2.595	1.645	Upward Trend
MW09-23S	2-NITROANILINE	22	-15	-0.5932	1.645	Not Significant
MW09-23S	2-NITROPHENOL	22	86	2.595	1.645	Upward Trend
MW09-23S	3- AND 4-METHYLPHENOL	11	-6	-0.5034	1.645	Not Significant
MW09-23S	3,3-DICHLOROBENZIDINE	19	-6	-0.1965	1.645	Not Significant
MW09-23S	3-NITROANILINE	22	-15	-0.5932	1.645	Not Significant
MW09-23S	4,6-DINITRO-2-METHYLPHENOL	20	-11	-0.5293	1.645	Not Significant
MW09-23S	4-BROMOPHENYL-PHENYLETHER	22	12	0.3628	1.645	Not Significant
MW09-23S	4-CHLORO-3-METHYLPHENOL	22	76	2.265	1.645	Upward Trend
MW09-23S	4-CHLOROANILINE	22	86	2.595	1.645	Upward Trend
MW09-23S	4-CHLOROPHENYL-PHENYLETHER	22	12	0.3628	1.645	Not Significant
MW09-23S	4-METHYLPHENOL	10	-9	-9	21	Not Significant
MW09-23S	4-NITROANILINE	22	-15	-0.5932	1.645	Not Significant
MW09-23S	4-NITROPHENOL	22	75	2.211	1.645	Upward Trend
MW09-23S	ACENAPHTHENE	22	-164	-4.612	1.645	Downward Trend
MW09-23S	ACENAPHTHYLENE	22	-105	-3.115	1.645	Downward Trend
MW09-23S	ANTHRACENE	22	118	3.396	1.645	Upward Trend
MW09-23S	BENZO(A)ANTHRACENE	22	124	3.735	1.645	Upward Trend
MW09-23S	BENZO(A)PYRENE	22	133	3.920	1.645	Upward Trend
MW09-23S	BENZO(B)FLUORANTHENE	22	120	3.475	1.645	Upward Trend
MW09-23S	BENZO(G,H,I)PERYLENE	22	80	2.320	1.645	Upward Trend
MW09-23S	BENZO(K)FLUORANTHENE	22	114	3.496	1.645	Upward Trend
MW09-23S	BENZOIC ACID	5	0	0	NA	No Trend
MW09-23S	BENZYL ALCOHOL	5	5	5	8	Not Significant
MW09-23S	BIS(2-CHLOROETHOXY)METHANE	22	12	0.3628	1.645	Not Significant
MW09-23S	BIS(2-CHLOROETHYL)ETHER	22	12	0.3628	1.645	Not Significant
MW09-23S	BIS(2-CHLOROISOPROPYL)ETHER	4	5	5	6	Not Significant
MW09-23S	BIS(2-ETHYLHEXYL)PHTHALATE	22	25	0.6954	1.645	Not Significant
MW09-23S	BUTYLBENZYLPHTHALATE	22	21	0.6100	1.645	Not Significant
MW09-23S	CARBAZOLE	22	12	0.3628	1.645	Not Significant
MW09-23S	CHRYSENE	22	98	2.924	1.645	Upward Trend
MW09-23S	CRESOLS	1	---	---	NA	NA
MW09-23S	DIBENZ(A,H)ANTHRACENE	22	104	3.127	1.645	Upward Trend
MW09-23S	DIBENZOFURAN	22	6	0.1649	1.645	Not Significant
MW09-23S	DIETHYLPHTHALATE	22	30	0.9048	1.645	Not Significant
MW09-23S	DIMETHYL PHTHALATE	22	30	0.9048	1.645	Not Significant
MW09-23S	DI-N-BUTYLPHTHALATE	22	30	0.9048	1.645	Not Significant
MW09-23S	DI-N-OCTYLPHTHALATE	22	30	0.9048	1.645	Not Significant
MW09-23S	FLUORANTHENE	22	-70	-1.970	1.645	Downward Trend
MW09-23S	FLUORENE	22	87	2.709	1.645	Upward Trend
MW09-23S	HEXACHLOROBUTADIENE	22	12	0.3628	1.645	Not Significant
MW09-23S	HEXACHLOROCYCLOPENTADIENE	22	-15	-0.5932	1.645	Not Significant
MW09-23S	HEXACHLOROETHANE	22	12	0.3628	1.645	Not Significant
MW09-23S	INDENO(1,2,3-CD)PYRENE	22	104	3.127	1.645	Upward Trend
MW09-23S	ISOPHORONE	22	12	0.3628	1.645	Not Significant
MW09-23S	NAPHTHALENE	22	95	2.776	1.645	Upward Trend

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-23S	NITROBENZENE	22	12	0.3628	1.645	Not Significant
MW09-23S	N-NITROSODINPROPYLAMINE	22	12	0.3628	1.645	Not Significant
MW09-23S	N-NITROSODIPHENYLAMINE	21	8	0.2440	1.645	Not Significant
MW09-23S	PHENANTHRENE	22	144	4.258	1.645	Upward Trend
MW09-23S	PHENOL	22	12	0.3628	1.645	Not Significant
MW09-23S	PYRENE	22	-25	-0.6780	1.645	Not Significant
MW09-23S	1,1,1-TRICHLOROETHANE	34	-159	-2.647	1.645	Downward Trend
MW09-23S	1,1,2,2-TETRACHLOROETHANE	35	-241	-3.965	1.645	Downward Trend
MW09-23S	1,1,2-TRICHLOROETHANE	35	-171	-2.801	1.645	Downward Trend
MW09-23S	1,1-DICHLOROETHANE	34	-207	-3.610	1.645	Downward Trend
MW09-23S	1,1-DICHLOROETHENE	34	-155	-2.862	1.645	Downward Trend
MW09-23S	1,2-DICHLOROETHANE	35	-213	-3.365	1.645	Downward Trend
MW09-23S	1,2-DICHLOROETHENE, TOTAL	30	-150	-2.761	1.645	Downward Trend
MW09-23S	1,2-DICHLOROPROPANE	35	-110	-1.641	1.645	Not Significant
MW09-23S	2-BUTANONE	26	-120	-3.400	1.645	Downward Trend
MW09-23S	2-HEXANONE	29	-151	-3.620	1.645	Downward Trend
MW09-23S	4-METHYL-2-PENTANONE	33	-241	-4.608	1.645	Downward Trend
MW09-23S	ACETONE	27	-102	-2.332	1.645	Downward Trend
MW09-23S	BENZENE	32	-31	-0.5127	1.645	Not Significant
MW09-23S	BROMODICHLOROMETHANE	34	-159	-2.647	1.645	Downward Trend
MW09-23S	BROMOFORM	32	-94	-1.710	1.645	Downward Trend
MW09-23S	BROMOMETHANE	34	-32	-0.5178	1.645	Not Significant
MW09-23S	CARBON DISULFIDE	34	-127	-1.957	1.645	Downward Trend
MW09-23S	CARBON TETRACHLORIDE	34	-108	-1.828	1.645	Downward Trend
MW09-23S	CHLOROBENZENE	33	-43	-0.6669	1.645	Not Significant
MW09-23S	CHLOROETHANE	34	-154	-2.427	1.645	Downward Trend
MW09-23S	CHLOROFORM	35	-189	-2.984	1.645	Downward Trend
MW09-23S	CHLOROMETHANE	34	-114	-1.821	1.645	Downward Trend
MW09-23S	CIS-1,2-DICHLOROETHENE	33	-159	-2.746	1.645	Downward Trend
MW09-23S	CIS-1,3-DICHLOROPROPENE	34	-167	-2.798	1.645	Downward Trend
MW09-23S	DIBROMOCHLOROMETHANE	34	-92	-1.554	1.645	Not Significant
MW09-23S	ETHYLBENZENE	32	-160	-3.073	1.645	Downward Trend
MW09-23S	M- AND P-XYLENE	4	-3	-3	6	Not Significant
MW09-23S	METHYLENE CHLORIDE	35	63	0.9099	1.645	Not Significant
MW09-23S	O-XYLENE	4	-3	-3	6	Not Significant
MW09-23S	STYRENE	32	-64	-1.067	1.645	Not Significant
MW09-23S	TETRACHLOROETHENE	35	-150	-2.406	1.645	Downward Trend
MW09-23S	TOLUENE	32	-160	-3.073	1.645	Downward Trend
MW09-23S	TRANS-1,2-DICHLOROETHENE	33	-95	-1.665	1.645	Downward Trend
MW09-23S	TRANS-1,3-DICHLOROPROPENE	34	-161	-2.657	1.645	Downward Trend
MW09-23S	TRICHLOROETHENE	35	-213	-3.365	1.645	Downward Trend
MW09-23S	VINYL CHLORIDE	35	-148	-2.423	1.645	Downward Trend
MW09-23S	XYLENES, TOTAL	11	-15	-1.152	1.645	Not Significant
MW09-24D	PENTACHLOROPHENOL	22	-77	-2.291	1.645	Downward Trend
MW09-24D	ALUMINUM	35	92	1.307	1.645	Not Significant
MW09-24D	ANTIMONY	35	-142	-2.040	1.645	Downward Trend
MW09-24D	ARSENIC	35	264	3.736	1.645	Upward Trend
MW09-24D	BARIUM	2	---	---	NA	NA
MW09-24D	BERYLLIUM	35	9	0.1159	1.645	Not Significant
MW09-24D	CADMIUM	2	---	---	NA	NA
MW09-24D	CALCIUM	2	---	---	NA	NA
MW09-24D	CHROMIUM, TOTAL	35	71	1.001	1.645	Not Significant
MW09-24D	COBALT	2	---	---	NA	NA
MW09-24D	COPPER	35	-35	-0.4941	1.645	Not Significant
MW09-24D	IRON	35	441	6.252	1.645	Upward Trend
MW09-24D	LEAD	35	-93	-1.337	1.645	Not Significant
MW09-24D	MAGNESIUM	2	---	---	NA	NA
MW09-24D	MANGANESE	35	424	6.009	1.645	Upward Trend
MW09-24D	MERCURY	34	-11	-0.1562	1.645	Not Significant
MW09-24D	NICKEL	35	-44	-0.6214	1.645	Not Significant
MW09-24D	POTASSIUM	2	---	---	NA	NA
MW09-24D	SELENIUM	2	---	---	NA	NA
MW09-24D	SILVER	2	---	---	NA	NA
MW09-24D	SODIUM	2	---	---	NA	NA
MW09-24D	VANADIUM	2	---	---	NA	NA
MW09-24D	ZINC	35	23	0.3144	1.645	Not Significant
MW09-24D	AROCLOR-1016	24	54	1.353	1.645	Not Significant
MW09-24D	AROCLOR-1221	24	9	0.2037	1.645	Not Significant
MW09-24D	AROCLOR-1232	24	54	1.353	1.645	Not Significant
MW09-24D	AROCLOR-1242	24	51	1.286	1.645	Not Significant
MW09-24D	AROCLOR-1248	24	41	1.028	1.645	Not Significant
MW09-24D	AROCLOR-1254	24	54	1.353	1.645	Not Significant
MW09-24D	AROCLOR-1260	24	54	1.353	1.645	Not Significant
MW09-24D	POLYCHLORINATED BIPHENYLS (PCBS)	22	-89	-2.511	1.645	Downward Trend
MW09-24D	4,4-DDD	24	108	2.743	1.645	Upward Trend
MW09-24D	4,4-DDE	24	108	2.743	1.645	Upward Trend
MW09-24D	4,4-DDT	24	108	2.743	1.645	Upward Trend
MW09-24D	ALDRIN	24	103	2.573	1.645	Upward Trend
MW09-24D	ALPHA-BHC	24	104	2.616	1.645	Upward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-24D	ALPHA-CHLORDANE	24	94	2.347	1.645	Upward Trend
MW09-24D	DELTA-BHC	24	103	2.589	1.645	Upward Trend
MW09-24D	ENDOSULFAN I	24	104	2.616	1.645	Upward Trend
MW09-24D	ENDOSULFAN II	24	108	2.743	1.645	Upward Trend
MW09-24D	LINDANE	24	104	2.616	1.645	Upward Trend
MW09-24D	BETA-BHC	24	104	2.616	1.645	Upward Trend
MW09-24D	DIELDRIN	24	101	2.590	1.645	Upward Trend
MW09-24D	ENDOSULFAN SULFATE	24	108	2.743	1.645	Upward Trend
MW09-24D	ENDRIN	24	108	2.741	1.645	Upward Trend
MW09-24D	ENDRIN KETONE	24	108	2.743	1.645	Upward Trend
MW09-24D	HEPTACHLOR	24	95	2.373	1.645	Upward Trend
MW09-24D	HEPTACHLOR EPOXIDE	24	104	2.616	1.645	Upward Trend
MW09-24D	HEXACHLOROBENZENE	22	131	3.780	1.645	Upward Trend
MW09-24D	METHOXYCHLOR	24	86	2.267	1.645	Upward Trend
MW09-24D	1,2,4-TRICHLOROBENZENE	22	50	1.616	1.645	Not Significant
MW09-24D	1,2-DICHLOROBENZENE	22	50	1.616	1.645	Not Significant
MW09-24D	1,3-DICHLOROBENZENE	22	50	1.616	1.645	Not Significant
MW09-24D	1,4-DICHLOROBENZENE	22	50	1.616	1.645	Not Significant
MW09-24D	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-24D	2,2'-OXYBIS(1-CHLOROPROPANE)	18	34	1.596	1.645	Not Significant
MW09-24D	2,4,5-TRICHLOROPHENOL	22	-90	-2.652	1.645	Downward Trend
MW09-24D	2,4,6-TRICHLOROPHENOL	22	109	3.311	1.645	Upward Trend
MW09-24D	2,4-DICHLOROPHENOL	22	109	3.311	1.645	Upward Trend
MW09-24D	2,4-DIMETHYLPHENOL	21	77	2.435	1.645	Upward Trend
MW09-24D	2,4-DINITROPHENOL	22	107	3.246	1.645	Upward Trend
MW09-24D	2,4-DINITROTOLUENE	22	109	3.311	1.645	Upward Trend
MW09-24D	2,6-DINITROTOLUENE	22	109	3.311	1.645	Upward Trend
MW09-24D	2-CHLORONAPHTHALENE	22	50	1.616	1.645	Not Significant
MW09-24D	2-CHLOROPHENOL	22	50	1.616	1.645	Not Significant
MW09-24D	2-METHYLNAPHTHALENE	22	108	3.271	1.645	Upward Trend
MW09-24D	2-METHYLPHENOL	22	109	3.311	1.645	Upward Trend
MW09-24D	2-NITROANILINE	22	29	1.186	1.645	Not Significant
MW09-24D	2-NITROPHENOL	22	109	3.311	1.645	Upward Trend
MW09-24D	3- AND 4-METHYLPHENOL	11	7	0.5547	1.645	Not Significant
MW09-24D	3,3-DICHLOROBENZIDINE	19	42	1.627	1.645	Not Significant
MW09-24D	3-NITROANILINE	22	29	1.186	1.645	Not Significant
MW09-24D	4,6-DINITRO-2-METHYLPHENOL	21	29	1.248	1.645	Not Significant
MW09-24D	4-BROMOPHENYL-PHENYLETHER	22	50	1.616	1.645	Not Significant
MW09-24D	4-CHLORO-3-METHYLPHENOL	22	87	2.590	1.645	Upward Trend
MW09-24D	4-CHLOROANILINE	22	109	3.311	1.645	Upward Trend
MW09-24D	4-CHLOROPHENYL-PHENYLETHER	22	50	1.616	1.645	Not Significant
MW09-24D	4-METHYLPHENOL	10	0	0	NA	No Trend
MW09-24D	4-NITROANILINE	22	29	1.186	1.645	Not Significant
MW09-24D	4-NITROPHENOL	21	78	2.493	1.645	Upward Trend
MW09-24D	ACENAPHTHENE	22	76	2.262	1.645	Upward Trend
MW09-24D	ACENAPHTHYLENE	22	-133	-3.944	1.645	Downward Trend
MW09-24D	ANTHRACENE	22	122	3.699	1.645	Upward Trend
MW09-24D	BENZO(A)ANTHRACENE	22	115	3.495	1.645	Upward Trend
MW09-24D	BENZO(A)PYRENE	22	122	3.654	1.645	Upward Trend
MW09-24D	BENZO(B)FLUORANTHENE	22	111	3.241	1.645	Upward Trend
MW09-24D	BENZO(G,H,I)PERYLENE	22	94	2.750	1.645	Upward Trend
MW09-24D	BENZO(K)FLUORANTHENE	22	105	3.251	1.645	Upward Trend
MW09-24D	BENZOIC ACID	5	4	4	8	Not Significant
MW09-24D	BENZYL ALCOHOL	5	7	7	8	Not Significant
MW09-24D	BIS(2-CHLOROETHOXY)METHANE	22	50	1.616	1.645	Not Significant
MW09-24D	BIS(2-CHLOROETHYL)ETHER	22	50	1.616	1.645	Not Significant
MW09-24D	BIS(2-CHLOROISOPROPYL)ETHER	4	5	5	6	Not Significant
MW09-24D	BIS(2-ETHYLHEXYL)PHTHALATE	22	3	0.05721	1.645	Not Significant
MW09-24D	BUTYLBENZYLPHTHALATE	22	70	2.105	1.645	Upward Trend
MW09-24D	CARBAZOLE	22	50	1.616	1.645	Not Significant
MW09-24D	CHRYSENE	22	95	2.882	1.645	Upward Trend
MW09-24D	CRESOLS	1	---	---	NA	NA
MW09-24D	DIBENZ(A,H)ANTHRACENE	22	88	2.627	1.645	Upward Trend
MW09-24D	DIBENZOFURAN	22	60	1.959	1.645	Upward Trend
MW09-24D	DIETHYLPHTHALATE	22	70	2.105	1.645	Upward Trend
MW09-24D	DIMETHYL PHTHALATE	22	70	2.105	1.645	Upward Trend
MW09-24D	DI-N-BUTYLPHTHALATE	22	81	2.398	1.645	Upward Trend
MW09-24D	DI-N-OCTYLPHTHALATE	22	70	2.105	1.645	Upward Trend
MW09-24D	FLUORANTHENE	22	80	2.386	1.645	Upward Trend
MW09-24D	FLUORENE	22	82	2.446	1.645	Upward Trend
MW09-24D	HEXACHLOROBUTADIENE	22	50	1.616	1.645	Not Significant
MW09-24D	HEXACHLOROCYCLOPENTADIENE	22	29	1.186	1.645	Not Significant
MW09-24D	HEXACHLOROETHANE	22	50	1.616	1.645	Not Significant
MW09-24D	INDENO(1,2,3-CD)PYRENE	22	95	2.882	1.645	Upward Trend
MW09-24D	ISOPHORONE	22	50	1.616	1.645	Not Significant
MW09-24D	NAPHTHALENE	22	84	2.534	1.645	Upward Trend
MW09-24D	NITROBENZENE	22	50	1.616	1.645	Not Significant
MW09-24D	N-NITROSODINPROPYLAMINE	22	50	1.616	1.645	Not Significant
MW09-24D	N-NITROSODIPHENYLAMINE	21	44	1.499	1.645	Not Significant

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-24D	PHENANTHRENE	22	104	3.083	1.645	Upward Trend
MW09-24D	PHENOL	22	50	1.616	1.645	Not Significant
MW09-24D	PYRENE	22	111	3.310	1.645	Upward Trend
MW09-24D	1,1,1-TRICHLOROETHANE	34	-159	-2.647	1.645	Downward Trend
MW09-24D	1,1,2,2-TETRACHLOROETHANE	35	-241	-3.965	1.645	Downward Trend
MW09-24D	1,1,2-TRICHLOROETHANE	35	-171	-2.801	1.645	Downward Trend
MW09-24D	1,1-DICHLOROETHANE	34	-207	-3.610	1.645	Downward Trend
MW09-24D	1,1-DICHLOROETHENE	34	-155	-2.862	1.645	Downward Trend
MW09-24D	1,2-DICHLOROETHANE	35	-213	-3.365	1.645	Downward Trend
MW09-24D	1,2-DICHLOROETHENE, TOTAL	31	-158	-2.786	1.645	Downward Trend
MW09-24D	1,2-DICHLOROPROPANE	35	-110	-1.641	1.645	Not Significant
MW09-24D	2-BUTANONE	26	-120	-3.400	1.645	Downward Trend
MW09-24D	2-HEXANONE	29	-151	-3.620	1.645	Downward Trend
MW09-24D	4-METHYL-2-PENTANONE	33	-241	-4.608	1.645	Downward Trend
MW09-24D	ACETONE	26	-107	-2.774	1.645	Downward Trend
MW09-24D	BENZENE	35	-224	-3.175	1.645	Downward Trend
MW09-24D	BROMODICHLOROMETHANE	34	-159	-2.647	1.645	Downward Trend
MW09-24D	BROMOFORM	32	-94	-1.710	1.645	Downward Trend
MW09-24D	BROMOMETHANE	34	-25	-0.3985	1.645	Not Significant
MW09-24D	CARBON DISULFIDE	34	-122	-1.904	1.645	Downward Trend
MW09-24D	CARBON TETRACHLORIDE	34	-108	-1.828	1.645	Downward Trend
MW09-24D	CHLOROBENZENE	35	-189	-2.984	1.645	Downward Trend
MW09-24D	CHLOROETHANE	35	-152	-2.314	1.645	Downward Trend
MW09-24D	CHLOROFORM	35	-170	-2.638	1.645	Downward Trend
MW09-24D	CHLOROMETHANE	34	-114	-1.821	1.645	Downward Trend
MW09-24D	CIS-1,2-DICHLOROETHENE	34	-159	-2.647	1.645	Downward Trend
MW09-24D	CIS-1,3-DICHLOROPROPENE	34	-167	-2.798	1.645	Downward Trend
MW09-24D	DIBROMOCHLOROMETHANE	34	-92	-1.554	1.645	Not Significant
MW09-24D	ETHYLBENZENE	35	-181	-3.132	1.645	Downward Trend
MW09-24D	M- AND P-XYLENE	6	-6	-6	11	Not Significant
MW09-24D	METHYLENE CHLORIDE	35	9	0.1174	1.645	Not Significant
MW09-24D	O-XYLENE	6	0	0	NA	No Trend
MW09-24D	STYRENE	34	-67	-1.038	1.645	Not Significant
MW09-24D	TETRACHLOROETHENE	35	-150	-2.406	1.645	Downward Trend
MW09-24D	TOLUENE	35	-95	-1.518	1.645	Not Significant
MW09-24D	TRANS-1,2-DICHLOROETHENE	34	-92	-1.554	1.645	Not Significant
MW09-24D	TRANS-1,3-DICHLOROPROPENE	34	-161	-2.657	1.645	Downward Trend
MW09-24D	TRICHLOROETHENE	35	-170	-2.601	1.645	Downward Trend
MW09-24D	VINYL CHLORIDE	35	-224	-3.528	1.645	Downward Trend
MW09-24D	XYLENES, TOTAL	12	-4	-0.2147	1.645	Not Significant
MW09-24S	PENTACHLOROPHENOL	22	-97	-2.894	1.645	Downward Trend
MW09-24S	ALUMINUM	33	73	1.134	1.645	Not Significant
MW09-24S	ANTIMONY	33	-115	-1.806	1.645	Downward Trend
MW09-24S	ARSENIC	33	32	0.4861	1.645	Not Significant
MW09-24S	BARIUM	2	---	---	NA	NA
MW09-24S	BERYLLIUM	33	2	0.01586	1.645	Not Significant
MW09-24S	CADMIUM	2	---	---	NA	NA
MW09-24S	CALCIUM	2	---	---	NA	NA
MW09-24S	CHROMIUM, TOTAL	33	44	0.6741	1.645	Not Significant
MW09-24S	COBALT	2	---	---	NA	NA
MW09-24S	COPPER	33	8	0.1115	1.645	Not Significant
MW09-24S	IRON	33	-134	-2.061	1.645	Downward Trend
MW09-24S	LEAD	33	-27	-0.4143	1.645	Not Significant
MW09-24S	MAGNESIUM	2	---	---	NA	NA
MW09-24S	MANGANESE	33	-157	-2.419	1.645	Downward Trend
MW09-24S	MERCURY	32	1	0	1.645	Not Significant
MW09-24S	NICKEL	33	-63	-0.9770	1.645	Not Significant
MW09-24S	POTASSIUM	2	---	---	NA	NA
MW09-24S	SELENIUM	2	---	---	NA	NA
MW09-24S	SILVER	2	---	---	NA	NA
MW09-24S	SODIUM	2	---	---	NA	NA
MW09-24S	VANADIUM	2	---	---	NA	NA
MW09-24S	ZINC	33	-2	-0.01557	1.645	Not Significant
MW09-24S	AROCLOR-1016	23	56	1.487	1.645	Not Significant
MW09-24S	AROCLOR-1221	23	35	0.9178	1.645	Not Significant
MW09-24S	AROCLOR-1232	23	56	1.487	1.645	Not Significant
MW09-24S	AROCLOR-1242	23	68	1.811	1.645	Upward Trend
MW09-24S	AROCLOR-1248	23	56	1.487	1.645	Not Significant
MW09-24S	AROCLOR-1254	23	56	1.487	1.645	Not Significant
MW09-24S	AROCLOR-1260	23	56	1.487	1.645	Not Significant
MW09-24S	POLYCHLORINATED BIPHENYLS (PCBS)	22	-91	-2.568	1.645	Downward Trend
MW09-24S	4,4-DDD	23	134	3.648	1.645	Upward Trend
MW09-24S	4,4-DDE	23	127	3.482	1.645	Upward Trend
MW09-24S	4,4-DDT	23	130	3.549	1.645	Upward Trend
MW09-24S	ALDRIN	23	129	3.533	1.645	Upward Trend
MW09-24S	ALPHA-BHC	23	129	3.533	1.645	Upward Trend
MW09-24S	ALPHA-CHLORDANE	23	119	3.201	1.645	Upward Trend
MW09-24S	DELTA-BHC	23	128	3.504	1.645	Upward Trend
MW09-24S	ENDOSULFAN I	23	129	3.533	1.645	Upward Trend

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-24S	ENDOSULFAN II	23	118	3.184	1.645	Upward Trend
MW09-24S	LINDANE	23	129	3.533	1.645	Upward Trend
MW09-24S	BETA-BHC	23	127	3.443	1.645	Upward Trend
MW09-24S	DIELDRIN	23	120	3.327	1.645	Upward Trend
MW09-24S	ENDOSULFAN SULFATE	23	130	3.549	1.645	Upward Trend
MW09-24S	ENDRIN	23	124	3.380	1.645	Upward Trend
MW09-24S	ENDRIN KETONE	23	127	3.482	1.645	Upward Trend
MW09-24S	HEPTACHLOR	23	119	3.228	1.645	Upward Trend
MW09-24S	HEPTACHLOR EPOXIDE	23	131	3.553	1.645	Upward Trend
MW09-24S	HEXACHLOROBENZENE	22	133	3.916	1.645	Upward Trend
MW09-24S	METHOXYCHLOR	23	29	0.8456	1.645	Not Significant
MW09-24S	1,2,4-TRICHLOROBENZENE	22	24	0.8325	1.645	Not Significant
MW09-24S	1,2-DICHLOROBENZENE	22	24	0.8325	1.645	Not Significant
MW09-24S	1,3-DICHLOROBENZENE	22	24	0.8325	1.645	Not Significant
MW09-24S	1,4-DICHLOROBENZENE	22	24	0.8325	1.645	Not Significant
MW09-24S	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-24S	2,2'-OXYBIS(1-CHLOROPROPANE)	18	34	1.596	1.645	Not Significant
MW09-24S	2,4,5-TRICHLOROPHENOL	22	-90	-2.652	1.645	Downward Trend
MW09-24S	2,4,6-TRICHLOROPHENOL	22	109	3.349	1.645	Upward Trend
MW09-24S	2,4-DICHLOROPHENOL	22	109	3.349	1.645	Upward Trend
MW09-24S	2,4-DIMETHYLPHENOL	21	80	2.551	1.645	Upward Trend
MW09-24S	2,4-DINITROPHENOL	22	109	3.307	1.645	Upward Trend
MW09-24S	2,4-DINITROTOLUENE	20	107	3.915	1.645	Upward Trend
MW09-24S	2,6-DINITROTOLUENE	20	107	3.915	1.645	Upward Trend
MW09-24S	2-CHLORONAPHTHALENE	22	24	0.8325	1.645	Not Significant
MW09-24S	2-CHLOROPHENOL	22	24	0.8325	1.645	Not Significant
MW09-24S	2-METHYLNAPHTHALENE	22	50	1.478	1.645	Not Significant
MW09-24S	2-METHYLPHENOL	22	109	3.349	1.645	Upward Trend
MW09-24S	2-NITROANILINE	21	20	1.138	1.645	Not Significant
MW09-24S	2-NITROPHENOL	22	109	3.349	1.645	Upward Trend
MW09-24S	3- AND 4-METHYLPHENOL	11	8	0.7047	1.645	Not Significant
MW09-24S	3,3-DICHLOROBENZIDINE	19	19	0.7720	1.645	Not Significant
MW09-24S	3-NITROANILINE	21	20	1.138	1.645	Not Significant
MW09-24S	4,6-DINITRO-2-METHYLPHENOL	21	18	0.8514	1.645	Not Significant
MW09-24S	4-BROMOPHENYL-PHENYLETHER	22	24	0.8325	1.645	Not Significant
MW09-24S	4-CHLORO-3-METHYLPHENOL	22	90	2.699	1.645	Upward Trend
MW09-24S	4-CHLOROANILINE	22	109	3.349	1.645	Upward Trend
MW09-24S	4-CHLOROPHENYL-PHENYLETHER	22	24	0.8325	1.645	Not Significant
MW09-24S	4-METHYLPHENOL	10	0	0	NA	No Trend
MW09-24S	4-NITROANILINE	21	20	1.138	1.645	Not Significant
MW09-24S	4-NITROPHENOL	21	80	2.558	1.645	Upward Trend
MW09-24S	ACENAPHTHENE	22	-32	-0.9014	1.645	Not Significant
MW09-24S	ACENAPHTHYLENE	22	-146	-4.270	1.645	Downward Trend
MW09-24S	ANTHRACENE	22	108	3.231	1.645	Upward Trend
MW09-24S	BENZO(A)ANTHRACENE	22	99	2.972	1.645	Upward Trend
MW09-24S	BENZO(A)PYRENE	22	106	3.137	1.645	Upward Trend
MW09-24S	BENZO(B)FLUORANTHENE	22	95	2.741	1.645	Upward Trend
MW09-24S	BENZO(G,H,I)PERYLENE	22	78	2.254	1.645	Upward Trend
MW09-24S	BENZO(K)FLUORANTHENE	22	89	2.719	1.645	Upward Trend
MW09-24S	BENZOIC ACID	5	4	4	8	Not Significant
MW09-24S	BENZYL ALCOHOL	5	7	7	8	Not Significant
MW09-24S	BIS(2-CHLOROETHOXY)METHANE	22	24	0.8325	1.645	Not Significant
MW09-24S	BIS(2-CHLOROETHYL)ETHER	22	24	0.8325	1.645	Not Significant
MW09-24S	BIS(2-CHLOROISOPROPYL)ETHER	4	3	3	6	Not Significant
MW09-24S	BIS(2-ETHYLHEXYL)PHTHALATE	22	-10	-0.2620	1.645	Not Significant
MW09-24S	BUTYLBENZYLPHTHALATE	22	48	1.516	1.645	Not Significant
MW09-24S	CARBAZOLE	22	24	0.8325	1.645	Not Significant
MW09-24S	CHRYSENE	22	79	2.365	1.645	Upward Trend
MW09-24S	CRESOLS	1	---	---	NA	NA
MW09-24S	DIBENZ(A,H)ANTHRACENE	22	72	2.113	1.645	Upward Trend
MW09-24S	DIBENZOFURAN	22	31	1.088	1.645	Not Significant
MW09-24S	DIETHYLPHTHALATE	22	48	1.516	1.645	Not Significant
MW09-24S	DIMETHYL PHTHALATE	22	48	1.516	1.645	Not Significant
MW09-24S	DI-N-BUTYLPHTHALATE	22	48	1.516	1.645	Not Significant
MW09-24S	DI-N-OCTYLPHTHALATE	22	48	1.516	1.645	Not Significant
MW09-24S	FLUORANTHENE	22	74	2.204	1.645	Upward Trend
MW09-24S	FLUORENE	22	126	3.725	1.645	Upward Trend
MW09-24S	HEXACHLOROBUTADIENE	22	24	0.8325	1.645	Not Significant
MW09-24S	HEXACHLOROCYCLOPENTADIENE	22	19	0.8584	1.645	Not Significant
MW09-24S	HEXACHLOROETHANE	22	24	0.8325	1.645	Not Significant
MW09-24S	INDENO(1,2,3-CD)PYRENE	22	79	2.365	1.645	Upward Trend
MW09-24S	ISOPHORONE	22	24	0.8325	1.645	Not Significant
MW09-24S	NAPHTHALENE	22	49	1.447	1.645	Not Significant
MW09-24S	NITROBENZENE	20	23	1.031	1.645	Not Significant
MW09-24S	N-NITROSODINPROPYLAMINE	22	24	0.8325	1.645	Not Significant
MW09-24S	N-NITROSODIPHENYLAMINE	21	20	0.7247	1.645	Not Significant
MW09-24S	PHENANTHRENE	22	111	3.323	1.645	Upward Trend
MW09-24S	PHENOL	22	24	0.8325	1.645	Not Significant
MW09-24S	PYRENE	22	74	2.256	1.645	Upward Trend

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-24S	1,1,1-TRICHLOROETHANE	34	-159	-2.647	1.645	Downward Trend
MW09-24S	1,1,2,2-TETRACHLOROETHANE	35	-241	-3.965	1.645	Downward Trend
MW09-24S	1,1,2-TRICHLOROETHANE	35	-171	-2.801	1.645	Downward Trend
MW09-24S	1,1-DICHLOROETHANE	34	-207	-3.610	1.645	Downward Trend
MW09-24S	1,1-DICHLOROETHENE	34	-155	-2.862	1.645	Downward Trend
MW09-24S	1,2-DICHLOROETHANE	35	-213	-3.365	1.645	Downward Trend
MW09-24S	1,2-DICHLOROETHENE, TOTAL	31	-137	-2.392	1.645	Downward Trend
MW09-24S	1,2-DICHLOROPROPANE	35	-110	-1.641	1.645	Not Significant
MW09-24S	2-BUTANONE	26	-120	-3.400	1.645	Downward Trend
MW09-24S	2-HEXANONE	29	-151	-3.620	1.645	Downward Trend
MW09-24S	4-METHYL-2-PENTANONE	33	-241	-4.608	1.645	Downward Trend
MW09-24S	ACETONE	27	-49	-1.132	1.645	Not Significant
MW09-24S	BENZENE	35	-55	-0.7894	1.645	Not Significant
MW09-24S	BROMODICHLOROMETHANE	34	-159	-2.647	1.645	Downward Trend
MW09-24S	BROMOFORM	32	-94	-1.710	1.645	Downward Trend
MW09-24S	BROMOMETHANE	34	-23	-0.3708	1.645	Not Significant
MW09-24S	CARBON DISULFIDE	34	-149	-2.347	1.645	Downward Trend
MW09-24S	CARBON TETRACHLORIDE	34	-108	-1.828	1.645	Downward Trend
MW09-24S	CHLOROBENZENE	35	-188	-2.919	1.645	Downward Trend
MW09-24S	CHLOROETHANE	35	-152	-2.314	1.645	Downward Trend
MW09-24S	CHLOROFORM	35	-189	-2.984	1.645	Downward Trend
MW09-24S	CHLOROMETHANE	34	-114	-1.821	1.645	Downward Trend
MW09-24S	CIS-1,2-DICHLOROETHENE	34	-148	-2.380	1.645	Downward Trend
MW09-24S	CIS-1,3-DICHLOROPROPENE	34	-167	-2.798	1.645	Downward Trend
MW09-24S	DIBROMOCHLOROMETHANE	34	-92	-1.554	1.645	Not Significant
MW09-24S	ETHYLBENZENE	35	-181	-3.132	1.645	Downward Trend
MW09-24S	M- AND P-XYLENE	6	-6	-6	11	Not Significant
MW09-24S	METHYLENE CHLORIDE	35	63	0.9099	1.645	Not Significant
MW09-24S	O-XYLENE	6	1	1	11	Not Significant
MW09-24S	STYRENE	34	-67	-1.038	1.645	Not Significant
MW09-24S	TETRACHLOROETHENE	35	-150	-2.406	1.645	Downward Trend
MW09-24S	TOLUENE	35	-181	-3.132	1.645	Downward Trend
MW09-24S	TRANS-1,2-DICHLOROETHENE	34	-92	-1.554	1.645	Not Significant
MW09-24S	TRANS-1,3-DICHLOROPROPENE	34	-161	-2.657	1.645	Downward Trend
MW09-24S	TRICHLOROETHENE	35	-188	-2.919	1.645	Downward Trend
MW09-24S	VINYL CHLORIDE	35	-156	-2.554	1.645	Downward Trend
MW09-24S	XYLENES, TOTAL	12	8	0.5009	1.645	Not Significant
MW09-25S	PENTACHLOROPHENOL	25	-90	-2.193	1.645	Downward Trend
MW09-25S	ALUMINUM	42	38	0.4038	1.645	Not Significant
MW09-25S	ANTIMONY	42	-308	-3.368	1.645	Downward Trend
MW09-25S	ARSENIC	42	-83	-0.9078	1.645	Not Significant
MW09-25S	BARIUM	2	---	---	NA	NA
MW09-25S	BERYLLIUM	42	-86	-0.9352	1.645	Not Significant
MW09-25S	CADMIUM	2	---	---	NA	NA
MW09-25S	CALCIUM	2	---	---	NA	NA
MW09-25S	CHROMIUM, TOTAL	42	61	0.6557	1.645	Not Significant
MW09-25S	COBALT	2	---	---	NA	NA
MW09-25S	COPPER	42	-80	-0.8707	1.645	Not Significant
MW09-25S	IRON	42	-482	-5.215	1.645	Downward Trend
MW09-25S	LEAD	42	-106	-1.161	1.645	Not Significant
MW09-25S	MAGNESIUM	2	---	---	NA	NA
MW09-25S	MANGANESE	42	-95	-1.019	1.645	Not Significant
MW09-25S	MERCURY	41	55	0.6377	1.645	Not Significant
MW09-25S	NICKEL	42	7	0.06588	1.645	Not Significant
MW09-25S	POTASSIUM	2	---	---	NA	NA
MW09-25S	SELENIUM	2	---	---	NA	NA
MW09-25S	SILVER	2	---	---	NA	NA
MW09-25S	SODIUM	2	---	---	NA	NA
MW09-25S	VANADIUM	2	---	---	NA	NA
MW09-25S	ZINC	42	117	1.260	1.645	Not Significant
MW09-25S	AROCLOR-1016	42	4	0.03277	1.645	Not Significant
MW09-25S	AROCLOR-1221	42	-113	-1.222	1.645	Not Significant
MW09-25S	AROCLOR-1232	42	2	0.01092	1.645	Not Significant
MW09-25S	AROCLOR-1242	42	-19	-0.1971	1.645	Not Significant
MW09-25S	AROCLOR-1248	42	-25	-0.2627	1.645	Not Significant
MW09-25S	AROCLOR-1254	42	2	0.01092	1.645	Not Significant
MW09-25S	AROCLOR-1260	42	24	0.2504	1.645	Not Significant
MW09-25S	POLYCHLORINATED BIPHENYLS (PCBS)	40	60	0.6903	1.645	Not Significant
MW09-25S	4,4-DDD	23	114	3.099	1.645	Upward Trend
MW09-25S	4,4-DDE	23	114	3.099	1.645	Upward Trend
MW09-25S	4,4-DDT	23	114	3.099	1.645	Upward Trend
MW09-25S	ALDRIN	23	116	3.115	1.645	Upward Trend
MW09-25S	ALPHA-BHC	23	116	3.115	1.645	Upward Trend
MW09-25S	ALPHA-CHLORDANE	23	105	2.798	1.645	Upward Trend
MW09-25S	DELTA-BHC	23	113	3.032	1.645	Upward Trend
MW09-25S	ENDOSULFAN I	23	115	3.089	1.645	Upward Trend
MW09-25S	ENDOSULFAN II	23	119	3.233	1.645	Upward Trend
MW09-25S	LINDANE	23	115	3.089	1.645	Upward Trend
MW09-25S	BETA-BHC	23	115	3.089	1.645	Upward Trend

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-25S	DIELDRIN	23	106	2.910	1.645	Upward Trend
MW09-25S	ENDOSULFAN SULFATE	23	119	3.233	1.645	Upward Trend
MW09-25S	ENDRIN	23	113	3.065	1.645	Upward Trend
MW09-25S	ENDRIN KETONE	23	119	3.233	1.645	Upward Trend
MW09-25S	HEPTACHLOR	23	105	2.802	1.645	Upward Trend
MW09-25S	HEPTACHLOR EPOXIDE	23	115	3.089	1.645	Upward Trend
MW09-25S	HEXACHLOROBENZENE	25	191	4.532	1.645	Upward Trend
MW09-25S	METHOXYCHLOR	23	63	1.745	1.645	Upward Trend
MW09-25S	1,2,4-TRICHLOROBENZENE	25	51	1.179	1.645	Not Significant
MW09-25S	1,2-DICHLOROBENZENE	25	-50	-1.202	1.645	Not Significant
MW09-25S	1,3-DICHLOROBENZENE	25	49	1.128	1.645	Not Significant
MW09-25S	1,4-DICHLOROBENZENE	25	90	2.088	1.645	Upward Trend
MW09-25S	1-METHYLNAPHTHALENE	3	---	---	NA	NA
MW09-25S	2,2'-OXYBIS(1-CHLOROPROPANE)	20	34	1.151	1.645	Not Significant
MW09-25S	2,4,5-TRICHLOROPHENOL	25	-154	-3.691	1.645	Downward Trend
MW09-25S	2,4,6-TRICHLOROPHENOL	25	53	1.286	1.645	Not Significant
MW09-25S	2,4-DICHLOROPHENOL	25	53	1.286	1.645	Not Significant
MW09-25S	2,4-DIMETHYLPHENOL	23	41	1.094	1.645	Not Significant
MW09-25S	2,4-DINITROPHENOL	24	77	2.046	1.645	Upward Trend
MW09-25S	2,4-DINITROTOLUENE	25	50	1.213	1.645	Not Significant
MW09-25S	2,6-DINITROTOLUENE	25	53	1.286	1.645	Not Significant
MW09-25S	2-CHLORONAPHTHALENE	25	21	0.4916	1.645	Not Significant
MW09-25S	2-CHLOROPHENOL	25	21	0.4916	1.645	Not Significant
MW09-25S	2-METHYLNAPHTHALENE	25	60	1.427	1.645	Not Significant
MW09-25S	2-METHYLPHENOL	25	53	1.286	1.645	Not Significant
MW09-25S	2-NITROANILINE	25	-27	-0.7738	1.645	Not Significant
MW09-25S	2-NITROPHENOL	25	53	1.286	1.645	Not Significant
MW09-25S	3- AND 4-METHYLPHENOL	11	11	0.9245	1.645	Not Significant
MW09-25S	3,3-DICHLOROBENZIDINE	21	91	2.956	1.645	Upward Trend
MW09-25S	3-NITROANILINE	25	-27	-0.7738	1.645	Not Significant
MW09-25S	4,6-DINITRO-2-METHYLPHENOL	24	-30	-0.9042	1.645	Not Significant
MW09-25S	4-BROMOPHENYL-PHENYLETHER	25	21	0.4916	1.645	Not Significant
MW09-25S	4-CHLORO-3-METHYLPHENOL	25	31	0.7332	1.645	Not Significant
MW09-25S	4-CHLOROANILINE	25	65	1.601	1.645	Not Significant
MW09-25S	4-CHLOROPHENYL-PHENYLETHER	25	21	0.4916	1.645	Not Significant
MW09-25S	4-METHYLPHENOL	13	-18	-1.678	1.645	Downward Trend
MW09-25S	4-NITROANILINE	25	-27	-0.7738	1.645	Not Significant
MW09-25S	4-NITROPHENOL	25	27	0.6319	1.645	Not Significant
MW09-25S	ACENAPHTHENE	25	60	1.456	1.645	Not Significant
MW09-25S	ACENAPHTHYLENE	25	-182	-4.426	1.645	Downward Trend
MW09-25S	ANTHRACENE	25	108	2.614	1.645	Upward Trend
MW09-25S	BENZO(A)ANTHRACENE	25	116	2.825	1.645	Upward Trend
MW09-25S	BENZO(A)PYRENE	25	113	2.723	1.645	Upward Trend
MW09-25S	BENZO(B)FLUORANTHENE	25	94	2.266	1.645	Upward Trend
MW09-25S	BENZO(G,H,I)PERYLENE	25	56	1.360	1.645	Not Significant
MW09-25S	BENZO(K)FLUORANTHENE	25	96	2.361	1.645	Upward Trend
MW09-25S	BENZOIC ACID	5	4	4	8	Not Significant
MW09-25S	BENZYL ALCOHOL	5	7	7	8	Not Significant
MW09-25S	BIS(2-CHLOROETHOXY)METHANE	25	34	0.8224	1.645	Not Significant
MW09-25S	BIS(2-CHLOROETHYL)ETHER	25	21	0.4916	1.645	Not Significant
MW09-25S	BIS(2-CHLOROISOPROPYL)ETHER	4	5	5	6	Not Significant
MW09-25S	BIS(2-ETHYLHEXYL)PHTHALATE	25	-25	-0.5727	1.645	Not Significant
MW09-25S	BUTYLBENZYLPHTHALATE	25	26	0.6093	1.645	Not Significant
MW09-25S	CARBAZOLE	25	21	0.4916	1.645	Not Significant
MW09-25S	CHRYSENE	25	96	2.334	1.645	Upward Trend
MW09-25S	CRESOLS	1	---	---	NA	NA
MW09-25S	DIBENZ(A,H)ANTHRACENE	25	54	1.354	1.645	Not Significant
MW09-25S	DIBENZOFURAN	25	35	0.8630	1.645	Not Significant
MW09-25S	DIETHYLPHTHALATE	25	26	0.6093	1.645	Not Significant
MW09-25S	DIMETHYL PHTHALATE	25	26	0.6089	1.645	Not Significant
MW09-25S	DI-N-BUTYLPHTHALATE	25	56	1.319	1.645	Not Significant
MW09-25S	DI-N-OCTYLPHTHALATE	25	26	0.6093	1.645	Not Significant
MW09-25S	FLUORANTHENE	25	62	1.490	1.645	Not Significant
MW09-25S	FLUORENE	25	74	1.790	1.645	Upward Trend
MW09-25S	HEXACHLOROBUTADIENE	25	15	0.3441	1.645	Not Significant
MW09-25S	HEXACHLOROCYCLOPENTADIENE	25	7	0.2023	1.645	Not Significant
MW09-25S	HEXACHLOROETHANE	25	15	0.3441	1.645	Not Significant
MW09-25S	INDENO(1,2,3-CD)PYRENE	25	76	1.834	1.645	Upward Trend
MW09-25S	ISOPHORONE	25	21	0.4916	1.645	Not Significant
MW09-25S	NAPHTHALENE	25	-64	-1.483	1.645	Not Significant
MW09-25S	NITROBENZENE	25	34	0.8224	1.645	Not Significant
MW09-25S	N-NITROSODINPROPYLAMINE	25	21	0.4916	1.645	Not Significant
MW09-25S	N-NITROSODIPHENYLAMINE	24	27	0.6829	1.645	Not Significant
MW09-25S	PHENANTHRENE	25	22	0.4939	1.645	Not Significant
MW09-25S	PHENOL	25	21	0.4916	1.645	Not Significant
MW09-25S	PYRENE	25	89	2.135	1.645	Upward Trend
MW09-25S	1,1,1-TRICHLOROETHANE	44	-284	-3.125	1.645	Downward Trend
MW09-25S	1,1,2,2-TETRACHLOROETHANE	44	-360	-4.190	1.645	Downward Trend
MW09-25S	1,1,2-TRICHLOROETHANE	44	-212	-2.448	1.645	Downward Trend

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-25S	1,1-DICHLOROETHANE	44	-360	-4.190	1.645	Downward Trend
MW09-25S	1,1-DICHLOROETHENE	44	-264	-3.070	1.645	Downward Trend
MW09-25S	1,2-DICHLOROETHANE	44	-316	-3.479	1.645	Downward Trend
MW09-25S	1,2-DICHLOROETHENE, TOTAL	40	-198	-2.353	1.645	Downward Trend
MW09-25S	1,2-DICHLOROPROPANE	44	-214	-2.274	1.645	Downward Trend
MW09-25S	2-BUTANONE	35	-179	-3.218	1.645	Downward Trend
MW09-25S	2-HEXANONE	41	-312	-4.193	1.645	Downward Trend
MW09-25S	4-METHYL-2-PENTANONE	43	-243	-2.991	1.645	Downward Trend
MW09-25S	ACETONE	34	-13	-0.1967	1.645	Not Significant
MW09-25S	BENZENE	44	63	0.6273	1.645	Not Significant
MW09-25S	BROMODICHLOROMETHANE	44	-284	-3.125	1.645	Downward Trend
MW09-25S	BROMOFORM	42	-154	-1.851	1.645	Downward Trend
MW09-25S	BROMOMETHANE	44	-92	-1.064	1.645	Not Significant
MW09-25S	CARBON DISULFIDE	44	-324	-3.490	1.645	Downward Trend
MW09-25S	CARBON TETRACHLORIDE	44	-174	-1.976	1.645	Downward Trend
MW09-25S	CHLOROBENZENE	44	76	0.7589	1.645	Not Significant
MW09-25S	CHLOROETHANE	43	-265	-3.004	1.645	Downward Trend
MW09-25S	CHLOROFORM	44	-284	-3.125	1.645	Downward Trend
MW09-25S	CHLOROMETHANE	44	-248	-2.729	1.645	Downward Trend
MW09-25S	CIS-1,2-DICHLOROETHENE	44	-275	-2.954	1.645	Downward Trend
MW09-25S	CIS-1,3-DICHLOROPROPENE	44	-192	-2.177	1.645	Downward Trend
MW09-25S	DIBROMOCHLOROMETHANE	44	-150	-1.702	1.645	Downward Trend
MW09-25S	ETHYLBENZENE	44	-299	-3.171	1.645	Downward Trend
MW09-25S	M- AND P-XYLENE	6	2	2	11	Not Significant
MW09-25S	METHYLENE CHLORIDE	44	98	1.008	1.645	Not Significant
MW09-25S	O-XYLENE	6	6	6	11	Not Significant
MW09-25S	STYRENE	44	-185	-1.935	1.645	Downward Trend
MW09-25S	TETRACHLOROETHENE	44	-186	-2.113	1.645	Downward Trend
MW09-25S	TOLUENE	44	-149	-1.663	1.645	Downward Trend
MW09-25S	TRANS-1,2-DICHLOROETHENE	44	-150	-1.702	1.645	Downward Trend
MW09-25S	TRANS-1,3-DICHLOROPROPENE	44	-182	-2.041	1.645	Downward Trend
MW09-25S	TRICHLOROETHENE	44	-254	-2.733	1.645	Downward Trend
MW09-25S	VINYL CHLORIDE	44	-73	-0.7907	1.645	Not Significant
MW09-25S	XYLENES, TOTAL	17	-42	-1.716	1.645	Downward Trend
MW09-26DA	PENTACHLOROPHENOL	1	---	---	NA	NA
MW09-26DA	ALUMINUM	1	---	---	NA	NA
MW09-26DA	ANTIMONY	1	---	---	NA	NA
MW09-26DA	ARSENIC	1	---	---	NA	NA
MW09-26DA	BARIUM	0	---	---	NA	NA
MW09-26DA	BERYLLIUM	1	---	---	NA	NA
MW09-26DA	CADMIUM	0	---	---	NA	NA
MW09-26DA	CALCIUM	0	---	---	NA	NA
MW09-26DA	CHROMIUM, TOTAL	1	---	---	NA	NA
MW09-26DA	COBALT	0	---	---	NA	NA
MW09-26DA	COPPER	1	---	---	NA	NA
MW09-26DA	IRON	1	---	---	NA	NA
MW09-26DA	LEAD	1	---	---	NA	NA
MW09-26DA	MAGNESIUM	0	---	---	NA	NA
MW09-26DA	MANGANESE	1	---	---	NA	NA
MW09-26DA	MERCURY	1	---	---	NA	NA
MW09-26DA	NICKEL	1	---	---	NA	NA
MW09-26DA	POTASSIUM	0	---	---	NA	NA
MW09-26DA	SELENIUM	0	---	---	NA	NA
MW09-26DA	SILVER	0	---	---	NA	NA
MW09-26DA	SODIUM	0	---	---	NA	NA
MW09-26DA	VANADIUM	0	---	---	NA	NA
MW09-26DA	ZINC	1	---	---	NA	NA
MW09-26DA	AROCLOR-1016	1	---	---	NA	NA
MW09-26DA	AROCLOR-1221	1	---	---	NA	NA
MW09-26DA	AROCLOR-1232	1	---	---	NA	NA
MW09-26DA	AROCLOR-1242	1	---	---	NA	NA
MW09-26DA	AROCLOR-1248	1	---	---	NA	NA
MW09-26DA	AROCLOR-1254	1	---	---	NA	NA
MW09-26DA	AROCLOR-1260	1	---	---	NA	NA
MW09-26DA	POLYCHLORINATED BIPHENYLS (PCBS)	0	---	---	NA	NA
MW09-26DA	4,4-DDD	1	---	---	NA	NA
MW09-26DA	4,4-DDE	1	---	---	NA	NA
MW09-26DA	4,4-DDT	1	---	---	NA	NA
MW09-26DA	ALDRIN	1	---	---	NA	NA
MW09-26DA	ALPHA-BHC	1	---	---	NA	NA
MW09-26DA	ALPHA-CHLORDANE	1	---	---	NA	NA
MW09-26DA	DELTA-BHC	1	---	---	NA	NA
MW09-26DA	ENDOSULFAN I	1	---	---	NA	NA
MW09-26DA	ENDOSULFAN II	1	---	---	NA	NA
MW09-26DA	LINDANE	1	---	---	NA	NA
MW09-26DA	BETA-BHC	1	---	---	NA	NA
MW09-26DA	DIELDRIN	1	---	---	NA	NA
MW09-26DA	ENDOSULFAN SULFATE	1	---	---	NA	NA
MW09-26DA	ENDRIN	1	---	---	NA	NA

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-26DA	ENDRIN KETONE	1	---	---	NA	NA
MW09-26DA	HEPTACHLOR	1	---	---	NA	NA
MW09-26DA	HEPTACHLOR EPOXIDE	1	---	---	NA	NA
MW09-26DA	HEXACHLOROBENZENE	1	---	---	NA	NA
MW09-26DA	METHOXYCHLOR	1	---	---	NA	NA
MW09-26DA	1,2,4-TRICHLOROBENZENE	1	---	---	NA	NA
MW09-26DA	1,2-DICHLOROBENZENE	1	---	---	NA	NA
MW09-26DA	1,3-DICHLOROBENZENE	1	---	---	NA	NA
MW09-26DA	1,4-DICHLOROBENZENE	1	---	---	NA	NA
MW09-26DA	1-METHYLNAPHTHALENE	0	---	---	NA	NA
MW09-26DA	2,2'-OXYBIS(1-CHLOROPROPANE)	1	---	---	NA	NA
MW09-26DA	2,4,5-TRICHLOROPHENOL	1	---	---	NA	NA
MW09-26DA	2,4,6-TRICHLOROPHENOL	1	---	---	NA	NA
MW09-26DA	2,4-DICHLOROPHENOL	1	---	---	NA	NA
MW09-26DA	2,4-DIMETHYLPHENOL	1	---	---	NA	NA
MW09-26DA	2,4-DINITROPHENOL	1	---	---	NA	NA
MW09-26DA	2,4-DINITROTOLUENE	1	---	---	NA	NA
MW09-26DA	2,6-DINITROTOLUENE	1	---	---	NA	NA
MW09-26DA	2-CHLORONAPHTHALENE	1	---	---	NA	NA
MW09-26DA	2-CHLOROPHENOL	1	---	---	NA	NA
MW09-26DA	2-METHYLNAPHTHALENE	1	---	---	NA	NA
MW09-26DA	2-METHYLPHENOL	1	---	---	NA	NA
MW09-26DA	2-NITROANILINE	1	---	---	NA	NA
MW09-26DA	2-NITROPHENOL	1	---	---	NA	NA
MW09-26DA	3- AND 4-METHYLPHENOL	0	---	---	NA	NA
MW09-26DA	3,3-DICHLOROBENZIDINE	1	---	---	NA	NA
MW09-26DA	3-NITROANILINE	1	---	---	NA	NA
MW09-26DA	4,6-DINITRO-2-METHYLPHENOL	1	---	---	NA	NA
MW09-26DA	4-BROMOPHENYL-PHENYLETHER	1	---	---	NA	NA
MW09-26DA	4-CHLORO-3-METHYLPHENOL	1	---	---	NA	NA
MW09-26DA	4-CHLOROANILINE	1	---	---	NA	NA
MW09-26DA	4-CHLOROPHENYL-PHENYLETHER	1	---	---	NA	NA
MW09-26DA	4-METHYLPHENOL	1	---	---	NA	NA
MW09-26DA	4-NITROANILINE	1	---	---	NA	NA
MW09-26DA	4-NITROPHENOL	1	---	---	NA	NA
MW09-26DA	ACENAPHTHENE	1	---	---	NA	NA
MW09-26DA	ACENAPHTHYLENE	1	---	---	NA	NA
MW09-26DA	ANTHRACENE	1	---	---	NA	NA
MW09-26DA	BENZO(A)ANTHRACENE	1	---	---	NA	NA
MW09-26DA	BENZO(A)PYRENE	1	---	---	NA	NA
MW09-26DA	BENZO(B)FLUORANTHENE	1	---	---	NA	NA
MW09-26DA	BENZO(G,H,I)PERYLENE	1	---	---	NA	NA
MW09-26DA	BENZO(K)FLUORANTHENE	1	---	---	NA	NA
MW09-26DA	BENZOIC ACID	0	---	---	NA	NA
MW09-26DA	BENZYL ALCOHOL	0	---	---	NA	NA
MW09-26DA	BIS(2-CHLOROETHOXY)METHANE	1	---	---	NA	NA
MW09-26DA	BIS(2-CHLOROETHYL)ETHER	1	---	---	NA	NA
MW09-26DA	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
MW09-26DA	BIS(2-ETHYLHEXYL)PHTHALATE	1	---	---	NA	NA
MW09-26DA	BUTYLBENZYLPHTHALATE	1	---	---	NA	NA
MW09-26DA	CARBAZOLE	1	---	---	NA	NA
MW09-26DA	CHRYSENE	1	---	---	NA	NA
MW09-26DA	CRESOLS	0	---	---	NA	NA
MW09-26DA	DIBENZ(A,H)ANTHRACENE	1	---	---	NA	NA
MW09-26DA	DIBENZOFURAN	1	---	---	NA	NA
MW09-26DA	DIETHYLPHTHALATE	1	---	---	NA	NA
MW09-26DA	DIMETHYL PHTHALATE	1	---	---	NA	NA
MW09-26DA	DI-N-BUTYLPHTHALATE	1	---	---	NA	NA
MW09-26DA	DI-N-OCTYLPHTHALATE	1	---	---	NA	NA
MW09-26DA	FLUORANTHENE	1	---	---	NA	NA
MW09-26DA	FLUORENE	1	---	---	NA	NA
MW09-26DA	HEXACHLOROBUTADIENE	1	---	---	NA	NA
MW09-26DA	HEXACHLOROCYCLOPENTADIENE	1	---	---	NA	NA
MW09-26DA	HEXACHLOROETHANE	1	---	---	NA	NA
MW09-26DA	INDENO(1,2,3-CD)PYRENE	1	---	---	NA	NA
MW09-26DA	ISOPHORONE	1	---	---	NA	NA
MW09-26DA	NAPHTHALENE	1	---	---	NA	NA
MW09-26DA	NITROBENZENE	1	---	---	NA	NA
MW09-26DA	N-NITROSODINPROPYLAMINE	1	---	---	NA	NA
MW09-26DA	N-NITROSODIPHENYLAMINE	1	---	---	NA	NA
MW09-26DA	PHENANTHRENE	1	---	---	NA	NA
MW09-26DA	PHENOL	1	---	---	NA	NA
MW09-26DA	PYRENE	1	---	---	NA	NA
MW09-26DA	1,1,1-TRICHLOROETHANE	2	---	---	NA	NA
MW09-26DA	1,1,2,2-TETRACHLOROETHANE	2	---	---	NA	NA
MW09-26DA	1,1,2-TRICHLOROETHANE	2	---	---	NA	NA
MW09-26DA	1,1-DICHLOROETHANE	2	---	---	NA	NA
MW09-26DA	1,1-DICHLOROETHENE	2	---	---	NA	NA
MW09-26DA	1,2-DICHLOROETHANE	2	---	---	NA	NA

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-26DA	1,2-DICHLOROETHENE, TOTAL	0	---	---	NA	NA
MW09-26DA	1,2-DICHLOROPROPANE	2	---	---	NA	NA
MW09-26DA	2-BUTANONE	2	---	---	NA	NA
MW09-26DA	2-HEXANONE	2	---	---	NA	NA
MW09-26DA	4-METHYL-2-PENTANONE	2	---	---	NA	NA
MW09-26DA	ACETONE	2	---	---	NA	NA
MW09-26DA	BENZENE	2	---	---	NA	NA
MW09-26DA	BROMODICHLOROMETHANE	2	---	---	NA	NA
MW09-26DA	BROMOFORM	2	---	---	NA	NA
MW09-26DA	BROMOMETHANE	2	---	---	NA	NA
MW09-26DA	CARBON DISULFIDE	2	---	---	NA	NA
MW09-26DA	CARBON TETRACHLORIDE	2	---	---	NA	NA
MW09-26DA	CHLOROBENZENE	2	---	---	NA	NA
MW09-26DA	CHLOROETHANE	2	---	---	NA	NA
MW09-26DA	CHLOROFORM	2	---	---	NA	NA
MW09-26DA	CHLOROMETHANE	2	---	---	NA	NA
MW09-26DA	CIS-1,2-DICHLOROETHENE	2	---	---	NA	NA
MW09-26DA	CIS-1,3-DICHLOROPROPENE	2	---	---	NA	NA
MW09-26DA	DIBROMOCHLOROMETHANE	2	---	---	NA	NA
MW09-26DA	ETHYLBENZENE	2	---	---	NA	NA
MW09-26DA	M- AND P-XYLENE	0	---	---	NA	NA
MW09-26DA	METHYLENE CHLORIDE	2	---	---	NA	NA
MW09-26DA	O-XYLENE	0	---	---	NA	NA
MW09-26DA	STYRENE	2	---	---	NA	NA
MW09-26DA	TETRACHLOROETHENE	2	---	---	NA	NA
MW09-26DA	TOLUENE	2	---	---	NA	NA
MW09-26DA	TRANS-1,2-DICHLOROETHENE	2	---	---	NA	NA
MW09-26DA	TRANS-1,3-DICHLOROPROPENE	2	---	---	NA	NA
MW09-26DA	TRICHLOROETHENE	2	---	---	NA	NA
MW09-26DA	VINYL CHLORIDE	2	---	---	NA	NA
MW09-26DA	XYLENES, TOTAL	2	---	---	NA	NA
MW09-26S	PENTACHLOROPHENOL	19	22	0.7723	1.645	Not Significant
MW09-26S	ALUMINUM	20	29	0.9112	1.645	Not Significant
MW09-26S	ANTIMONY	20	-111	-3.650	1.645	Downward Trend
MW09-26S	ARSENIC	20	-4	-0.09927	1.645	Not Significant
MW09-26S	BARIUM	0	---	---	NA	NA
MW09-26S	BERYLLIUM	20	-106	-3.509	1.645	Downward Trend
MW09-26S	CADMIUM	0	---	---	NA	NA
MW09-26S	CALCIUM	0	---	---	NA	NA
MW09-26S	CHROMIUM, TOTAL	20	-8	-0.2282	1.645	Not Significant
MW09-26S	COBALT	0	---	---	NA	NA
MW09-26S	COPPER	20	-1	0	1.645	Not Significant
MW09-26S	IRON	20	6	0.1636	1.645	Not Significant
MW09-26S	LEAD	20	-96	-3.112	1.645	Downward Trend
MW09-26S	MAGNESIUM	0	---	---	NA	NA
MW09-26S	MANGANESE	20	-69	-2.207	1.645	Downward Trend
MW09-26S	MERCURY	20	5	0.1358	1.645	Not Significant
MW09-26S	NICKEL	20	-72	-2.320	1.645	Downward Trend
MW09-26S	POTASSIUM	0	---	---	NA	NA
MW09-26S	SELENIUM	0	---	---	NA	NA
MW09-26S	SILVER	0	---	---	NA	NA
MW09-26S	SODIUM	0	---	---	NA	NA
MW09-26S	VANADIUM	0	---	---	NA	NA
MW09-26S	ZINC	20	31	0.9738	1.645	Not Significant
MW09-26S	AROCLOR-1016	20	-54	-1.728	1.645	Downward Trend
MW09-26S	AROCLOR-1221	20	-53	-1.699	1.645	Downward Trend
MW09-26S	AROCLOR-1232	20	-46	-1.467	1.645	Not Significant
MW09-26S	AROCLOR-1242	20	-66	-2.119	1.645	Downward Trend
MW09-26S	AROCLOR-1248	20	-67	-2.153	1.645	Downward Trend
MW09-26S	AROCLOR-1254	20	-46	-1.467	1.645	Not Significant
MW09-26S	AROCLOR-1260	20	-54	-1.728	1.645	Downward Trend
MW09-26S	POLYCHLORINATED BIPHENYLS (PCBS)	18	-9	-0.3051	1.645	Not Significant
MW09-26S	4,4-DDD	19	-71	-2.468	1.645	Downward Trend
MW09-26S	4,4-DDE	19	-6	-0.1771	1.645	Not Significant
MW09-26S	4,4-DDT	19	19	0.6347	1.645	Not Significant
MW09-26S	ALDRIN	19	-71	-2.468	1.645	Downward Trend
MW09-26S	ALPHA-BHC	19	-71	-2.468	1.645	Downward Trend
MW09-26S	ALPHA-CHLORDANE	19	-29	-0.9873	1.645	Not Significant
MW09-26S	DELTA-BHC	19	-81	-2.821	1.645	Downward Trend
MW09-26S	ENDOSULFAN I	19	-29	-0.9873	1.645	Not Significant
MW09-26S	ENDOSULFAN II	19	-71	-2.468	1.645	Downward Trend
MW09-26S	LINDANE	19	-71	-2.468	1.645	Downward Trend
MW09-26S	BETA-BHC	19	-71	-2.468	1.645	Downward Trend
MW09-26S	DIELDRIN	19	10	0.3175	1.645	Not Significant
MW09-26S	ENDOSULFAN SULFATE	19	-71	-2.468	1.645	Downward Trend
MW09-26S	ENDRIN	19	-8	-0.2480	1.645	Not Significant
MW09-26S	ENDRIN KETONE	19	-71	-2.468	1.645	Downward Trend
MW09-26S	HEPTACHLOR	19	-29	-0.9873	1.645	Not Significant
MW09-26S	HEPTACHLOR EPOXIDE	19	-5	-0.1416	1.645	Not Significant

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-26S	HEXACHLOROBENZENE	19	-38	-1.303	1.645	Not Significant
MW09-26S	METHOXYCHLOR	19	-57	-1.978	1.645	Downward Trend
MW09-26S	1,2,4-TRICHLOROBENZENE	19	-117	-4.179	1.645	Downward Trend
MW09-26S	1,2-DICHLOROBENZENE	19	-29	-1.009	1.645	Not Significant
MW09-26S	1,3-DICHLOROBENZENE	19	-29	-1.009	1.645	Not Significant
MW09-26S	1,4-DICHLOROBENZENE	19	-22	-0.7581	1.645	Not Significant
MW09-26S	1-METHYLNAPHTHALENE	0	---	---	NA	NA
MW09-26S	2,2'-OXYBIS(1-CHLOROPROPANE)	5	-4	-4	8	Not Significant
MW09-26S	2,4,5-TRICHLOROPHENOL	20	-114	-3.767	1.645	Downward Trend
MW09-26S	2,4,6-TRICHLOROPHENOL	19	-32	-1.113	1.645	Not Significant
MW09-26S	2,4-DICHLOROPHENOL	19	-32	-1.113	1.645	Not Significant
MW09-26S	2,4-DIMETHYLPHENOL	19	-24	-0.8289	1.645	Not Significant
MW09-26S	2,4-DINITROPHENOL	19	-1	0	1.645	Not Significant
MW09-26S	2,4-DINITROTOLUENE	19	-29	-1.009	1.645	Not Significant
MW09-26S	2,6-DINITROTOLUENE	19	-29	-1.009	1.645	Not Significant
MW09-26S	2-CHLORONAPHTHALENE	19	-32	-1.113	1.645	Not Significant
MW09-26S	2-CHLOROPHENOL	19	-32	-1.113	1.645	Not Significant
MW09-26S	2-METHYLNAPHTHALENE	20	-80	-2.676	1.645	Downward Trend
MW09-26S	2-METHYLPHENOL	19	-32	-1.113	1.645	Not Significant
MW09-26S	2-NITROANILINE	19	-16	-0.5341	1.645	Not Significant
MW09-26S	2-NITROPHENOL	19	-32	-1.113	1.645	Not Significant
MW09-26S	3- AND 4-METHYLPHENOL	9	-10	-10	18	Not Significant
MW09-26S	3,3-DICHLOROBENZIDINE	19	16	0.5537	1.645	Not Significant
MW09-26S	3-NITROANILINE	19	-13	-0.4260	1.645	Not Significant
MW09-26S	4,6-DINITRO-2-METHYLPHENOL	19	-16	-0.5341	1.645	Not Significant
MW09-26S	4-BROMOPHENYL-PHENYLETHER	19	-29	-1.009	1.645	Not Significant
MW09-26S	4-CHLORO-3-METHYLPHENOL	19	-32	-1.113	1.645	Not Significant
MW09-26S	4-CHLOROANILINE	19	-22	-0.7581	1.645	Not Significant
MW09-26S	4-CHLOROPHENYL-PHENYLETHER	19	-29	-1.009	1.645	Not Significant
MW09-26S	4-METHYLPHENOL	10	-3	-3	21	Not Significant
MW09-26S	4-NITROANILINE	19	-16	-0.5341	1.645	Not Significant
MW09-26S	4-NITROPHENOL	19	-16	-0.5341	1.645	Not Significant
MW09-26S	ACENAPHTHENE	20	-85	-2.844	1.645	Downward Trend
MW09-26S	ACENAPHTHYLENE	20	-80	-2.676	1.645	Downward Trend
MW09-26S	ANTHRACENE	20	16	0.5082	1.645	Not Significant
MW09-26S	BENZO(A)ANTHRACENE	20	7	0.1988	1.645	Not Significant
MW09-26S	BENZO(A)PYRENE	20	19	0.6175	1.645	Not Significant
MW09-26S	BENZO(B)FLUORANTHENE	20	-8	-0.2451	1.645	Not Significant
MW09-26S	BENZO(G,H,I)PERYLENE	20	-26	-0.8978	1.645	Not Significant
MW09-26S	BENZO(K)FLUORANTHENE	20	16	0.5082	1.645	Not Significant
MW09-26S	BENZOIC ACID	0	---	---	NA	NA
MW09-26S	BENZYL ALCOHOL	0	---	---	NA	NA
MW09-26S	BIS(2-CHLOROETHOXY)METHANE	19	-22	-0.7581	1.645	Not Significant
MW09-26S	BIS(2-CHLOROETHYL)ETHER	19	-29	-1.009	1.645	Not Significant
MW09-26S	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
MW09-26S	BIS(2-ETHYLHEXYL)PHTHALATE	19	-8	-0.2514	1.645	Not Significant
MW09-26S	BUTYLBENZYLPHTHALATE	19	-93	-3.522	1.645	Downward Trend
MW09-26S	CARBAZOLE	19	-93	-3.522	1.645	Downward Trend
MW09-26S	CHRYSENE	20	14	0.4397	1.645	Not Significant
MW09-26S	CRESOLS	0	---	---	NA	NA
MW09-26S	DIBENZ(A,H)ANTHRACENE	20	-26	-0.8978	1.645	Not Significant
MW09-26S	DIBENZOFURAN	19	-93	-3.522	1.645	Downward Trend
MW09-26S	DIETHYLPHTHALATE	19	-93	-3.522	1.645	Downward Trend
MW09-26S	DIMETHYL PHTHALATE	19	-93	-3.522	1.645	Downward Trend
MW09-26S	DI-N-BUTYLPHTHALATE	19	-66	-2.430	1.645	Downward Trend
MW09-26S	DI-N-OCTYLPHTHALATE	19	-93	-3.522	1.645	Downward Trend
MW09-26S	FLUORANTHENE	20	-26	-0.8978	1.645	Not Significant
MW09-26S	FLUORENE	20	-26	-0.8978	1.645	Not Significant
MW09-26S	HEXACHLOROBUTADIENE	19	-93	-3.522	1.645	Downward Trend
MW09-26S	HEXACHLOROCYCLOPENTADIENE	19	-92	-3.341	1.645	Downward Trend
MW09-26S	HEXACHLOROETHANE	19	-93	-3.522	1.645	Downward Trend
MW09-26S	INDENO(1,2,3-CD)PYRENE	20	16	0.5082	1.645	Not Significant
MW09-26S	ISOPHORONE	19	-93	-3.522	1.645	Downward Trend
MW09-26S	NAPHTHALENE	20	-80	-2.676	1.645	Downward Trend
MW09-26S	NITROBENZENE	19	-60	-2.402	1.645	Downward Trend
MW09-26S	N-NITROSODINPROPYLAMINE	19	-93	-3.522	1.645	Downward Trend
MW09-26S	N-NITROSODIPHENYLAMINE	19	-92	-3.464	1.645	Downward Trend
MW09-26S	PHENANTHRENE	20	16	0.5082	1.645	Not Significant
MW09-26S	PHENOL	18	-67	-2.694	1.645	Downward Trend
MW09-26S	PYRENE	20	14	0.4397	1.645	Not Significant
MW09-26S	1,1,1-TRICHLOROETHANE	21	-103	-3.306	1.645	Downward Trend
MW09-26S	1,1,2,2-TETRACHLOROETHANE	21	-85	-2.832	1.645	Downward Trend
MW09-26S	1,1,2-TRICHLOROETHANE	21	-74	-2.388	1.645	Downward Trend
MW09-26S	1,1-DICHLOROETHANE	21	-75	-2.554	1.645	Downward Trend
MW09-26S	1,1-DICHLOROETHENE	21	-103	-3.306	1.645	Downward Trend
MW09-26S	1,2-DICHLOROETHANE	21	-103	-3.306	1.645	Downward Trend
MW09-26S	1,2-DICHLOROETHENE, TOTAL	18	-56	-2.135	1.645	Downward Trend
MW09-26S	1,2-DICHLOROPROPANE	21	-57	-1.800	1.645	Downward Trend
MW09-26S	2-BUTANONE	20	-67	-2.460	1.645	Downward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-26S	2-HEXANONE	21	-75	-2.554	1.645	Downward Trend
MW09-26S	4-METHYL-2-PENTANONE	21	-107	-3.488	1.645	Downward Trend
MW09-26S	ACETONE	20	-57	-2.127	1.645	Downward Trend
MW09-26S	BENZENE	21	-103	-3.306	1.645	Downward Trend
MW09-26S	BROMODICHLOROMETHANE	21	-103	-3.306	1.645	Downward Trend
MW09-26S	BROMOFORM	21	-65	-2.057	1.645	Downward Trend
MW09-26S	BROMOMETHANE	21	16	0.6151	1.645	Not Significant
MW09-26S	CARBON DISULFIDE	21	-75	-2.554	1.645	Downward Trend
MW09-26S	CARBON TETRACHLORIDE	21	-57	-1.800	1.645	Downward Trend
MW09-26S	CHLOROBENZENE	21	-103	-3.306	1.645	Downward Trend
MW09-26S	CHLOROETHANE	21	-41	-1.455	1.645	Not Significant
MW09-26S	CHLOROFORM	21	-103	-3.306	1.645	Downward Trend
MW09-26S	CHLOROMETHANE	21	-30	-0.9794	1.645	Not Significant
MW09-26S	CIS-1,2-DICHLOROETHENE	21	-103	-3.306	1.645	Downward Trend
MW09-26S	CIS-1,3-DICHLOROPROPENE	21	-75	-2.554	1.645	Downward Trend
MW09-26S	DIBROMOCHLOROMETHANE	21	-65	-2.057	1.645	Downward Trend
MW09-26S	ETHYLBENZENE	21	-103	-3.306	1.645	Downward Trend
MW09-26S	M- AND P-XYLENE	4	3	3	6	Not Significant
MW09-26S	METHYLENE CHLORIDE	21	1	0	1.645	Not Significant
MW09-26S	O-XYLENE	4	3	3	6	Not Significant
MW09-26S	STYRENE	21	-103	-3.306	1.645	Downward Trend
MW09-26S	TETRACHLOROETHENE	21	-69	-2.186	1.645	Downward Trend
MW09-26S	TOLUENE	21	-103	-3.306	1.645	Downward Trend
MW09-26S	TRANS-1,2-DICHLOROETHENE	21	-65	-2.057	1.645	Downward Trend
MW09-26S	TRANS-1,3-DICHLOROPROPENE	21	-75	-2.554	1.645	Downward Trend
MW09-26S	TRICHLOROETHENE	21	-103	-3.306	1.645	Downward Trend
MW09-26S	VINYL CHLORIDE	21	5	0.1294	1.645	Not Significant
MW09-26S	XYLENES, TOTAL	14	-37	-2.103	1.645	Downward Trend
MW09-27D	PENTACHLOROPHENOL	20	38	1.225	1.645	Not Significant
MW09-27D	ALUMINUM	21	30	0.8787	1.645	Not Significant
MW09-27D	ANTIMONY	21	-124	-3.789	1.645	Downward Trend
MW09-27D	ARSENIC	21	39	1.157	1.645	Not Significant
MW09-27D	BARIUM	0	---	---	NA	NA
MW09-27D	BERYLLIUM	21	-107	-3.285	1.645	Downward Trend
MW09-27D	CADMIUM	0	---	---	NA	NA
MW09-27D	CALCIUM	0	---	---	NA	NA
MW09-27D	CHROMIUM, TOTAL	21	-23	-0.6714	1.645	Not Significant
MW09-27D	COBALT	0	---	---	NA	NA
MW09-27D	COPPER	21	5	0.1219	1.645	Not Significant
MW09-27D	IRON	21	-14	-0.3926	1.645	Not Significant
MW09-27D	LEAD	21	-104	-3.142	1.645	Downward Trend
MW09-27D	MAGNESIUM	0	---	---	NA	NA
MW09-27D	MANGANESE	21	-2	-0.03020	1.645	Not Significant
MW09-27D	MERCURY	21	-15	-0.4362	1.645	Not Significant
MW09-27D	NICKEL	21	10	0.2726	1.645	Not Significant
MW09-27D	POTASSIUM	0	---	---	NA	NA
MW09-27D	SELENIUM	0	---	---	NA	NA
MW09-27D	SILVER	0	---	---	NA	NA
MW09-27D	SODIUM	0	---	---	NA	NA
MW09-27D	VANADIUM	0	---	---	NA	NA
MW09-27D	ZINC	21	44	1.298	1.645	Not Significant
MW09-27D	AROCLOR-1016	21	-53	-1.584	1.645	Not Significant
MW09-27D	AROCLOR-1221	21	-39	-1.158	1.645	Not Significant
MW09-27D	AROCLOR-1232	21	-45	-1.340	1.645	Not Significant
MW09-27D	AROCLOR-1242	21	-67	-2.010	1.645	Downward Trend
MW09-27D	AROCLOR-1248	21	-67	-2.010	1.645	Downward Trend
MW09-27D	AROCLOR-1254	21	-45	-1.340	1.645	Not Significant
MW09-27D	AROCLOR-1260	21	-53	-1.584	1.645	Not Significant
MW09-27D	POLYCHLORINATED BIPHENYLS (PCBS)	18	-8	-0.2671	1.645	Not Significant
MW09-27D	4,4-DDD	21	-80	-2.417	1.645	Downward Trend
MW09-27D	4,4-DDE	21	-6	-0.1537	1.645	Not Significant
MW09-27D	4,4-DDT	21	16	0.4584	1.645	Not Significant
MW09-27D	ALDRIN	21	-82	-2.479	1.645	Downward Trend
MW09-27D	ALPHA-BHC	21	-82	-2.479	1.645	Downward Trend
MW09-27D	ALPHA-CHLORDANE	21	-40	-1.193	1.645	Not Significant
MW09-27D	DELTA-BHC	21	-90	-2.723	1.645	Downward Trend
MW09-27D	ENDOSULFAN I	21	-38	-1.132	1.645	Not Significant
MW09-27D	ENDOSULFAN II	21	-80	-2.417	1.645	Downward Trend
MW09-27D	LINDANE	21	-82	-2.479	1.645	Downward Trend
MW09-27D	BETA-BHC	21	-80	-2.417	1.645	Downward Trend
MW09-27D	DIELDRIN	21	16	0.4590	1.645	Not Significant
MW09-27D	ENDOSULFAN SULFATE	21	-80	-2.417	1.645	Downward Trend
MW09-27D	ENDRIN	21	-5	-0.1236	1.645	Not Significant
MW09-27D	ENDRIN KETONE	21	-80	-2.417	1.645	Downward Trend
MW09-27D	HEPTACHLOR	21	-40	-1.193	1.645	Not Significant
MW09-27D	HEPTACHLOR EPOXIDE	21	-7	-0.1854	1.645	Not Significant
MW09-27D	HEXACHLOROBENZENE	20	-47	-1.505	1.645	Not Significant
MW09-27D	METHOXYCHLOR	21	-65	-1.963	1.645	Downward Trend
MW09-27D	1,2,4-TRICHLOROBENZENE	20	-143	-4.694	1.645	Downward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-27D	1,2-DICHLOROBENZENE	20	-47	-1.521	1.645	Not Significant
MW09-27D	1,3-DICHLOROBENZENE	20	-47	-1.521	1.645	Not Significant
MW09-27D	1,4-DICHLOROBENZENE	20	-40	-1.291	1.645	Not Significant
MW09-27D	1-METHYLNAPHTHALENE	0	---	---	NA	NA
MW09-27D	2,2'-OXYBIS(1-CHLOROPROPANE)	5	-4	-4	8	Not Significant
MW09-27D	2,4,5-TRICHLOROPHENOL	20	-122	-3.975	1.645	Downward Trend
MW09-27D	2,4,6-TRICHLOROPHENOL	20	-50	-1.615	1.645	Not Significant
MW09-27D	2,4-DICHLOROPHENOL	20	-50	-1.615	1.645	Not Significant
MW09-27D	2,4-DIMETHYLPHENOL	20	-42	-1.356	1.645	Not Significant
MW09-27D	2,4-DINITROPHENOL	20	-14	-0.4354	1.645	Not Significant
MW09-27D	2,4-DINITROTOLUENE	20	-47	-1.521	1.645	Not Significant
MW09-27D	2,6-DINITROTOLUENE	20	-47	-1.521	1.645	Not Significant
MW09-27D	2-CHLORONAPHTHALENE	20	-50	-1.615	1.645	Not Significant
MW09-27D	2-CHLOROPHENOL	20	-50	-1.615	1.645	Not Significant
MW09-27D	2-METHYLNAPHTHALENE	20	-84	-2.846	1.645	Downward Trend
MW09-27D	2-METHYLPHENOL	20	-50	-1.615	1.645	Not Significant
MW09-27D	2-NITROANILINE	20	-29	-0.9240	1.645	Not Significant
MW09-27D	2-NITROPHENOL	20	-47	-1.521	1.645	Not Significant
MW09-27D	3- AND 4-METHYLPHENOL	10	-23	-23	21	Downward Trend
MW09-27D	3,3-DICHLOROBENZIDINE	20	4	0.1007	1.645	Not Significant
MW09-27D	3-NITROANILINE	20	-26	-0.8227	1.645	Not Significant
MW09-27D	4,6-DINITRO-2-METHYLPHENOL	20	-29	-0.9240	1.645	Not Significant
MW09-27D	4-BROMOPHENYL-PHENYLETHER	20	-47	-1.521	1.645	Not Significant
MW09-27D	4-CHLORO-3-METHYLPHENOL	20	-50	-1.615	1.645	Not Significant
MW09-27D	4-CHLOROANILINE	20	-40	-1.291	1.645	Not Significant
MW09-27D	4-CHLOROPHENYL-PHENYLETHER	20	-47	-1.521	1.645	Not Significant
MW09-27D	4-METHYLPHENOL	10	-3	-3	21	Not Significant
MW09-27D	4-NITROANILINE	20	-29	-0.9240	1.645	Not Significant
MW09-27D	4-NITROPHENOL	20	-29	-0.9240	1.645	Not Significant
MW09-27D	ACENAPHTHENE	20	-79	-2.682	1.645	Downward Trend
MW09-27D	ACENAPHTHYLENE	20	-84	-2.846	1.645	Downward Trend
MW09-27D	ANTHRACENE	20	9	0.2751	1.645	Not Significant
MW09-27D	BENZO(A)ANTHRACENE	20	18	0.5731	1.645	Not Significant
MW09-27D	BENZO(A)PYRENE	20	14	0.4389	1.645	Not Significant
MW09-27D	BENZO(B)FLUORANTHENE	20	-20	-0.6797	1.645	Not Significant
MW09-27D	BENZO(G,H,I)PERYLENE	20	-27	-0.9599	1.645	Not Significant
MW09-27D	BENZO(K)FLUORANTHENE	20	12	0.3771	1.645	Not Significant
MW09-27D	BENZOIC ACID	0	---	---	NA	NA
MW09-27D	BENZYL ALCOHOL	0	---	---	NA	NA
MW09-27D	BIS(2-CHLOROETHOXY)METHANE	20	-40	-1.291	1.645	Not Significant
MW09-27D	BIS(2-CHLOROETHYL)ETHER	20	-47	-1.521	1.645	Not Significant
MW09-27D	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
MW09-27D	BIS(2-ETHYLHEXYL)PHTHALATE	20	-9	-0.2651	1.645	Not Significant
MW09-27D	BUTYLBENZYLPHTHALATE	20	-123	-4.189	1.645	Downward Trend
MW09-27D	CARBAZOLE	20	-123	-4.189	1.645	Downward Trend
MW09-27D	CHRYSENE	20	20	0.6504	1.645	Not Significant
MW09-27D	CRESOLS	0	---	---	NA	NA
MW09-27D	DIBENZ(A,H)ANTHRACENE	20	-27	-0.9599	1.645	Not Significant
MW09-27D	DIBENZOFURAN	20	-123	-4.189	1.645	Downward Trend
MW09-27D	DIETHYLPHTHALATE	20	-123	-4.189	1.645	Downward Trend
MW09-27D	DIMETHYL PHTHALATE	20	-123	-4.189	1.645	Downward Trend
MW09-27D	DI-N-BUTYLPHTHALATE	20	-123	-4.189	1.645	Downward Trend
MW09-27D	DI-N-OCTYLPHTHALATE	20	-123	-4.189	1.645	Downward Trend
MW09-27D	FLUORANTHENE	20	-27	-0.9599	1.645	Not Significant
MW09-27D	FLUORENE	20	-27	-0.9599	1.645	Not Significant
MW09-27D	HEXACHLOROBUTADIENE	20	-123	-4.189	1.645	Downward Trend
MW09-27D	HEXACHLOROCYCLOPENTADIENE	20	-112	-3.708	1.645	Downward Trend
MW09-27D	HEXACHLOROETHANE	20	-123	-4.189	1.645	Downward Trend
MW09-27D	INDENO(1,2,3-CD)PYRENE	20	16	0.5064	1.645	Not Significant
MW09-27D	ISOPHORONE	20	-123	-4.189	1.645	Downward Trend
MW09-27D	NAPHTHALENE	20	-78	-2.636	1.645	Downward Trend
MW09-27D	NITROBENZENE	20	-84	-2.964	1.645	Downward Trend
MW09-27D	N-NITROSODINPROPYLAMINE	20	-123	-4.189	1.645	Downward Trend
MW09-27D	N-NITROSODIPHENYLAMINE	20	-122	-4.136	1.645	Downward Trend
MW09-27D	PHENANTHRENE	20	12	0.3771	1.645	Not Significant
MW09-27D	PHENOL	19	-64	-2.273	1.645	Downward Trend
MW09-27D	PYRENE	20	12	0.3771	1.645	Not Significant
MW09-27D	1,1,1-TRICHLOROETHANE	20	-109	-3.769	1.645	Downward Trend
MW09-27D	1,1,2,2-TETRACHLOROETHANE	20	-85	-3.103	1.645	Downward Trend
MW09-27D	1,1,2-TRICHLOROETHANE	20	-77	-2.652	1.645	Downward Trend
MW09-27D	1,1-DICHLOROETHANE	20	-85	-3.103	1.645	Downward Trend
MW09-27D	1,1-DICHLOROETHENE	20	-109	-3.769	1.645	Downward Trend
MW09-27D	1,2-DICHLOROETHANE	20	-100	-3.257	1.645	Downward Trend
MW09-27D	1,2-DICHLOROETHENE, TOTAL	18	23	0.8361	1.645	Not Significant
MW09-27D	1,2-DICHLOROPROPANE	20	-71	-2.298	1.645	Downward Trend
MW09-27D	2-BUTANONE	19	-76	-2.996	1.645	Downward Trend
MW09-27D	2-HEXANONE	20	-85	-3.103	1.645	Downward Trend
MW09-27D	4-METHYL-2-PENTANONE	20	-126	-4.201	1.645	Downward Trend
MW09-27D	ACETONE	19	-91	-3.536	1.645	Downward Trend

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Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-27D	BENZENE	20	-109	-3.769	1.645	Downward Trend
MW09-27D	BROMODICHLOROMETHANE	20	-109	-3.769	1.645	Downward Trend
MW09-27D	BROMOFORM	20	-77	-2.652	1.645	Downward Trend
MW09-27D	BROMOMETHANE	20	-1	0	1.645	Not Significant
MW09-27D	CARBON DISULFIDE	20	-85	-3.103	1.645	Downward Trend
MW09-27D	CARBON TETRACHLORIDE	20	-77	-2.652	1.645	Downward Trend
MW09-27D	CHLOROBENZENE	20	-109	-3.769	1.645	Downward Trend
MW09-27D	CHLOROETHANE	20	-42	-1.579	1.645	Not Significant
MW09-27D	CHLOROFORM	20	-109	-3.769	1.645	Downward Trend
MW09-27D	CHLOROMETHANE	20	-36	-1.348	1.645	Not Significant
MW09-27D	CIS-1,2-DICHLOROETHENE	20	40	1.272	1.645	Not Significant
MW09-27D	CIS-1,3-DICHLOROPROPENE	20	-85	-3.103	1.645	Downward Trend
MW09-27D	DIBROMOCHLOROMETHANE	20	-77	-2.652	1.645	Downward Trend
MW09-27D	ETHYLBENZENE	20	-109	-3.769	1.645	Downward Trend
MW09-27D	M- AND P-XYLENE	4	3	3	6	Not Significant
MW09-27D	METHYLENE CHLORIDE	20	14	0.4431	1.645	Not Significant
MW09-27D	O-XYLENE	4	3	3	6	Not Significant
MW09-27D	STYRENE	20	-109	-3.769	1.645	Downward Trend
MW09-27D	TETRACHLOROETHENE	20	-89	-3.071	1.645	Downward Trend
MW09-27D	TOLUENE	20	-109	-3.709	1.645	Downward Trend
MW09-27D	TRANS-1,2-DICHLOROETHENE	20	-77	-2.652	1.645	Downward Trend
MW09-27D	TRANS-1,3-DICHLOROPROPENE	20	-85	-3.103	1.645	Downward Trend
MW09-27D	TRICHLOROETHENE	20	-109	-3.769	1.645	Downward Trend
MW09-27D	VINYL CHLORIDE	20	-85	-2.764	1.645	Downward Trend
MW09-27D	XYLENES, TOTAL	13	-29	-1.834	1.645	Downward Trend
MW09-27S	PENTACHLOROPHENOL	19	19	0.6499	1.645	Not Significant
MW09-27S	ALUMINUM	20	-62	-1.987	1.645	Downward Trend
MW09-27S	ANTIMONY	20	-121	-3.948	1.645	Downward Trend
MW09-27S	ARSENIC	20	31	0.9885	1.645	Not Significant
MW09-27S	BARIUM	0	---	---	NA	NA
MW09-27S	BERYLLIUM	20	-93	-3.032	1.645	Downward Trend
MW09-27S	CADMIUM	0	---	---	NA	NA
MW09-27S	CALCIUM	0	---	---	NA	NA
MW09-27S	CHROMIUM, TOTAL	20	-24	-0.7510	1.645	Not Significant
MW09-27S	COBALT	0	---	---	NA	NA
MW09-27S	COPPER	20	-36	-1.153	1.645	Not Significant
MW09-27S	IRON	20	-32	-1.006	1.645	Not Significant
MW09-27S	LEAD	20	-96	-3.113	1.645	Downward Trend
MW09-27S	MAGNESIUM	0	---	---	NA	NA
MW09-27S	MANGANESE	20	-46	-1.460	1.645	Not Significant
MW09-27S	MERCURY	20	4	0.1018	1.645	Not Significant
MW09-27S	NICKEL	20	-25	-0.7821	1.645	Not Significant
MW09-27S	POTASSIUM	0	---	---	NA	NA
MW09-27S	SELENIUM	0	---	---	NA	NA
MW09-27S	SILVER	0	---	---	NA	NA
MW09-27S	SODIUM	0	---	---	NA	NA
MW09-27S	VANADIUM	0	---	---	NA	NA
MW09-27S	ZINC	20	-6	-0.1622	1.645	Not Significant
MW09-27S	AROCLOR-1016	21	-56	-1.675	1.645	Downward Trend
MW09-27S	AROCLOR-1221	21	-42	-1.248	1.645	Not Significant
MW09-27S	AROCLOR-1232	21	-48	-1.431	1.645	Not Significant
MW09-27S	AROCLOR-1242	21	-70	-2.101	1.645	Downward Trend
MW09-27S	AROCLOR-1248	21	-70	-2.101	1.645	Downward Trend
MW09-27S	AROCLOR-1254	21	-48	-1.431	1.645	Not Significant
MW09-27S	AROCLOR-1260	21	-56	-1.675	1.645	Downward Trend
MW09-27S	POLYCHLORINATED BIPHENYLS (PCBS)	18	-6	-0.1908	1.645	Not Significant
MW09-27S	4,4-DDD	21	-77	-2.315	1.645	Downward Trend
MW09-27S	4,4-DDE	21	12	0.3368	1.645	Not Significant
MW09-27S	4,4-DDT	21	25	0.7311	1.645	Not Significant
MW09-27S	ALDRIN	21	-81	-2.435	1.645	Downward Trend
MW09-27S	ALPHA-BHC	21	-76	-2.284	1.645	Downward Trend
MW09-27S	ALPHA-CHLORDANE	21	-38	-1.127	1.645	Not Significant
MW09-27S	DELTA-BHC	21	-90	-2.710	1.645	Downward Trend
MW09-27S	ENDOSULFAN I	21	-33	-0.9748	1.645	Not Significant
MW09-27S	ENDOSULFAN II	21	-77	-2.315	1.645	Downward Trend
MW09-27S	LINDANE	21	-76	-2.284	1.645	Downward Trend
MW09-27S	BETA-BHC	21	-75	-2.254	1.645	Downward Trend
MW09-27S	DIELDRIN	21	19	0.5483	1.645	Not Significant
MW09-27S	ENDOSULFAN SULFATE	21	-77	-2.315	1.645	Downward Trend
MW09-27S	ENDRIN	21	7	0.1838	1.645	Not Significant
MW09-27S	ENDRIN KETONE	21	-77	-2.315	1.645	Downward Trend
MW09-27S	HEPTACHLOR	21	-34	-1.005	1.645	Not Significant
MW09-27S	HEPTACHLOR EPOXIDE	21	11	0.3052	1.645	Not Significant
MW09-27S	HEXACHLOROBENZENE	20	-44	-1.405	1.645	Not Significant
MW09-27S	METHOXYCHLOR	21	-59	-1.770	1.645	Downward Trend
MW09-27S	1,2,4-TRICHLOROBENZENE	20	-135	-4.430	1.645	Downward Trend
MW09-27S	1,2-DICHLOROBENZENE	20	-39	-1.256	1.645	Not Significant
MW09-27S	1,3-DICHLOROBENZENE	20	-39	-1.256	1.645	Not Significant
MW09-27S	1,4-DICHLOROBENZENE	20	-32	-1.027	1.645	Not Significant

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-27S	1-METHYLNAPHTHALENE	0	---	---	NA	NA
MW09-27S	2,2'-OXYBIS(1-CHLOROPROPANE)	5	-4	-4	8	Not Significant
MW09-27S	2,4,5-TRICHLOROPHENOL	20	-131	-4.304	1.645	Downward Trend
MW09-27S	2,4,6-TRICHLOROPHENOL	20	-42	-1.352	1.645	Not Significant
MW09-27S	2,4-DICHLOROPHENOL	20	-42	-1.352	1.645	Not Significant
MW09-27S	2,4-DIMETHYLPHENOL	20	-34	-1.091	1.645	Not Significant
MW09-27S	2,4-DINITROPHENOL	20	-8	-0.2352	1.645	Not Significant
MW09-27S	2,4-DINITROTOLUENE	20	-39	-1.256	1.645	Not Significant
MW09-27S	2,6-DINITROTOLUENE	20	-39	-1.256	1.645	Not Significant
MW09-27S	2-CHLORONAPHTHALENE	20	-42	-1.352	1.645	Not Significant
MW09-27S	2-CHLOROPHENOL	20	-42	-1.352	1.645	Not Significant
MW09-27S	2-METHYLNAPHTHALENE	20	-75	-2.535	1.645	Downward Trend
MW09-27S	2-METHYLPHENOL	20	-42	-1.352	1.645	Not Significant
MW09-27S	2-NITROANILINE	20	-23	-0.7281	1.645	Not Significant
MW09-27S	2-NITROPHENOL	20	-39	-1.256	1.645	Not Significant
MW09-27S	3- AND 4-METHYLPHENOL	10	-15	-15	21	Not Significant
MW09-27S	3,3-DICHLOROBENZIDINE	20	12	0.3691	1.645	Not Significant
MW09-27S	3-NITROANILINE	20	-20	-0.6271	1.645	Not Significant
MW09-27S	4,6-DINITRO-2-METHYLPHENOL	20	-23	-0.7281	1.645	Not Significant
MW09-27S	4-BROMOPHENYL-PHENYLETHER	20	-39	-1.256	1.645	Not Significant
MW09-27S	4-CHLORO-3-METHYLPHENOL	20	-42	-1.352	1.645	Not Significant
MW09-27S	4-CHLOROANILINE	20	-32	-1.027	1.645	Not Significant
MW09-27S	4-CHLOROPHENYL-PHENYLETHER	20	-39	-1.256	1.645	Not Significant
MW09-27S	4-METHYLPHENOL	10	-3	-3	21	Not Significant
MW09-27S	4-NITROANILINE	20	-23	-0.7281	1.645	Not Significant
MW09-27S	4-NITROPHENOL	20	-23	-0.7281	1.645	Not Significant
MW09-27S	ACENAPHTHENE	20	-87	-2.905	1.645	Downward Trend
MW09-27S	ACENAPHTHYLENE	20	-85	-2.882	1.645	Downward Trend
MW09-27S	ANTHRACENE	20	14	0.4455	1.645	Not Significant
MW09-27S	BENZO(A)ANTHRACENE	20	24	0.7667	1.645	Not Significant
MW09-27S	BENZO(A)PYRENE	20	27	0.8906	1.645	Not Significant
MW09-27S	BENZO(B)FLUORANTHENE	20	-28	-1.036	1.645	Not Significant
MW09-27S	BENZO(G,H,I)PERYLENE	20	-28	-1.036	1.645	Not Significant
MW09-27S	BENZO(K)FLUORANTHENE	20	21	0.6851	1.645	Not Significant
MW09-27S	BENZOIC ACID	0	---	---	NA	NA
MW09-27S	BENZYL ALCOHOL	0	---	---	NA	NA
MW09-27S	BIS(2-CHLOROETHOXY)METHANE	20	-32	-1.027	1.645	Not Significant
MW09-27S	BIS(2-CHLOROETHYL)ETHER	20	-39	-1.256	1.645	Not Significant
MW09-27S	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
MW09-27S	BIS(2-ETHYLHEXYL)PHTHALATE	20	-15	-0.4638	1.645	Not Significant
MW09-27S	BUTYLBENZYLPHTHALATE	20	-115	-3.914	1.645	Downward Trend
MW09-27S	CARBAZOLE	20	-115	-3.914	1.645	Downward Trend
MW09-27S	CHRYSENE	20	23	0.7420	1.645	Not Significant
MW09-27S	CRESOLS	0	---	---	NA	NA
MW09-27S	DIBENZ(A,H)ANTHRACENE	20	-28	-0.9975	1.645	Not Significant
MW09-27S	DIBENZOFURAN	20	-115	-3.914	1.645	Downward Trend
MW09-27S	DIETHYLPHTHALATE	20	-115	-3.914	1.645	Downward Trend
MW09-27S	DIMETHYL PHTHALATE	20	-115	-3.914	1.645	Downward Trend
MW09-27S	DI-N-BUTYLPHTHALATE	20	-115	-3.914	1.645	Downward Trend
MW09-27S	DI-N-OCTYLPHTHALATE	20	-115	-3.914	1.645	Downward Trend
MW09-27S	FLUORANTHENE	20	-24	-0.8225	1.645	Not Significant
MW09-27S	FLUORENE	20	-28	-0.9975	1.645	Not Significant
MW09-27S	HEXACHLOROBUTADIENE	20	-115	-3.914	1.645	Downward Trend
MW09-27S	HEXACHLOROCYCLOPENTADIENE	20	-104	-3.441	1.645	Downward Trend
MW09-27S	HEXACHLOROETHANE	20	-115	-3.914	1.645	Downward Trend
MW09-27S	INDENO(1,2,3-CD)PYRENE	20	11	0.3431	1.645	Not Significant
MW09-27S	ISOPHORONE	20	-115	-3.914	1.645	Downward Trend
MW09-27S	NAPHTHALENE	20	-96	-3.139	1.645	Downward Trend
MW09-27S	NITROBENZENE	20	-76	-2.679	1.645	Downward Trend
MW09-27S	N-NITROSODINPROPYLAMINE	20	-115	-3.914	1.645	Downward Trend
MW09-27S	N-NITROSODIPHENYLAMINE	20	-114	-3.862	1.645	Downward Trend
MW09-27S	PHENANTHRENE	20	12	0.3672	1.645	Not Significant
MW09-27S	PHENOL	19	-80	-2.889	1.645	Downward Trend
MW09-27S	PYRENE	20	34	1.112	1.645	Not Significant
MW09-27S	1,1,1-TRICHLOROETHANE	21	-103	-3.306	1.645	Downward Trend
MW09-27S	1,1,2,2-TETRACHLOROETHANE	21	-75	-2.554	1.645	Downward Trend
MW09-27S	1,1,2-TRICHLOROETHANE	21	-74	-2.388	1.645	Downward Trend
MW09-27S	1,1-DICHLOROETHANE	21	-75	-2.554	1.645	Downward Trend
MW09-27S	1,1-DICHLOROETHENE	21	-103	-3.306	1.645	Downward Trend
MW09-27S	1,2-DICHLOROETHANE	21	-103	-3.306	1.645	Downward Trend
MW09-27S	1,2-DICHLOROETHENE, TOTAL	18	-56	-2.135	1.645	Downward Trend
MW09-27S	1,2-DICHLOROPROPANE	21	-57	-1.800	1.645	Downward Trend
MW09-27S	2-BUTANONE	20	-67	-2.460	1.645	Downward Trend
MW09-27S	2-HEXANONE	21	-75	-2.554	1.645	Downward Trend
MW09-27S	4-METHYL-2-PENTANONE	21	-107	-3.488	1.645	Downward Trend
MW09-27S	ACETONE	20	-62	-2.241	1.645	Downward Trend
MW09-27S	BENZENE	21	-103	-3.306	1.645	Downward Trend
MW09-27S	BROMODICHLOROMETHANE	21	-103	-3.306	1.645	Downward Trend
MW09-27S	BROMOFORM	21	-65	-2.057	1.645	Downward Trend

Table F-5
Site 9 Monitoring Well Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
MW09-27S	BROMOMETHANE	21	16	0.6151	1.645	Not Significant
MW09-27S	CARBON DISULFIDE	21	-75	-2.554	1.645	Downward Trend
MW09-27S	CARBON TETRACHLORIDE	21	-57	-1.800	1.645	Downward Trend
MW09-27S	CHLOROBENZENE	21	-103	-3.306	1.645	Downward Trend
MW09-27S	CHLOROETHANE	21	-41	-1.455	1.645	Not Significant
MW09-27S	CHLOROFORM	21	-103	-3.306	1.645	Downward Trend
MW09-27S	CHLOROMETHANE	21	-34	-1.202	1.645	Not Significant
MW09-27S	CIS-1,2-DICHLOROETHENE	21	-103	-3.306	1.645	Downward Trend
MW09-27S	CIS-1,3-DICHLOROPROPENE	21	-75	-2.554	1.645	Downward Trend
MW09-27S	DIBROMOCHLOROMETHANE	21	-65	-2.057	1.645	Downward Trend
MW09-27S	ETHYLBENZENE	21	-103	-3.306	1.645	Downward Trend
MW09-27S	M- AND P-XYLENE	4	3	3	6	Not Significant
MW09-27S	METHYLENE CHLORIDE	21	1	0	1.645	Not Significant
MW09-27S	O-XYLENE	4	3	3	6	Not Significant
MW09-27S	STYRENE	21	-103	-3.306	1.645	Downward Trend
MW09-27S	TETRACHLOROETHENE	21	-69	-2.186	1.645	Downward Trend
MW09-27S	TOLUENE	21	-103	-3.306	1.645	Downward Trend
MW09-27S	TRANS-1,2-DICHLOROETHENE	21	-65	-2.057	1.645	Downward Trend
MW09-27S	TRANS-1,3-DICHLOROPROPENE	21	-75	-2.554	1.645	Downward Trend
MW09-27S	TRICHLOROETHENE	21	-103	-3.306	1.645	Downward Trend
MW09-27S	VINYL CHLORIDE	21	5	0.1294	1.645	Not Significant
MW09-27S	XYLENES, TOTAL	14	-37	-2.103	1.645	Downward Trend

Notes:
Datasets presented for all analytes detected in at least one location since ME-01.
Field duplicates assigned the maximum value.
A significance level of 95% was used to interpret results.
* - When N > 10, the Normal approximation is used and calculated per box 4-9 in
Data Quality Assessment: Statistical Methods for Practitioners.
EPA QA/G-9S. When the normal approximation is used, the critical value is the standard normal distribution.
When S is 0, no critical value is calculated and a conclusion of no trend is made.
NA = The Mann-Kendall Trend Test was not computed because there were not at least 4 samples,
or there were less than 3 detected concentrations.

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
Dissolved						
P09-01	ALUMINUM	34	23	0.3362	1.645	Not Significant
P09-01	ANTIMONY	34	-59	-0.8762	1.645	Not Significant
P09-01	ARSENIC	34	51	0.7490	1.645	Not Significant
P09-01	BARIUM	2	---	---	NA	NA
P09-01	BERYLLIUM	34	12	0.1655	1.645	Not Significant
P09-01	CADMIUM	2	---	---	NA	NA
P09-01	CALCIUM	2	---	---	NA	NA
P09-01	CHROMIUM, TOTAL	34	-10	-0.1367	1.645	Not Significant
P09-01	COBALT	2	---	---	NA	NA
P09-01	COPPER	34	-110	-1.646	1.645	Downward Trend
P09-01	IRON	34	-11	-0.1482	1.645	Not Significant
P09-01	LEAD	34	-53	-0.7820	1.645	Not Significant
P09-01	MAGNESIUM	2	---	---	NA	NA
P09-01	MANGANESE	34	-31	-0.4447	1.645	Not Significant
P09-01	MERCURY	34	-1	0	1.645	Not Significant
P09-01	NICKEL	34	60	0.8747	1.645	Not Significant
P09-01	POTASSIUM	2	---	---	NA	NA
P09-01	SELENIUM	2	---	---	NA	NA
P09-01	SILVER	2	---	---	NA	NA
P09-01	SODIUM	2	---	---	NA	NA
P09-01	VANADIUM	2	---	---	NA	NA
P09-01	ZINC	34	43	0.6316	1.645	Not Significant
P09-02A	ALUMINUM	7	16	16	13	Upward Trend
P09-02A	ANTIMONY	7	5	5	13	Not Significant
P09-02A	ARSENIC	7	3	3	13	Not Significant
P09-02A	BARIUM	0	---	---	NA	NA
P09-02A	BERYLLIUM	7	9	9	13	Not Significant
P09-02A	CADMIUM	0	---	---	NA	NA
P09-02A	CALCIUM	0	---	---	NA	NA
P09-02A	CHROMIUM, TOTAL	7	13	13	13	Upward Trend
P09-02A	COBALT	0	---	---	NA	NA
P09-02A	COPPER	7	11	11	13	Not Significant
P09-02A	IRON	7	9	9	13	Not Significant
P09-02A	LEAD	7	13	13	13	Upward Trend
P09-02A	MAGNESIUM	0	---	---	NA	NA
P09-02A	MANGANESE	7	-1	-1	13	Not Significant
P09-02A	MERCURY	7	3	3	13	Not Significant
P09-02A	NICKEL	7	11	11	13	Not Significant
P09-02A	POTASSIUM	0	---	---	NA	NA
P09-02A	SELENIUM	0	---	---	NA	NA
P09-02A	SILVER	0	---	---	NA	NA
P09-02A	SODIUM	0	---	---	NA	NA
P09-02A	VANADIUM	0	---	---	NA	NA
P09-02A	ZINC	7	13	13	13	Upward Trend
P09-03A	ALUMINUM	5	1	1	8	Not Significant
P09-03A	ANTIMONY	5	4	4	8	Not Significant
P09-03A	ARSENIC	5	2	2	8	Not Significant
P09-03A	BARIUM	0	---	---	NA	NA
P09-03A	BERYLLIUM	5	1	1	8	Not Significant
P09-03A	CADMIUM	0	---	---	NA	NA
P09-03A	CALCIUM	0	---	---	NA	NA
P09-03A	CHROMIUM, TOTAL	5	4	4	8	Not Significant
P09-03A	COBALT	0	---	---	NA	NA
P09-03A	COPPER	5	-2	-2	8	Not Significant
P09-03A	IRON	5	-2	-2	8	Not Significant
P09-03A	LEAD	5	2	2	8	Not Significant
P09-03A	MAGNESIUM	0	---	---	NA	NA
P09-03A	MANGANESE	5	4	4	8	Not Significant
P09-03A	MERCURY	5	-1	-1	8	Not Significant
P09-03A	NICKEL	5	6	6	8	Not Significant
P09-03A	POTASSIUM	0	---	---	NA	NA
P09-03A	SELENIUM	0	---	---	NA	NA
P09-03A	SILVER	0	---	---	NA	NA
P09-03A	SODIUM	0	---	---	NA	NA
P09-03A	VANADIUM	0	---	---	NA	NA
P09-03A	ZINC	5	6	6	8	Not Significant
P09-04A	ALUMINUM	6	7	7	11	Not Significant
P09-04A	ANTIMONY	6	8	8	11	Not Significant
P09-04A	ARSENIC	6	8	8	11	Not Significant
P09-04A	BARIUM	0	---	---	NA	NA
P09-04A	BERYLLIUM	6	5	5	11	Not Significant
P09-04A	CADMIUM	0	---	---	NA	NA
P09-04A	CALCIUM	0	---	---	NA	NA
P09-04A	CHROMIUM, TOTAL	6	8	8	11	Not Significant
P09-04A	COBALT	0	---	---	NA	NA
P09-04A	COPPER	6	7	7	11	Not Significant
P09-04A	IRON	6	4	4	11	Not Significant
P09-04A	LEAD	6	8	8	11	Not Significant
P09-04A	MAGNESIUM	0	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-04A	MANGANESE	6	6	6	11	Not Significant
P09-04A	MERCURY	6	2	2	11	Not Significant
P09-04A	NICKEL	6	3	3	11	Not Significant
P09-04A	POTASSIUM	0	---	---	NA	NA
P09-04A	SELENIUM	0	---	---	NA	NA
P09-04A	SILVER	0	---	---	NA	NA
P09-04A	SODIUM	0	---	---	NA	NA
P09-04A	VANADIUM	0	---	---	NA	NA
P09-04A	ZINC	6	9	9	11	Not Significant
P09-06B	ALUMINUM	3	---	---	NA	NA
P09-06B	ANTIMONY	3	---	---	NA	NA
P09-06B	ARSENIC	3	---	---	NA	NA
P09-06B	BARIUM	0	---	---	NA	NA
P09-06B	BERYLLIUM	3	---	---	NA	NA
P09-06B	CADMIUM	0	---	---	NA	NA
P09-06B	CALCIUM	0	---	---	NA	NA
P09-06B	CHROMIUM, TOTAL	3	---	---	NA	NA
P09-06B	COBALT	0	---	---	NA	NA
P09-06B	COPPER	3	---	---	NA	NA
P09-06B	IRON	3	---	---	NA	NA
P09-06B	LEAD	3	---	---	NA	NA
P09-06B	MAGNESIUM	0	---	---	NA	NA
P09-06B	MANGANESE	3	---	---	NA	NA
P09-06B	MERCURY	3	---	---	NA	NA
P09-06B	NICKEL	3	---	---	NA	NA
P09-06B	POTASSIUM	0	---	---	NA	NA
P09-06B	SELENIUM	0	---	---	NA	NA
P09-06B	SILVER	0	---	---	NA	NA
P09-06B	SODIUM	0	---	---	NA	NA
P09-06B	VANADIUM	0	---	---	NA	NA
P09-06B	ZINC	3	---	---	NA	NA
P09-07B	ALUMINUM	2	---	---	NA	NA
P09-07B	ANTIMONY	2	---	---	NA	NA
P09-07B	ARSENIC	2	---	---	NA	NA
P09-07B	BARIUM	0	---	---	NA	NA
P09-07B	BERYLLIUM	2	---	---	NA	NA
P09-07B	CADMIUM	0	---	---	NA	NA
P09-07B	CALCIUM	0	---	---	NA	NA
P09-07B	CHROMIUM, TOTAL	2	---	---	NA	NA
P09-07B	COBALT	0	---	---	NA	NA
P09-07B	COPPER	2	---	---	NA	NA
P09-07B	IRON	2	---	---	NA	NA
P09-07B	LEAD	2	---	---	NA	NA
P09-07B	MAGNESIUM	0	---	---	NA	NA
P09-07B	MANGANESE	2	---	---	NA	NA
P09-07B	MERCURY	2	---	---	NA	NA
P09-07B	NICKEL	2	---	---	NA	NA
P09-07B	POTASSIUM	0	---	---	NA	NA
P09-07B	SELENIUM	0	---	---	NA	NA
P09-07B	SILVER	0	---	---	NA	NA
P09-07B	SODIUM	0	---	---	NA	NA
P09-07B	VANADIUM	0	---	---	NA	NA
P09-07B	ZINC	2	---	---	NA	NA
P09-08B	ALUMINUM	3	---	---	NA	NA
P09-08B	ANTIMONY	3	---	---	NA	NA
P09-08B	ARSENIC	3	---	---	NA	NA
P09-08B	BARIUM	0	---	---	NA	NA
P09-08B	BERYLLIUM	3	---	---	NA	NA
P09-08B	CADMIUM	0	---	---	NA	NA
P09-08B	CALCIUM	0	---	---	NA	NA
P09-08B	CHROMIUM, TOTAL	3	---	---	NA	NA
P09-08B	COBALT	0	---	---	NA	NA
P09-08B	COPPER	3	---	---	NA	NA
P09-08B	IRON	3	---	---	NA	NA
P09-08B	LEAD	3	---	---	NA	NA
P09-08B	MAGNESIUM	0	---	---	NA	NA
P09-08B	MANGANESE	3	---	---	NA	NA
P09-08B	MERCURY	3	---	---	NA	NA
P09-08B	NICKEL	3	---	---	NA	NA
P09-08B	POTASSIUM	0	---	---	NA	NA
P09-08B	SELENIUM	0	---	---	NA	NA
P09-08B	SILVER	0	---	---	NA	NA
P09-08B	SODIUM	0	---	---	NA	NA
P09-08B	VANADIUM	0	---	---	NA	NA
P09-08B	ZINC	3	---	---	NA	NA
P09-09	ALUMINUM	33	54	0.8432	1.645	Not Significant
P09-09	ANTIMONY	33	69	1.078	1.645	Not Significant
P09-09	ARSENIC	33	126	1.959	1.645	Upward Trend
P09-09	BARIUM	1	---	---	NA	NA
P09-09	BERYLLIUM	33	133	2.071	1.645	Upward Trend

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-09	CADMIUM	1	---	---	NA	NA
P09-09	CALCIUM	1	---	---	NA	NA
P09-09	CHROMIUM, TOTAL	33	27	0.4166	1.645	Not Significant
P09-09	COBALT	1	---	---	NA	NA
P09-09	COPPER	33	-22	-0.3321	1.645	Not Significant
P09-09	IRON	33	97	1.488	1.645	Not Significant
P09-09	LEAD	33	71	1.097	1.645	Not Significant
P09-09	MAGNESIUM	1	---	---	NA	NA
P09-09	MANGANESE	33	-53	-0.8058	1.645	Not Significant
P09-09	MERCURY	33	-40	-0.6336	1.645	Not Significant
P09-09	NICKEL	33	27	0.4030	1.645	Not Significant
P09-09	POTASSIUM	1	---	---	NA	NA
P09-09	SELENIUM	1	---	---	NA	NA
P09-09	SILVER	1	---	---	NA	NA
P09-09	SODIUM	1	---	---	NA	NA
P09-09	VANADIUM	1	---	---	NA	NA
P09-09	ZINC	33	111	1.731	1.645	Upward Trend
P09-10	ALUMINUM	33	18	0.2725	1.645	Not Significant
P09-10	ANTIMONY	33	-36	-0.5542	1.645	Not Significant
P09-10	ARSENIC	33	92	1.426	1.645	Not Significant
P09-10	BARIUM	1	---	---	NA	NA
P09-10	BERYLLIUM	33	-7	-0.09453	1.645	Not Significant
P09-10	CADMIUM	1	---	---	NA	NA
P09-10	CALCIUM	1	---	---	NA	NA
P09-10	CHROMIUM, TOTAL	33	16	0.2360	1.645	Not Significant
P09-10	COBALT	1	---	---	NA	NA
P09-10	COPPER	33	-79	-1.273	1.645	Not Significant
P09-10	IRON	33	66	1.011	1.645	Not Significant
P09-10	LEAD	33	-55	-0.8608	1.645	Not Significant
P09-10	MAGNESIUM	1	---	---	NA	NA
P09-10	MANGANESE	33	-1	0	1.645	Not Significant
P09-10	MERCURY	31	-40	-0.6926	1.645	Not Significant
P09-10	NICKEL	33	35	0.5269	1.645	Not Significant
P09-10	POTASSIUM	1	---	---	NA	NA
P09-10	SELENIUM	1	---	---	NA	NA
P09-10	SILVER	1	---	---	NA	NA
P09-10	SODIUM	1	---	---	NA	NA
P09-10	VANADIUM	1	---	---	NA	NA
P09-10	ZINC	33	-85	-1.312	1.645	Not Significant
P09-11B	ALUMINUM	4	4	4	6	Not Significant
P09-11B	ANTIMONY	4	2	2	6	Not Significant
P09-11B	ARSENIC	4	3	3	6	Not Significant
P09-11B	BARIUM	0	---	---	NA	NA
P09-11B	BERYLLIUM	4	3	3	6	Not Significant
P09-11B	CADMIUM	0	---	---	NA	NA
P09-11B	CALCIUM	0	---	---	NA	NA
P09-11B	CHROMIUM, TOTAL	4	4	4	6	Not Significant
P09-11B	COBALT	0	---	---	NA	NA
P09-11B	COPPER	4	2	2	6	Not Significant
P09-11B	IRON	4	0	0	NA	No Trend
P09-11B	LEAD	4	3	3	6	Not Significant
P09-11B	MAGNESIUM	0	---	---	NA	NA
P09-11B	MANGANESE	4	4	4	6	Not Significant
P09-11B	MERCURY	4	2	2	6	Not Significant
P09-11B	NICKEL	4	6	6	6	Upward Trend
P09-11B	POTASSIUM	0	---	---	NA	NA
P09-11B	SELENIUM	0	---	---	NA	NA
P09-11B	SILVER	0	---	---	NA	NA
P09-11B	SODIUM	0	---	---	NA	NA
P09-11B	VANADIUM	0	---	---	NA	NA
P09-11B	ZINC	4	4	4	6	Not Significant
P09-12B	ALUMINUM	2	---	---	NA	NA
P09-12B	ANTIMONY	2	---	---	NA	NA
P09-12B	ARSENIC	2	---	---	NA	NA
P09-12B	BARIUM	0	---	---	NA	NA
P09-12B	BERYLLIUM	2	---	---	NA	NA
P09-12B	CADMIUM	0	---	---	NA	NA
P09-12B	CALCIUM	0	---	---	NA	NA
P09-12B	CHROMIUM, TOTAL	2	---	---	NA	NA
P09-12B	COBALT	0	---	---	NA	NA
P09-12B	COPPER	2	---	---	NA	NA
P09-12B	IRON	2	---	---	NA	NA
P09-12B	LEAD	2	---	---	NA	NA
P09-12B	MAGNESIUM	0	---	---	NA	NA
P09-12B	MANGANESE	2	---	---	NA	NA
P09-12B	MERCURY	2	---	---	NA	NA
P09-12B	NICKEL	2	---	---	NA	NA
P09-12B	POTASSIUM	0	---	---	NA	NA
P09-12B	SELENIUM	0	---	---	NA	NA
P09-12B	SILVER	0	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-12B	SODIUM	0	---	---	NA	NA
P09-12B	VANADIUM	0	---	---	NA	NA
P09-12B	ZINC	2	---	---	NA	NA
Total						
P09-01	PENTACHLOROPHENOL	10	-16	-16	21	Not Significant
P09-01	ALUMINUM	34	-59	-0.8598	1.645	Not Significant
P09-01	ANTIMONY	33	-5	-0.06254	1.645	Not Significant
P09-01	ARSENIC	33	114	1.751	1.645	Upward Trend
P09-01	BARIUM	2	---	---	NA	NA
P09-01	BERYLLIUM	34	-60	-0.8749	1.645	Not Significant
P09-01	CADMIUM	2	---	---	NA	NA
P09-01	CALCIUM	2	---	---	NA	NA
P09-01	CHROMIUM, TOTAL	34	73	1.067	1.645	Not Significant
P09-01	COBALT	2	---	---	NA	NA
P09-01	COPPER	34	-43	-0.6226	1.645	Not Significant
P09-01	IRON	34	27	0.3854	1.645	Not Significant
P09-01	LEAD	34	-47	-0.6819	1.645	Not Significant
P09-01	MAGNESIUM	2	---	---	NA	NA
P09-01	MANGANESE	34	-5	-0.05930	1.645	Not Significant
P09-01	MERCURY	33	-15	-0.2219	1.645	Not Significant
P09-01	NICKEL	34	61	0.8895	1.645	Not Significant
P09-01	POTASSIUM	2	---	---	NA	NA
P09-01	SELENIUM	2	---	---	NA	NA
P09-01	SILVER	2	---	---	NA	NA
P09-01	SODIUM	2	---	---	NA	NA
P09-01	VANADIUM	2	---	---	NA	NA
P09-01	ZINC	34	-49	-0.7116	1.645	Not Significant
P09-01	AROCLOR-1016	30	-35	-0.6107	1.645	Not Significant
P09-01	AROCLOR-1221	30	-76	-1.349	1.645	Not Significant
P09-01	AROCLOR-1232	30	-47	-0.8262	1.645	Not Significant
P09-01	AROCLOR-1242	30	-42	-0.7378	1.645	Not Significant
P09-01	AROCLOR-1248	30	-48	-0.8458	1.645	Not Significant
P09-01	AROCLOR-1254	30	-45	-0.7903	1.645	Not Significant
P09-01	AROCLOR-1260	30	-36	-0.6279	1.645	Not Significant
P09-01	POLYCHLORINATED BIPHENYLS (PCBS)	28	-1	0	1.645	Not Significant
P09-01	4,4-DDD	18	41	1.567	1.645	Not Significant
P09-01	4,4-DDE	18	48	1.872	1.645	Upward Trend
P09-01	4,4-DDT	18	41	1.567	1.645	Not Significant
P09-01	ALDRIN	18	61	2.304	1.645	Upward Trend
P09-01	ALPHA-BHC	18	61	2.304	1.645	Upward Trend
P09-01	ALPHA-CHLORDANE	18	61	2.304	1.645	Upward Trend
P09-01	DELTA-BHC	18	63	2.385	1.645	Upward Trend
P09-01	ENDOSULFAN I	18	61	2.304	1.645	Upward Trend
P09-01	ENDOSULFAN II	18	41	1.567	1.645	Not Significant
P09-01	LINDANE	18	61	2.304	1.645	Upward Trend
P09-01	BETA-BHC	18	61	2.304	1.645	Upward Trend
P09-01	DIELDRIN	18	41	1.567	1.645	Not Significant
P09-01	ENDOSULFAN SULFATE	17	32	1.329	1.645	Not Significant
P09-01	ENDRIN	18	48	1.872	1.645	Upward Trend
P09-01	ENDRIN KETONE	18	41	1.567	1.645	Not Significant
P09-01	HEPTACHLOR	18	55	2.073	1.645	Upward Trend
P09-01	HEPTACHLOR EPOXIDE	18	61	2.304	1.645	Upward Trend
P09-01	HEXACHLOROBENZENE	15	53	2.601	1.645	Upward Trend
P09-01	METHOXYCHLOR	18	-7	-0.2304	1.645	Not Significant
P09-01	1,2,4-TRICHLOROBENZENE	12	24	1.651	1.645	Upward Trend
P09-01	1,2-DICHLOROBENZENE	12	24	1.651	1.645	Upward Trend
P09-01	1,3-DICHLOROBENZENE	12	24	1.651	1.645	Upward Trend
P09-01	1,4-DICHLOROBENZENE	12	24	1.651	1.645	Upward Trend
P09-01	1-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-01	2,2'-OXYBIS(1-CHLOROPROPANE)	11	22	1.730	1.645	Upward Trend
P09-01	2,4,5-TRICHLOROPHENOL	10	-24	-24	21	Downward Trend
P09-01	2,4,6-TRICHLOROPHENOL	7	11	11	13	Not Significant
P09-01	2,4-DICHLOROPHENOL	7	11	11	13	Not Significant
P09-01	2,4-DIMETHYLPHENOL	4	5	5	6	Not Significant
P09-01	2,4-DINITROPHENOL	7	11	11	13	Not Significant
P09-01	2,4-DINITROTOLUENE	12	40	2.839	1.645	Upward Trend
P09-01	2,6-DINITROTOLUENE	12	40	2.839	1.645	Upward Trend
P09-01	2-CHLORONAPHTHALENE	12	24	1.651	1.645	Upward Trend
P09-01	2-CHLOROPHENOL	7	11	11	13	Not Significant
P09-01	2-METHYLNAPHTHALENE	17	47	1.968	1.645	Upward Trend
P09-01	2-METHYLPHENOL	7	11	11	13	Not Significant
P09-01	2-NITROANILINE	12	25	2.002	1.645	Upward Trend
P09-01	2-NITROPHENOL	8	16	16	16	Upward Trend
P09-01	3- AND 4-METHYLPHENOL	4	2	2	6	Not Significant
P09-01	3,3-DICHLOROBENZIDINE	11	25	2.061	1.645	Upward Trend
P09-01	3-NITROANILINE	12	25	2.002	1.645	Upward Trend
P09-01	4,6-DINITRO-2-METHYLPHENOL	8	7	7	16	Not Significant
P09-01	4-BROMOPHENYL-PHENYLETHER	12	24	1.651	1.645	Upward Trend
P09-01	4-CHLORO-3-METHYLPHENOL	7	11	11	13	Not Significant
P09-01	4-CHLOROANILINE	11	33	2.622	1.645	Upward Trend

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-01	4-CHLOROPHENYL-PHENYLETHER	12	24	1.651	1.645	Upward Trend
P09-01	4-METHYLPHENOL	5	0	0	NA	No Trend
P09-01	4-NITROANILINE	12	25	2.002	1.645	Upward Trend
P09-01	4-NITROPHENOL	7	11	11	13	Not Significant
P09-01	ACENAPHTHENE	17	59	2.497	1.645	Upward Trend
P09-01	ACENAPHTHYLENE	17	-49	-2.025	1.645	Downward Trend
P09-01	ANTHRACENE	17	68	2.898	1.645	Upward Trend
P09-01	BENZO(A)ANTHRACENE	17	76	3.138	1.645	Upward Trend
P09-01	BENZO(A)PYRENE	17	74	3.061	1.645	Upward Trend
P09-01	BENZO(B)FLUORANTHENE	17	62	2.570	1.645	Upward Trend
P09-01	BENZO(G,H,I)PERYLENE	17	62	2.576	1.645	Upward Trend
P09-01	BENZO(K)FLUORANTHENE	17	67	2.817	1.645	Upward Trend
P09-01	BENZOIC ACID	2	---	---	NA	NA
P09-01	BENZYL ALCOHOL	1	---	---	NA	NA
P09-01	BIS(2-CHLOROETHOXY)METHANE	12	24	1.651	1.645	Upward Trend
P09-01	BIS(2-CHLOROETHYL)ETHER	12	24	1.651	1.645	Upward Trend
P09-01	BIS(2-CHLOROISOPROPYL)ETHER	1	---	---	NA	NA
P09-01	BIS(2-ETHYLHEXYL)PHTHALATE	14	9	0.4489	1.645	Not Significant
P09-01	BUTYLBENZYLPHTHALATE	12	28	1.966	1.645	Upward Trend
P09-01	CARBAZOLE	12	24	1.651	1.645	Upward Trend
P09-01	CHRYSENE	17	58	2.390	1.645	Upward Trend
P09-01	CRESOLS	0	---	---	NA	NA
P09-01	DIBENZ(A,H)ANTHRACENE	17	62	2.576	1.645	Upward Trend
P09-01	DIBENZOFURAN	12	30	2.242	1.645	Upward Trend
P09-01	DIETHYLPHTHALATE	13	18	1.087	1.645	Not Significant
P09-01	DIMETHYL PHTHALATE	12	28	1.966	1.645	Upward Trend
P09-01	DI-N-BUTYLPHTHALATE	12	28	1.966	1.645	Upward Trend
P09-01	DI-N-OCTYLPHTHALATE	12	26	1.783	1.645	Upward Trend
P09-01	FLUORANTHENE	17	68	2.898	1.645	Upward Trend
P09-01	FLUORENE	17	68	2.898	1.645	Upward Trend
P09-01	HEXACHLOROBUTADIENE	12	24	1.651	1.645	Upward Trend
P09-01	HEXACHLOROCYCLOPENTADIENE	12	25	2.002	1.645	Upward Trend
P09-01	HEXACHLOROETHANE	12	24	1.651	1.645	Upward Trend
P09-01	INDENO(1,2,3-CD)PYRENE	17	47	1.941	1.645	Upward Trend
P09-01	ISOPHORONE	12	24	1.651	1.645	Upward Trend
P09-01	NAPHTHALENE	17	68	2.898	1.645	Upward Trend
P09-01	NITROBENZENE	11	23	1.819	1.645	Upward Trend
P09-01	N-NITROSODINPROPYLAMINE	12	24	1.651	1.645	Upward Trend
P09-01	N-NITROSODIPHENYLAMINE	12	24	1.651	1.645	Upward Trend
P09-01	PHENANTHRENE	17	75	3.093	1.645	Upward Trend
P09-01	PHENOL	7	11	11	13	Not Significant
P09-01	PYRENE	17	34	1.400	1.645	Not Significant
P09-01	1,1,1-TRICHLOROETHANE	27	-117	-2.748	1.645	Downward Trend
P09-01	1,1,2,2-TETRACHLOROETHANE	28	-145	-3.357	1.645	Downward Trend
P09-01	1,1,2-TRICHLOROETHANE	28	-119	-2.745	1.645	Downward Trend
P09-01	1,1-DICHLOROETHANE	27	-135	-3.263	1.645	Downward Trend
P09-01	1,1-DICHLOROETHENE	28	-100	-2.601	1.645	Downward Trend
P09-01	1,2-DICHLOROETHANE	28	-136	-3.059	1.645	Downward Trend
P09-01	1,2-DICHLOROETHENE, TOTAL	26	-133	-2.976	1.645	Downward Trend
P09-01	1,2-DICHLOROPROPANE	27	-63	-1.401	1.645	Not Significant
P09-01	2-BUTANONE	24	-62	-1.903	1.645	Downward Trend
P09-01	2-HEXANONE	26	-101	-3.027	1.645	Downward Trend
P09-01	4-METHYL-2-PENTANONE	27	-138	-3.741	1.645	Downward Trend
P09-01	ACETONE	24	-77	-2.066	1.645	Downward Trend
P09-01	BENZENE	28	-46	-1.012	1.645	Not Significant
P09-01	BROMODICHLOROMETHANE	27	-117	-2.748	1.645	Downward Trend
P09-01	BROMOFORM	27	-81	-1.895	1.645	Downward Trend
P09-01	BROMOMETHANE	27	-22	-0.5013	1.645	Not Significant
P09-01	CARBON DISULFIDE	27	-9	-0.1760	1.645	Not Significant
P09-01	CARBON TETRACHLORIDE	27	-87	-2.037	1.645	Downward Trend
P09-01	CHLOROBENZENE	27	-117	-2.748	1.645	Downward Trend
P09-01	CHLOROETHANE	27	-93	-2.064	1.645	Downward Trend
P09-01	CHLOROFORM	28	-128	-2.878	1.645	Downward Trend
P09-01	CHLOROMETHANE	27	-91	-2.019	1.645	Downward Trend
P09-01	CIS-1,2-DICHLOROETHENE	28	-128	-2.878	1.645	Downward Trend
P09-01	CIS-1,3-DICHLOROPROPENE	27	-59	-1.441	1.645	Not Significant
P09-01	DIBROMOCHLOROMETHANE	27	-81	-1.895	1.645	Downward Trend
P09-01	ETHYLBENZENE	27	-93	-2.519	1.645	Downward Trend
P09-01	M- AND P-XYLENE	3	---	---	NA	NA
P09-01	METHYLENE CHLORIDE	27	63	1.362	1.645	Not Significant
P09-01	O-XYLENE	3	---	---	NA	NA
P09-01	STYRENE	27	-69	-1.518	1.645	Not Significant
P09-01	TETRACHLOROETHENE	28	-104	-2.334	1.645	Downward Trend
P09-01	TOLUENE	27	-66	-1.697	1.645	Downward Trend
P09-01	TRANS-1,2-DICHLOROETHENE	28	-90	-2.017	1.645	Downward Trend
P09-01	TRANS-1,3-DICHLOROPROPENE	27	-54	-1.280	1.645	Not Significant
P09-01	TRICHLOROETHENE	28	-136	-3.059	1.645	Downward Trend
P09-01	VINYL CHLORIDE	28	-74	-1.828	1.645	Downward Trend
P09-01	XYLENES, TOTAL	8	-5	-5	16	Not Significant
P09-02A	PENTACHLOROPHENOL	0	---	---	NA	NA

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Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-02A	ALUMINUM	7	5	5	13	Not Significant
P09-02A	ANTIMONY	7	7	7	13	Not Significant
P09-02A	ARSENIC	7	9	9	13	Not Significant
P09-02A	BARIUM	0	---	---	NA	NA
P09-02A	BERYLLIUM	7	10	10	13	Not Significant
P09-02A	CADMIUM	0	---	---	NA	NA
P09-02A	CALCIUM	0	---	---	NA	NA
P09-02A	CHROMIUM, TOTAL	7	9	9	13	Not Significant
P09-02A	COBALT	0	---	---	NA	NA
P09-02A	COPPER	7	7	7	13	Not Significant
P09-02A	IRON	7	9	9	13	Not Significant
P09-02A	LEAD	7	11	11	13	Not Significant
P09-02A	MAGNESIUM	0	---	---	NA	NA
P09-02A	MANGANESE	7	5	5	13	Not Significant
P09-02A	MERCURY	7	-8	-8	13	Not Significant
P09-02A	NICKEL	7	9	9	13	Not Significant
P09-02A	POTASSIUM	0	---	---	NA	NA
P09-02A	SELENIUM	0	---	---	NA	NA
P09-02A	SILVER	0	---	---	NA	NA
P09-02A	SODIUM	0	---	---	NA	NA
P09-02A	VANADIUM	0	---	---	NA	NA
P09-02A	ZINC	7	9	9	13	Not Significant
P09-02A	AROCLOR-1016	4	2	2	6	Not Significant
P09-02A	AROCLOR-1221	4	1	1	6	Not Significant
P09-02A	AROCLOR-1232	4	2	2	6	Not Significant
P09-02A	AROCLOR-1242	4	2	2	6	Not Significant
P09-02A	AROCLOR-1248	4	2	2	6	Not Significant
P09-02A	AROCLOR-1254	4	2	2	6	Not Significant
P09-02A	AROCLOR-1260	4	2	2	6	Not Significant
P09-02A	POLYCHLORINATED BIPHENYLS (PCBS)	3	---	---	NA	NA
P09-02A	4,4-DDD	0	---	---	NA	NA
P09-02A	4,4-DDE	0	---	---	NA	NA
P09-02A	4,4-DDT	0	---	---	NA	NA
P09-02A	ALDRIN	0	---	---	NA	NA
P09-02A	ALPHA-BHC	0	---	---	NA	NA
P09-02A	ALPHA-CHLORDANE	0	---	---	NA	NA
P09-02A	DELTA-BHC	0	---	---	NA	NA
P09-02A	ENDOSULFAN I	0	---	---	NA	NA
P09-02A	ENDOSULFAN II	0	---	---	NA	NA
P09-02A	LINDANE	0	---	---	NA	NA
P09-02A	BETA-BHC	0	---	---	NA	NA
P09-02A	DIELDRIN	0	---	---	NA	NA
P09-02A	ENDOSULFAN SULFATE	0	---	---	NA	NA
P09-02A	ENDRIN	0	---	---	NA	NA
P09-02A	ENDRIN KETONE	0	---	---	NA	NA
P09-02A	HEPTACHLOR	0	---	---	NA	NA
P09-02A	HEPTACHLOR EPOXIDE	0	---	---	NA	NA
P09-02A	HEXACHLOROBENZENE	0	---	---	NA	NA
P09-02A	METHOXYCHLOR	0	---	---	NA	NA
P09-02A	1,2,4-TRICHLOROBENZENE	0	---	---	NA	NA
P09-02A	1,2-DICHLOROBENZENE	0	---	---	NA	NA
P09-02A	1,3-DICHLOROBENZENE	0	---	---	NA	NA
P09-02A	1,4-DICHLOROBENZENE	0	---	---	NA	NA
P09-02A	1-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-02A	2,2'-OXYBIS(1-CHLOROPROPANE)	0	---	---	NA	NA
P09-02A	2,4,5-TRICHLOROPHENOL	0	---	---	NA	NA
P09-02A	2,4,6-TRICHLOROPHENOL	0	---	---	NA	NA
P09-02A	2,4-DICHLOROPHENOL	0	---	---	NA	NA
P09-02A	2,4-DIMETHYLPHENOL	0	---	---	NA	NA
P09-02A	2,4-DINITROPHENOL	0	---	---	NA	NA
P09-02A	2,4-DINITROTOLUENE	0	---	---	NA	NA
P09-02A	2,6-DINITROTOLUENE	0	---	---	NA	NA
P09-02A	2-CHLORONAPHTHALENE	0	---	---	NA	NA
P09-02A	2-CHLOROPHENOL	0	---	---	NA	NA
P09-02A	2-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-02A	2-METHYLPHENOL	0	---	---	NA	NA
P09-02A	2-NITROANILINE	0	---	---	NA	NA
P09-02A	2-NITROPHENOL	0	---	---	NA	NA
P09-02A	3- AND 4-METHYLPHENOL	0	---	---	NA	NA
P09-02A	3,3-DICHLOROBENZIDINE	0	---	---	NA	NA
P09-02A	3-NITROANILINE	0	---	---	NA	NA
P09-02A	4,6-DINITRO-2-METHYLPHENOL	0	---	---	NA	NA
P09-02A	4-BROMOPHENYL-PHENYLETHER	0	---	---	NA	NA
P09-02A	4-CHLORO-3-METHYLPHENOL	0	---	---	NA	NA
P09-02A	4-CHLOROANILINE	0	---	---	NA	NA
P09-02A	4-CHLOROPHENYL-PHENYLETHER	0	---	---	NA	NA
P09-02A	4-METHYLPHENOL	0	---	---	NA	NA
P09-02A	4-NITROANILINE	0	---	---	NA	NA
P09-02A	4-NITROPHENOL	0	---	---	NA	NA
P09-02A	ACENAPHTHENE	0	---	---	NA	NA

Table F-6
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-02A	ACENAPHTHYLENE	0	---	---	NA	NA
P09-02A	ANTHRACENE	0	---	---	NA	NA
P09-02A	BENZO(A)ANTHRACENE	0	---	---	NA	NA
P09-02A	BENZO(A)PYRENE	0	---	---	NA	NA
P09-02A	BENZO(B)FLUORANTHENE	0	---	---	NA	NA
P09-02A	BENZO(G,H,I)PERYLENE	0	---	---	NA	NA
P09-02A	BENZO(K)FLUORANTHENE	0	---	---	NA	NA
P09-02A	BENZOIC ACID	0	---	---	NA	NA
P09-02A	BENZYL ALCOHOL	0	---	---	NA	NA
P09-02A	BIS(2-CHLOROETHOXY)METHANE	0	---	---	NA	NA
P09-02A	BIS(2-CHLOROETHYL)ETHER	0	---	---	NA	NA
P09-02A	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
P09-02A	BIS(2-ETHYLHEXYL)PHTHALATE	0	---	---	NA	NA
P09-02A	BUTYLBENZYLPHTHALATE	0	---	---	NA	NA
P09-02A	CARBAZOLE	0	---	---	NA	NA
P09-02A	CHRYSENE	0	---	---	NA	NA
P09-02A	CRESOLS	0	---	---	NA	NA
P09-02A	DIBENZ(A,H)ANTHRACENE	0	---	---	NA	NA
P09-02A	DIBENZOFURAN	0	---	---	NA	NA
P09-02A	DIETHYLPHTHALATE	0	---	---	NA	NA
P09-02A	DIMETHYL PHTHALATE	0	---	---	NA	NA
P09-02A	DI-N-BUTYLPHTHALATE	0	---	---	NA	NA
P09-02A	DI-N-OCTYLPHTHALATE	0	---	---	NA	NA
P09-02A	FLUORANTHENE	0	---	---	NA	NA
P09-02A	FLUORENE	0	---	---	NA	NA
P09-02A	HEXACHLOROBUTADIENE	0	---	---	NA	NA
P09-02A	HEXACHLOROCYCLOPENTADIENE	0	---	---	NA	NA
P09-02A	HEXACHLOROETHANE	0	---	---	NA	NA
P09-02A	INDENO(1,2,3-CD)PYRENE	0	---	---	NA	NA
P09-02A	ISOPHORONE	0	---	---	NA	NA
P09-02A	NAPHTHALENE	0	---	---	NA	NA
P09-02A	NITROBENZENE	0	---	---	NA	NA
P09-02A	N-NITROSODINPROPYLAMINE	0	---	---	NA	NA
P09-02A	N-NITROSODIPHENYLAMINE	0	---	---	NA	NA
P09-02A	PHENANTHRENE	0	---	---	NA	NA
P09-02A	PHENOL	0	---	---	NA	NA
P09-02A	PYRENE	0	---	---	NA	NA
P09-02A	1,1,1-TRICHLOROETHANE	6	5	5	11	Not Significant
P09-02A	1,1,2,2-TETRACHLOROETHANE	6	5	5	11	Not Significant
P09-02A	1,1,2-TRICHLOROETHANE	6	6	6	11	Not Significant
P09-02A	1,1-DICHLOROETHANE	6	5	5	11	Not Significant
P09-02A	1,1-DICHLOROETHENE	6	5	5	11	Not Significant
P09-02A	1,2-DICHLOROETHANE	6	5	5	11	Not Significant
P09-02A	1,2-DICHLOROETHENE, TOTAL	4	3	3	6	Not Significant
P09-02A	1,2-DICHLOROPROPANE	6	7	7	11	Not Significant
P09-02A	2-BUTANONE	6	5	5	11	Not Significant
P09-02A	2-HEXANONE	6	5	5	11	Not Significant
P09-02A	4-METHYL-2-PENTANONE	6	-5	-5	11	Not Significant
P09-02A	ACETONE	6	5	5	11	Not Significant
P09-02A	BENZENE	6	5	5	11	Not Significant
P09-02A	BROMODICHLOROMETHANE	6	5	5	11	Not Significant
P09-02A	BROMOFORM	6	7	7	11	Not Significant
P09-02A	BROMOMETHANE	6	5	5	11	Not Significant
P09-02A	CARBON DISULFIDE	6	5	5	11	Not Significant
P09-02A	CARBON TETRACHLORIDE	6	7	7	11	Not Significant
P09-02A	CHLOROBENZENE	6	5	5	11	Not Significant
P09-02A	CHLOROETHANE	6	-1	-1	11	Not Significant
P09-02A	CHLOROFORM	6	5	5	11	Not Significant
P09-02A	CHLOROMETHANE	6	-1	-1	11	Not Significant
P09-02A	CIS-1,2-DICHLOROETHENE	6	7	7	11	Not Significant
P09-02A	CIS-1,3-DICHLOROPROPENE	6	5	5	11	Not Significant
P09-02A	DIBROMOCHLOROMETHANE	6	7	7	11	Not Significant
P09-02A	ETHYLBENZENE	6	5	5	11	Not Significant
P09-02A	M- AND P-XYLENE	1	---	---	NA	NA
P09-02A	METHYLENE CHLORIDE	6	-5	-5	11	Not Significant
P09-02A	O-XYLENE	1	---	---	NA	NA
P09-02A	STYRENE	6	5	5	11	Not Significant
P09-02A	TETRACHLOROETHENE	6	7	7	11	Not Significant
P09-02A	TOLUENE	6	5	5	11	Not Significant
P09-02A	TRANS-1,2-DICHLOROETHENE	6	7	7	11	Not Significant
P09-02A	TRANS-1,3-DICHLOROPROPENE	6	5	5	11	Not Significant
P09-02A	TRICHLOROETHENE	6	5	5	11	Not Significant
P09-02A	VINYL CHLORIDE	6	-1	-1	11	Not Significant
P09-02A	XYLENES, TOTAL	6	-6	-6	11	Not Significant
P09-03A	PENTACHLOROPHENOL	0	---	---	NA	NA
P09-03A	ALUMINUM	5	4	4	8	Not Significant
P09-03A	ANTIMONY	5	4	4	8	Not Significant
P09-03A	ARSENIC	5	6	6	8	Not Significant
P09-03A	BARIUM	0	---	---	NA	NA
P09-03A	BERYLLIUM	5	2	2	8	Not Significant

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-03A	CADMIUM	0	---	---	NA	NA
P09-03A	CALCIUM	0	---	---	NA	NA
P09-03A	CHROMIUM, TOTAL	5	6	6	8	Not Significant
P09-03A	COBALT	0	---	---	NA	NA
P09-03A	COPPER	5	0	0	NA	No Trend
P09-03A	IRON	5	4	4	8	Not Significant
P09-03A	LEAD	5	4	4	8	Not Significant
P09-03A	MAGNESIUM	0	---	---	NA	NA
P09-03A	MANGANESE	5	4	4	8	Not Significant
P09-03A	MERCURY	5	-1	-1	8	Not Significant
P09-03A	NICKEL	5	4	4	8	Not Significant
P09-03A	POTASSIUM	0	---	---	NA	NA
P09-03A	SELENIUM	0	---	---	NA	NA
P09-03A	SILVER	0	---	---	NA	NA
P09-03A	SODIUM	0	---	---	NA	NA
P09-03A	VANADIUM	0	---	---	NA	NA
P09-03A	ZINC	5	6	6	8	Not Significant
P09-03A	AROCLOR-1016	0	---	---	NA	NA
P09-03A	AROCLOR-1221	0	---	---	NA	NA
P09-03A	AROCLOR-1232	0	---	---	NA	NA
P09-03A	AROCLOR-1242	0	---	---	NA	NA
P09-03A	AROCLOR-1248	0	---	---	NA	NA
P09-03A	AROCLOR-1254	0	---	---	NA	NA
P09-03A	AROCLOR-1260	0	---	---	NA	NA
P09-03A	POLYCHLORINATED BIPHENYLS (PCBS)	0	---	---	NA	NA
P09-03A	4,4-DDD	0	---	---	NA	NA
P09-03A	4,4-DDE	0	---	---	NA	NA
P09-03A	4,4-DDT	0	---	---	NA	NA
P09-03A	ALDRIN	0	---	---	NA	NA
P09-03A	ALPHA-BHC	0	---	---	NA	NA
P09-03A	ALPHA-CHLORDANE	0	---	---	NA	NA
P09-03A	DELTA-BHC	0	---	---	NA	NA
P09-03A	ENDOSULFAN I	0	---	---	NA	NA
P09-03A	ENDOSULFAN II	0	---	---	NA	NA
P09-03A	LINDANE	0	---	---	NA	NA
P09-03A	BETA-BHC	0	---	---	NA	NA
P09-03A	DIELDRIN	0	---	---	NA	NA
P09-03A	ENDOSULFAN SULFATE	0	---	---	NA	NA
P09-03A	ENDRIN	0	---	---	NA	NA
P09-03A	ENDRIN KETONE	0	---	---	NA	NA
P09-03A	HEPTACHLOR	0	---	---	NA	NA
P09-03A	HEPTACHLOR EPOXIDE	0	---	---	NA	NA
P09-03A	HEXACHLOROBENZENE	0	---	---	NA	NA
P09-03A	METHOXYCHLOR	0	---	---	NA	NA
P09-03A	1,2,4-TRICHLOROBENZENE	0	---	---	NA	NA
P09-03A	1,2-DICHLOROBENZENE	0	---	---	NA	NA
P09-03A	1,3-DICHLOROBENZENE	0	---	---	NA	NA
P09-03A	1,4-DICHLOROBENZENE	0	---	---	NA	NA
P09-03A	1-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-03A	2,2'-OXYBIS(1-CHLOROPROPANE)	0	---	---	NA	NA
P09-03A	2,4,5-TRICHLOROPHENOL	0	---	---	NA	NA
P09-03A	2,4,6-TRICHLOROPHENOL	0	---	---	NA	NA
P09-03A	2,4-DICHLOROPHENOL	0	---	---	NA	NA
P09-03A	2,4-DIMETHYLPHENOL	0	---	---	NA	NA
P09-03A	2,4-DINITROPHENOL	0	---	---	NA	NA
P09-03A	2,4-DINITROTOLUENE	0	---	---	NA	NA
P09-03A	2,6-DINITROTOLUENE	0	---	---	NA	NA
P09-03A	2-CHLORONAPHTHALENE	0	---	---	NA	NA
P09-03A	2-CHLOROPHENOL	0	---	---	NA	NA
P09-03A	2-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-03A	2-METHYLPHENOL	0	---	---	NA	NA
P09-03A	2-NITROANILINE	0	---	---	NA	NA
P09-03A	2-NITROPHENOL	0	---	---	NA	NA
P09-03A	3- AND 4-METHYLPHENOL	0	---	---	NA	NA
P09-03A	3,3-DICHLOROBENZIDINE	0	---	---	NA	NA
P09-03A	3-NITROANILINE	0	---	---	NA	NA
P09-03A	4,6-DINITRO-2-METHYLPHENOL	0	---	---	NA	NA
P09-03A	4-BROMOPHENYL-PHENYLETHER	0	---	---	NA	NA
P09-03A	4-CHLORO-3-METHYLPHENOL	0	---	---	NA	NA
P09-03A	4-CHLOROANILINE	0	---	---	NA	NA
P09-03A	4-CHLOROPHENYL-PHENYLETHER	0	---	---	NA	NA
P09-03A	4-METHYLPHENOL	0	---	---	NA	NA
P09-03A	4-NITROANILINE	0	---	---	NA	NA
P09-03A	4-NITROPHENOL	0	---	---	NA	NA
P09-03A	ACENAPHTHENE	0	---	---	NA	NA
P09-03A	ACENAPHTHYLENE	0	---	---	NA	NA
P09-03A	ANTHRACENE	0	---	---	NA	NA
P09-03A	BENZO(A)ANTHRACENE	0	---	---	NA	NA
P09-03A	BENZO(A)PYRENE	0	---	---	NA	NA
P09-03A	BENZO(B)FLUORANTHENE	0	---	---	NA	NA

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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-03A	BENZO(G,H,I)PERYLENE	0	---	---	NA	NA
P09-03A	BENZO(K)FLUORANTHENE	0	---	---	NA	NA
P09-03A	BENZOIC ACID	0	---	---	NA	NA
P09-03A	BENZYL ALCOHOL	0	---	---	NA	NA
P09-03A	BIS(2-CHLOROETHOXY)METHANE	0	---	---	NA	NA
P09-03A	BIS(2-CHLOROETHYL)ETHER	0	---	---	NA	NA
P09-03A	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
P09-03A	BIS(2-ETHYLHEXYL)PHTHALATE	0	---	---	NA	NA
P09-03A	BUTYLBENZYLPHTHALATE	0	---	---	NA	NA
P09-03A	CARBAZOLE	0	---	---	NA	NA
P09-03A	CHRYSENE	0	---	---	NA	NA
P09-03A	CRESOLS	0	---	---	NA	NA
P09-03A	DIBENZ(A,H)ANTHRACENE	0	---	---	NA	NA
P09-03A	DIBENZOFURAN	0	---	---	NA	NA
P09-03A	DIETHYLPHTHALATE	0	---	---	NA	NA
P09-03A	DIMETHYL PHTHALATE	0	---	---	NA	NA
P09-03A	DI-N-BUTYLPHTHALATE	0	---	---	NA	NA
P09-03A	DI-N-OCTYLPHTHALATE	0	---	---	NA	NA
P09-03A	FLUORANTHENE	0	---	---	NA	NA
P09-03A	FLUORENE	0	---	---	NA	NA
P09-03A	HEXACHLOROBUTADIENE	0	---	---	NA	NA
P09-03A	HEXACHLOROCYCLOPENTADIENE	0	---	---	NA	NA
P09-03A	HEXACHLOROETHANE	0	---	---	NA	NA
P09-03A	INDENO(1,2,3-CD)PYRENE	0	---	---	NA	NA
P09-03A	ISOPHORONE	0	---	---	NA	NA
P09-03A	NAPHTHALENE	0	---	---	NA	NA
P09-03A	NITROBENZENE	0	---	---	NA	NA
P09-03A	N-NITROSODINPROPYLAMINE	0	---	---	NA	NA
P09-03A	N-NITROSODIPHENYLAMINE	0	---	---	NA	NA
P09-03A	PHENANTHRENE	0	---	---	NA	NA
P09-03A	PHENOL	0	---	---	NA	NA
P09-03A	PYRENE	0	---	---	NA	NA
P09-03A	1,1,1-TRICHLOROETHANE	5	4	4	8	Not Significant
P09-03A	1,1,2,2-TETRACHLOROETHANE	5	4	4	8	Not Significant
P09-03A	1,1,2-TRICHLOROETHANE	5	4	4	8	Not Significant
P09-03A	1,1-DICHLOROETHANE	5	4	4	8	Not Significant
P09-03A	1,1-DICHLOROETHENE	5	4	4	8	Not Significant
P09-03A	1,2-DICHLOROETHANE	5	4	4	8	Not Significant
P09-03A	1,2-DICHLOROETHENE, TOTAL	3	---	---	NA	NA
P09-03A	1,2-DICHLOROPROPANE	5	4	4	8	Not Significant
P09-03A	2-BUTANONE	5	4	4	8	Not Significant
P09-03A	2-HEXANONE	5	4	4	8	Not Significant
P09-03A	4-METHYL-2-PENTANONE	5	-4	-4	8	Not Significant
P09-03A	ACETONE	5	3	3	8	Not Significant
P09-03A	BENZENE	5	4	4	8	Not Significant
P09-03A	BROMODICHLOROMETHANE	5	4	4	8	Not Significant
P09-03A	BROMOFORM	5	4	4	8	Not Significant
P09-03A	BROMOMETHANE	5	4	4	8	Not Significant
P09-03A	CARBON DISULFIDE	5	4	4	8	Not Significant
P09-03A	CARBON TETRACHLORIDE	5	4	4	8	Not Significant
P09-03A	CHLOROBENZENE	5	4	4	8	Not Significant
P09-03A	CHLOROETHANE	5	0	0	NA	No Trend
P09-03A	CHLOROFORM	5	4	4	8	Not Significant
P09-03A	CHLOROMETHANE	5	0	0	NA	No Trend
P09-03A	CIS-1,2-DICHLOROETHENE	5	4	4	8	Not Significant
P09-03A	CIS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-03A	DIBROMOCHLOROMETHANE	5	4	4	8	Not Significant
P09-03A	ETHYLBENZENE	5	4	4	8	Not Significant
P09-03A	M- AND P-XYLENE	1	---	---	NA	NA
P09-03A	METHYLENE CHLORIDE	5	-4	-4	8	Not Significant
P09-03A	O-XYLENE	1	---	---	NA	NA
P09-03A	STYRENE	5	4	4	8	Not Significant
P09-03A	TETRACHLOROETHENE	5	4	4	8	Not Significant
P09-03A	TOLUENE	5	4	4	8	Not Significant
P09-03A	TRANS-1,2-DICHLOROETHENE	5	4	4	8	Not Significant
P09-03A	TRANS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-03A	TRICHLOROETHENE	5	4	4	8	Not Significant
P09-03A	VINYL CHLORIDE	5	0	0	NA	No Trend
P09-03A	XYLENES, TOTAL	5	-4	-4	8	Not Significant
P09-04A	PENTACHLOROPHENOL	1	---	---	NA	NA
P09-04A	ALUMINUM	6	10	10	11	Not Significant
P09-04A	ANTIMONY	6	8	8	11	Not Significant
P09-04A	ARSENIC	6	9	9	11	Not Significant
P09-04A	BARIUM	0	---	---	NA	NA
P09-04A	BERYLLIUM	6	5	5	11	Not Significant
P09-04A	CADMIUM	0	---	---	NA	NA
P09-04A	CALCIUM	0	---	---	NA	NA
P09-04A	CHROMIUM, TOTAL	6	5	5	11	Not Significant
P09-04A	COBALT	0	---	---	NA	NA
P09-04A	COPPER	6	3	3	11	Not Significant

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-04A	IRON	6	5	5	11	Not Significant
P09-04A	LEAD	6	5	5	11	Not Significant
P09-04A	MAGNESIUM	0	---	---	NA	NA
P09-04A	MANGANESE	6	3	3	11	Not Significant
P09-04A	MERCURY	6	2	2	11	Not Significant
P09-04A	NICKEL	6	9	9	11	Not Significant
P09-04A	POTASSIUM	0	---	---	NA	NA
P09-04A	SELENIUM	0	---	---	NA	NA
P09-04A	SILVER	0	---	---	NA	NA
P09-04A	SODIUM	0	---	---	NA	NA
P09-04A	VANADIUM	0	---	---	NA	NA
P09-04A	ZINC	6	9	9	11	Not Significant
P09-04A	AROCLOR-1016	0	---	---	NA	NA
P09-04A	AROCLOR-1221	0	---	---	NA	NA
P09-04A	AROCLOR-1232	0	---	---	NA	NA
P09-04A	AROCLOR-1242	0	---	---	NA	NA
P09-04A	AROCLOR-1248	0	---	---	NA	NA
P09-04A	AROCLOR-1254	0	---	---	NA	NA
P09-04A	AROCLOR-1260	0	---	---	NA	NA
P09-04A	POLYCHLORINATED BIPHENYLS (PCBS)	0	---	---	NA	NA
P09-04A	4,4-DDD	0	---	---	NA	NA
P09-04A	4,4-DDE	0	---	---	NA	NA
P09-04A	4,4-DDT	0	---	---	NA	NA
P09-04A	ALDRIN	0	---	---	NA	NA
P09-04A	ALPHA-BHC	0	---	---	NA	NA
P09-04A	ALPHA-CHLORDANE	0	---	---	NA	NA
P09-04A	DELTA-BHC	0	---	---	NA	NA
P09-04A	ENDOSULFAN I	0	---	---	NA	NA
P09-04A	ENDOSULFAN II	0	---	---	NA	NA
P09-04A	LINDANE	0	---	---	NA	NA
P09-04A	BETA-BHC	0	---	---	NA	NA
P09-04A	DIELDRIN	0	---	---	NA	NA
P09-04A	ENDOSULFAN SULFATE	0	---	---	NA	NA
P09-04A	ENDRIN	0	---	---	NA	NA
P09-04A	ENDRIN KETONE	0	---	---	NA	NA
P09-04A	HEPTACHLOR	0	---	---	NA	NA
P09-04A	HEPTACHLOR EPOXIDE	0	---	---	NA	NA
P09-04A	HEXACHLOROBENZENE	1	---	---	NA	NA
P09-04A	METHOXYCHLOR	0	---	---	NA	NA
P09-04A	1,2,4-TRICHLOROBENZENE	1	---	---	NA	NA
P09-04A	1,2-DICHLOROBENZENE	1	---	---	NA	NA
P09-04A	1,3-DICHLOROBENZENE	1	---	---	NA	NA
P09-04A	1,4-DICHLOROBENZENE	1	---	---	NA	NA
P09-04A	1-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-04A	2,2'-OXYBIS(1-CHLOROPROPANE)	1	---	---	NA	NA
P09-04A	2,4,5-TRICHLOROPHENOL	1	---	---	NA	NA
P09-04A	2,4,6-TRICHLOROPHENOL	1	---	---	NA	NA
P09-04A	2,4-DICHLOROPHENOL	1	---	---	NA	NA
P09-04A	2,4-DIMETHYLPHENOL	1	---	---	NA	NA
P09-04A	2,4-DINITROPHENOL	1	---	---	NA	NA
P09-04A	2,4-DINITROTOLUENE	1	---	---	NA	NA
P09-04A	2,6-DINITROTOLUENE	1	---	---	NA	NA
P09-04A	2-CHLORONAPHTHALENE	1	---	---	NA	NA
P09-04A	2-CHLOROPHENOL	1	---	---	NA	NA
P09-04A	2-METHYLNAPHTHALENE	1	---	---	NA	NA
P09-04A	2-METHYLPHENOL	1	---	---	NA	NA
P09-04A	2-NITROANILINE	1	---	---	NA	NA
P09-04A	2-NITROPHENOL	1	---	---	NA	NA
P09-04A	3- AND 4-METHYLPHENOL	0	---	---	NA	NA
P09-04A	3,3-DICHLOROBENZIDINE	1	---	---	NA	NA
P09-04A	3-NITROANILINE	1	---	---	NA	NA
P09-04A	4,6-DINITRO-2-METHYLPHENOL	1	---	---	NA	NA
P09-04A	4-BROMOPHENYL-PHENYLETHER	1	---	---	NA	NA
P09-04A	4-CHLORO-3-METHYLPHENOL	1	---	---	NA	NA
P09-04A	4-CHLOROANILINE	1	---	---	NA	NA
P09-04A	4-CHLOROPHENYL-PHENYLETHER	1	---	---	NA	NA
P09-04A	4-METHYLPHENOL	1	---	---	NA	NA
P09-04A	4-NITROANILINE	1	---	---	NA	NA
P09-04A	4-NITROPHENOL	1	---	---	NA	NA
P09-04A	ACENAPHTHENE	1	---	---	NA	NA
P09-04A	ACENAPHTHYLENE	1	---	---	NA	NA
P09-04A	ANTHRACENE	1	---	---	NA	NA
P09-04A	BENZO(A)ANTHRACENE	1	---	---	NA	NA
P09-04A	BENZO(A)PYRENE	1	---	---	NA	NA
P09-04A	BENZO(B)FLUORANTHENE	1	---	---	NA	NA
P09-04A	BENZO(G,H,I)PERYLENE	1	---	---	NA	NA
P09-04A	BENZO(K)FLUORANTHENE	1	---	---	NA	NA
P09-04A	BENZOIC ACID	0	---	---	NA	NA
P09-04A	BENZYL ALCOHOL	0	---	---	NA	NA
P09-04A	BIS(2-CHLOROETHOXY)METHANE	1	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-04A	BIS(2-CHLOROETHYL)ETHER	1	---	---	NA	NA
P09-04A	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
P09-04A	BIS(2-ETHYLHEXYL)PHTHALATE	1	---	---	NA	NA
P09-04A	BUTYLBENZYLPHTHALATE	1	---	---	NA	NA
P09-04A	CARBAZOLE	1	---	---	NA	NA
P09-04A	CHRYSENE	1	---	---	NA	NA
P09-04A	CRESOLS	0	---	---	NA	NA
P09-04A	DIBENZ(A,H)ANTHRACENE	1	---	---	NA	NA
P09-04A	DIBENZOFURAN	1	---	---	NA	NA
P09-04A	DIETHYLPHTHALATE	1	---	---	NA	NA
P09-04A	DIMETHYL PHTHALATE	1	---	---	NA	NA
P09-04A	DI-N-BUTYLPHTHALATE	1	---	---	NA	NA
P09-04A	DI-N-OCTYLPHTHALATE	1	---	---	NA	NA
P09-04A	FLUORANTHENE	1	---	---	NA	NA
P09-04A	FLUORENE	1	---	---	NA	NA
P09-04A	HEXACHLOROBUTADIENE	1	---	---	NA	NA
P09-04A	HEXACHLOROCYCLOPENTADIENE	1	---	---	NA	NA
P09-04A	HEXACHLOROETHANE	1	---	---	NA	NA
P09-04A	INDENO(1,2,3-CD)PYRENE	1	---	---	NA	NA
P09-04A	ISOPHORONE	1	---	---	NA	NA
P09-04A	NAPHTHALENE	1	---	---	NA	NA
P09-04A	NITROBENZENE	1	---	---	NA	NA
P09-04A	N-NITROSODINPROPYLAMINE	1	---	---	NA	NA
P09-04A	N-NITROSODIPHENYLAMINE	1	---	---	NA	NA
P09-04A	PHENANTHRENE	1	---	---	NA	NA
P09-04A	PHENOL	1	---	---	NA	NA
P09-04A	PYRENE	1	---	---	NA	NA
P09-04A	1,1,1-TRICHLOROETHANE	5	4	4	8	Not Significant
P09-04A	1,1,2,2-TETRACHLOROETHANE	5	4	4	8	Not Significant
P09-04A	1,1,2-TRICHLOROETHANE	5	4	4	8	Not Significant
P09-04A	1,1-DICHLOROETHANE	5	4	4	8	Not Significant
P09-04A	1,1-DICHLOROETHENE	5	4	4	8	Not Significant
P09-04A	1,2-DICHLOROETHANE	5	4	4	8	Not Significant
P09-04A	1,2-DICHLOROETHENE, TOTAL	3	---	---	NA	NA
P09-04A	1,2-DICHLOROPROPANE	5	4	4	8	Not Significant
P09-04A	2-BUTANONE	5	4	4	8	Not Significant
P09-04A	2-HEXANONE	5	4	4	8	Not Significant
P09-04A	4-METHYL-2-PENTANONE	5	-4	-4	8	Not Significant
P09-04A	ACETONE	5	3	3	8	Not Significant
P09-04A	BENZENE	5	4	4	8	Not Significant
P09-04A	BROMODICHLOROMETHANE	5	4	4	8	Not Significant
P09-04A	BROMOFORM	5	4	4	8	Not Significant
P09-04A	BROMOMETHANE	5	4	4	8	Not Significant
P09-04A	CARBON DISULFIDE	5	4	4	8	Not Significant
P09-04A	CARBON TETRACHLORIDE	5	4	4	8	Not Significant
P09-04A	CHLOROBENZENE	5	4	4	8	Not Significant
P09-04A	CHLOROETHANE	5	0	0	NA	No Trend
P09-04A	CHLOROFORM	5	4	4	8	Not Significant
P09-04A	CHLOROMETHANE	5	0	0	NA	No Trend
P09-04A	CIS-1,2-DICHLOROETHENE	5	4	4	8	Not Significant
P09-04A	CIS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-04A	DIBROMOCHLOROMETHANE	5	4	4	8	Not Significant
P09-04A	ETHYLBENZENE	5	4	4	8	Not Significant
P09-04A	M- AND P-XYLENE	1	---	---	NA	NA
P09-04A	METHYLENE CHLORIDE	5	-4	-4	8	Not Significant
P09-04A	O-XYLENE	1	---	---	NA	NA
P09-04A	STYRENE	5	4	4	8	Not Significant
P09-04A	TETRACHLOROETHENE	5	4	4	8	Not Significant
P09-04A	TOLUENE	5	4	4	8	Not Significant
P09-04A	TRANS-1,2-DICHLOROETHENE	5	4	4	8	Not Significant
P09-04A	TRANS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-04A	TRICHLOROETHENE	5	4	4	8	Not Significant
P09-04A	VINYL CHLORIDE	5	0	0	NA	No Trend
P09-04A	XYLENES, TOTAL	5	-4	-4	8	Not Significant
P09-06B	PENTACHLOROPHENOL	1	---	---	NA	NA
P09-06B	ALUMINUM	4	0	0	NA	No Trend
P09-06B	ANTIMONY	4	-2	-2	6	Not Significant
P09-06B	ARSENIC	4	-6	-6	6	Downward Trend
P09-06B	BARIUM	0	---	---	NA	NA
P09-06B	BERYLLIUM	4	0	0	NA	No Trend
P09-06B	CADMIUM	0	---	---	NA	NA
P09-06B	CALCIUM	0	---	---	NA	NA
P09-06B	CHROMIUM, TOTAL	4	-2	-2	6	Not Significant
P09-06B	COBALT	0	---	---	NA	NA
P09-06B	COPPER	4	-6	-6	6	Downward Trend
P09-06B	IRON	4	-4	-4	6	Not Significant
P09-06B	LEAD	4	-2	-2	6	Not Significant
P09-06B	MAGNESIUM	0	---	---	NA	NA
P09-06B	MANGANESE	4	-4	-4	6	Not Significant
P09-06B	MERCURY	4	-5	-5	6	Not Significant

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-06B	NICKEL	4	-2	-2	6	Not Significant
P09-06B	POTASSIUM	0	---	---	NA	NA
P09-06B	SELENIUM	0	---	---	NA	NA
P09-06B	SILVER	0	---	---	NA	NA
P09-06B	SODIUM	0	---	---	NA	NA
P09-06B	VANADIUM	0	---	---	NA	NA
P09-06B	ZINC	4	2	2	6	Not Significant
P09-06B	AROCLOR-1016	0	---	---	NA	NA
P09-06B	AROCLOR-1221	0	---	---	NA	NA
P09-06B	AROCLOR-1232	0	---	---	NA	NA
P09-06B	AROCLOR-1242	0	---	---	NA	NA
P09-06B	AROCLOR-1248	0	---	---	NA	NA
P09-06B	AROCLOR-1254	0	---	---	NA	NA
P09-06B	AROCLOR-1260	0	---	---	NA	NA
P09-06B	POLYCHLORINATED BIPHENYLS (PCBS)	0	---	---	NA	NA
P09-06B	4,4-DDD	0	---	---	NA	NA
P09-06B	4,4-DDE	0	---	---	NA	NA
P09-06B	4,4-DDT	0	---	---	NA	NA
P09-06B	ALDRIN	0	---	---	NA	NA
P09-06B	ALPHA-BHC	0	---	---	NA	NA
P09-06B	ALPHA-CHLORDANE	0	---	---	NA	NA
P09-06B	DELTA-BHC	0	---	---	NA	NA
P09-06B	ENDOSULFAN I	0	---	---	NA	NA
P09-06B	ENDOSULFAN II	0	---	---	NA	NA
P09-06B	LINDANE	0	---	---	NA	NA
P09-06B	BETA-BHC	0	---	---	NA	NA
P09-06B	DIELDRIN	0	---	---	NA	NA
P09-06B	ENDOSULFAN SULFATE	0	---	---	NA	NA
P09-06B	ENDRIN	0	---	---	NA	NA
P09-06B	ENDRIN KETONE	0	---	---	NA	NA
P09-06B	HEPTACHLOR	0	---	---	NA	NA
P09-06B	HEPTACHLOR EPOXIDE	0	---	---	NA	NA
P09-06B	HEXACHLOROBENZENE	1	---	---	NA	NA
P09-06B	METHOXYCHLOR	0	---	---	NA	NA
P09-06B	1,2,4-TRICHLOROBENZENE	1	---	---	NA	NA
P09-06B	1,2-DICHLOROBENZENE	1	---	---	NA	NA
P09-06B	1,3-DICHLOROBENZENE	1	---	---	NA	NA
P09-06B	1,4-DICHLOROBENZENE	1	---	---	NA	NA
P09-06B	1-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-06B	2,2'-OXYBIS(1-CHLOROPROPANE)	1	---	---	NA	NA
P09-06B	2,4,5-TRICHLOROPHENOL	1	---	---	NA	NA
P09-06B	2,4,6-TRICHLOROPHENOL	1	---	---	NA	NA
P09-06B	2,4-DICHLOROPHENOL	1	---	---	NA	NA
P09-06B	2,4-DIMETHYLPHENOL	1	---	---	NA	NA
P09-06B	2,4-DINITROPHENOL	1	---	---	NA	NA
P09-06B	2,4-DINITROTOLUENE	1	---	---	NA	NA
P09-06B	2,6-DINITROTOLUENE	1	---	---	NA	NA
P09-06B	2-CHLORONAPHTHALENE	1	---	---	NA	NA
P09-06B	2-CHLOROPHENOL	1	---	---	NA	NA
P09-06B	2-METHYLNAPHTHALENE	1	---	---	NA	NA
P09-06B	2-METHYLPHENOL	1	---	---	NA	NA
P09-06B	2-NITROANILINE	1	---	---	NA	NA
P09-06B	2-NITROPHENOL	1	---	---	NA	NA
P09-06B	3- AND 4-METHYLPHENOL	0	---	---	NA	NA
P09-06B	3,3-DICHLOROBENZIDINE	1	---	---	NA	NA
P09-06B	3-NITROANILINE	1	---	---	NA	NA
P09-06B	4,6-DINITRO-2-METHYLPHENOL	1	---	---	NA	NA
P09-06B	4-BROMOPHENYL-PHENYLETHER	1	---	---	NA	NA
P09-06B	4-CHLORO-3-METHYLPHENOL	1	---	---	NA	NA
P09-06B	4-CHLOROANILINE	1	---	---	NA	NA
P09-06B	4-CHLOROPHENYL-PHENYLETHER	1	---	---	NA	NA
P09-06B	4-METHYLPHENOL	1	---	---	NA	NA
P09-06B	4-NITROANILINE	1	---	---	NA	NA
P09-06B	4-NITROPHENOL	1	---	---	NA	NA
P09-06B	ACENAPHTHENE	1	---	---	NA	NA
P09-06B	ACENAPHTHYLENE	1	---	---	NA	NA
P09-06B	ANTHRACENE	1	---	---	NA	NA
P09-06B	BENZO(A)ANTHRACENE	1	---	---	NA	NA
P09-06B	BENZO(A)PYRENE	1	---	---	NA	NA
P09-06B	BENZO(B)FLUORANTHENE	1	---	---	NA	NA
P09-06B	BENZO(G,H,I)PERYLENE	1	---	---	NA	NA
P09-06B	BENZO(K)FLUORANTHENE	1	---	---	NA	NA
P09-06B	BENZOIC ACID	0	---	---	NA	NA
P09-06B	BENZYL ALCOHOL	0	---	---	NA	NA
P09-06B	BIS(2-CHLOROETHOXY)METHANE	1	---	---	NA	NA
P09-06B	BIS(2-CHLOROETHYL)ETHER	1	---	---	NA	NA
P09-06B	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
P09-06B	BIS(2-ETHYLHEXYL)PHTHALATE	1	---	---	NA	NA
P09-06B	BUTYLBENZYLPHTHALATE	1	---	---	NA	NA
P09-06B	CARBAZOLE	1	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-06B	CHRYSENE	1	---	---	NA	NA
P09-06B	CRESOLS	0	---	---	NA	NA
P09-06B	DIBENZ(A,H)ANTHRACENE	1	---	---	NA	NA
P09-06B	DIBENZOFURAN	1	---	---	NA	NA
P09-06B	DIETHYLPHTHALATE	1	---	---	NA	NA
P09-06B	DIMETHYL PHTHALATE	1	---	---	NA	NA
P09-06B	DI-N-BUTYLPHTHALATE	1	---	---	NA	NA
P09-06B	DI-N-OCTYLPHTHALATE	1	---	---	NA	NA
P09-06B	FLUORANTHENE	1	---	---	NA	NA
P09-06B	FLUORENE	1	---	---	NA	NA
P09-06B	HEXACHLOROBUTADIENE	1	---	---	NA	NA
P09-06B	HEXACHLOROCYCLOPENTADIENE	1	---	---	NA	NA
P09-06B	HEXACHLOROETHANE	1	---	---	NA	NA
P09-06B	INDENO(1,2,3-CD)PYRENE	1	---	---	NA	NA
P09-06B	ISOPHORONE	1	---	---	NA	NA
P09-06B	NAPHTHALENE	1	---	---	NA	NA
P09-06B	NITROBENZENE	1	---	---	NA	NA
P09-06B	N-NITROSODINPROPYLAMINE	1	---	---	NA	NA
P09-06B	N-NITROSODIPHENYLAMINE	1	---	---	NA	NA
P09-06B	PHENANTHRENE	1	---	---	NA	NA
P09-06B	PHENOL	1	---	---	NA	NA
P09-06B	PYRENE	1	---	---	NA	NA
P09-06B	1,1,1-TRICHLOROETHANE	5	4	4	8	Not Significant
P09-06B	1,1,2,2-TETRACHLOROETHANE	5	4	4	8	Not Significant
P09-06B	1,1,2-TRICHLOROETHANE	5	2	2	8	Not Significant
P09-06B	1,1-DICHLOROETHANE	5	4	4	8	Not Significant
P09-06B	1,1-DICHLOROETHENE	5	4	4	8	Not Significant
P09-06B	1,2-DICHLOROETHANE	5	4	4	8	Not Significant
P09-06B	1,2-DICHLOROETHENE, TOTAL	1	---	---	NA	NA
P09-06B	1,2-DICHLOROPROPANE	5	5	5	8	Not Significant
P09-06B	2-BUTANONE	4	3	3	6	Not Significant
P09-06B	2-HEXANONE	5	4	4	8	Not Significant
P09-06B	4-METHYL-2-PENTANONE	5	2	2	8	Not Significant
P09-06B	ACETONE	5	-1	-1	8	Not Significant
P09-06B	BENZENE	5	4	4	8	Not Significant
P09-06B	BROMODICHLOROMETHANE	5	4	4	8	Not Significant
P09-06B	BROMOFORM	5	5	5	8	Not Significant
P09-06B	BROMOMETHANE	5	4	4	8	Not Significant
P09-06B	CARBON DISULFIDE	5	1	1	8	Not Significant
P09-06B	CARBON TETRACHLORIDE	5	5	5	8	Not Significant
P09-06B	CHLOROBENZENE	5	4	4	8	Not Significant
P09-06B	CHLOROETHANE	5	2	2	8	Not Significant
P09-06B	CHLOROFORM	5	4	4	8	Not Significant
P09-06B	CHLOROMETHANE	5	2	2	8	Not Significant
P09-06B	CIS-1,2-DICHLOROETHENE	5	4	4	8	Not Significant
P09-06B	CIS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-06B	DIBROMOCHLOROMETHANE	5	5	5	8	Not Significant
P09-06B	ETHYLBENZENE	5	4	4	8	Not Significant
P09-06B	M- AND P-XYLENE	1	---	---	NA	NA
P09-06B	METHYLENE CHLORIDE	5	1	1	8	Not Significant
P09-06B	O-XYLENE	1	---	---	NA	NA
P09-06B	STYRENE	5	4	4	8	Not Significant
P09-06B	TETRACHLOROETHENE	5	5	5	8	Not Significant
P09-06B	TOLUENE	5	3	3	8	Not Significant
P09-06B	TRANS-1,2-DICHLOROETHENE	5	5	5	8	Not Significant
P09-06B	TRANS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-06B	TRICHLOROETHENE	5	4	4	8	Not Significant
P09-06B	VINYL CHLORIDE	5	2	2	8	Not Significant
P09-06B	XYLENES, TOTAL	5	-2	-2	8	Not Significant
P09-07B	PENTACHLOROPHENOL	0	---	---	NA	NA
P09-07B	ALUMINUM	4	0	0	NA	No Trend
P09-07B	ANTIMONY	4	0	0	NA	No Trend
P09-07B	ARSENIC	4	2	2	6	Not Significant
P09-07B	BARIUM	0	---	---	NA	NA
P09-07B	BERYLLIUM	4	4	4	6	Not Significant
P09-07B	CADMIUM	0	---	---	NA	NA
P09-07B	CALCIUM	0	---	---	NA	NA
P09-07B	CHROMIUM, TOTAL	4	0	0	NA	No Trend
P09-07B	COBALT	0	---	---	NA	NA
P09-07B	COPPER	4	-2	-2	6	Not Significant
P09-07B	IRON	4	-2	-2	6	Not Significant
P09-07B	LEAD	4	0	0	NA	No Trend
P09-07B	MAGNESIUM	0	---	---	NA	NA
P09-07B	MANGANESE	4	0	0	NA	No Trend
P09-07B	MERCURY	4	-2	-2	6	Not Significant
P09-07B	NICKEL	4	0	0	NA	No Trend
P09-07B	POTASSIUM	0	---	---	NA	NA
P09-07B	SELENIUM	0	---	---	NA	NA
P09-07B	SILVER	0	---	---	NA	NA
P09-07B	SODIUM	0	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-07B	VANADIUM	0	---	---	NA	NA
P09-07B	ZINC	4	0	0	NA	No Trend
P09-07B	AROCLOR-1016	0	---	---	NA	NA
P09-07B	AROCLOR-1221	0	---	---	NA	NA
P09-07B	AROCLOR-1232	0	---	---	NA	NA
P09-07B	AROCLOR-1242	0	---	---	NA	NA
P09-07B	AROCLOR-1248	0	---	---	NA	NA
P09-07B	AROCLOR-1254	0	---	---	NA	NA
P09-07B	AROCLOR-1260	0	---	---	NA	NA
P09-07B	POLYCHLORINATED BIPHENYLS (PCBS)	0	---	---	NA	NA
P09-07B	4,4-DDD	0	---	---	NA	NA
P09-07B	4,4-DDE	0	---	---	NA	NA
P09-07B	4,4-DDT	0	---	---	NA	NA
P09-07B	ALDRIN	0	---	---	NA	NA
P09-07B	ALPHA-BHC	0	---	---	NA	NA
P09-07B	ALPHA-CHLORDANE	0	---	---	NA	NA
P09-07B	DELTA-BHC	0	---	---	NA	NA
P09-07B	ENDOSULFAN I	0	---	---	NA	NA
P09-07B	ENDOSULFAN II	0	---	---	NA	NA
P09-07B	LINDANE	0	---	---	NA	NA
P09-07B	BETA-BHC	0	---	---	NA	NA
P09-07B	DIELDRIN	0	---	---	NA	NA
P09-07B	ENDOSULFAN SULFATE	0	---	---	NA	NA
P09-07B	ENDRIN	0	---	---	NA	NA
P09-07B	ENDRIN KETONE	0	---	---	NA	NA
P09-07B	HEPTACHLOR	0	---	---	NA	NA
P09-07B	HEPTACHLOR EPOXIDE	0	---	---	NA	NA
P09-07B	HEXACHLOROBENZENE	0	---	---	NA	NA
P09-07B	METHOXYCHLOR	0	---	---	NA	NA
P09-07B	1,2,4-TRICHLOROBENZENE	0	---	---	NA	NA
P09-07B	1,2-DICHLOROBENZENE	0	---	---	NA	NA
P09-07B	1,3-DICHLOROBENZENE	0	---	---	NA	NA
P09-07B	1,4-DICHLOROBENZENE	0	---	---	NA	NA
P09-07B	1-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-07B	2,2'-OXYBIS(1-CHLOROPROPANE)	0	---	---	NA	NA
P09-07B	2,4,5-TRICHLOROPHENOL	0	---	---	NA	NA
P09-07B	2,4,6-TRICHLOROPHENOL	0	---	---	NA	NA
P09-07B	2,4-DICHLOROPHENOL	0	---	---	NA	NA
P09-07B	2,4-DIMETHYLPHENOL	0	---	---	NA	NA
P09-07B	2,4-DINITROPHENOL	0	---	---	NA	NA
P09-07B	2,4-DINITROTOLUENE	0	---	---	NA	NA
P09-07B	2,6-DINITROTOLUENE	0	---	---	NA	NA
P09-07B	2-CHLORONAPHTHALENE	0	---	---	NA	NA
P09-07B	2-CHLOROPHENOL	0	---	---	NA	NA
P09-07B	2-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-07B	2-METHYLPHENOL	0	---	---	NA	NA
P09-07B	2-NITROANILINE	0	---	---	NA	NA
P09-07B	2-NITROPHENOL	0	---	---	NA	NA
P09-07B	3- AND 4-METHYLPHENOL	0	---	---	NA	NA
P09-07B	3,3-DICHLOROBENZIDINE	0	---	---	NA	NA
P09-07B	3-NITROANILINE	0	---	---	NA	NA
P09-07B	4,6-DINITRO-2-METHYLPHENOL	0	---	---	NA	NA
P09-07B	4-BROMOPHENYL-PHENYLETHER	0	---	---	NA	NA
P09-07B	4-CHLORO-3-METHYLPHENOL	0	---	---	NA	NA
P09-07B	4-CHLOROANILINE	0	---	---	NA	NA
P09-07B	4-CHLOROPHENYL-PHENYLETHER	0	---	---	NA	NA
P09-07B	4-METHYLPHENOL	0	---	---	NA	NA
P09-07B	4-NITROANILINE	0	---	---	NA	NA
P09-07B	4-NITROPHENOL	0	---	---	NA	NA
P09-07B	ACENAPHTHENE	0	---	---	NA	NA
P09-07B	ACENAPHTHYLENE	0	---	---	NA	NA
P09-07B	ANTHRACENE	0	---	---	NA	NA
P09-07B	BENZO(A)ANTHRACENE	0	---	---	NA	NA
P09-07B	BENZO(A)PYRENE	0	---	---	NA	NA
P09-07B	BENZO(B)FLUORANTHENE	0	---	---	NA	NA
P09-07B	BENZO(G,H,I)PERYLENE	0	---	---	NA	NA
P09-07B	BENZO(K)FLUORANTHENE	0	---	---	NA	NA
P09-07B	BENZOIC ACID	0	---	---	NA	NA
P09-07B	BENZYL ALCOHOL	0	---	---	NA	NA
P09-07B	BIS(2-CHLOROETHOXY)METHANE	0	---	---	NA	NA
P09-07B	BIS(2-CHLOROETHYL)ETHER	0	---	---	NA	NA
P09-07B	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
P09-07B	BIS(2-ETHYLHEXYL)PHTHALATE	0	---	---	NA	NA
P09-07B	BUTYLBENZYLPHTHALATE	0	---	---	NA	NA
P09-07B	CARBAZOLE	0	---	---	NA	NA
P09-07B	CHRYSENE	0	---	---	NA	NA
P09-07B	CRESOLS	0	---	---	NA	NA
P09-07B	DIBENZ(A,H)ANTHRACENE	0	---	---	NA	NA
P09-07B	DIBENZOFURAN	0	---	---	NA	NA
P09-07B	DIETHYLPHTHALATE	0	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-07B	DIMETHYL PHTHALATE	0	---	---	NA	NA
P09-07B	DI-N-BUTYLPHTHALATE	0	---	---	NA	NA
P09-07B	DI-N-OCTYLPHTHALATE	0	---	---	NA	NA
P09-07B	FLUORANTHENE	0	---	---	NA	NA
P09-07B	FLUORENE	0	---	---	NA	NA
P09-07B	HEXACHLOROBUTADIENE	0	---	---	NA	NA
P09-07B	HEXACHLOROCYCLOPENTADIENE	0	---	---	NA	NA
P09-07B	HEXACHLOROETHANE	0	---	---	NA	NA
P09-07B	INDENO(1,2,3-CD)PYRENE	0	---	---	NA	NA
P09-07B	ISOPHORONE	0	---	---	NA	NA
P09-07B	NAPHTHALENE	0	---	---	NA	NA
P09-07B	NITROBENZENE	0	---	---	NA	NA
P09-07B	N-NITROSODINPROPYLAMINE	0	---	---	NA	NA
P09-07B	N-NITROSODIPHENYLAMINE	0	---	---	NA	NA
P09-07B	PHENANTHRENE	0	---	---	NA	NA
P09-07B	PHENOL	0	---	---	NA	NA
P09-07B	PYRENE	0	---	---	NA	NA
P09-07B	1,1,1-TRICHLOROETHANE	5	4	4	8	Not Significant
P09-07B	1,1,2,2-TETRACHLOROETHANE	5	4	4	8	Not Significant
P09-07B	1,1,2-TRICHLOROETHANE	5	2	2	8	Not Significant
P09-07B	1,1-DICHLOROETHANE	5	4	4	8	Not Significant
P09-07B	1,1-DICHLOROETHENE	5	4	4	8	Not Significant
P09-07B	1,2-DICHLOROETHANE	5	4	4	8	Not Significant
P09-07B	1,2-DICHLOROETHENE, TOTAL	1	---	---	NA	NA
P09-07B	1,2-DICHLOROPROPANE	5	5	5	8	Not Significant
P09-07B	2-BUTANONE	4	-1	-1	6	Not Significant
P09-07B	2-HEXANONE	5	4	4	8	Not Significant
P09-07B	4-METHYL-2-PENTANONE	5	2	2	8	Not Significant
P09-07B	ACETONE	4	-1	-1	6	Not Significant
P09-07B	BENZENE	5	4	4	8	Not Significant
P09-07B	BROMODICHLOROMETHANE	5	4	4	8	Not Significant
P09-07B	BROMOFORM	5	5	5	8	Not Significant
P09-07B	BROMOMETHANE	5	4	4	8	Not Significant
P09-07B	CARBON DISULFIDE	5	1	1	8	Not Significant
P09-07B	CARBON TETRACHLORIDE	5	5	5	8	Not Significant
P09-07B	CHLOROBENZENE	5	4	4	8	Not Significant
P09-07B	CHLOROETHANE	5	2	2	8	Not Significant
P09-07B	CHLOROFORM	5	4	4	8	Not Significant
P09-07B	CHLOROMETHANE	5	2	2	8	Not Significant
P09-07B	CIS-1,2-DICHLOROETHENE	5	4	4	8	Not Significant
P09-07B	CIS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-07B	DIBROMOCHLOROMETHANE	5	5	5	8	Not Significant
P09-07B	ETHYLBENZENE	5	4	4	8	Not Significant
P09-07B	M- AND P-XYLENE	1	---	---	NA	NA
P09-07B	METHYLENE CHLORIDE	5	1	1	8	Not Significant
P09-07B	O-XYLENE	1	---	---	NA	NA
P09-07B	STYRENE	5	4	4	8	Not Significant
P09-07B	TETRACHLOROETHENE	5	5	5	8	Not Significant
P09-07B	TOLUENE	5	3	3	8	Not Significant
P09-07B	TRANS-1,2-DICHLOROETHENE	5	5	5	8	Not Significant
P09-07B	TRANS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-07B	TRICHLOROETHENE	5	4	4	8	Not Significant
P09-07B	VINYL CHLORIDE	5	2	2	8	Not Significant
P09-07B	XYLENES, TOTAL	5	-1	-1	8	Not Significant
P09-08B	PENTACHLOROPHENOL	1	---	---	NA	NA
P09-08B	ALUMINUM	4	6	6	6	Upward Trend
P09-08B	ANTIMONY	4	2	2	6	Not Significant
P09-08B	ARSENIC	4	-2	-2	6	Not Significant
P09-08B	BARIUM	0	---	---	NA	NA
P09-08B	BERYLLIUM	4	4	4	6	Not Significant
P09-08B	CADMIUM	0	---	---	NA	NA
P09-08B	CALCIUM	0	---	---	NA	NA
P09-08B	CHROMIUM, TOTAL	4	4	4	6	Not Significant
P09-08B	COBALT	0	---	---	NA	NA
P09-08B	COPPER	4	2	2	6	Not Significant
P09-08B	IRON	4	2	2	6	Not Significant
P09-08B	LEAD	4	6	6	6	Upward Trend
P09-08B	MAGNESIUM	0	---	---	NA	NA
P09-08B	MANGANESE	4	4	4	6	Not Significant
P09-08B	MERCURY	4	4	4	6	Not Significant
P09-08B	NICKEL	4	2	2	6	Not Significant
P09-08B	POTASSIUM	0	---	---	NA	NA
P09-08B	SELENIUM	0	---	---	NA	NA
P09-08B	SILVER	0	---	---	NA	NA
P09-08B	SODIUM	0	---	---	NA	NA
P09-08B	VANADIUM	0	---	---	NA	NA
P09-08B	ZINC	4	6	6	6	Upward Trend
P09-08B	AROCLOR-1016	0	---	---	NA	NA
P09-08B	AROCLOR-1221	0	---	---	NA	NA
P09-08B	AROCLOR-1232	0	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-08B	AROCLOR-1242	0	---	---	NA	NA
P09-08B	AROCLOR-1248	0	---	---	NA	NA
P09-08B	AROCLOR-1254	0	---	---	NA	NA
P09-08B	AROCLOR-1260	0	---	---	NA	NA
P09-08B	POLYCHLORINATED BIPHENYLS (PCBS)	0	---	---	NA	NA
P09-08B	4,4-DDD	0	---	---	NA	NA
P09-08B	4,4-DDE	0	---	---	NA	NA
P09-08B	4,4-DDT	0	---	---	NA	NA
P09-08B	ALDRIN	0	---	---	NA	NA
P09-08B	ALPHA-BHC	0	---	---	NA	NA
P09-08B	ALPHA-CHLORDANE	0	---	---	NA	NA
P09-08B	DELTA-BHC	0	---	---	NA	NA
P09-08B	ENDOSULFAN I	0	---	---	NA	NA
P09-08B	ENDOSULFAN II	0	---	---	NA	NA
P09-08B	LINDANE	0	---	---	NA	NA
P09-08B	BETA-BHC	0	---	---	NA	NA
P09-08B	DIELDRIN	0	---	---	NA	NA
P09-08B	ENDOSULFAN SULFATE	0	---	---	NA	NA
P09-08B	ENDRIN	0	---	---	NA	NA
P09-08B	ENDRIN KETONE	0	---	---	NA	NA
P09-08B	HEPTACHLOR	0	---	---	NA	NA
P09-08B	HEPTACHLOR EPOXIDE	0	---	---	NA	NA
P09-08B	HEXACHLOROBENZENE	1	---	---	NA	NA
P09-08B	METHOXYCHLOR	0	---	---	NA	NA
P09-08B	1,2,4-TRICHLOROBENZENE	1	---	---	NA	NA
P09-08B	1,2-DICHLOROBENZENE	1	---	---	NA	NA
P09-08B	1,3-DICHLOROBENZENE	1	---	---	NA	NA
P09-08B	1,4-DICHLOROBENZENE	1	---	---	NA	NA
P09-08B	1-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-08B	2,2'-OXYBIS(1-CHLOROPROPANE)	1	---	---	NA	NA
P09-08B	2,4,5-TRICHLOROPHENOL	1	---	---	NA	NA
P09-08B	2,4,6-TRICHLOROPHENOL	1	---	---	NA	NA
P09-08B	2,4-DICHLOROPHENOL	1	---	---	NA	NA
P09-08B	2,4-DIMETHYLPHENOL	1	---	---	NA	NA
P09-08B	2,4-DINITROPHENOL	1	---	---	NA	NA
P09-08B	2,4-DINITROTOLUENE	1	---	---	NA	NA
P09-08B	2,6-DINITROTOLUENE	1	---	---	NA	NA
P09-08B	2-CHLORONAPHTHALENE	1	---	---	NA	NA
P09-08B	2-CHLOROPHENOL	1	---	---	NA	NA
P09-08B	2-METHYLNAPHTHALENE	1	---	---	NA	NA
P09-08B	2-METHYLPHENOL	1	---	---	NA	NA
P09-08B	2-NITROANILINE	1	---	---	NA	NA
P09-08B	2-NITROPHENOL	1	---	---	NA	NA
P09-08B	3- AND 4-METHYLPHENOL	0	---	---	NA	NA
P09-08B	3,3-DICHLOROBENZIDINE	1	---	---	NA	NA
P09-08B	3-NITROANILINE	1	---	---	NA	NA
P09-08B	4,6-DINITRO-2-METHYLPHENOL	1	---	---	NA	NA
P09-08B	4-BROMOPHENYL-PHENYLETHER	1	---	---	NA	NA
P09-08B	4-CHLORO-3-METHYLPHENOL	1	---	---	NA	NA
P09-08B	4-CHLOROANILINE	1	---	---	NA	NA
P09-08B	4-CHLOROPHENYL-PHENYLETHER	1	---	---	NA	NA
P09-08B	4-METHYLPHENOL	1	---	---	NA	NA
P09-08B	4-NITROANILINE	1	---	---	NA	NA
P09-08B	4-NITROPHENOL	1	---	---	NA	NA
P09-08B	ACENAPHTHENE	1	---	---	NA	NA
P09-08B	ACENAPHTHYLENE	1	---	---	NA	NA
P09-08B	ANTHRACENE	1	---	---	NA	NA
P09-08B	BENZO(A)ANTHRACENE	1	---	---	NA	NA
P09-08B	BENZO(A)PYRENE	1	---	---	NA	NA
P09-08B	BENZO(B)FLUORANTHENE	1	---	---	NA	NA
P09-08B	BENZO(G,H,I)PERYLENE	1	---	---	NA	NA
P09-08B	BENZO(K)FLUORANTHENE	1	---	---	NA	NA
P09-08B	BENZOIC ACID	0	---	---	NA	NA
P09-08B	BENZYL ALCOHOL	0	---	---	NA	NA
P09-08B	BIS(2-CHLOROETHOXY)METHANE	1	---	---	NA	NA
P09-08B	BIS(2-CHLOROETHYL)ETHER	1	---	---	NA	NA
P09-08B	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
P09-08B	BIS(2-ETHYLHEXYL)PHTHALATE	1	---	---	NA	NA
P09-08B	BUTYLBENZYLPHTHALATE	1	---	---	NA	NA
P09-08B	CARBAZOLE	1	---	---	NA	NA
P09-08B	CHRYSENE	1	---	---	NA	NA
P09-08B	CRESOLS	0	---	---	NA	NA
P09-08B	DIBENZ(A,H)ANTHRACENE	1	---	---	NA	NA
P09-08B	DIBENZOFURAN	1	---	---	NA	NA
P09-08B	DIETHYLPHTHALATE	1	---	---	NA	NA
P09-08B	DIMETHYL PHTHALATE	1	---	---	NA	NA
P09-08B	DI-N-BUTYLPHTHALATE	1	---	---	NA	NA
P09-08B	DI-N-OCTYLPHTHALATE	1	---	---	NA	NA
P09-08B	FLUORANTHENE	1	---	---	NA	NA
P09-08B	FLUORENE	1	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-08B	HEXACHLOROBUTADIENE	1	---	---	NA	NA
P09-08B	HEXACHLOROCYCLOPENTADIENE	1	---	---	NA	NA
P09-08B	HEXACHLOROETHANE	1	---	---	NA	NA
P09-08B	INDENO(1,2,3-CD)PYRENE	1	---	---	NA	NA
P09-08B	ISOPHORONE	1	---	---	NA	NA
P09-08B	NAPHTHALENE	1	---	---	NA	NA
P09-08B	NITROBENZENE	1	---	---	NA	NA
P09-08B	N-NITROSODINPROPYLAMINE	1	---	---	NA	NA
P09-08B	N-NITROSODIPHENYLAMINE	1	---	---	NA	NA
P09-08B	PHENANTHRENE	1	---	---	NA	NA
P09-08B	PHENOL	1	---	---	NA	NA
P09-08B	PYRENE	1	---	---	NA	NA
P09-08B	1,1,1-TRICHLOROETHANE	5	4	4	8	Not Significant
P09-08B	1,1,2,2-TETRACHLOROETHANE	5	4	4	8	Not Significant
P09-08B	1,1,2-TRICHLOROETHANE	5	2	2	8	Not Significant
P09-08B	1,1-DICHLOROETHANE	5	4	4	8	Not Significant
P09-08B	1,1-DICHLOROETHENE	5	4	4	8	Not Significant
P09-08B	1,2-DICHLOROETHANE	5	4	4	8	Not Significant
P09-08B	1,2-DICHLOROETHENE, TOTAL	1	---	---	NA	NA
P09-08B	1,2-DICHLOROPROPANE	5	5	5	8	Not Significant
P09-08B	2-BUTANONE	4	-1	-1	6	Not Significant
P09-08B	2-HEXANONE	5	4	4	8	Not Significant
P09-08B	4-METHYL-2-PENTANONE	5	2	2	8	Not Significant
P09-08B	ACETONE	4	-4	-4	6	Not Significant
P09-08B	BENZENE	5	4	4	8	Not Significant
P09-08B	BROMODICHLOROMETHANE	5	4	4	8	Not Significant
P09-08B	BROMOFORM	5	5	5	8	Not Significant
P09-08B	BROMOMETHANE	5	4	4	8	Not Significant
P09-08B	CARBON DISULFIDE	5	4	4	8	Not Significant
P09-08B	CARBON TETRACHLORIDE	5	5	5	8	Not Significant
P09-08B	CHLOROBENZENE	5	4	4	8	Not Significant
P09-08B	CHLOROETHANE	5	2	2	8	Not Significant
P09-08B	CHLOROFORM	5	4	4	8	Not Significant
P09-08B	CHLOROMETHANE	5	2	2	8	Not Significant
P09-08B	CIS-1,2-DICHLOROETHENE	5	4	4	8	Not Significant
P09-08B	CIS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-08B	DIBROMOCHLOROMETHANE	5	5	5	8	Not Significant
P09-08B	ETHYLBENZENE	5	4	4	8	Not Significant
P09-08B	M- AND P-XYLENE	1	---	---	NA	NA
P09-08B	METHYLENE CHLORIDE	5	1	1	8	Not Significant
P09-08B	O-XYLENE	1	---	---	NA	NA
P09-08B	STYRENE	5	4	4	8	Not Significant
P09-08B	TETRACHLOROETHENE	5	5	5	8	Not Significant
P09-08B	TOLUENE	5	4	4	8	Not Significant
P09-08B	TRANS-1,2-DICHLOROETHENE	5	5	5	8	Not Significant
P09-08B	TRANS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-08B	TRICHLOROETHENE	5	4	4	8	Not Significant
P09-08B	VINYL CHLORIDE	5	2	2	8	Not Significant
P09-08B	XYLENES, TOTAL	5	-2	-2	8	Not Significant
P09-09	PENTACHLOROPHENOL	15	-38	-1.883	1.645	Downward Trend
P09-09	ALUMINUM	33	242	3.734	1.645	Upward Trend
P09-09	ANTIMONY	33	104	1.631	1.645	Not Significant
P09-09	ARSENIC	33	176	2.717	1.645	Upward Trend
P09-09	BARIUM	1	---	---	NA	NA
P09-09	BERYLLIUM	33	145	2.239	1.645	Upward Trend
P09-09	CADMIUM	1	---	---	NA	NA
P09-09	CALCIUM	1	---	---	NA	NA
P09-09	CHROMIUM, TOTAL	33	184	2.836	1.645	Upward Trend
P09-09	COBALT	1	---	---	NA	NA
P09-09	COPPER	33	224	3.455	1.645	Upward Trend
P09-09	IRON	33	299	4.618	1.645	Upward Trend
P09-09	LEAD	33	210	3.245	1.645	Upward Trend
P09-09	MAGNESIUM	1	---	---	NA	NA
P09-09	MANGANESE	33	140	2.154	1.645	Upward Trend
P09-09	MERCURY	32	63	1.018	1.645	Not Significant
P09-09	NICKEL	33	109	1.674	1.645	Upward Trend
P09-09	POTASSIUM	1	---	---	NA	NA
P09-09	SELENIUM	1	---	---	NA	NA
P09-09	SILVER	1	---	---	NA	NA
P09-09	SODIUM	1	---	---	NA	NA
P09-09	VANADIUM	1	---	---	NA	NA
P09-09	ZINC	33	232	3.579	1.645	Upward Trend
P09-09	AROCLOR-1016	30	69	1.219	1.645	Not Significant
P09-09	AROCLOR-1221	30	0	0	NA	No Trend
P09-09	AROCLOR-1232	30	60	1.057	1.645	Not Significant
P09-09	AROCLOR-1242	30	56	0.9871	1.645	Not Significant
P09-09	AROCLOR-1248	30	58	1.023	1.645	Not Significant
P09-09	AROCLOR-1254	30	60	1.057	1.645	Not Significant
P09-09	AROCLOR-1260	30	72	1.272	1.645	Not Significant
P09-09	POLYCHLORINATED BIPHENYLS (PCBS)	28	37	0.7143	1.645	Not Significant

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-09	4,4-DDD	16	4	0.1450	1.645	Not Significant
P09-09	4,4-DDE	16	4	0.1450	1.645	Not Significant
P09-09	4,4-DDT	16	4	0.1450	1.645	Not Significant
P09-09	ALDRIN	16	21	0.9170	1.645	Not Significant
P09-09	ALPHA-BHC	16	21	0.9170	1.645	Not Significant
P09-09	ALPHA-CHLORDANE	16	21	0.9170	1.645	Not Significant
P09-09	DELTA-BHC	16	23	1.012	1.645	Not Significant
P09-09	ENDOSULFAN I	16	23	1.012	1.645	Not Significant
P09-09	ENDOSULFAN II	16	4	0.1450	1.645	Not Significant
P09-09	LINDANE	16	23	1.012	1.645	Not Significant
P09-09	BETA-BHC	16	23	1.012	1.645	Not Significant
P09-09	DIELDRIN	16	-3	-0.09439	1.645	Not Significant
P09-09	ENDOSULFAN SULFATE	15	1	0	1.645	Not Significant
P09-09	ENDRIN	16	4	0.1450	1.645	Not Significant
P09-09	ENDRIN KETONE	16	4	0.1450	1.645	Not Significant
P09-09	HEPTACHLOR	16	23	1.012	1.645	Not Significant
P09-09	HEPTACHLOR EPOXIDE	16	23	1.012	1.645	Not Significant
P09-09	HEXACHLOROBENZENE	15	35	1.722	1.645	Upward Trend
P09-09	METHOXYCHLOR	16	-24	-1.059	1.645	Not Significant
P09-09	1,2,4-TRICHLOROBENZENE	15	27	1.322	1.645	Not Significant
P09-09	1,2-DICHLOROBENZENE	15	27	1.322	1.645	Not Significant
P09-09	1,3-DICHLOROBENZENE	15	27	1.322	1.645	Not Significant
P09-09	1,4-DICHLOROBENZENE	15	32	1.600	1.645	Not Significant
P09-09	1-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-09	2,2'-OXYBIS(1-CHLOROPROPANE)	11	14	1.071	1.645	Not Significant
P09-09	2,4,5-TRICHLOROPHENOL	15	-60	-2.993	1.645	Downward Trend
P09-09	2,4,6-TRICHLOROPHENOL	15	55	2.736	1.645	Upward Trend
P09-09	2,4-DICHLOROPHENOL	15	55	2.736	1.645	Upward Trend
P09-09	2,4-DIMETHYLPHENOL	12	5	0.2798	1.645	Not Significant
P09-09	2,4-DINITROPHENOL	15	60	3.035	1.645	Upward Trend
P09-09	2,4-DINITROTOLUENE	14	43	2.366	1.645	Upward Trend
P09-09	2,6-DINITROTOLUENE	14	43	2.366	1.645	Upward Trend
P09-09	2-CHLORONAPHTHALENE	15	27	1.322	1.645	Not Significant
P09-09	2-CHLOROPHENOL	15	27	1.322	1.645	Not Significant
P09-09	2-METHYLNAPHTHALENE	18	85	3.241	1.645	Upward Trend
P09-09	2-METHYLPHENOL	15	55	2.736	1.645	Upward Trend
P09-09	2-NITROANILINE	14	33	1.885	1.645	Upward Trend
P09-09	2-NITROPHENOL	15	55	2.736	1.645	Upward Trend
P09-09	3- AND 4-METHYLPHENOL	8	9	9	16	Not Significant
P09-09	3,3-DICHLOROBENZIDINE	14	47	2.637	1.645	Upward Trend
P09-09	3-NITROANILINE	14	33	1.885	1.645	Upward Trend
P09-09	4,6-DINITRO-2-METHYLPHENOL	15	45	2.309	1.645	Upward Trend
P09-09	4-BROMOPHENYL-PHENYLETHER	15	27	1.322	1.645	Not Significant
P09-09	4-CHLORO-3-METHYLPHENOL	15	27	1.322	1.645	Not Significant
P09-09	4-CHLOROANILINE	14	51	2.817	1.645	Upward Trend
P09-09	4-CHLOROPHENYL-PHENYLETHER	15	27	1.322	1.645	Not Significant
P09-09	4-METHYLPHENOL	6	3	3	11	Not Significant
P09-09	4-NITROANILINE	14	33	1.885	1.645	Upward Trend
P09-09	4-NITROPHENOL	15	24	1.164	1.645	Not Significant
P09-09	ACENAPHTHENE	18	85	3.241	1.645	Upward Trend
P09-09	ACENAPHTHYLENE	18	-56	-2.110	1.645	Downward Trend
P09-09	ANTHRACENE	18	97	3.682	1.645	Upward Trend
P09-09	BENZO(A)ANTHRACENE	18	88	3.325	1.645	Upward Trend
P09-09	BENZO(A)PYRENE	18	84	3.177	1.645	Upward Trend
P09-09	BENZO(B)FLUORANTHENE	18	83	3.173	1.645	Upward Trend
P09-09	BENZO(G,H,I)PERYLENE	18	56	2.134	1.645	Upward Trend
P09-09	BENZO(K)FLUORANTHENE	18	85	3.232	1.645	Upward Trend
P09-09	BENZOIC ACID	1	---	---	NA	NA
P09-09	BENZYL ALCOHOL	1	---	---	NA	NA
P09-09	BIS(2-CHLOROETHOXY)METHANE	15	32	1.600	1.645	Not Significant
P09-09	BIS(2-CHLOROETHYL)ETHER	15	27	1.322	1.645	Not Significant
P09-09	BIS(2-CHLOROISOPROPYL)ETHER	4	-1	-1	6	Not Significant
P09-09	BIS(2-ETHYLHEXYL)PHTHALATE	15	35	1.692	1.645	Upward Trend
P09-09	BUTYLBENZYLPHTHALATE	15	26	1.269	1.645	Not Significant
P09-09	CARBAZOLE	15	27	1.322	1.645	Not Significant
P09-09	CHRYSENE	18	81	3.060	1.645	Upward Trend
P09-09	CRESOLS	1	---	---	NA	NA
P09-09	DIBENZ(A,H)ANTHRACENE	18	58	2.219	1.645	Upward Trend
P09-09	DIBENZOFURAN	15	49	2.466	1.645	Upward Trend
P09-09	DIETHYLPHTHALATE	15	34	1.675	1.645	Upward Trend
P09-09	DIMETHYL PHTHALATE	15	34	1.675	1.645	Upward Trend
P09-09	DI-N-BUTYLPHTHALATE	15	24	1.164	1.645	Not Significant
P09-09	DI-N-OCTYLPHTHALATE	15	32	1.568	1.645	Not Significant
P09-09	FLUORANTHENE	18	26	0.9554	1.645	Not Significant
P09-09	FLUORENE	18	90	3.464	1.645	Upward Trend
P09-09	HEXACHLOROBUTADIENE	15	27	1.322	1.645	Not Significant
P09-09	HEXACHLOROCYCLOPENTADIENE	15	45	2.309	1.645	Upward Trend
P09-09	HEXACHLOROETHANE	15	27	1.322	1.645	Not Significant
P09-09	INDENO(1,2,3-CD)PYRENE	18	73	2.778	1.645	Upward Trend
P09-09	ISOPHORONE	15	27	1.322	1.645	Not Significant

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Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-09	NAPHTHALENE	18	85	3.241	1.645	Upward Trend
P09-09	NITROBENZENE	14	30	1.672	1.645	Upward Trend
P09-09	N-NITROSODINPROPYLAMINE	15	27	1.322	1.645	Not Significant
P09-09	N-NITROSODIPHENYLAMINE	15	32	1.600	1.645	Not Significant
P09-09	PHENANTHRENE	18	88	3.309	1.645	Upward Trend
P09-09	PHENOL	15	27	1.322	1.645	Not Significant
P09-09	PYRENE	18	64	2.418	1.645	Upward Trend
P09-09	1,1,1-TRICHLOROETHANE	30	-109	-2.196	1.645	Downward Trend
P09-09	1,1,2,2-TETRACHLOROETHANE	30	-149	-3.180	1.645	Downward Trend
P09-09	1,1,2-TRICHLOROETHANE	30	-107	-2.207	1.645	Downward Trend
P09-09	1,1-DICHLOROETHANE	30	-149	-3.180	1.645	Downward Trend
P09-09	1,1-DICHLOROETHENE	30	-93	-2.130	1.645	Downward Trend
P09-09	1,2-DICHLOROETHANE	30	-125	-2.522	1.645	Downward Trend
P09-09	1,2-DICHLOROETHENE, TOTAL	28	-134	-2.708	1.645	Downward Trend
P09-09	1,2-DICHLOROPROPANE	30	-57	-1.070	1.645	Not Significant
P09-09	2-BUTANONE	26	-74	-1.802	1.645	Downward Trend
P09-09	2-HEXANONE	27	-106	-2.741	1.645	Downward Trend
P09-09	4-METHYL-2-PENTANONE	30	-139	-3.188	1.645	Downward Trend
P09-09	ACETONE	27	-40	-0.8213	1.645	Not Significant
P09-09	BENZENE	30	-75	-1.473	1.645	Not Significant
P09-09	BROMODICHLOROMETHANE	30	-109	-2.196	1.645	Downward Trend
P09-09	BROMOFORM	30	-69	-1.383	1.645	Not Significant
P09-09	BROMOMETHANE	30	-7	-0.1225	1.645	Not Significant
P09-09	CARBON DISULFIDE	30	-26	-0.4496	1.645	Not Significant
P09-09	CARBON TETRACHLORIDE	30	-81	-1.627	1.645	Not Significant
P09-09	CHLOROBENZENE	30	-109	-2.196	1.645	Downward Trend
P09-09	CHLOROETHANE	30	-69	-1.291	1.645	Not Significant
P09-09	CHLOROFORM	30	-109	-2.196	1.645	Downward Trend
P09-09	CHLOROMETHANE	30	-82	-1.579	1.645	Not Significant
P09-09	CIS-1,2-DICHLOROETHENE	30	-109	-2.196	1.645	Downward Trend
P09-09	CIS-1,3-DICHLOROPROPENE	30	-89	-1.819	1.645	Downward Trend
P09-09	DIBROMOCHLOROMETHANE	30	-69	-1.383	1.645	Not Significant
P09-09	ETHYLBENZENE	30	-76	-1.666	1.645	Downward Trend
P09-09	M- AND P-XYLENE	3	---	---	NA	NA
P09-09	METHYLENE CHLORIDE	30	85	1.572	1.645	Not Significant
P09-09	O-XYLENE	3	---	---	NA	NA
P09-09	STYRENE	30	-45	-0.8336	1.645	Not Significant
P09-09	TETRACHLOROETHENE	30	-89	-1.789	1.645	Downward Trend
P09-09	TOLUENE	30	-33	-0.6496	1.645	Not Significant
P09-09	TRANS-1,2-DICHLOROETHENE	30	-69	-1.383	1.645	Not Significant
P09-09	TRANS-1,3-DICHLOROPROPENE	30	-84	-1.682	1.645	Downward Trend
P09-09	TRICHLOROETHENE	30	-125	-2.522	1.645	Downward Trend
P09-09	VINYL CHLORIDE	30	-80	-1.755	1.645	Downward Trend
P09-09	XYLENES, TOTAL	8	-5	-5	16	Not Significant
P09-10	PENTACHLOROPHENOL	20	-90	-2.967	1.645	Downward Trend
P09-10	ALUMINUM	33	24	0.3565	1.645	Not Significant
P09-10	ANTIMONY	33	-41	-0.6333	1.645	Not Significant
P09-10	ARSENIC	33	177	2.752	1.645	Upward Trend
P09-10	BARIUM	1	---	---	NA	NA
P09-10	BERYLLIUM	33	-15	-0.2184	1.645	Not Significant
P09-10	CADMIUM	1	---	---	NA	NA
P09-10	CALCIUM	1	---	---	NA	NA
P09-10	CHROMIUM, TOTAL	33	145	2.231	1.645	Upward Trend
P09-10	COBALT	1	---	---	NA	NA
P09-10	COPPER	33	-24	-0.3575	1.645	Not Significant
P09-10	IRON	33	128	1.968	1.645	Upward Trend
P09-10	LEAD	33	32	0.4825	1.645	Not Significant
P09-10	MAGNESIUM	1	---	---	NA	NA
P09-10	MANGANESE	33	44	0.6664	1.645	Not Significant
P09-10	MERCURY	32	-67	-1.115	1.645	Not Significant
P09-10	NICKEL	33	77	1.178	1.645	Not Significant
P09-10	POTASSIUM	1	---	---	NA	NA
P09-10	SELENIUM	1	---	---	NA	NA
P09-10	SILVER	1	---	---	NA	NA
P09-10	SODIUM	1	---	---	NA	NA
P09-10	VANADIUM	1	---	---	NA	NA
P09-10	ZINC	33	25	0.3719	1.645	Not Significant
P09-10	AROCLOR-1016	30	48	0.8474	1.645	Not Significant
P09-10	AROCLOR-1221	30	-21	-0.3602	1.645	Not Significant
P09-10	AROCLOR-1232	30	42	0.7373	1.645	Not Significant
P09-10	AROCLOR-1242	30	43	0.7574	1.645	Not Significant
P09-10	AROCLOR-1248	30	38	0.6668	1.645	Not Significant
P09-10	AROCLOR-1254	30	44	0.7733	1.645	Not Significant
P09-10	AROCLOR-1260	30	63	1.115	1.645	Not Significant
P09-10	POLYCHLORINATED BIPHENYLS (PCBS)	28	30	0.5765	1.645	Not Significant
P09-10	4,4-DDD	21	31	0.9853	1.645	Not Significant
P09-10	4,4-DDE	21	31	0.9853	1.645	Not Significant
P09-10	4,4-DDT	21	16	0.4743	1.645	Not Significant
P09-10	ALDRIN	21	54	1.656	1.645	Upward Trend
P09-10	ALPHA-BHC	21	54	1.656	1.645	Upward Trend

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Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-10	ALPHA-CHLORDANE	21	39	1.177	1.645	Not Significant
P09-10	DELTA-BHC	21	56	1.720	1.645	Upward Trend
P09-10	ENDOSULFAN I	21	56	1.720	1.645	Upward Trend
P09-10	ENDOSULFAN II	21	21	0.6432	1.645	Not Significant
P09-10	LINDANE	21	56	1.720	1.645	Upward Trend
P09-10	BETA-BHC	21	56	1.720	1.645	Upward Trend
P09-10	DIELDRIN	21	59	1.865	1.645	Upward Trend
P09-10	ENDOSULFAN SULFATE	20	26	0.8944	1.645	Not Significant
P09-10	ENDRIN	21	31	0.9853	1.645	Not Significant
P09-10	ENDRIN KETONE	21	31	0.9853	1.645	Not Significant
P09-10	HEPTACHLOR	21	41	1.240	1.645	Not Significant
P09-10	HEPTACHLOR EPOXIDE	21	56	1.720	1.645	Upward Trend
P09-10	HEXACHLOROBENZENE	19	72	2.599	1.645	Upward Trend
P09-10	METHOXYCHLOR	21	-63	-1.962	1.645	Downward Trend
P09-10	1,2,4-TRICHLOROBENZENE	20	9	0.2695	1.645	Not Significant
P09-10	1,2-DICHLOROBENZENE	20	9	0.2695	1.645	Not Significant
P09-10	1,3-DICHLOROBENZENE	20	9	0.2695	1.645	Not Significant
P09-10	1,4-DICHLOROBENZENE	20	17	0.5474	1.645	Not Significant
P09-10	1-METHYLNAPHTHALENE	2	---	---	NA	NA
P09-10	2,2'-OXYBIS(1-CHLOROPROPANE)	16	5	0.1942	1.645	Not Significant
P09-10	2,4,5-TRICHLOROPHENOL	20	-98	-3.229	1.645	Downward Trend
P09-10	2,4,6-TRICHLOROPHENOL	20	62	2.040	1.645	Upward Trend
P09-10	2,4-DICHLOROPHENOL	20	62	2.040	1.645	Upward Trend
P09-10	2,4-DIMETHYLPHENOL	15	-11	-0.5002	1.645	Not Significant
P09-10	2,4-DINITROPHENOL	20	68	2.264	1.645	Upward Trend
P09-10	2,4-DINITROTOLUENE	20	62	2.040	1.645	Upward Trend
P09-10	2,6-DINITROTOLUENE	20	62	2.040	1.645	Upward Trend
P09-10	2-CHLORONAPHTHALENE	20	9	0.2695	1.645	Not Significant
P09-10	2-CHLOROPHENOL	20	9	0.2695	1.645	Not Significant
P09-10	2-METHYLNAPHTHALENE	21	18	0.5328	1.645	Not Significant
P09-10	2-METHYLPHENOL	20	62	2.040	1.645	Upward Trend
P09-10	2-NITROANILINE	20	22	0.7325	1.645	Not Significant
P09-10	2-NITROPHENOL	20	62	2.040	1.645	Upward Trend
P09-10	3- AND 4-METHYLPHENOL	10	-7	-7	21	Not Significant
P09-10	3,3-DICHLOROBENZIDINE	19	32	1.131	1.645	Not Significant
P09-10	3-NITROANILINE	20	22	0.7325	1.645	Not Significant
P09-10	4,6-DINITRO-2-METHYLPHENOL	20	22	0.7325	1.645	Not Significant
P09-10	4-BROMOPHENYL-PHENYLETHER	20	9	0.2695	1.645	Not Significant
P09-10	4-CHLORO-3-METHYLPHENOL	20	34	1.100	1.645	Not Significant
P09-10	4-CHLOROANILINE	19	59	2.102	1.645	Upward Trend
P09-10	4-CHLOROPHENYL-PHENYLETHER	20	9	0.2695	1.645	Not Significant
P09-10	4-METHYLPHENOL	9	-11	-11	18	Not Significant
P09-10	4-NITROANILINE	20	22	0.7325	1.645	Not Significant
P09-10	4-NITROPHENOL	20	33	1.065	1.645	Not Significant
P09-10	ACENAPHTHENE	21	52	1.605	1.645	Not Significant
P09-10	ACENAPHTHYLENE	21	-120	-3.714	1.645	Downward Trend
P09-10	ANTHRACENE	21	88	2.723	1.645	Upward Trend
P09-10	BENZO(A)ANTHRACENE	21	81	2.450	1.645	Upward Trend
P09-10	BENZO(A)PYRENE	21	92	2.778	1.645	Upward Trend
P09-10	BENZO(B)FLUORANTHENE	21	96	2.900	1.645	Upward Trend
P09-10	BENZO(G,H,I)PERYLENE	21	71	2.148	1.645	Upward Trend
P09-10	BENZO(K)FLUORANTHENE	21	109	3.412	1.645	Upward Trend
P09-10	BENZOIC ACID	2	---	---	NA	NA
P09-10	BENZYL ALCOHOL	2	---	---	NA	NA
P09-10	BIS(2-CHLOROETHOXY)METHANE	20	17	0.5474	1.645	Not Significant
P09-10	BIS(2-CHLOROETHYL)ETHER	20	9	0.2695	1.645	Not Significant
P09-10	BIS(2-CHLOROISOPROPYL)ETHER	4	0	0	NA	No Trend
P09-10	BIS(2-ETHYLHEXYL)PHTHALATE	20	8	0.2297	1.645	Not Significant
P09-10	BUTYLBENZYLPHTHALATE	20	23	0.7420	1.645	Not Significant
P09-10	CARBAZOLE	20	9	0.2695	1.645	Not Significant
P09-10	CHRYSENE	21	70	2.117	1.645	Upward Trend
P09-10	CRESOLS	1	---	---	NA	NA
P09-10	DIBENZ(A,H)ANTHRACENE	21	23	0.6960	1.645	Not Significant
P09-10	DIBENZOFURAN	20	33	1.076	1.645	Not Significant
P09-10	DIETHYLPHTHALATE	20	15	0.4722	1.645	Not Significant
P09-10	DIMETHYL PHTHALATE	20	23	0.7420	1.645	Not Significant
P09-10	DI-N-BUTYLPHTHALATE	20	13	0.4047	1.645	Not Significant
P09-10	DI-N-OCTYLPHTHALATE	20	23	0.7420	1.645	Not Significant
P09-10	FLUORANTHENE	21	35	1.043	1.645	Not Significant
P09-10	FLUORENE	21	77	2.419	1.645	Upward Trend
P09-10	HEXACHLOROBUTADIENE	20	9	0.2695	1.645	Not Significant
P09-10	HEXACHLOROCYCLOPENTADIENE	20	22	0.7325	1.645	Not Significant
P09-10	HEXACHLOROETHANE	20	9	0.2695	1.645	Not Significant
P09-10	INDENO(1,2,3-CD)PYRENE	21	85	2.594	1.645	Upward Trend
P09-10	ISOPHORONE	20	9	0.2695	1.645	Not Significant
P09-10	NAPHTHALENE	21	41	1.258	1.645	Not Significant
P09-10	NITROBENZENE	20	17	0.5474	1.645	Not Significant
P09-10	N-NITROSODINPROPYLAMINE	20	9	0.2695	1.645	Not Significant
P09-10	N-NITROSODIPHENYLAMINE	20	17	0.5474	1.645	Not Significant
P09-10	PHENANTHRENE	21	101	3.044	1.645	Upward Trend

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Site 9 Piezometer Mann Kendall Trend Tests
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-10	PHENOL	20	9	0.2695	1.645	Not Significant
P09-10	PYRENE	21	92	2.792	1.645	Upward Trend
P09-10	1,1,1-TRICHLOROETHANE	31	-109	-2.111	1.645	Downward Trend
P09-10	1,1,2,2-TETRACHLOROETHANE	31	-151	-3.101	1.645	Downward Trend
P09-10	1,1,2-TRICHLOROETHANE	31	-106	-2.103	1.645	Downward Trend
P09-10	1,1-DICHLOROETHANE	31	-151	-3.101	1.645	Downward Trend
P09-10	1,1-DICHLOROETHENE	31	-97	-2.141	1.645	Downward Trend
P09-10	1,2-DICHLOROETHANE	31	-125	-2.423	1.645	Downward Trend
P09-10	1,2-DICHLOROETHENE, TOTAL	29	-85	-1.610	1.645	Not Significant
P09-10	1,2-DICHLOROPROPANE	31	-47	-0.8373	1.645	Not Significant
P09-10	2-BUTANONE	26	-102	-2.886	1.645	Downward Trend
P09-10	2-HEXANONE	28	-113	-3.121	1.645	Downward Trend
P09-10	4-METHYL-2-PENTANONE	30	-159	-3.834	1.645	Downward Trend
P09-10	ACETONE	27	-124	-2.775	1.645	Downward Trend
P09-10	BENZENE	31	-214	-3.622	1.645	Downward Trend
P09-10	BROMODICHLOROMETHANE	31	-109	-2.111	1.645	Downward Trend
P09-10	BROMOFORM	31	-67	-1.290	1.645	Not Significant
P09-10	BROMOMETHANE	31	6	0.09741	1.645	Not Significant
P09-10	CARBON DISULFIDE	31	-75	-1.345	1.645	Not Significant
P09-10	CARBON TETRACHLORIDE	31	-79	-1.524	1.645	Not Significant
P09-10	CHLOROBENZENE	31	-109	-2.111	1.645	Downward Trend
P09-10	CHLOROETHANE	31	-41	-0.7129	1.645	Not Significant
P09-10	CHLOROFORM	31	-109	-2.111	1.645	Downward Trend
P09-10	CHLOROMETHANE	31	-71	-1.307	1.645	Not Significant
P09-10	CIS-1,2-DICHLOROETHENE	31	-67	-1.237	1.645	Not Significant
P09-10	CIS-1,3-DICHLOROPROPENE	31	-107	-2.077	1.645	Downward Trend
P09-10	DIBROMOCHLOROMETHANE	31	-67	-1.290	1.645	Not Significant
P09-10	ETHYLBENZENE	31	-97	-2.141	1.645	Downward Trend
P09-10	M- AND P-XYLENE	3	---	---	NA	NA
P09-10	METHYLENE CHLORIDE	31	114	1.991	1.645	Upward Trend
P09-10	O-XYLENE	3	---	---	NA	NA
P09-10	STYRENE	31	-37	-0.6501	1.645	Not Significant
P09-10	TETRACHLOROETHENE	31	-87	-1.681	1.645	Downward Trend
P09-10	TOLUENE	31	-68	-1.383	1.645	Not Significant
P09-10	TRANS-1,2-DICHLOROETHENE	31	-67	-1.290	1.645	Not Significant
P09-10	TRANS-1,3-DICHLOROPROPENE	31	-102	-1.944	1.645	Downward Trend
P09-10	TRICHLOROETHENE	31	-125	-2.423	1.645	Downward Trend
P09-10	VINYL CHLORIDE	31	-203	-3.437	1.645	Downward Trend
P09-10	XYLENES, TOTAL	8	-5	-5	16	Not Significant
P09-11B	PENTACHLOROPHENOL	3	---	---	NA	NA
P09-11B	ALUMINUM	4	4	4	6	Not Significant
P09-11B	ANTIMONY	4	2	2	6	Not Significant
P09-11B	ARSENIC	4	3	3	6	Not Significant
P09-11B	BARIUM	0	---	---	NA	NA
P09-11B	BERYLLIUM	4	3	3	6	Not Significant
P09-11B	CADMIUM	0	---	---	NA	NA
P09-11B	CALCIUM	0	---	---	NA	NA
P09-11B	CHROMIUM, TOTAL	4	2	2	6	Not Significant
P09-11B	COBALT	0	---	---	NA	NA
P09-11B	COPPER	4	3	3	6	Not Significant
P09-11B	IRON	4	0	0	NA	No Trend
P09-11B	LEAD	4	3	3	6	Not Significant
P09-11B	MAGNESIUM	0	---	---	NA	NA
P09-11B	MANGANESE	4	4	4	6	Not Significant
P09-11B	MERCURY	4	2	2	6	Not Significant
P09-11B	NICKEL	4	4	4	6	Not Significant
P09-11B	POTASSIUM	0	---	---	NA	NA
P09-11B	SELENIUM	0	---	---	NA	NA
P09-11B	SILVER	0	---	---	NA	NA
P09-11B	SODIUM	0	---	---	NA	NA
P09-11B	VANADIUM	0	---	---	NA	NA
P09-11B	ZINC	4	4	4	6	Not Significant
P09-11B	AROCLOR-1016	2	---	---	NA	NA
P09-11B	AROCLOR-1221	2	---	---	NA	NA
P09-11B	AROCLOR-1232	2	---	---	NA	NA
P09-11B	AROCLOR-1242	2	---	---	NA	NA
P09-11B	AROCLOR-1248	2	---	---	NA	NA
P09-11B	AROCLOR-1254	2	---	---	NA	NA
P09-11B	AROCLOR-1260	2	---	---	NA	NA
P09-11B	POLYCHLORINATED BIPHENYLS (PCBS)	1	---	---	NA	NA
P09-11B	4,4-DDD	2	---	---	NA	NA
P09-11B	4,4-DDE	2	---	---	NA	NA
P09-11B	4,4-DDT	2	---	---	NA	NA
P09-11B	ALDRIN	2	---	---	NA	NA
P09-11B	ALPHA-BHC	2	---	---	NA	NA
P09-11B	ALPHA-CHLORDANE	2	---	---	NA	NA
P09-11B	DELTA-BHC	2	---	---	NA	NA
P09-11B	ENDOSULFAN I	2	---	---	NA	NA
P09-11B	ENDOSULFAN II	2	---	---	NA	NA
P09-11B	LINDANE	2	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-11B	BETA-BHC	2	---	---	NA	NA
P09-11B	DIELDRIN	2	---	---	NA	NA
P09-11B	ENDOSULFAN SULFATE	2	---	---	NA	NA
P09-11B	ENDRIN	2	---	---	NA	NA
P09-11B	ENDRIN KETONE	2	---	---	NA	NA
P09-11B	HEPTACHLOR	2	---	---	NA	NA
P09-11B	HEPTACHLOR EPOXIDE	2	---	---	NA	NA
P09-11B	HEXACHLOROBENZENE	3	---	---	NA	NA
P09-11B	METHOXYCHLOR	2	---	---	NA	NA
P09-11B	1,2,4-TRICHLOROBENZENE	3	---	---	NA	NA
P09-11B	1,2-DICHLOROBENZENE	3	---	---	NA	NA
P09-11B	1,3-DICHLOROBENZENE	3	---	---	NA	NA
P09-11B	1,4-DICHLOROBENZENE	3	---	---	NA	NA
P09-11B	1-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-11B	2,2'-OXYBIS(1-CHLOROPROPANE)	1	---	---	NA	NA
P09-11B	2,4,5-TRICHLOROPHENOL	3	---	---	NA	NA
P09-11B	2,4,6-TRICHLOROPHENOL	3	---	---	NA	NA
P09-11B	2,4-DICHLOROPHENOL	3	---	---	NA	NA
P09-11B	2,4-DIMETHYLPHENOL	3	---	---	NA	NA
P09-11B	2,4-DINITROPHENOL	3	---	---	NA	NA
P09-11B	2,4-DINITROTOLUENE	3	---	---	NA	NA
P09-11B	2,6-DINITROTOLUENE	3	---	---	NA	NA
P09-11B	2-CHLORONAPHTHALENE	3	---	---	NA	NA
P09-11B	2-CHLOROPHENOL	3	---	---	NA	NA
P09-11B	2-METHYLNAPHTHALENE	3	---	---	NA	NA
P09-11B	2-METHYLPHENOL	3	---	---	NA	NA
P09-11B	2-NITROANILINE	3	---	---	NA	NA
P09-11B	2-NITROPHENOL	3	---	---	NA	NA
P09-11B	3- AND 4-METHYLPHENOL	1	---	---	NA	NA
P09-11B	3,3-DICHLOROBENZIDINE	3	---	---	NA	NA
P09-11B	3-NITROANILINE	3	---	---	NA	NA
P09-11B	4,6-DINITRO-2-METHYLPHENOL	3	---	---	NA	NA
P09-11B	4-BROMOPHENYL-PHENYLETHER	3	---	---	NA	NA
P09-11B	4-CHLORO-3-METHYLPHENOL	3	---	---	NA	NA
P09-11B	4-CHLOROANILINE	3	---	---	NA	NA
P09-11B	4-CHLOROPHENYL-PHENYLETHER	3	---	---	NA	NA
P09-11B	4-METHYLPHENOL	2	---	---	NA	NA
P09-11B	4-NITROANILINE	3	---	---	NA	NA
P09-11B	4-NITROPHENOL	3	---	---	NA	NA
P09-11B	ACENAPHTHENE	3	---	---	NA	NA
P09-11B	ACENAPHTHYLENE	3	---	---	NA	NA
P09-11B	ANTHRACENE	3	---	---	NA	NA
P09-11B	BENZO(A)ANTHRACENE	3	---	---	NA	NA
P09-11B	BENZO(A)PYRENE	3	---	---	NA	NA
P09-11B	BENZO(B)FLUORANTHENE	3	---	---	NA	NA
P09-11B	BENZO(G,H,I)PERYLENE	3	---	---	NA	NA
P09-11B	BENZO(K)FLUORANTHENE	3	---	---	NA	NA
P09-11B	BENZOIC ACID	0	---	---	NA	NA
P09-11B	BENZYL ALCOHOL	0	---	---	NA	NA
P09-11B	BIS(2-CHLOROETHOXY)METHANE	3	---	---	NA	NA
P09-11B	BIS(2-CHLOROETHYL)ETHER	3	---	---	NA	NA
P09-11B	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
P09-11B	BIS(2-ETHYLHEXYL)PHTHALATE	3	---	---	NA	NA
P09-11B	BUTYLBENZYLPHTHALATE	3	---	---	NA	NA
P09-11B	CARBAZOLE	3	---	---	NA	NA
P09-11B	CHRYSENE	3	---	---	NA	NA
P09-11B	CRESOLS	0	---	---	NA	NA
P09-11B	DIBENZ(A,H)ANTHRACENE	3	---	---	NA	NA
P09-11B	DIBENZOFURAN	3	---	---	NA	NA
P09-11B	DIETHYLPHTHALATE	3	---	---	NA	NA
P09-11B	DIMETHYL PHTHALATE	3	---	---	NA	NA
P09-11B	DI-N-BUTYLPHTHALATE	3	---	---	NA	NA
P09-11B	DI-N-OCTYLPHTHALATE	3	---	---	NA	NA
P09-11B	FLUORANTHENE	3	---	---	NA	NA
P09-11B	FLUORENE	3	---	---	NA	NA
P09-11B	HEXACHLOROBUTADIENE	3	---	---	NA	NA
P09-11B	HEXACHLOROCYCLOPENTADIENE	3	---	---	NA	NA
P09-11B	HEXACHLOROETHANE	3	---	---	NA	NA
P09-11B	INDENO(1,2,3-CD)PYRENE	3	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-11B	ISOPHORONE	3	---	---	NA	NA
P09-11B	NAPHTHALENE	3	---	---	NA	NA
P09-11B	NITROBENZENE	3	---	---	NA	NA
P09-11B	N-NITROSODINPROPYLAMINE	3	---	---	NA	NA
P09-11B	N-NITROSODIPHENYLAMINE	3	---	---	NA	NA
P09-11B	PHENANTHRENE	3	---	---	NA	NA
P09-11B	PHENOL	3	---	---	NA	NA
P09-11B	PYRENE	3	---	---	NA	NA
P09-11B	1,1,1-TRICHLOROETHANE	5	4	4	8	Not Significant
P09-11B	1,1,2,2-TETRACHLOROETHANE	5	4	4	8	Not Significant
P09-11B	1,1,2-TRICHLOROETHANE	5	2	2	8	Not Significant
P09-11B	1,1-DICHLOROETHANE	5	4	4	8	Not Significant
P09-11B	1,1-DICHLOROETHENE	5	4	4	8	Not Significant
P09-11B	1,2-DICHLOROETHANE	5	4	4	8	Not Significant
P09-11B	1,2-DICHLOROETHENE, TOTAL	1	---	---	NA	NA
P09-11B	1,2-DICHLOROPROPANE	5	5	5	8	Not Significant
P09-11B	2-BUTANONE	4	3	3	6	Not Significant
P09-11B	2-HEXANONE	5	4	4	8	Not Significant
P09-11B	4-METHYL-2-PENTANONE	5	2	2	8	Not Significant
P09-11B	ACETONE	4	3	3	6	Not Significant
P09-11B	BENZENE	5	4	4	8	Not Significant
P09-11B	BROMODICHLOROMETHANE	5	4	4	8	Not Significant
P09-11B	BROMOFORM	5	5	5	8	Not Significant
P09-11B	BROMOMETHANE	5	4	4	8	Not Significant
P09-11B	CARBON DISULFIDE	5	4	4	8	Not Significant
P09-11B	CARBON TETRACHLORIDE	5	5	5	8	Not Significant
P09-11B	CHLOROBENZENE	5	4	4	8	Not Significant
P09-11B	CHLOROETHANE	5	2	2	8	Not Significant
P09-11B	CHLOROFORM	5	4	4	8	Not Significant
P09-11B	CHLOROMETHANE	5	2	2	8	Not Significant
P09-11B	CIS-1,2-DICHLOROETHENE	5	4	4	8	Not Significant
P09-11B	CIS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-11B	DIBROMOCHLOROMETHANE	5	5	5	8	Not Significant
P09-11B	ETHYLBENZENE	5	4	4	8	Not Significant
P09-11B	M- AND P-XYLENE	1	---	---	NA	NA
P09-11B	METHYLENE CHLORIDE	5	1	1	8	Not Significant
P09-11B	O-XYLENE	1	---	---	NA	NA
P09-11B	STYRENE	5	4	4	8	Not Significant
P09-11B	TETRACHLOROETHENE	5	3	3	8	Not Significant
P09-11B	TOLUENE	5	4	4	8	Not Significant
P09-11B	TRANS-1,2-DICHLOROETHENE	5	5	5	8	Not Significant
P09-11B	TRANS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-11B	TRICHLOROETHENE	5	4	4	8	Not Significant
P09-11B	VINYL CHLORIDE	5	2	2	8	Not Significant
P09-11B	XYLENES, TOTAL	5	-2	-2	8	Not Significant
P09-12B	PENTACHLOROPHENOL	1	---	---	NA	NA
P09-12B	ALUMINUM	4	-5	-5	6	Not Significant
P09-12B	ANTIMONY	4	0	0	NA	No Trend
P09-12B	ARSENIC	4	-6	-6	6	Downward Trend
P09-12B	BARIUM	0	---	---	NA	NA
P09-12B	BERYLLIUM	4	-4	-4	6	Not Significant
P09-12B	CADMIUM	0	---	---	NA	NA
P09-12B	CALCIUM	0	---	---	NA	NA
P09-12B	CHROMIUM, TOTAL	4	-4	-4	6	Not Significant
P09-12B	COBALT	0	---	---	NA	NA
P09-12B	COPPER	4	-6	-6	6	Downward Trend
P09-12B	IRON	4	-4	-4	6	Not Significant
P09-12B	LEAD	4	-6	-6	6	Downward Trend
P09-12B	MAGNESIUM	0	---	---	NA	NA
P09-12B	MANGANESE	4	-6	-6	6	Downward Trend
P09-12B	MERCURY	4	-4	-4	6	Not Significant
P09-12B	NICKEL	4	0	0	NA	No Trend
P09-12B	POTASSIUM	0	---	---	NA	NA
P09-12B	SELENIUM	0	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-12B	SILVER	0	---	---	NA	NA
P09-12B	SODIUM	0	---	---	NA	NA
P09-12B	VANADIUM	0	---	---	NA	NA
P09-12B	ZINC	4	-6	-6	6	Downward Trend
P09-12B	AROCLOR-1016	0	---	---	NA	NA
P09-12B	AROCLOR-1221	0	---	---	NA	NA
P09-12B	AROCLOR-1232	0	---	---	NA	NA
P09-12B	AROCLOR-1242	0	---	---	NA	NA
P09-12B	AROCLOR-1248	0	---	---	NA	NA
P09-12B	AROCLOR-1254	0	---	---	NA	NA
P09-12B	AROCLOR-1260	0	---	---	NA	NA
P09-12B	POLYCHLORINATED BIPHENYLS (PCBS)	0	---	---	NA	NA
P09-12B	4,4-DDD	0	---	---	NA	NA
P09-12B	4,4-DDE	0	---	---	NA	NA
P09-12B	4,4-DDT	0	---	---	NA	NA
P09-12B	ALDRIN	0	---	---	NA	NA
P09-12B	ALPHA-BHC	0	---	---	NA	NA
P09-12B	ALPHA-CHLORDANE	0	---	---	NA	NA
P09-12B	DELTA-BHC	0	---	---	NA	NA
P09-12B	ENDOSULFAN I	0	---	---	NA	NA
P09-12B	ENDOSULFAN II	0	---	---	NA	NA
P09-12B	LINDANE	0	---	---	NA	NA
P09-12B	BETA-BHC	0	---	---	NA	NA
P09-12B	DIELDRIN	0	---	---	NA	NA
P09-12B	ENDOSULFAN SULFATE	0	---	---	NA	NA
P09-12B	ENDRIN	0	---	---	NA	NA
P09-12B	ENDRIN KETONE	0	---	---	NA	NA
P09-12B	HEPTACHLOR	0	---	---	NA	NA
P09-12B	HEPTACHLOR EPOXIDE	0	---	---	NA	NA
P09-12B	HEXACHLOROBENZENE	1	---	---	NA	NA
P09-12B	METHOXYCHLOR	0	---	---	NA	NA
P09-12B	1,2,4-TRICHLOROBENZENE	1	---	---	NA	NA
P09-12B	1,2-DICHLOROBENZENE	1	---	---	NA	NA
P09-12B	1,3-DICHLOROBENZENE	1	---	---	NA	NA
P09-12B	1,4-DICHLOROBENZENE	1	---	---	NA	NA
P09-12B	1-METHYLNAPHTHALENE	0	---	---	NA	NA
P09-12B	2,2'-OXYBIS(1-CHLOROPROPANE)	1	---	---	NA	NA
P09-12B	2,4,5-TRICHLOROPHENOL	1	---	---	NA	NA
P09-12B	2,4,6-TRICHLOROPHENOL	1	---	---	NA	NA
P09-12B	2,4-DICHLOROPHENOL	1	---	---	NA	NA
P09-12B	2,4-DIMETHYLPHENOL	1	---	---	NA	NA
P09-12B	2,4-DINITROPHENOL	1	---	---	NA	NA
P09-12B	2,4-DINITROTOLUENE	1	---	---	NA	NA
P09-12B	2,6-DINITROTOLUENE	1	---	---	NA	NA
P09-12B	2-CHLORONAPHTHALENE	1	---	---	NA	NA
P09-12B	2-CHLOROPHENOL	1	---	---	NA	NA
P09-12B	2-METHYLNAPHTHALENE	1	---	---	NA	NA
P09-12B	2-METHYLPHENOL	1	---	---	NA	NA
P09-12B	2-NITROANILINE	1	---	---	NA	NA
P09-12B	2-NITROPHENOL	1	---	---	NA	NA
P09-12B	3- AND 4-METHYLPHENOL	0	---	---	NA	NA
P09-12B	3,3-DICHLOROBENZIDINE	1	---	---	NA	NA
P09-12B	3-NITROANILINE	1	---	---	NA	NA
P09-12B	4,6-DINITRO-2-METHYLPHENOL	1	---	---	NA	NA
P09-12B	4-BROMOPHENYL-PHENYLETHER	1	---	---	NA	NA
P09-12B	4-CHLORO-3-METHYLPHENOL	1	---	---	NA	NA
P09-12B	4-CHLOROANILINE	1	---	---	NA	NA
P09-12B	4-CHLOROPHENYL-PHENYLETHER	1	---	---	NA	NA
P09-12B	4-METHYLPHENOL	1	---	---	NA	NA
P09-12B	4-NITROANILINE	1	---	---	NA	NA
P09-12B	4-NITROPHENOL	1	---	---	NA	NA
P09-12B	ACENAPHTHENE	1	---	---	NA	NA
P09-12B	ACENAPHTHYLENE	1	---	---	NA	NA
P09-12B	ANTHRACENE	1	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-12B	BENZO(A)ANTHRACENE	1	---	---	NA	NA
P09-12B	BENZO(A)PYRENE	1	---	---	NA	NA
P09-12B	BENZO(B)FLUORANTHENE	1	---	---	NA	NA
P09-12B	BENZO(G,H,I)PERYLENE	1	---	---	NA	NA
P09-12B	BENZO(K)FLUORANTHENE	1	---	---	NA	NA
P09-12B	BENZOIC ACID	0	---	---	NA	NA
P09-12B	BENZYL ALCOHOL	0	---	---	NA	NA
P09-12B	BIS(2-CHLOROETHOXY)METHANE	1	---	---	NA	NA
P09-12B	BIS(2-CHLOROETHYL)ETHER	1	---	---	NA	NA
P09-12B	BIS(2-CHLOROISOPROPYL)ETHER	0	---	---	NA	NA
P09-12B	BIS(2-ETHYLHEXYL)PHTHALATE	1	---	---	NA	NA
P09-12B	BUTYLBENZYLPHTHALATE	1	---	---	NA	NA
P09-12B	CARBAZOLE	1	---	---	NA	NA
P09-12B	CHRYSENE	1	---	---	NA	NA
P09-12B	CRESOLS	0	---	---	NA	NA
P09-12B	DIBENZ(A,H)ANTHRACENE	1	---	---	NA	NA
P09-12B	DIBENZOFURAN	1	---	---	NA	NA
P09-12B	DIETHYLPHTHALATE	1	---	---	NA	NA
P09-12B	DIMETHYL PHTHALATE	1	---	---	NA	NA
P09-12B	DI-N-BUTYLPHTHALATE	1	---	---	NA	NA
P09-12B	DI-N-OCTYLPHTHALATE	1	---	---	NA	NA
P09-12B	FLUORANTHENE	1	---	---	NA	NA
P09-12B	FLUORENE	1	---	---	NA	NA
P09-12B	HEXACHLOROBUTADIENE	1	---	---	NA	NA
P09-12B	HEXACHLOROCYCLOPENTADIENE	1	---	---	NA	NA
P09-12B	HEXACHLOROETHANE	1	---	---	NA	NA
P09-12B	INDENO(1,2,3-CD)PYRENE	1	---	---	NA	NA
P09-12B	ISOPHORONE	1	---	---	NA	NA
P09-12B	NAPHTHALENE	1	---	---	NA	NA
P09-12B	NITROBENZENE	1	---	---	NA	NA
P09-12B	N-NITROSODINPROPYLAMINE	1	---	---	NA	NA
P09-12B	N-NITROSODIPHENYLAMINE	1	---	---	NA	NA
P09-12B	PHENANTHRENE	1	---	---	NA	NA
P09-12B	PHENOL	1	---	---	NA	NA
P09-12B	PYRENE	1	---	---	NA	NA
P09-12B	1,1,1-TRICHLOROETHANE	5	4	4	8	Not Significant
P09-12B	1,1,2,2-TETRACHLOROETHANE	5	4	4	8	Not Significant
P09-12B	1,1,2-TRICHLOROETHANE	5	2	2	8	Not Significant
P09-12B	1,1-DICHLOROETHANE	5	4	4	8	Not Significant
P09-12B	1,1-DICHLOROETHENE	5	4	4	8	Not Significant
P09-12B	1,2-DICHLOROETHANE	5	4	4	8	Not Significant
P09-12B	1,2-DICHLOROETHENE, TOTAL	1	---	---	NA	NA
P09-12B	1,2-DICHLOROPROPANE	5	5	5	8	Not Significant
P09-12B	2-BUTANONE	4	-1	-1	6	Not Significant
P09-12B	2-HEXANONE	5	4	4	8	Not Significant
P09-12B	4-METHYL-2-PENTANONE	5	2	2	8	Not Significant
P09-12B	ACETONE	4	-6	-6	6	Downward Trend
P09-12B	BENZENE	5	4	4	8	Not Significant
P09-12B	BROMODICHLOROMETHANE	5	4	4	8	Not Significant
P09-12B	BROMOFORM	5	5	5	8	Not Significant
P09-12B	BROMOMETHANE	5	4	4	8	Not Significant
P09-12B	CARBON DISULFIDE	5	4	4	8	Not Significant
P09-12B	CARBON TETRACHLORIDE	5	5	5	8	Not Significant
P09-12B	CHLOROBENZENE	5	4	4	8	Not Significant
P09-12B	CHLOROETHANE	5	2	2	8	Not Significant
P09-12B	CHLOROFORM	5	4	4	8	Not Significant
P09-12B	CHLOROMETHANE	5	2	2	8	Not Significant
P09-12B	CIS-1,2-DICHLOROETHENE	5	4	4	8	Not Significant
P09-12B	CIS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-12B	DIBROMOCHLOROMETHANE	5	5	5	8	Not Significant
P09-12B	ETHYLBENZENE	5	4	4	8	Not Significant
P09-12B	M- AND P-XYLENE	1	---	---	NA	NA
P09-12B	METHYLENE CHLORIDE	5	1	1	8	Not Significant
P09-12B	O-XYLENE	1	---	---	NA	NA

Table F-6
Site 9 Piezometer Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
P09-12B	STYRENE	5	4	4	8	Not Significant
P09-12B	TETRACHLOROETHENE	5	5	5	8	Not Significant
P09-12B	TOLUENE	5	4	4	8	Not Significant
P09-12B	TRANS-1,2-DICHLOROETHENE	5	5	5	8	Not Significant
P09-12B	TRANS-1,3-DICHLOROPROPENE	5	4	4	8	Not Significant
P09-12B	TRICHLOROETHENE	5	4	4	8	Not Significant
P09-12B	VINYL CHLORIDE	5	2	2	8	Not Significant
P09-12B	XYLENES, TOTAL	5	-2	-2	8	Not Significant

Notes:

Datasets presented for all analytes detected in at least one location since ME-01.

Field duplicates assigned the maximum value.

A significance level of 95% was used to interpret results.

* - When N > 10, the Normal approximation is used and calculated per box 4-9 in Data Quality Assessment: Statistical Methods for Practitioners. EPA QA/G-9S. When the normal approximation is used, the critical value is the standard normal distribution.

When S is 0, no critical value is calculated and a conclusion of no trend is made.

NA = The Mann-Kendall Trend Test was not computed because there were not at least 4 samples, or there were less than 3 detected concentrations.

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-01	ALUMINUM	6	-9	-9	11	Not Significant
SED09-01	ANTIMONY	6	7	7	11	Not Significant
SED09-01	ARSENIC	6	-3	-3	11	Not Significant
SED09-01	BERYLLIUM	6	-5	-5	11	Not Significant
SED09-01	CHROMIUM, TOTAL	6	-9	-9	11	Not Significant
SED09-01	COPPER	6	5	5	11	Not Significant
SED09-01	IRON	6	-9	-9	11	Not Significant
SED09-01	LEAD	6	-1	-1	11	Not Significant
SED09-01	MANGANESE	6	-9	-9	11	Not Significant
SED09-01	MERCURY	6	-2	-2	11	Not Significant
SED09-01	NICKEL	6	-11	-11	11	Downward Trend
SED09-01	ZINC	6	-9	-9	11	Not Significant
SED09-01	AROCLOR-1242	8	-18	-18	16	Downward Trend
SED09-01	AROCLOR-1248	8	-18	-18	16	Downward Trend
SED09-01	AROCLOR-1254	8	-12	-12	16	Not Significant
SED09-01	AROCLOR-1260	8	-16	-16	16	Downward Trend
SED09-01	POLYCHLORINATED BIPHENYLS (PCBS)	5	0	0	NA	No Trend
SED09-01	4,4-DDD	8	-14	-14	16	Not Significant
SED09-01	4,4-DDE	8	-18	-18	16	Downward Trend
SED09-01	4,4-DDT	8	2	2	16	Not Significant
SED09-01	ALDRIN	8	-15	-15	16	Not Significant
SED09-01	ALPHA-CHLORDANE	8	-14	-14	16	Not Significant
SED09-01	DELTA-BHC	8	-13	-13	16	Not Significant
SED09-01	DIELDRIN	8	-20	-20	16	Downward Trend
SED09-01	ENDOSULFAN I	8	-19	-19	16	Downward Trend
SED09-01	ENDOSULFAN II	8	-20	-20	16	Downward Trend
SED09-01	ENDOSULFAN SULFATE	8	-22	-22	16	Downward Trend
SED09-01	ENDRIN ALDEHYDE	8	-10	-10	16	Not Significant
SED09-01	ENDRIN KETONE	8	-20	-20	16	Downward Trend
SED09-01	HEPTACHLOR EPOXIDE	8	-15	-15	16	Not Significant
SED09-01	LINDANE	8	-19	-19	16	Downward Trend
SED09-01	METHOXYCHLOR	8	-19	-19	16	Downward Trend
SED09-01	TRANS-CHLORDANE	8	-18	-18	16	Downward Trend
SED09-01	BETA-BHC	8	-19	-19	16	Downward Trend
SED09-01	ENDRIN	8	-20	-20	16	Downward Trend
SED09-01	HEPTACHLOR	8	-19	-19	16	Downward Trend
SED09-01	2-METHYLNAPHTHALENE	7	3	3	13	Not Significant
SED09-01	ACENAPHTHENE	7	-1	-1	13	Not Significant
SED09-01	ACENAPHTHYLENE	7	5	5	13	Not Significant
SED09-01	ANTHRACENE	7	2	2	13	Not Significant
SED09-01	BENZO(A)ANTHRACENE	7	-3	-3	13	Not Significant
SED09-01	BENZO(A)PYRENE	7	-5	-5	13	Not Significant
SED09-01	BENZO(B)FLUORANTHENE	7	-6	-6	13	Not Significant
SED09-01	BENZO(G,H,I)PERYLENE	7	-8	-8	13	Not Significant
SED09-01	BENZO(K)FLUORANTHENE	7	-2	-2	13	Not Significant
SED09-01	CHRYSENE	7	-3	-3	13	Not Significant
SED09-01	DIBENZ(A,H)ANTHRACENE	7	-17	-17	13	Downward Trend
SED09-01	FLUORANTHENE	7	-3	-3	13	Not Significant
SED09-01	FLUORENE	7	-1	-1	13	Not Significant
SED09-01	INDENO(1,2,3-CD)PYRENE	7	-14	-14	13	Downward Trend
SED09-01	NAPHTHALENE	7	-10	-10	13	Not Significant
SED09-01	PHENANTHRENE	7	3	3	13	Not Significant
SED09-01	PYRENE	7	-5	-5	13	Not Significant
SED09-01	1,1,1-TRICHLOROETHANE	1	---	---	NA	NA
SED09-01	1,1,2,2-TETRACHLOROETHANE	1	---	---	NA	NA
SED09-01	1,1,2-TRICHLOROETHANE	1	---	---	NA	NA
SED09-01	1,1-DICHLOROETHANE	1	---	---	NA	NA
SED09-01	1,1-DICHLOROETHENE	1	---	---	NA	NA
SED09-01	1,2-DICHLOROETHANE	1	---	---	NA	NA
SED09-01	1,2-DICHLOROPROPANE	1	---	---	NA	NA
SED09-01	2-BUTANONE	1	---	---	NA	NA
SED09-01	2-HEXANONE	1	---	---	NA	NA
SED09-01	4-METHYL-2-PENTANONE	1	---	---	NA	NA
SED09-01	ACETONE	1	---	---	NA	NA
SED09-01	BENZENE	1	---	---	NA	NA
SED09-01	BROMODICHLOROMETHANE	1	---	---	NA	NA
SED09-01	BROMOFORM	1	---	---	NA	NA
SED09-01	BROMOMETHANE	1	---	---	NA	NA
SED09-01	CARBON DISULFIDE	1	---	---	NA	NA
SED09-01	CARBON TETRACHLORIDE	1	---	---	NA	NA
SED09-01	CHLOROBENZENE	1	---	---	NA	NA
SED09-01	CHLOROETHANE	1	---	---	NA	NA
SED09-01	CHLOROFORM	1	---	---	NA	NA
SED09-01	CHLOROMETHANE	1	---	---	NA	NA
SED09-01	CIS-1,2-DICHLOROETHENE	1	---	---	NA	NA
SED09-01	CIS-1,3-DICHLOROPROPENE	1	---	---	NA	NA
SED09-01	DIBROMOCHLOROMETHANE	1	---	---	NA	NA
SED09-01	ETHYLBENZENE	1	---	---	NA	NA
SED09-01	METHYLENE CHLORIDE	1	---	---	NA	NA

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-01	STYRENE	1	---	---	NA	NA
SED09-01	TETRACHLOROETHENE	1	---	---	NA	NA
SED09-01	TOLUENE	1	---	---	NA	NA
SED09-01	TRANS-1,2-DICHLOROETHENE	1	---	---	NA	NA
SED09-01	TRANS-1,3-DICHLOROPROPENE	1	---	---	NA	NA
SED09-01	TRICHLOROETHENE	1	---	---	NA	NA
SED09-01	VINYL CHLORIDE	1	---	---	NA	NA
SED09-02A	ALUMINUM	1	---	---	NA	NA
SED09-02A	ANTIMONY	1	---	---	NA	NA
SED09-02A	ARSENIC	1	---	---	NA	NA
SED09-02A	BERYLLIUM	1	---	---	NA	NA
SED09-02A	CHROMIUM, TOTAL	1	---	---	NA	NA
SED09-02A	COPPER	1	---	---	NA	NA
SED09-02A	IRON	1	---	---	NA	NA
SED09-02A	LEAD	1	---	---	NA	NA
SED09-02A	MANGANESE	1	---	---	NA	NA
SED09-02A	MERCURY	1	---	---	NA	NA
SED09-02A	NICKEL	1	---	---	NA	NA
SED09-02A	ZINC	1	---	---	NA	NA
SED09-02A	AROCLOR-1242	6	-9	-9	11	Not Significant
SED09-02A	AROCLOR-1248	6	-9	-9	11	Not Significant
SED09-02A	AROCLOR-1254	6	-5	-5	11	Not Significant
SED09-02A	AROCLOR-1260	6	-9	-9	11	Not Significant
SED09-02A	POLYCHLORINATED BIPHENYLS (PCBS)	4	-2	-2	6	Not Significant
SED09-02A	4,4-DDD	2	---	---	NA	NA
SED09-02A	4,4-DDE	2	---	---	NA	NA
SED09-02A	4,4-DDT	2	---	---	NA	NA
SED09-02A	ALDRIN	2	---	---	NA	NA
SED09-02A	ALPHA-CHLORDANE	2	---	---	NA	NA
SED09-02A	DELTA-BHC	2	---	---	NA	NA
SED09-02A	DIELDRIN	2	---	---	NA	NA
SED09-02A	ENDOSULFAN I	2	---	---	NA	NA
SED09-02A	ENDOSULFAN II	2	---	---	NA	NA
SED09-02A	ENDOSULFAN SULFATE	2	---	---	NA	NA
SED09-02A	ENDRIN ALDEHYDE	2	---	---	NA	NA
SED09-02A	ENDRIN KETONE	2	---	---	NA	NA
SED09-02A	HEPTACHLOR EPOXIDE	2	---	---	NA	NA
SED09-02A	LINDANE	2	---	---	NA	NA
SED09-02A	METHOXYCHLOR	2	---	---	NA	NA
SED09-02A	TRANS-CHLORDANE	2	---	---	NA	NA
SED09-02A	BETA-BHC	2	---	---	NA	NA
SED09-02A	ENDRIN	2	---	---	NA	NA
SED09-02A	HEPTACHLOR	2	---	---	NA	NA
SED09-02A	2-METHYLNAPHTHALENE	2	---	---	NA	NA
SED09-02A	ACENAPHTHENE	2	---	---	NA	NA
SED09-02A	ACENAPHTHYLENE	2	---	---	NA	NA
SED09-02A	ANTHRACENE	2	---	---	NA	NA
SED09-02A	BENZO(A)ANTHRACENE	2	---	---	NA	NA
SED09-02A	BENZO(A)PYRENE	2	---	---	NA	NA
SED09-02A	BENZO(B)FLUORANTHENE	2	---	---	NA	NA
SED09-02A	BENZO(G,H,I)PERYLENE	2	---	---	NA	NA
SED09-02A	BENZO(K)FLUORANTHENE	2	---	---	NA	NA
SED09-02A	CHRYSENE	2	---	---	NA	NA
SED09-02A	DIBENZ(A,H)ANTHRACENE	2	---	---	NA	NA
SED09-02A	FLUORANTHENE	2	---	---	NA	NA
SED09-02A	FLUORENE	2	---	---	NA	NA
SED09-02A	INDENO(1,2,3-CD)PYRENE	2	---	---	NA	NA
SED09-02A	NAPHTHALENE	2	---	---	NA	NA
SED09-02A	PHENANTHRENE	2	---	---	NA	NA
SED09-02A	PYRENE	2	---	---	NA	NA
SED09-02A	1,1,1-TRICHLOROETHANE	1	---	---	NA	NA
SED09-02A	1,1,2,2-TETRACHLOROETHANE	1	---	---	NA	NA
SED09-02A	1,1,2-TRICHLOROETHANE	1	---	---	NA	NA
SED09-02A	1,1-DICHLOROETHANE	1	---	---	NA	NA
SED09-02A	1,1-DICHLOROETHENE	1	---	---	NA	NA
SED09-02A	1,2-DICHLOROETHANE	1	---	---	NA	NA
SED09-02A	1,2-DICHLOROPROPANE	1	---	---	NA	NA
SED09-02A	2-BUTANONE	1	---	---	NA	NA
SED09-02A	2-HEXANONE	1	---	---	NA	NA
SED09-02A	4-METHYL-2-PENTANONE	1	---	---	NA	NA
SED09-02A	ACETONE	1	---	---	NA	NA
SED09-02A	BENZENE	1	---	---	NA	NA
SED09-02A	BROMODICHLOROMETHANE	1	---	---	NA	NA
SED09-02A	BROMOFORM	1	---	---	NA	NA
SED09-02A	BROMOMETHANE	1	---	---	NA	NA
SED09-02A	CARBON DISULFIDE	1	---	---	NA	NA
SED09-02A	CARBON TETRACHLORIDE	1	---	---	NA	NA
SED09-02A	CHLOROBENZENE	1	---	---	NA	NA
SED09-02A	CHLOROETHANE	1	---	---	NA	NA

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-02A	CHLOROFORM	1	---	---	NA	NA
SED09-02A	CHLOROMETHANE	1	---	---	NA	NA
SED09-02A	CIS-1,2-DICHLOROETHENE	1	---	---	NA	NA
SED09-02A	CIS-1,3-DICHLOROPROPENE	1	---	---	NA	NA
SED09-02A	DIBROMOCHLOROMETHANE	1	---	---	NA	NA
SED09-02A	ETHYLBENZENE	1	---	---	NA	NA
SED09-02A	METHYLENE CHLORIDE	1	---	---	NA	NA
SED09-02A	STYRENE	1	---	---	NA	NA
SED09-02A	TETRACHLOROETHENE	1	---	---	NA	NA
SED09-02A	TOLUENE	1	---	---	NA	NA
SED09-02A	TRANS-1,2-DICHLOROETHENE	1	---	---	NA	NA
SED09-02A	TRANS-1,3-DICHLOROPROPENE	1	---	---	NA	NA
SED09-02A	TRICHLOROETHENE	1	---	---	NA	NA
SED09-02A	VINYL CHLORIDE	1	---	---	NA	NA
SED09-03A	ALUMINUM	1	---	---	NA	NA
SED09-03A	ANTIMONY	1	---	---	NA	NA
SED09-03A	ARSENIC	1	---	---	NA	NA
SED09-03A	BERYLLIUM	1	---	---	NA	NA
SED09-03A	CHROMIUM, TOTAL	1	---	---	NA	NA
SED09-03A	COPPER	1	---	---	NA	NA
SED09-03A	IRON	1	---	---	NA	NA
SED09-03A	LEAD	1	---	---	NA	NA
SED09-03A	MANGANESE	1	---	---	NA	NA
SED09-03A	MERCURY	1	---	---	NA	NA
SED09-03A	NICKEL	1	---	---	NA	NA
SED09-03A	ZINC	1	---	---	NA	NA
SED09-03A	AROCLOR-1242	0	---	---	NA	NA
SED09-03A	AROCLOR-1248	0	---	---	NA	NA
SED09-03A	AROCLOR-1254	0	---	---	NA	NA
SED09-03A	AROCLOR-1260	0	---	---	NA	NA
SED09-03A	POLYCHLORINATED BIPHENYLS (PCBS)	0	---	---	NA	NA
SED09-03A	4,4-DDD	0	---	---	NA	NA
SED09-03A	4,4-DDE	0	---	---	NA	NA
SED09-03A	4,4-DDT	0	---	---	NA	NA
SED09-03A	ALDRIN	0	---	---	NA	NA
SED09-03A	ALPHA-CHLORDANE	0	---	---	NA	NA
SED09-03A	DELTA-BHC	0	---	---	NA	NA
SED09-03A	DIELDRIN	0	---	---	NA	NA
SED09-03A	ENDOSULFAN I	0	---	---	NA	NA
SED09-03A	ENDOSULFAN II	0	---	---	NA	NA
SED09-03A	ENDOSULFAN SULFATE	0	---	---	NA	NA
SED09-03A	ENDRIN ALDEHYDE	0	---	---	NA	NA
SED09-03A	ENDRIN KETONE	0	---	---	NA	NA
SED09-03A	HEPTACHLOR EPOXIDE	0	---	---	NA	NA
SED09-03A	LINDANE	0	---	---	NA	NA
SED09-03A	METHOXYCHLOR	0	---	---	NA	NA
SED09-03A	TRANS-CHLORDANE	0	---	---	NA	NA
SED09-03A	BETA-BHC	0	---	---	NA	NA
SED09-03A	ENDRIN	0	---	---	NA	NA
SED09-03A	HEPTACHLOR	0	---	---	NA	NA
SED09-03A	2-METHYLNAPHTHALENE	1	---	---	NA	NA
SED09-03A	ACENAPHTHENE	1	---	---	NA	NA
SED09-03A	ACENAPHTHYLENE	1	---	---	NA	NA
SED09-03A	ANTHRACENE	1	---	---	NA	NA
SED09-03A	BENZO(A)ANTHRACENE	1	---	---	NA	NA
SED09-03A	BENZO(A)PYRENE	1	---	---	NA	NA
SED09-03A	BENZO(B)FLUORANTHENE	1	---	---	NA	NA
SED09-03A	BENZO(G,H,I)PERYLENE	1	---	---	NA	NA
SED09-03A	BENZO(K)FLUORANTHENE	1	---	---	NA	NA
SED09-03A	CHRYSENE	1	---	---	NA	NA
SED09-03A	DIBENZ(A,H)ANTHRACENE	1	---	---	NA	NA
SED09-03A	FLUORANTHENE	1	---	---	NA	NA
SED09-03A	FLUORENE	1	---	---	NA	NA
SED09-03A	INDENO(1,2,3-CD)PYRENE	1	---	---	NA	NA
SED09-03A	NAPHTHALENE	1	---	---	NA	NA
SED09-03A	PHENANTHRENE	1	---	---	NA	NA
SED09-03A	PYRENE	1	---	---	NA	NA
SED09-03A	1,1,1-TRICHLOROETHANE	1	---	---	NA	NA
SED09-03A	1,1,2,2-TETRACHLOROETHANE	1	---	---	NA	NA
SED09-03A	1,1,2-TRICHLOROETHANE	1	---	---	NA	NA
SED09-03A	1,1-DICHLOROETHANE	1	---	---	NA	NA
SED09-03A	1,1-DICHLOROETHENE	1	---	---	NA	NA
SED09-03A	1,2-DICHLOROETHANE	1	---	---	NA	NA
SED09-03A	1,2-DICHLOROPROPANE	1	---	---	NA	NA
SED09-03A	2-BUTANONE	1	---	---	NA	NA
SED09-03A	2-HEXANONE	1	---	---	NA	NA
SED09-03A	4-METHYL-2-PENTANONE	1	---	---	NA	NA
SED09-03A	ACETONE	1	---	---	NA	NA
SED09-03A	BENZENE	1	---	---	NA	NA

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-03A	BROMODICHLOROMETHANE	1	---	---	NA	NA
SED09-03A	BROMOFORM	1	---	---	NA	NA
SED09-03A	BROMOMETHANE	1	---	---	NA	NA
SED09-03A	CARBON DISULFIDE	1	---	---	NA	NA
SED09-03A	CARBON TETRACHLORIDE	1	---	---	NA	NA
SED09-03A	CHLOROBENZENE	1	---	---	NA	NA
SED09-03A	CHLOROETHANE	1	---	---	NA	NA
SED09-03A	CHLOROFORM	1	---	---	NA	NA
SED09-03A	CHLOROMETHANE	1	---	---	NA	NA
SED09-03A	CIS-1,2-DICHLOROETHENE	1	---	---	NA	NA
SED09-03A	CIS-1,3-DICHLOROPROPENE	1	---	---	NA	NA
SED09-03A	DIBROMOCHLOROMETHANE	1	---	---	NA	NA
SED09-03A	ETHYLBENZENE	1	---	---	NA	NA
SED09-03A	METHYLENE CHLORIDE	1	---	---	NA	NA
SED09-03A	STYRENE	1	---	---	NA	NA
SED09-03A	TETRACHLOROETHENE	1	---	---	NA	NA
SED09-03A	TOLUENE	1	---	---	NA	NA
SED09-03A	TRANS-1,2-DICHLOROETHENE	1	---	---	NA	NA
SED09-03A	TRANS-1,3-DICHLOROPROPENE	1	---	---	NA	NA
SED09-03A	TRICHLOROETHENE	1	---	---	NA	NA
SED09-03A	VINYL CHLORIDE	1	---	---	NA	NA
SED09-04A	ALUMINUM	2	---	---	NA	NA
SED09-04A	ANTIMONY	2	---	---	NA	NA
SED09-04A	ARSENIC	2	---	---	NA	NA
SED09-04A	BERYLLIUM	2	---	---	NA	NA
SED09-04A	CHROMIUM, TOTAL	2	---	---	NA	NA
SED09-04A	COPPER	2	---	---	NA	NA
SED09-04A	IRON	2	---	---	NA	NA
SED09-04A	LEAD	2	---	---	NA	NA
SED09-04A	MANGANESE	2	---	---	NA	NA
SED09-04A	MERCURY	2	---	---	NA	NA
SED09-04A	NICKEL	2	---	---	NA	NA
SED09-04A	ZINC	2	---	---	NA	NA
SED09-04A	AROCLOR-1242	0	---	---	NA	NA
SED09-04A	AROCLOR-1248	0	---	---	NA	NA
SED09-04A	AROCLOR-1254	0	---	---	NA	NA
SED09-04A	AROCLOR-1260	0	---	---	NA	NA
SED09-04A	POLYCHLORINATED BIPHENYLS (PCBS)	0	---	---	NA	NA
SED09-04A	4,4-DDD	0	---	---	NA	NA
SED09-04A	4,4-DDE	0	---	---	NA	NA
SED09-04A	4,4-DDT	0	---	---	NA	NA
SED09-04A	ALDRIN	0	---	---	NA	NA
SED09-04A	ALPHA-CHLORDANE	0	---	---	NA	NA
SED09-04A	DELTA-BHC	0	---	---	NA	NA
SED09-04A	DIELDRIN	0	---	---	NA	NA
SED09-04A	ENDOSULFAN I	0	---	---	NA	NA
SED09-04A	ENDOSULFAN II	0	---	---	NA	NA
SED09-04A	ENDOSULFAN SULFATE	0	---	---	NA	NA
SED09-04A	ENDRIN ALDEHYDE	0	---	---	NA	NA
SED09-04A	ENDRIN KETONE	0	---	---	NA	NA
SED09-04A	HEPTACHLOR EPOXIDE	0	---	---	NA	NA
SED09-04A	LINDANE	0	---	---	NA	NA
SED09-04A	METHOXYCHLOR	0	---	---	NA	NA
SED09-04A	TRANS-CHLORDANE	0	---	---	NA	NA
SED09-04A	BETA-BHC	0	---	---	NA	NA
SED09-04A	ENDRIN	0	---	---	NA	NA
SED09-04A	HEPTACHLOR	0	---	---	NA	NA
SED09-04A	2-METHYLNAPHTHALENE	1	---	---	NA	NA
SED09-04A	ACENAPHTHENE	1	---	---	NA	NA
SED09-04A	ACENAPHTHYLENE	1	---	---	NA	NA
SED09-04A	ANTHRACENE	1	---	---	NA	NA
SED09-04A	BENZO(A)ANTHRACENE	1	---	---	NA	NA
SED09-04A	BENZO(A)PYRENE	1	---	---	NA	NA
SED09-04A	BENZO(B)FLUORANTHENE	1	---	---	NA	NA
SED09-04A	BENZO(G,H,I)PERYLENE	1	---	---	NA	NA
SED09-04A	BENZO(K)FLUORANTHENE	1	---	---	NA	NA
SED09-04A	CHRYSENE	1	---	---	NA	NA
SED09-04A	DIBENZ(A,H)ANTHRACENE	1	---	---	NA	NA
SED09-04A	FLUORANTHENE	1	---	---	NA	NA
SED09-04A	FLUORENE	1	---	---	NA	NA
SED09-04A	INDENO(1,2,3-CD)PYRENE	1	---	---	NA	NA
SED09-04A	NAPHTHALENE	1	---	---	NA	NA
SED09-04A	PHENANTHRENE	1	---	---	NA	NA
SED09-04A	PYRENE	1	---	---	NA	NA
SED09-04A	1,1,1-TRICHLOROETHANE	1	---	---	NA	NA
SED09-04A	1,1,2,2-TETRACHLOROETHANE	1	---	---	NA	NA
SED09-04A	1,1,2-TRICHLOROETHANE	1	---	---	NA	NA
SED09-04A	1,1-DICHLOROETHANE	1	---	---	NA	NA
SED09-04A	1,1-DICHLOROETHENE	1	---	---	NA	NA

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-04A	1,2-DICHLOROETHANE	1	---	---	NA	NA
SED09-04A	1,2-DICHLOROPROPANE	1	---	---	NA	NA
SED09-04A	2-BUTANONE	1	---	---	NA	NA
SED09-04A	2-HEXANONE	1	---	---	NA	NA
SED09-04A	4-METHYL-2-PENTANONE	1	---	---	NA	NA
SED09-04A	ACETONE	1	---	---	NA	NA
SED09-04A	BENZENE	1	---	---	NA	NA
SED09-04A	BROMODICHLOROMETHANE	1	---	---	NA	NA
SED09-04A	BROMOFORM	1	---	---	NA	NA
SED09-04A	BROMOMETHANE	1	---	---	NA	NA
SED09-04A	CARBON DISULFIDE	1	---	---	NA	NA
SED09-04A	CARBON TETRACHLORIDE	1	---	---	NA	NA
SED09-04A	CHLOROBENZENE	1	---	---	NA	NA
SED09-04A	CHLOROETHANE	1	---	---	NA	NA
SED09-04A	CHLOROFORM	1	---	---	NA	NA
SED09-04A	CHLOROMETHANE	1	---	---	NA	NA
SED09-04A	CIS-1,2-DICHLOROETHENE	1	---	---	NA	NA
SED09-04A	CIS-1,3-DICHLOROPROPENE	1	---	---	NA	NA
SED09-04A	DIBROMOCHLOROMETHANE	1	---	---	NA	NA
SED09-04A	ETHYLBENZENE	1	---	---	NA	NA
SED09-04A	METHYLENE CHLORIDE	1	---	---	NA	NA
SED09-04A	STYRENE	1	---	---	NA	NA
SED09-04A	TETRACHLOROETHENE	1	---	---	NA	NA
SED09-04A	TOLUENE	1	---	---	NA	NA
SED09-04A	TRANS-1,2-DICHLOROETHENE	1	---	---	NA	NA
SED09-04A	TRANS-1,3-DICHLOROPROPENE	1	---	---	NA	NA
SED09-04A	TRICHLOROETHENE	1	---	---	NA	NA
SED09-04A	VINYL CHLORIDE	1	---	---	NA	NA
SED09-05A	ALUMINUM	1	---	---	NA	NA
SED09-05A	ANTIMONY	1	---	---	NA	NA
SED09-05A	ARSENIC	1	---	---	NA	NA
SED09-05A	BERYLLIUM	1	---	---	NA	NA
SED09-05A	CHROMIUM, TOTAL	1	---	---	NA	NA
SED09-05A	COPPER	1	---	---	NA	NA
SED09-05A	IRON	1	---	---	NA	NA
SED09-05A	LEAD	1	---	---	NA	NA
SED09-05A	MANGANESE	1	---	---	NA	NA
SED09-05A	MERCURY	1	---	---	NA	NA
SED09-05A	NICKEL	1	---	---	NA	NA
SED09-05A	ZINC	1	---	---	NA	NA
SED09-05A	AROCLOR-1242	0	---	---	NA	NA
SED09-05A	AROCLOR-1248	0	---	---	NA	NA
SED09-05A	AROCLOR-1254	0	---	---	NA	NA
SED09-05A	AROCLOR-1260	0	---	---	NA	NA
SED09-05A	POLYCHLORINATED BIPHENYLS (PCBS)	0	---	---	NA	NA
SED09-05A	4,4-DDD	0	---	---	NA	NA
SED09-05A	4,4-DDE	0	---	---	NA	NA
SED09-05A	4,4-DDT	0	---	---	NA	NA
SED09-05A	ALDRIN	0	---	---	NA	NA
SED09-05A	ALPHA-CHLORDANE	0	---	---	NA	NA
SED09-05A	DELTA-BHC	0	---	---	NA	NA
SED09-05A	DIELDRIN	0	---	---	NA	NA
SED09-05A	ENDOSULFAN I	0	---	---	NA	NA
SED09-05A	ENDOSULFAN II	0	---	---	NA	NA
SED09-05A	ENDOSULFAN SULFATE	0	---	---	NA	NA
SED09-05A	ENDRIN ALDEHYDE	0	---	---	NA	NA
SED09-05A	ENDRIN KETONE	0	---	---	NA	NA
SED09-05A	HEPTACHLOR EPOXIDE	0	---	---	NA	NA
SED09-05A	LINDANE	0	---	---	NA	NA
SED09-05A	METHOXYCHLOR	0	---	---	NA	NA
SED09-05A	TRANS-CHLORDANE	0	---	---	NA	NA
SED09-05A	BETA-BHC	0	---	---	NA	NA
SED09-05A	ENDRIN	0	---	---	NA	NA
SED09-05A	HEPTACHLOR	0	---	---	NA	NA
SED09-05A	2-METHYLNAPHTHALENE	1	---	---	NA	NA
SED09-05A	ACENAPHTHENE	1	---	---	NA	NA
SED09-05A	ACENAPHTHYLENE	1	---	---	NA	NA
SED09-05A	ANTHRACENE	1	---	---	NA	NA
SED09-05A	BENZO(A)ANTHRACENE	1	---	---	NA	NA
SED09-05A	BENZO(A)PYRENE	1	---	---	NA	NA
SED09-05A	BENZO(B)FLUORANTHENE	1	---	---	NA	NA
SED09-05A	BENZO(G,H,I)PERYLENE	1	---	---	NA	NA
SED09-05A	BENZO(K)FLUORANTHENE	1	---	---	NA	NA
SED09-05A	CHRYSENE	1	---	---	NA	NA
SED09-05A	DIBENZ(A,H)ANTHRACENE	1	---	---	NA	NA
SED09-05A	FLUORANTHENE	1	---	---	NA	NA
SED09-05A	FLUORENE	1	---	---	NA	NA
SED09-05A	INDENO(1,2,3-CD)PYRENE	1	---	---	NA	NA
SED09-05A	NAPHTHALENE	1	---	---	NA	NA

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-05A	PHENANTHRENE	1	---	---	NA	NA
SED09-05A	PYRENE	1	---	---	NA	NA
SED09-05A	1,1,1-TRICHLOROETHANE	2	---	---	NA	NA
SED09-05A	1,1,2,2-TETRACHLOROETHANE	2	---	---	NA	NA
SED09-05A	1,1,2-TRICHLOROETHANE	2	---	---	NA	NA
SED09-05A	1,1-DICHLOROETHANE	2	---	---	NA	NA
SED09-05A	1,1-DICHLOROETHENE	2	---	---	NA	NA
SED09-05A	1,2-DICHLOROETHANE	2	---	---	NA	NA
SED09-05A	1,2-DICHLOROPROPANE	2	---	---	NA	NA
SED09-05A	2-BUTANONE	2	---	---	NA	NA
SED09-05A	2-HEXANONE	2	---	---	NA	NA
SED09-05A	4-METHYL-2-PENTANONE	2	---	---	NA	NA
SED09-05A	ACETONE	2	---	---	NA	NA
SED09-05A	BENZENE	2	---	---	NA	NA
SED09-05A	BROMODICHLOROMETHANE	2	---	---	NA	NA
SED09-05A	BROMOFORM	2	---	---	NA	NA
SED09-05A	BROMOMETHANE	2	---	---	NA	NA
SED09-05A	CARBON DISULFIDE	2	---	---	NA	NA
SED09-05A	CARBON TETRACHLORIDE	2	---	---	NA	NA
SED09-05A	CHLOROBENZENE	2	---	---	NA	NA
SED09-05A	CHLOROETHANE	2	---	---	NA	NA
SED09-05A	CHLOROFORM	2	---	---	NA	NA
SED09-05A	CHLOROMETHANE	2	---	---	NA	NA
SED09-05A	CIS-1,2-DICHLOROETHENE	2	---	---	NA	NA
SED09-05A	CIS-1,3-DICHLOROPROPENE	2	---	---	NA	NA
SED09-05A	DIBROMOCHLOROMETHANE	2	---	---	NA	NA
SED09-05A	ETHYLBENZENE	2	---	---	NA	NA
SED09-05A	METHYLENE CHLORIDE	2	---	---	NA	NA
SED09-05A	STYRENE	2	---	---	NA	NA
SED09-05A	TETRACHLOROETHENE	2	---	---	NA	NA
SED09-05A	TOLUENE	2	---	---	NA	NA
SED09-05A	TRANS-1,2-DICHLOROETHENE	2	---	---	NA	NA
SED09-05A	TRANS-1,3-DICHLOROPROPENE	2	---	---	NA	NA
SED09-05A	TRICHLOROETHENE	2	---	---	NA	NA
SED09-05A	VINYL CHLORIDE	2	---	---	NA	NA
SED09-06B	ALUMINUM	2	---	---	NA	NA
SED09-06B	ANTIMONY	2	---	---	NA	NA
SED09-06B	ARSENIC	2	---	---	NA	NA
SED09-06B	BERYLLIUM	2	---	---	NA	NA
SED09-06B	CHROMIUM, TOTAL	2	---	---	NA	NA
SED09-06B	COPPER	2	---	---	NA	NA
SED09-06B	IRON	2	---	---	NA	NA
SED09-06B	LEAD	2	---	---	NA	NA
SED09-06B	MANGANESE	2	---	---	NA	NA
SED09-06B	MERCURY	2	---	---	NA	NA
SED09-06B	NICKEL	2	---	---	NA	NA
SED09-06B	ZINC	2	---	---	NA	NA
SED09-06B	AROCLOR-1242	1	---	---	NA	NA
SED09-06B	AROCLOR-1248	1	---	---	NA	NA
SED09-06B	AROCLOR-1254	1	---	---	NA	NA
SED09-06B	AROCLOR-1260	1	---	---	NA	NA
SED09-06B	POLYCHLORINATED BIPHENYLS (PCBS)	1	---	---	NA	NA
SED09-06B	4,4-DDD	1	---	---	NA	NA
SED09-06B	4,4-DDE	1	---	---	NA	NA
SED09-06B	4,4-DDT	1	---	---	NA	NA
SED09-06B	ALDRIN	1	---	---	NA	NA
SED09-06B	ALPHA-CHLORDANE	1	---	---	NA	NA
SED09-06B	DELTA-BHC	1	---	---	NA	NA
SED09-06B	DIELDRIN	1	---	---	NA	NA
SED09-06B	ENDOSULFAN I	1	---	---	NA	NA
SED09-06B	ENDOSULFAN II	1	---	---	NA	NA
SED09-06B	ENDOSULFAN SULFATE	1	---	---	NA	NA
SED09-06B	ENDRIN ALDEHYDE	1	---	---	NA	NA
SED09-06B	ENDRIN KETONE	1	---	---	NA	NA
SED09-06B	HEPTACHLOR EPOXIDE	1	---	---	NA	NA
SED09-06B	LINDANE	1	---	---	NA	NA
SED09-06B	METHOXYCHLOR	1	---	---	NA	NA
SED09-06B	TRANS-CHLORDANE	1	---	---	NA	NA
SED09-06B	BETA-BHC	1	---	---	NA	NA
SED09-06B	ENDRIN	1	---	---	NA	NA
SED09-06B	HEPTACHLOR	1	---	---	NA	NA
SED09-06B	2-METHYLNAPHTHALENE	3	---	---	NA	NA
SED09-06B	ACENAPHTHENE	3	---	---	NA	NA
SED09-06B	ACENAPHTHYLENE	3	---	---	NA	NA
SED09-06B	ANTHRACENE	3	---	---	NA	NA
SED09-06B	BENZO(A)ANTHRACENE	3	---	---	NA	NA
SED09-06B	BENZO(A)PYRENE	3	---	---	NA	NA
SED09-06B	BENZO(B)FLUORANTHENE	3	---	---	NA	NA
SED09-06B	BENZO(G,H,I)PERYLENE	3	---	---	NA	NA

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-06B	BENZO(K)FLUORANTHENE	3	---	---	NA	NA
SED09-06B	CHRYSENE	3	---	---	NA	NA
SED09-06B	DIBENZ(A,H)ANTHRACENE	3	---	---	NA	NA
SED09-06B	FLUORANTHENE	3	---	---	NA	NA
SED09-06B	FLUORENE	3	---	---	NA	NA
SED09-06B	INDENO(1,2,3-CD)PYRENE	3	---	---	NA	NA
SED09-06B	NAPHTHALENE	3	---	---	NA	NA
SED09-06B	PHENANTHRENE	3	---	---	NA	NA
SED09-06B	PYRENE	3	---	---	NA	NA
SED09-06B	1,1,1-TRICHLOROETHANE	3	---	---	NA	NA
SED09-06B	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
SED09-06B	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
SED09-06B	1,1-DICHLOROETHANE	3	---	---	NA	NA
SED09-06B	1,1-DICHLOROETHENE	3	---	---	NA	NA
SED09-06B	1,2-DICHLOROETHANE	3	---	---	NA	NA
SED09-06B	1,2-DICHLOROPROPANE	3	---	---	NA	NA
SED09-06B	2-BUTANONE	2	---	---	NA	NA
SED09-06B	2-HEXANONE	3	---	---	NA	NA
SED09-06B	4-METHYL-2-PENTANONE	3	---	---	NA	NA
SED09-06B	ACETONE	2	---	---	NA	NA
SED09-06B	BENZENE	3	---	---	NA	NA
SED09-06B	BROMODICHLOROMETHANE	3	---	---	NA	NA
SED09-06B	BROMOFORM	3	---	---	NA	NA
SED09-06B	BROMOMETHANE	3	---	---	NA	NA
SED09-06B	CARBON DISULFIDE	3	---	---	NA	NA
SED09-06B	CARBON TETRACHLORIDE	3	---	---	NA	NA
SED09-06B	CHLOROBENZENE	3	---	---	NA	NA
SED09-06B	CHLOROETHANE	3	---	---	NA	NA
SED09-06B	CHLOROFORM	3	---	---	NA	NA
SED09-06B	CHLOROMETHANE	3	---	---	NA	NA
SED09-06B	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
SED09-06B	CIS-1,3-DICHLOROPROPENE	3	---	---	NA	NA
SED09-06B	DIBROMOCHLOROMETHANE	3	---	---	NA	NA
SED09-06B	ETHYLBENZENE	3	---	---	NA	NA
SED09-06B	METHYLENE CHLORIDE	3	---	---	NA	NA
SED09-06B	STYRENE	3	---	---	NA	NA
SED09-06B	TETRACHLOROETHENE	3	---	---	NA	NA
SED09-06B	TOLUENE	3	---	---	NA	NA
SED09-06B	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
SED09-06B	TRANS-1,3-DICHLOROPROPENE	3	---	---	NA	NA
SED09-06B	TRICHLOROETHENE	3	---	---	NA	NA
SED09-06B	VINYL CHLORIDE	3	---	---	NA	NA
SED09-07B	ALUMINUM	2	---	---	NA	NA
SED09-07B	ANTIMONY	2	---	---	NA	NA
SED09-07B	ARSENIC	2	---	---	NA	NA
SED09-07B	BERYLLIUM	2	---	---	NA	NA
SED09-07B	CHROMIUM, TOTAL	2	---	---	NA	NA
SED09-07B	COPPER	2	---	---	NA	NA
SED09-07B	IRON	2	---	---	NA	NA
SED09-07B	LEAD	2	---	---	NA	NA
SED09-07B	MANGANESE	2	---	---	NA	NA
SED09-07B	MERCURY	2	---	---	NA	NA
SED09-07B	NICKEL	2	---	---	NA	NA
SED09-07B	ZINC	2	---	---	NA	NA
SED09-07B	AROCLOR-1242	1	---	---	NA	NA
SED09-07B	AROCLOR-1248	1	---	---	NA	NA
SED09-07B	AROCLOR-1254	1	---	---	NA	NA
SED09-07B	AROCLOR-1260	1	---	---	NA	NA
SED09-07B	POLYCHLORINATED BIPHENYLS (PCBS)	1	---	---	NA	NA
SED09-07B	4,4-DDD	1	---	---	NA	NA
SED09-07B	4,4-DDE	1	---	---	NA	NA
SED09-07B	4,4-DDT	1	---	---	NA	NA
SED09-07B	ALDRIN	1	---	---	NA	NA
SED09-07B	ALPHA-CHLORDANE	1	---	---	NA	NA
SED09-07B	DELTA-BHC	1	---	---	NA	NA
SED09-07B	DIELDRIN	1	---	---	NA	NA
SED09-07B	ENDOSULFAN I	1	---	---	NA	NA
SED09-07B	ENDOSULFAN II	1	---	---	NA	NA
SED09-07B	ENDOSULFAN SULFATE	1	---	---	NA	NA
SED09-07B	ENDRIN ALDEHYDE	1	---	---	NA	NA
SED09-07B	ENDRIN KETONE	1	---	---	NA	NA
SED09-07B	HEPTACHLOR EPOXIDE	1	---	---	NA	NA
SED09-07B	LINDANE	1	---	---	NA	NA
SED09-07B	METHOXYCHLOR	1	---	---	NA	NA
SED09-07B	TRANS-CHLORDANE	1	---	---	NA	NA
SED09-07B	BETA-BHC	1	---	---	NA	NA
SED09-07B	ENDRIN	1	---	---	NA	NA
SED09-07B	HEPTACHLOR	1	---	---	NA	NA
SED09-07B	2-METHYLNAPHTHALENE	2	---	---	NA	NA

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-07B	ACENAPHTHENE	2	---	---	NA	NA
SED09-07B	ACENAPHTHYLENE	2	---	---	NA	NA
SED09-07B	ANTHRACENE	2	---	---	NA	NA
SED09-07B	BENZO(A)ANTHRACENE	2	---	---	NA	NA
SED09-07B	BENZO(A)PYRENE	2	---	---	NA	NA
SED09-07B	BENZO(B)FLUORANTHENE	2	---	---	NA	NA
SED09-07B	BENZO(G,H,I)PERYLENE	2	---	---	NA	NA
SED09-07B	BENZO(K)FLUORANTHENE	2	---	---	NA	NA
SED09-07B	CHRYSENE	2	---	---	NA	NA
SED09-07B	DIBENZ(A,H)ANTHRACENE	2	---	---	NA	NA
SED09-07B	FLUORANTHENE	2	---	---	NA	NA
SED09-07B	FLUORENE	2	---	---	NA	NA
SED09-07B	INDENO(1,2,3-CD)PYRENE	2	---	---	NA	NA
SED09-07B	NAPHTHALENE	2	---	---	NA	NA
SED09-07B	PHENANTHRENE	2	---	---	NA	NA
SED09-07B	PYRENE	2	---	---	NA	NA
SED09-07B	1,1,1-TRICHLOROETHANE	3	---	---	NA	NA
SED09-07B	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
SED09-07B	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
SED09-07B	1,1-DICHLOROETHANE	3	---	---	NA	NA
SED09-07B	1,1-DICHLOROETHENE	3	---	---	NA	NA
SED09-07B	1,2-DICHLOROETHANE	3	---	---	NA	NA
SED09-07B	1,2-DICHLOROPROPANE	3	---	---	NA	NA
SED09-07B	2-BUTANONE	2	---	---	NA	NA
SED09-07B	2-HEXANONE	3	---	---	NA	NA
SED09-07B	4-METHYL-2-PENTANONE	3	---	---	NA	NA
SED09-07B	ACETONE	2	---	---	NA	NA
SED09-07B	BENZENE	3	---	---	NA	NA
SED09-07B	BROMODICHLOROMETHANE	3	---	---	NA	NA
SED09-07B	BROMOFORM	3	---	---	NA	NA
SED09-07B	BROMOMETHANE	3	---	---	NA	NA
SED09-07B	CARBON DISULFIDE	3	---	---	NA	NA
SED09-07B	CARBON TETRACHLORIDE	3	---	---	NA	NA
SED09-07B	CHLOROBENZENE	3	---	---	NA	NA
SED09-07B	CHLOROETHANE	3	---	---	NA	NA
SED09-07B	CHLOROFORM	3	---	---	NA	NA
SED09-07B	CHLOROMETHANE	3	---	---	NA	NA
SED09-07B	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
SED09-07B	CIS-1,3-DICHLOROPROPENE	3	---	---	NA	NA
SED09-07B	DIBROMOCHLOROMETHANE	3	---	---	NA	NA
SED09-07B	ETHYLBENZENE	3	---	---	NA	NA
SED09-07B	METHYLENE CHLORIDE	3	---	---	NA	NA
SED09-07B	STYRENE	3	---	---	NA	NA
SED09-07B	TETRACHLOROETHENE	3	---	---	NA	NA
SED09-07B	TOLUENE	3	---	---	NA	NA
SED09-07B	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
SED09-07B	TRANS-1,3-DICHLOROPROPENE	3	---	---	NA	NA
SED09-07B	TRICHLOROETHENE	3	---	---	NA	NA
SED09-07B	VINYL CHLORIDE	3	---	---	NA	NA
SED09-08B	ALUMINUM	3	---	---	NA	NA
SED09-08B	ANTIMONY	3	---	---	NA	NA
SED09-08B	ARSENIC	3	---	---	NA	NA
SED09-08B	BERYLLIUM	3	---	---	NA	NA
SED09-08B	CHROMIUM, TOTAL	3	---	---	NA	NA
SED09-08B	COPPER	3	---	---	NA	NA
SED09-08B	IRON	3	---	---	NA	NA
SED09-08B	LEAD	3	---	---	NA	NA
SED09-08B	MANGANESE	3	---	---	NA	NA
SED09-08B	MERCURY	3	---	---	NA	NA
SED09-08B	NICKEL	3	---	---	NA	NA
SED09-08B	ZINC	3	---	---	NA	NA
SED09-08B	AROCLOR-1242	1	---	---	NA	NA
SED09-08B	AROCLOR-1248	1	---	---	NA	NA
SED09-08B	AROCLOR-1254	1	---	---	NA	NA
SED09-08B	AROCLOR-1260	1	---	---	NA	NA
SED09-08B	POLYCHLORINATED BIPHENYLS (PCBS)	1	---	---	NA	NA
SED09-08B	4,4-DDD	1	---	---	NA	NA
SED09-08B	4,4-DDE	1	---	---	NA	NA
SED09-08B	4,4-DDT	1	---	---	NA	NA
SED09-08B	ALDRIN	1	---	---	NA	NA
SED09-08B	ALPHA-CHLORDANE	1	---	---	NA	NA
SED09-08B	DELTA-BHC	1	---	---	NA	NA
SED09-08B	DIELDRIN	1	---	---	NA	NA
SED09-08B	ENDOSULFAN I	1	---	---	NA	NA
SED09-08B	ENDOSULFAN II	1	---	---	NA	NA
SED09-08B	ENDOSULFAN SULFATE	1	---	---	NA	NA
SED09-08B	ENDRIN ALDEHYDE	1	---	---	NA	NA
SED09-08B	ENDRIN KETONE	1	---	---	NA	NA
SED09-08B	HEPTACHLOR EPOXIDE	1	---	---	NA	NA

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-08B	LINDANE	1	---	---	NA	NA
SED09-08B	METHOXYCHLOR	1	---	---	NA	NA
SED09-08B	TRANS-CHLORDANE	1	---	---	NA	NA
SED09-08B	BETA-BHC	1	---	---	NA	NA
SED09-08B	ENDRIN	1	---	---	NA	NA
SED09-08B	HEPTACHLOR	1	---	---	NA	NA
SED09-08B	2-METHYLNAPHTHALENE	3	---	---	NA	NA
SED09-08B	ACENAPHTHENE	3	---	---	NA	NA
SED09-08B	ACENAPHTHYLENE	3	---	---	NA	NA
SED09-08B	ANTHRACENE	3	---	---	NA	NA
SED09-08B	BENZO(A)ANTHRACENE	3	---	---	NA	NA
SED09-08B	BENZO(A)PYRENE	3	---	---	NA	NA
SED09-08B	BENZO(B)FLUORANTHENE	3	---	---	NA	NA
SED09-08B	BENZO(G,H,I)PERYLENE	3	---	---	NA	NA
SED09-08B	BENZO(K)FLUORANTHENE	3	---	---	NA	NA
SED09-08B	CHRYSENE	3	---	---	NA	NA
SED09-08B	DIBENZ(A,H)ANTHRACENE	3	---	---	NA	NA
SED09-08B	FLUORANTHENE	3	---	---	NA	NA
SED09-08B	FLUORENE	3	---	---	NA	NA
SED09-08B	INDENO(1,2,3-CD)PYRENE	3	---	---	NA	NA
SED09-08B	NAPHTHALENE	3	---	---	NA	NA
SED09-08B	PHENANTHRENE	3	---	---	NA	NA
SED09-08B	PYRENE	3	---	---	NA	NA
SED09-08B	1,1,1-TRICHLOROETHANE	3	---	---	NA	NA
SED09-08B	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
SED09-08B	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
SED09-08B	1,1-DICHLOROETHANE	3	---	---	NA	NA
SED09-08B	1,1-DICHLOROETHENE	3	---	---	NA	NA
SED09-08B	1,2-DICHLOROETHANE	3	---	---	NA	NA
SED09-08B	1,2-DICHLOROPROPANE	3	---	---	NA	NA
SED09-08B	2-BUTANONE	2	---	---	NA	NA
SED09-08B	2-HEXANONE	3	---	---	NA	NA
SED09-08B	4-METHYL-2-PENTANONE	3	---	---	NA	NA
SED09-08B	ACETONE	2	---	---	NA	NA
SED09-08B	BENZENE	3	---	---	NA	NA
SED09-08B	BROMODICHLOROMETHANE	3	---	---	NA	NA
SED09-08B	BROMOFORM	3	---	---	NA	NA
SED09-08B	BROMOMETHANE	3	---	---	NA	NA
SED09-08B	CARBON DISULFIDE	3	---	---	NA	NA
SED09-08B	CARBON TETRACHLORIDE	3	---	---	NA	NA
SED09-08B	CHLOROBENZENE	3	---	---	NA	NA
SED09-08B	CHLOROETHANE	3	---	---	NA	NA
SED09-08B	CHLOROFORM	3	---	---	NA	NA
SED09-08B	CHLOROMETHANE	3	---	---	NA	NA
SED09-08B	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
SED09-08B	CIS-1,3-DICHLOROPROPENE	3	---	---	NA	NA
SED09-08B	DIBROMOCHLOROMETHANE	3	---	---	NA	NA
SED09-08B	ETHYLBENZENE	3	---	---	NA	NA
SED09-08B	METHYLENE CHLORIDE	3	---	---	NA	NA
SED09-08B	STYRENE	3	---	---	NA	NA
SED09-08B	TETRACHLOROETHENE	3	---	---	NA	NA
SED09-08B	TOLUENE	3	---	---	NA	NA
SED09-08B	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
SED09-08B	TRANS-1,3-DICHLOROPROPENE	3	---	---	NA	NA
SED09-08B	TRICHLOROETHENE	3	---	---	NA	NA
SED09-08B	VINYL CHLORIDE	3	---	---	NA	NA
SED09-09	ALUMINUM	8	-10	-10	16	Not Significant
SED09-09	ANTIMONY	8	6	6	16	Not Significant
SED09-09	ARSENIC	8	-4	-4	16	Not Significant
SED09-09	BERYLLIUM	8	-6	-6	16	Not Significant
SED09-09	CHROMIUM, TOTAL	8	-4	-4	16	Not Significant
SED09-09	COPPER	8	-2	-2	16	Not Significant
SED09-09	IRON	8	-2	-2	16	Not Significant
SED09-09	LEAD	8	0	0	NA	No Trend
SED09-09	MANGANESE	8	-4	-4	16	Not Significant
SED09-09	MERCURY	8	5	5	16	Not Significant
SED09-09	NICKEL	8	-6	-6	16	Not Significant
SED09-09	ZINC	8	8	8	16	Not Significant
SED09-09	AROCLOR-1242	7	-12	-12	13	Not Significant
SED09-09	AROCLOR-1248	7	-12	-12	13	Not Significant
SED09-09	AROCLOR-1254	7	-4	-4	13	Not Significant
SED09-09	AROCLOR-1260	7	-10	-10	13	Not Significant
SED09-09	POLYCHLORINATED BIPHENYLS (PCBS)	5	-1	-1	8	Not Significant
SED09-09	4,4-DDD	7	-9	-9	13	Not Significant
SED09-09	4,4-DDE	7	-15	-15	13	Downward Trend
SED09-09	4,4-DDT	7	2	2	13	Not Significant
SED09-09	ALDRIN	7	-10	-10	13	Not Significant
SED09-09	ALPHA-CHLORDANE	7	-14	-14	13	Downward Trend
SED09-09	DELTA-BHC	7	-16	-16	13	Downward Trend

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-09	DIELDRIN	7	-14	-14	13	Downward Trend
SED09-09	ENDOSULFAN I	7	-14	-14	13	Downward Trend
SED09-09	ENDOSULFAN II	7	-11	-11	13	Not Significant
SED09-09	ENDOSULFAN SULFATE	7	-15	-15	13	Downward Trend
SED09-09	ENDRIN ALDEHYDE	7	-4	-4	13	Not Significant
SED09-09	ENDRIN KETONE	7	-12	-12	13	Not Significant
SED09-09	HEPTACHLOR EPOXIDE	7	-8	-8	13	Not Significant
SED09-09	LINDANE	7	-2	-2	13	Not Significant
SED09-09	METHOXYCHLOR	7	-12	-12	13	Not Significant
SED09-09	TRANS-CHLORDANE	7	-10	-10	13	Not Significant
SED09-09	BETA-BHC	7	-14	-14	13	Downward Trend
SED09-09	ENDRIN	7	-14	-14	13	Downward Trend
SED09-09	HEPTACHLOR	7	-14	-14	13	Downward Trend
SED09-09	2-METHYLNAPHTHALENE	7	3	3	13	Not Significant
SED09-09	ACENAPHTHENE	7	-11	-11	13	Not Significant
SED09-09	ACENAPHTHYLENE	7	-14	-14	13	Downward Trend
SED09-09	ANTHRACENE	7	-9	-9	13	Not Significant
SED09-09	BENZO(A)ANTHRACENE	7	-10	-10	13	Not Significant
SED09-09	BENZO(A)PYRENE	7	-11	-11	13	Not Significant
SED09-09	BENZO(B)FLUORANTHENE	7	-11	-11	13	Not Significant
SED09-09	BENZO(G,H,I)PERYLENE	7	-10	-10	13	Not Significant
SED09-09	BENZO(K)FLUORANTHENE	7	-5	-5	13	Not Significant
SED09-09	CHRYSENE	7	-5	-5	13	Not Significant
SED09-09	DIBENZ(A,H)ANTHRACENE	7	-13	-13	13	Downward Trend
SED09-09	FLUORANTHENE	7	-7	-7	13	Not Significant
SED09-09	FLUORENE	7	-7	-7	13	Not Significant
SED09-09	INDENO(1,2,3-CD)PYRENE	7	-14	-14	13	Downward Trend
SED09-09	NAPHTHALENE	7	-4	-4	13	Not Significant
SED09-09	PHENANTHRENE	7	-8	-8	13	Not Significant
SED09-09	PYRENE	7	-7	-7	13	Not Significant
SED09-09	1,1,1-TRICHLOROETHANE	2	---	---	NA	NA
SED09-09	1,1,2,2-TETRACHLOROETHANE	2	---	---	NA	NA
SED09-09	1,1,2-TRICHLOROETHANE	2	---	---	NA	NA
SED09-09	1,1-DICHLOROETHANE	2	---	---	NA	NA
SED09-09	1,1-DICHLOROETHENE	2	---	---	NA	NA
SED09-09	1,2-DICHLOROETHANE	2	---	---	NA	NA
SED09-09	1,2-DICHLOROPROPANE	2	---	---	NA	NA
SED09-09	2-BUTANONE	2	---	---	NA	NA
SED09-09	2-HEXANONE	2	---	---	NA	NA
SED09-09	4-METHYL-2-PENTANONE	2	---	---	NA	NA
SED09-09	ACETONE	2	---	---	NA	NA
SED09-09	BENZENE	2	---	---	NA	NA
SED09-09	BROMODICHLOROMETHANE	2	---	---	NA	NA
SED09-09	BROMOFORM	2	---	---	NA	NA
SED09-09	BROMOMETHANE	2	---	---	NA	NA
SED09-09	CARBON DISULFIDE	2	---	---	NA	NA
SED09-09	CARBON TETRACHLORIDE	2	---	---	NA	NA
SED09-09	CHLOROBENZENE	2	---	---	NA	NA
SED09-09	CHLOROETHANE	2	---	---	NA	NA
SED09-09	CHLOROFORM	2	---	---	NA	NA
SED09-09	CHLOROMETHANE	2	---	---	NA	NA
SED09-09	CIS-1,2-DICHLOROETHENE	2	---	---	NA	NA
SED09-09	CIS-1,3-DICHLOROPROPENE	2	---	---	NA	NA
SED09-09	DIBROMOCHLOROMETHANE	2	---	---	NA	NA
SED09-09	ETHYLBENZENE	2	---	---	NA	NA
SED09-09	METHYLENE CHLORIDE	2	---	---	NA	NA
SED09-09	STYRENE	2	---	---	NA	NA
SED09-09	TETRACHLOROETHENE	2	---	---	NA	NA
SED09-09	TOLUENE	2	---	---	NA	NA
SED09-09	TRANS-1,2-DICHLOROETHENE	2	---	---	NA	NA
SED09-09	TRANS-1,3-DICHLOROPROPENE	2	---	---	NA	NA
SED09-09	TRICHLOROETHENE	2	---	---	NA	NA
SED09-09	VINYL CHLORIDE	2	---	---	NA	NA
SED09-10	ALUMINUM	6	-5	-5	11	Not Significant
SED09-10	ANTIMONY	6	6	6	11	Not Significant
SED09-10	ARSENIC	6	-3	-3	11	Not Significant
SED09-10	BERYLLIUM	6	3	3	11	Not Significant
SED09-10	CHROMIUM, TOTAL	6	-5	-5	11	Not Significant
SED09-10	COPPER	6	1	1	11	Not Significant
SED09-10	IRON	6	-1	-1	11	Not Significant
SED09-10	LEAD	6	3	3	11	Not Significant
SED09-10	MANGANESE	6	-7	-7	11	Not Significant
SED09-10	MERCURY	6	2	2	11	Not Significant
SED09-10	NICKEL	6	-5	-5	11	Not Significant
SED09-10	ZINC	6	-1	-1	11	Not Significant
SED09-10	AROCLOR-1242	7	-1	-1	13	Not Significant
SED09-10	AROCLOR-1248	7	-1	-1	13	Not Significant
SED09-10	AROCLOR-1254	7	3	3	13	Not Significant
SED09-10	AROCLOR-1260	7	-15	-15	13	Downward Trend

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-10	POLYCHLORINATED BIPHENYLS (PCBS)	5	-4	-4	8	Not Significant
SED09-10	4,4-DDD	7	-5	-5	13	Not Significant
SED09-10	4,4-DDE	7	-7	-7	13	Not Significant
SED09-10	4,4-DDT	7	-5	-5	13	Not Significant
SED09-10	ALDRIN	7	-5	-5	13	Not Significant
SED09-10	ALPHA-CHLORDANE	7	-9	-9	13	Not Significant
SED09-10	DELTA-BHC	7	-7	-7	13	Not Significant
SED09-10	DIELDRIN	7	-5	-5	13	Not Significant
SED09-10	ENDOSULFAN I	7	-11	-11	13	Not Significant
SED09-10	ENDOSULFAN II	7	-15	-15	13	Downward Trend
SED09-10	ENDOSULFAN SULFATE	7	-11	-11	13	Not Significant
SED09-10	ENDRIN ALDEHYDE	7	-7	-7	13	Not Significant
SED09-10	ENDRIN KETONE	7	-5	-5	13	Not Significant
SED09-10	HEPTACHLOR EPOXIDE	7	-7	-7	13	Not Significant
SED09-10	LINDANE	7	-9	-9	13	Not Significant
SED09-10	METHOXYCHLOR	7	-9	-9	13	Not Significant
SED09-10	TRANS-CHLORDANE	7	-5	-5	13	Not Significant
SED09-10	BETA-BHC	7	-7	-7	13	Not Significant
SED09-10	ENDRIN	7	-9	-9	13	Not Significant
SED09-10	HEPTACHLOR	7	-9	-9	13	Not Significant
SED09-10	2-METHYLNAPHTHALENE	8	-18	-18	16	Downward Trend
SED09-10	ACENAPHTHENE	8	-12	-12	16	Not Significant
SED09-10	ACENAPHTHYLENE	8	-14	-14	16	Not Significant
SED09-10	ANTHRACENE	8	-14	-14	16	Not Significant
SED09-10	BENZO(A)ANTHRACENE	8	-18	-18	16	Downward Trend
SED09-10	BENZO(A)PYRENE	8	-16	-16	16	Downward Trend
SED09-10	BENZO(B)FLUORANTHENE	8	-16	-16	16	Downward Trend
SED09-10	BENZO(G,H,I)PERYLENE	8	-16	-16	16	Downward Trend
SED09-10	BENZO(K)FLUORANTHENE	8	-12	-12	16	Not Significant
SED09-10	CHRYSENE	8	-16	-16	16	Downward Trend
SED09-10	DIBENZ(A,H)ANTHRACENE	8	-16	-16	16	Downward Trend
SED09-10	FLUORANTHENE	8	-14	-14	16	Not Significant
SED09-10	FLUORENE	8	-14	-14	16	Not Significant
SED09-10	INDENO(1,2,3-CD)PYRENE	8	-14	-14	16	Not Significant
SED09-10	NAPHTHALENE	8	-16	-16	16	Downward Trend
SED09-10	PHENANTHRENE	8	-14	-14	16	Not Significant
SED09-10	PYRENE	8	-16	-16	16	Downward Trend
SED09-10	1,1,1-TRICHLOROETHANE	2	---	---	NA	NA
SED09-10	1,1,2,2-TETRACHLOROETHANE	2	---	---	NA	NA
SED09-10	1,1,2-TRICHLOROETHANE	2	---	---	NA	NA
SED09-10	1,1-DICHLOROETHANE	2	---	---	NA	NA
SED09-10	1,1-DICHLOROETHENE	2	---	---	NA	NA
SED09-10	1,2-DICHLOROETHANE	2	---	---	NA	NA
SED09-10	1,2-DICHLOROPROPANE	2	---	---	NA	NA
SED09-10	2-BUTANONE	2	---	---	NA	NA
SED09-10	2-HEXANONE	2	---	---	NA	NA
SED09-10	4-METHYL-2-PENTANONE	2	---	---	NA	NA
SED09-10	ACETONE	2	---	---	NA	NA
SED09-10	BENZENE	2	---	---	NA	NA
SED09-10	BROMODICHLOROMETHANE	2	---	---	NA	NA
SED09-10	BROMOFORM	2	---	---	NA	NA
SED09-10	BROMOMETHANE	2	---	---	NA	NA
SED09-10	CARBON DISULFIDE	2	---	---	NA	NA
SED09-10	CARBON TETRACHLORIDE	2	---	---	NA	NA
SED09-10	CHLOROBENZENE	2	---	---	NA	NA
SED09-10	CHLOROETHANE	2	---	---	NA	NA
SED09-10	CHLOROFORM	2	---	---	NA	NA
SED09-10	CHLOROMETHANE	2	---	---	NA	NA
SED09-10	CIS-1,2-DICHLOROETHENE	2	---	---	NA	NA
SED09-10	CIS-1,3-DICHLOROPROPENE	2	---	---	NA	NA
SED09-10	DIBROMOCHLOROMETHANE	2	---	---	NA	NA
SED09-10	ETHYLBENZENE	2	---	---	NA	NA
SED09-10	METHYLENE CHLORIDE	2	---	---	NA	NA
SED09-10	STYRENE	2	---	---	NA	NA
SED09-10	TETRACHLOROETHENE	2	---	---	NA	NA
SED09-10	TOLUENE	2	---	---	NA	NA
SED09-10	TRANS-1,2-DICHLOROETHENE	2	---	---	NA	NA
SED09-10	TRANS-1,3-DICHLOROPROPENE	2	---	---	NA	NA
SED09-10	TRICHLOROETHENE	2	---	---	NA	NA
SED09-10	VINYL CHLORIDE	2	---	---	NA	NA
SED09-11B	ALUMINUM	2	---	---	NA	NA
SED09-11B	ANTIMONY	2	---	---	NA	NA
SED09-11B	ARSENIC	2	---	---	NA	NA
SED09-11B	BERYLLIUM	2	---	---	NA	NA
SED09-11B	CHROMIUM, TOTAL	2	---	---	NA	NA
SED09-11B	COPPER	2	---	---	NA	NA
SED09-11B	IRON	2	---	---	NA	NA
SED09-11B	LEAD	2	---	---	NA	NA
SED09-11B	MANGANESE	2	---	---	NA	NA

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-11B	MERCURY	2	---	---	NA	NA
SED09-11B	NICKEL	2	---	---	NA	NA
SED09-11B	ZINC	2	---	---	NA	NA
SED09-11B	AROCLOR-1242	1	---	---	NA	NA
SED09-11B	AROCLOR-1248	1	---	---	NA	NA
SED09-11B	AROCLOR-1254	1	---	---	NA	NA
SED09-11B	AROCLOR-1260	1	---	---	NA	NA
SED09-11B	POLYCHLORINATED BIPHENYLS (PCBS)	1	---	---	NA	NA
SED09-11B	4,4-DDD	1	---	---	NA	NA
SED09-11B	4,4-DDE	1	---	---	NA	NA
SED09-11B	4,4-DDT	1	---	---	NA	NA
SED09-11B	ALDRIN	1	---	---	NA	NA
SED09-11B	ALPHA-CHLORDANE	1	---	---	NA	NA
SED09-11B	DELTA-BHC	1	---	---	NA	NA
SED09-11B	DIELDRIN	1	---	---	NA	NA
SED09-11B	ENDOSULFAN I	1	---	---	NA	NA
SED09-11B	ENDOSULFAN II	1	---	---	NA	NA
SED09-11B	ENDOSULFAN SULFATE	1	---	---	NA	NA
SED09-11B	ENDRIN ALDEHYDE	1	---	---	NA	NA
SED09-11B	ENDRIN KETONE	1	---	---	NA	NA
SED09-11B	HEPTACHLOR EPOXIDE	1	---	---	NA	NA
SED09-11B	LINDANE	1	---	---	NA	NA
SED09-11B	METHOXYCHLOR	1	---	---	NA	NA
SED09-11B	TRANS-CHLORDANE	1	---	---	NA	NA
SED09-11B	BETA-BHC	1	---	---	NA	NA
SED09-11B	ENDRIN	1	---	---	NA	NA
SED09-11B	HEPTACHLOR	1	---	---	NA	NA
SED09-11B	2-METHYLNAPHTHALENE	2	---	---	NA	NA
SED09-11B	ACENAPHTHENE	2	---	---	NA	NA
SED09-11B	ACENAPHTHYLENE	2	---	---	NA	NA
SED09-11B	ANTHRACENE	2	---	---	NA	NA
SED09-11B	BENZO(A)ANTHRACENE	2	---	---	NA	NA
SED09-11B	BENZO(A)PYRENE	2	---	---	NA	NA
SED09-11B	BENZO(B)FLUORANTHENE	2	---	---	NA	NA
SED09-11B	BENZO(G,H,I)PERYLENE	2	---	---	NA	NA
SED09-11B	BENZO(K)FLUORANTHENE	2	---	---	NA	NA
SED09-11B	CHRYSENE	2	---	---	NA	NA
SED09-11B	DIBENZ(A,H)ANTHRACENE	2	---	---	NA	NA
SED09-11B	FLUORANTHENE	2	---	---	NA	NA
SED09-11B	FLUORENE	2	---	---	NA	NA
SED09-11B	INDENO(1,2,3-CD)PYRENE	2	---	---	NA	NA
SED09-11B	NAPHTHALENE	2	---	---	NA	NA
SED09-11B	PHENANTHRENE	2	---	---	NA	NA
SED09-11B	PYRENE	2	---	---	NA	NA
SED09-11B	1,1,1-TRICHLOROETHANE	3	---	---	NA	NA
SED09-11B	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
SED09-11B	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
SED09-11B	1,1-DICHLOROETHANE	3	---	---	NA	NA
SED09-11B	1,1-DICHLOROETHENE	3	---	---	NA	NA
SED09-11B	1,2-DICHLOROETHANE	3	---	---	NA	NA
SED09-11B	1,2-DICHLOROPROPANE	3	---	---	NA	NA
SED09-11B	2-BUTANONE	2	---	---	NA	NA
SED09-11B	2-HEXANONE	3	---	---	NA	NA
SED09-11B	4-METHYL-2-PENTANONE	3	---	---	NA	NA
SED09-11B	ACETONE	2	---	---	NA	NA
SED09-11B	BENZENE	3	---	---	NA	NA
SED09-11B	BROMODICHLOROMETHANE	3	---	---	NA	NA
SED09-11B	BROMOFORM	3	---	---	NA	NA
SED09-11B	BROMOMETHANE	3	---	---	NA	NA
SED09-11B	CARBON DISULFIDE	3	---	---	NA	NA
SED09-11B	CARBON TETRACHLORIDE	3	---	---	NA	NA
SED09-11B	CHLOROBENZENE	3	---	---	NA	NA
SED09-11B	CHLOROETHANE	3	---	---	NA	NA
SED09-11B	CHLOROFORM	3	---	---	NA	NA
SED09-11B	CHLOROMETHANE	3	---	---	NA	NA
SED09-11B	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
SED09-11B	CIS-1,3-DICHLOROPROPENE	3	---	---	NA	NA
SED09-11B	DIBROMOCHLOROMETHANE	3	---	---	NA	NA
SED09-11B	ETHYLBENZENE	3	---	---	NA	NA
SED09-11B	METHYLENE CHLORIDE	3	---	---	NA	NA
SED09-11B	STYRENE	3	---	---	NA	NA
SED09-11B	TETRACHLOROETHENE	3	---	---	NA	NA
SED09-11B	TOLUENE	3	---	---	NA	NA
SED09-11B	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
SED09-11B	TRANS-1,3-DICHLOROPROPENE	3	---	---	NA	NA
SED09-11B	TRICHLOROETHENE	3	---	---	NA	NA
SED09-11B	VINYL CHLORIDE	3	---	---	NA	NA
SED09-12B	ALUMINUM	2	---	---	NA	NA
SED09-12B	ANTIMONY	2	---	---	NA	NA

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-12B	ARSENIC	2	---	---	NA	NA
SED09-12B	BERYLLIUM	2	---	---	NA	NA
SED09-12B	CHROMIUM, TOTAL	2	---	---	NA	NA
SED09-12B	COPPER	2	---	---	NA	NA
SED09-12B	IRON	2	---	---	NA	NA
SED09-12B	LEAD	2	---	---	NA	NA
SED09-12B	MANGANESE	2	---	---	NA	NA
SED09-12B	MERCURY	2	---	---	NA	NA
SED09-12B	NICKEL	2	---	---	NA	NA
SED09-12B	ZINC	2	---	---	NA	NA
SED09-12B	AROCLOR-1242	1	---	---	NA	NA
SED09-12B	AROCLOR-1248	1	---	---	NA	NA
SED09-12B	AROCLOR-1254	1	---	---	NA	NA
SED09-12B	AROCLOR-1260	1	---	---	NA	NA
SED09-12B	POLYCHLORINATED BIPHENYLS (PCBS)	1	---	---	NA	NA
SED09-12B	4,4-DDD	1	---	---	NA	NA
SED09-12B	4,4-DDE	1	---	---	NA	NA
SED09-12B	4,4-DDT	1	---	---	NA	NA
SED09-12B	ALDRIN	1	---	---	NA	NA
SED09-12B	ALPHA-CHLORDANE	1	---	---	NA	NA
SED09-12B	DELTA-BHC	1	---	---	NA	NA
SED09-12B	DIELDRIN	1	---	---	NA	NA
SED09-12B	ENDOSULFAN I	1	---	---	NA	NA
SED09-12B	ENDOSULFAN II	1	---	---	NA	NA
SED09-12B	ENDOSULFAN SULFATE	1	---	---	NA	NA
SED09-12B	ENDRIN ALDEHYDE	1	---	---	NA	NA
SED09-12B	ENDRIN KETONE	1	---	---	NA	NA
SED09-12B	HEPTACHLOR EPOXIDE	1	---	---	NA	NA
SED09-12B	LINDANE	1	---	---	NA	NA
SED09-12B	METHOXYCHLOR	1	---	---	NA	NA
SED09-12B	TRANS-CHLORDANE	1	---	---	NA	NA
SED09-12B	BETA-BHC	1	---	---	NA	NA
SED09-12B	ENDRIN	1	---	---	NA	NA
SED09-12B	HEPTACHLOR	1	---	---	NA	NA
SED09-12B	2-METHYLNAPHTHALENE	2	---	---	NA	NA
SED09-12B	ACENAPHTHENE	2	---	---	NA	NA
SED09-12B	ACENAPHTHYLENE	2	---	---	NA	NA
SED09-12B	ANTHRACENE	2	---	---	NA	NA
SED09-12B	BENZO(A)ANTHRACENE	2	---	---	NA	NA
SED09-12B	BENZO(A)PYRENE	2	---	---	NA	NA
SED09-12B	BENZO(B)FLUORANTHENE	2	---	---	NA	NA
SED09-12B	BENZO(G,H,I)PERYLENE	2	---	---	NA	NA
SED09-12B	BENZO(K)FLUORANTHENE	2	---	---	NA	NA
SED09-12B	CHRYSENE	2	---	---	NA	NA
SED09-12B	DIBENZ(A,H)ANTHRACENE	2	---	---	NA	NA
SED09-12B	FLUORANTHENE	2	---	---	NA	NA
SED09-12B	FLUORENE	2	---	---	NA	NA
SED09-12B	INDENO(1,2,3-CD)PYRENE	2	---	---	NA	NA
SED09-12B	NAPHTHALENE	2	---	---	NA	NA
SED09-12B	PHENANTHRENE	2	---	---	NA	NA
SED09-12B	PYRENE	2	---	---	NA	NA
SED09-12B	1,1,1-TRICHLOROETHANE	3	---	---	NA	NA
SED09-12B	1,1,2,2-TETRACHLOROETHANE	3	---	---	NA	NA
SED09-12B	1,1,2-TRICHLOROETHANE	3	---	---	NA	NA
SED09-12B	1,1-DICHLOROETHANE	3	---	---	NA	NA
SED09-12B	1,1-DICHLOROETHENE	3	---	---	NA	NA
SED09-12B	1,2-DICHLOROETHANE	3	---	---	NA	NA
SED09-12B	1,2-DICHLOROPROPANE	3	---	---	NA	NA
SED09-12B	2-BUTANONE	2	---	---	NA	NA
SED09-12B	2-HEXANONE	3	---	---	NA	NA
SED09-12B	4-METHYL-2-PENTANONE	3	---	---	NA	NA
SED09-12B	ACETONE	2	---	---	NA	NA
SED09-12B	BENZENE	3	---	---	NA	NA
SED09-12B	BROMODICHLOROMETHANE	3	---	---	NA	NA
SED09-12B	BROMOFORM	3	---	---	NA	NA
SED09-12B	BROMOMETHANE	3	---	---	NA	NA
SED09-12B	CARBON DISULFIDE	3	---	---	NA	NA
SED09-12B	CARBON TETRACHLORIDE	3	---	---	NA	NA
SED09-12B	CHLOROBENZENE	3	---	---	NA	NA
SED09-12B	CHLOROETHANE	3	---	---	NA	NA
SED09-12B	CHLOROFORM	3	---	---	NA	NA
SED09-12B	CHLOROMETHANE	3	---	---	NA	NA
SED09-12B	CIS-1,2-DICHLOROETHENE	3	---	---	NA	NA
SED09-12B	CIS-1,3-DICHLOROPROPENE	3	---	---	NA	NA
SED09-12B	DIBROMOCHLOROMETHANE	3	---	---	NA	NA
SED09-12B	ETHYLBENZENE	3	---	---	NA	NA
SED09-12B	METHYLENE CHLORIDE	3	---	---	NA	NA
SED09-12B	STYRENE	3	---	---	NA	NA
SED09-12B	TETRACHLOROETHENE	3	---	---	NA	NA

Table F-7
Site 9 Shallow Sediment Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
SED09-12B	TOLUENE	3	---	---	NA	NA
SED09-12B	TRANS-1,2-DICHLOROETHENE	3	---	---	NA	NA
SED09-12B	TRANS-1,3-DICHLOROPROPENE	3	---	---	NA	NA
SED09-12B	TRICHLOROETHENE	3	---	---	NA	NA
SED09-12B	VINYL CHLORIDE	3	---	---	NA	NA

Notes:
Datasets presented for all analytes detected in at least one location since ME-01.
Field duplicates assigned the maximum value.
A significance level of 95% was used to interpret results.
* - When N > 10, the Normal approximation is used and calculated per box 4-9 in
Data Quality Assessment: Statistical Methods for Practitioners.
EPA QA/G-9S. When the normal approximation is used, the critical value is the standard normal distribution.
When S is 0, no critical value is calculated and a conclusion of no trend is made.
NA = The Mann-Kendall Trend Test was not computed because there were not at least 4 samples,
or there were less than 3 detected concentrations.

Table F-8
Site 9 Tissue Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
ET09-03	ALUMINUM	10	29	29	21	Upward Trend
ET09-03	ANTIMONY	10	3	3	21	Not Significant
ET09-03	ARSENIC	10	27	27	21	Upward Trend
ET09-03	BARIUM	8	12	12	16	Not Significant
ET09-03	BERYLLIUM	10	1	1	21	Not Significant
ET09-03	CADMIUM	8	7	7	16	Not Significant
ET09-03	CALCIUM	8	8	8	16	Not Significant
ET09-03	CHROMIUM, TOTAL	10	15	15	21	Not Significant
ET09-03	COBALT	8	-4	-4	16	Not Significant
ET09-03	COPPER	10	20	20	21	Not Significant
ET09-03	IRON	10	29	29	21	Upward Trend
ET09-03	LEAD	10	15	15	21	Not Significant
ET09-03	MAGNESIUM	8	14	14	16	Not Significant
ET09-03	MANGANESE	10	28	28	21	Upward Trend
ET09-03	MERCURY	10	-15	-15	21	Not Significant
ET09-03	NICKEL	10	-5	-5	21	Not Significant
ET09-03	POTASSIUM	8	-14	-14	16	Not Significant
ET09-03	SELENIUM	8	4	4	16	Not Significant
ET09-03	SILVER	8	-14	-14	16	Not Significant
ET09-03	SODIUM	8	8	8	16	Not Significant
ET09-03	VANADIUM	8	1	1	16	Not Significant
ET09-03	ZINC	10	11	11	21	Not Significant
ET09-03	DECACHLOROBIPHENYL	10	-32	-32	21	Downward Trend
ET09-03	DICHLOROBIPHENYL	10	-24	-24	21	Downward Trend
ET09-03	HEPTACHLOROBIPHENYL	10	-13	-13	21	Not Significant
ET09-03	HEXACHLOROBIPHENYL	10	-15	-15	21	Not Significant
ET09-03	NONACHLOROBIPHENYL	10	-30	-30	21	Downward Trend
ET09-03	OCTACHLOROBIPHENYL	10	-18	-18	21	Not Significant
ET09-03	PENTACHLOROBIPHENYL	10	-17	-17	21	Not Significant
ET09-03	POLYCHLORINATED BIPHENYLS (PCBS)	6	-7	-7	11	Not Significant
ET09-03	TETRACHLOROBIPHENYL	10	-18	-18	21	Not Significant
ET09-03	TRICHLOROBIPHENYL	10	-29	-29	21	Downward Trend
ET09-03	4,4-DDD	9	-8	-8	18	Not Significant
ET09-03	4,4-DDE	10	-21	-21	21	Downward Trend
ET09-03	4,4-DDT	10	-13	-13	21	Not Significant
ET09-03	ALDRIN	10	-19	-19	21	Not Significant
ET09-03	ALPHA-BHC	10	-33	-33	21	Downward Trend
ET09-03	ALPHA-CHLORDANE	10	-29	-29	21	Downward Trend
ET09-03	BETA-BHC	10	-18	-18	21	Not Significant
ET09-03	DELTA-BHC	9	-20	-20	18	Downward Trend
ET09-03	DIELDRIN	10	-31	-31	21	Downward Trend
ET09-03	ENDOSULFAN I	10	-33	-33	21	Downward Trend
ET09-03	ENDOSULFAN II	10	-31	-31	21	Downward Trend
ET09-03	ENDOSULFAN SULFATE	10	-28	-28	21	Downward Trend
ET09-03	ENDRIN	10	-19	-19	21	Not Significant
ET09-03	ENDRIN ALDEHYDE	10	-27	-27	21	Downward Trend
ET09-03	ENDRIN KETONE	10	-31	-31	21	Downward Trend
ET09-03	HEPTACHLOR	9	-20	-20	18	Downward Trend
ET09-03	HEPTACHLOR EPOXIDE	10	-30	-30	21	Downward Trend
ET09-03	LINDANE	10	-33	-33	21	Downward Trend
ET09-03	METHOXYCHLOR	10	-35	-35	21	Downward Trend
ET09-03	TRANS-CHLORDANE	10	-23	-23	21	Downward Trend
ET09-03	1,4-DICHLOROBENZENE	10	-24	-24	21	Downward Trend
ET09-03	2-METHYLPHENOL	10	-24	-24	21	Downward Trend
ET09-03	4-METHYLPHENOL	10	-24	-24	21	Downward Trend
ET09-03	BIS(2-ETHYLHEXYL)PHTHALATE	10	-5	-5	21	Not Significant
ET09-03	BUTYLBENZYLPHTHALATE	10	-16	-16	21	Not Significant
ET09-03	DIMETHYL PHTHALATE	10	-16	-16	21	Not Significant
ET09-03	DI-N-BUTYLPHTHALATE	10	-12	-12	21	Not Significant
ET09-03	NITROBENZENE	10	-24	-24	21	Downward Trend
ET09-03	PHENANTHRENE	10	-12	-12	21	Not Significant
ET09-03	PHENOL	10	-24	-24	21	Downward Trend
ET09-03	2-METHYLNAPHTHALENE	10	-13	-13	21	Not Significant
ET09-03	ACENAPHTHENE	10	-15	-15	21	Not Significant
ET09-03	ACENAPHTHYLENE	10	-1	-1	21	Not Significant
ET09-03	ANTHRACENE	10	15	15	21	Not Significant
ET09-03	BENZO(A)ANTHRACENE	10	3	3	21	Not Significant
ET09-03	BENZO(A)PYRENE	10	15	15	21	Not Significant
ET09-03	BENZO(B)FLUORANTHENE	10	15	15	21	Not Significant
ET09-03	BENZO(G,H,I)PERYLENE	10	15	15	21	Not Significant
ET09-03	BENZO(K)FLUORANTHENE	10	15	15	21	Not Significant
ET09-03	CHRYSENE	10	15	15	21	Not Significant
ET09-03	DIBENZ(A,H)ANTHRACENE	10	15	15	21	Not Significant
ET09-03	FLUORANTHENE	10	-12	-12	21	Not Significant
ET09-03	FLUORENE	10	-10	-10	21	Not Significant
ET09-03	INDENO(1,2,3-CD)PYRENE	10	15	15	21	Not Significant
ET09-03	NAPHTHALENE	10	-26	-26	21	Downward Trend
ET09-03	PYRENE	10	-12	-12	21	Not Significant
ET09-03	LIPIDS	10	-4	-4	21	Not Significant

Table F-8
Site 9 Tissue Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
ET09-04	ALUMINUM	10	33	33	21	Upward Trend
ET09-04	ANTIMONY	10	0	0	NA	No Trend
ET09-04	ARSENIC	10	29	29	21	Upward Trend
ET09-04	BARIUM	8	22	22	16	Upward Trend
ET09-04	BERYLLIUM	10	1	1	21	Not Significant
ET09-04	CADMIUM	8	14	14	16	Not Significant
ET09-04	CALCIUM	8	4	4	16	Not Significant
ET09-04	CHROMIUM, TOTAL	10	21	21	21	Upward Trend
ET09-04	COBALT	8	18	18	16	Upward Trend
ET09-04	COPPER	10	33	33	21	Upward Trend
ET09-04	IRON	10	27	27	21	Upward Trend
ET09-04	LEAD	10	18	18	21	Not Significant
ET09-04	MAGNESIUM	8	16	16	16	Upward Trend
ET09-04	MANGANESE	10	17	17	21	Not Significant
ET09-04	MERCURY	10	-15	-15	21	Not Significant
ET09-04	NICKEL	10	17	17	21	Not Significant
ET09-04	POTASSIUM	8	-1	-1	16	Not Significant
ET09-04	SELENIUM	8	12	12	16	Not Significant
ET09-04	SILVER	8	-9	-9	16	Not Significant
ET09-04	SODIUM	8	8	8	16	Not Significant
ET09-04	VANADIUM	8	16	16	16	Upward Trend
ET09-04	ZINC	10	21	21	21	Upward Trend
ET09-04	DECACHLOROBIPHENYL	10	-25	-25	21	Downward Trend
ET09-04	DICHLOROBIPHENYL	10	-13	-13	21	Not Significant
ET09-04	HEPTACHLOROBIPHENYL	10	-5	-5	21	Not Significant
ET09-04	HEXACHLOROBIPHENYL	10	-11	-11	21	Not Significant
ET09-04	NONACHLOROBIPHENYL	10	-25	-25	21	Downward Trend
ET09-04	OCTACHLOROBIPHENYL	10	-22	-22	21	Downward Trend
ET09-04	PENTACHLOROBIPHENYL	10	-13	-13	21	Not Significant
ET09-04	POLYCHLORINATED BIPHENYLS (PCBS)	6	-5	-5	11	Not Significant
ET09-04	TETRACHLOROBIPHENYL	10	-17	-17	21	Not Significant
ET09-04	TRICHLOROBIPHENYL	10	-22	-22	21	Downward Trend
ET09-04	4,4-DDD	10	-17	-17	21	Not Significant
ET09-04	4,4-DDE	10	-34	-34	21	Downward Trend
ET09-04	4,4-DDT	10	-27	-27	21	Downward Trend
ET09-04	ALDRIN	10	-29	-29	21	Downward Trend
ET09-04	ALPHA-BHC	10	-28	-28	21	Downward Trend
ET09-04	ALPHA-CHLORDANE	10	-28	-28	21	Downward Trend
ET09-04	BETA-BHC	10	-24	-24	21	Downward Trend
ET09-04	DELTA-BHC	10	-23	-23	21	Downward Trend
ET09-04	DIELDRIN	10	-27	-27	21	Downward Trend
ET09-04	ENDOSULFAN I	10	-31	-31	21	Downward Trend
ET09-04	ENDOSULFAN II	10	-31	-31	21	Downward Trend
ET09-04	ENDOSULFAN SULFATE	10	-26	-26	21	Downward Trend
ET09-04	ENDRIN	10	-31	-31	21	Downward Trend
ET09-04	ENDRIN ALDEHYDE	10	-27	-27	21	Downward Trend
ET09-04	ENDRIN KETONE	10	-31	-31	21	Downward Trend
ET09-04	HEPTACHLOR	10	-23	-23	21	Downward Trend
ET09-04	HEPTACHLOR EPOXIDE	10	-31	-31	21	Downward Trend
ET09-04	LINDANE	10	-31	-31	21	Downward Trend
ET09-04	METHOXYCHLOR	10	-35	-35	21	Downward Trend
ET09-04	TRANS-CHLORDANE	10	-23	-23	21	Downward Trend
ET09-04	1,4-DICHLOROBENZENE	10	-23	-23	21	Downward Trend
ET09-04	2-METHYLPHENOL	10	-23	-23	21	Downward Trend
ET09-04	4-METHYLPHENOL	10	-23	-23	21	Downward Trend
ET09-04	BIS(2-ETHYLHEXYL)PHTHALATE	10	-15	-15	21	Not Significant
ET09-04	BUTYLBENZYLPHTHALATE	10	-15	-15	21	Not Significant
ET09-04	DIMETHYL PHTHALATE	10	-15	-15	21	Not Significant
ET09-04	DI-N-BUTYLPHTHALATE	10	-10	-10	21	Not Significant
ET09-04	NITROBENZENE	10	-23	-23	21	Downward Trend
ET09-04	PHENANTHRENE	10	-12	-12	21	Not Significant
ET09-04	PHENOL	10	-23	-23	21	Downward Trend
ET09-04	2-METHYLNAPHTHALENE	10	-9	-9	21	Not Significant
ET09-04	ACENAPHTHENE	10	-8	-8	21	Not Significant
ET09-04	ACENAPHTHYLENE	10	-2	-2	21	Not Significant
ET09-04	ANTHRACENE	10	25	25	21	Upward Trend
ET09-04	BENZO(A)ANTHRACENE	10	3	3	21	Not Significant
ET09-04	BENZO(A)PYRENE	10	11	11	21	Not Significant
ET09-04	BENZO(B)FLUORANTHENE	10	17	17	21	Not Significant
ET09-04	BENZO(G,H,I)PERYLENE	10	17	17	21	Not Significant
ET09-04	BENZO(K)FLUORANTHENE	10	11	11	21	Not Significant
ET09-04	CHRYSENE	10	17	17	21	Not Significant
ET09-04	DIBENZ(A,H)ANTHRACENE	10	17	17	21	Not Significant
ET09-04	FLUORANTHENE	10	-12	-12	21	Not Significant
ET09-04	FLUORENE	10	-10	-10	21	Not Significant
ET09-04	INDENO(1,2,3-CD)PYRENE	10	17	17	21	Not Significant
ET09-04	NAPHTHALENE	10	-16	-16	21	Not Significant
ET09-04	PYRENE	10	-12	-12	21	Not Significant
ET09-04	LIPIDS	10	-3	-3	21	Not Significant

Table F-8
Site 9 Tissue Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
ET09-05	ALUMINUM	10	35	35	21	Upward Trend
ET09-05	ANTIMONY	10	5	5	21	Not Significant
ET09-05	ARSENIC	10	36	36	21	Upward Trend
ET09-05	BARIUM	8	8	8	16	Not Significant
ET09-05	BERYLLIUM	10	3	3	21	Not Significant
ET09-05	CADMIUM	8	6	6	16	Not Significant
ET09-05	CALCIUM	8	22	22	16	Upward Trend
ET09-05	CHROMIUM, TOTAL	10	13	13	21	Not Significant
ET09-05	COBALT	8	6	6	16	Not Significant
ET09-05	COPPER	10	21	21	21	Upward Trend
ET09-05	IRON	10	19	19	21	Not Significant
ET09-05	LEAD	10	6	6	21	Not Significant
ET09-05	MAGNESIUM	8	22	22	16	Upward Trend
ET09-05	MANGANESE	10	-11	-11	21	Not Significant
ET09-05	MERCURY	10	-15	-15	21	Not Significant
ET09-05	NICKEL	10	10	10	21	Not Significant
ET09-05	POTASSIUM	8	-6	-6	16	Not Significant
ET09-05	SELENIUM	8	7	7	16	Not Significant
ET09-05	SILVER	8	-16	-16	16	Downward Trend
ET09-05	SODIUM	8	2	2	16	Not Significant
ET09-05	VANADIUM	8	14	14	16	Not Significant
ET09-05	ZINC	10	27	27	21	Upward Trend
ET09-05	DECACHLOROBIPHENYL	10	-32	-32	21	Downward Trend
ET09-05	DICHLOROBIPHENYL	10	-25	-25	21	Downward Trend
ET09-05	HEPTACHLOROBIPHENYL	10	-28	-28	21	Downward Trend
ET09-05	HEXACHLOROBIPHENYL	10	-31	-31	21	Downward Trend
ET09-05	NONACHLOROBIPHENYL	10	-25	-25	21	Downward Trend
ET09-05	OCTACHLOROBIPHENYL	10	-19	-19	21	Not Significant
ET09-05	PENTACHLOROBIPHENYL	10	-27	-27	21	Downward Trend
ET09-05	POLYCHLORINATED BIPHENYLS (PCBS)	6	-7	-7	11	Not Significant
ET09-05	TETRACHLOROBIPHENYL	10	-23	-23	21	Downward Trend
ET09-05	TRICHLOROBIPHENYL	10	-22	-22	21	Downward Trend
ET09-05	4,4-DDD	10	-19	-19	21	Not Significant
ET09-05	4,4-DDE	10	-26	-26	21	Downward Trend
ET09-05	4,4-DDT	10	-26	-26	21	Downward Trend
ET09-05	ALDRIN	10	-25	-25	21	Downward Trend
ET09-05	ALPHA-BHC	10	-30	-30	21	Downward Trend
ET09-05	ALPHA-CHLORDANE	10	-25	-25	21	Downward Trend
ET09-05	BETA-BHC	10	-22	-22	21	Downward Trend
ET09-05	DELTA-BHC	10	-25	-25	21	Downward Trend
ET09-05	DIELDRIN	10	-25	-25	21	Downward Trend
ET09-05	ENDOSULFAN I	10	-33	-33	21	Downward Trend
ET09-05	ENDOSULFAN II	10	-29	-29	21	Downward Trend
ET09-05	ENDOSULFAN SULFATE	10	-29	-29	21	Downward Trend
ET09-05	ENDRIN	10	-29	-29	21	Downward Trend
ET09-05	ENDRIN ALDEHYDE	10	-26	-26	21	Downward Trend
ET09-05	ENDRIN KETONE	10	-25	-25	21	Downward Trend
ET09-05	HEPTACHLOR	10	-29	-29	21	Downward Trend
ET09-05	HEPTACHLOR EPOXIDE	10	-31	-31	21	Downward Trend
ET09-05	LINDANE	10	-31	-31	21	Downward Trend
ET09-05	METHOXYCHLOR	10	-35	-35	21	Downward Trend
ET09-05	TRANS-CHLORDANE	10	-21	-21	21	Downward Trend
ET09-05	1,4-DICHLOROBENZENE	10	-22	-22	21	Downward Trend
ET09-05	2-METHYLPHENOL	10	-23	-23	21	Downward Trend
ET09-05	4-METHYLPHENOL	10	-18	-18	21	Not Significant
ET09-05	BIS(2-ETHYLHEXYL)PHTHALATE	10	-19	-19	21	Not Significant
ET09-05	BUTYLBENZYLPHTHALATE	10	-15	-15	21	Not Significant
ET09-05	DIMETHYL PHTHALATE	10	-8	-8	21	Not Significant
ET09-05	DI-N-BUTYLPHTHALATE	10	-19	-19	21	Not Significant
ET09-05	NITROBENZENE	10	-23	-23	21	Downward Trend
ET09-05	PHENANTHRENE	10	-21	-21	21	Downward Trend
ET09-05	PHENOL	10	-23	-23	21	Downward Trend
ET09-05	2-METHYLNAPHTHALENE	10	-22	-22	21	Downward Trend
ET09-05	ACENAPHTHENE	10	-25	-25	21	Downward Trend
ET09-05	ACENAPHTHYLENE	10	1	1	21	Not Significant
ET09-05	ANTHRACENE	10	18	18	21	Not Significant
ET09-05	BENZO(A)ANTHRACENE	10	3	3	21	Not Significant
ET09-05	BENZO(A)PYRENE	10	19	19	21	Not Significant
ET09-05	BENZO(B)FLUORANTHENE	10	19	19	21	Not Significant
ET09-05	BENZO(G,H,I)PERYLENE	10	19	19	21	Not Significant
ET09-05	BENZO(K)FLUORANTHENE	10	19	19	21	Not Significant
ET09-05	CHRYSENE	10	12	12	21	Not Significant
ET09-05	DIBENZ(A,H)ANTHRACENE	10	19	19	21	Not Significant
ET09-05	FLUORANTHENE	10	-24	-24	21	Downward Trend
ET09-05	FLUORENE	10	-19	-19	21	Not Significant
ET09-05	INDENO(1,2,3-CD)PYRENE	10	19	19	21	Not Significant
ET09-05	NAPHTHALENE	10	-23	-23	21	Downward Trend
ET09-05	PYRENE	10	-22	-22	21	Downward Trend
ET09-05	LIPIDS	10	-19	-19	21	Not Significant

Table F-8
Site 9 Tissue Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
ET09-06	ALUMINUM	10	21	21	21	Upward Trend
ET09-06	ANTIMONY	10	-2	-2	21	Not Significant
ET09-06	ARSENIC	10	33	33	21	Upward Trend
ET09-06	BARIUM	8	13	13	16	Not Significant
ET09-06	BERYLLIUM	10	1	1	21	Not Significant
ET09-06	CADMIUM	8	-2	-2	16	Not Significant
ET09-06	CALCIUM	8	-2	-2	16	Not Significant
ET09-06	CHROMIUM, TOTAL	10	19	19	21	Not Significant
ET09-06	COBALT	8	10	10	16	Not Significant
ET09-06	COPPER	10	38	38	21	Upward Trend
ET09-06	IRON	10	11	11	21	Not Significant
ET09-06	LEAD	10	-1	-1	21	Not Significant
ET09-06	MAGNESIUM	8	14	14	16	Not Significant
ET09-06	MANGANESE	10	1	1	21	Not Significant
ET09-06	MERCURY	10	-13	-13	21	Not Significant
ET09-06	NICKEL	10	19	19	21	Not Significant
ET09-06	POTASSIUM	8	5	5	16	Not Significant
ET09-06	SELENIUM	8	0	0	NA	No Trend
ET09-06	SILVER	8	-14	-14	16	Not Significant
ET09-06	SODIUM	8	2	2	16	Not Significant
ET09-06	VANADIUM	8	10	10	16	Not Significant
ET09-06	ZINC	10	28	28	21	Upward Trend
ET09-06	DECACHLOROBIPHENYL	10	-25	-25	21	Downward Trend
ET09-06	DICHLOROBIPHENYL	10	-16	-16	21	Not Significant
ET09-06	HEPTACHLOROBIPHENYL	10	-12	-12	21	Not Significant
ET09-06	HEXACHLOROBIPHENYL	10	-20	-20	21	Not Significant
ET09-06	NONACHLOROBIPHENYL	10	-25	-25	21	Downward Trend
ET09-06	OCTACHLOROBIPHENYL	10	-19	-19	21	Not Significant
ET09-06	PENTACHLOROBIPHENYL	10	-19	-19	21	Not Significant
ET09-06	POLYCHLORINATED BIPHENYLS (PCBS)	6	-5	-5	11	Not Significant
ET09-06	TETRACHLOROBIPHENYL	10	-20	-20	21	Not Significant
ET09-06	TRICHLOROBIPHENYL	10	-27	-27	21	Downward Trend
ET09-06	4,4-DDD	10	-19	-19	21	Not Significant
ET09-06	4,4-DDE	10	-31	-31	21	Downward Trend
ET09-06	4,4-DDT	10	-25	-25	21	Downward Trend
ET09-06	ALDRIN	10	-17	-17	21	Not Significant
ET09-06	ALPHA-BHC	10	-32	-32	21	Downward Trend
ET09-06	ALPHA-CHLORDANE	10	-28	-28	21	Downward Trend
ET09-06	BETA-BHC	10	-23	-23	21	Downward Trend
ET09-06	DELTA-BHC	10	-19	-19	21	Not Significant
ET09-06	DIELDRIN	10	-31	-31	21	Downward Trend
ET09-06	ENDOSULFAN I	10	-33	-33	21	Downward Trend
ET09-06	ENDOSULFAN II	10	-31	-31	21	Downward Trend
ET09-06	ENDOSULFAN SULFATE	10	-28	-28	21	Downward Trend
ET09-06	ENDRIN	10	-31	-31	21	Downward Trend
ET09-06	ENDRIN ALDEHYDE	10	-24	-24	21	Downward Trend
ET09-06	ENDRIN KETONE	10	-31	-31	21	Downward Trend
ET09-06	HEPTACHLOR	10	-31	-31	21	Downward Trend
ET09-06	HEPTACHLOR EPOXIDE	10	-29	-29	21	Downward Trend
ET09-06	LINDANE	10	-26	-26	21	Downward Trend
ET09-06	METHOXYCHLOR	10	-33	-33	21	Downward Trend
ET09-06	TRANS-CHLORDANE	10	-25	-25	21	Downward Trend
ET09-06	1,4-DICHLOROBENZENE	10	-21	-21	21	Downward Trend
ET09-06	2-METHYLPHENOL	10	-21	-21	21	Downward Trend
ET09-06	4-METHYLPHENOL	10	-21	-21	21	Downward Trend
ET09-06	BIS(2-ETHYLHEXYL)PHTHALATE	10	-13	-13	21	Not Significant
ET09-06	BUTYLBENZYLPHTHALATE	10	-11	-11	21	Not Significant
ET09-06	DIMETHYL PHTHALATE	10	-15	-15	21	Not Significant
ET09-06	DI-N-BUTYLPHTHALATE	10	-11	-11	21	Not Significant
ET09-06	NITROBENZENE	10	-21	-21	21	Downward Trend
ET09-06	PHENANTHRENE	10	-10	-10	21	Not Significant
ET09-06	PHENOL	10	-21	-21	21	Downward Trend
ET09-06	2-METHYLNAPHTHALENE	10	-17	-17	21	Not Significant
ET09-06	ACENAPHTHENE	10	-12	-12	21	Not Significant
ET09-06	ACENAPHTHYLENE	10	13	13	21	Not Significant
ET09-06	ANTHRACENE	10	14	14	21	Not Significant
ET09-06	BENZO(A)ANTHRACENE	10	6	6	21	Not Significant
ET09-06	BENZO(A)PYRENE	10	16	16	21	Not Significant
ET09-06	BENZO(B)FLUORANTHENE	10	16	16	21	Not Significant
ET09-06	BENZO(G,H,I)PERYLENE	10	16	16	21	Not Significant
ET09-06	BENZO(K)FLUORANTHENE	10	14	14	21	Not Significant
ET09-06	CHRYSENE	10	14	14	21	Not Significant
ET09-06	DIBENZ(A,H)ANTHRACENE	10	16	16	21	Not Significant
ET09-06	FLUORANTHENE	10	-22	-22	21	Downward Trend
ET09-06	FLUORENE	10	-9	-9	21	Not Significant
ET09-06	INDENO(1,2,3-CD)PYRENE	10	14	14	21	Not Significant
ET09-06	NAPHTHALENE	10	-25	-25	21	Downward Trend
ET09-06	PYRENE	10	-18	-18	21	Not Significant
ET09-06	LIPIDS	10	3	3	21	Not Significant

Table F-8
Site 9 Tissue Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
ET09-07	ALUMINUM	3	---	---	NA	NA
ET09-07	ANTIMONY	3	---	---	NA	NA
ET09-07	ARSENIC	3	---	---	NA	NA
ET09-07	BARIUM	3	---	---	NA	NA
ET09-07	BERYLLIUM	3	---	---	NA	NA
ET09-07	CADMIUM	3	---	---	NA	NA
ET09-07	CALCIUM	3	---	---	NA	NA
ET09-07	CHROMIUM, TOTAL	3	---	---	NA	NA
ET09-07	COBALT	3	---	---	NA	NA
ET09-07	COPPER	3	---	---	NA	NA
ET09-07	IRON	3	---	---	NA	NA
ET09-07	LEAD	3	---	---	NA	NA
ET09-07	MAGNESIUM	3	---	---	NA	NA
ET09-07	MANGANESE	3	---	---	NA	NA
ET09-07	MERCURY	3	---	---	NA	NA
ET09-07	NICKEL	3	---	---	NA	NA
ET09-07	POTASSIUM	3	---	---	NA	NA
ET09-07	SELENIUM	3	---	---	NA	NA
ET09-07	SILVER	3	---	---	NA	NA
ET09-07	SODIUM	3	---	---	NA	NA
ET09-07	VANADIUM	3	---	---	NA	NA
ET09-07	ZINC	3	---	---	NA	NA
ET09-07	DECACHLOROBIPHENYL	3	---	---	NA	NA
ET09-07	DICHLOROBIPHENYL	3	---	---	NA	NA
ET09-07	HEPTACHLOROBIPHENYL	3	---	---	NA	NA
ET09-07	HEXACHLOROBIPHENYL	3	---	---	NA	NA
ET09-07	NONACHLOROBIPHENYL	3	---	---	NA	NA
ET09-07	OCTACHLOROBIPHENYL	3	---	---	NA	NA
ET09-07	PENTACHLOROBIPHENYL	3	---	---	NA	NA
ET09-07	POLYCHLORINATED BIPHENYLS (PCBS)	2	---	---	NA	NA
ET09-07	TETRACHLOROBIPHENYL	3	---	---	NA	NA
ET09-07	TRICHLOROBIPHENYL	3	---	---	NA	NA
ET09-07	4,4-DDD	3	---	---	NA	NA
ET09-07	4,4-DDE	3	---	---	NA	NA
ET09-07	4,4-DDT	3	---	---	NA	NA
ET09-07	ALDRIN	3	---	---	NA	NA
ET09-07	ALPHA-BHC	3	---	---	NA	NA
ET09-07	ALPHA-CHLORDANE	3	---	---	NA	NA
ET09-07	BETA-BHC	3	---	---	NA	NA
ET09-07	DELTA-BHC	3	---	---	NA	NA
ET09-07	DIELDRIN	3	---	---	NA	NA
ET09-07	ENDOSULFAN I	3	---	---	NA	NA
ET09-07	ENDOSULFAN II	3	---	---	NA	NA
ET09-07	ENDOSULFAN SULFATE	3	---	---	NA	NA
ET09-07	ENDRIN	3	---	---	NA	NA
ET09-07	ENDRIN ALDEHYDE	3	---	---	NA	NA
ET09-07	ENDRIN KETONE	3	---	---	NA	NA
ET09-07	HEPTACHLOR	3	---	---	NA	NA
ET09-07	HEPTACHLOR EPOXIDE	3	---	---	NA	NA
ET09-07	LINDANE	3	---	---	NA	NA
ET09-07	METHOXYCHLOR	3	---	---	NA	NA
ET09-07	TRANS-CHLORDANE	3	---	---	NA	NA
ET09-07	1,4-DICHLOROBENZENE	3	---	---	NA	NA
ET09-07	2-METHYLPHENOL	3	---	---	NA	NA
ET09-07	4-METHYLPHENOL	3	---	---	NA	NA
ET09-07	BIS(2-ETHYLHEXYL)PHTHALATE	3	---	---	NA	NA
ET09-07	BUTYLBENZYLPHTHALATE	3	---	---	NA	NA
ET09-07	DIMETHYL PHTHALATE	3	---	---	NA	NA
ET09-07	DI-N-BUTYLPHTHALATE	3	---	---	NA	NA
ET09-07	NITROBENZENE	3	---	---	NA	NA
ET09-07	PHENANTHRENE	3	---	---	NA	NA
ET09-07	PHENOL	3	---	---	NA	NA
ET09-07	2-METHYLNAPHTHALENE	3	---	---	NA	NA
ET09-07	ACENAPHTHENE	3	---	---	NA	NA
ET09-07	ACENAPHTHYLENE	3	---	---	NA	NA
ET09-07	ANTHRACENE	3	---	---	NA	NA
ET09-07	BENZO(A)ANTHRACENE	3	---	---	NA	NA
ET09-07	BENZO(A)PYRENE	3	---	---	NA	NA
ET09-07	BENZO(B)FLUORANTHENE	3	---	---	NA	NA
ET09-07	BENZO(G,H,I)PERYLENE	3	---	---	NA	NA
ET09-07	BENZO(K)FLUORANTHENE	3	---	---	NA	NA
ET09-07	CHRYSENE	3	---	---	NA	NA
ET09-07	DIBENZ(A,H)ANTHRACENE	3	---	---	NA	NA
ET09-07	FLUORANTHENE	3	---	---	NA	NA
ET09-07	FLUORENE	3	---	---	NA	NA
ET09-07	INDENO(1,2,3-CD)PYRENE	3	---	---	NA	NA
ET09-07	NAPHTHALENE	3	---	---	NA	NA
ET09-07	PYRENE	3	---	---	NA	NA
ET09-07	LIPIDS	3	---	---	NA	NA

Table F-8
Site 9 Tissue Mann Kendall Trend Tests
Former NCBC Davisville
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
ET09-08	ALUMINUM	3	---	---	NA	NA
ET09-08	ANTIMONY	3	---	---	NA	NA
ET09-08	ARSENIC	3	---	---	NA	NA
ET09-08	BARIUM	3	---	---	NA	NA
ET09-08	BERYLLIUM	3	---	---	NA	NA
ET09-08	CADMIUM	3	---	---	NA	NA
ET09-08	CALCIUM	3	---	---	NA	NA
ET09-08	CHROMIUM, TOTAL	3	---	---	NA	NA
ET09-08	COBALT	3	---	---	NA	NA
ET09-08	COPPER	3	---	---	NA	NA
ET09-08	IRON	3	---	---	NA	NA
ET09-08	LEAD	3	---	---	NA	NA
ET09-08	MAGNESIUM	3	---	---	NA	NA
ET09-08	MANGANESE	3	---	---	NA	NA
ET09-08	MERCURY	3	---	---	NA	NA
ET09-08	NICKEL	3	---	---	NA	NA
ET09-08	POTASSIUM	3	---	---	NA	NA
ET09-08	SELENIUM	3	---	---	NA	NA
ET09-08	SILVER	3	---	---	NA	NA
ET09-08	SODIUM	3	---	---	NA	NA
ET09-08	VANADIUM	3	---	---	NA	NA
ET09-08	ZINC	3	---	---	NA	NA
ET09-08	DECACHLOROBIPHENYL	3	---	---	NA	NA
ET09-08	DICHLOROBIPHENYL	3	---	---	NA	NA
ET09-08	HEPTACHLOROBIPHENYL	3	---	---	NA	NA
ET09-08	HEXACHLOROBIPHENYL	3	---	---	NA	NA
ET09-08	NONACHLOROBIPHENYL	3	---	---	NA	NA
ET09-08	OCTACHLOROBIPHENYL	3	---	---	NA	NA
ET09-08	PENTACHLOROBIPHENYL	3	---	---	NA	NA
ET09-08	POLYCHLORINATED BIPHENYLS (PCBS)	2	---	---	NA	NA
ET09-08	TETRACHLOROBIPHENYL	3	---	---	NA	NA
ET09-08	TRICHLOROBIPHENYL	3	---	---	NA	NA
ET09-08	4,4-DDD	3	---	---	NA	NA
ET09-08	4,4-DDE	3	---	---	NA	NA
ET09-08	4,4-DDT	3	---	---	NA	NA
ET09-08	ALDRIN	3	---	---	NA	NA
ET09-08	ALPHA-BHC	3	---	---	NA	NA
ET09-08	ALPHA-CHLORDANE	3	---	---	NA	NA
ET09-08	BETA-BHC	3	---	---	NA	NA
ET09-08	DELTA-BHC	3	---	---	NA	NA
ET09-08	DIELDRIN	3	---	---	NA	NA
ET09-08	ENDOSULFAN I	3	---	---	NA	NA
ET09-08	ENDOSULFAN II	3	---	---	NA	NA
ET09-08	ENDOSULFAN SULFATE	3	---	---	NA	NA
ET09-08	ENDRIN	3	---	---	NA	NA
ET09-08	ENDRIN ALDEHYDE	3	---	---	NA	NA
ET09-08	ENDRIN KETONE	3	---	---	NA	NA
ET09-08	HEPTACHLOR	3	---	---	NA	NA
ET09-08	HEPTACHLOR EPOXIDE	3	---	---	NA	NA
ET09-08	LINDANE	3	---	---	NA	NA
ET09-08	METHOXYCHLOR	3	---	---	NA	NA
ET09-08	TRANS-CHLORDANE	3	---	---	NA	NA
ET09-08	1,4-DICHLOROBENZENE	3	---	---	NA	NA
ET09-08	2-METHYLPHENOL	3	---	---	NA	NA
ET09-08	4-METHYLPHENOL	3	---	---	NA	NA
ET09-08	BIS(2-ETHYLHEXYL)PHTHALATE	3	---	---	NA	NA
ET09-08	BUTYLBENZYLPHTHALATE	3	---	---	NA	NA
ET09-08	DIMETHYL PHTHALATE	3	---	---	NA	NA
ET09-08	DI-N-BUTYLPHTHALATE	3	---	---	NA	NA
ET09-08	NITROBENZENE	3	---	---	NA	NA
ET09-08	PHENANTHRENE	3	---	---	NA	NA
ET09-08	PHENOL	3	---	---	NA	NA
ET09-08	2-METHYLNAPHTHALENE	3	---	---	NA	NA
ET09-08	ACENAPHTHENE	3	---	---	NA	NA
ET09-08	ACENAPHTHYLENE	3	---	---	NA	NA
ET09-08	ANTHRACENE	3	---	---	NA	NA
ET09-08	BENZO(A)ANTHRACENE	3	---	---	NA	NA
ET09-08	BENZO(A)PYRENE	3	---	---	NA	NA
ET09-08	BENZO(B)FLUORANTHENE	3	---	---	NA	NA
ET09-08	BENZO(G,H,I)PERYLENE	3	---	---	NA	NA
ET09-08	BENZO(K)FLUORANTHENE	3	---	---	NA	NA
ET09-08	CHRYSENE	3	---	---	NA	NA
ET09-08	DIBENZ(A,H)ANTHRACENE	3	---	---	NA	NA
ET09-08	FLUORANTHENE	3	---	---	NA	NA
ET09-08	FLUORENE	3	---	---	NA	NA
ET09-08	INDENO(1,2,3-CD)PYRENE	3	---	---	NA	NA
ET09-08	NAPHTHALENE	3	---	---	NA	NA
ET09-08	PYRENE	3	---	---	NA	NA
ET09-08	LIPIDS	3	---	---	NA	NA

Table F-8
Site 9 Tissue Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
ET09-09	ALUMINUM	5	0	0	NA	No Trend
ET09-09	ANTIMONY	5	-2	-2	8	Not Significant
ET09-09	ARSENIC	5	-5	-5	8	Not Significant
ET09-09	BARIUM	5	6	6	8	Not Significant
ET09-09	BERYLLIUM	5	4	4	8	Not Significant
ET09-09	CADMIUM	5	0	0	NA	No Trend
ET09-09	CALCIUM	5	-4	-4	8	Not Significant
ET09-09	CHROMIUM, TOTAL	5	6	6	8	Not Significant
ET09-09	COBALT	5	4	4	8	Not Significant
ET09-09	COPPER	5	2	2	8	Not Significant
ET09-09	IRON	5	0	0	NA	No Trend
ET09-09	LEAD	5	-4	-4	8	Not Significant
ET09-09	MAGNESIUM	5	6	6	8	Not Significant
ET09-09	MANGANESE	5	4	4	8	Not Significant
ET09-09	MERCURY	5	-8	-8	8	Downward Trend
ET09-09	NICKEL	5	4	4	8	Not Significant
ET09-09	POTASSIUM	5	-2	-2	8	Not Significant
ET09-09	SELENIUM	5	-2	-2	8	Not Significant
ET09-09	SILVER	5	0	0	NA	No Trend
ET09-09	SODIUM	5	2	2	8	Not Significant
ET09-09	VANADIUM	5	6	6	8	Not Significant
ET09-09	ZINC	5	-2	-2	8	Not Significant
ET09-09	DECACHLOROBIPHENYL	5	4	4	8	Not Significant
ET09-09	DICHLOROBIPHENYL	5	4	4	8	Not Significant
ET09-09	HEPTACHLOROBIPHENYL	5	-3	-3	8	Not Significant
ET09-09	HEXACHLOROBIPHENYL	5	0	0	NA	No Trend
ET09-09	NONACHLOROBIPHENYL	5	4	4	8	Not Significant
ET09-09	OCTACHLOROBIPHENYL	5	6	6	8	Not Significant
ET09-09	PENTACHLOROBIPHENYL	5	1	1	8	Not Significant
ET09-09	POLYCHLORINATED BIPHENYLS (PCBS)	5	0	0	NA	No Trend
ET09-09	TETRACHLOROBIPHENYL	5	-1	-1	8	Not Significant
ET09-09	TRICHLOROBIPHENYL	5	5	5	8	Not Significant
ET09-09	4,4-DDD	5	-3	-3	8	Not Significant
ET09-09	4,4-DDE	5	-3	-3	8	Not Significant
ET09-09	4,4-DDT	5	-3	-3	8	Not Significant
ET09-09	ALDRIN	5	-2	-2	8	Not Significant
ET09-09	ALPHA-BHC	5	-9	-9	8	Downward Trend
ET09-09	ALPHA-CHLORDANE	5	-8	-8	8	Downward Trend
ET09-09	BETA-BHC	5	-7	-7	8	Not Significant
ET09-09	DELTA-BHC	5	-7	-7	8	Not Significant
ET09-09	DIELDRIN	5	-5	-5	8	Not Significant
ET09-09	ENDOSULFAN I	5	-5	-5	8	Not Significant
ET09-09	ENDOSULFAN II	5	-5	-5	8	Not Significant
ET09-09	ENDOSULFAN SULFATE	5	-5	-5	8	Not Significant
ET09-09	ENDRIN	5	-9	-9	8	Downward Trend
ET09-09	ENDRIN ALDEHYDE	5	-3	-3	8	Not Significant
ET09-09	ENDRIN KETONE	5	-5	-5	8	Not Significant
ET09-09	HEPTACHLOR	5	-5	-5	8	Not Significant
ET09-09	HEPTACHLOR EPOXIDE	5	-2	-2	8	Not Significant
ET09-09	LINDANE	5	-3	-3	8	Not Significant
ET09-09	METHOXYCHLOR	5	-5	-5	8	Not Significant
ET09-09	TRANS-CHLORDANE	5	-7	-7	8	Not Significant
ET09-09	1,4-DICHLOROBENZENE	5	2	2	8	Not Significant
ET09-09	2-METHYLPHENOL	5	2	2	8	Not Significant
ET09-09	4-METHYLPHENOL	5	2	2	8	Not Significant
ET09-09	BIS(2-ETHYLHEXYL)PHTHALATE	5	-1	-1	8	Not Significant
ET09-09	BUTYLBENZYLPHTHALATE	5	1	1	8	Not Significant
ET09-09	DIMETHYL PHTHALATE	5	1	1	8	Not Significant
ET09-09	DI-N-BUTYLPHTHALATE	5	-3	-3	8	Not Significant
ET09-09	NITROBENZENE	5	2	2	8	Not Significant
ET09-09	PHENANTHRENE	5	4	4	8	Not Significant
ET09-09	PHENOL	5	4	4	8	Not Significant
ET09-09	2-METHYLNAPHTHALENE	5	2	2	8	Not Significant
ET09-09	ACENAPHTHENE	5	2	2	8	Not Significant
ET09-09	ACENAPHTHYLENE	5	7	7	8	Not Significant
ET09-09	ANTHRACENE	5	5	5	8	Not Significant
ET09-09	BENZO(A)ANTHRACENE	5	2	2	8	Not Significant
ET09-09	BENZO(A)PYRENE	5	2	2	8	Not Significant
ET09-09	BENZO(B)FLUORANTHENE	5	2	2	8	Not Significant
ET09-09	BENZO(G,H,I)PERYLENE	5	2	2	8	Not Significant
ET09-09	BENZO(K)FLUORANTHENE	5	5	5	8	Not Significant
ET09-09	CHRYSENE	5	5	5	8	Not Significant
ET09-09	DIBENZ(A,H)ANTHRACENE	5	2	2	8	Not Significant
ET09-09	FLUORANTHENE	5	2	2	8	Not Significant
ET09-09	FLUORENE	5	3	3	8	Not Significant
ET09-09	INDENO(1,2,3-CD)PYRENE	5	5	5	8	Not Significant
ET09-09	NAPHTHALENE	5	0	0	NA	No Trend
ET09-09	PYRENE	5	-1	-1	8	Not Significant
ET09-09	LIPIDS	5	-2	-2	8	Not Significant

Table F-8
Site 9 Tissue Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
ET09-10	ALUMINUM	5	0	0	NA	No Trend
ET09-10	ANTIMONY	5	2	2	8	Not Significant
ET09-10	ARSENIC	5	6	6	8	Not Significant
ET09-10	BARIUM	5	9	9	8	Upward Trend
ET09-10	BERYLLIUM	5	4	4	8	Not Significant
ET09-10	CADMIUM	5	-4	-4	8	Not Significant
ET09-10	CALCIUM	5	2	2	8	Not Significant
ET09-10	CHROMIUM, TOTAL	5	3	3	8	Not Significant
ET09-10	COBALT	5	4	4	8	Not Significant
ET09-10	COPPER	5	-2	-2	8	Not Significant
ET09-10	IRON	5	0	0	NA	No Trend
ET09-10	LEAD	5	0	0	NA	No Trend
ET09-10	MAGNESIUM	5	-2	-2	8	Not Significant
ET09-10	MANGANESE	5	-4	-4	8	Not Significant
ET09-10	MERCURY	5	-7	-7	8	Not Significant
ET09-10	NICKEL	5	-2	-2	8	Not Significant
ET09-10	POTASSIUM	5	-2	-2	8	Not Significant
ET09-10	SELENIUM	5	-7	-7	8	Not Significant
ET09-10	SILVER	5	2	2	8	Not Significant
ET09-10	SODIUM	5	-2	-2	8	Not Significant
ET09-10	VANADIUM	5	2	2	8	Not Significant
ET09-10	ZINC	5	0	0	NA	No Trend
ET09-10	DECACHLOROBIPHENYL	5	-1	-1	8	Not Significant
ET09-10	DICHLOROBIPHENYL	5	4	4	8	Not Significant
ET09-10	HEPTACHLOROBIPHENYL	5	-4	-4	8	Not Significant
ET09-10	HEXACHLOROBIPHENYL	5	-1	-1	8	Not Significant
ET09-10	NONACHLOROBIPHENYL	5	4	4	8	Not Significant
ET09-10	OCTACHLOROBIPHENYL	5	6	6	8	Not Significant
ET09-10	PENTACHLOROBIPHENYL	5	7	7	8	Not Significant
ET09-10	POLYCHLORINATED BIPHENYLS (PCBS)	5	-1	-1	8	Not Significant
ET09-10	TETRACHLOROBIPHENYL	5	4	4	8	Not Significant
ET09-10	TRICHLOROBIPHENYL	5	4	4	8	Not Significant
ET09-10	4,4-DDD	5	1	1	8	Not Significant
ET09-10	4,4-DDE	5	1	1	8	Not Significant
ET09-10	4,4-DDT	5	1	1	8	Not Significant
ET09-10	ALDRIN	5	1	1	8	Not Significant
ET09-10	ALPHA-BHC	5	-9	-9	8	Downward Trend
ET09-10	ALPHA-CHLORDANE	5	-6	-6	8	Not Significant
ET09-10	BETA-BHC	5	-6	-6	8	Not Significant
ET09-10	DELTA-BHC	5	-5	-5	8	Not Significant
ET09-10	DIELDRIN	5	-3	-3	8	Not Significant
ET09-10	ENDOSULFAN I	5	-3	-3	8	Not Significant
ET09-10	ENDOSULFAN II	5	-1	-1	8	Not Significant
ET09-10	ENDOSULFAN SULFATE	5	-3	-3	8	Not Significant
ET09-10	ENDRIN	5	0	0	NA	No Trend
ET09-10	ENDRIN ALDEHYDE	5	1	1	8	Not Significant
ET09-10	ENDRIN KETONE	5	-3	-3	8	Not Significant
ET09-10	HEPTACHLOR	5	-3	-3	8	Not Significant
ET09-10	HEPTACHLOR EPOXIDE	5	1	1	8	Not Significant
ET09-10	LINDANE	5	-9	-9	8	Downward Trend
ET09-10	METHOXYCHLOR	5	-3	-3	8	Not Significant
ET09-10	TRANS-CHLORDANE	5	-7	-7	8	Not Significant
ET09-10	1,4-DICHLOROBENZENE	5	2	2	8	Not Significant
ET09-10	2-METHYLPHENOL	5	2	2	8	Not Significant
ET09-10	4-METHYLPHENOL	5	2	2	8	Not Significant
ET09-10	BIS(2-ETHYLHEXYL)PHTHALATE	4	-2	-2	6	Not Significant
ET09-10	BUTYLBENZYLPHTHALATE	5	1	1	8	Not Significant
ET09-10	DIMETHYL PHTHALATE	5	1	1	8	Not Significant
ET09-10	DI-N-BUTYLPHTHALATE	5	-3	-3	8	Not Significant
ET09-10	NITROBENZENE	5	2	2	8	Not Significant
ET09-10	PHENANTHRENE	5	1	1	8	Not Significant
ET09-10	PHENOL	5	2	2	8	Not Significant
ET09-10	2-METHYLNAPHTHALENE	5	1	1	8	Not Significant
ET09-10	ACENAPHTHENE	5	3	3	8	Not Significant
ET09-10	ACENAPHTHYLENE	5	1	1	8	Not Significant
ET09-10	ANTHRACENE	5	3	3	8	Not Significant
ET09-10	BENZO(A)ANTHRACENE	5	1	1	8	Not Significant
ET09-10	BENZO(A)PYRENE	5	1	1	8	Not Significant
ET09-10	BENZO(B)FLUORANTHENE	5	1	1	8	Not Significant
ET09-10	BENZO(G,H,I)PERYLENE	5	3	3	8	Not Significant
ET09-10	BENZO(K)FLUORANTHENE	5	1	1	8	Not Significant
ET09-10	CHRYSENE	5	1	1	8	Not Significant
ET09-10	DIBENZ(A,H)ANTHRACENE	5	5	5	8	Not Significant
ET09-10	FLUORANTHENE	5	1	1	8	Not Significant
ET09-10	FLUORENE	5	1	1	8	Not Significant
ET09-10	INDENO(1,2,3-CD)PYRENE	5	1	1	8	Not Significant
ET09-10	NAPHTHALENE	5	3	3	8	Not Significant
ET09-10	PYRENE	5	1	1	8	Not Significant
ET09-10	LIPIDS	5	-2	-2	8	Not Significant

Table F-8
Site 9 Tissue Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
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Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
ET09-11	ALUMINUM	5	-4	-4	8	Not Significant
ET09-11	ANTIMONY	5	0	0	NA	No Trend
ET09-11	ARSENIC	5	-5	-5	8	Not Significant
ET09-11	BARIUM	5	6	6	8	Not Significant
ET09-11	BERYLLIUM	5	4	4	8	Not Significant
ET09-11	CADMIUM	5	-4	-4	8	Not Significant
ET09-11	CALCIUM	5	5	5	8	Not Significant
ET09-11	CHROMIUM, TOTAL	5	6	6	8	Not Significant
ET09-11	COBALT	5	4	4	8	Not Significant
ET09-11	COPPER	5	1	1	8	Not Significant
ET09-11	IRON	5	0	0	NA	No Trend
ET09-11	LEAD	5	-4	-4	8	Not Significant
ET09-11	MAGNESIUM	5	4	4	8	Not Significant
ET09-11	MANGANESE	5	4	4	8	Not Significant
ET09-11	MERCURY	5	-8	-8	8	Downward Trend
ET09-11	NICKEL	5	4	4	8	Not Significant
ET09-11	POTASSIUM	5	-4	-4	8	Not Significant
ET09-11	SELENIUM	5	-4	-4	8	Not Significant
ET09-11	SILVER	5	-2	-2	8	Not Significant
ET09-11	SODIUM	5	2	2	8	Not Significant
ET09-11	VANADIUM	5	6	6	8	Not Significant
ET09-11	ZINC	5	0	0	NA	No Trend
ET09-11	DECACHLOROBIPHENYL	5	-2	-2	8	Not Significant
ET09-11	DICHLOROBIPHENYL	5	0	0	NA	No Trend
ET09-11	HEPTACHLOROBIPHENYL	5	2	2	8	Not Significant
ET09-11	HEXACHLOROBIPHENYL	5	0	0	NA	No Trend
ET09-11	NONACHLOROBIPHENYL	5	-2	-2	8	Not Significant
ET09-11	OCTACHLOROBIPHENYL	5	5	5	8	Not Significant
ET09-11	PENTACHLOROBIPHENYL	5	0	0	NA	No Trend
ET09-11	POLYCHLORINATED BIPHENYLS (PCBS)	5	0	0	NA	No Trend
ET09-11	TETRACHLOROBIPHENYL	5	3	3	8	Not Significant
ET09-11	TRICHLOROBIPHENYL	5	-1	-1	8	Not Significant
ET09-11	4,4-DDD	5	-3	-3	8	Not Significant
ET09-11	4,4-DDE	5	-3	-3	8	Not Significant
ET09-11	4,4-DDT	5	-3	-3	8	Not Significant
ET09-11	ALDRIN	5	5	5	8	Not Significant
ET09-11	ALPHA-BHC	5	-10	-10	8	Downward Trend
ET09-11	ALPHA-CHLORDANE	5	-10	-10	8	Downward Trend
ET09-11	BETA-BHC	5	-10	-10	8	Downward Trend
ET09-11	DELTA-BHC	5	-7	-7	8	Not Significant
ET09-11	DIELDRIN	5	-7	-7	8	Not Significant
ET09-11	ENDOSULFAN I	5	-5	-5	8	Not Significant
ET09-11	ENDOSULFAN II	5	-7	-7	8	Not Significant
ET09-11	ENDOSULFAN SULFATE	5	-10	-10	8	Downward Trend
ET09-11	ENDRIN	5	-7	-7	8	Not Significant
ET09-11	ENDRIN ALDEHYDE	5	-3	-3	8	Not Significant
ET09-11	ENDRIN KETONE	5	-7	-7	8	Not Significant
ET09-11	HEPTACHLOR	5	-10	-10	8	Downward Trend
ET09-11	HEPTACHLOR EPOXIDE	5	0	0	NA	No Trend
ET09-11	LINDANE	5	-5	-5	8	Not Significant
ET09-11	METHOXYCHLOR	5	-5	-5	8	Not Significant
ET09-11	TRANS-CHLORDANE	5	-5	-5	8	Not Significant
ET09-11	1,4-DICHLOROBENZENE	5	4	4	8	Not Significant
ET09-11	2-METHYLPHENOL	5	5	5	8	Not Significant
ET09-11	4-METHYLPHENOL	5	4	4	8	Not Significant
ET09-11	BIS(2-ETHYLHEXYL)PHTHALATE	5	0	0	NA	No Trend
ET09-11	BUTYLBENZYLPHTHALATE	5	3	3	8	Not Significant
ET09-11	DIMETHYL PHTHALATE	5	3	3	8	Not Significant
ET09-11	DI-N-BUTYLPHTHALATE	5	-2	-2	8	Not Significant
ET09-11	NITROBENZENE	5	4	4	8	Not Significant
ET09-11	PHENANTHRENE	5	-6	-6	8	Not Significant
ET09-11	PHENOL	5	5	5	8	Not Significant
ET09-11	2-METHYLNAPHTHALENE	5	-4	-4	8	Not Significant
ET09-11	ACENAPHTHENE	5	-4	-4	8	Not Significant
ET09-11	ACENAPHTHYLENE	5	-1	-1	8	Not Significant
ET09-11	ANTHRACENE	5	3	3	8	Not Significant
ET09-11	BENZO(A)ANTHRACENE	5	2	2	8	Not Significant
ET09-11	BENZO(A)PYRENE	5	2	2	8	Not Significant
ET09-11	BENZO(B)FLUORANTHENE	5	5	5	8	Not Significant
ET09-11	BENZO(G,H,I)PERYLENE	5	2	2	8	Not Significant
ET09-11	BENZO(K)FLUORANTHENE	5	5	5	8	Not Significant
ET09-11	CHRYSENE	5	3	3	8	Not Significant
ET09-11	DIBENZ(A,H)ANTHRACENE	5	2	2	8	Not Significant
ET09-11	FLUORANTHENE	5	-3	-3	8	Not Significant
ET09-11	FLUORENE	5	-2	-2	8	Not Significant
ET09-11	INDENO(1,2,3-CD)PYRENE	5	3	3	8	Not Significant
ET09-11	NAPHTHALENE	5	-6	-6	8	Not Significant
ET09-11	PYRENE	5	-3	-3	8	Not Significant
ET09-11	LIPIDS	5	-2	-2	8	Not Significant

Table F-8
Site 9 Tissue Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend
ET09-12	ALUMINUM	5	-2	-2	8	Not Significant
ET09-12	ANTIMONY	5	-6	-6	8	Not Significant
ET09-12	ARSENIC	5	4	4	8	Not Significant
ET09-12	BARIUM	5	6	6	8	Not Significant
ET09-12	BERYLLIUM	5	4	4	8	Not Significant
ET09-12	CADMIUM	5	2	2	8	Not Significant
ET09-12	CALCIUM	5	2	2	8	Not Significant
ET09-12	CHROMIUM, TOTAL	5	0	0	NA	No Trend
ET09-12	COBALT	5	2	2	8	Not Significant
ET09-12	COPPER	5	0	0	NA	No Trend
ET09-12	IRON	5	0	0	NA	No Trend
ET09-12	LEAD	5	0	0	NA	No Trend
ET09-12	MAGNESIUM	5	6	6	8	Not Significant
ET09-12	MANGANESE	5	2	2	8	Not Significant
ET09-12	MERCURY	5	-6	-6	8	Not Significant
ET09-12	NICKEL	5	2	2	8	Not Significant
ET09-12	POTASSIUM	5	-8	-8	8	Downward Trend
ET09-12	SELENIUM	5	-4	-4	8	Not Significant
ET09-12	SILVER	5	-3	-3	8	Not Significant
ET09-12	SODIUM	5	4	4	8	Not Significant
ET09-12	VANADIUM	5	4	4	8	Not Significant
ET09-12	ZINC	5	-4	-4	8	Not Significant
ET09-12	DECACHLOROBIPHENYL	5	2	2	8	Not Significant
ET09-12	DICHLOROBIPHENYL	5	2	2	8	Not Significant
ET09-12	HEPTACHLOROBIPHENYL	5	1	1	8	Not Significant
ET09-12	HEXACHLOROBIPHENYL	5	2	2	8	Not Significant
ET09-12	NONACHLOROBIPHENYL	5	2	2	8	Not Significant
ET09-12	OCTACHLOROBIPHENYL	5	6	6	8	Not Significant
ET09-12	PENTACHLOROBIPHENYL	5	-1	-1	8	Not Significant
ET09-12	POLYCHLORINATED BIPHENYLS (PCBS)	5	2	2	8	Not Significant
ET09-12	TETRACHLOROBIPHENYL	5	2	2	8	Not Significant
ET09-12	TRICHLOROBIPHENYL	5	2	2	8	Not Significant
ET09-12	4,4-DDD	5	-1	-1	8	Not Significant
ET09-12	4,4-DDE	5	3	3	8	Not Significant
ET09-12	4,4-DDT	5	-3	-3	8	Not Significant
ET09-12	ALDRIN	5	-5	-5	8	Not Significant
ET09-12	ALPHA-BHC	5	-9	-9	8	Downward Trend
ET09-12	ALPHA-CHLORDANE	5	-6	-6	8	Not Significant
ET09-12	BETA-BHC	5	-7	-7	8	Not Significant
ET09-12	DELTA-BHC	5	-5	-5	8	Not Significant
ET09-12	DIELDRIN	5	-5	-5	8	Not Significant
ET09-12	ENDOSULFAN I	5	-7	-7	8	Not Significant
ET09-12	ENDOSULFAN II	5	-5	-5	8	Not Significant
ET09-12	ENDOSULFAN SULFATE	5	-5	-5	8	Not Significant
ET09-12	ENDRIN	5	-4	-4	8	Not Significant
ET09-12	ENDRIN ALDEHYDE	5	-1	-1	8	Not Significant
ET09-12	ENDRIN KETONE	5	-5	-5	8	Not Significant
ET09-12	HEPTACHLOR	5	-7	-7	8	Not Significant
ET09-12	HEPTACHLOR EPOXIDE	5	-3	-3	8	Not Significant
ET09-12	LINDANE	5	-7	-7	8	Not Significant
ET09-12	METHOXYCHLOR	5	-7	-7	8	Not Significant
ET09-12	TRANS-CHLORDANE	5	-5	-5	8	Not Significant
ET09-12	1,4-DICHLOROBENZENE	5	2	2	8	Not Significant
ET09-12	2-METHYLPHENOL	5	2	2	8	Not Significant
ET09-12	4-METHYLPHENOL	5	2	2	8	Not Significant
ET09-12	BIS(2-ETHYLHEXYL)PHTHALATE	5	4	4	8	Not Significant
ET09-12	BUTYLBENZYLPHTHALATE	5	1	1	8	Not Significant
ET09-12	DIMETHYL PHTHALATE	5	1	1	8	Not Significant
ET09-12	DI-N-BUTYLPHTHALATE	5	-4	-4	8	Not Significant
ET09-12	NITROBENZENE	5	2	2	8	Not Significant
ET09-12	PHENANTHRENE	5	4	4	8	Not Significant
ET09-12	PHENOL	5	2	2	8	Not Significant
ET09-12	2-METHYLNAPHTHALENE	5	1	1	8	Not Significant
ET09-12	ACENAPHTHENE	5	3	3	8	Not Significant
ET09-12	ACENAPHTHYLENE	5	3	3	8	Not Significant
ET09-12	ANTHRACENE	5	2	2	8	Not Significant
ET09-12	BENZO(A)ANTHRACENE	5	2	2	8	Not Significant
ET09-12	BENZO(A)PYRENE	5	2	2	8	Not Significant
ET09-12	BENZO(B)FLUORANTHENE	5	2	2	8	Not Significant
ET09-12	BENZO(G,H,I)PERYLENE	5	2	2	8	Not Significant
ET09-12	BENZO(K)FLUORANTHENE	5	2	2	8	Not Significant
ET09-12	CHRYSENE	5	5	5	8	Not Significant
ET09-12	DIBENZ(A,H)ANTHRACENE	5	2	2	8	Not Significant
ET09-12	FLUORANTHENE	5	1	1	8	Not Significant
ET09-12	FLUORENE	5	2	2	8	Not Significant
ET09-12	INDENO(1,2,3-CD)PYRENE	5	2	2	8	Not Significant
ET09-12	NAPHTHALENE	5	2	2	8	Not Significant
ET09-12	PYRENE	5	3	3	8	Not Significant
ET09-12	LIPIDS	5	-4	-4	8	Not Significant

Table F-8
Site 9 Tissue Mann Kendall Trend Tests
Former NCBC Davisville
North Kingston, Rhode Island
11 of 11

Location	Analyte	N	S	Test Statistic*	Critical Value	Trend

Notes:

Datasets presented for all analytes detected in at least one location since ME-01.

Field duplicates assigned the maximum value.

One half the detection limit was used for non-detect concentrations.

A significance level of 95% was used to interpret results.

* - When N > 10, the Normal approximation is used and calculated per box 4-9 in

Data Quality Assessment: Statistical Methods for Practitioners.

EPA QA/G-9S. When the normal approximation is used, the critical value is the standard normal distribution.

When S is 0, no critical value is calculated and a conclusion of no trend is made.

NA = The Mann-Kendall Trend Test was not computed because there were not at least 4 samples.

ND = There were less than 3 detected concentrations, therefore the Mann-Kendall Trend Test was not computed.

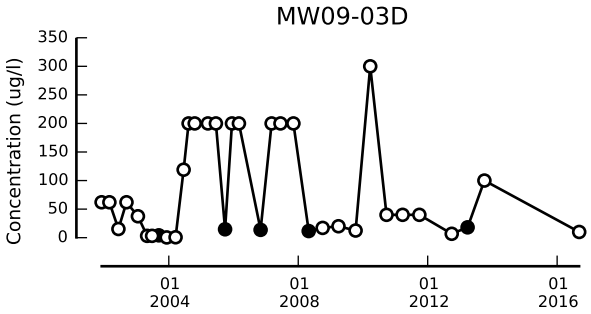
- = Analyte results not available for location.

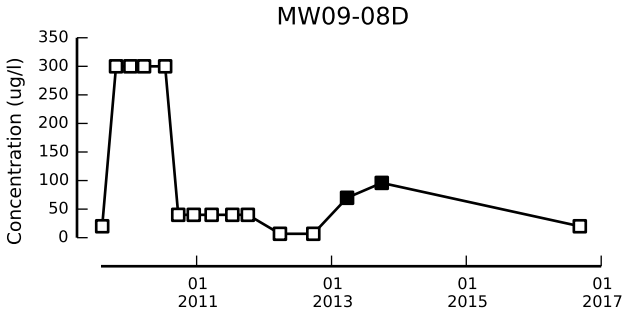
Wet weighht results used for Mann-Kendall tests

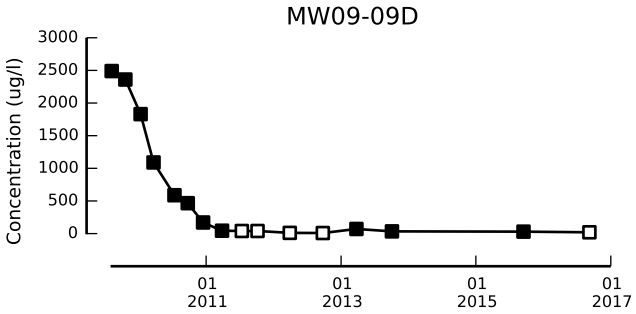
Trend Plots

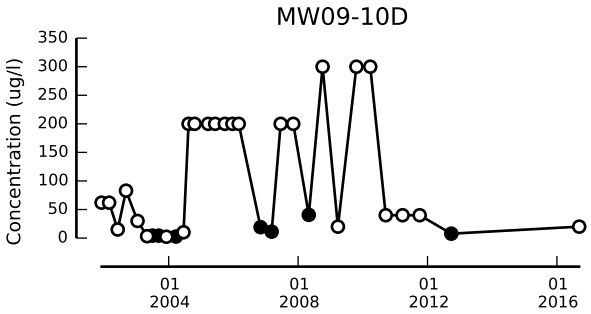
ALUMINUM in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 22

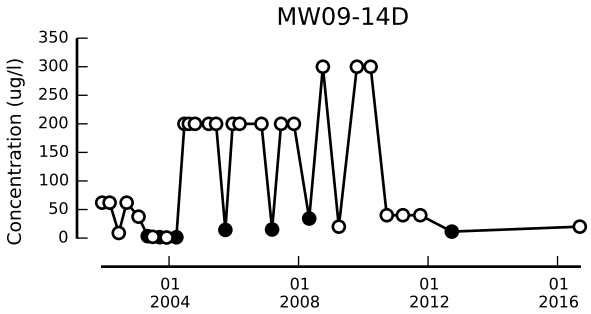
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

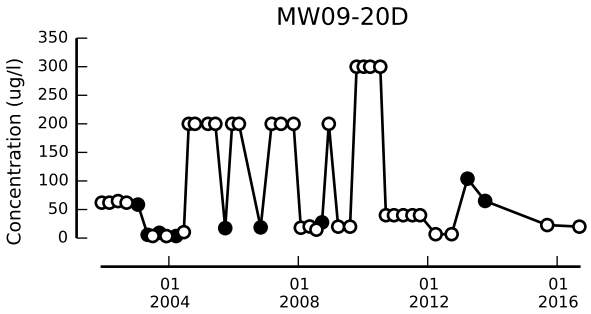


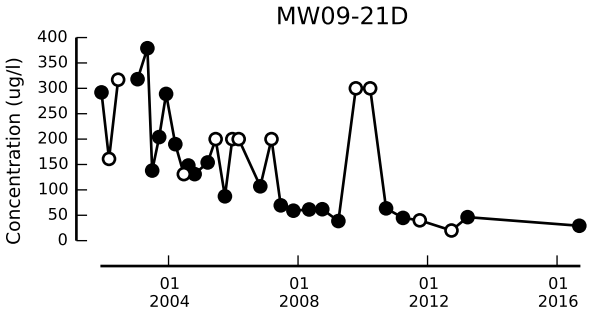


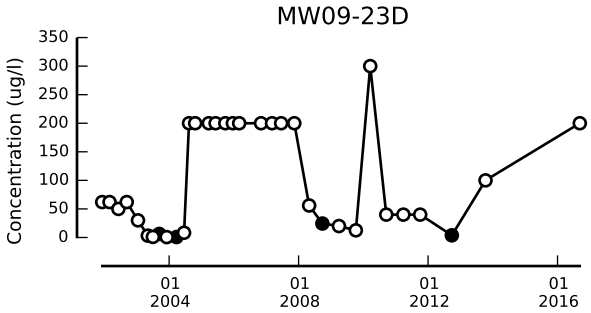


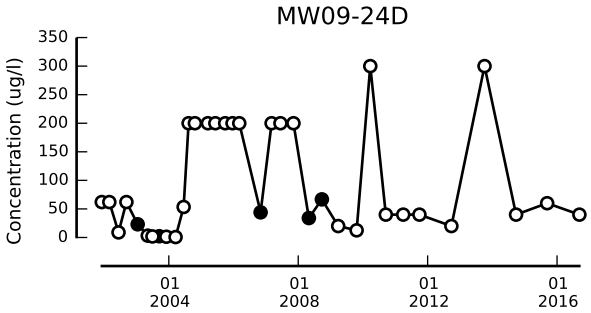


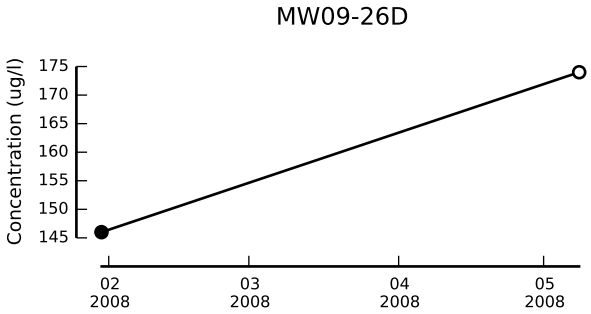






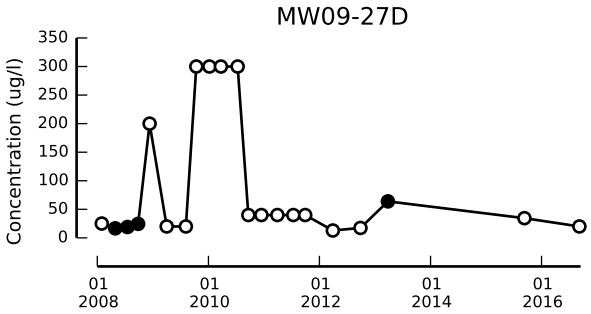






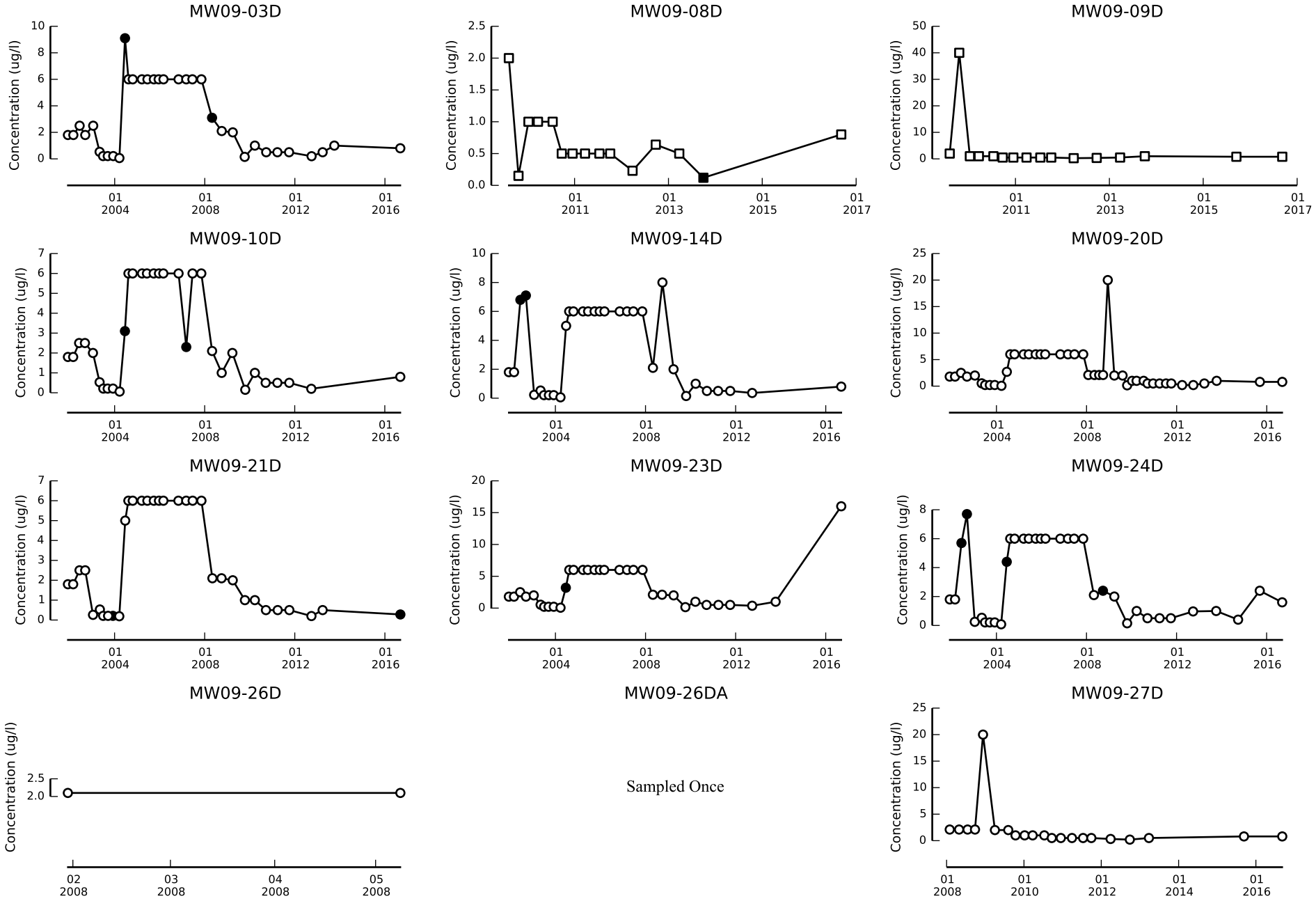
MW09-26DA

Sampled Once



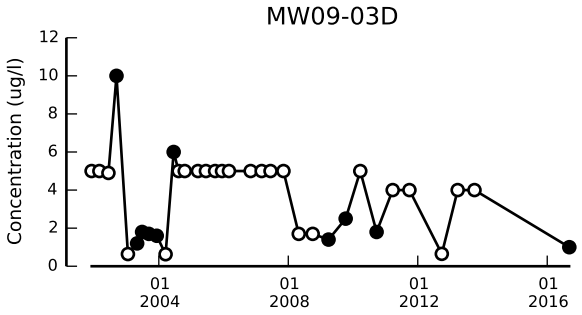
ANTIMONY in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 22

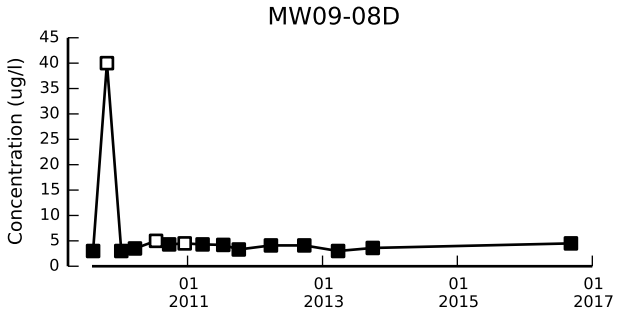
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

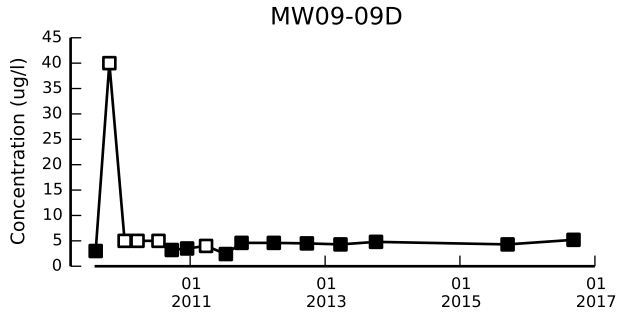


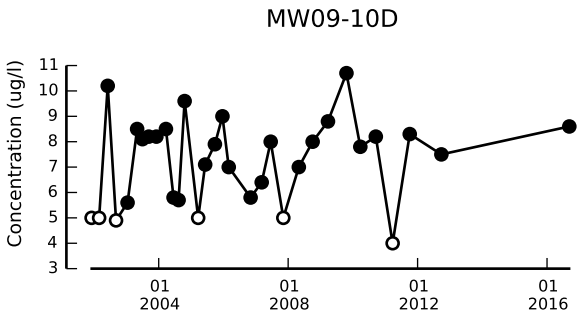
ARSENIC in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 22

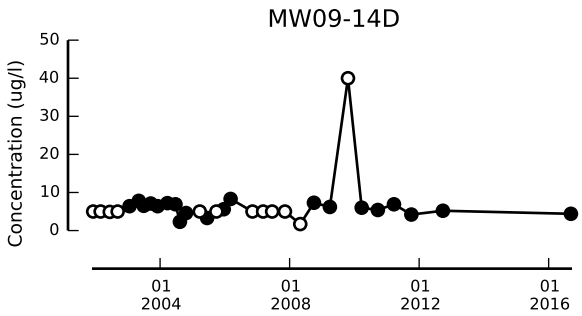
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

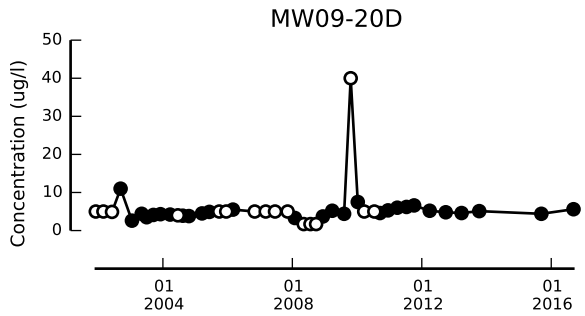


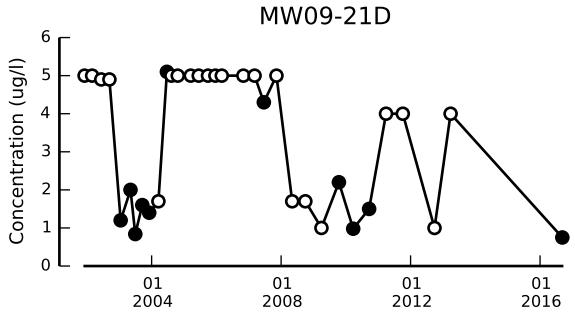


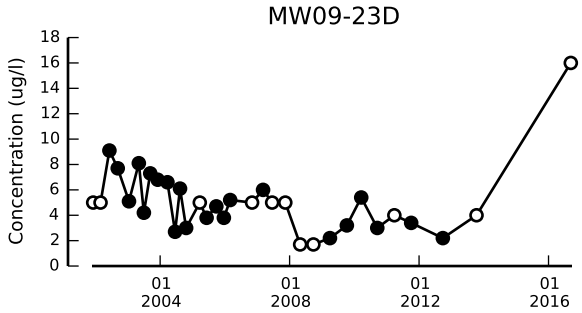


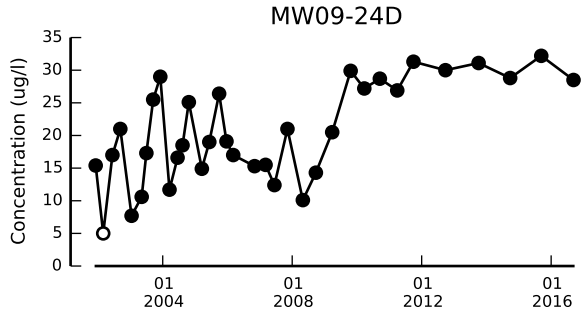


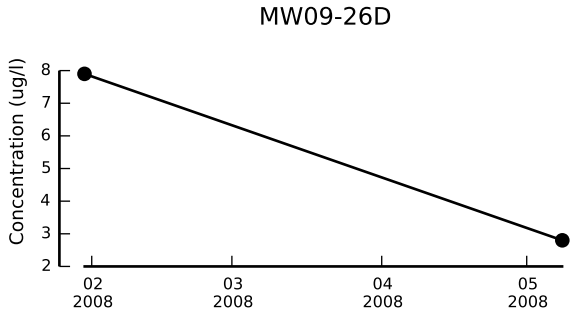






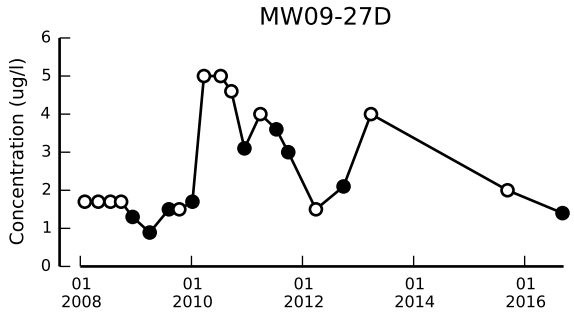






MW09-26DA

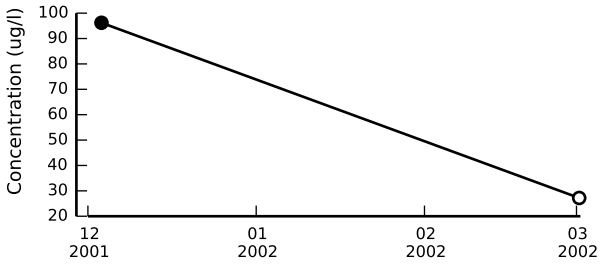
Sampled Once



BARIUM in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D



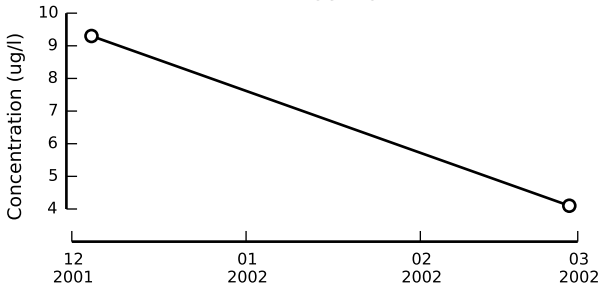
MW09-08D

Not Sampled

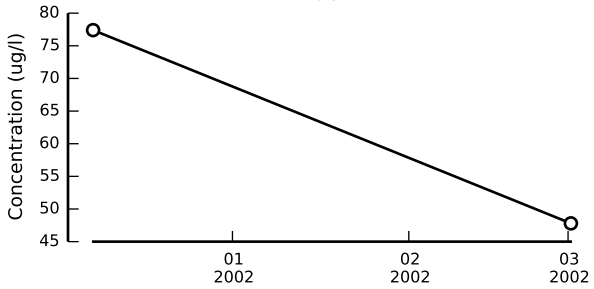
MW09-09D

Not Sampled

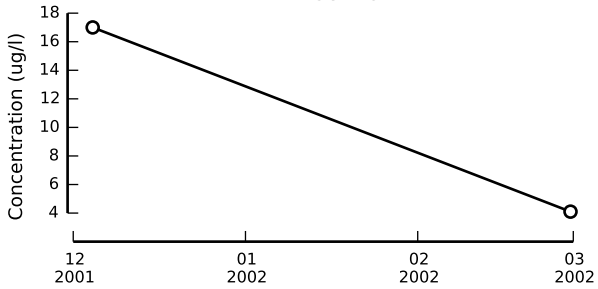
MW09-10D



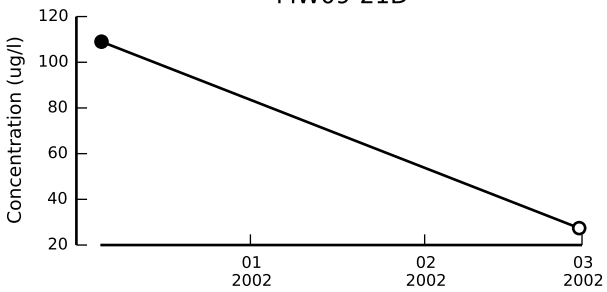
MW09-14D



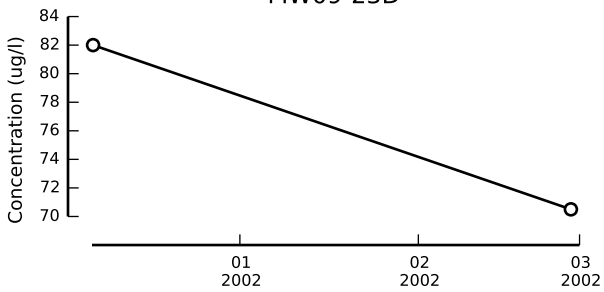
MW09-20D



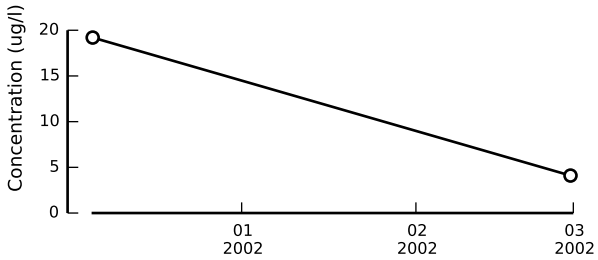
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

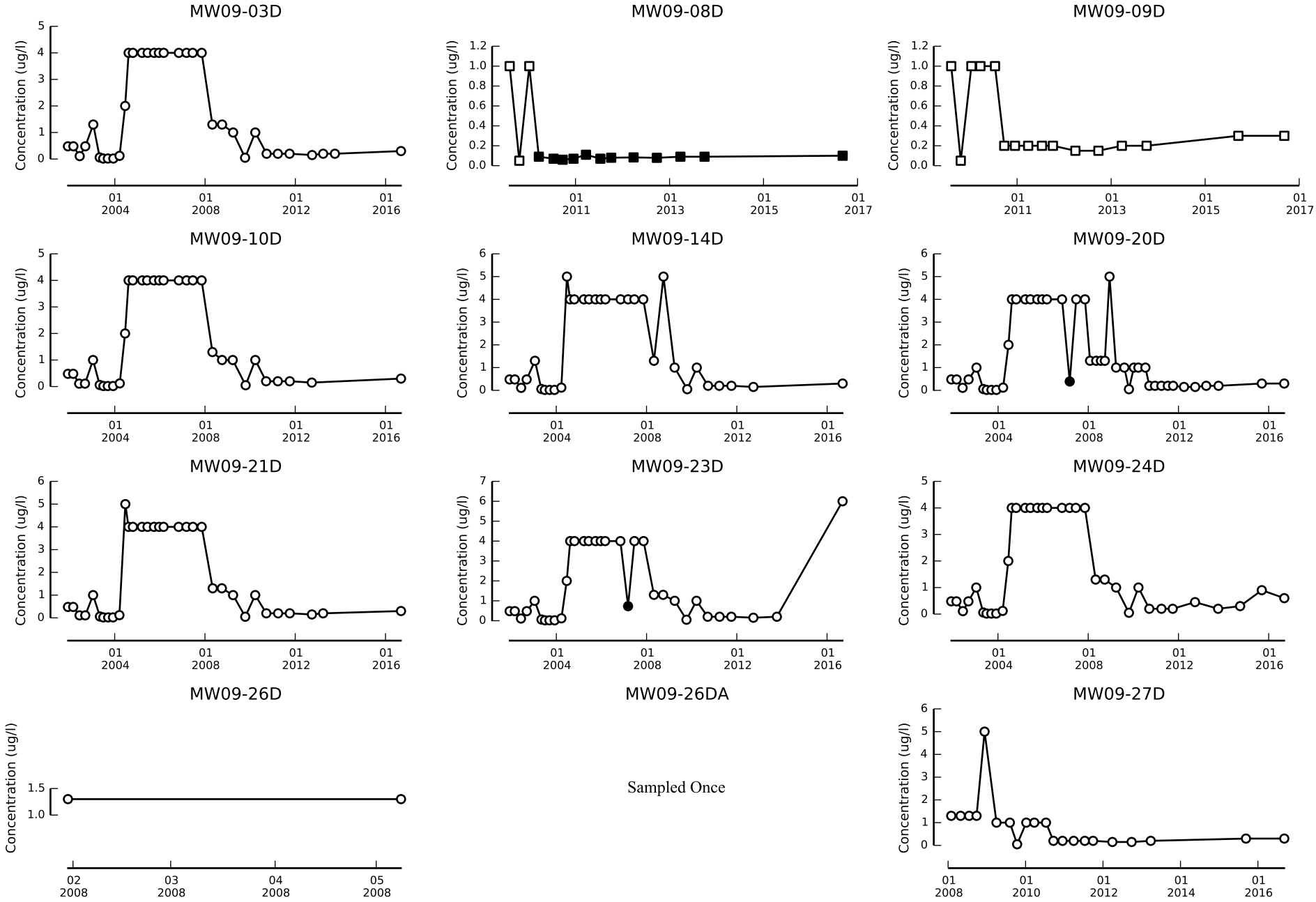
Not Sampled

MW09-27D

Not Sampled

BERYLLIUM in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



CADMIUM in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D

MW09-08D

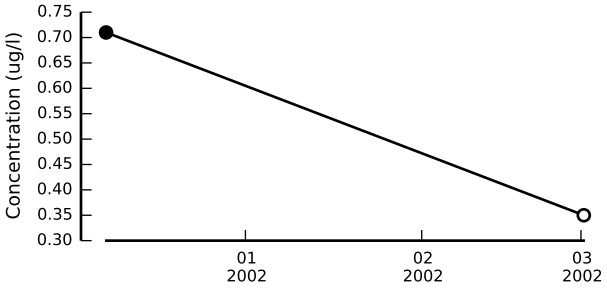
Not Sampled

MW09-09D

Not Sampled

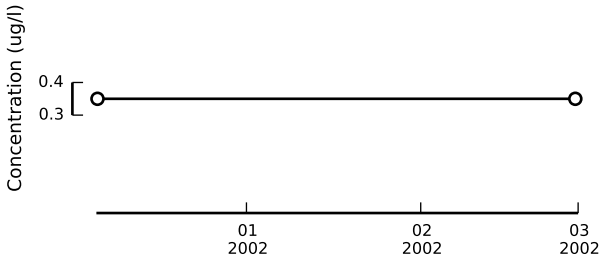
MW09-10D

MW09-14D

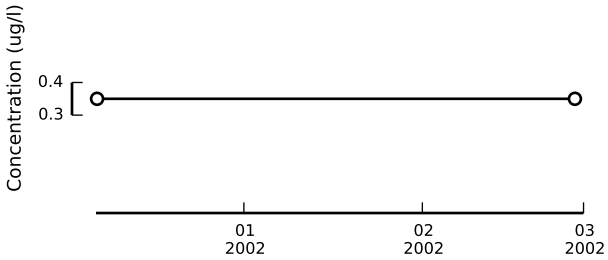


MW09-20D

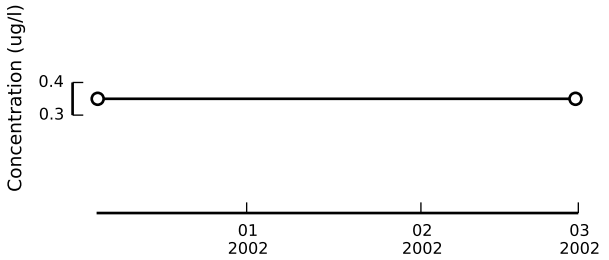
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

Not Sampled

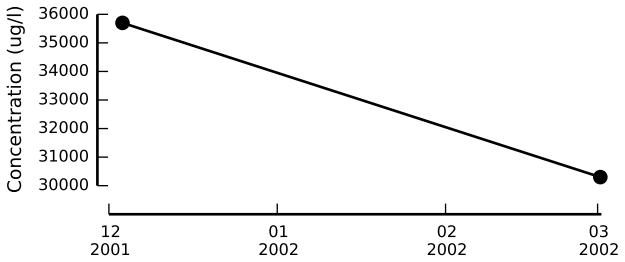
MW09-27D

Not Sampled

CALCIUM in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D



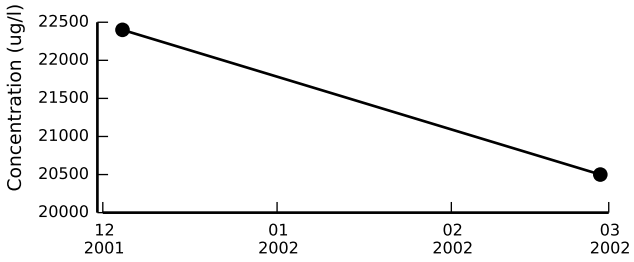
MW09-08D

Not Sampled

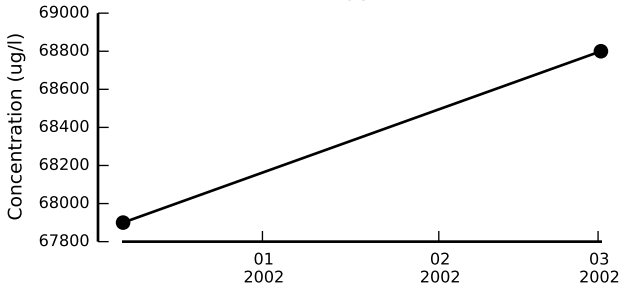
MW09-09D

Not Sampled

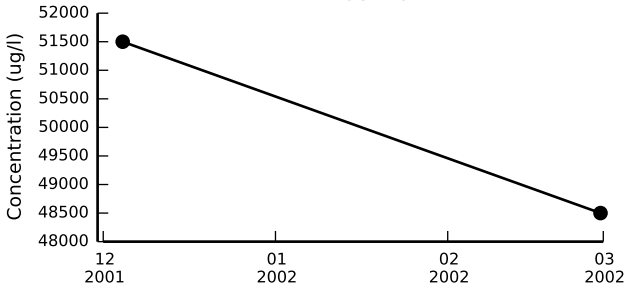
MW09-10D



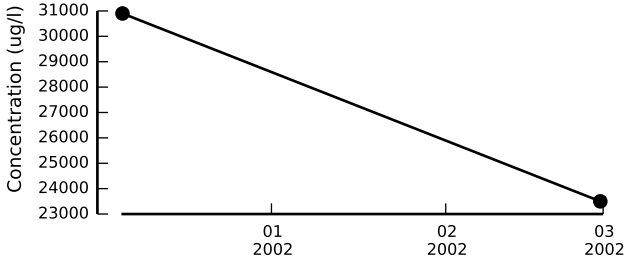
MW09-14D



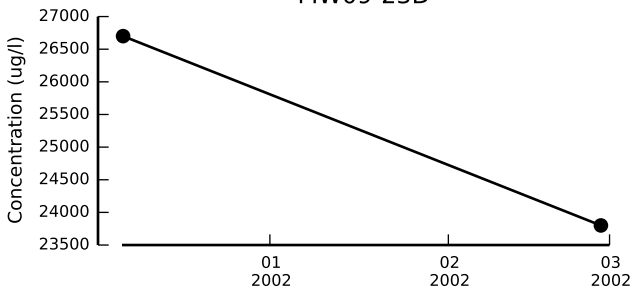
MW09-20D



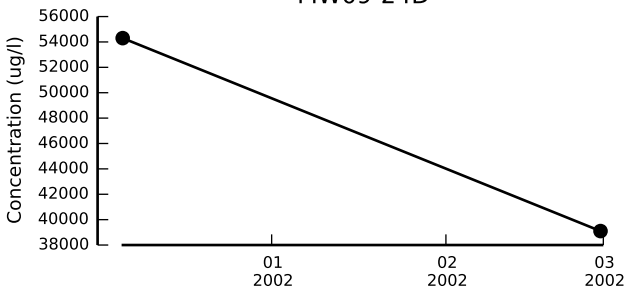
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

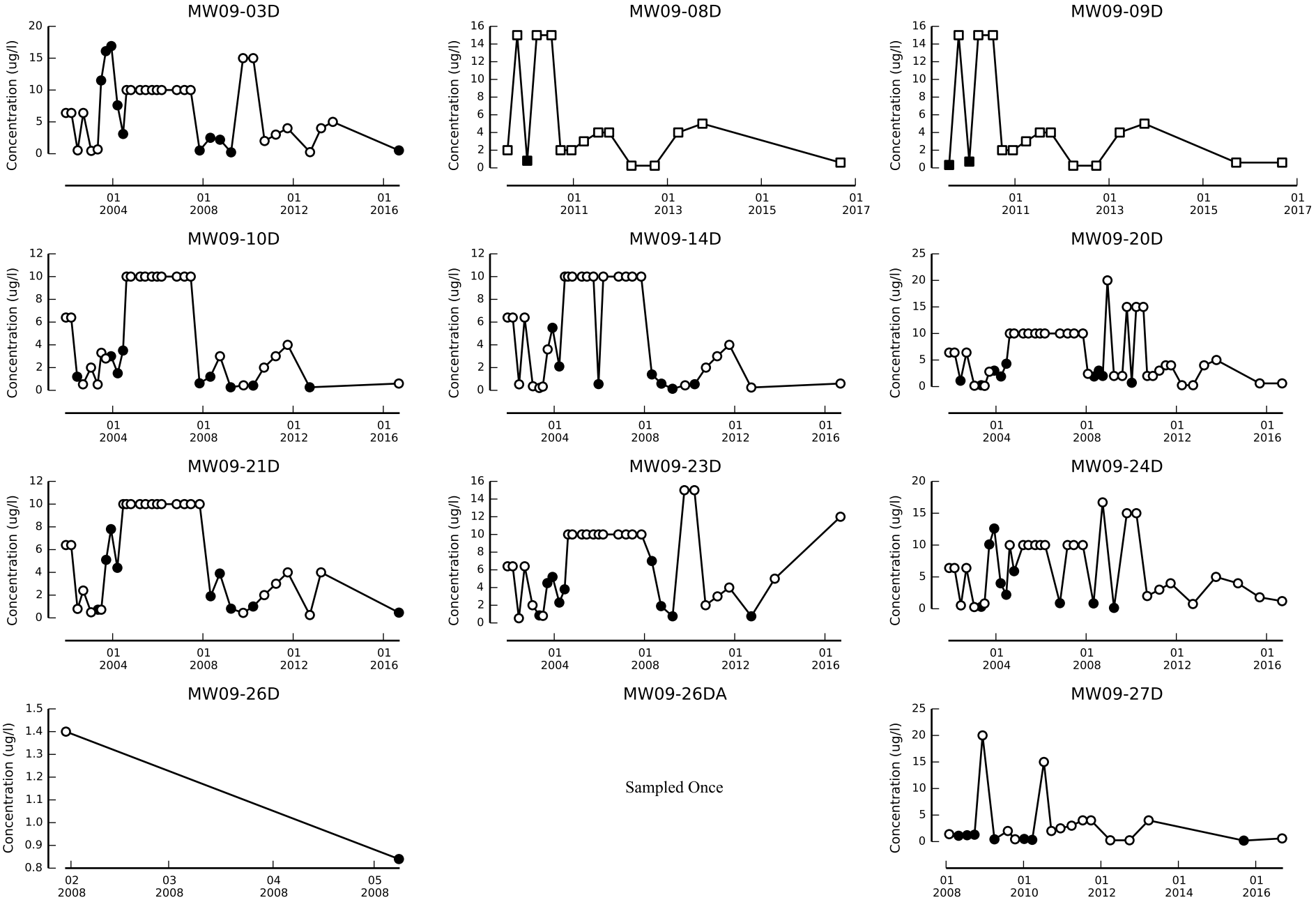
Not Sampled

MW09-27D

Not Sampled

CHROMIUM, TOTAL in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



COBALT in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D

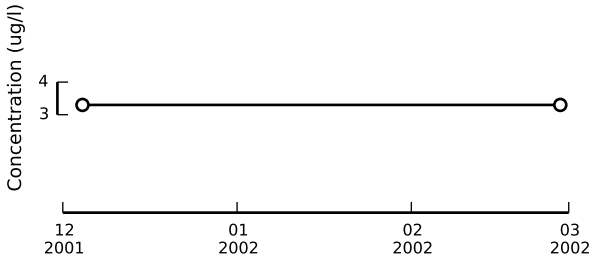
MW09-08D

Not Sampled

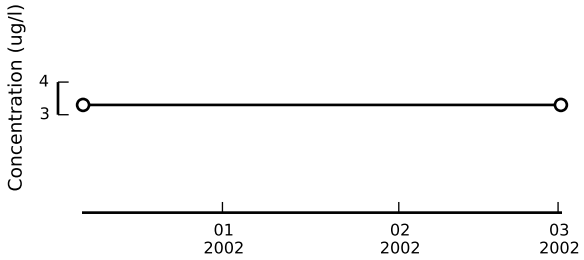
MW09-09D

Not Sampled

MW09-10D

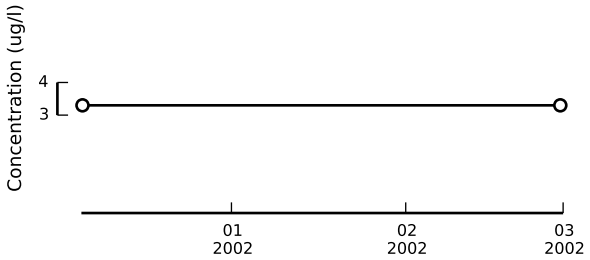


MW09-14D

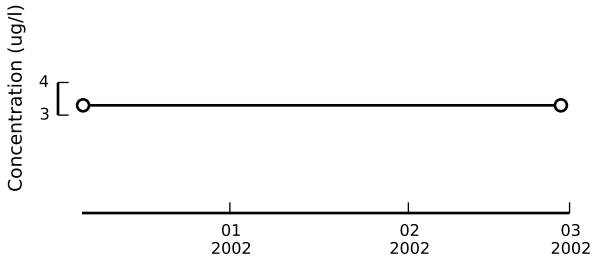


MW09-20D

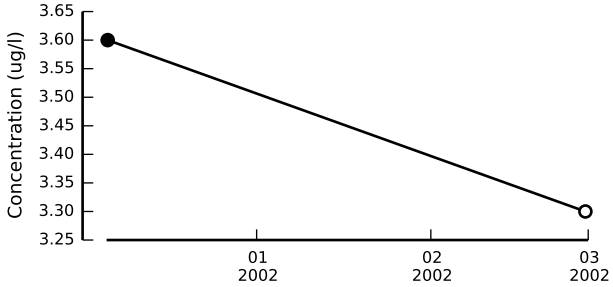
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

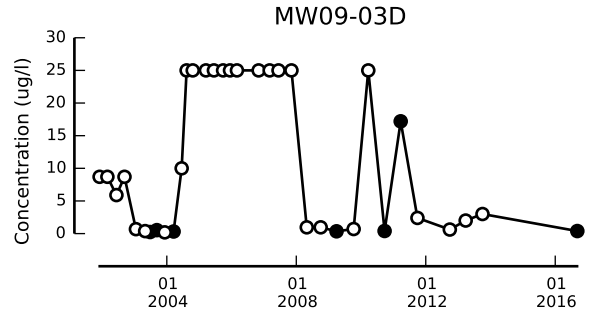
Not Sampled

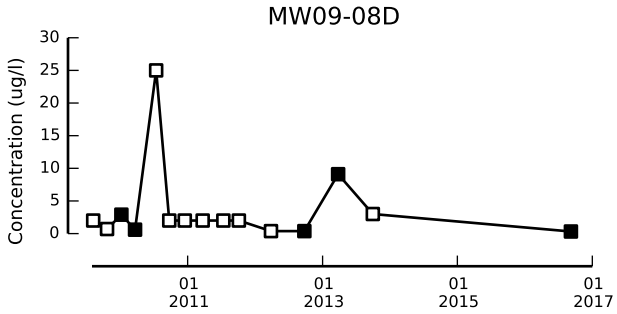
MW09-27D

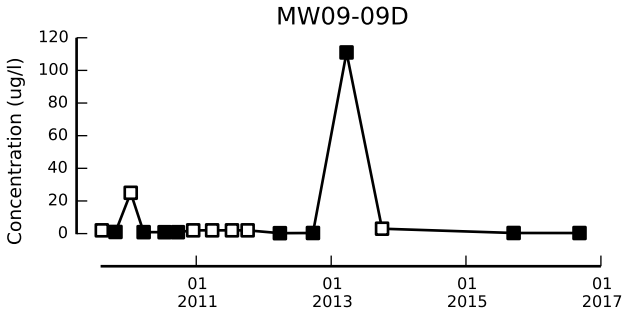
Not Sampled

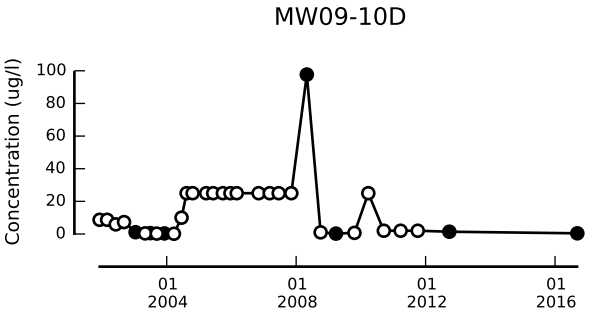
COPPER in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 22

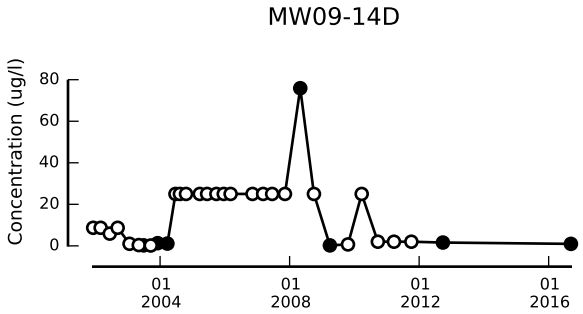
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

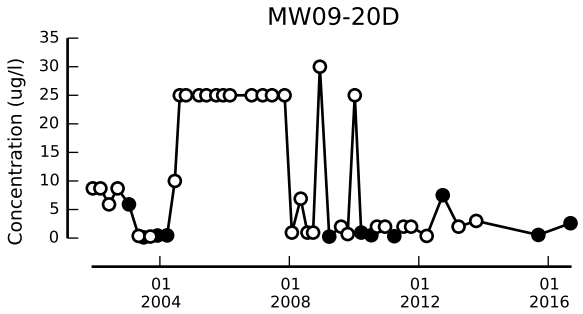


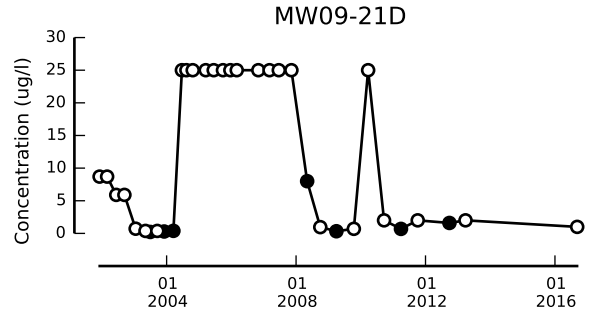


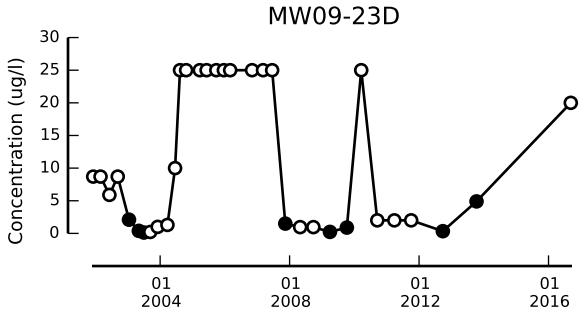


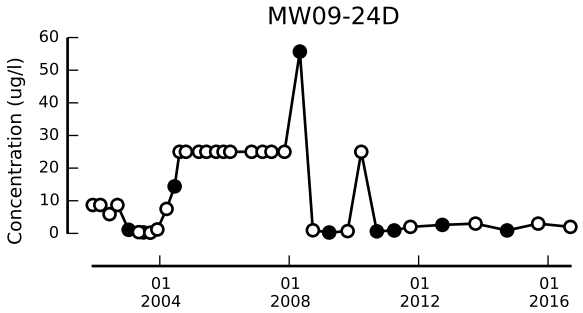


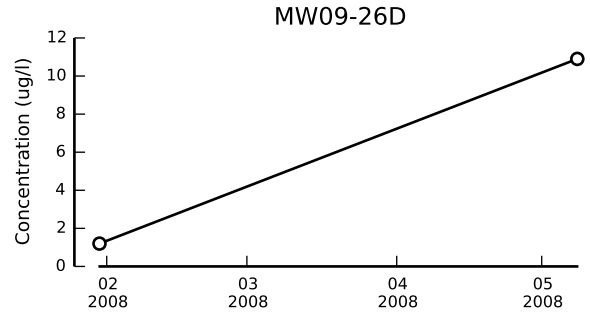






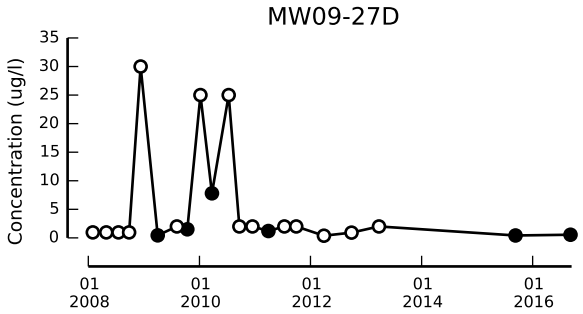






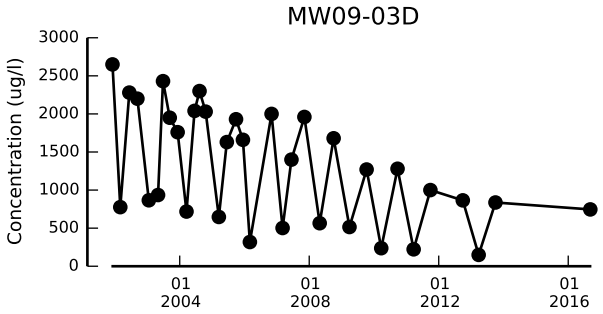
MW09-26DA

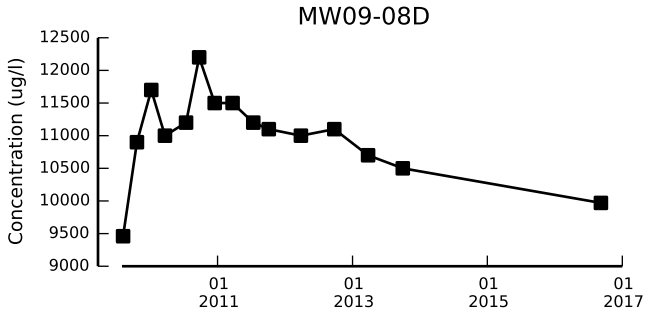
Sampled Once

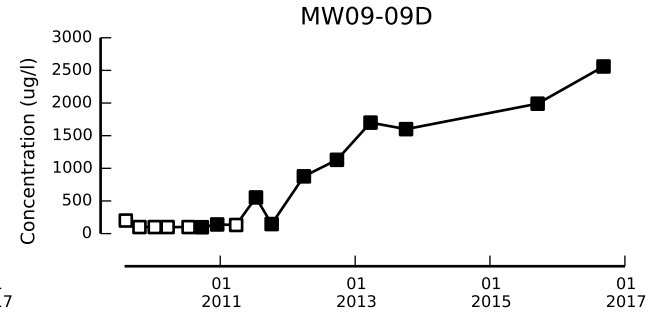


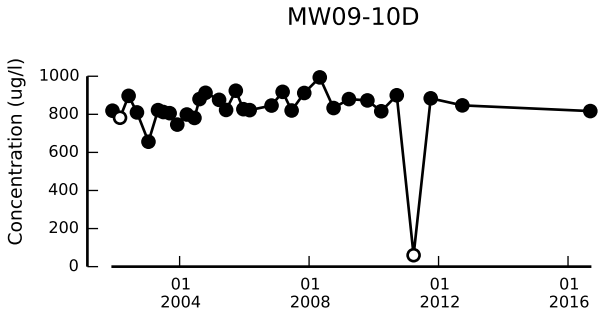
IRON in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 22

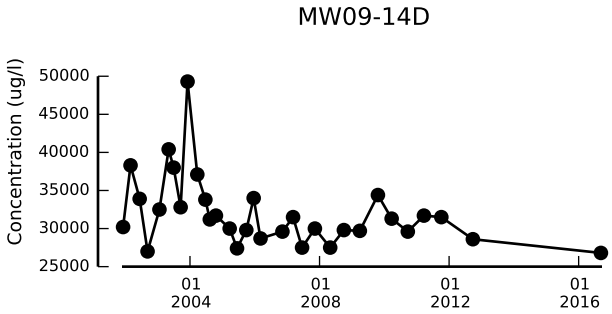
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

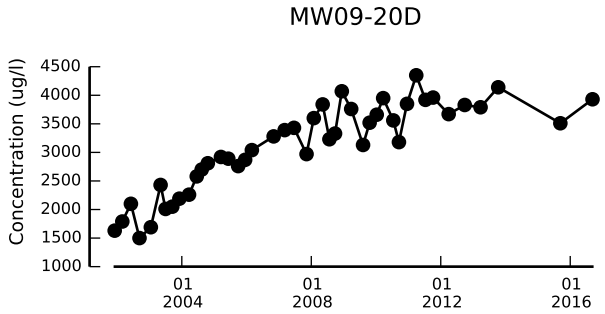


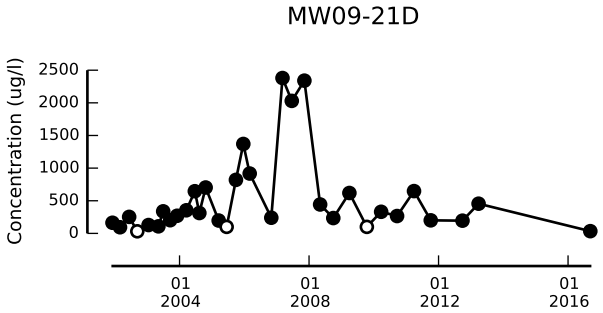


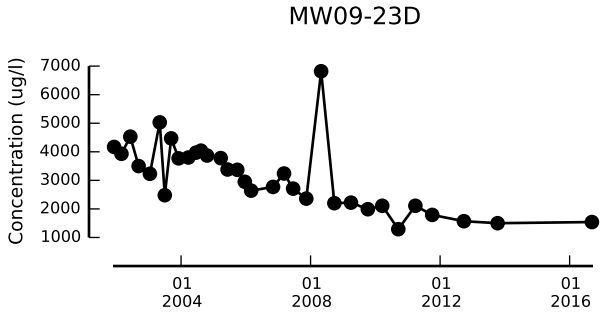


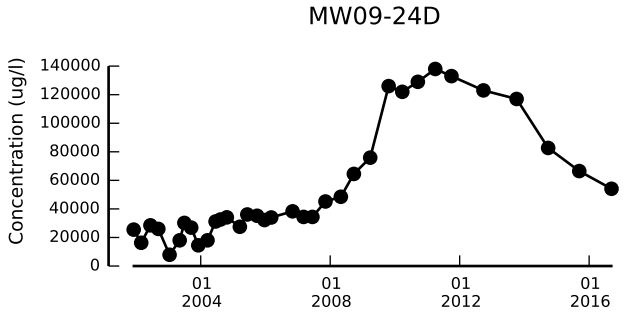


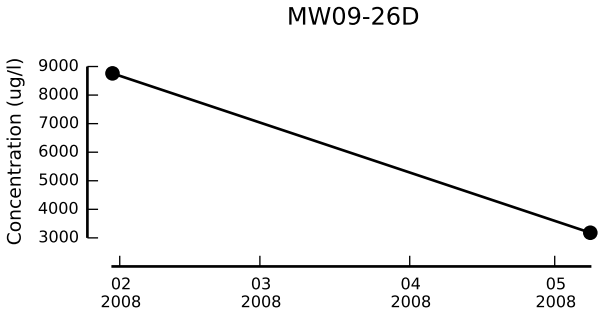






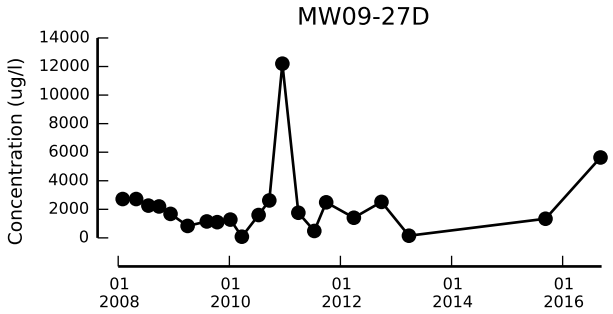






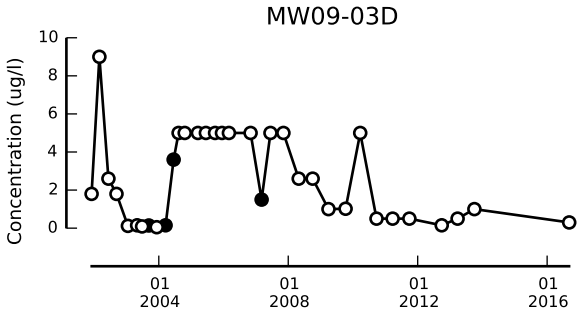
MW09-26DA

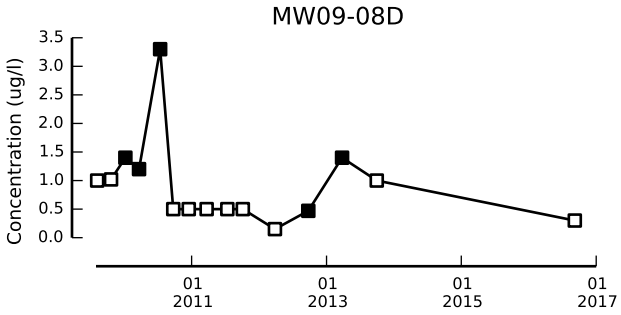
Sampled Once

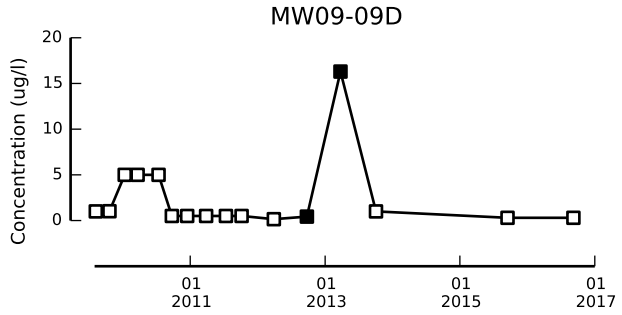


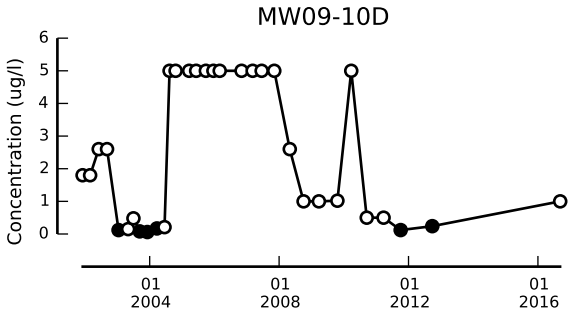
LEAD in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 22

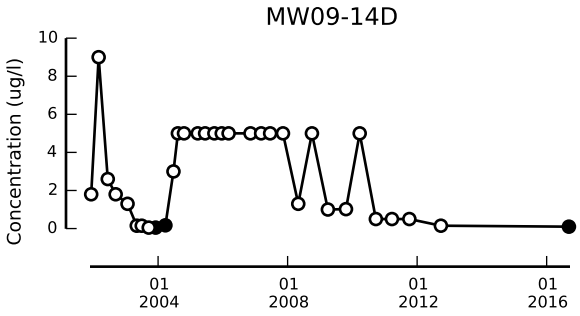
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

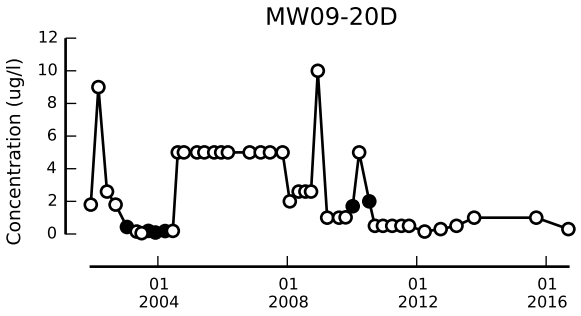


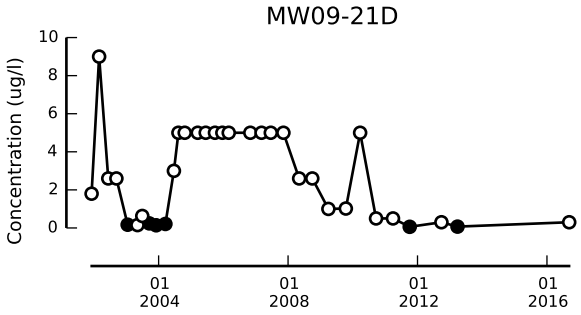


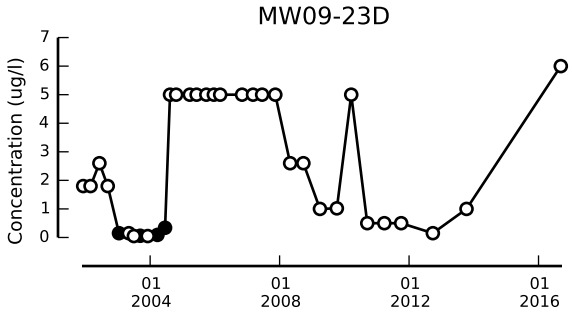


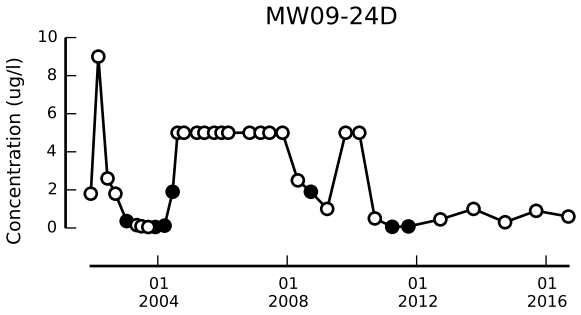


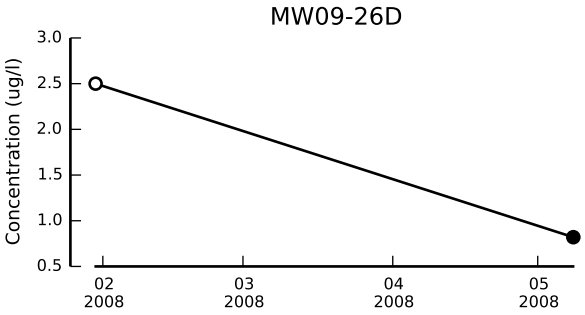






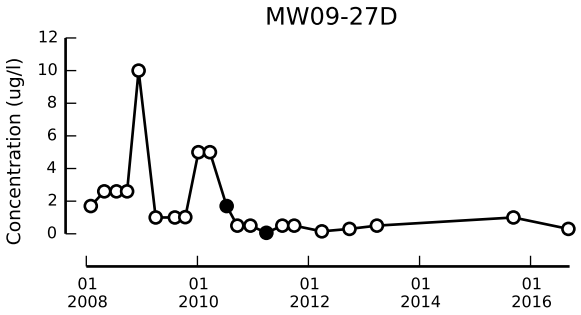






MW09-26DA

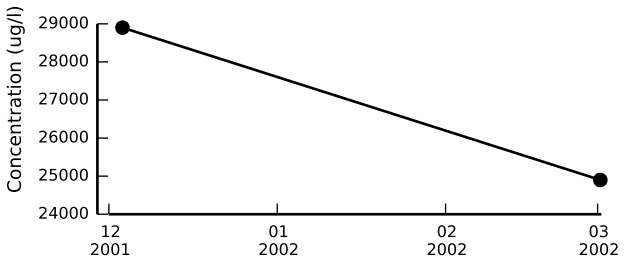
Sampled Once



MAGNESIUM in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D



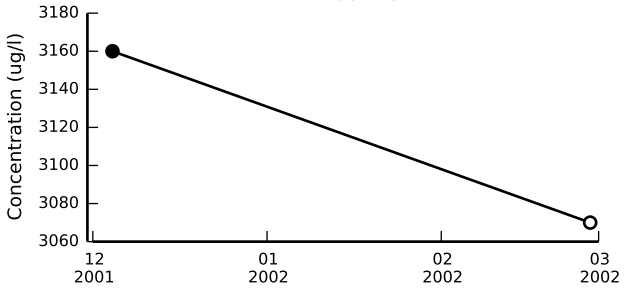
MW09-08D

Not Sampled

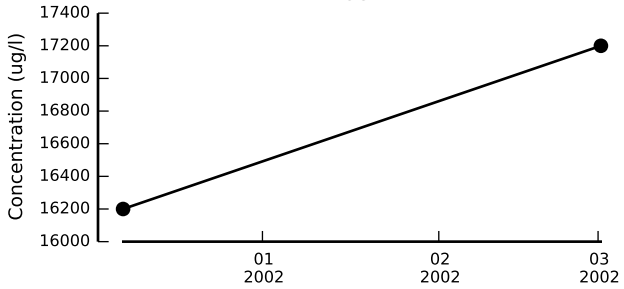
MW09-09D

Not Sampled

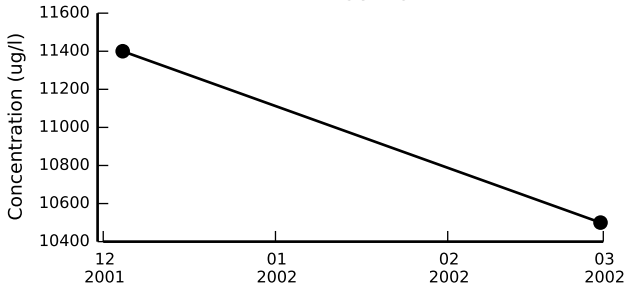
MW09-10D



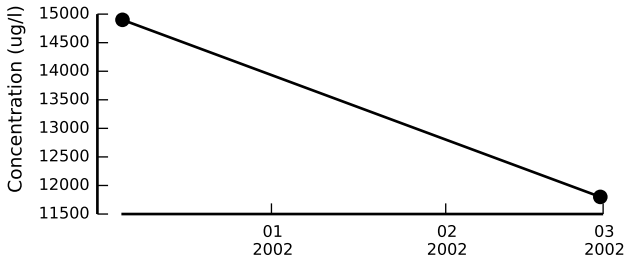
MW09-14D



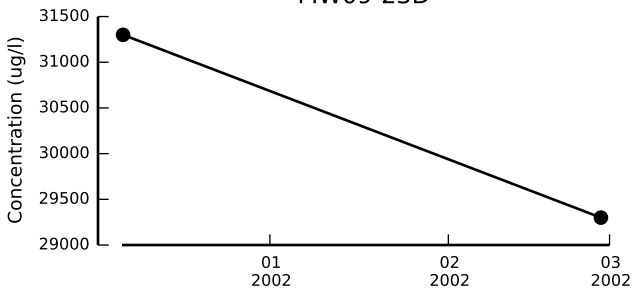
MW09-20D



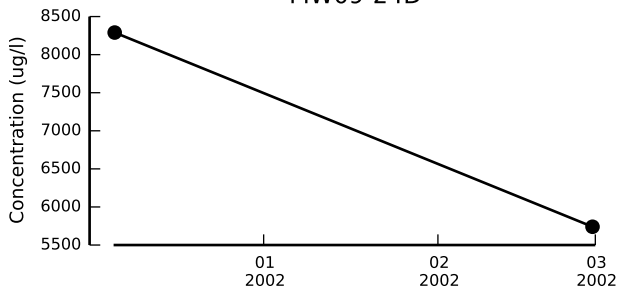
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

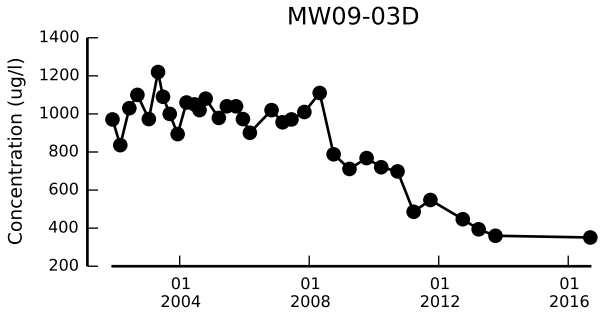
Not Sampled

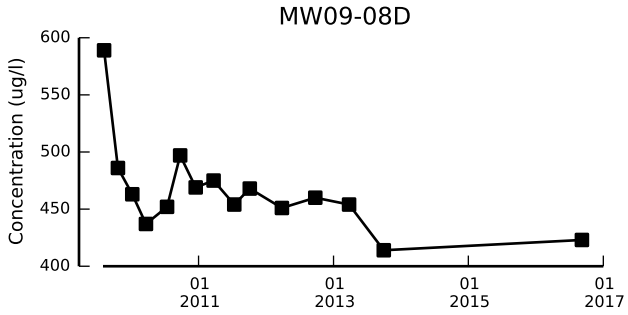
MW09-27D

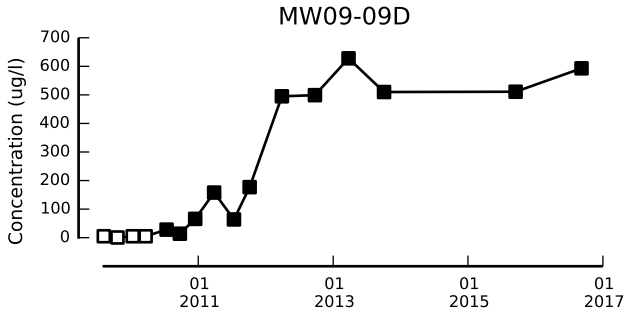
Not Sampled

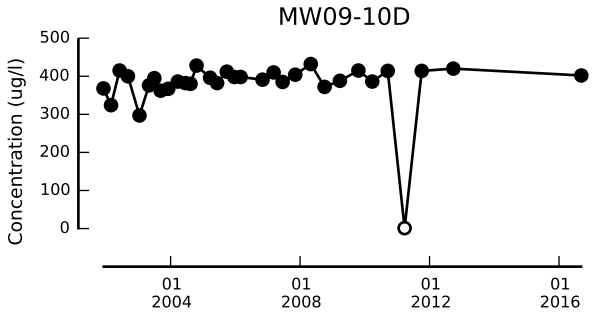
MANGANESE in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 22

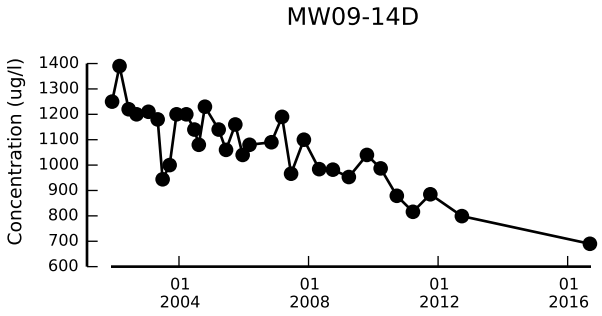
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

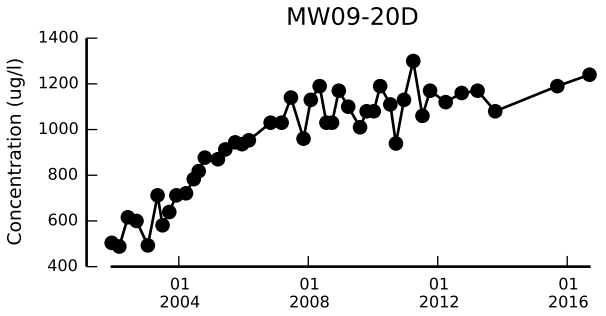


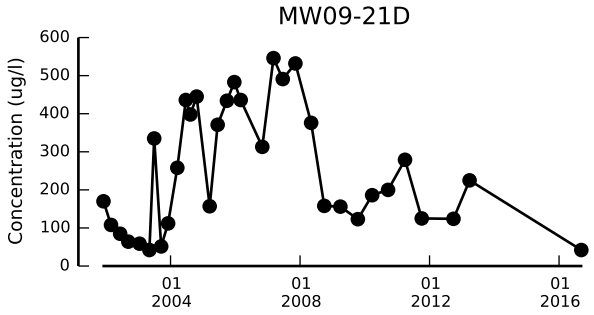


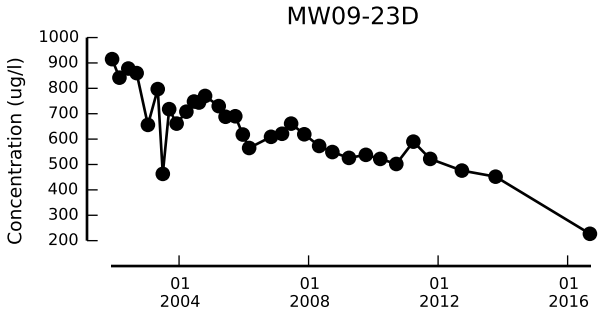


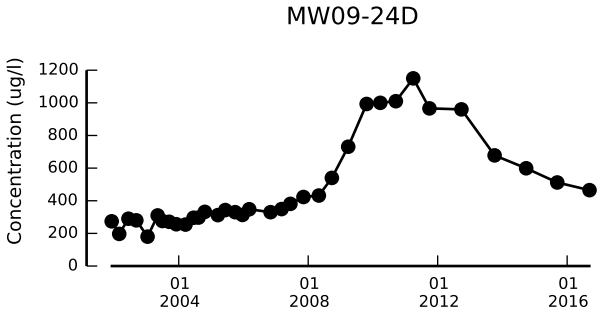


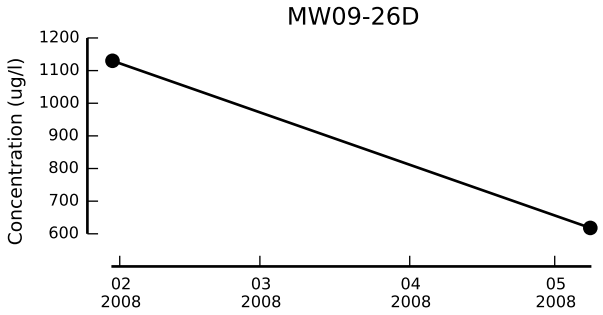






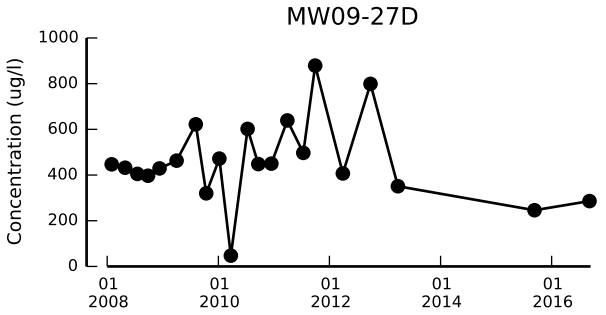






MW09-26DA

Sampled Once

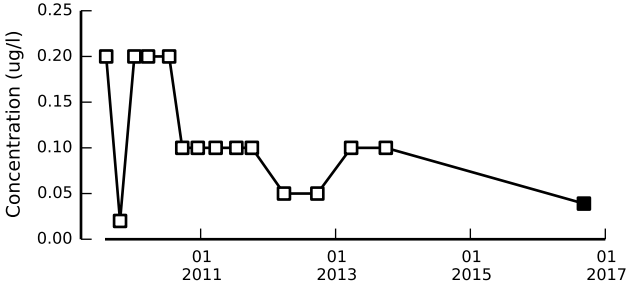


MERCURY in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 22

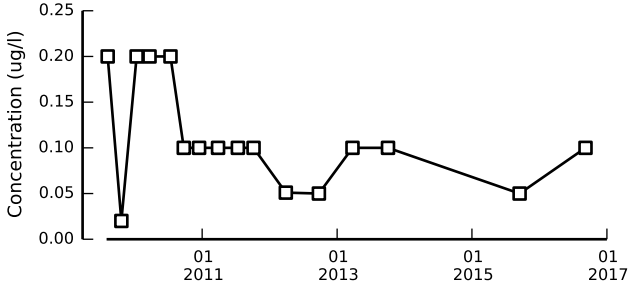
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

MW09-03D

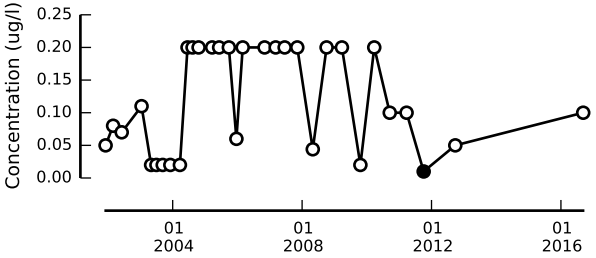
MW09-08D



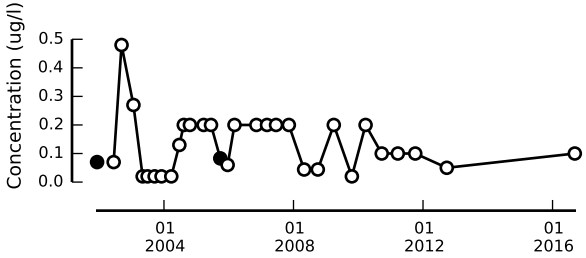
MW09-09D



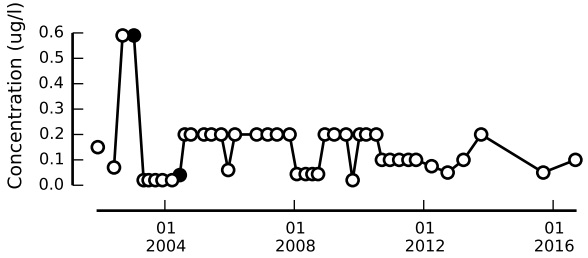
MW09-10D



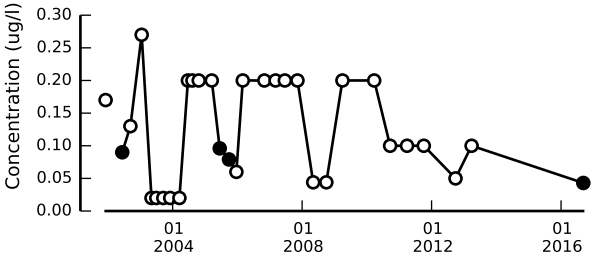
MW09-14D



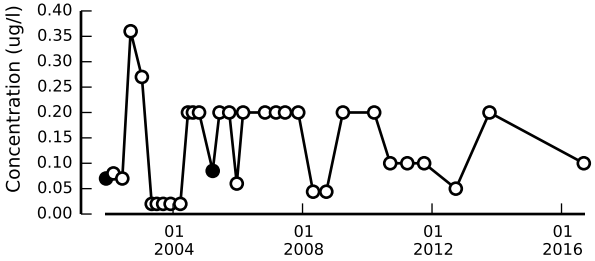
MW09-20D



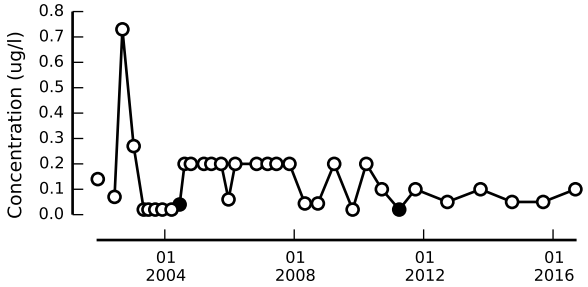
MW09-21D



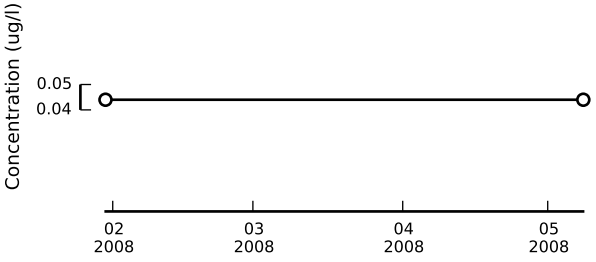
MW09-23D



MW09-24D



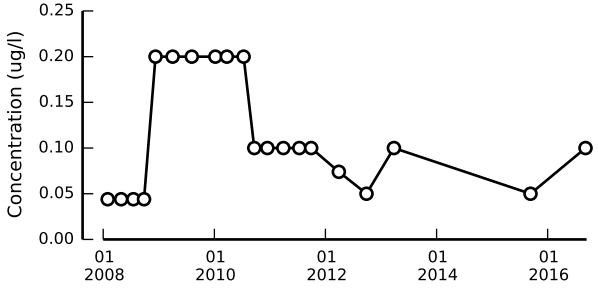
MW09-26D



MW09-26DA

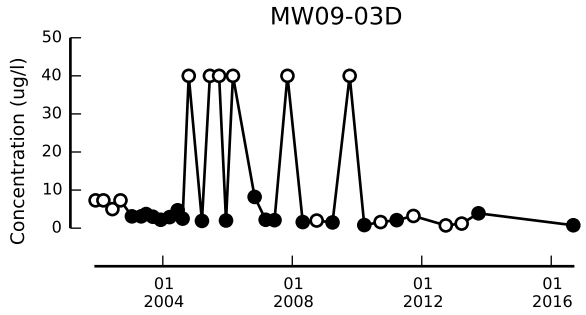
Sampled Once

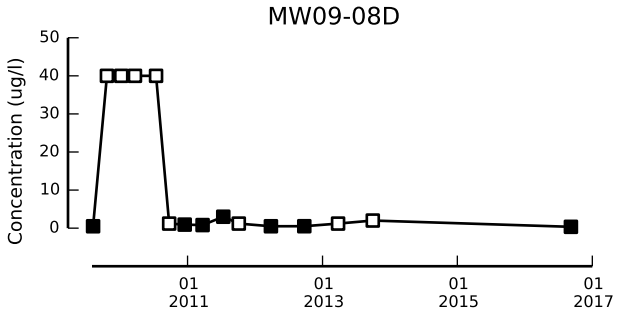
MW09-27D

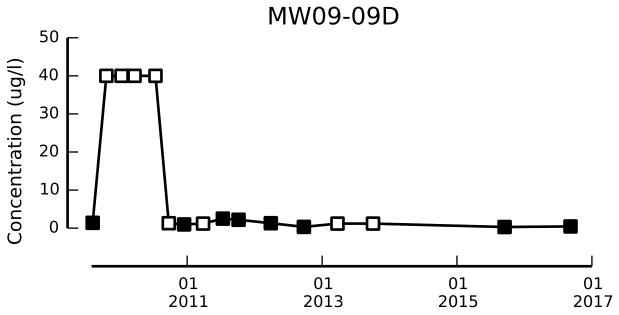


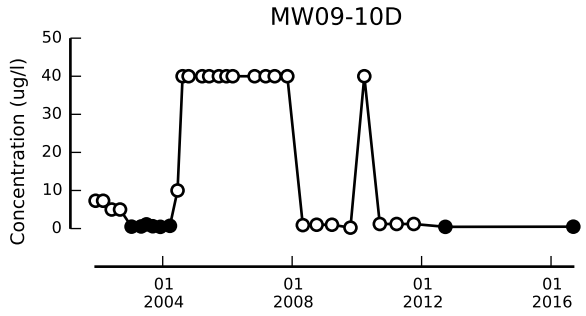
NICKEL in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 22

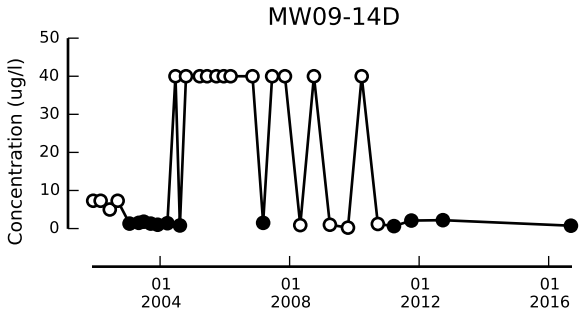
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

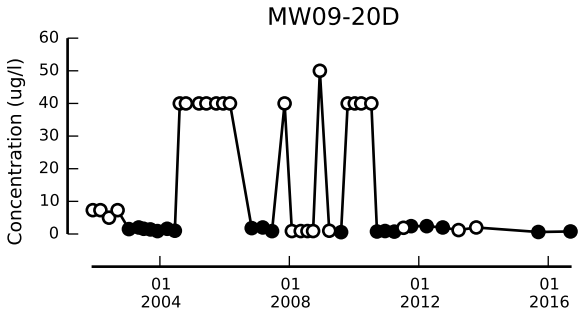


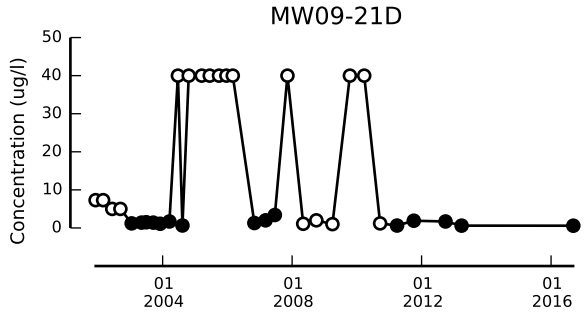


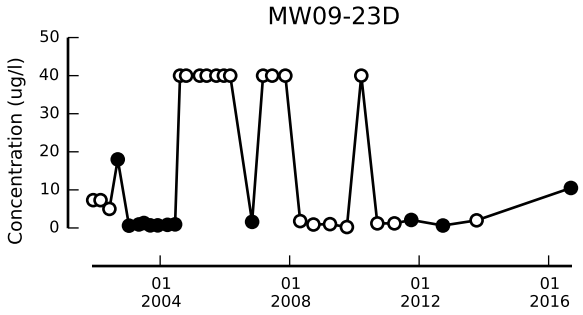


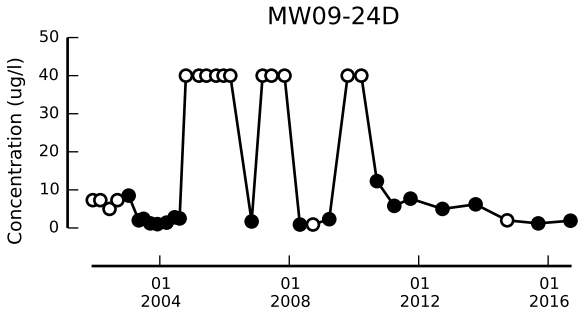


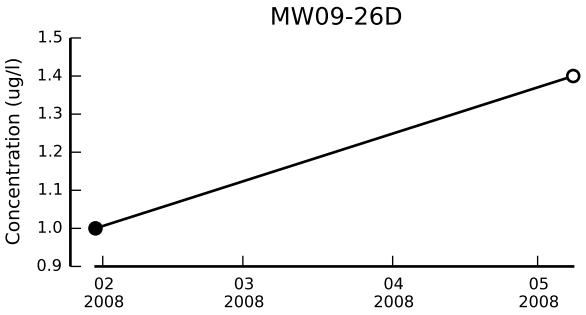






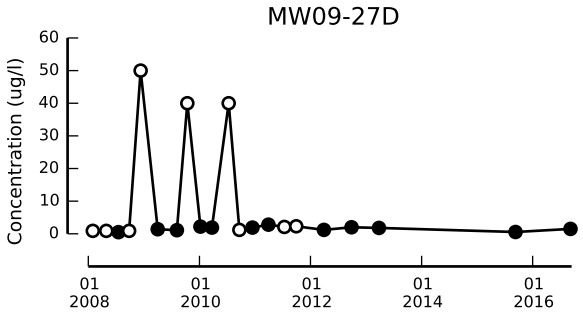






MW09-26DA

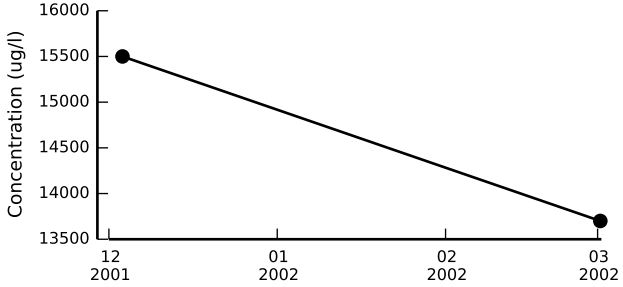
Sampled Once



POTASSIUM in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D



MW09-08D

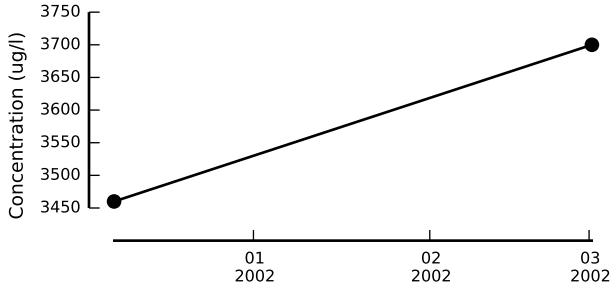
Not Sampled

MW09-09D

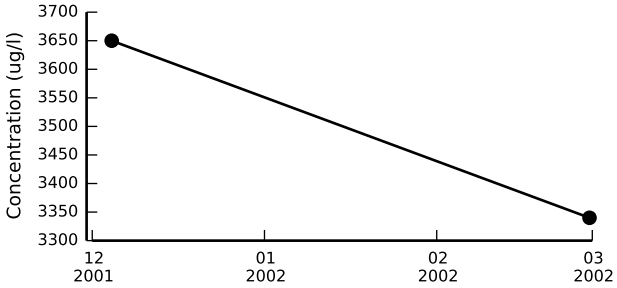
Not Sampled

MW09-10D

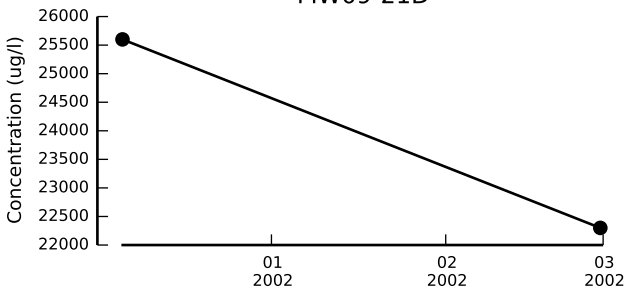
MW09-14D



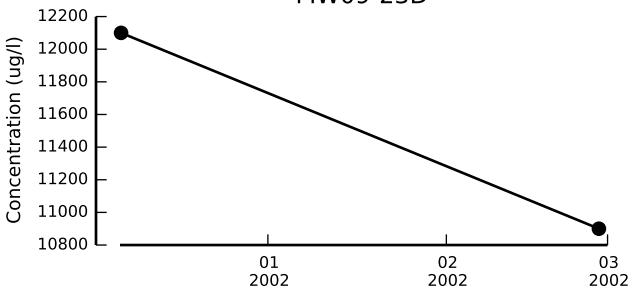
MW09-20D



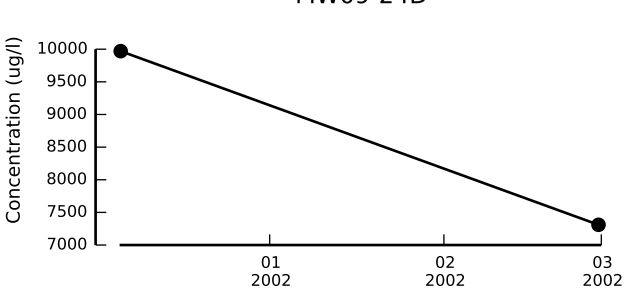
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

Not Sampled

MW09-27D

Not Sampled

SELENIUM in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D

MW09-08D

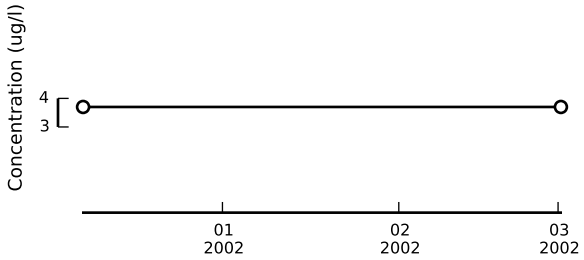
Not Sampled

MW09-09D

Not Sampled

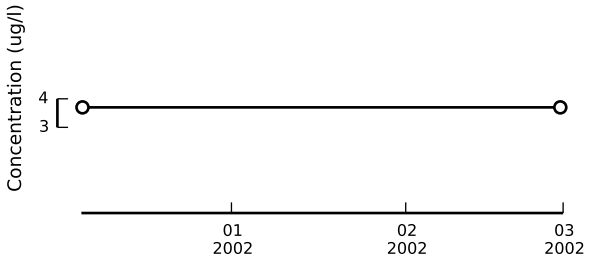
MW09-10D

MW09-14D

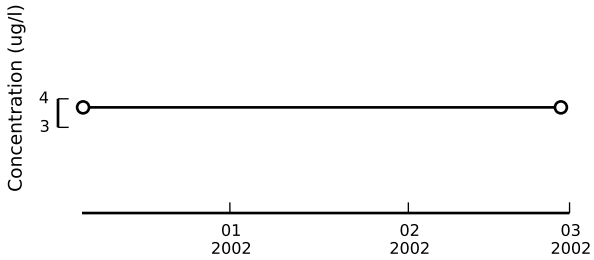


MW09-20D

MW09-21D



MW09-23D



MW09-24D

MW09-26D

Not Sampled

MW09-26DA

Not Sampled

MW09-27D

Not Sampled

SILVER in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D

MW09-08D

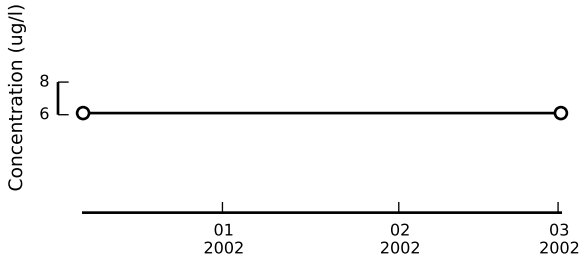
Not Sampled

MW09-09D

Not Sampled

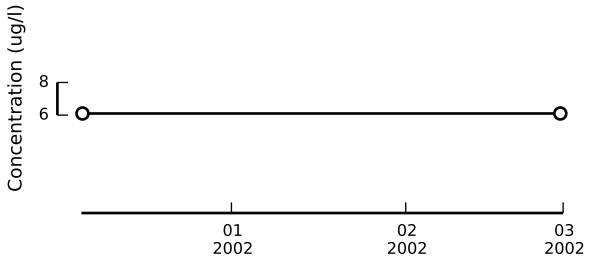
MW09-10D

MW09-14D



MW09-20D

MW09-21D



MW09-23D

MW09-24D

MW09-26D

Not Sampled

MW09-26DA

Not Sampled

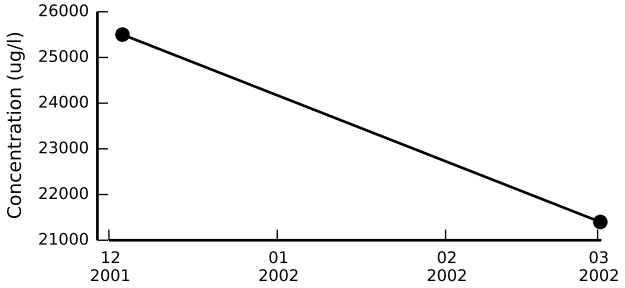
MW09-27D

Not Sampled

SODIUM in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D



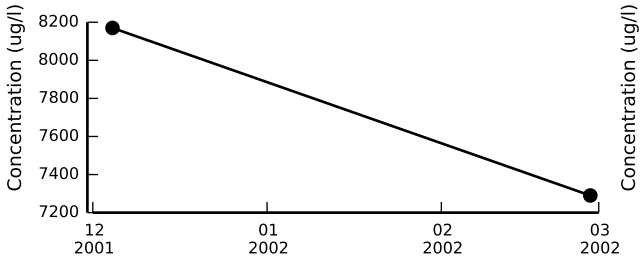
MW09-08D

Not Sampled

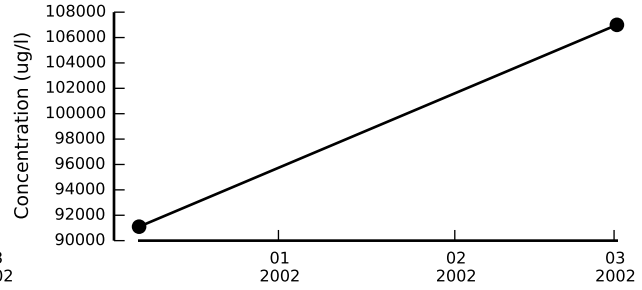
MW09-09D

Not Sampled

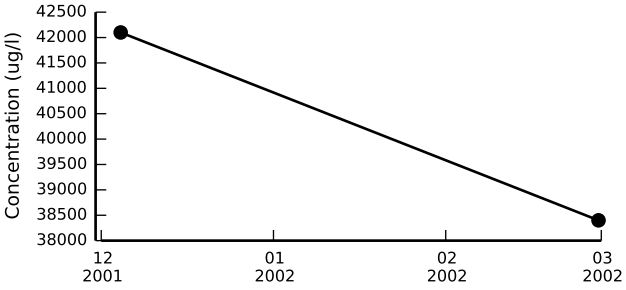
MW09-10D



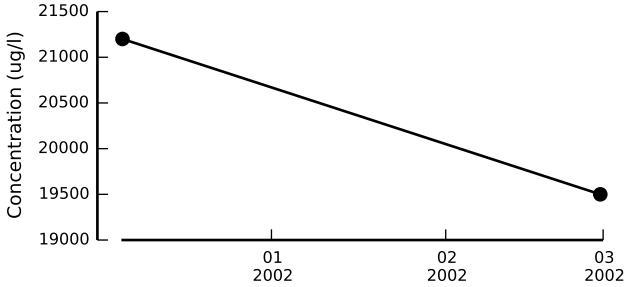
MW09-14D



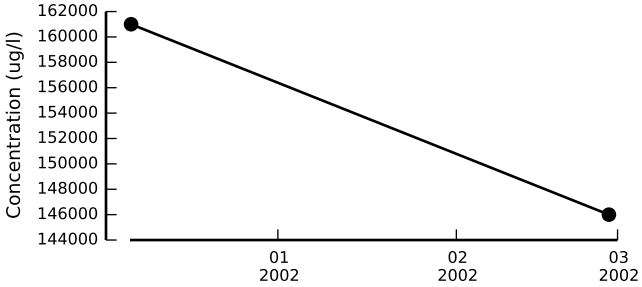
MW09-20D



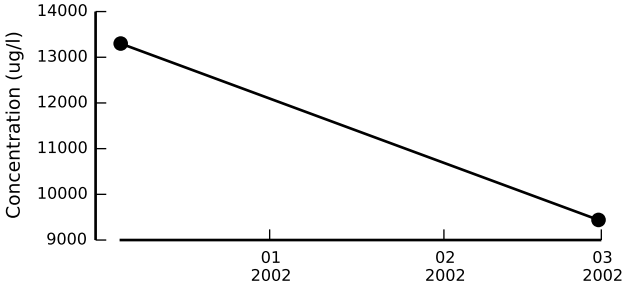
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

Not Sampled

MW09-27D

Not Sampled

VANADIUM in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D

MW09-08D

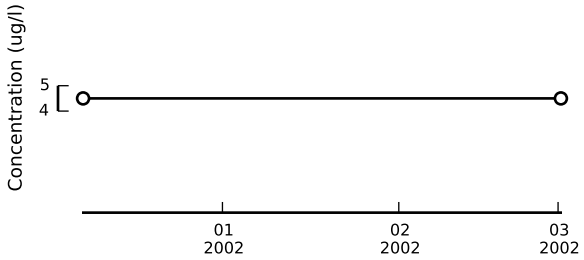
Not Sampled

MW09-09D

Not Sampled

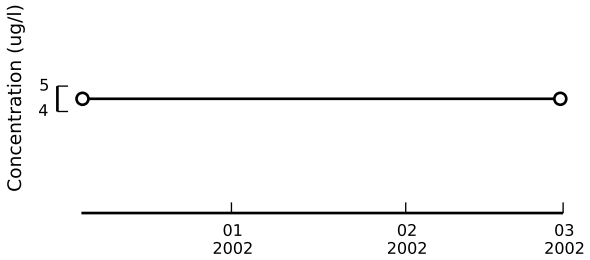
MW09-10D

MW09-14D

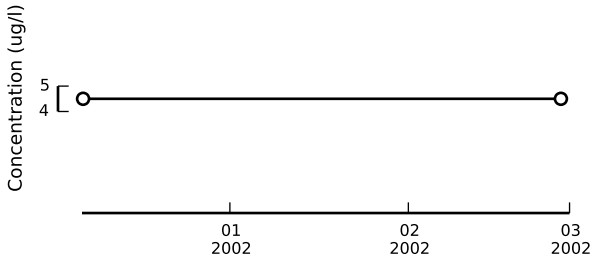


MW09-20D

MW09-21D



MW09-23D



MW09-24D

MW09-26D

Not Sampled

MW09-26DA

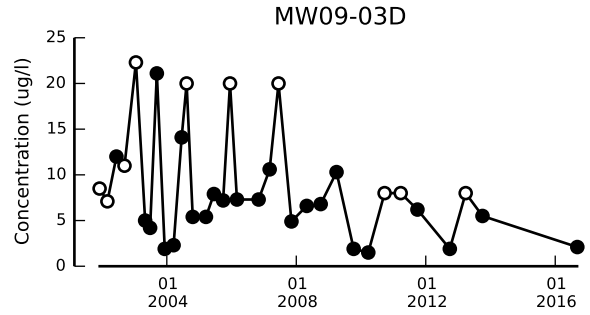
Not Sampled

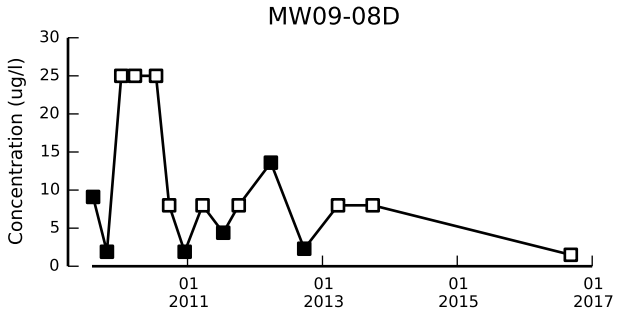
MW09-27D

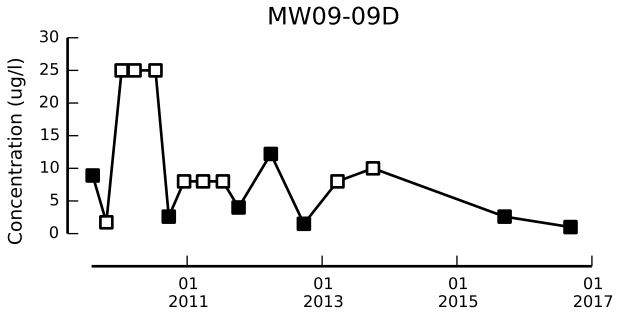
Not Sampled

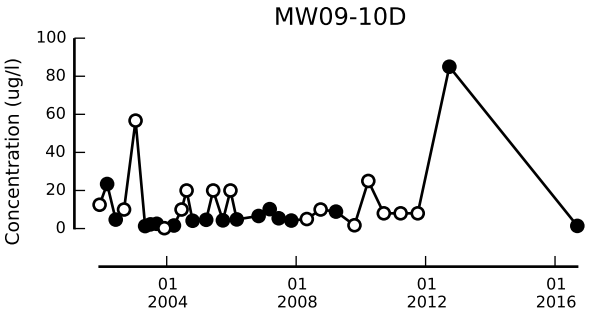
ZINC in Groundwater, Deep Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 22

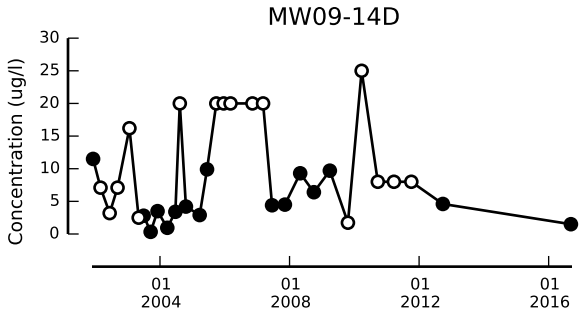
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

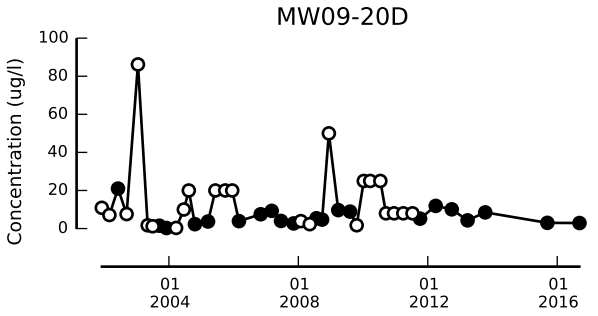


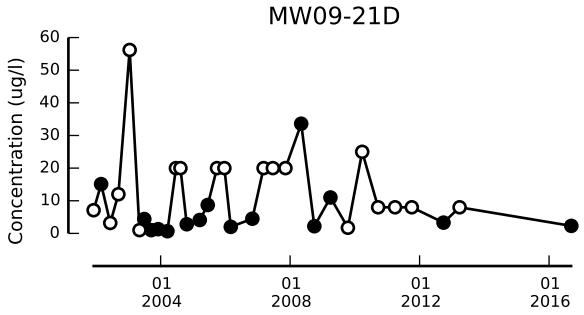


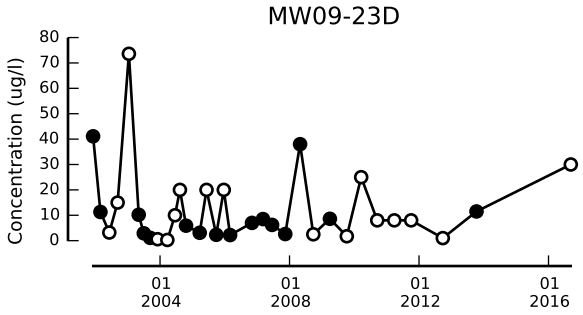


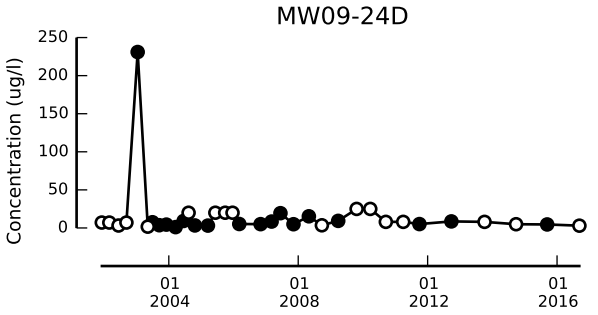


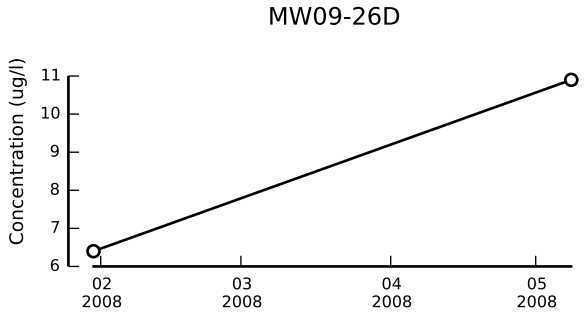






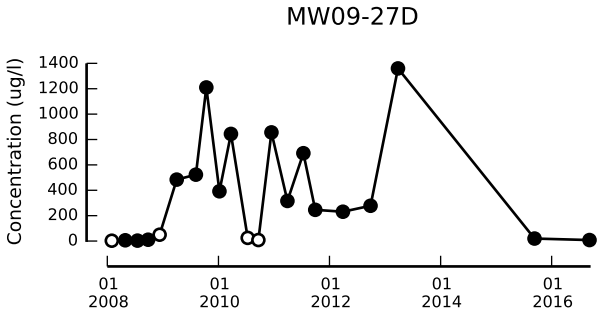






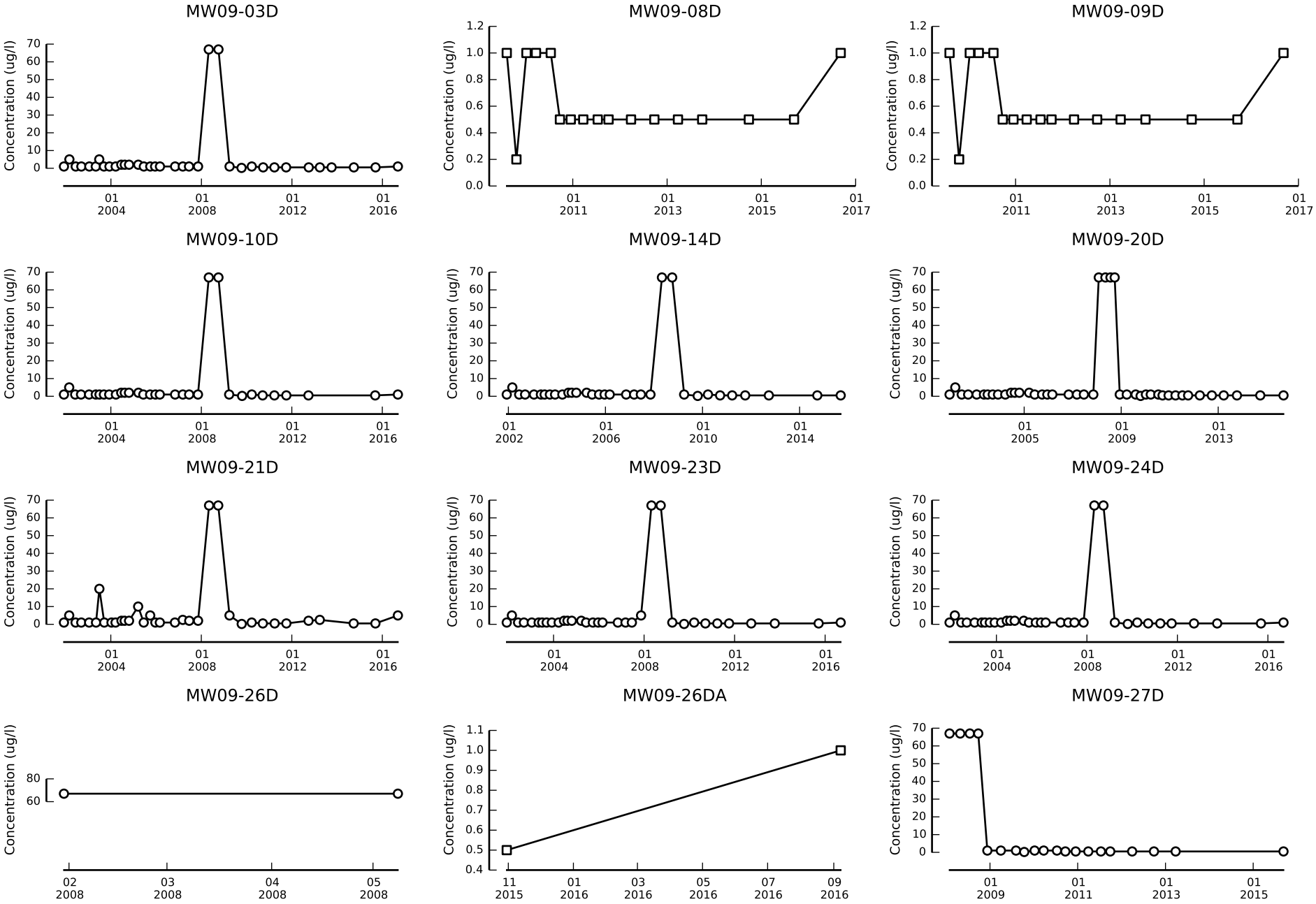
MW09-26DA

Sampled Once



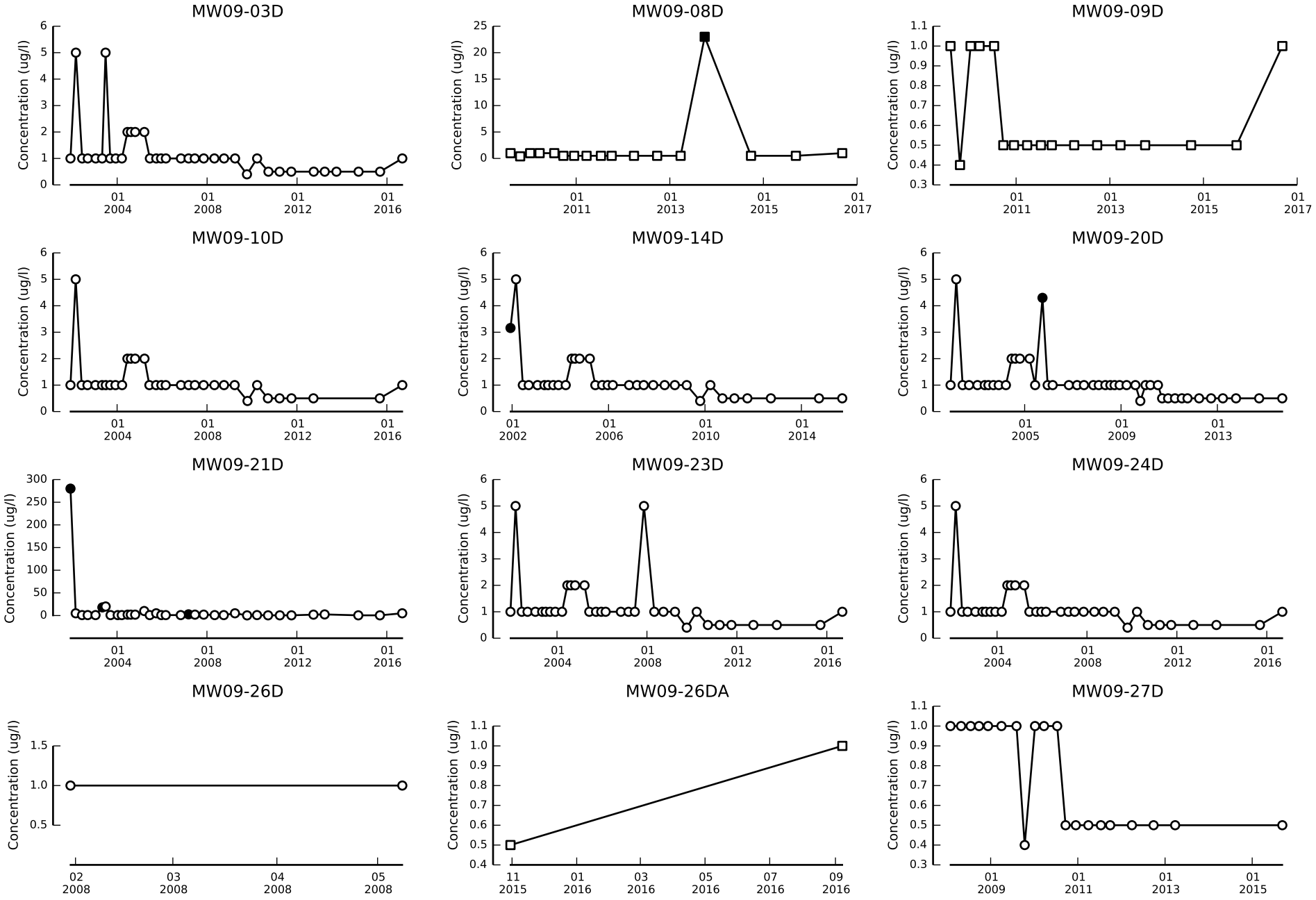
1,1,1-TRICHLOROETHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



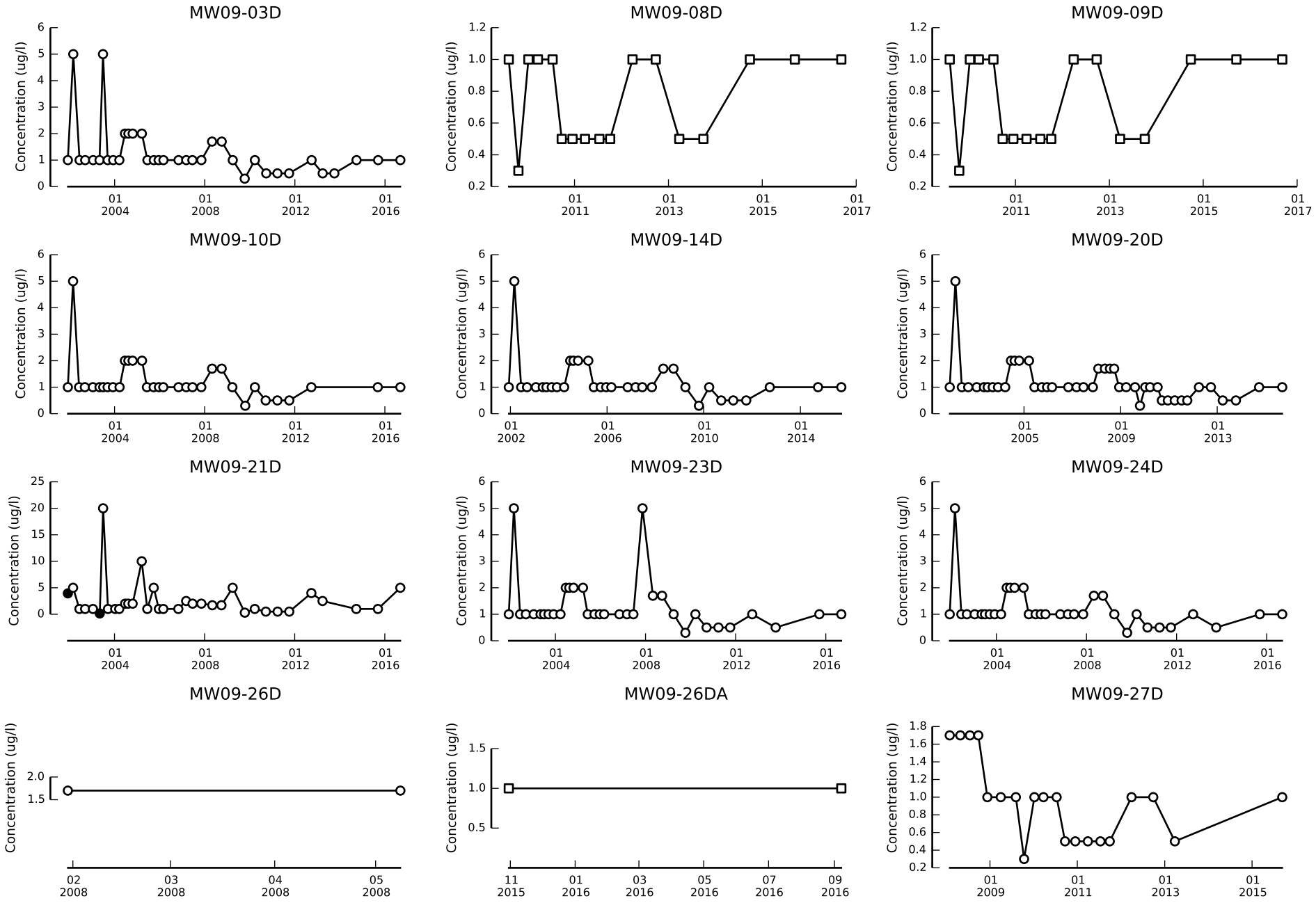
1,1,2,2-TETRACHLOROETHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



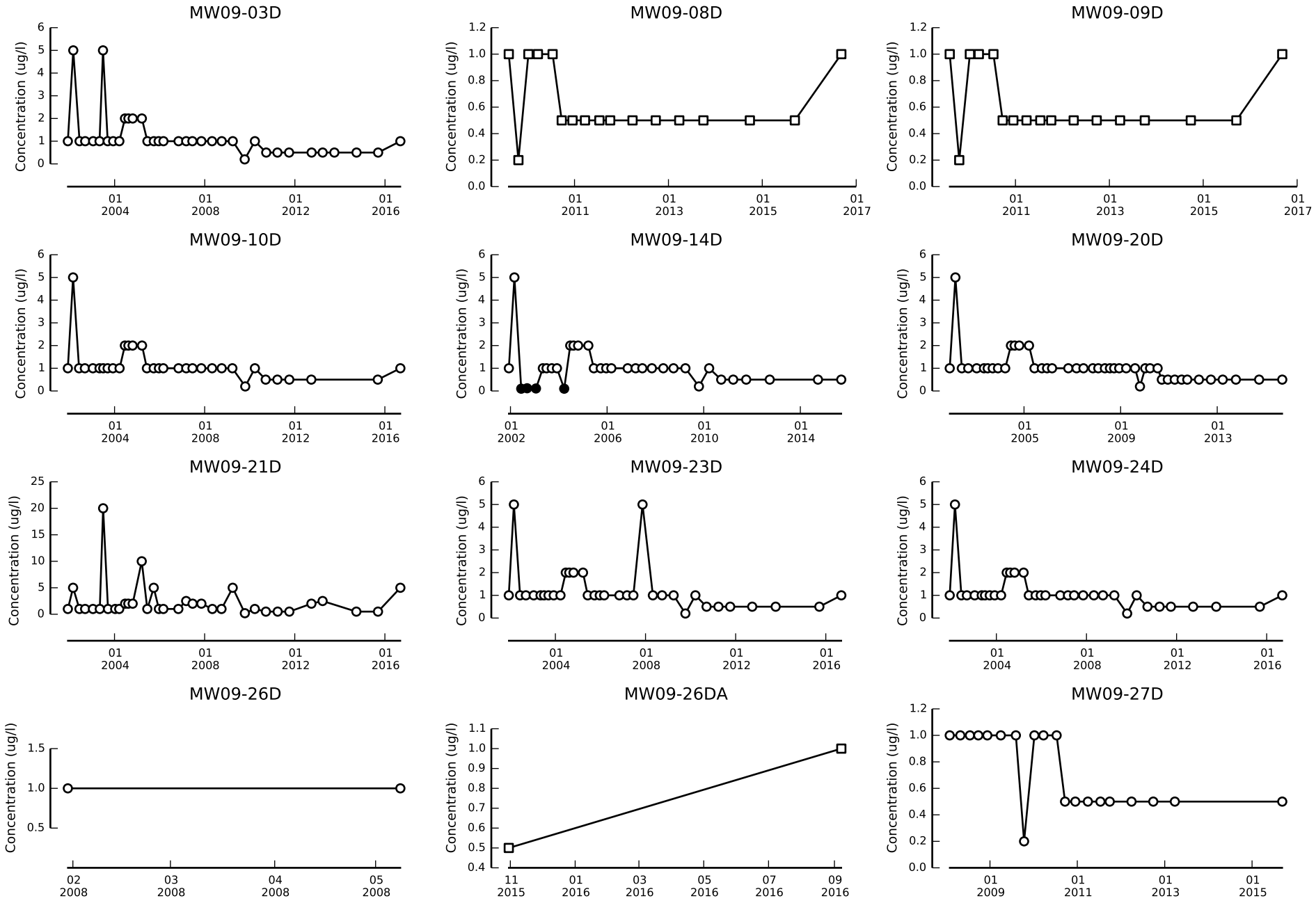
1,1,2-TRICHLOROETHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



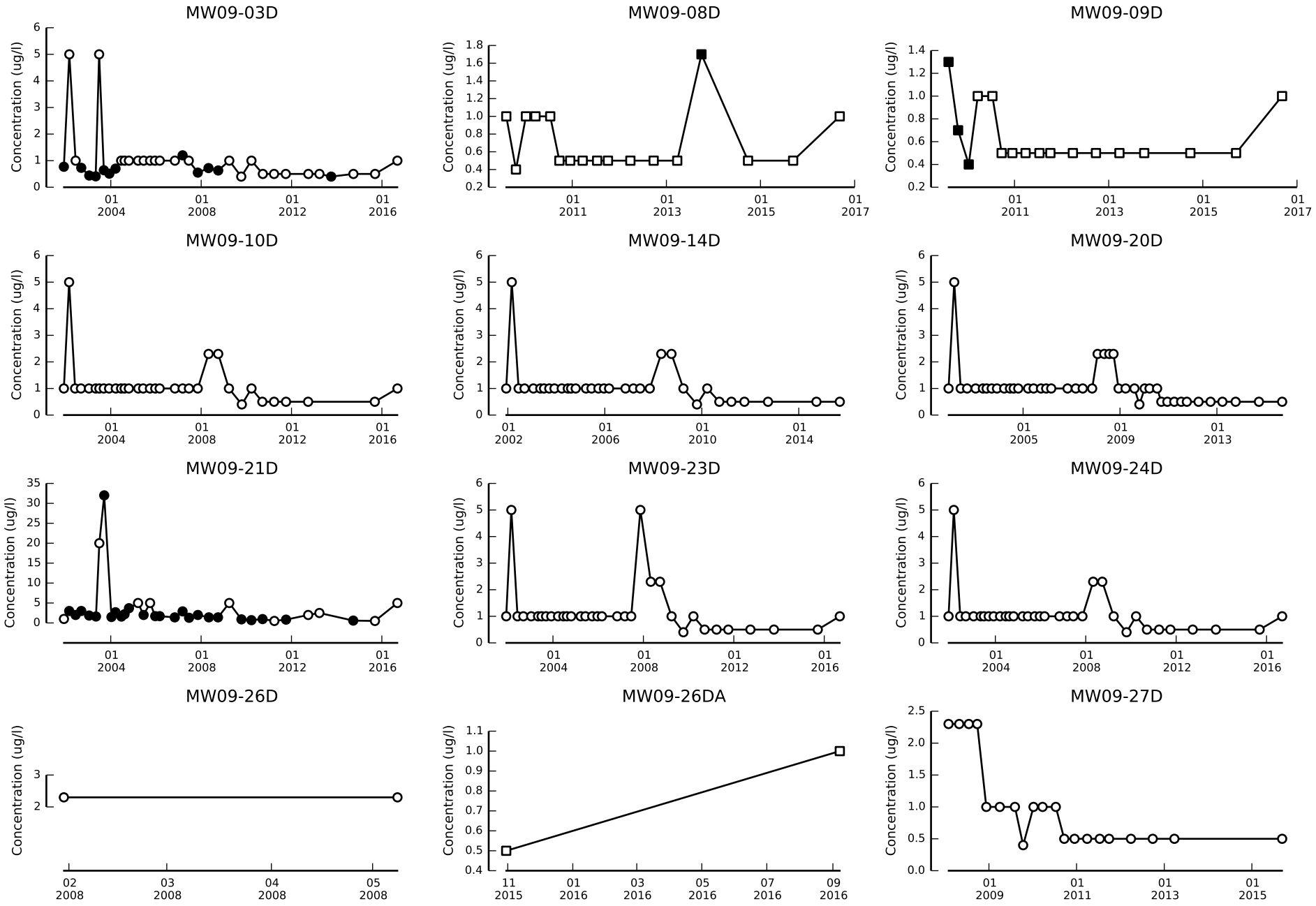
1,1-DICHLOROETHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



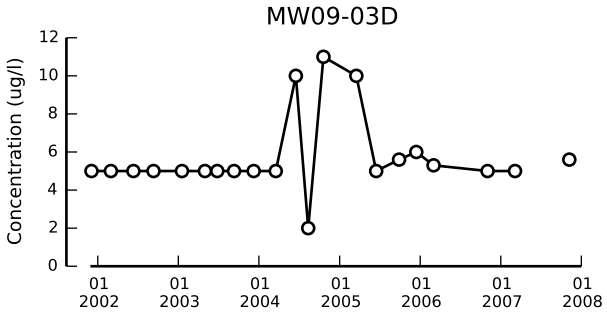
1,1-DICHLOROETHENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 133

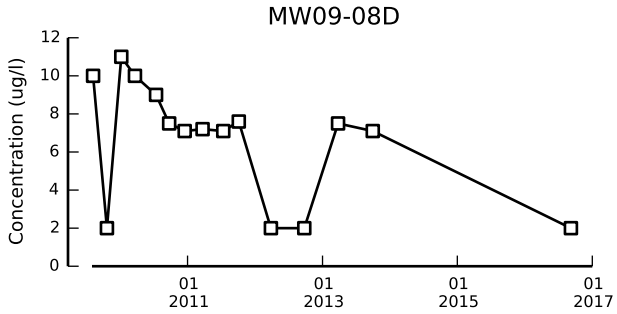
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

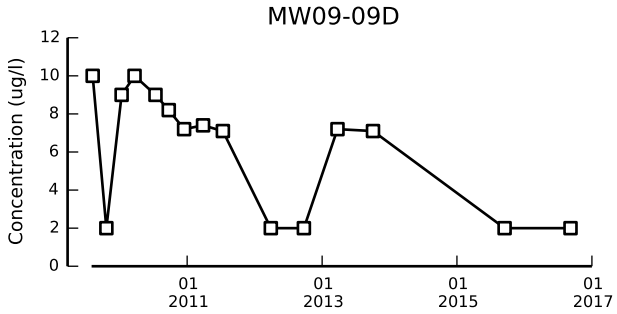


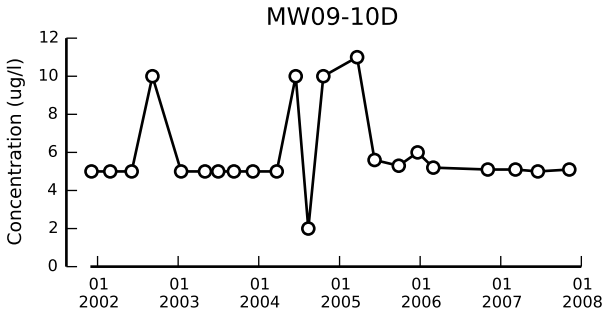
1,2,4-TRICHLOROBENZENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 133

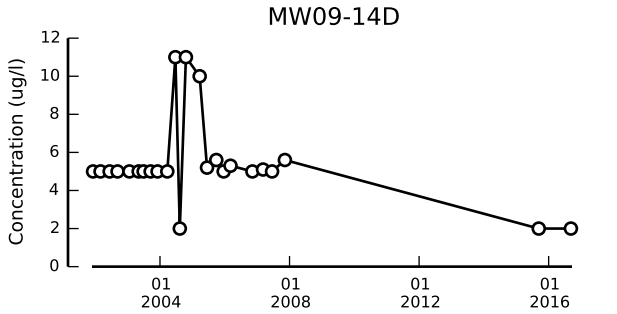
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

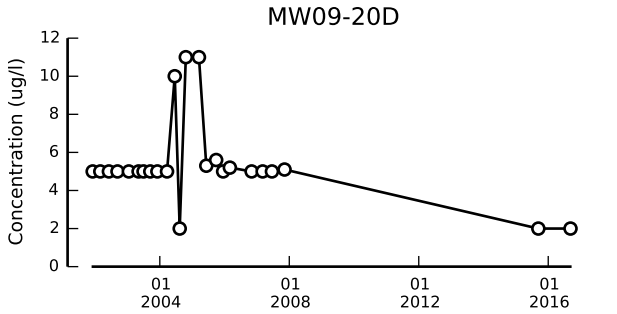


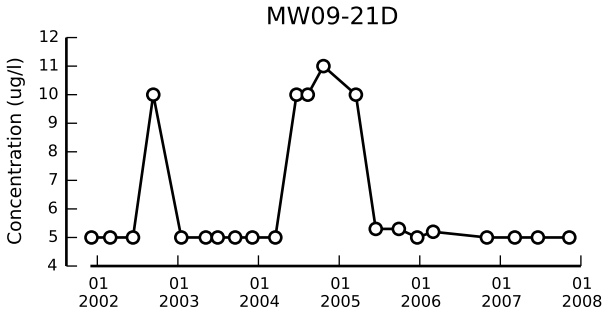


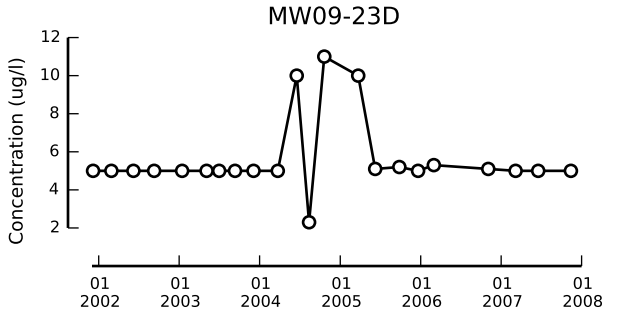


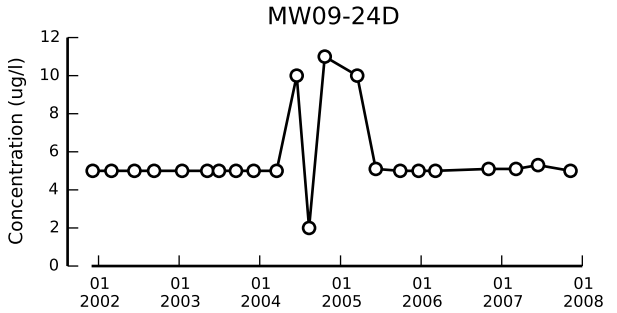


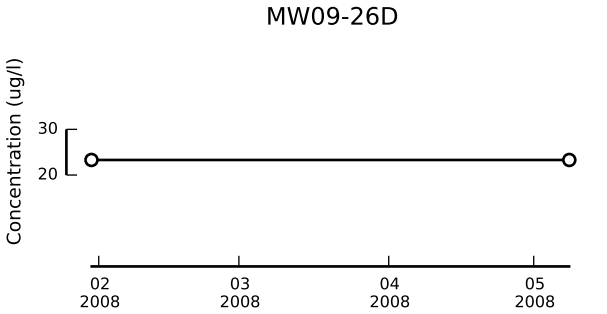






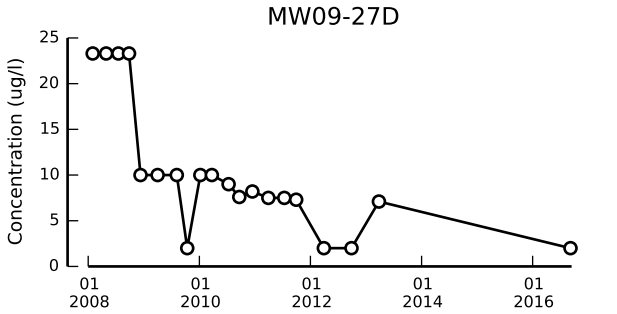






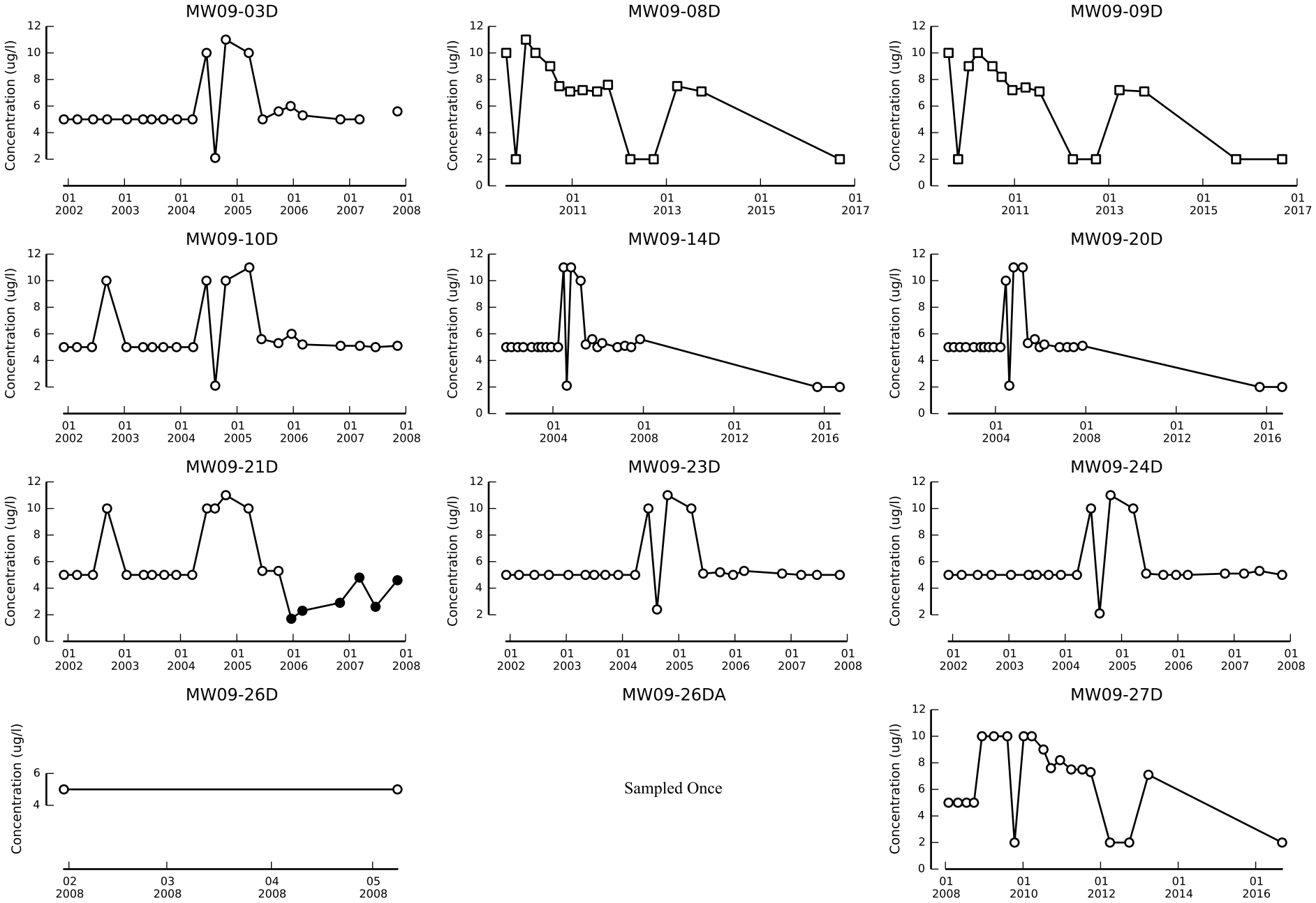
MW09-26DA

Sampled Once



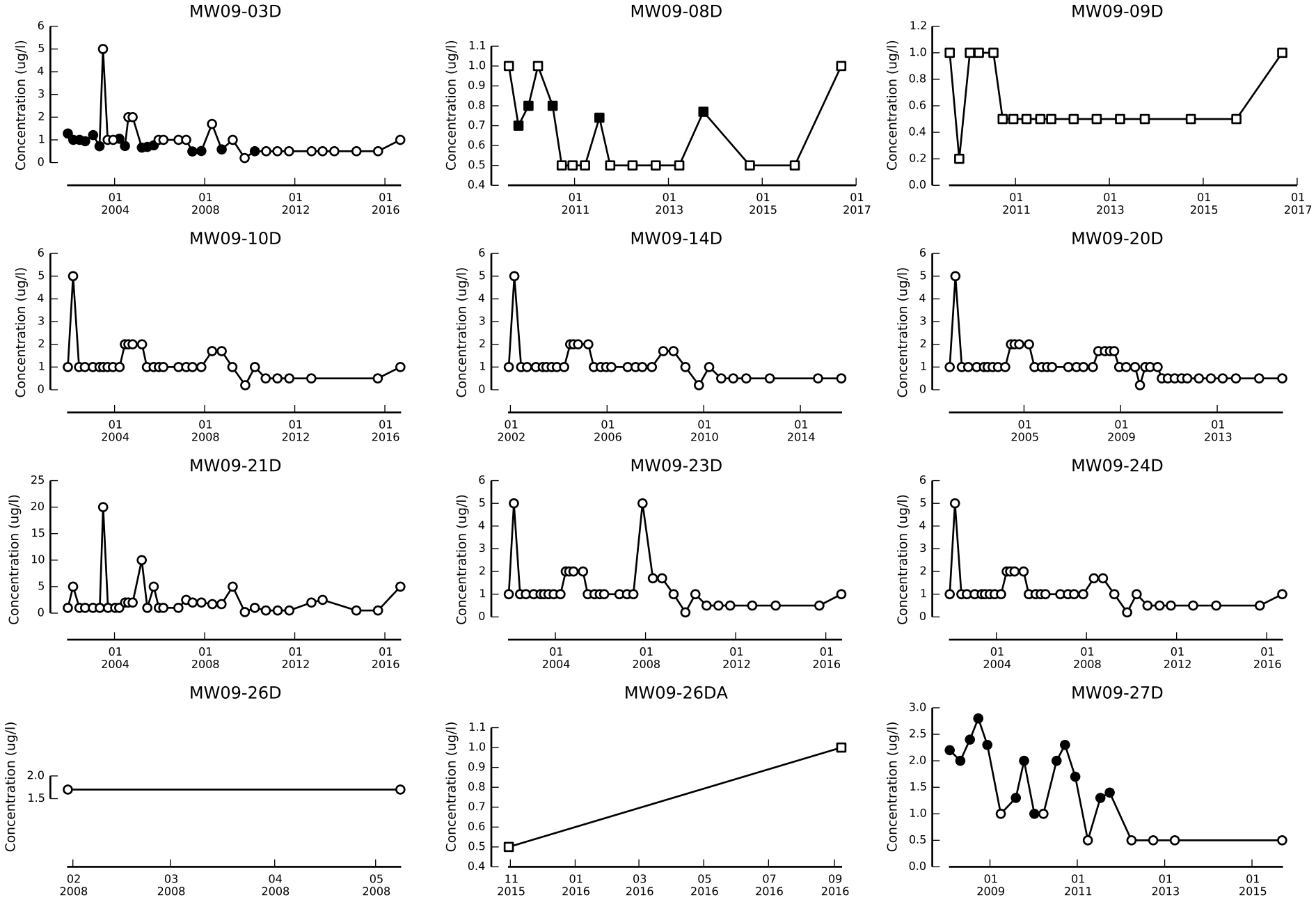
1,2-DICHLOROBENZENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



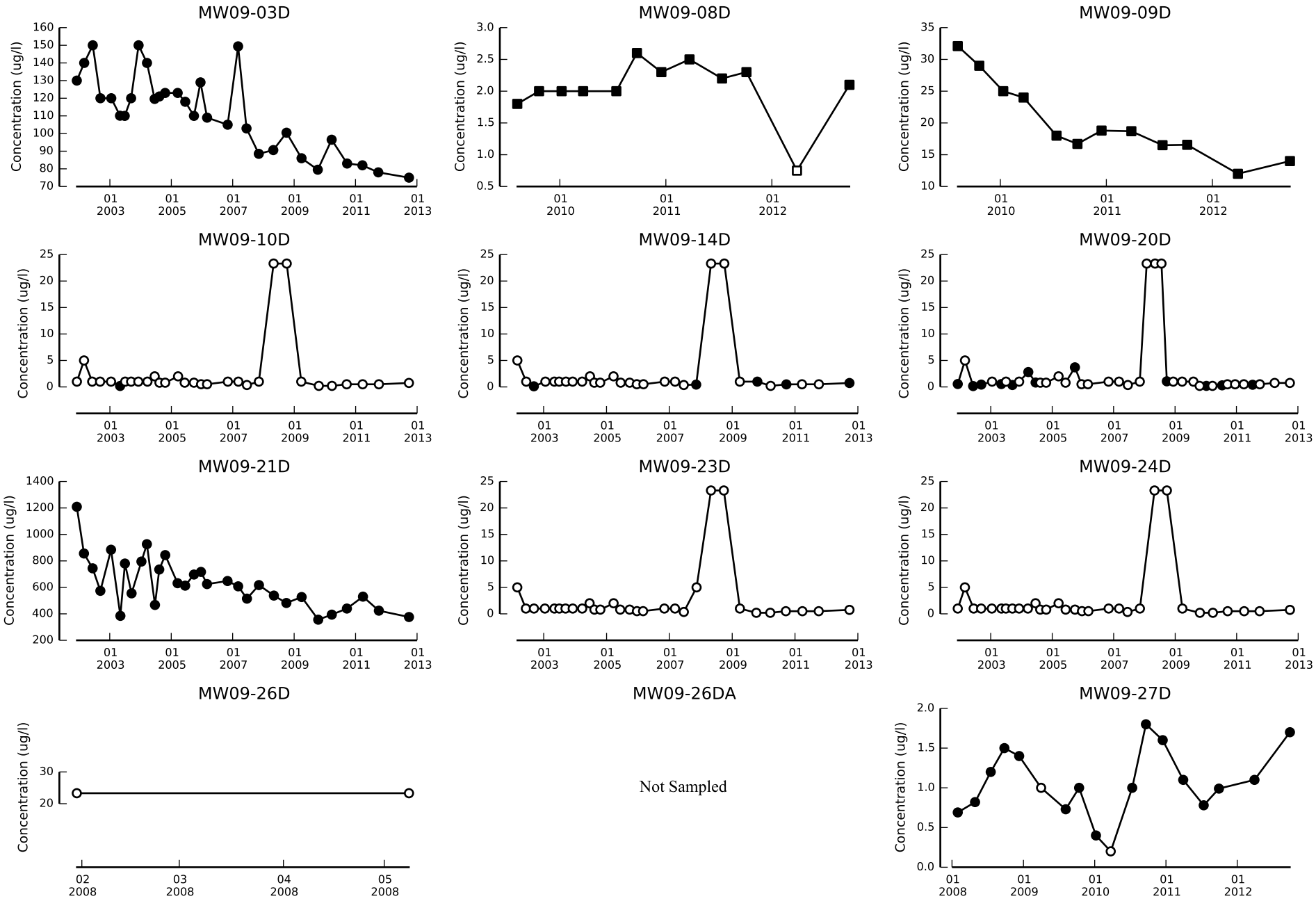
1,2-DICHLOROETHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



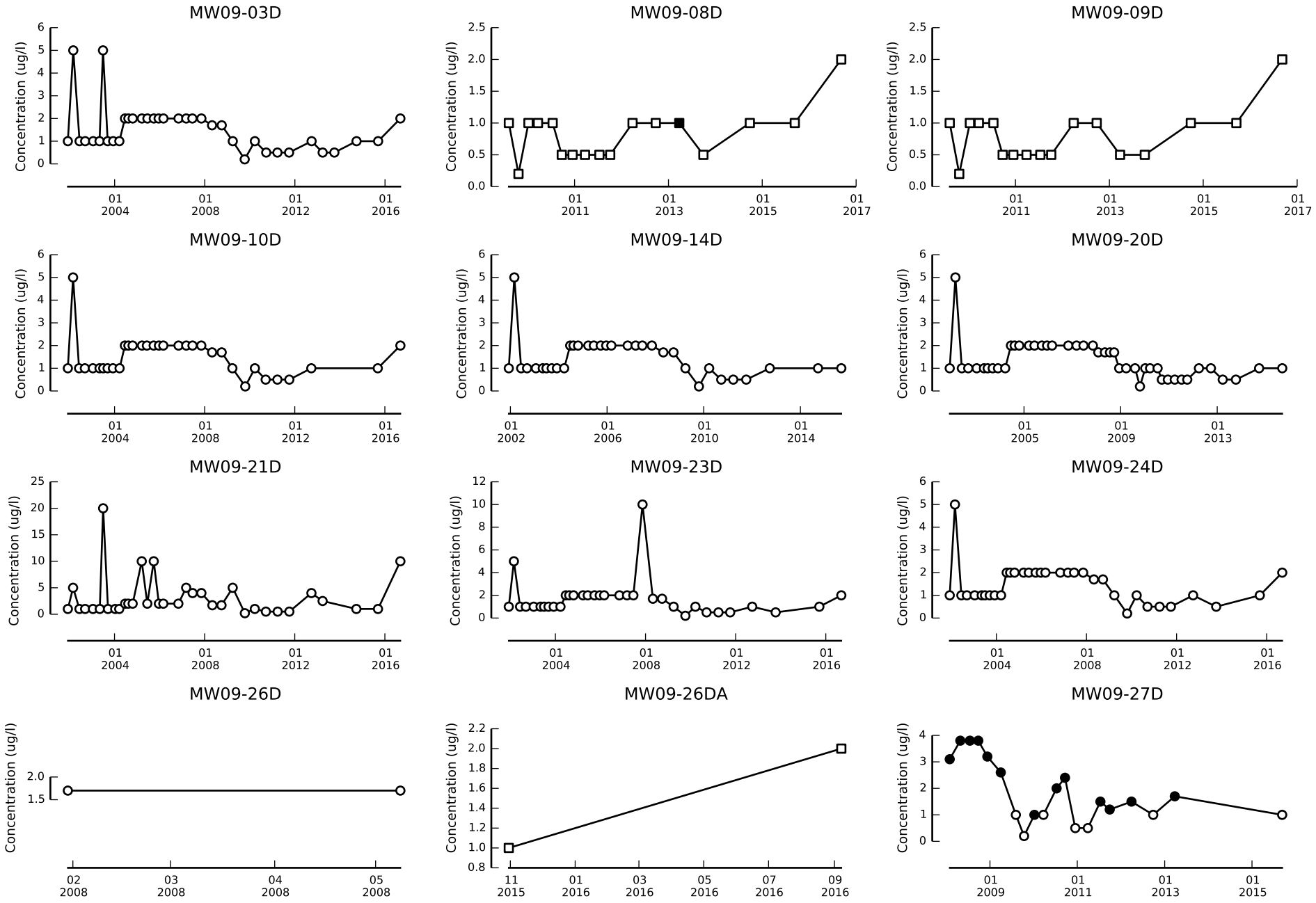
1,2-DICHLOROETHENE, TOTAL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



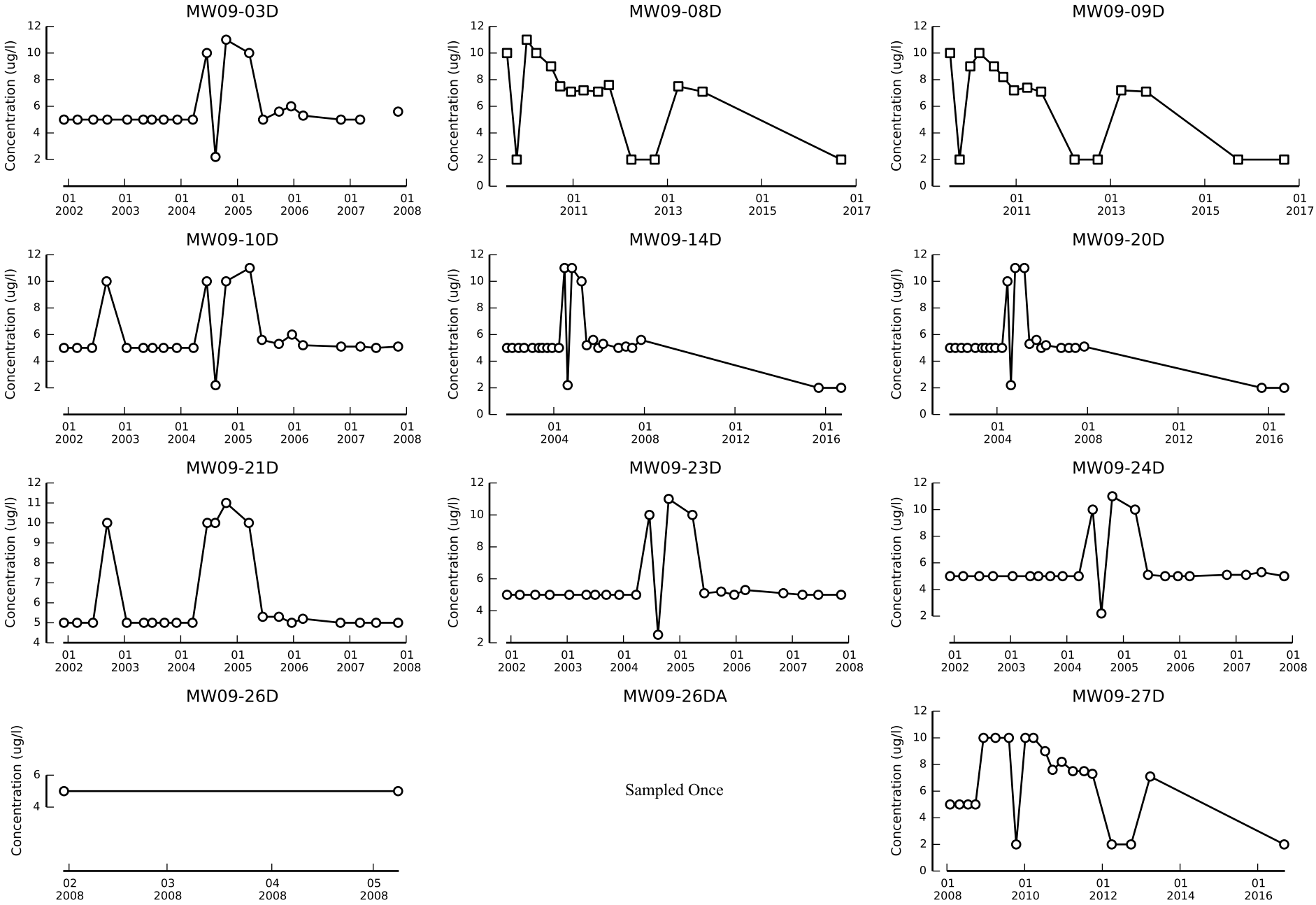
1,2-DICHLOROPROPANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



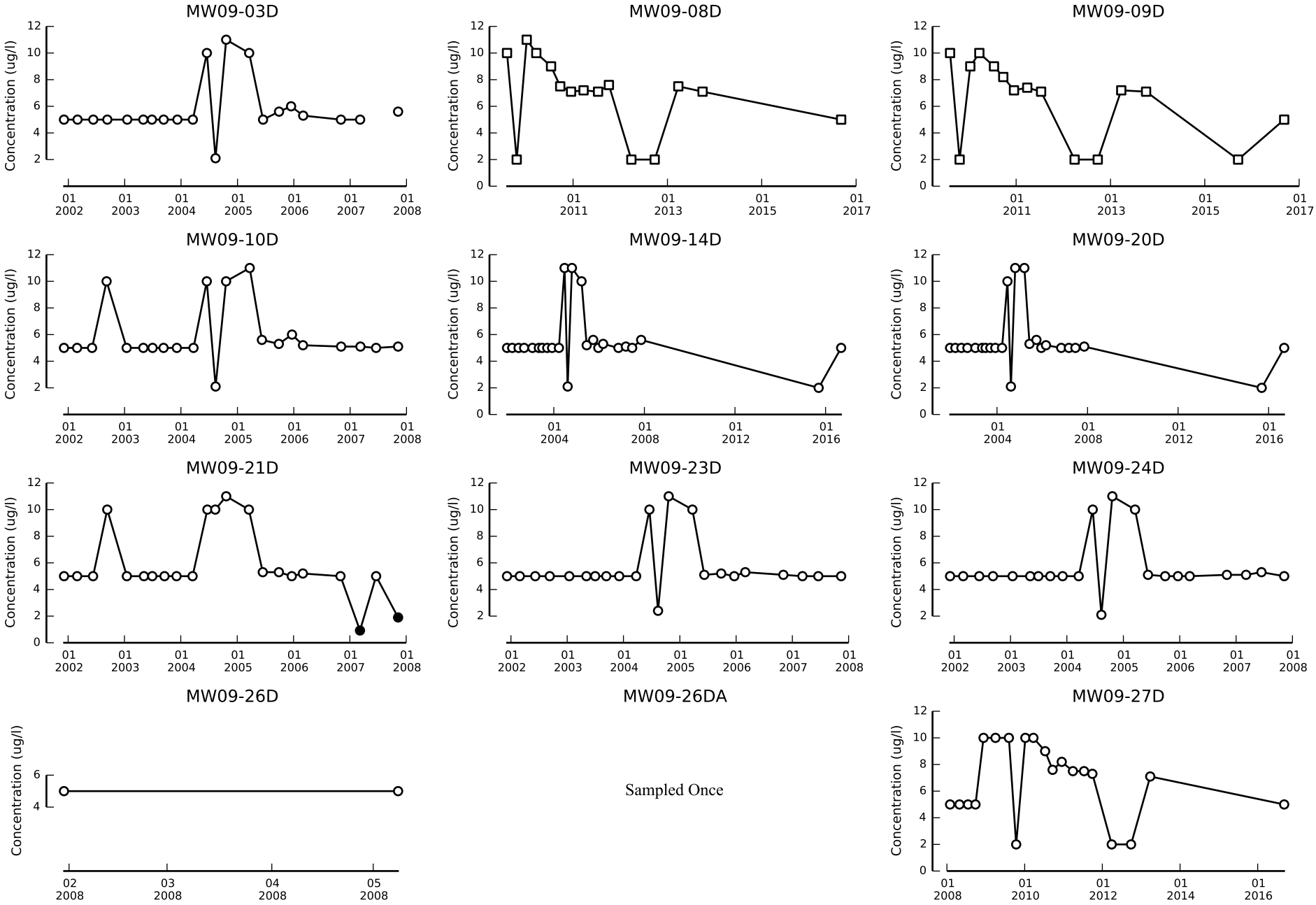
1,3-DICHLOROBENZENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



1,4-DICHLOROBENZENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 133

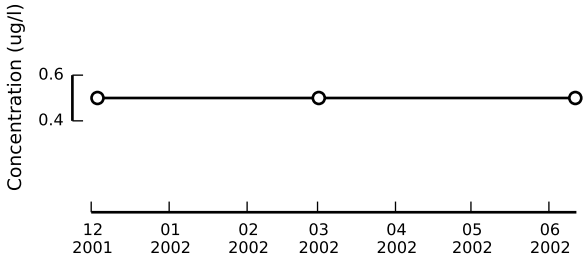
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



1-METHYLNAPHTHALENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 133

● Detected
○ Not Detected, shown at detection limit

MW09-03D



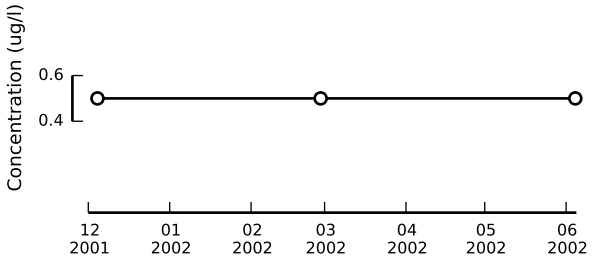
MW09-08D

Not Sampled

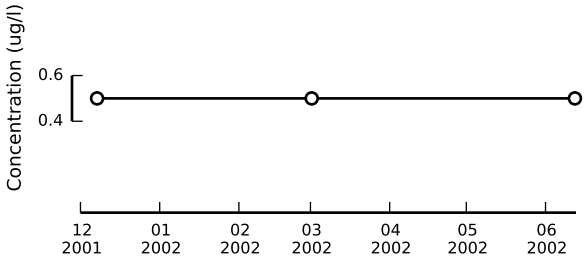
MW09-09D

Not Sampled

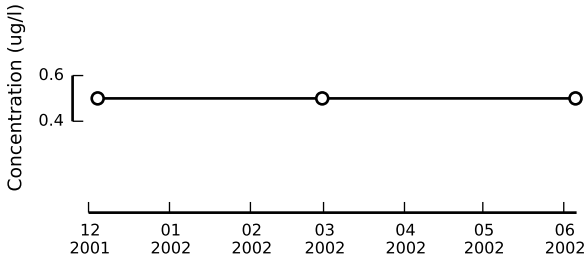
MW09-10D



MW09-14D

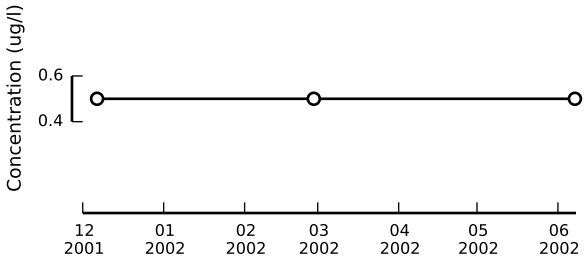


MW09-20D

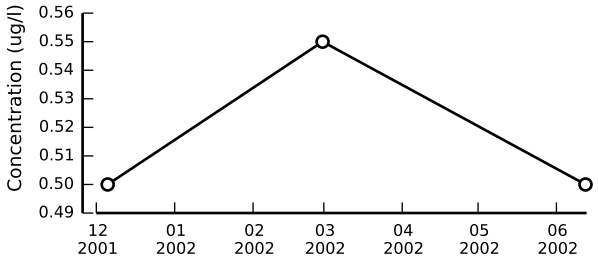


MW09-21D

MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

Not Sampled

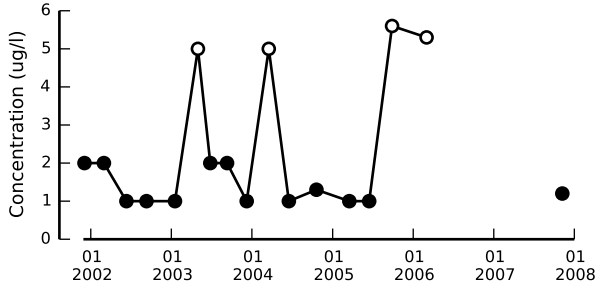
MW09-27D

Not Sampled

2,2'-OXYBIS(1-CHLOROPROPANE) in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

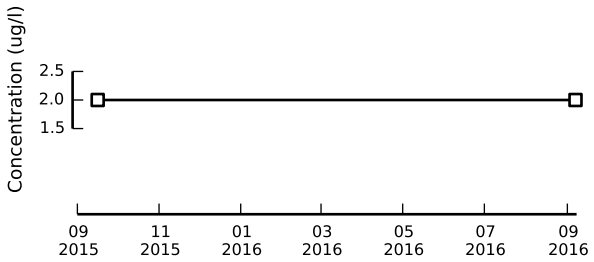
MW09-03D



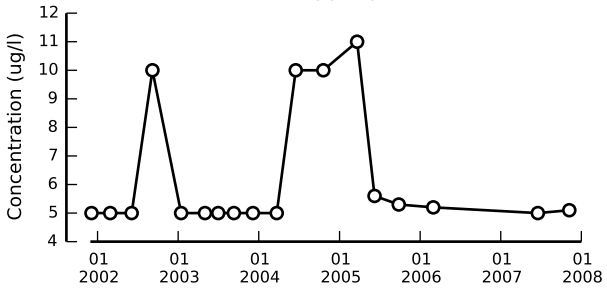
MW09-08D

Sampled Once

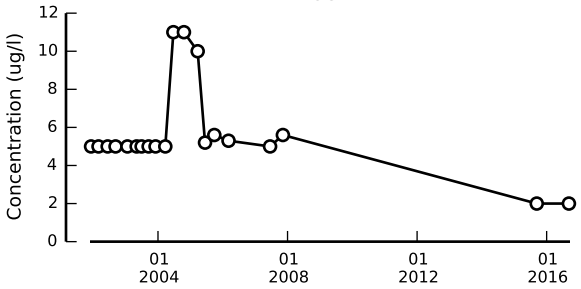
MW09-09D



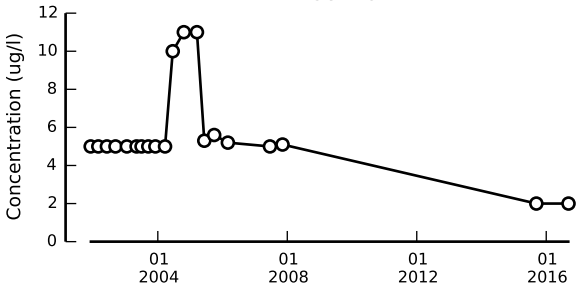
MW09-10D



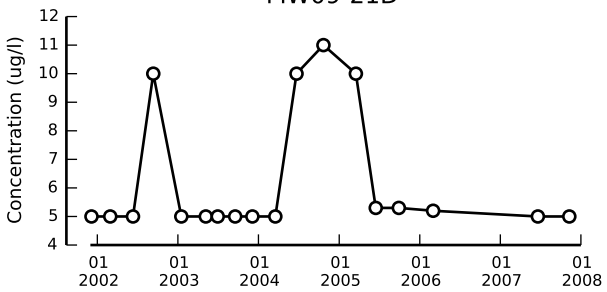
MW09-14D



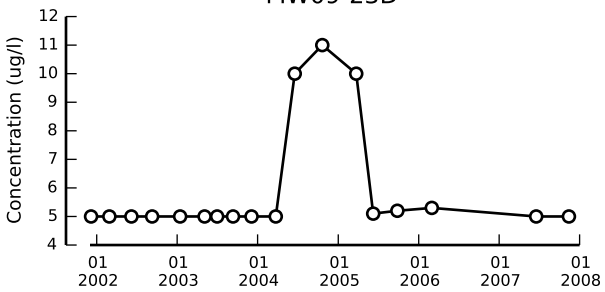
MW09-20D



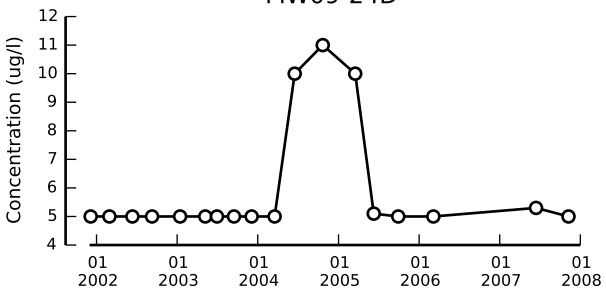
MW09-21D



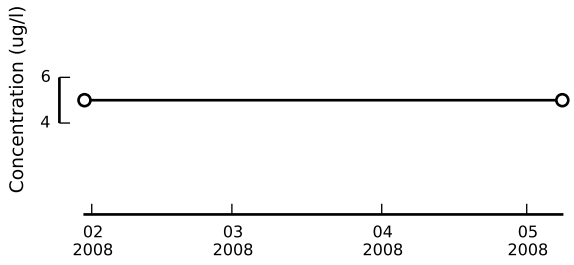
MW09-23D



MW09-24D



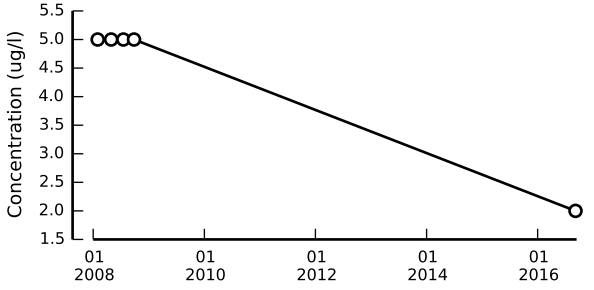
MW09-26D



MW09-26DA

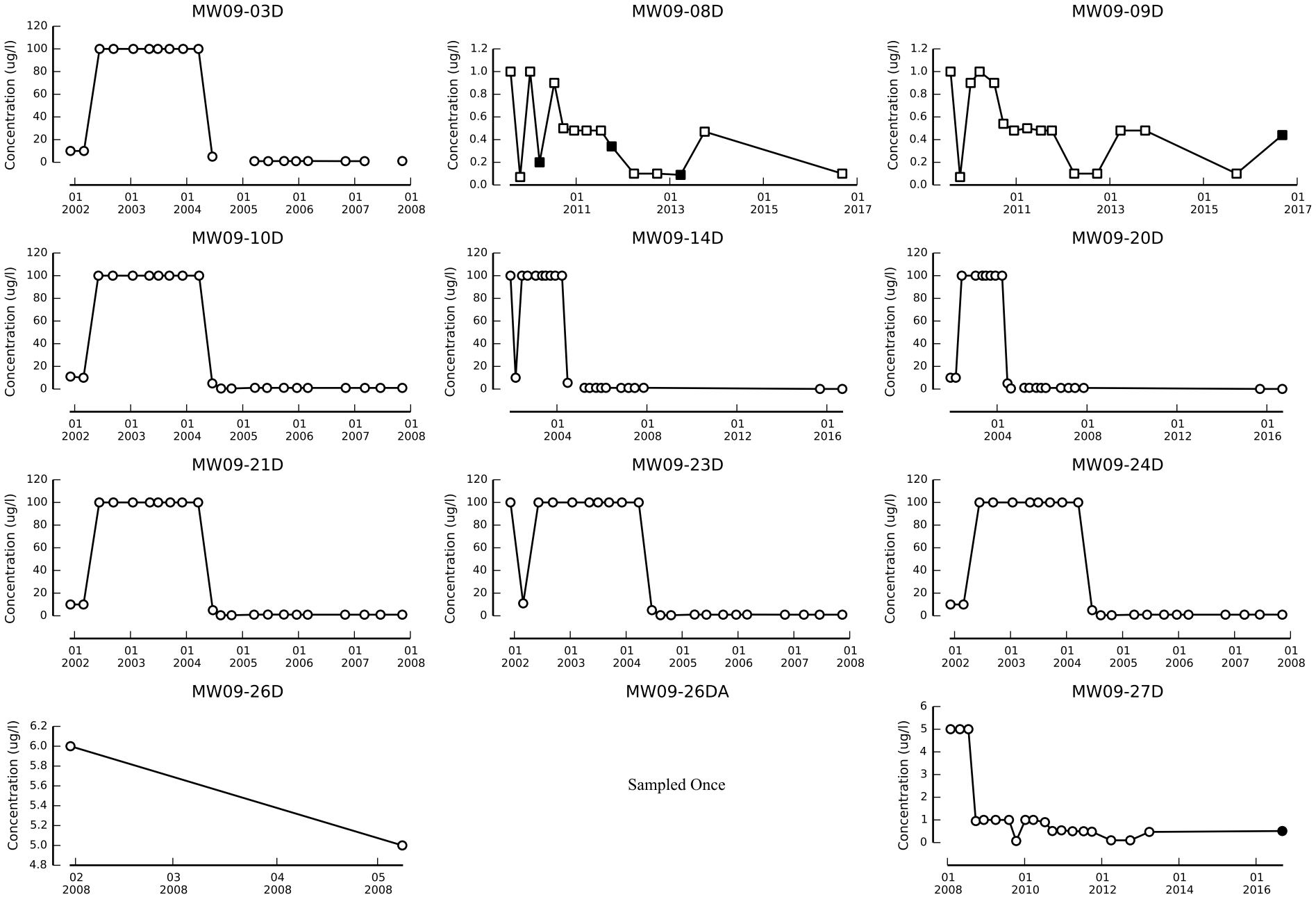
Sampled Once

MW09-27D



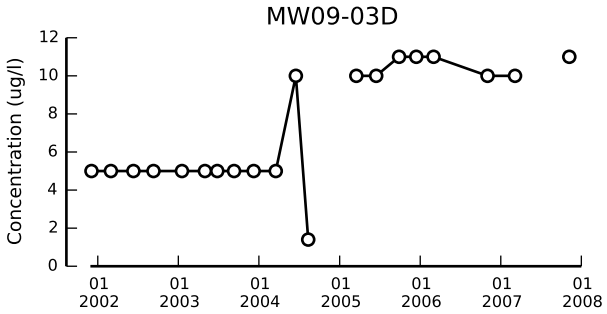
2,4,5-TRICHLOROPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 133

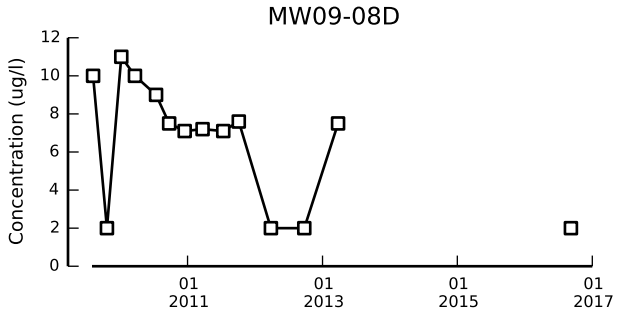
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

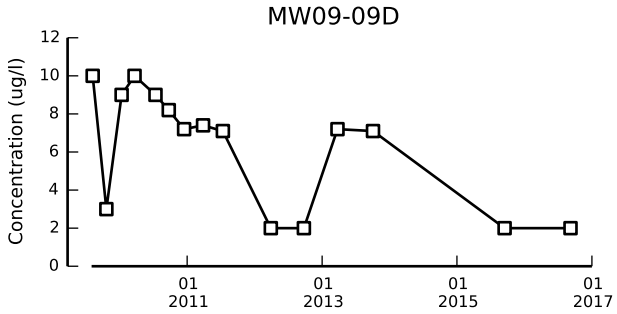


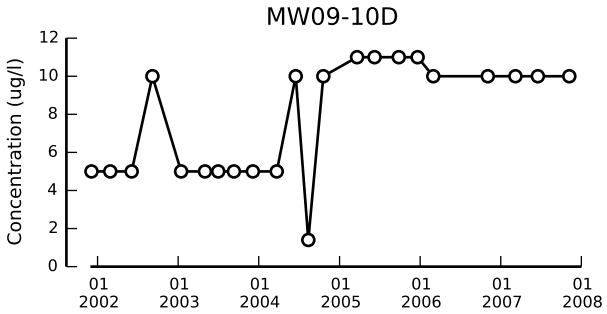
2,4,6-TRICHLOROPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 133

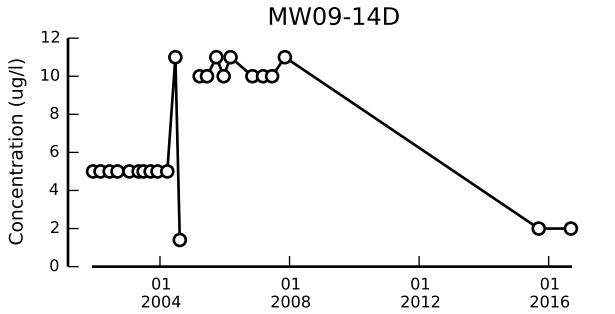
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

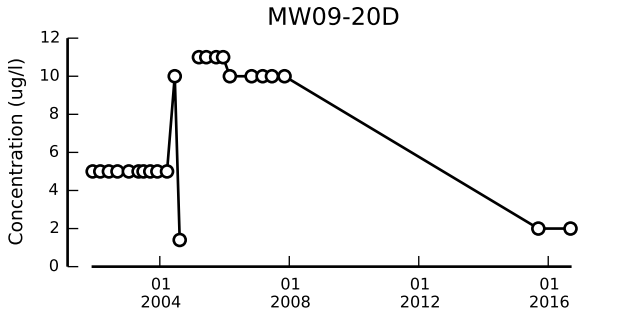


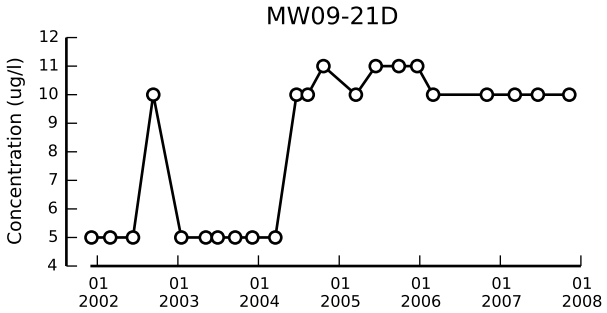


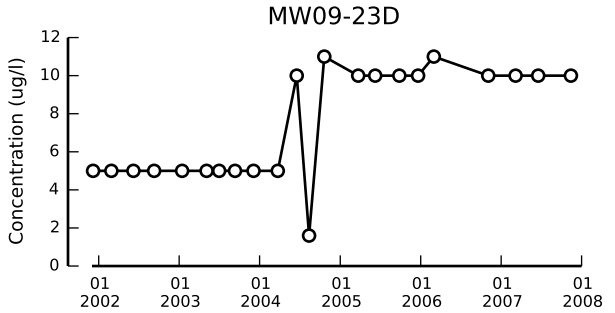


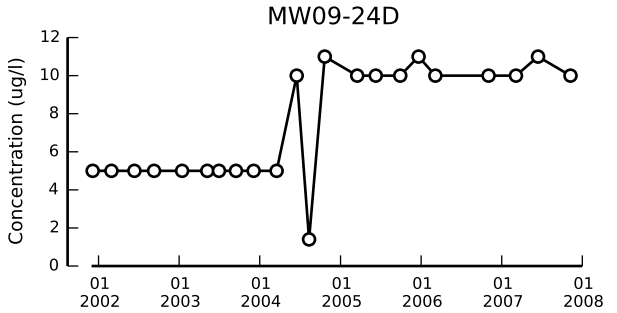


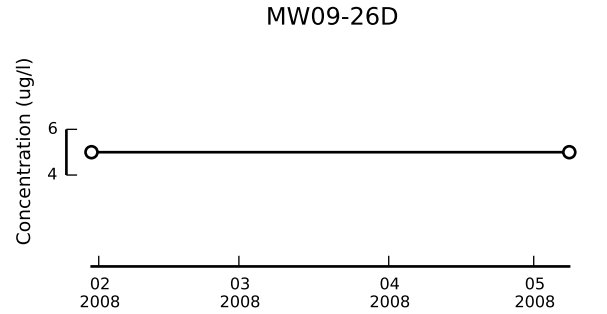






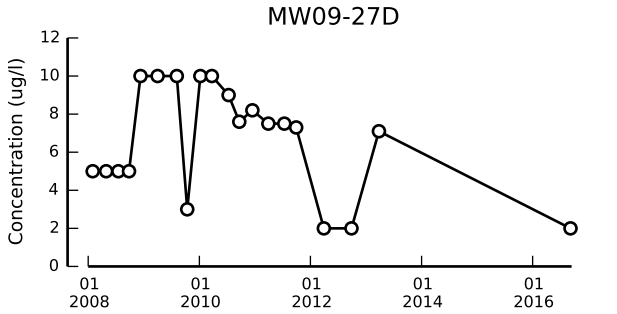






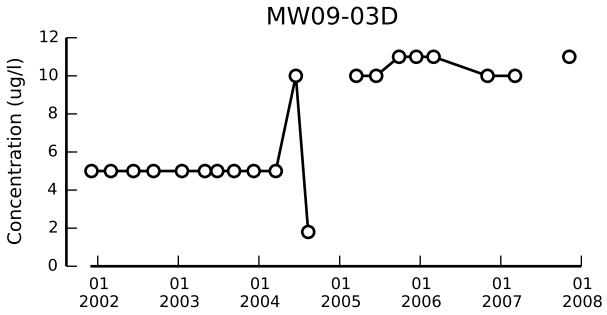
MW09-26DA

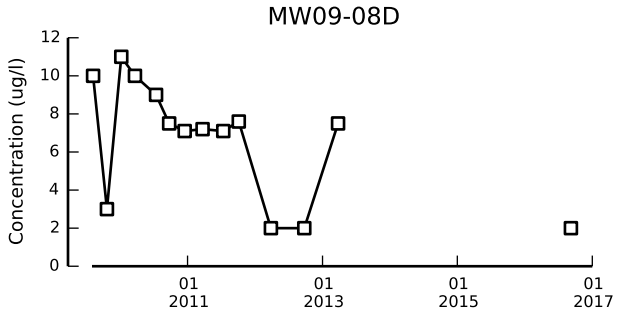
Sampled Once

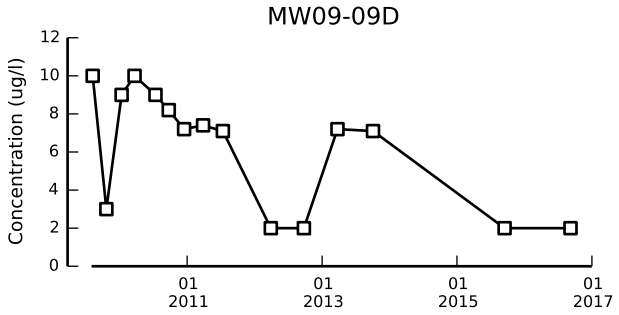


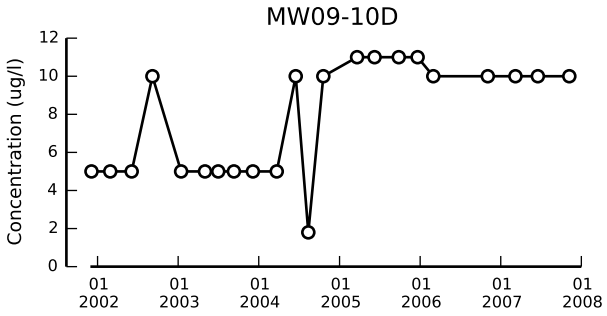
2,4-DICHLOROPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 133

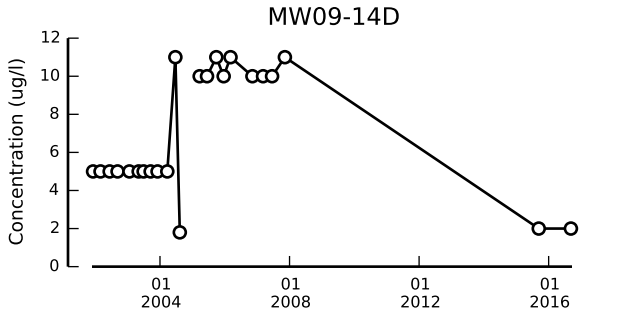
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

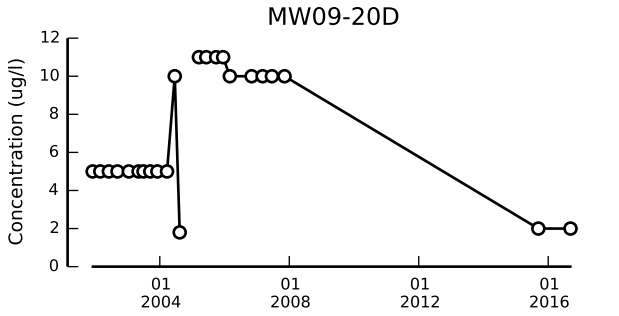


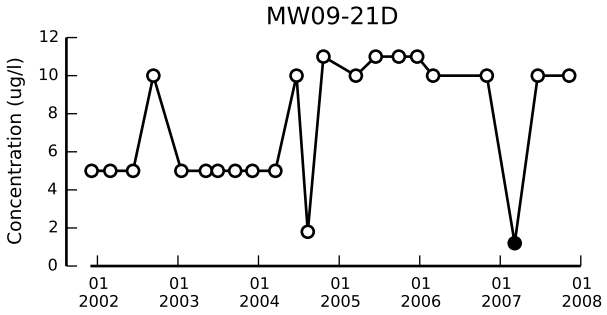


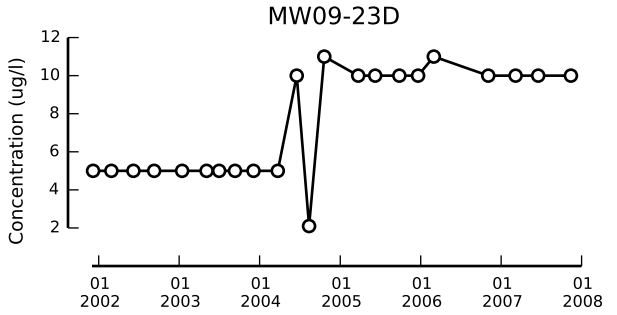


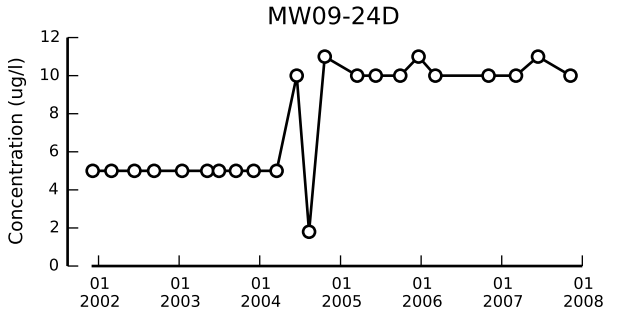


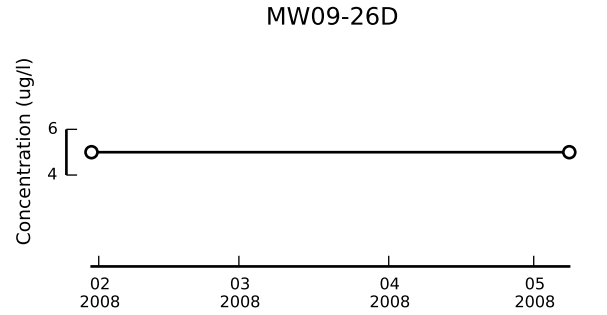












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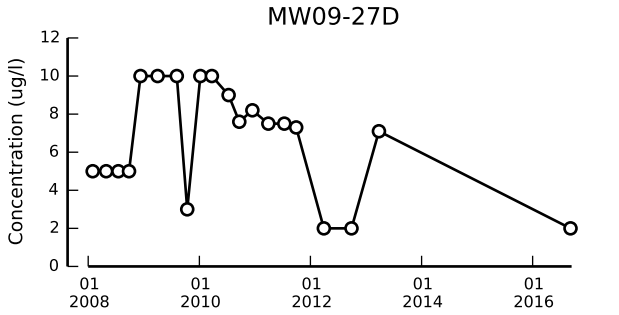
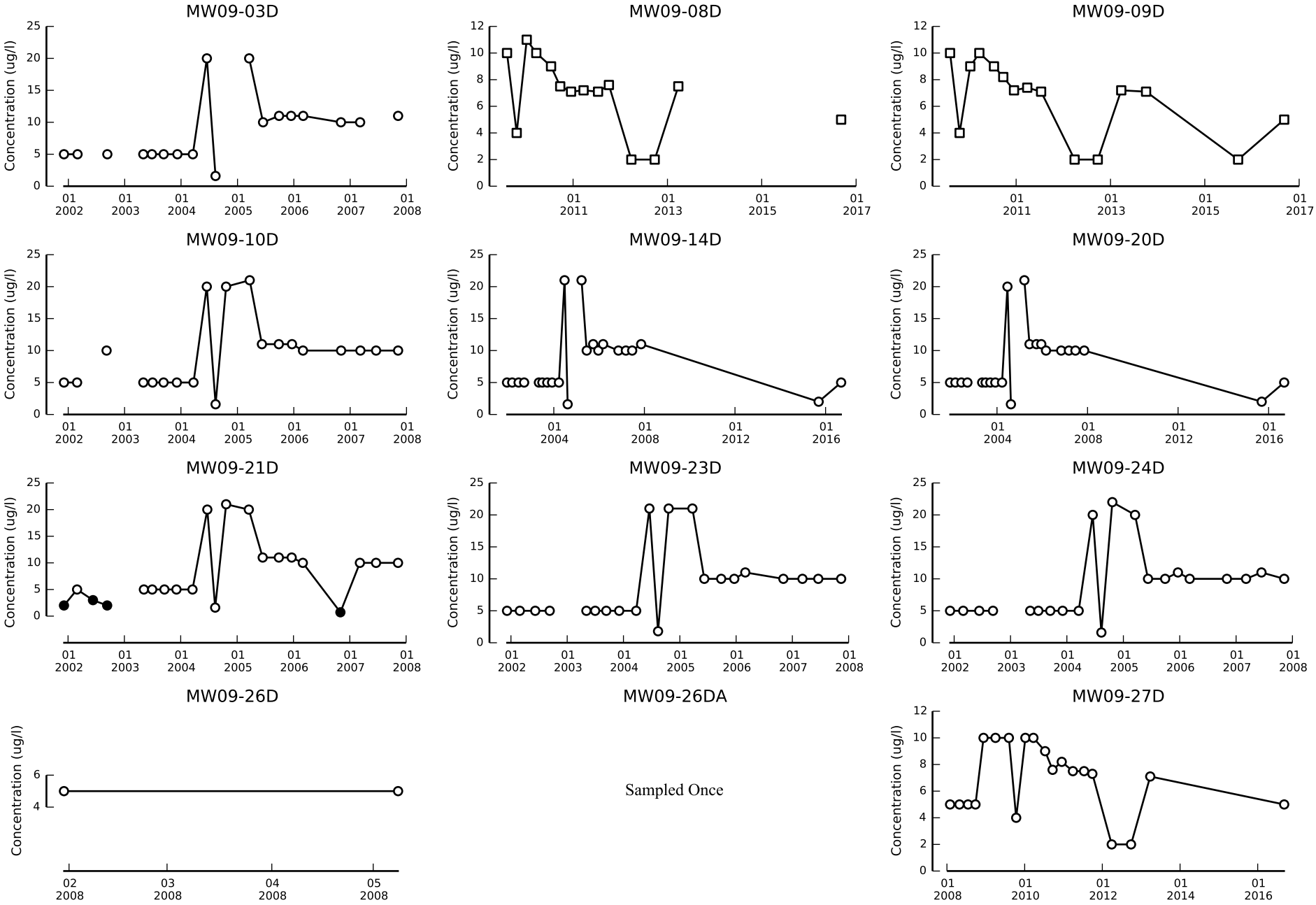
Sampled Once



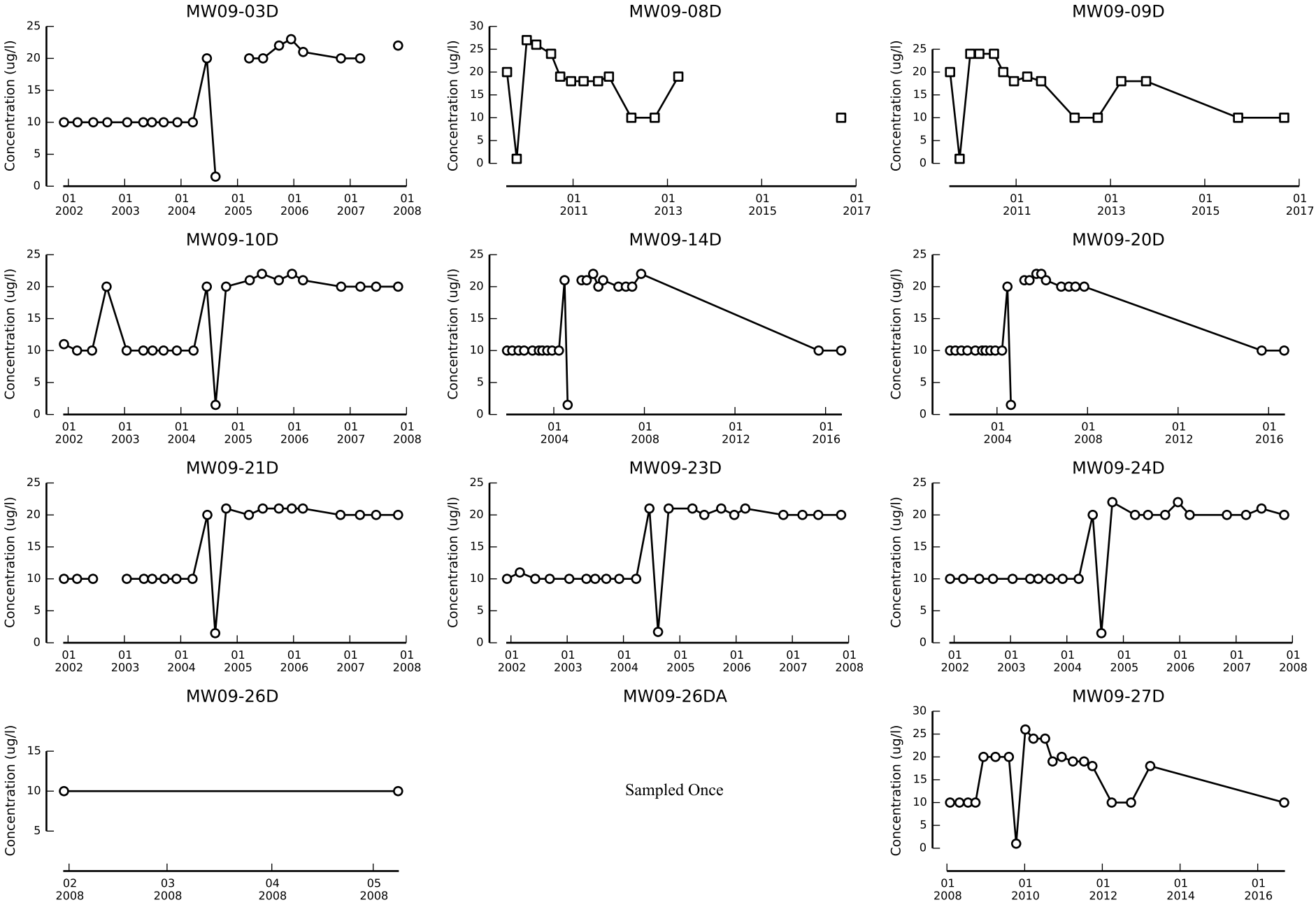
2,4-DIMETHYLPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



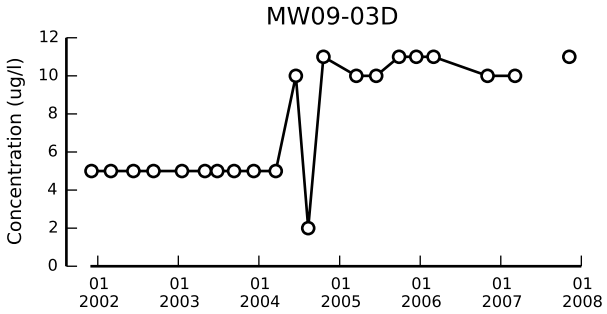
2,4-DINITROPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 133

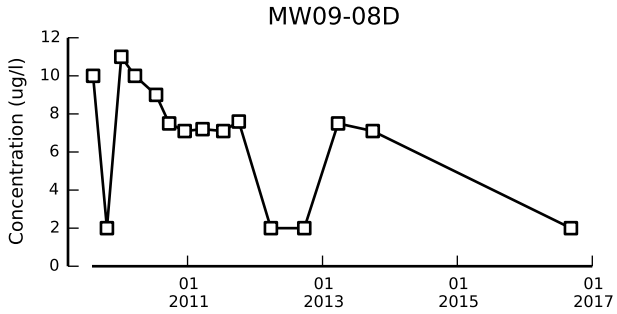
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

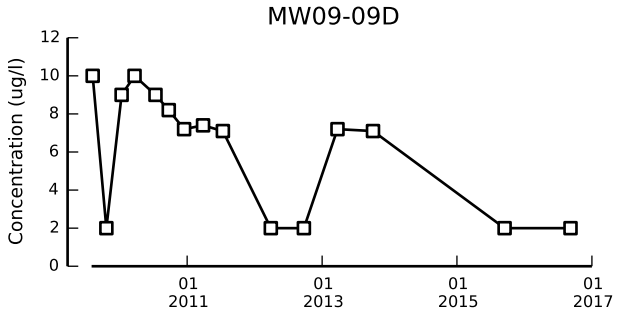


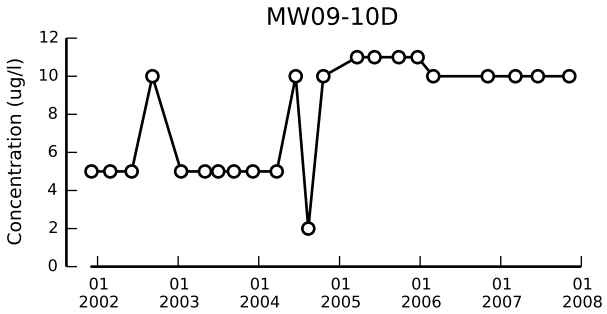
2,4-DINITROTOLUENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 133

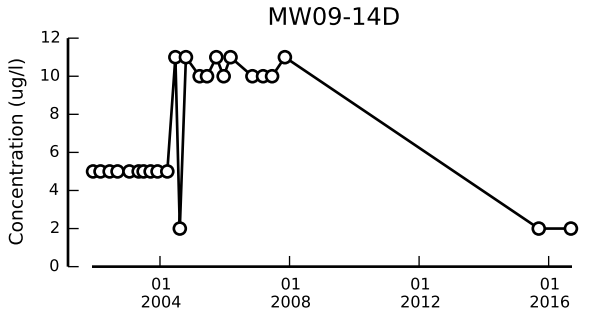
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

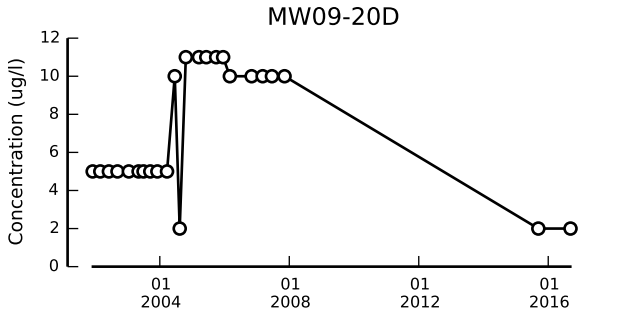


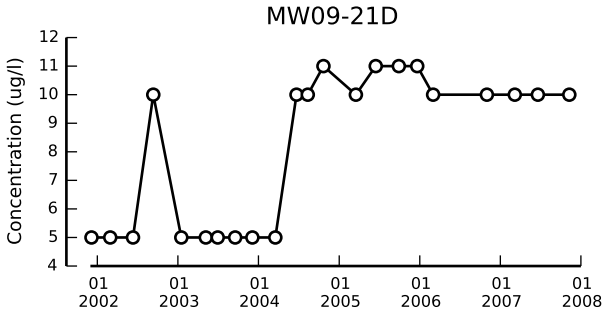


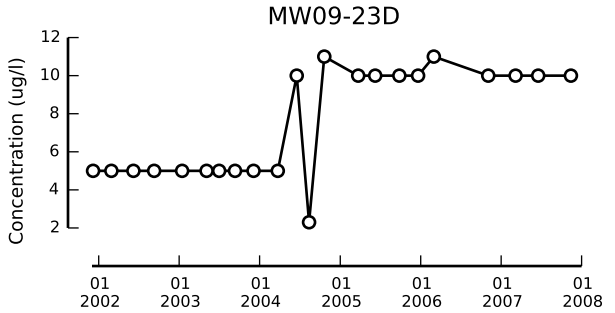


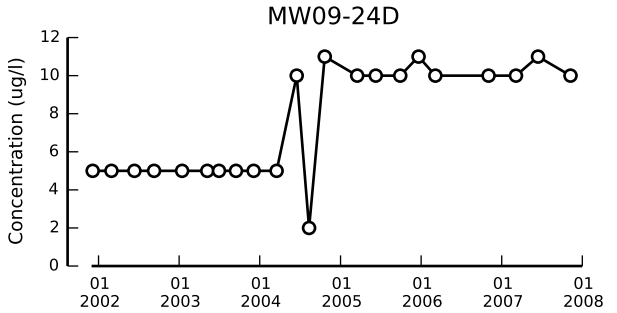


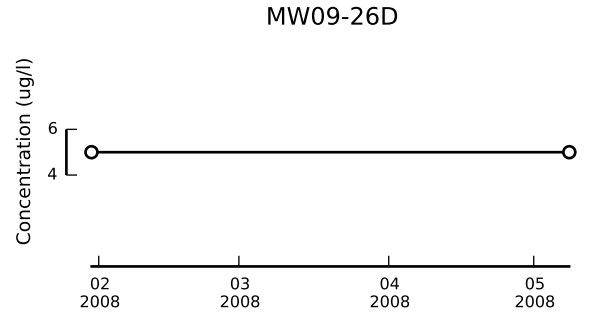






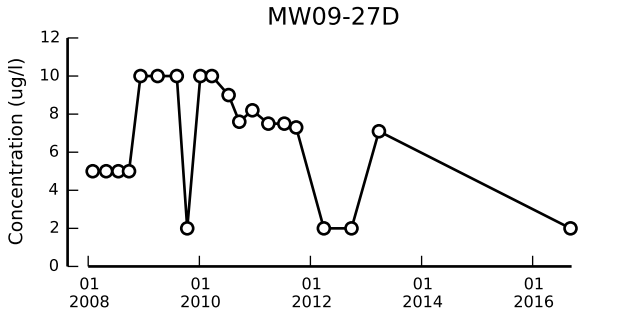






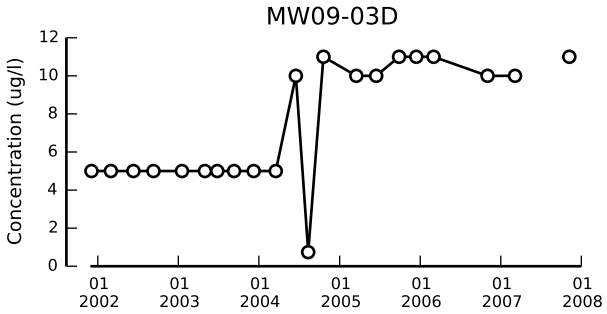
MW09-26DA

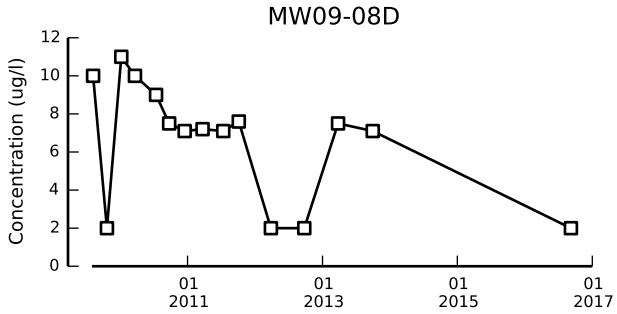
Sampled Once

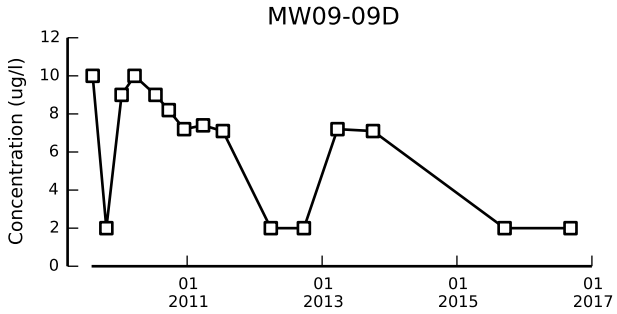


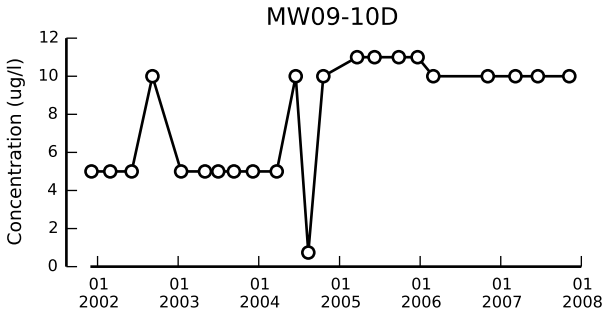
2,6-DINITROTOLUENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 133

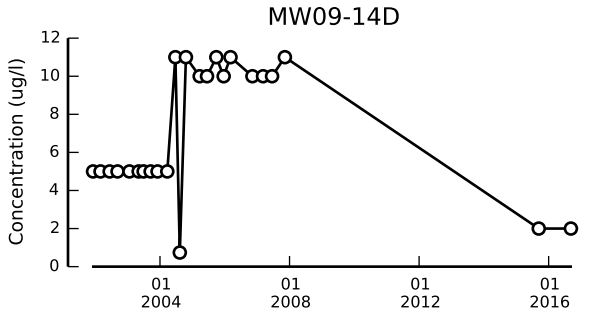
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

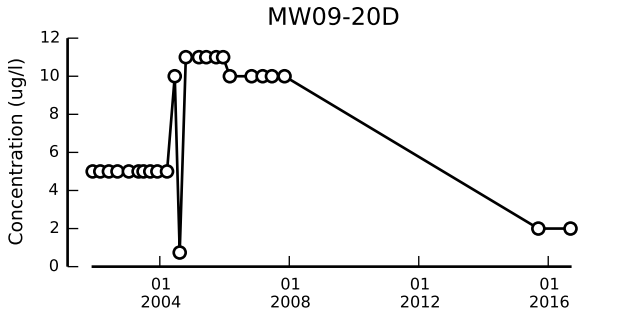


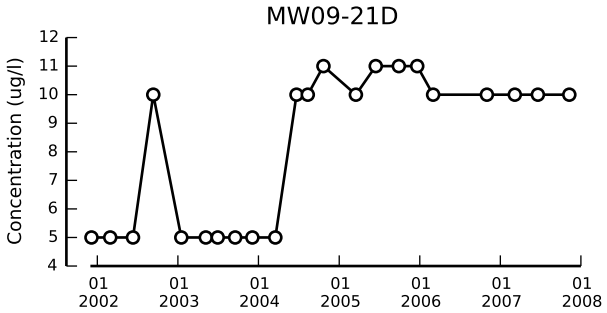


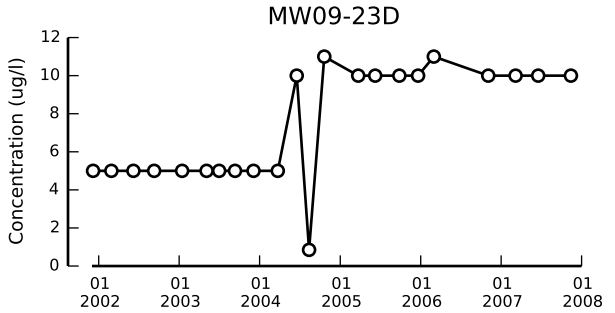


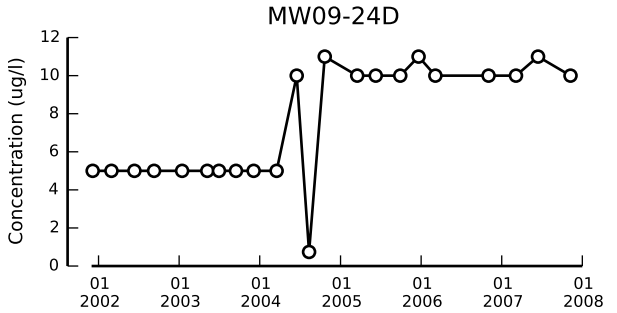


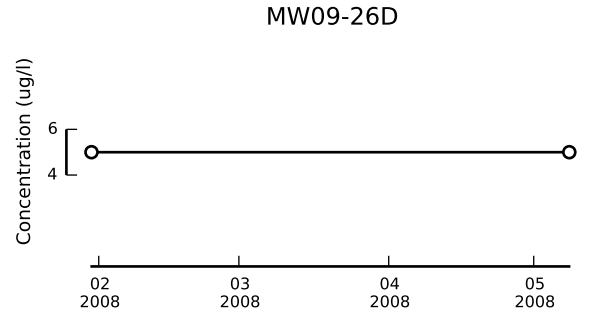






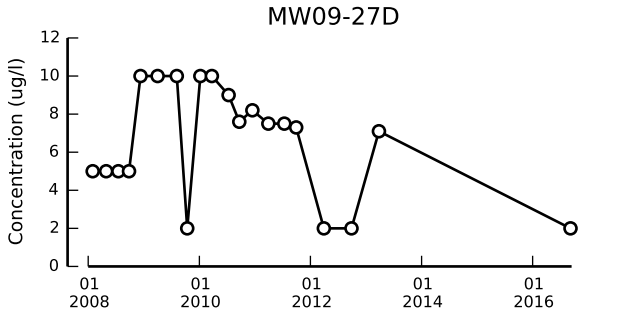






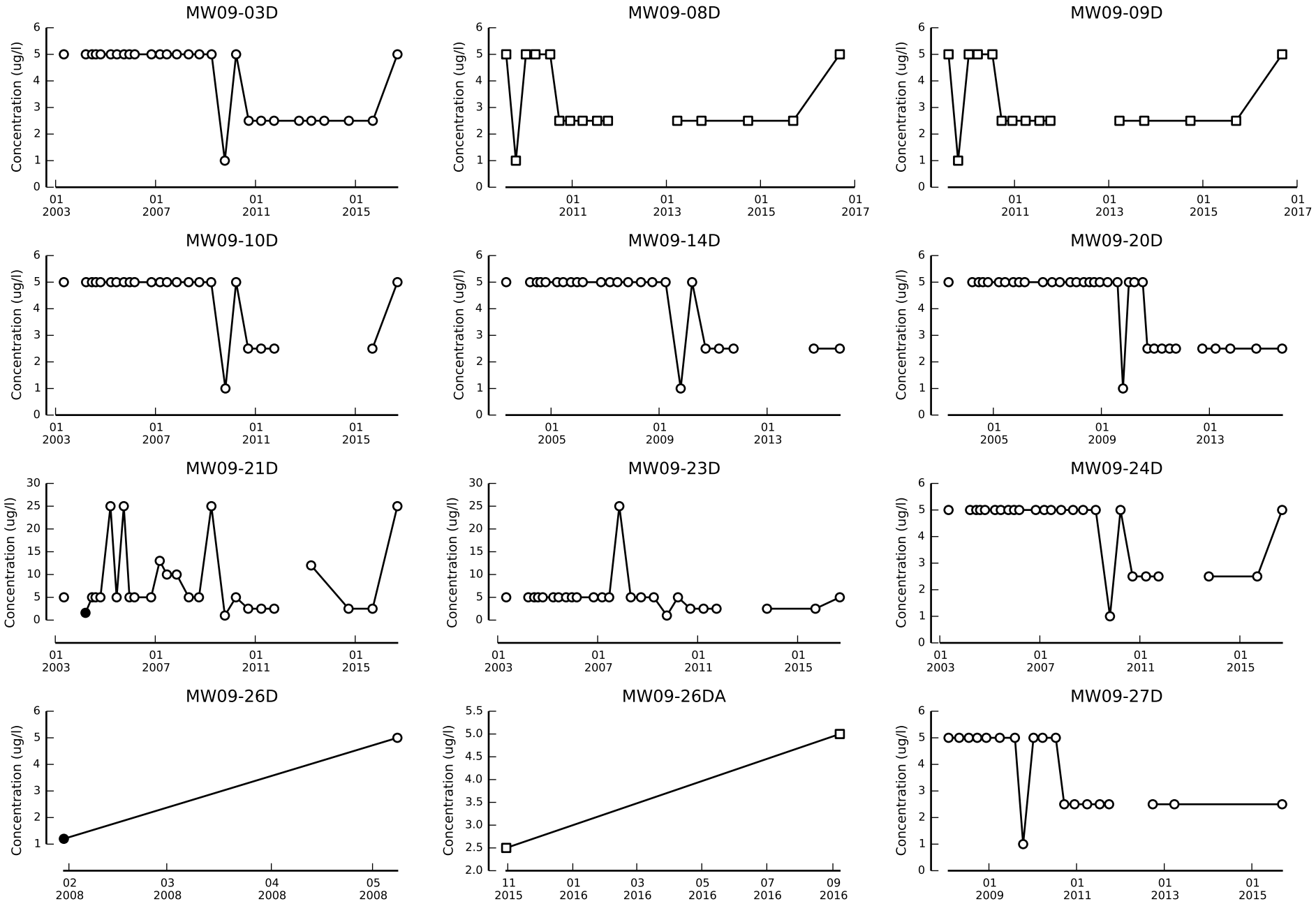
MW09-26DA

Sampled Once



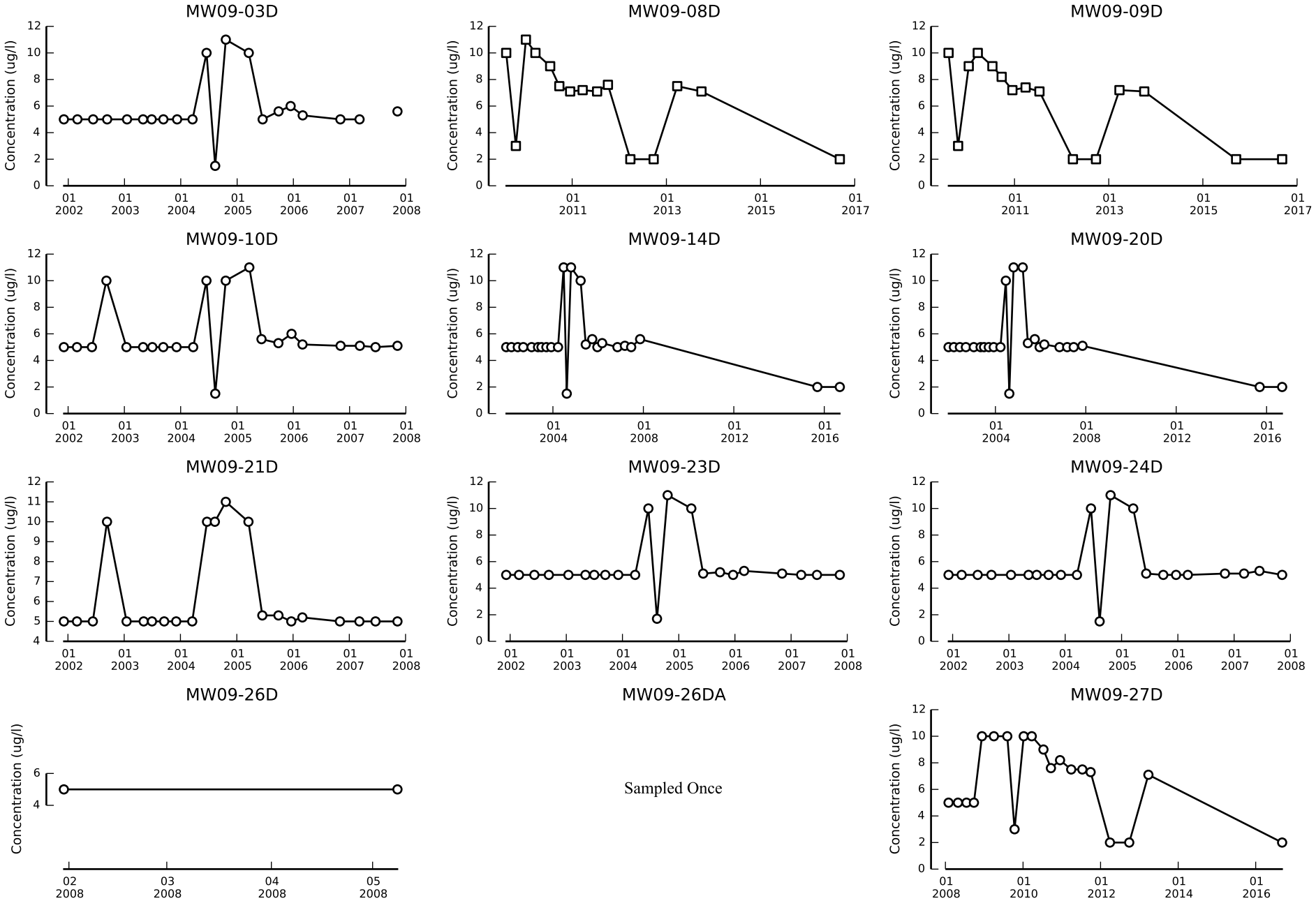
2-BUTANONE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



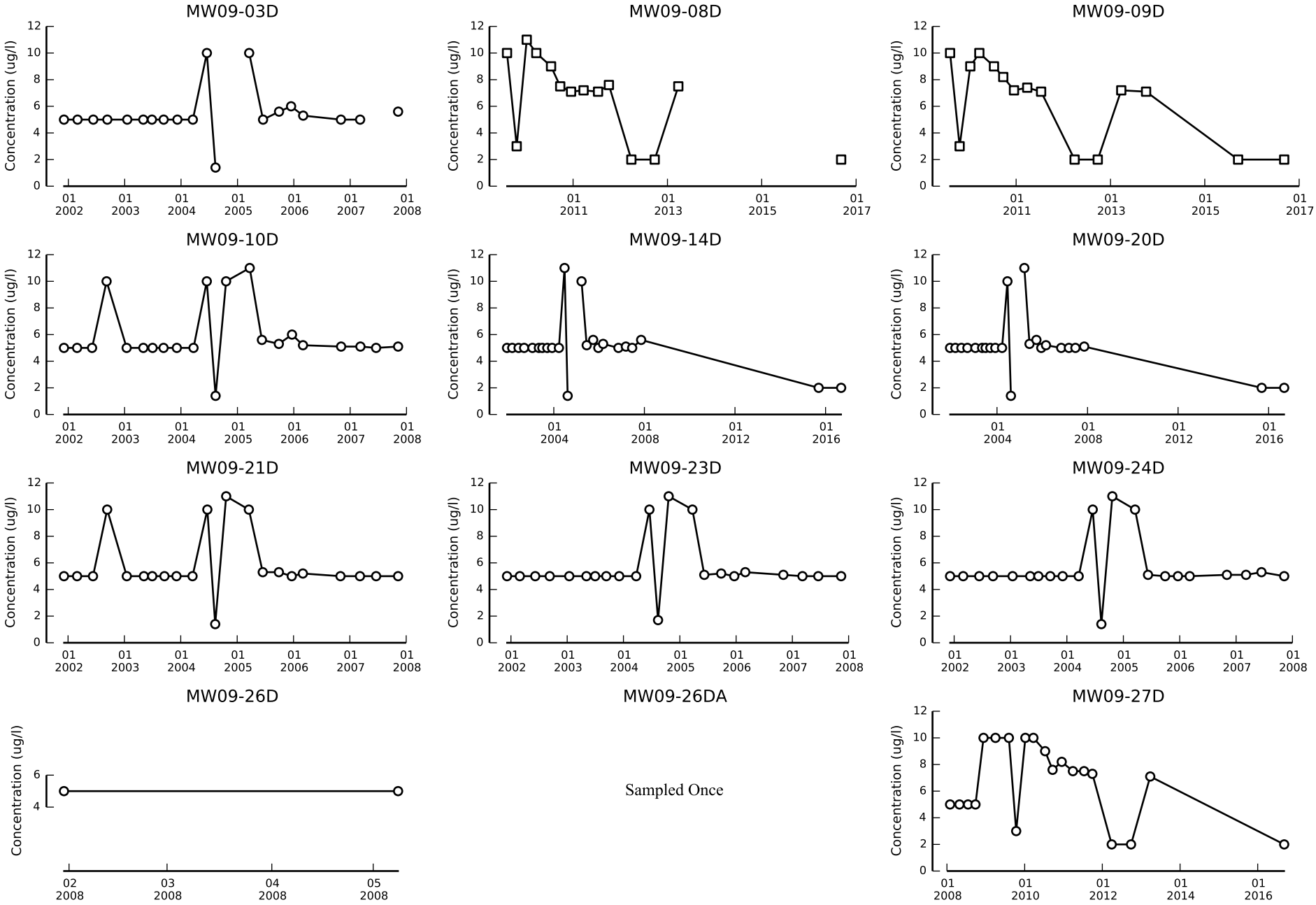
2-CHLORONAPHTHALENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 23 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



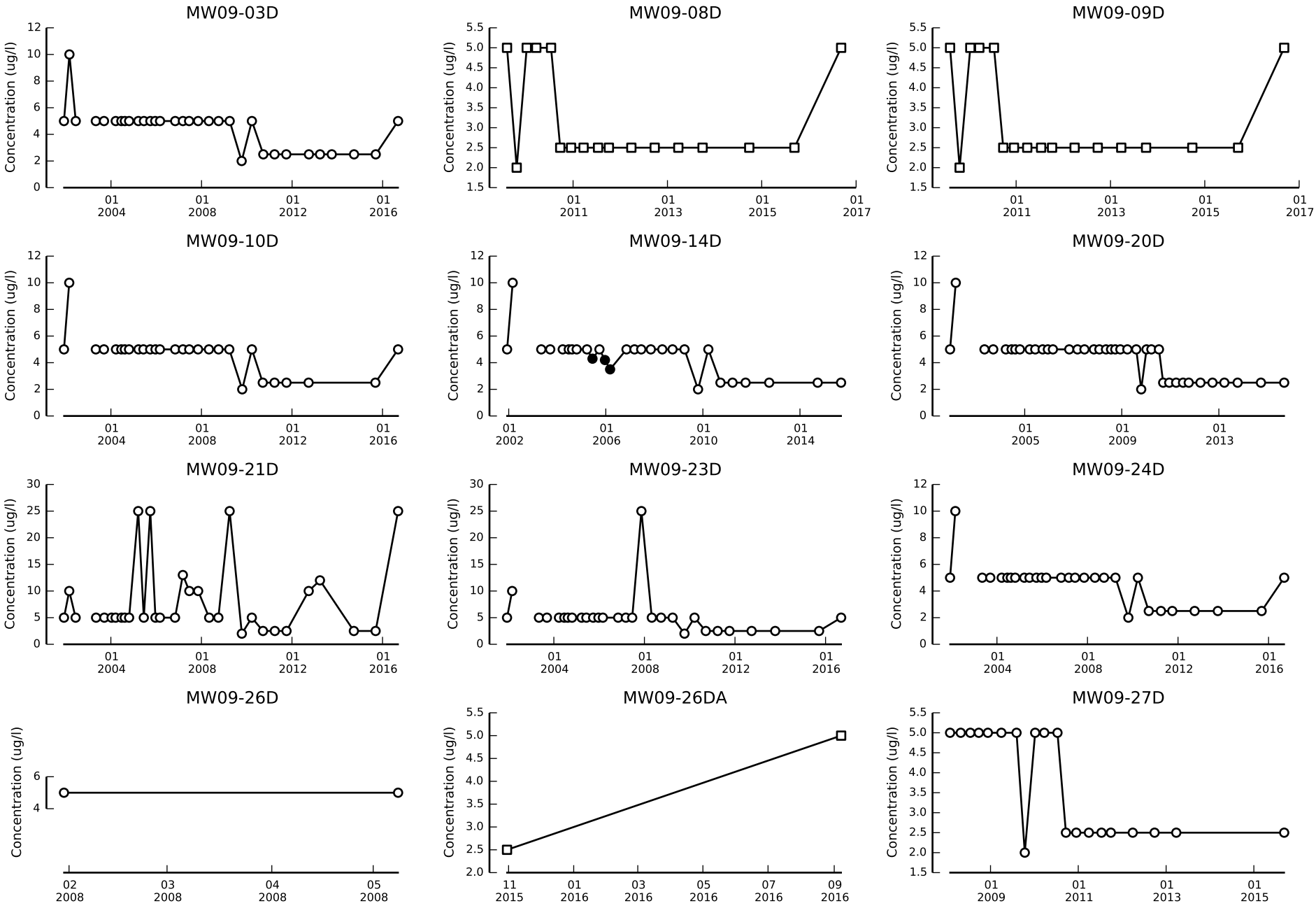
2-CHLOROPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 24 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



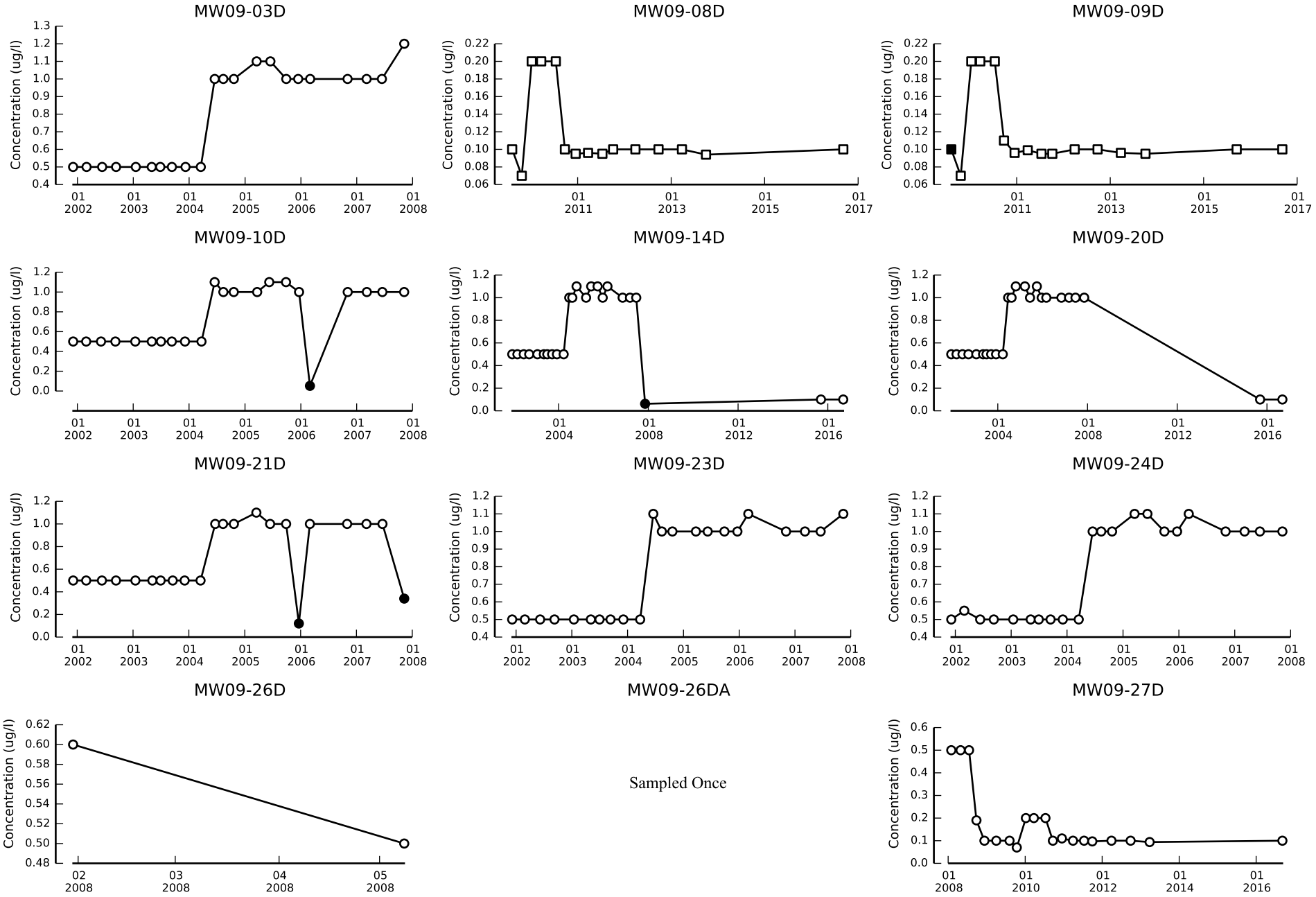
2-HEXANONE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 25 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



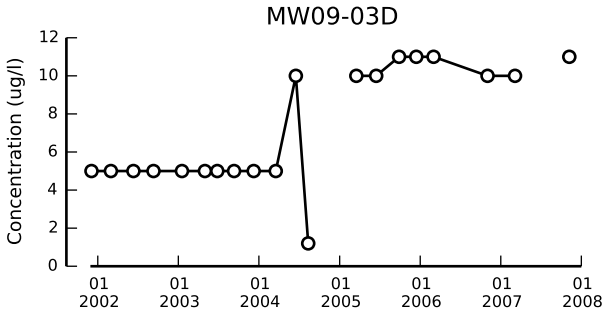
2-METHYLNAPHTHALENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 26 of 133

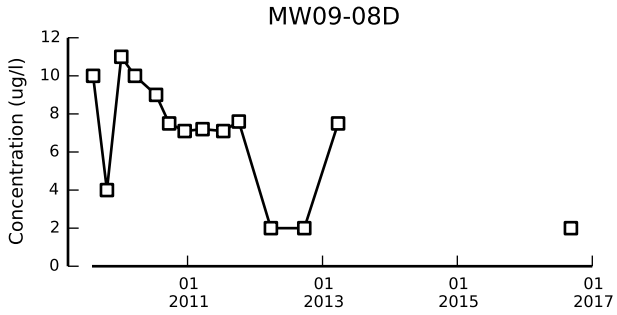
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

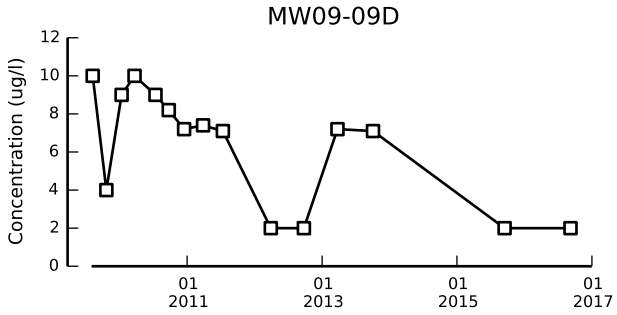


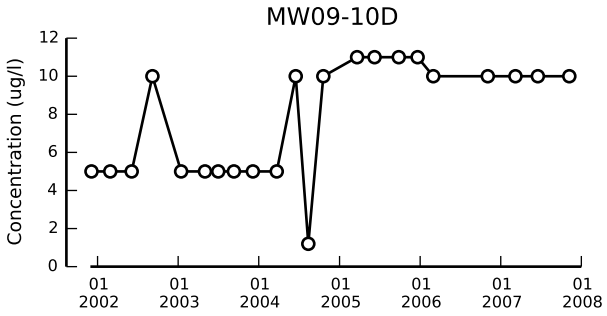
2-METHYLPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 27 of 133

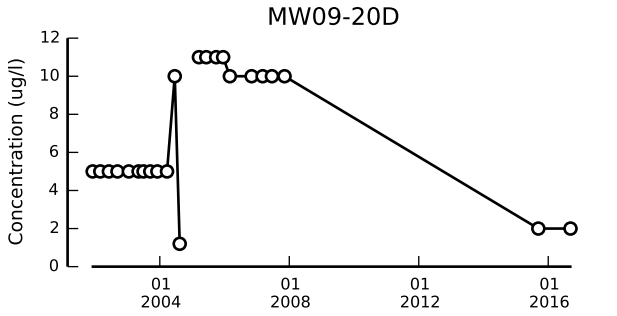
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

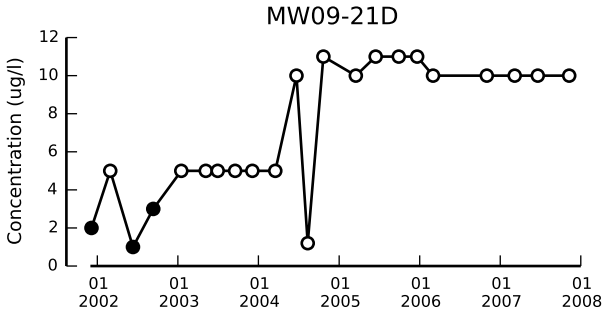


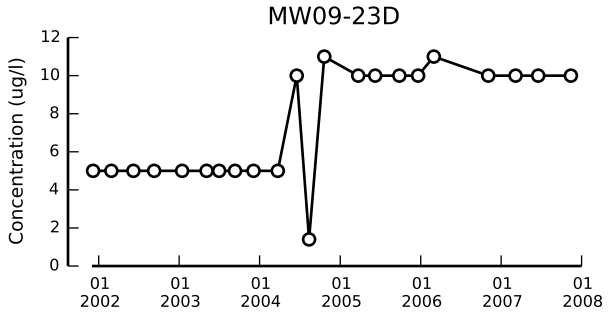


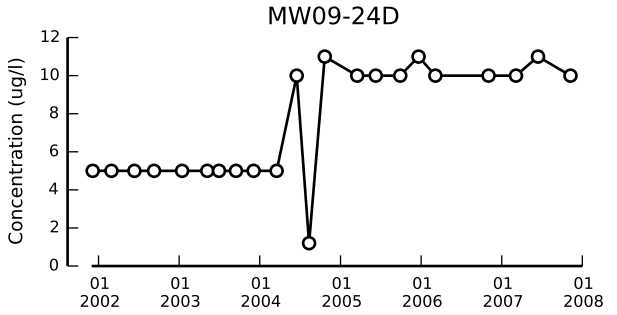


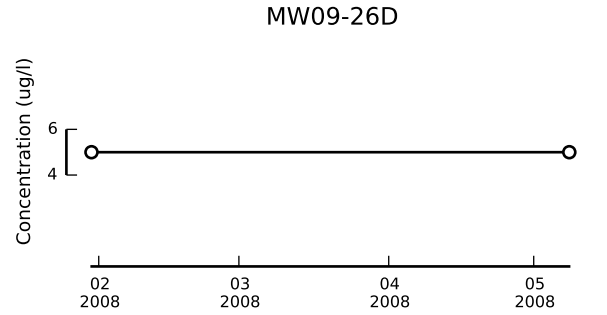






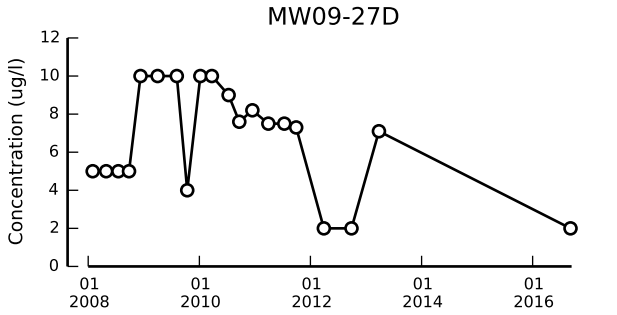






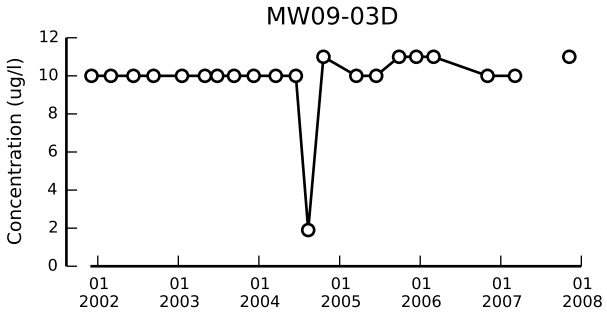
MW09-26DA

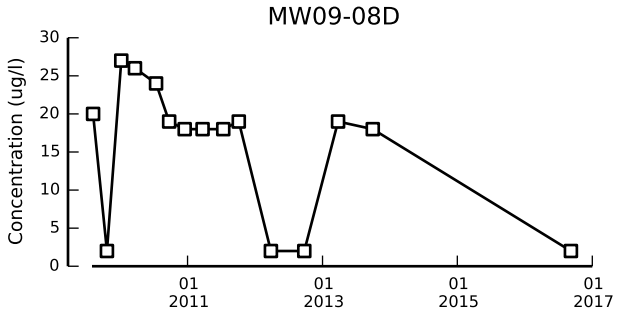
Sampled Once

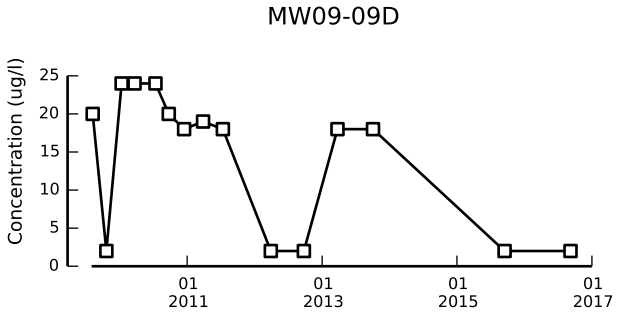


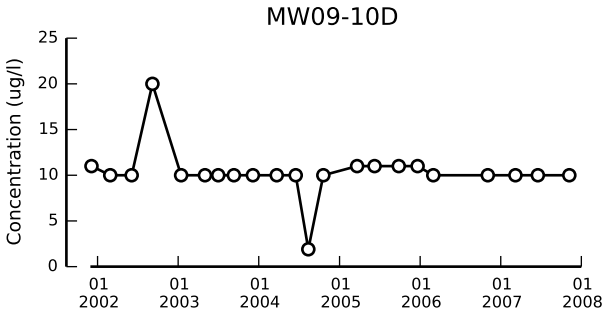
2-NITROANILINE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 28 of 133

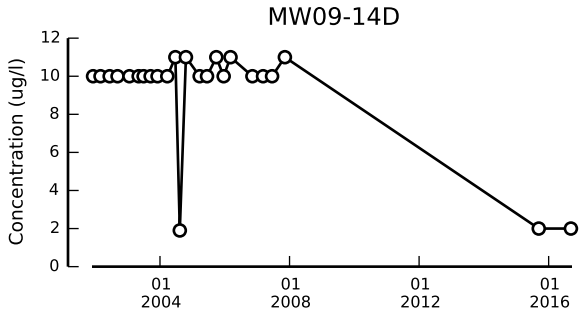
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

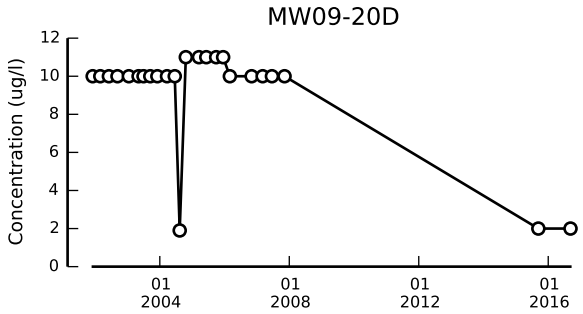


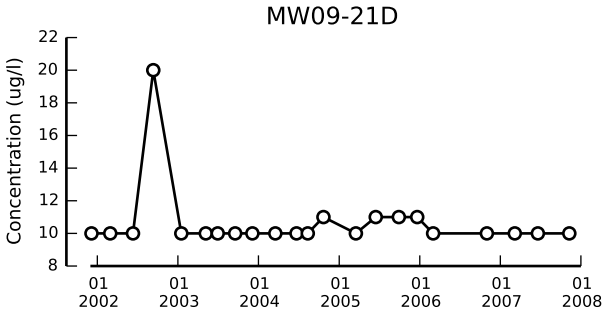


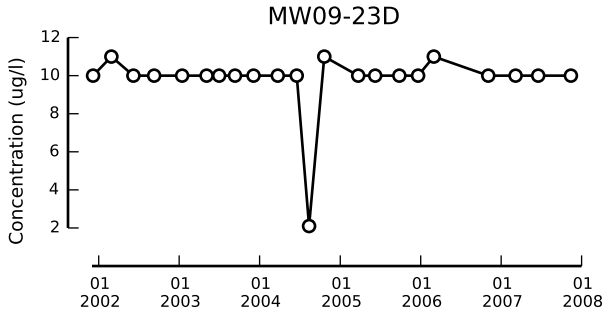


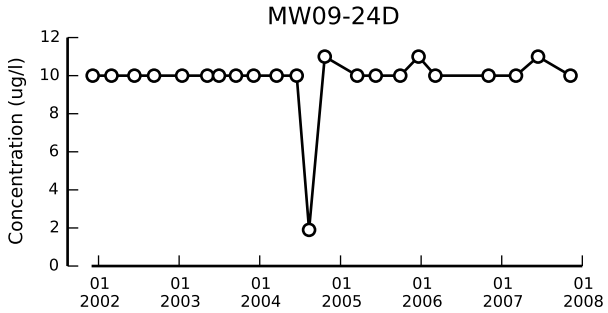


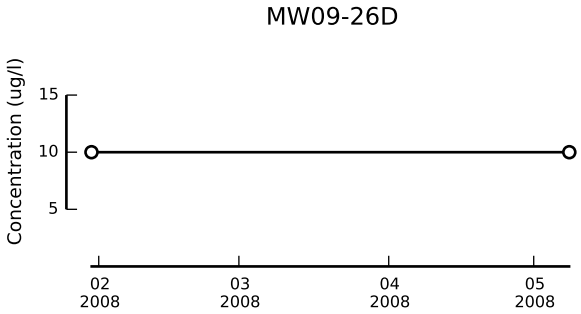












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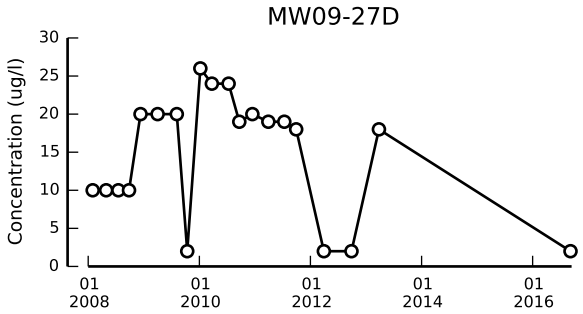
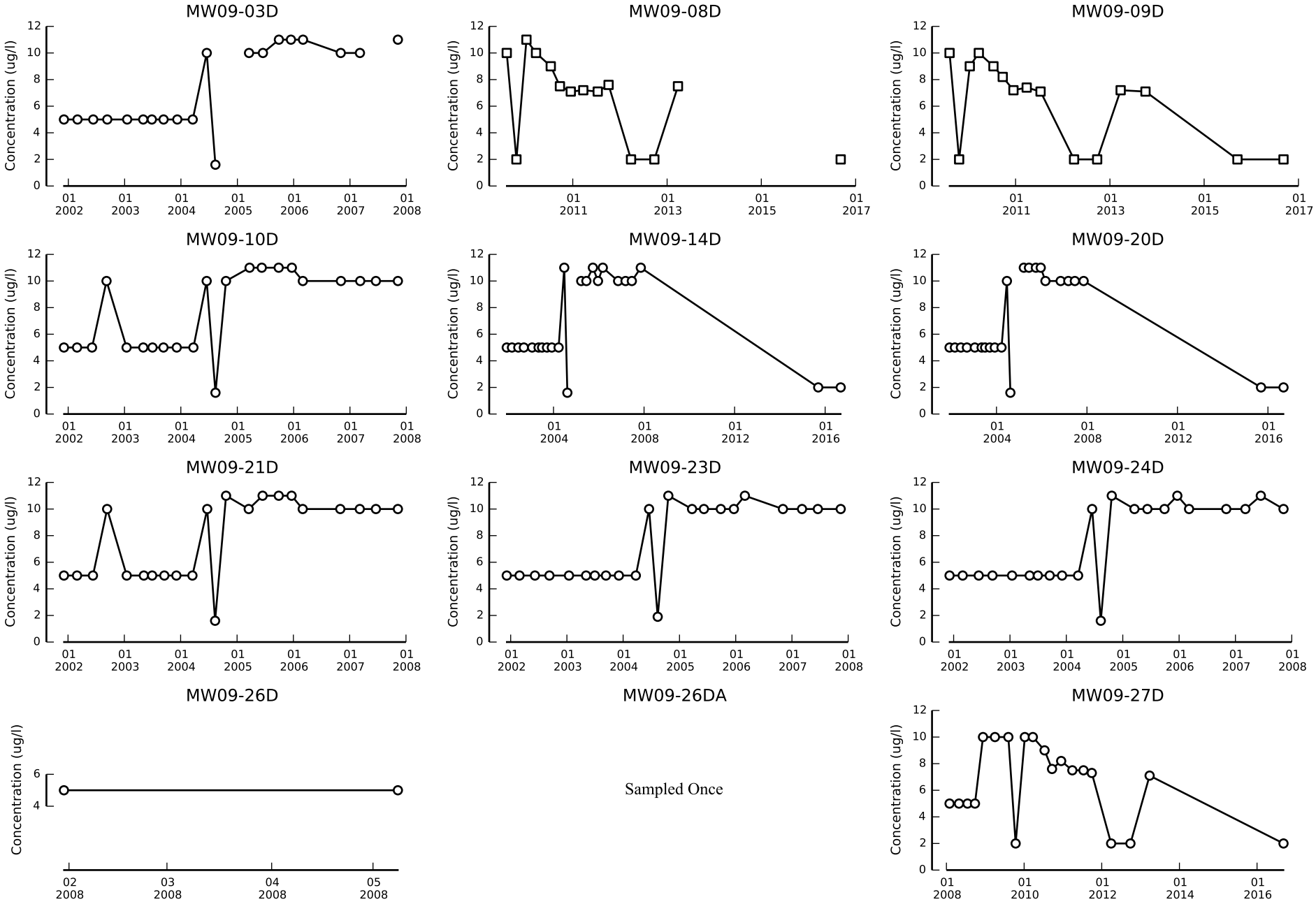
Sampled Once



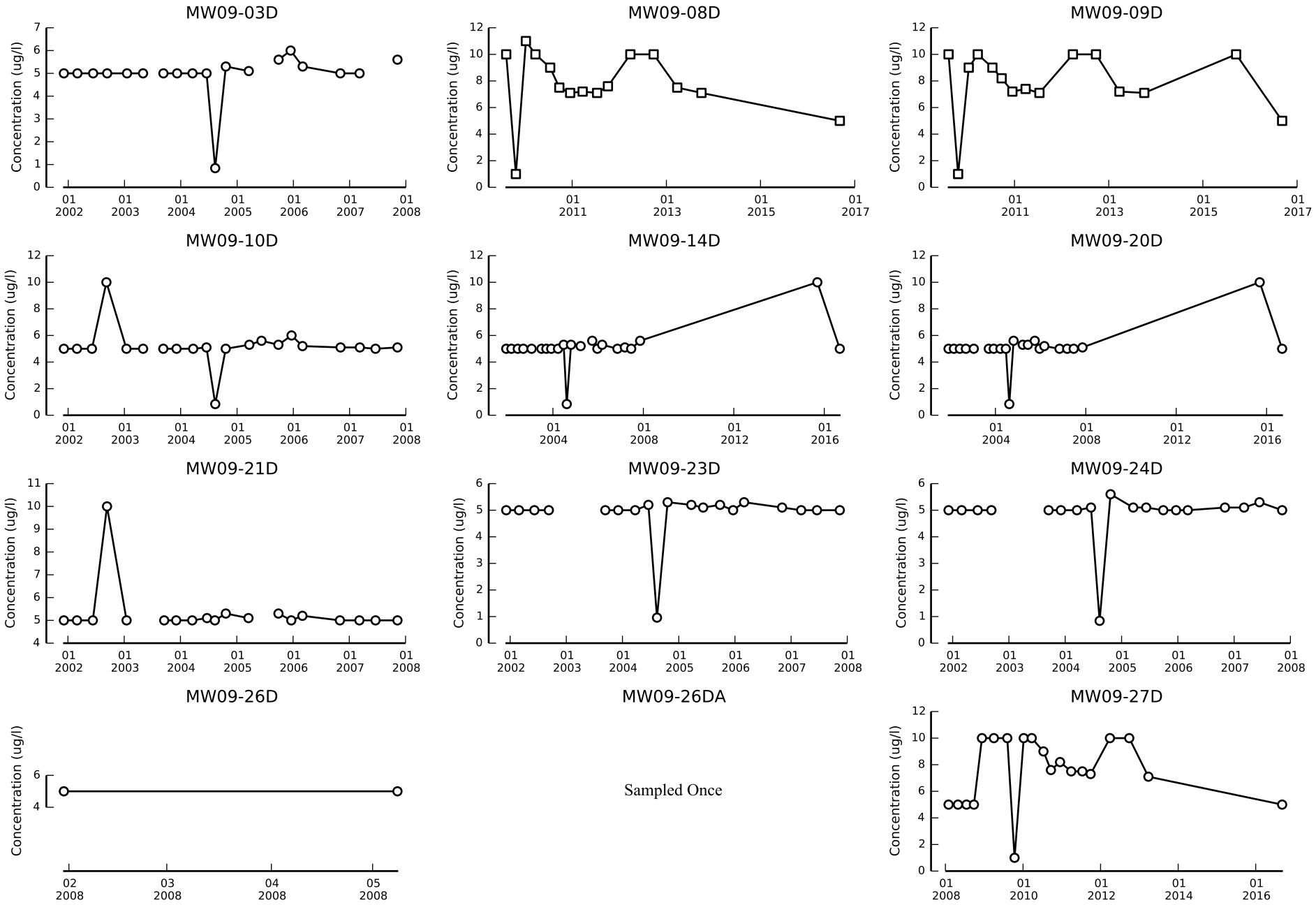
2-NITROPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 29 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



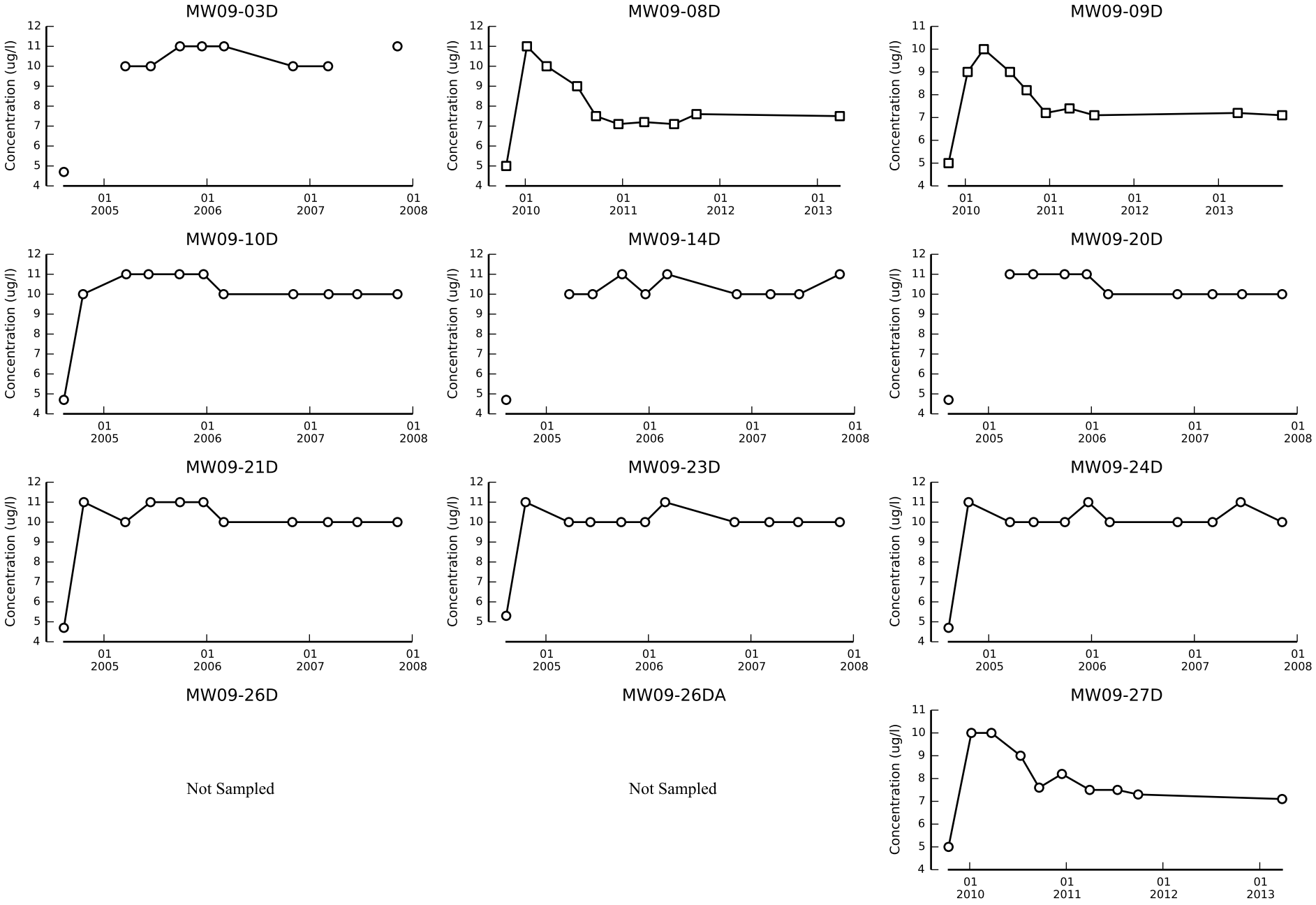
3,3-DICHLOROBENZIDINE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 30 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



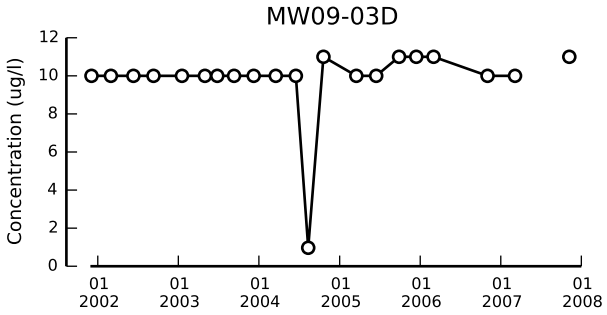
3- AND 4-METHYLPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 31 of 133

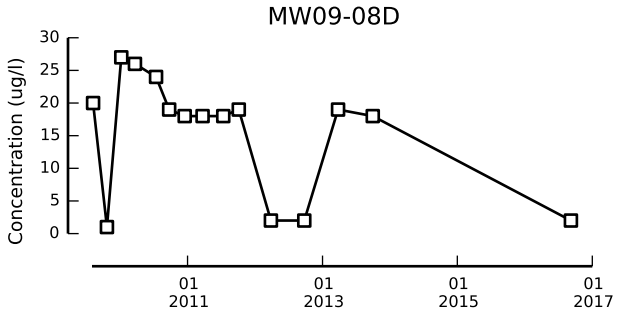
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

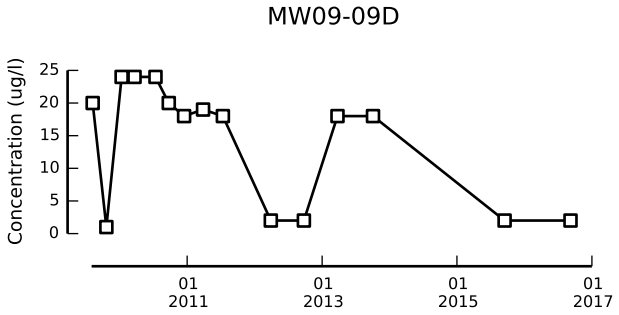


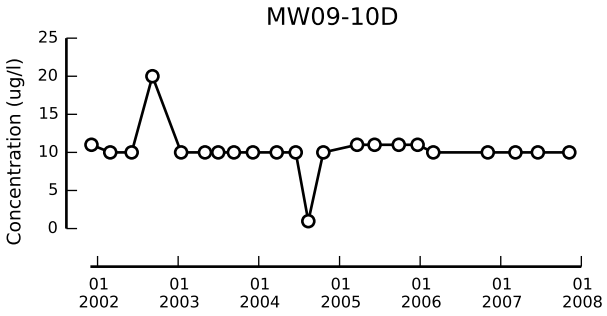
3-NITROANILINE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 32 of 133

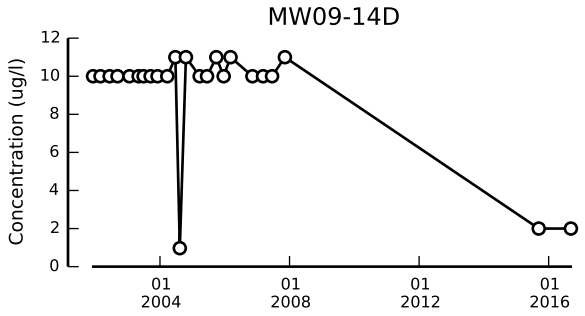
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

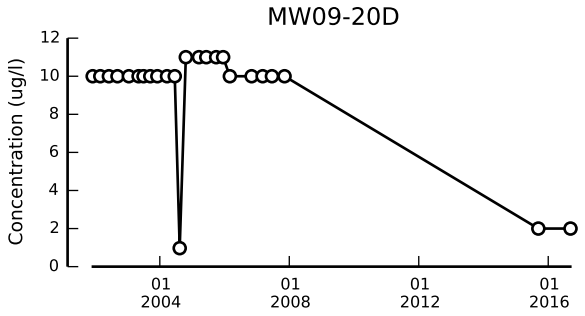


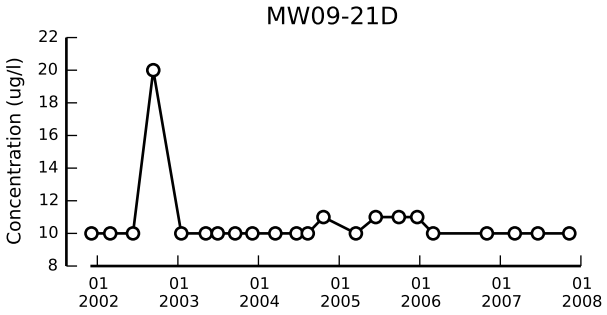


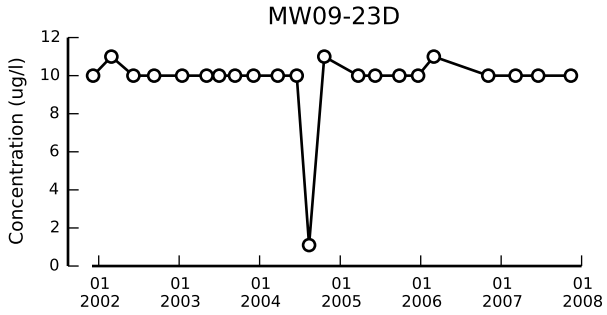


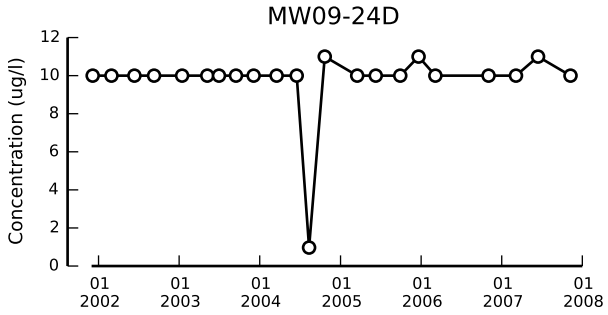


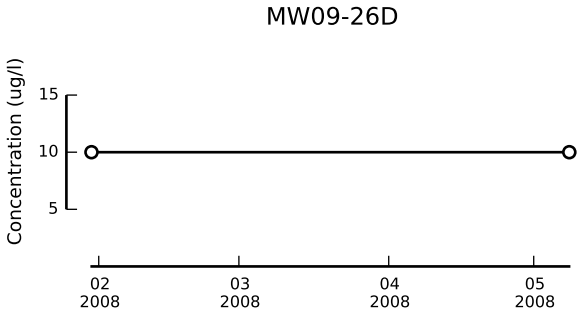






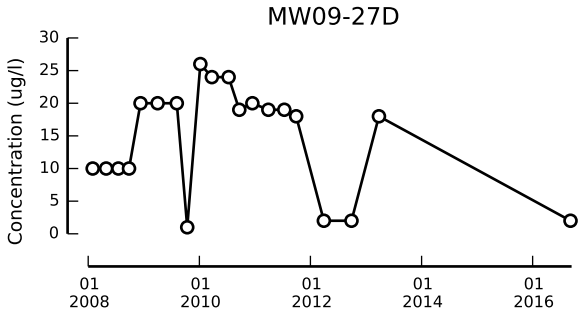






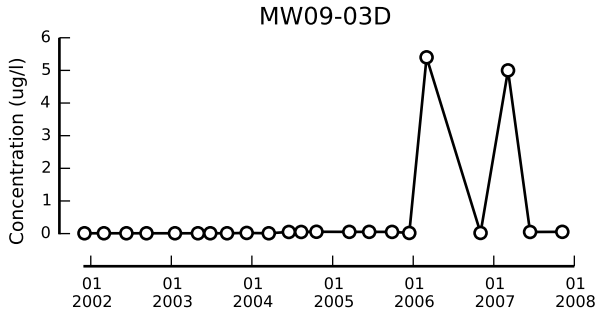
MW09-26DA

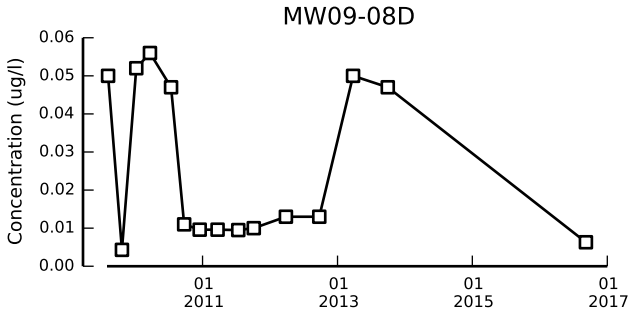
Sampled Once

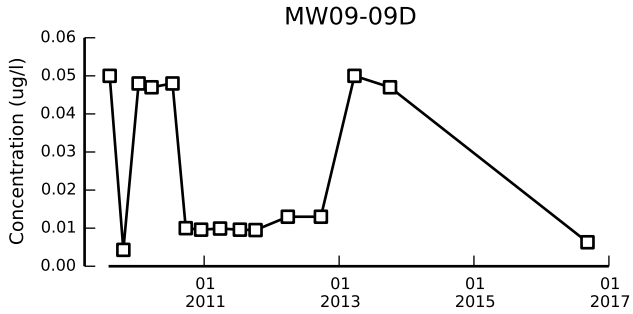


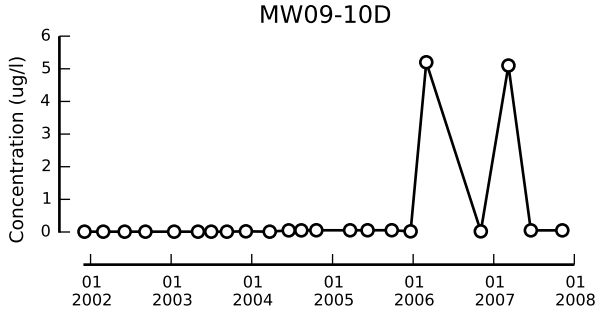
4,4-DDD in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 33 of 133

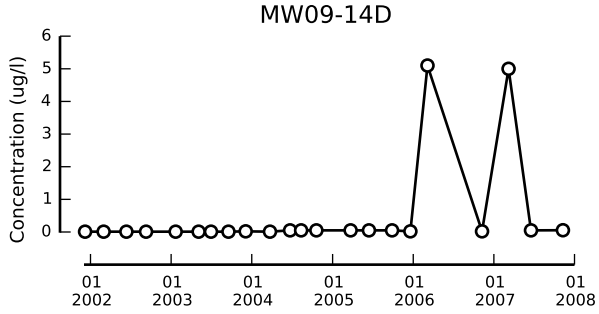
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

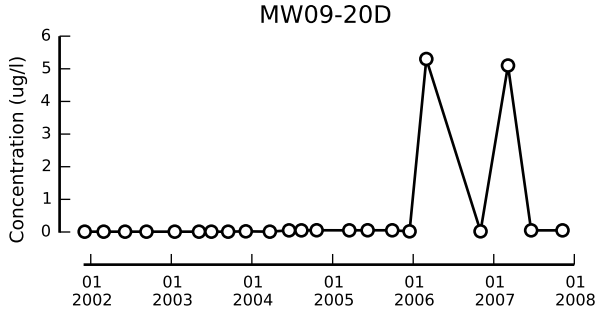


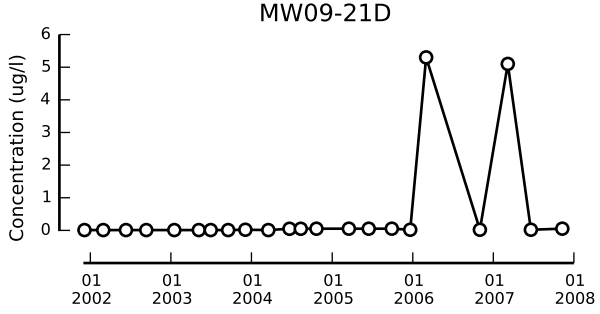


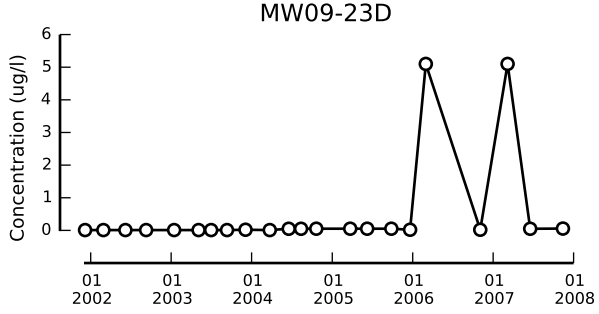


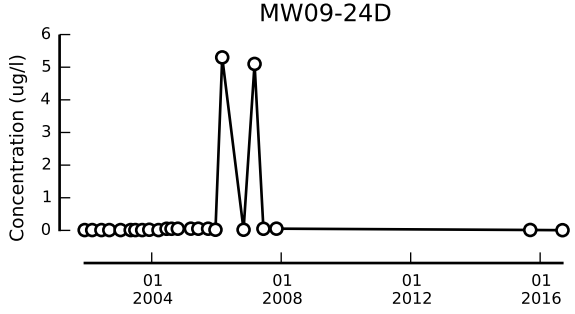


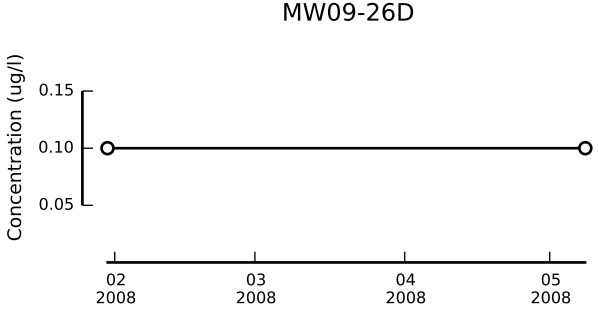






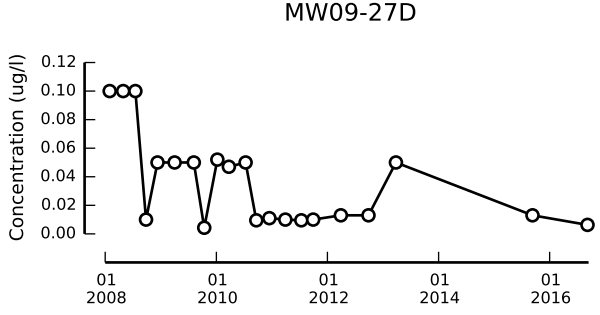






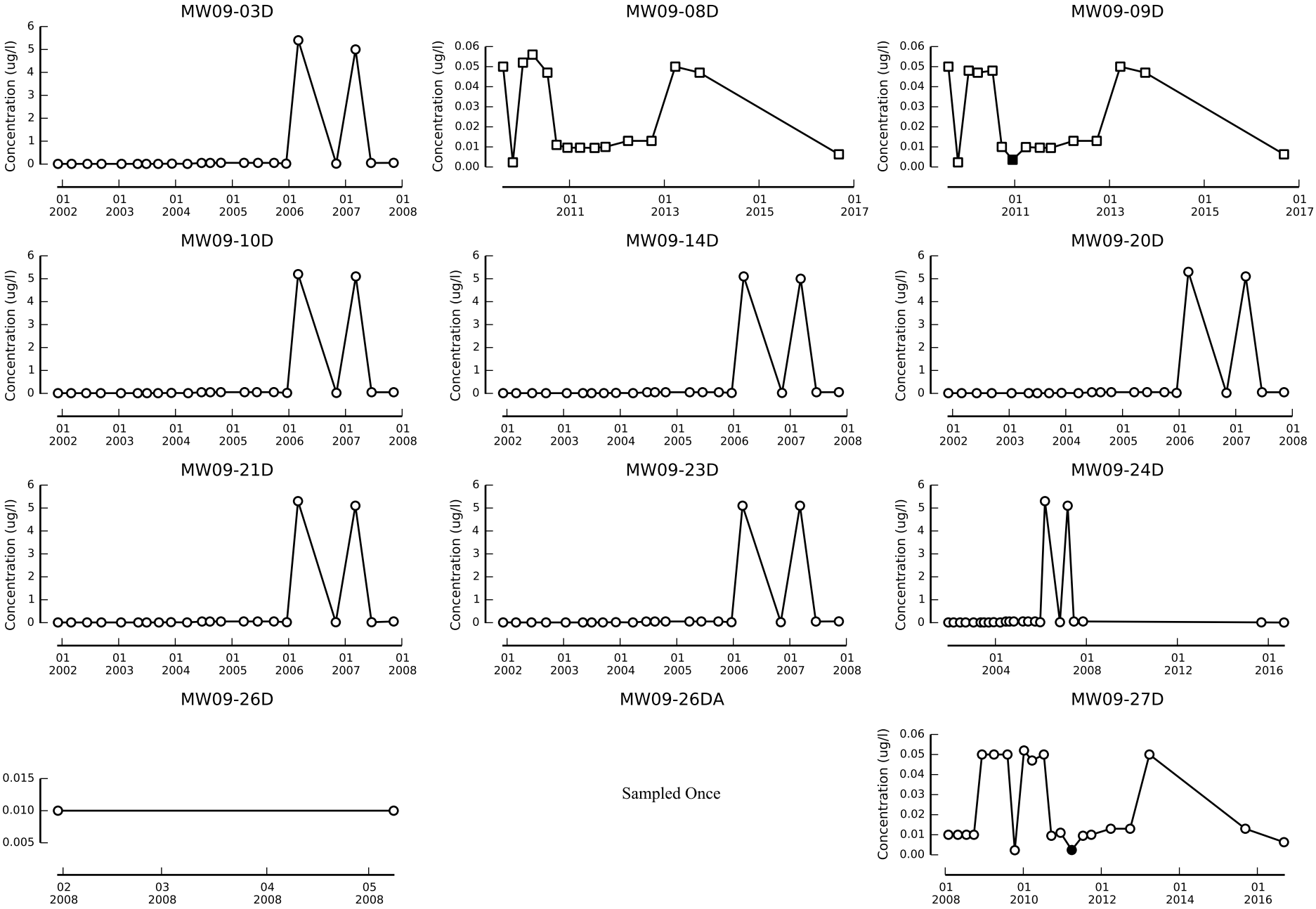
MW09-26DA

Sampled Once



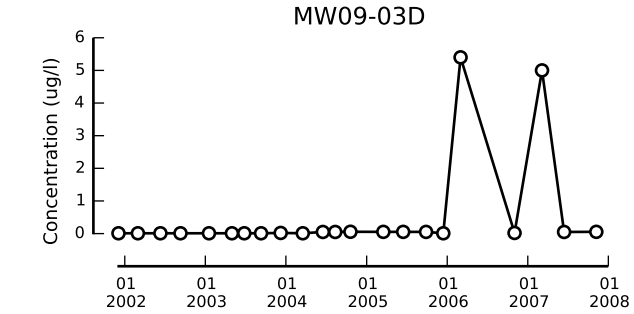
4,4-DDE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 34 of 133

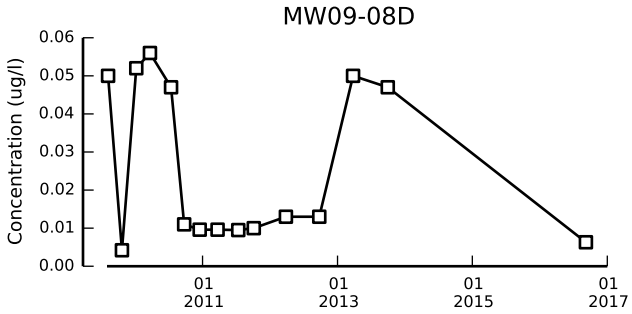
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

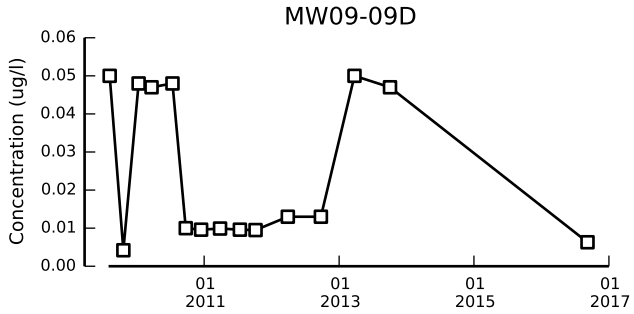


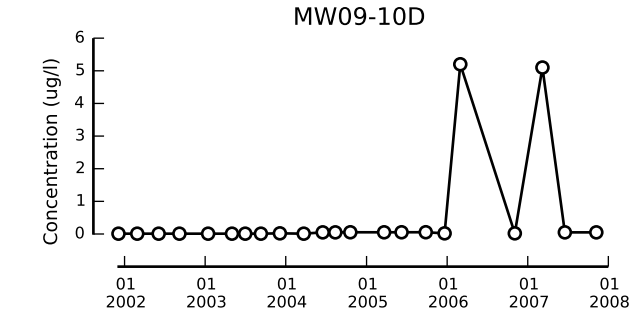
4,4-DDT in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 35 of 133

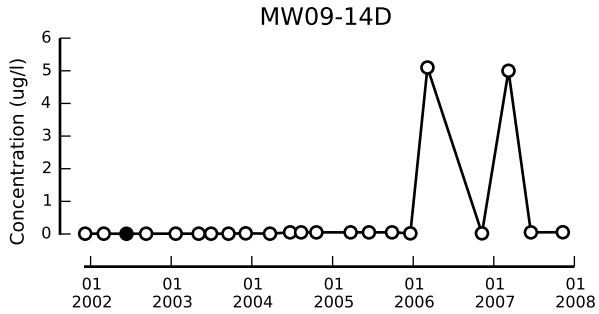
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

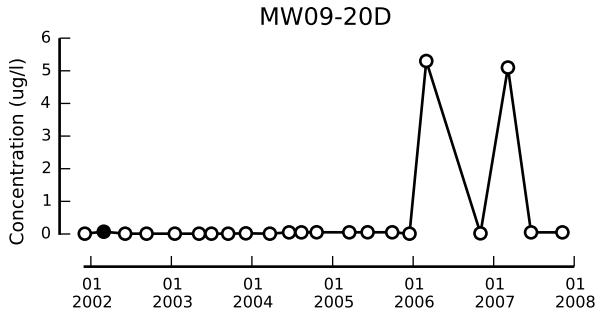


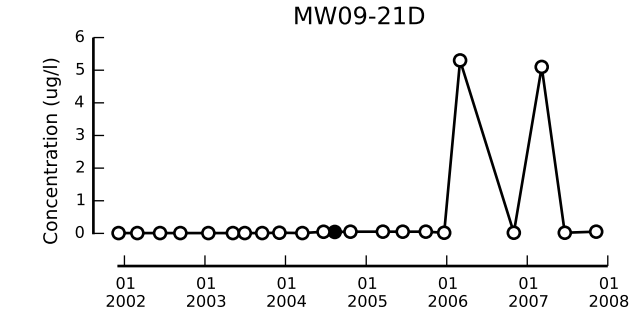


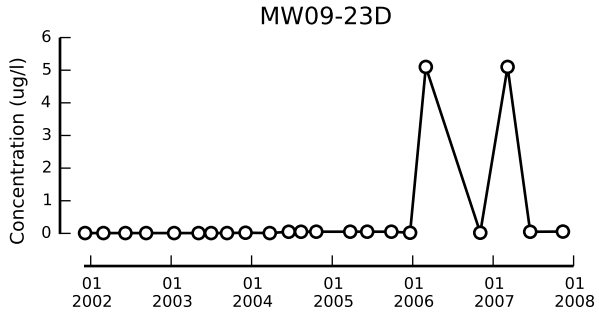


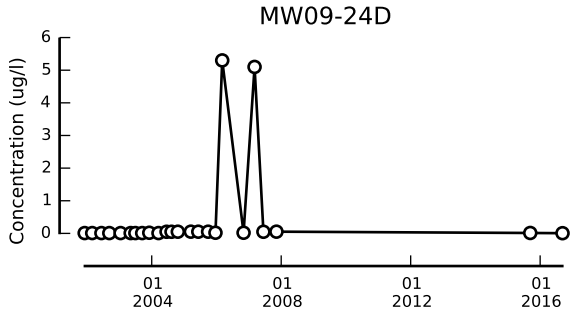


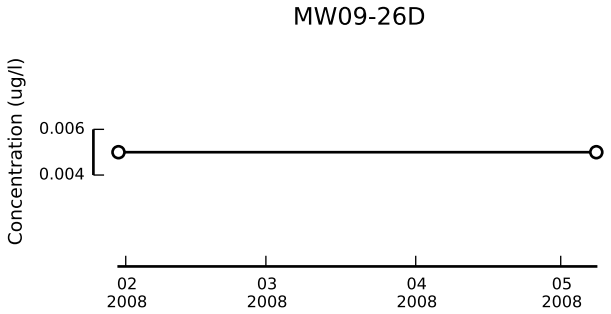






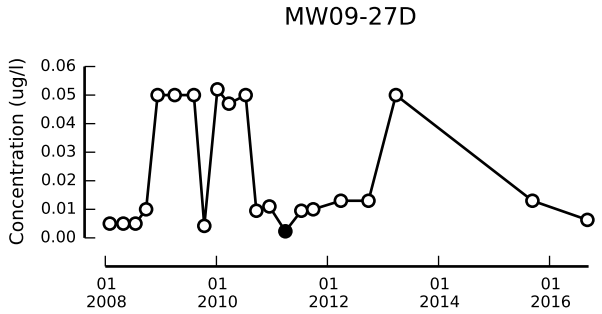






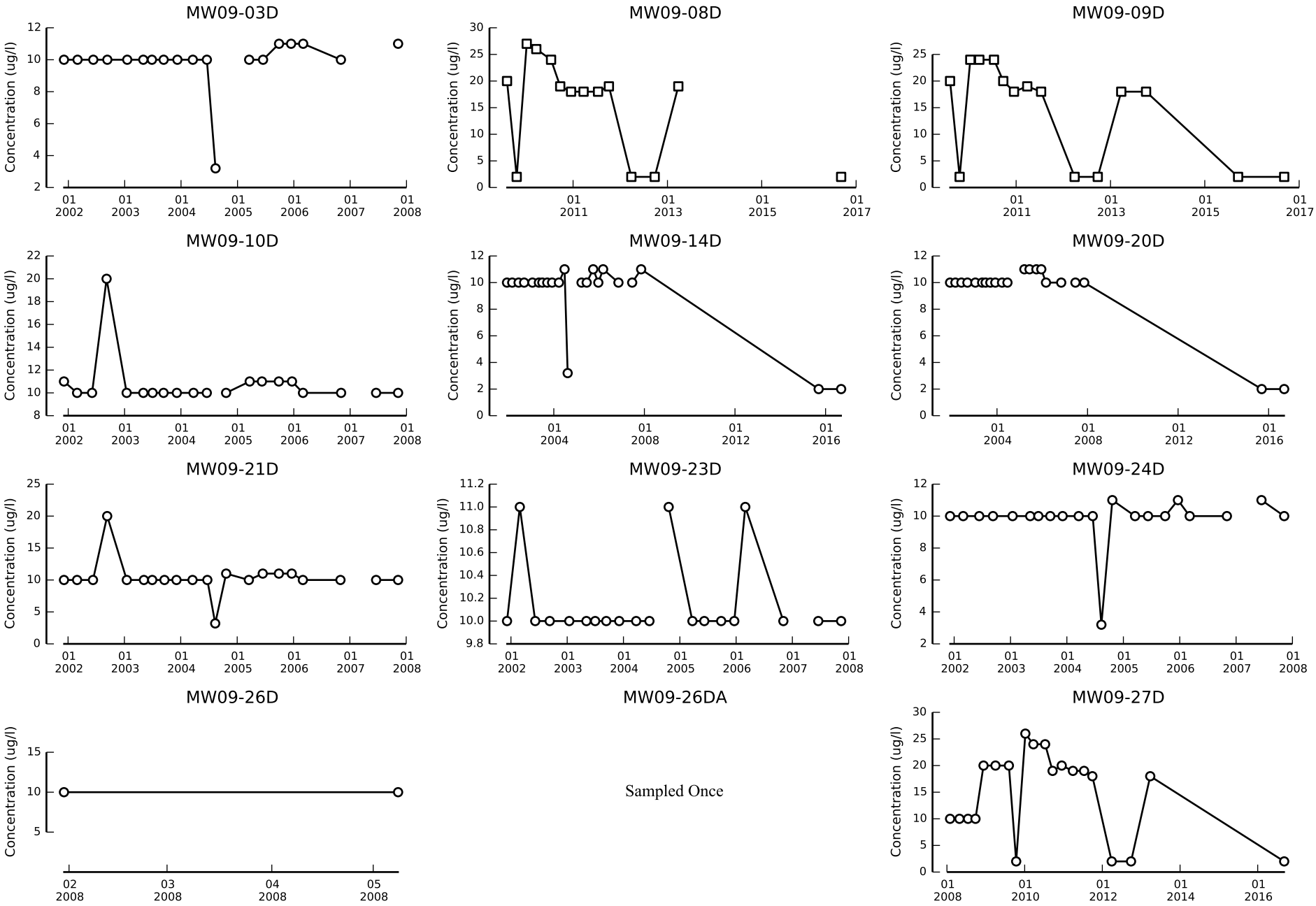
MW09-26DA

Sampled Once



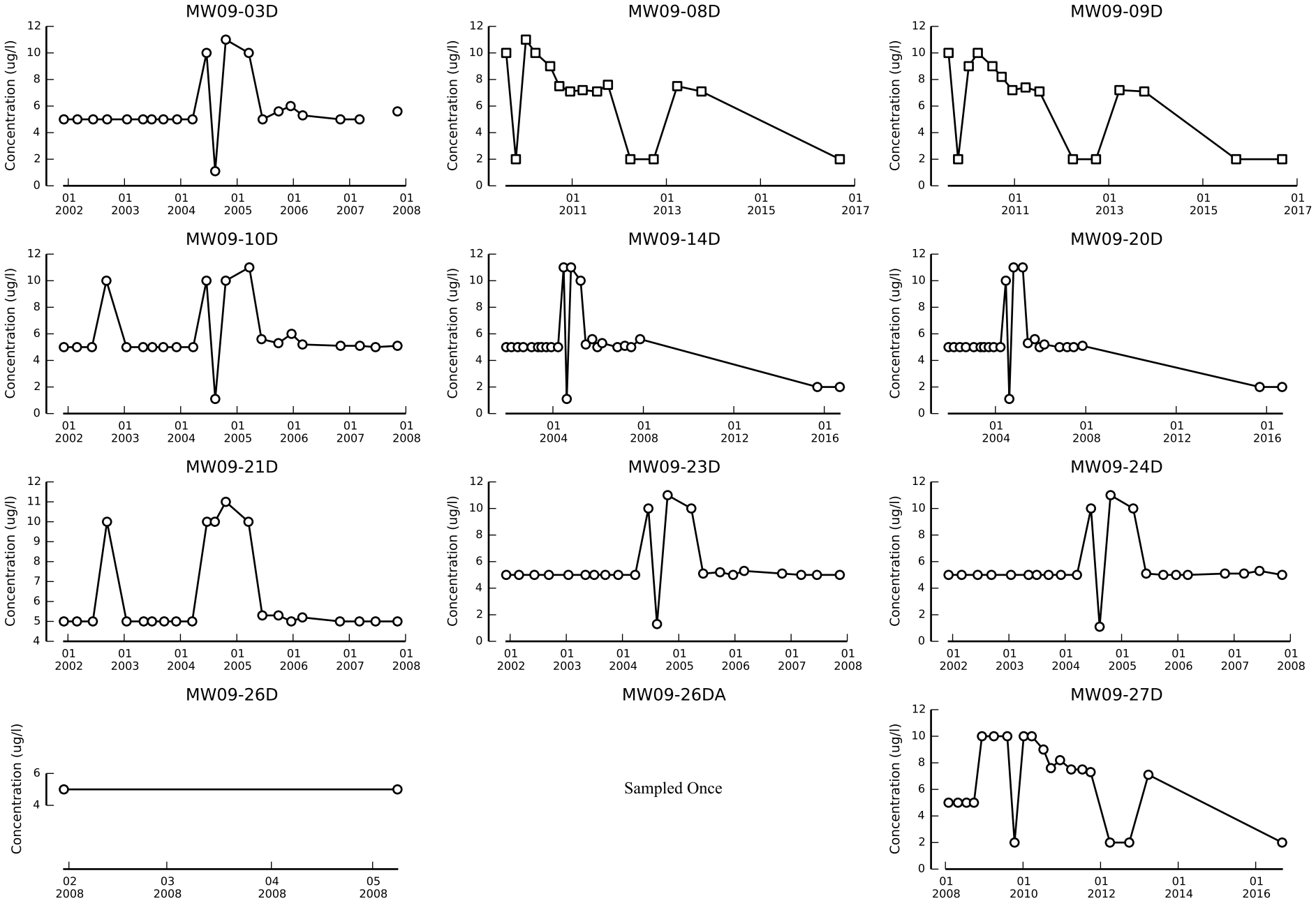
4,6-DINITRO-2-METHYLPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 36 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



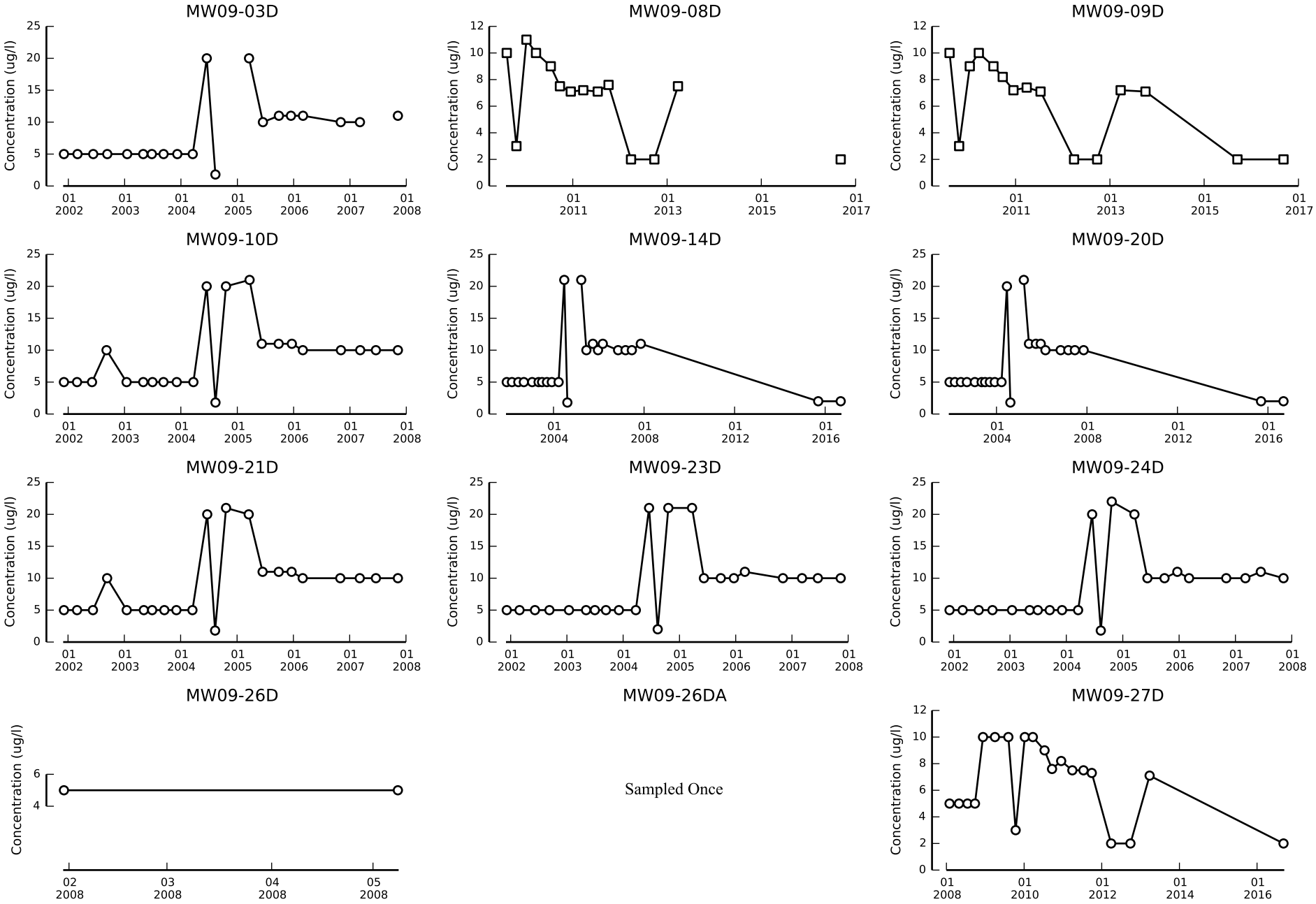
4-BROMOPHENYL-PHENYLETHER in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 37 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



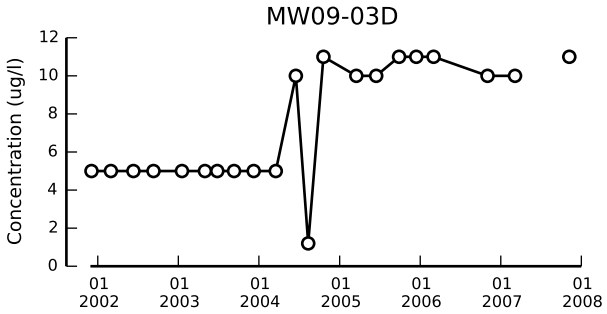
4-CHLORO-3-METHYLPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 38 of 133

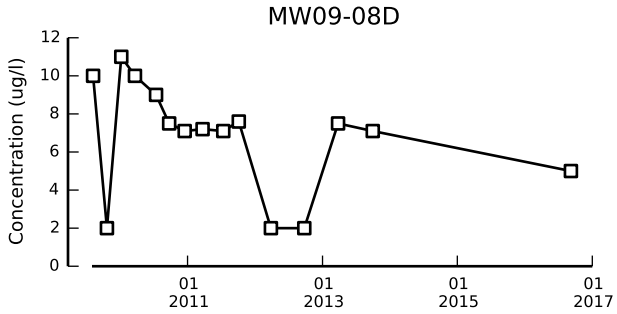
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

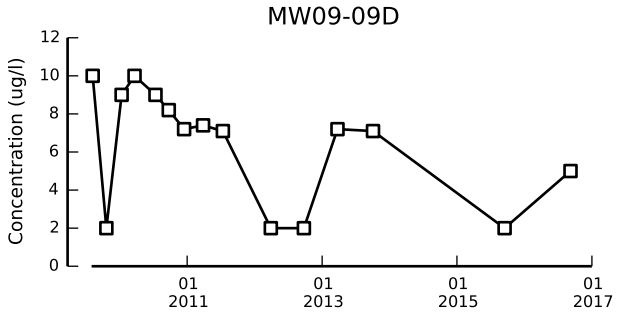


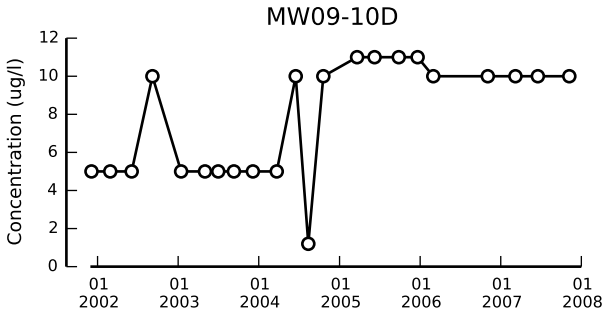
4-CHLOROANILINE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 39 of 133

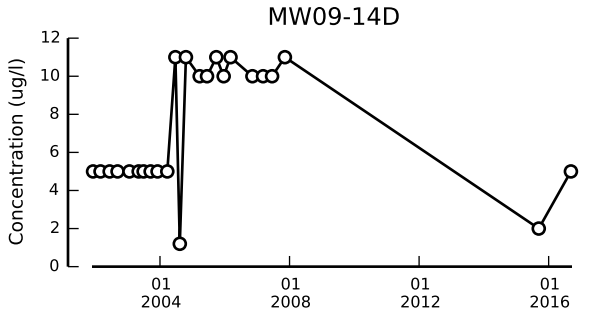
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

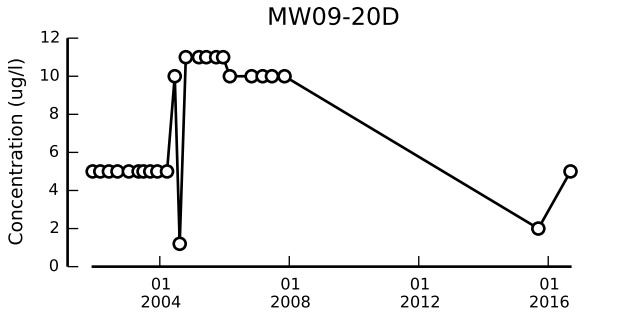


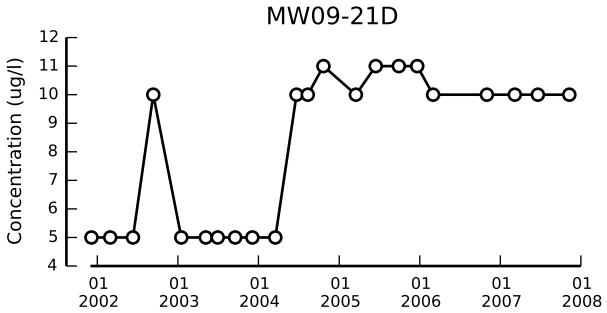


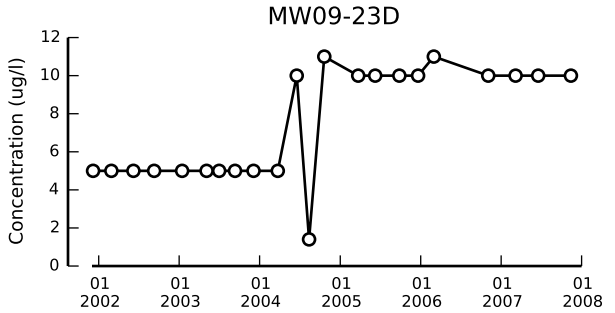


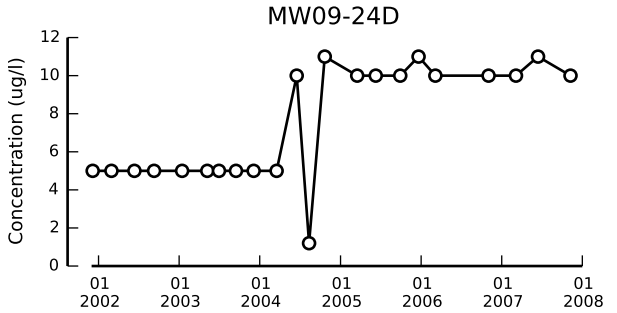


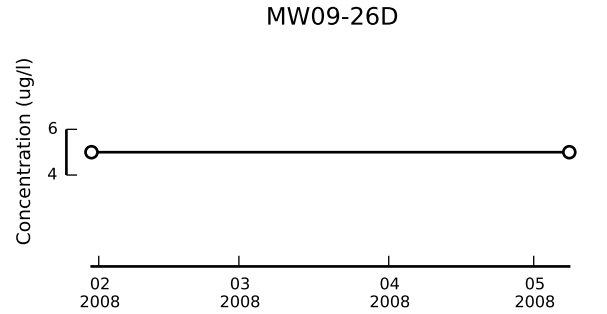






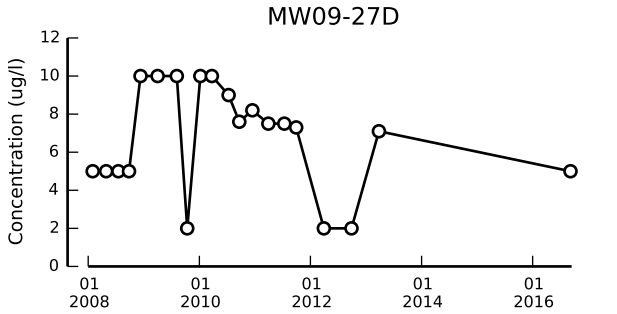






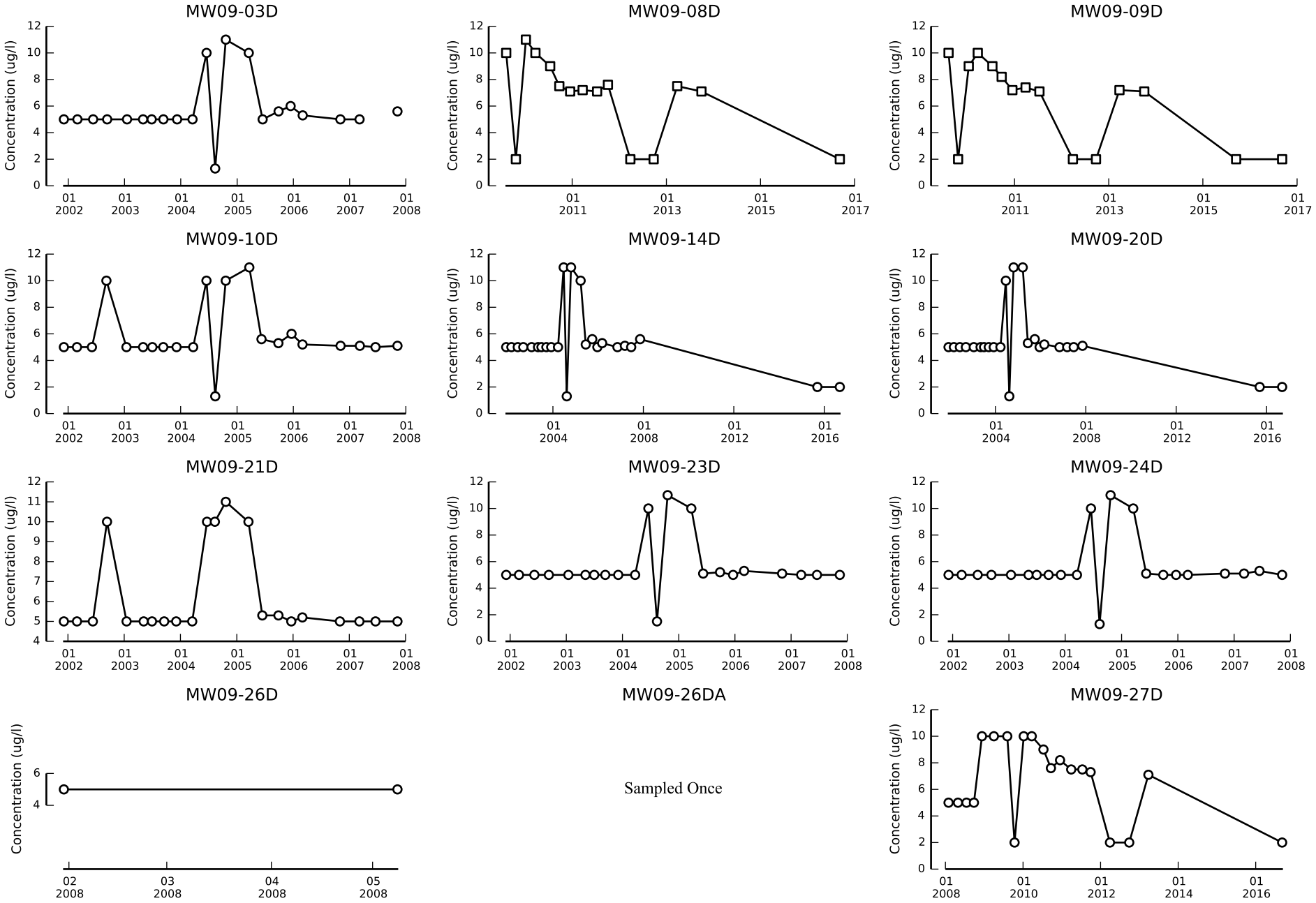
MW09-26DA

Sampled Once



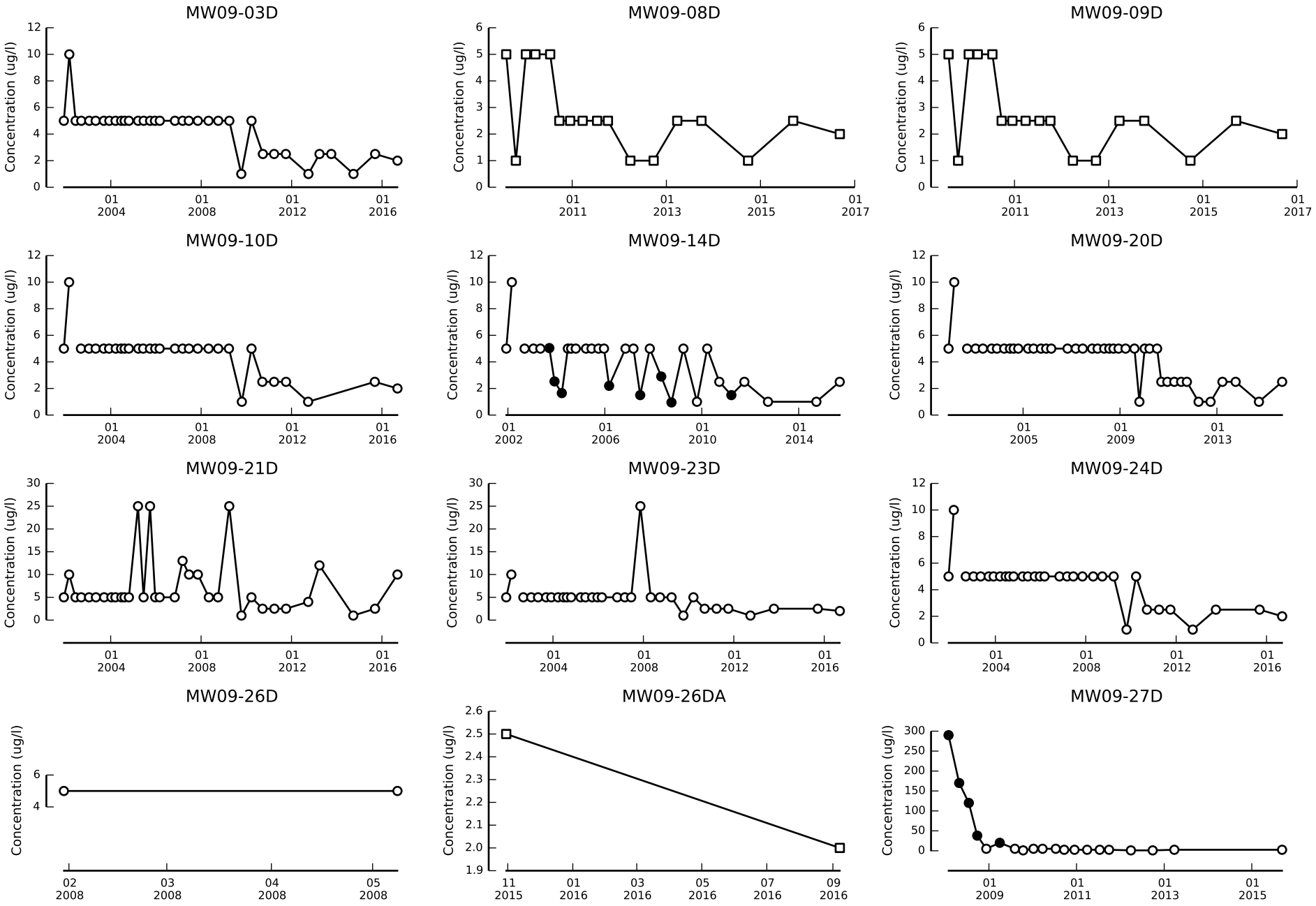
4-CHLOROPHENYL-PHENYLETHER in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 40 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



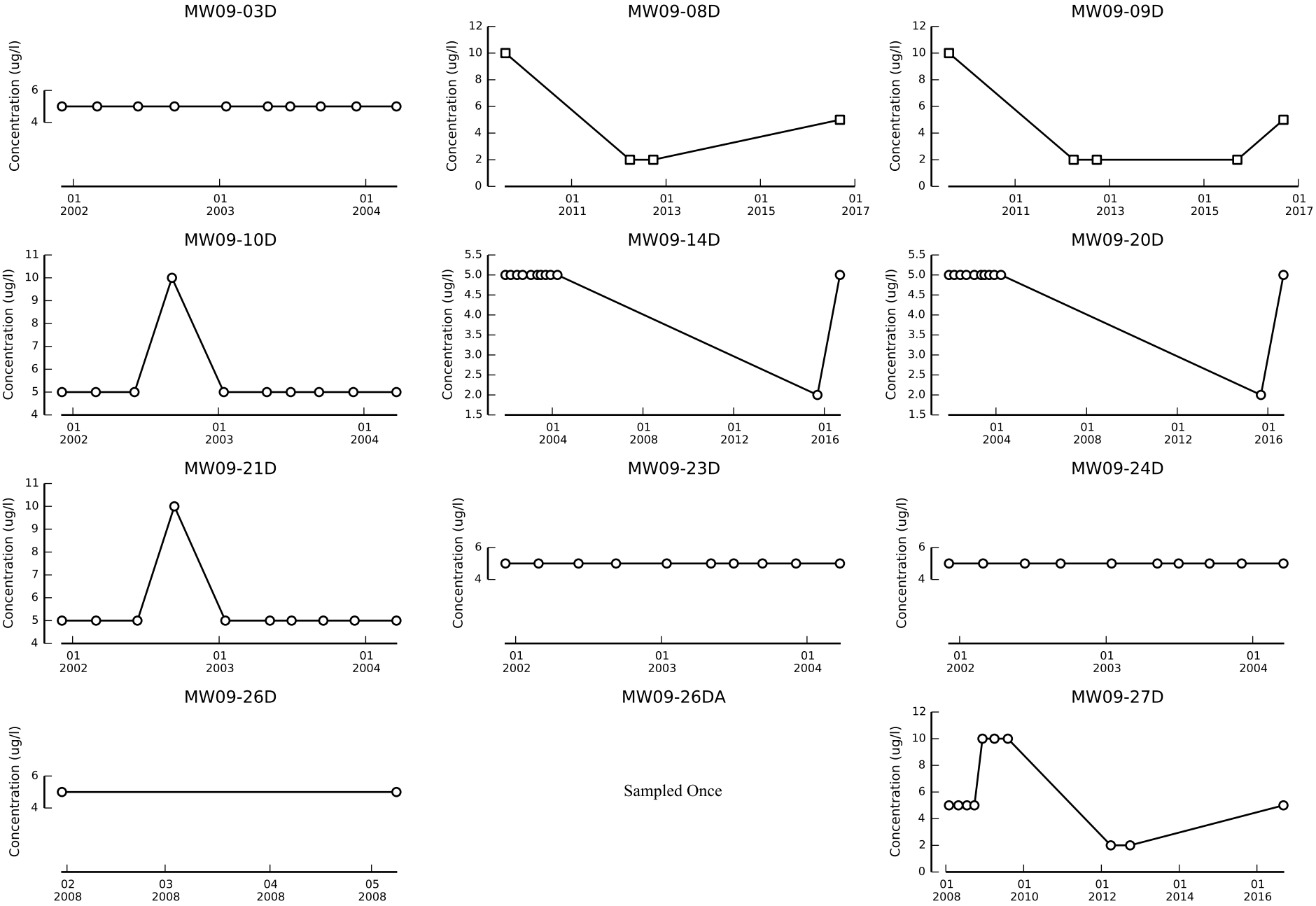
4-METHYL-2-PENTANONE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 41 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



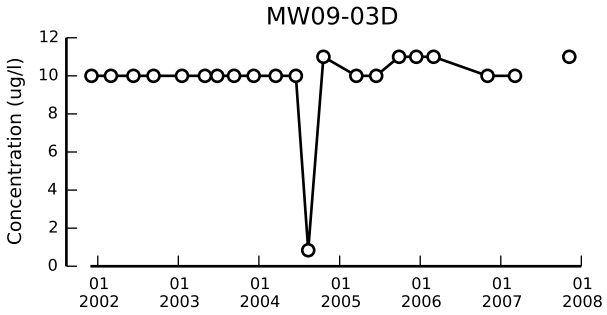
4-METHYLPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 42 of 133

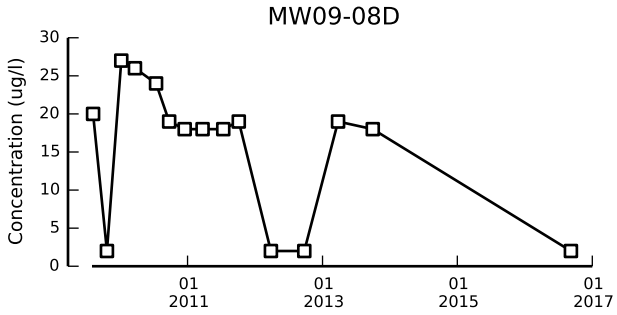
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

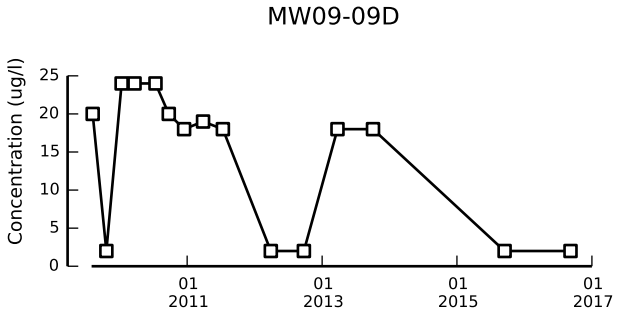


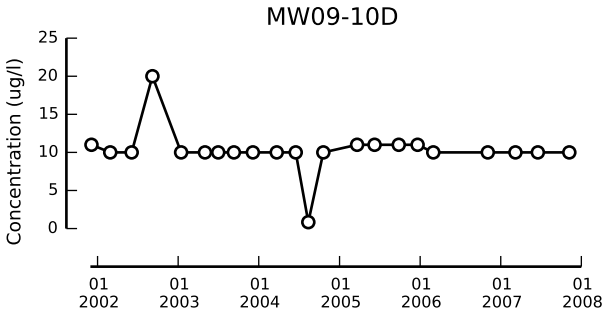
4-NITROANILINE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 43 of 133

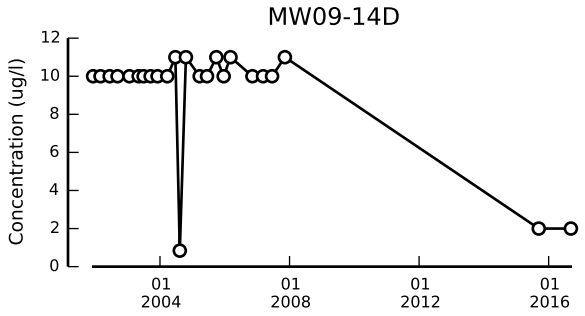
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

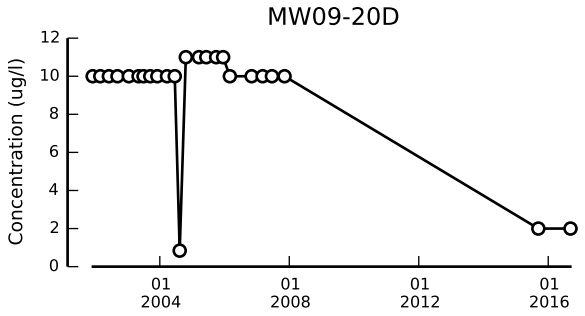


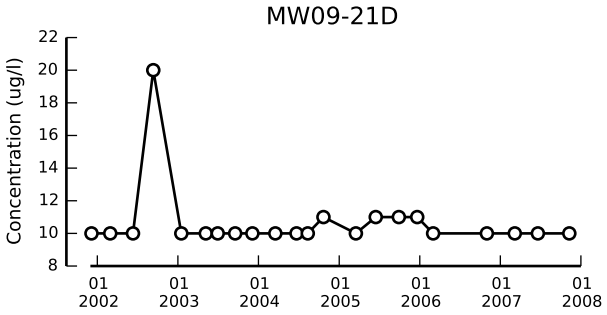


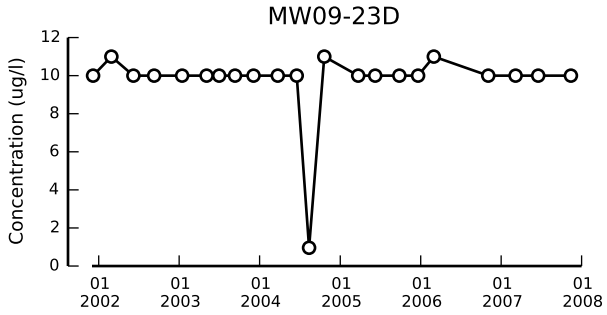


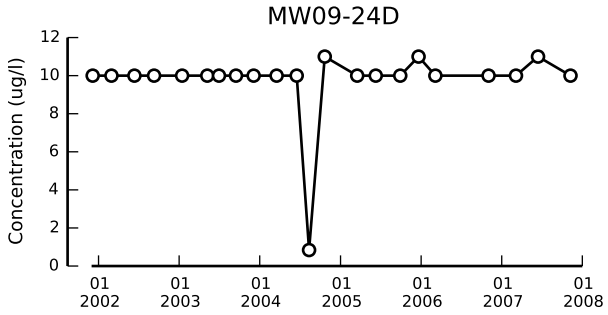


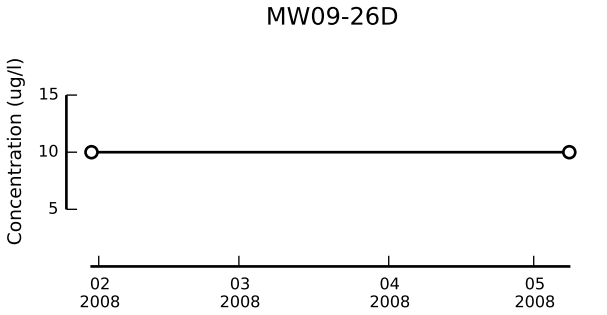






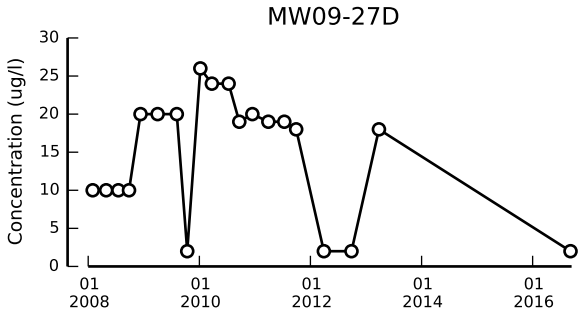






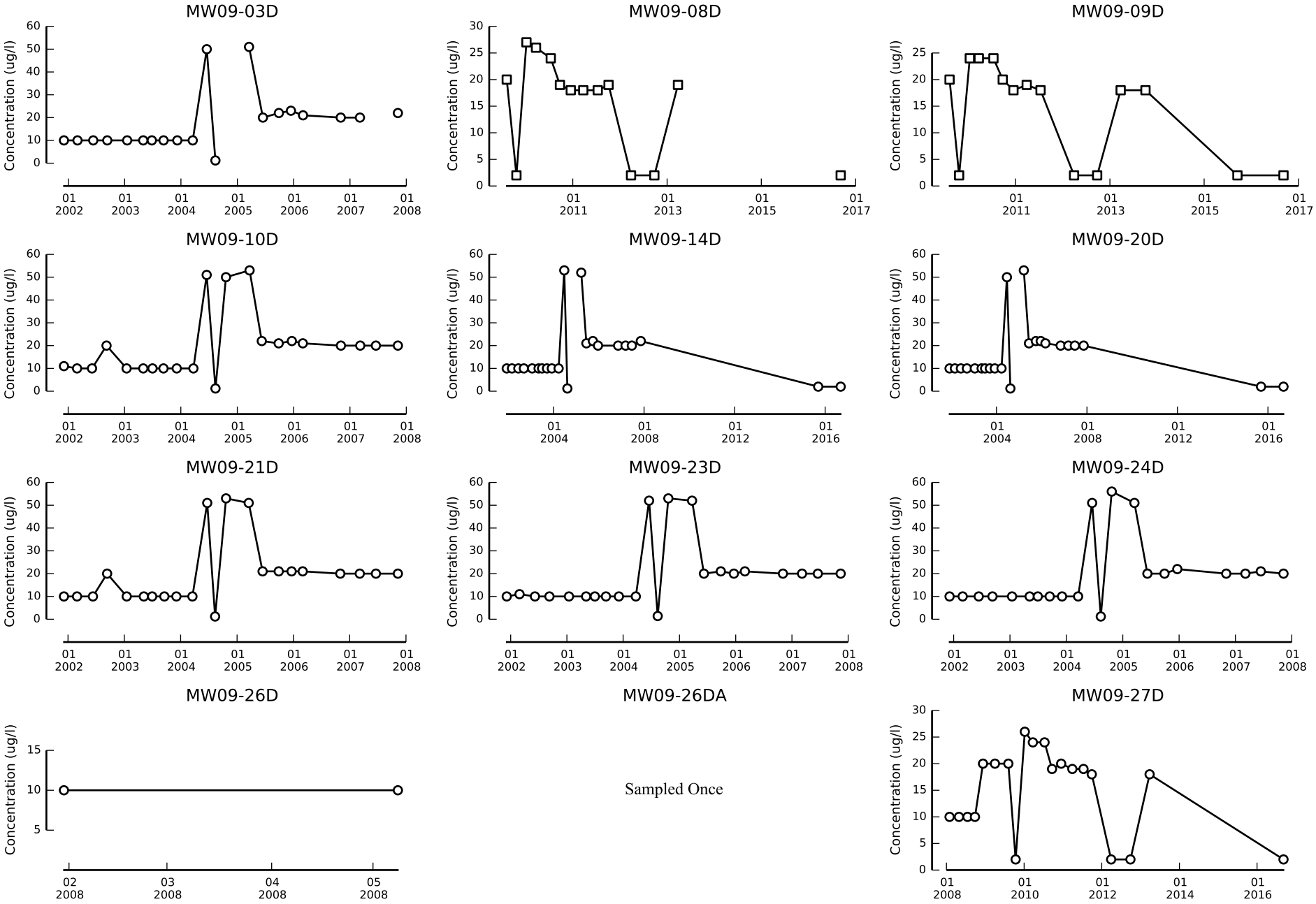
MW09-26DA

Sampled Once



4-NITROPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 44 of 133

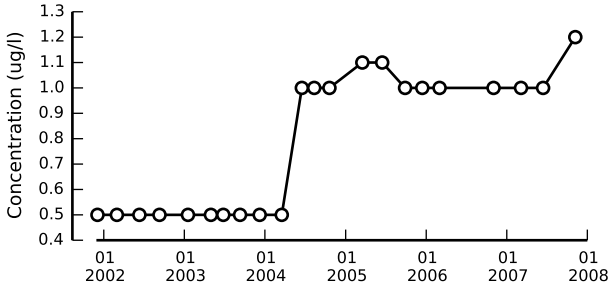
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



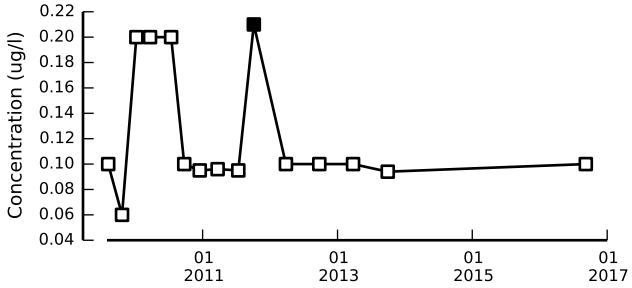
ACENAPHTHENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 45 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

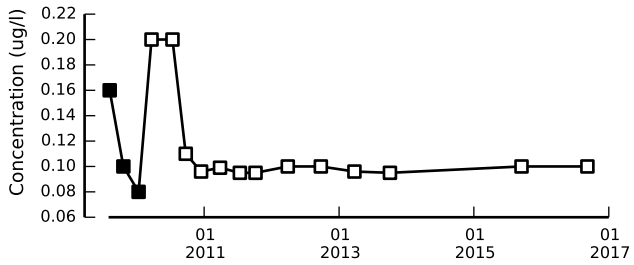
MW09-03D



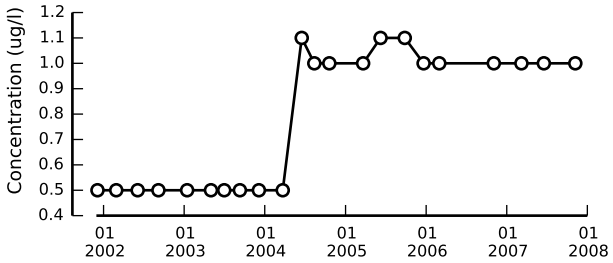
MW09-08D



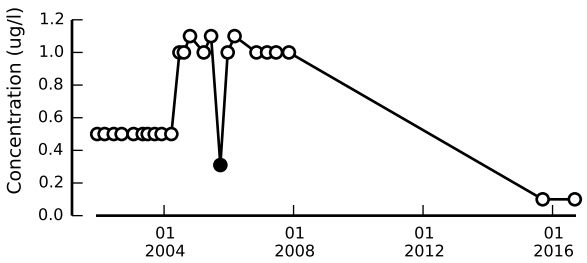
MW09-09D



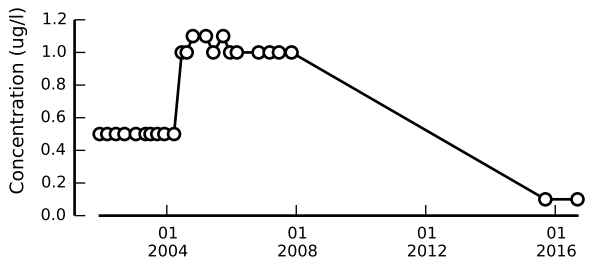
MW09-10D



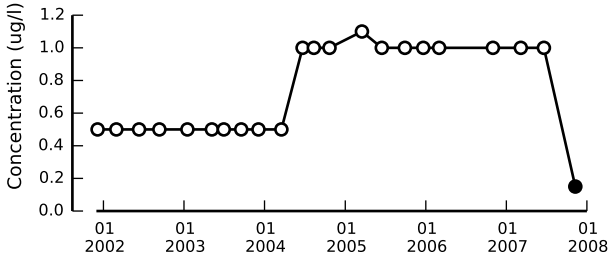
MW09-14D



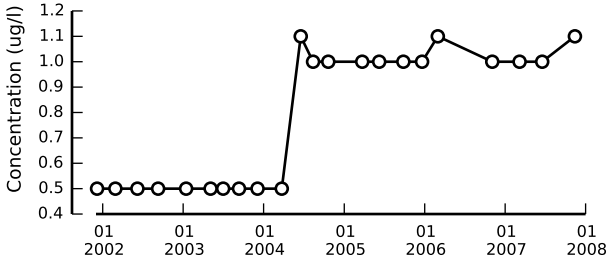
MW09-20D



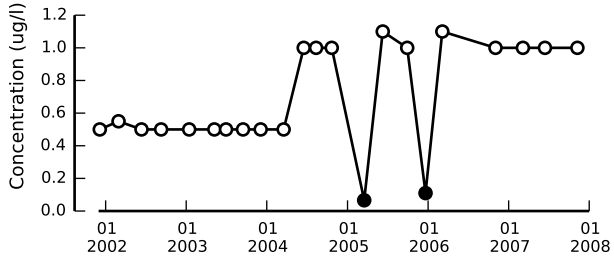
MW09-21D



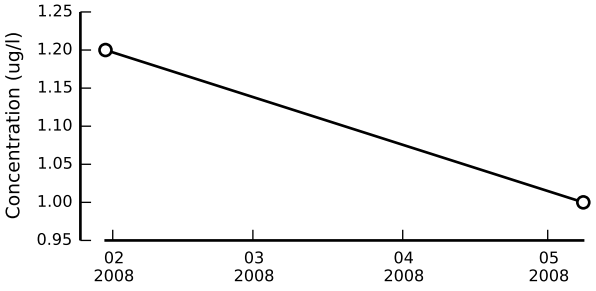
MW09-23D



MW09-24D



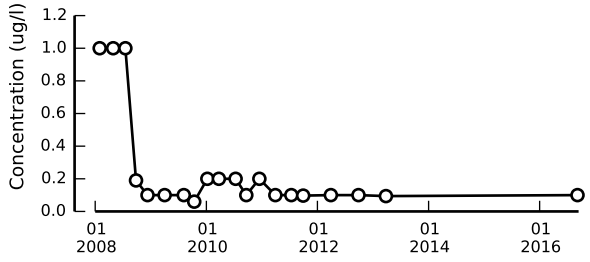
MW09-26D



MW09-26DA

Sampled Once

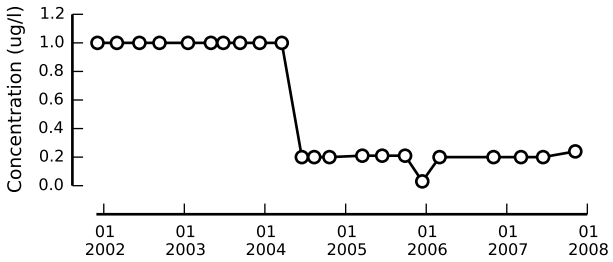
MW09-27D



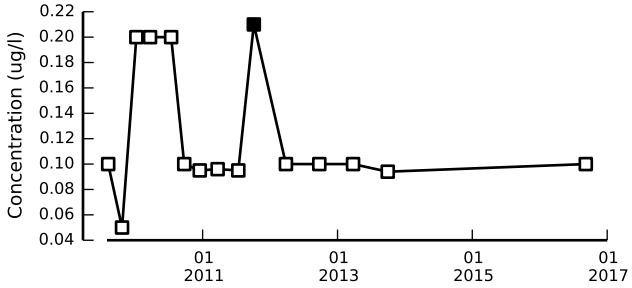
ACENAPHTHYLENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 46 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

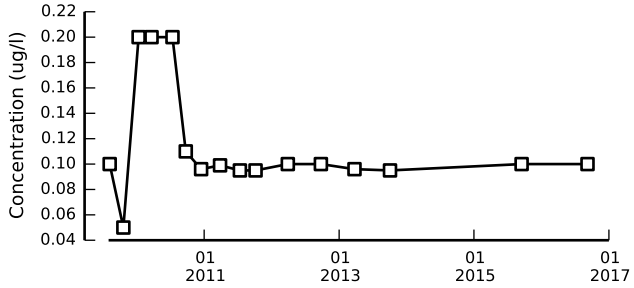
MW09-03D



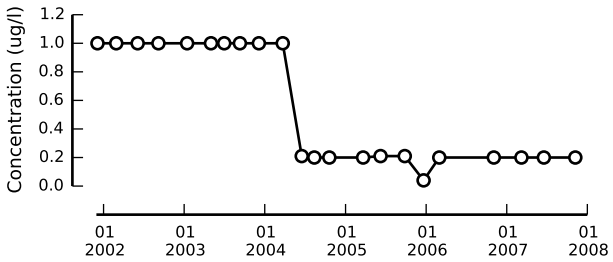
MW09-08D



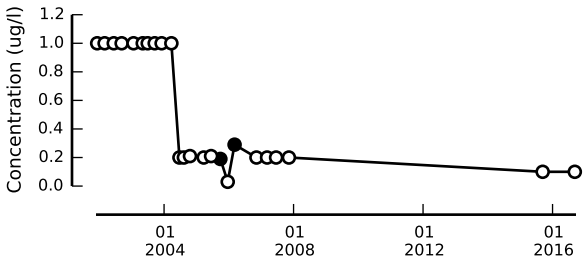
MW09-09D



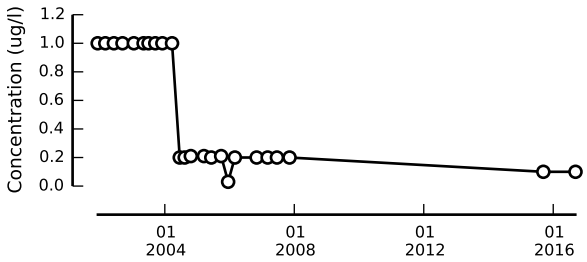
MW09-10D



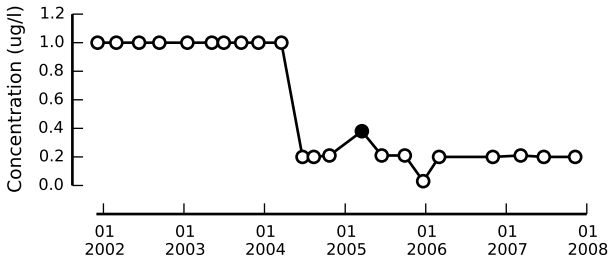
MW09-14D



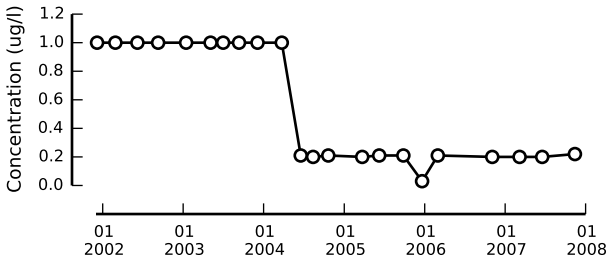
MW09-20D



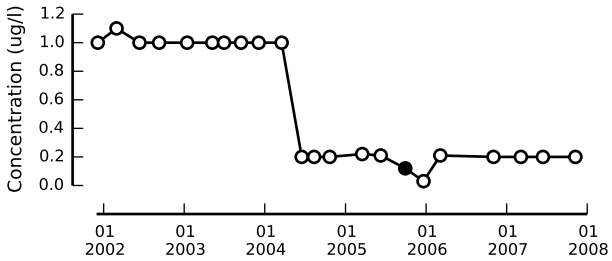
MW09-21D



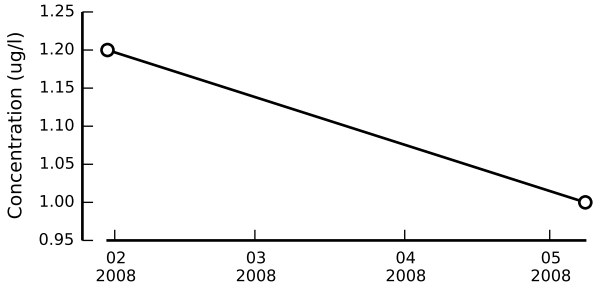
MW09-23D



MW09-24D



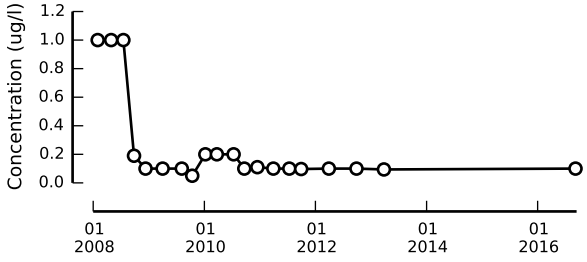
MW09-26D



MW09-26DA

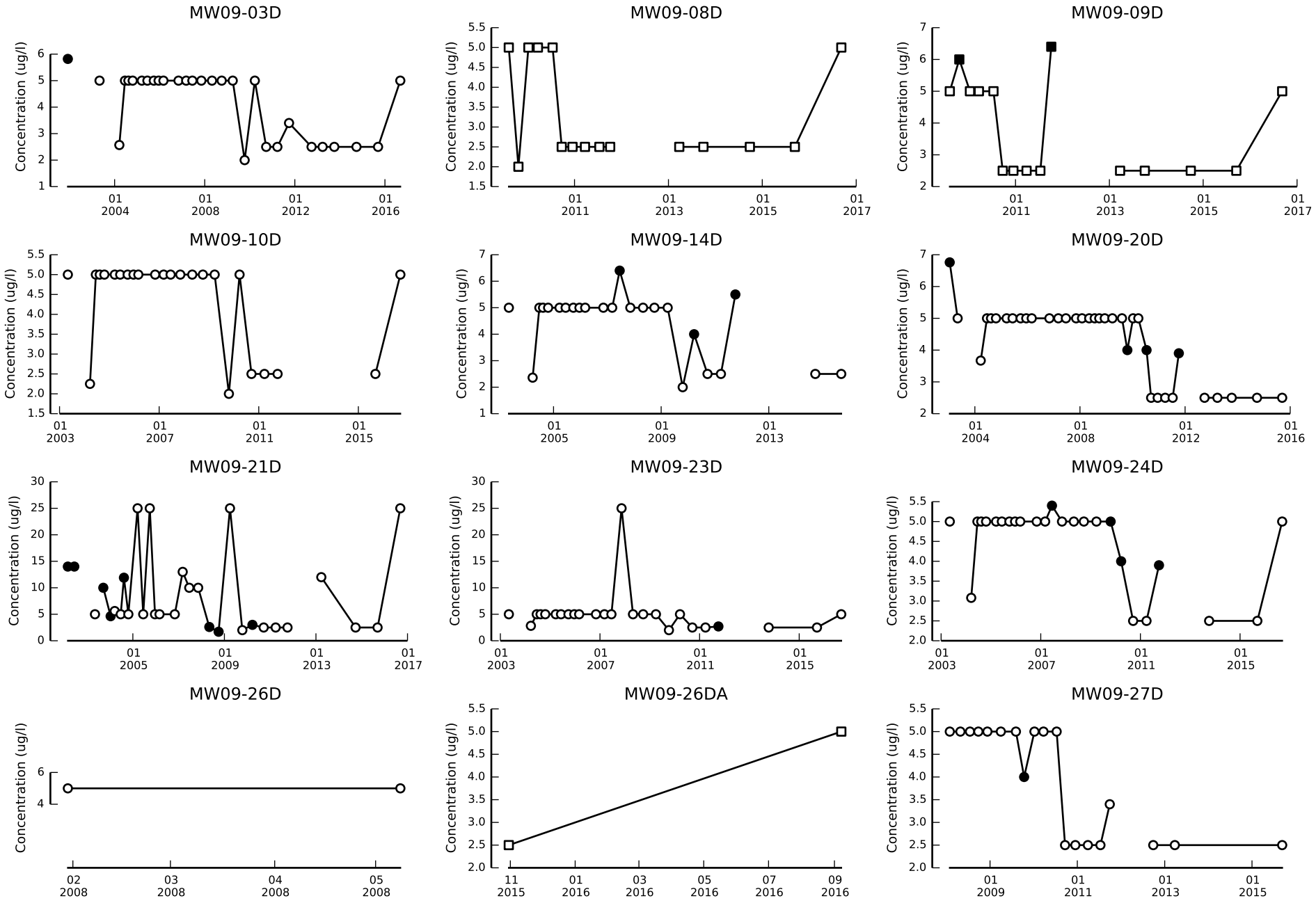
Sampled Once

MW09-27D



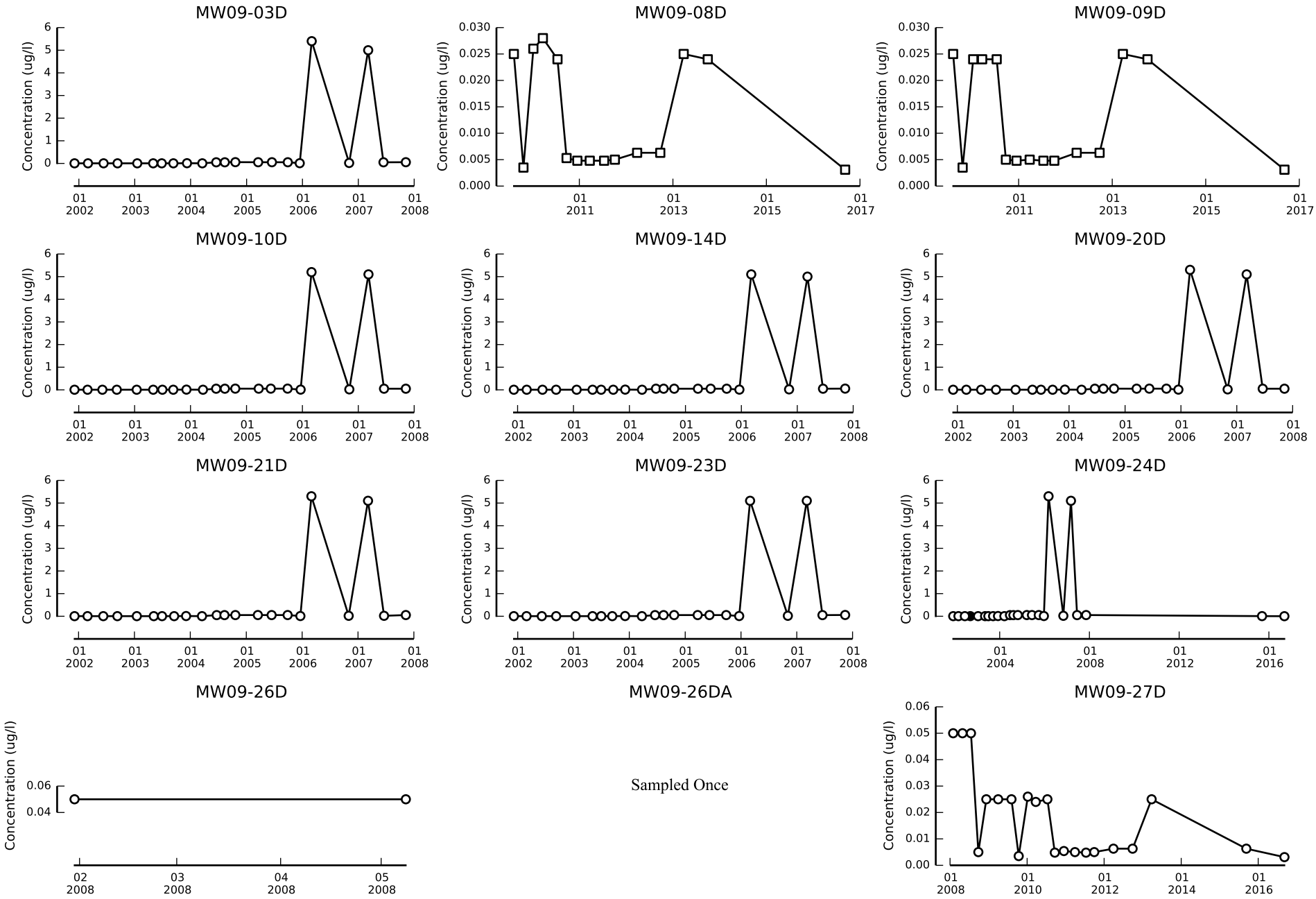
ACETONE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 47 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



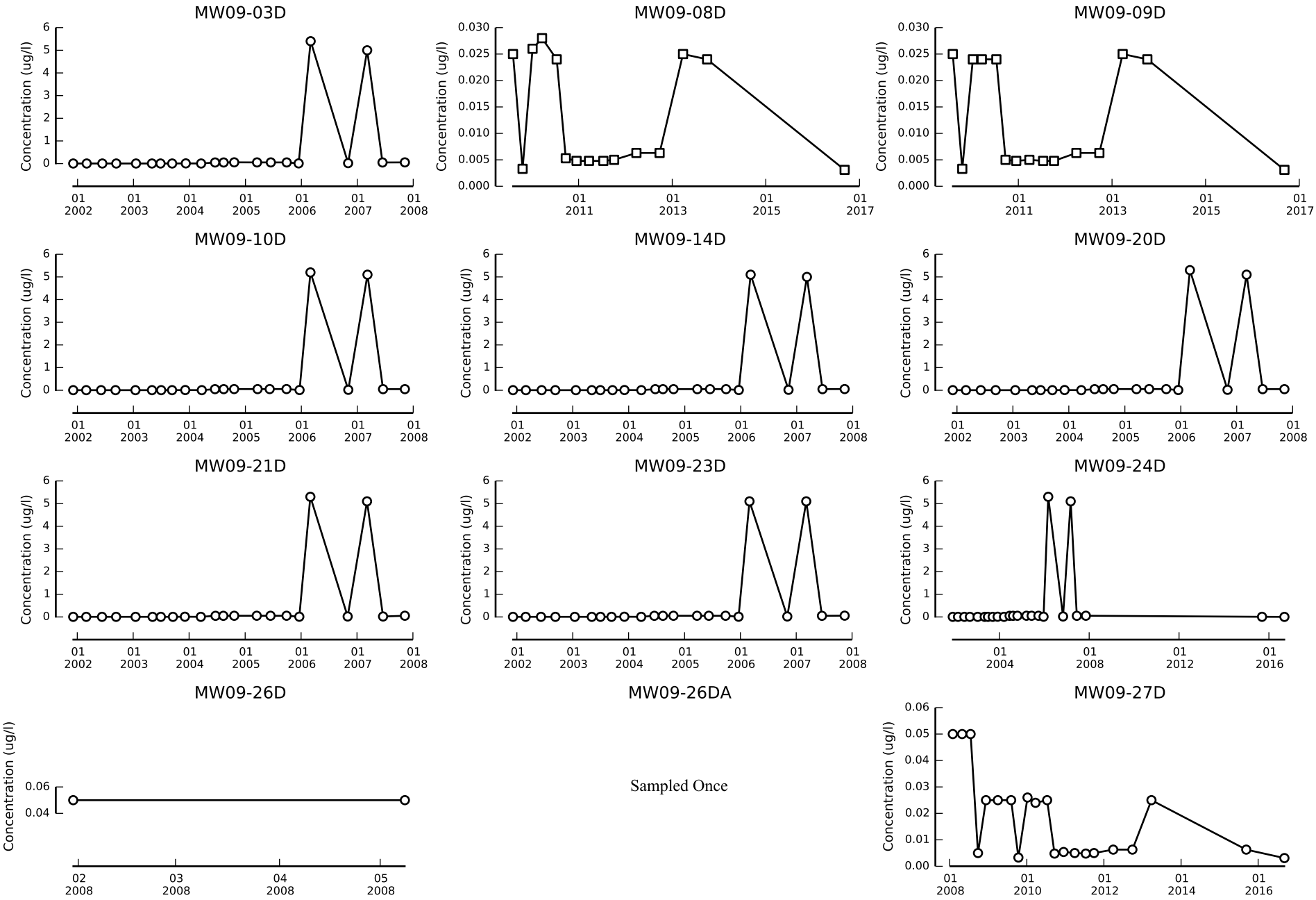
ALDRIN in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 48 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



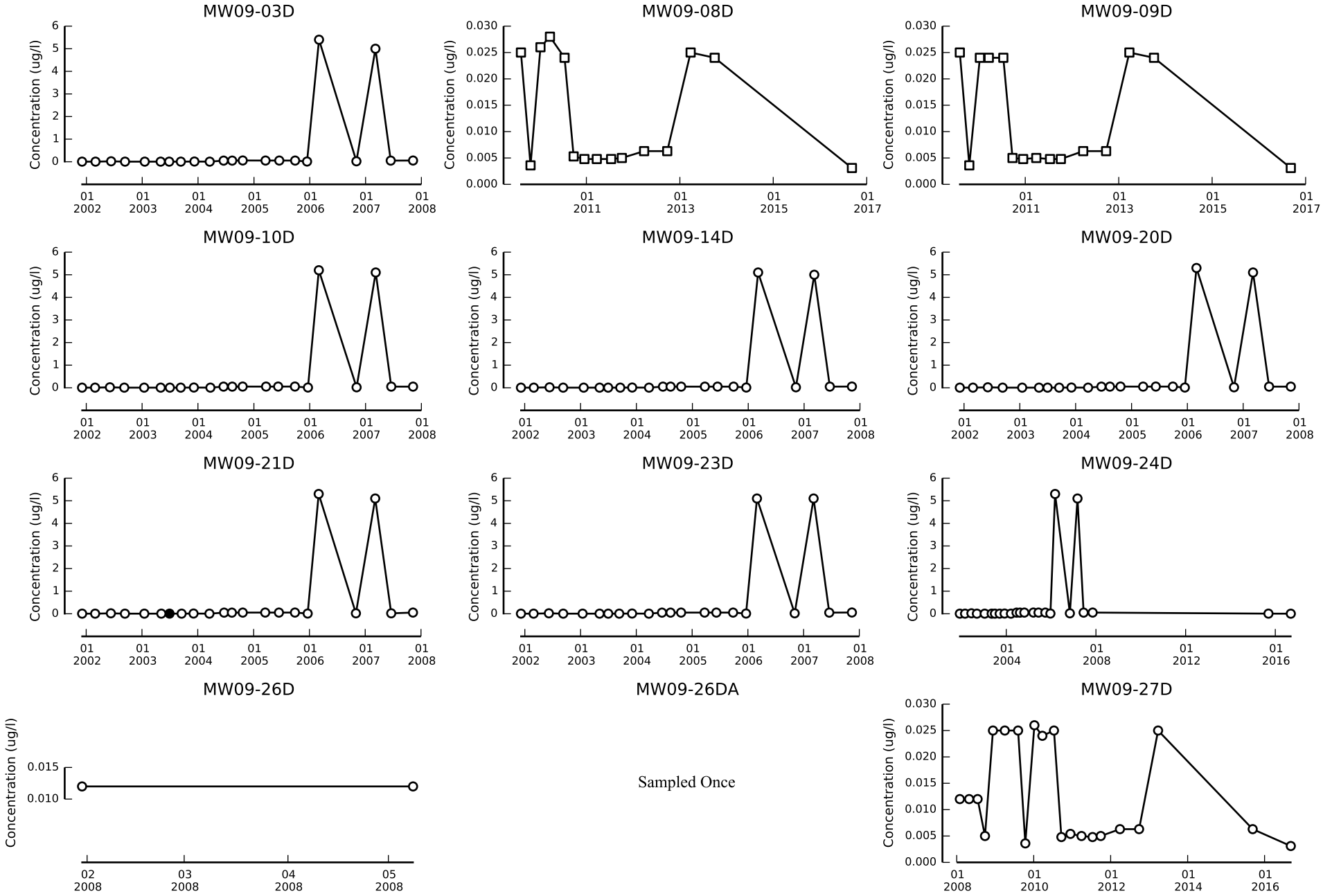
ALPHA-BHC in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 49 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



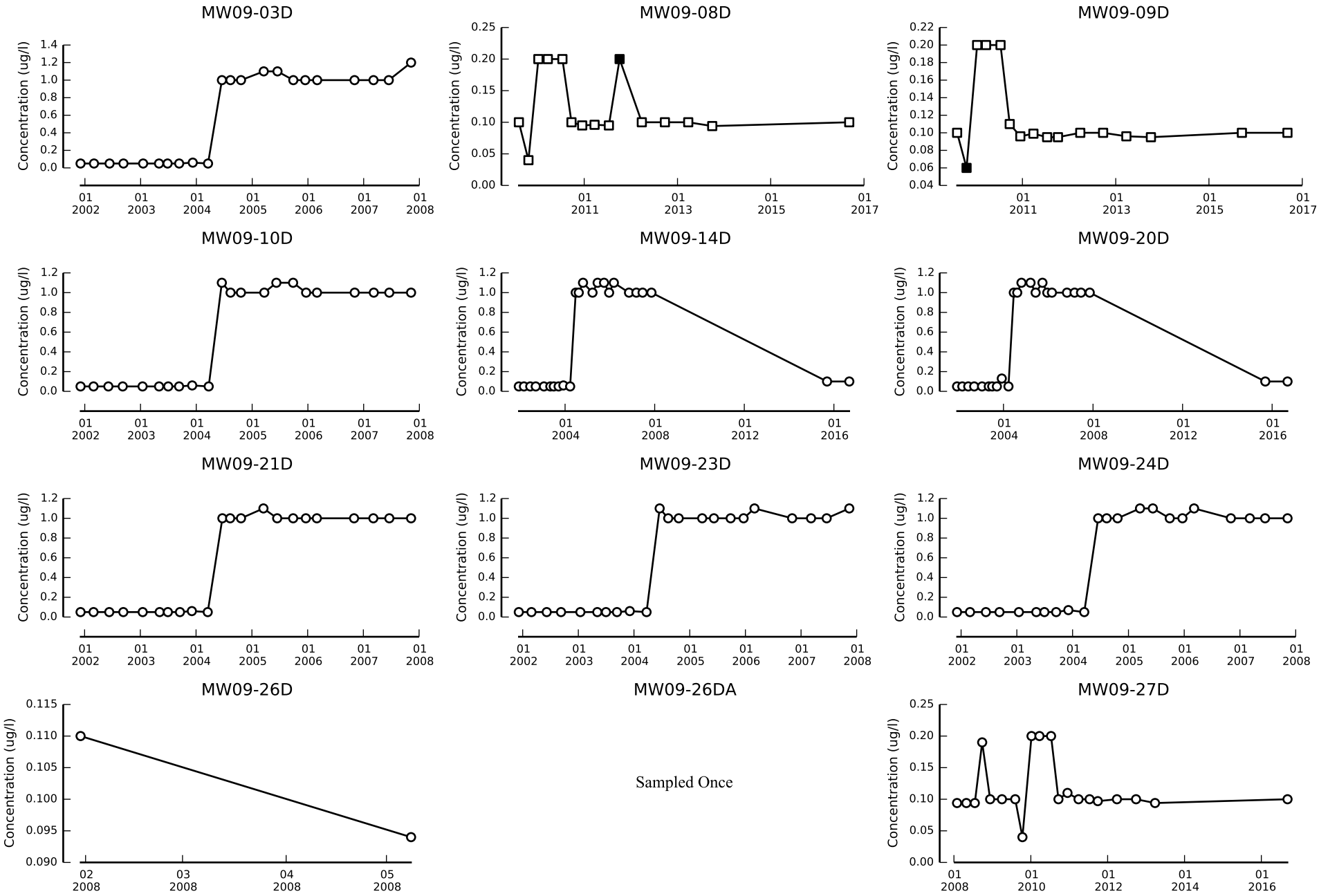
ALPHA-CHLORDANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 50 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



ANTHRACENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 51 of 133

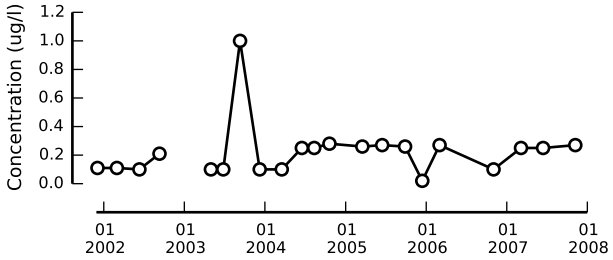
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



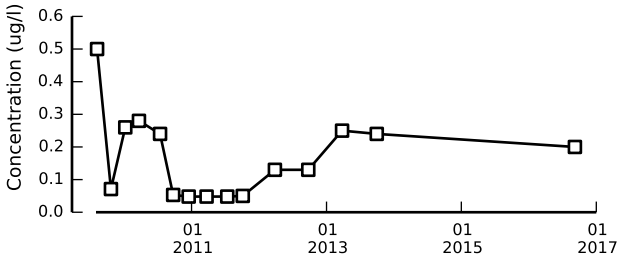
AROCLOR-1016 in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 52 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

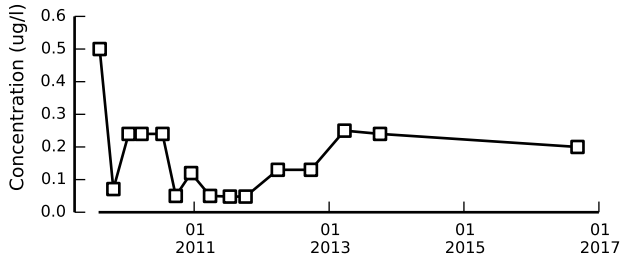
MW09-03D



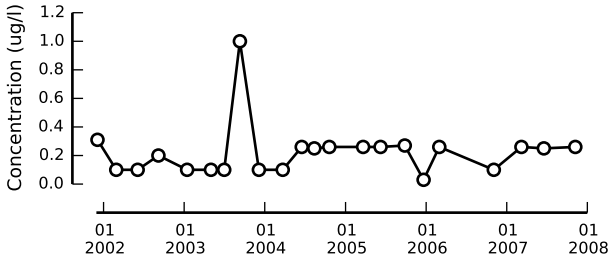
MW09-08D



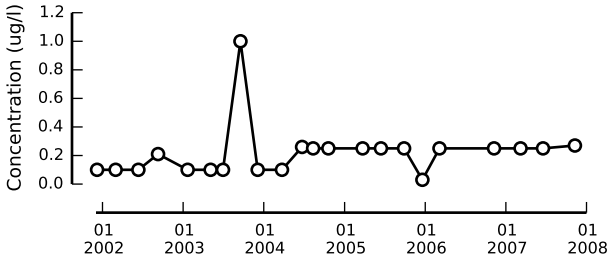
MW09-09D



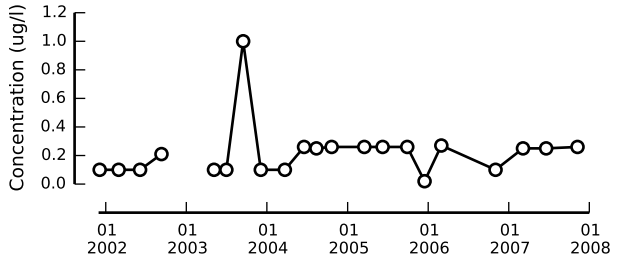
MW09-10D



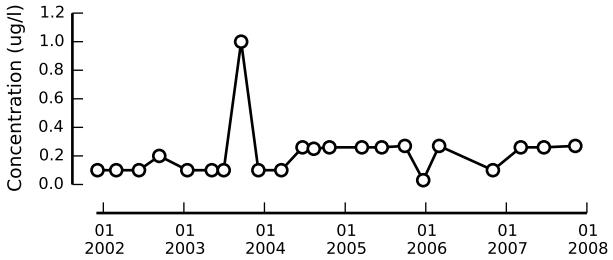
MW09-14D



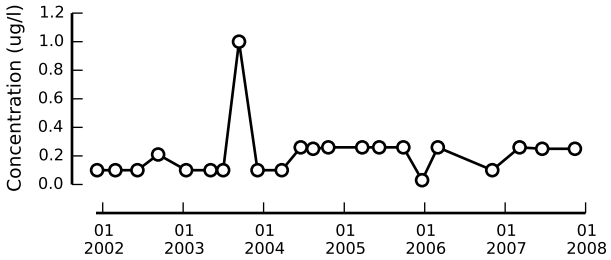
MW09-20D



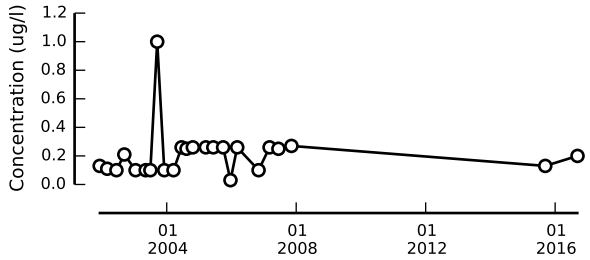
MW09-21D



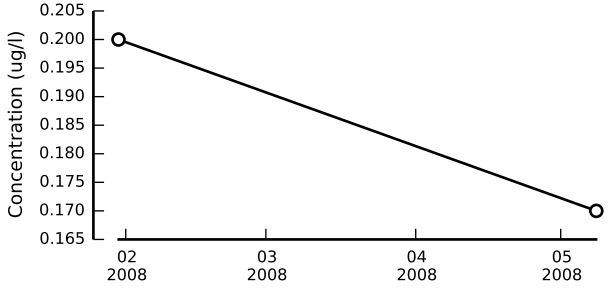
MW09-23D



MW09-24D



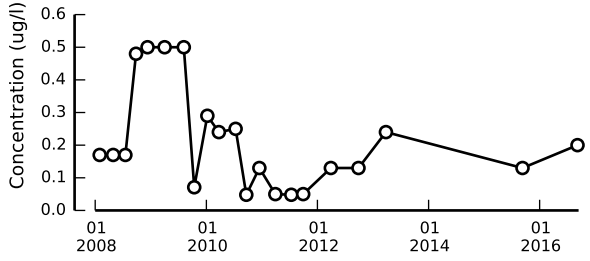
MW09-26D



MW09-26DA

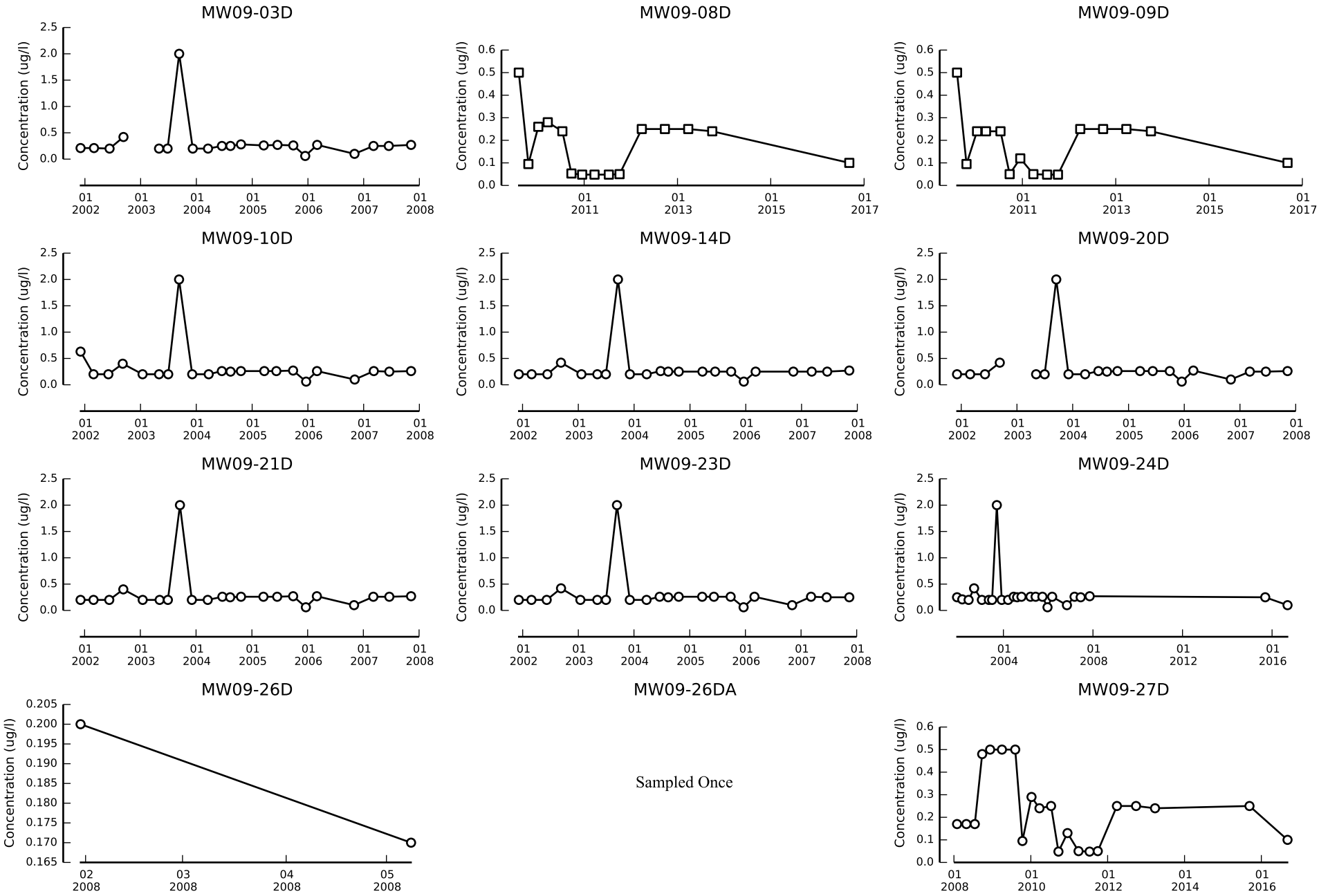
Sampled Once

MW09-27D



AROCLOR-1221 in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 53 of 133

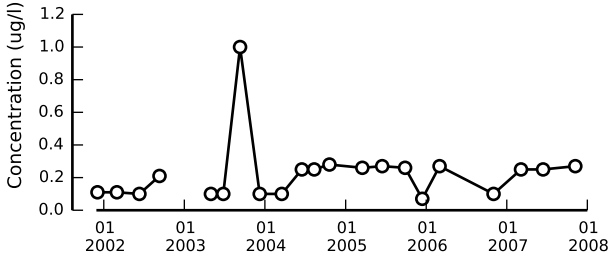
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



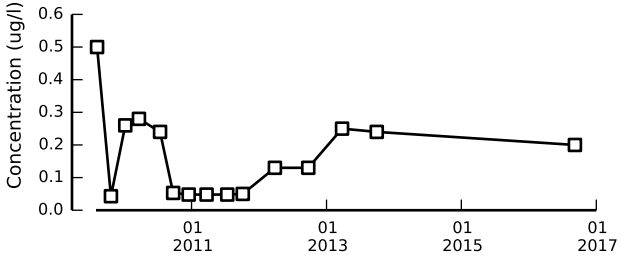
AROCLOR-1232 in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 54 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

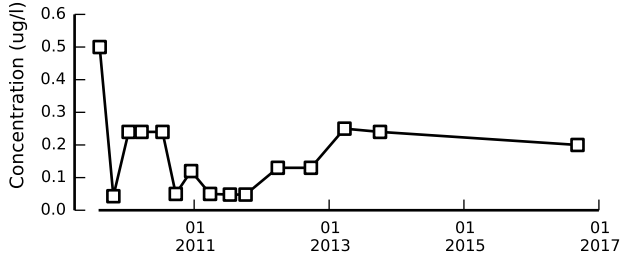
MW09-03D



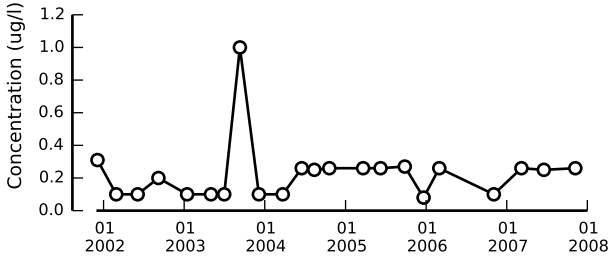
MW09-08D



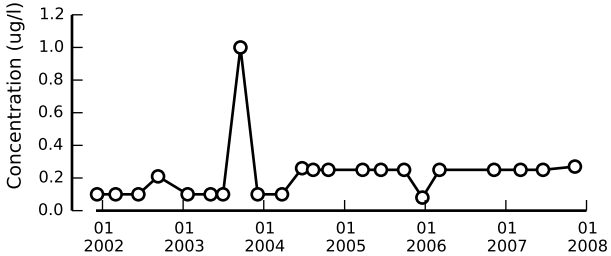
MW09-09D



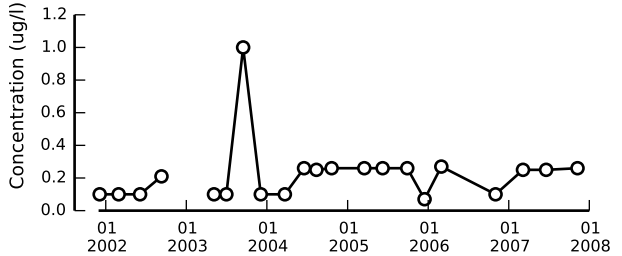
MW09-10D



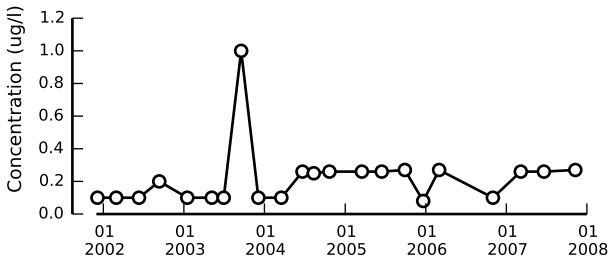
MW09-14D



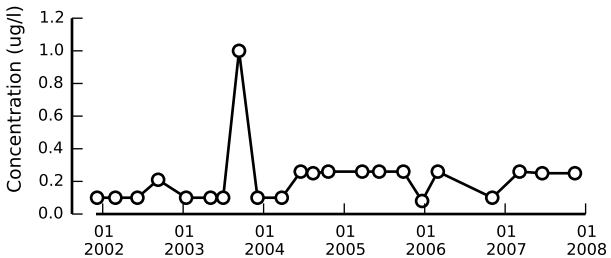
MW09-20D



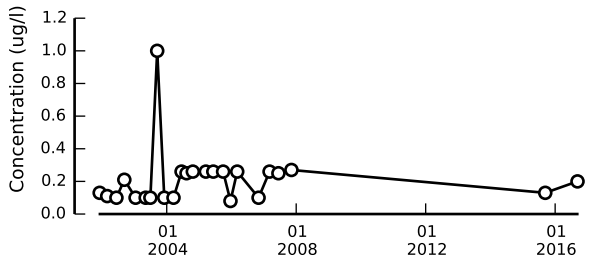
MW09-21D



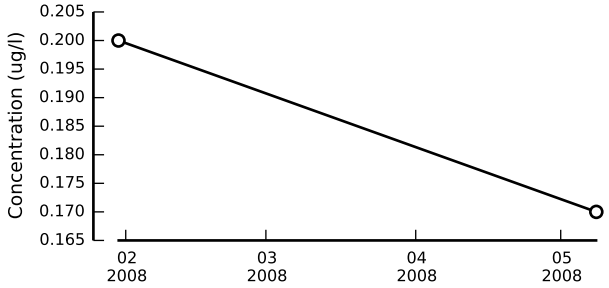
MW09-23D



MW09-24D



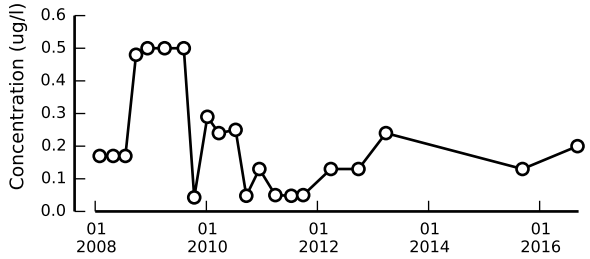
MW09-26D



MW09-26DA

Sampled Once

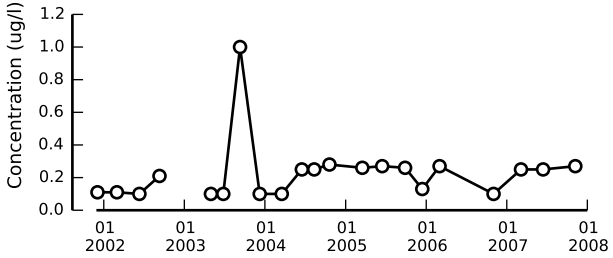
MW09-27D



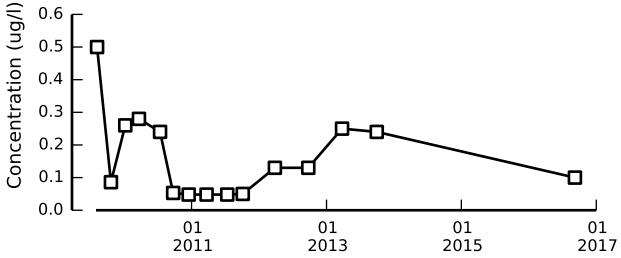
AROCLOR-1242 in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 55 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

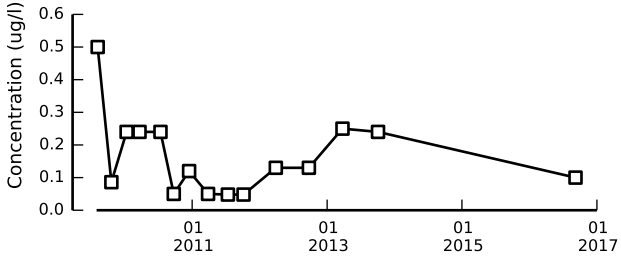
MW09-03D



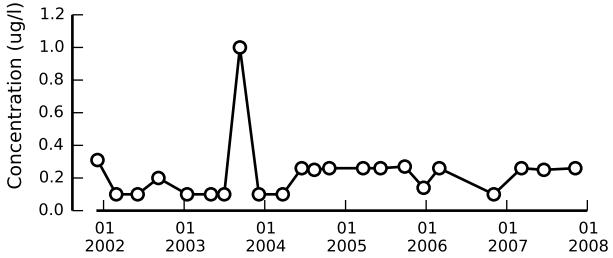
MW09-08D



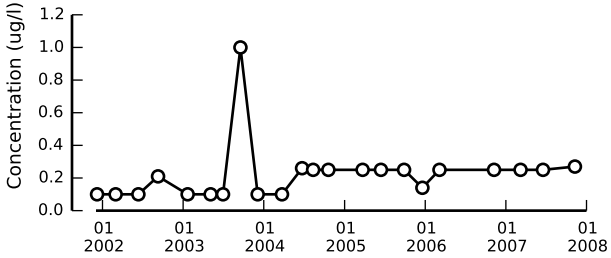
MW09-09D



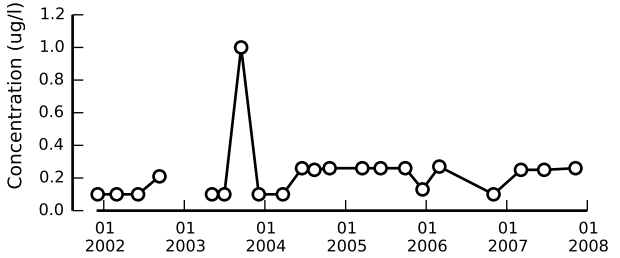
MW09-10D



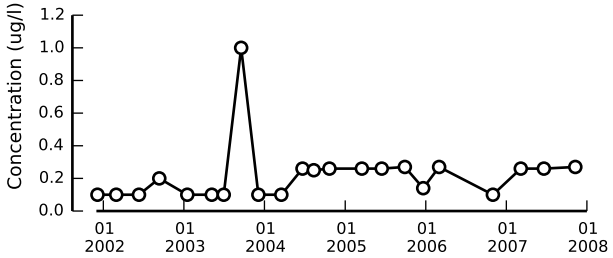
MW09-14D



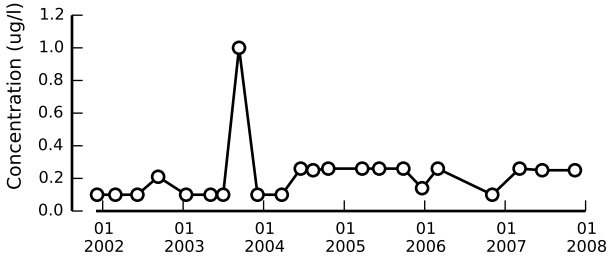
MW09-20D



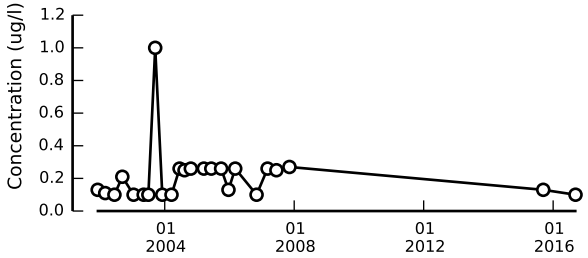
MW09-21D



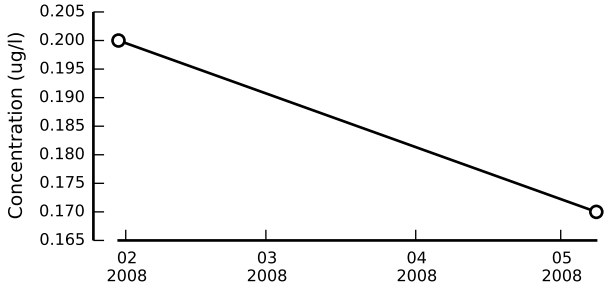
MW09-23D



MW09-24D



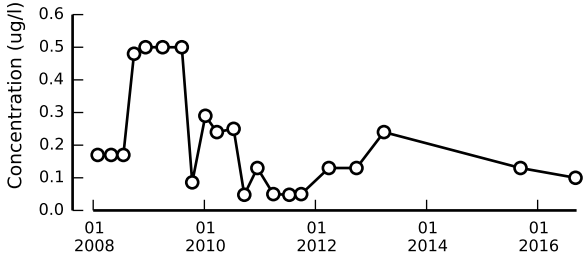
MW09-26D



MW09-26DA

Sampled Once

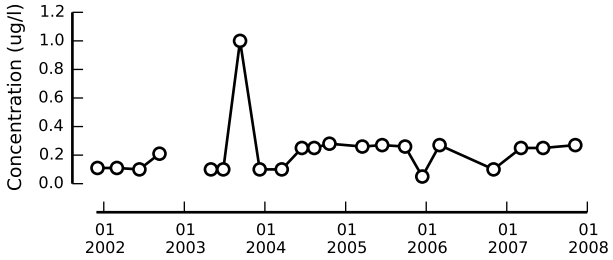
MW09-27D



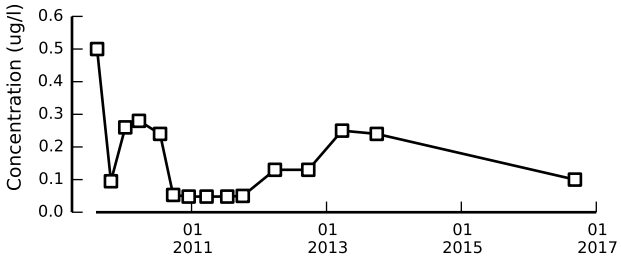
AROCLOR-1248 in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 56 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

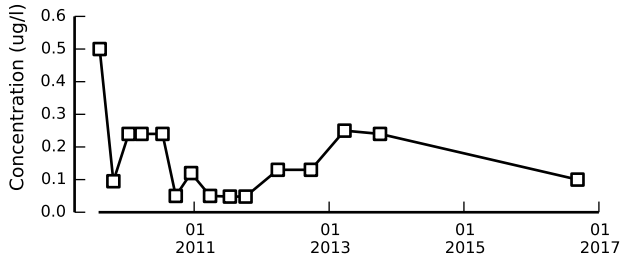
MW09-03D



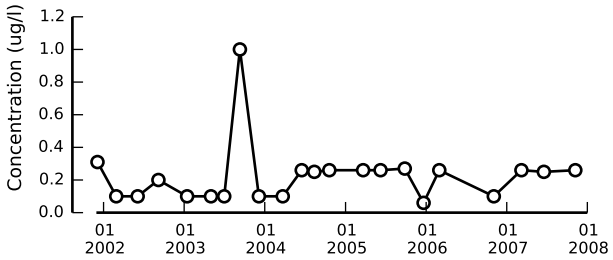
MW09-08D



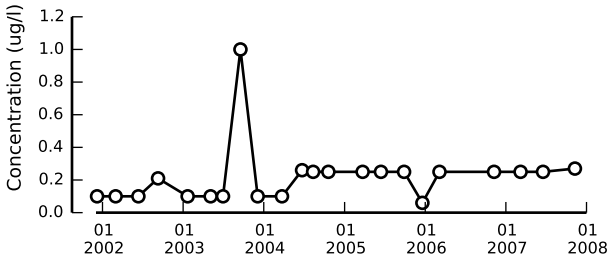
MW09-09D



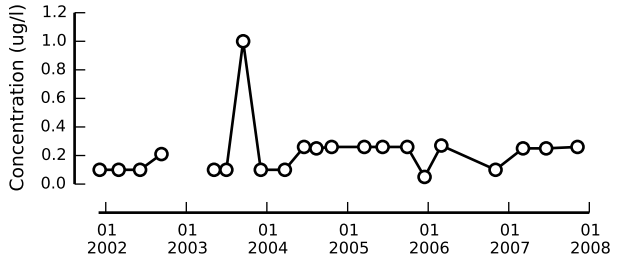
MW09-10D



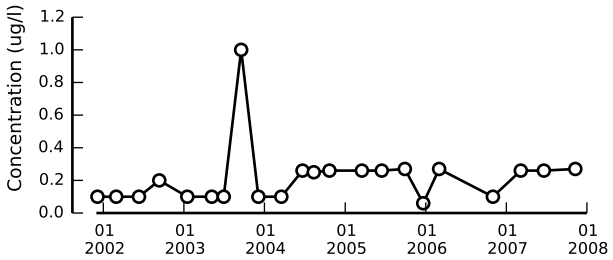
MW09-14D



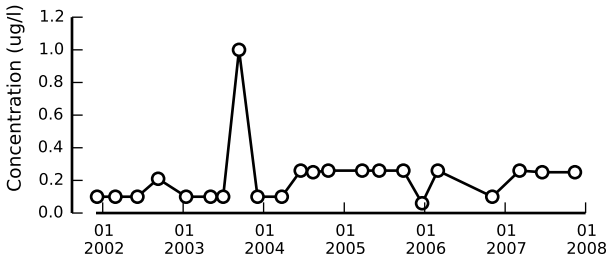
MW09-20D



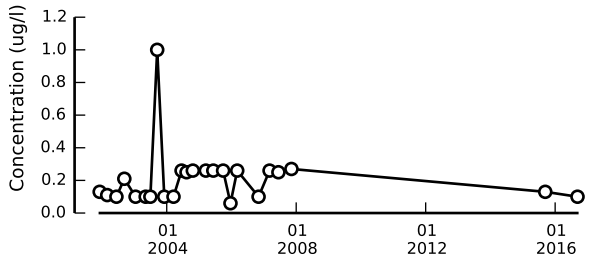
MW09-21D



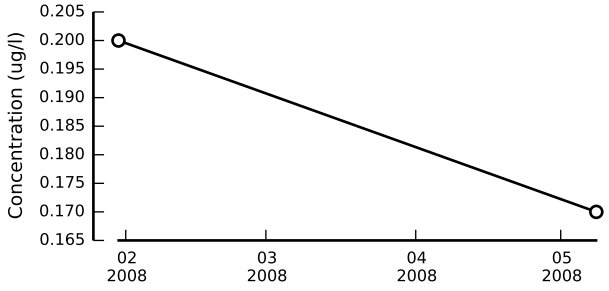
MW09-23D



MW09-24D



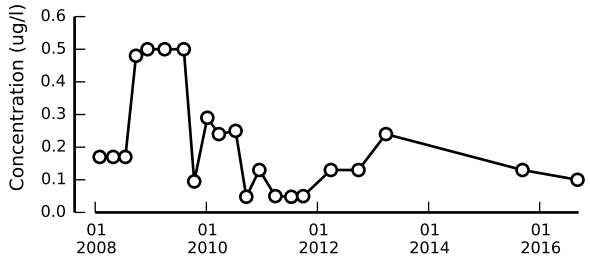
MW09-26D



MW09-26DA

Sampled Once

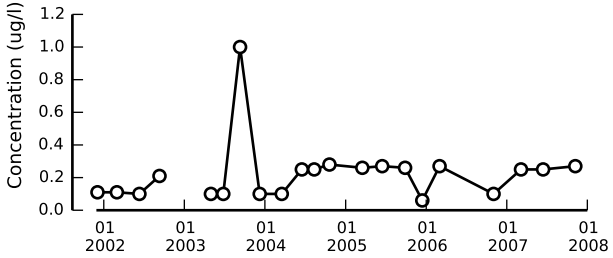
MW09-27D



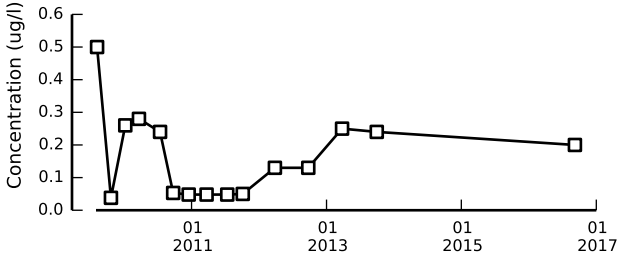
AROCLOR-1254 in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 57 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

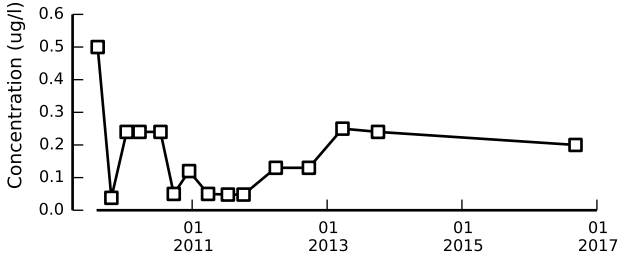
MW09-03D



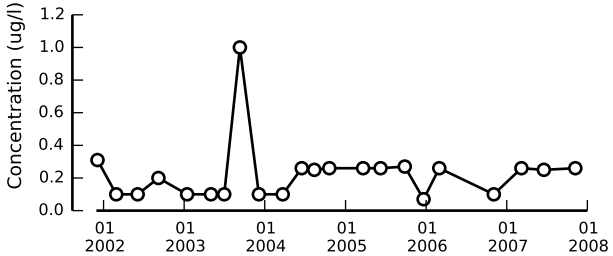
MW09-08D



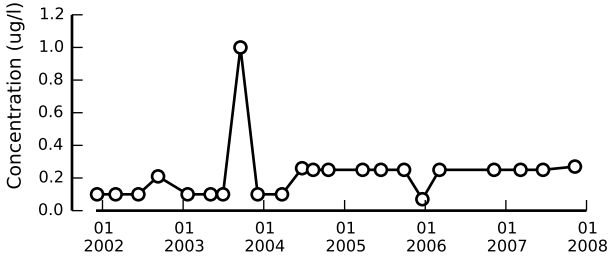
MW09-09D



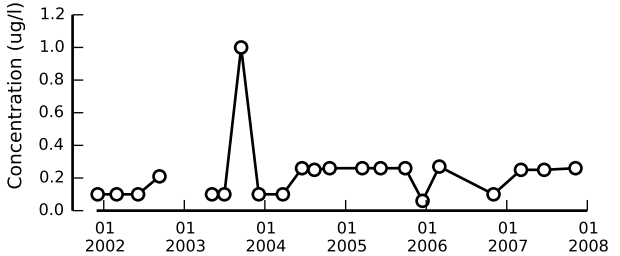
MW09-10D



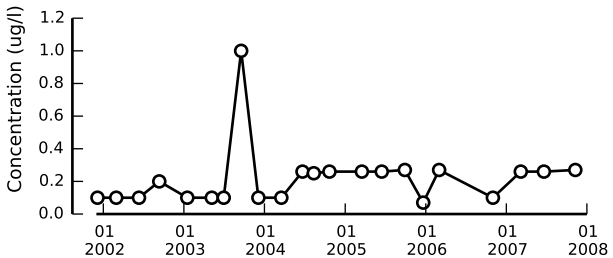
MW09-14D



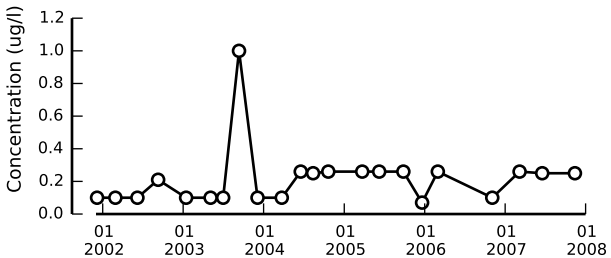
MW09-20D



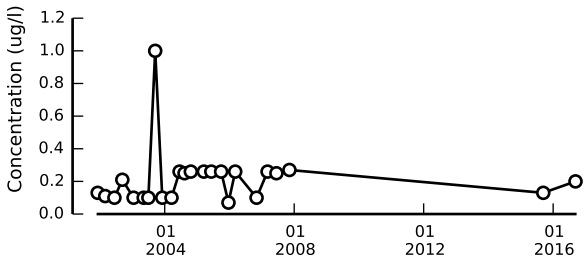
MW09-21D



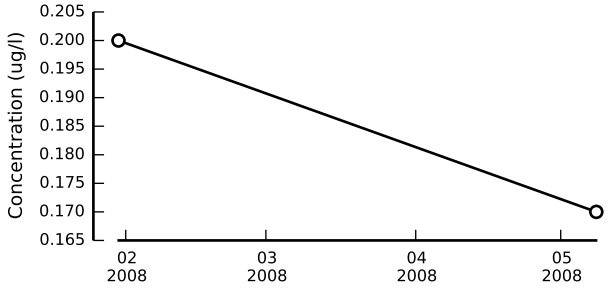
MW09-23D



MW09-24D



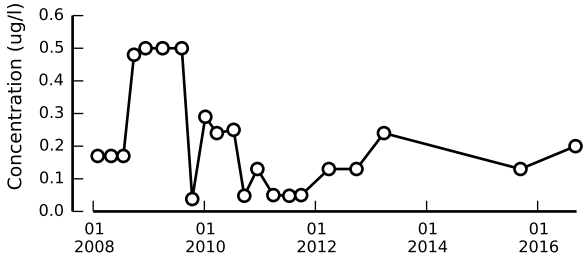
MW09-26D



MW09-26DA

Sampled Once

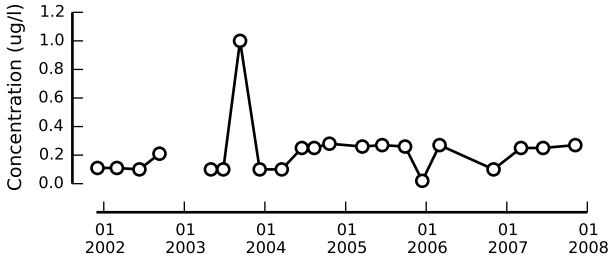
MW09-27D



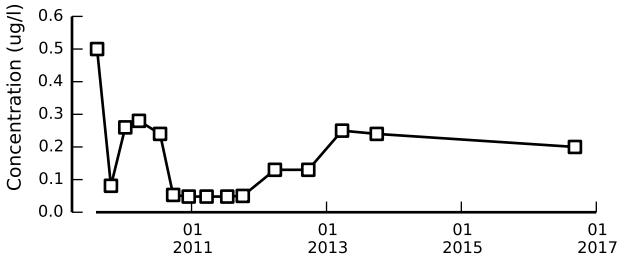
AROCLOR-1260 in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 58 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

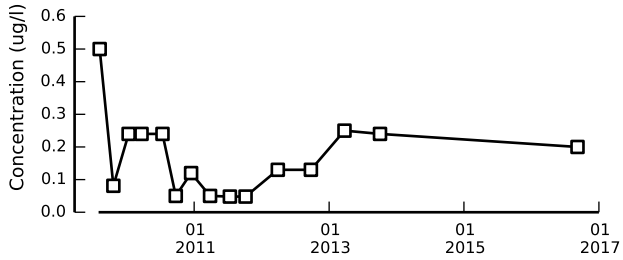
MW09-03D



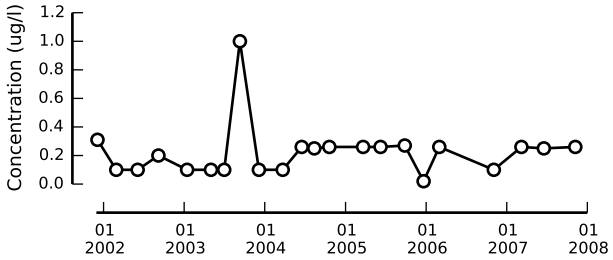
MW09-08D



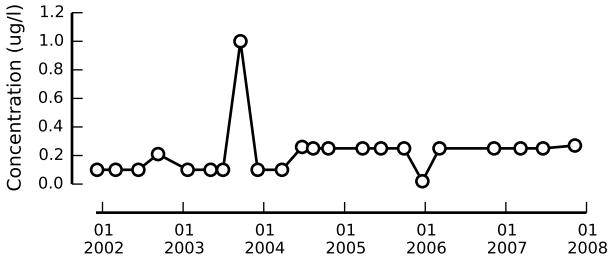
MW09-09D



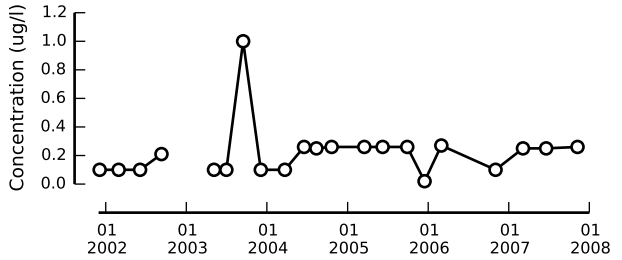
MW09-10D



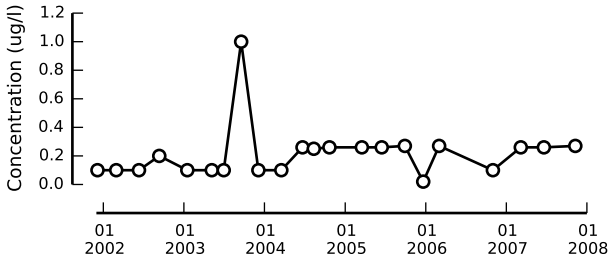
MW09-14D



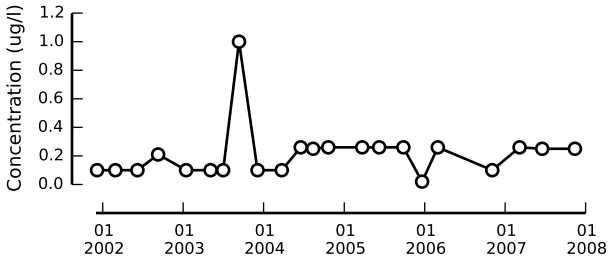
MW09-20D



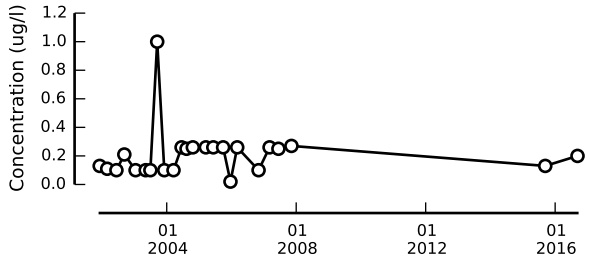
MW09-21D



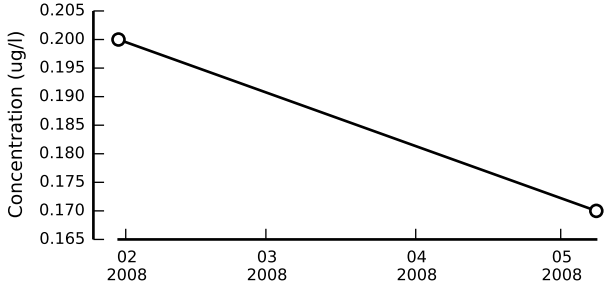
MW09-23D



MW09-24D



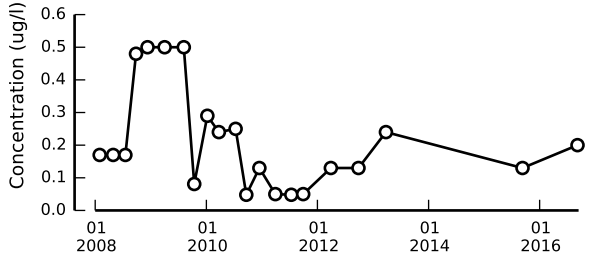
MW09-26D



MW09-26DA

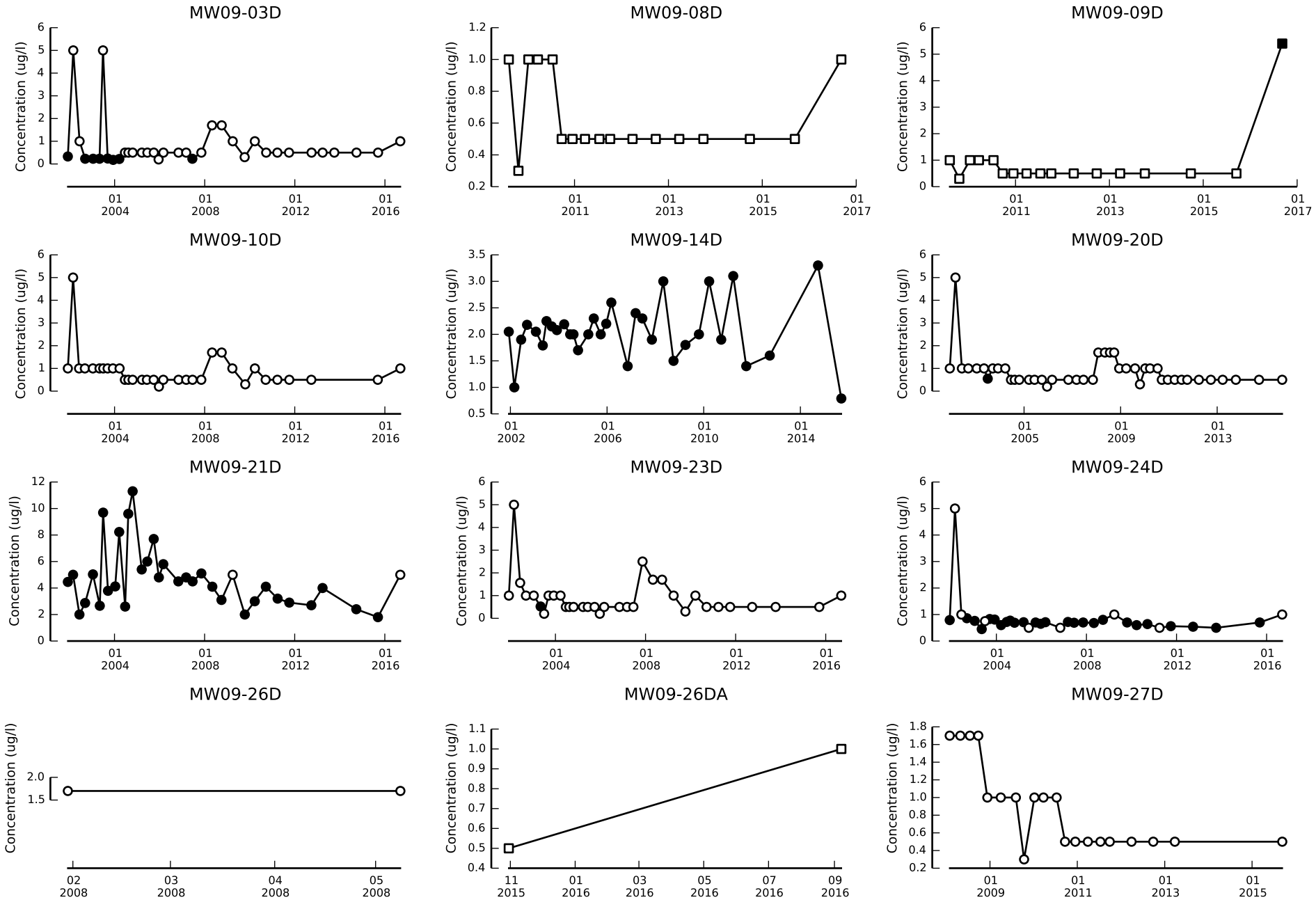
Sampled Once

MW09-27D



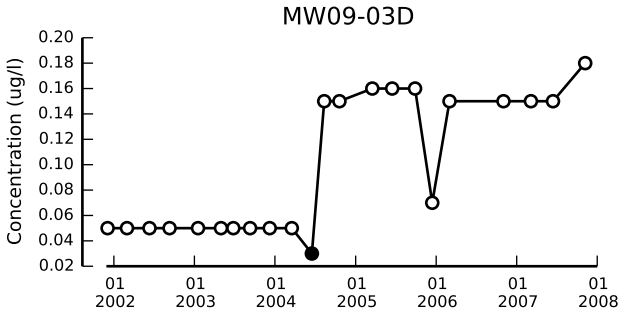
BENZENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 59 of 133

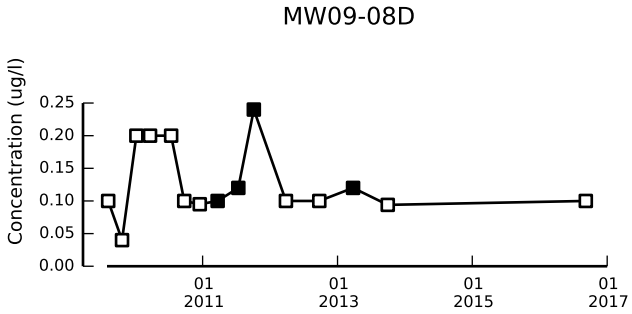
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

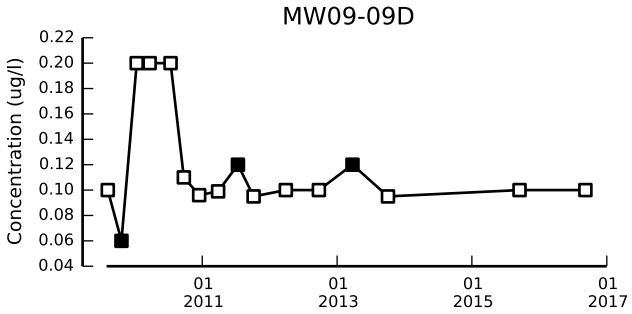


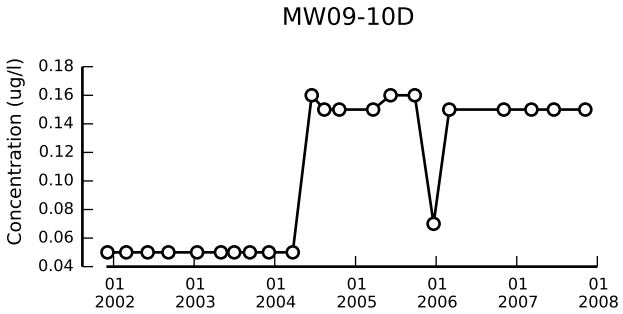
BENZO(A)ANTHRACENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 60 of 133

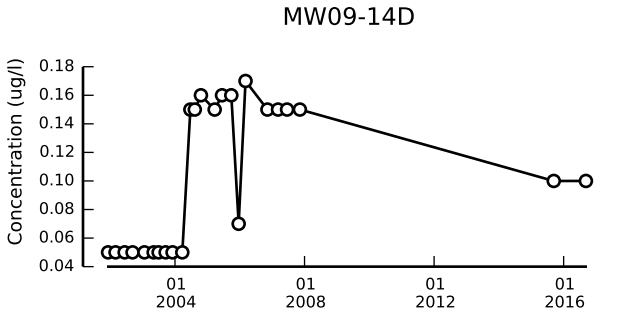
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

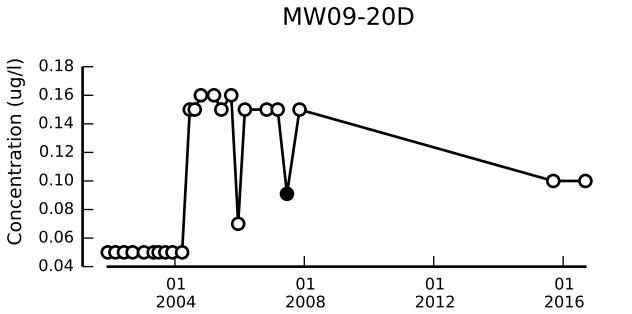


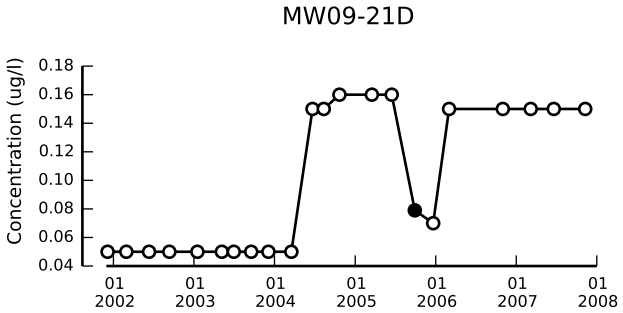


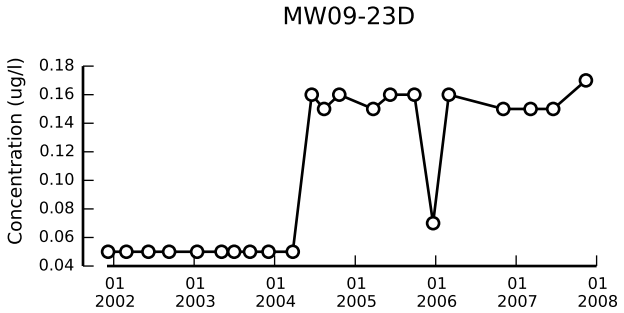


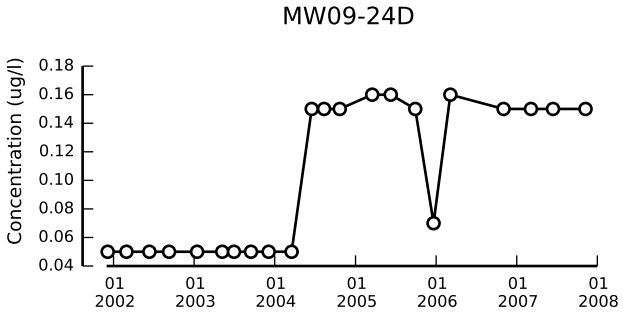


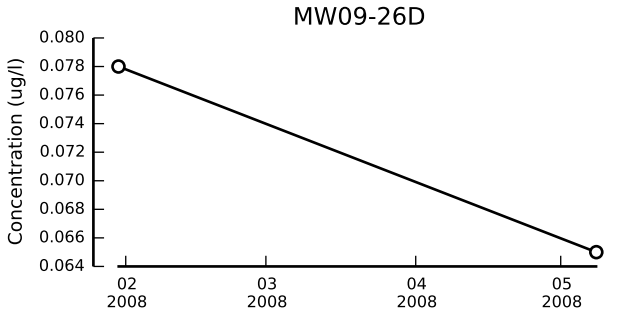






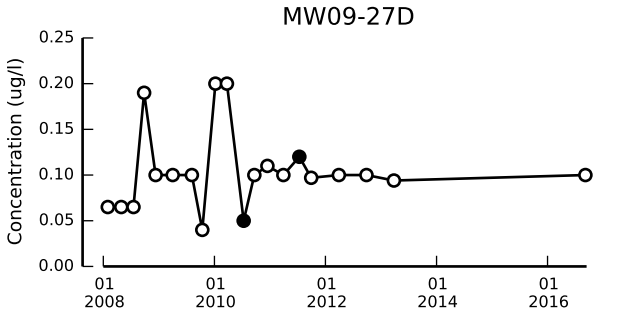






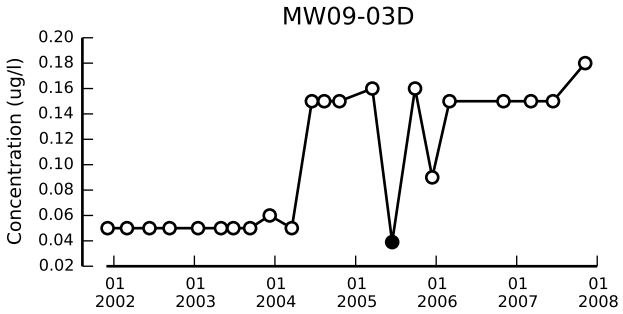
MW09-26DA

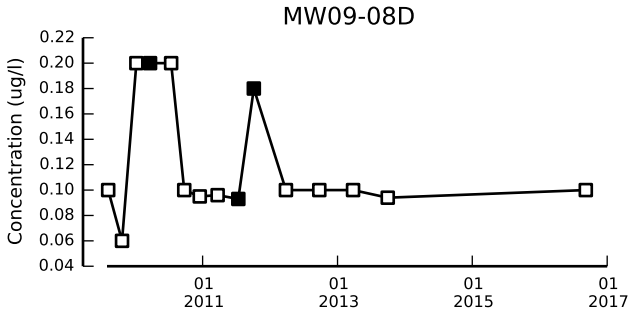
Sampled Once

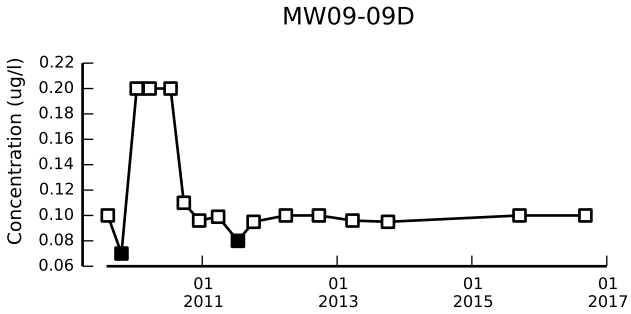


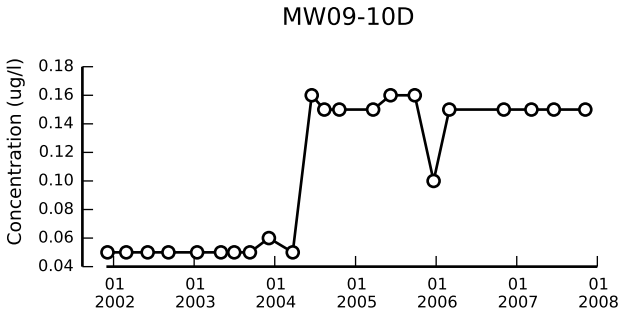
BENZO(A)PYRENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 61 of 133

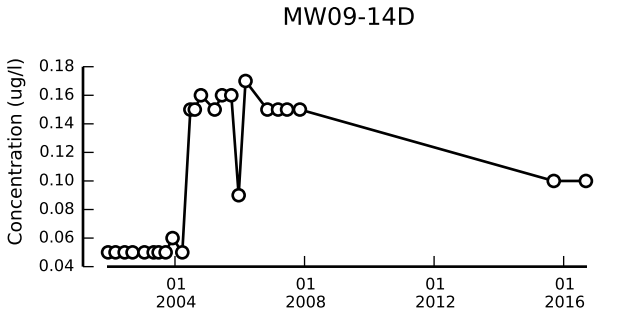
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

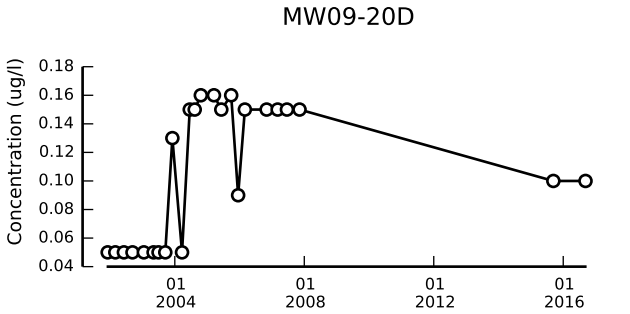


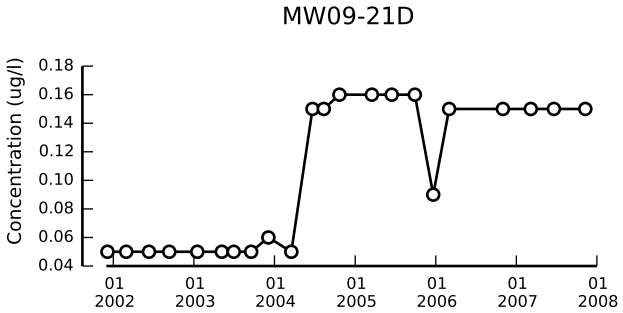


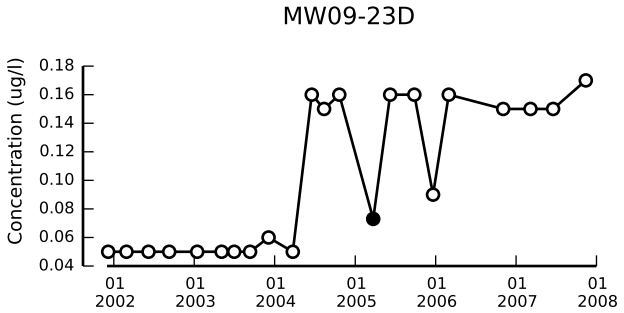


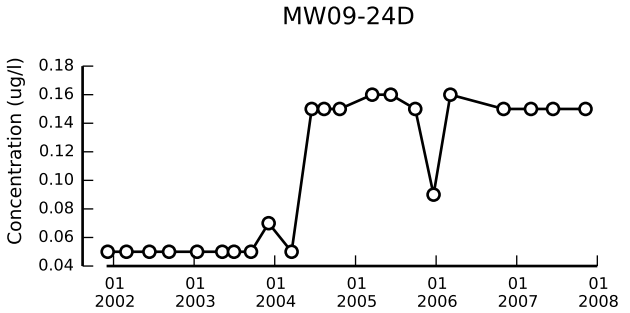


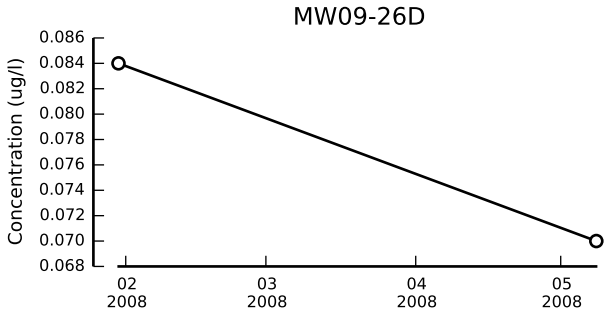






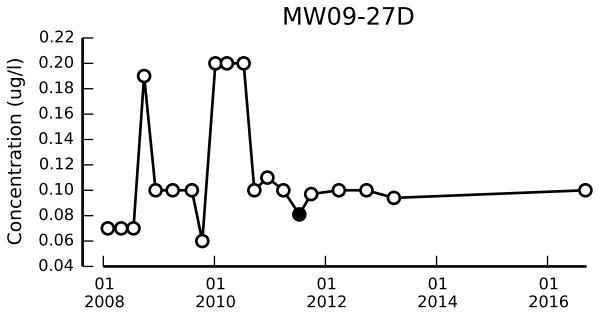






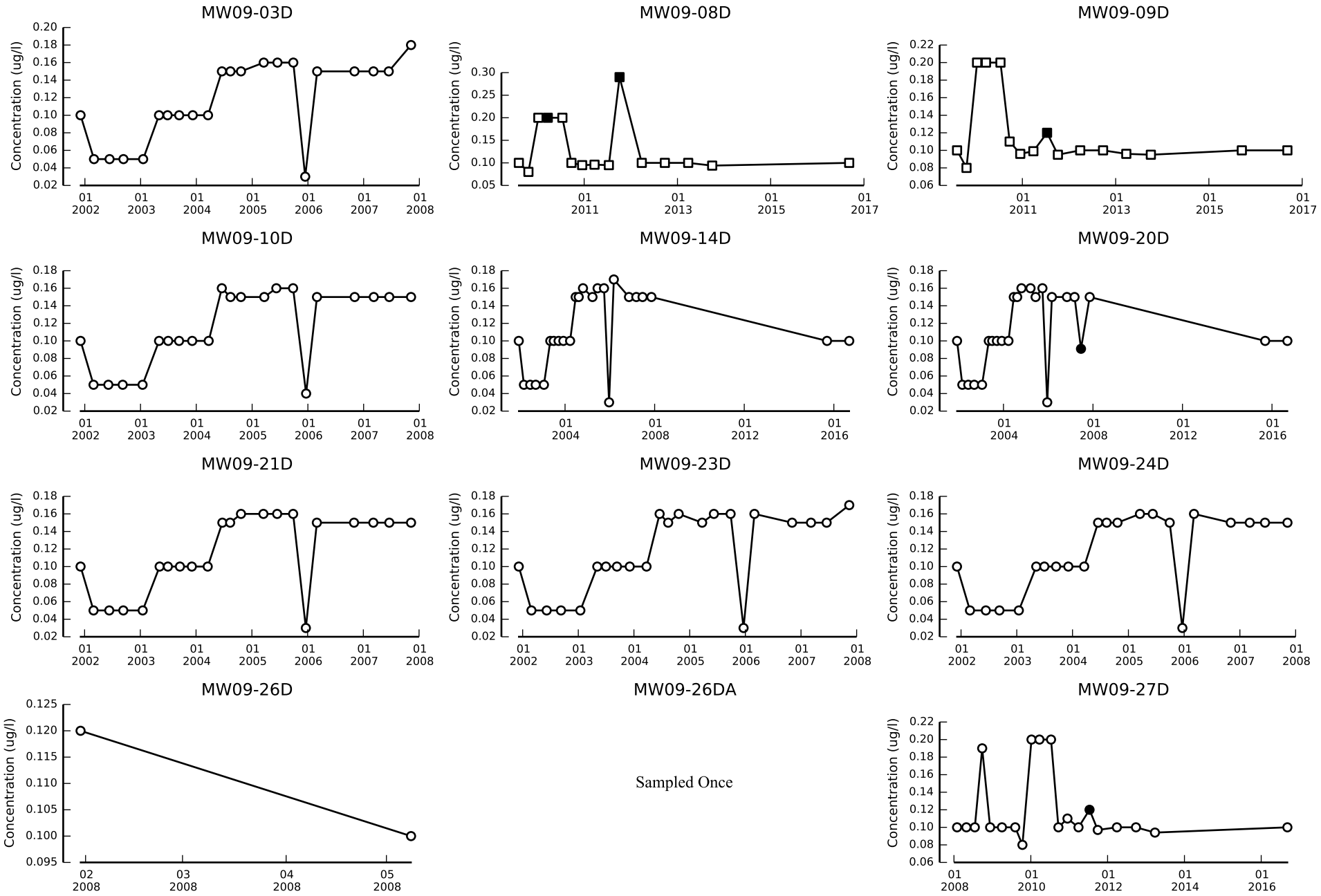
MW09-26DA

Sampled Once



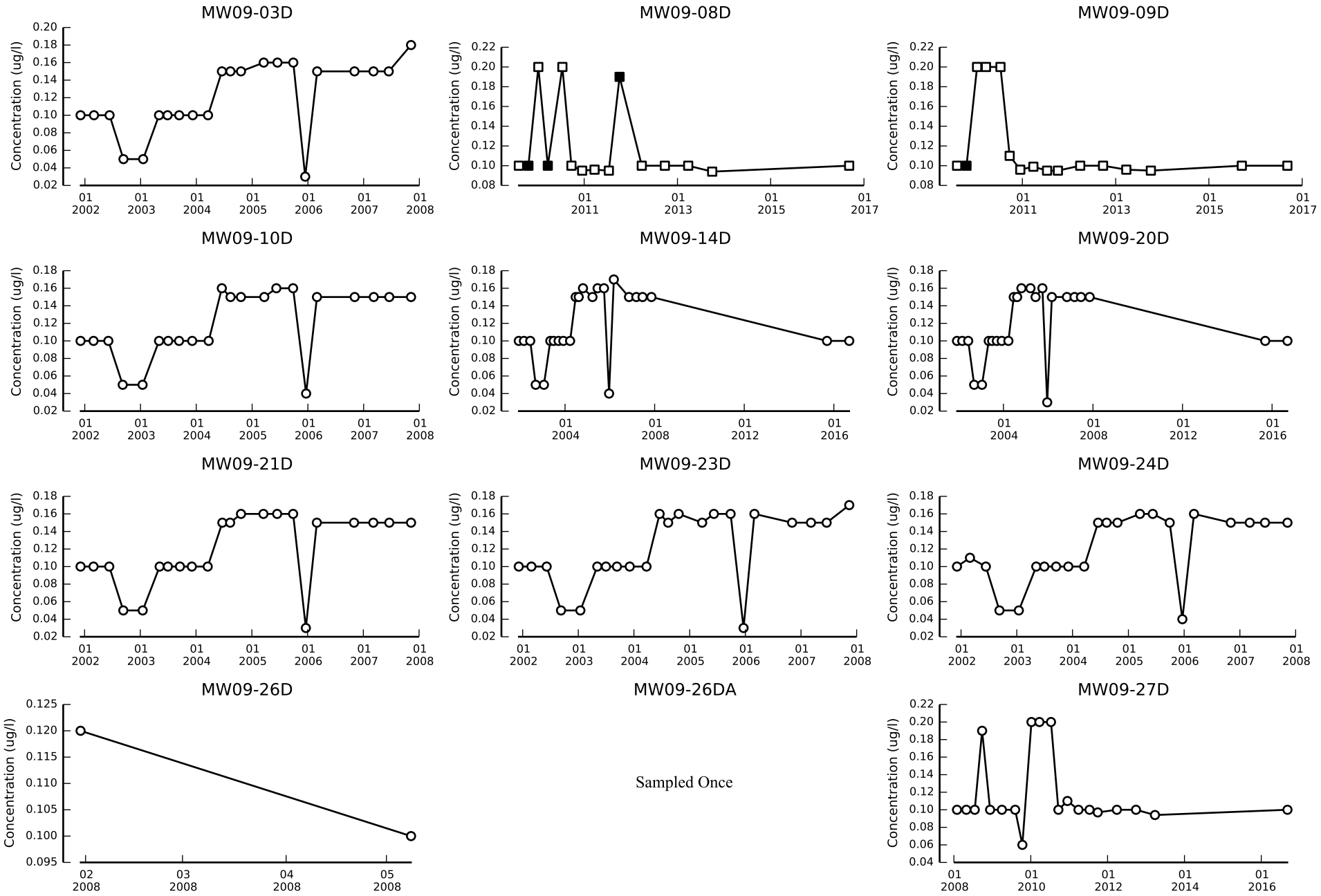
BENZO(B)FLUORANTHENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 62 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



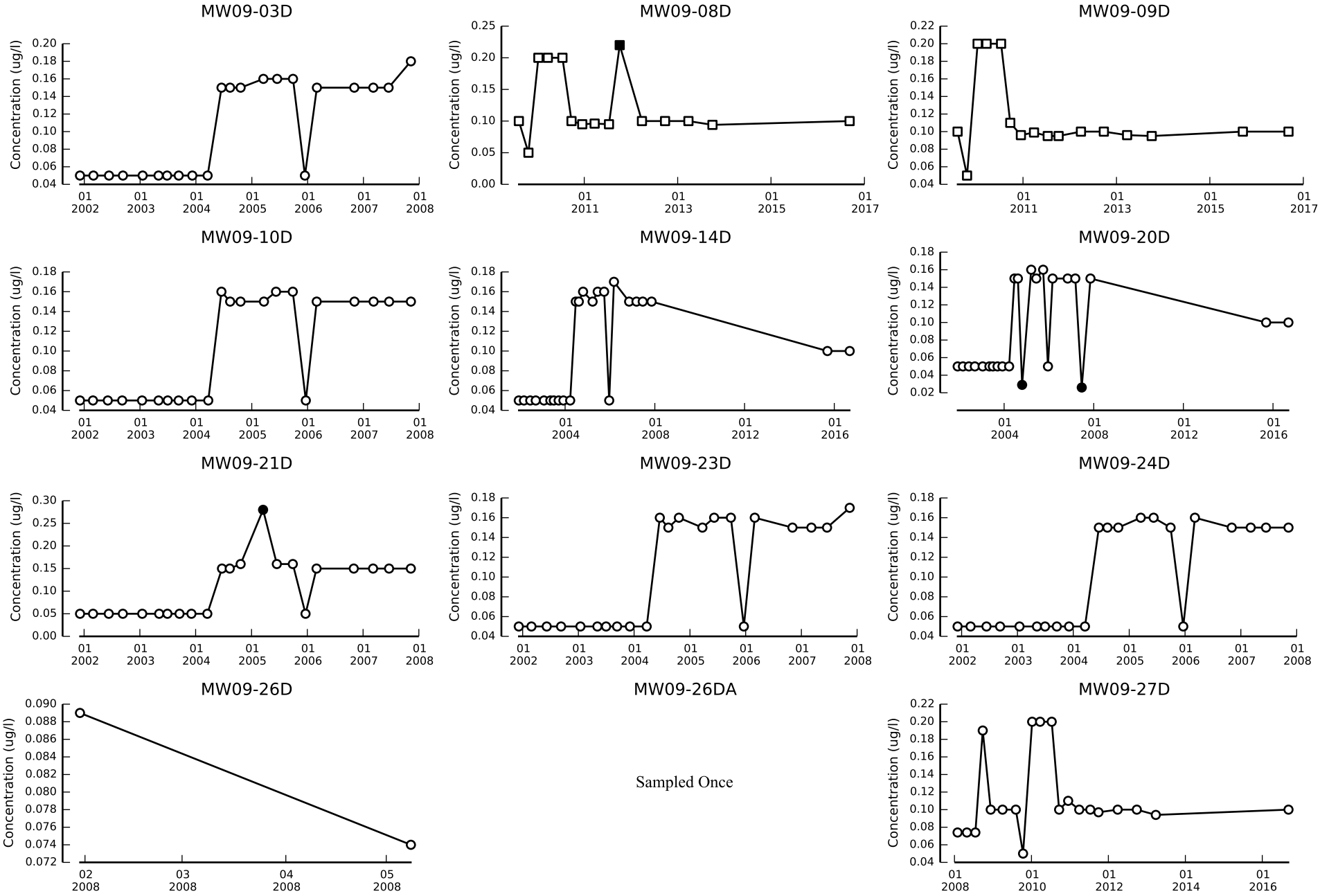
BENZO(G,H,I)PERYLENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 63 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



BENZO(K)FLUORANTHENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 64 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



BENZOIC ACID in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 65 of 133

● Detected
○ Not Detected, shown at detection limit

MW09-03D

MW09-08D

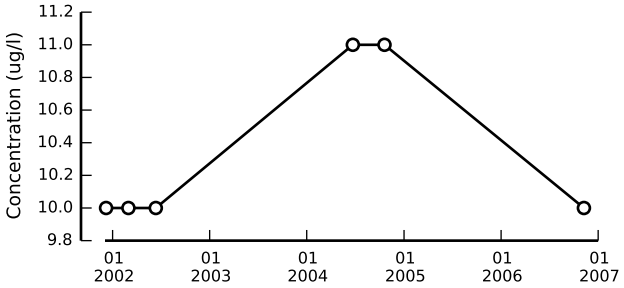
Not Sampled

MW09-09D

Not Sampled

MW09-10D

MW09-14D



MW09-20D

MW09-21D

MW09-23D

MW09-24D

MW09-26D

Not Sampled

MW09-26DA

Not Sampled

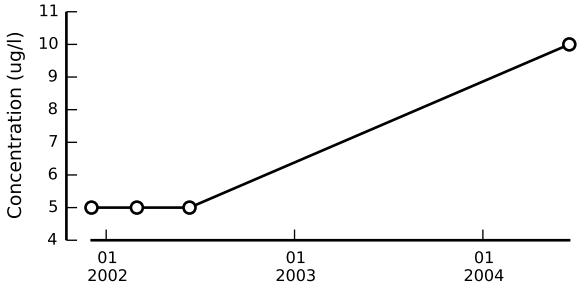
MW09-27D

Not Sampled

BENZYL ALCOHOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 66 of 133

● Detected
○ Not Detected, shown at detection limit

MW09-03D



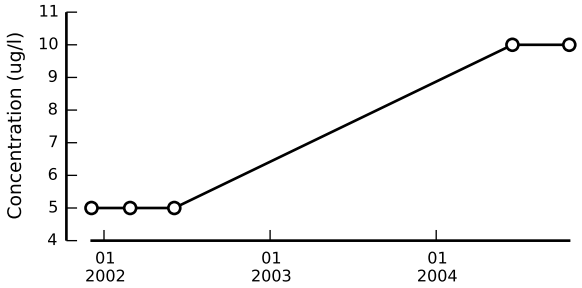
MW09-08D

Not Sampled

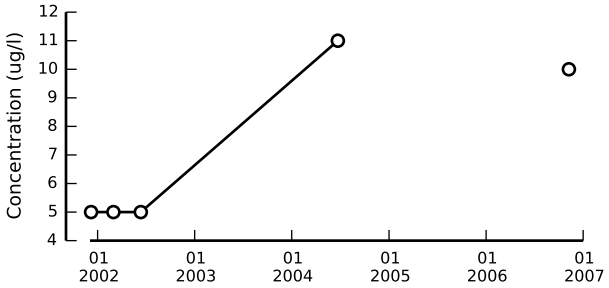
MW09-09D

Not Sampled

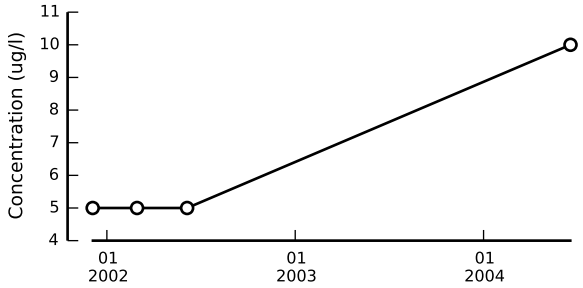
MW09-10D



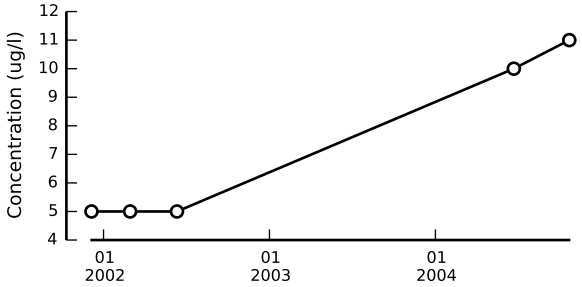
MW09-14D



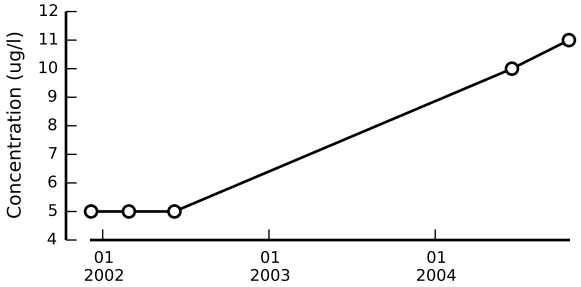
MW09-20D



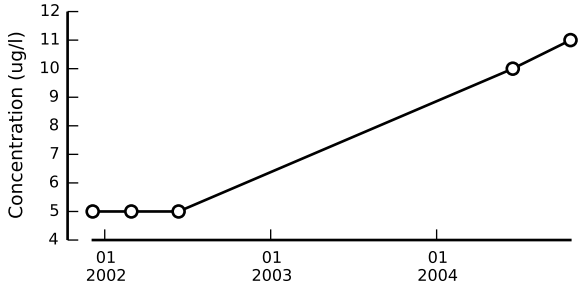
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

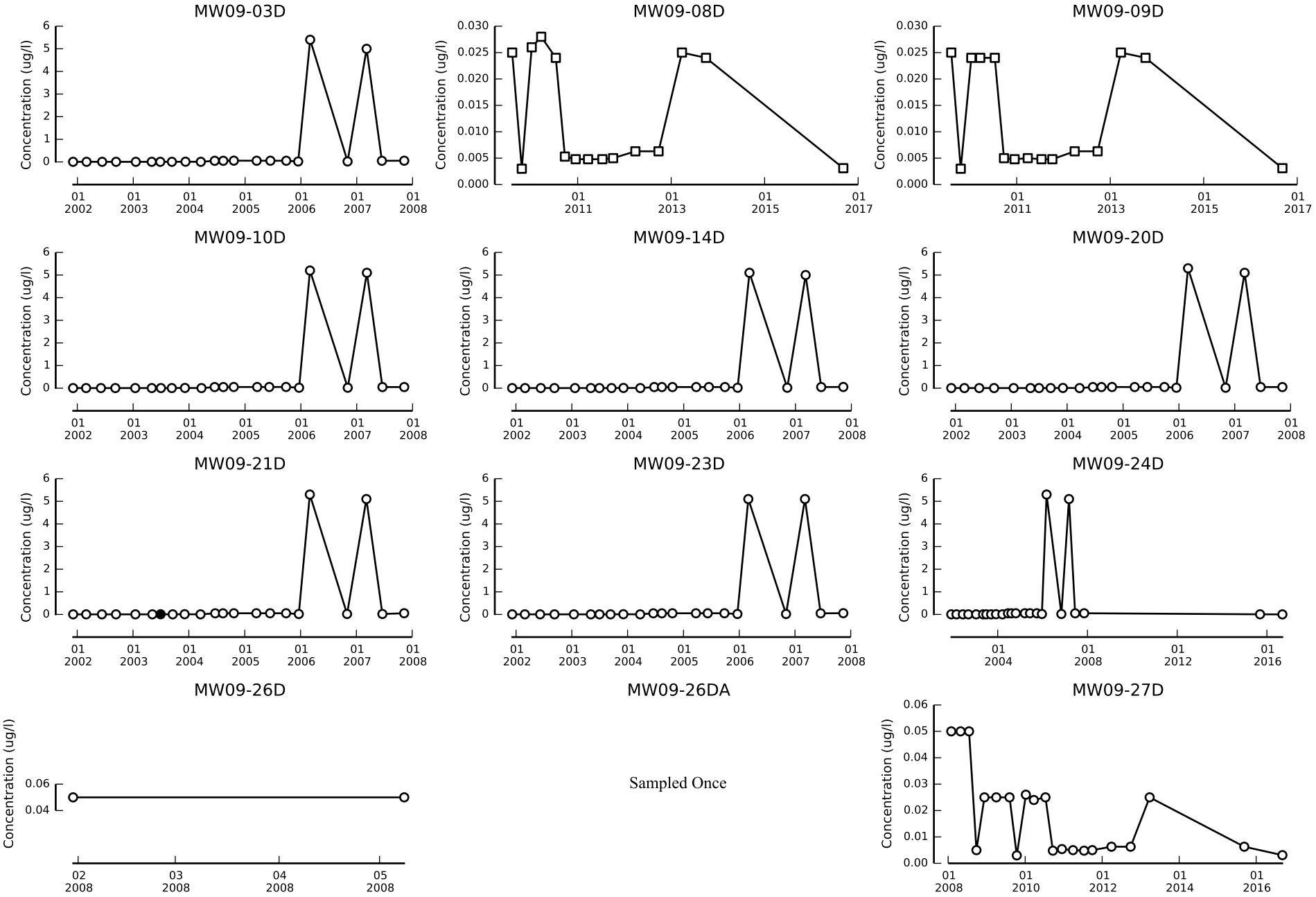
Not Sampled

MW09-27D

Not Sampled

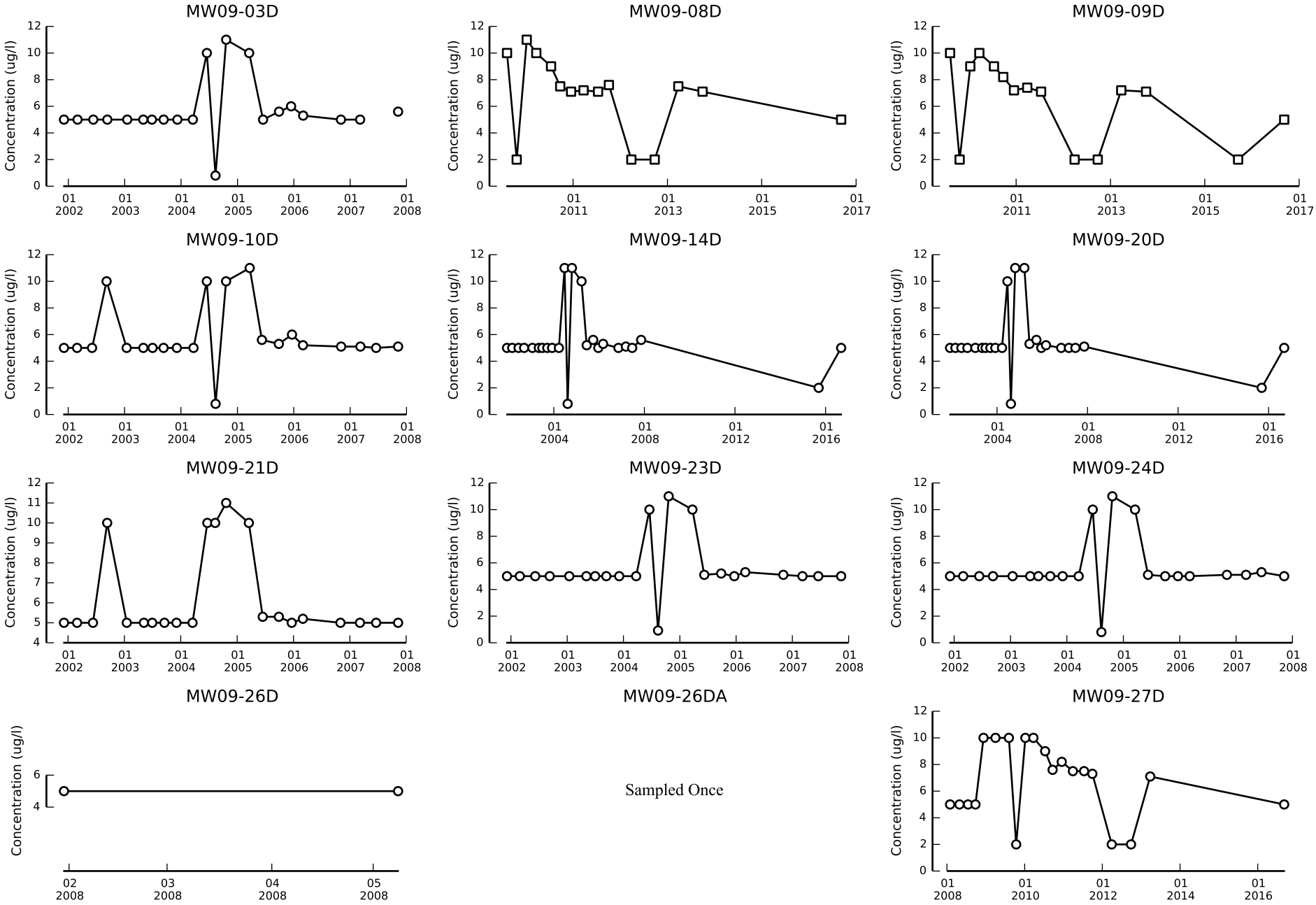
BETA-BHC in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 67 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



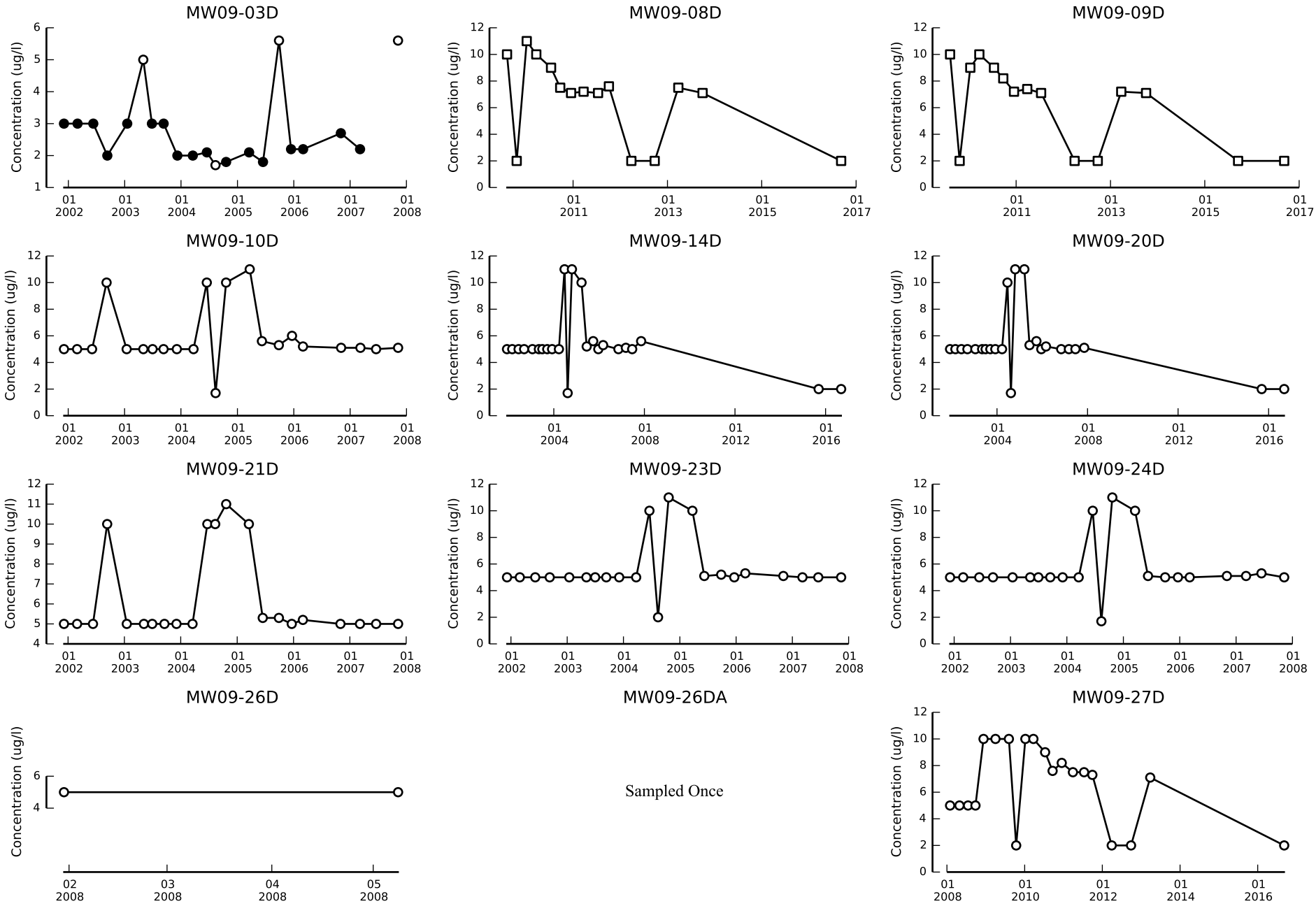
BIS(2-CHLOROETHOXY)METHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 68 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



BIS(2-CHLOROETHYL)ETHER in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 69 of 133

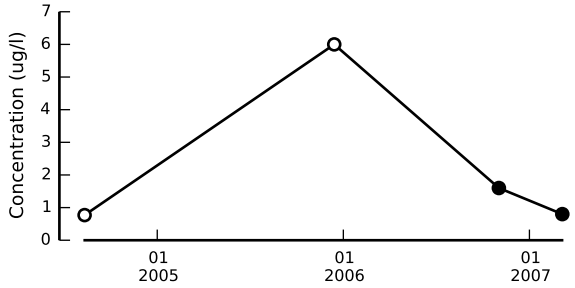
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



BIS(2-CHLOROISOPROPYL)ETHER in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 70 of 133

● Detected
○ Not Detected, shown at detection limit

MW09-03D



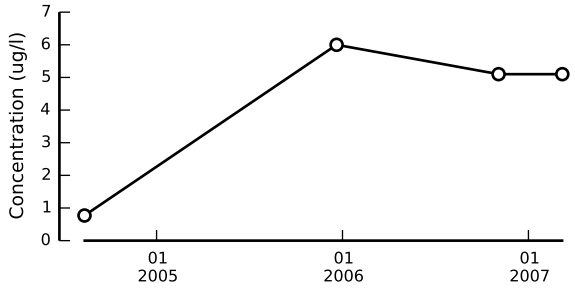
MW09-08D

Not Sampled

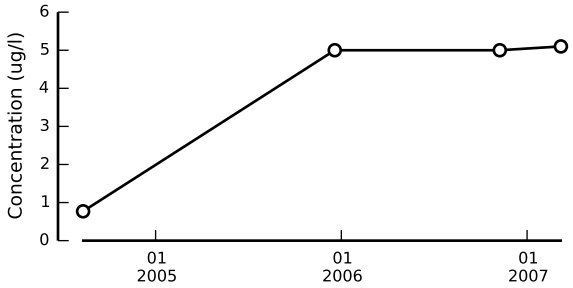
MW09-09D

Not Sampled

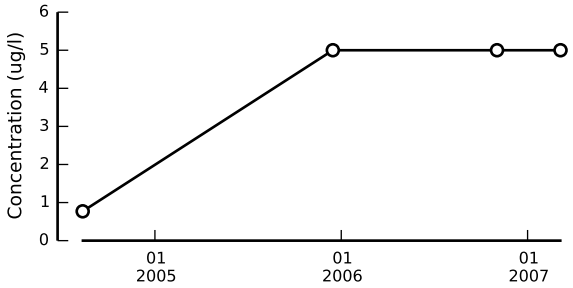
MW09-10D



MW09-14D

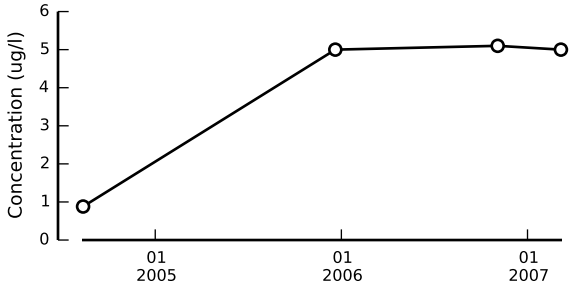


MW09-20D

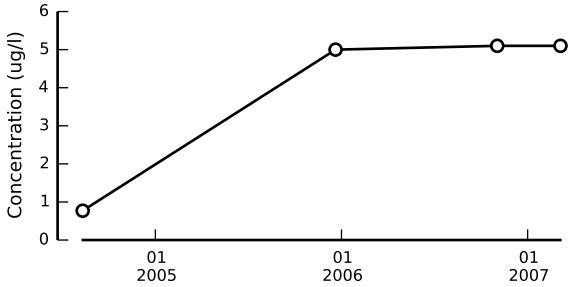


MW09-21D

MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

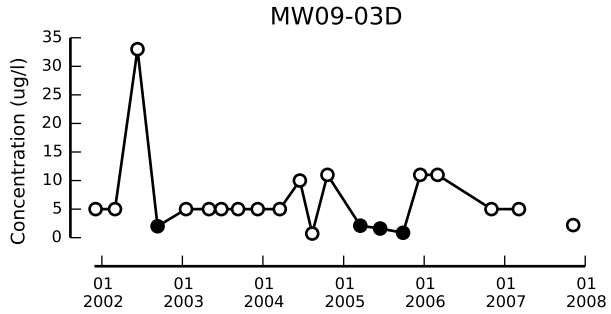
Not Sampled

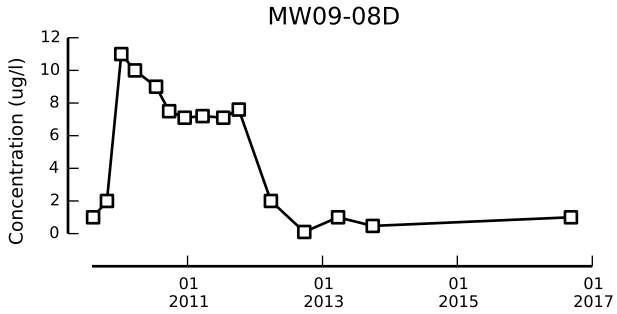
MW09-27D

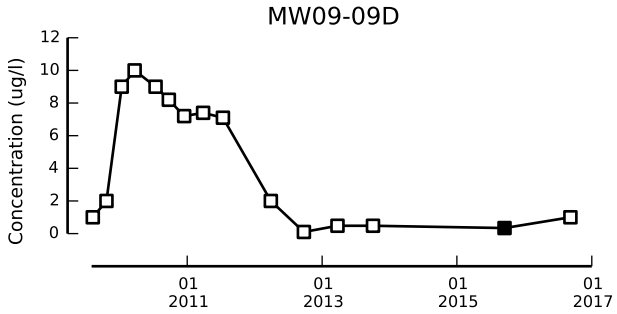
Not Sampled

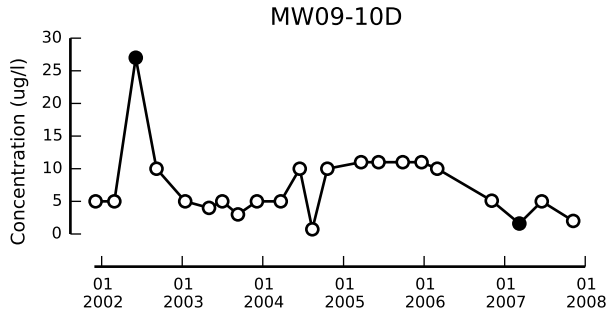
BIS(2-ETHYLHEXYL)PHTHALATE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 71 of 133

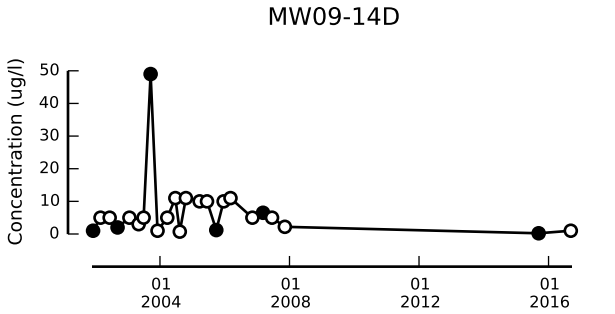
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

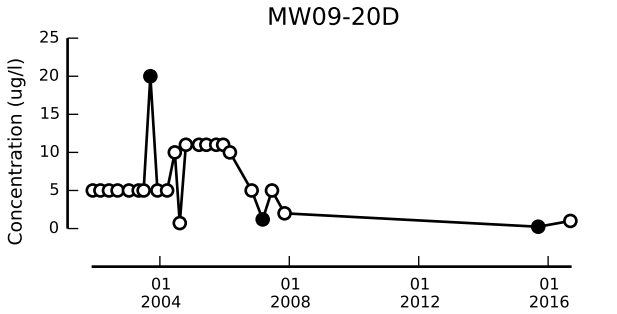


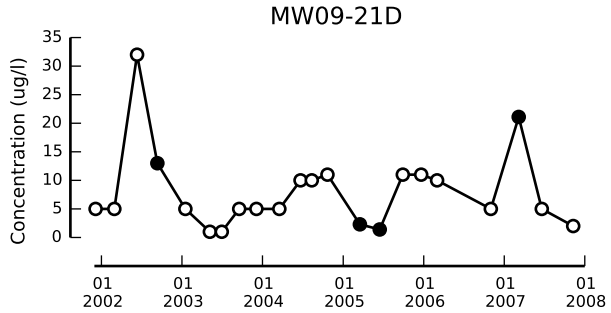


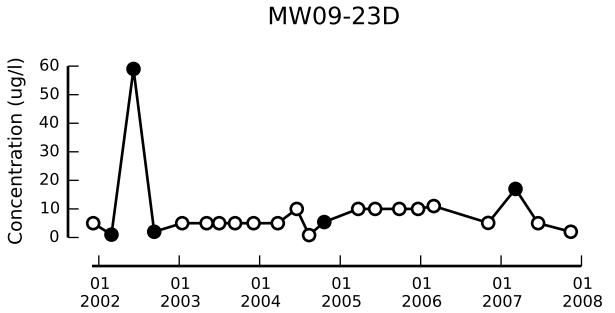


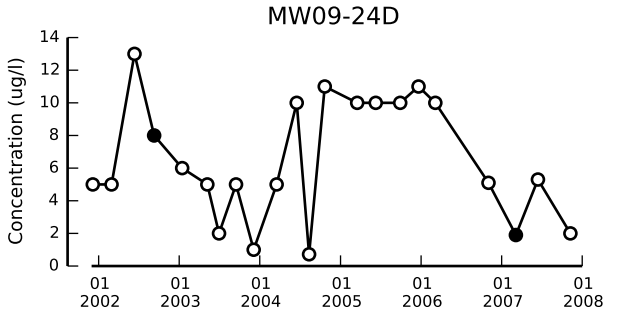


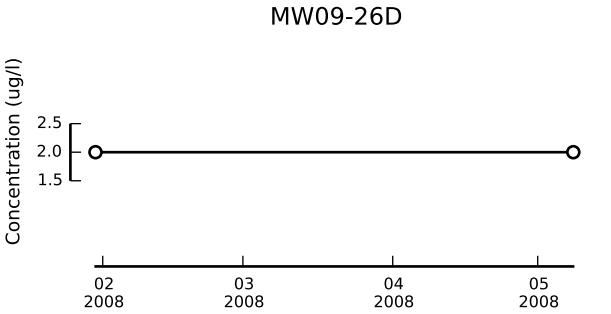






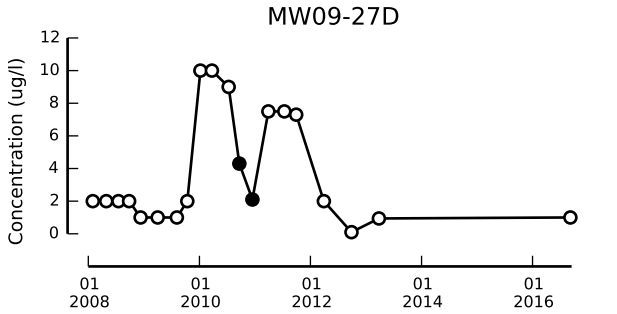






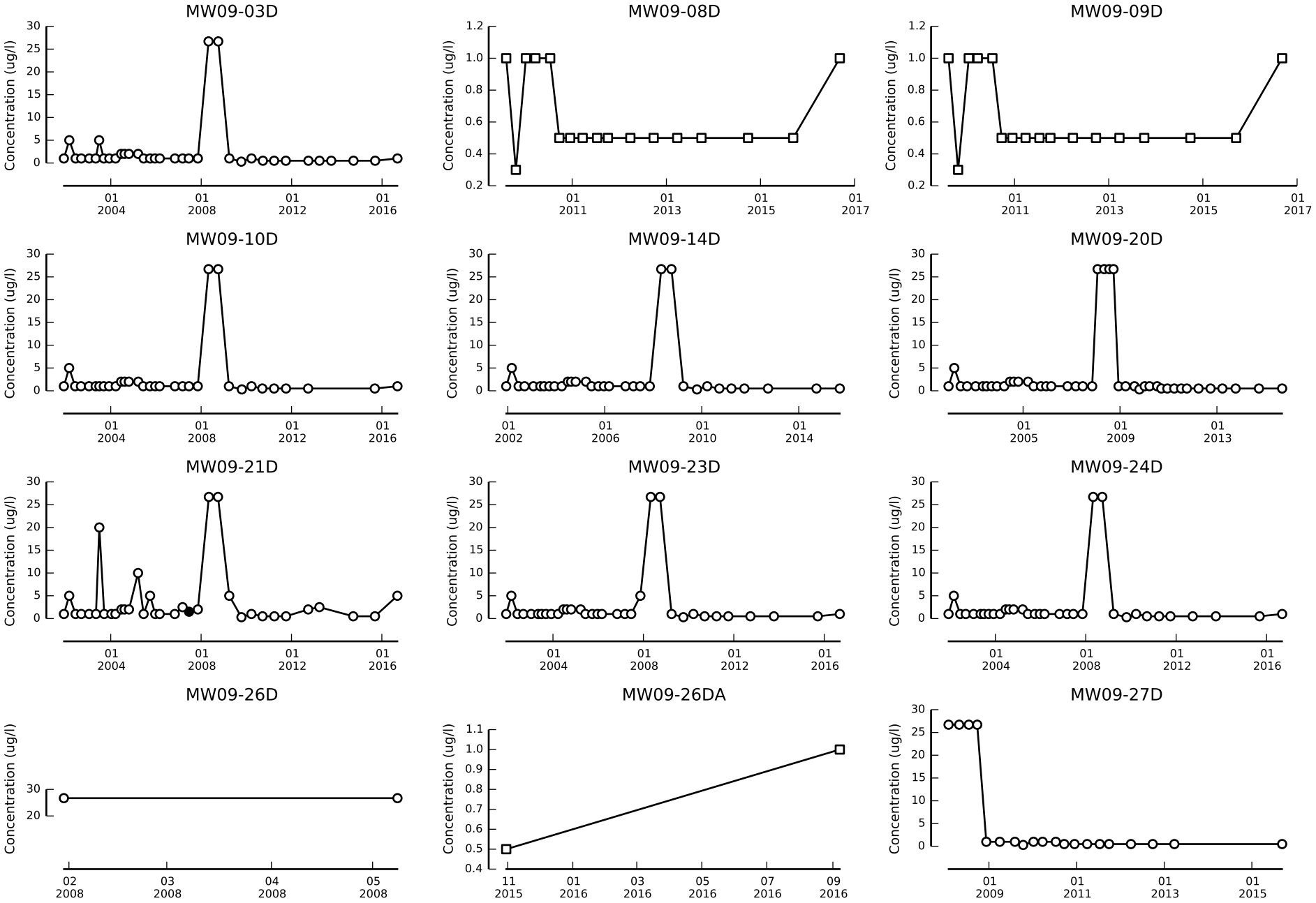
MW09-26DA

Sampled Once



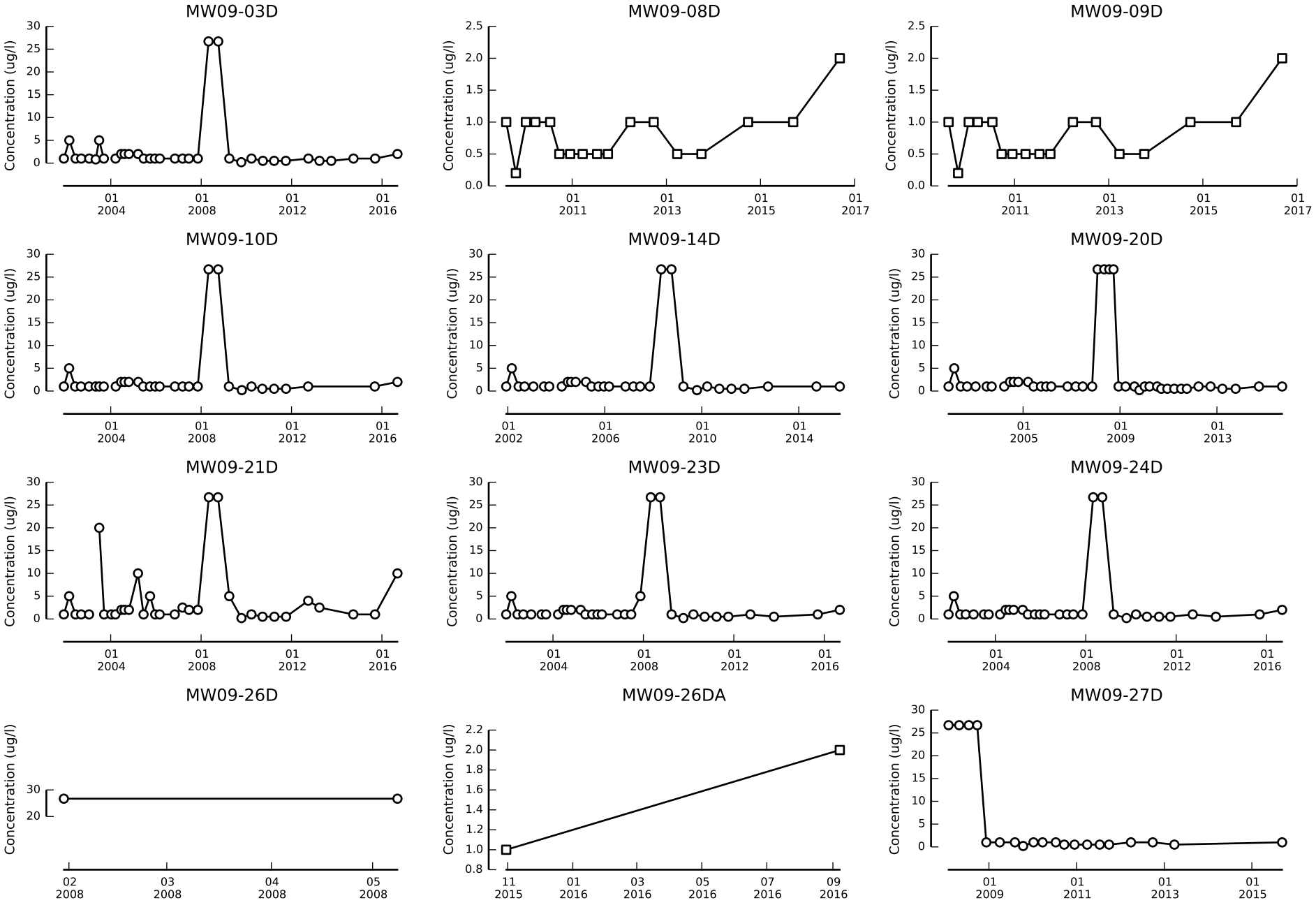
BROMODICHLOROMETHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 72 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



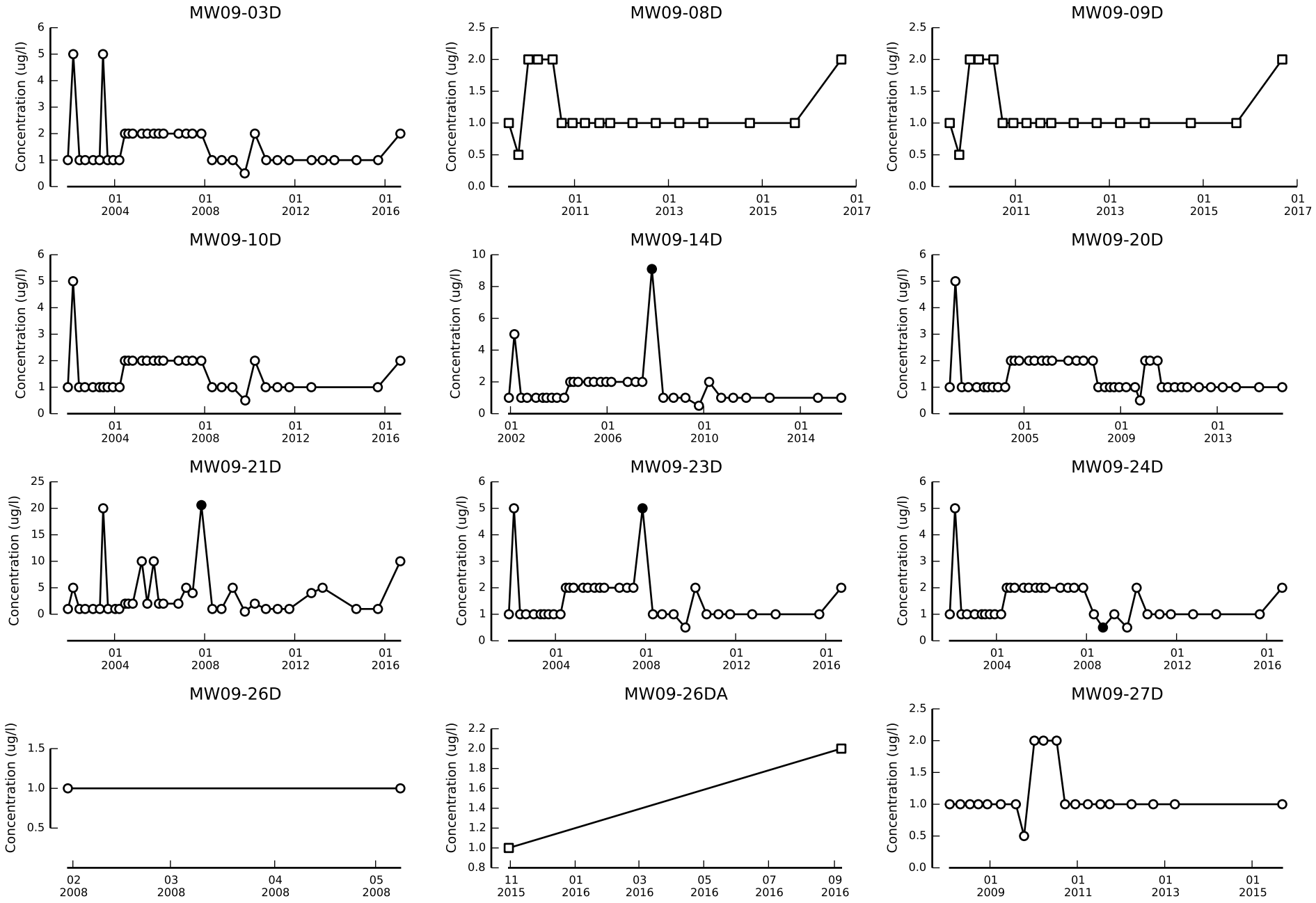
BROMOFORM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 73 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



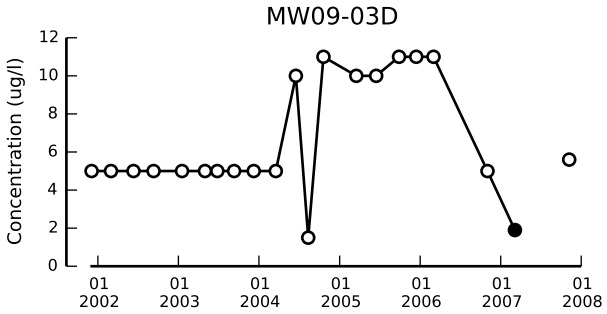
BROMOMETHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 74 of 133

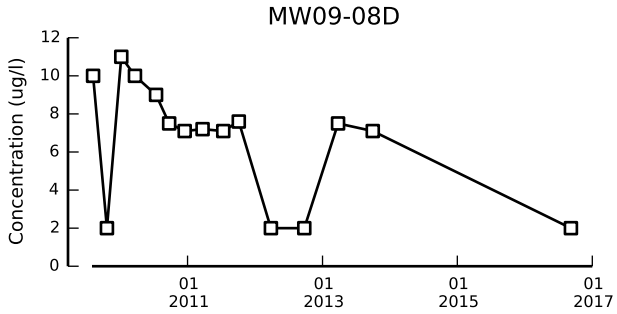
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

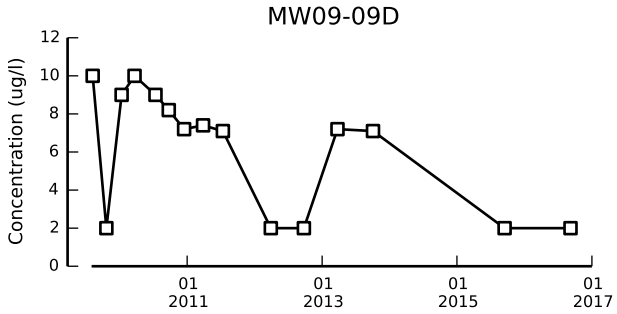


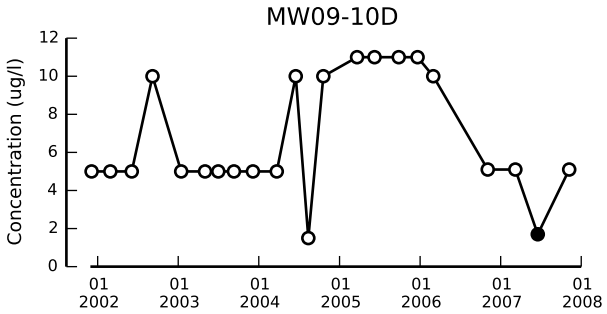
BUTYLBENZYLPHTHALATE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 75 of 133

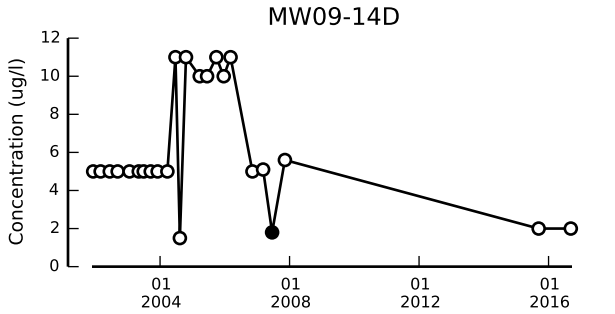
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

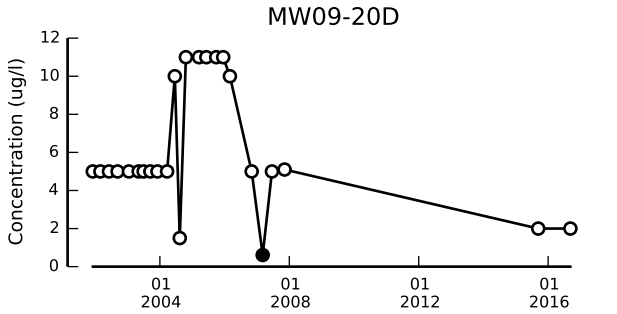


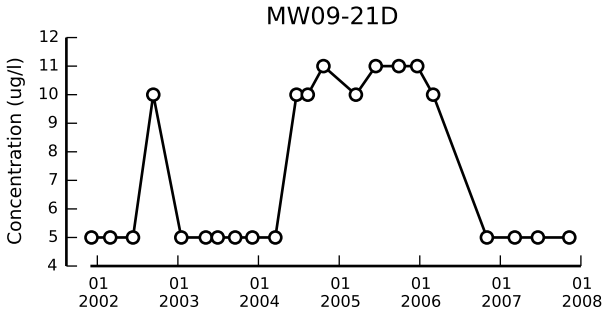


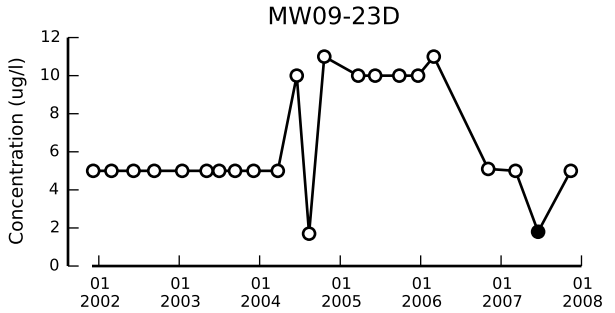


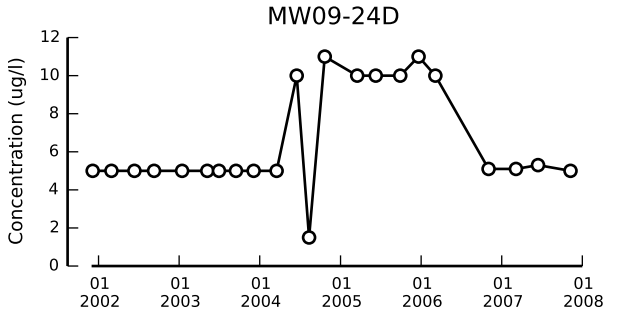


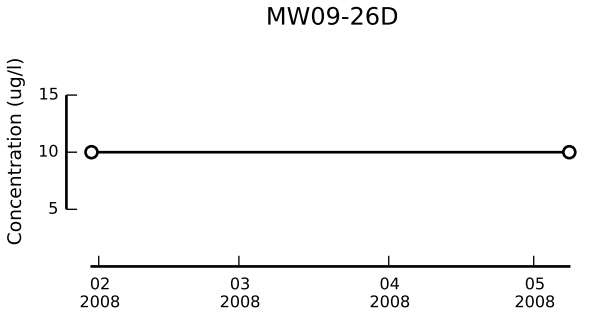






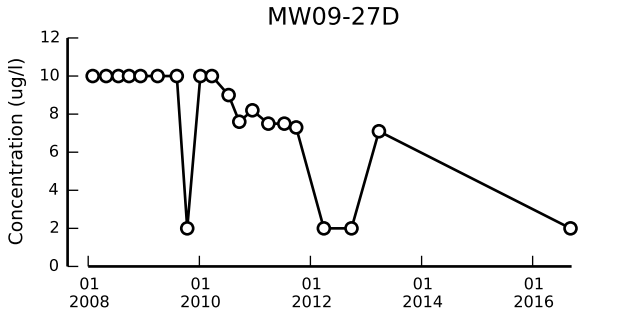






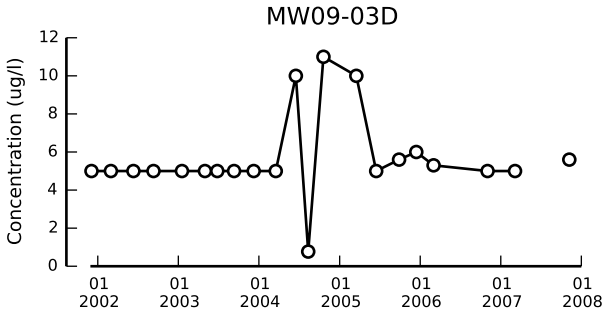
MW09-26DA

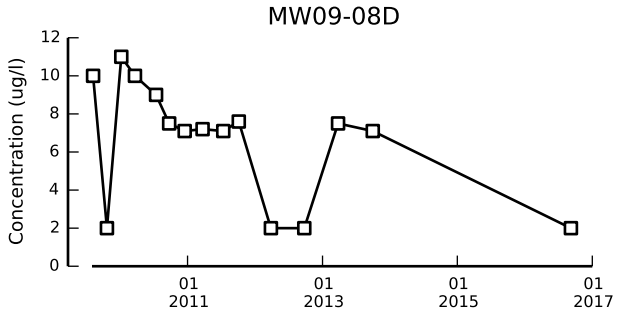
Sampled Once

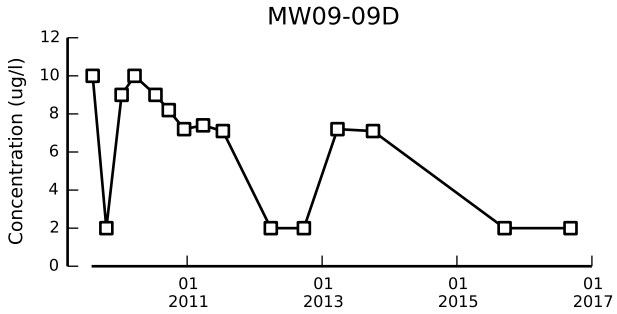


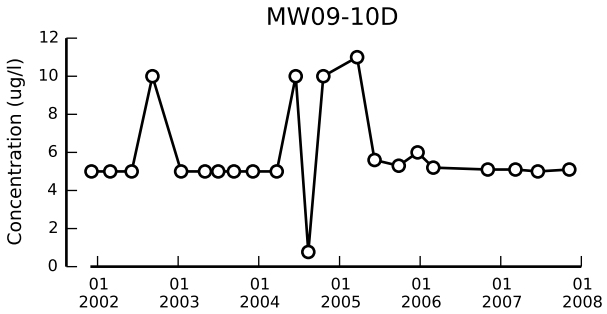
CARBAZOLE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 76 of 133

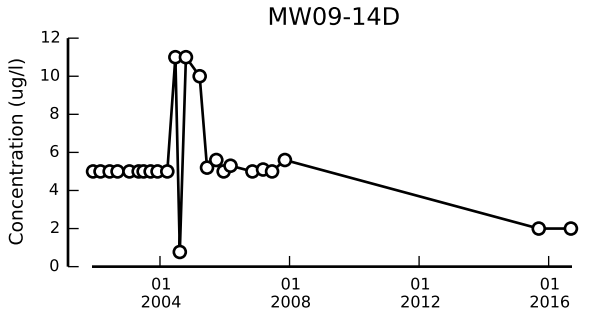
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

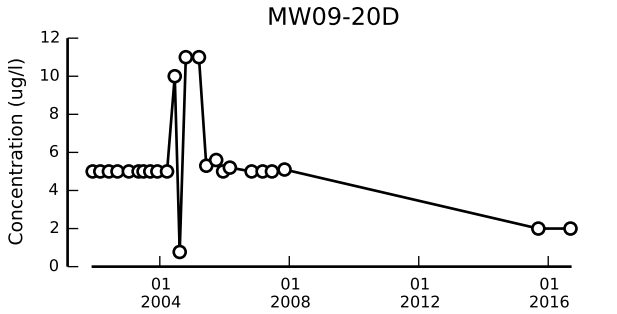


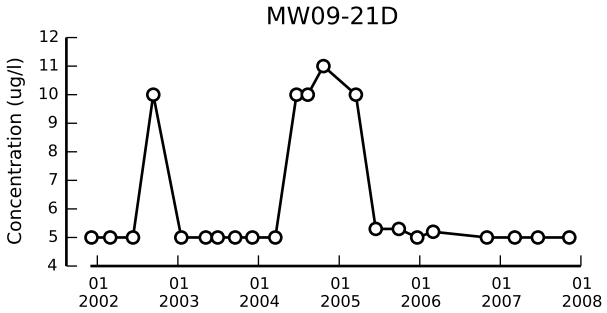


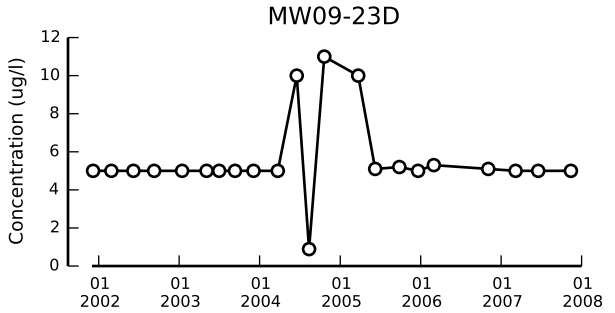


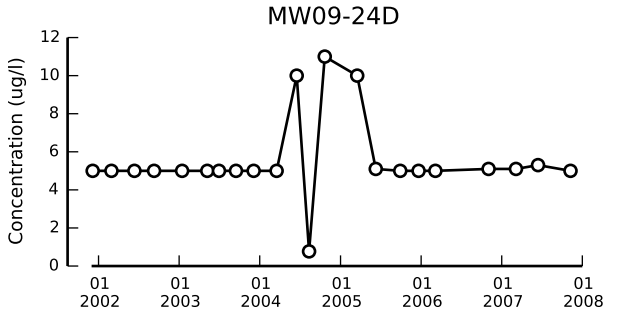


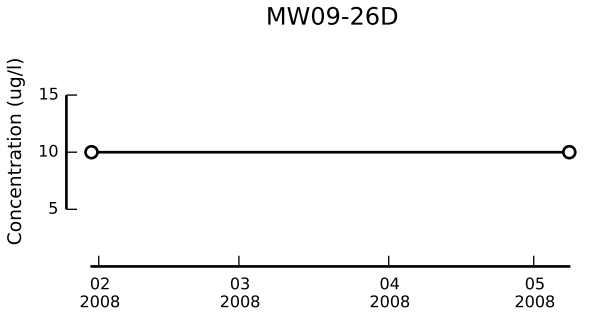






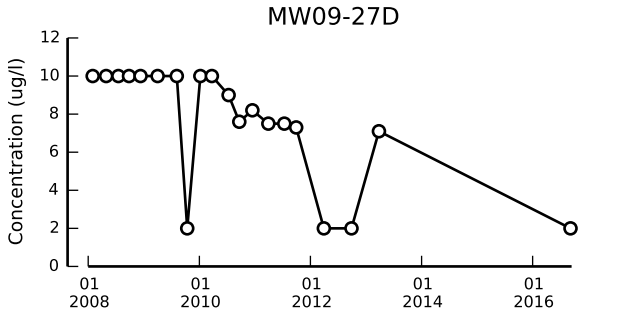






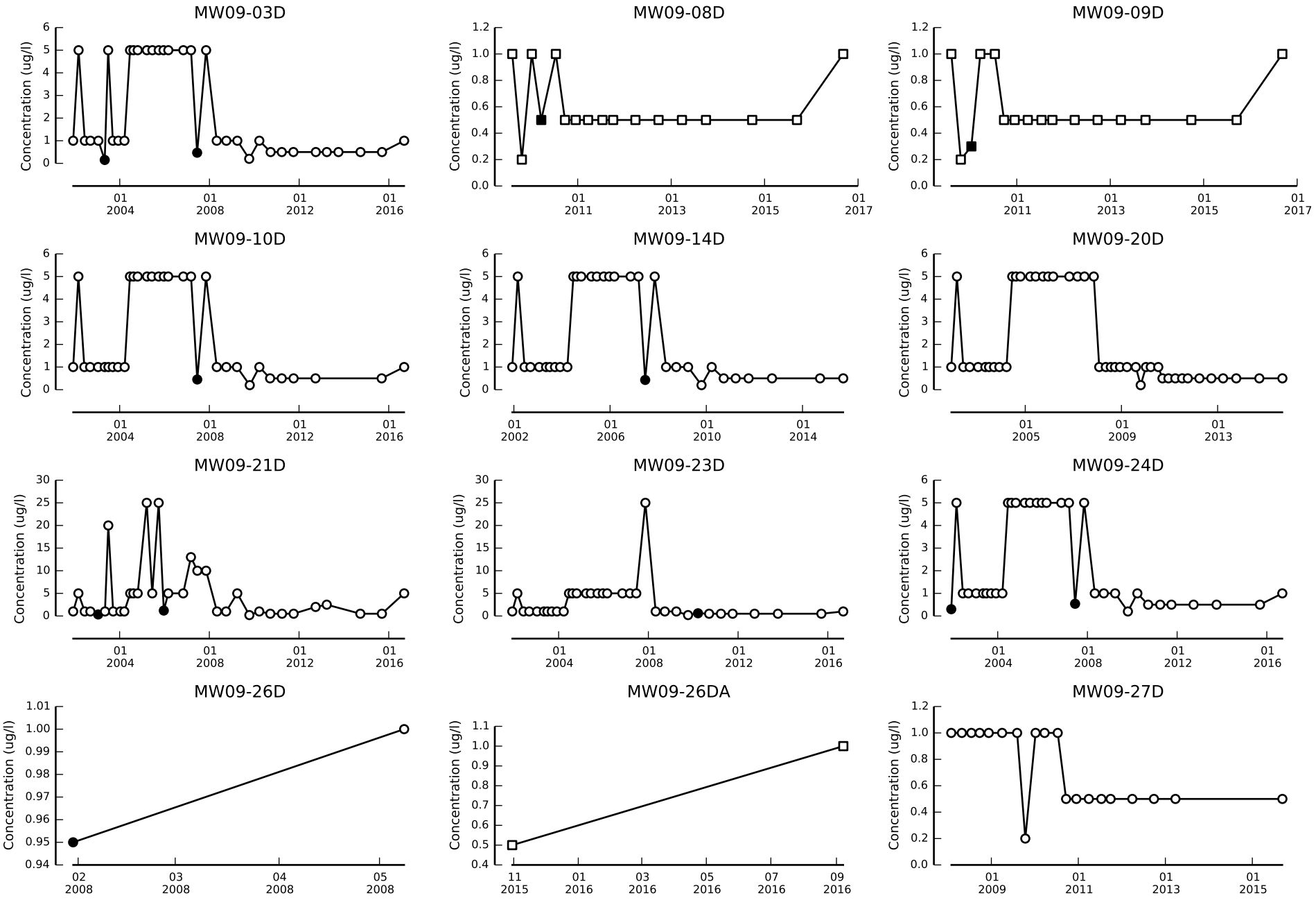
MW09-26DA

Sampled Once



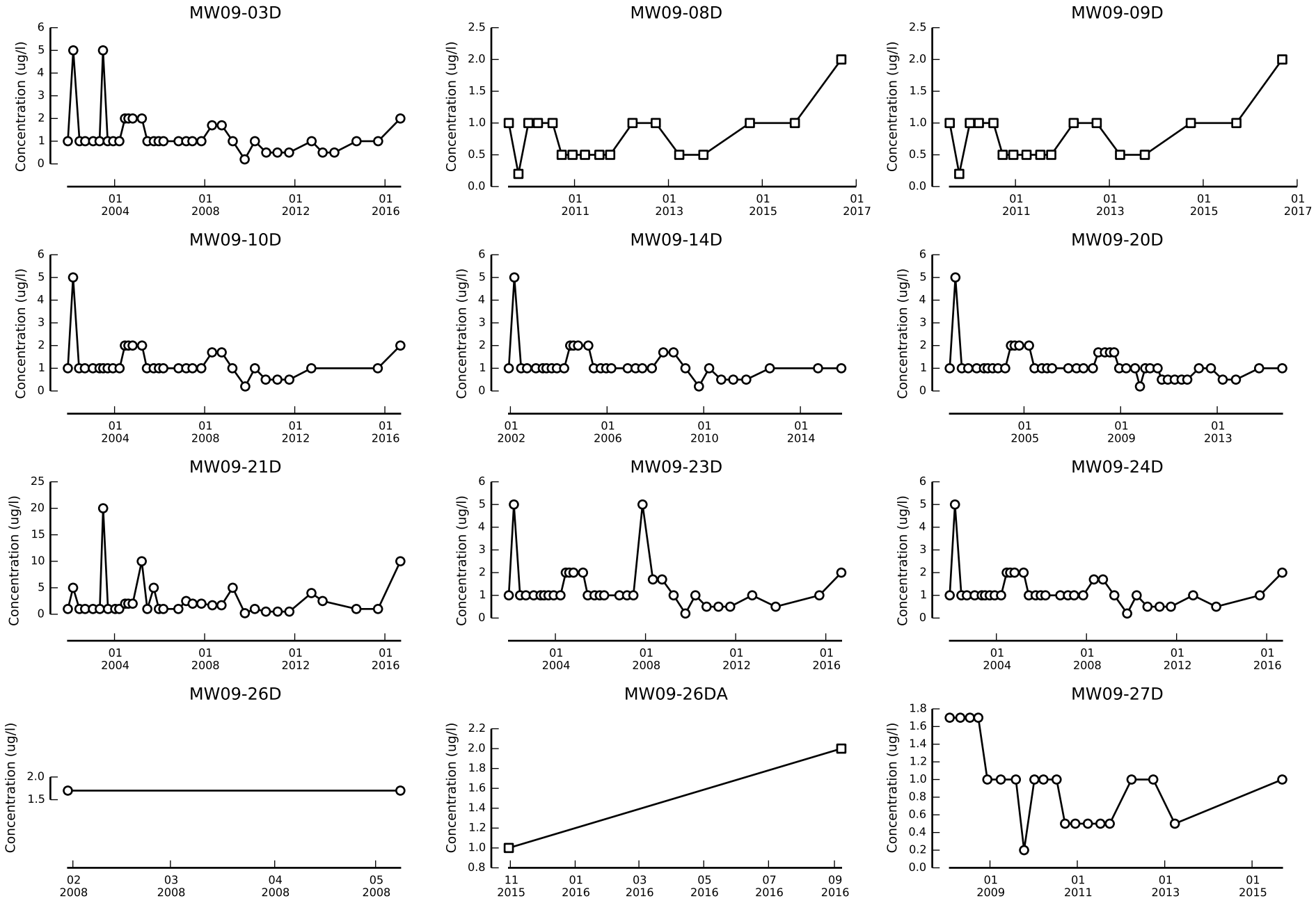
CARBON DISULFIDE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 77 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



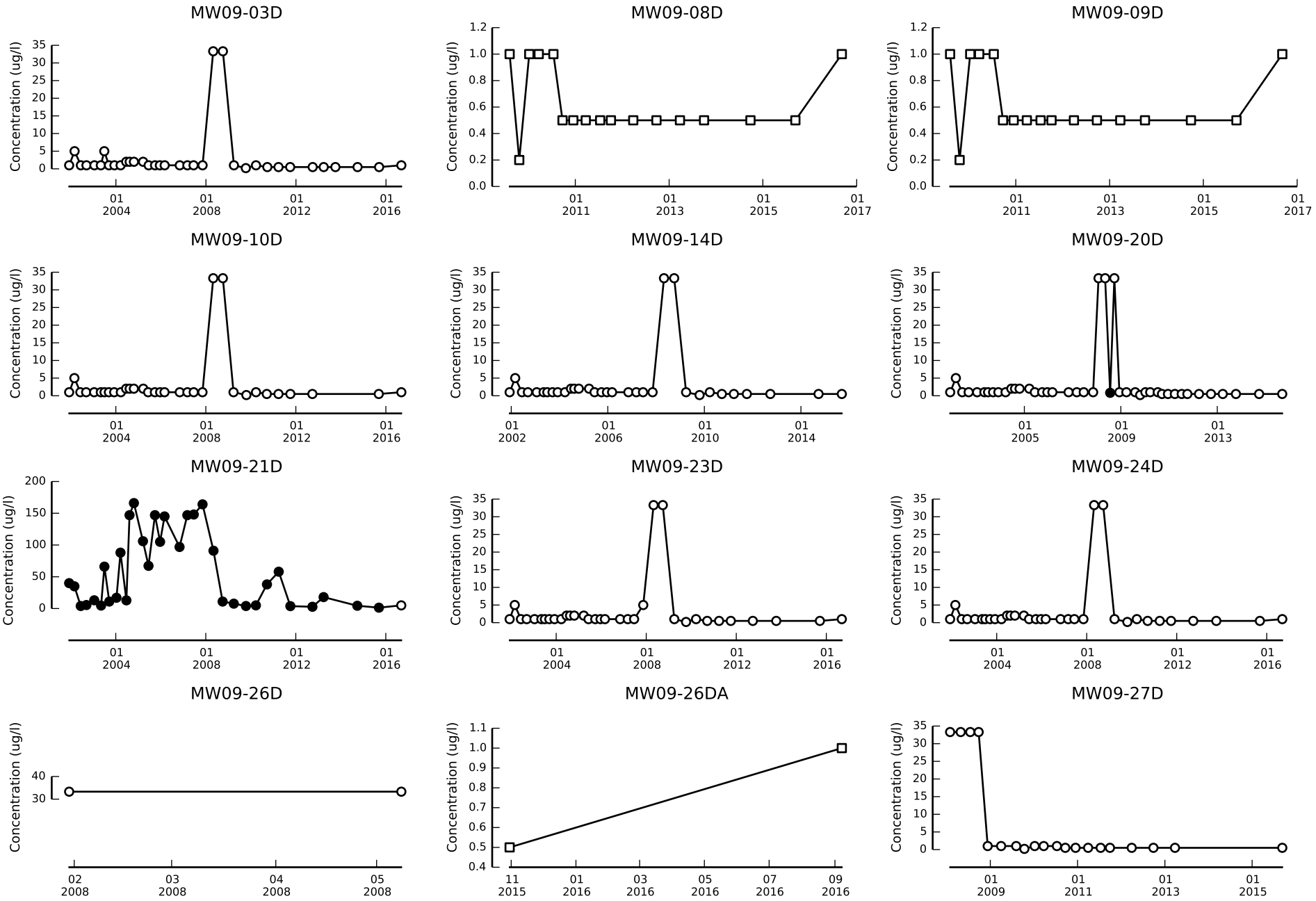
CARBON TETRACHLORIDE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 78 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



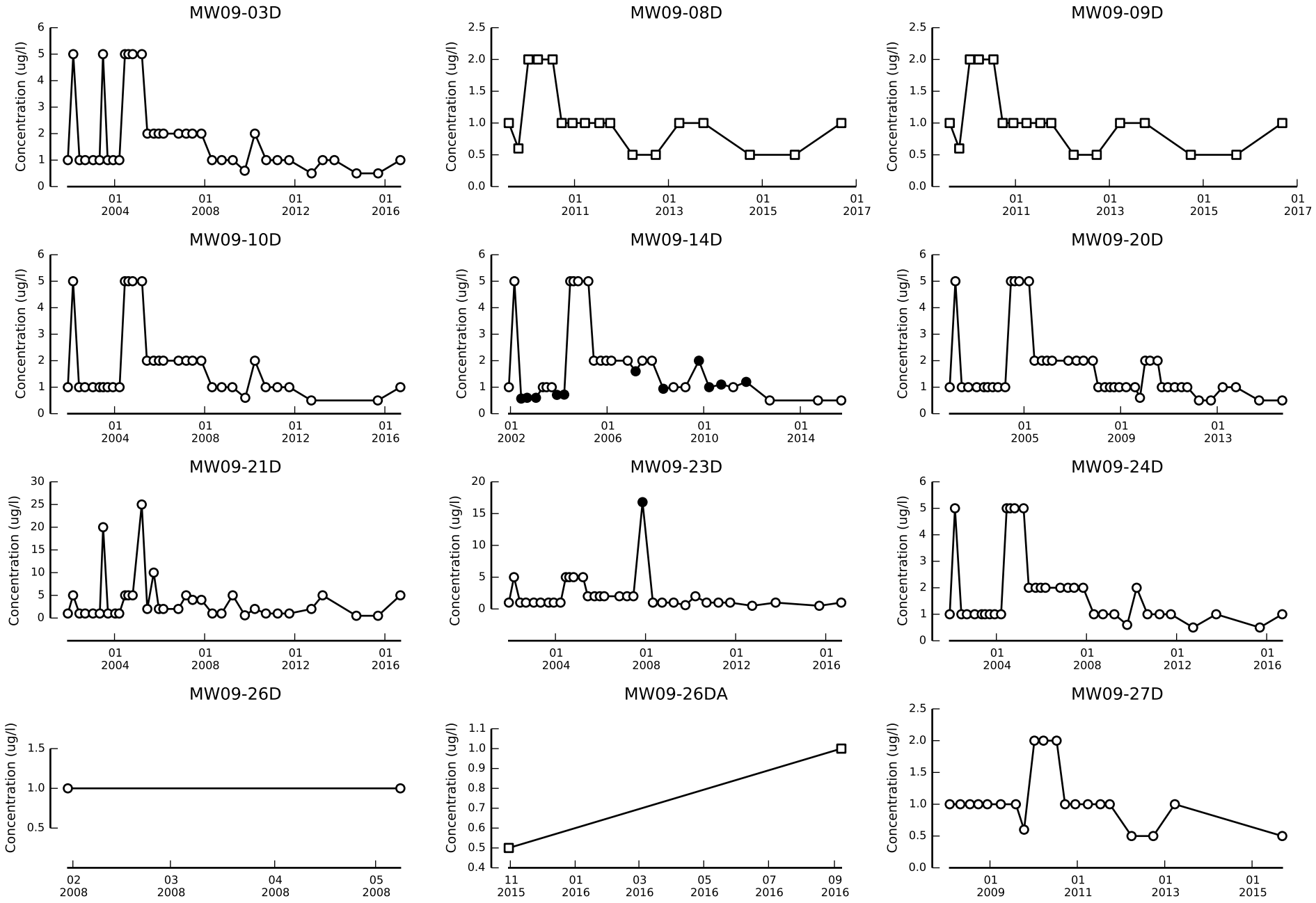
CHLOROBENZENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 79 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



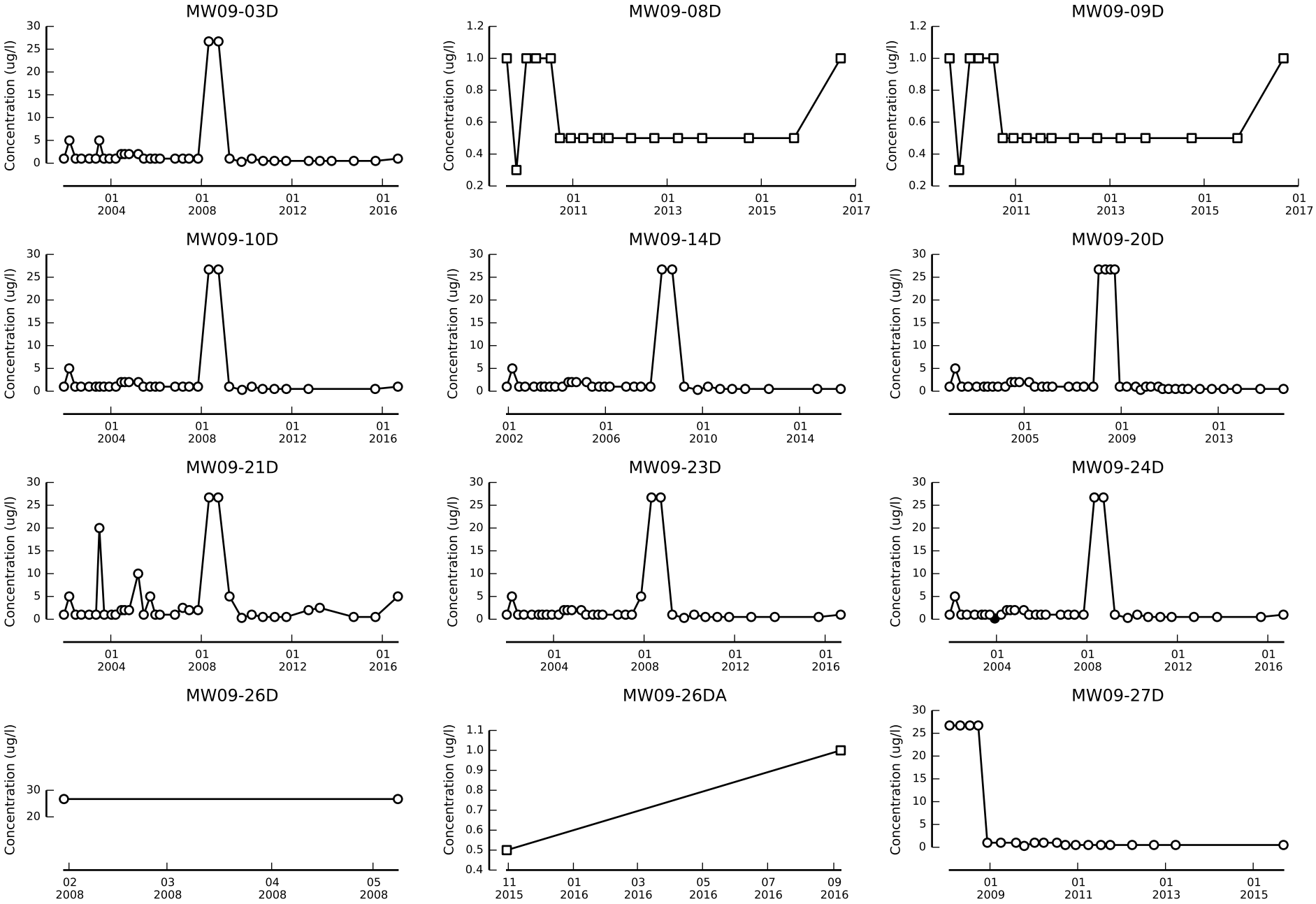
CHLOROETHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 80 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



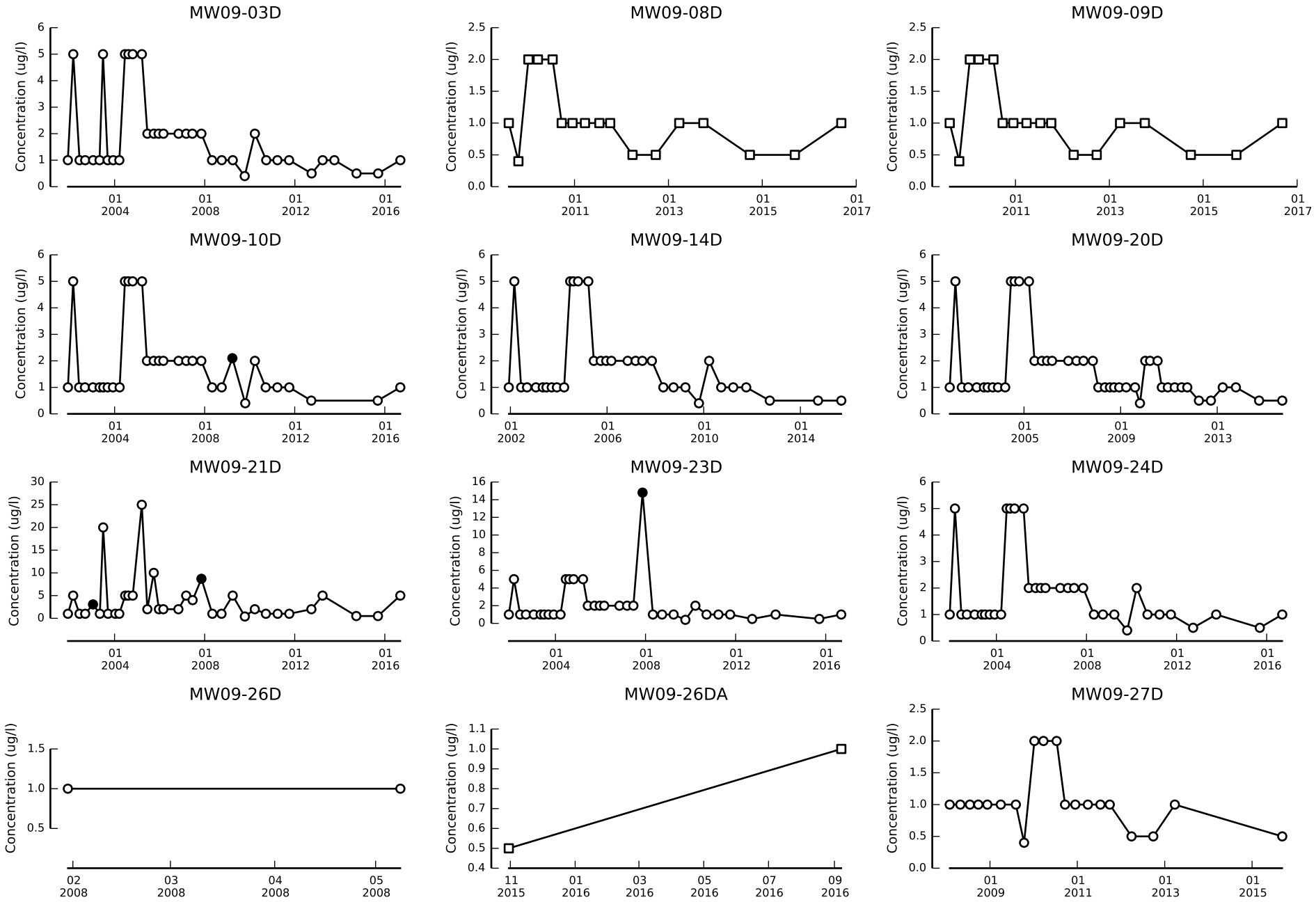
CHLOROFORM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 81 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



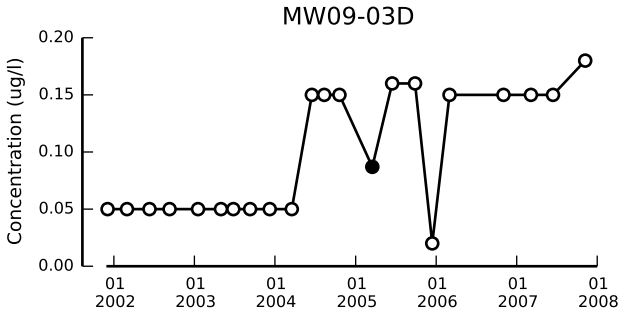
CHLOROMETHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 82 of 133

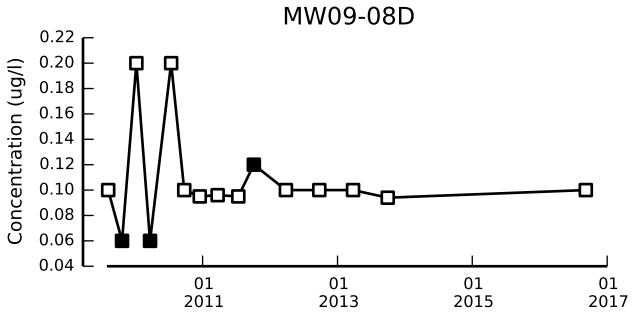
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

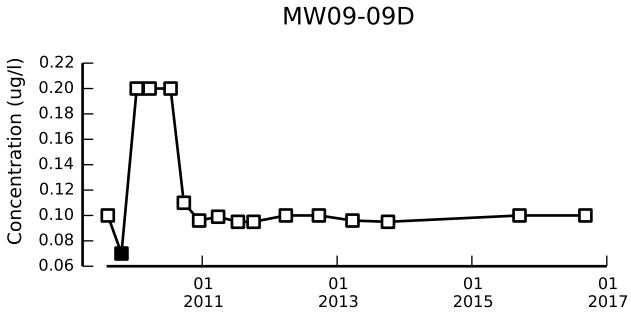


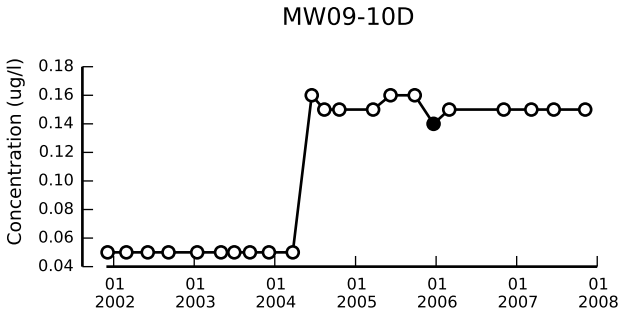
CHRYSENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 83 of 133

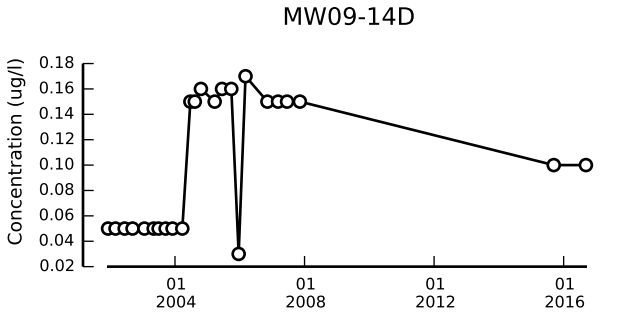
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

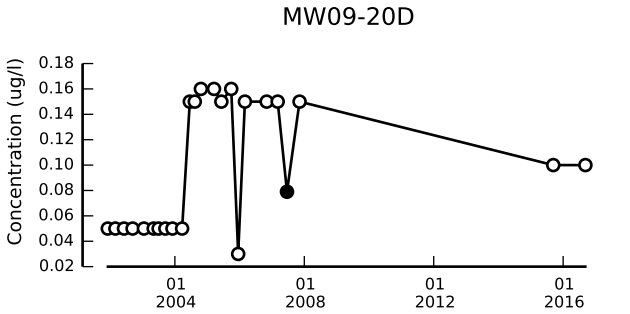


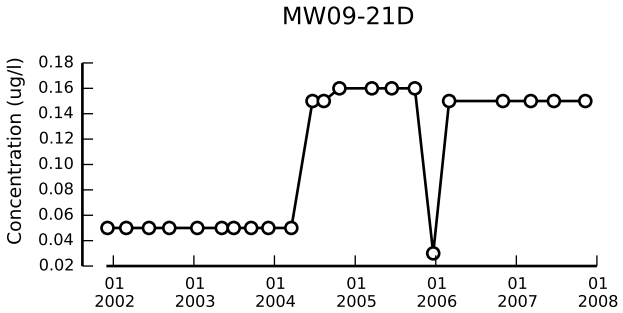


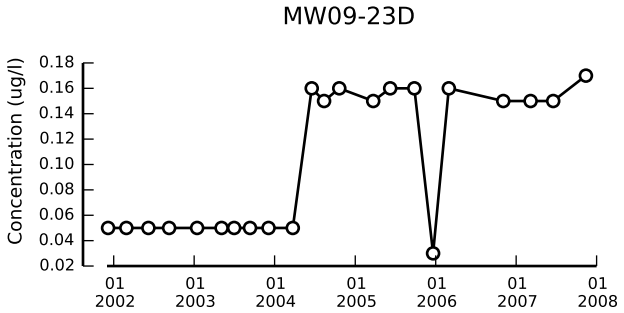


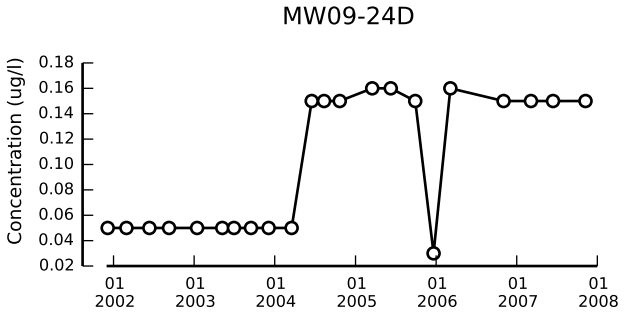


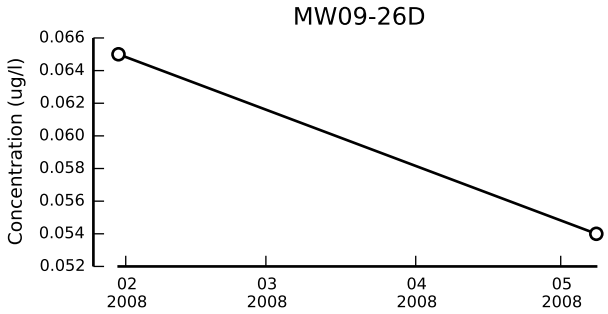






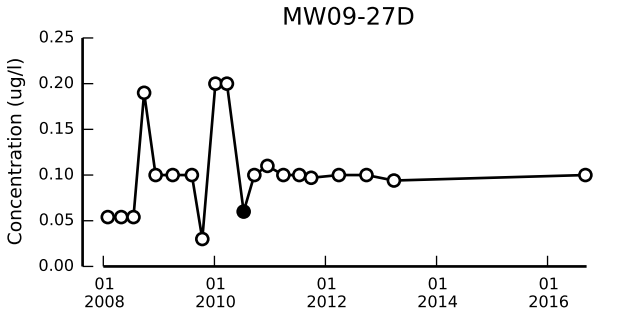






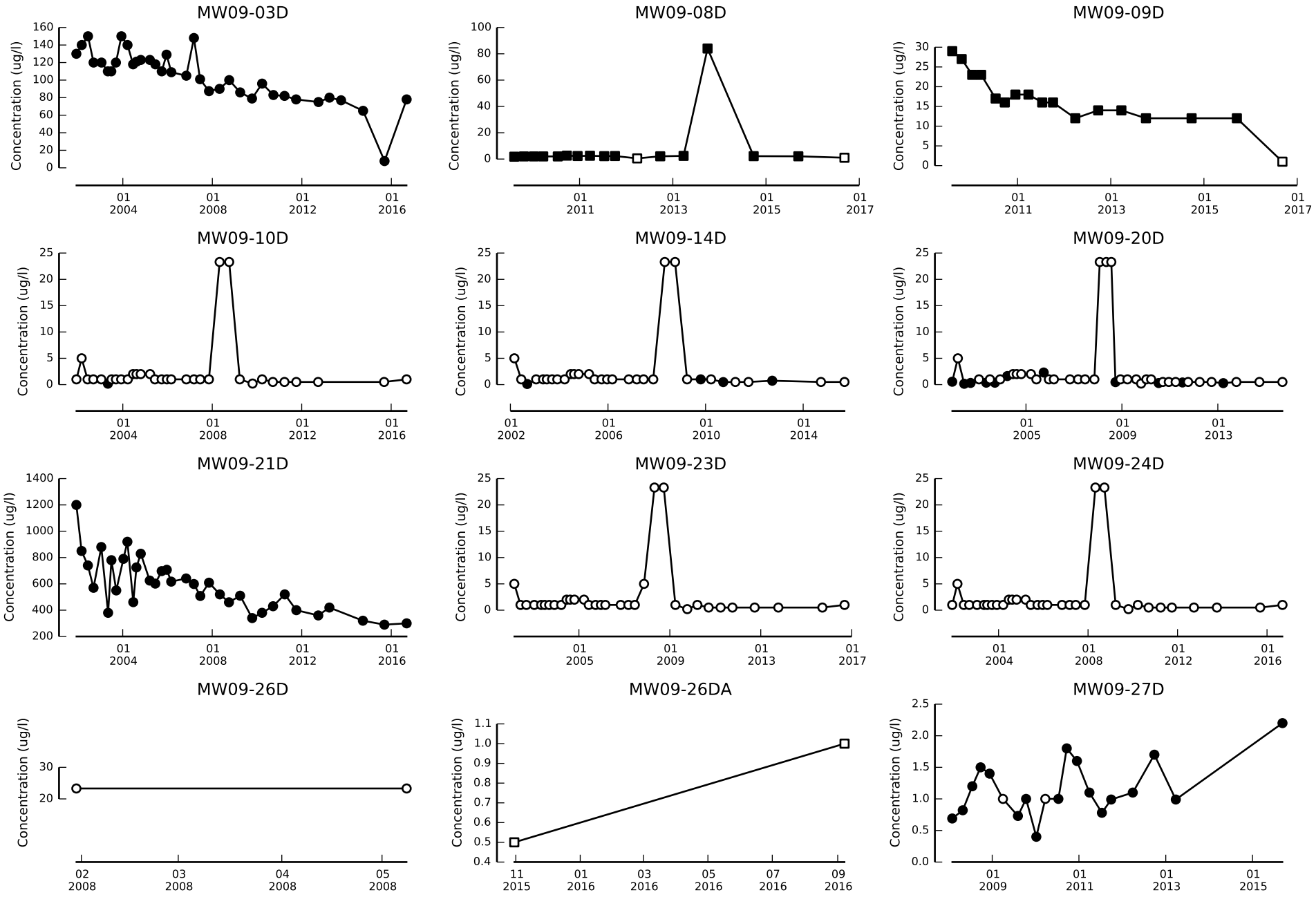
MW09-26DA

Sampled Once



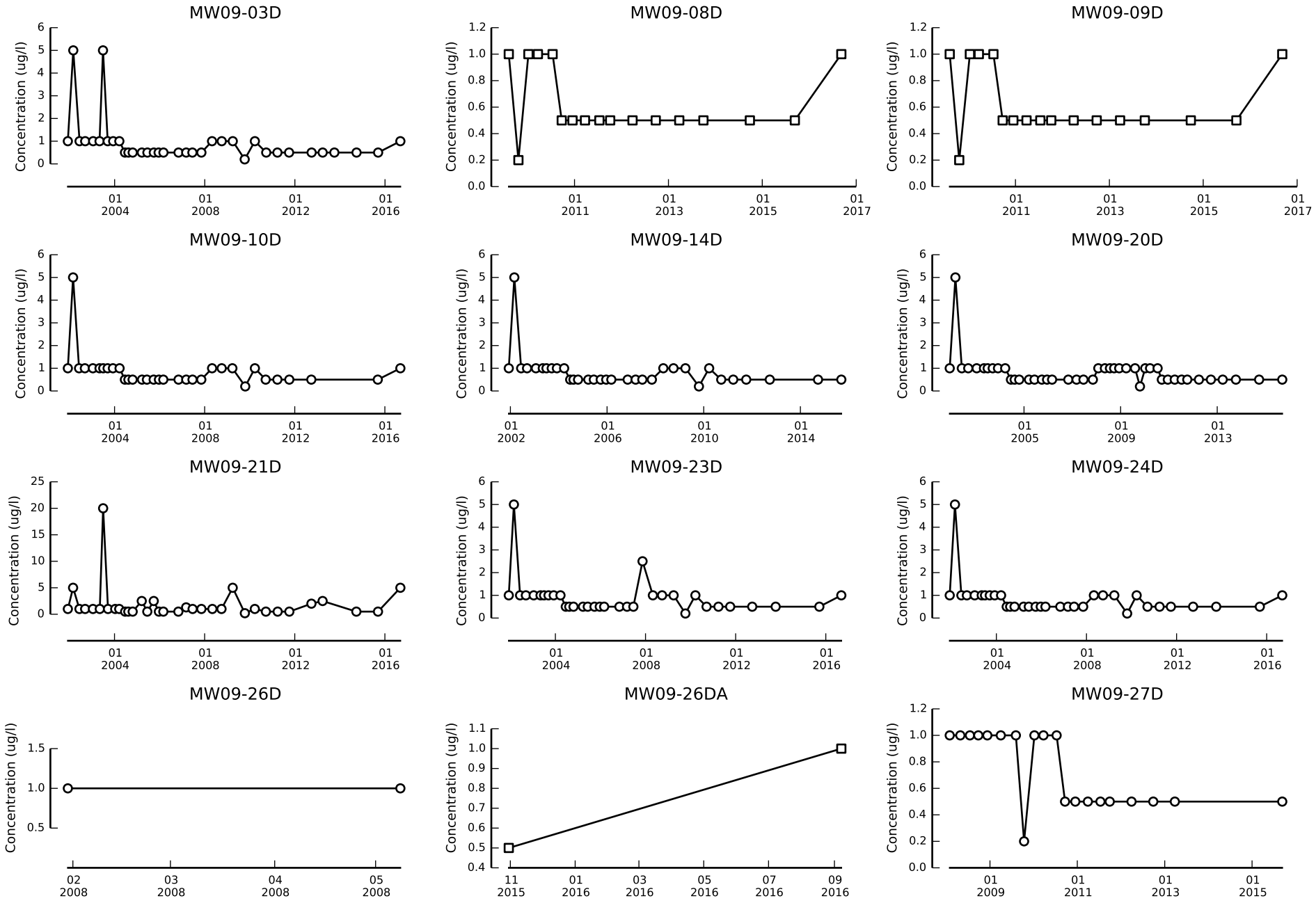
CIS-1,2-DICHLOROETHENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 84 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



CIS-1,3-DICHLOROPROPENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 85 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



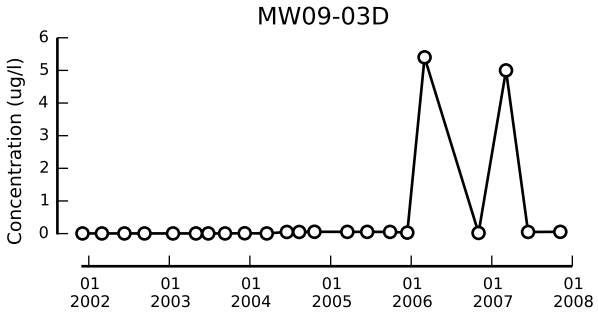
CRESOLS in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 86 of 133

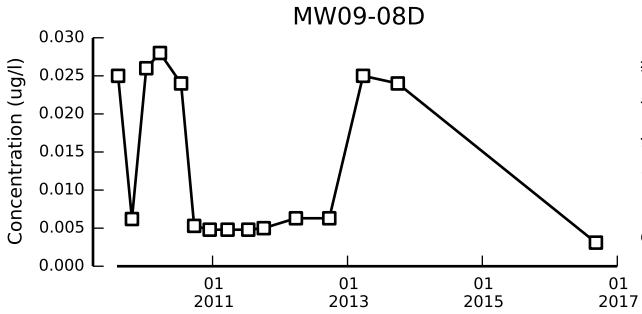
● Detected
○ Not Detected, shown at detection limit

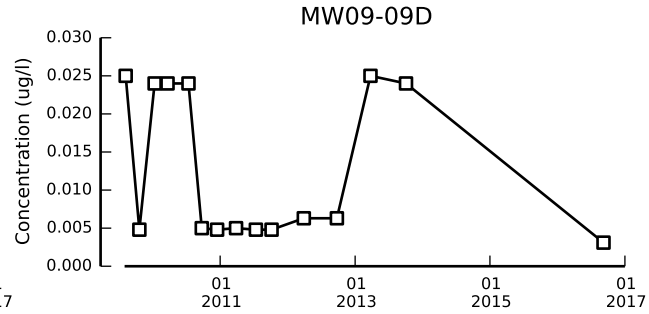
MW09-03D	MW09-08D	MW09-09D
Sampled Once	Not Sampled	Not Sampled
MW09-10D	MW09-14D	MW09-20D
Sampled Once	Sampled Once	Sampled Once
MW09-21D	MW09-23D	MW09-24D
Sampled Once	Sampled Once	Sampled Once
MW09-26D	MW09-26DA	MW09-27D
Not Sampled	Not Sampled	Not Sampled

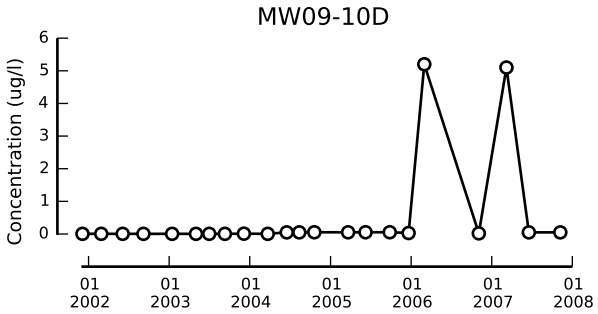
DELTA-BHC in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 87 of 133

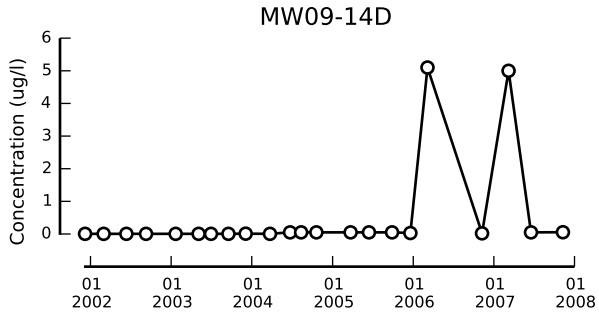
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

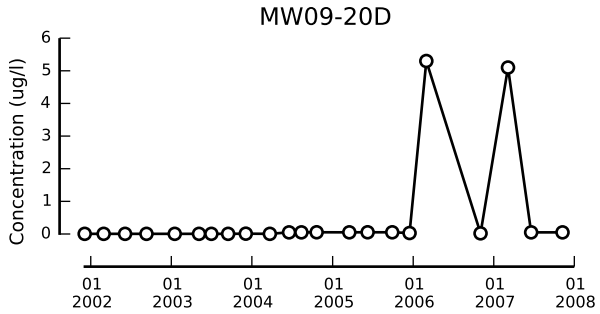


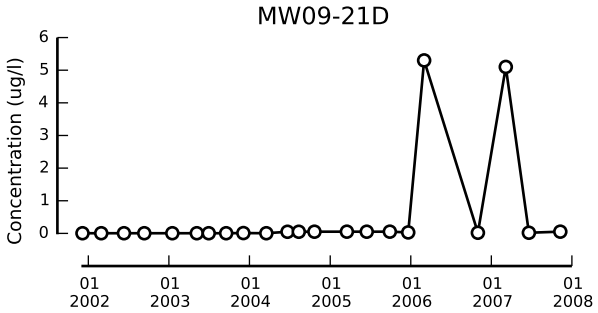


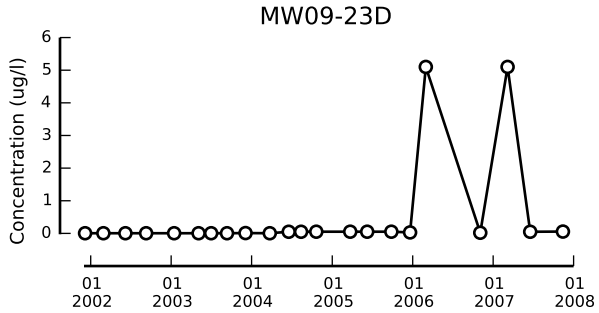


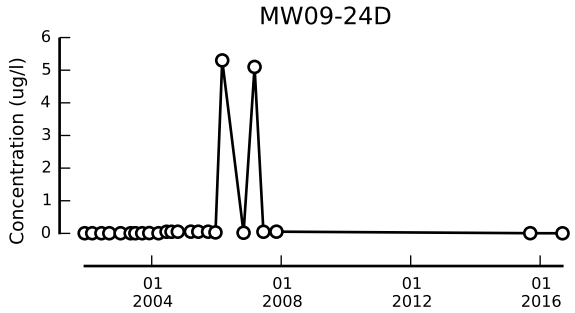


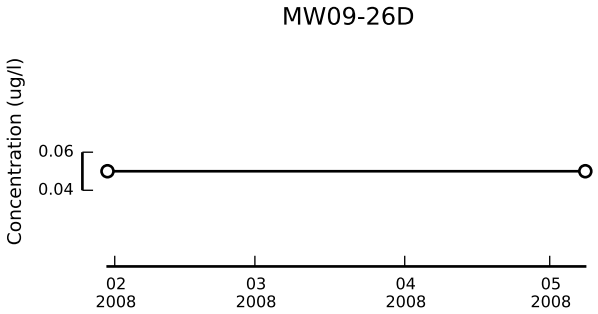






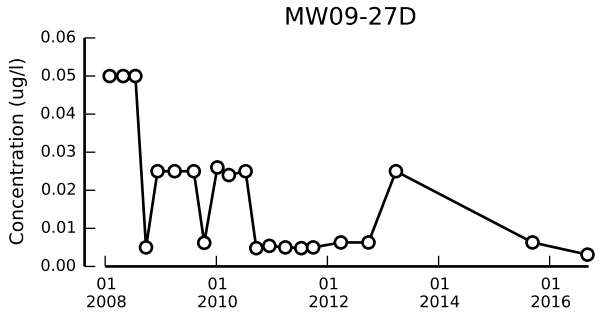






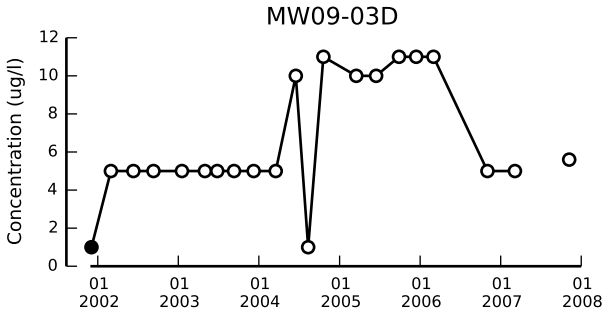
MW09-26DA

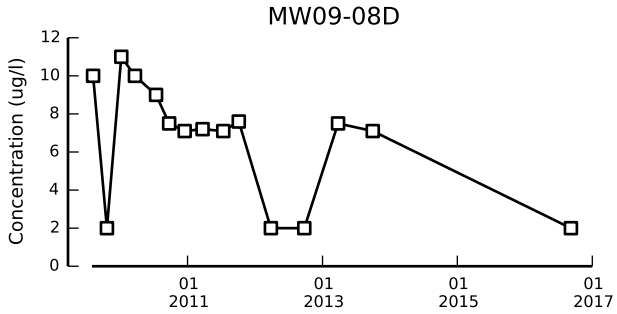
Sampled Once

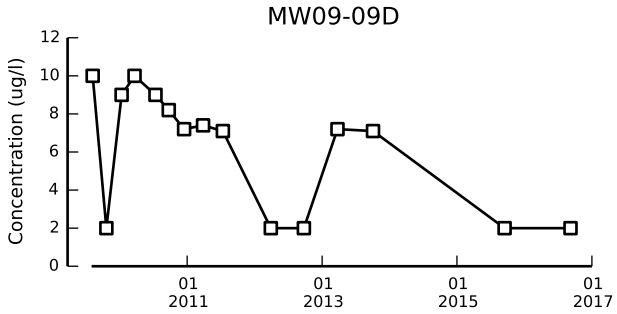


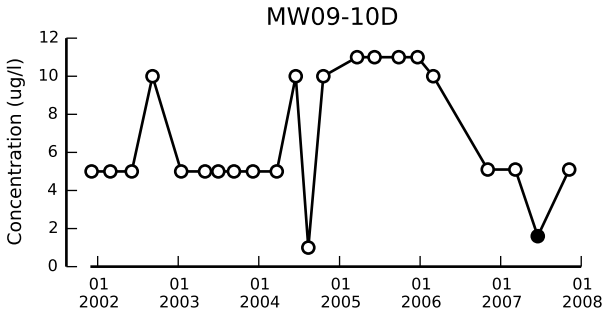
DI-N-BUTYLPHTHALATE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 88 of 133

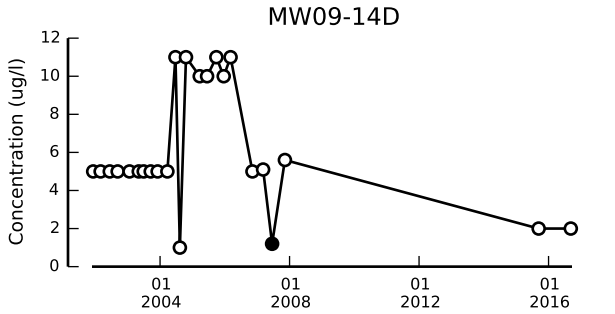
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

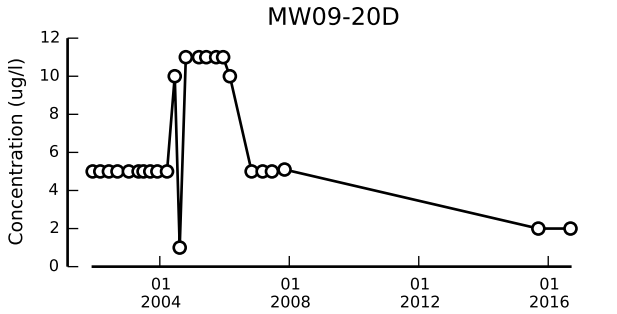


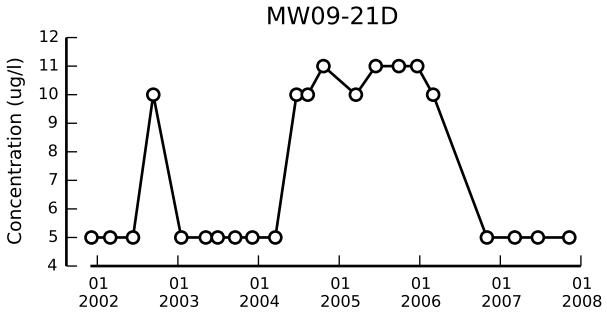


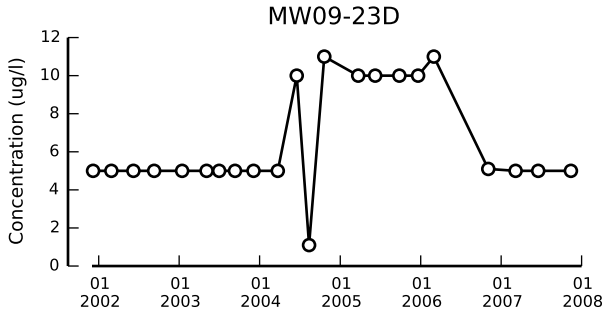


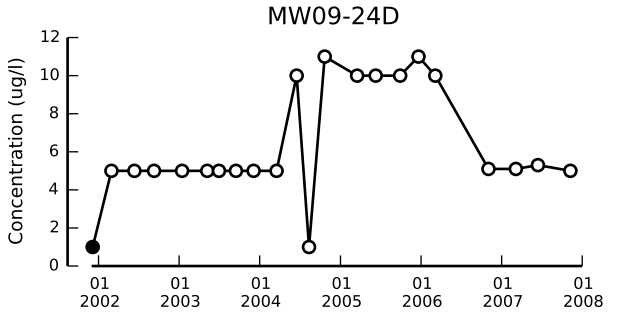


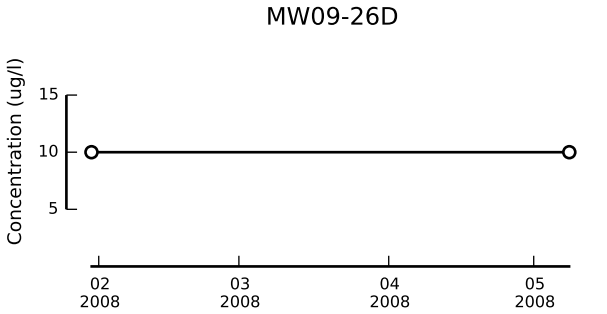






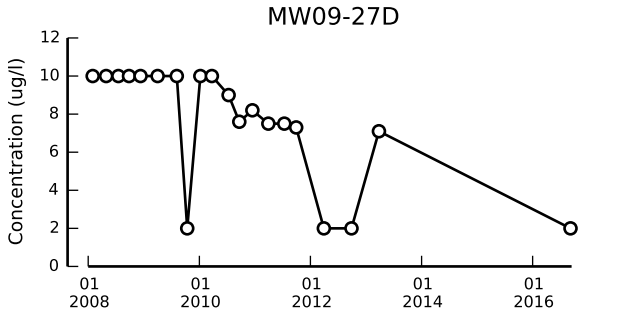






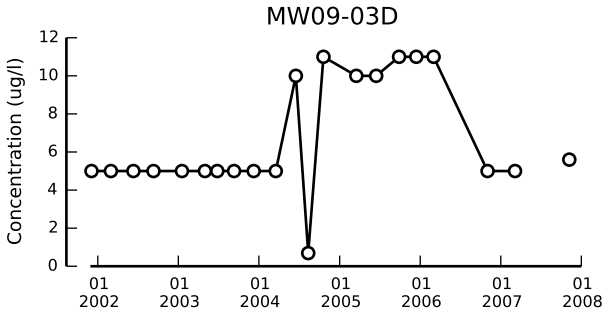
MW09-26DA

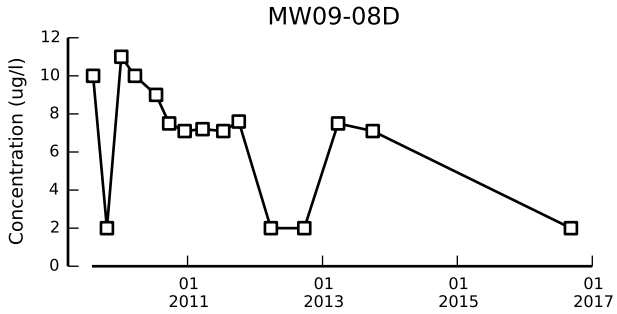
Sampled Once

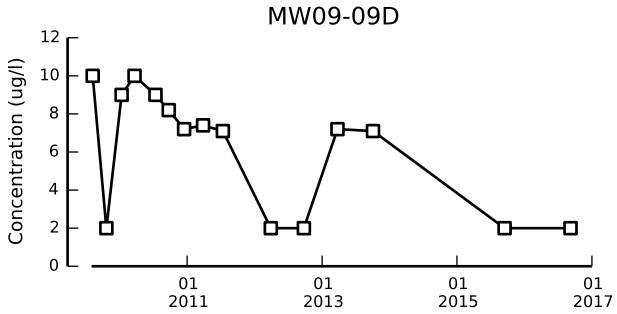


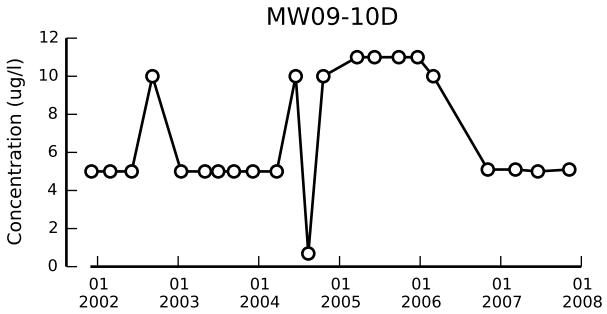
DI-N-OCTYLPHTHALATE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 89 of 133

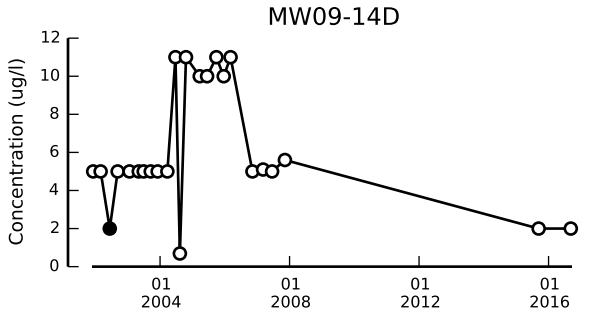
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

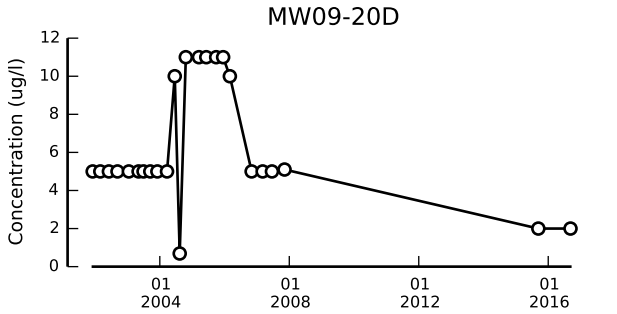


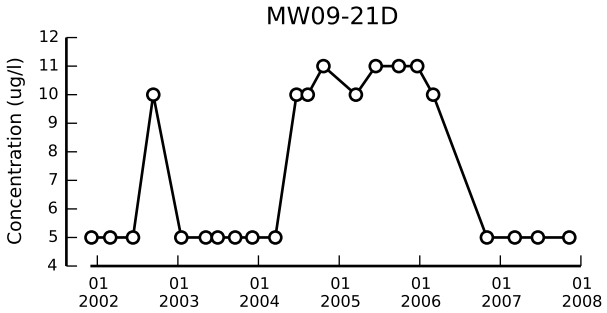


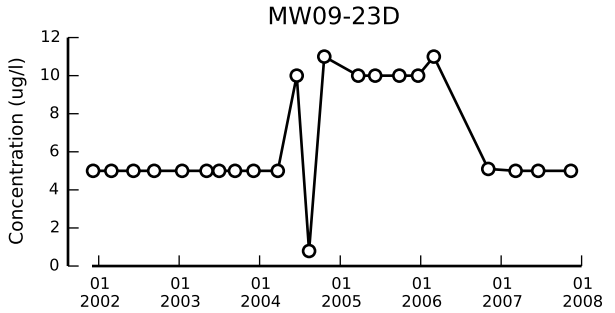


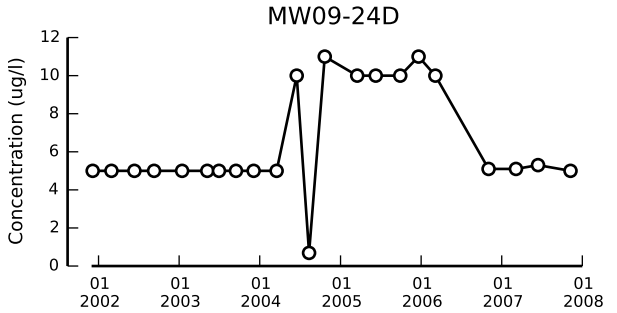


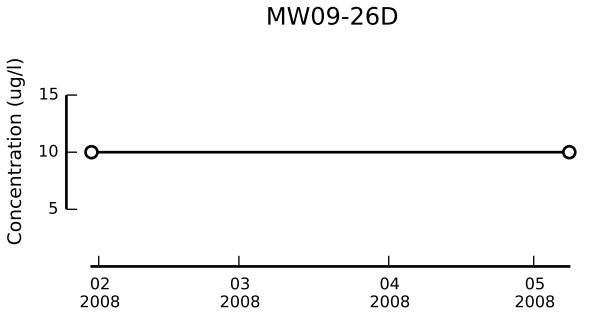






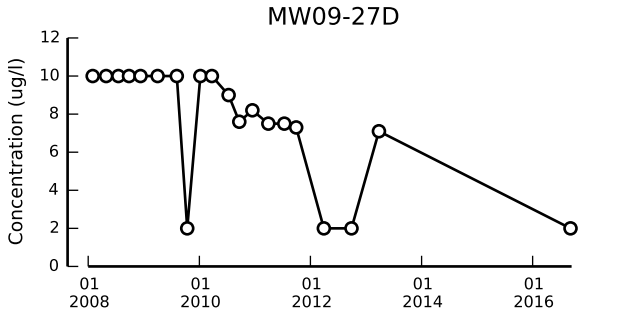






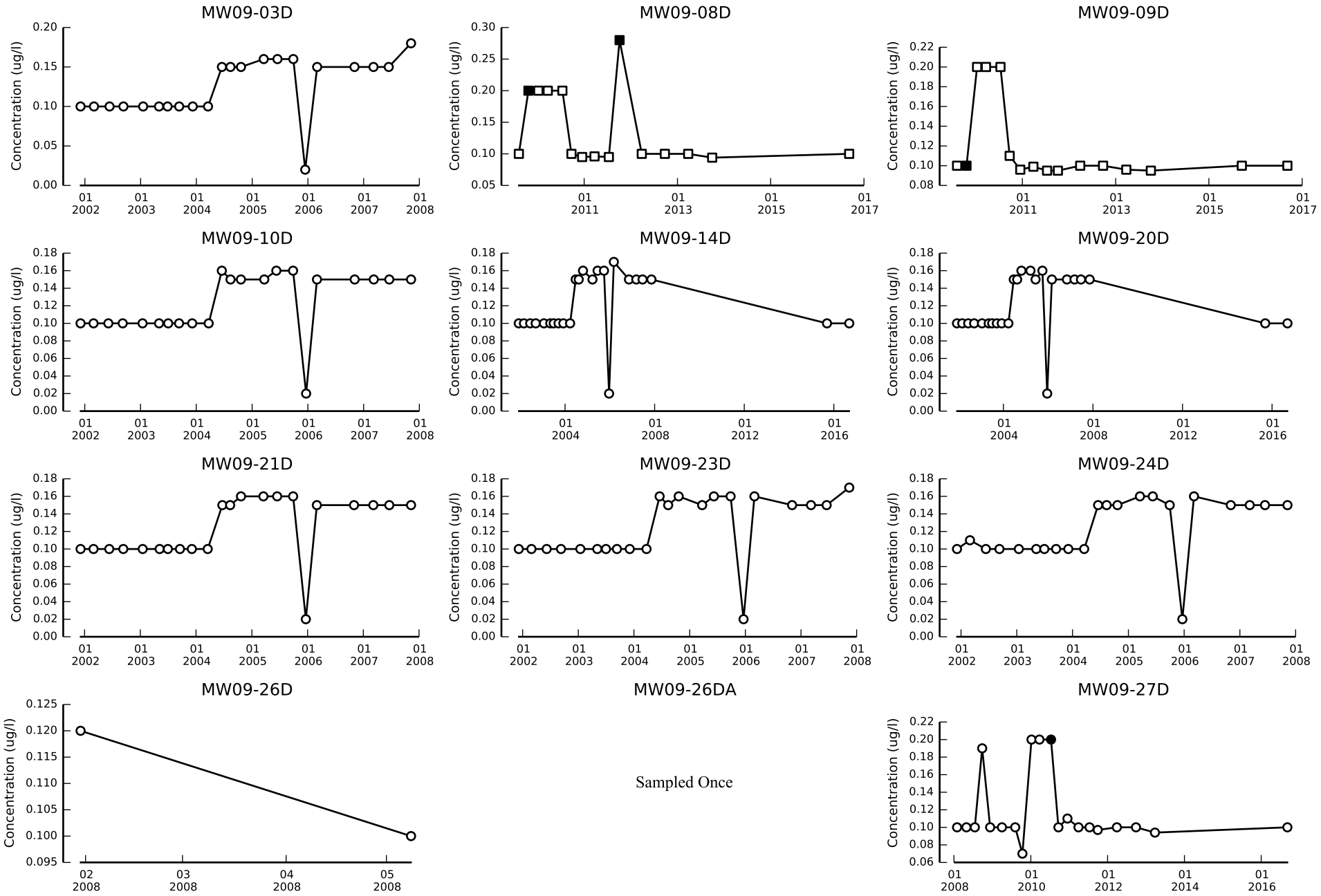
MW09-26DA

Sampled Once



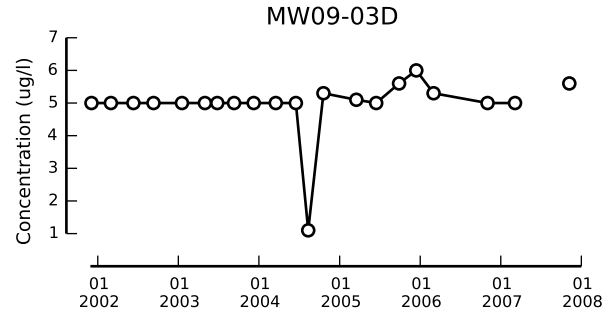
DIBENZ(A,H)ANTHRACENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 90 of 133

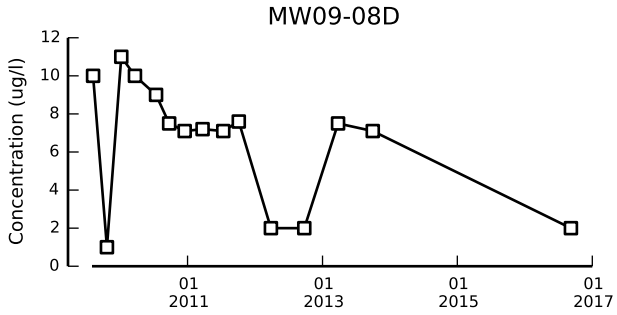
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

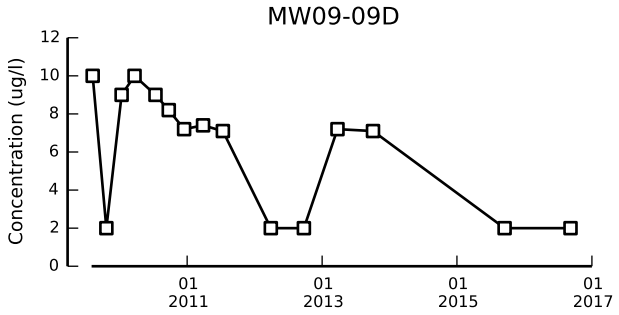


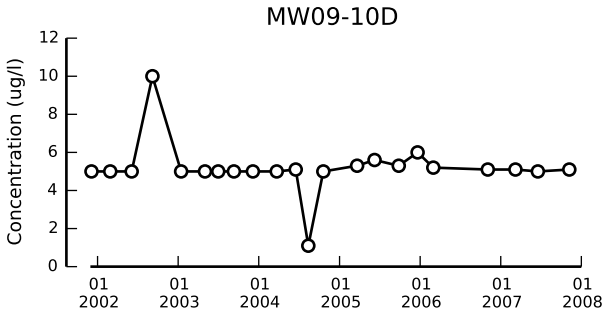
DIBENZOFURAN in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 91 of 133

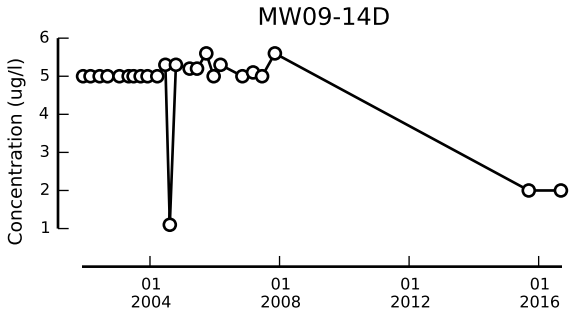
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

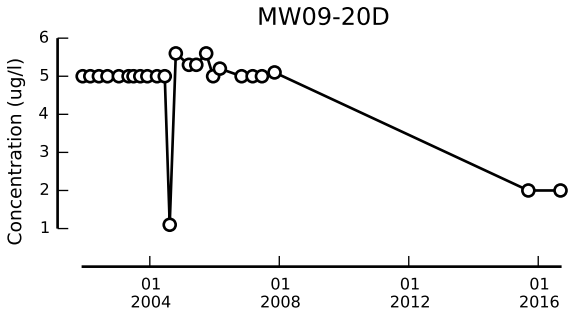


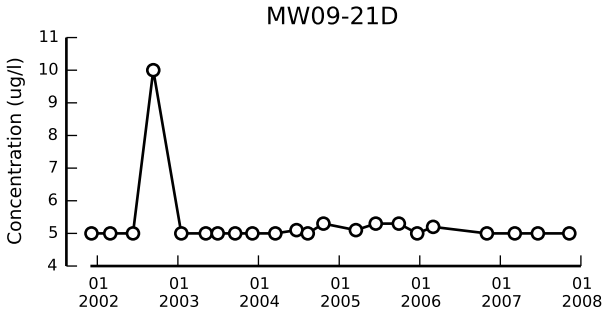


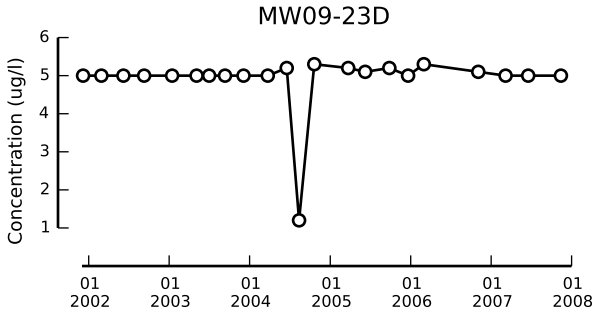


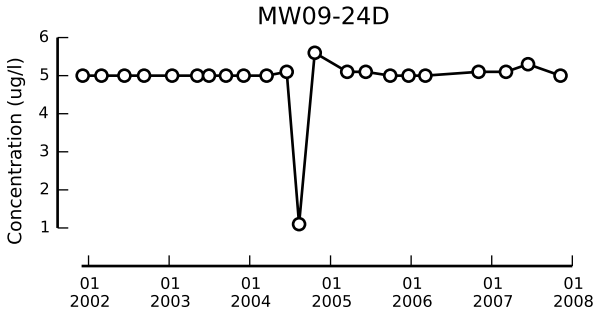


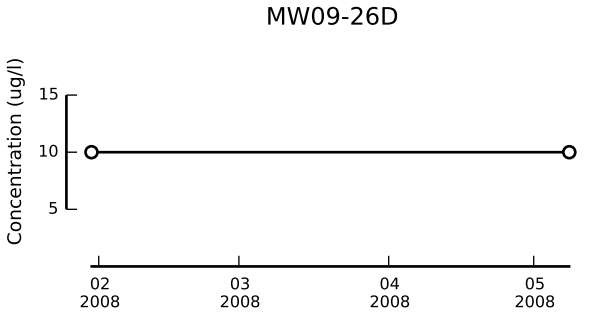






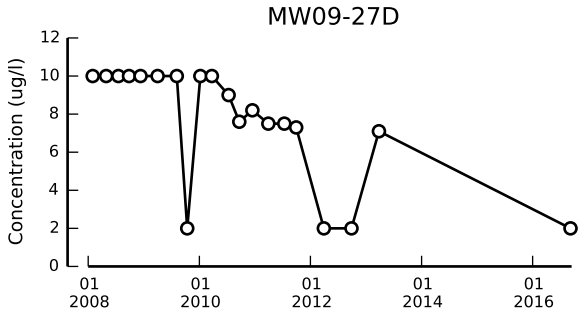






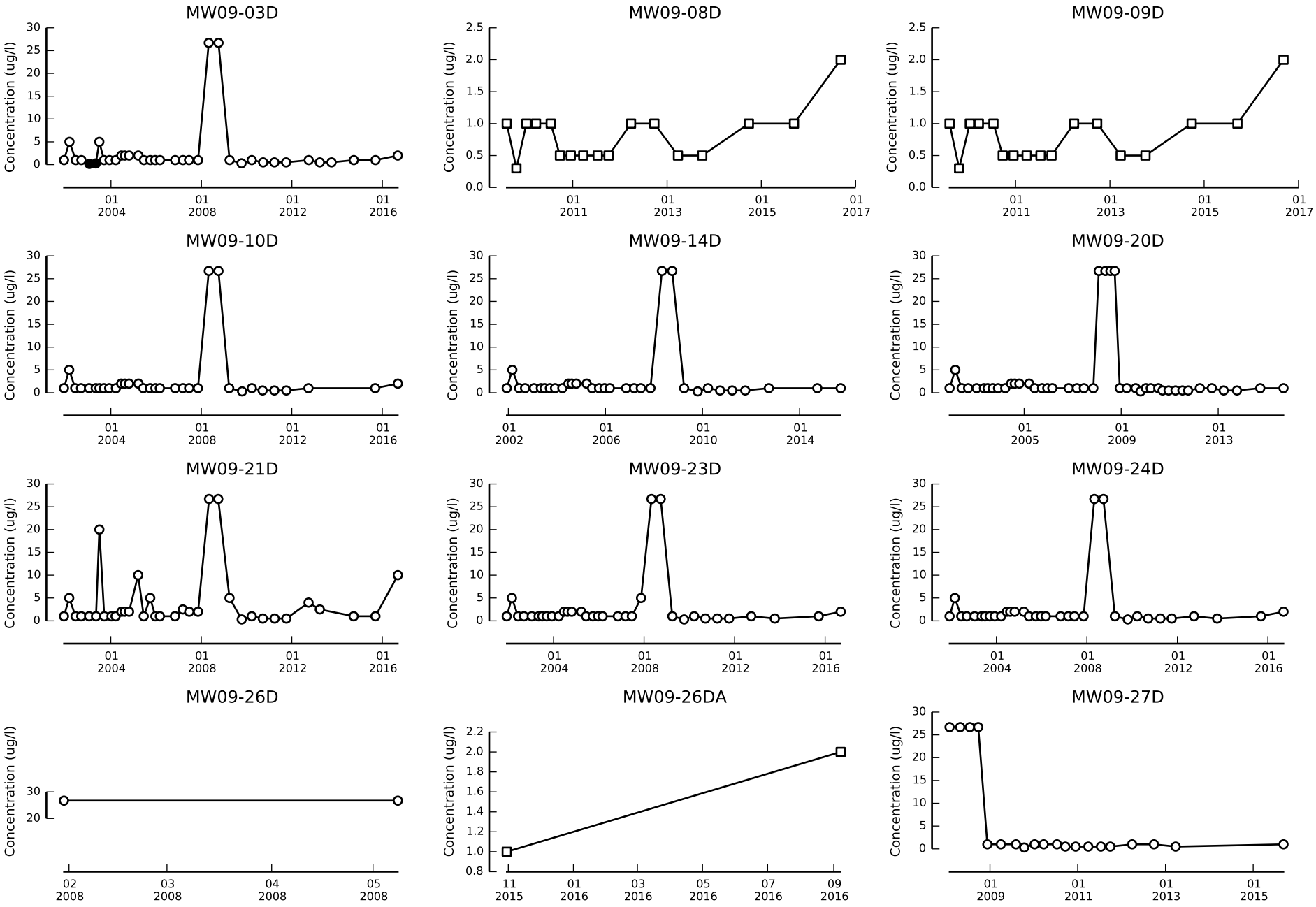
MW09-26DA

Sampled Once



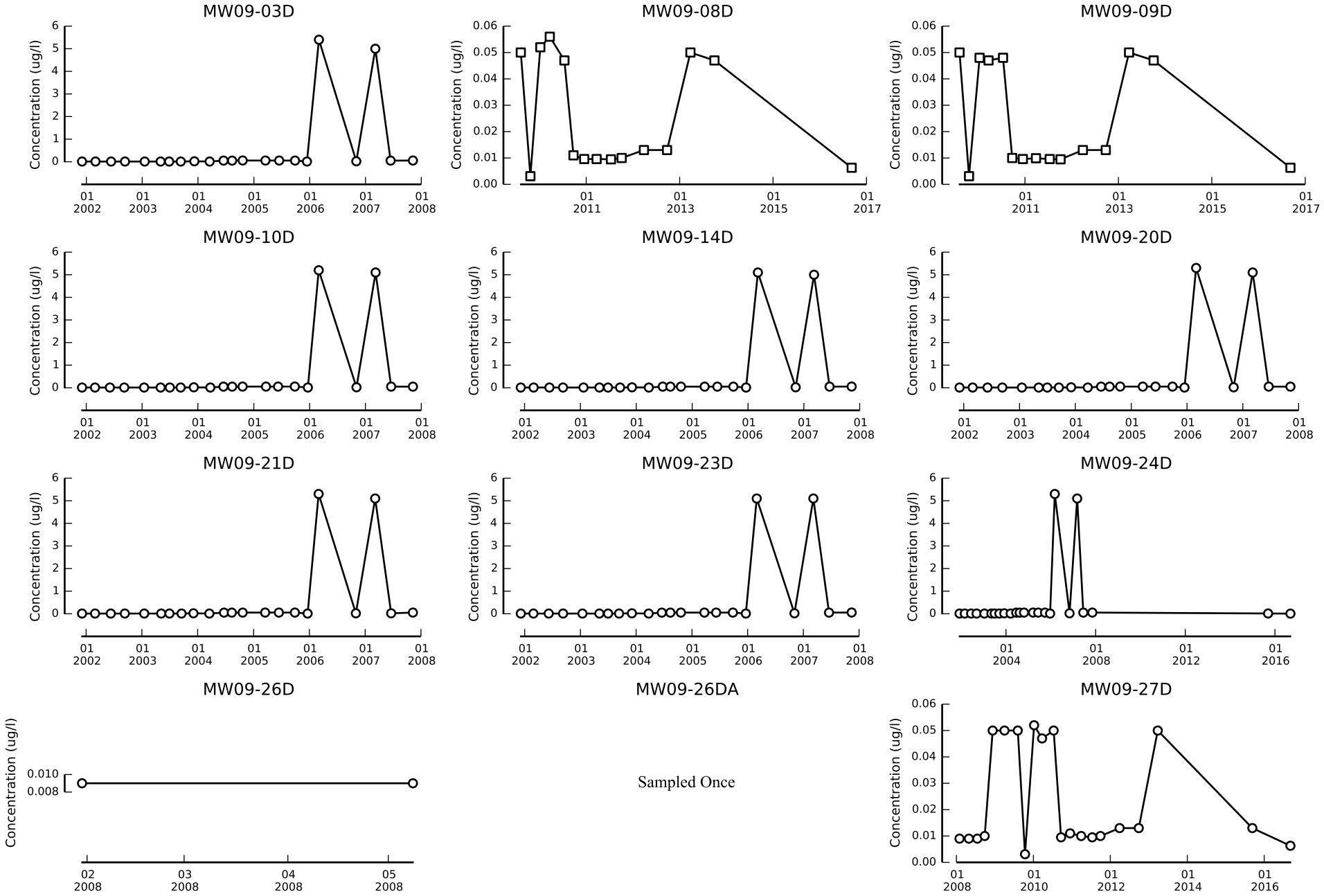
DIBROMOCHLOROMETHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 92 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



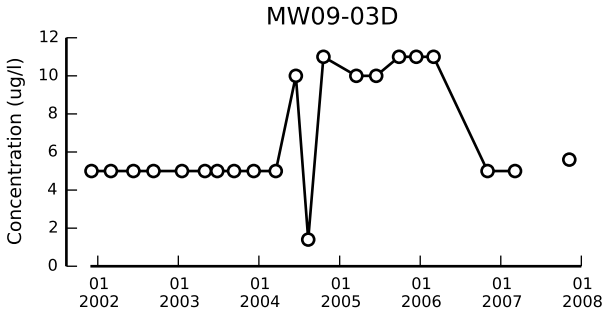
DIELDRIN in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 93 of 133

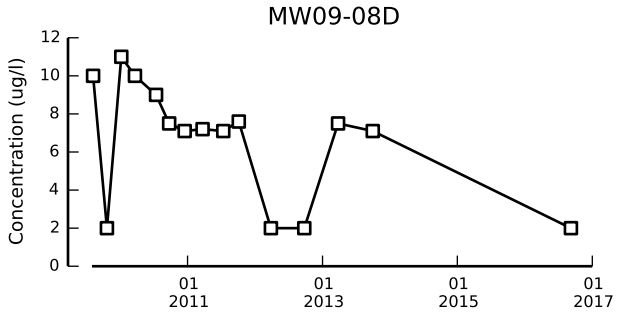
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

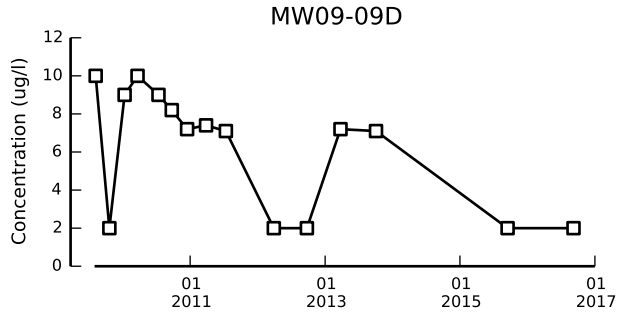


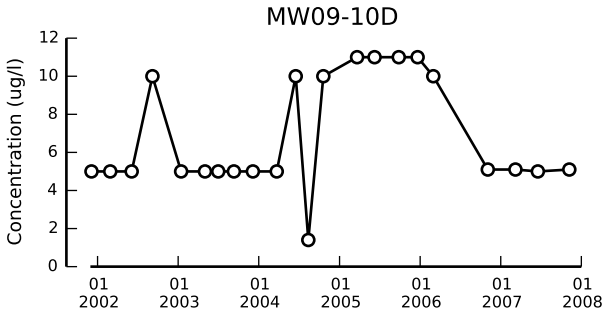
DIETHYLPHTHALATE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 94 of 133

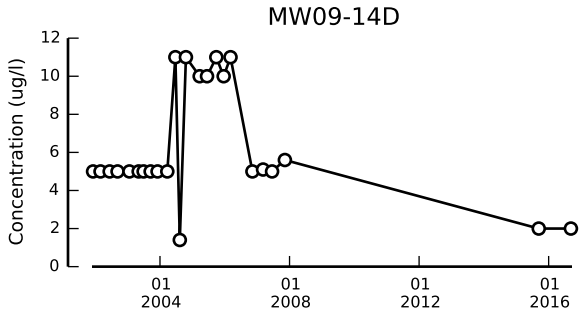
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

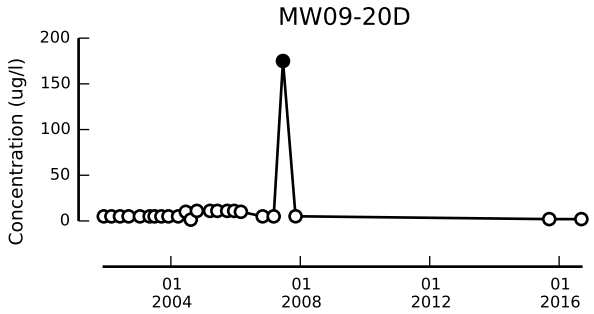


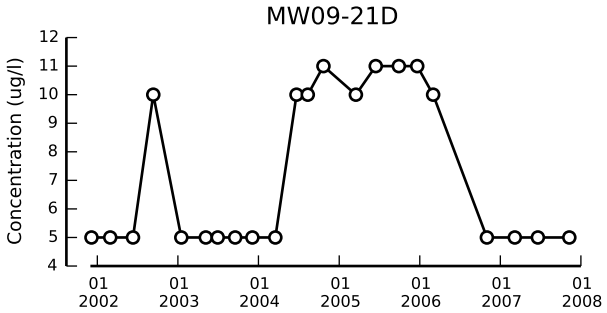


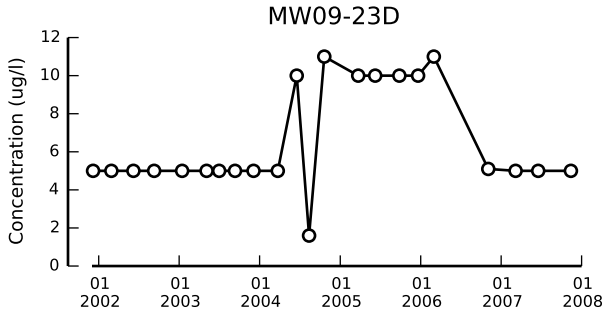


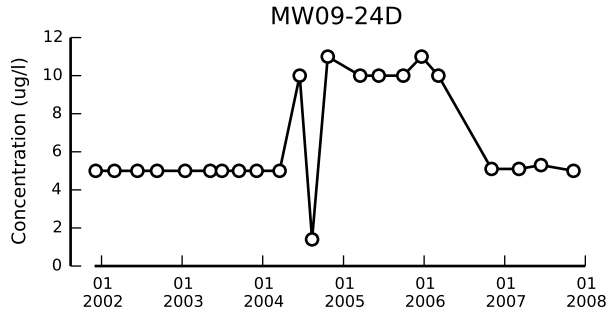


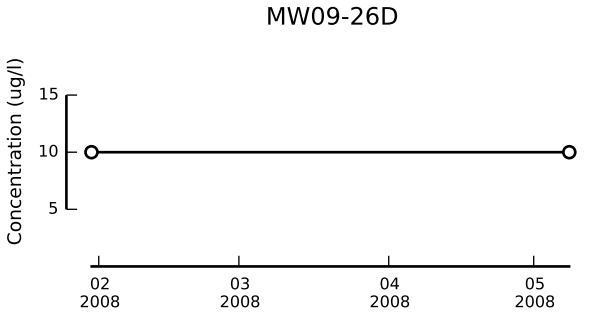






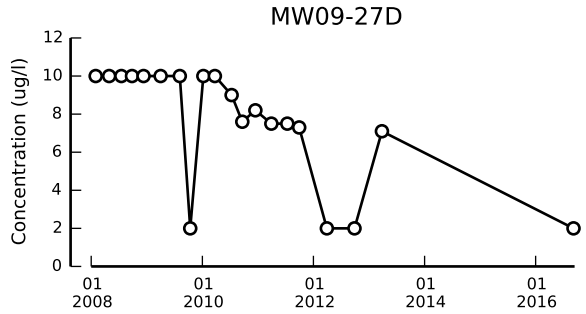






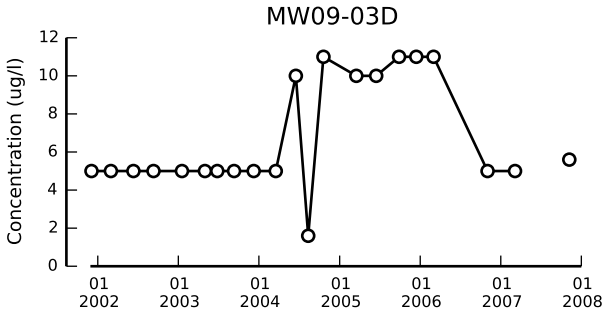
MW09-26DA

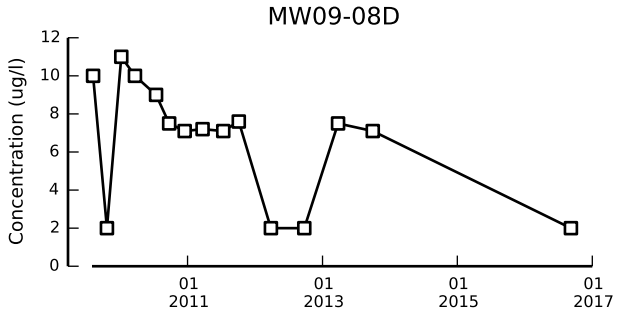
Sampled Once

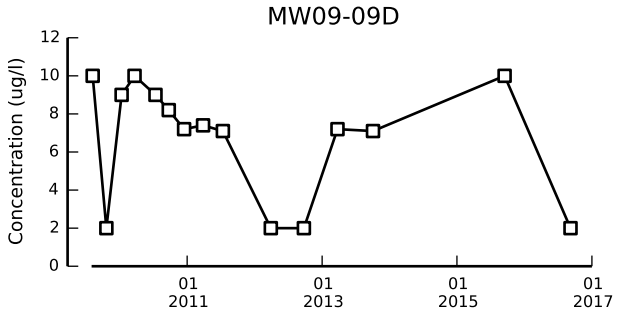


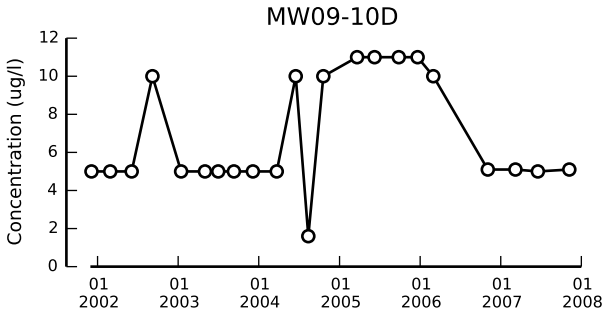
DIMETHYL PHTHALATE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 95 of 133

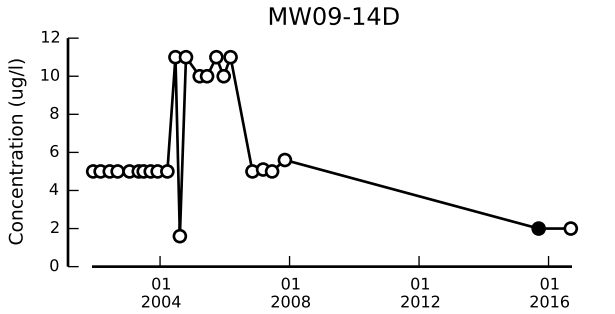
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

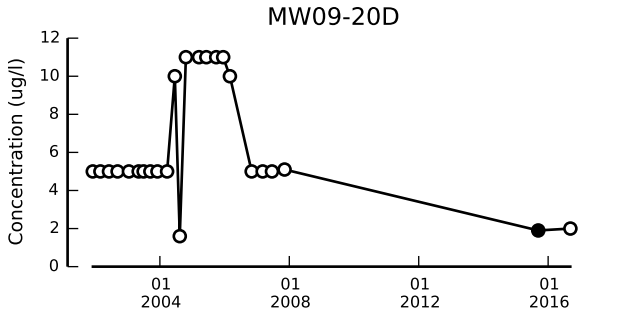


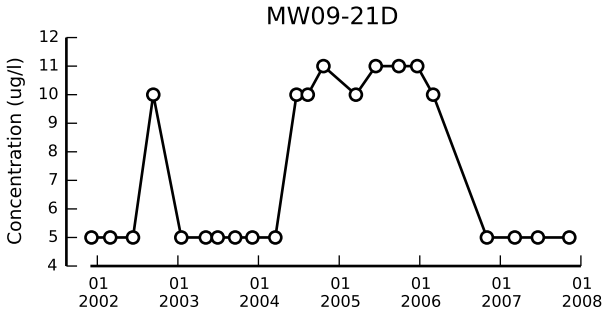


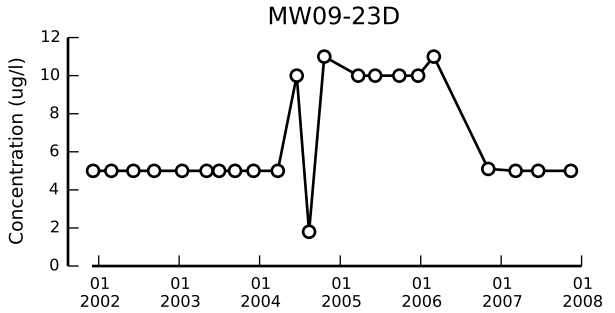


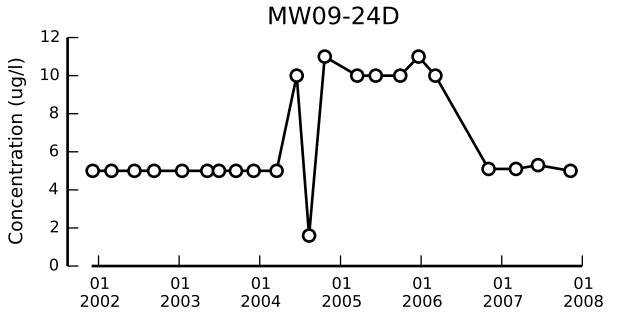


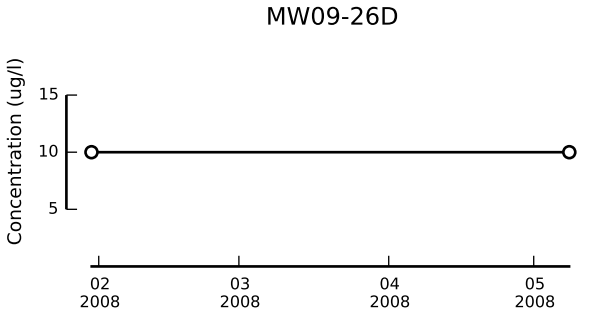






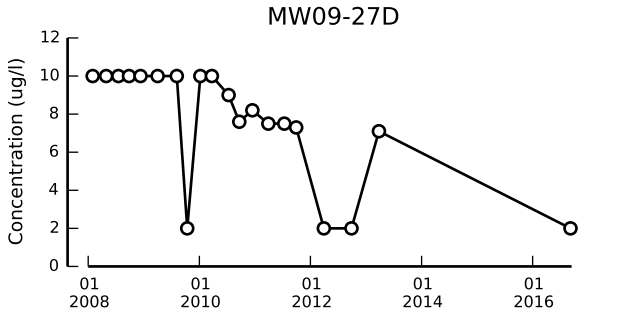






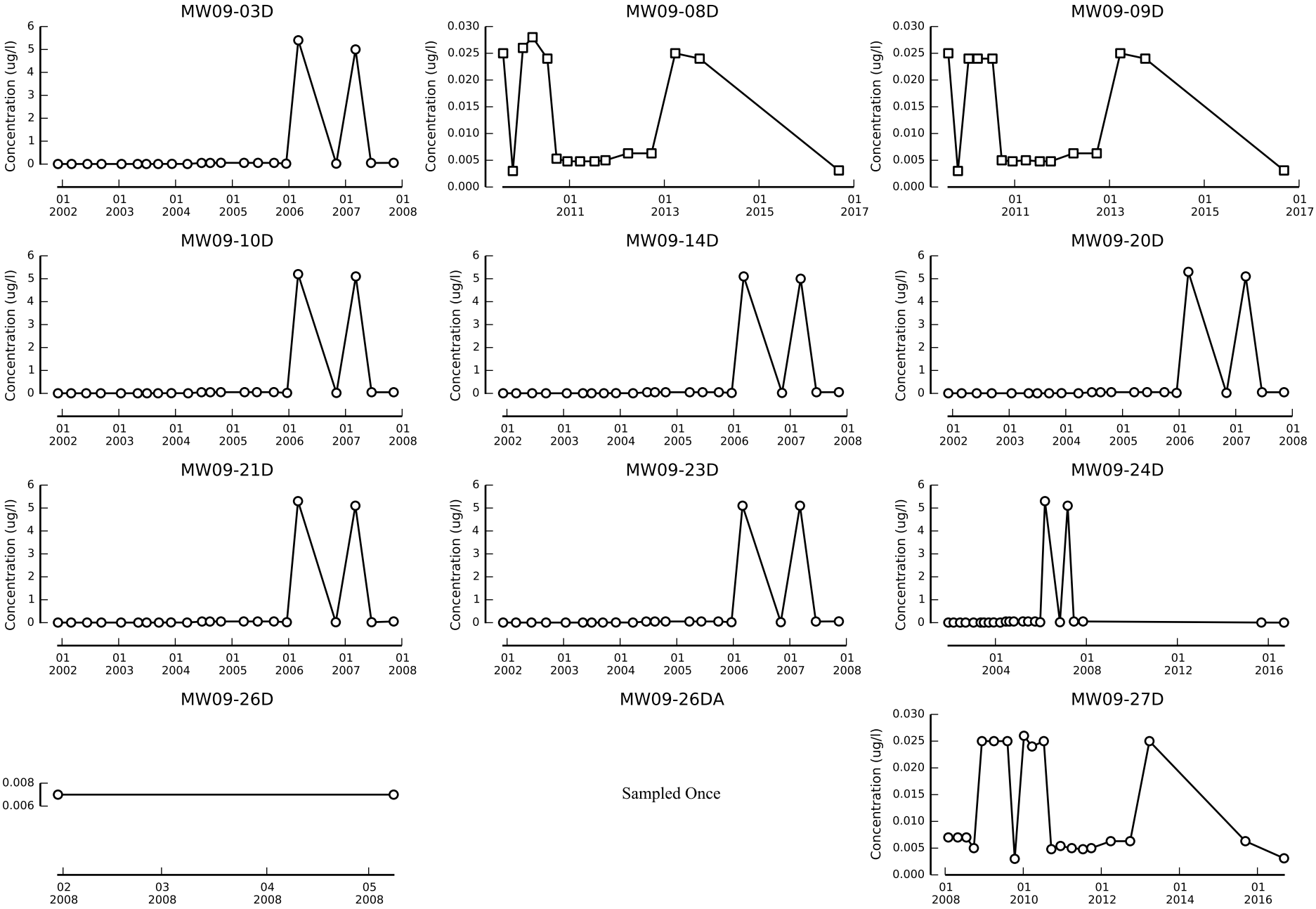
MW09-26DA

Sampled Once



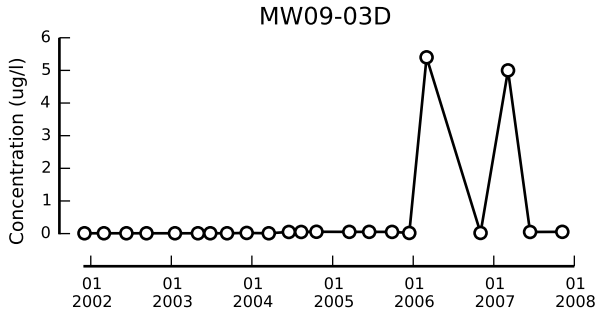
ENDOSULFAN I in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 96 of 133

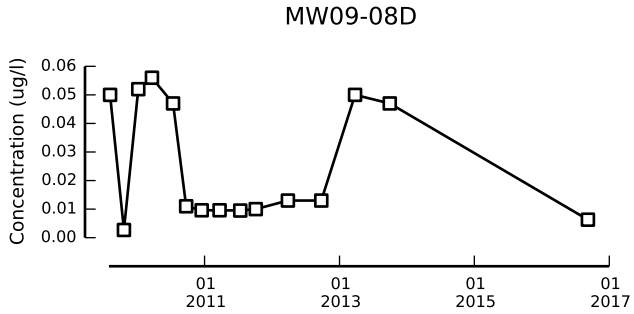
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

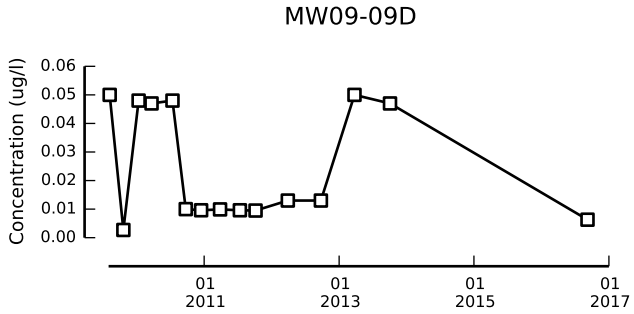


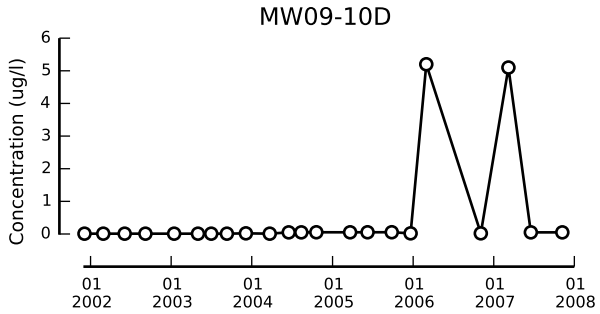
ENDOSULFAN II in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 97 of 133

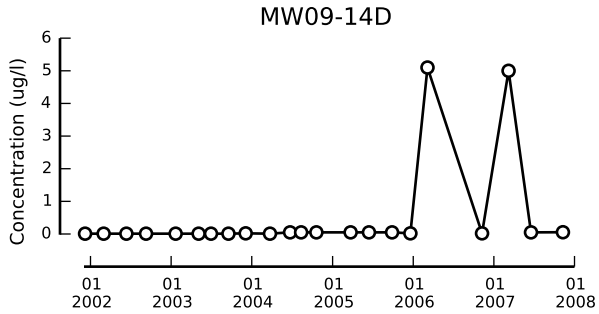
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

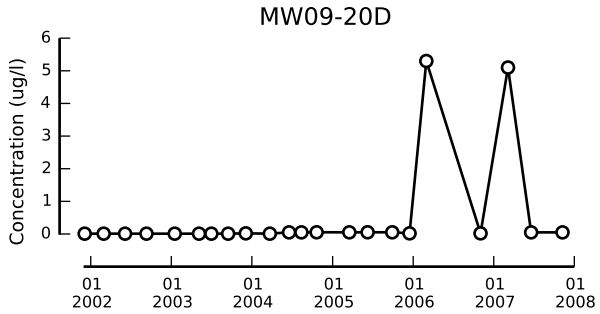


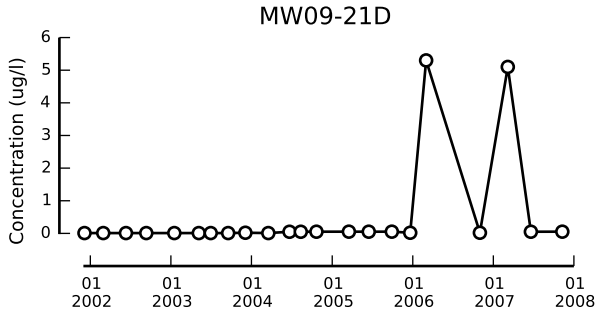


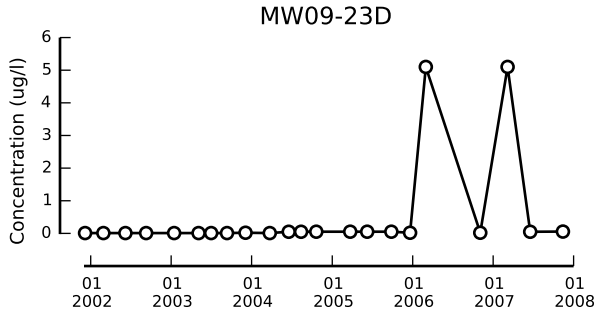


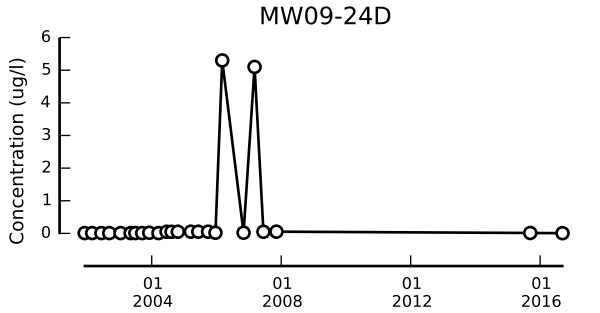


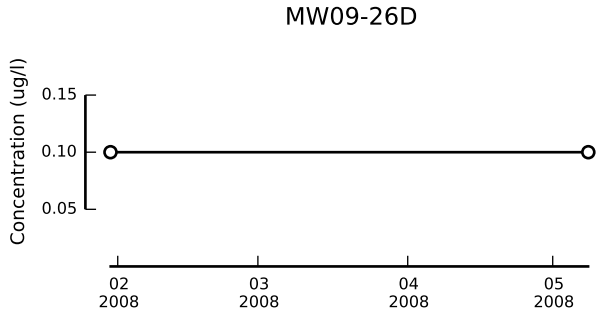






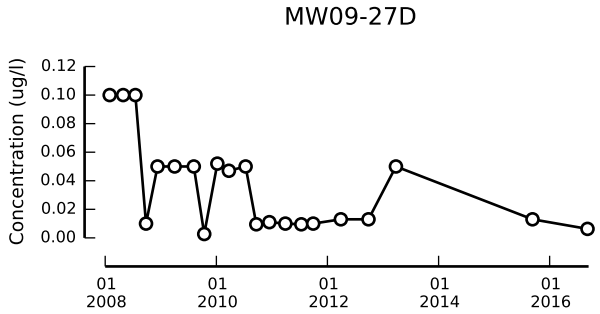






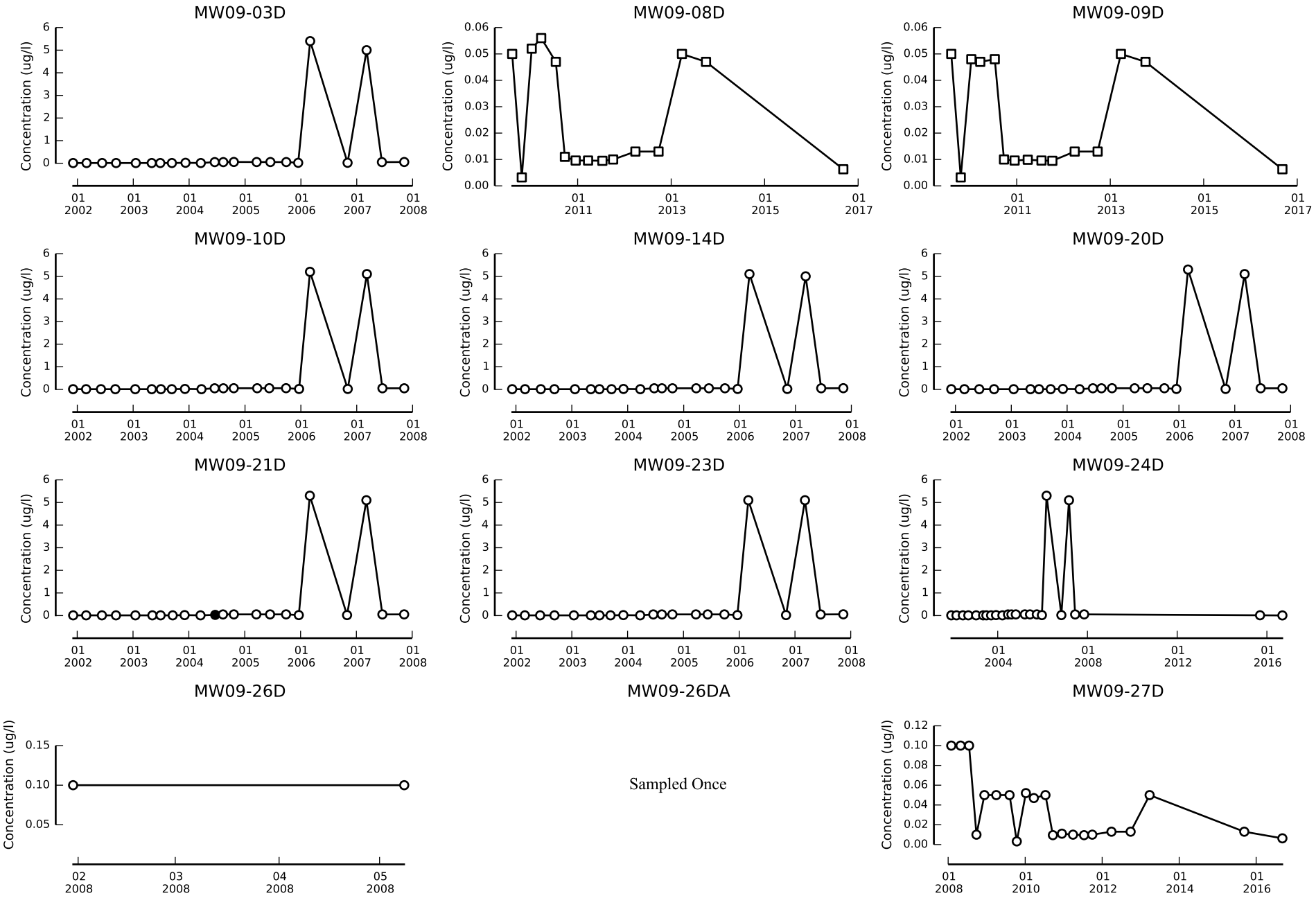
MW09-26DA

Sampled Once



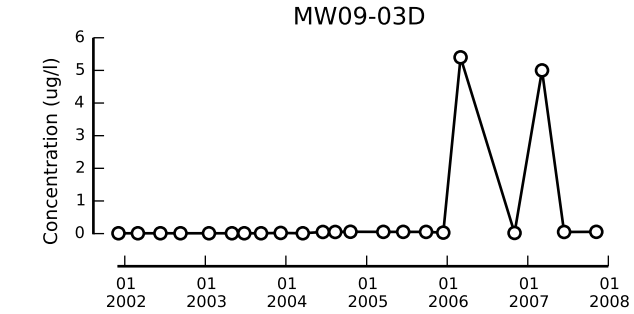
ENDOSULFAN SULFATE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 98 of 133

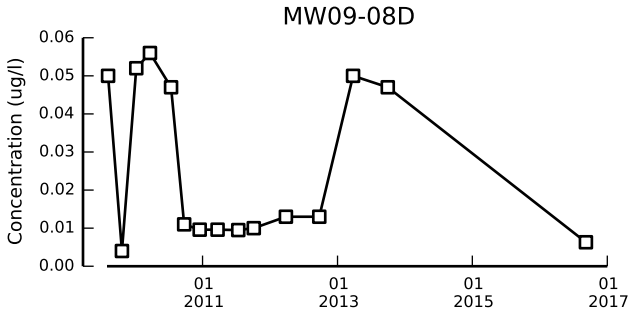
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

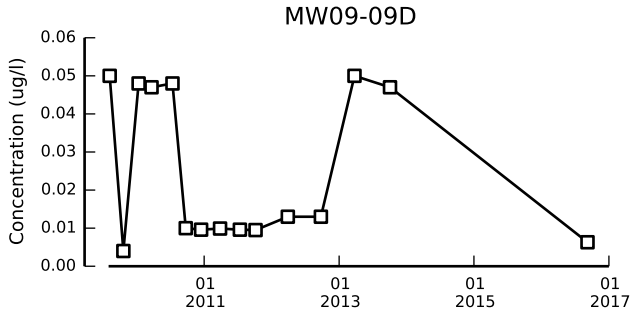


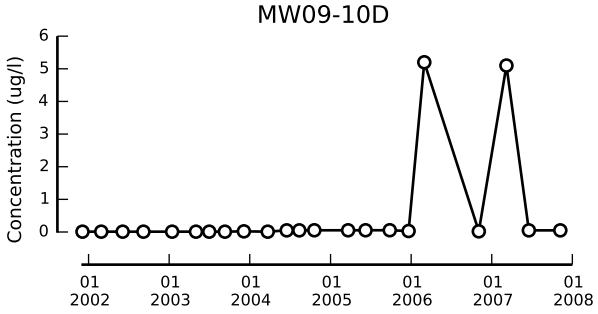
ENDRIN in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 99 of 133

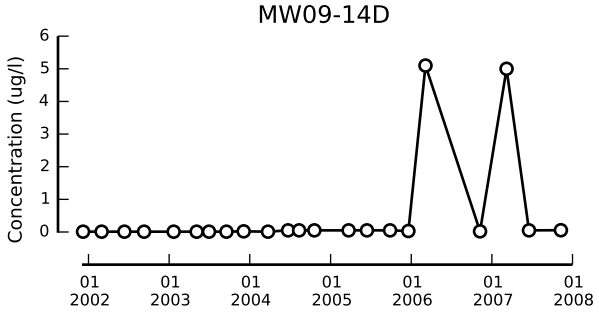
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

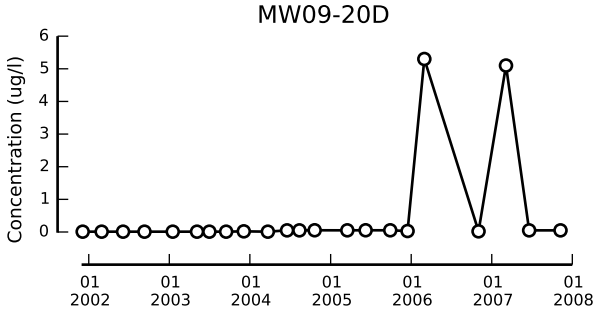


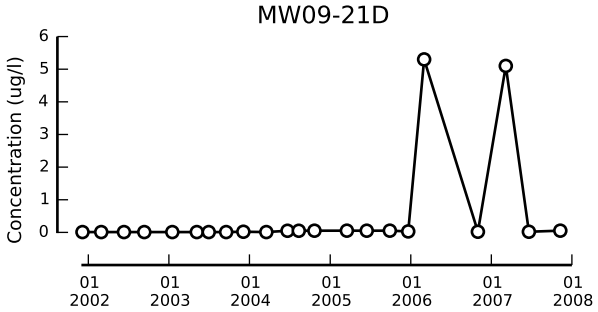


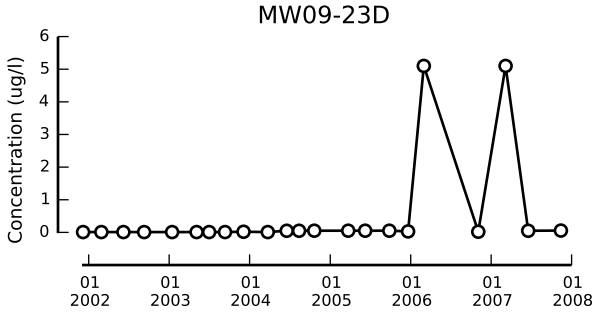


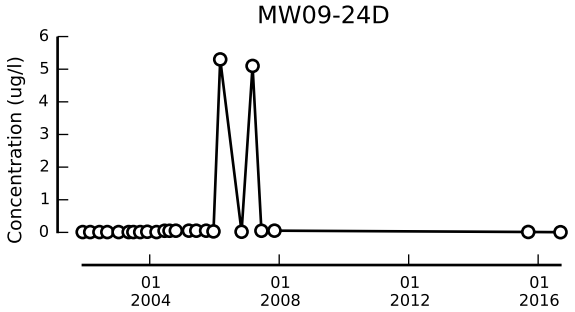


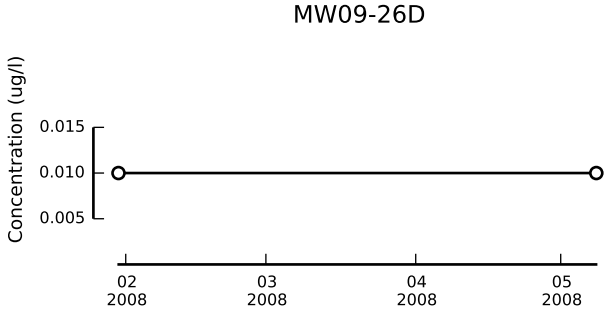






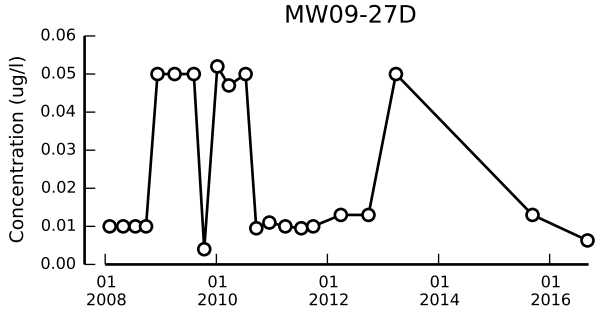






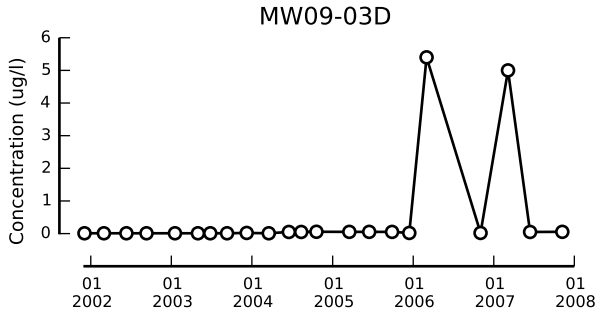
MW09-26DA

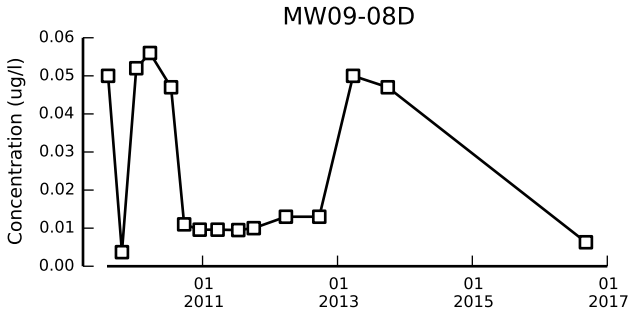
Sampled Once

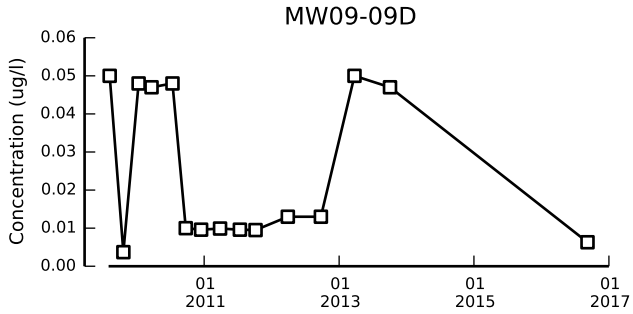


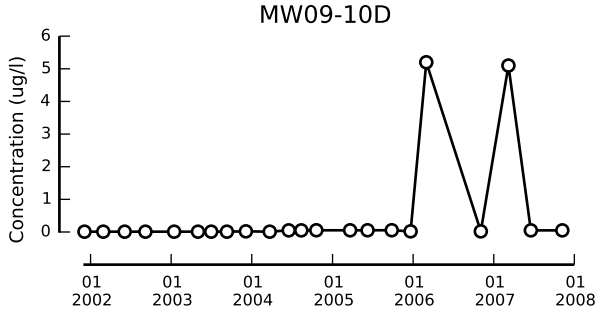
ENDRIN KETONE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 100 of 133

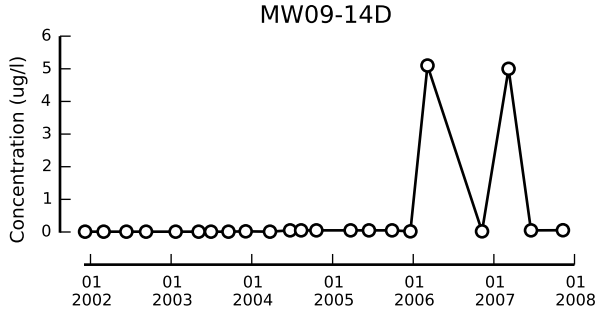
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

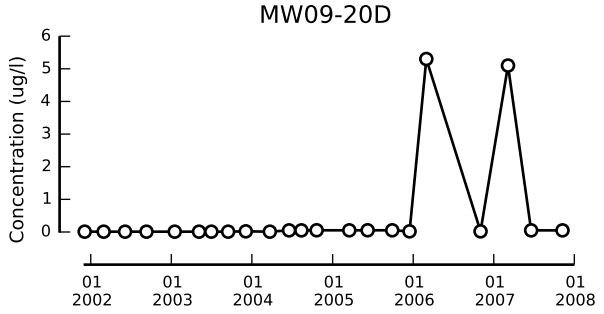


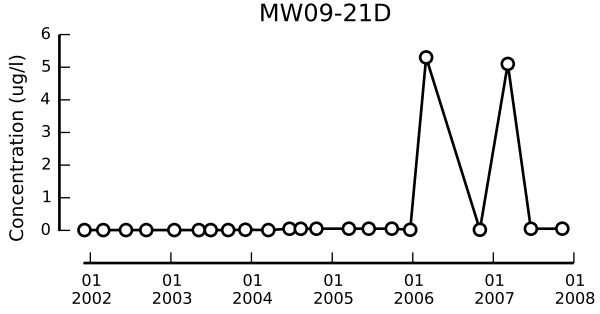


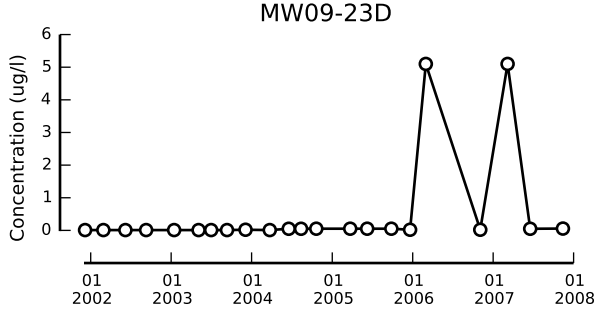


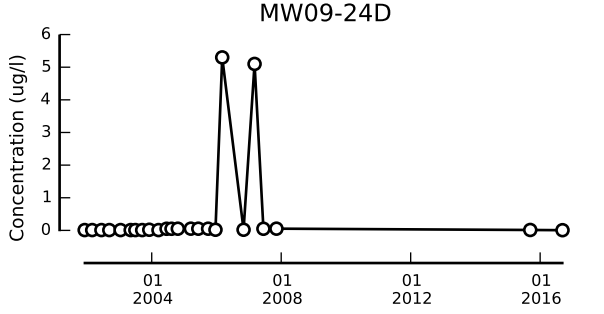


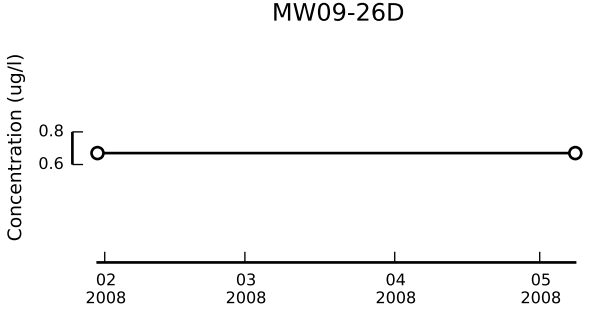






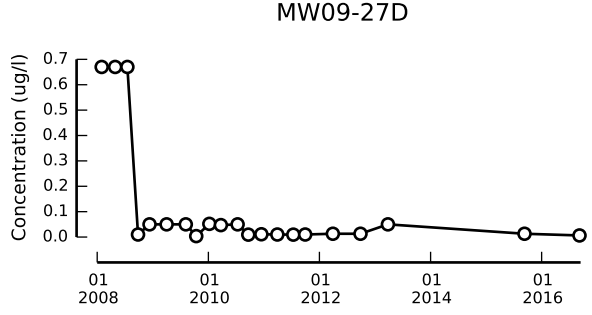






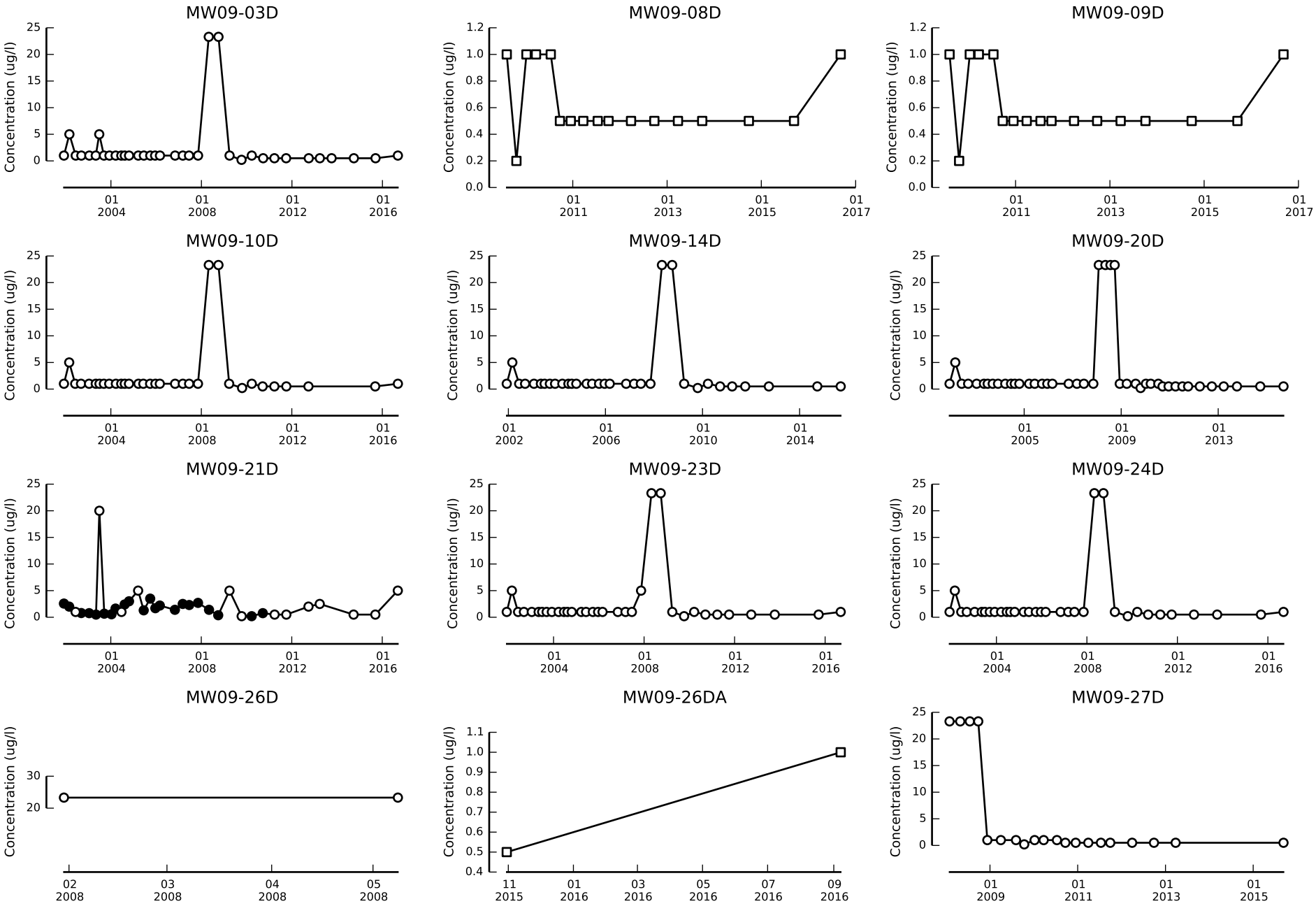
MW09-26DA

Sampled Once



ETHYLBENZENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 101 of 133

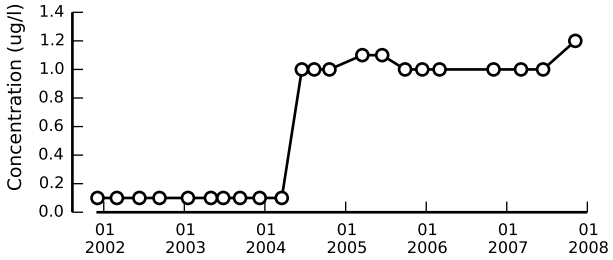
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



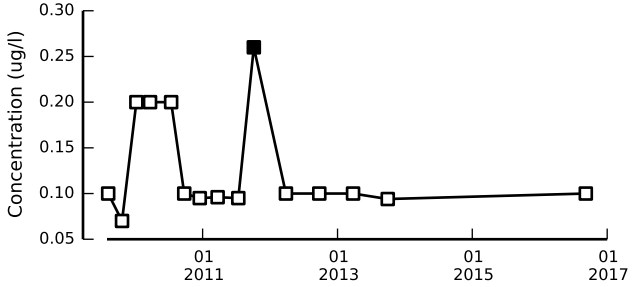
FLUORANTHENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 102 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

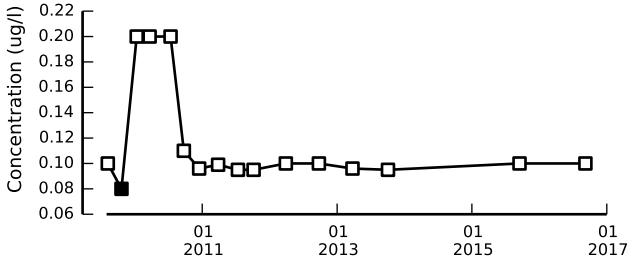
MW09-03D



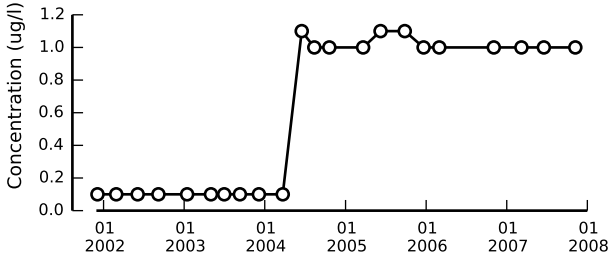
MW09-08D



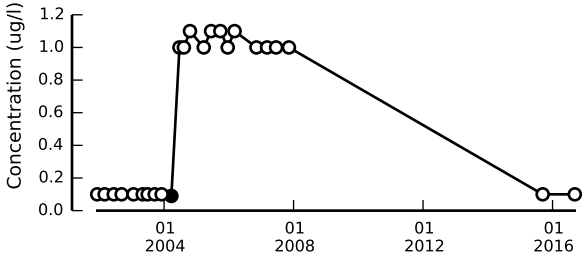
MW09-09D



MW09-10D



MW09-14D



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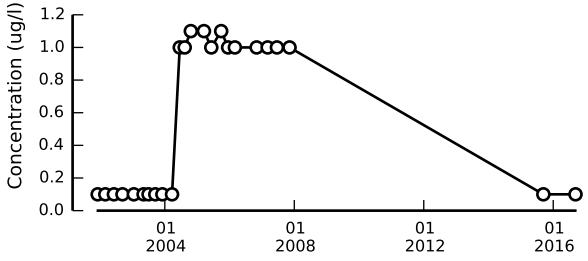
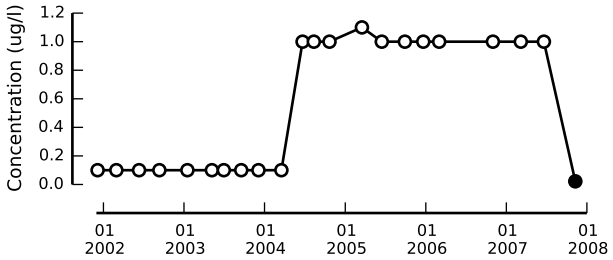
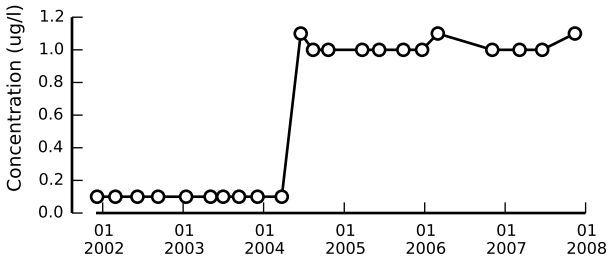


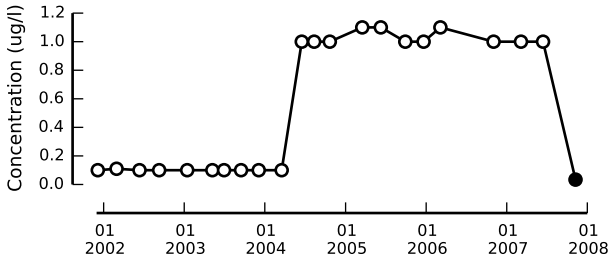
MW09-21D



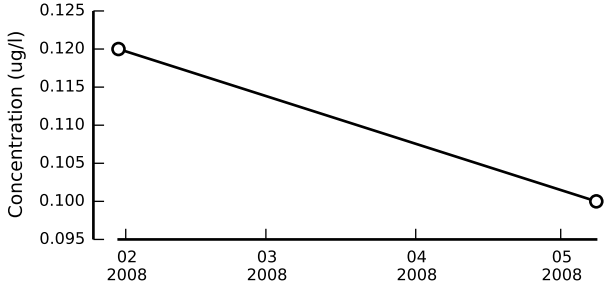
MW09-23D



MW09-24D



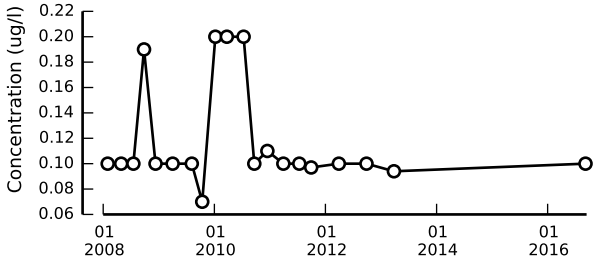
MW09-26D



MW09-26DA

Sampled Once

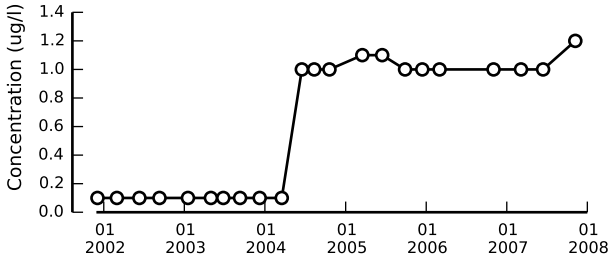
MW09-27D



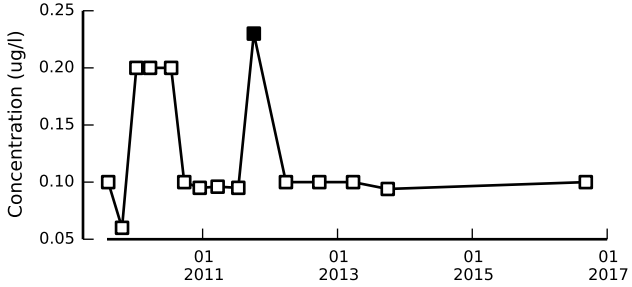
FLUORENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 103 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

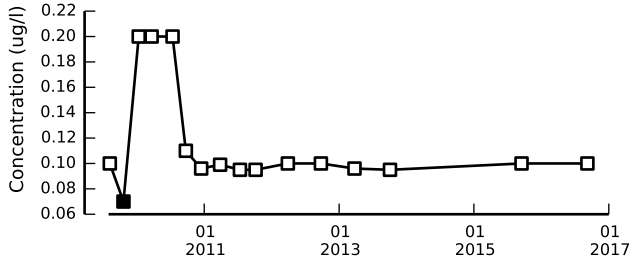
MW09-03D



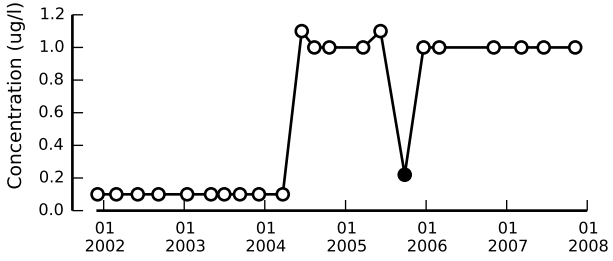
MW09-08D



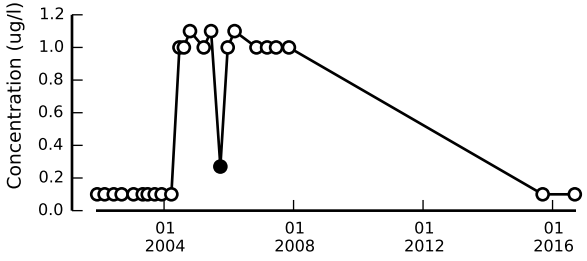
MW09-09D



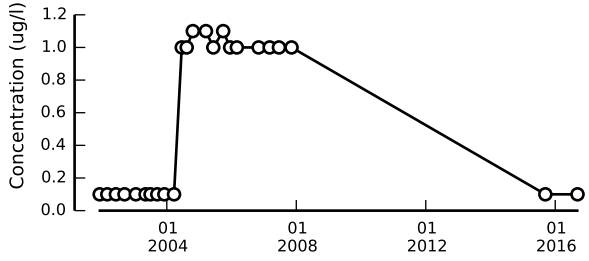
MW09-10D



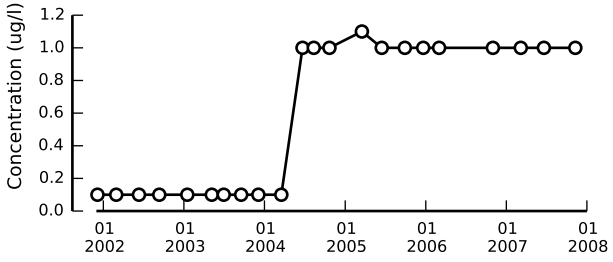
MW09-14D



MW09-20D

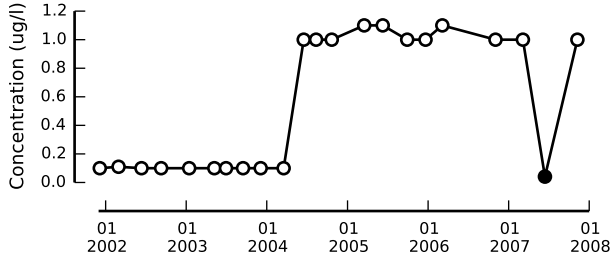


MW09-21D

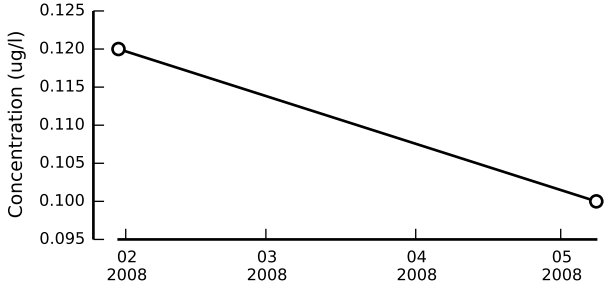


MW09-23D

MW09-24D



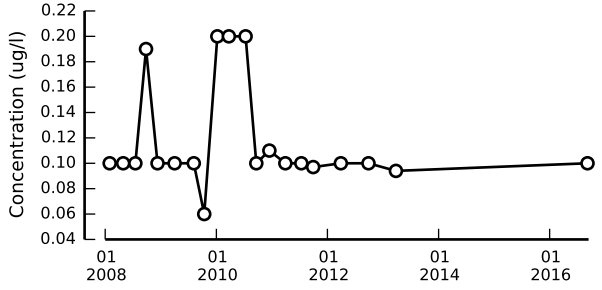
MW09-26D



MW09-26DA

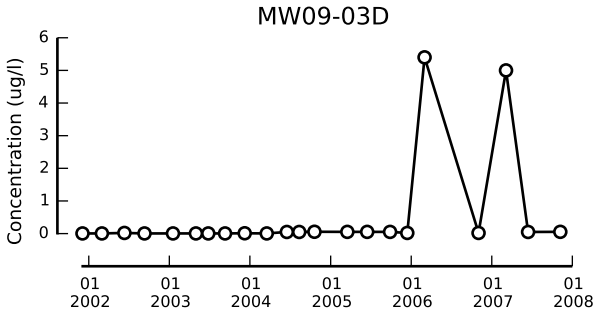
Sampled Once

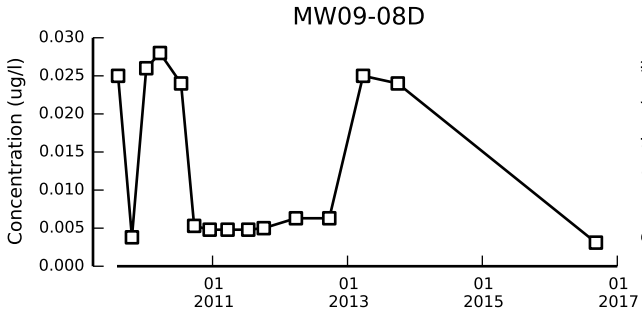
MW09-27D

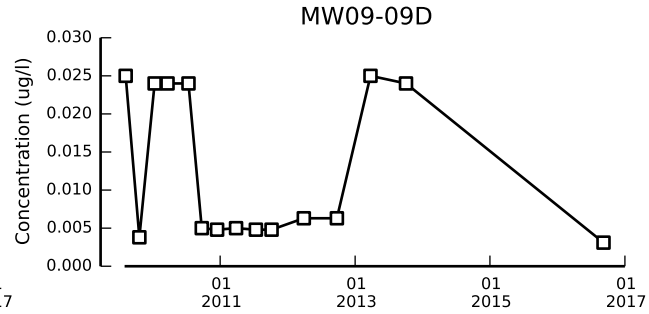


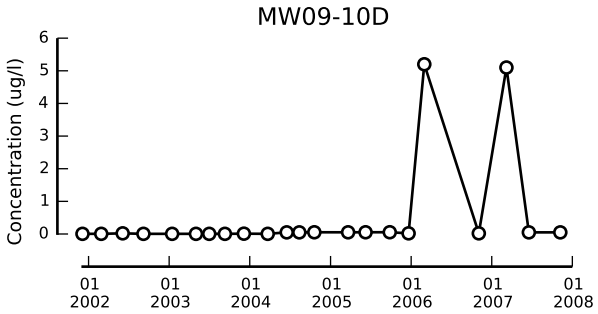
HEPTACHLOR in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 104 of 133

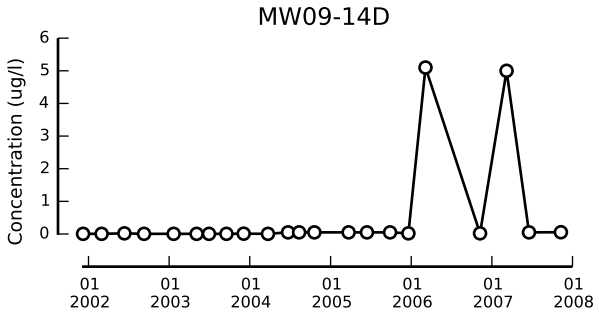
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

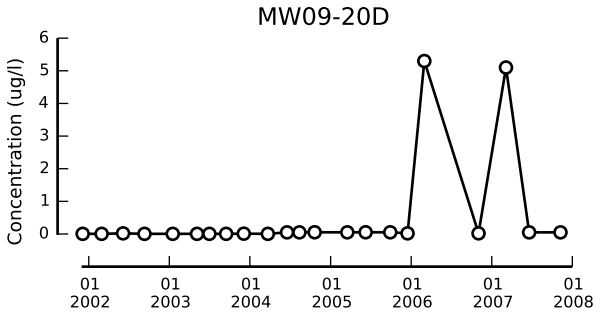


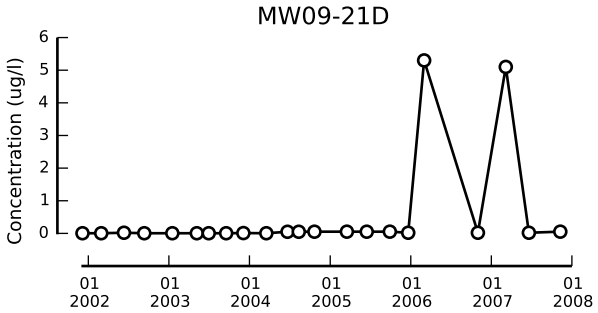


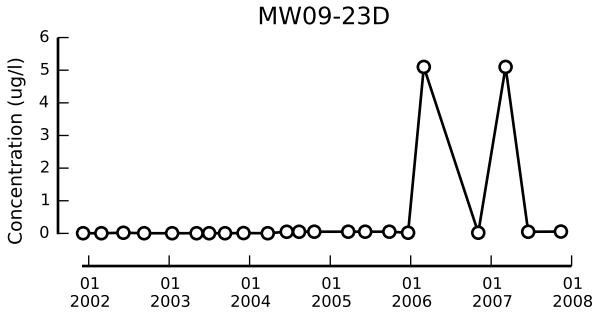


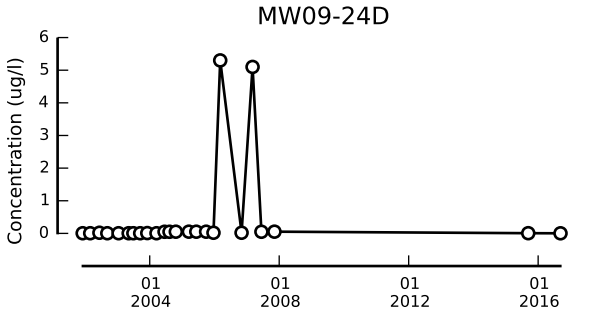


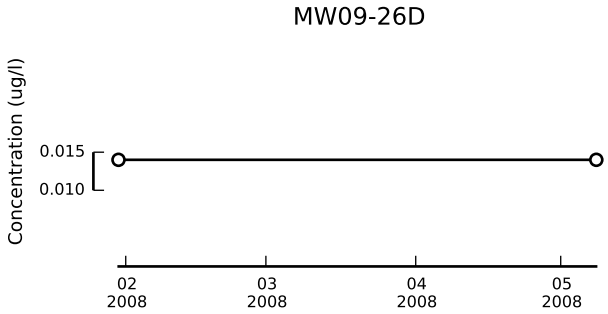






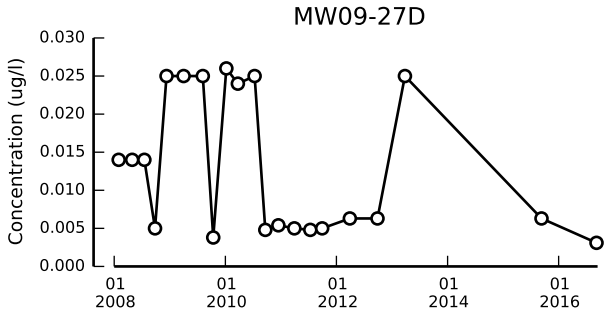






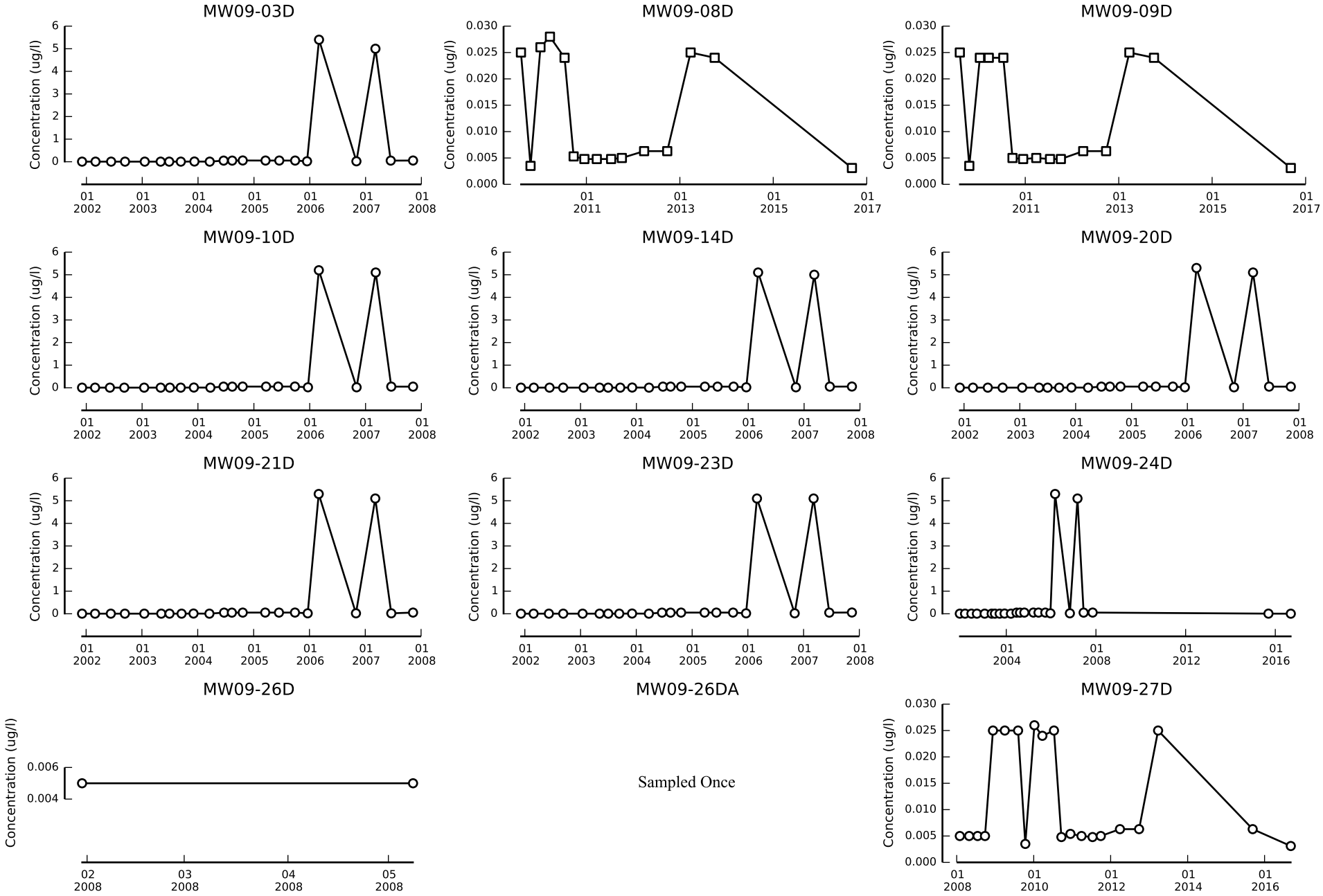
MW09-26DA

Sampled Once



HEPTACHLOR EPOXIDE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 105 of 133

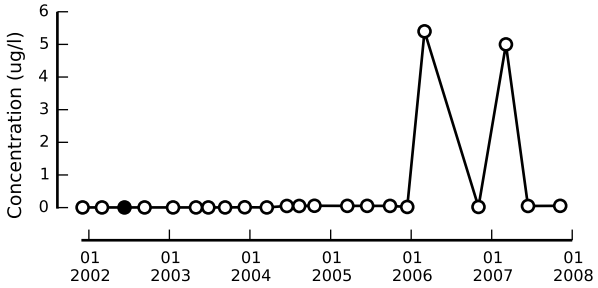
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



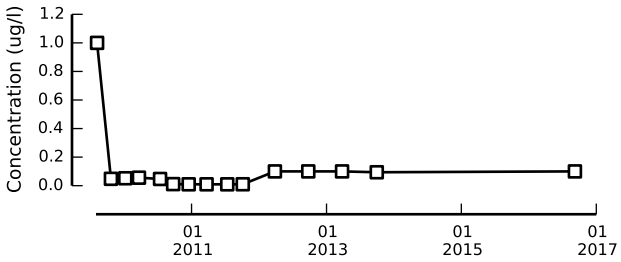
HEXACHLOROBENZENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 106 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

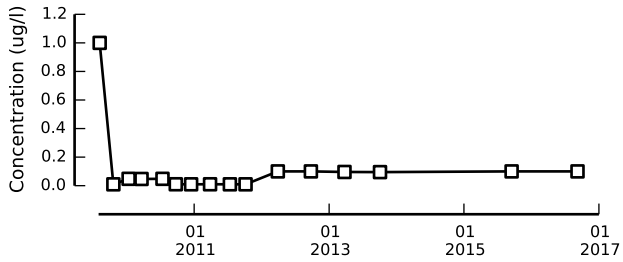
MW09-03D



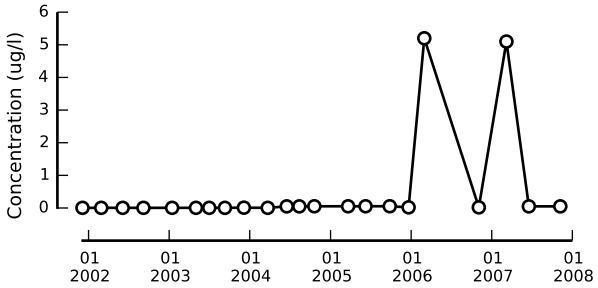
MW09-08D



MW09-09D

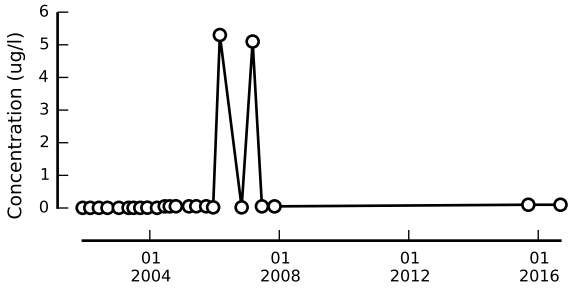


MW09-10D

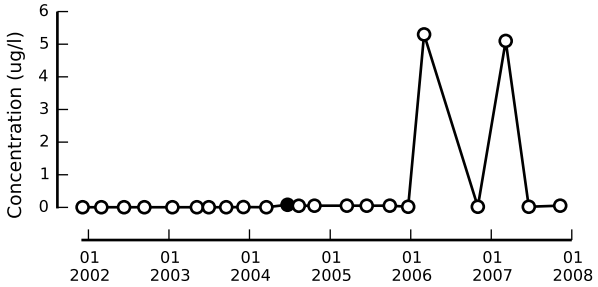


MW09-14D

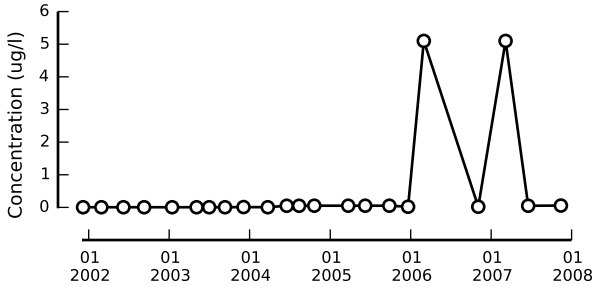
MW09-20D



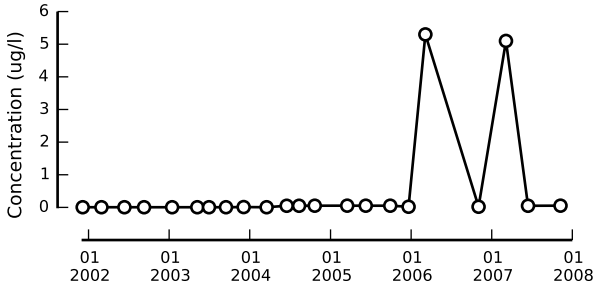
MW09-21D



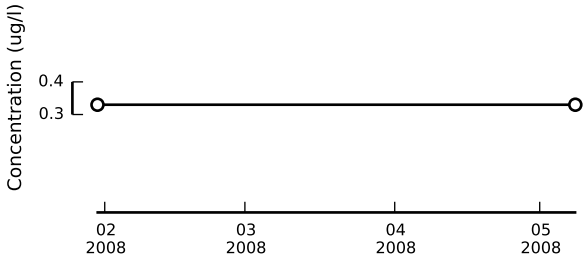
MW09-23D



MW09-24D



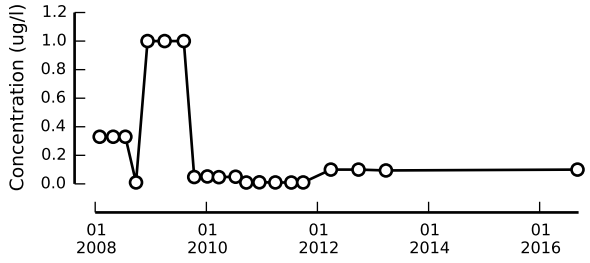
MW09-26D



MW09-26DA

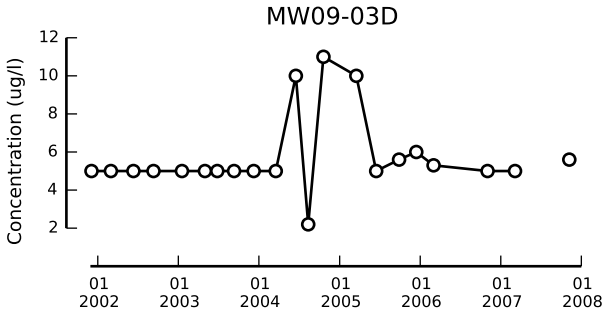
Sampled Once

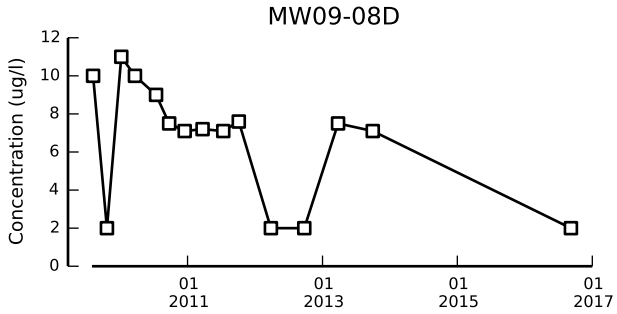
MW09-27D

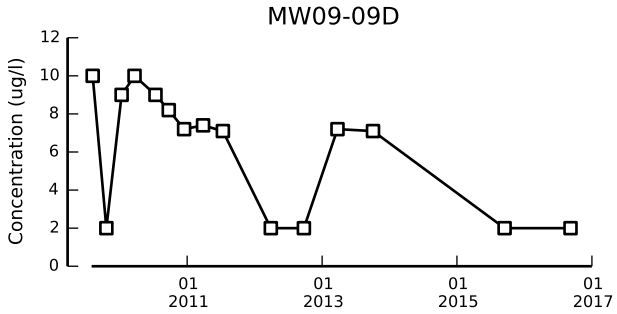


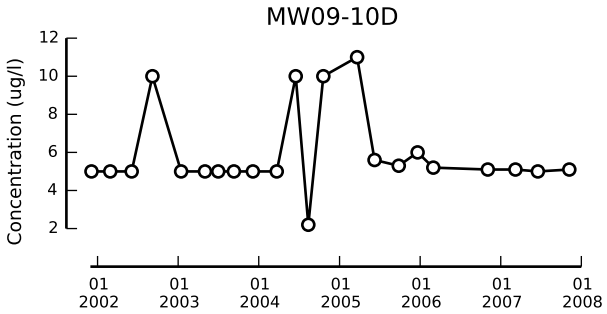
HEXACHLOROBUTADIENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 107 of 133

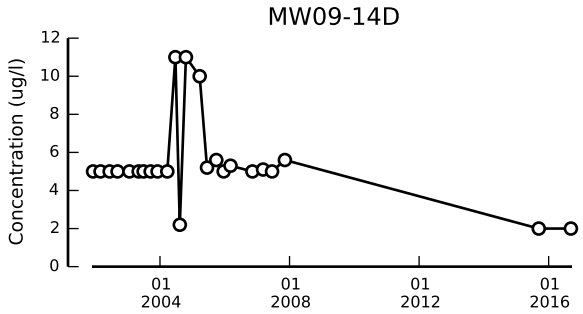
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

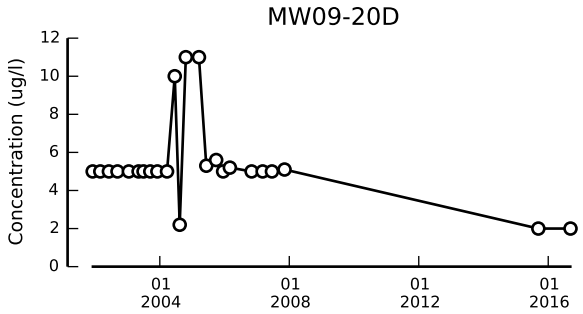


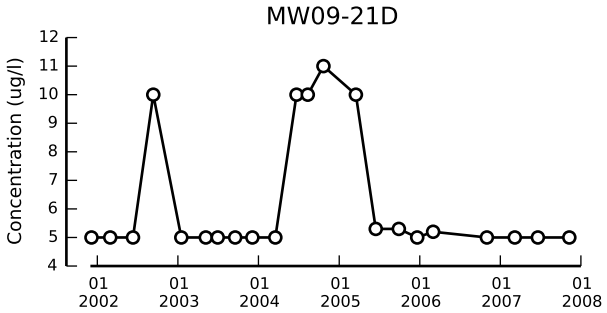


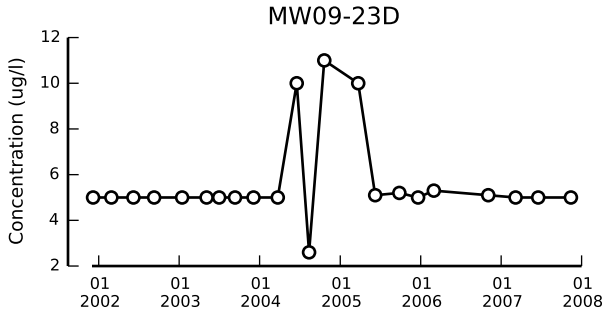


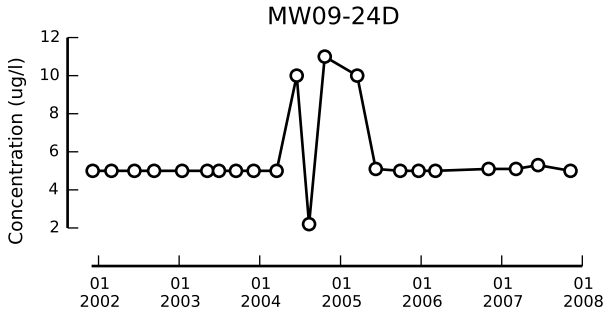


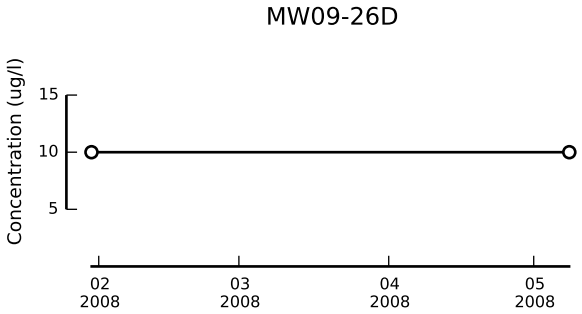






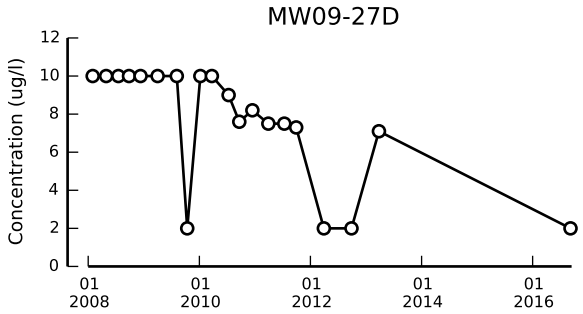






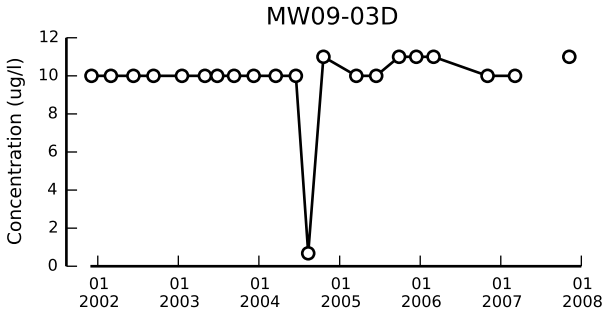
MW09-26DA

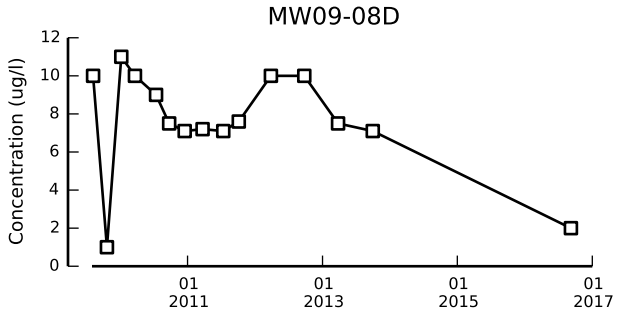
Sampled Once

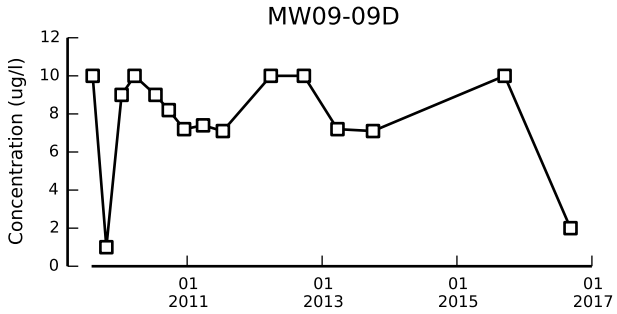


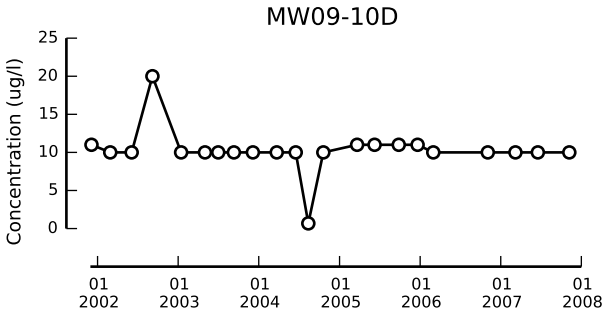
HEXACHLOROCYCLOPENTADIENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 108 of 133

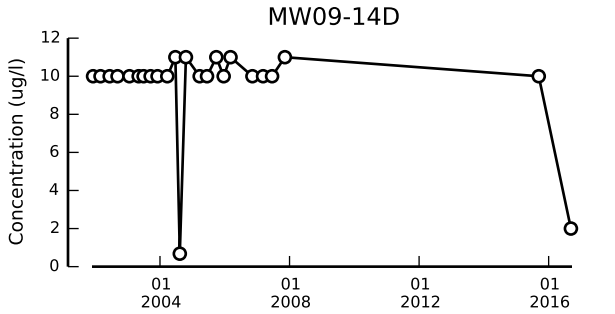
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

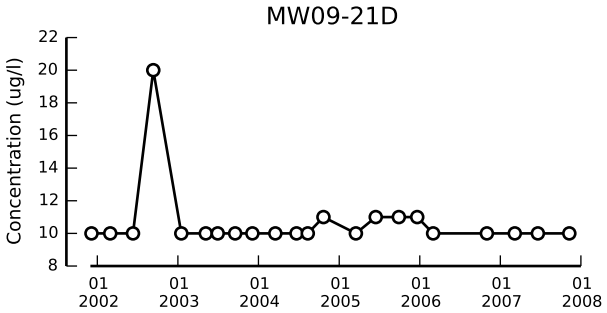


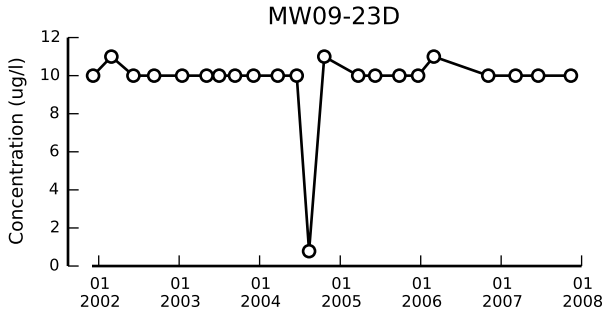


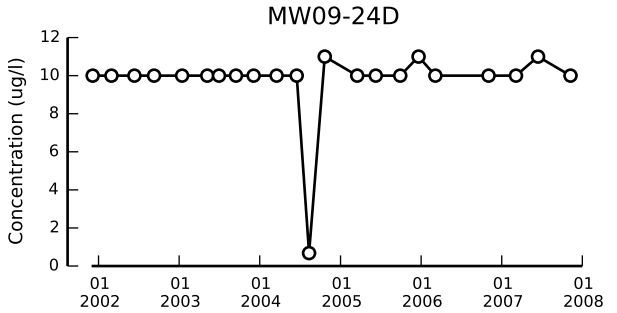


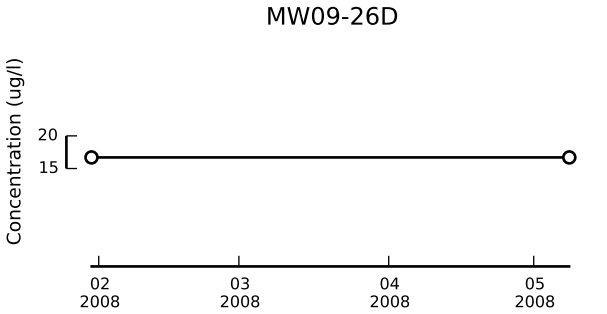






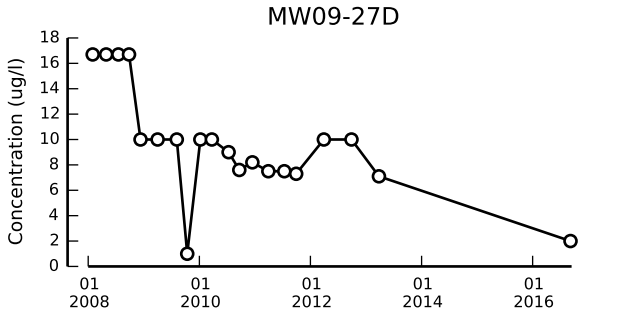






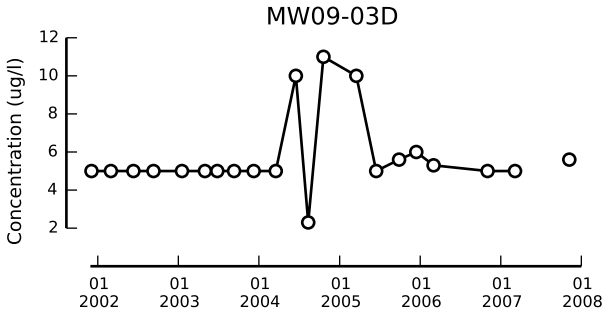
MW09-26DA

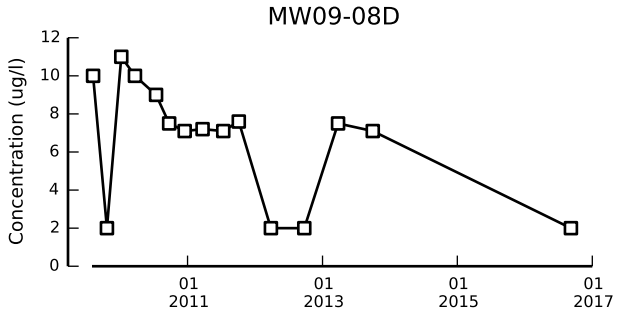
Sampled Once

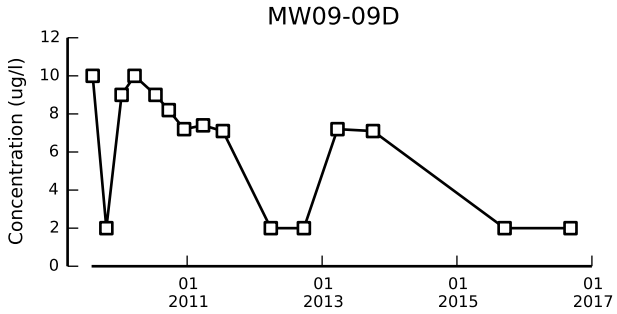


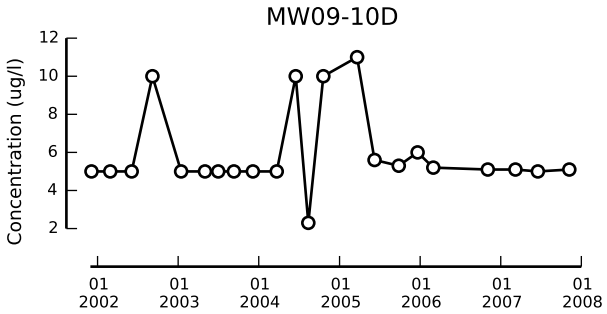
HEXACHLOROETHANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 109 of 133

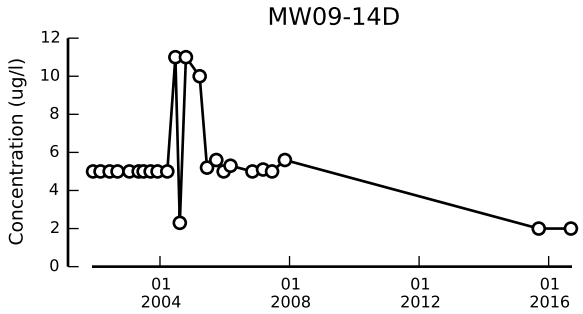
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

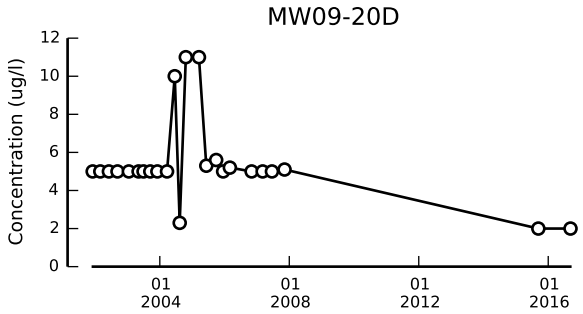


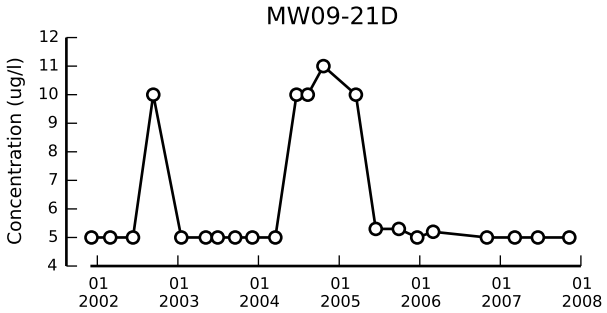


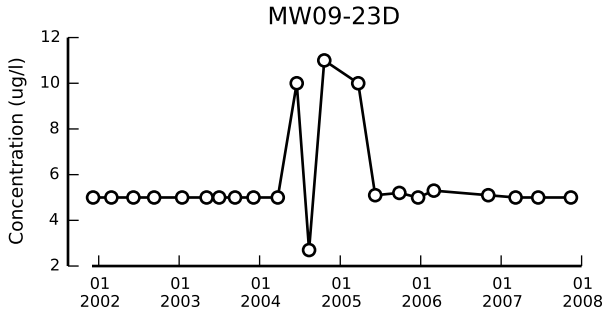


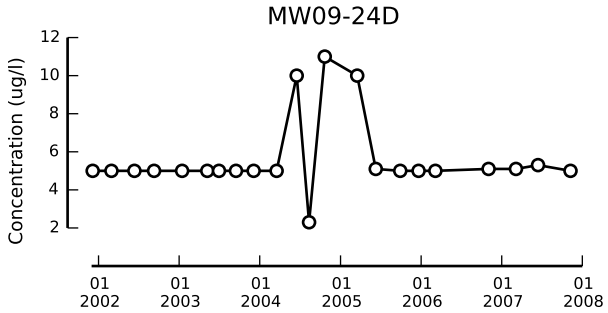


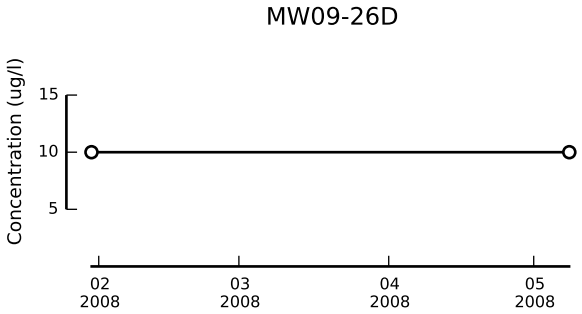






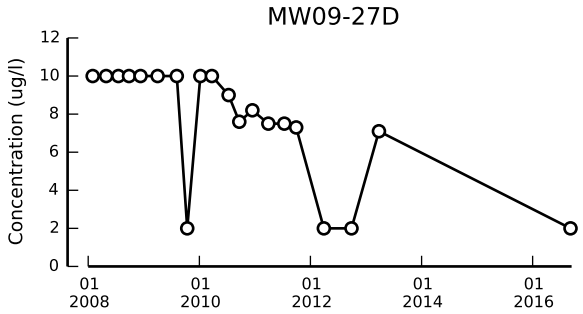






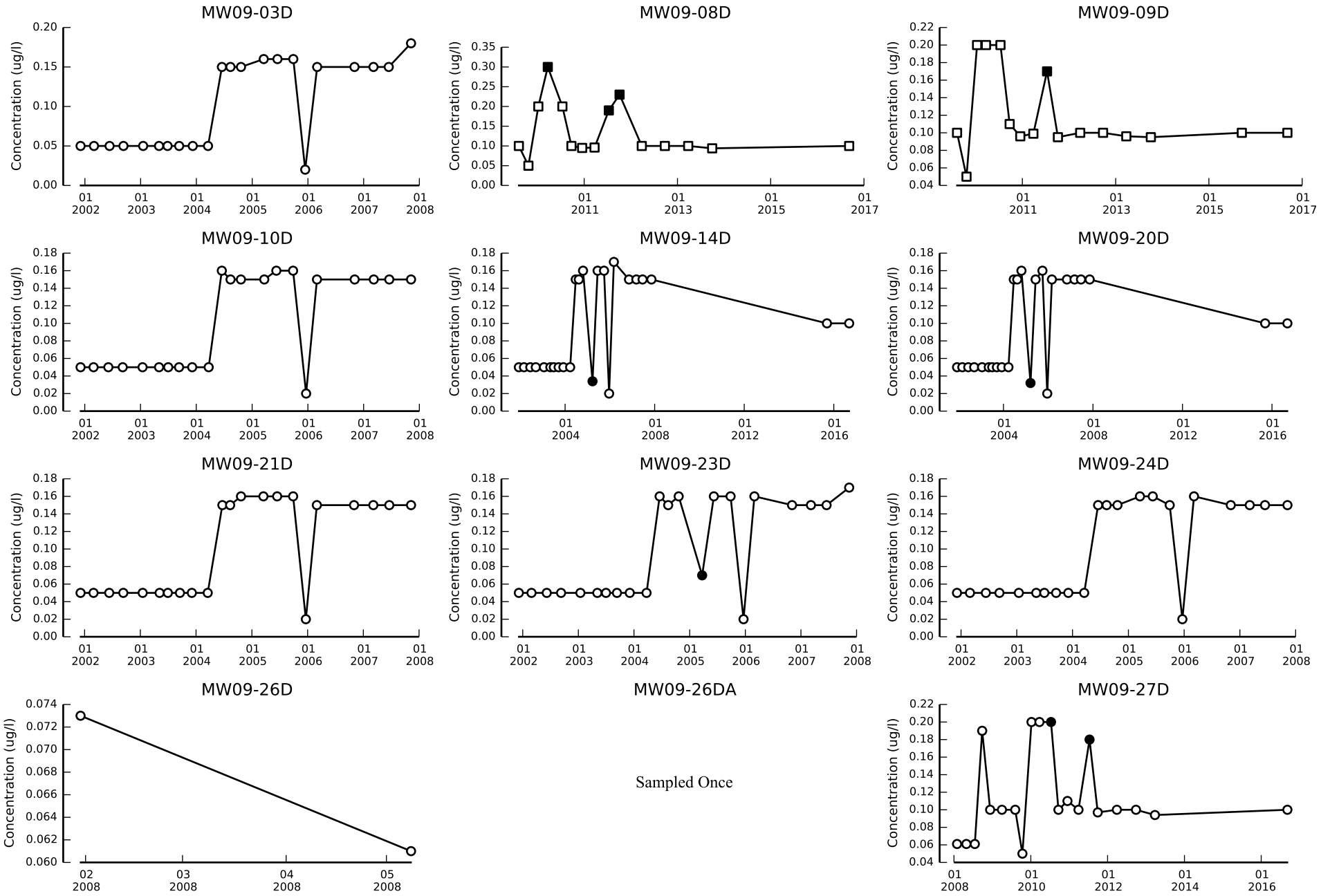
MW09-26DA

Sampled Once



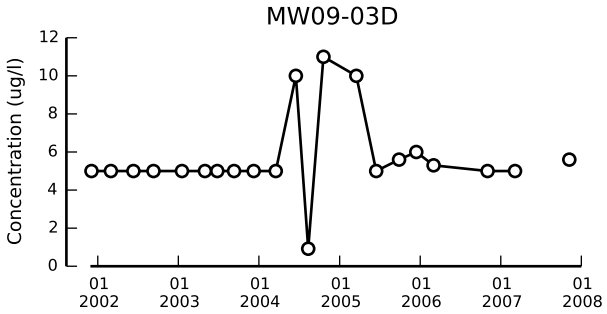
INDENO(1,2,3-CD)PYRENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 110 of 133

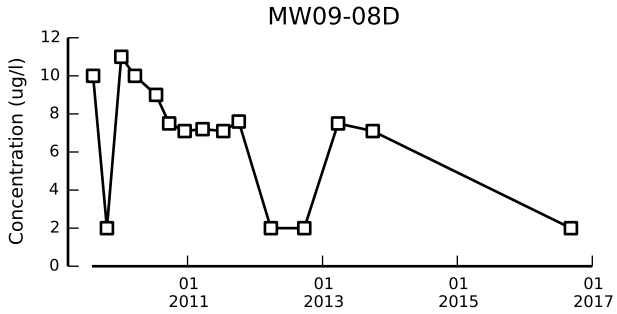
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

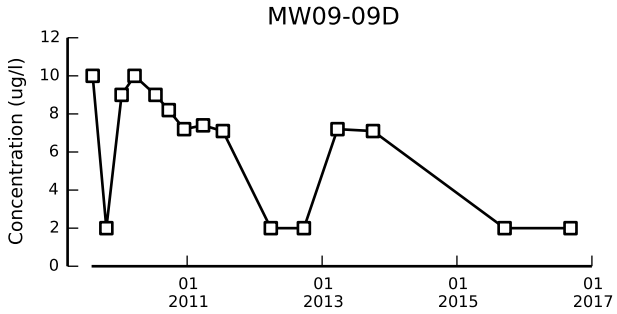


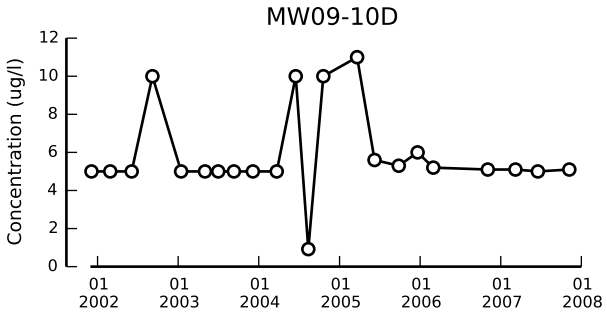
ISOPHORONE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 111 of 133

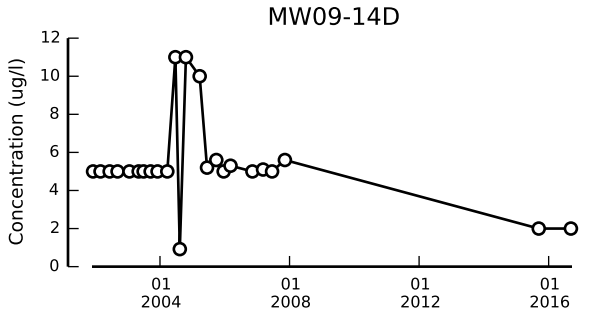
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

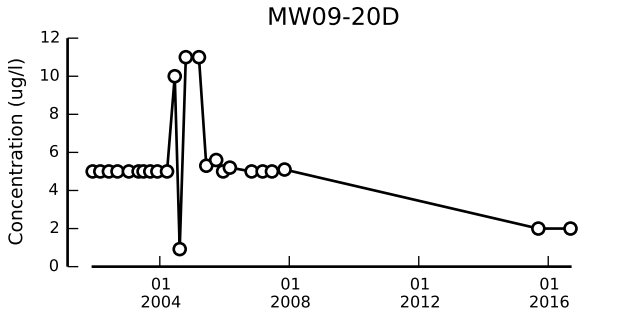


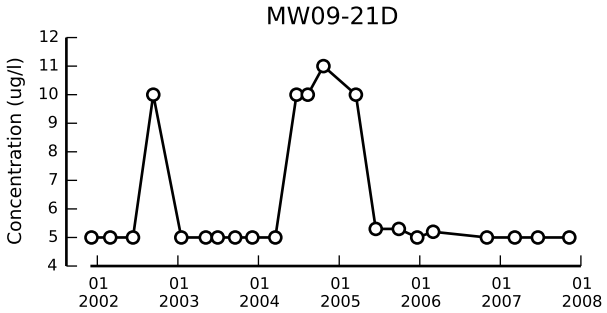


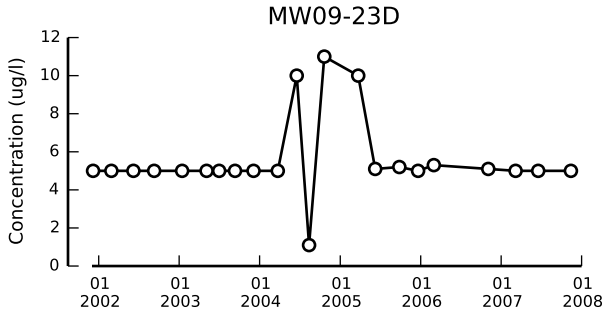


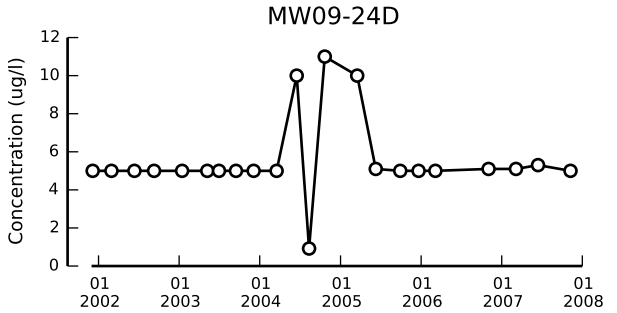


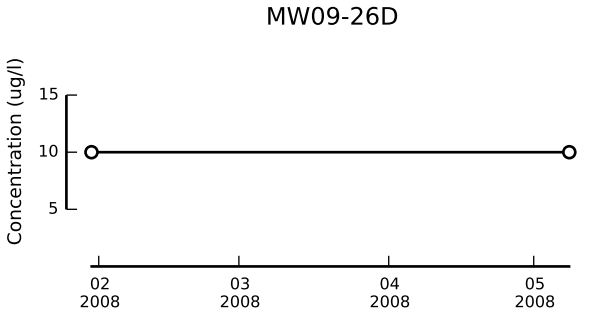






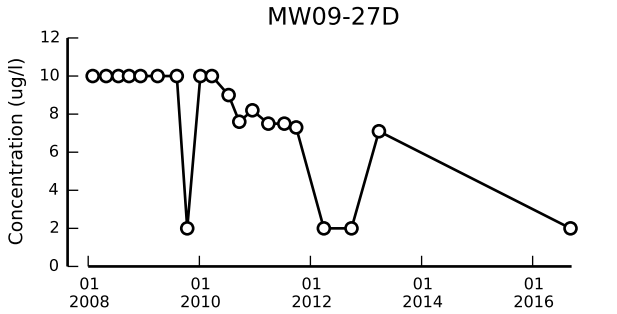






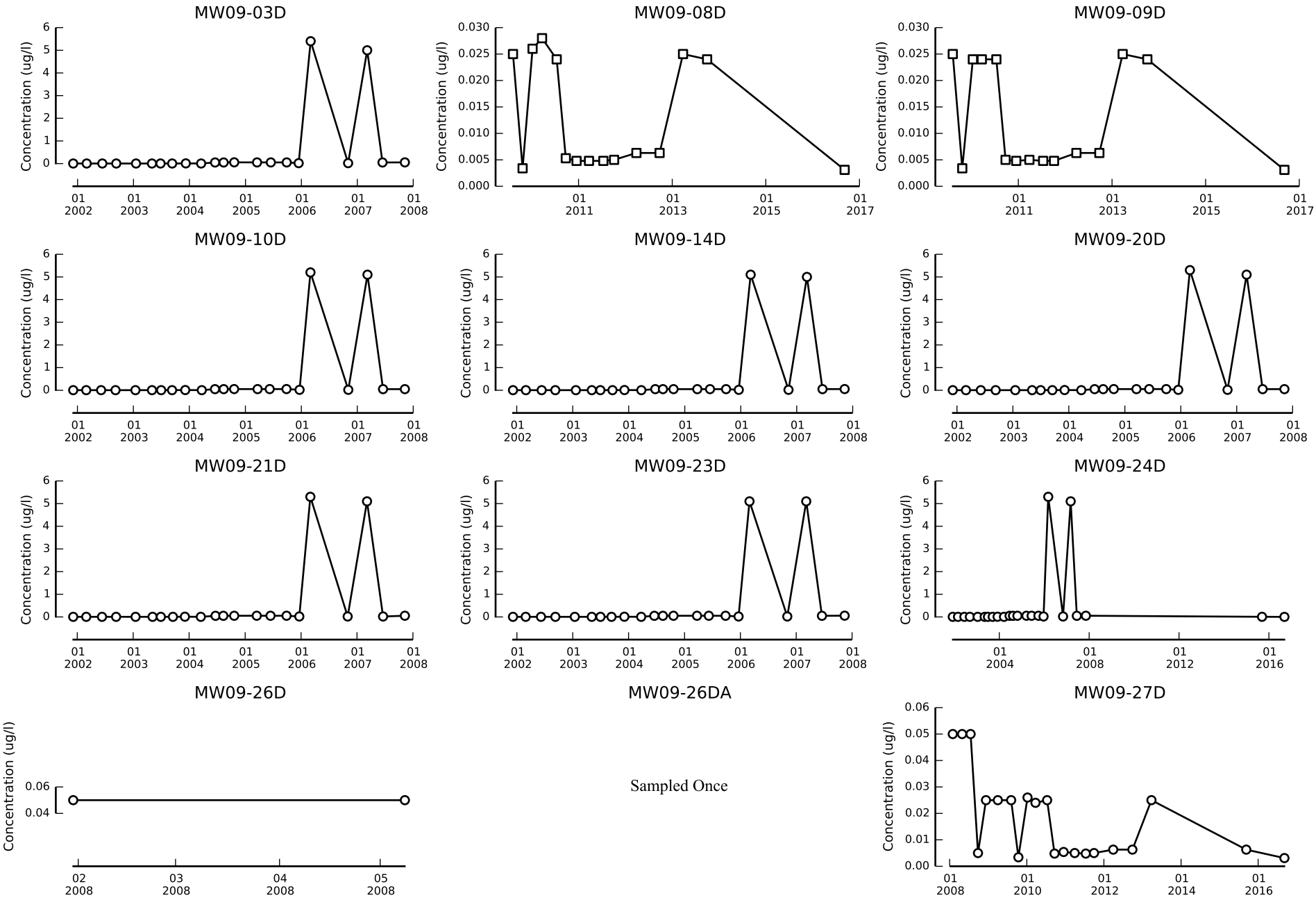
MW09-26DA

Sampled Once



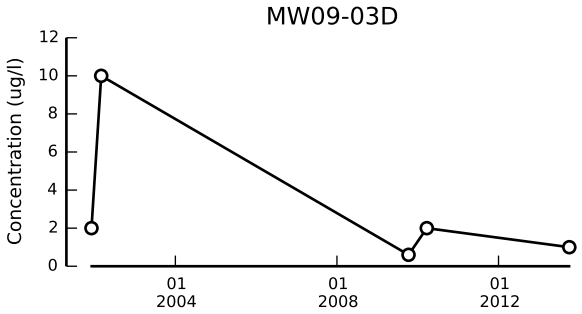
LINDANE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 112 of 133

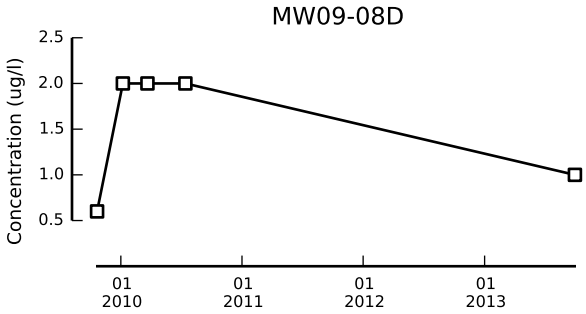
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

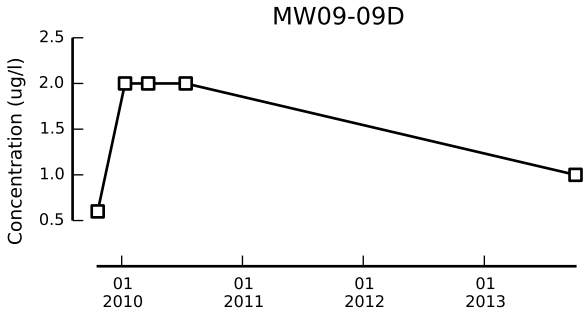


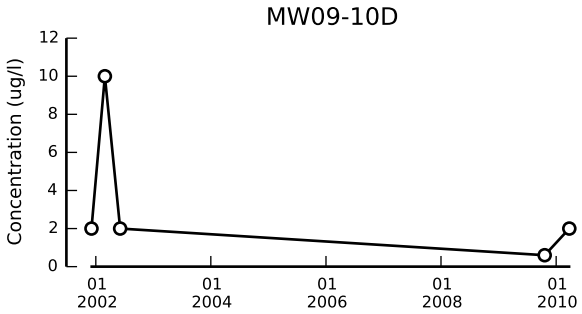
M- AND P-XYLENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 113 of 133

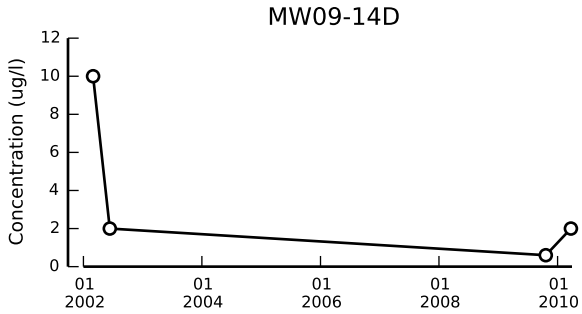
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

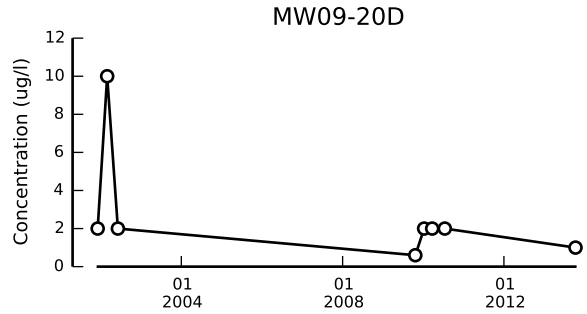


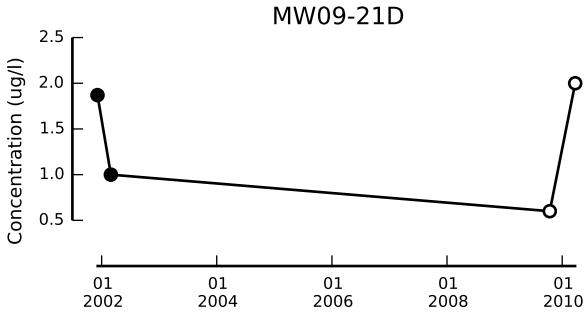


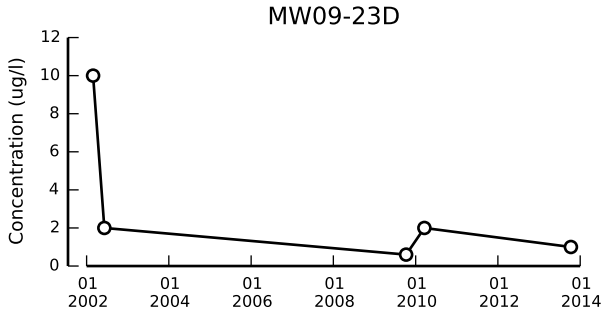


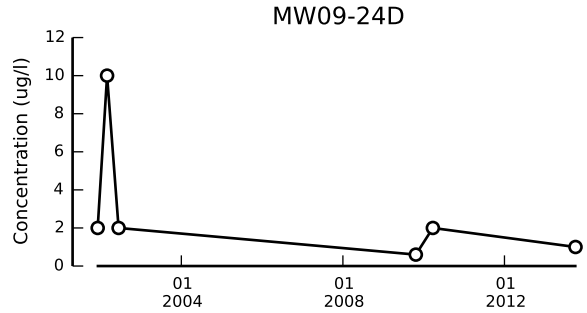


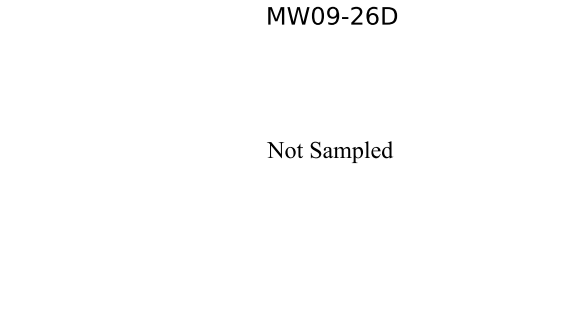




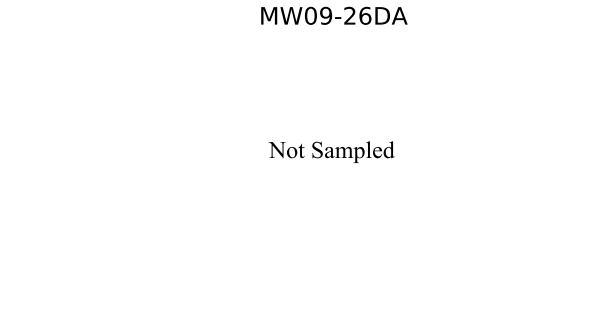




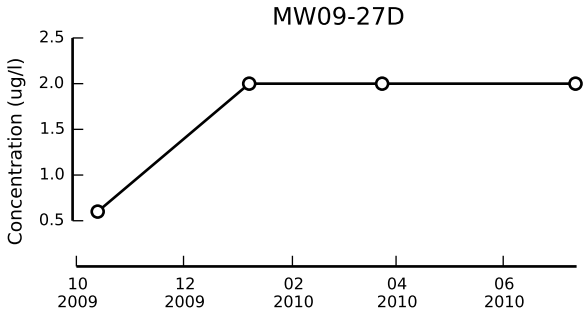




Not Sampled



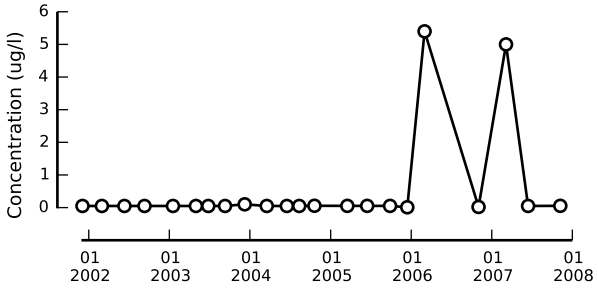
Not Sampled



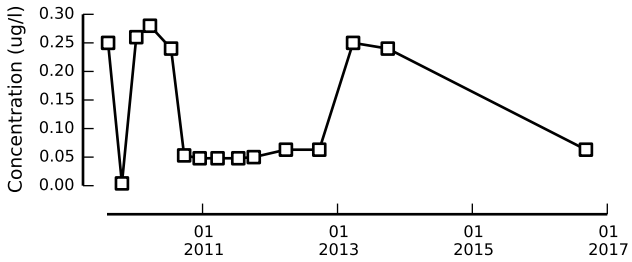
METHOXYCHLOR in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 114 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

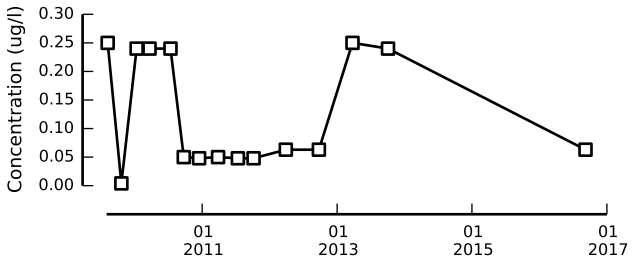
MW09-03D



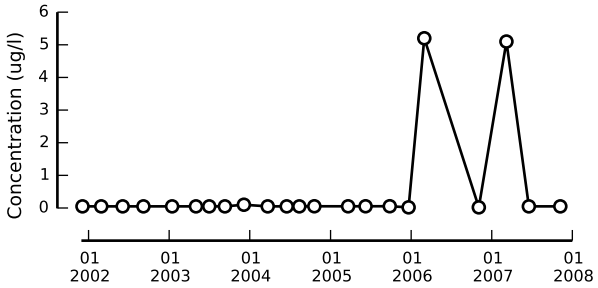
MW09-08D



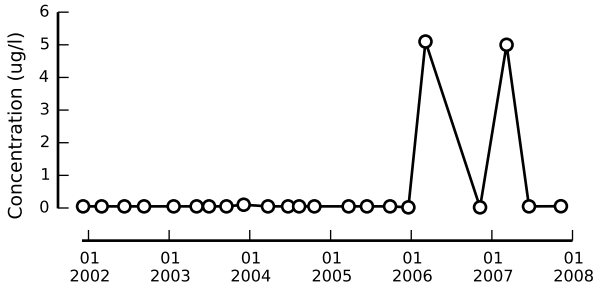
MW09-09D



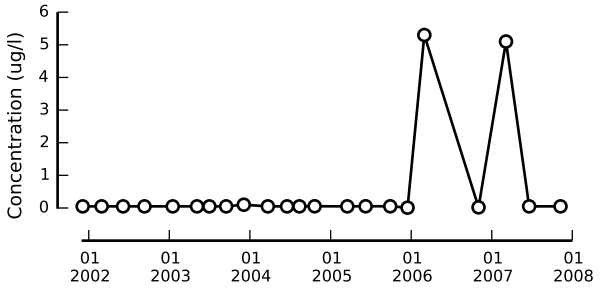
MW09-10D



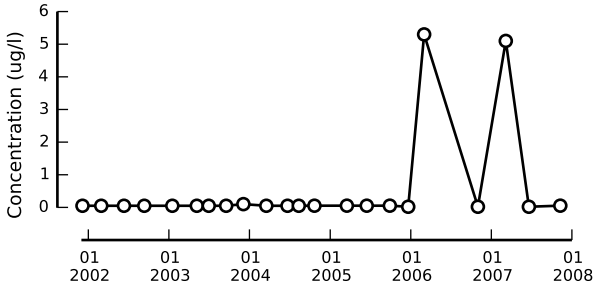
MW09-14D



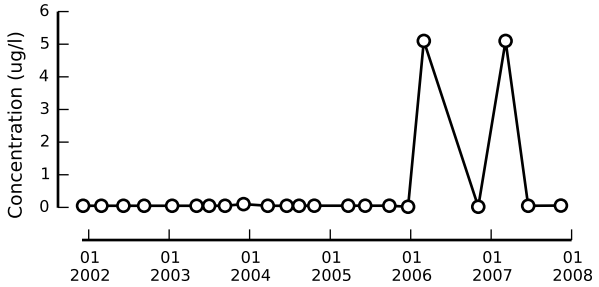
MW09-20D



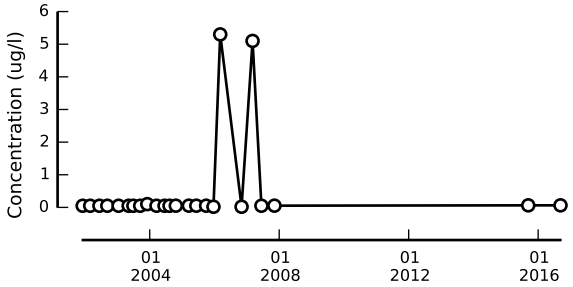
MW09-21D



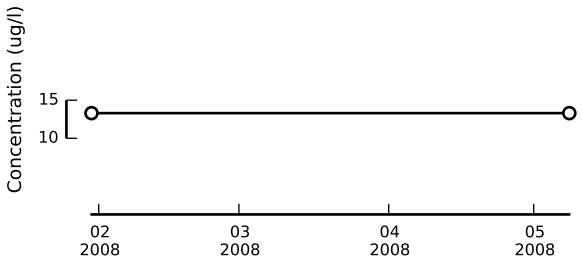
MW09-23D



MW09-24D



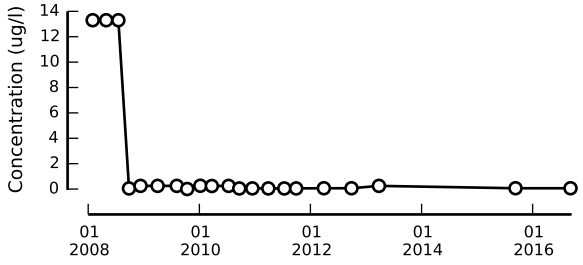
MW09-26D



MW09-26DA

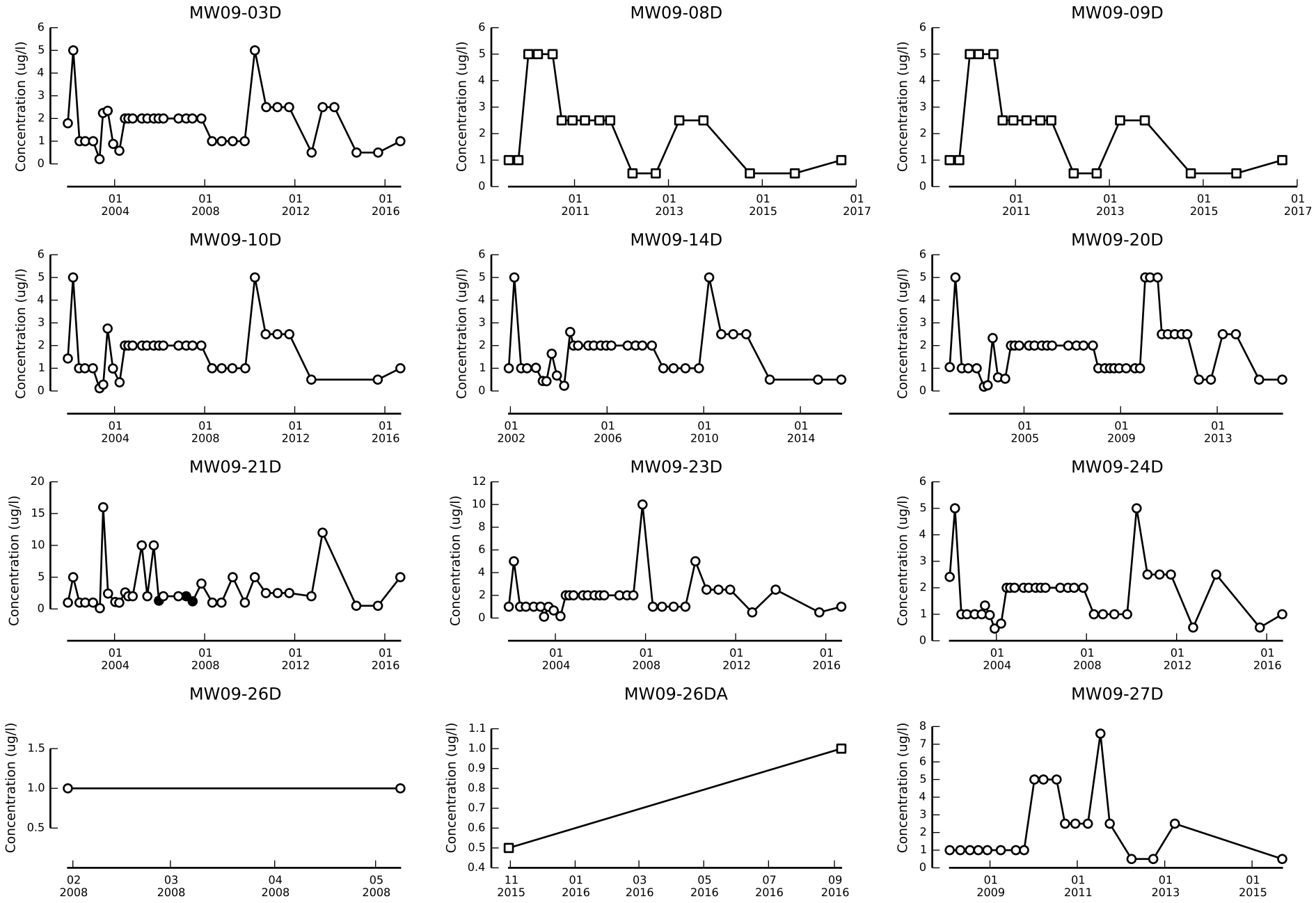
Sampled Once

MW09-27D



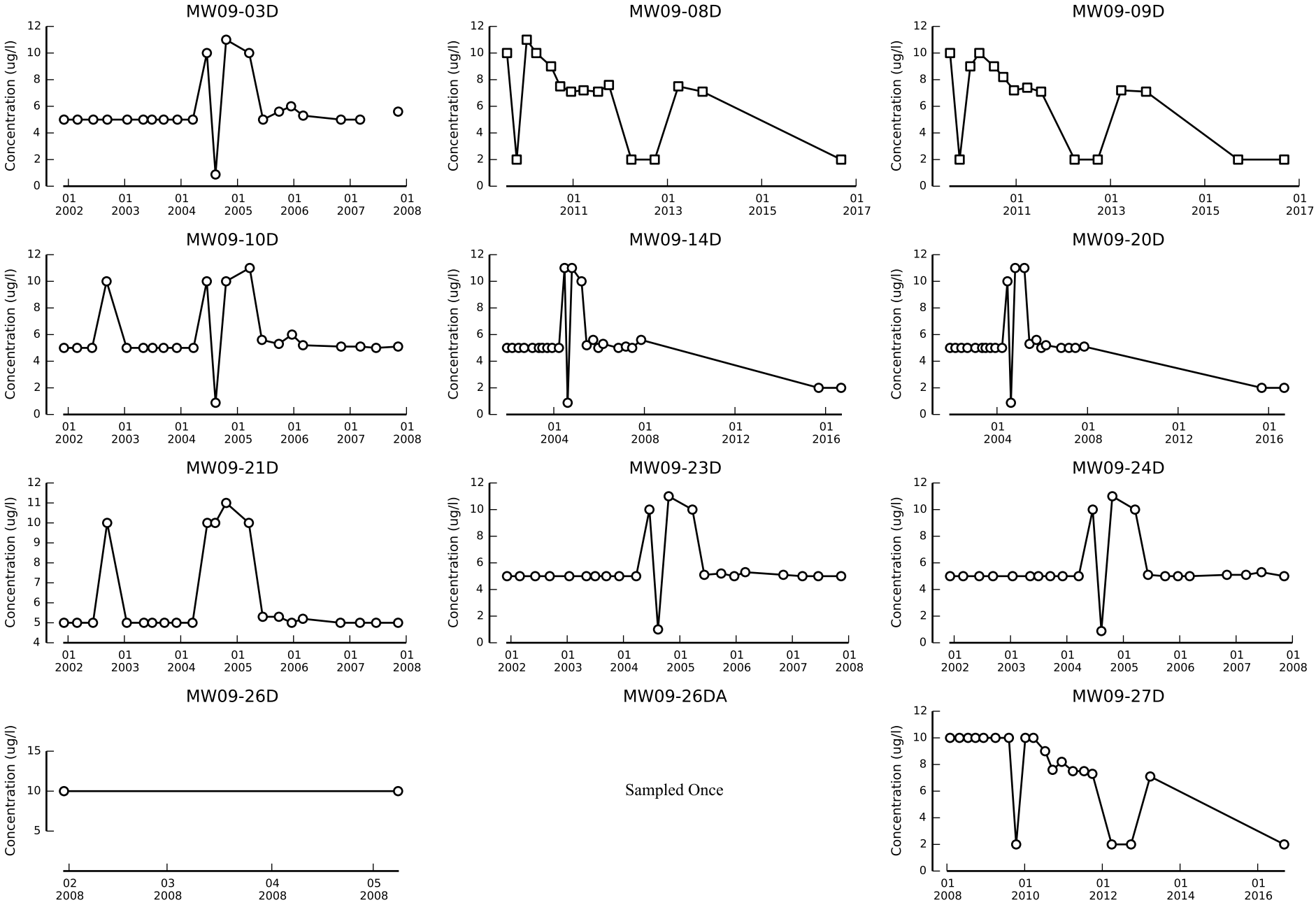
METHYLENE CHLORIDE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 115 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



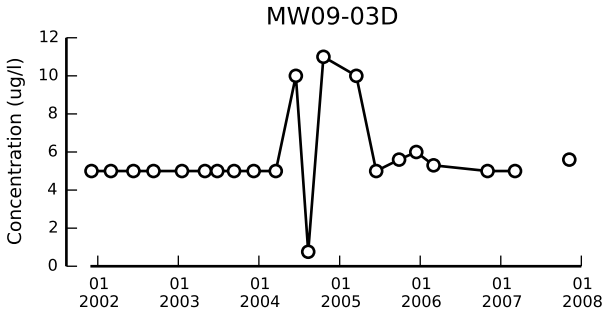
N-NITROSODINPROPYLAMINE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 116 of 133

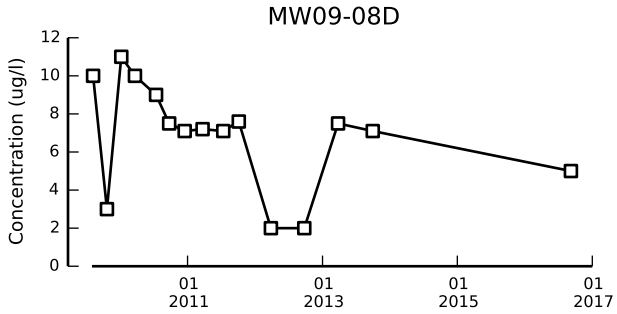
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

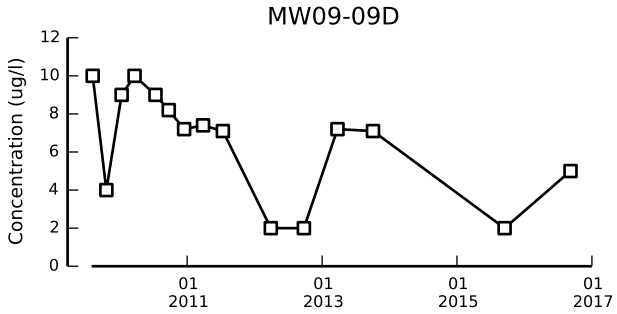


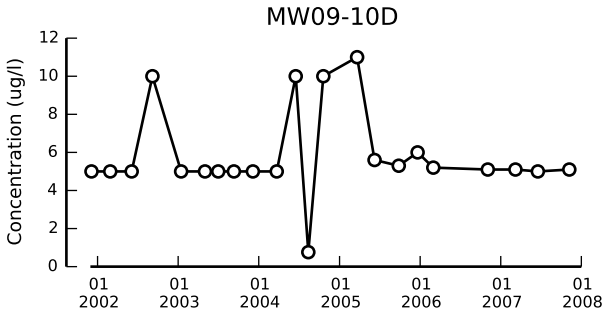
N-NITROSODIPHENYLAMINE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 117 of 133

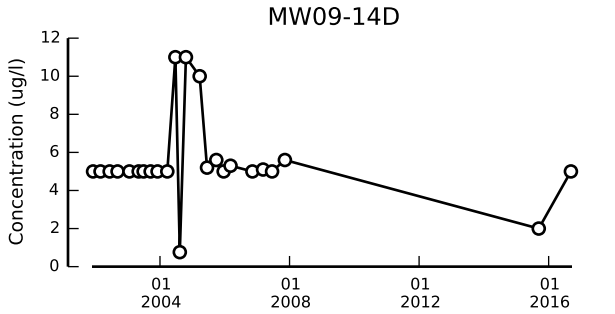
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

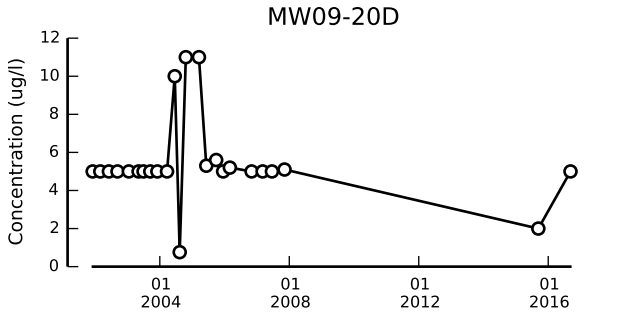


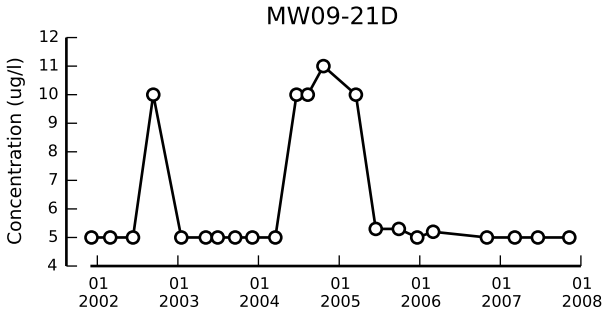


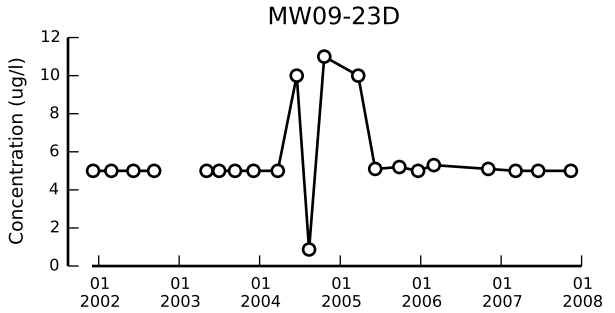


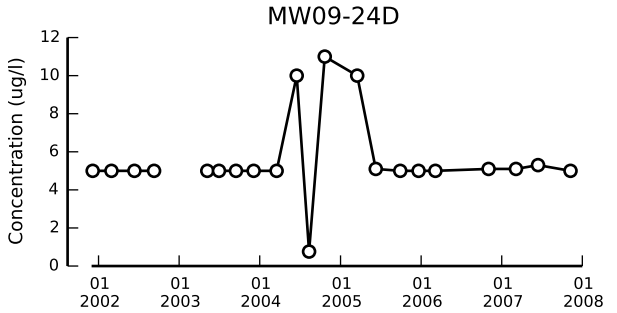


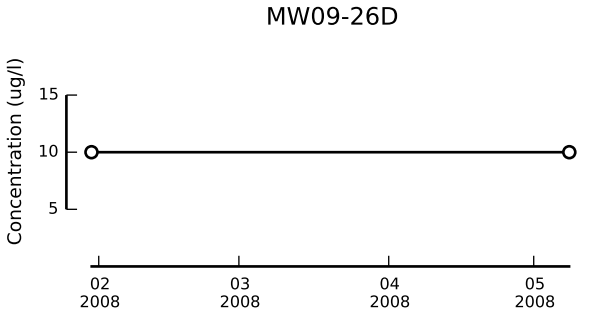






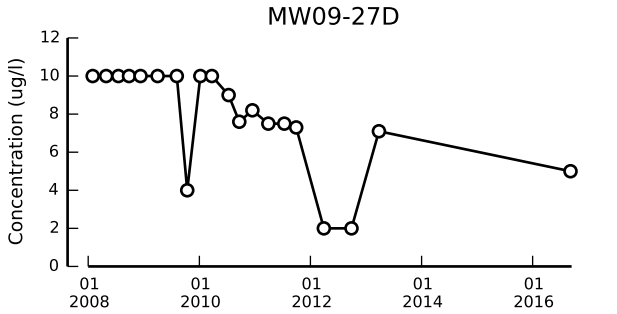






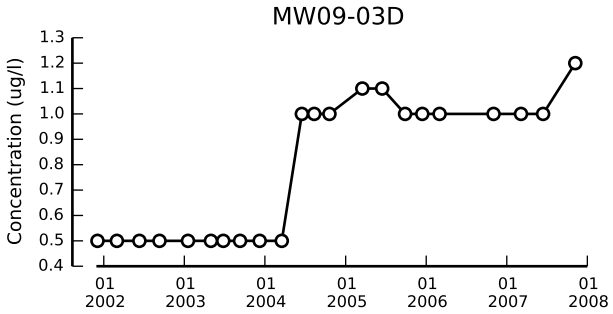
MW09-26DA

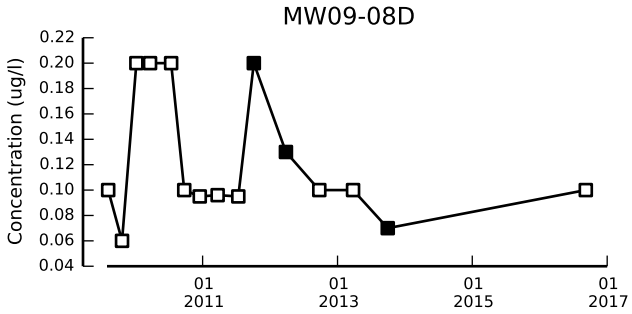
Sampled Once

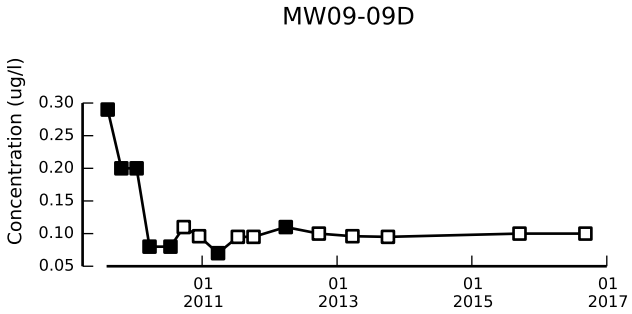


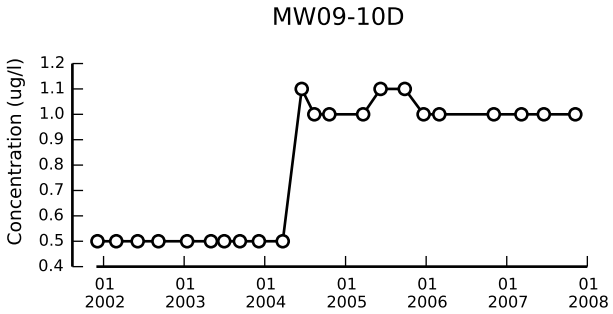
NAPHTHALENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 118 of 133

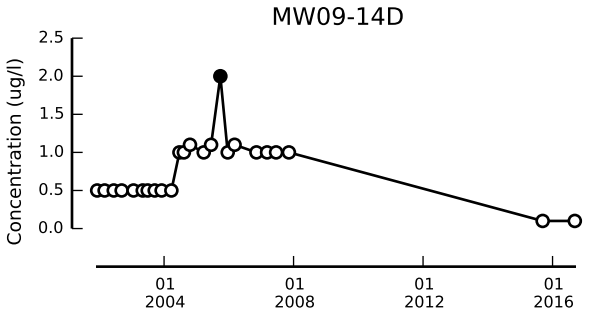
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

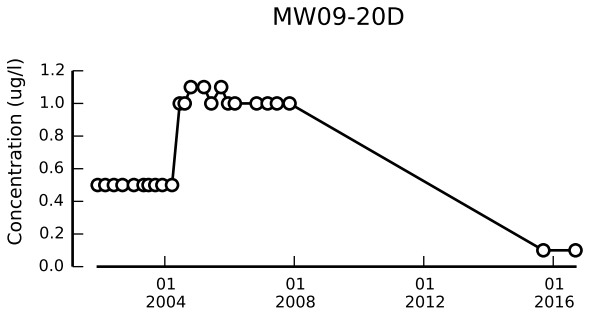


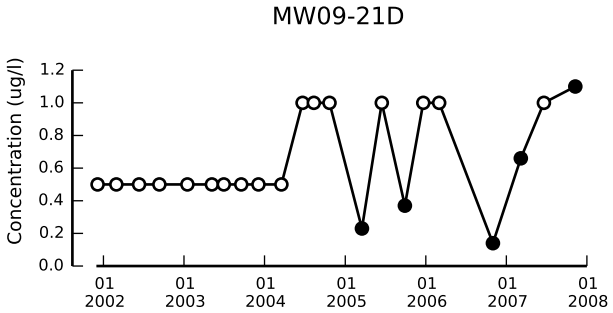


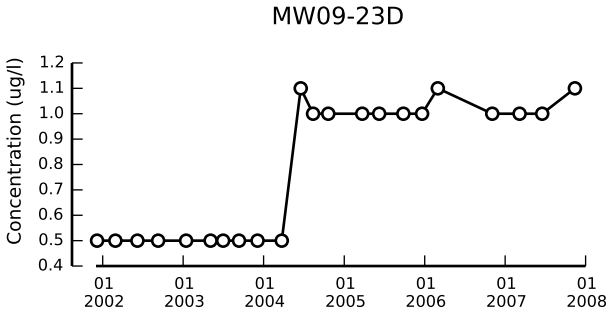


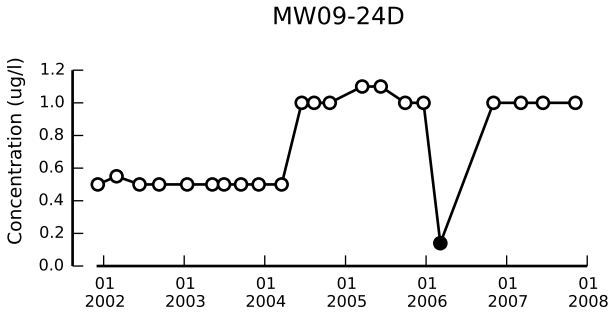


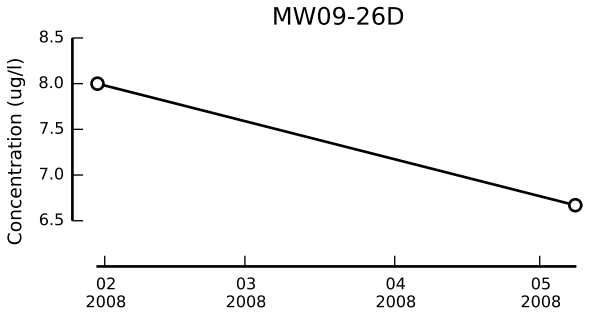






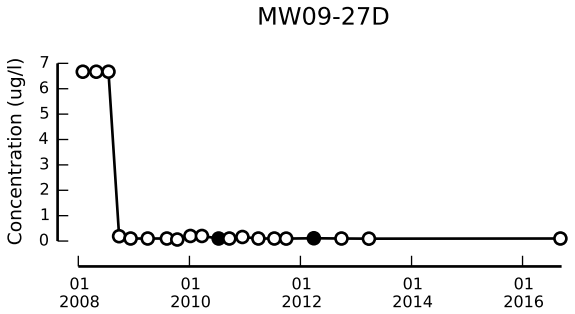






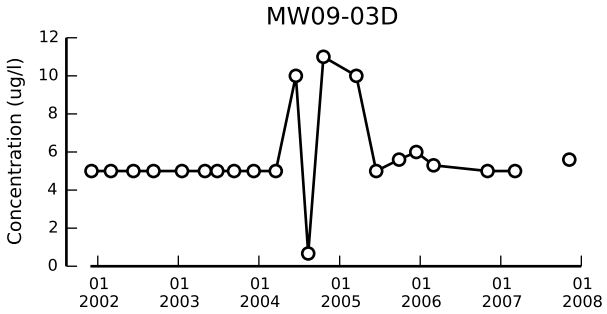
MW09-26DA

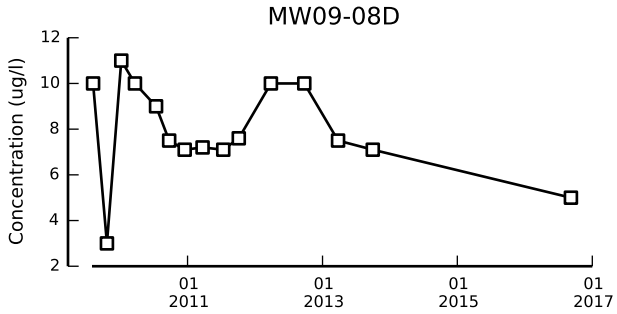
Sampled Once

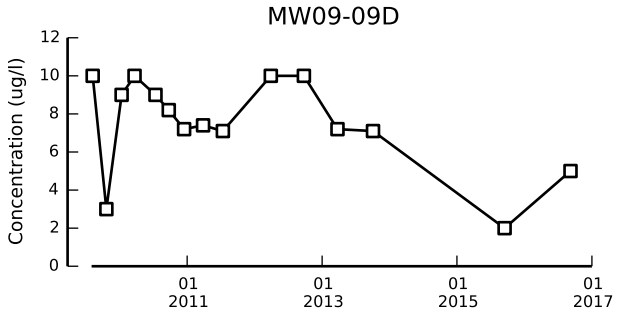


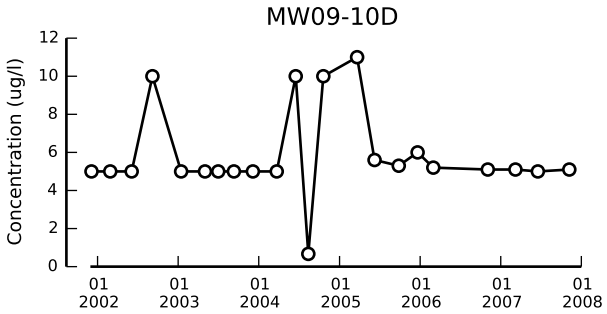
NITROBENZENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 119 of 133

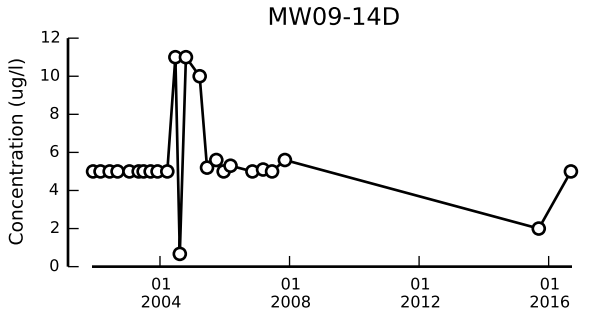
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

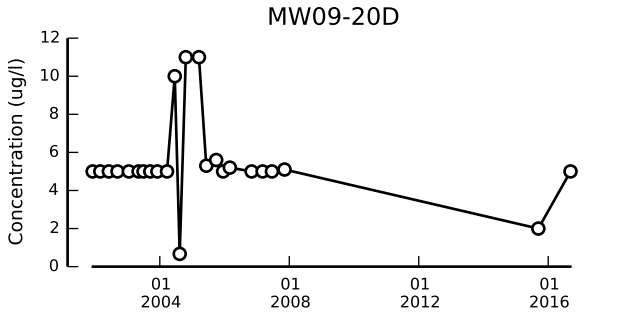


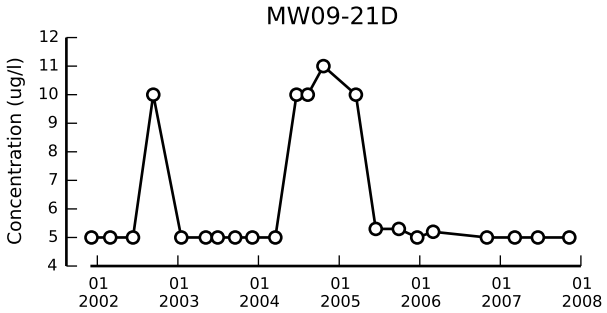


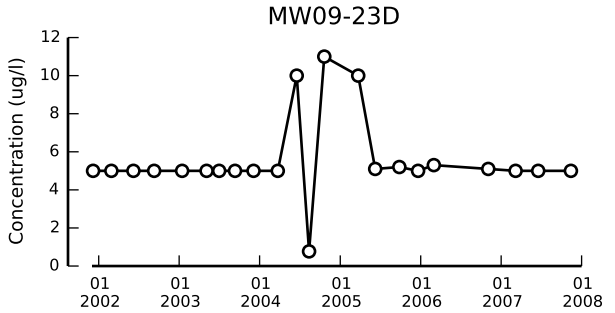


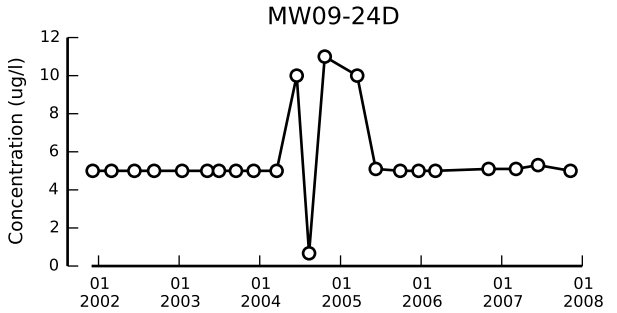


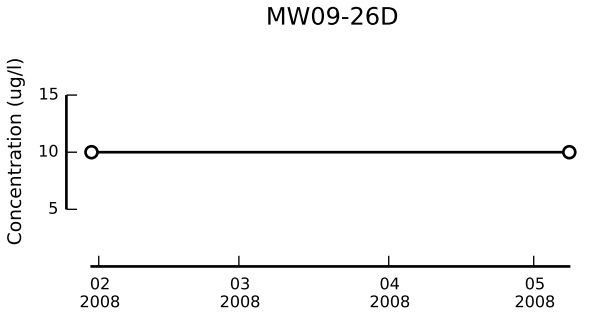






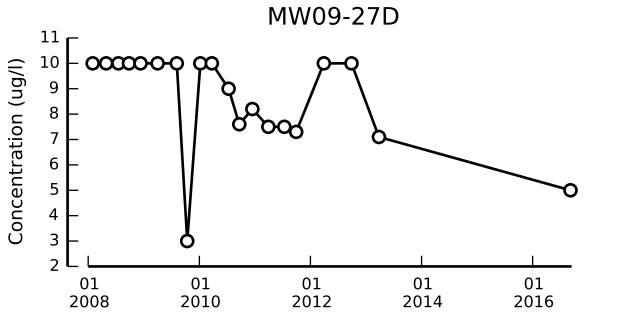






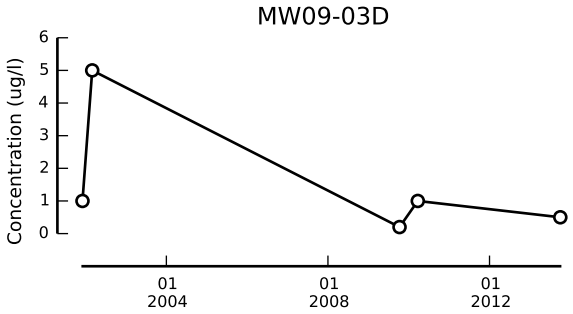
MW09-26DA

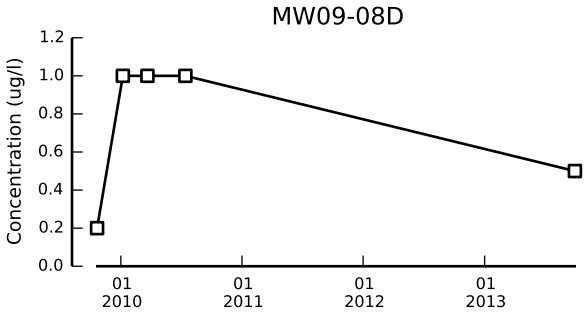
Sampled Once

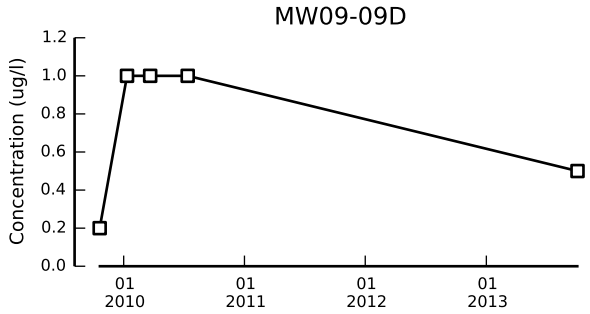


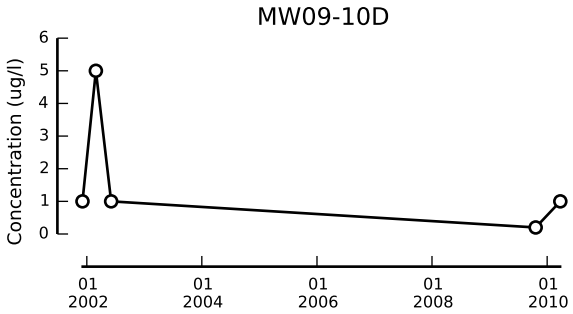
O-XYLENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 120 of 133

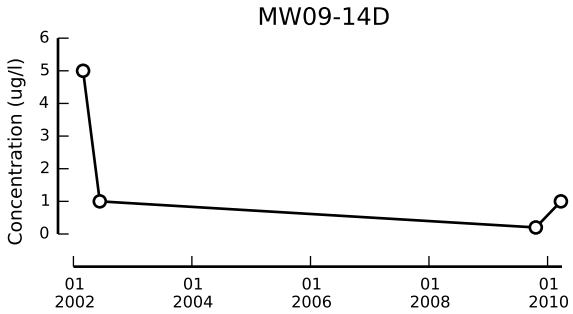
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

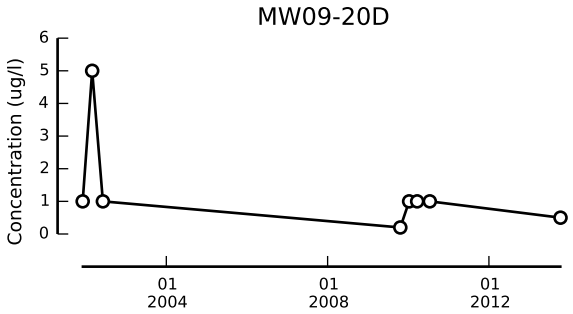


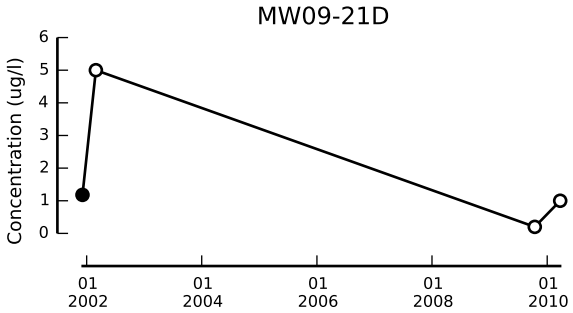


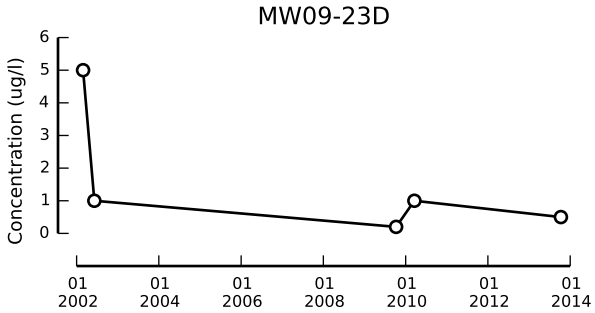


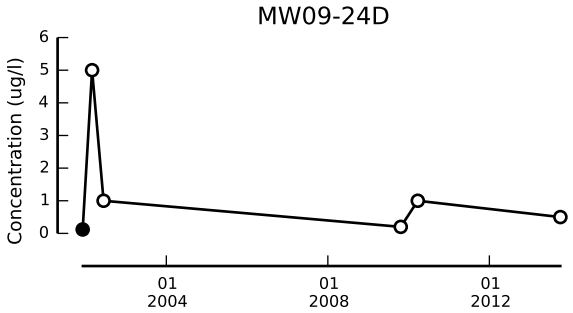










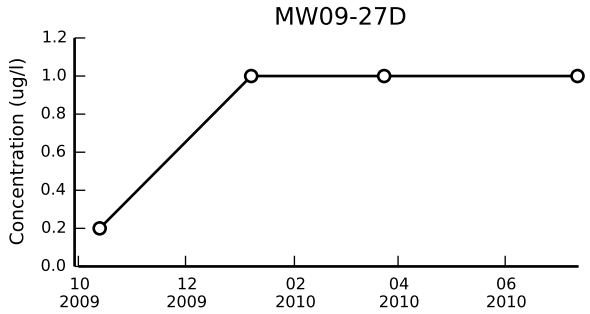


MW09-26D

Not Sampled

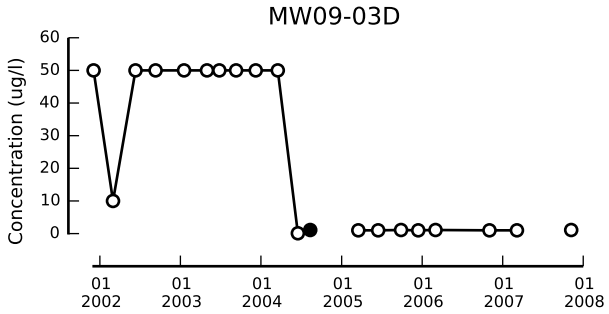
MW09-26DA

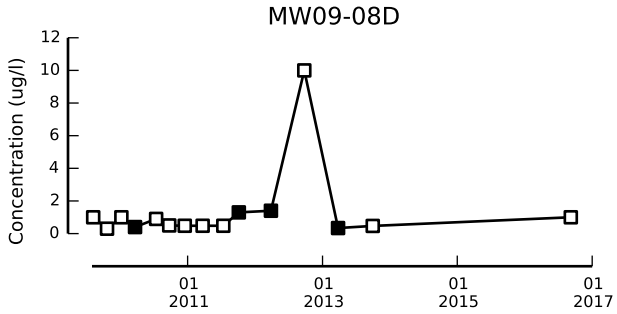
Not Sampled

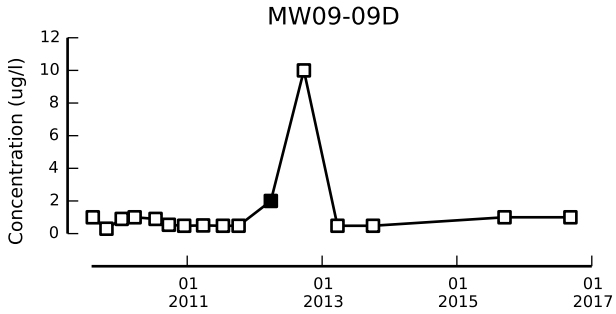


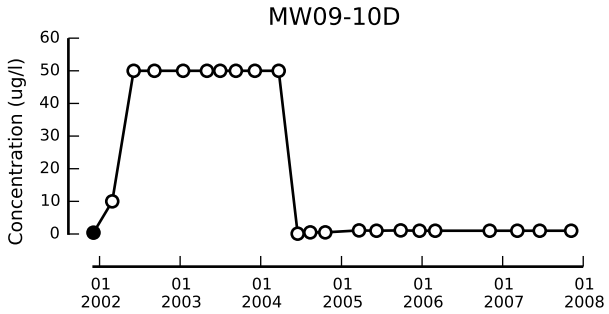
PENTACHLOROPHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 121 of 133

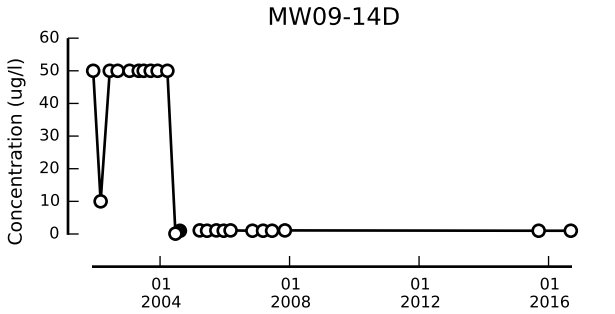
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

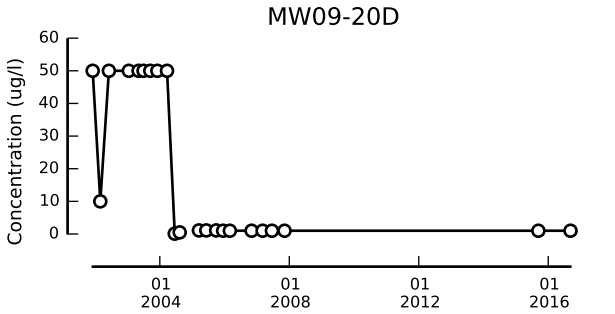


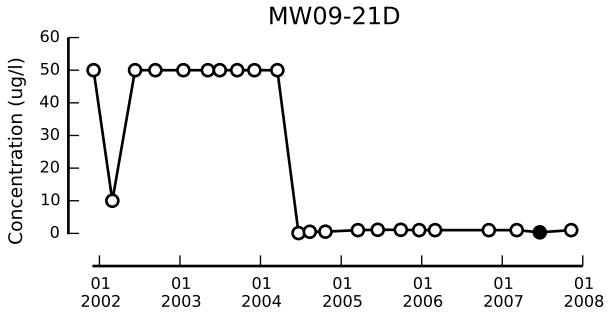


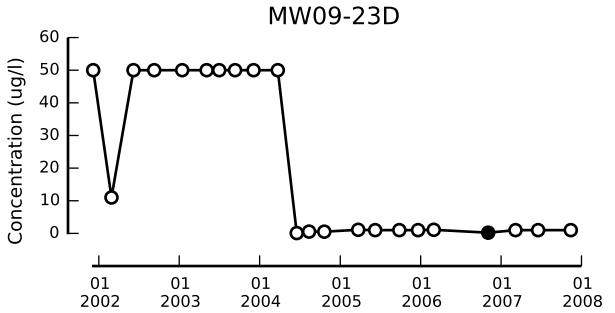


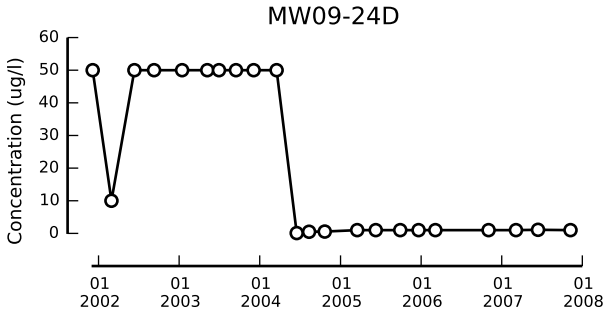


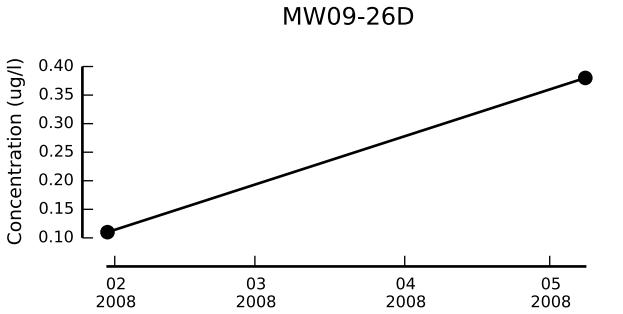






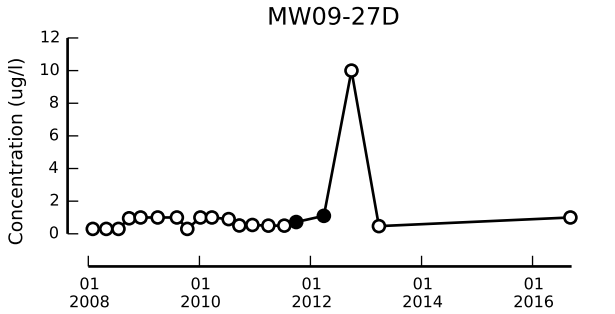






MW09-26DA

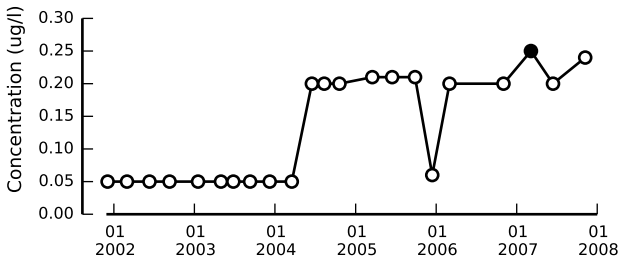
Sampled Once



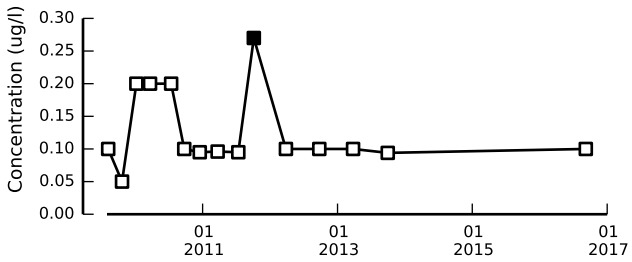
PHENANTHRENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 122 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

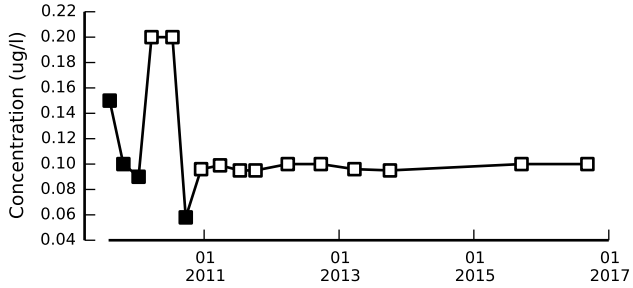
MW09-03D



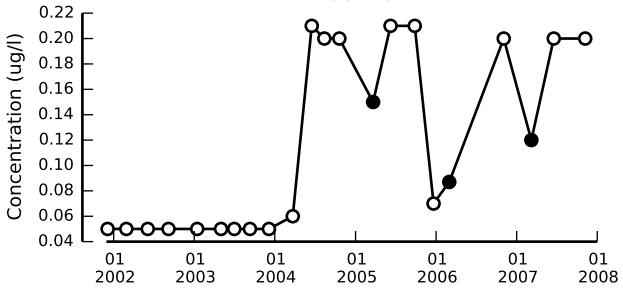
MW09-08D



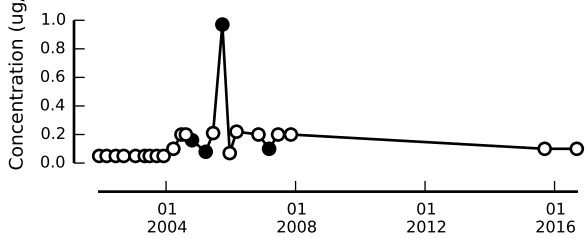
MW09-09D



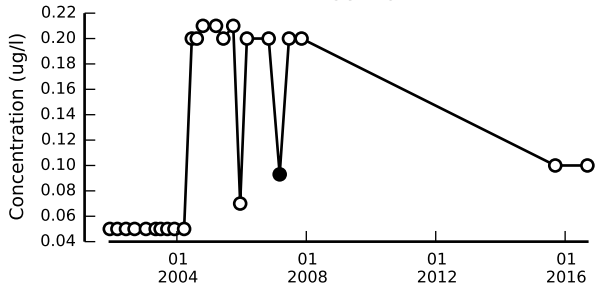
MW09-10D



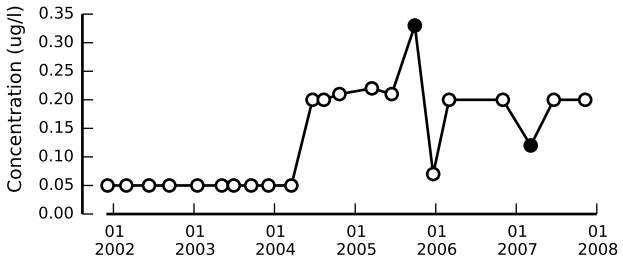
MW09-14D



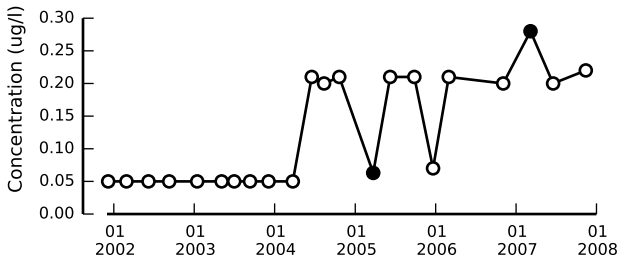
MW09-20D



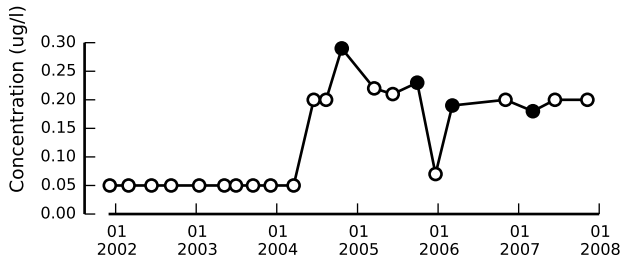
MW09-21D



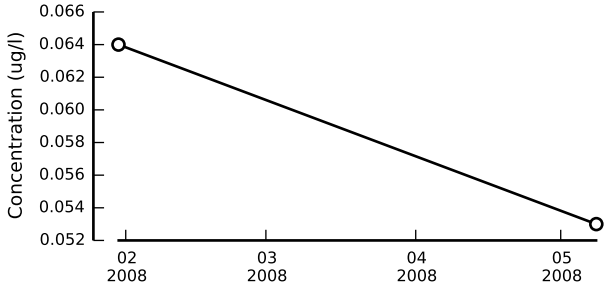
MW09-23D



MW09-24D



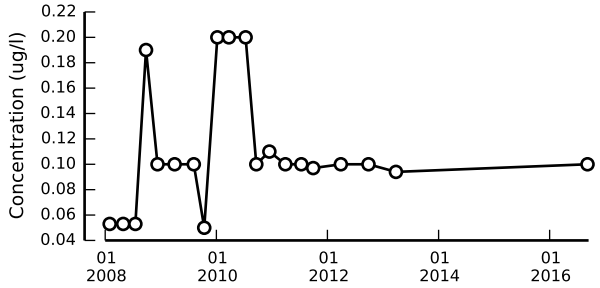
MW09-26D



MW09-26DA

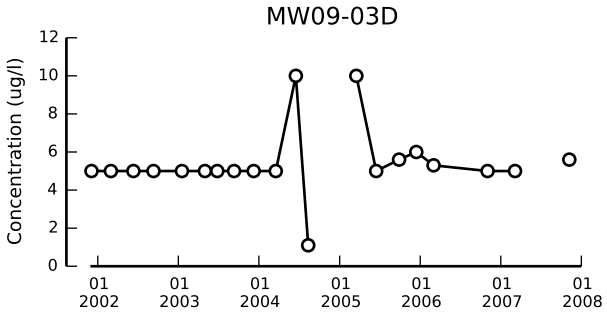
Sampled Once

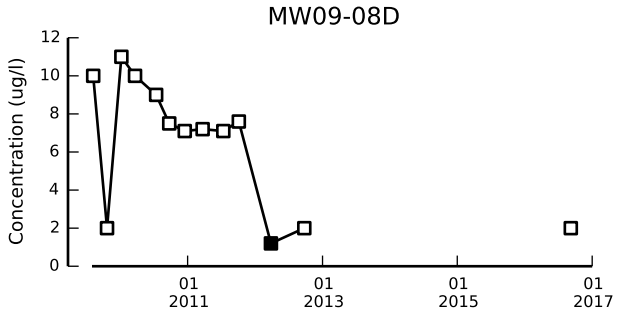
MW09-27D

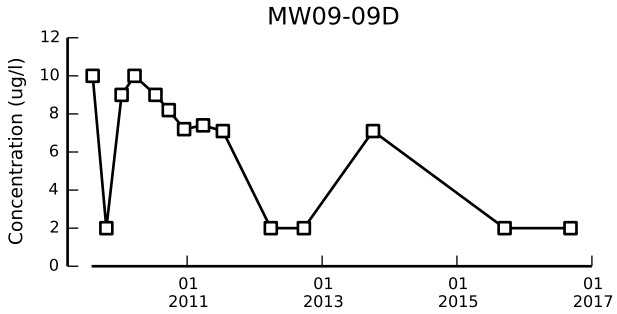


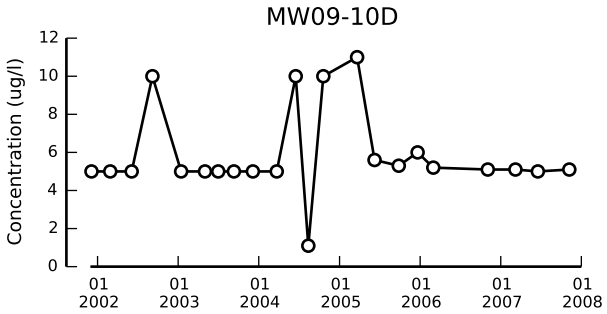
PHENOL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 123 of 133

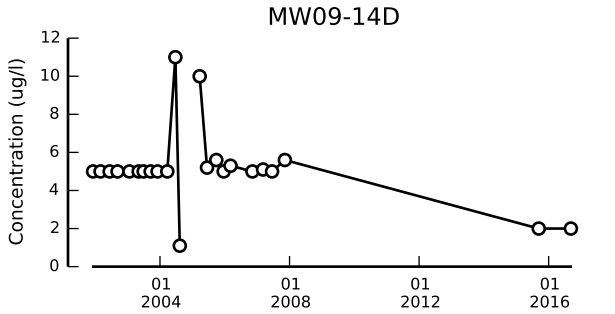
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

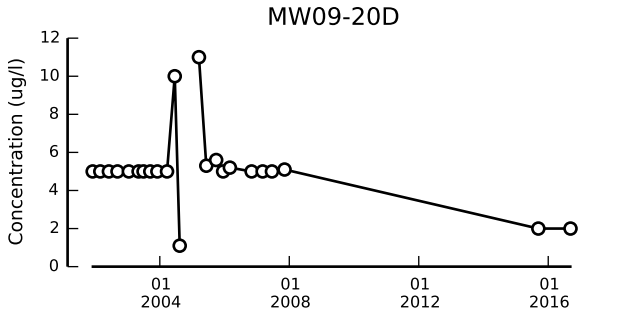


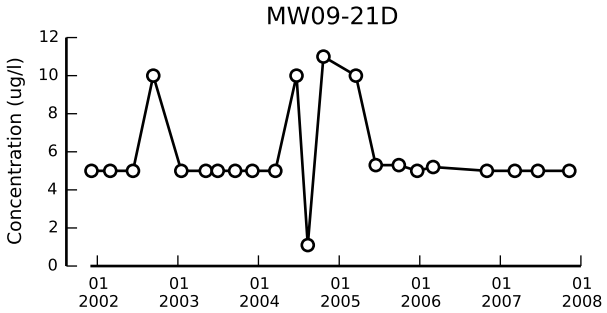


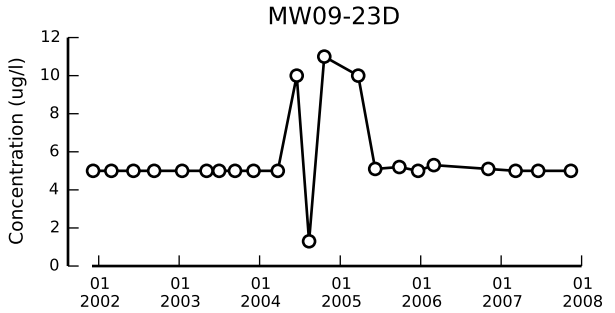


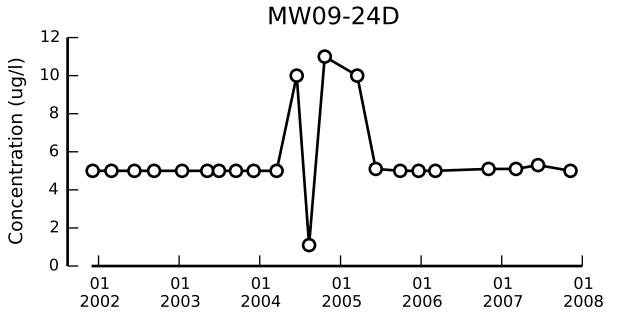


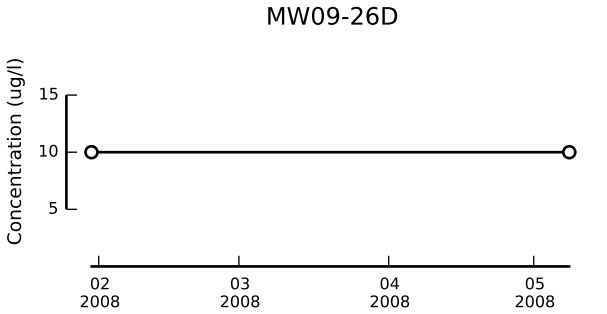






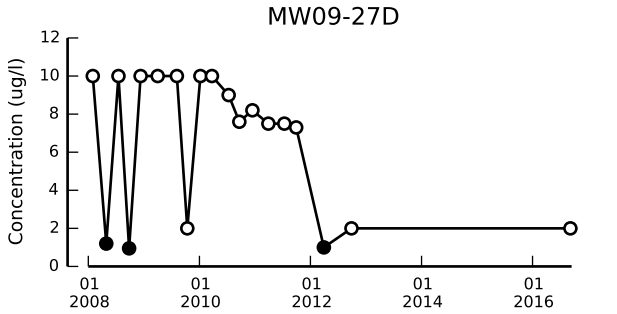






MW09-26DA

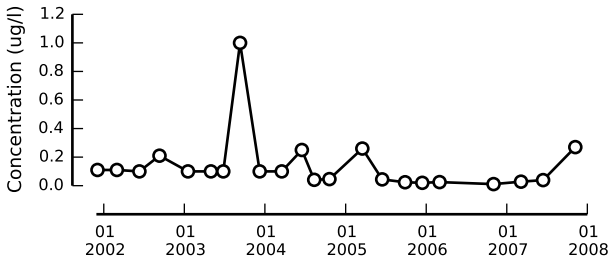
Sampled Once



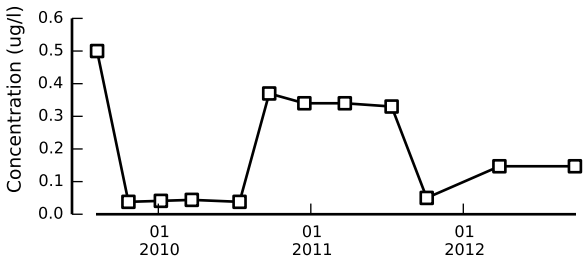
POLYCHLORINATED BIPHENYLS (PCBS) in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 124 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

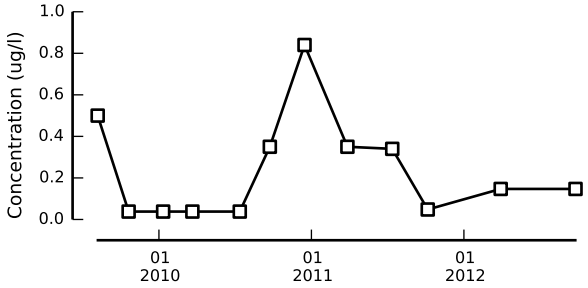
MW09-03D



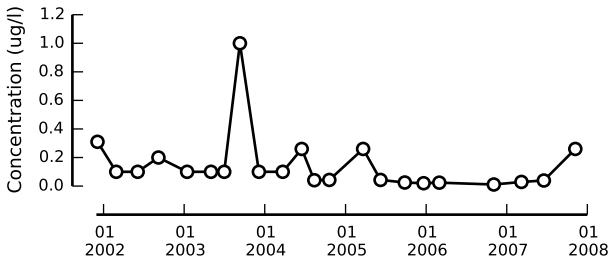
MW09-08D



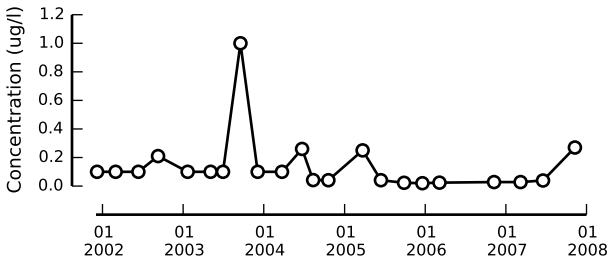
MW09-09D



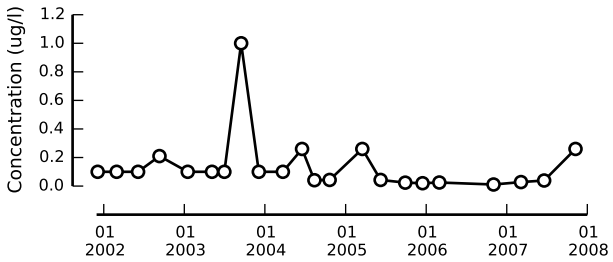
MW09-10D



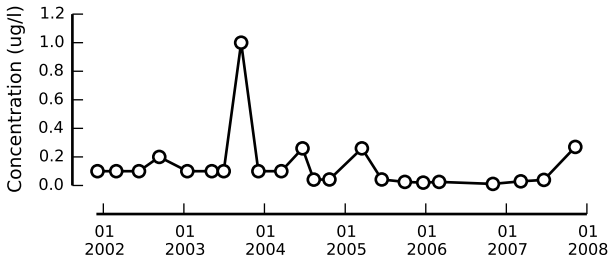
MW09-14D



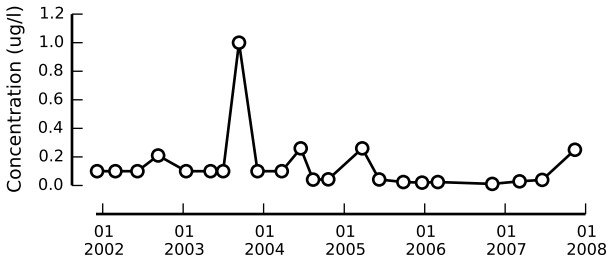
MW09-20D



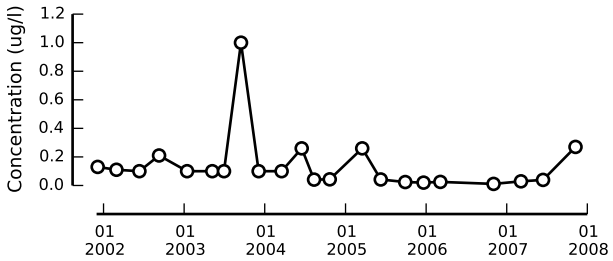
MW09-21D



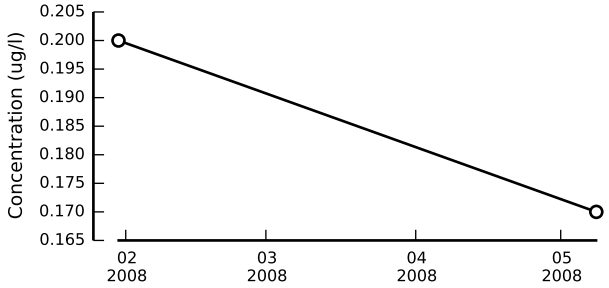
MW09-23D



MW09-24D



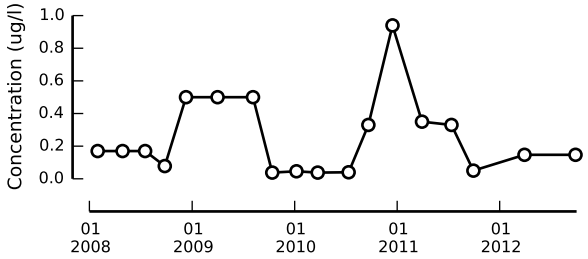
MW09-26D



MW09-26DA

Not Sampled

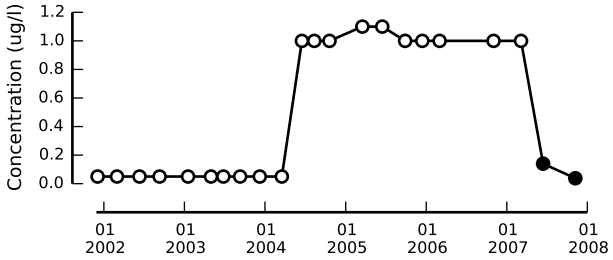
MW09-27D



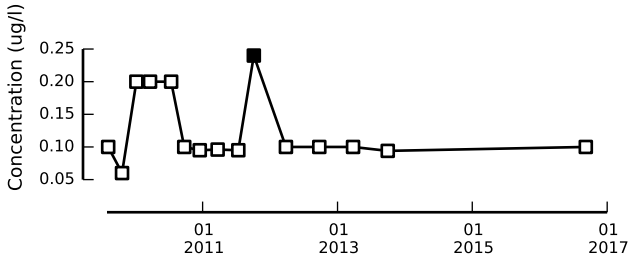
PYRENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 125 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

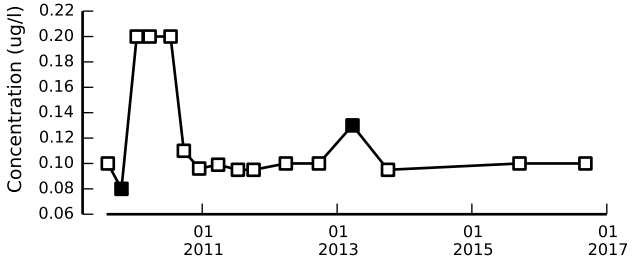
MW09-03D



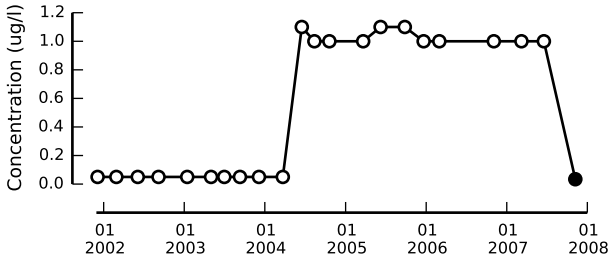
MW09-08D



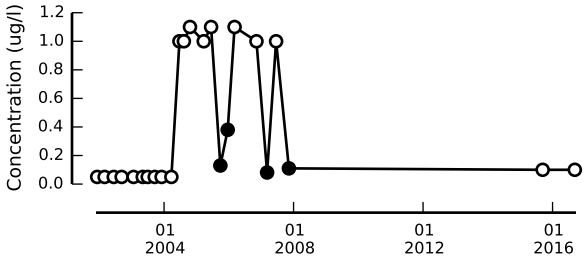
MW09-09D



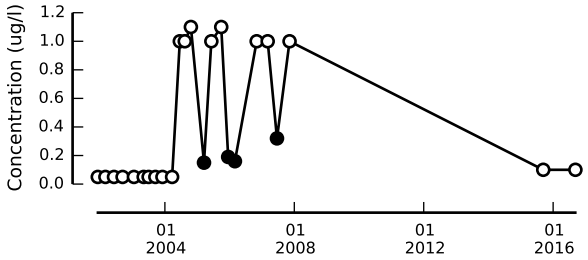
MW09-10D



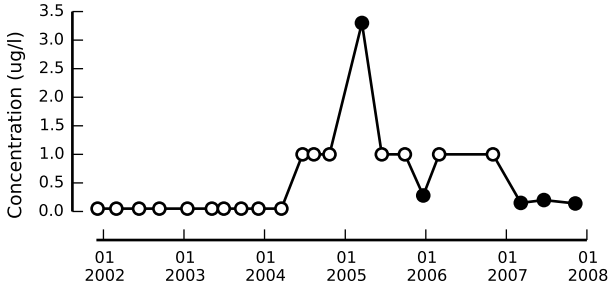
MW09-14D



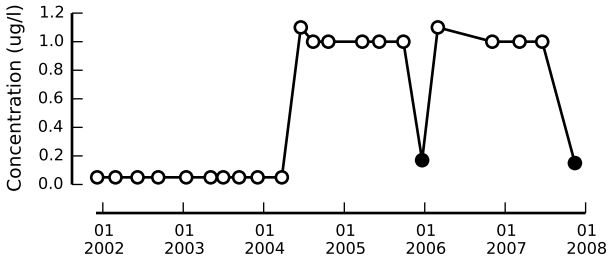
MW09-20D



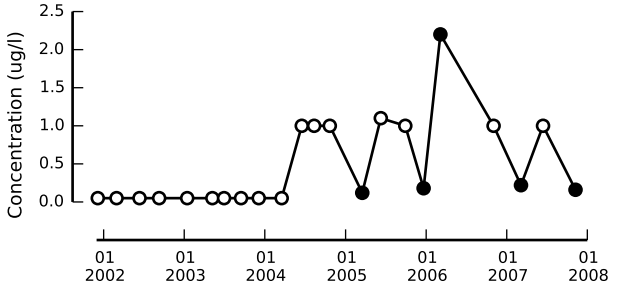
MW09-21D



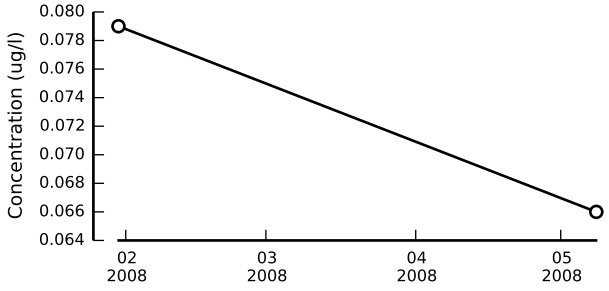
MW09-23D



MW09-24D



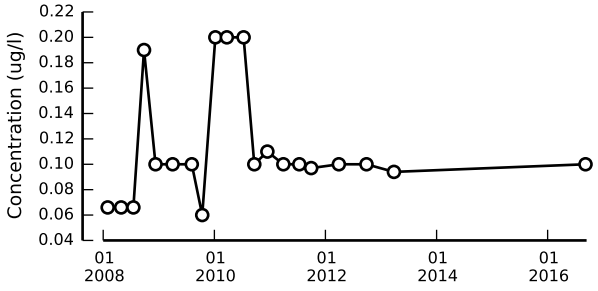
MW09-26D



MW09-26DA

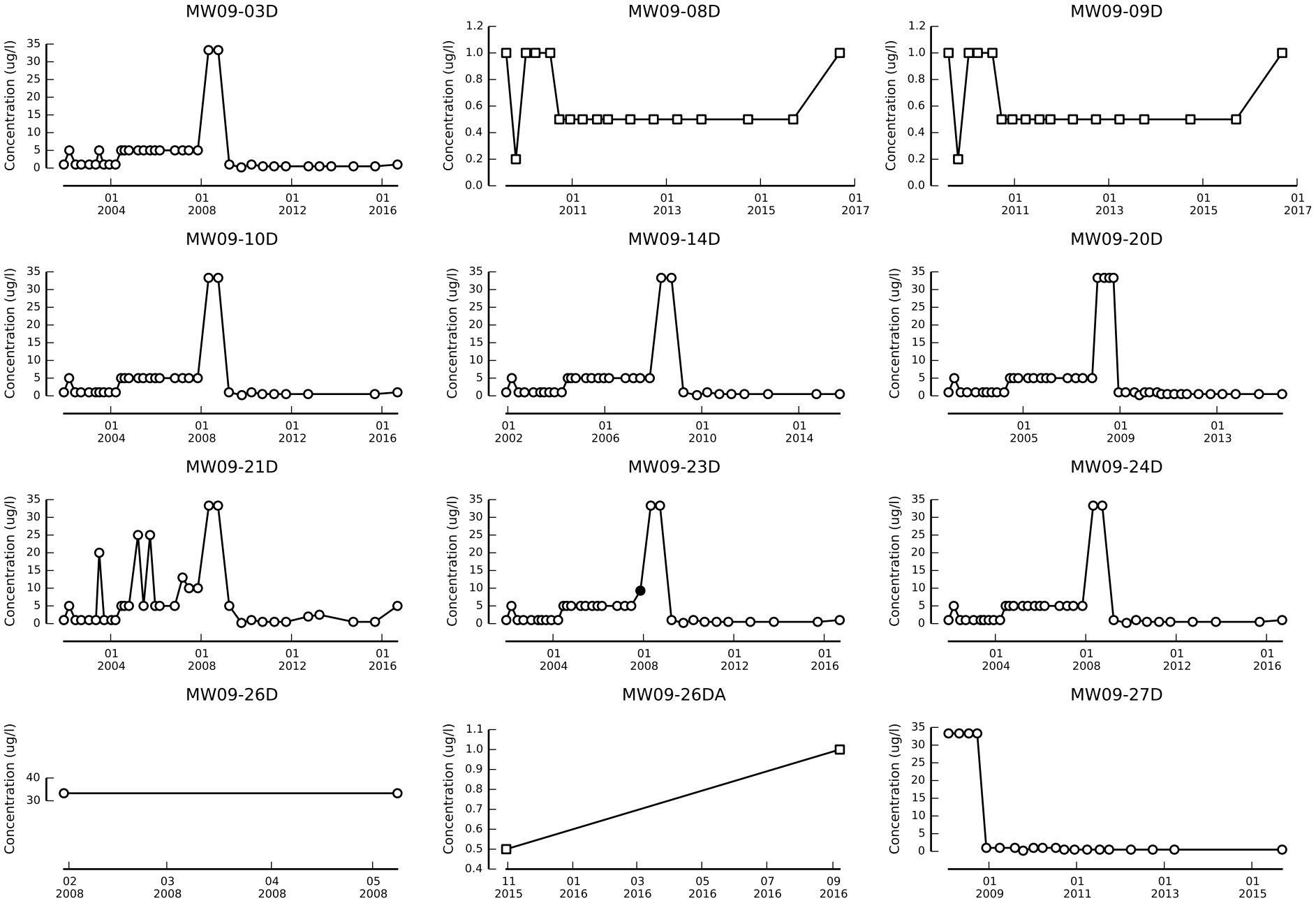
Sampled Once

MW09-27D



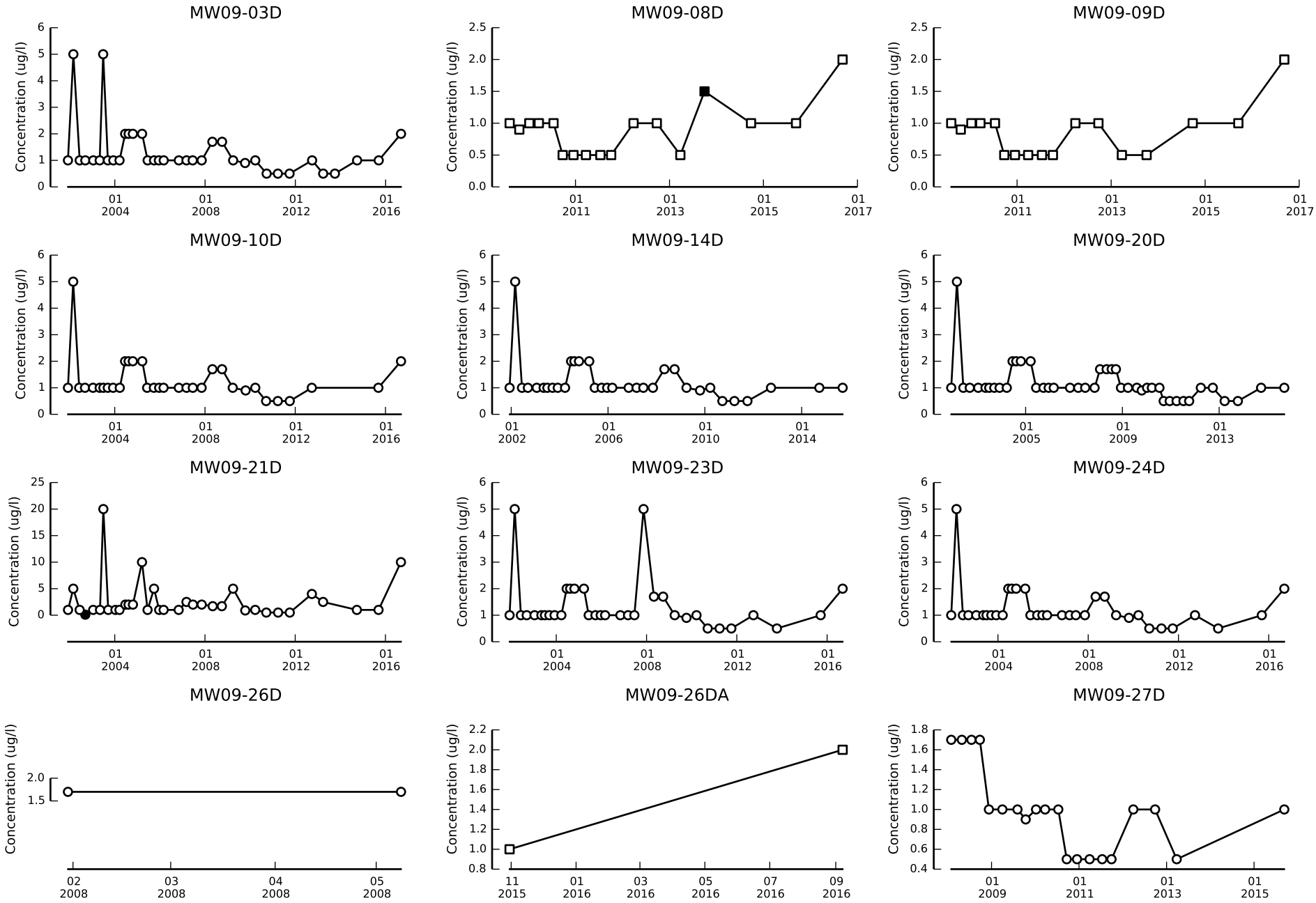
STYRENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 126 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



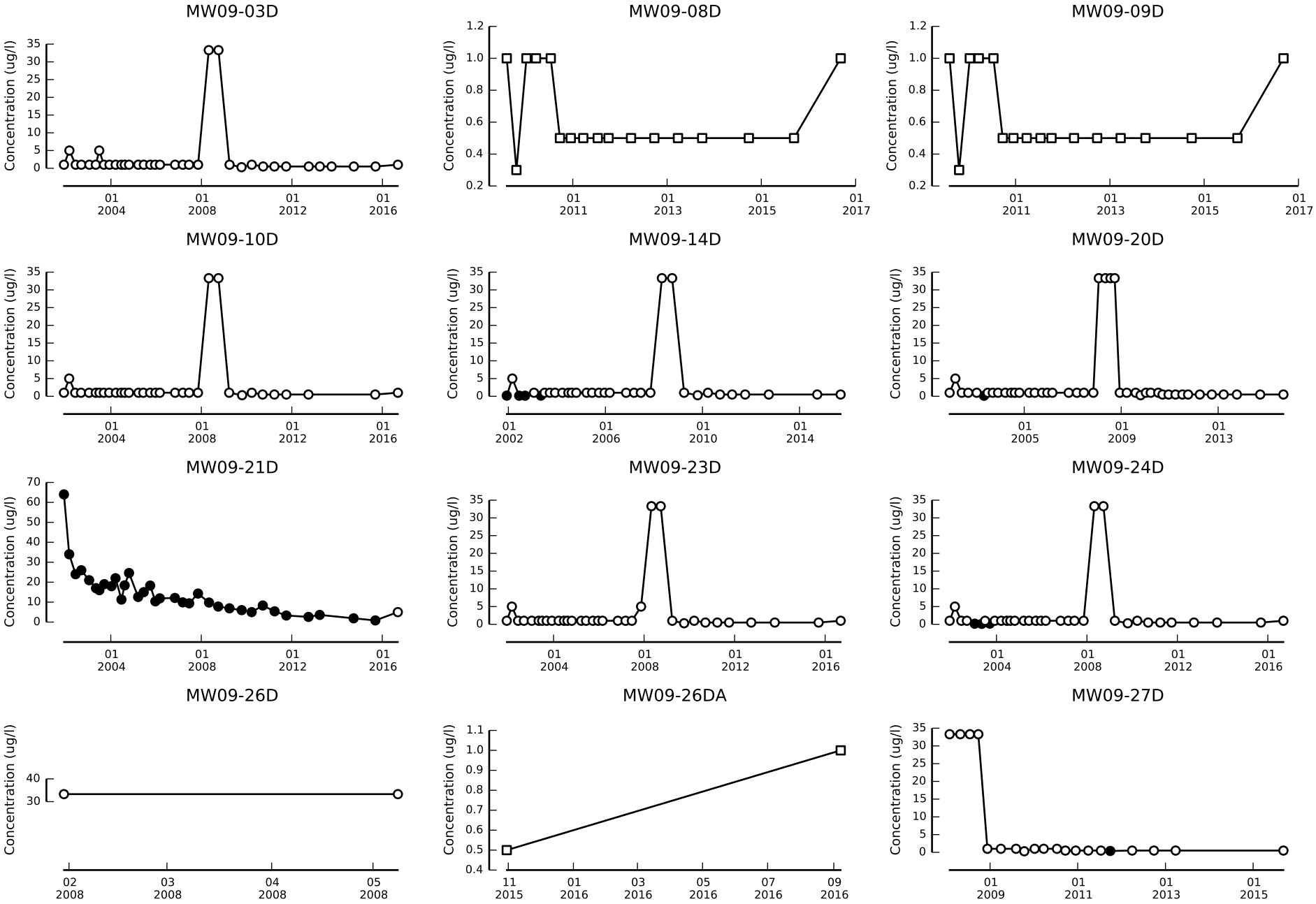
TETRACHLOROETHENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 127 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

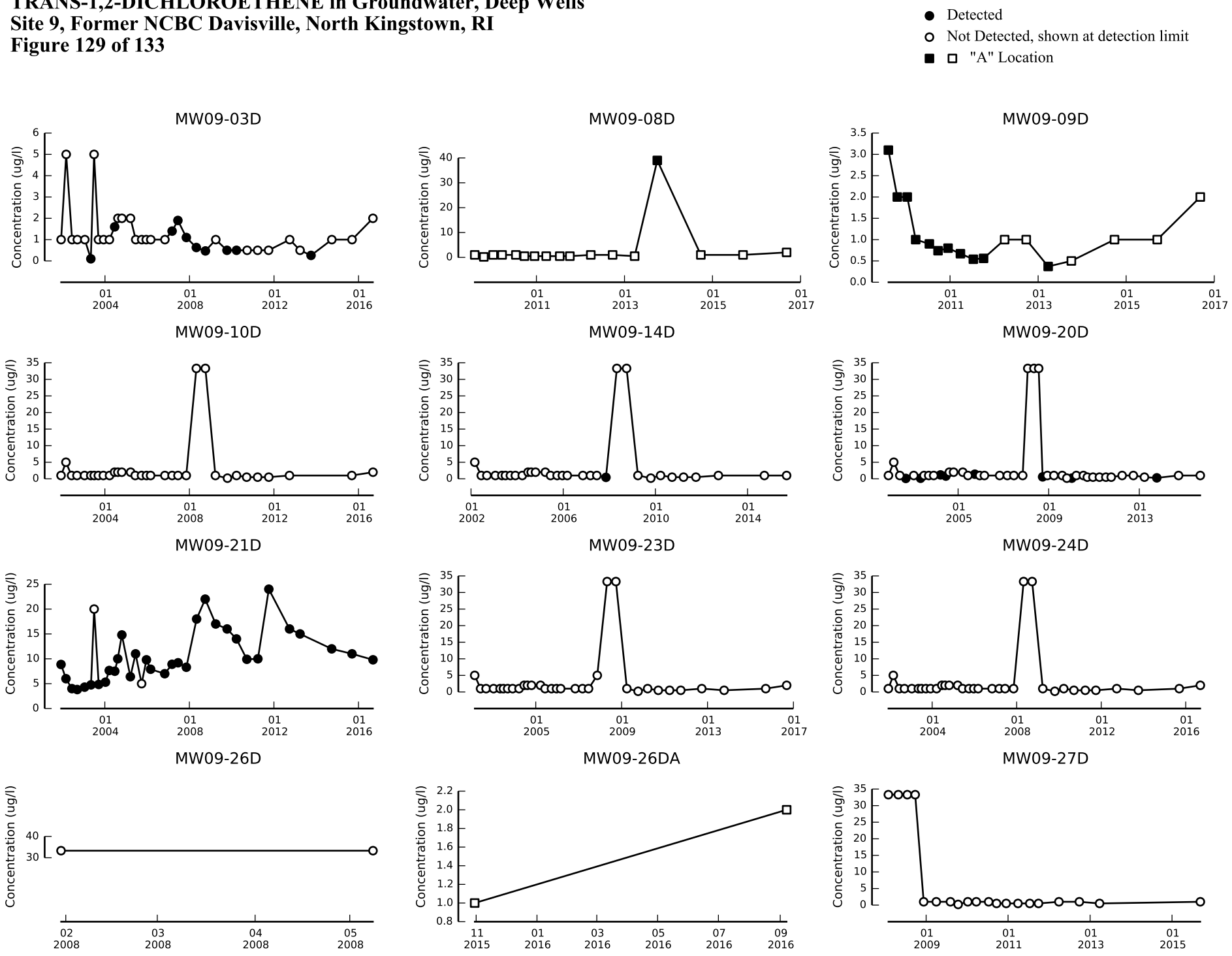


TOLUENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 128 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

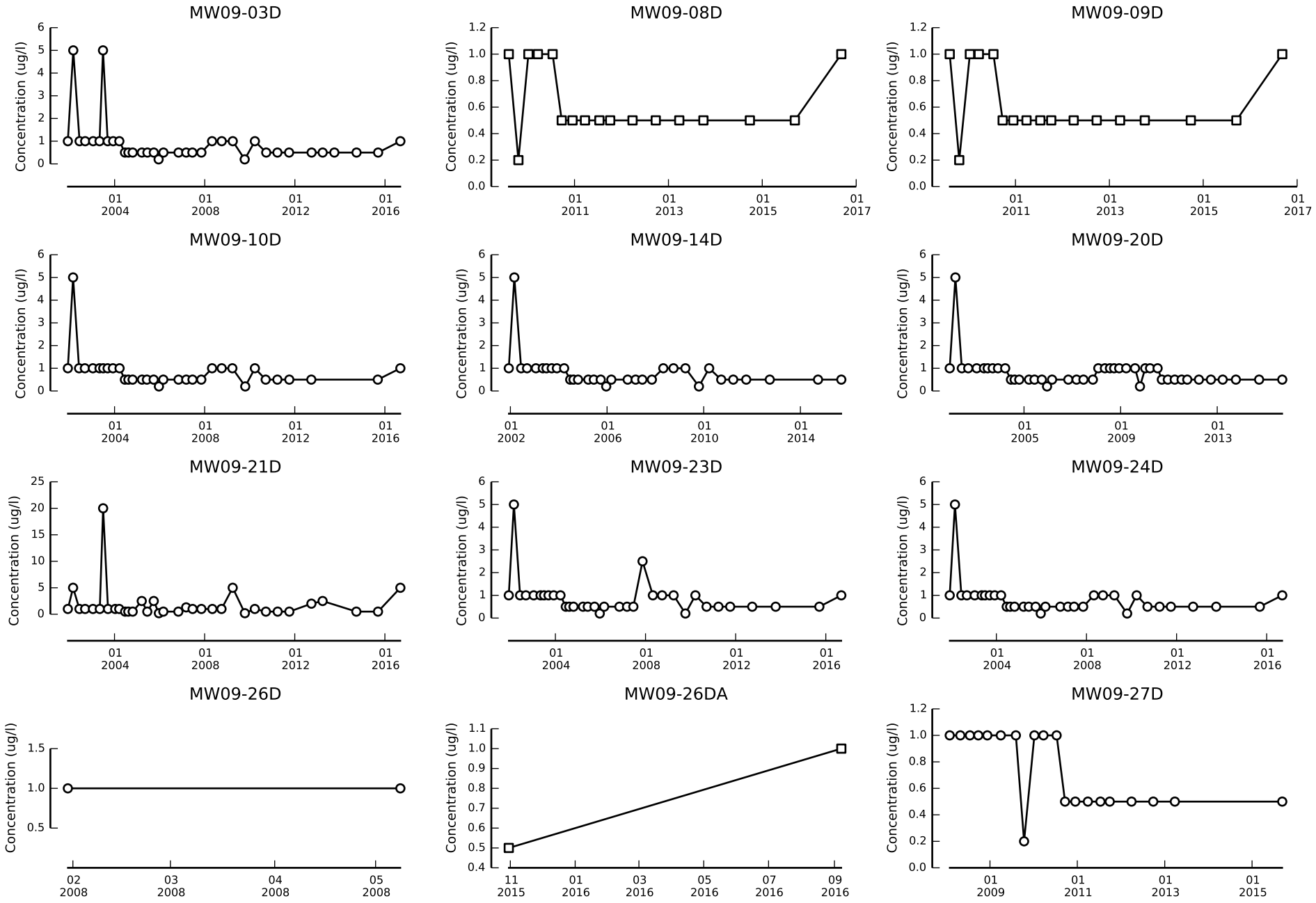


TRANS-1,2-DICHLOROETHENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 129 of 133



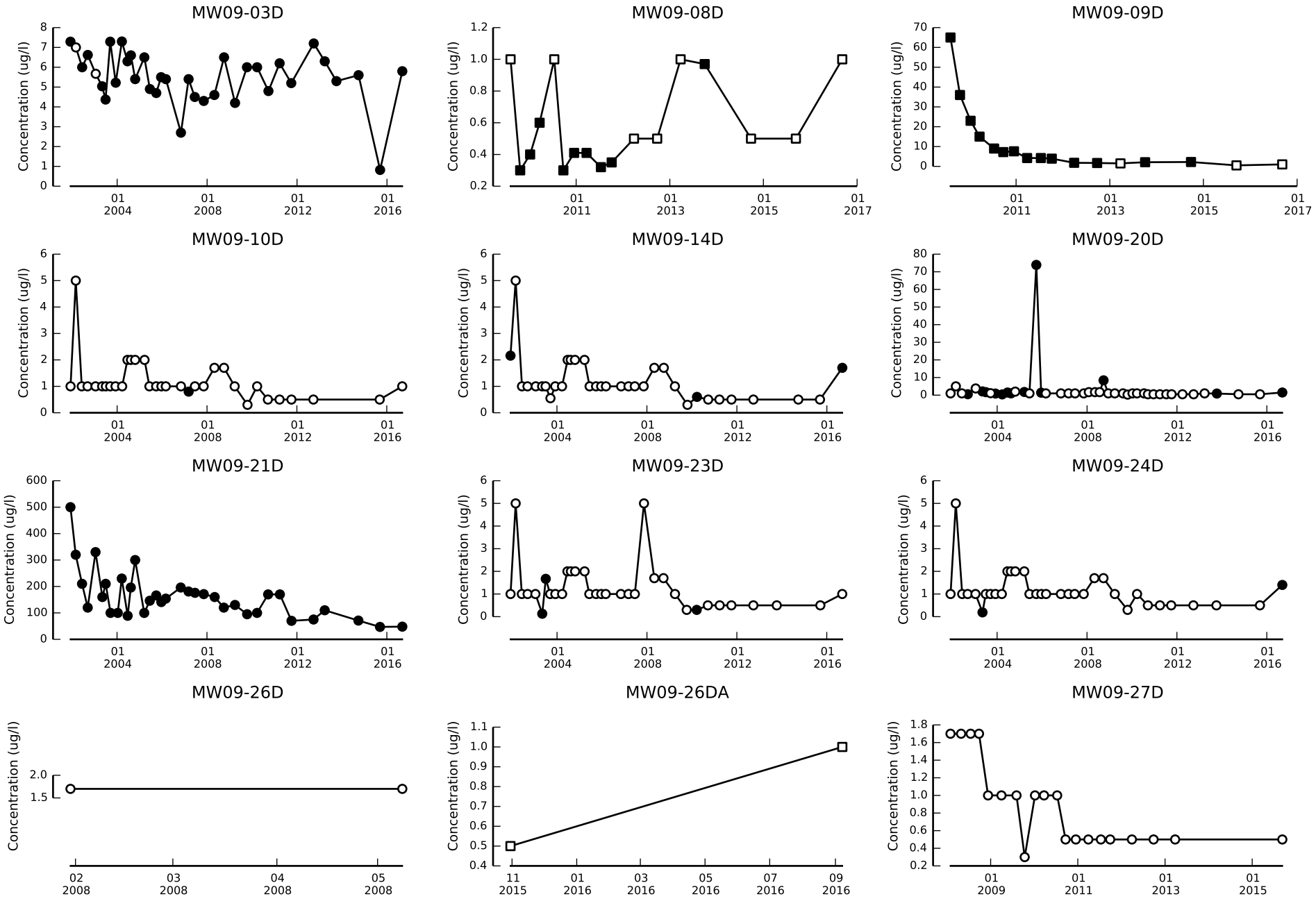
TRANS-1,3-DICHLOROPROPENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 130 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



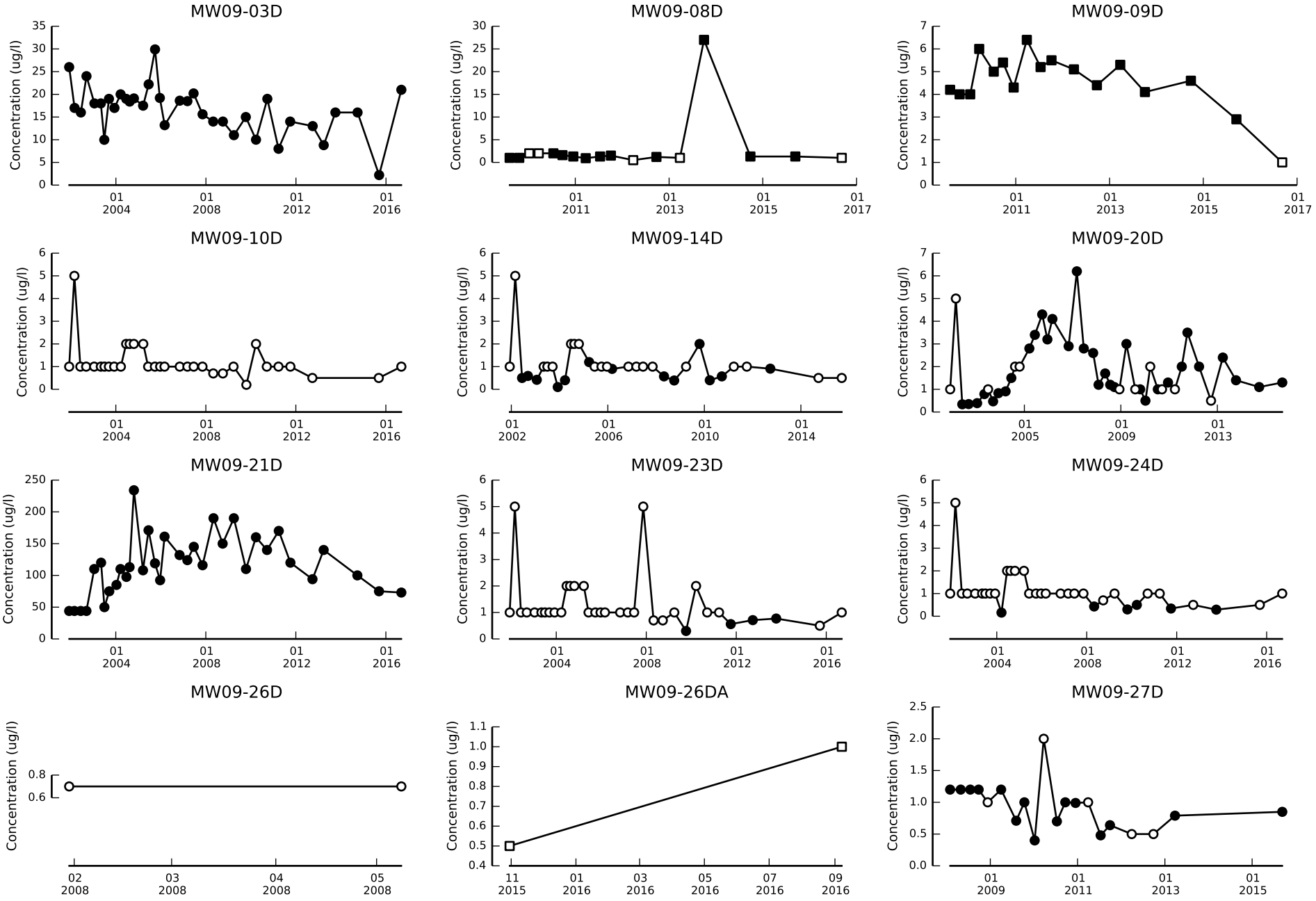
TRICHLOROETHENE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 131 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



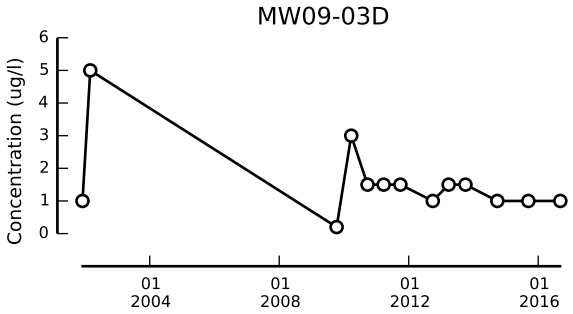
VINYL CHLORIDE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 132 of 133

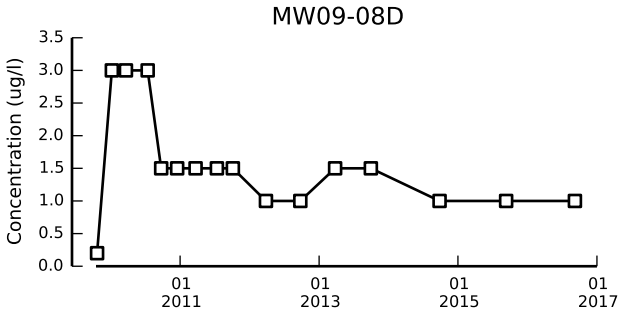
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

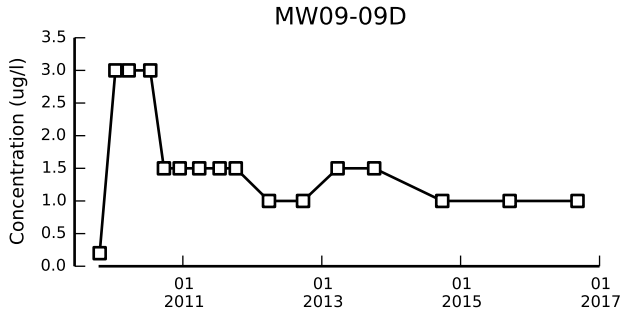


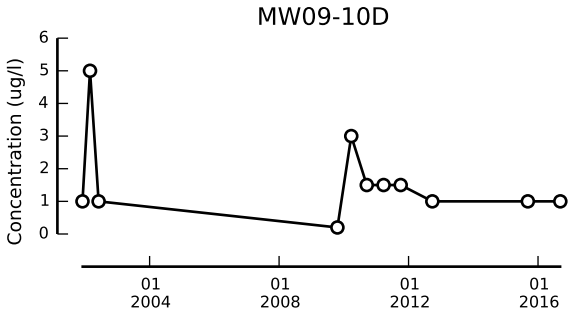
XYLENES, TOTAL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 133 of 133

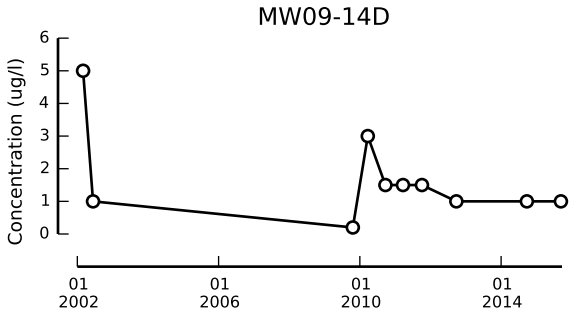
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

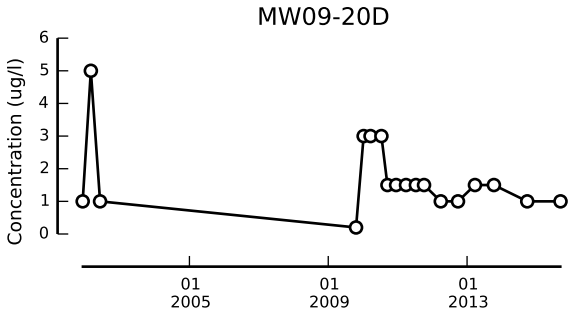


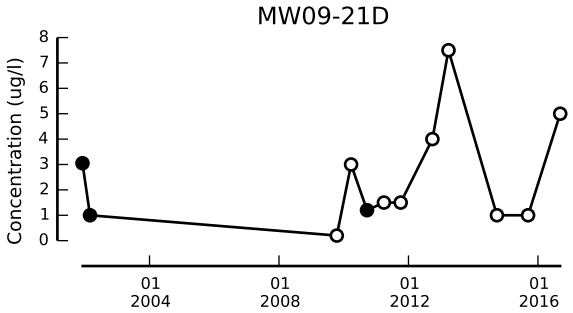


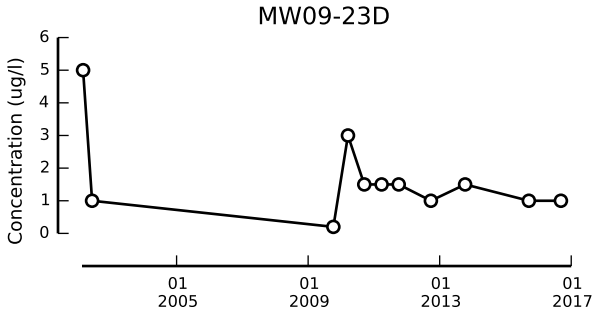


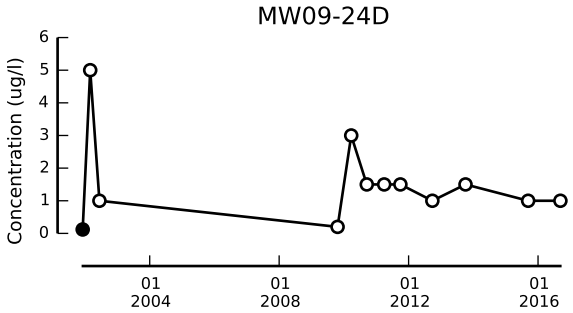


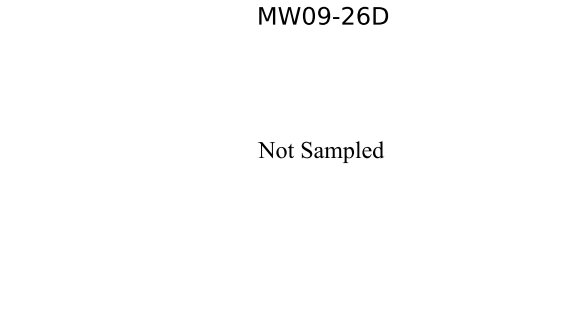




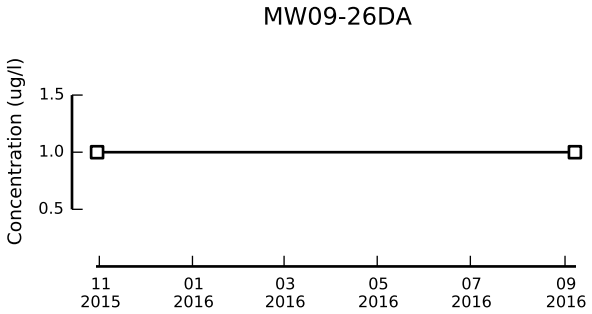


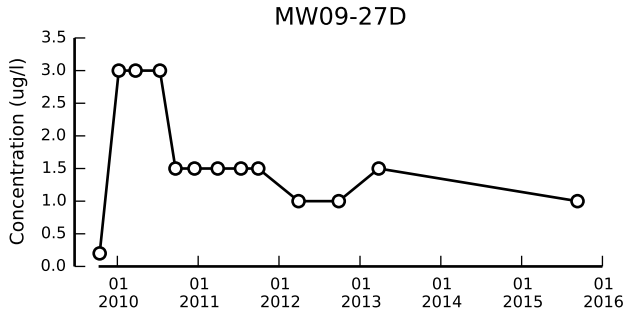






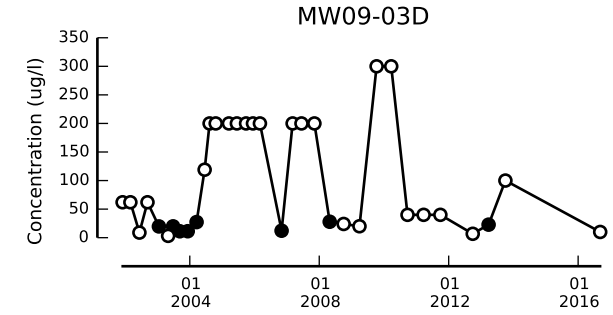
Not Sampled

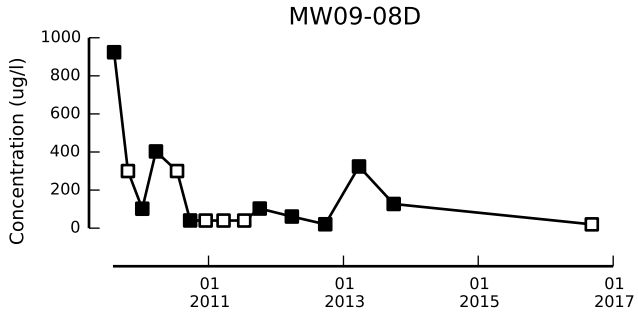


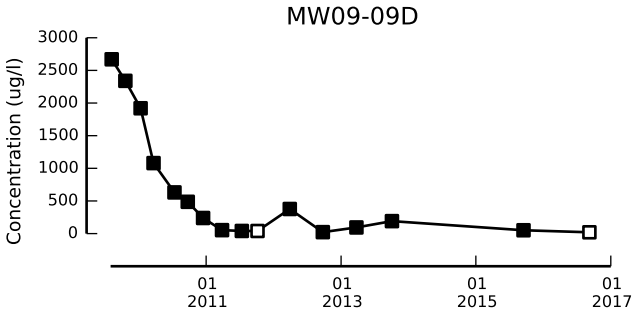


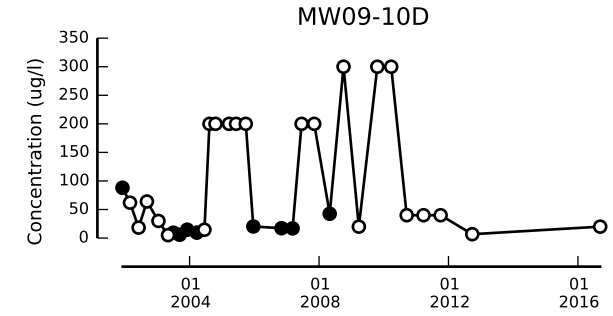
ALUMINUM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 22

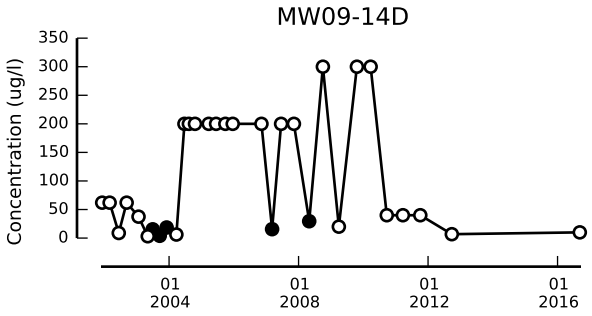
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

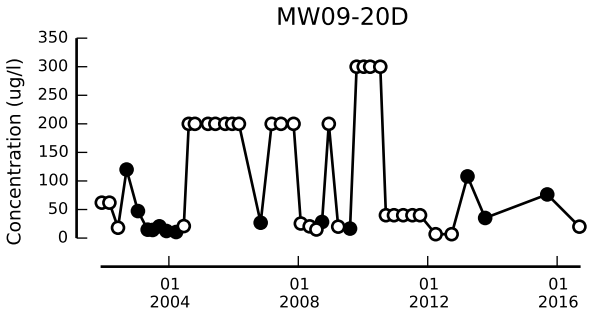


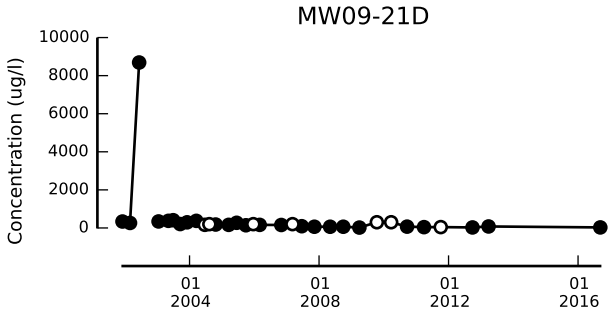


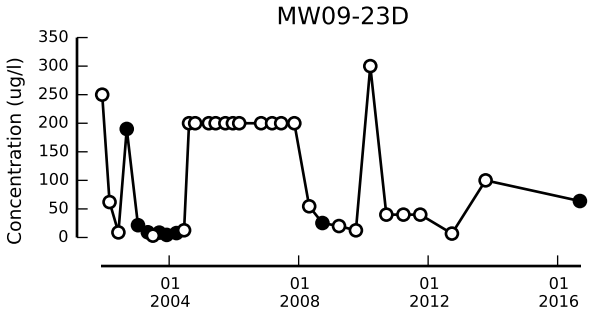


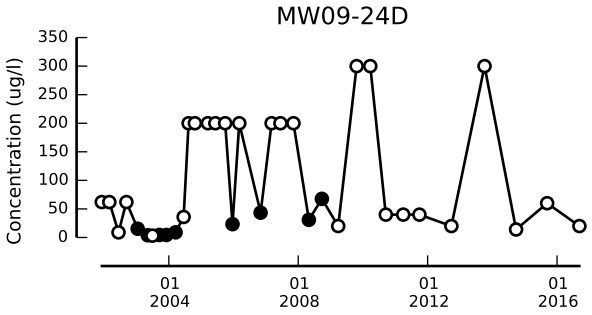


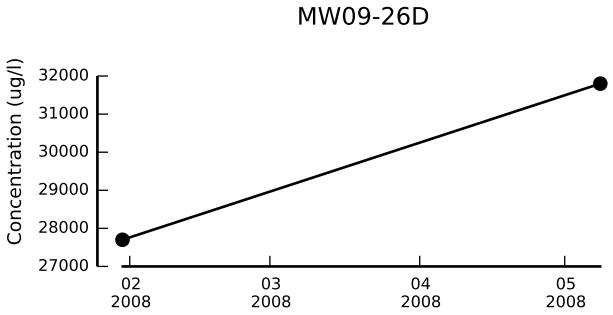






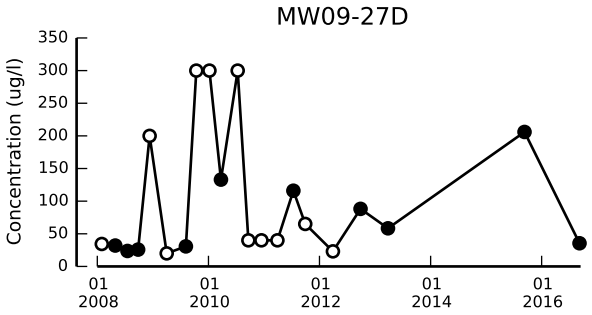






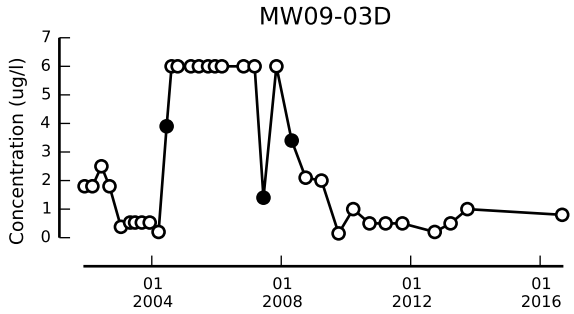
MW09-26DA

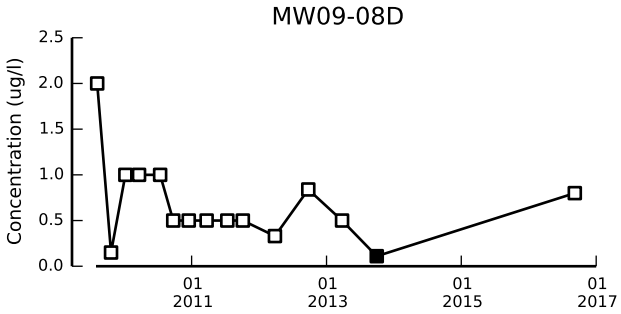
Sampled Once

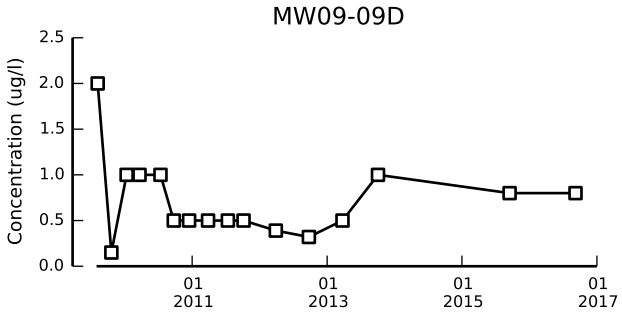


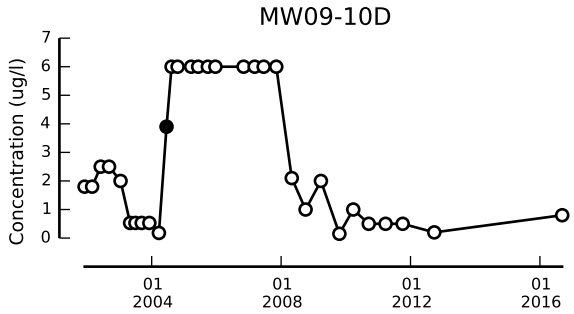
ANTIMONY in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 22

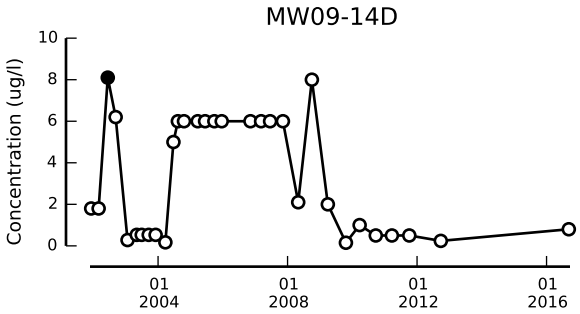
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

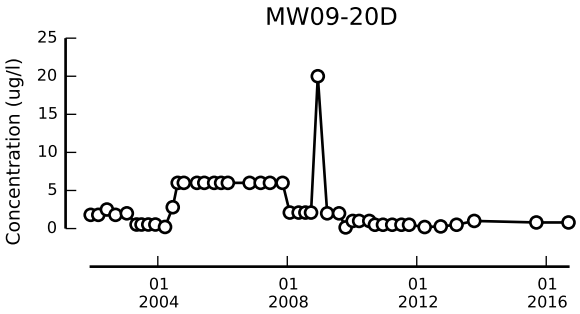


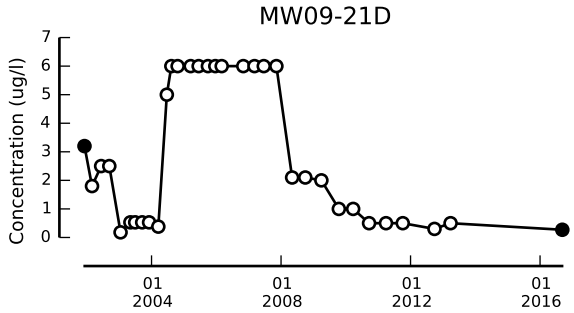


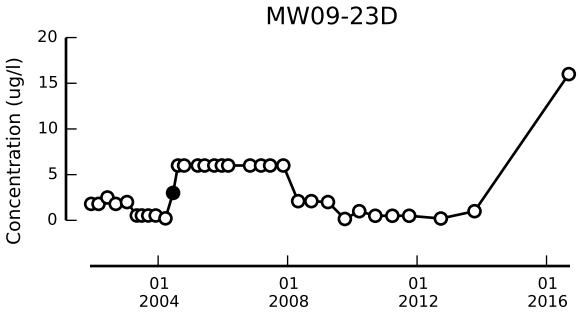


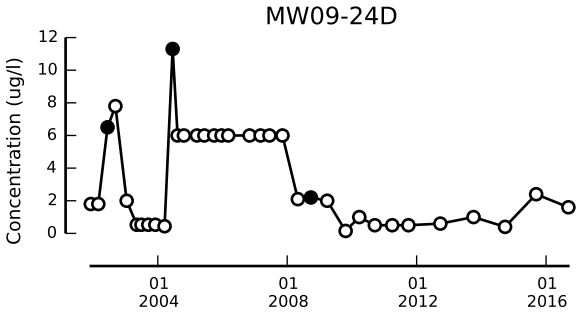


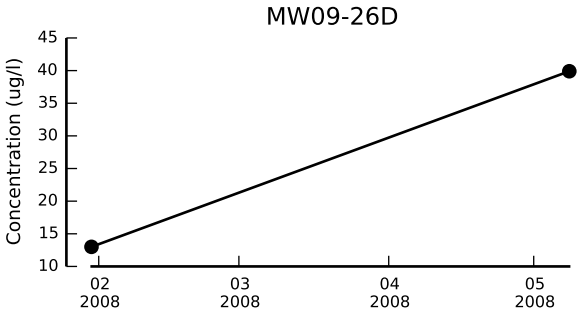






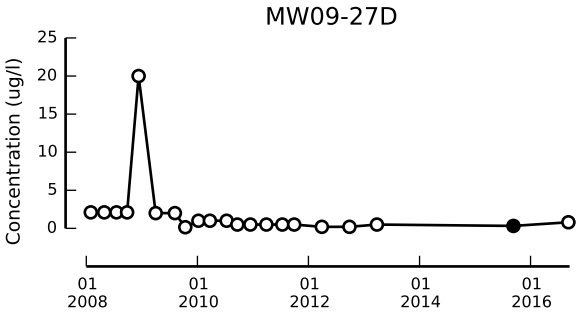






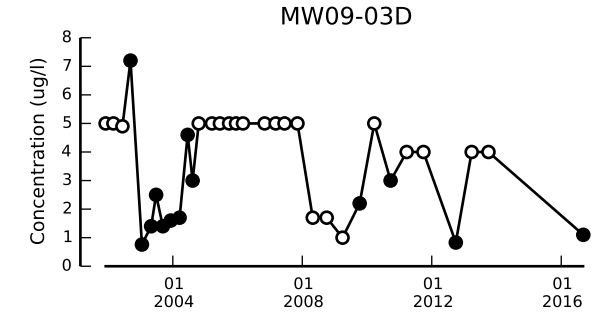
MW09-26DA

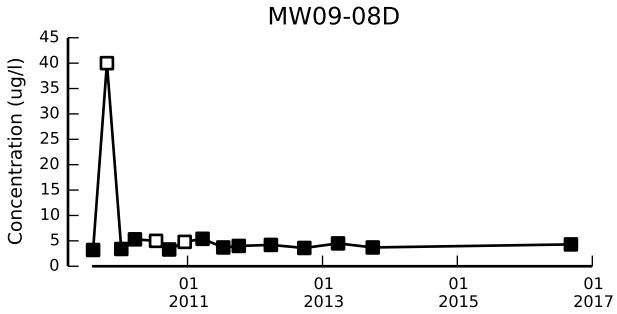
Sampled Once

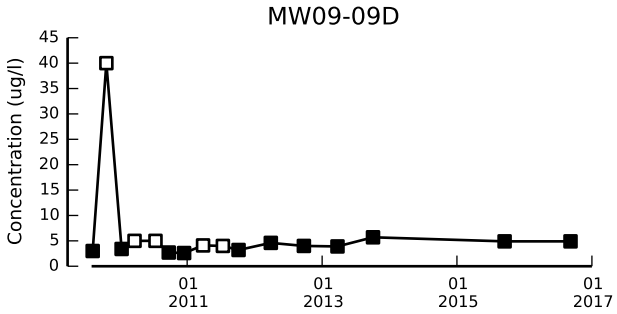


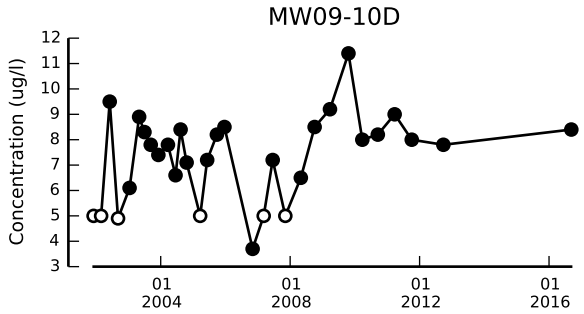
ARSENIC in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 22

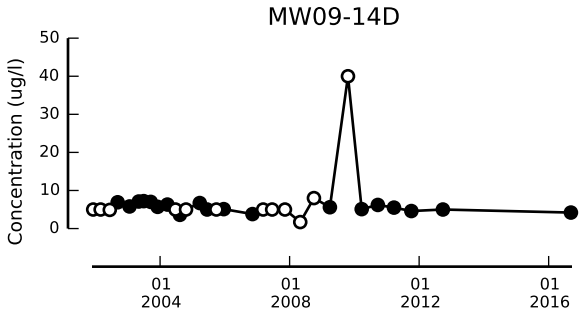
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

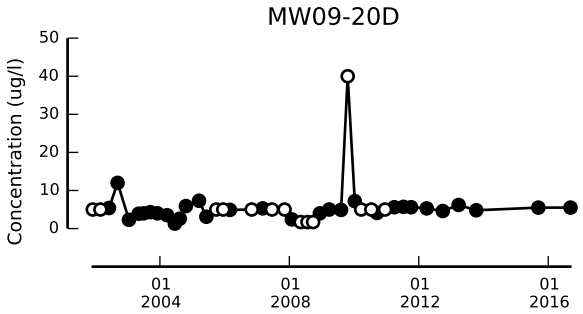


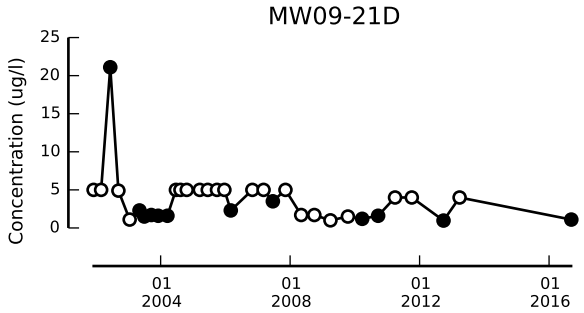


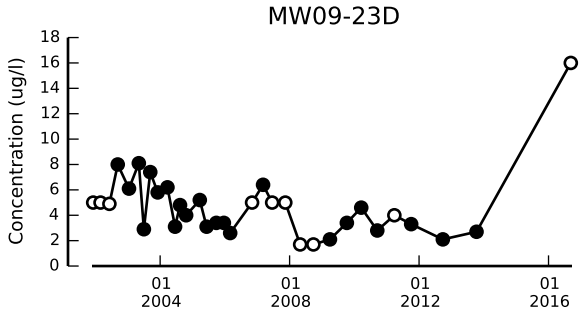


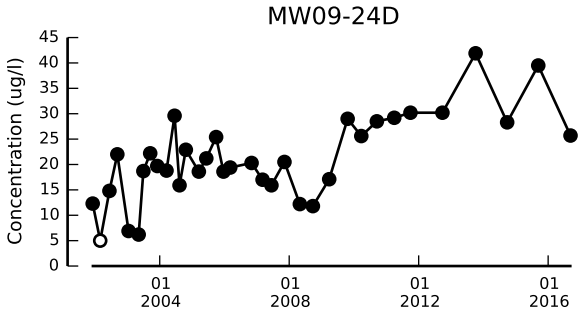


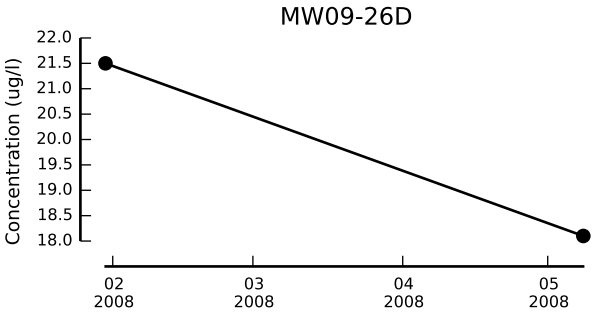






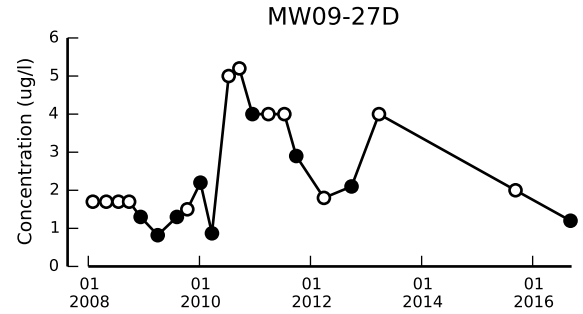






MW09-26DA

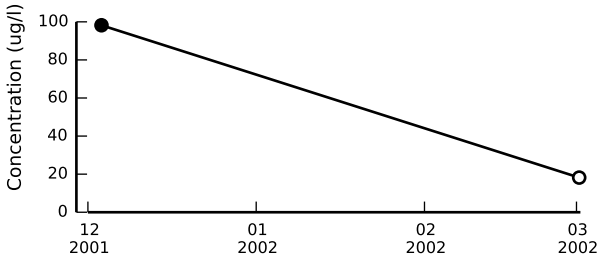
Sampled Once



BARIUM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D



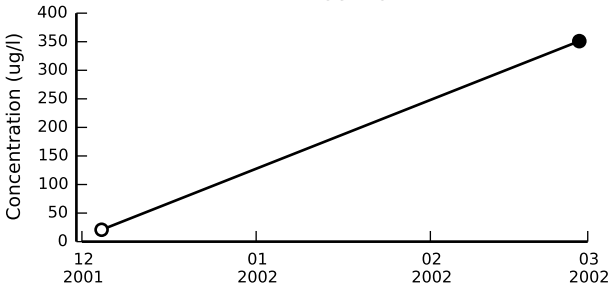
MW09-08D

Not Sampled

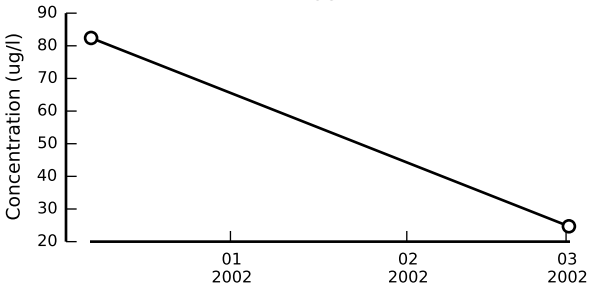
MW09-09D

Not Sampled

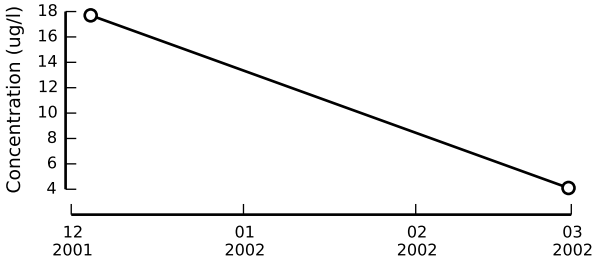
MW09-10D



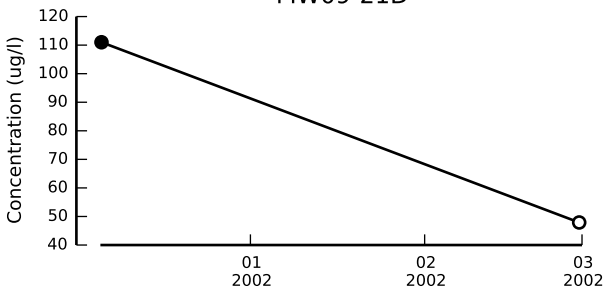
MW09-14D



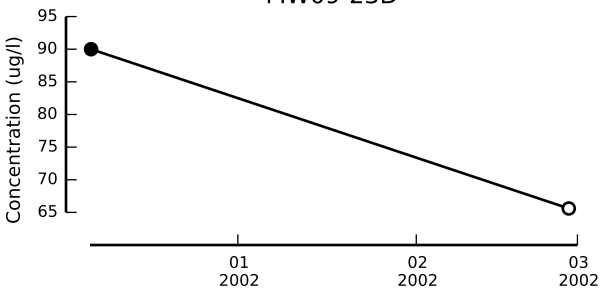
MW09-20D



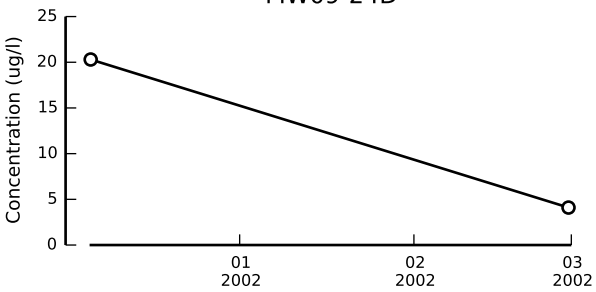
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

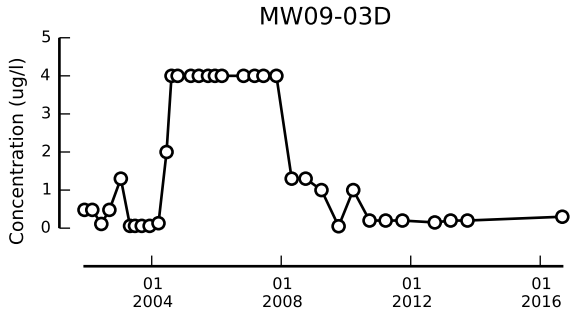
Not Sampled

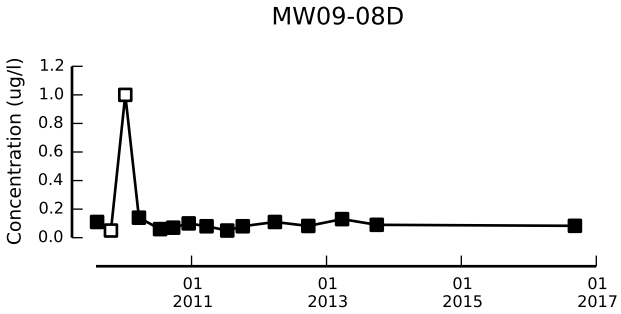
MW09-27D

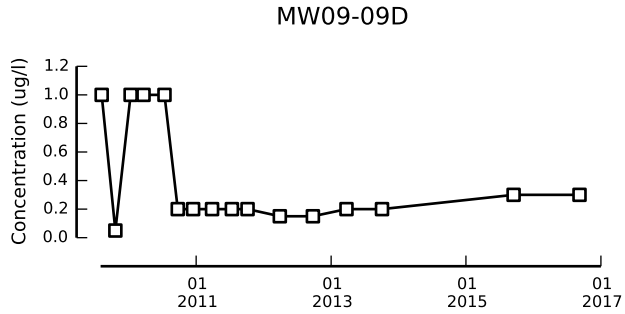
Not Sampled

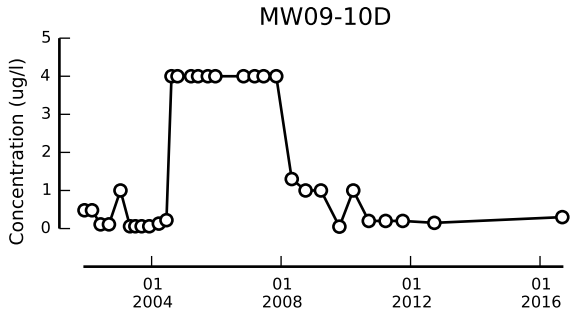
BERYLLIUM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 22

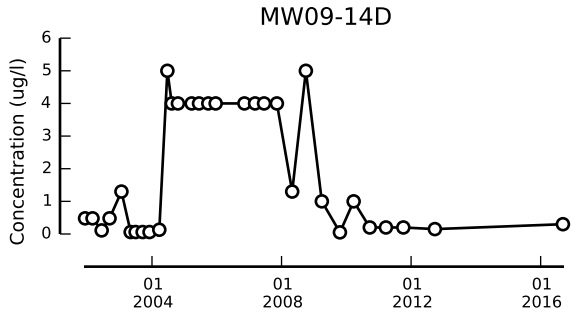
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

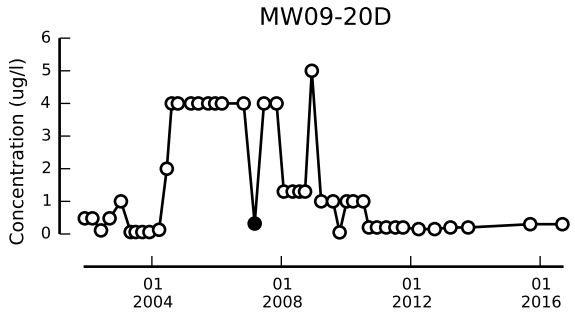


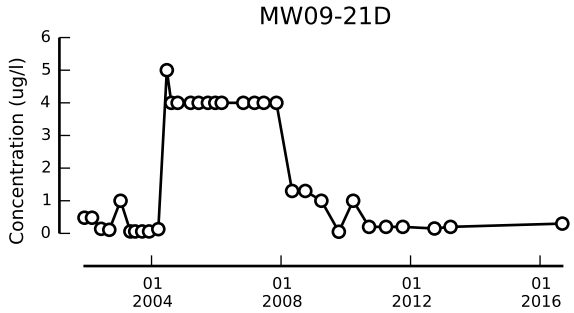


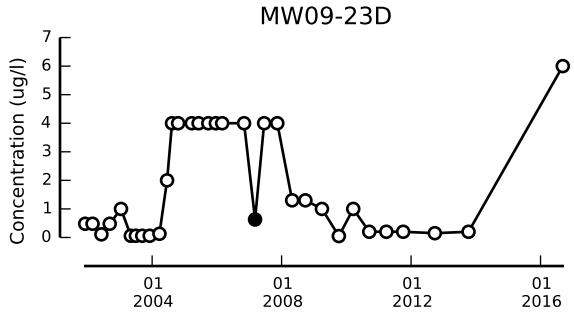


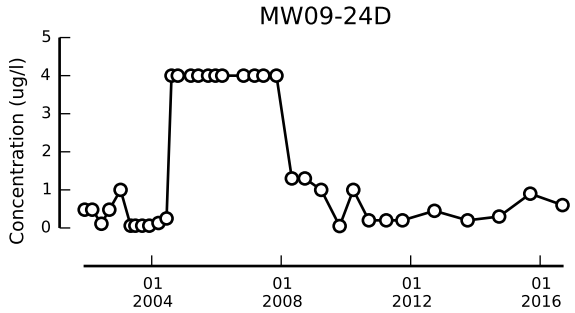


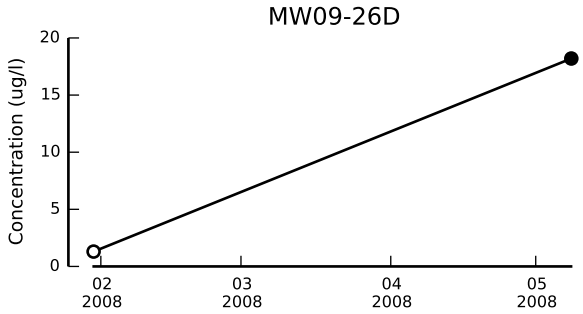






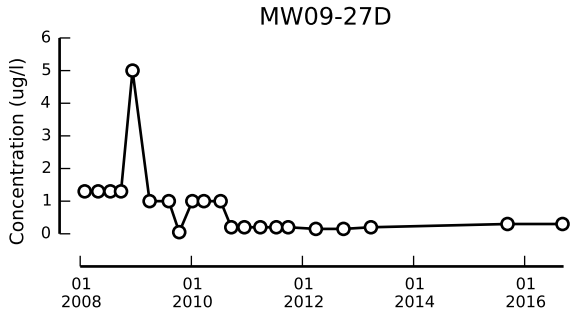






MW09-26DA

Sampled Once



CADMIUM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D

MW09-08D

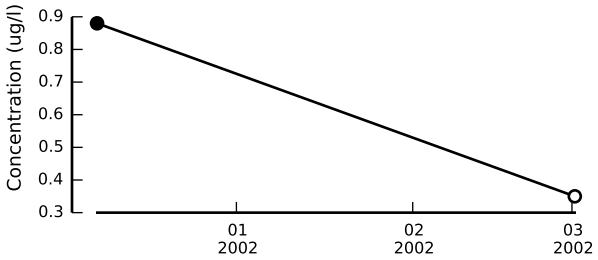
Not Sampled

MW09-09D

Not Sampled

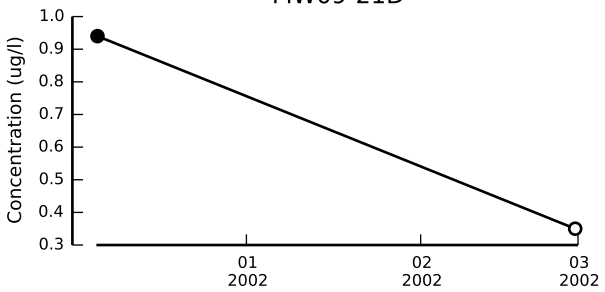
MW09-10D

MW09-14D

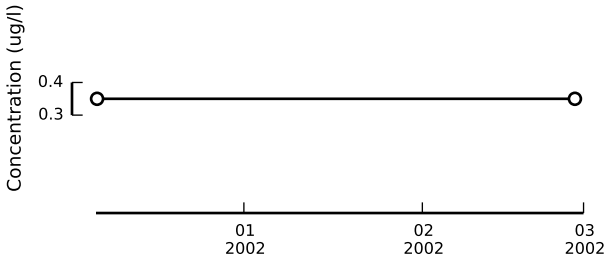


MW09-20D

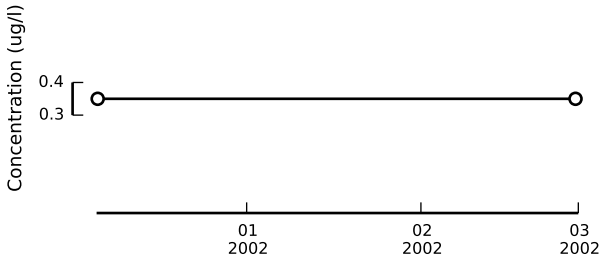
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

Not Sampled

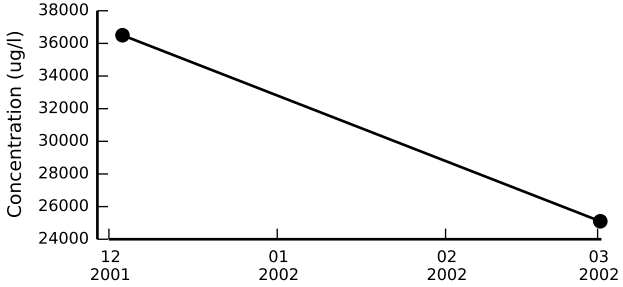
MW09-27D

Not Sampled

CALCIUM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D



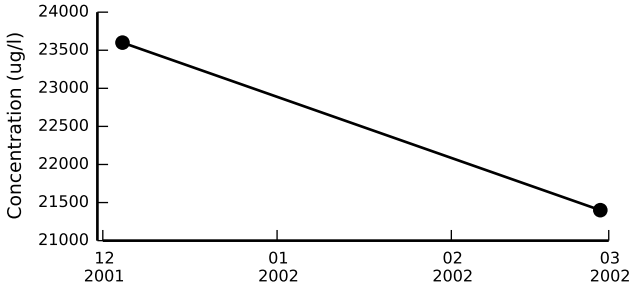
MW09-08D

Not Sampled

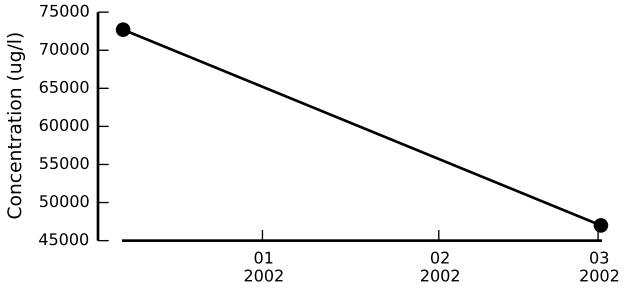
MW09-09D

Not Sampled

MW09-10D

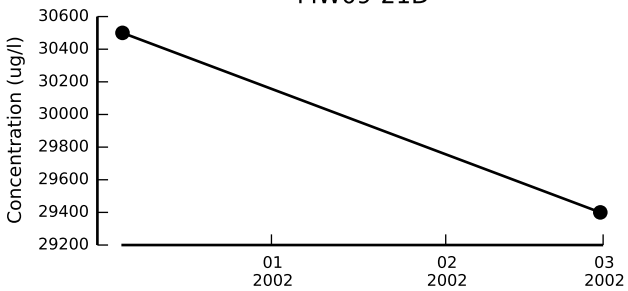


MW09-14D

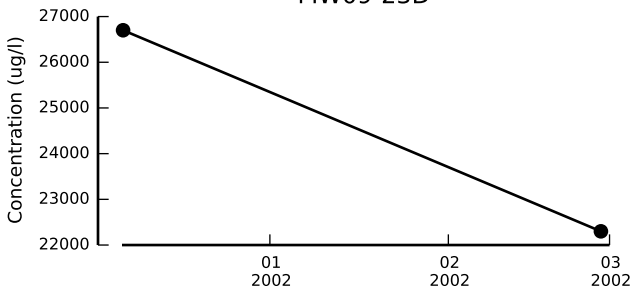


MW09-20D

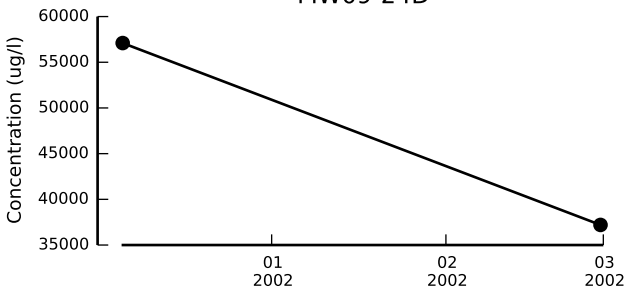
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

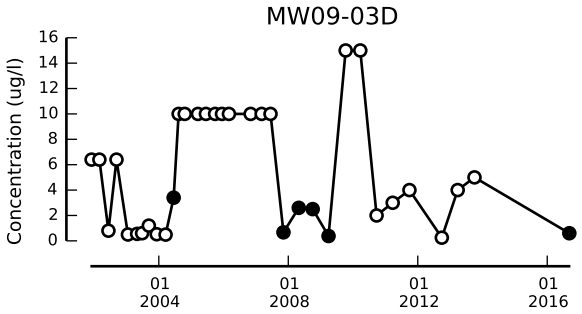
Not Sampled

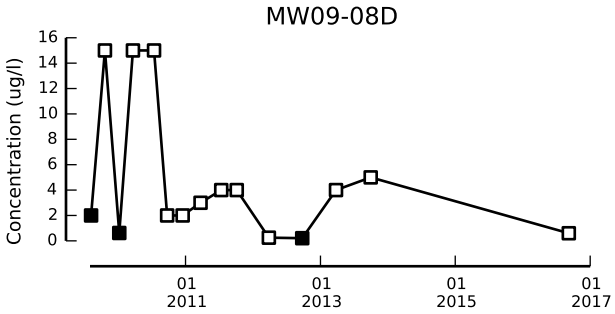
MW09-27D

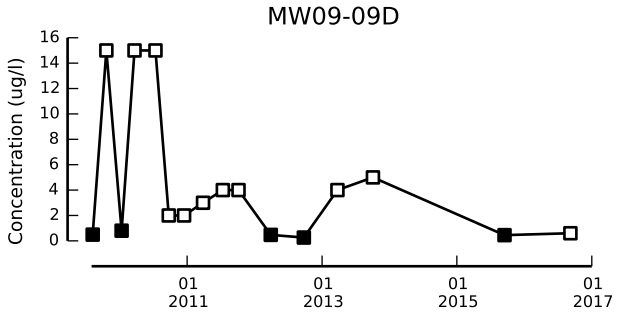
Not Sampled

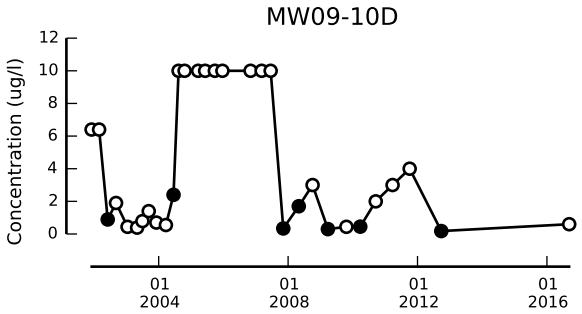
CHROMIUM, TOTAL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 22

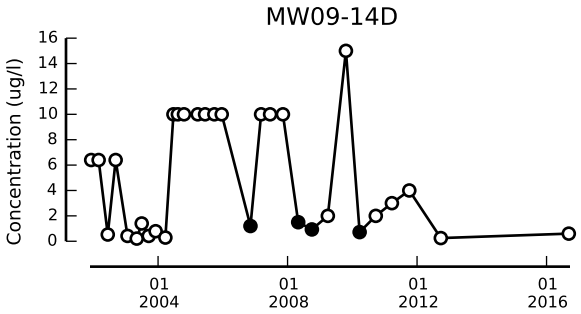
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

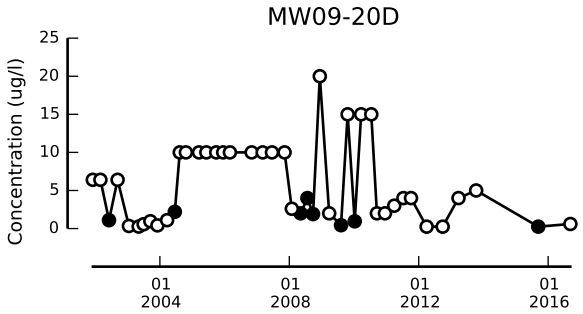


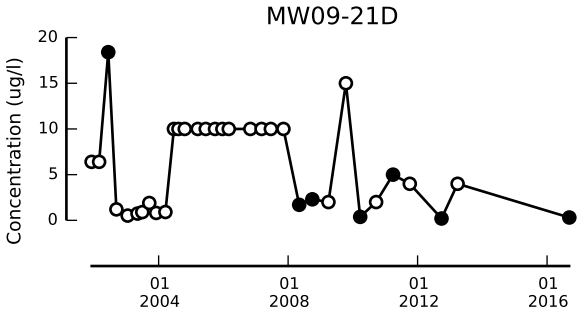


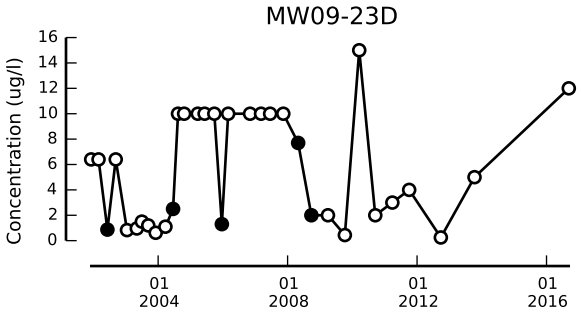


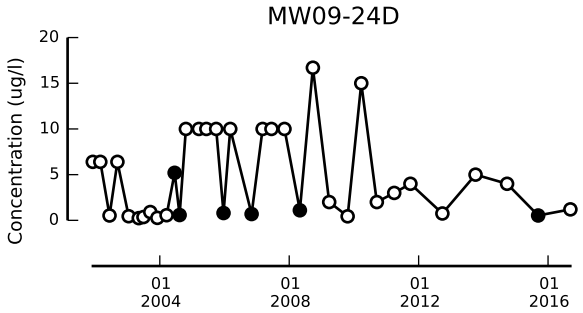


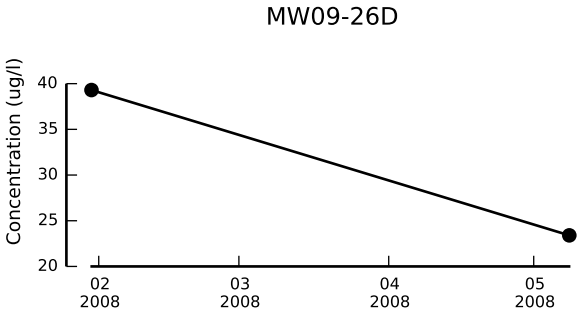






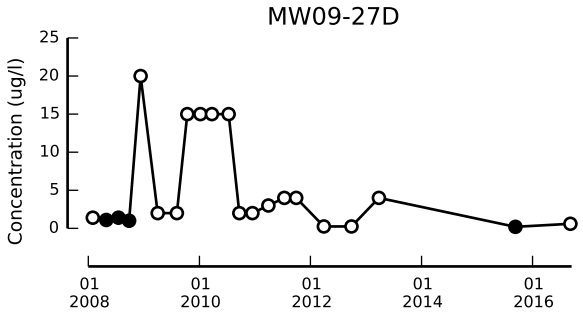






MW09-26DA

Sampled Once



COBALT in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D

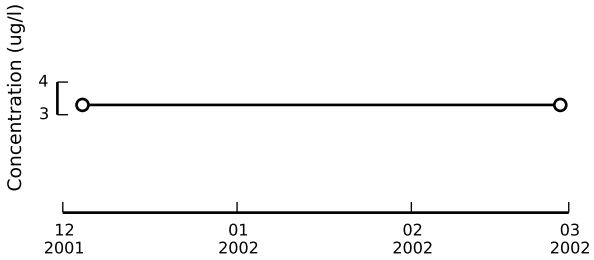
MW09-08D

Not Sampled

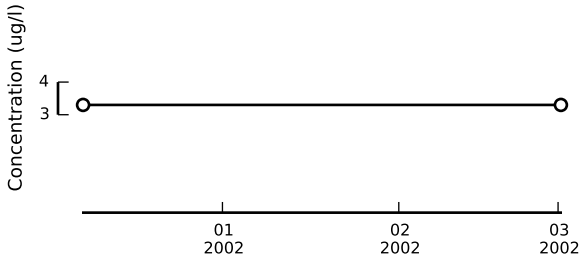
MW09-09D

Not Sampled

MW09-10D

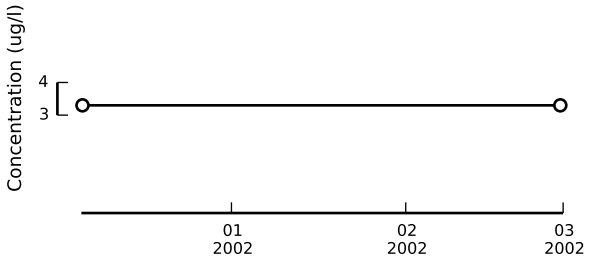


MW09-14D

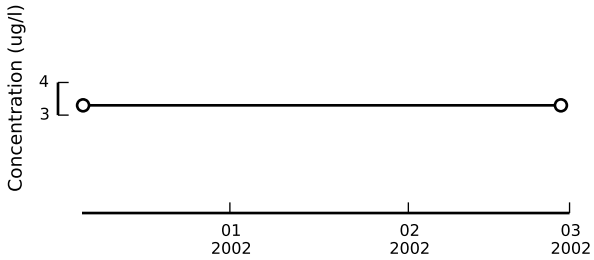


MW09-20D

MW09-21D



MW09-23D



MW09-24D

MW09-26D

Not Sampled

MW09-26DA

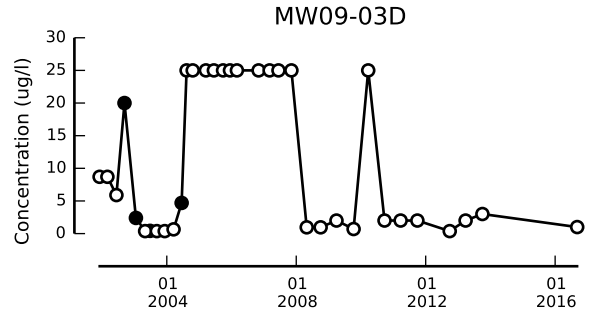
Not Sampled

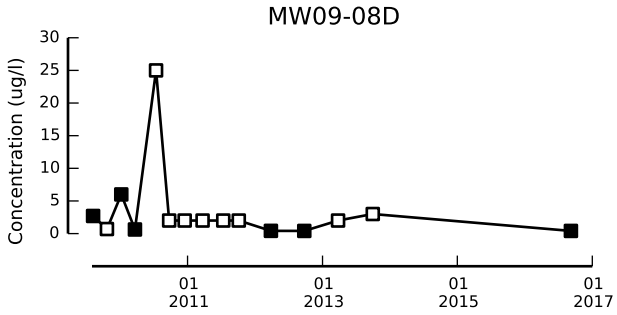
MW09-27D

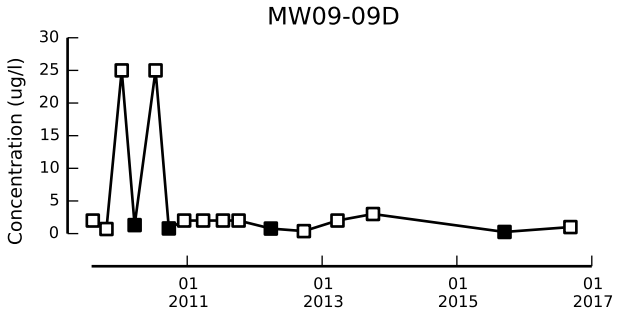
Not Sampled

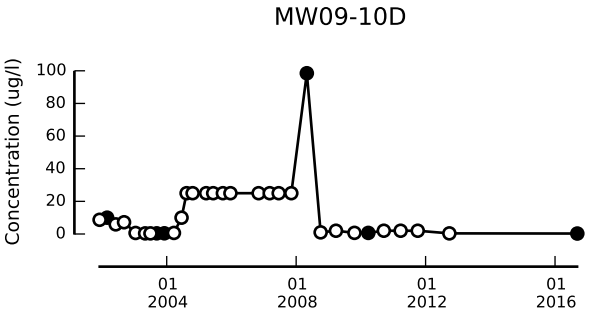
COPPER in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 22

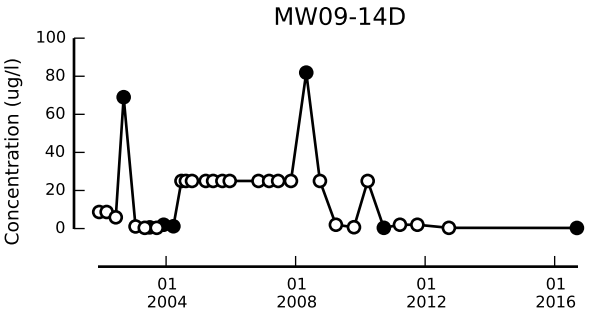
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

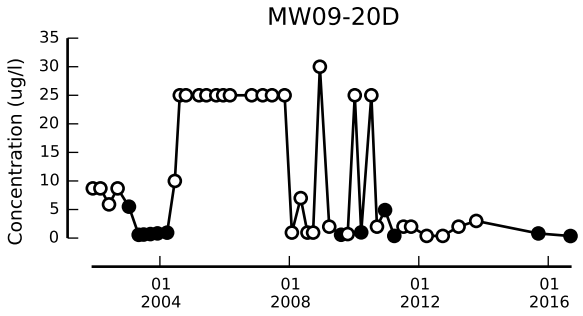


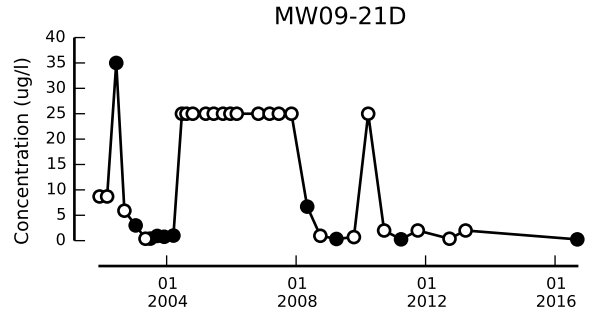


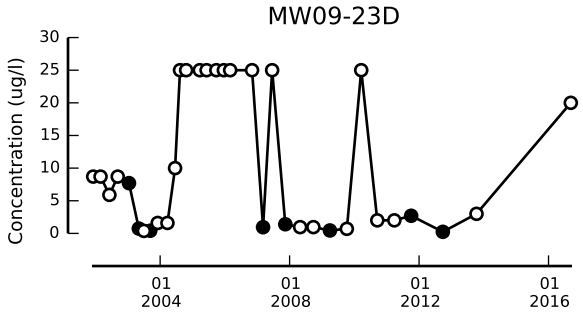


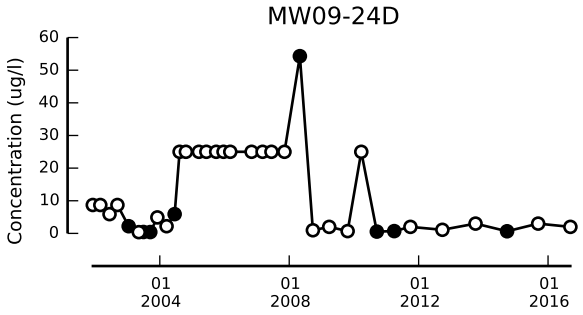


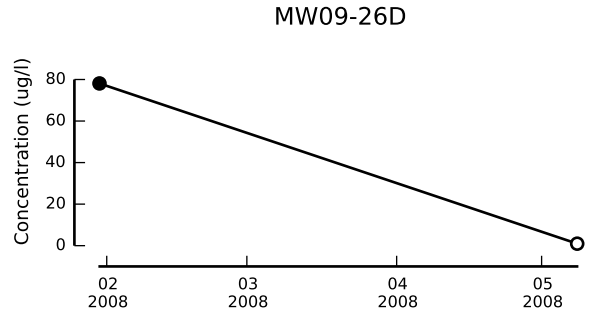






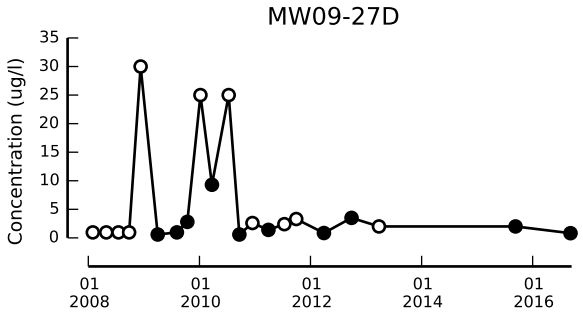






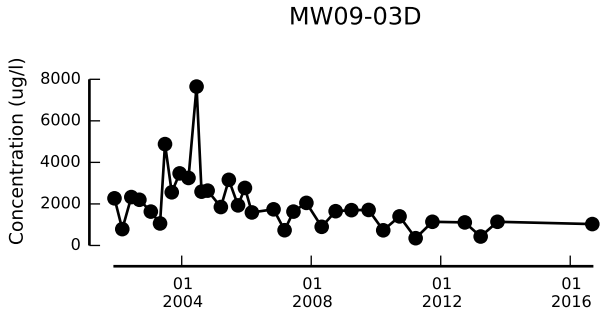
MW09-26DA

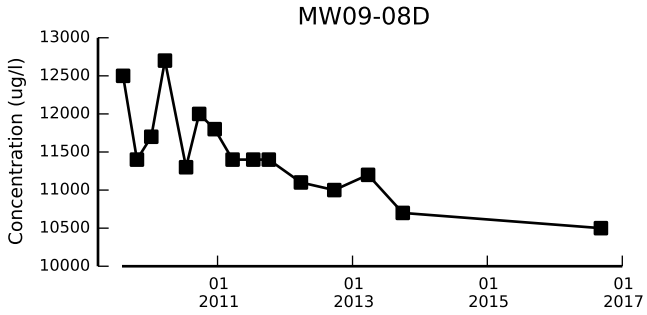
Sampled Once

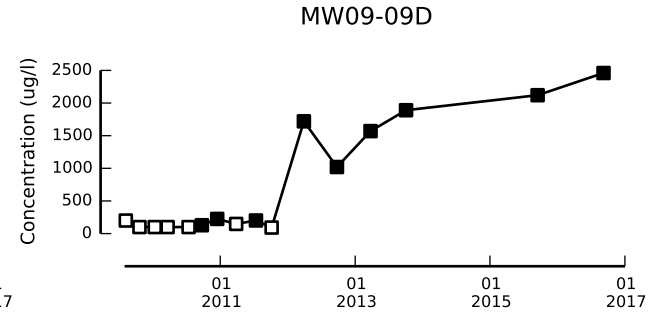


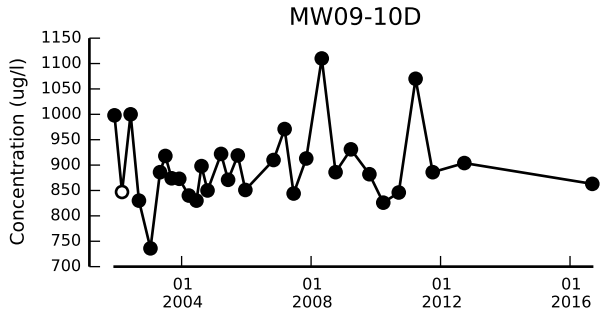
IRON in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 22

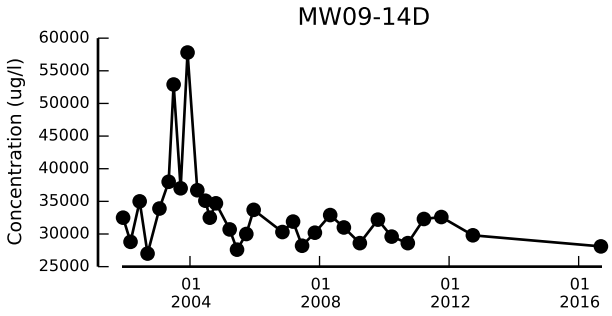
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

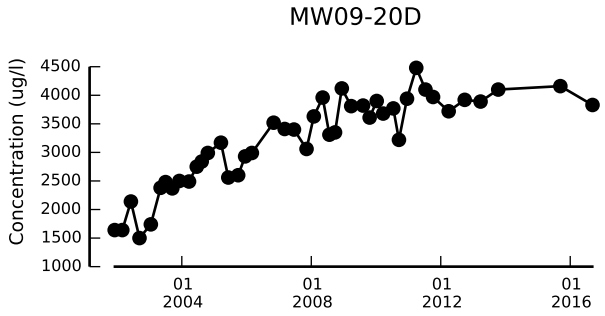


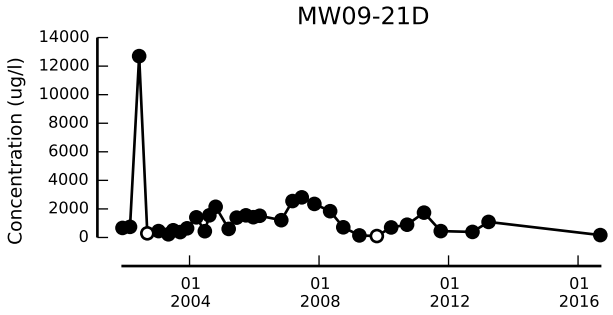


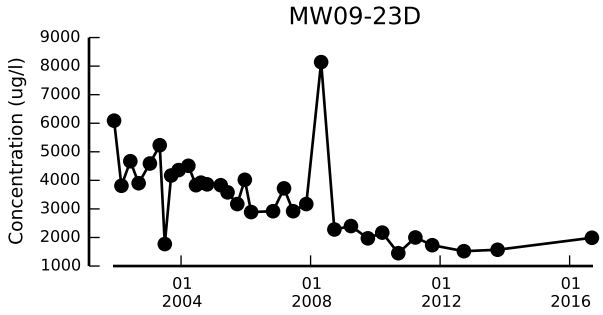


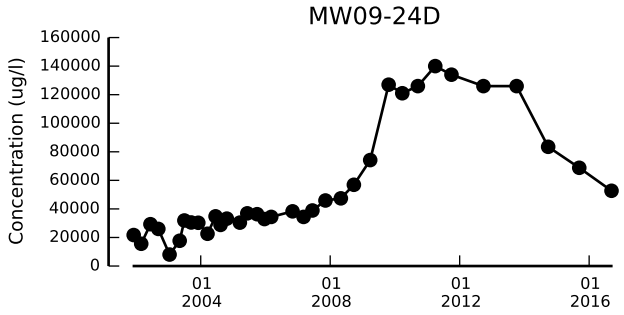


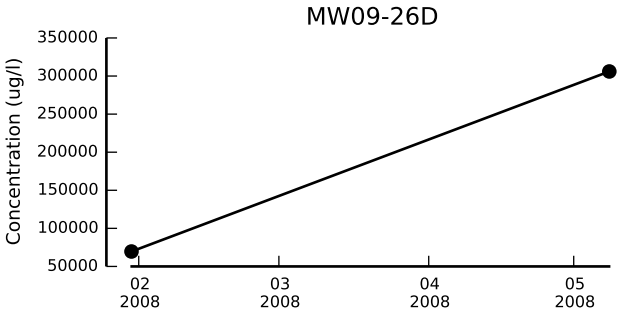






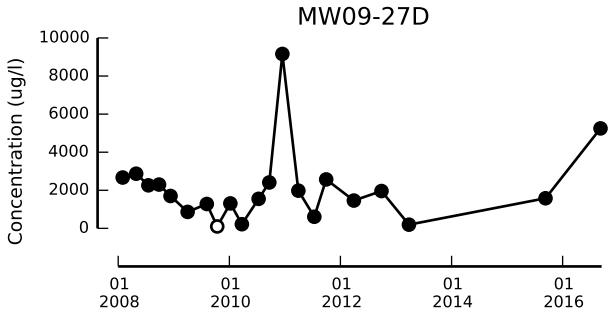






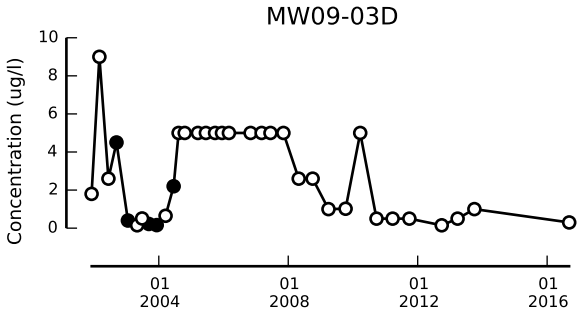
MW09-26DA

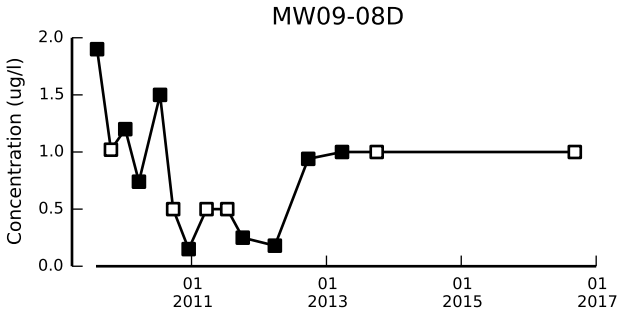
Sampled Once

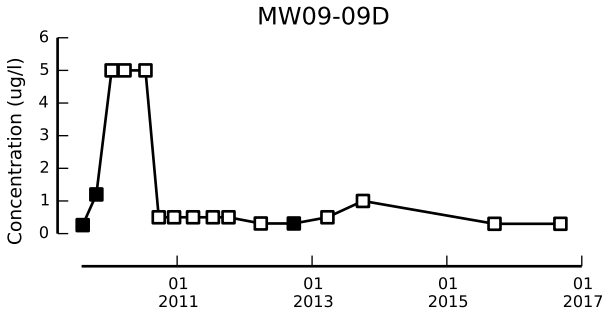


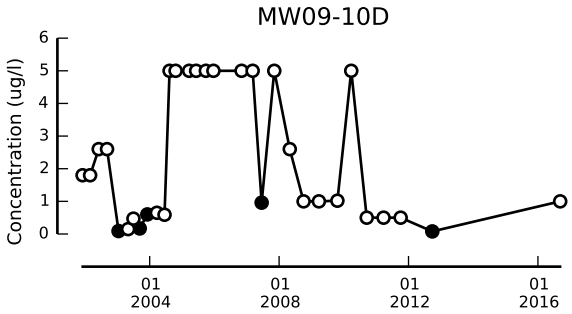
LEAD in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 22

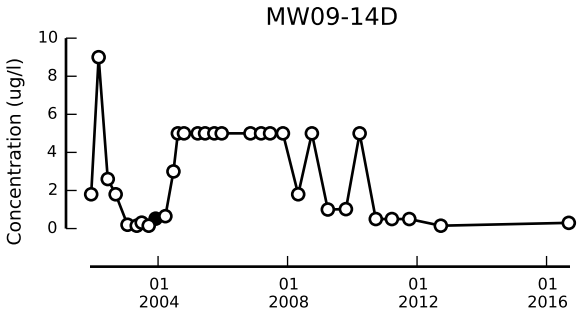
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

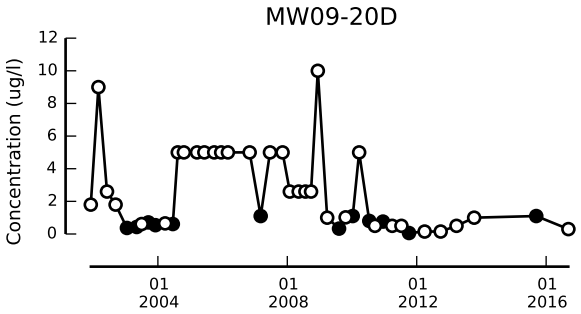


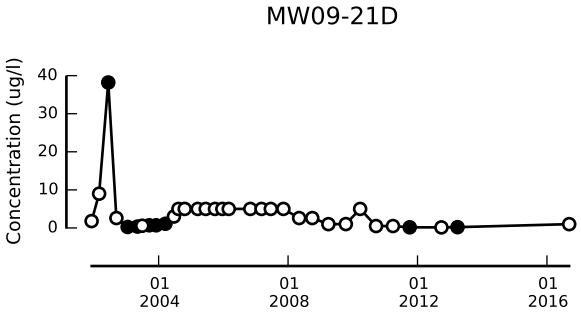


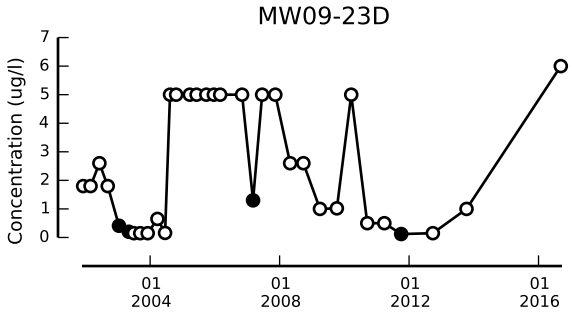


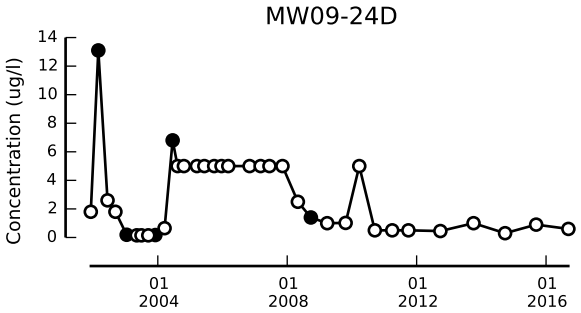


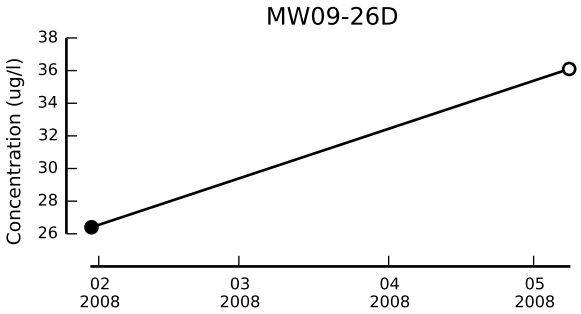






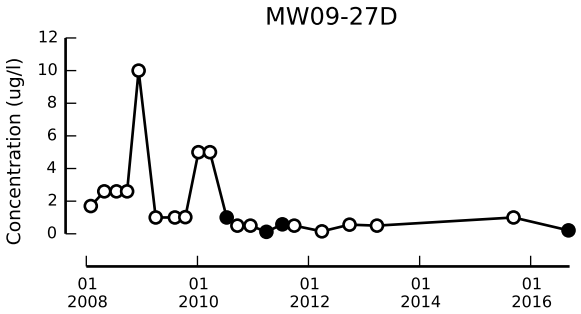






MW09-26DA

Sampled Once



MAGNESIUM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D

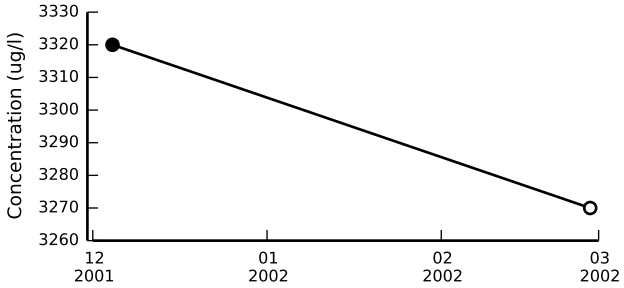
MW09-08D

Not Sampled

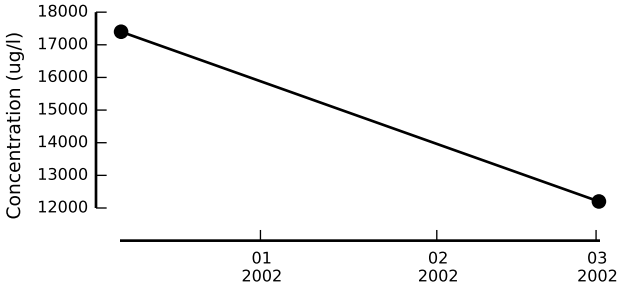
MW09-09D

Not Sampled

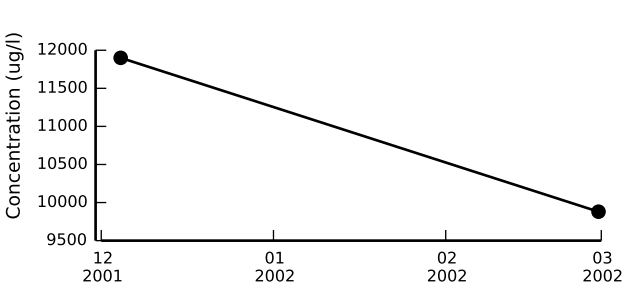
MW09-10D



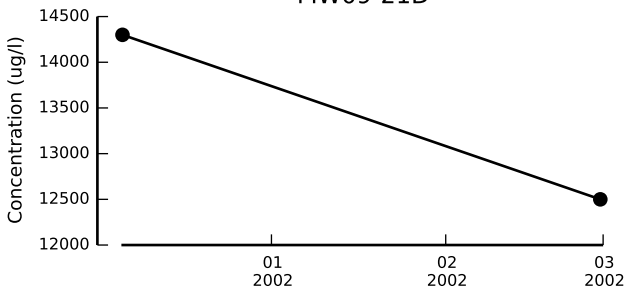
MW09-14D



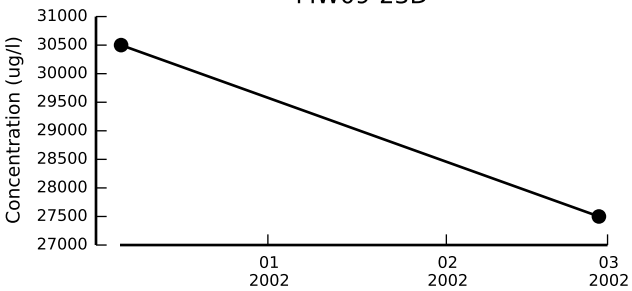
MW09-20D



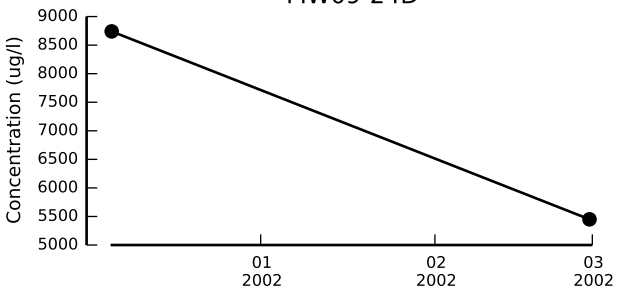
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

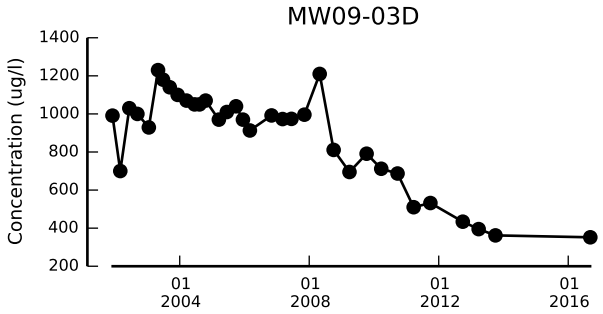
Not Sampled

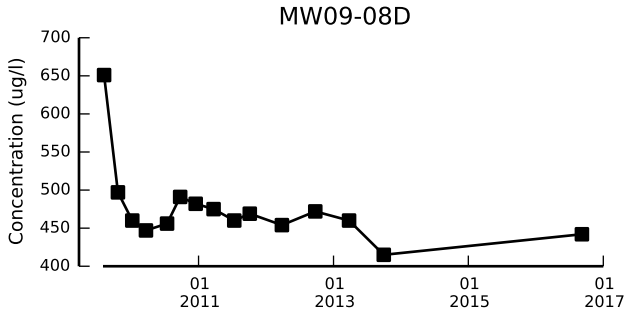
MW09-27D

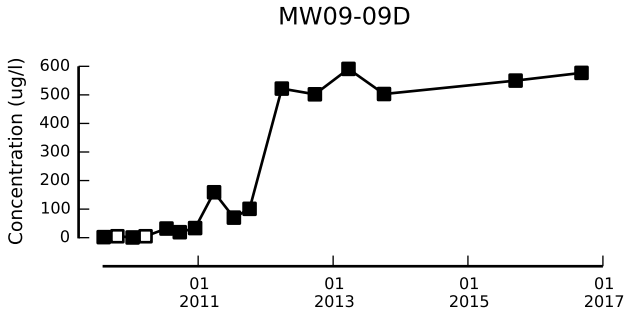
Not Sampled

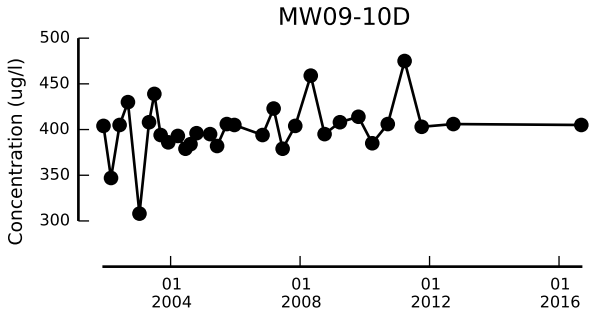
MANGANESE in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 22

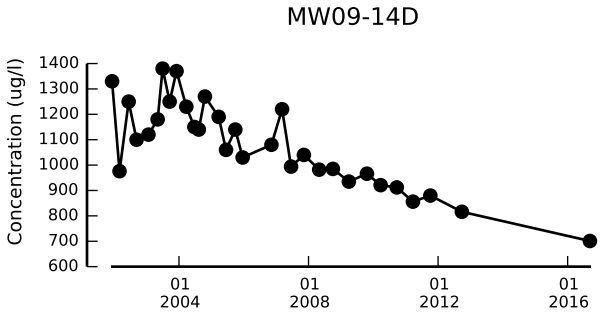
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

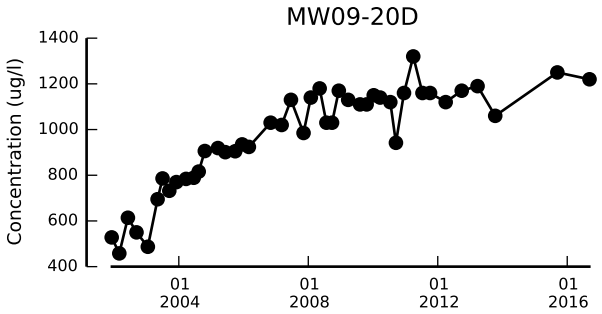


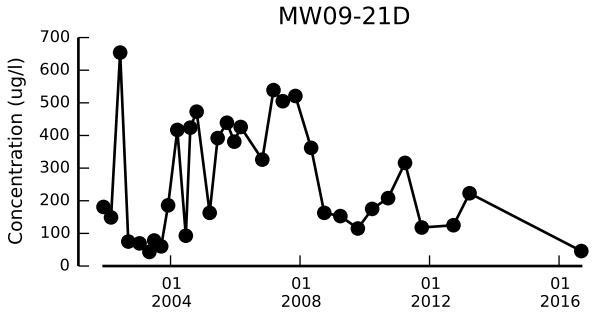


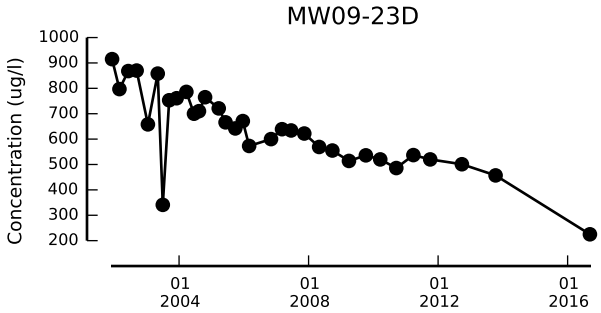


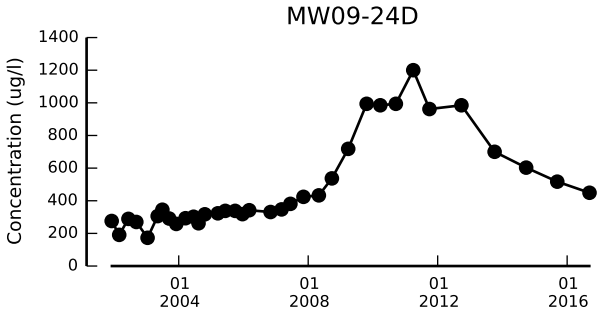


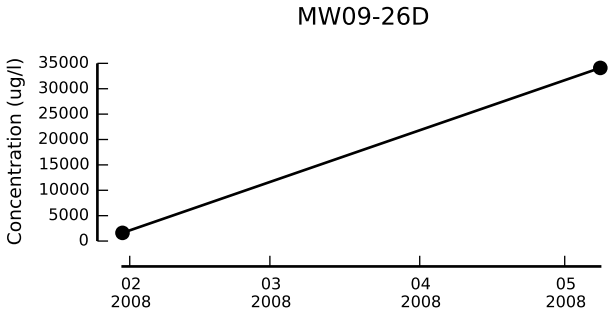






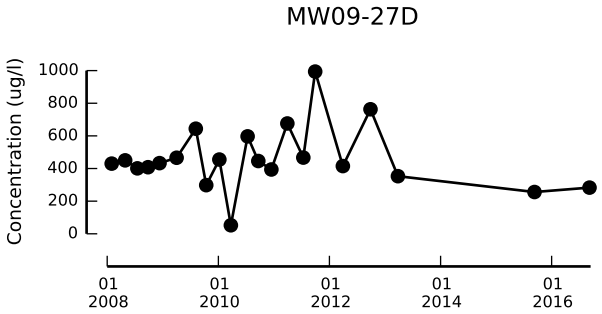






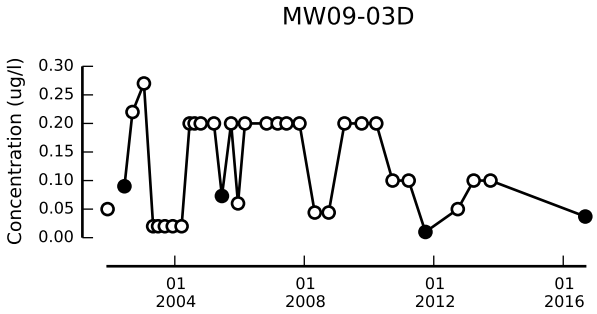
MW09-26DA

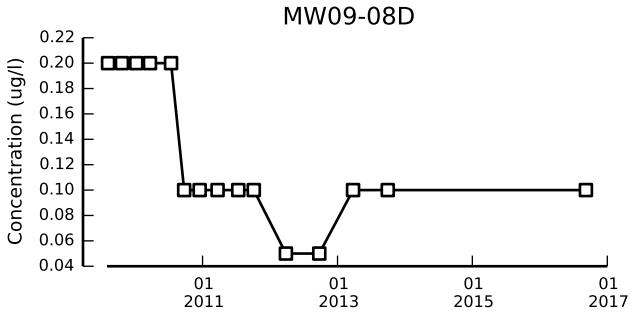
Sampled Once

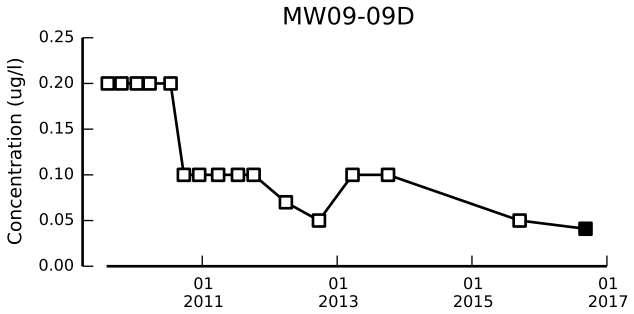


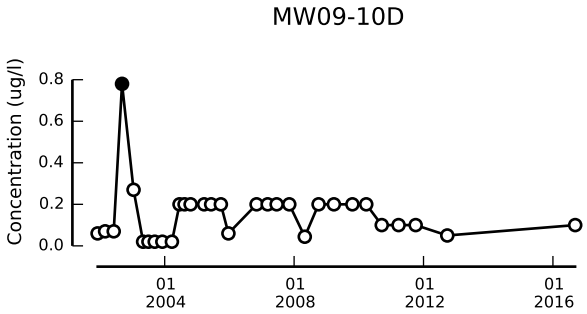
MERCURY in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 22

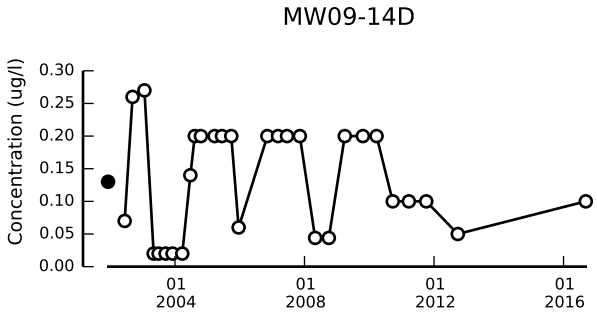
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

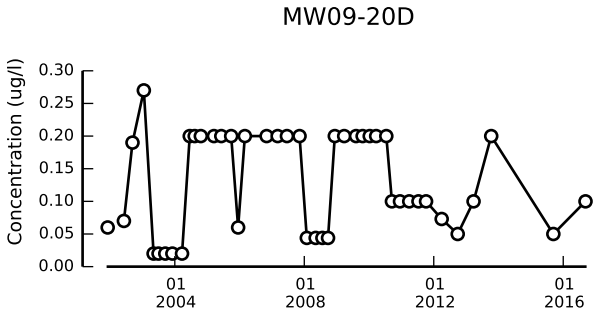


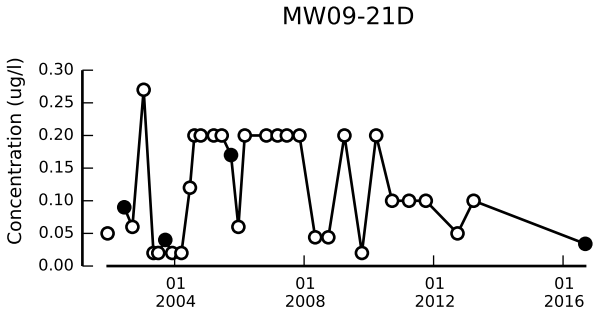


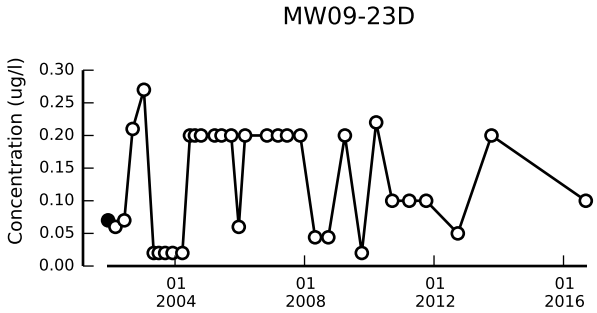


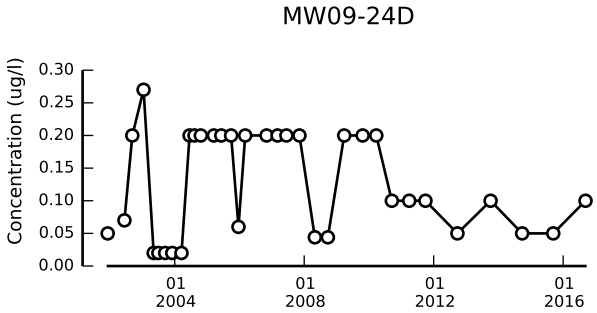


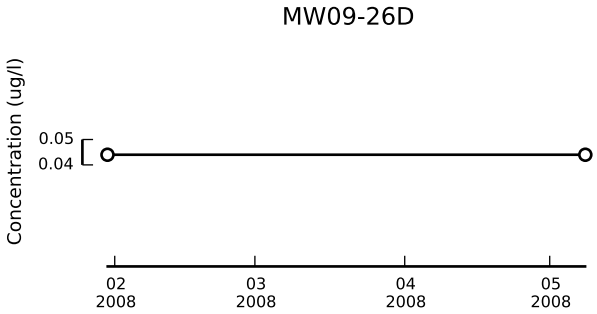






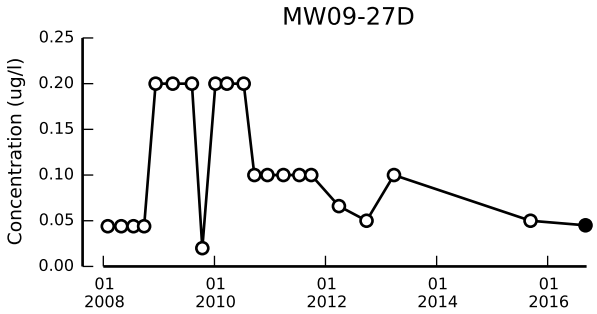






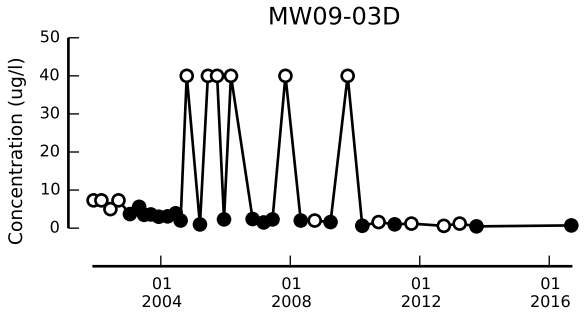
MW09-26DA

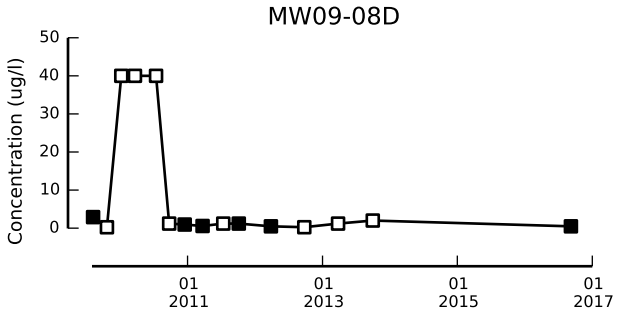
Sampled Once

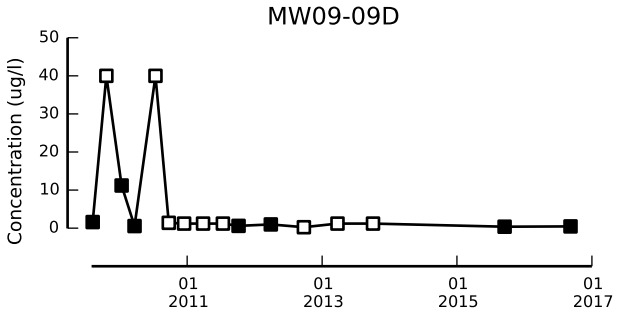


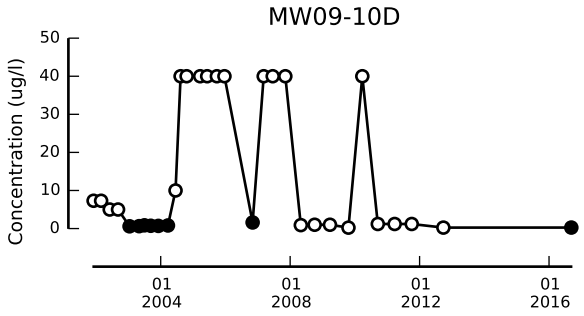
NICKEL in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 22

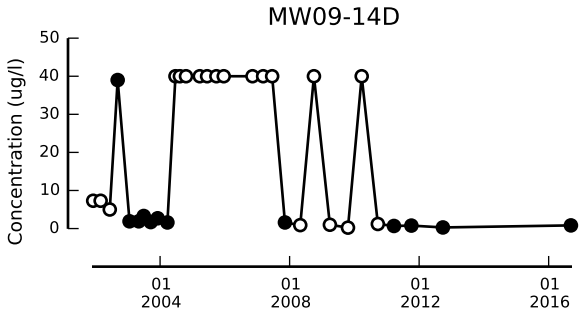
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

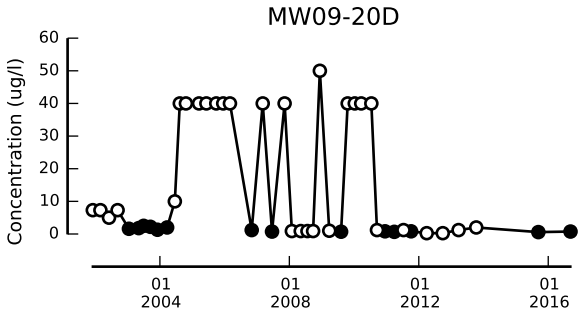


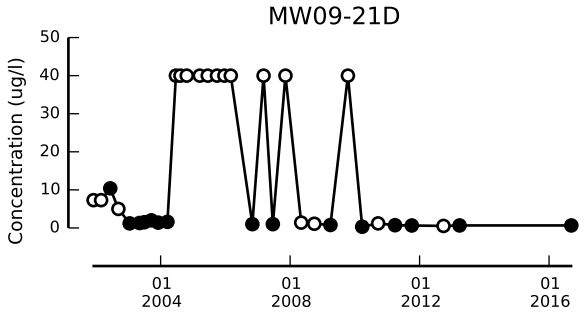


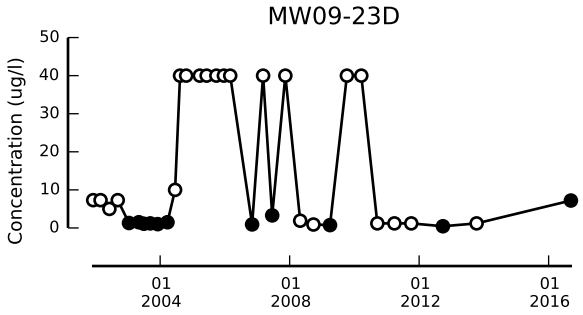


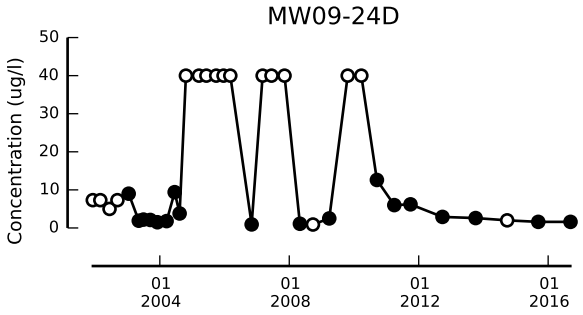


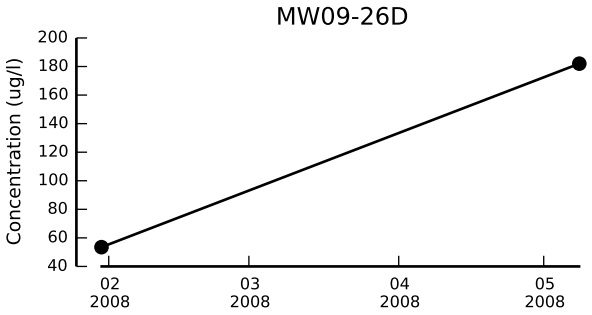






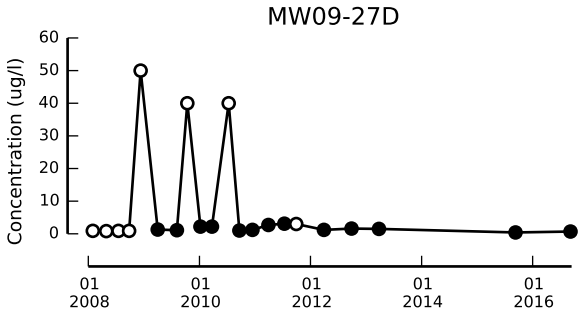






MW09-26DA

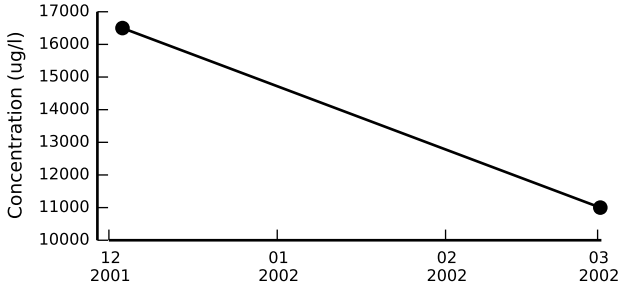
Sampled Once



POTASSIUM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D



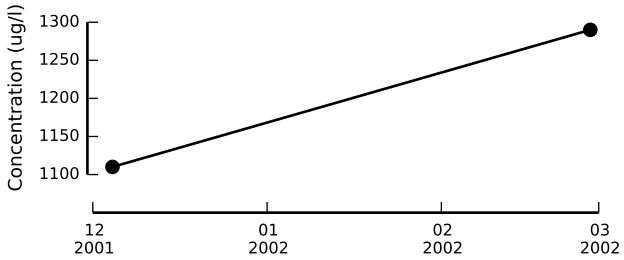
MW09-08D

Not Sampled

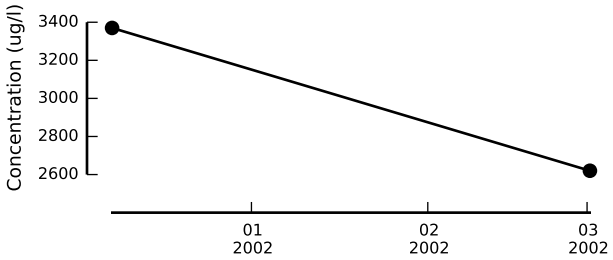
MW09-09D

Not Sampled

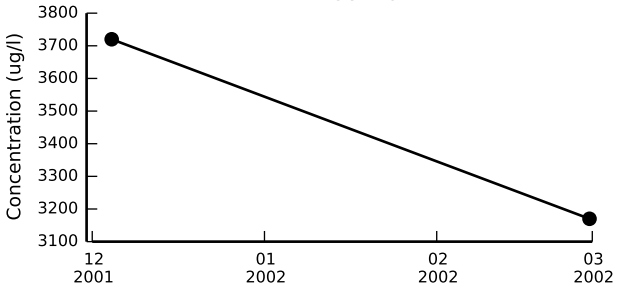
MW09-10D



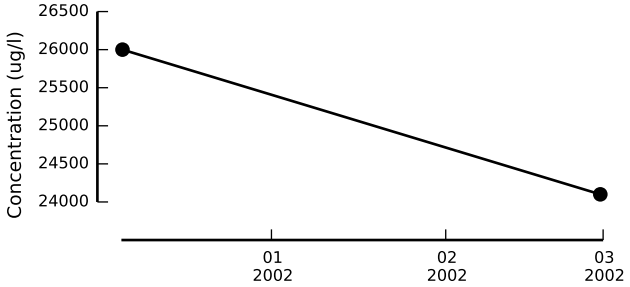
MW09-14D



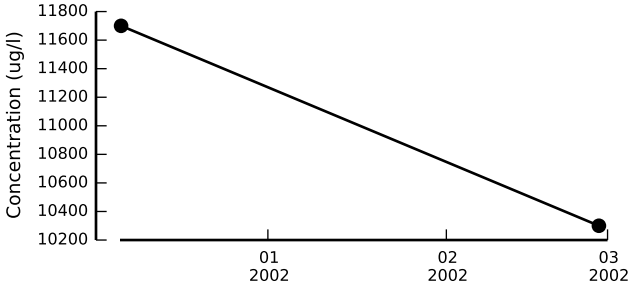
MW09-20D



MW09-21D



MW09-23D



MW09-24D

MW09-26D

Not Sampled

MW09-26DA

Not Sampled

MW09-27D

Not Sampled

SELENIUM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D

MW09-08D

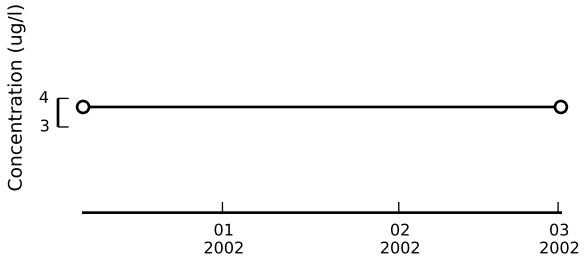
Not Sampled

MW09-09D

Not Sampled

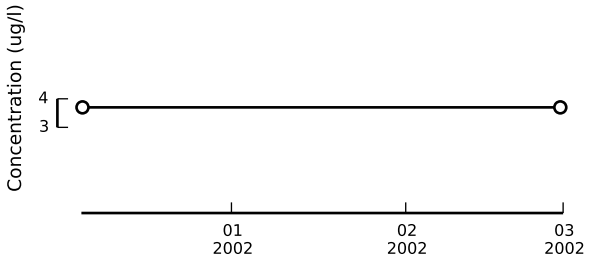
MW09-10D

MW09-14D

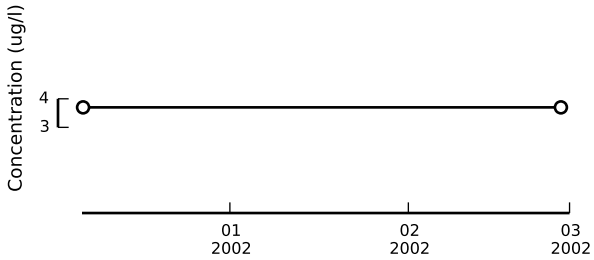


MW09-20D

MW09-21D



MW09-23D



MW09-24D

MW09-26D

Not Sampled

MW09-26DA

Not Sampled

MW09-27D

Not Sampled

SILVER in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D

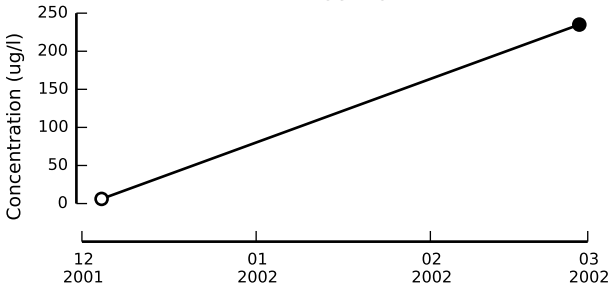
MW09-08D

Not Sampled

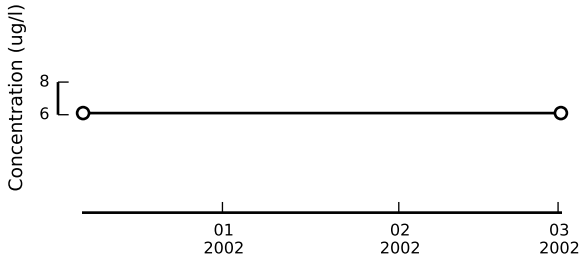
MW09-09D

Not Sampled

MW09-10D



MW09-14D



MW09-20D

MW09-21D

MW09-23D

MW09-24D

MW09-26D

Not Sampled

MW09-26DA

Not Sampled

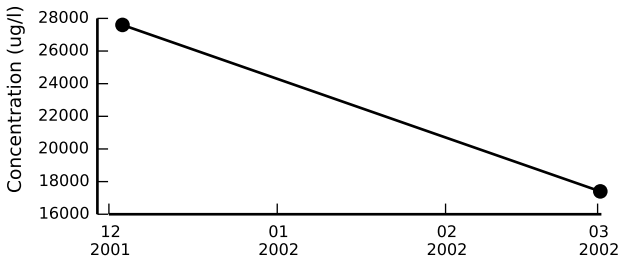
MW09-27D

Not Sampled

SODIUM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D



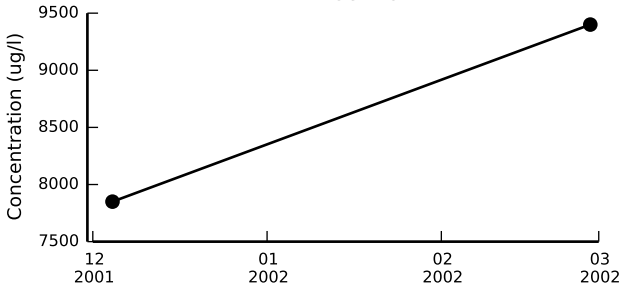
MW09-08D

Not Sampled

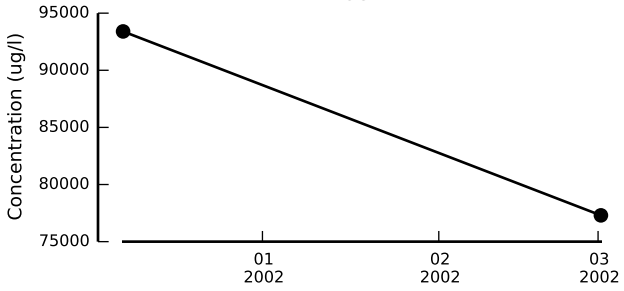
MW09-09D

Not Sampled

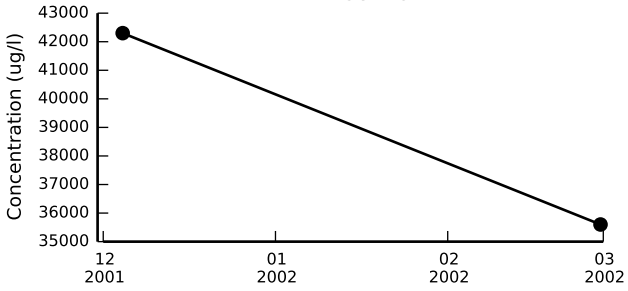
MW09-10D



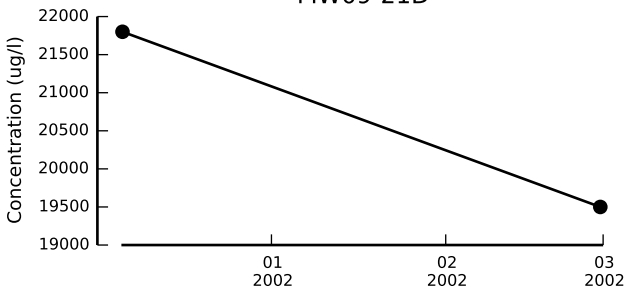
MW09-14D



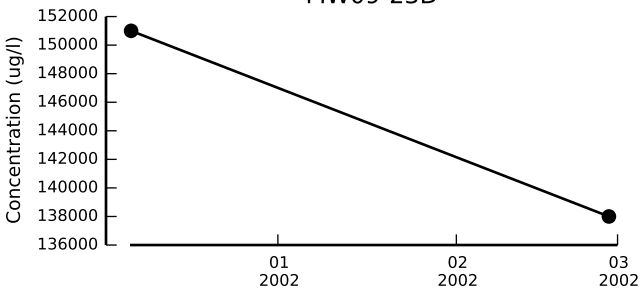
MW09-20D



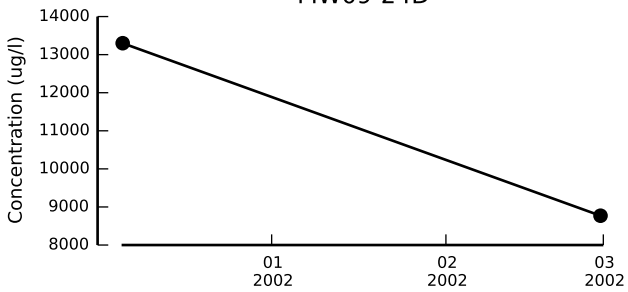
MW09-21D



MW09-23D



MW09-24D



MW09-26D

Not Sampled

MW09-26DA

Not Sampled

MW09-27D

Not Sampled

VANADIUM in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-03D

MW09-08D

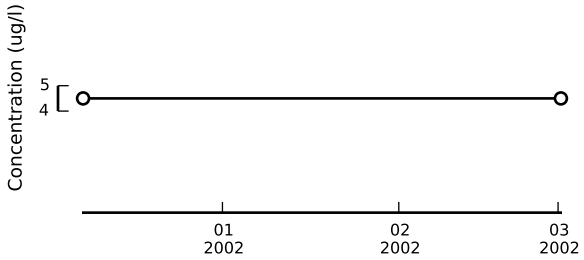
Not Sampled

MW09-09D

Not Sampled

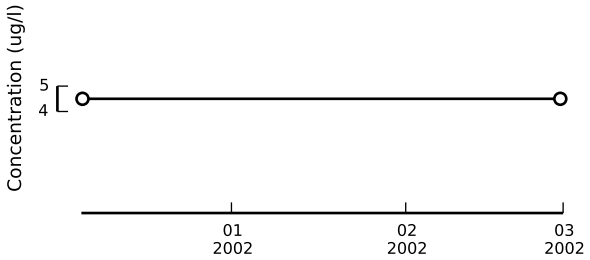
MW09-10D

MW09-14D

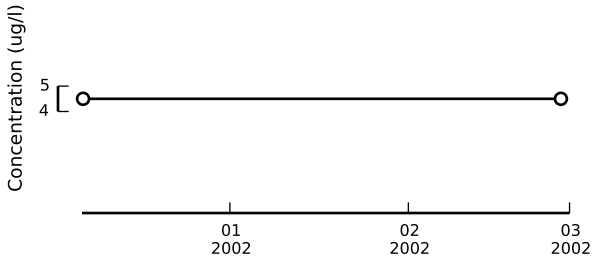


MW09-20D

MW09-21D



MW09-23D



MW09-24D

MW09-26D

Not Sampled

MW09-26DA

Not Sampled

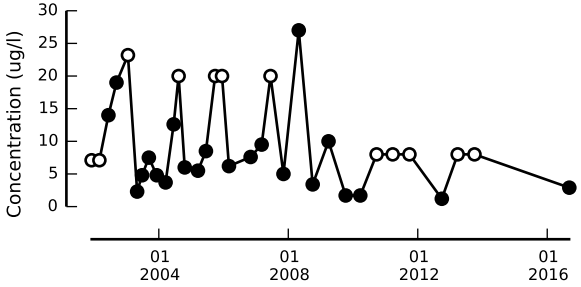
MW09-27D

Not Sampled

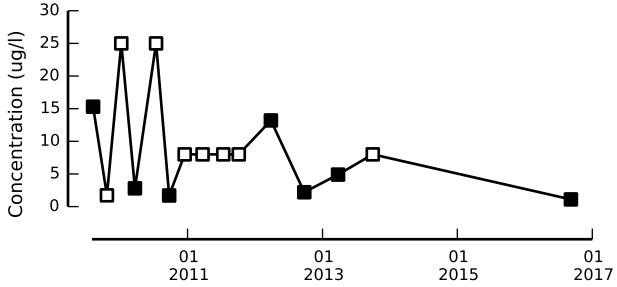
ZINC in Groundwater, Deep Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

MW09-03D

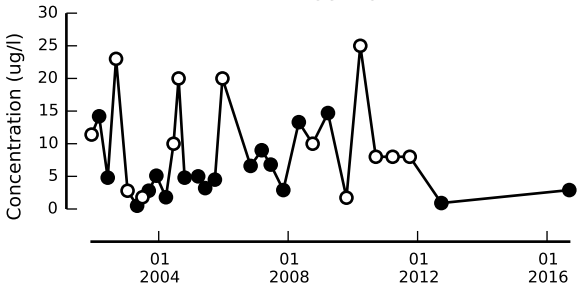


MW09-08D

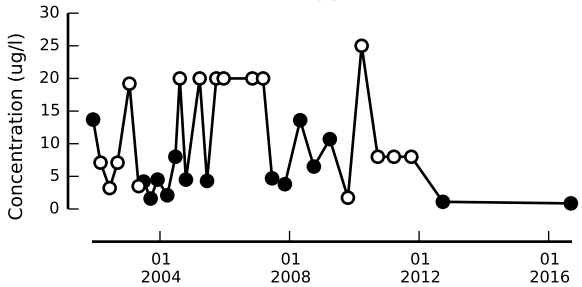


MW09-09D

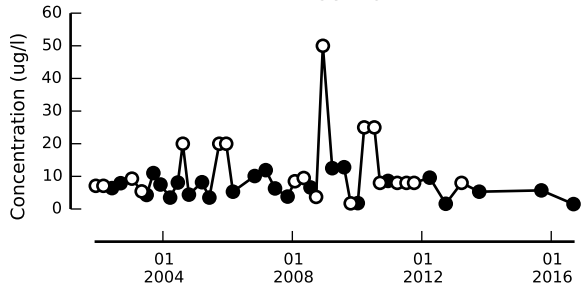
MW09-10D



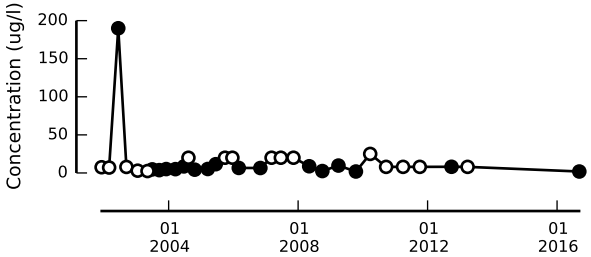
MW09-14D



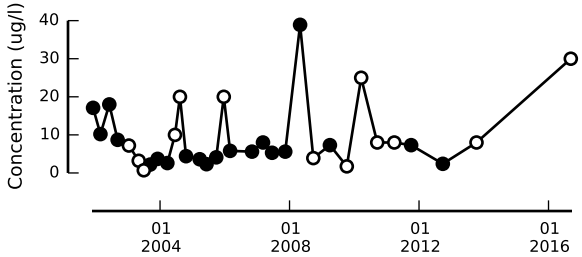
MW09-20D



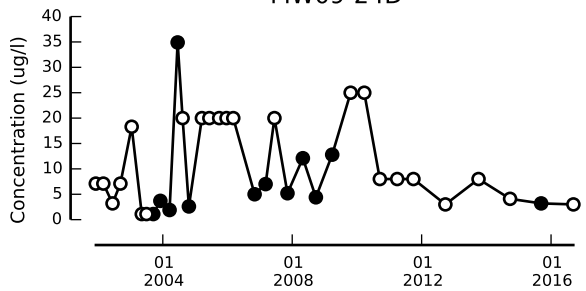
MW09-21D



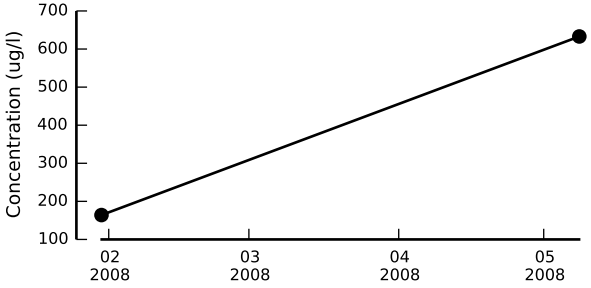
MW09-23D



MW09-24D



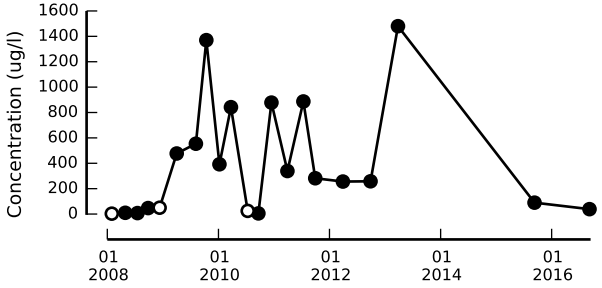
MW09-26D



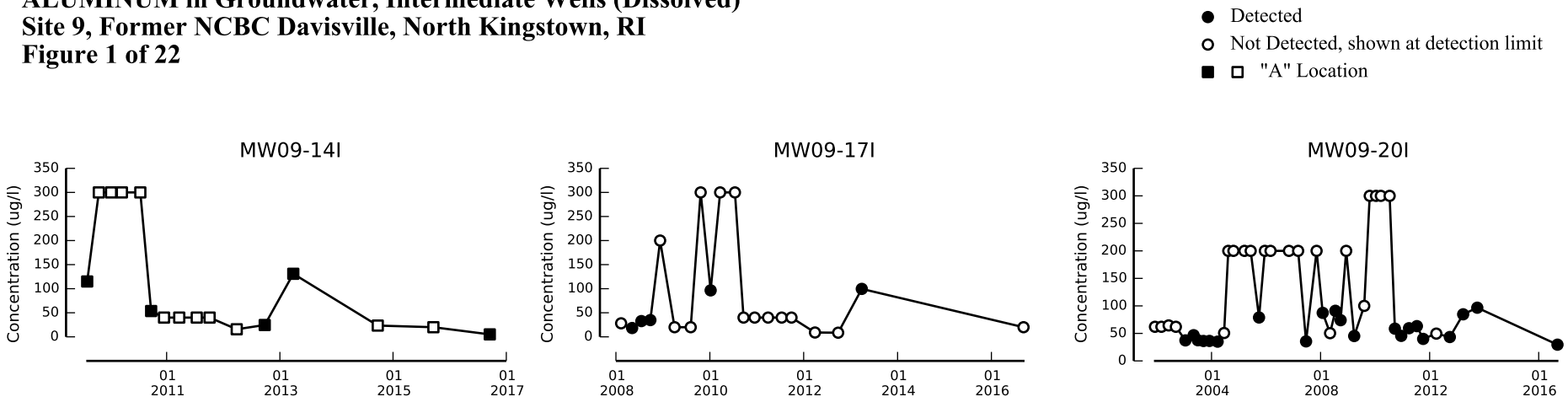
MW09-26DA

Sampled Once

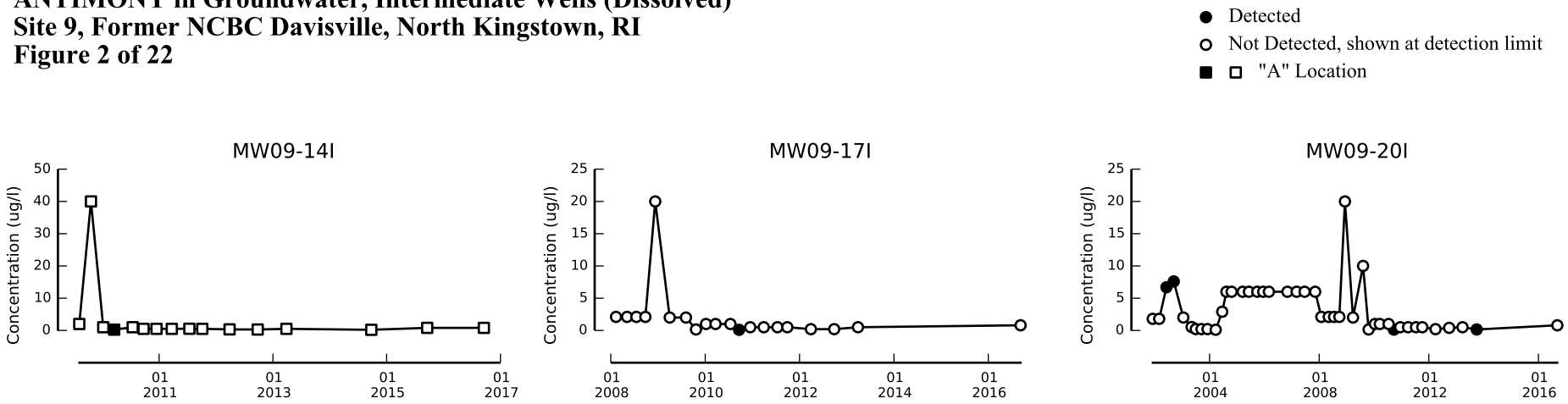
MW09-27D



ALUMINUM in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 22

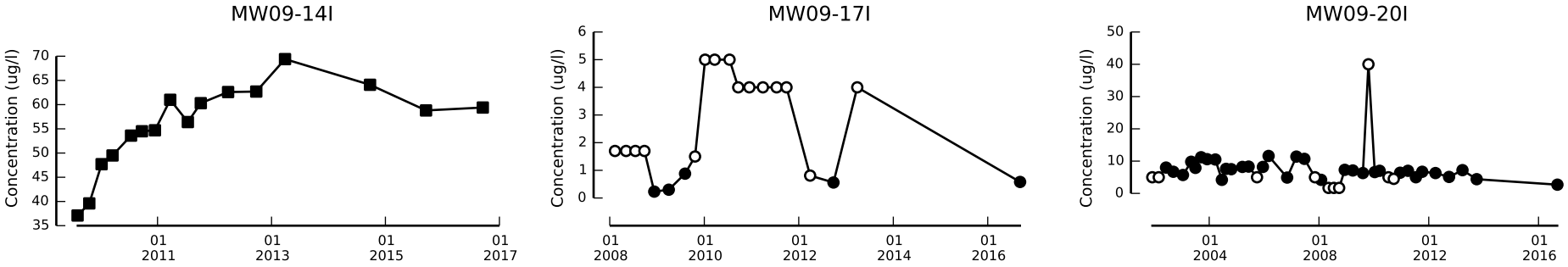


ANTIMONY in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 22



ARSENIC in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



BARIUM in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

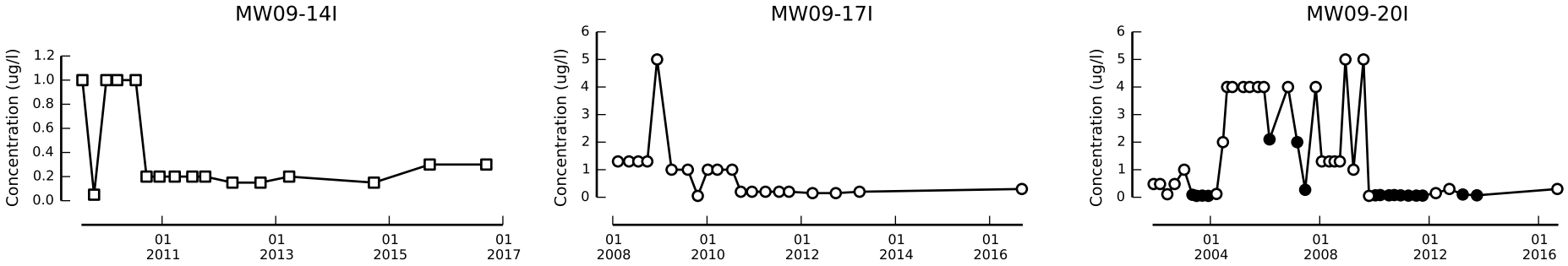
MW09-17I

Not Sampled

MW09-20I

BERYLLIUM in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



CADMIUM in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

MW09-17I

Not Sampled

MW09-20I

CALCIUM in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 22

● Detected
○ Not Detected, shown at detection limit

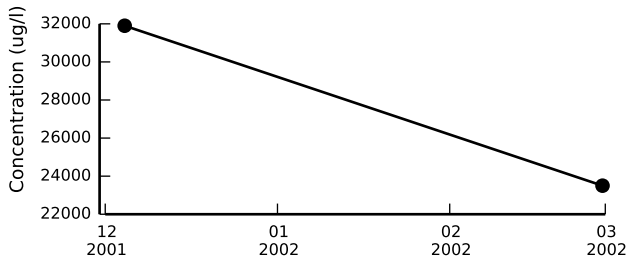
MW09-14I

Not Sampled

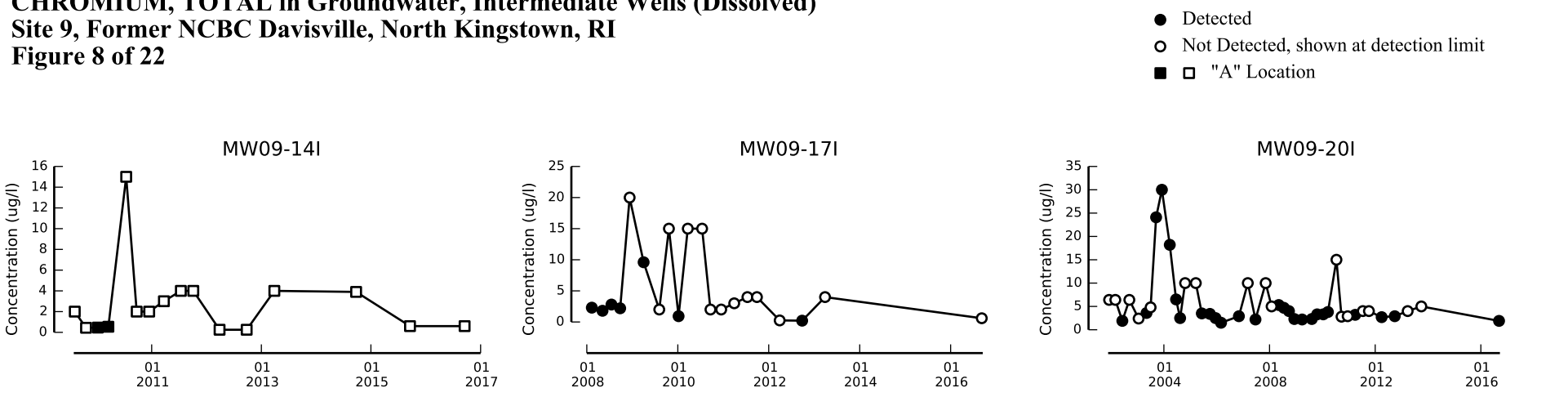
MW09-17I

Not Sampled

MW09-20I



CHROMIUM, TOTAL in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 22



COBALT in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

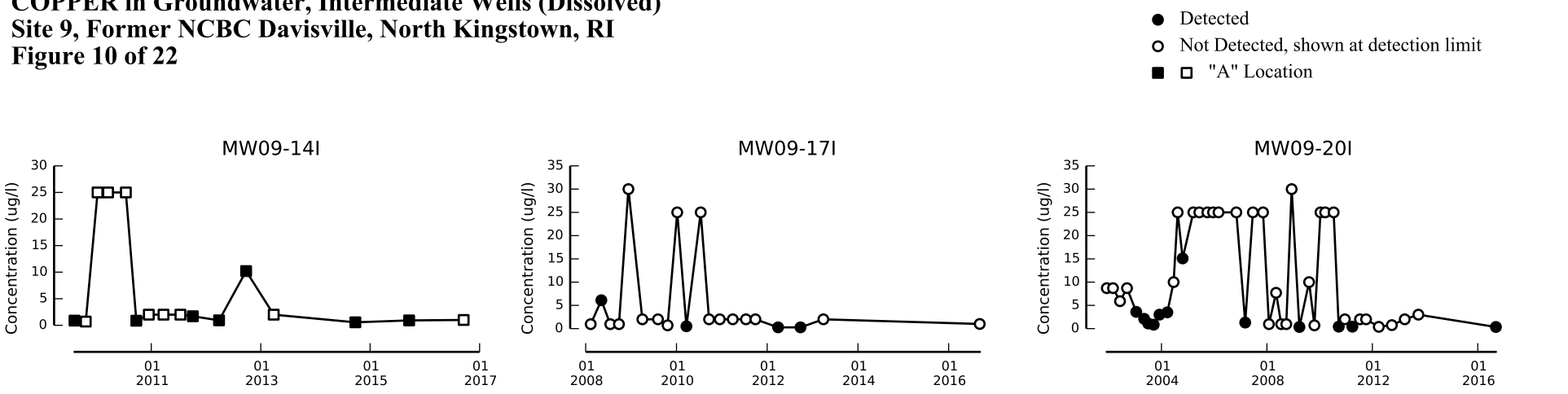
Not Sampled

MW09-17I

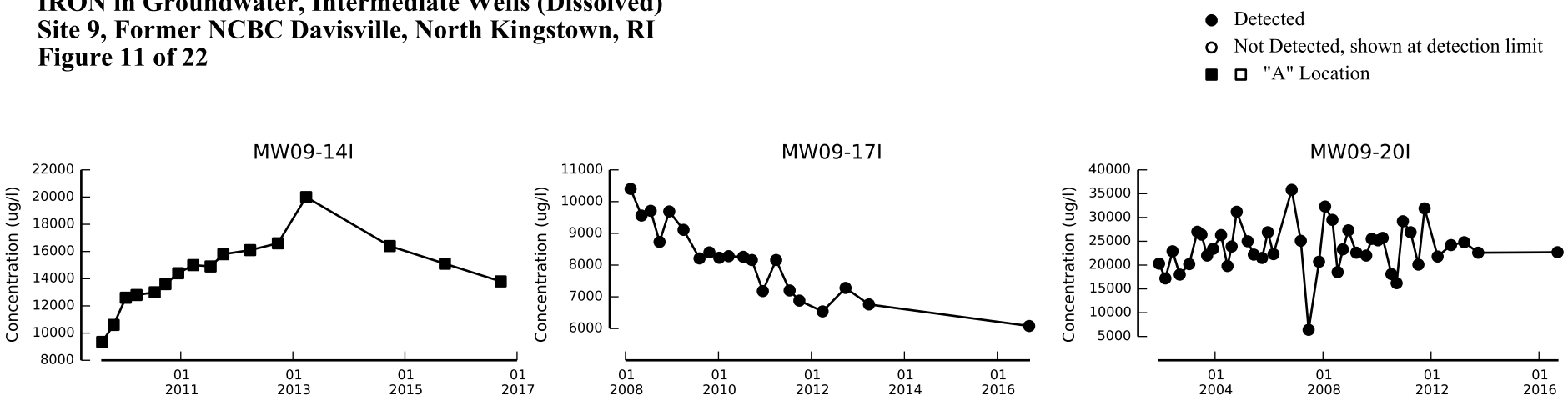
Not Sampled

MW09-20I

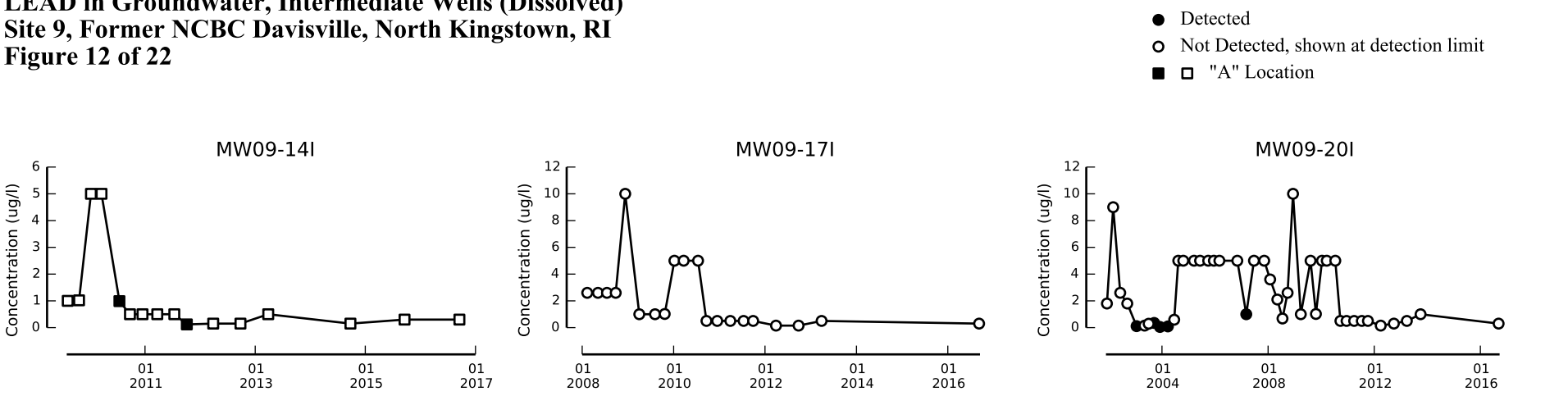
COPPER in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 22



IRON in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 22



LEAD in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 22



MAGNESIUM in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

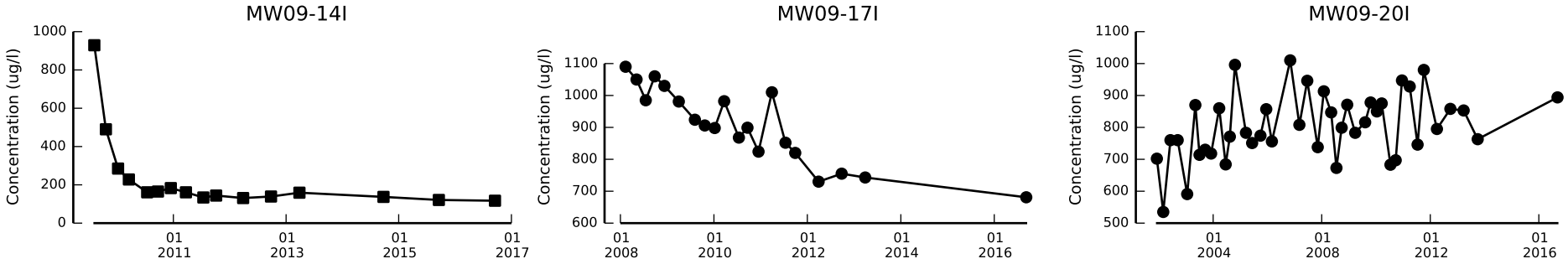
MW09-17I

Not Sampled

MW09-20I

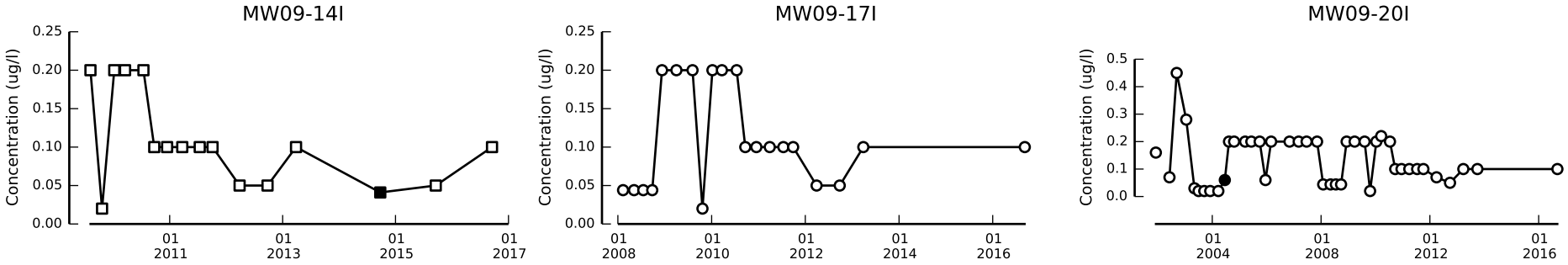
MANGANESE in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



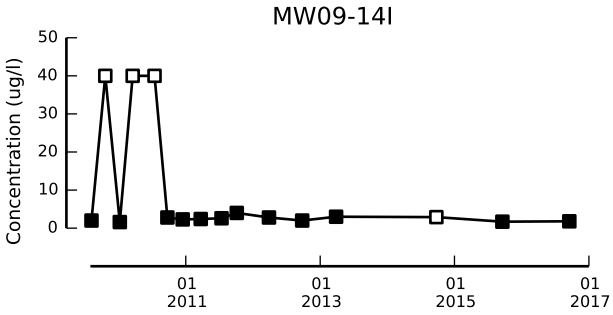
MERCURY in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 22

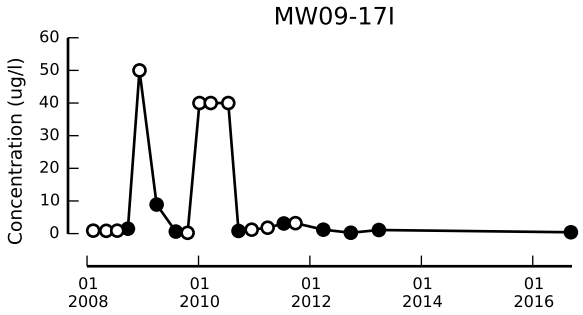
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

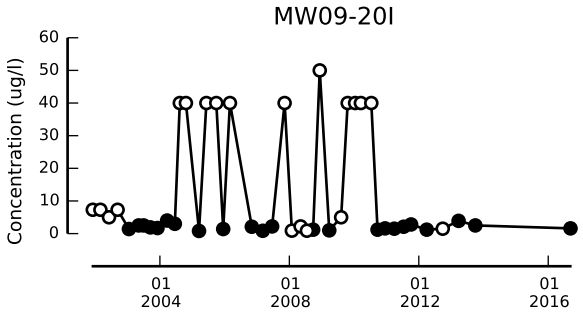


NICKEL in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location







POTASSIUM in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

MW09-17I

Not Sampled

MW09-20I

SELENIUM in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

MW09-17I

Not Sampled

MW09-20I

SILVER in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

MW09-17I

Not Sampled

MW09-20I

SODIUM in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

MW09-17I

Not Sampled

MW09-20I

VANADIUM in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 22

● Detected
○ Not Detected, shown at detection limit

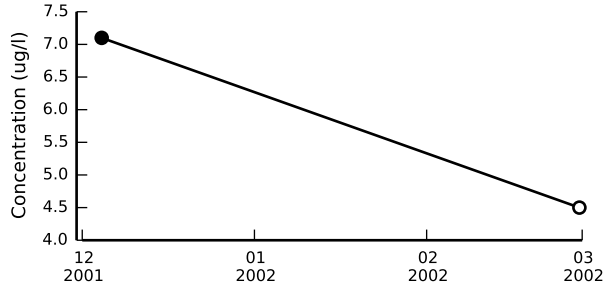
MW09-14I

Not Sampled

MW09-17I

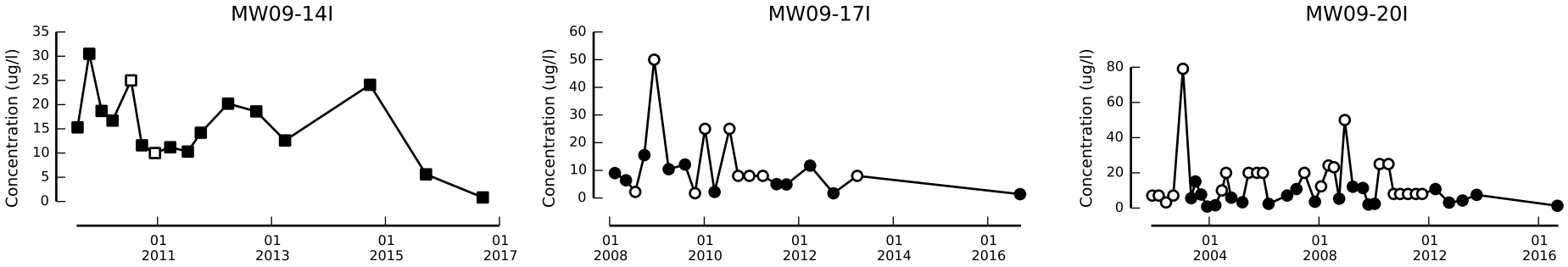
Not Sampled

MW09-20I



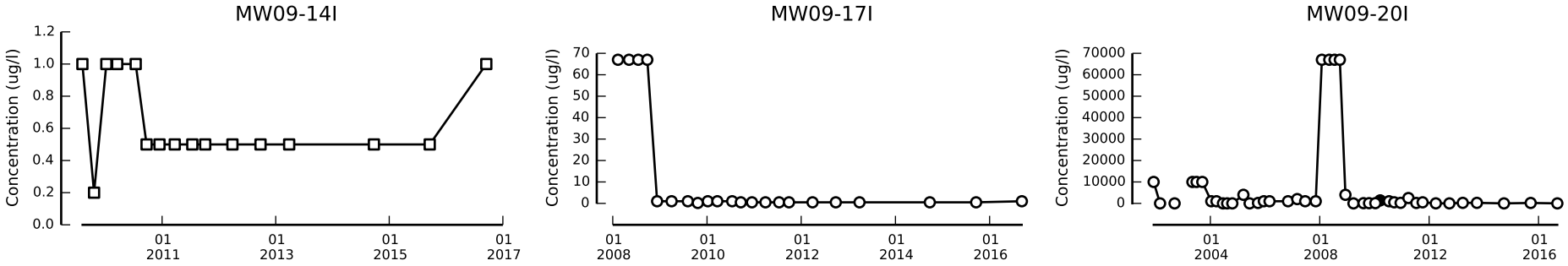
ZINC in Groundwater, Intermediate Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



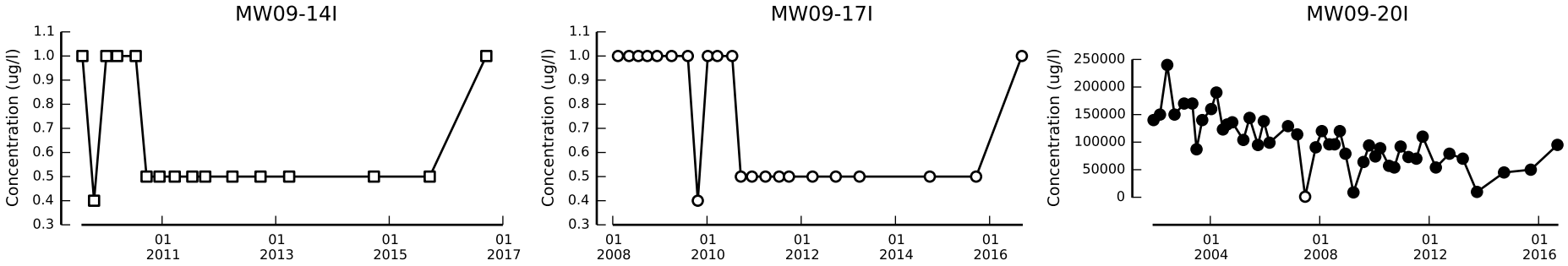
1,1,1-TRICHLOROETHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



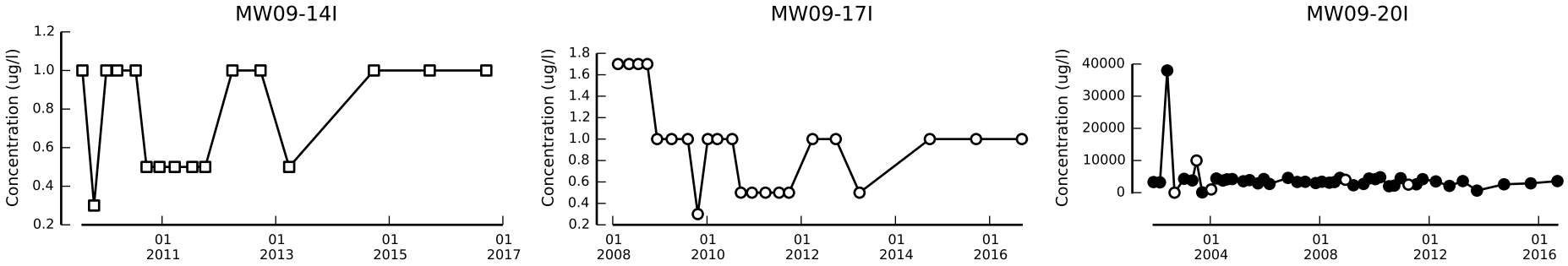
1,1,2,2-TETRACHLOROETHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



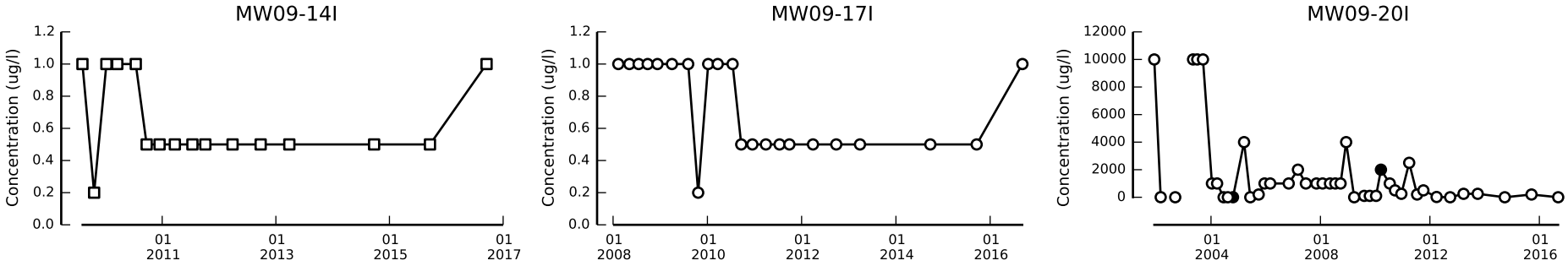
1,1,2-TRICHLOROETHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



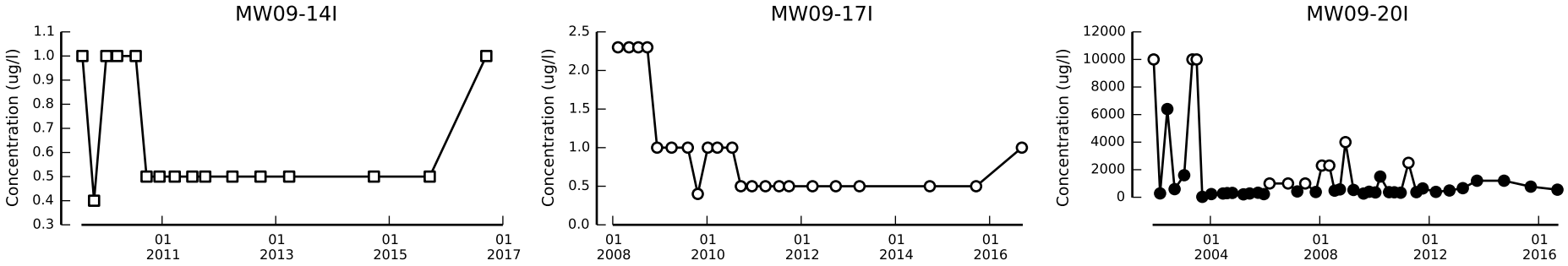
1,1-DICHLOROETHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



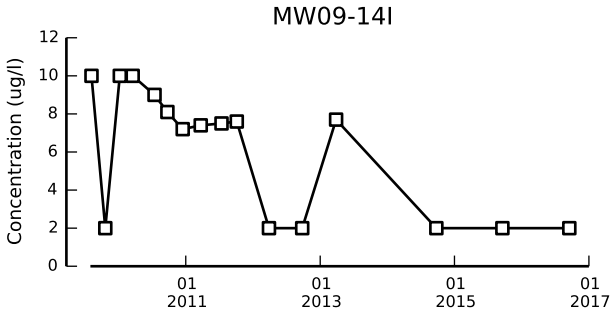
1,1-DICHLOROETHENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 133

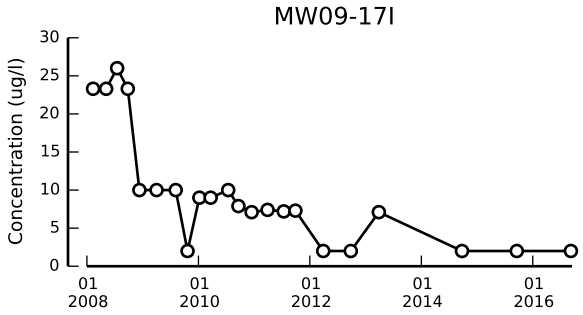
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

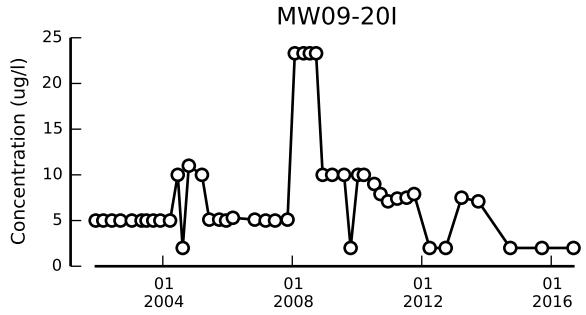


1,2,4-TRICHLOROBENZENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

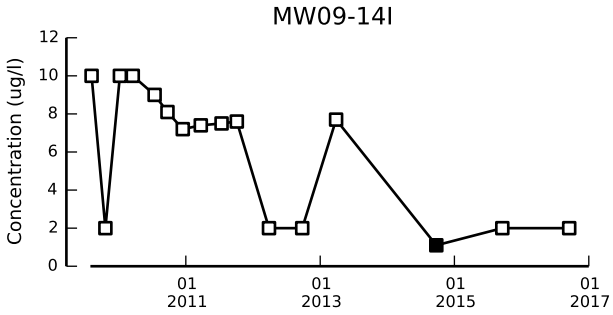


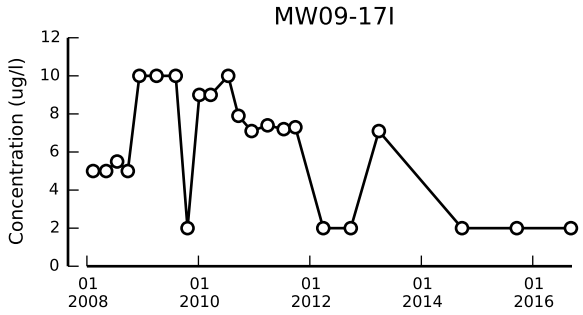


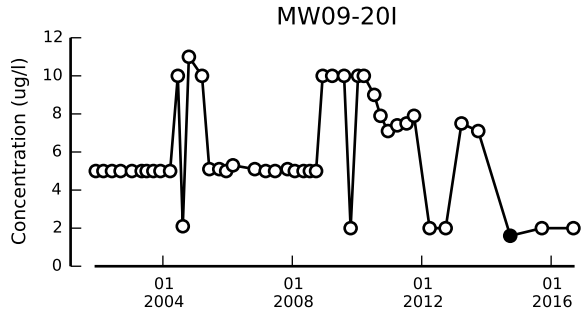


1,2-DICHLOROBENZENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

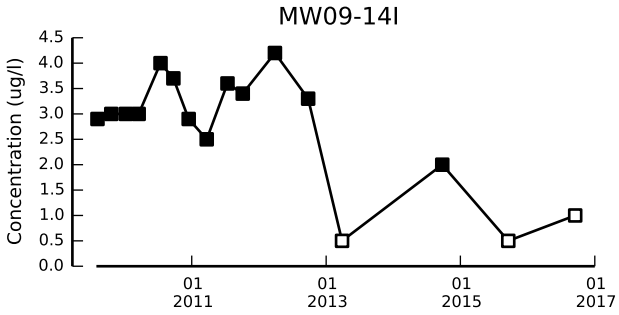


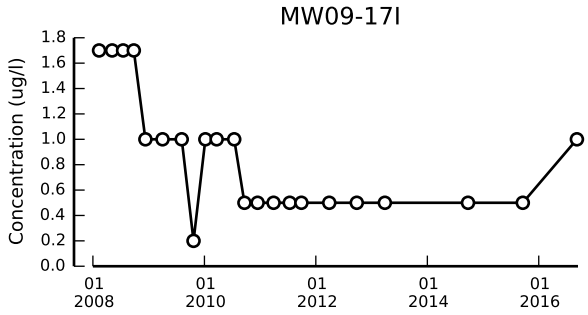


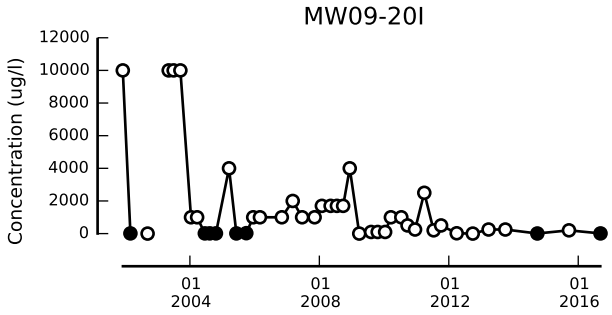


1,2-DICHLOROETHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

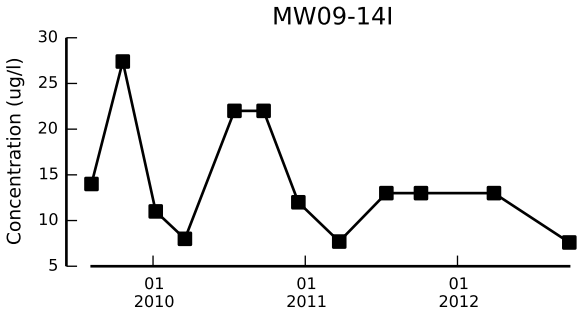


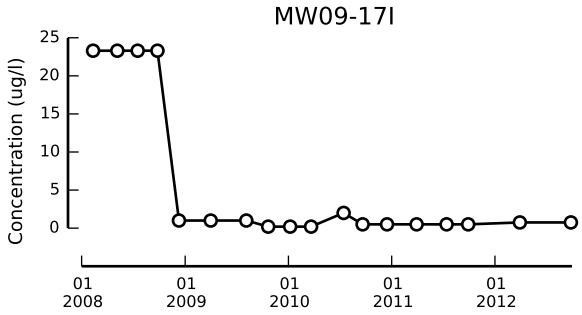


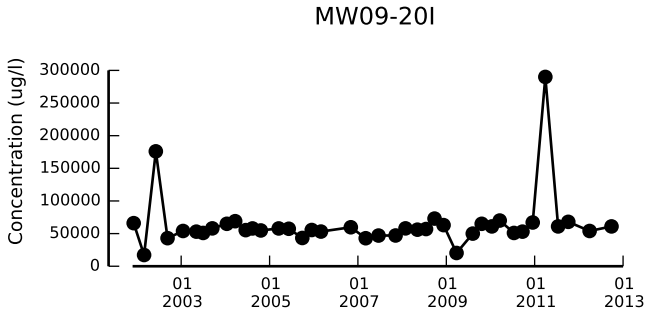


1,2-DICHLOROETHENE, TOTAL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

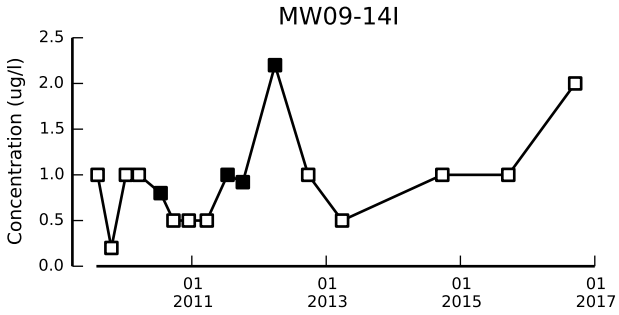


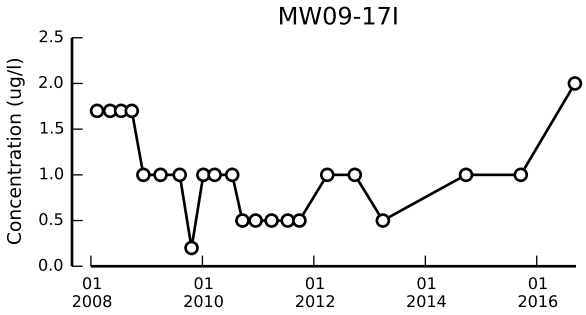


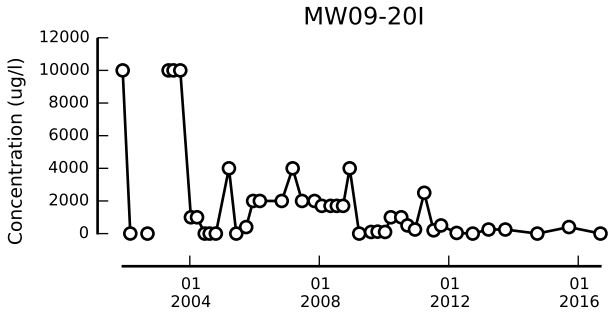


1,2-DICHLOROPROPANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

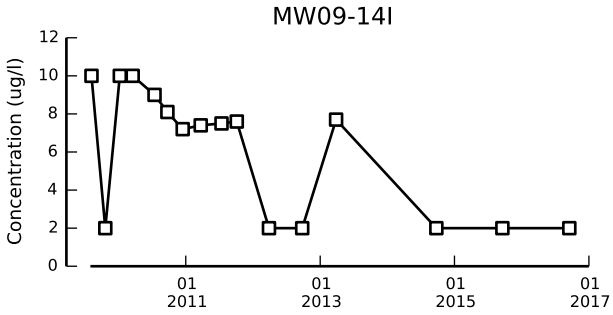


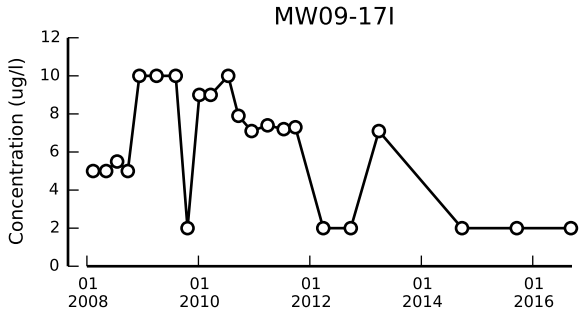


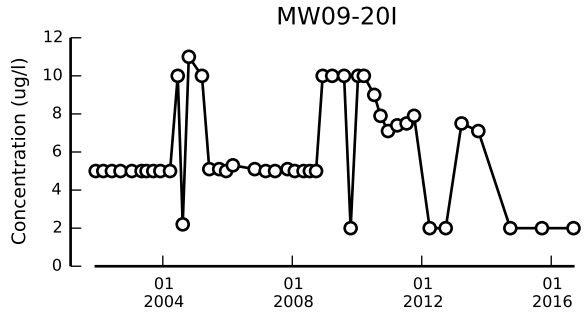


1,3-DICHLOROBENZENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

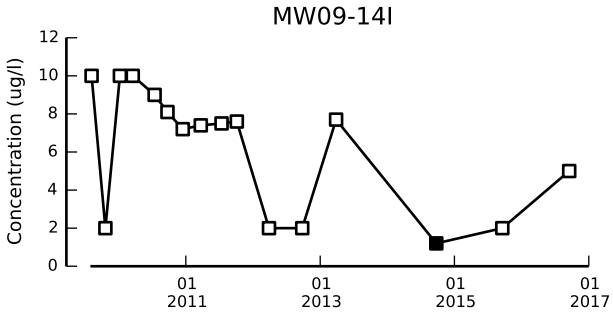


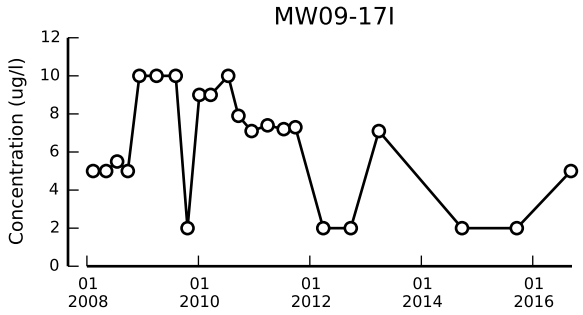


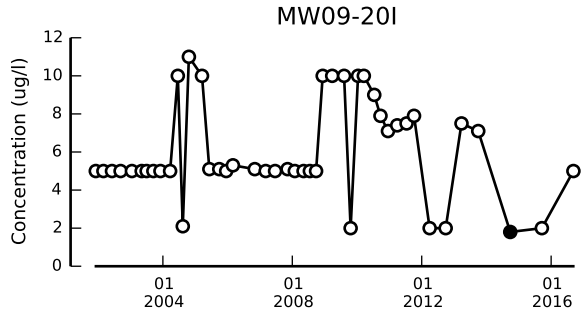


1,4-DICHLOROBENZENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location







1-METHYLNAPHTHALENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 133

● Detected
○ Not Detected, shown at detection limit

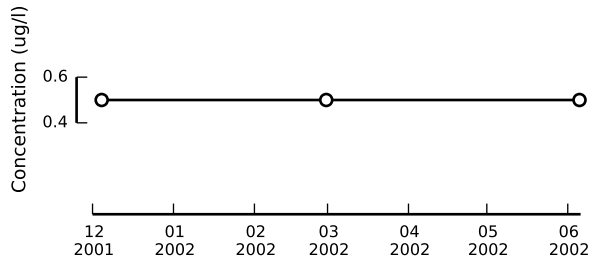
MW09-14I

Not Sampled

MW09-17I

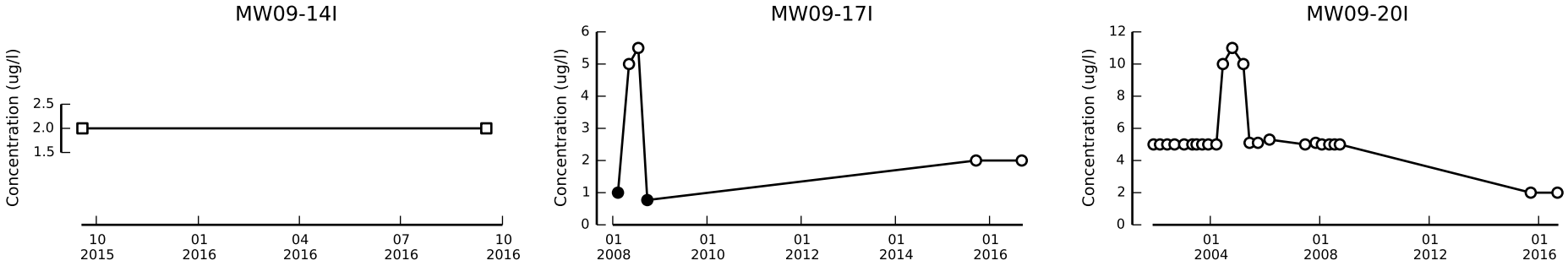
Not Sampled

MW09-20I



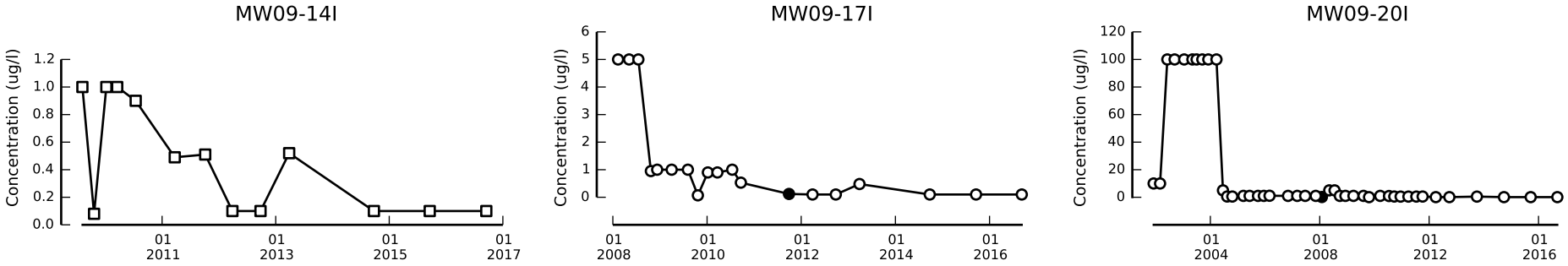
2,2'-OXYBIS(1-CHLOROPROPANE) in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



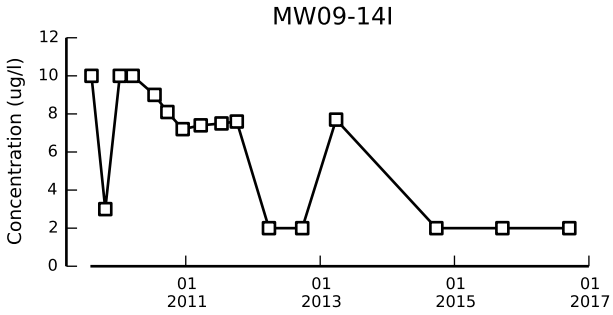
2,4,5-TRICHLOROPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 133

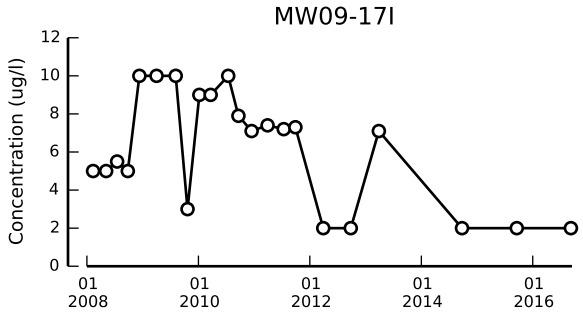
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

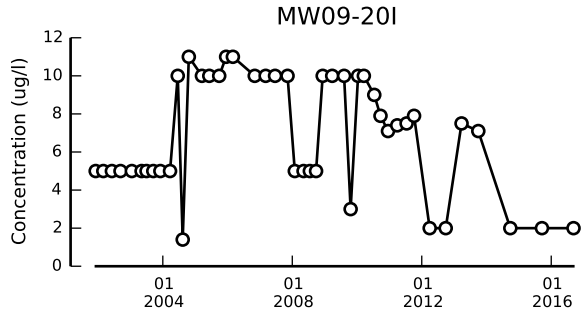


2,4,6-TRICHLOROPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

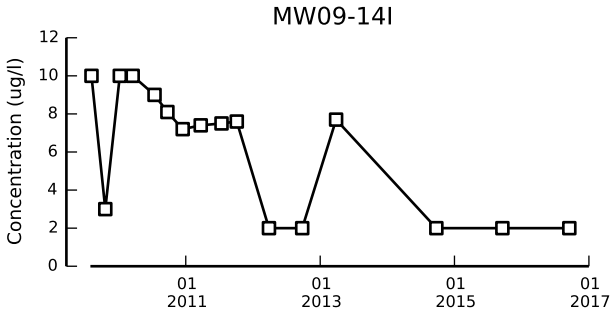


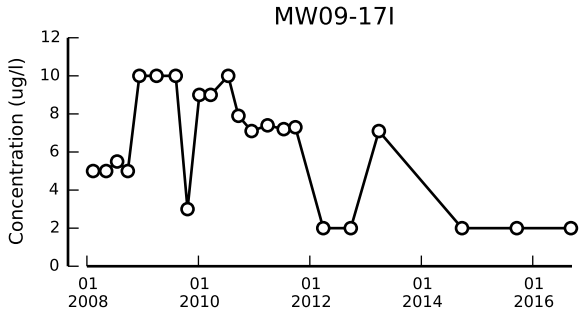


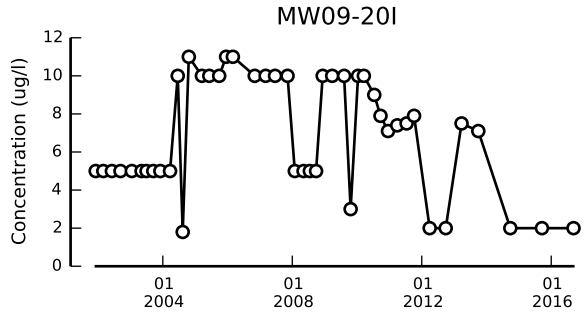


2,4-DICHLOROPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

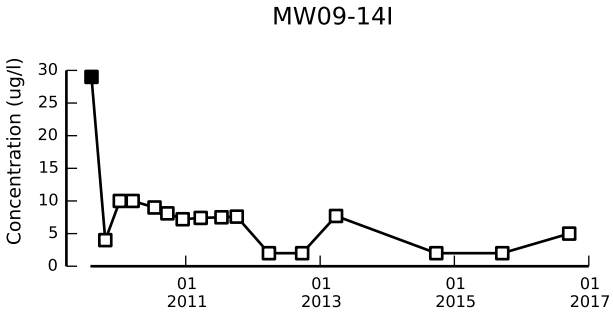


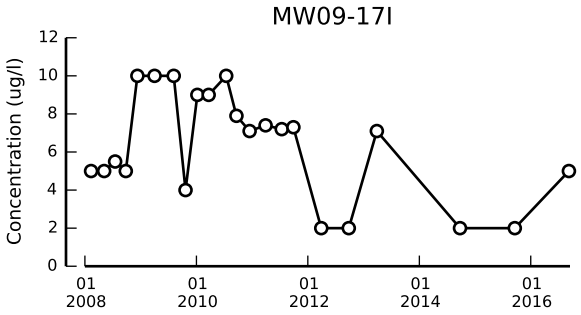


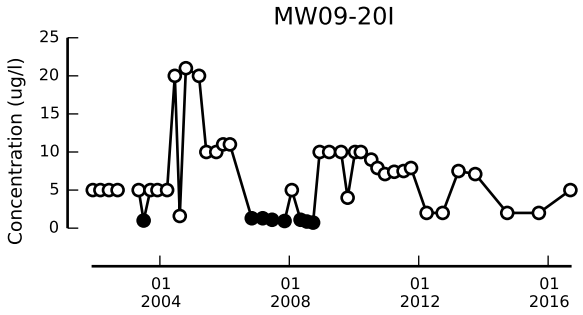


2,4-DIMETHYLPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

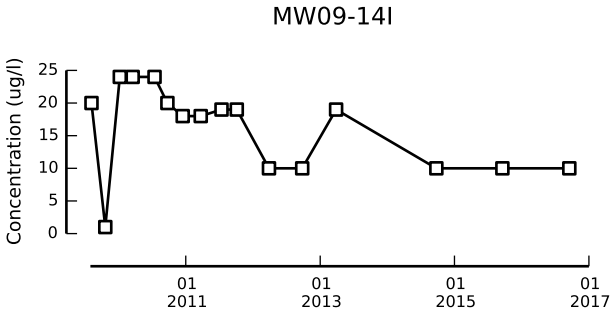


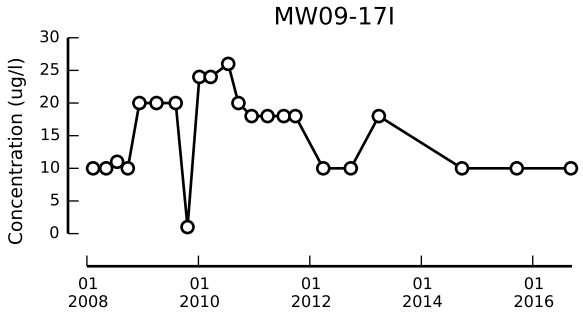


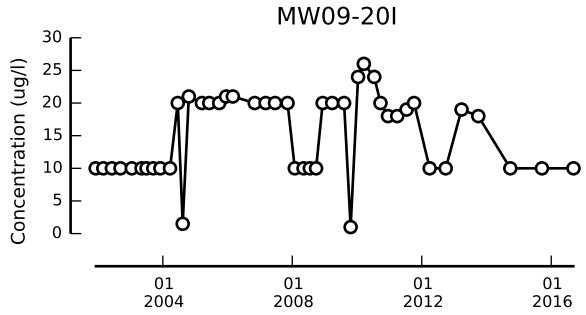


2,4-DINITROPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

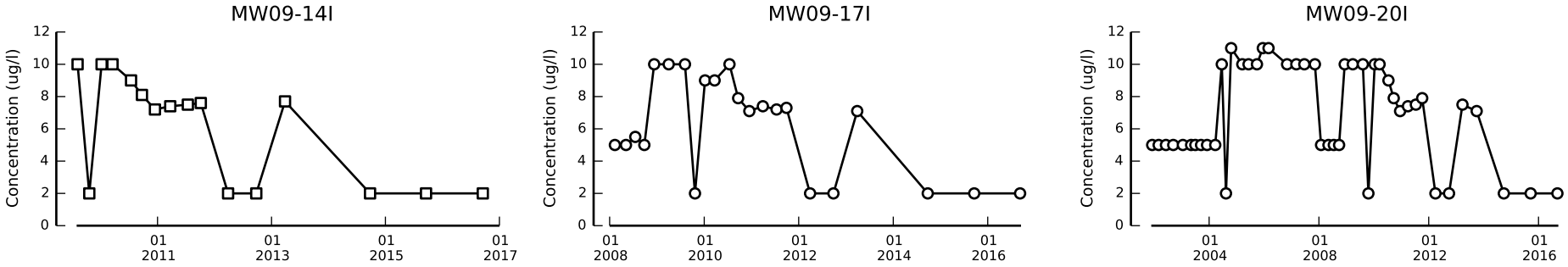






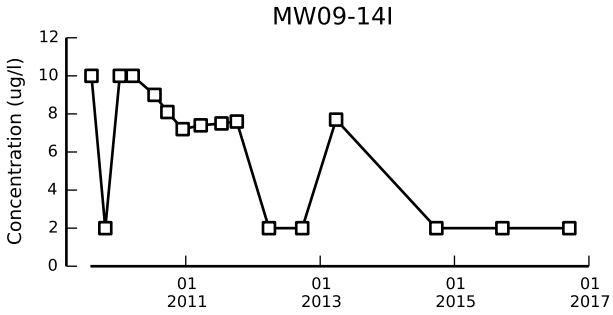
2,4-DINITROTOLUENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 133

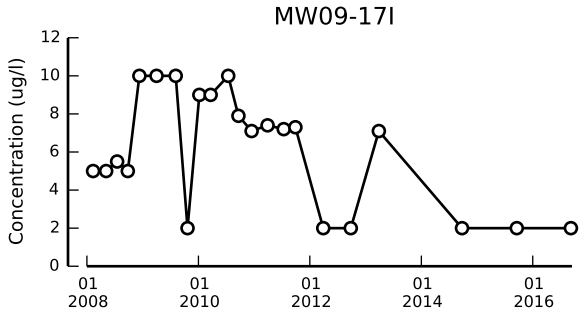
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

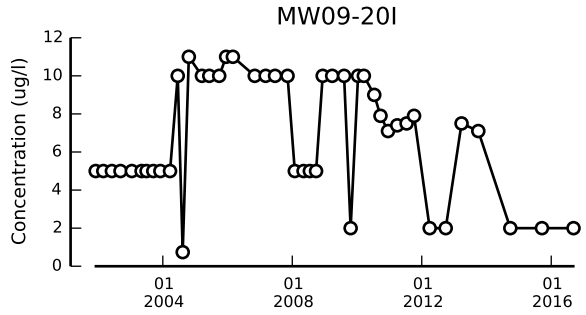


2,6-DINITROTOLUENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

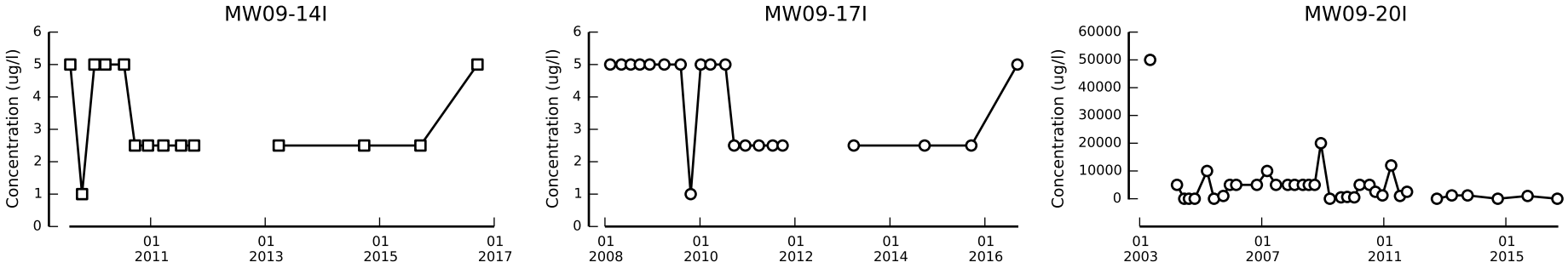






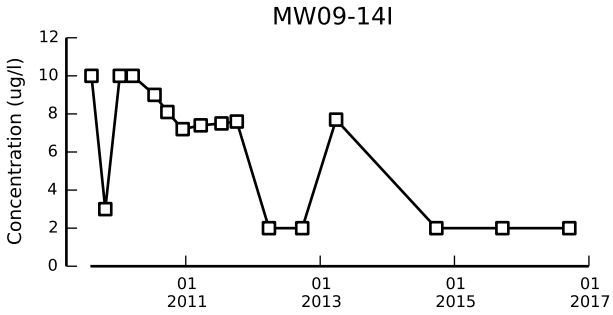
2-BUTANONE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 133

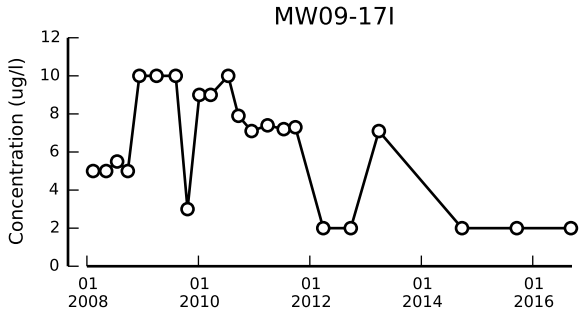
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

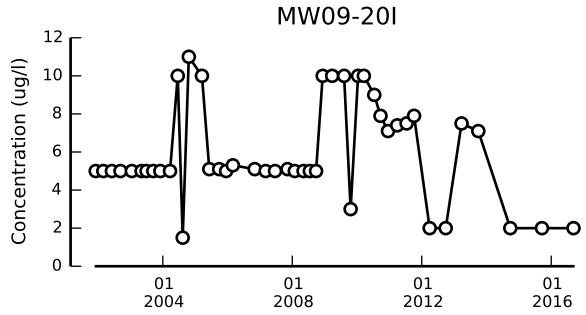


2-CHLORONAPHTHALENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 23 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

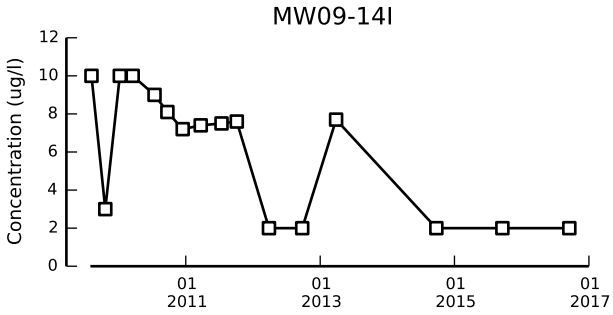


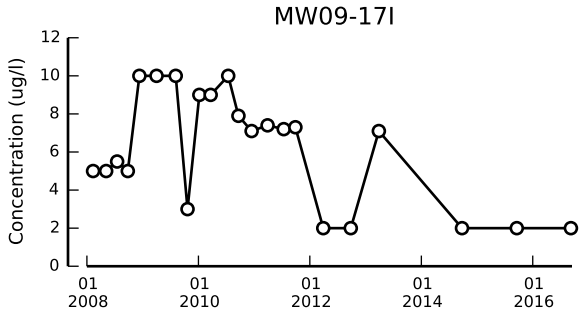


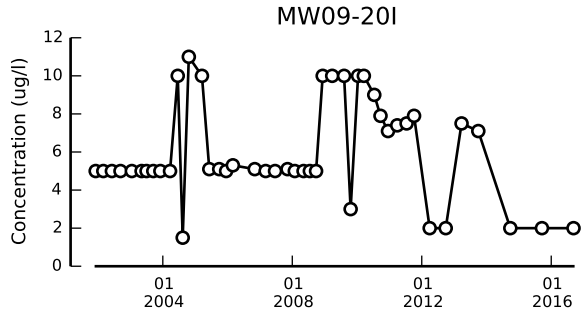


2-CHLOROPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 24 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

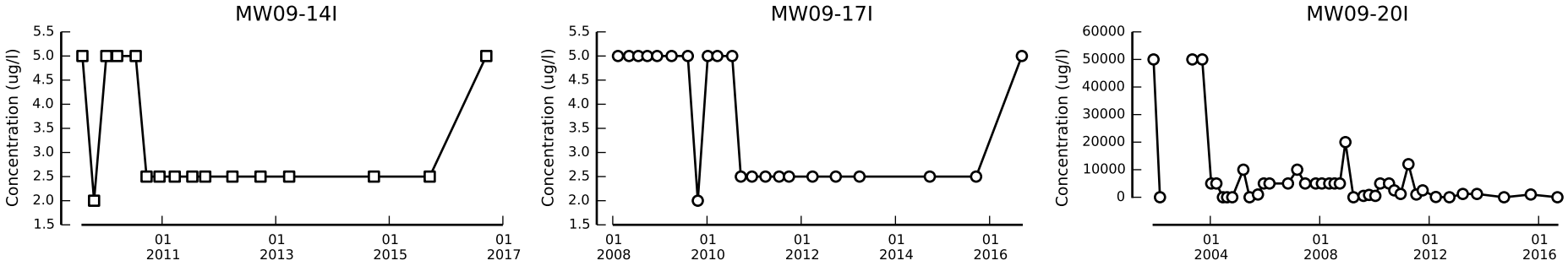






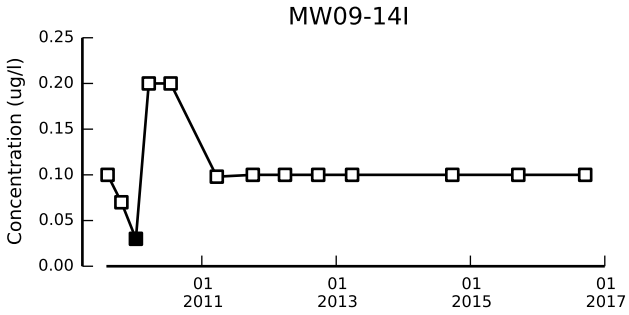
2-HEXANONE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 25 of 133

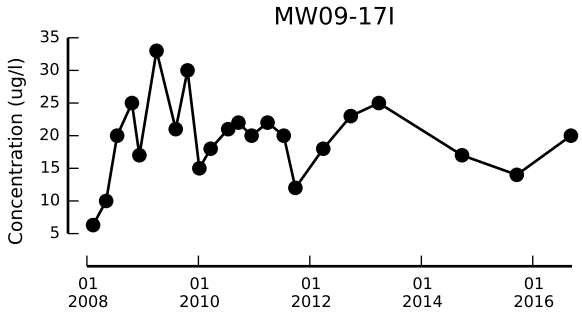
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

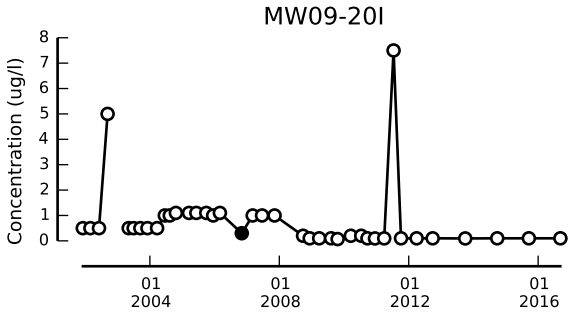


2-METHYLNAPHTHALENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 26 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

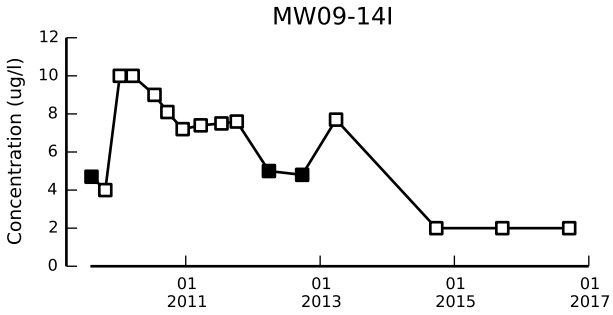


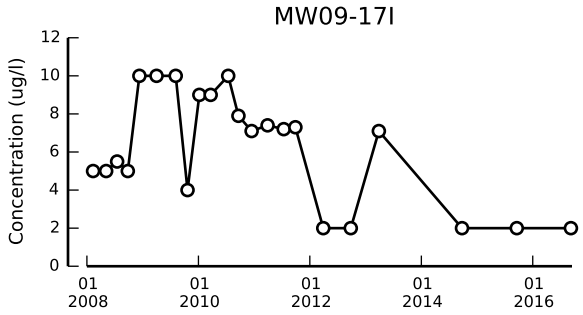


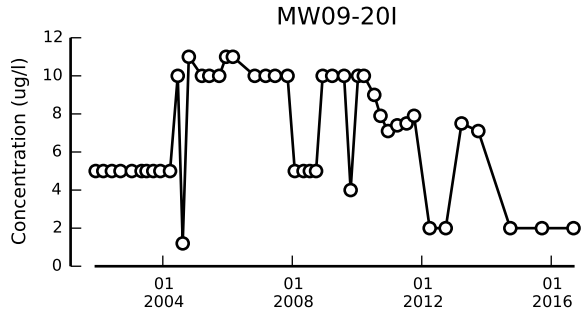


2-METHYLPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 27 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

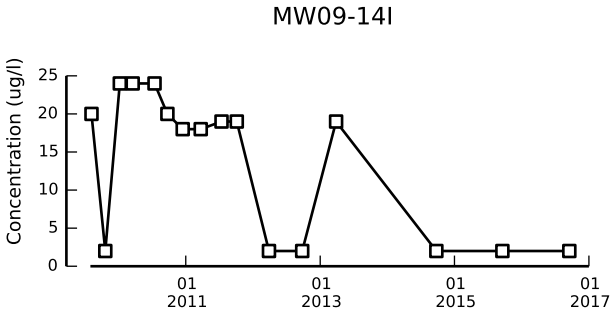


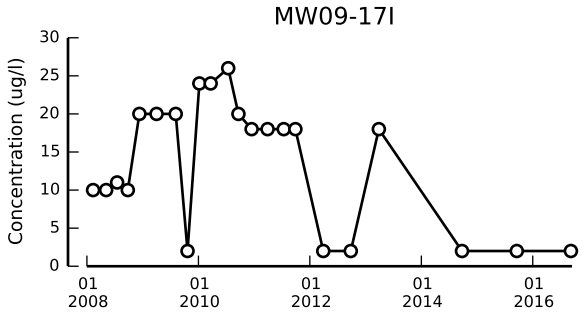


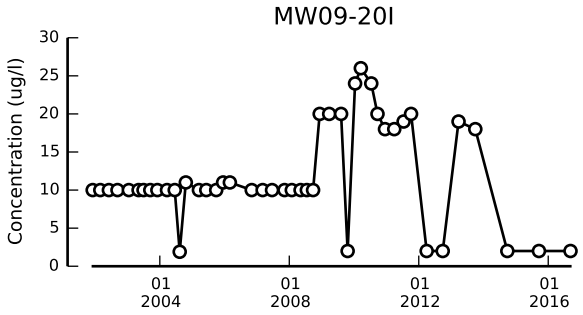


2-NITROANILINE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 28 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

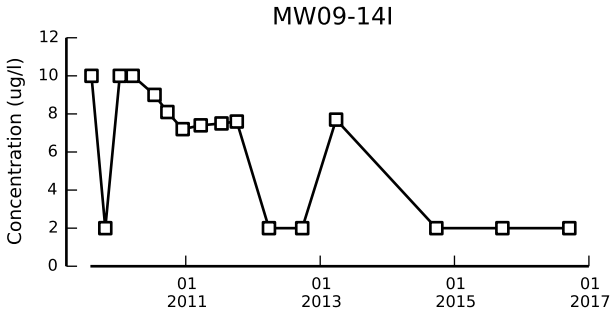


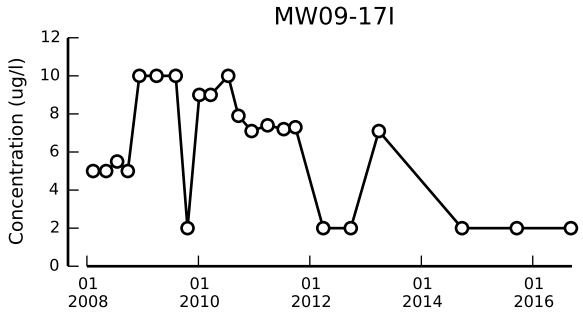


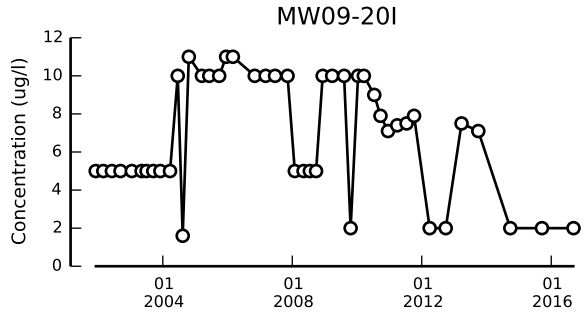


2-NITROPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 29 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

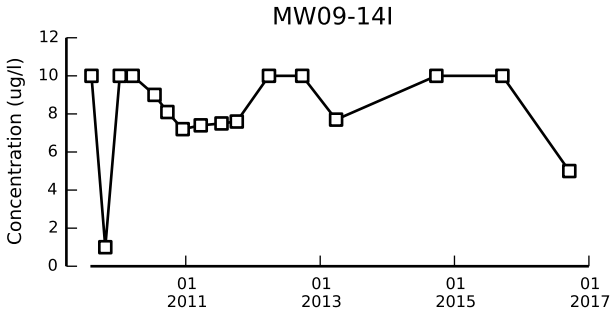


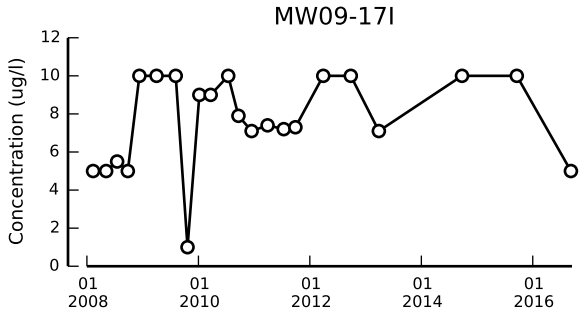


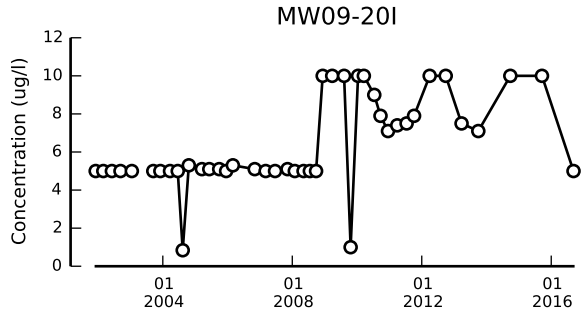


3,3-DICHLOROBENZIDINE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 30 of 133

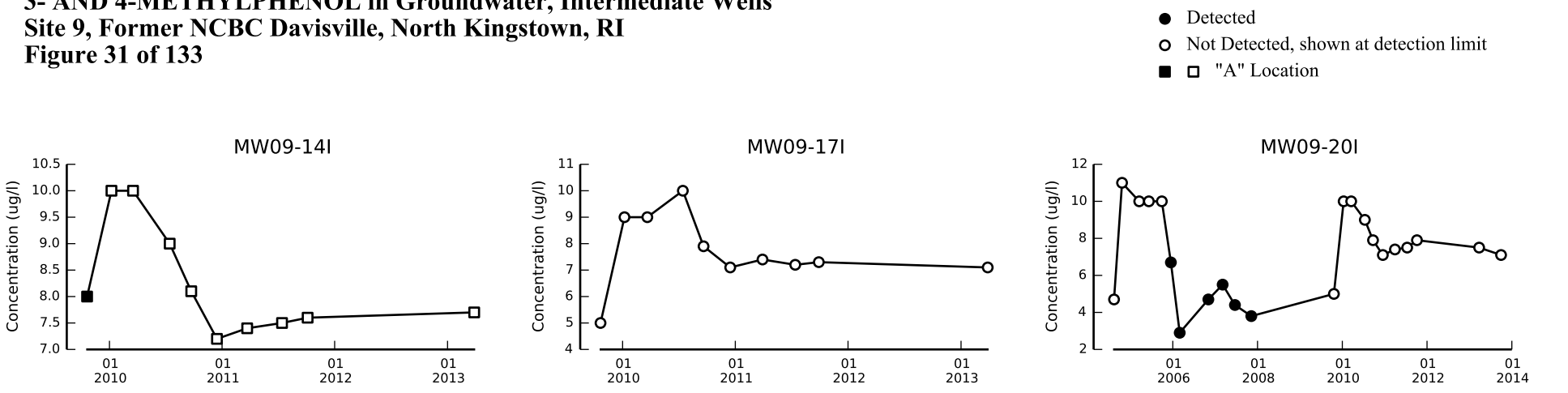
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location





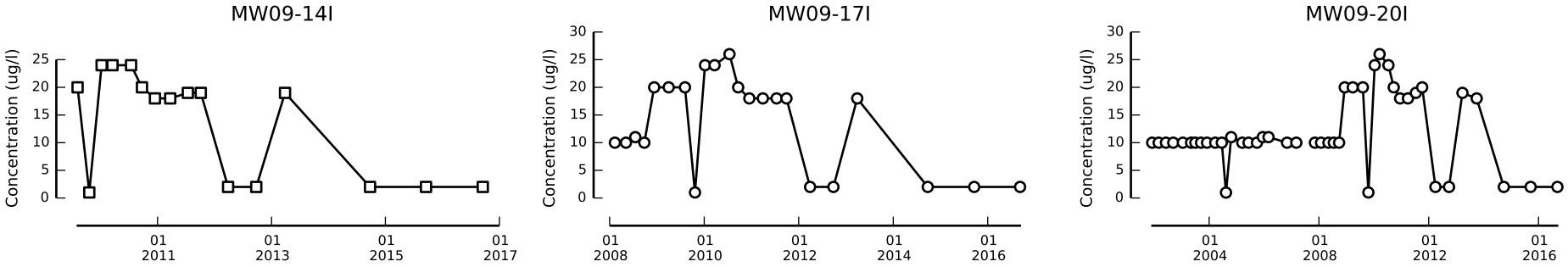


3- AND 4-METHYLPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 31 of 133



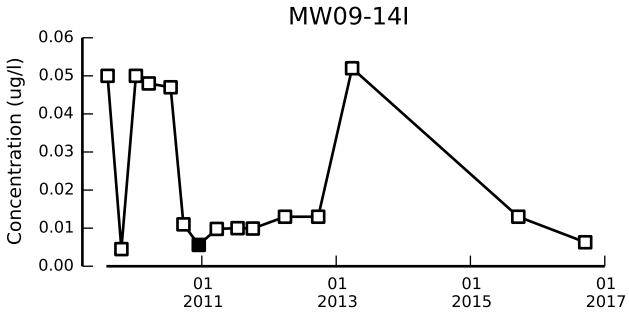
3-NITROANILINE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 32 of 133

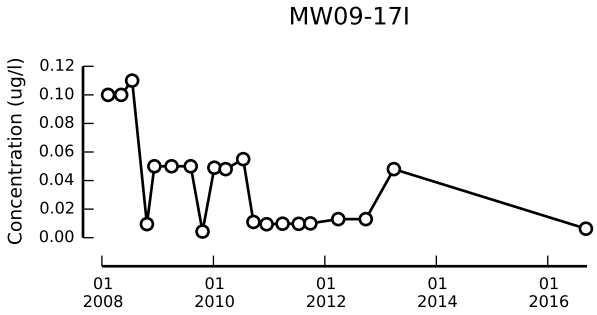
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

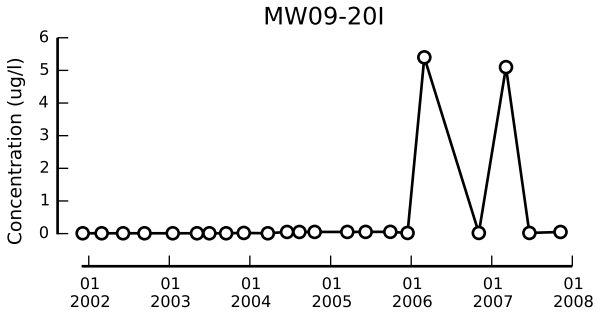


4,4-DDD in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 33 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

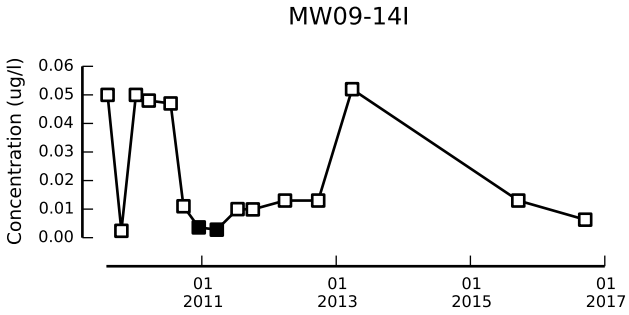


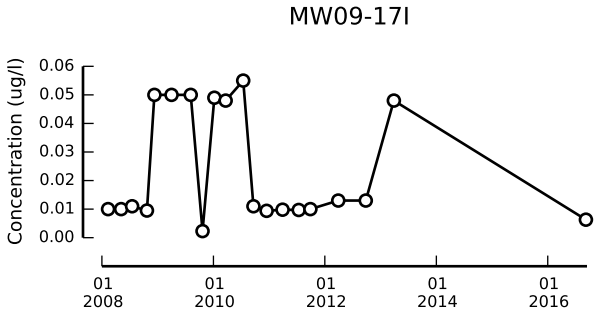


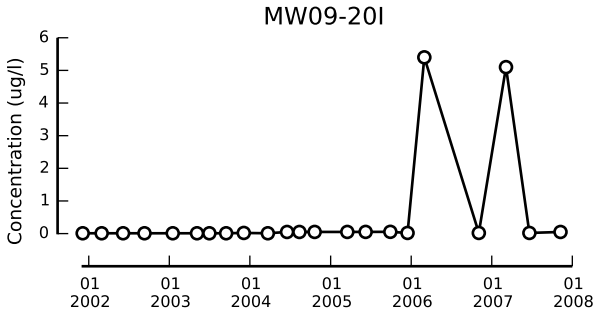


4,4-DDE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 34 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

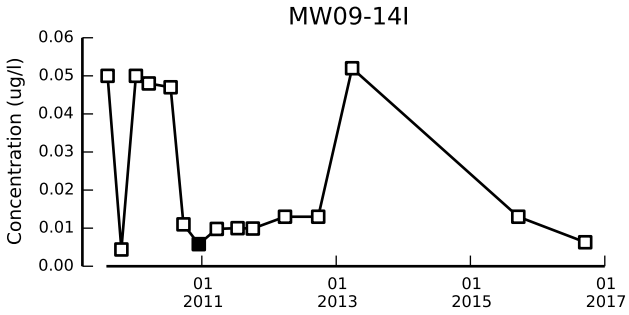


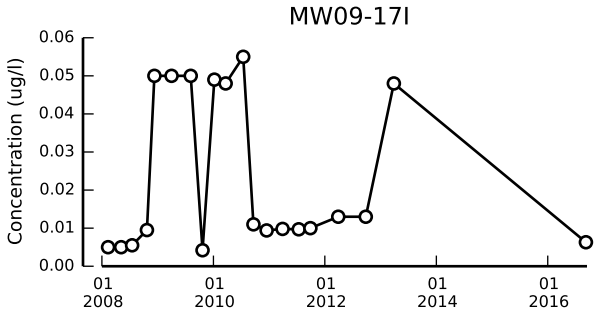


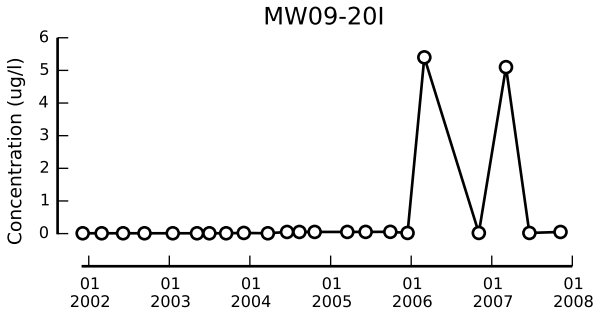


4,4-DDT in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 35 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

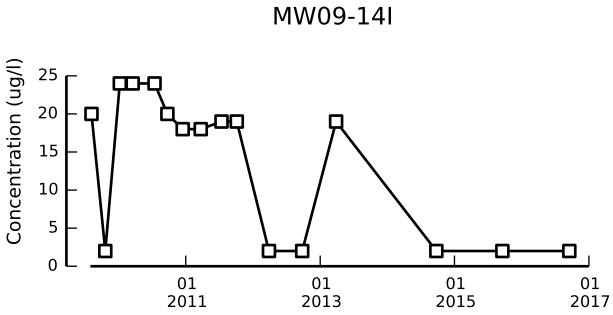


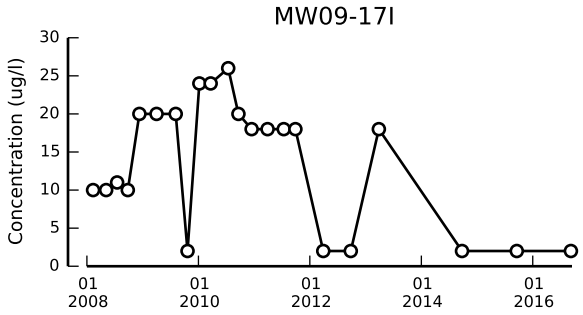


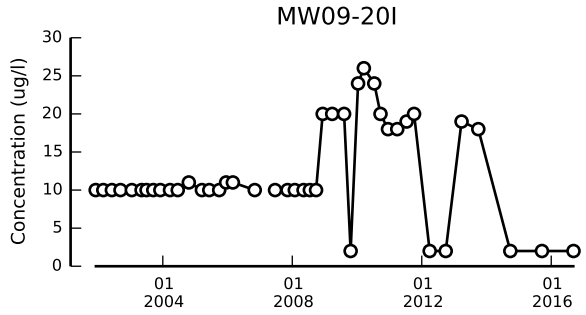


4,6-DINITRO-2-METHYLPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 36 of 133

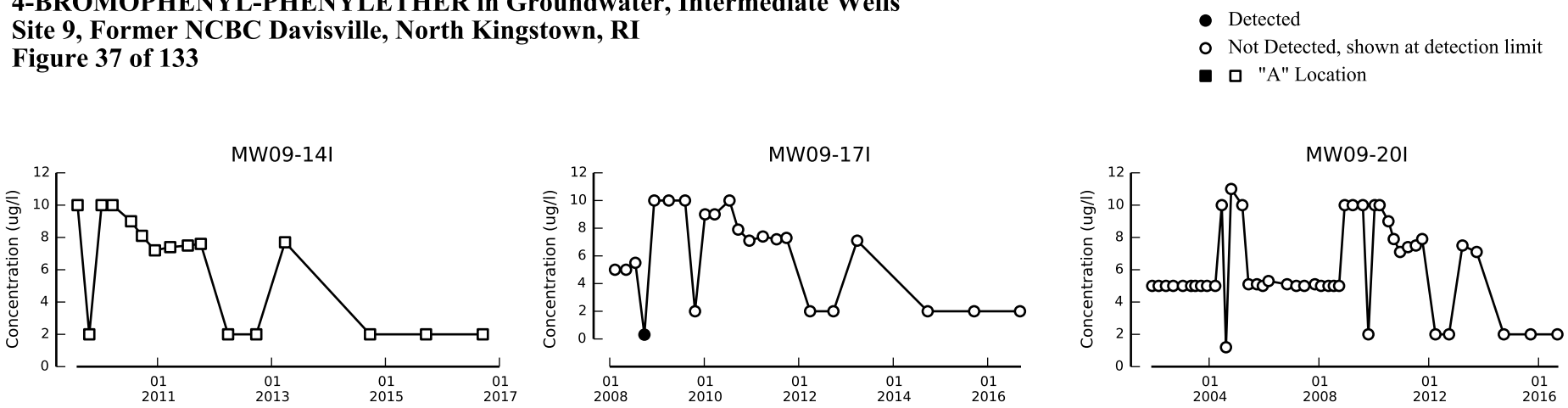
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location





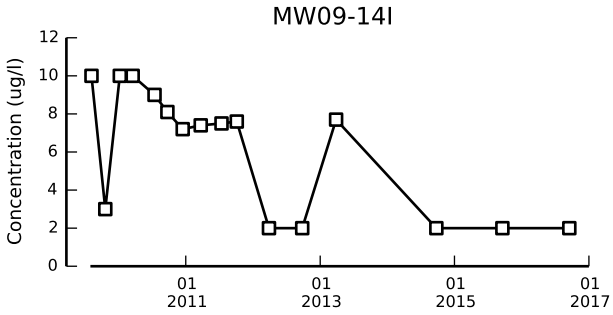


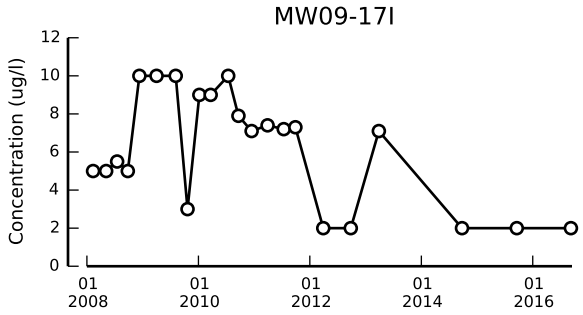
4-BROMOPHENYL-PHENYLETHER in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 37 of 133

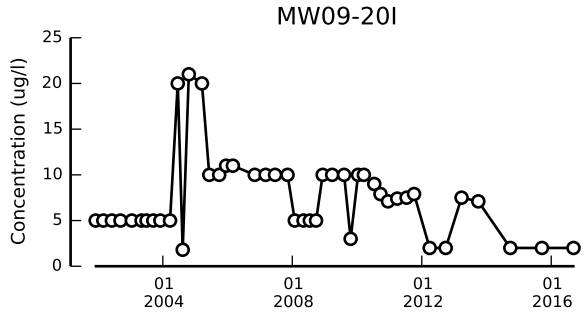


4-CHLORO-3-METHYLPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 38 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

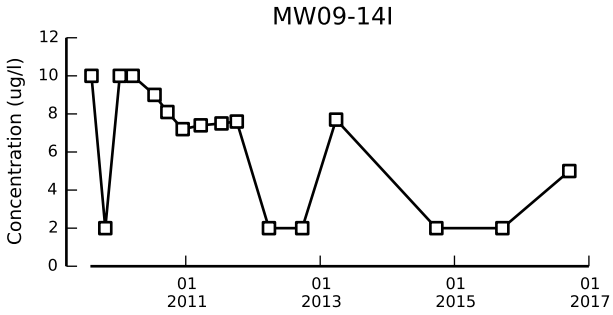


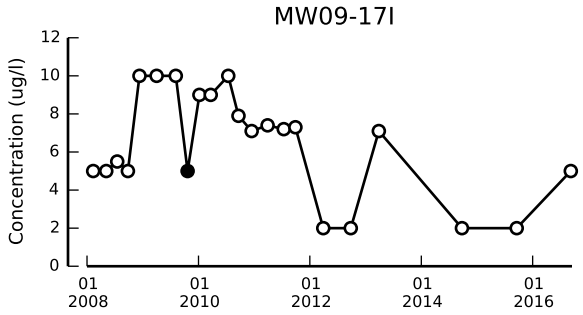


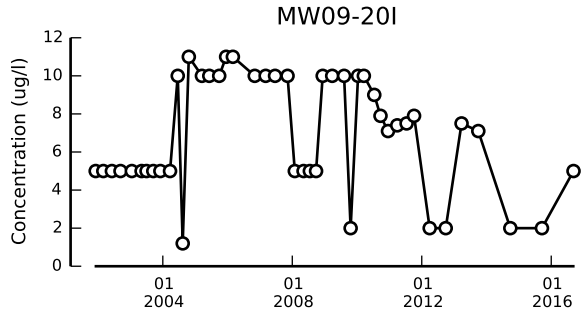


4-CHLOROANILINE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 39 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

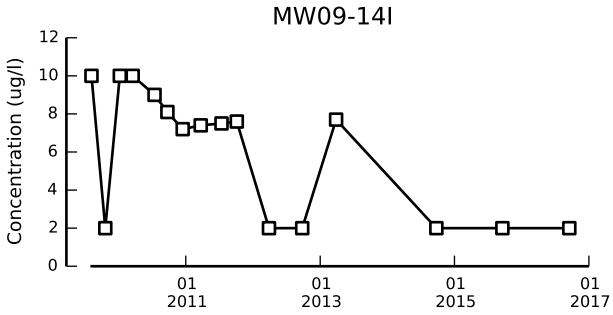


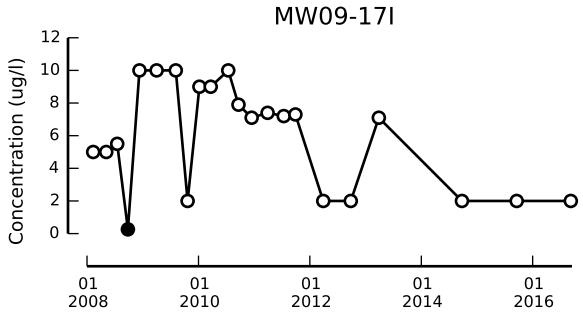


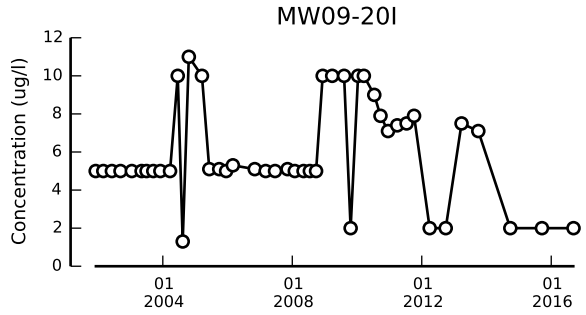


4-CHLOROPHENYL-PHENYLETHER in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 40 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

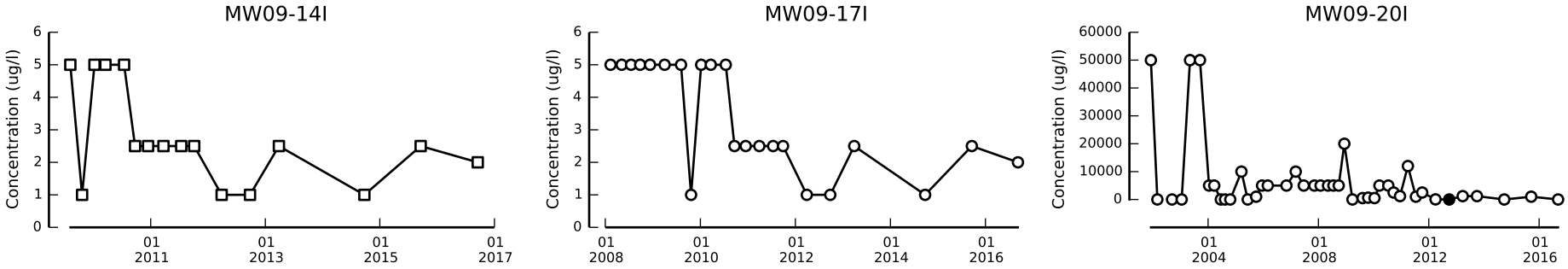






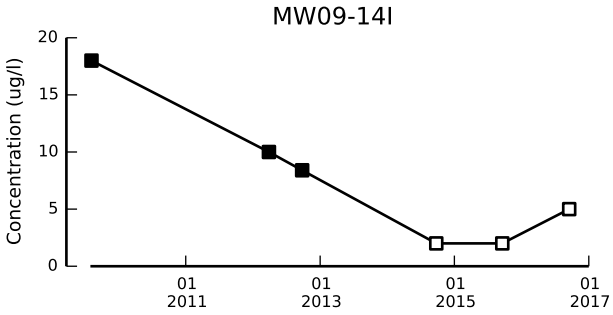
4-METHYL-2-PENTANONE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 41 of 133

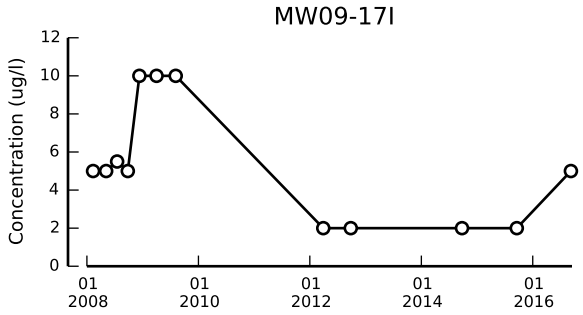
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

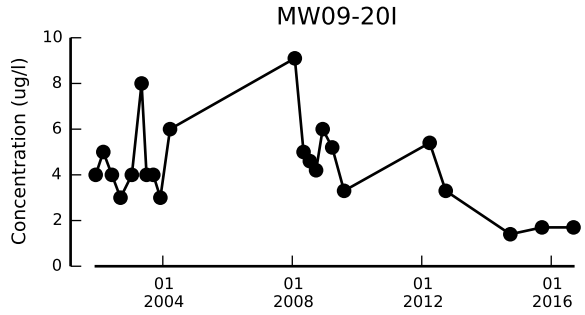


4-METHYLPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 42 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

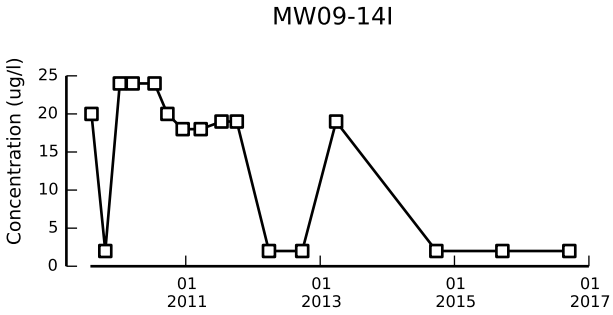


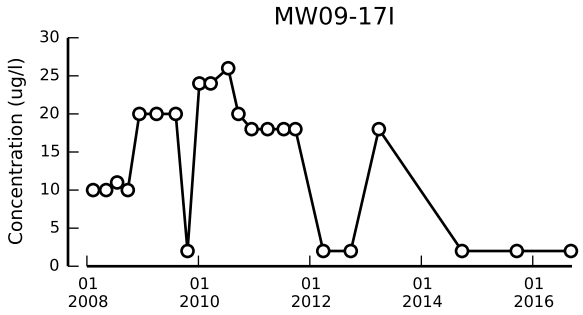


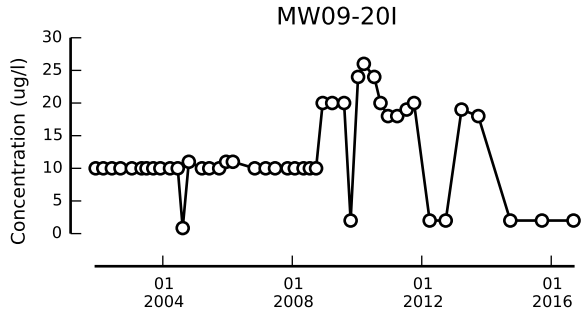


4-NITROANILINE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 43 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

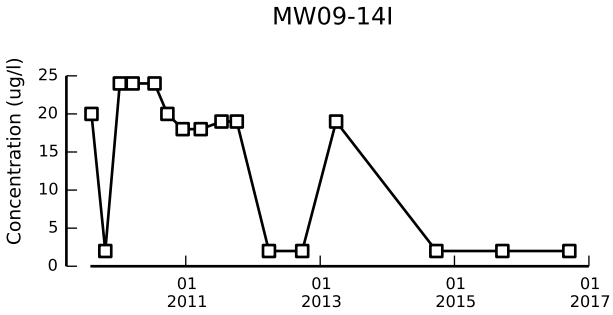


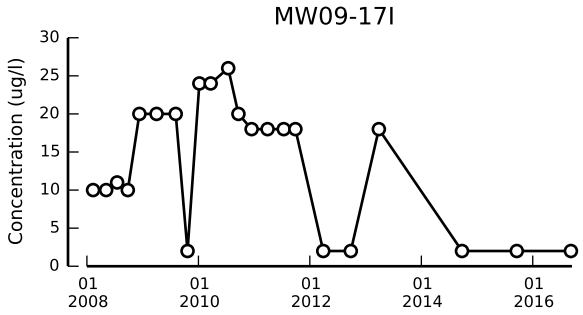


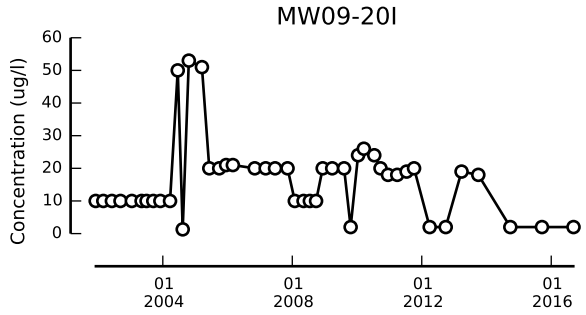


4-NITROPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 44 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

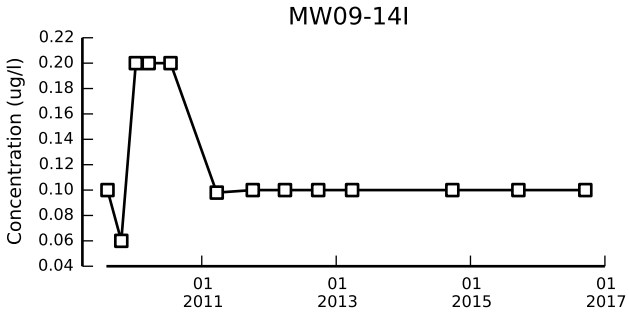


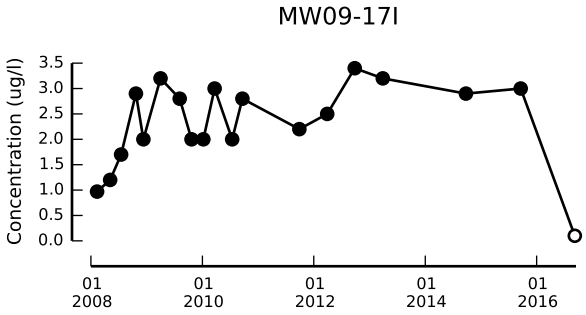


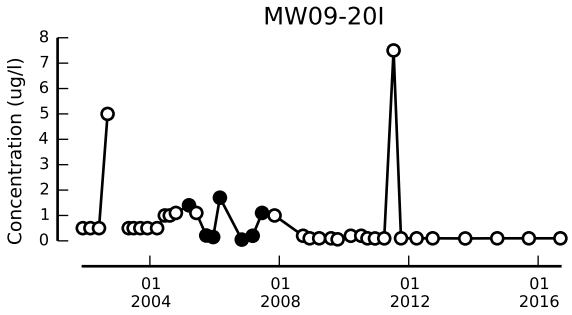


ACENAPHTHENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 45 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

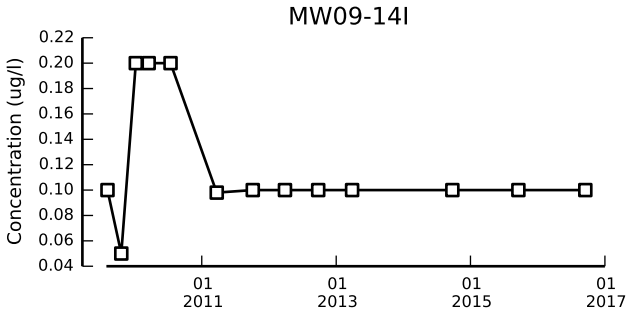


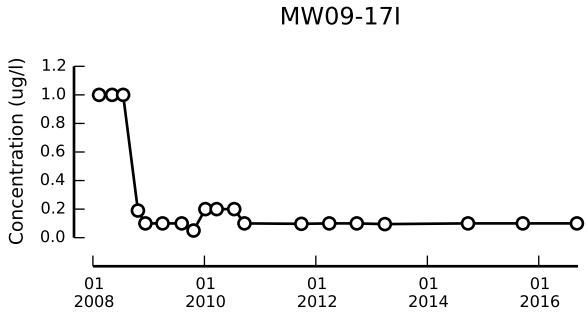


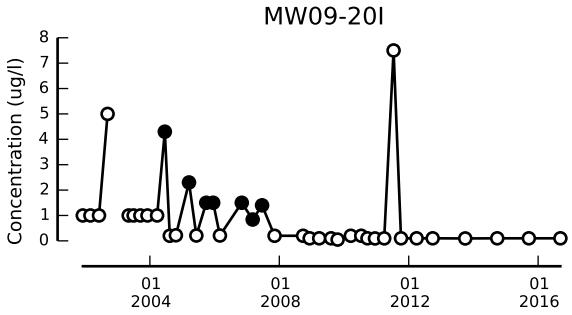


ACENAPHTHYLENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 46 of 133

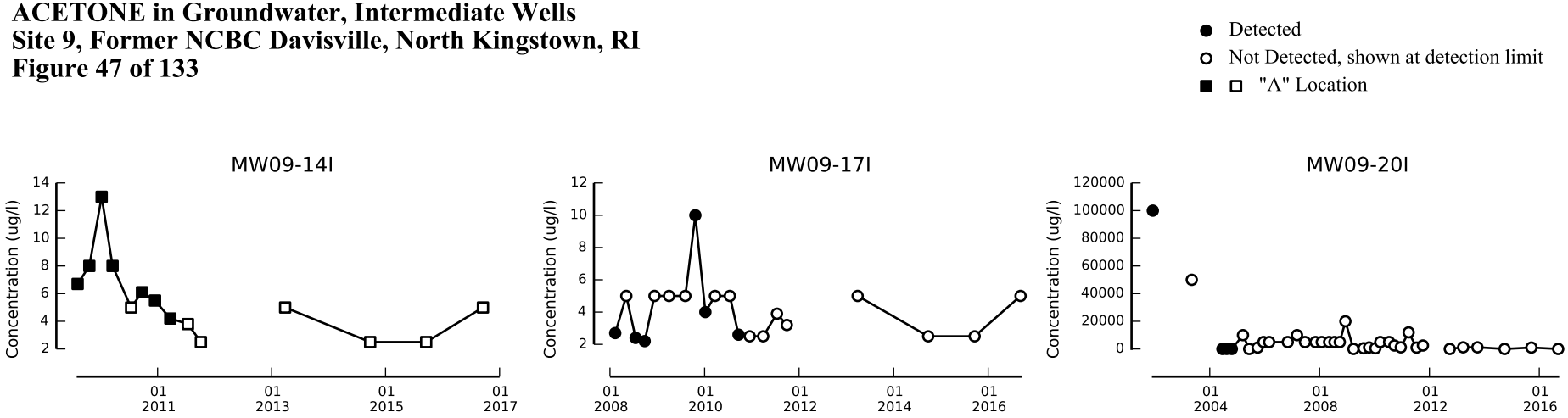
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location





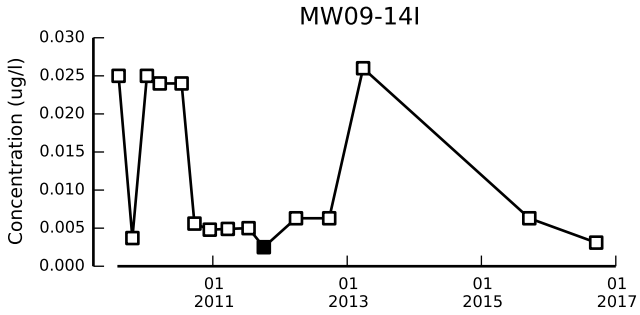


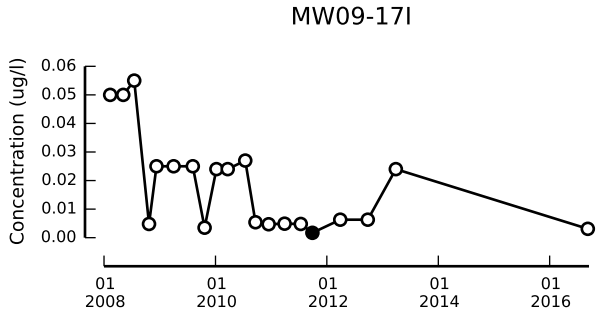
ACETONE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 47 of 133

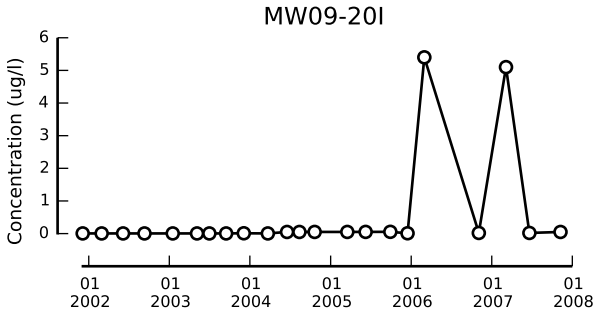


ALDRIN in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 48 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

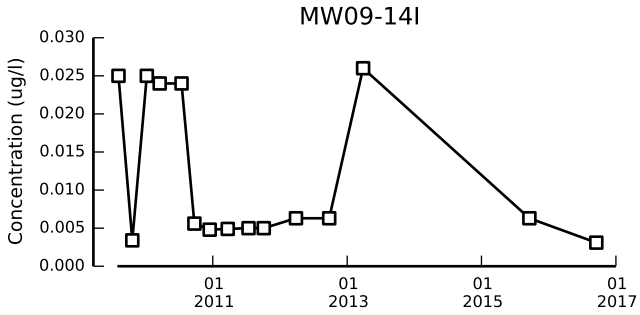


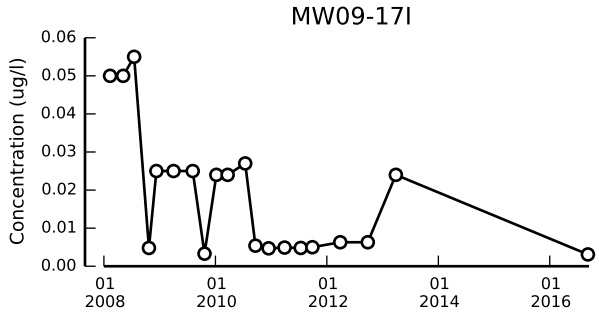


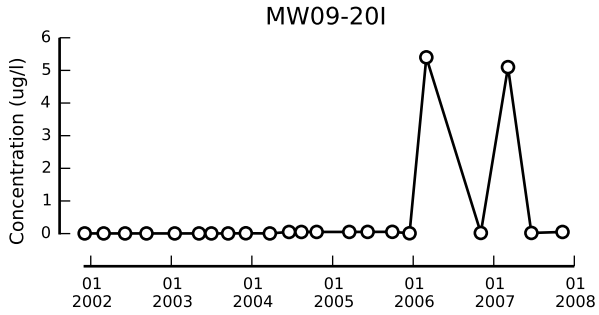


ALPHA-BHC in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 49 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

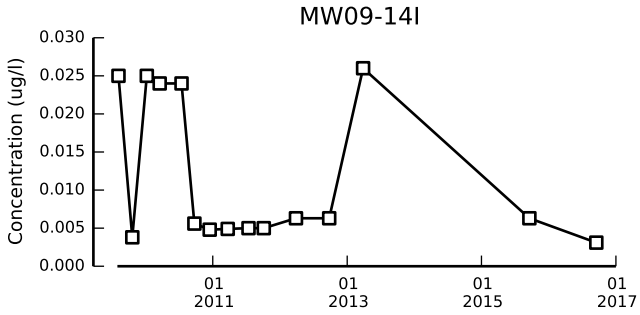


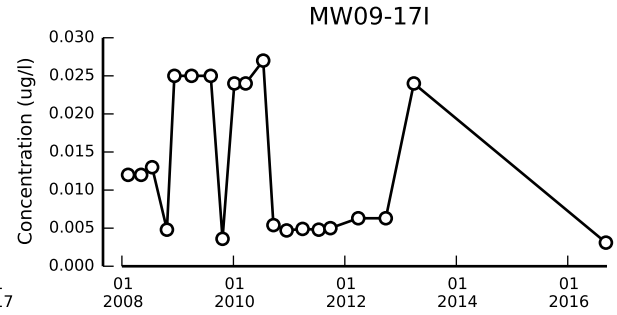


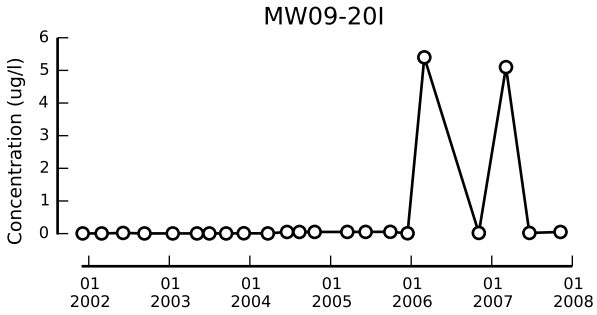


ALPHA-CHLORDANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 50 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

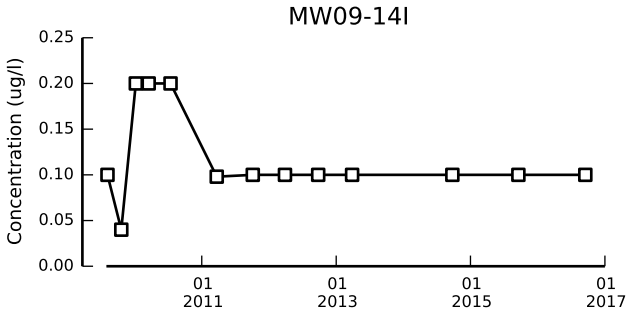


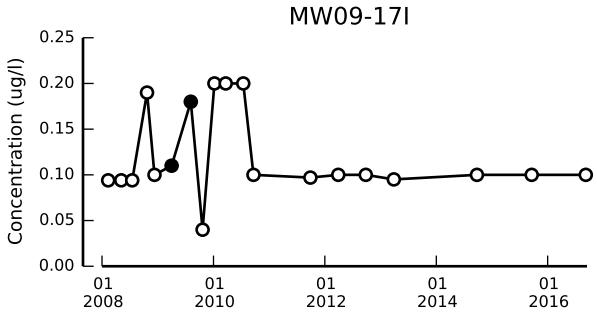


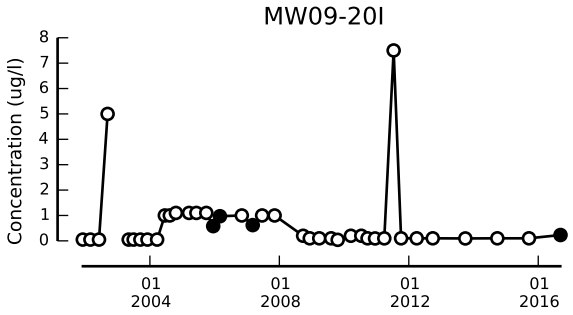


ANTHRACENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 51 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

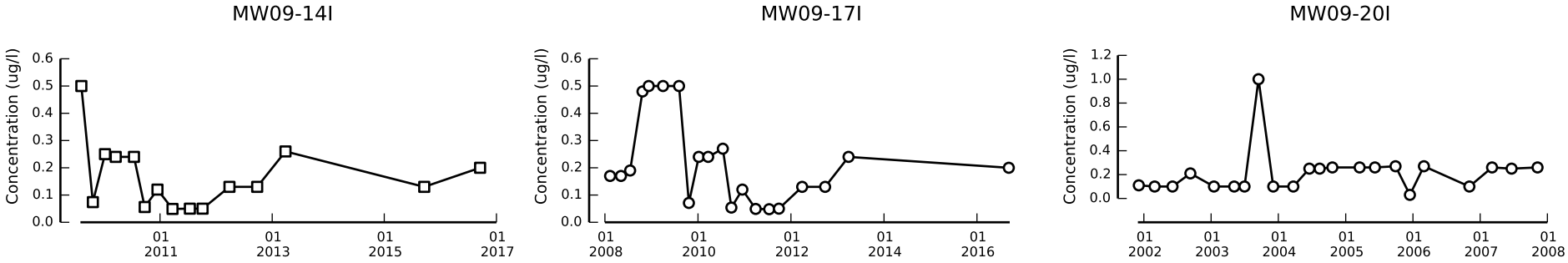






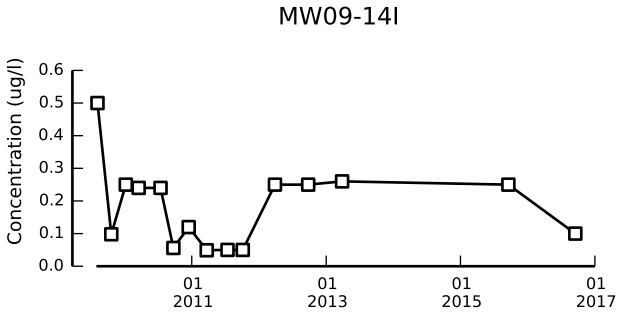
AROCLOR-1016 in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 52 of 133

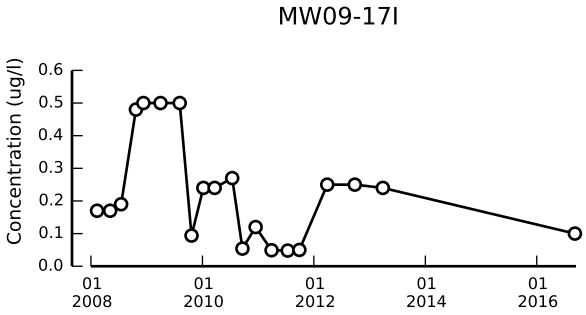
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

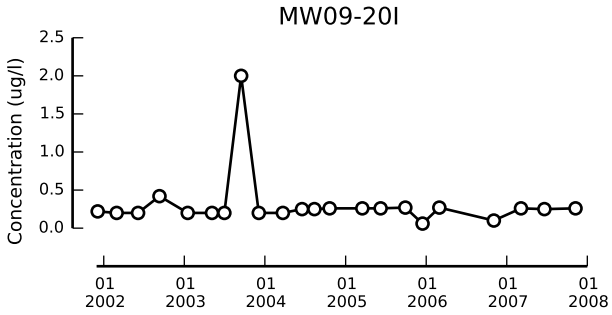


AROCLOR-1221 in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 53 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



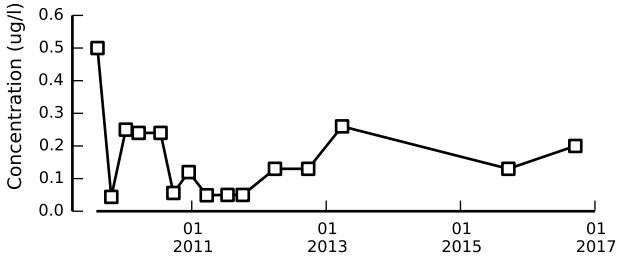




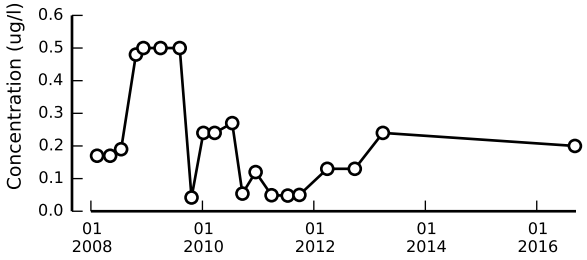
AROCLOR-1232 in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 54 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

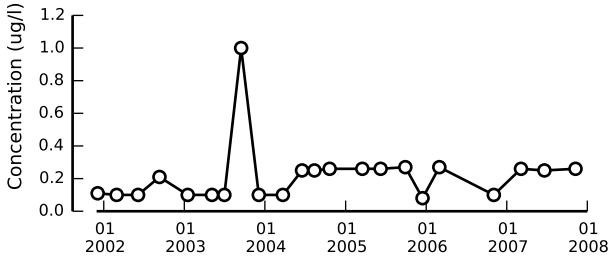
MW09-14I



MW09-17I



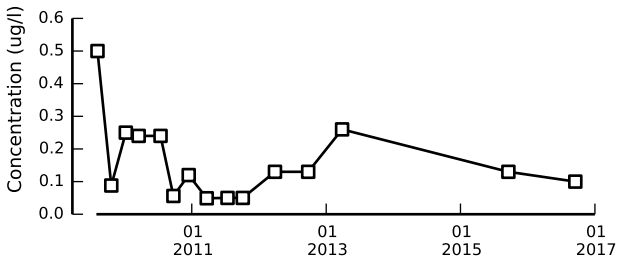
MW09-20I



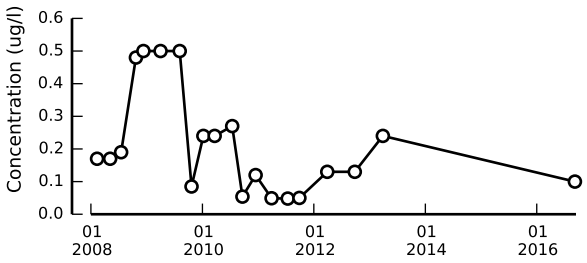
AROCLOR-1242 in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 55 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

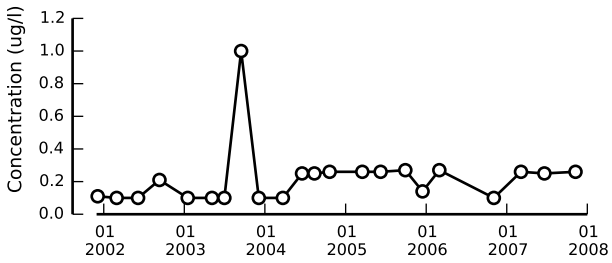
MW09-14I



MW09-17I

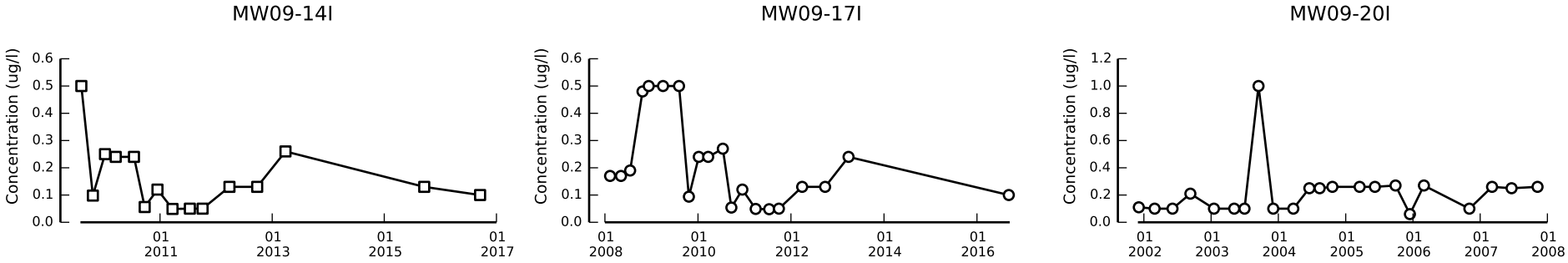


MW09-20I



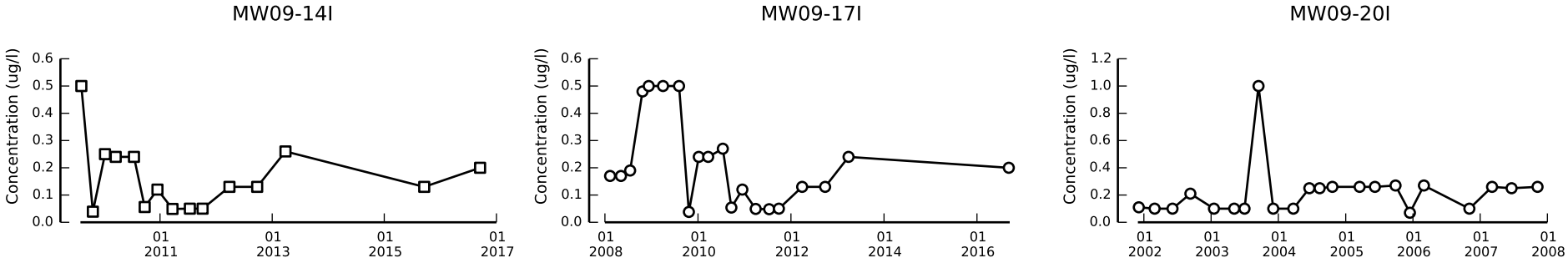
AROCLOR-1248 in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 56 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



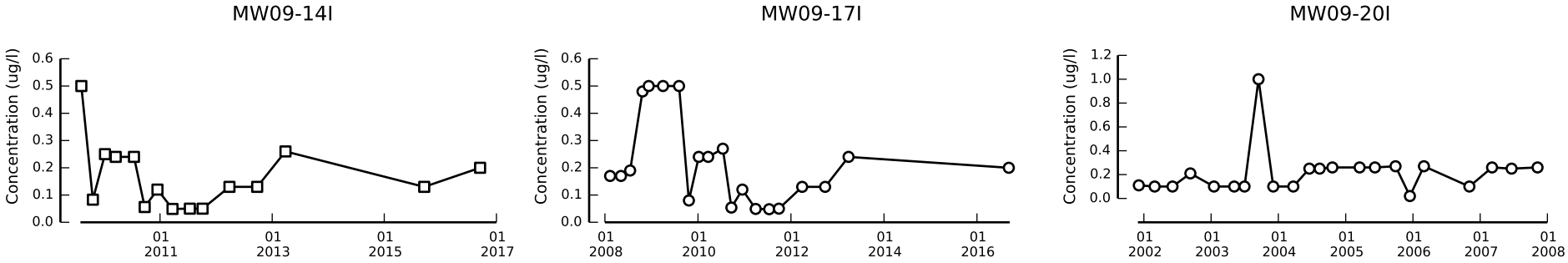
AROCLOR-1254 in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 57 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

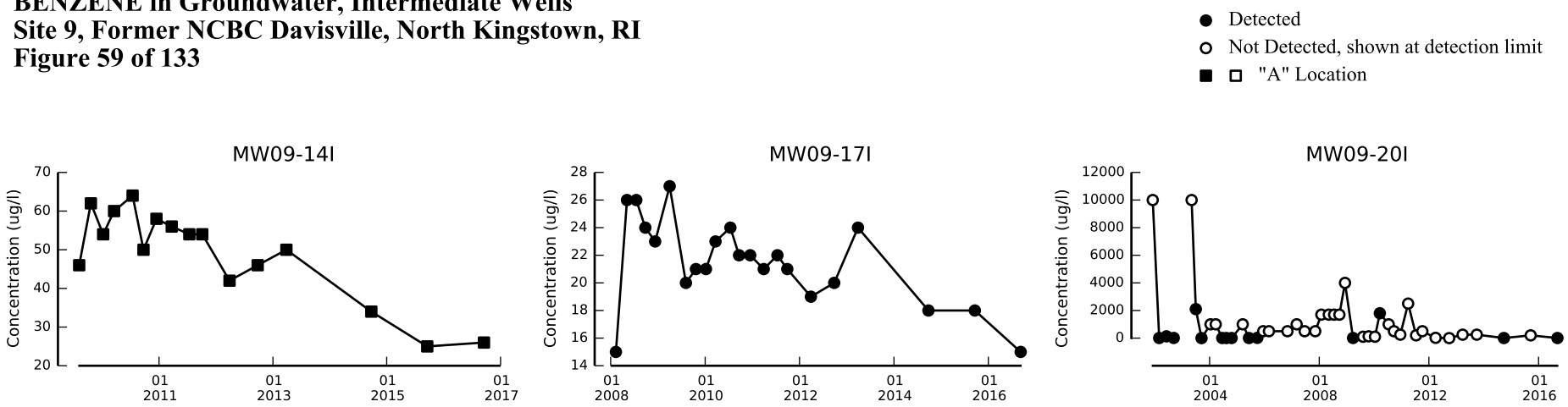


AROCLOR-1260 in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 58 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

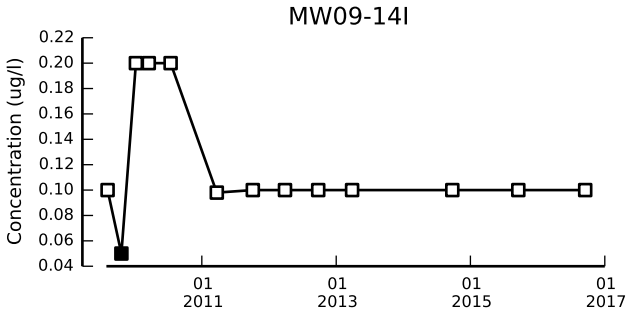


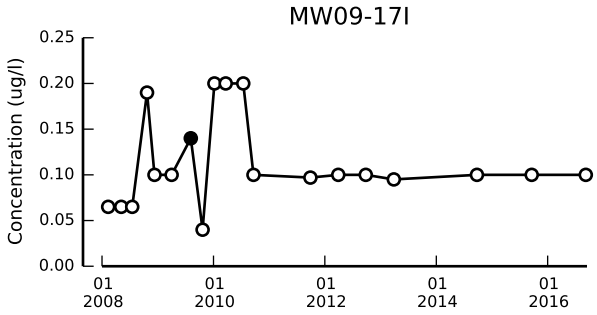
BENZENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 59 of 133

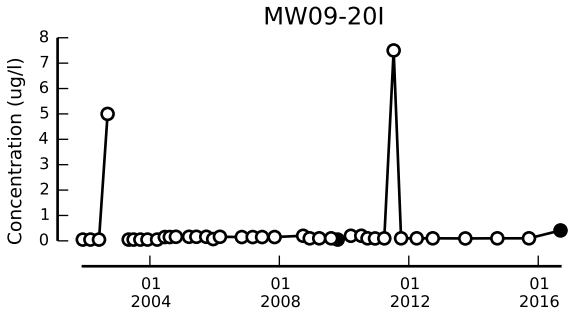


BENZO(A)ANTHRACENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 60 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

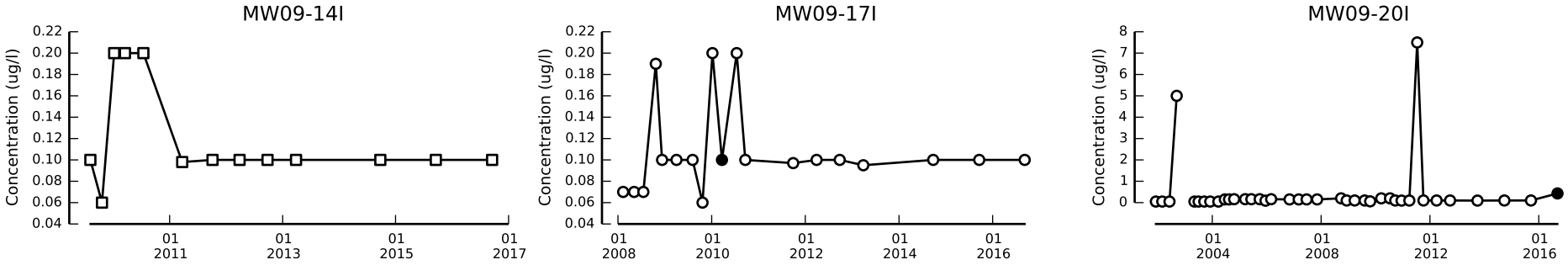






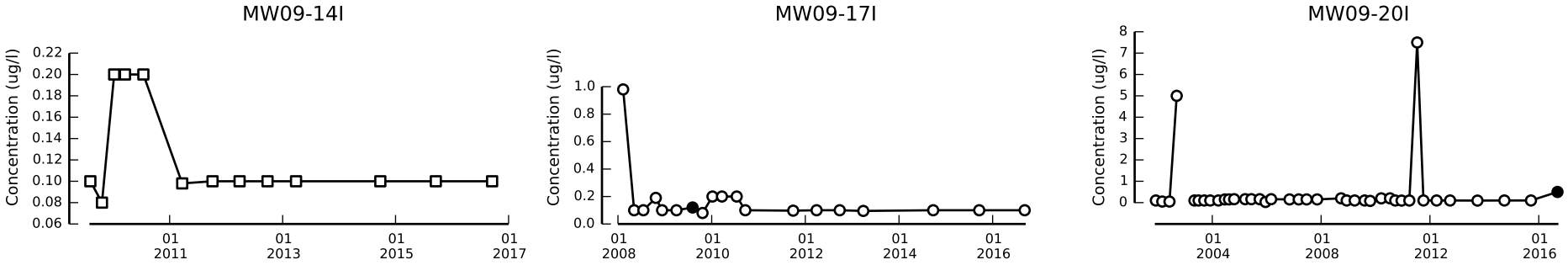
BENZO(A)PYRENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 61 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



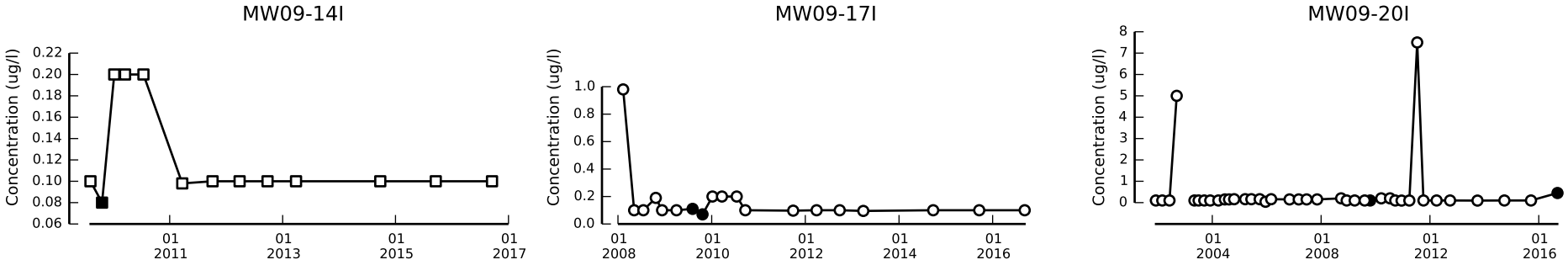
BENZO(B)FLUORANTHENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 62 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



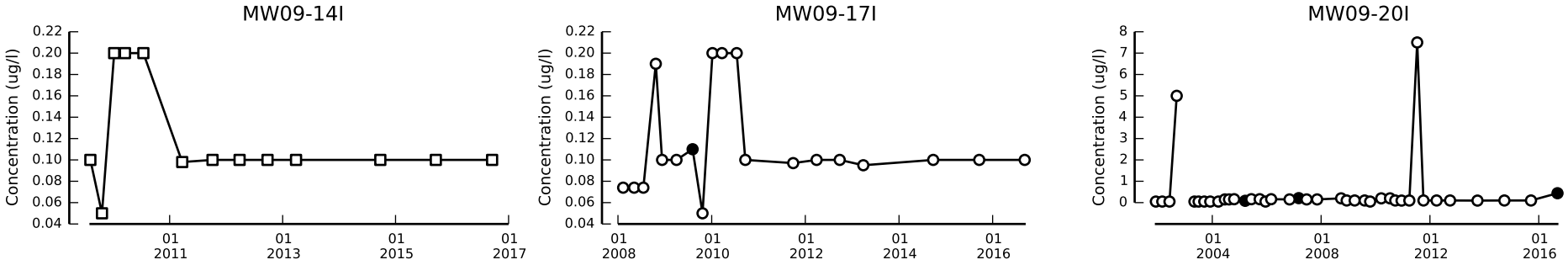
BENZO(G,H,I)PERYLENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 63 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



BENZO(K)FLUORANTHENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 64 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



BENZOIC ACID in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 65 of 133

● Detected
○ Not Detected, shown at detection limit

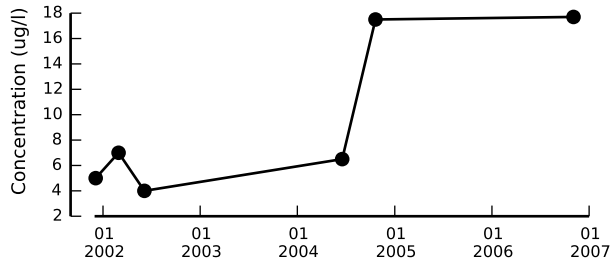
MW09-14I

Not Sampled

MW09-17I

Not Sampled

MW09-20I



BENZYL ALCOHOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 66 of 133

● Detected
○ Not Detected, shown at detection limit

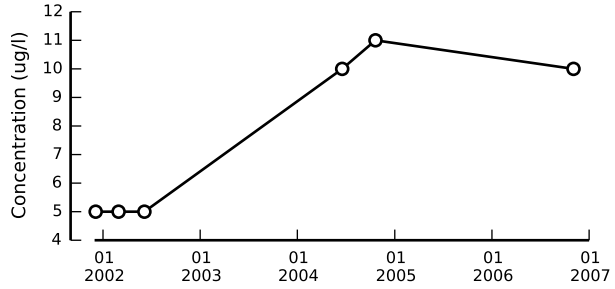
MW09-14I

Not Sampled

MW09-17I

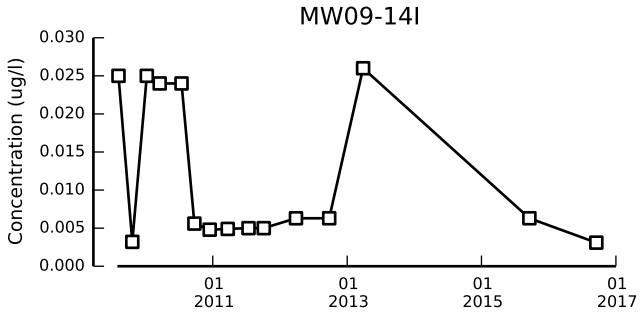
Not Sampled

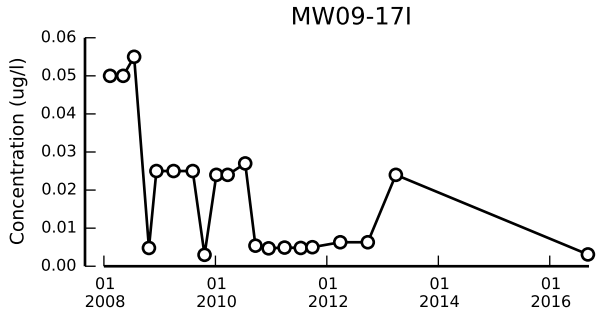
MW09-20I

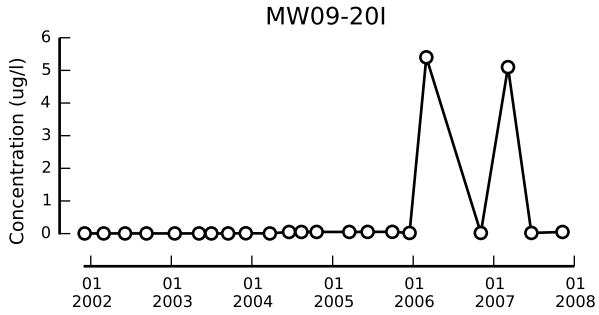


BETA-BHC in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 67 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

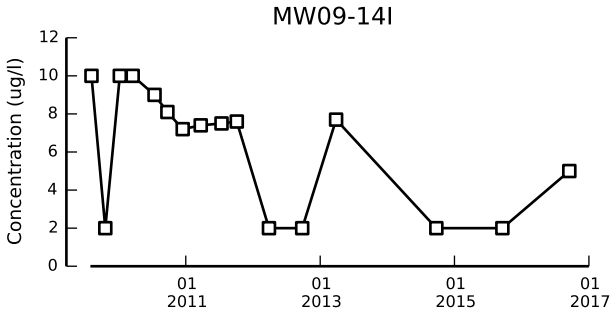


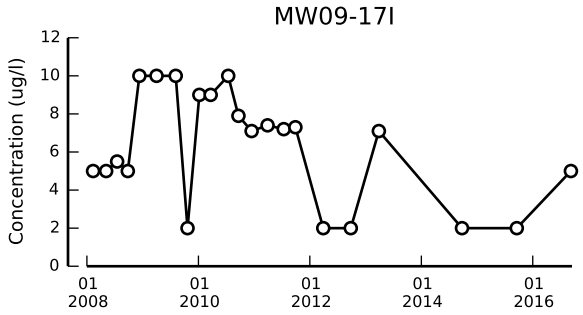


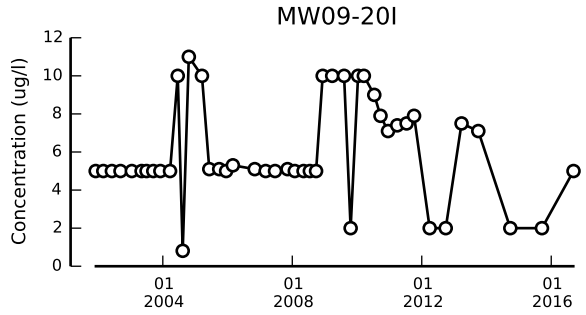


BIS(2-CHLOROETHOXY)METHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 68 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

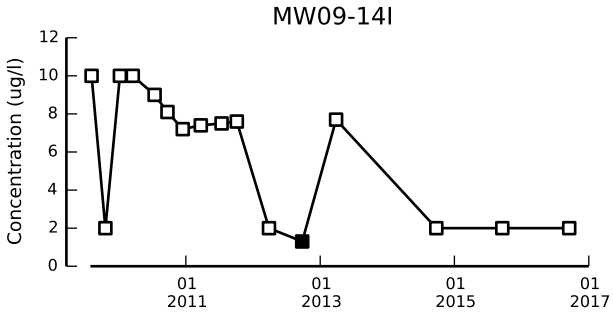


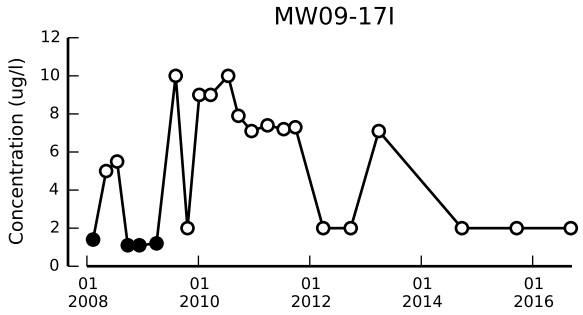


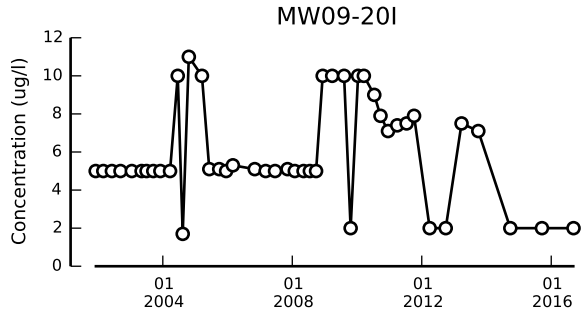


BIS(2-CHLOROETHYL)ETHER in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 69 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location







BIS(2-CHLOROISOPROPYL)ETHER in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 70 of 133

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

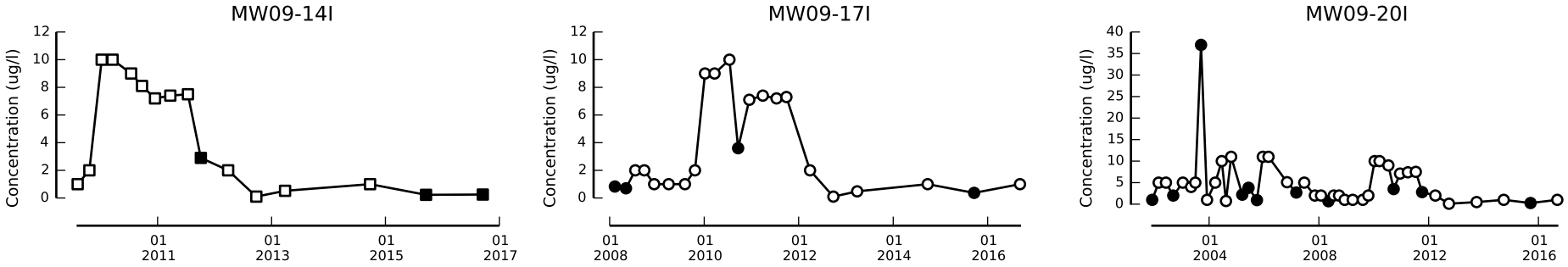
MW09-17I

Not Sampled

MW09-20I

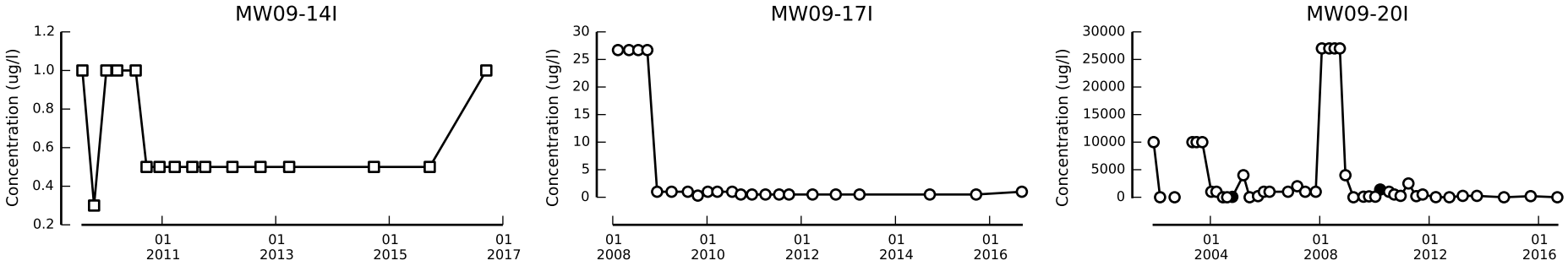
BIS(2-ETHYLHEXYL)PHTHALATE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 71 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



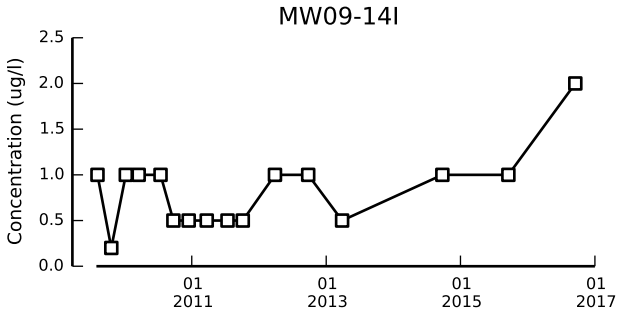
BROMODICHLOROMETHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 72 of 133

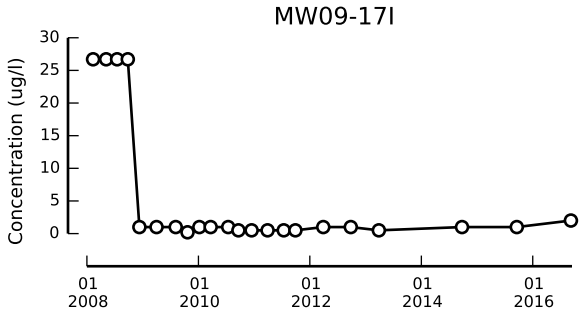
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

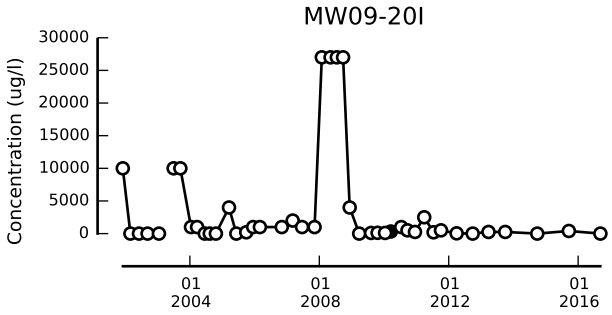


BROMOFORM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 73 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

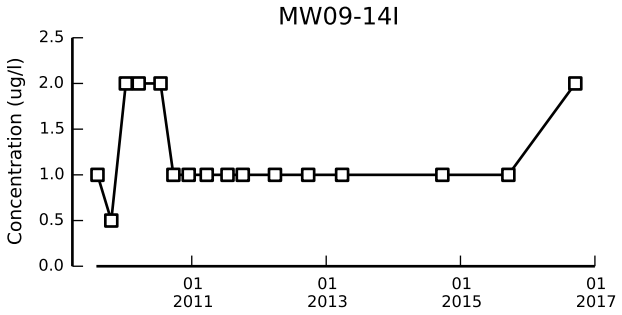


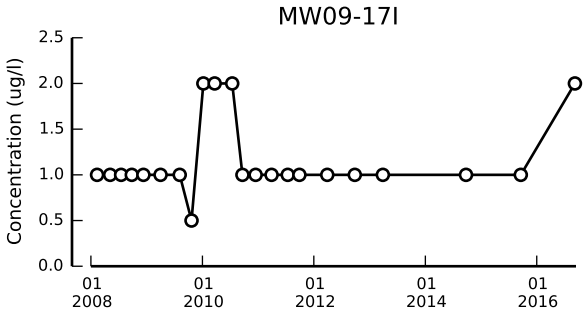


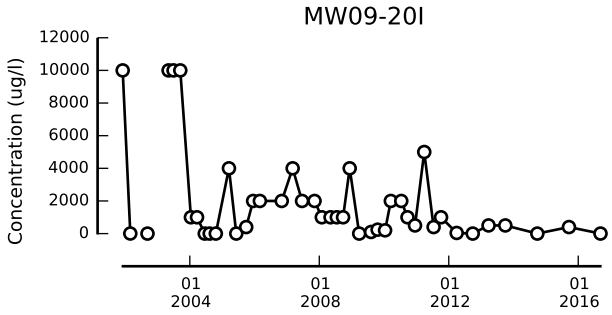


BROMOMETHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 74 of 133

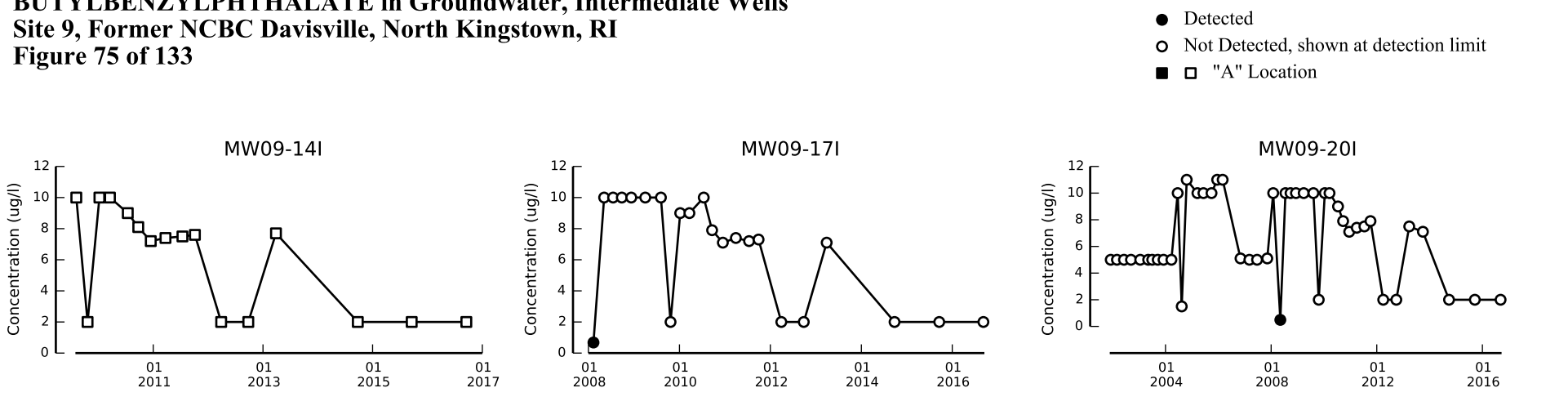
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location





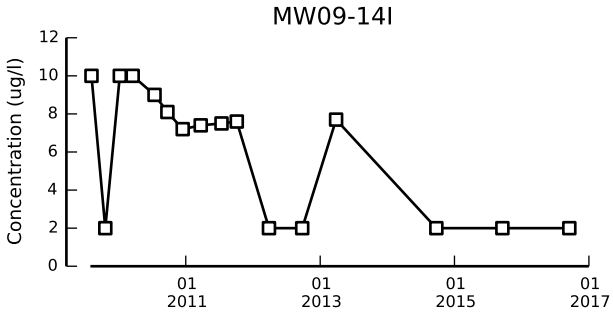


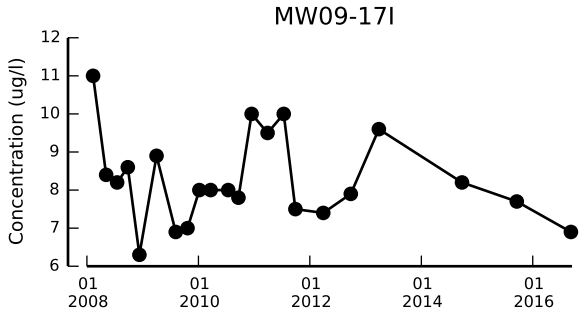
BUTYLBENZYLPHTHALATE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 75 of 133

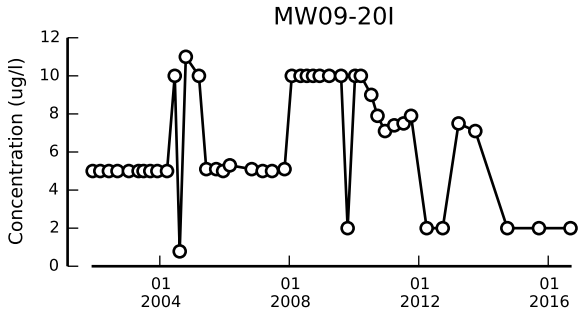


CARBAZOLE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 76 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

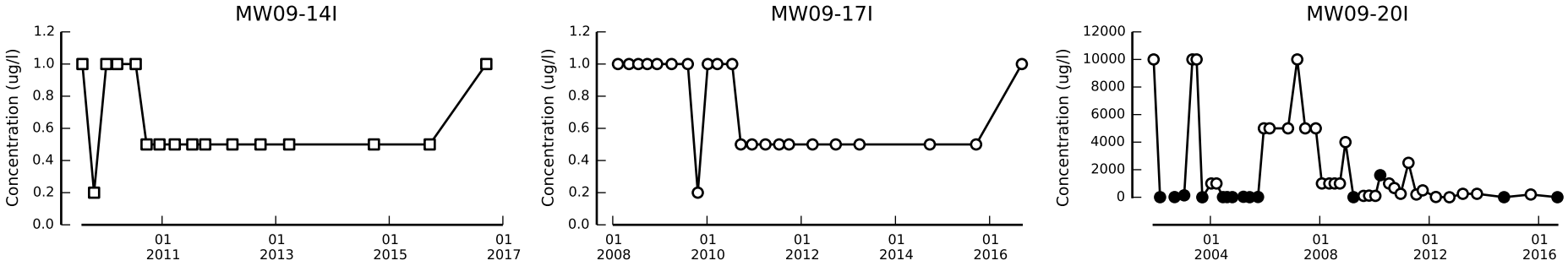






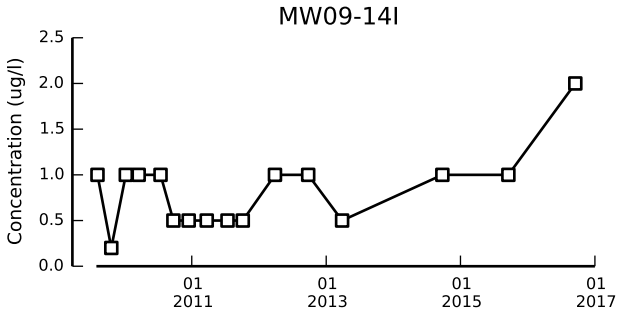
CARBON DISULFIDE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 77 of 133

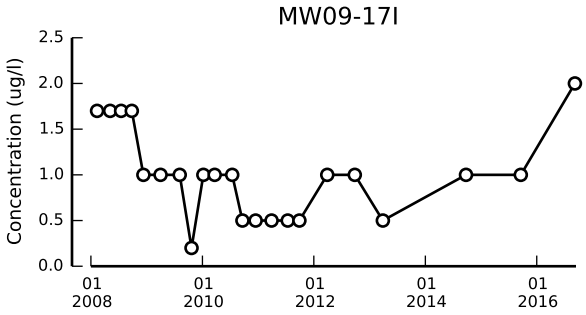
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

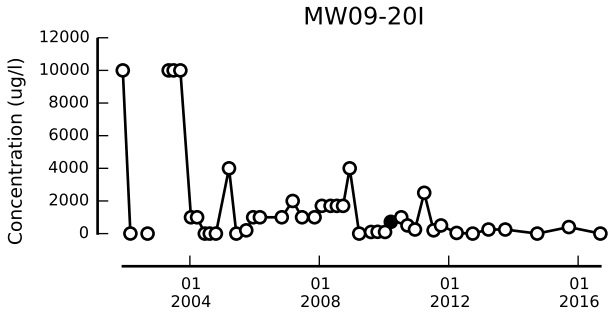


CARBON TETRACHLORIDE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 78 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

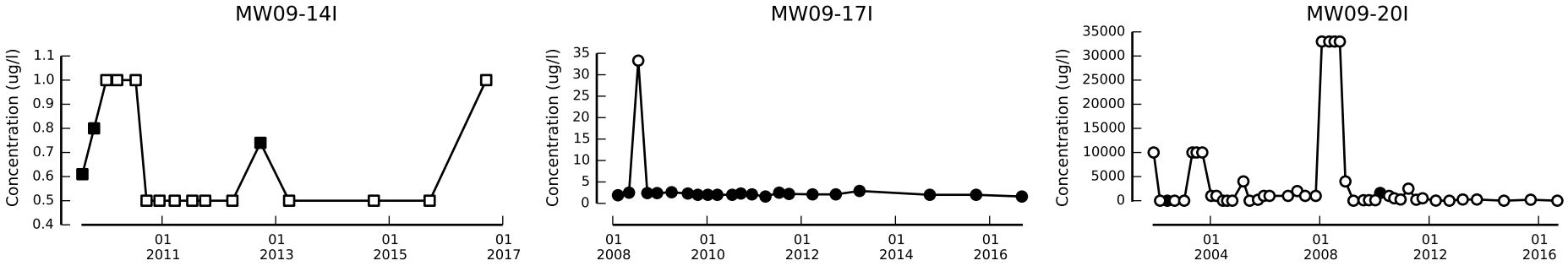






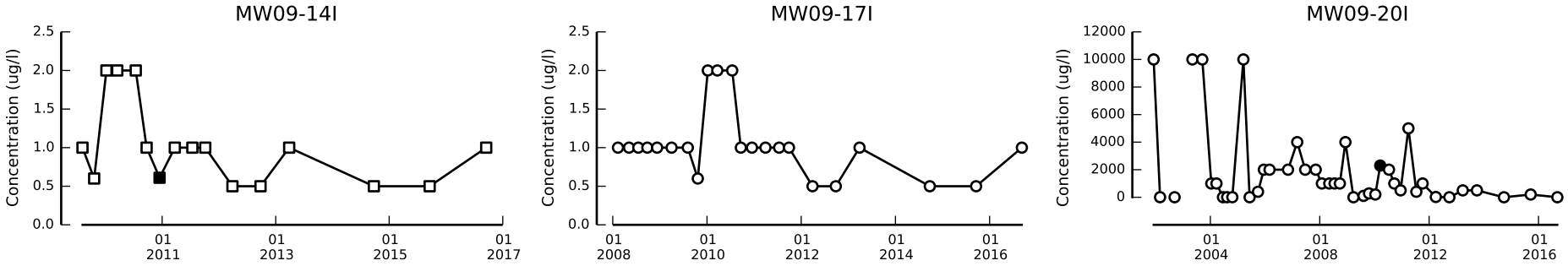
CHLOROBENZENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 79 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



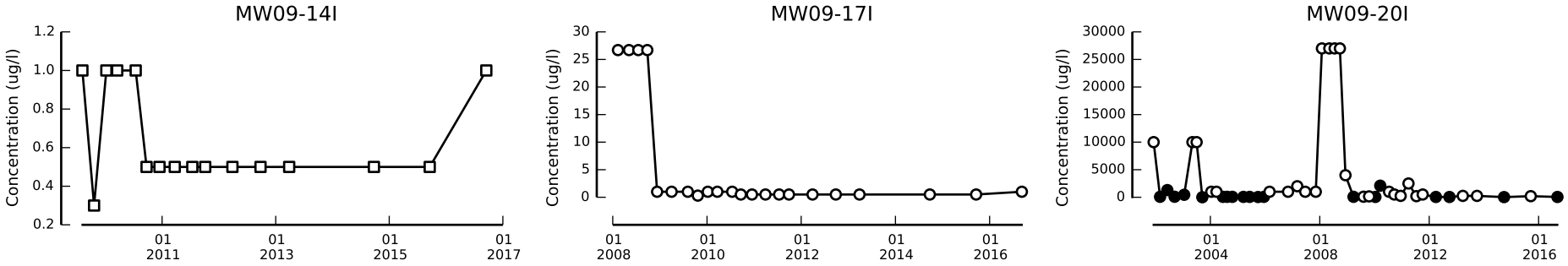
CHLOROETHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 80 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



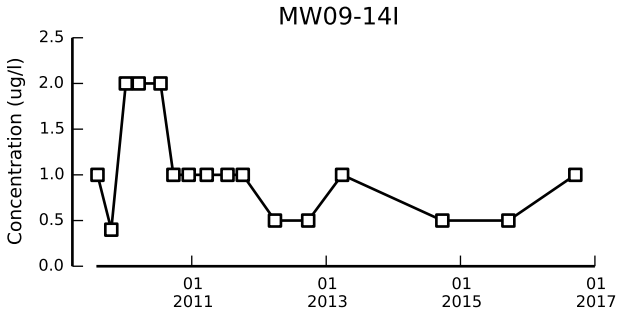
CHLOROFORM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 81 of 133

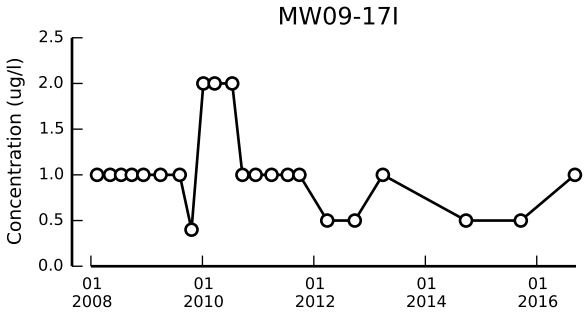
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

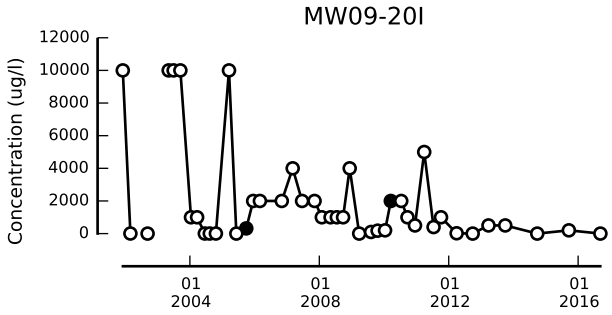


CHLOROMETHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 82 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

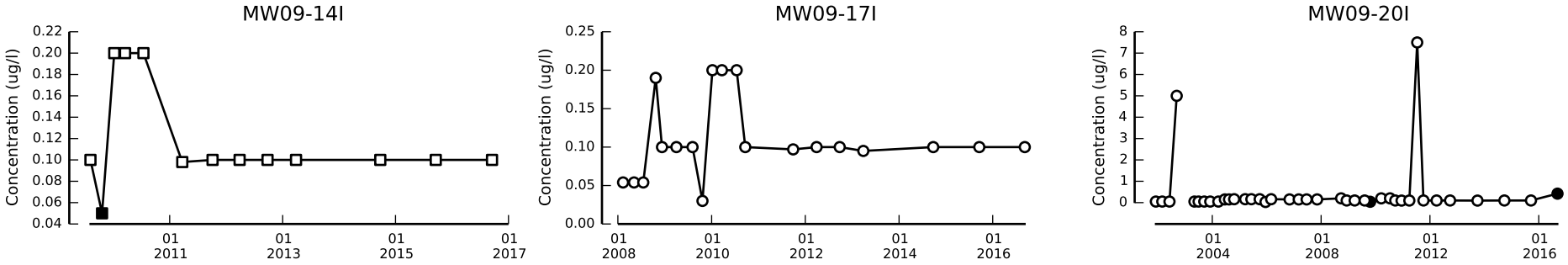






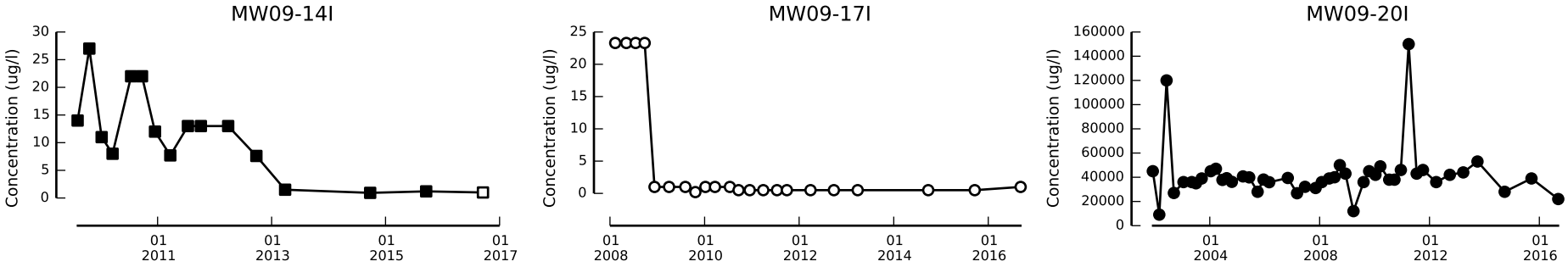
CHRYSENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 83 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



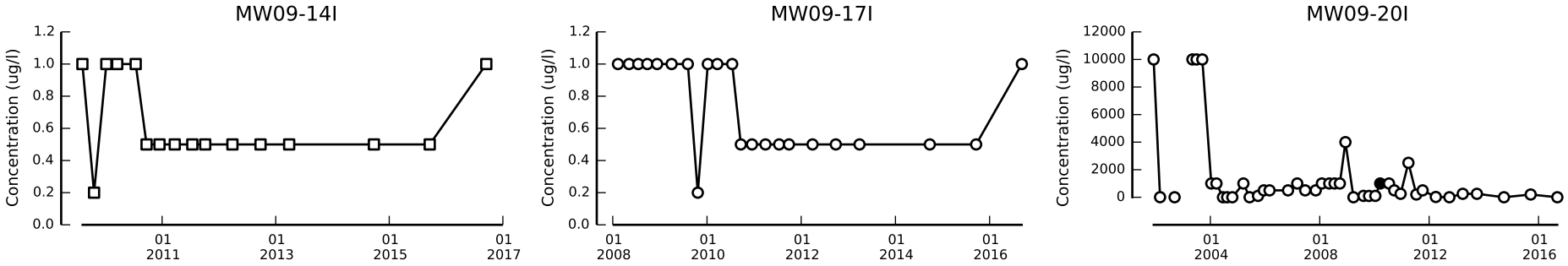
CIS-1,2-DICHLOROETHENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 84 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



CIS-1,3-DICHLOROPROPENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 85 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



CRESOLS in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 86 of 133

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

MW09-17I

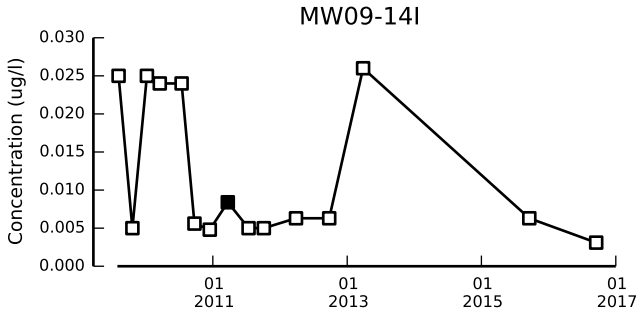
Not Sampled

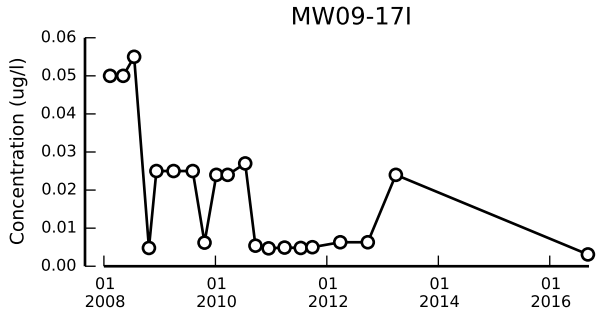
MW09-20I

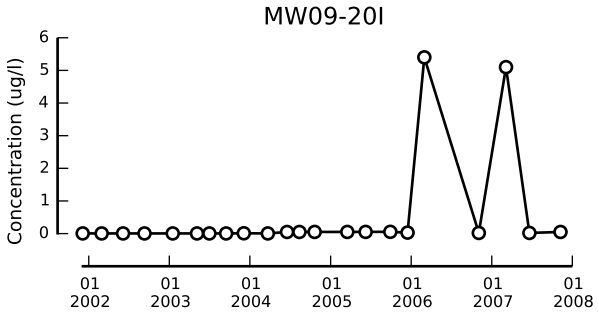
Sampled Once

DELTA-BHC in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 87 of 133

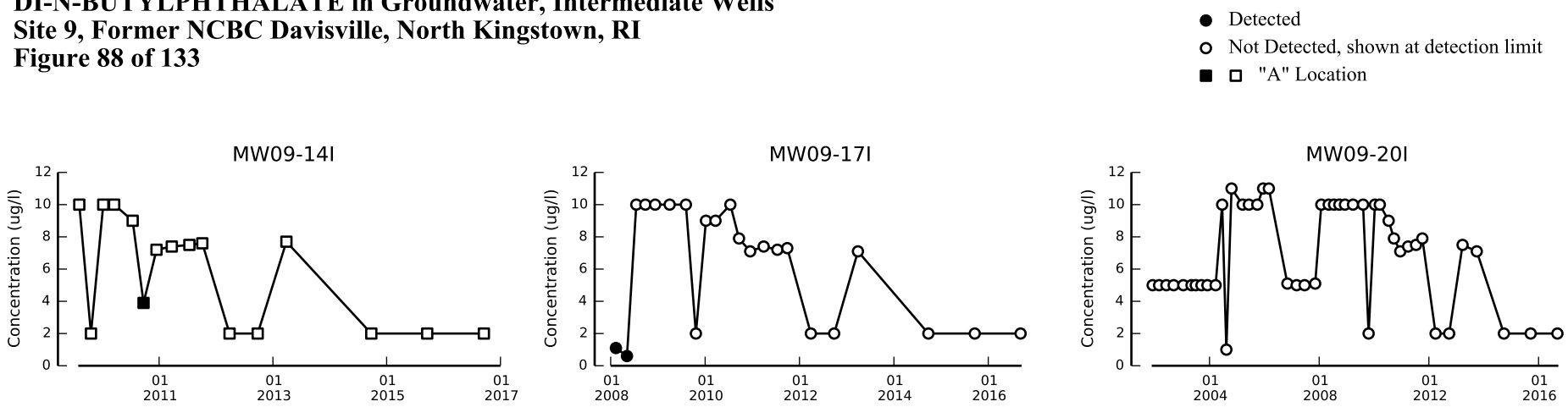
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location





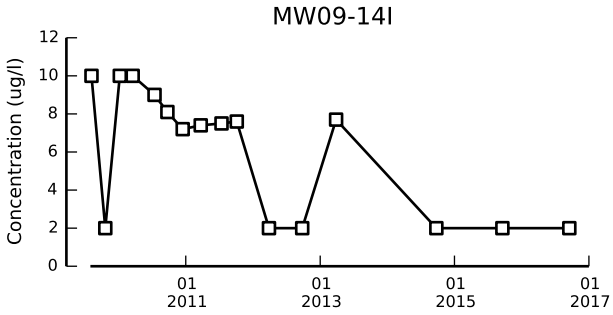


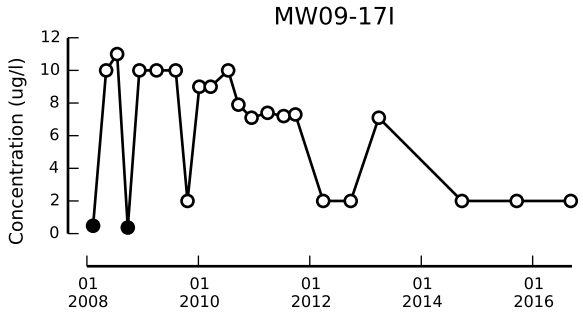
DI-N-BUTYLPHTHALATE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 88 of 133

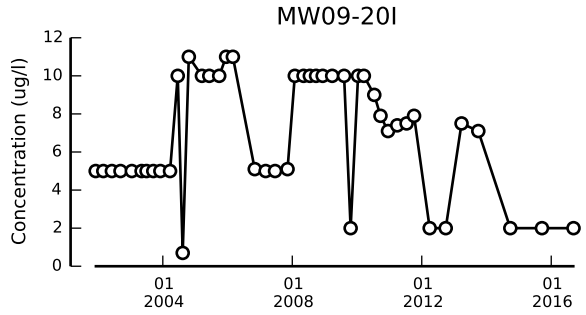


DI-N-OCTYLPHTHALATE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 89 of 133

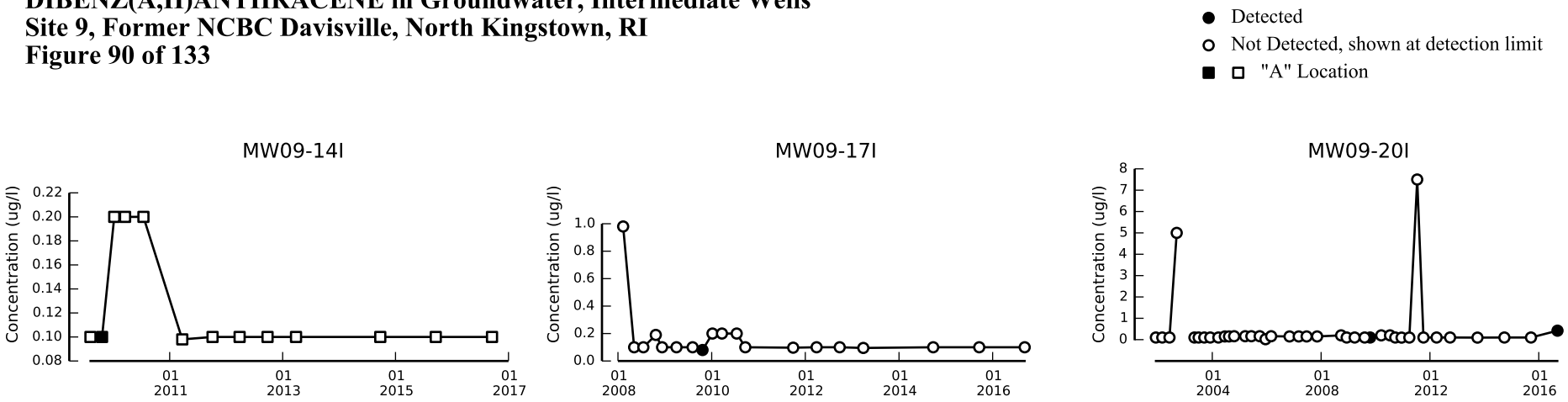
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location





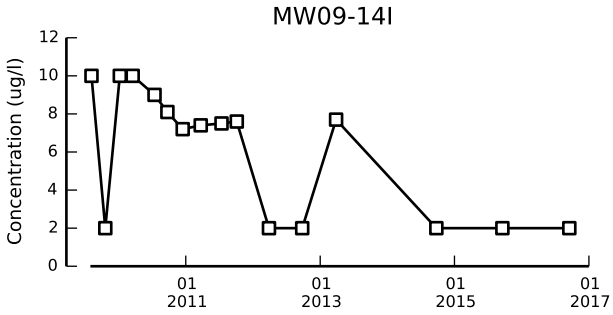


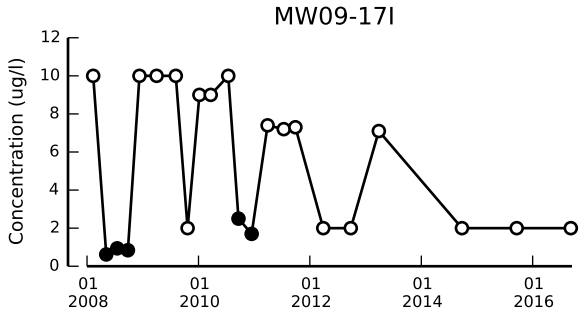
DIBENZ(A,H)ANTHRACENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 90 of 133

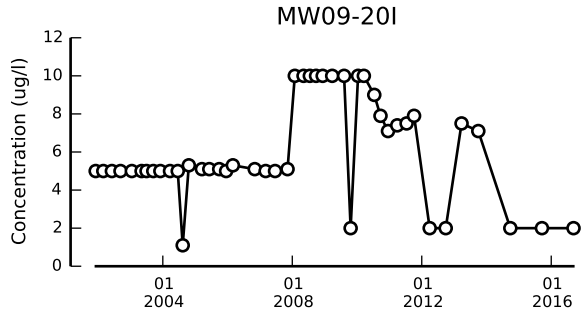


DIBENZOFURAN in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 91 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

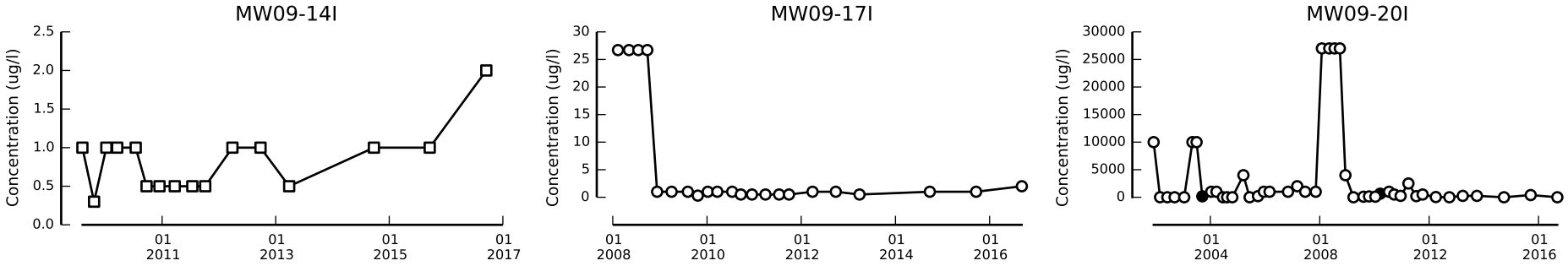






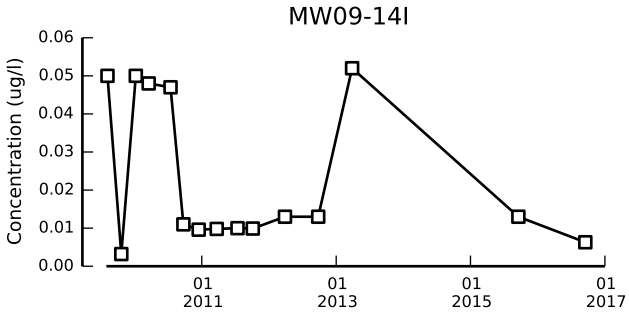
DIBROMOCHLOROMETHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 92 of 133

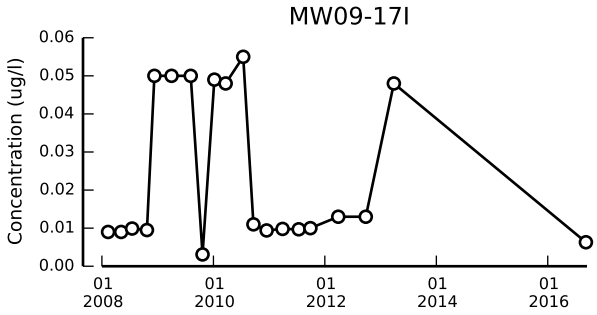
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

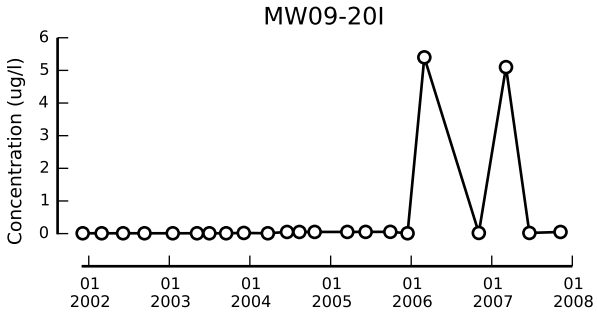


DIELDRIN in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 93 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

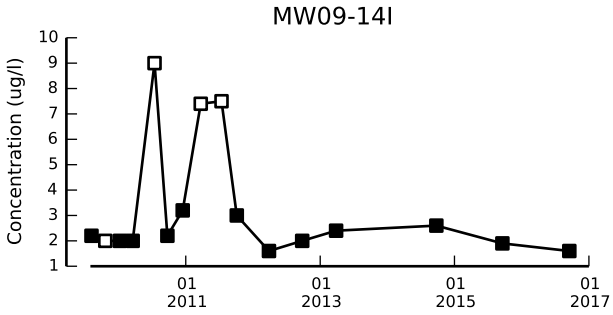


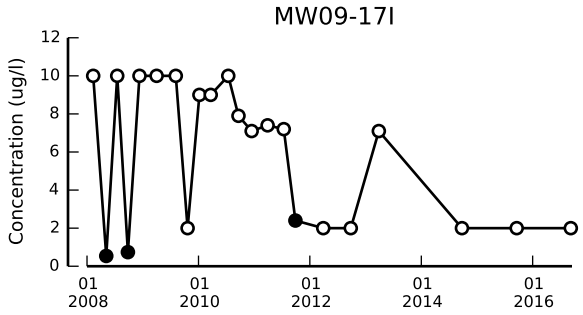


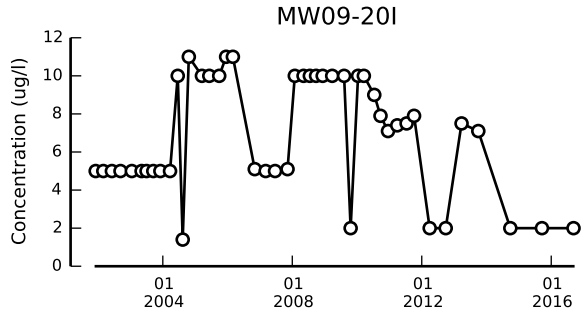


DIETHYLPHTHALATE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 94 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

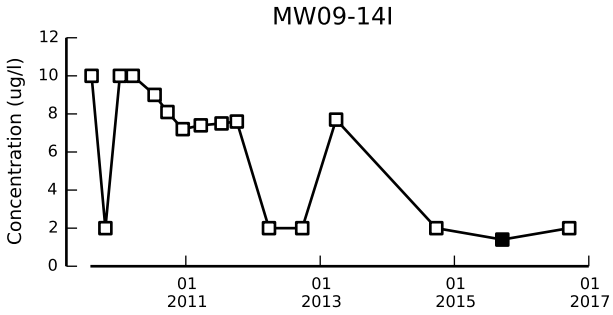


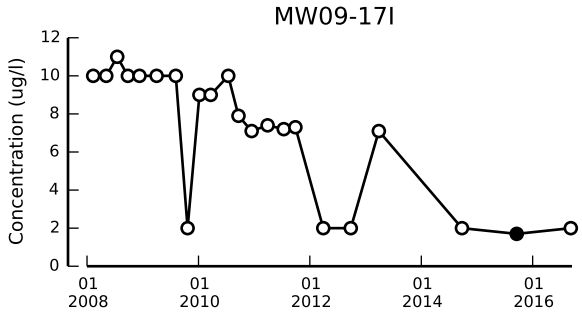


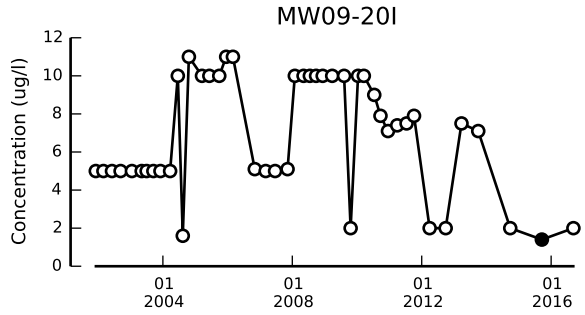


DIMETHYL PHTHALATE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 95 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

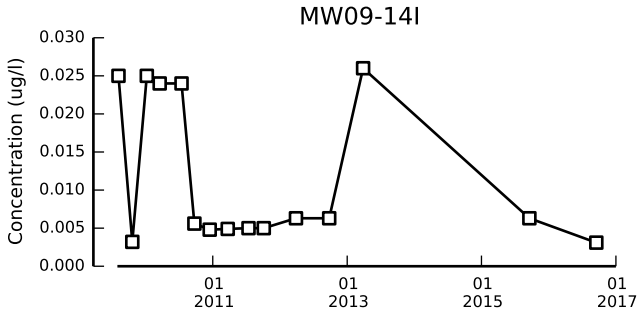


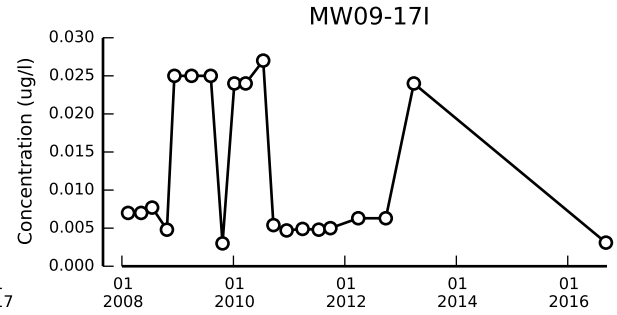


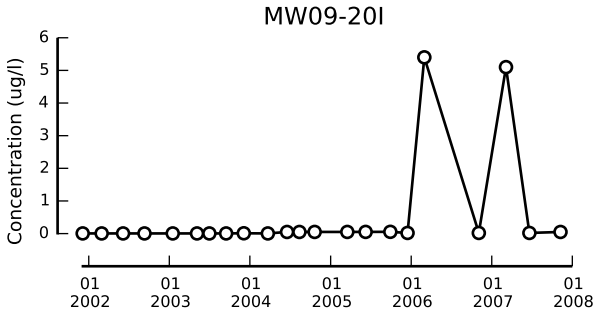


ENDOSULFAN I in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 96 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

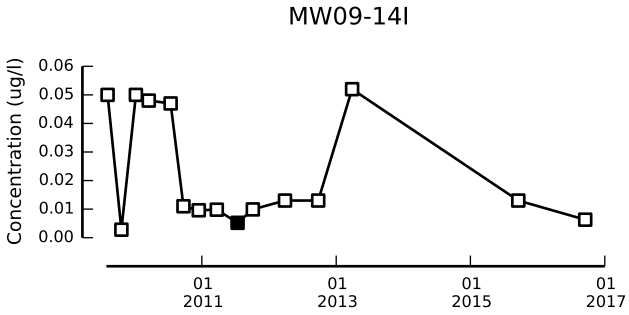


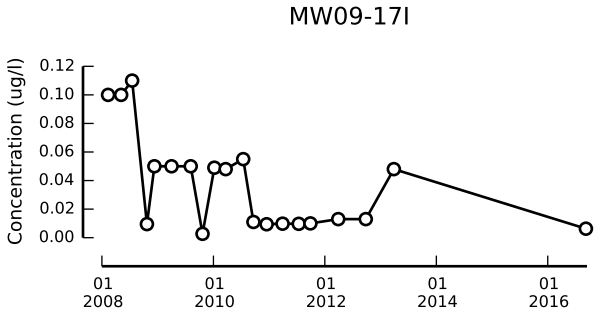


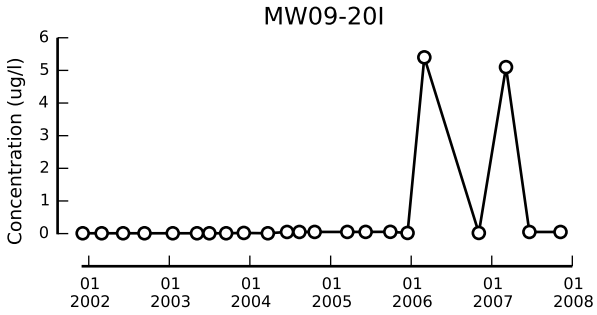


ENDOSULFAN II in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 97 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

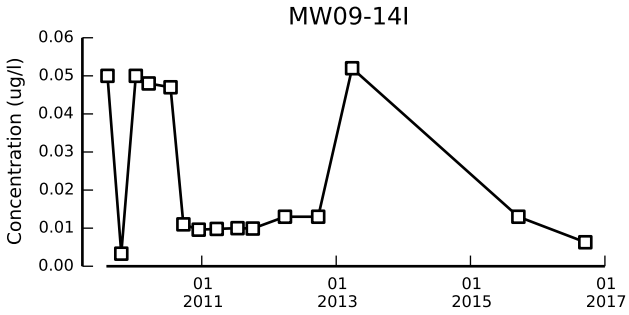


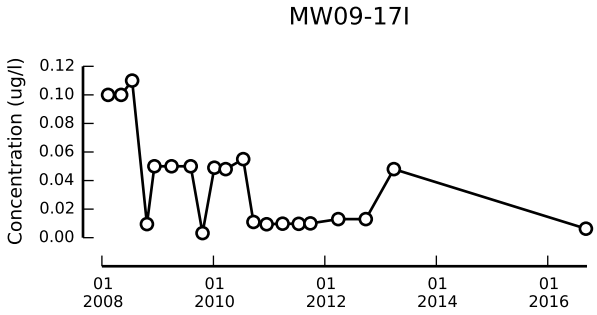


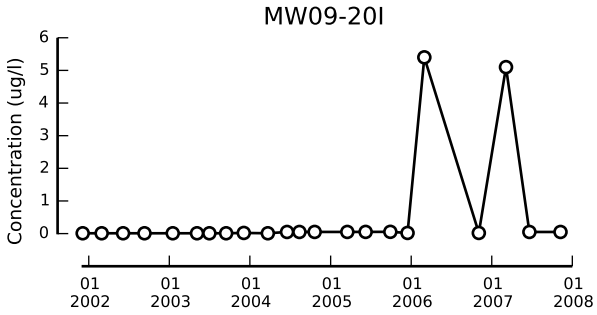


ENDOSULFAN SULFATE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 98 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

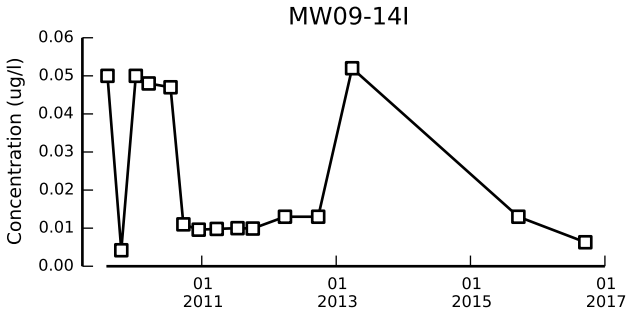


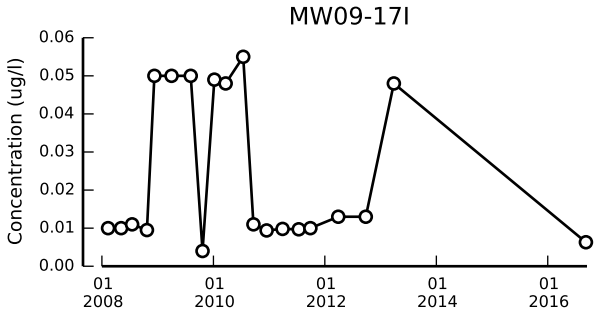


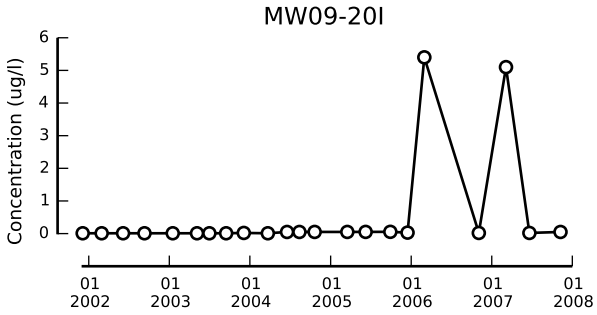


ENDRIN in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 99 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

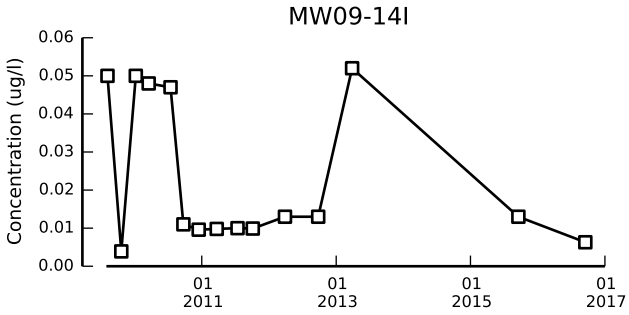


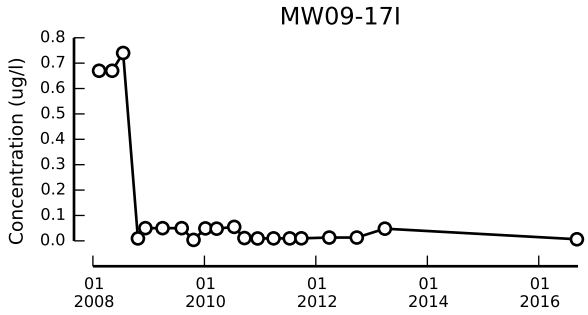


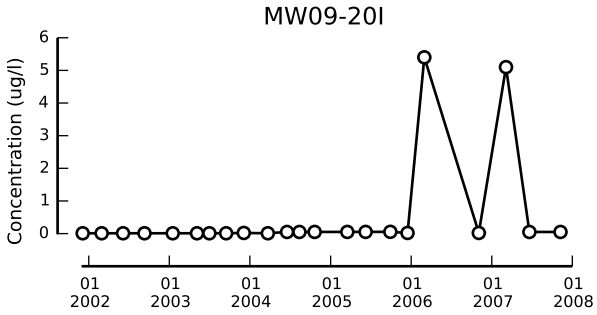


ENDRIN KETONE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 100 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

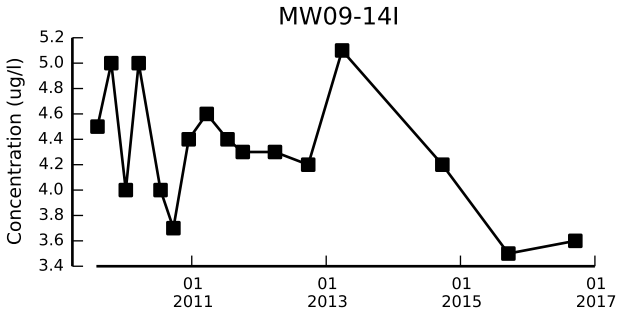


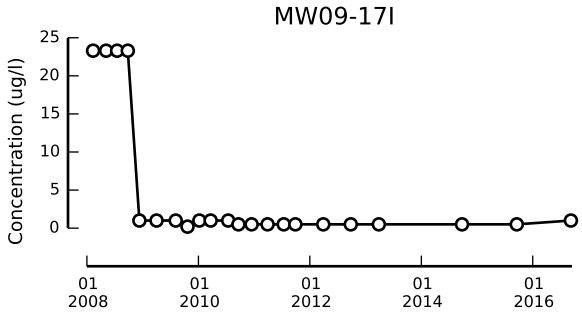


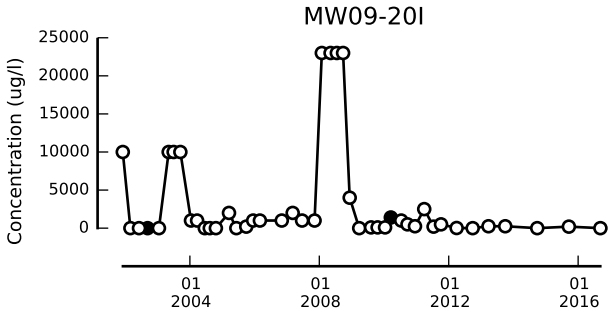


ETHYLBENZENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 101 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



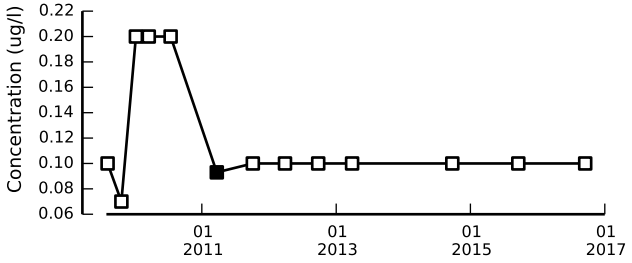




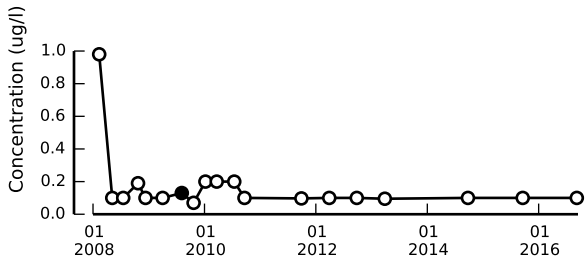
FLUORANTHENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 102 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

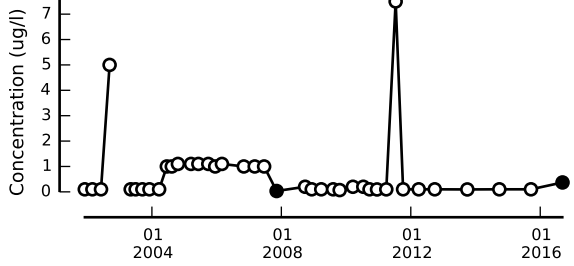
MW09-14I



MW09-17I

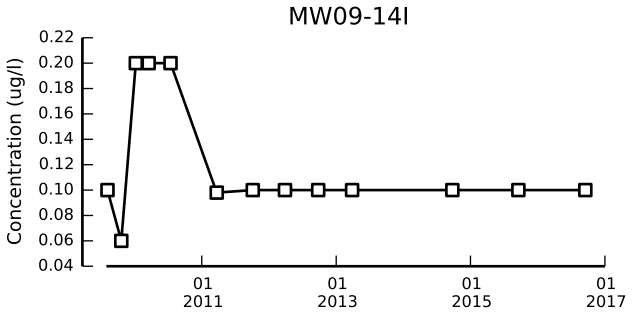


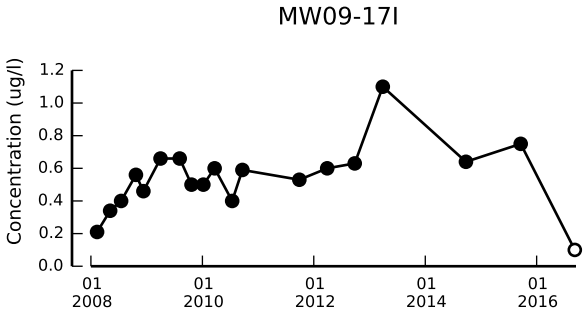
MW09-20I

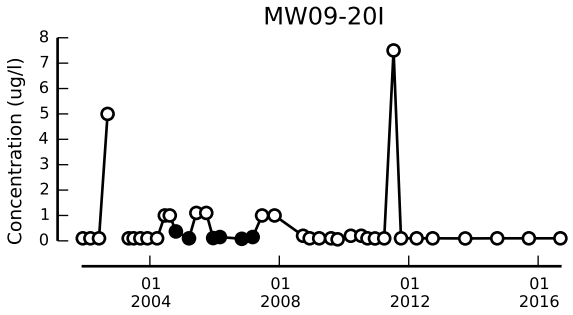


FLUORENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 103 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

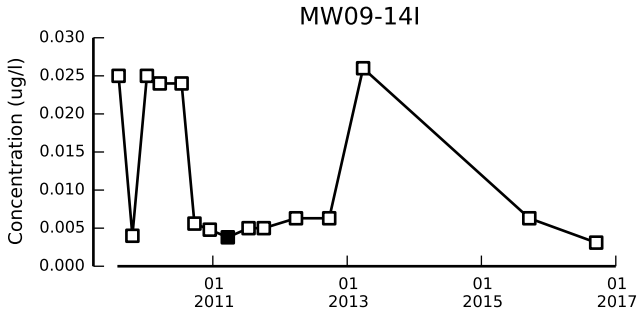


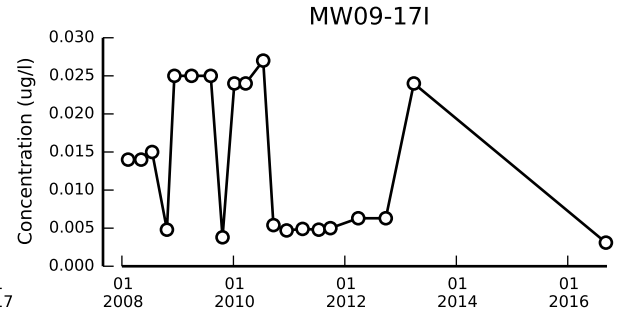


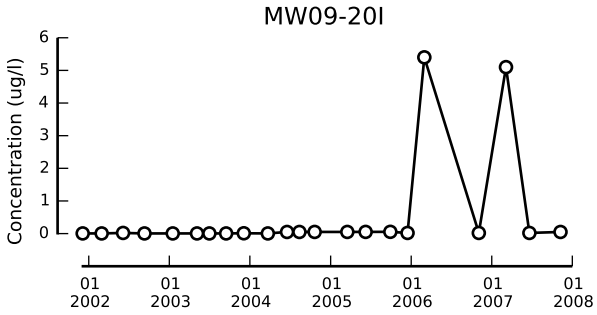


HEPTACHLOR in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 104 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

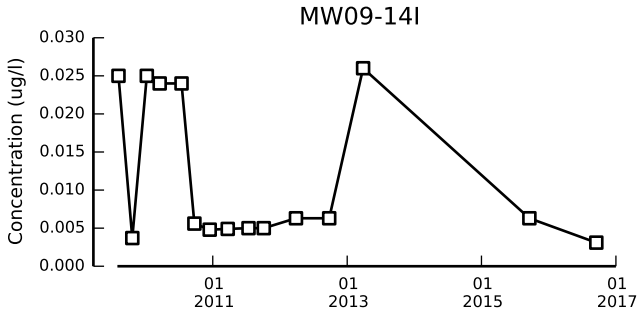


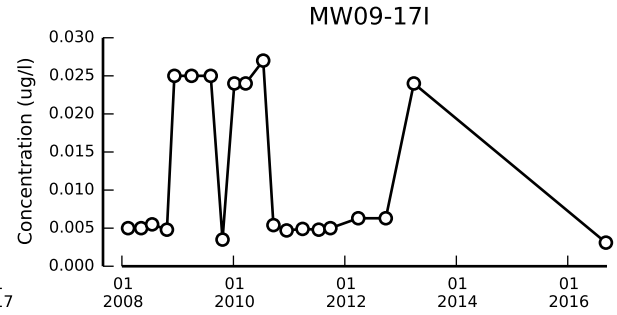


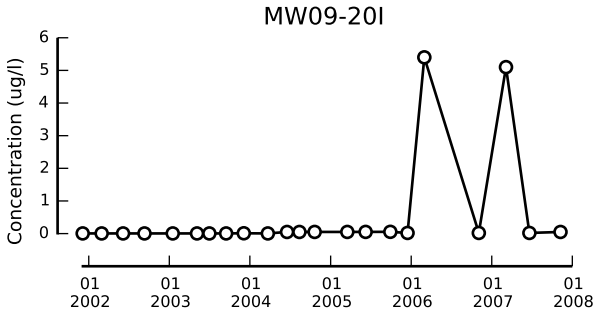


HEPTACHLOR EPOXIDE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 105 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

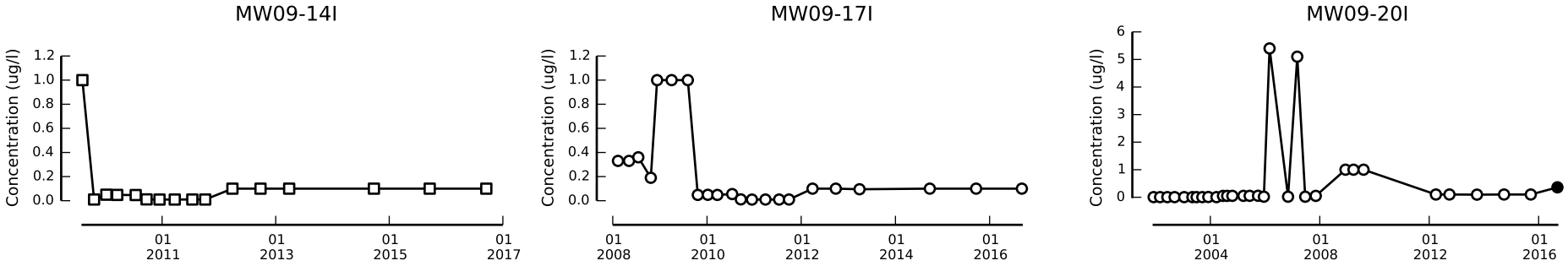






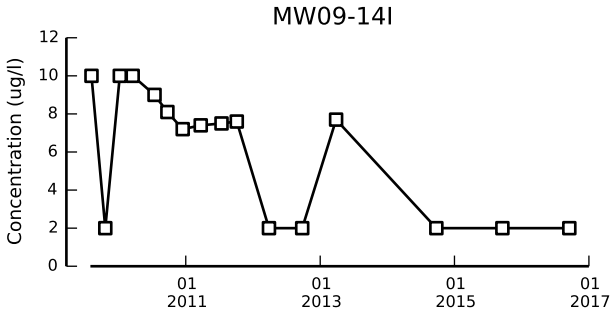
HEXACHLOROBENZENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 106 of 133

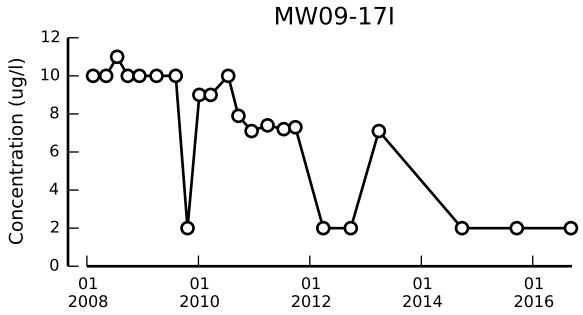
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

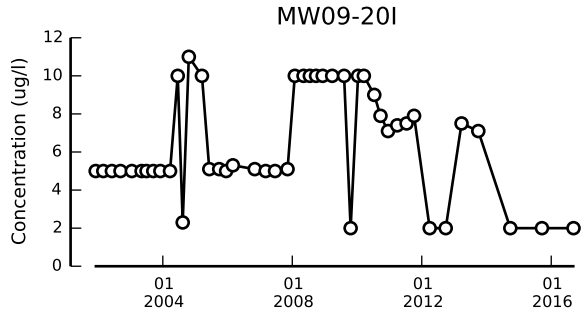


HEXACHLOROBUTADIENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 107 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

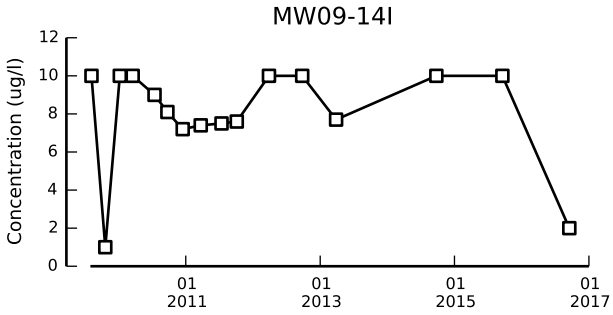


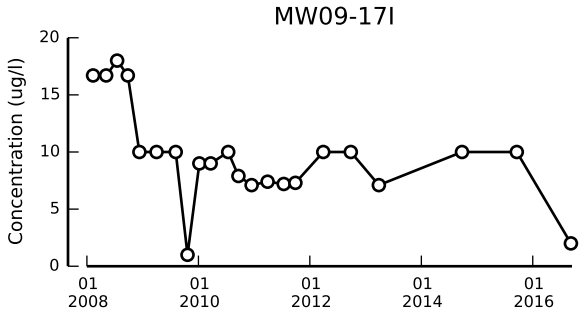


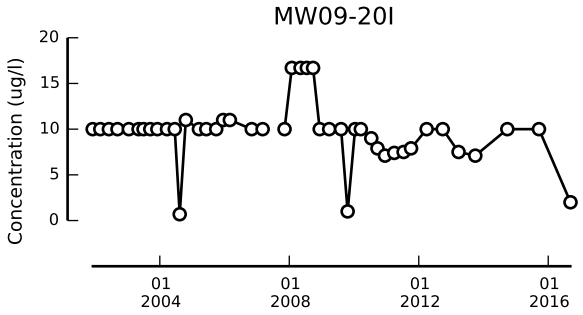


HEXACHLOROCYCLOPENTADIENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 108 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

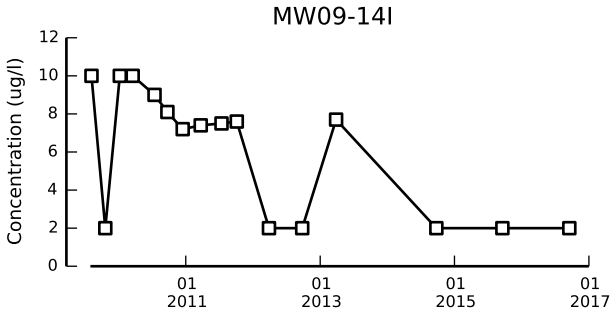


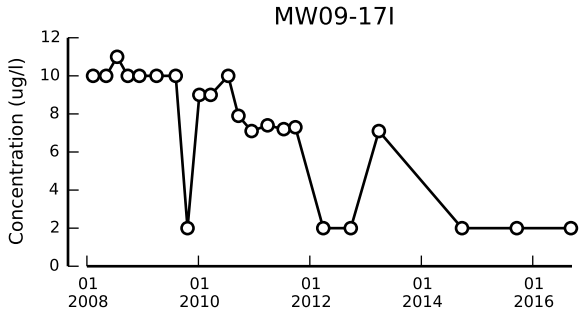


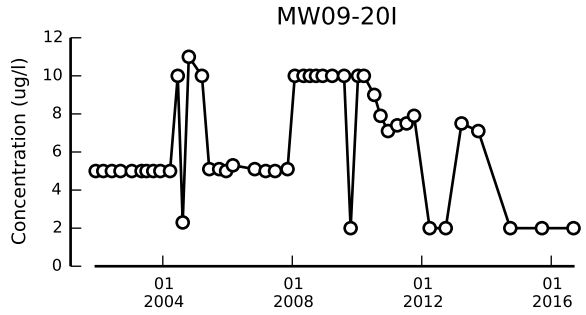


HEXACHLOROETHANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 109 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

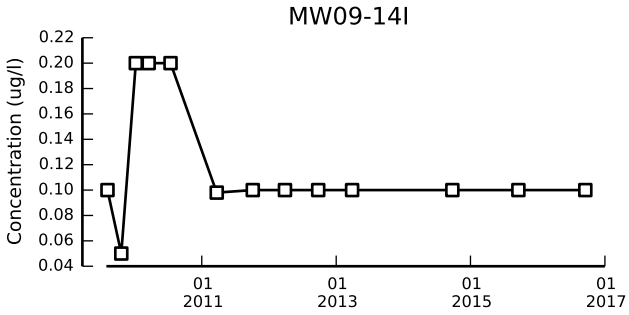


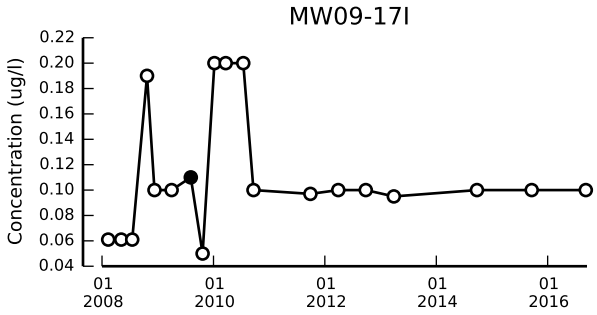


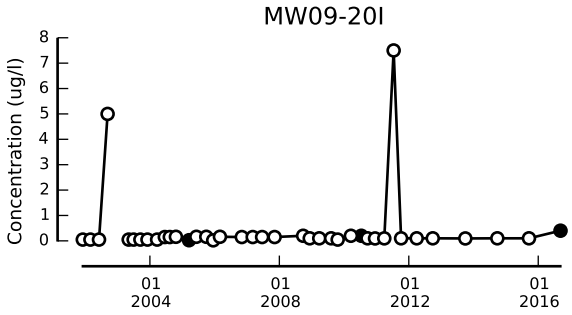


INDENO(1,2,3-CD)PYRENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 110 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

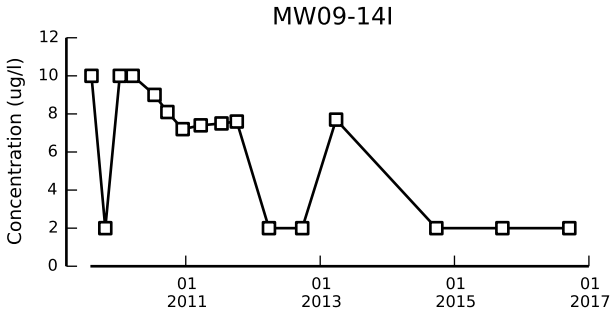


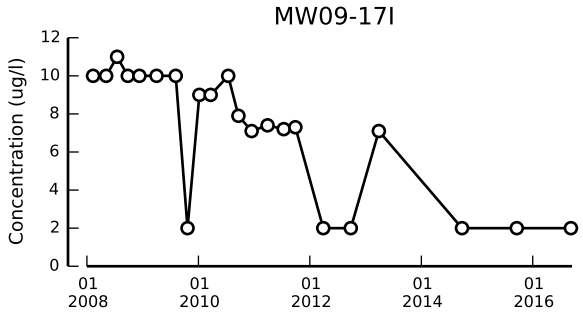


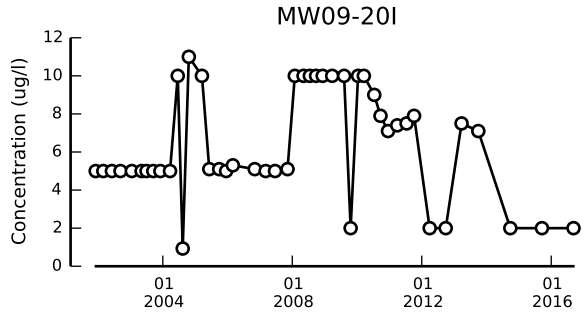


ISOPHORONE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 111 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

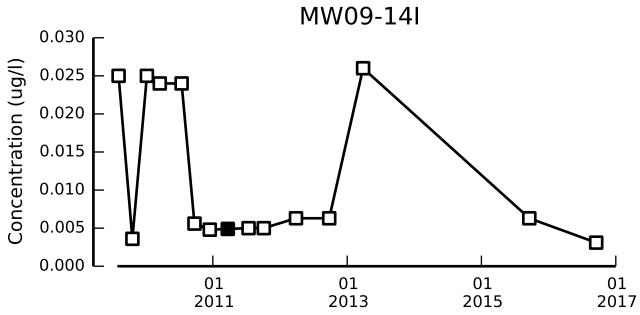


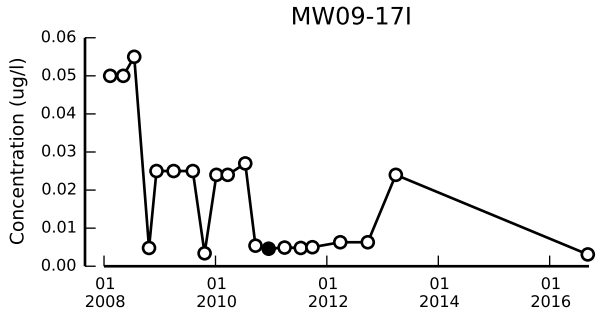


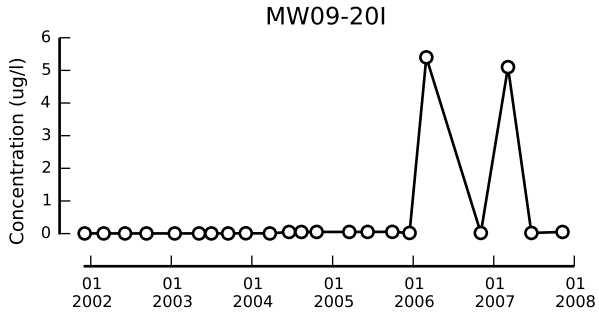


LINDANE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 112 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

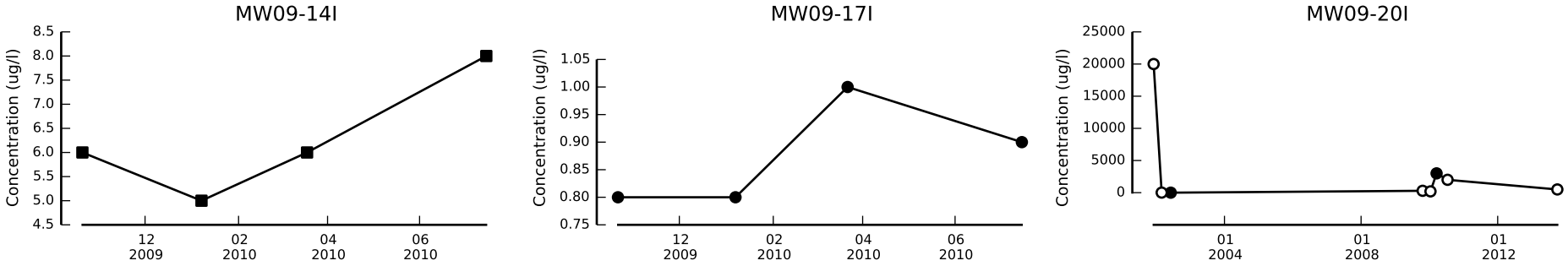






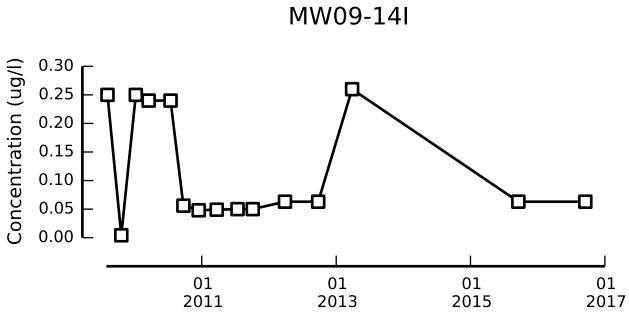
M- AND P-XYLENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 113 of 133

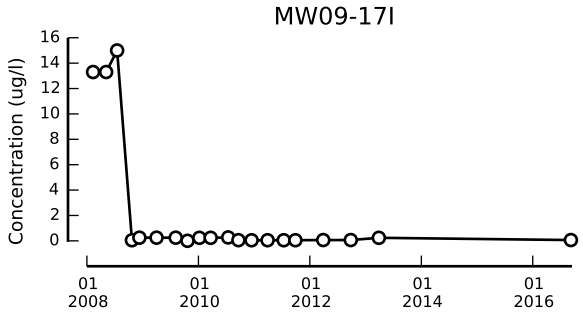
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

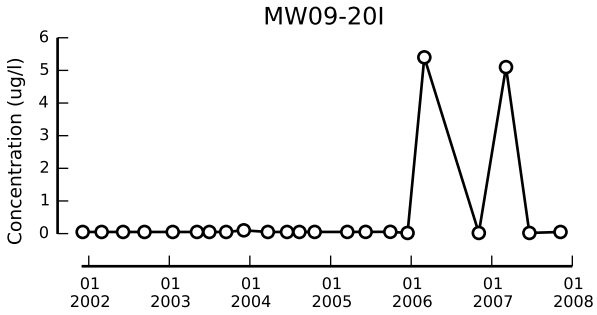


METHOXYCHLOR in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 114 of 133

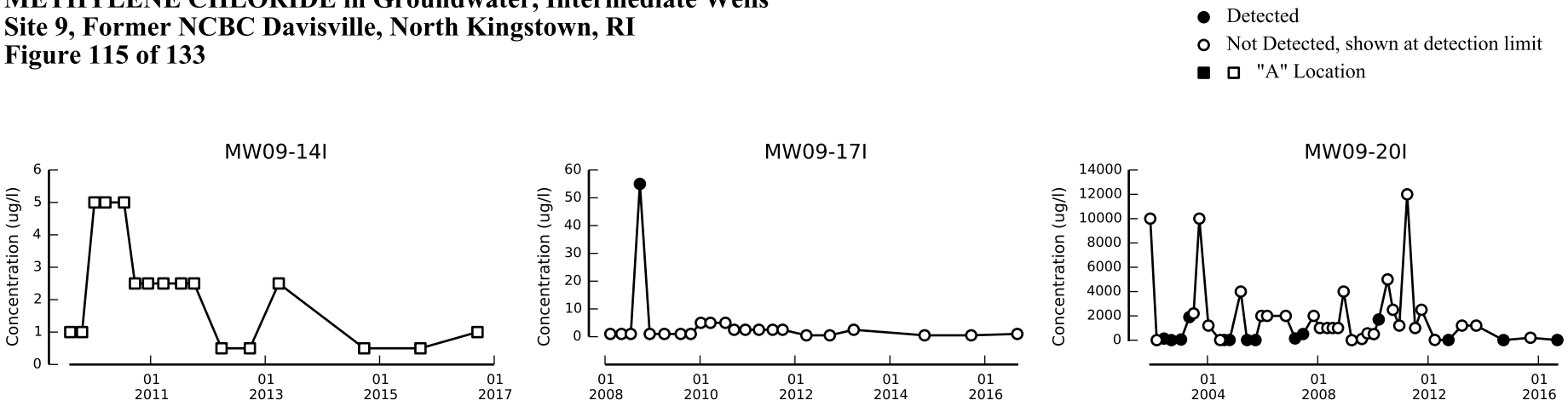
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location





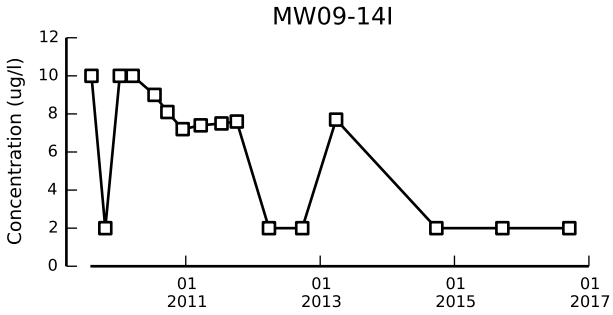


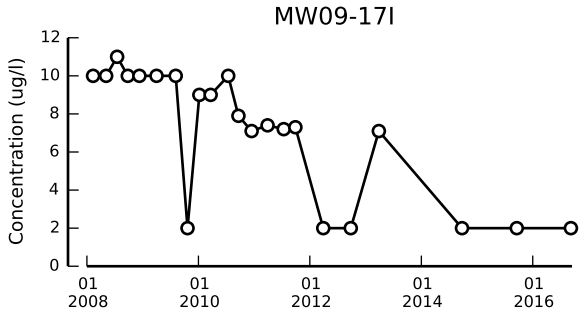
METHYLENE CHLORIDE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 115 of 133

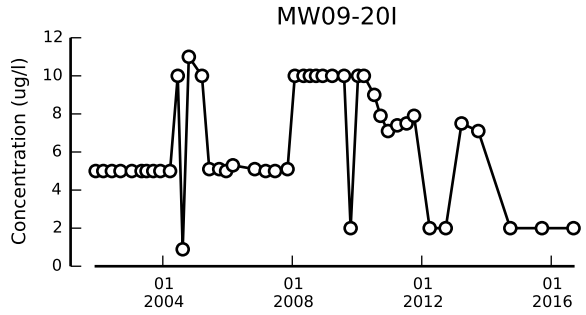


N-NITROSODINPROPYLAMINE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 116 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

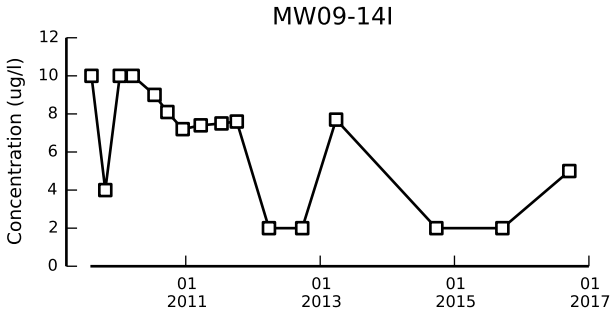


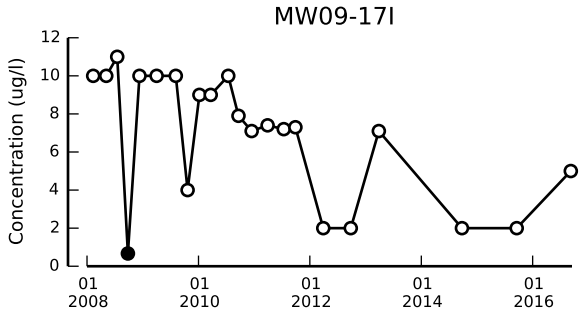


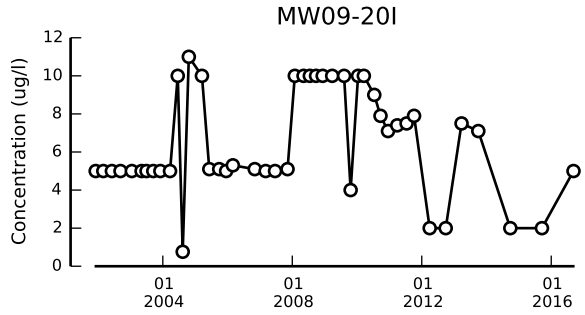


N-NITROSODIPHENYLAMINE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 117 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

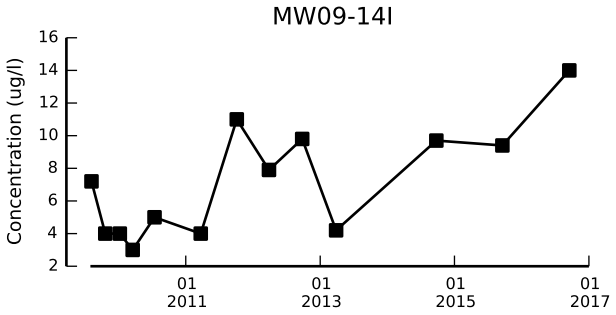


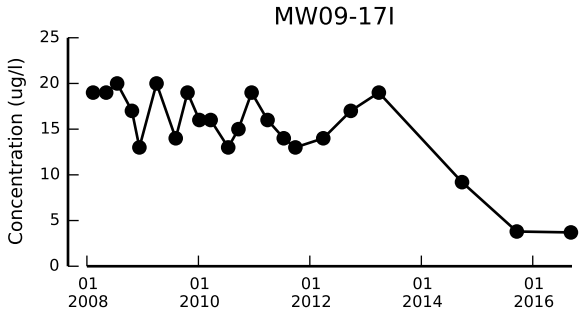


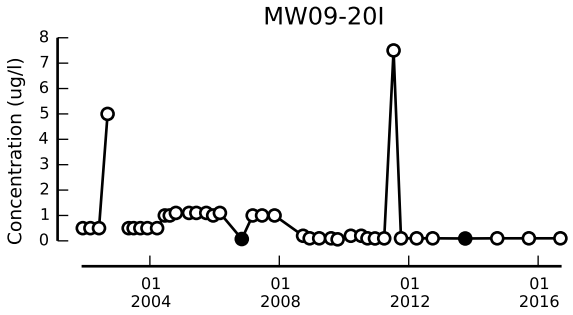


NAPHTHALENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 118 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

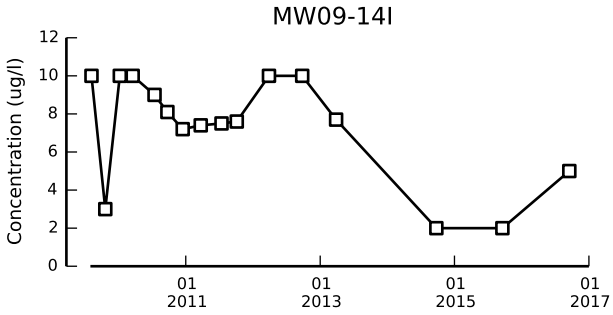


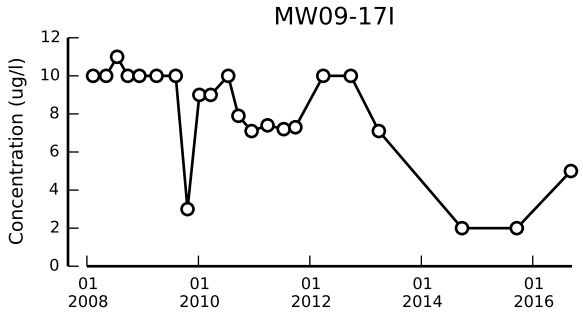


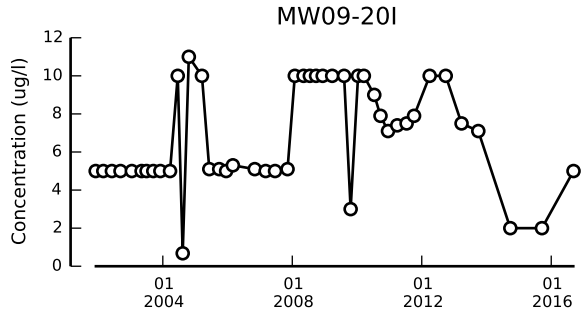


NITROBENZENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 119 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

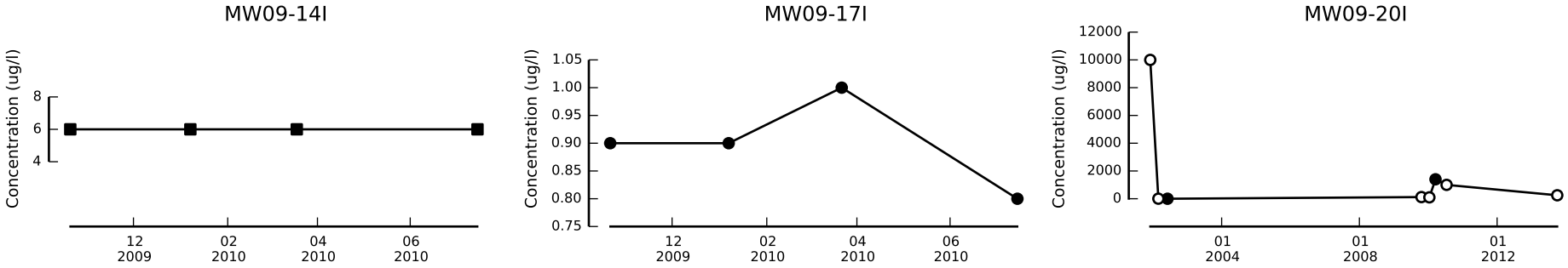






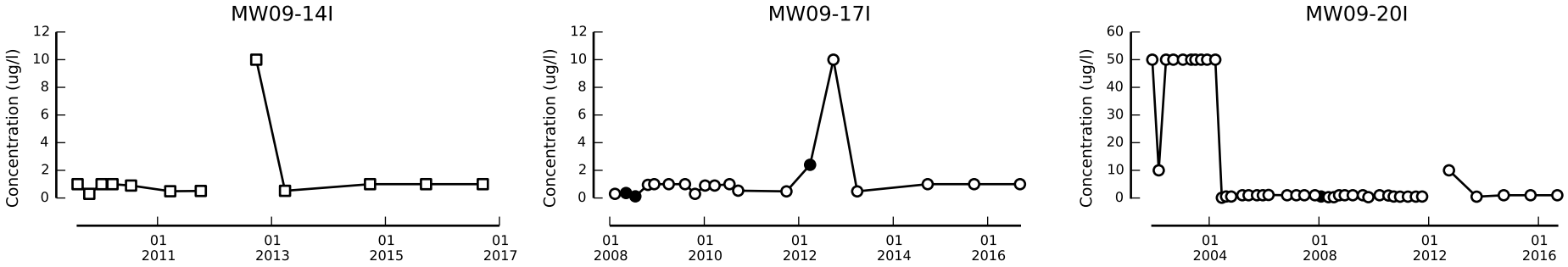
O-XYLENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 120 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



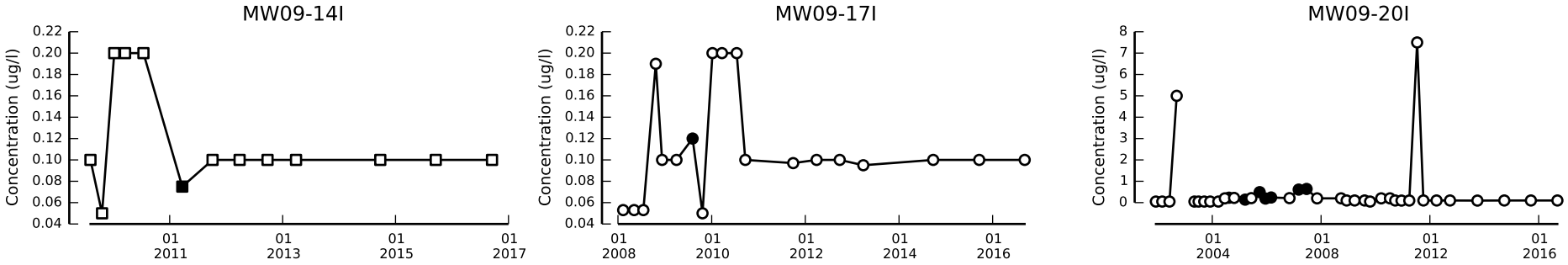
PENTACHLOROPHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 121 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



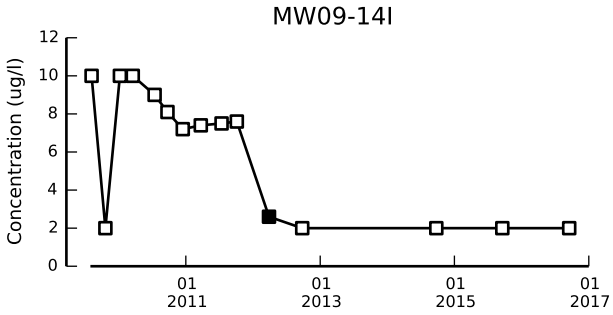
PHENANTHRENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 122 of 133

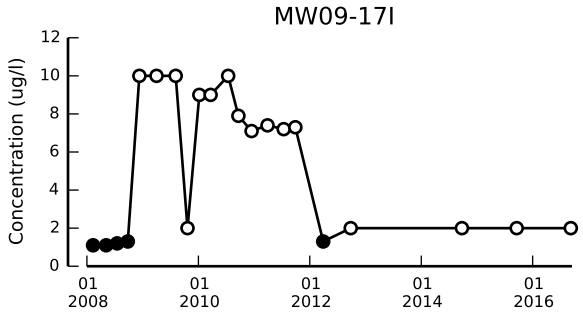
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

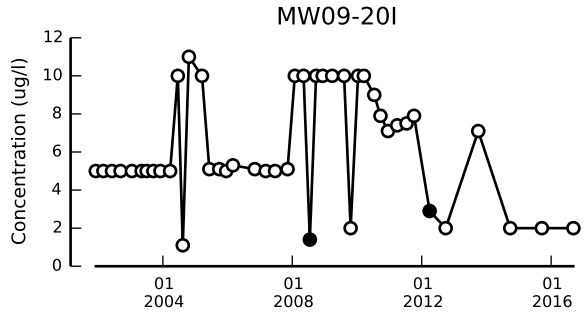


PHENOL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 123 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

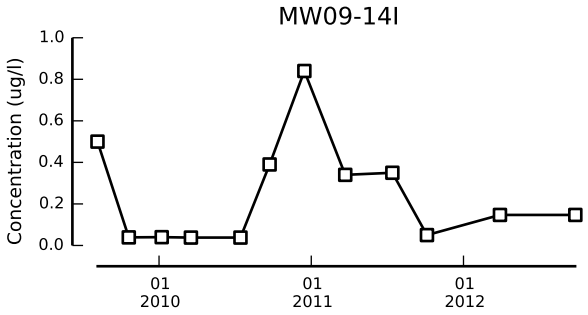


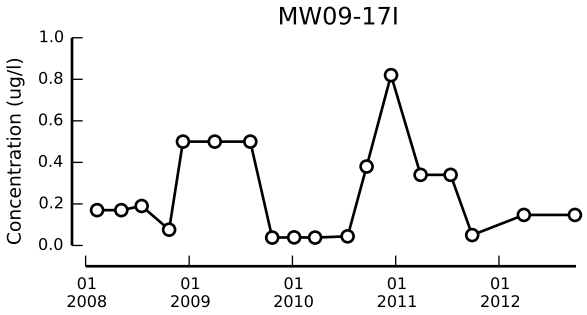


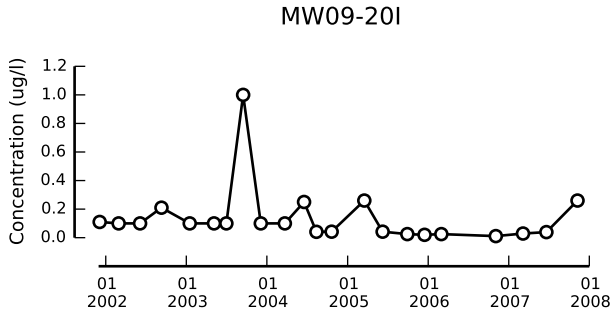


POLYCHLORINATED BIPHENYLS (PCBS) in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 124 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

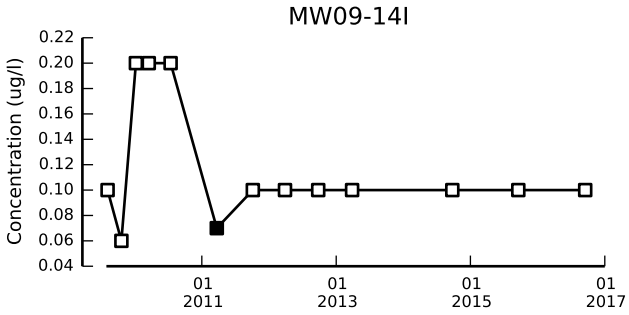


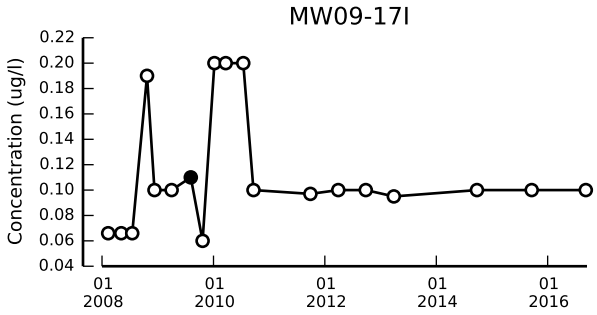


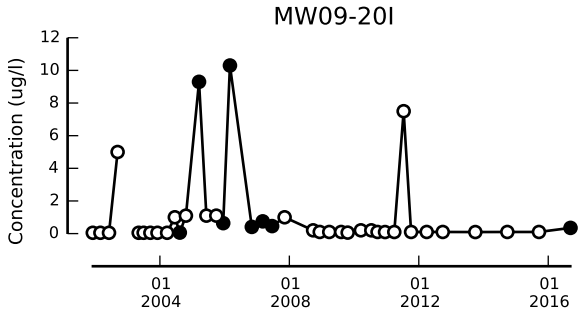


PYRENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 125 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

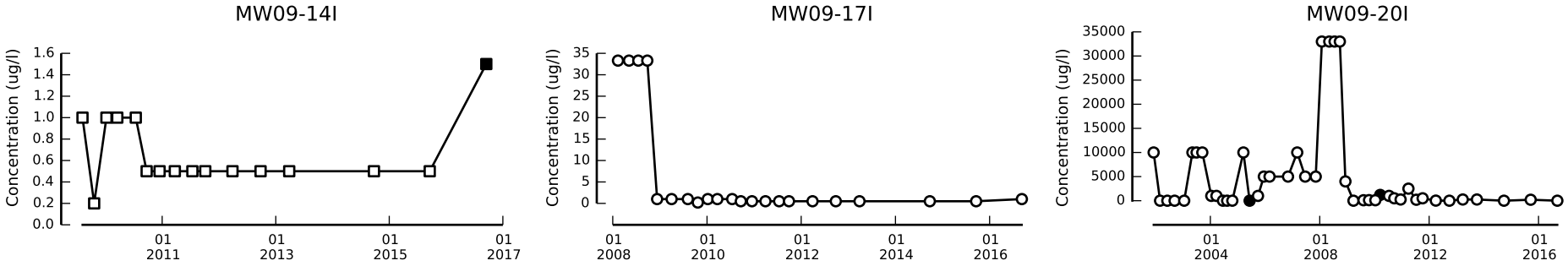






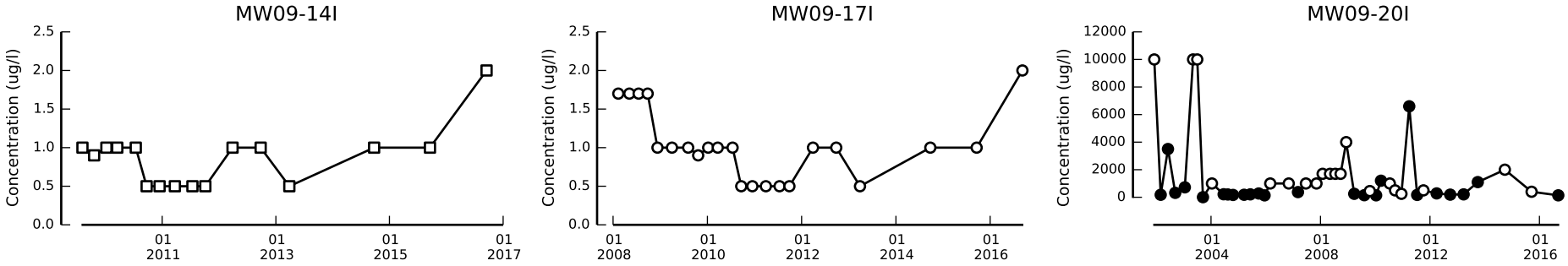
STYRENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 126 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



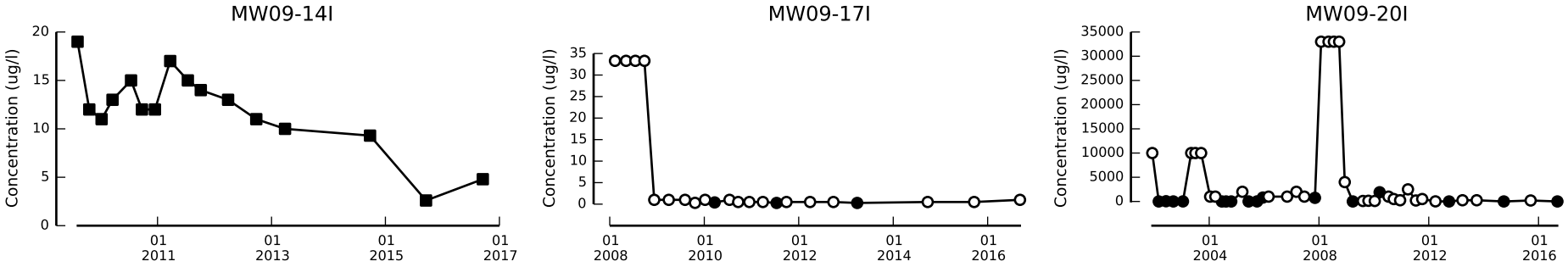
TETRACHLOROETHENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 127 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



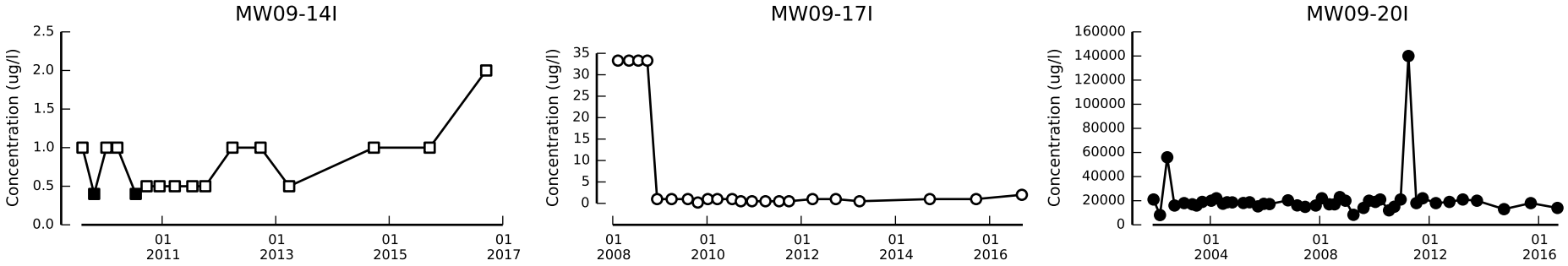
TOLUENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 128 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



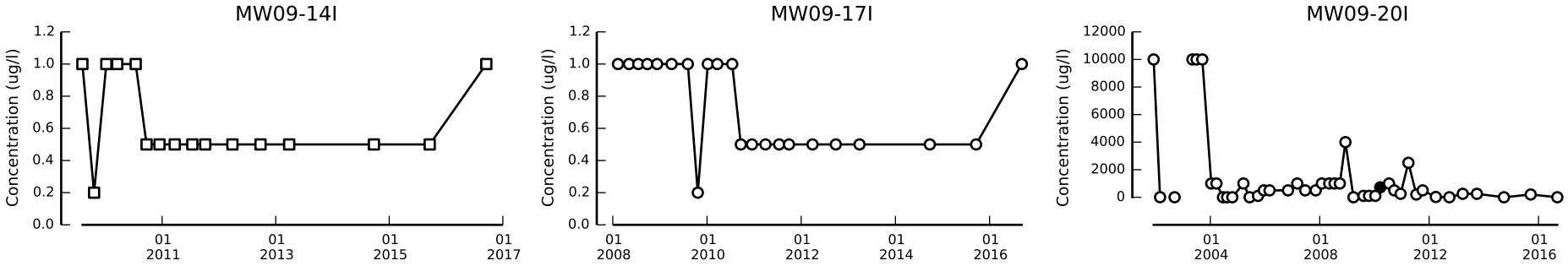
TRANS-1,2-DICHLOROETHENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 129 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



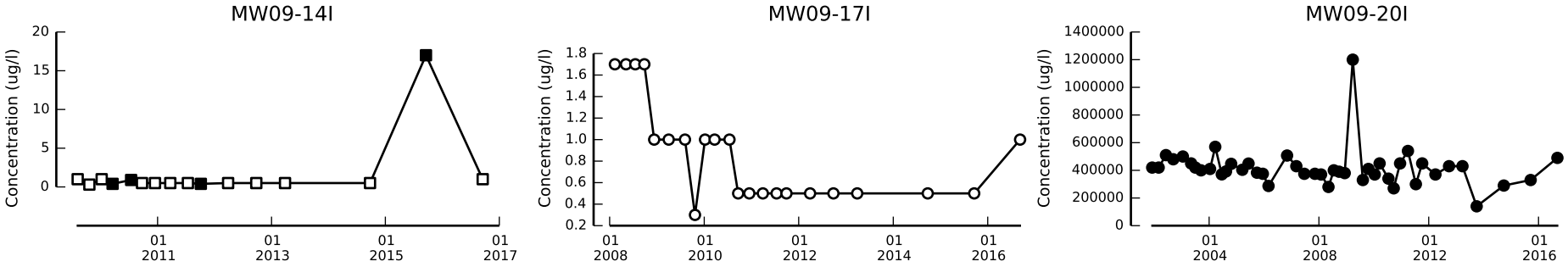
TRANS-1,3-DICHLOROPROPENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 130 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



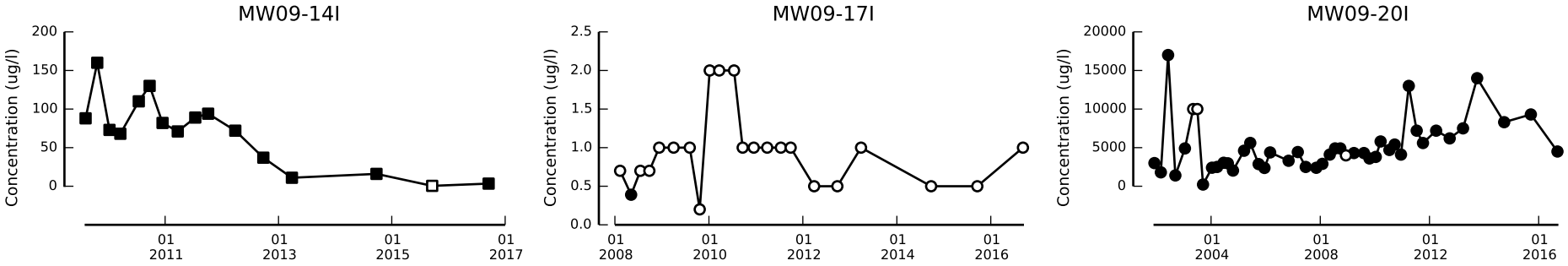
TRICHLOROETHENE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 131 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



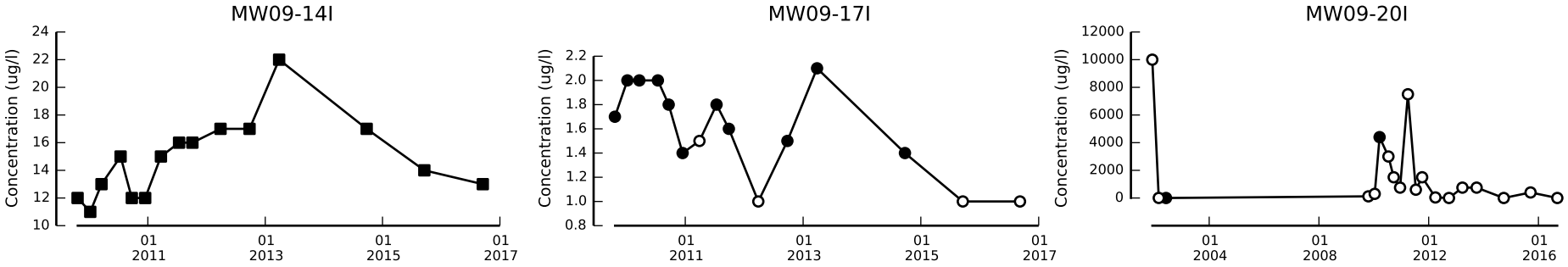
VINYL CHLORIDE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 132 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

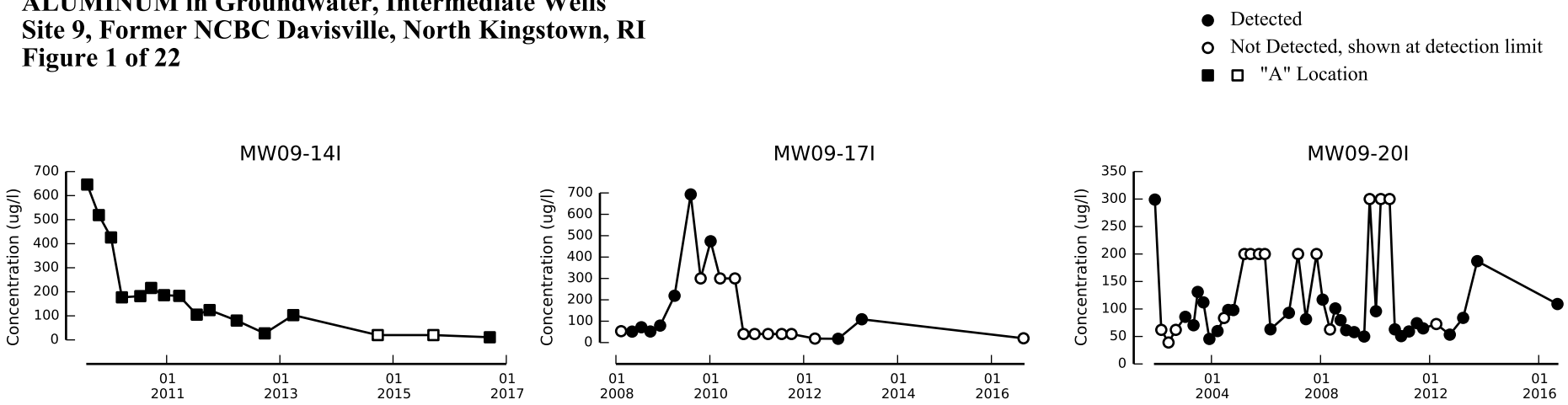


XYLENES, TOTAL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 133 of 133

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

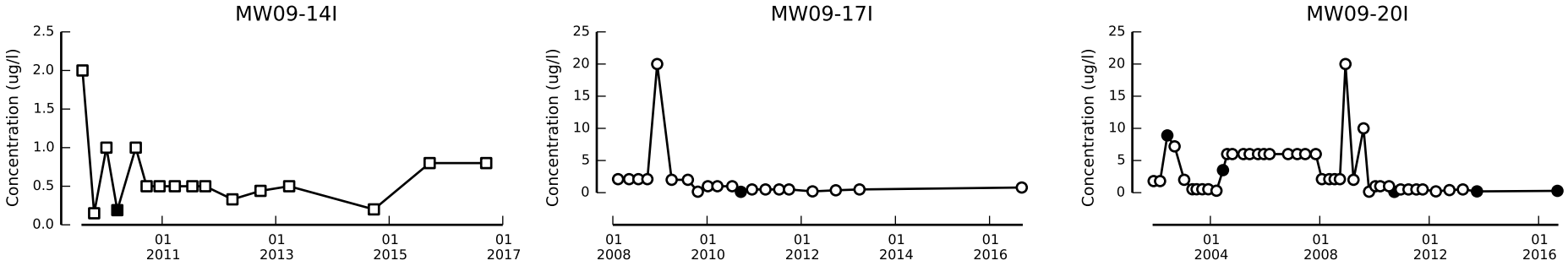


ALUMINUM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 22



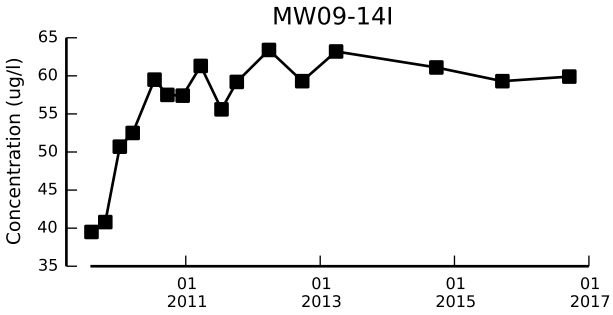
ANTIMONY in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 22

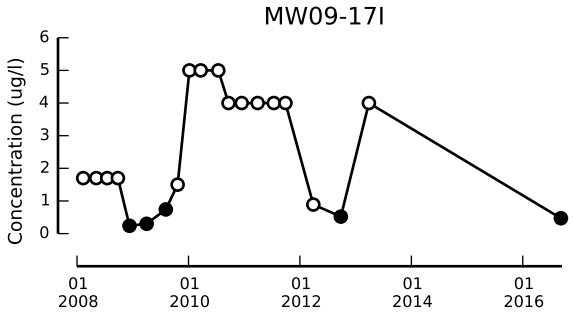
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

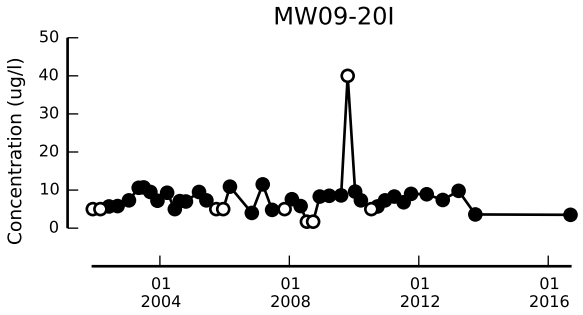


ARSENIC in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location







BARIUM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

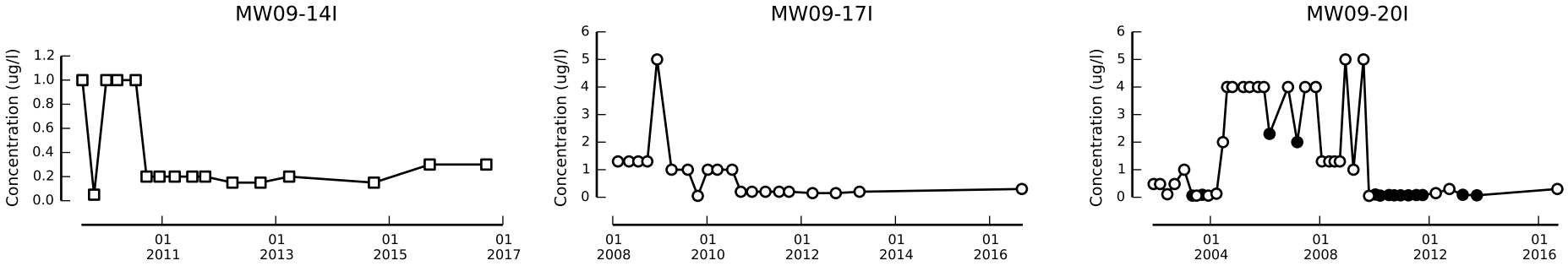
MW09-17I

Not Sampled

MW09-20I

BERYLLIUM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



CADMIUM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

MW09-17I

Not Sampled

MW09-20I

CALCIUM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

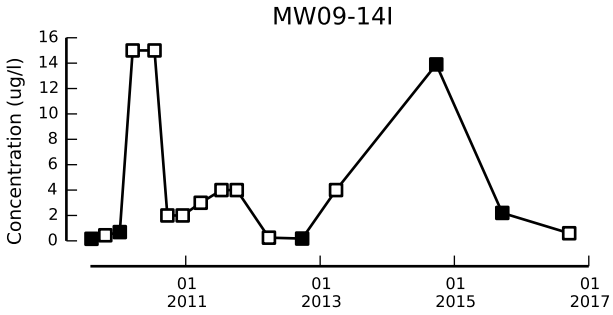
MW09-17I

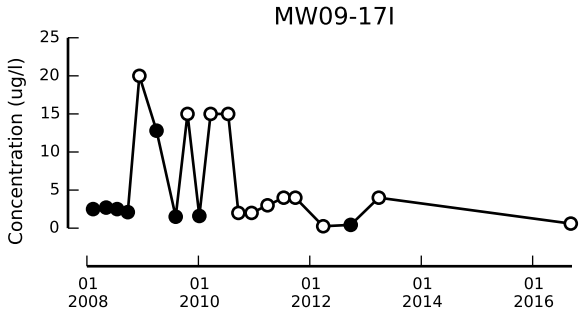
Not Sampled

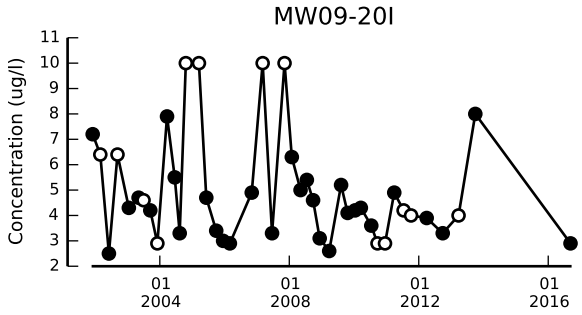
MW09-20I

CHROMIUM, TOTAL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location







COBALT in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

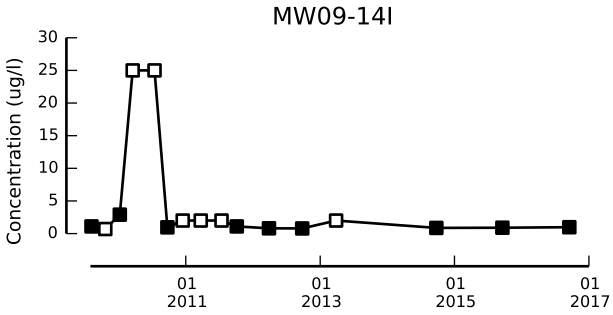
MW09-17I

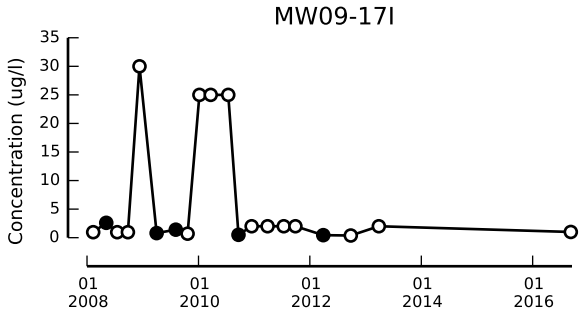
Not Sampled

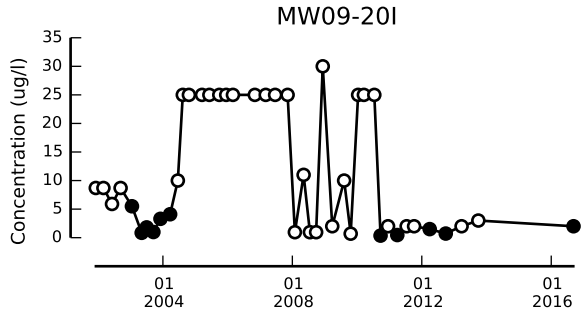
MW09-20I

COPPER in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

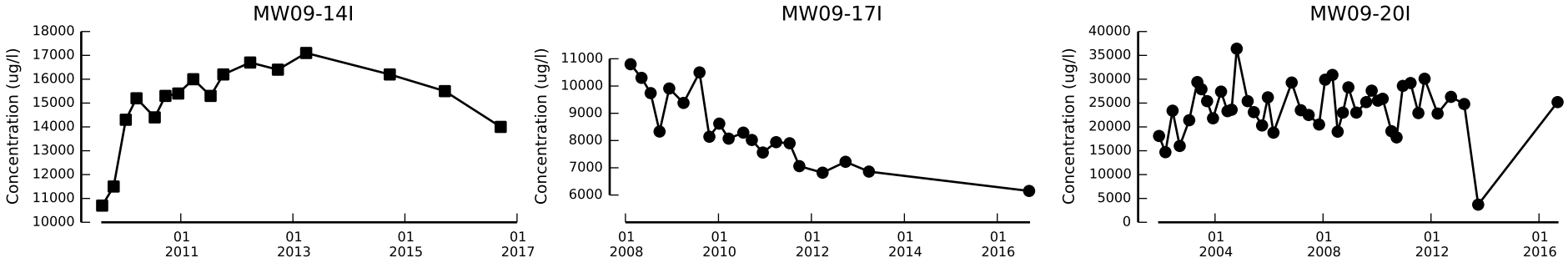






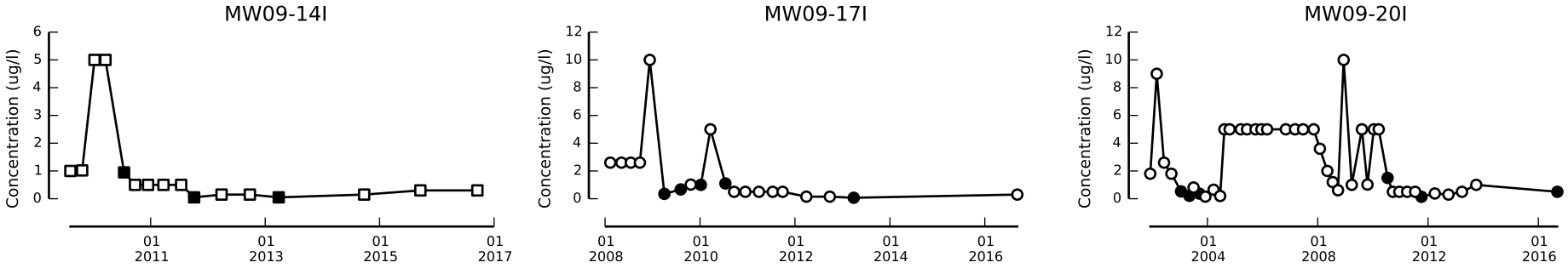
IRON in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



LEAD in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



MAGNESIUM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

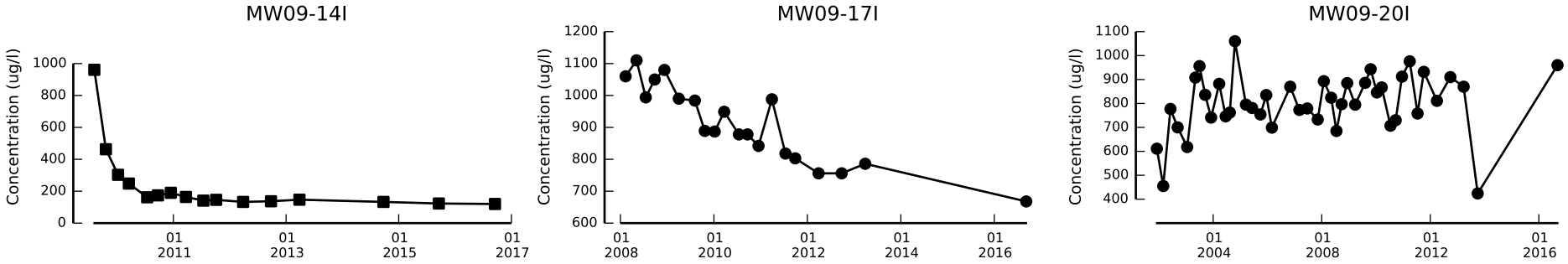
MW09-17I

Not Sampled

MW09-20I

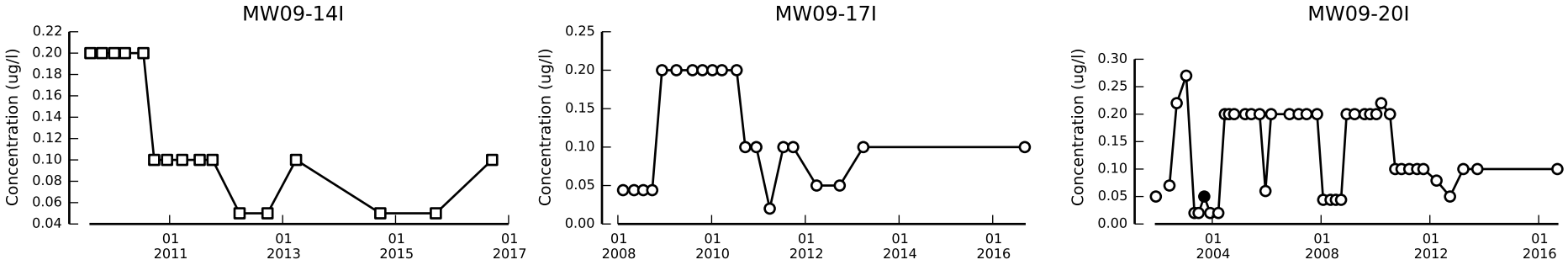
MANGANESE in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



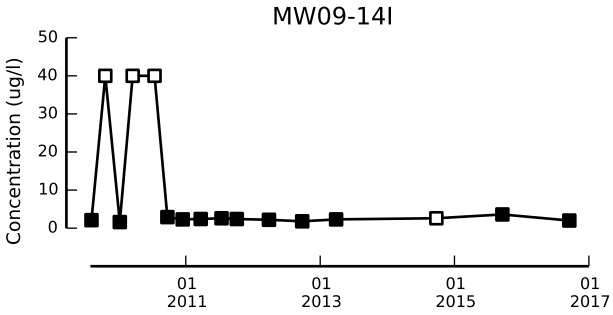
MERCURY in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 22

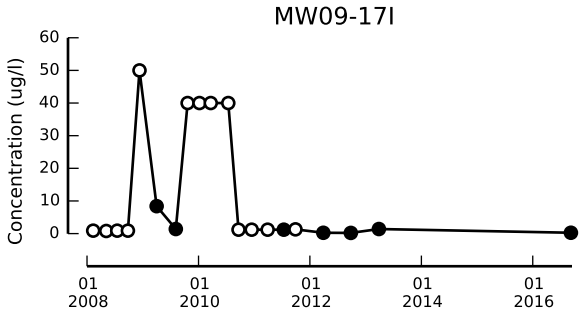
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

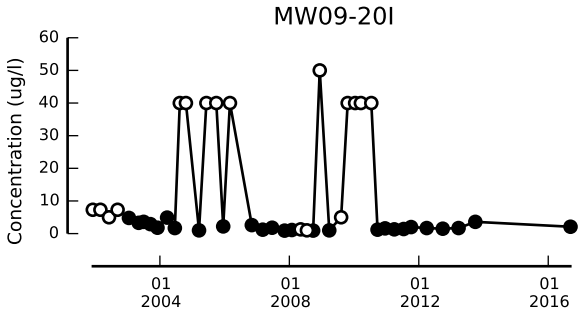


NICKEL in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location







POTASSIUM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

MW09-17I

Not Sampled

MW09-20I

SELENIUM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

MW09-17I

Not Sampled

MW09-20I

SILVER in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

MW09-17I

Not Sampled

MW09-20I

SODIUM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 22

● Detected
○ Not Detected, shown at detection limit

MW09-14I

Not Sampled

MW09-17I

Not Sampled

MW09-20I

VANADIUM in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 22

● Detected
○ Not Detected, shown at detection limit

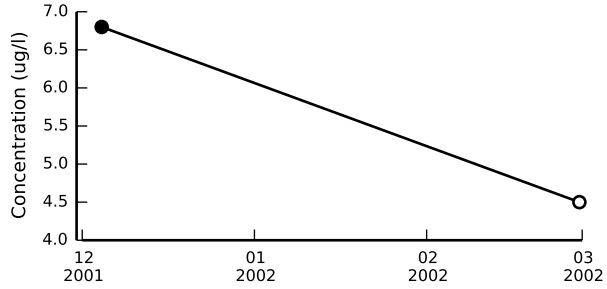
MW09-14I

Not Sampled

MW09-17I

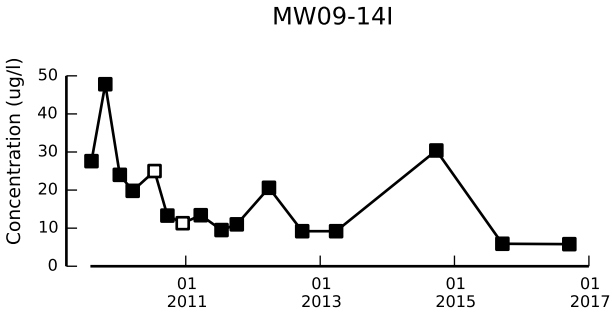
Not Sampled

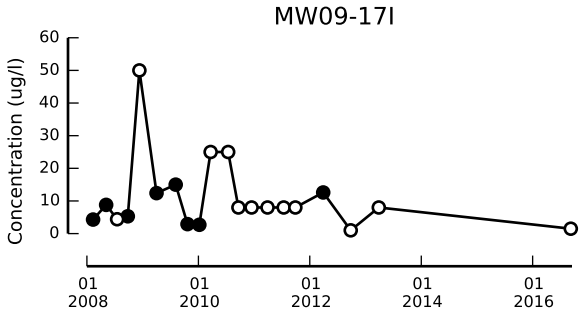
MW09-20I

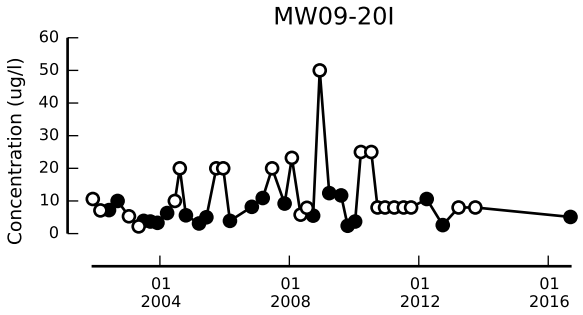


ZINC in Groundwater, Intermediate Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 22

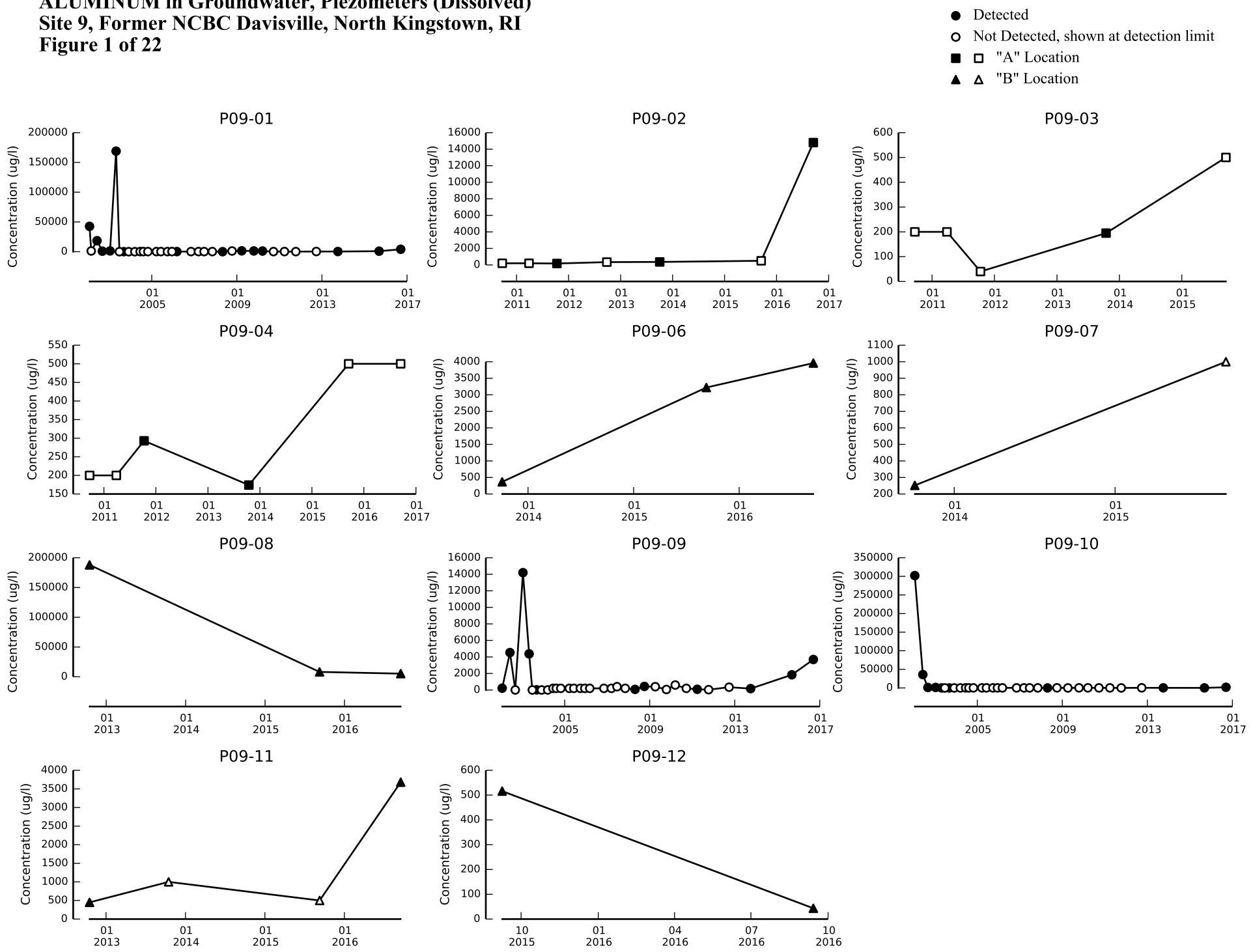
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location



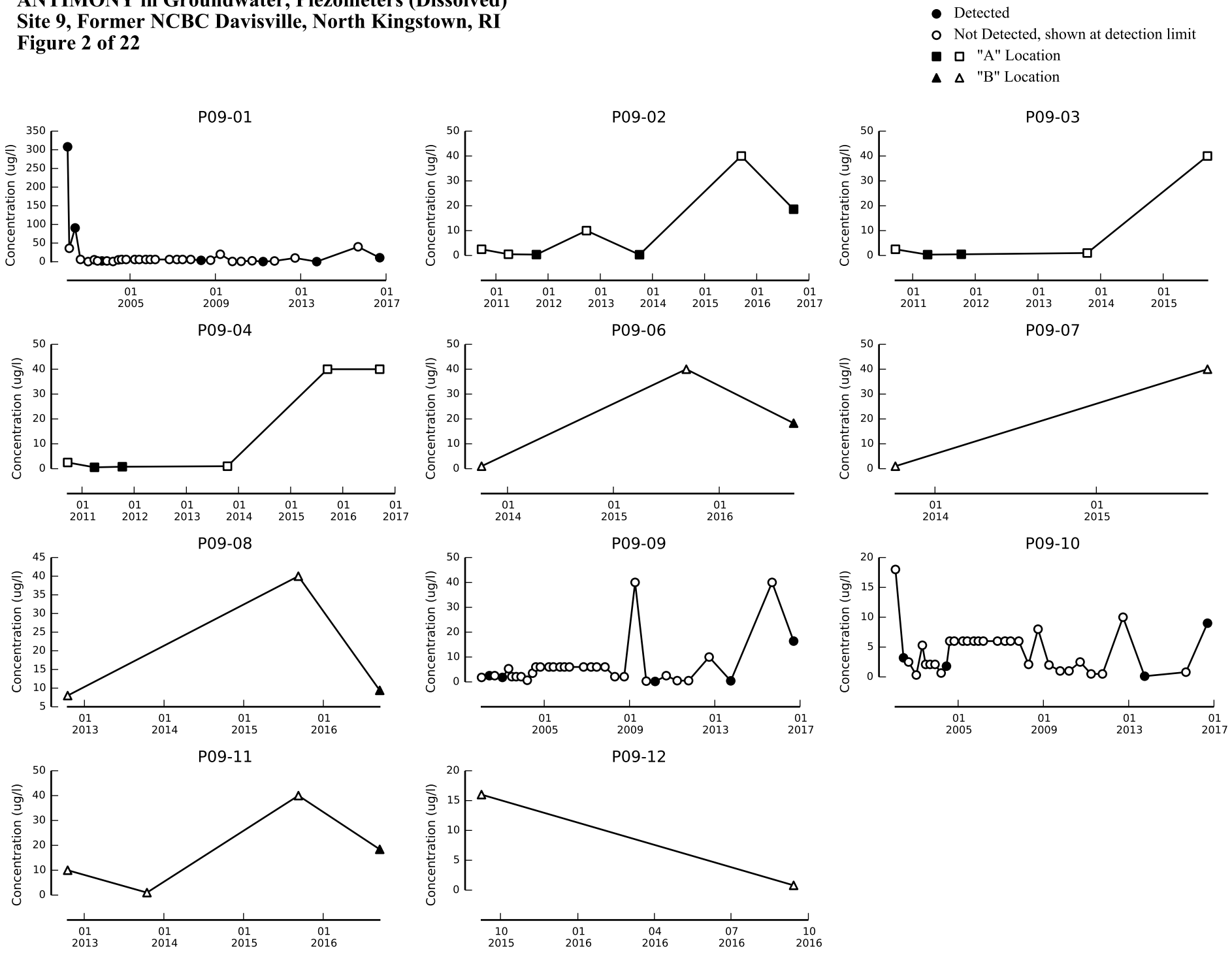




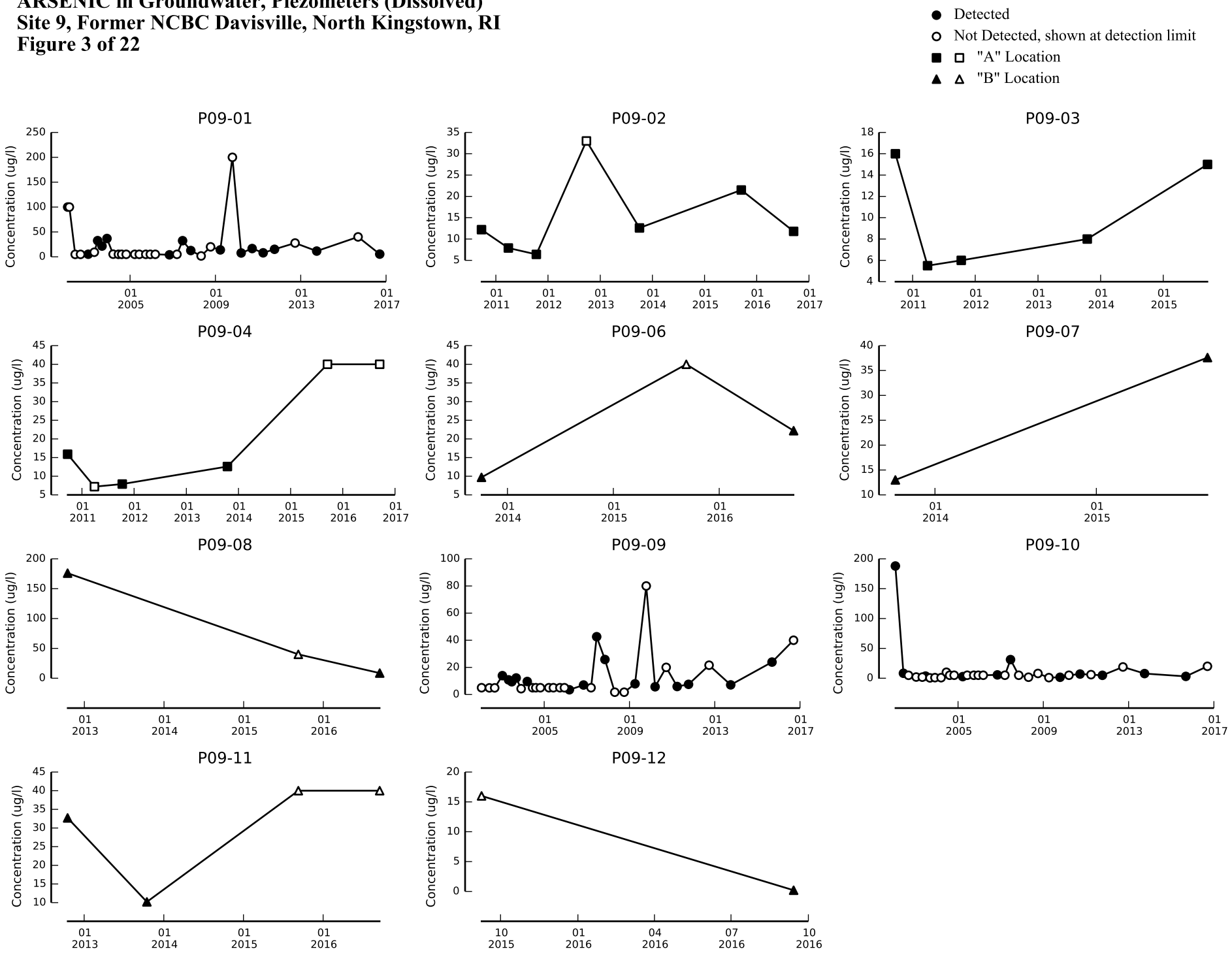
ALUMINUM in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 22



ANTIMONY in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 22



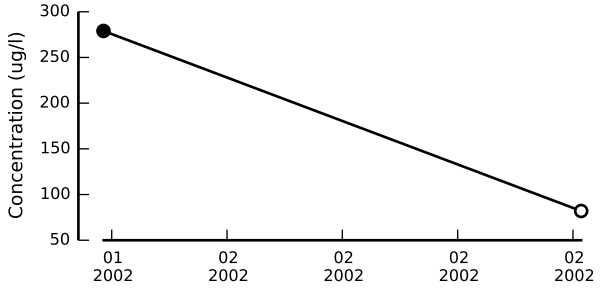
ARSENIC in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 22



BARIUM in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

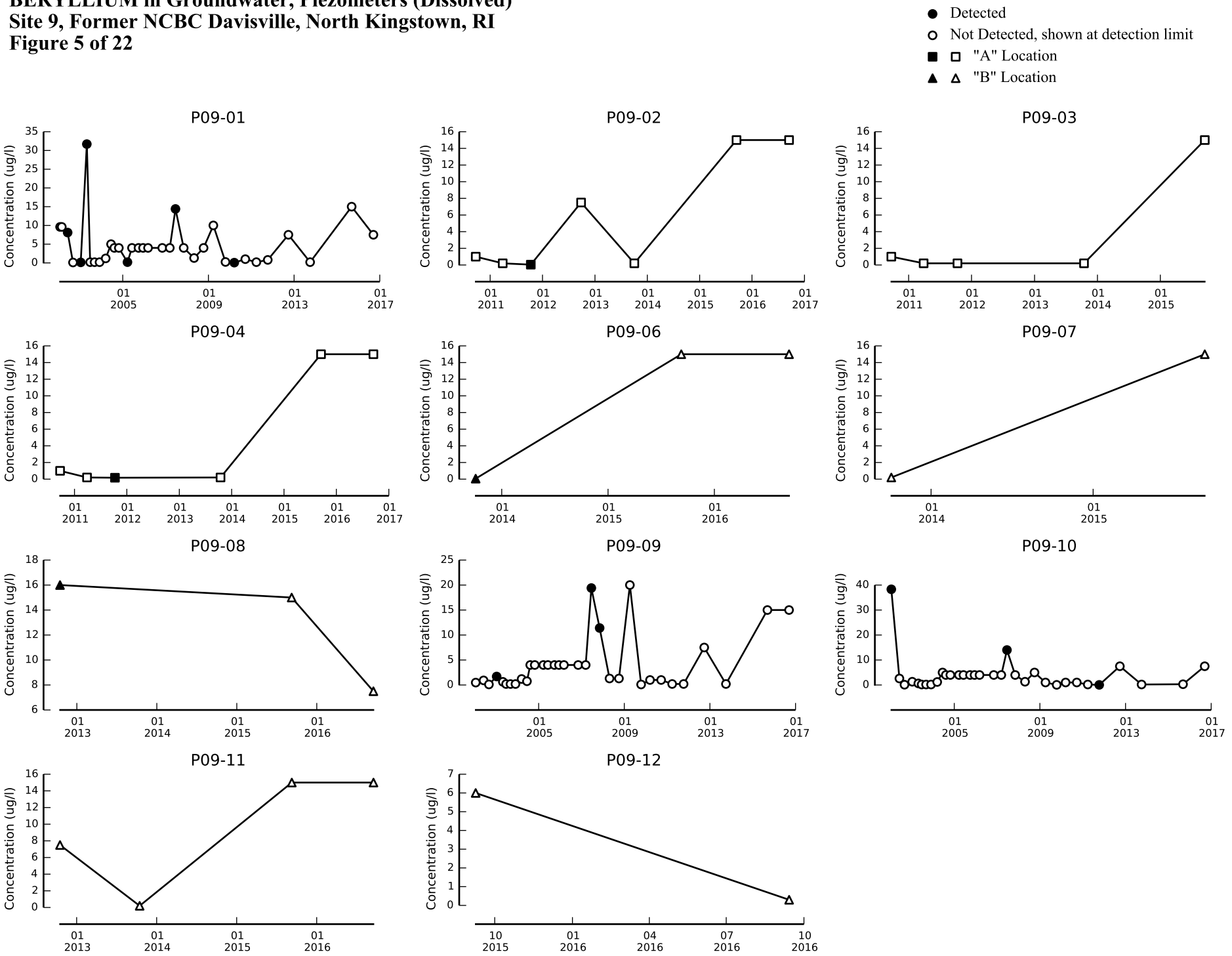
P09-11

Not Sampled

P09-12

Not Sampled

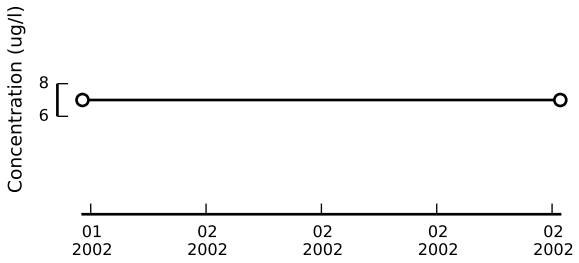
BERYLLIUM in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 22



CADMIUM in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

Not Sampled

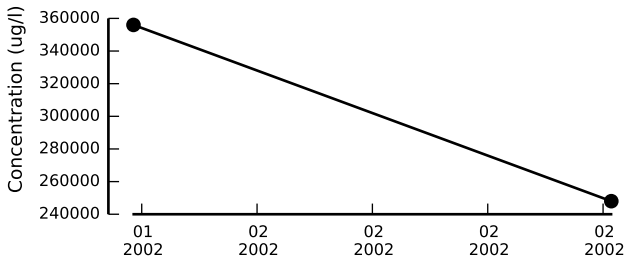
P09-12

Not Sampled

CALCIUM in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

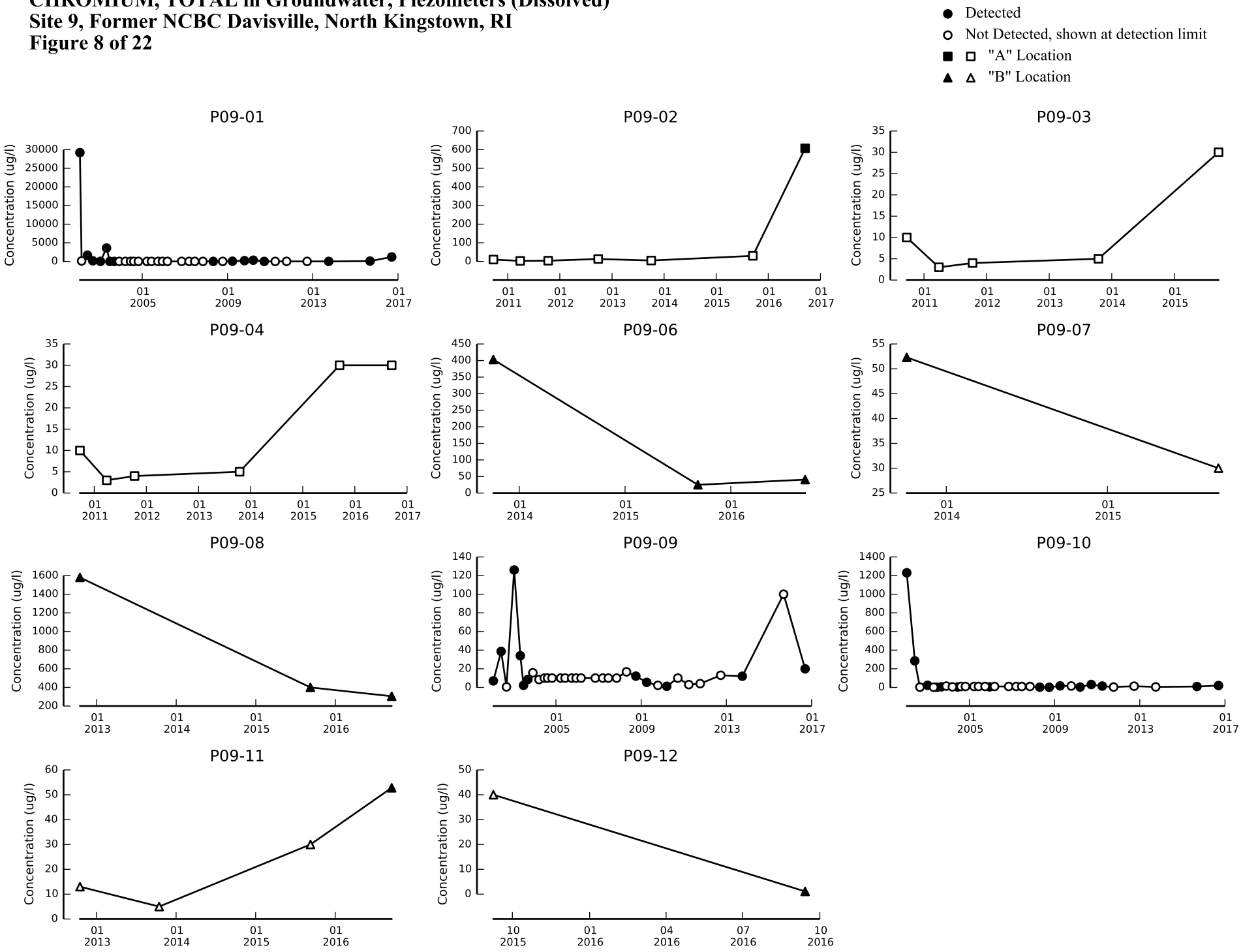
P09-11

Not Sampled

P09-12

Not Sampled

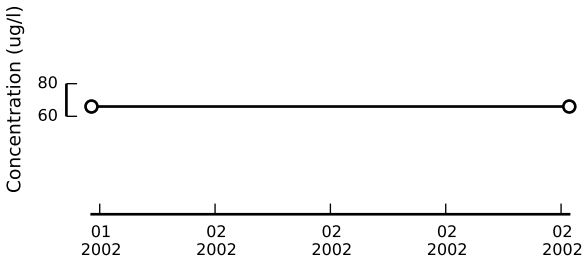
CHROMIUM, TOTAL in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 22



COBALT in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

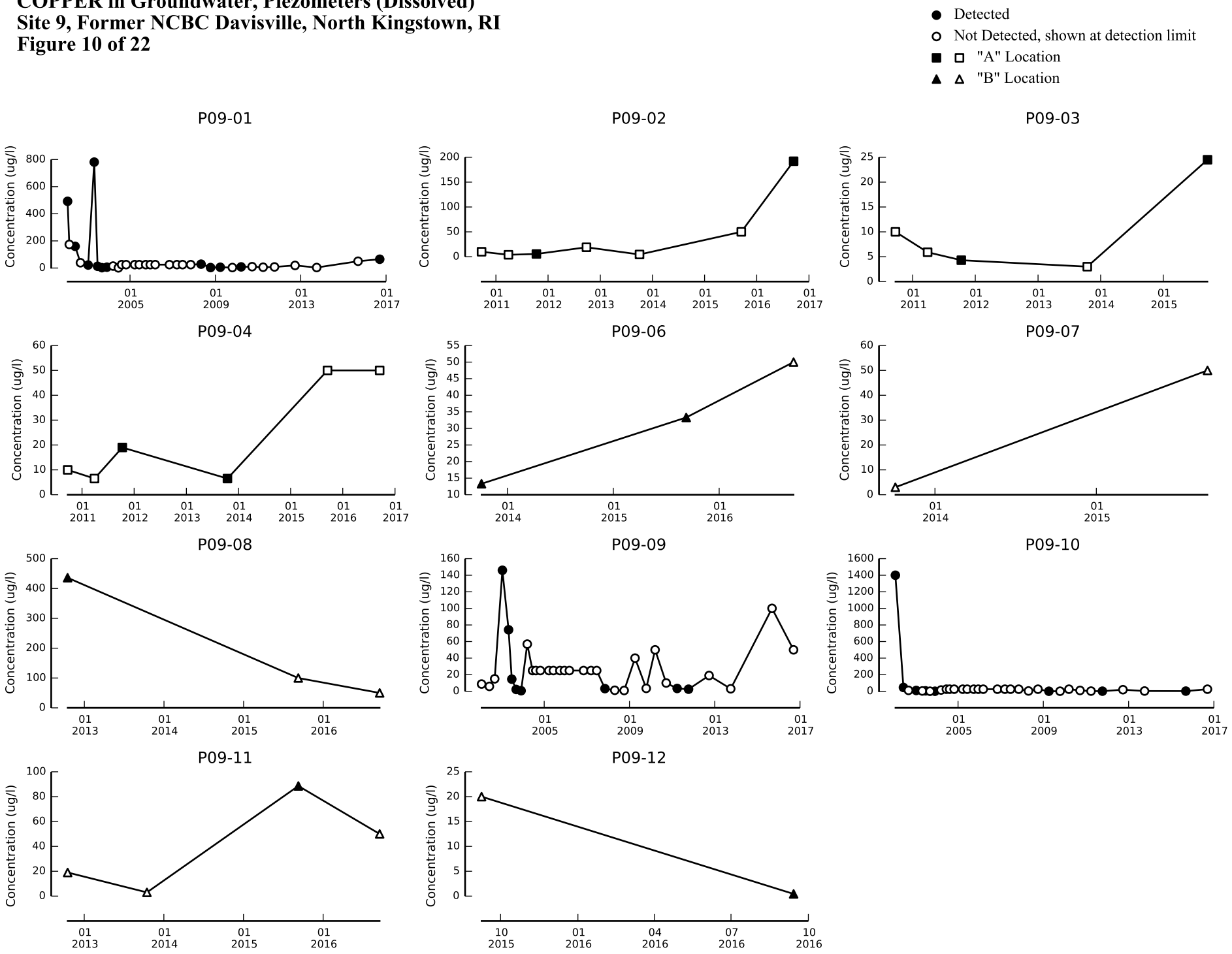
P09-11

Not Sampled

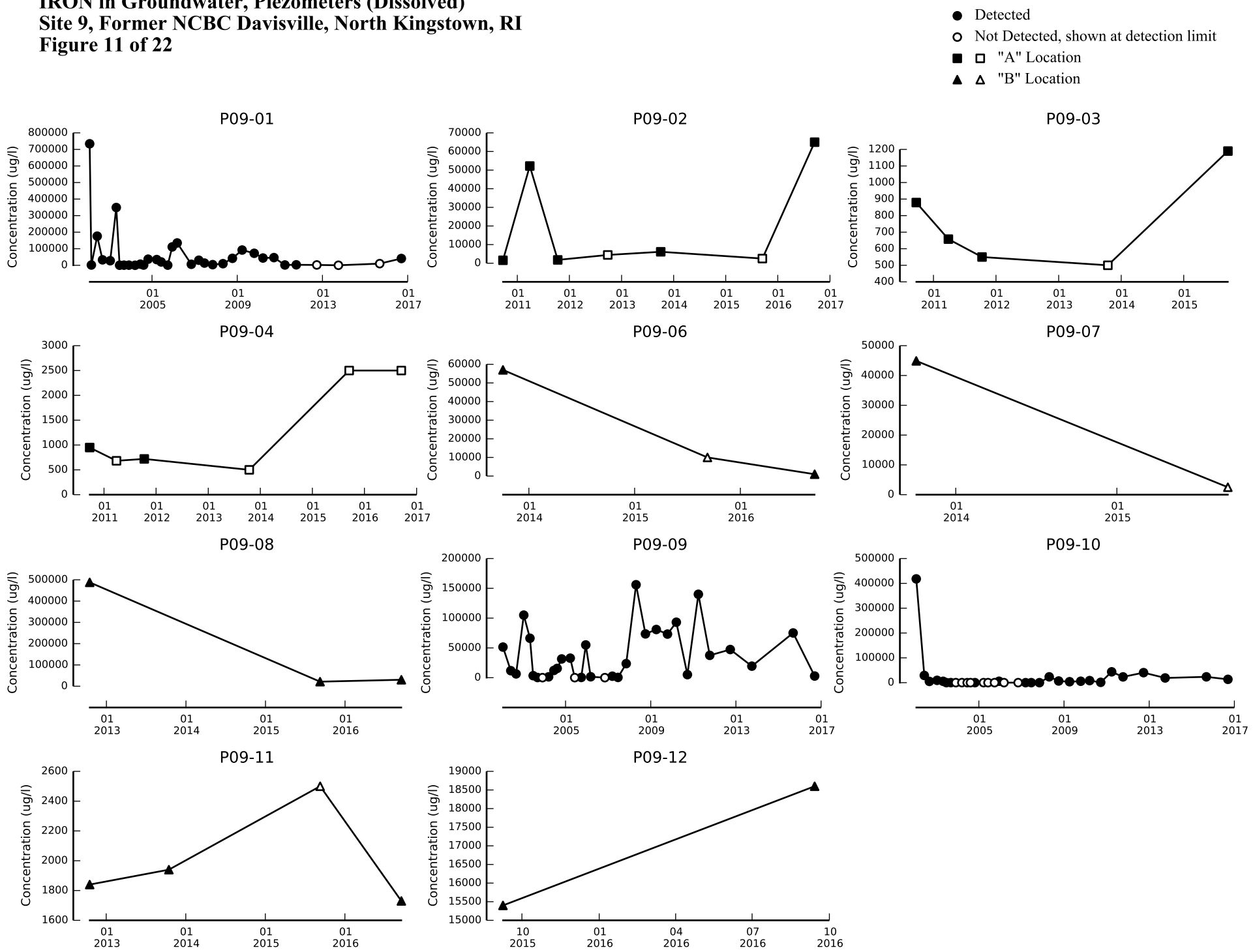
P09-12

Not Sampled

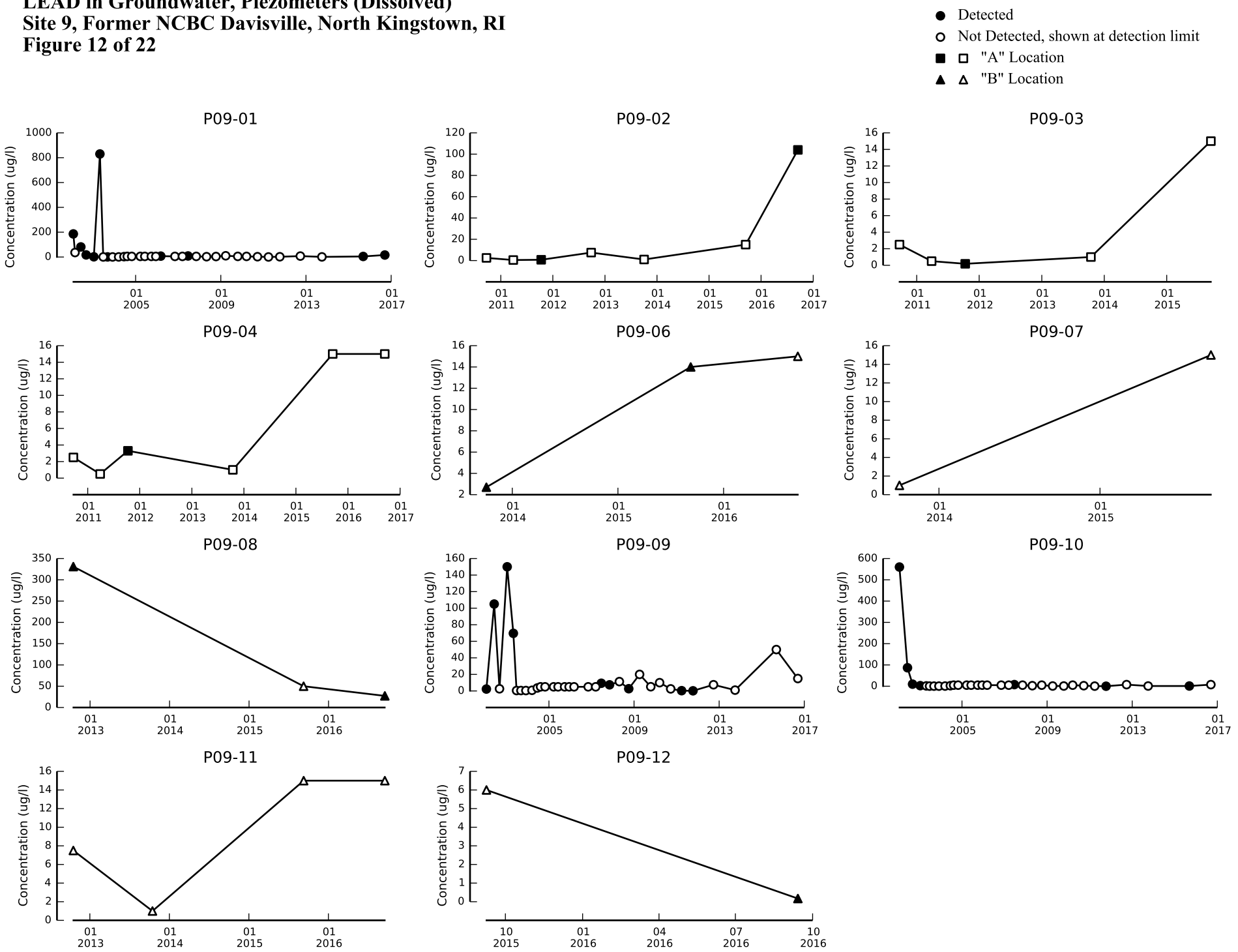
COPPER in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 22



IRON in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 22



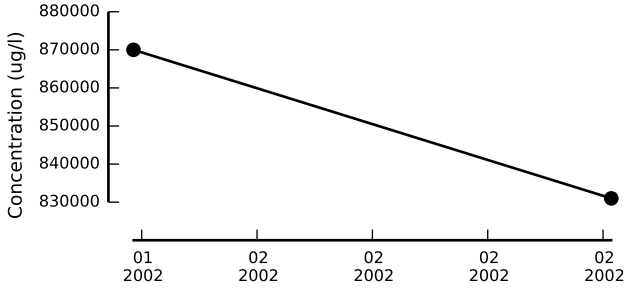
LEAD in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 22



MAGNESIUM in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

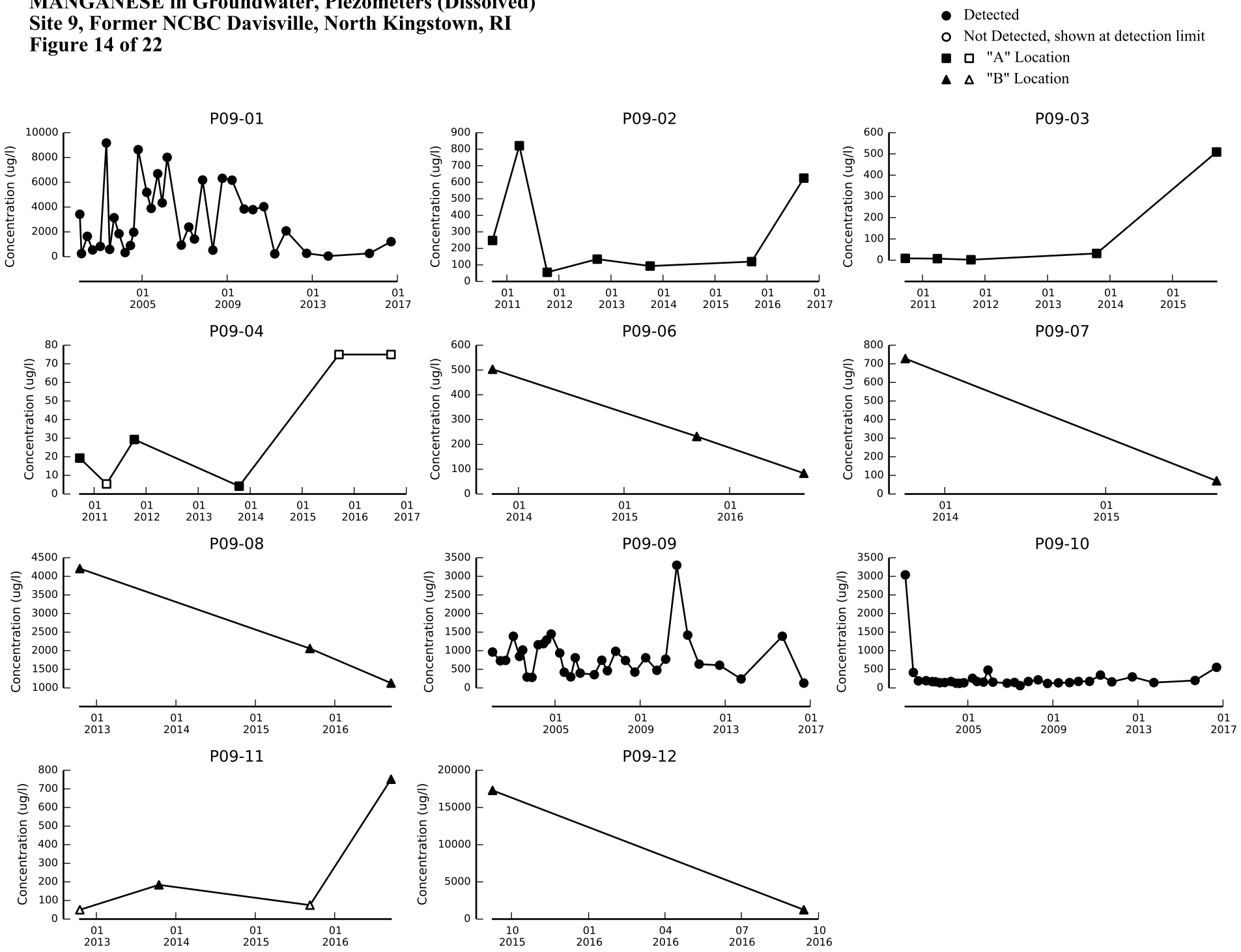
P09-11

Not Sampled

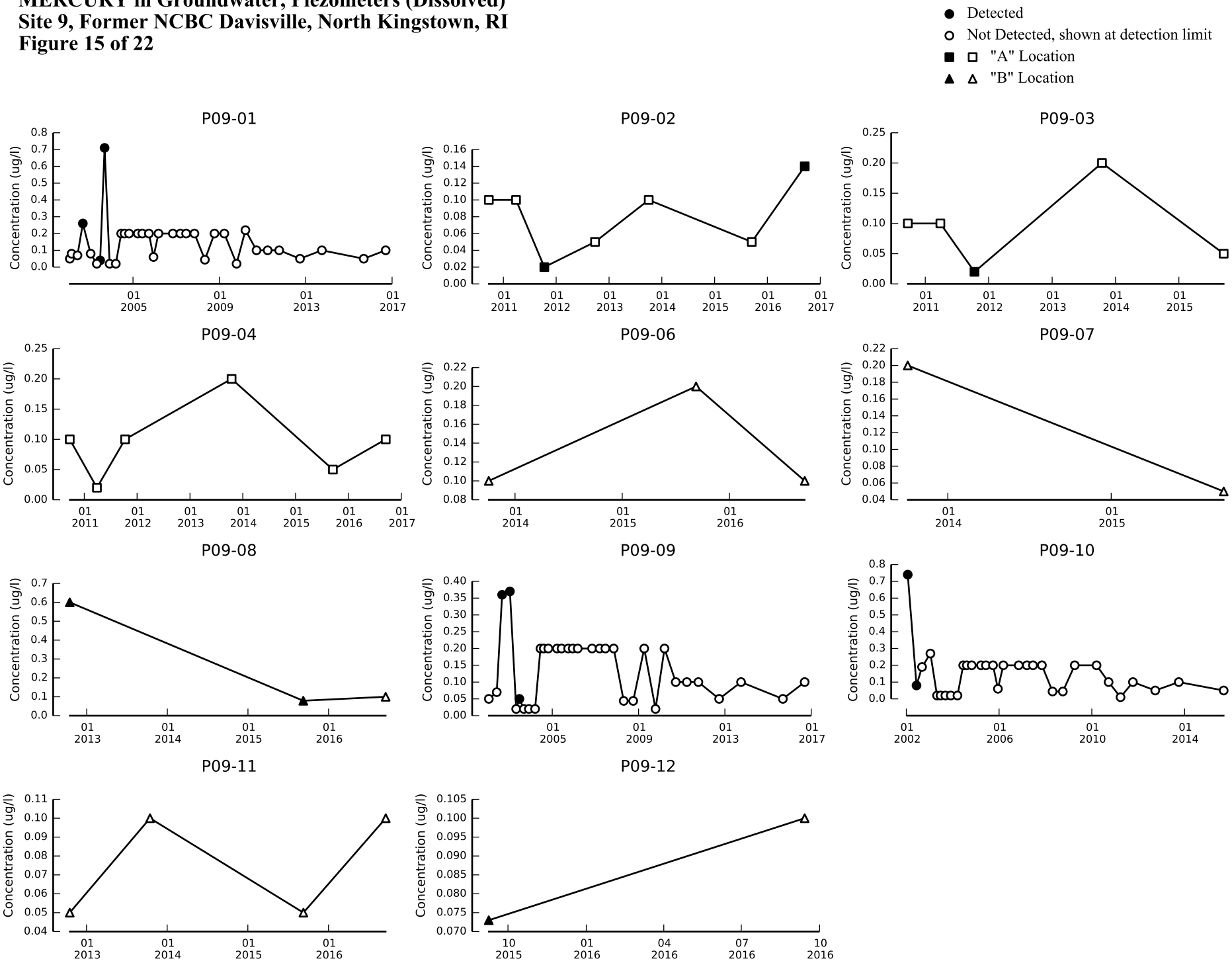
P09-12

Not Sampled

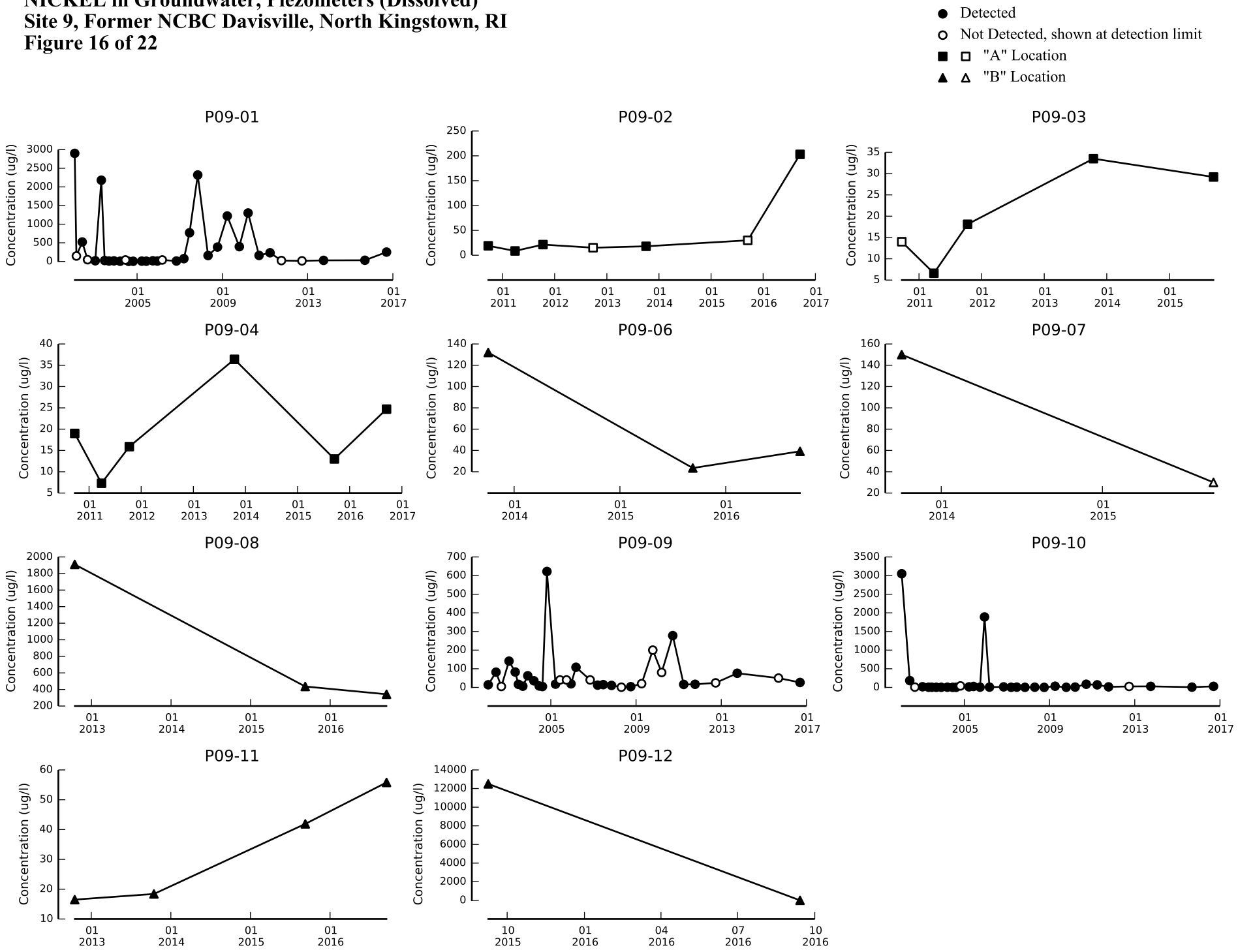
MANGANESE in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 22



MERCURY in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 22



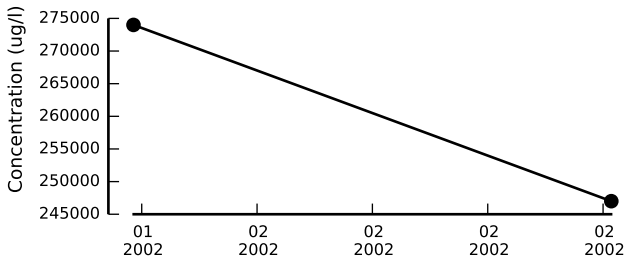
NICKEL in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 22



POTASSIUM in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

Not Sampled

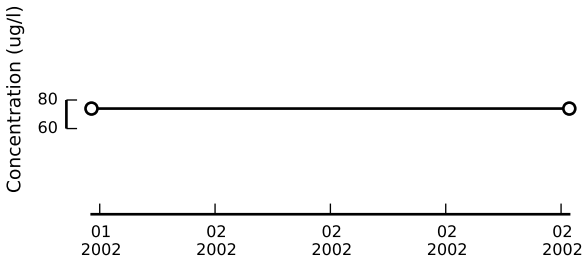
P09-12

Not Sampled

SELENIUM in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

Not Sampled

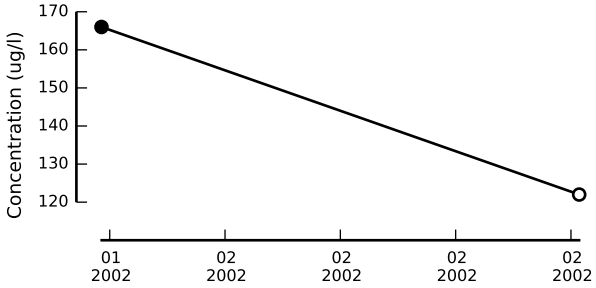
P09-12

Not Sampled

SILVER in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

Not Sampled

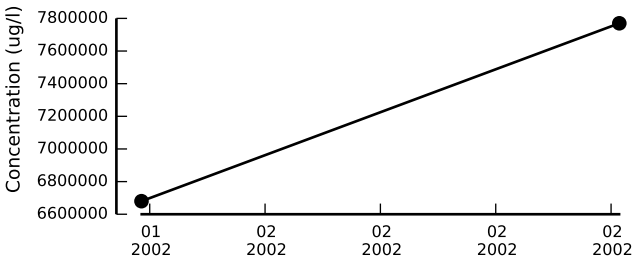
P09-12

Not Sampled

SODIUM in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

Not Sampled

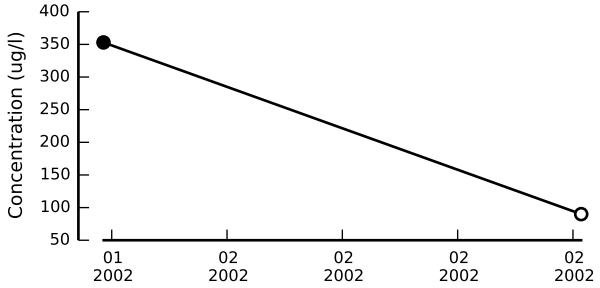
P09-12

Not Sampled

VANADIUM in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

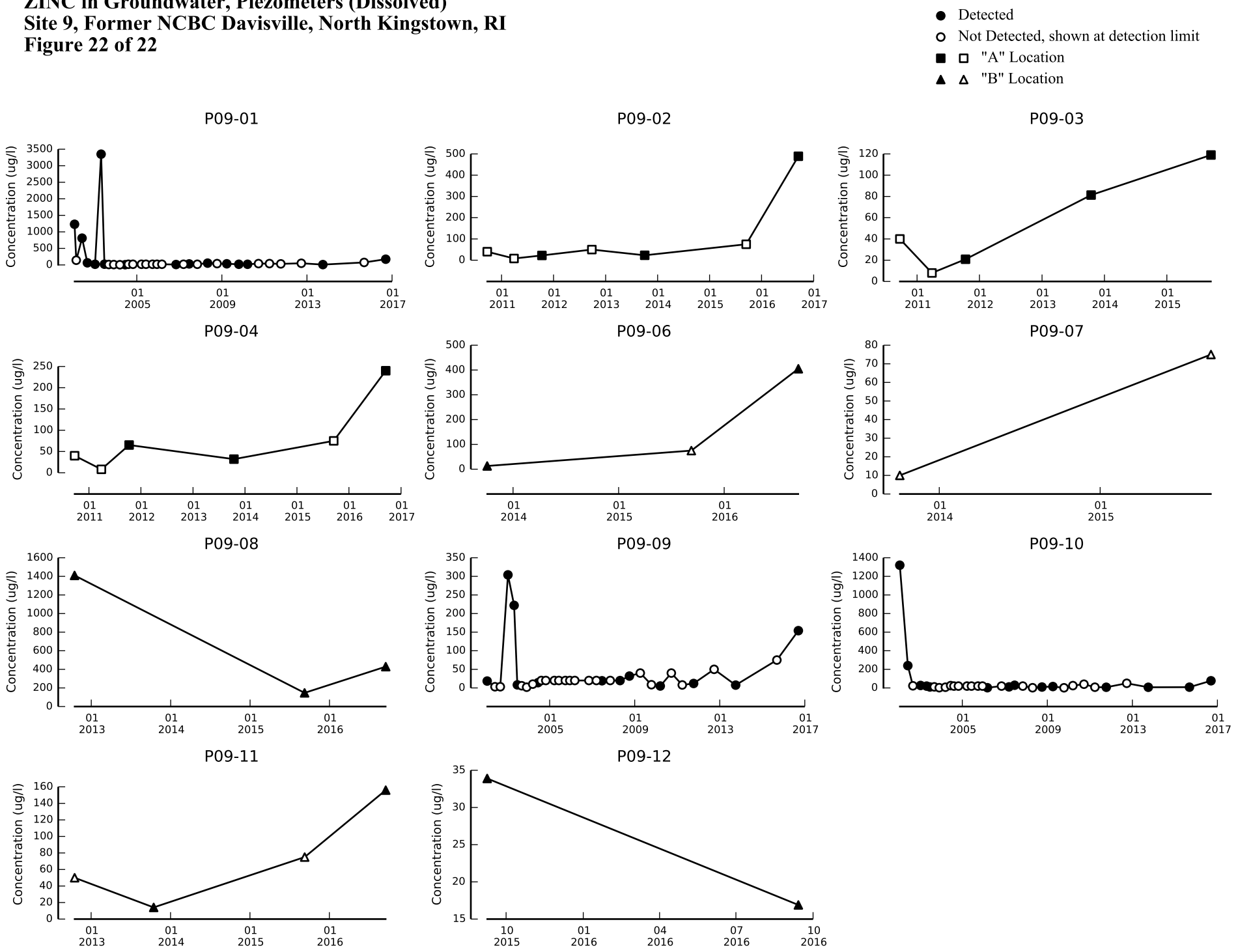
P09-11

Not Sampled

P09-12

Not Sampled

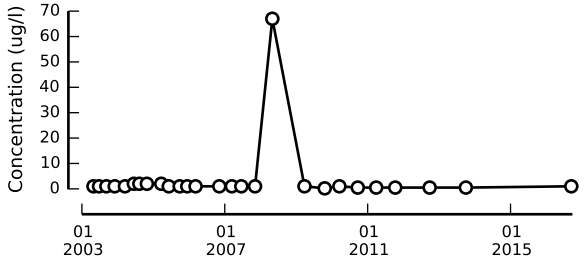
ZINC in Groundwater, Piezometers (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 22



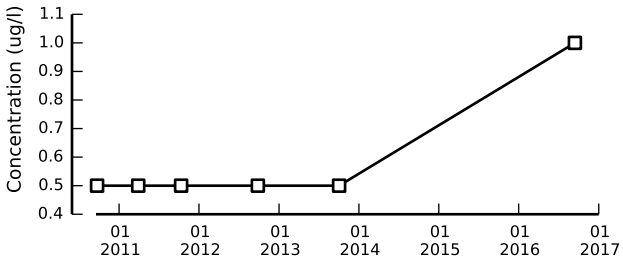
1,1,1-TRICHLOROETHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

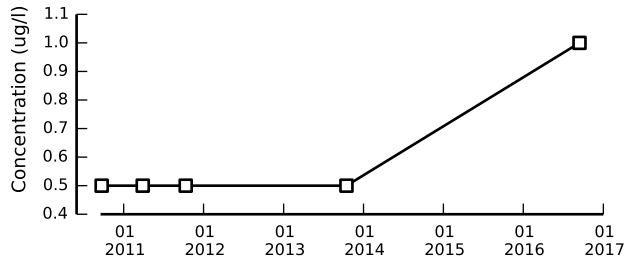
P09-01



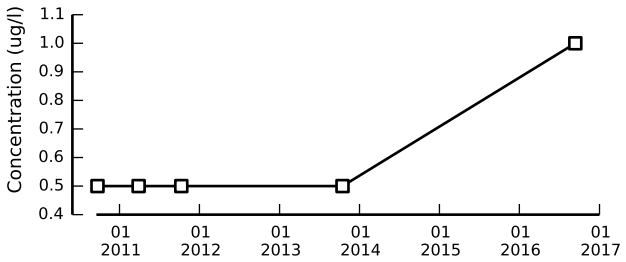
P09-02



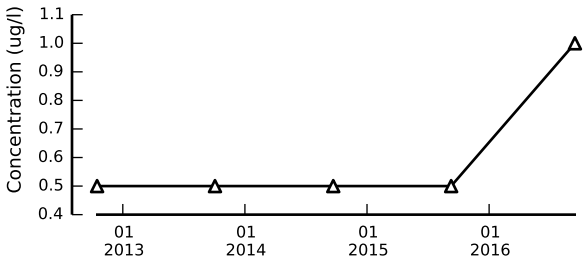
P09-03



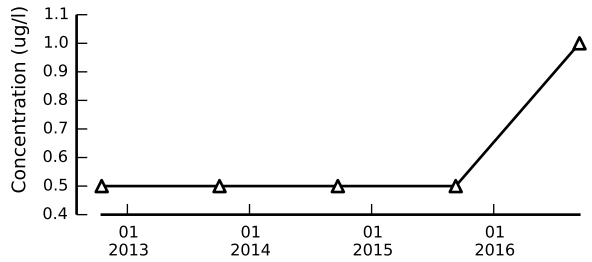
P09-04



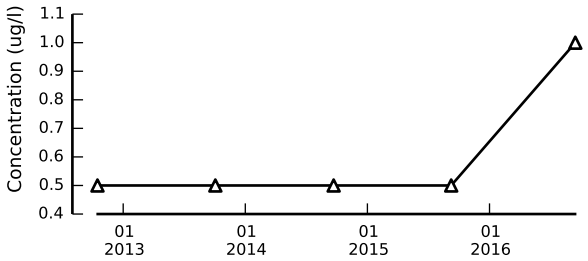
P09-06



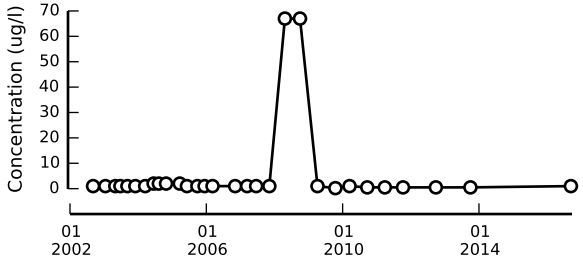
P09-07



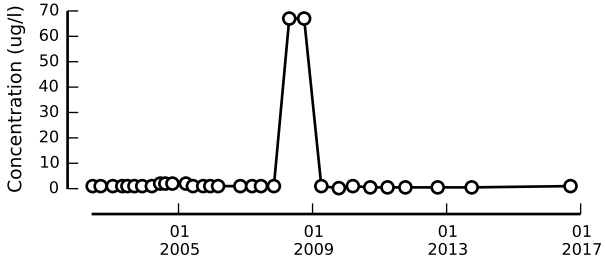
P09-08



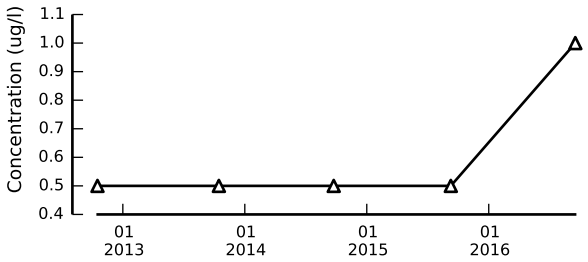
P09-09



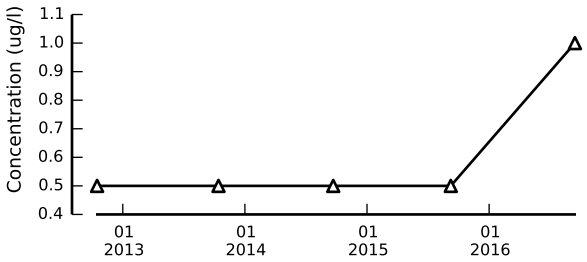
P09-10



P09-11



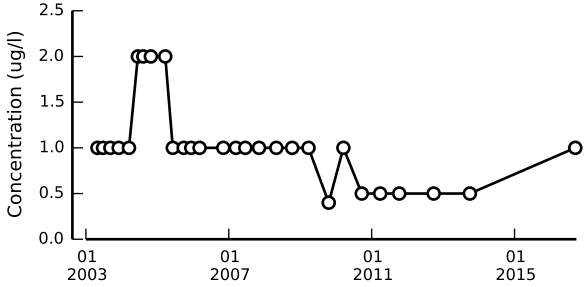
P09-12



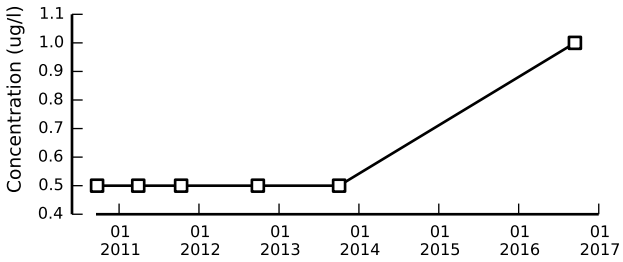
1,1,2,2-TETRACHLOROETHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

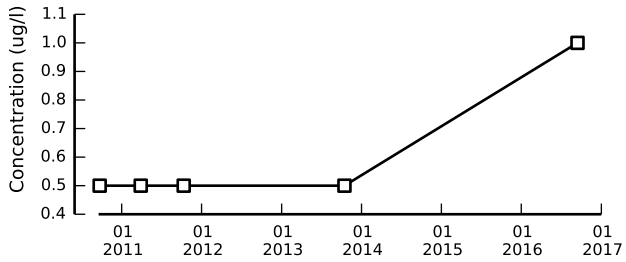
P09-01



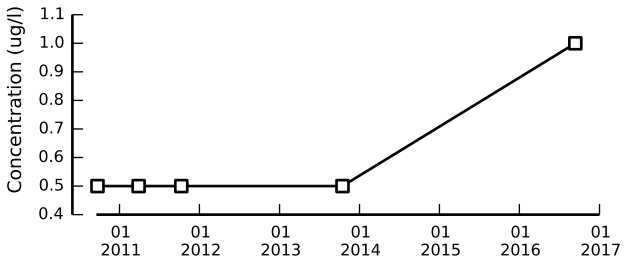
P09-02



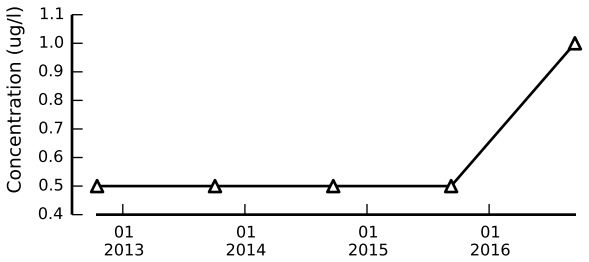
P09-03



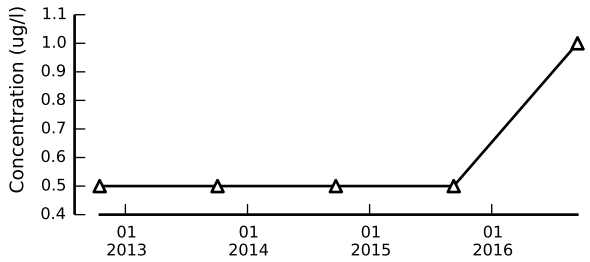
P09-04



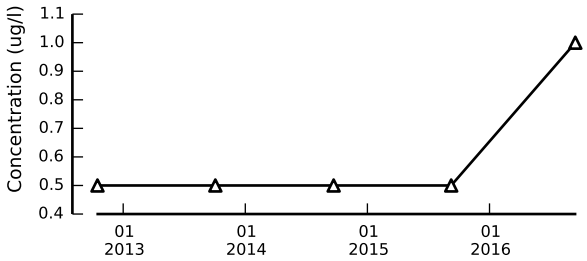
P09-06



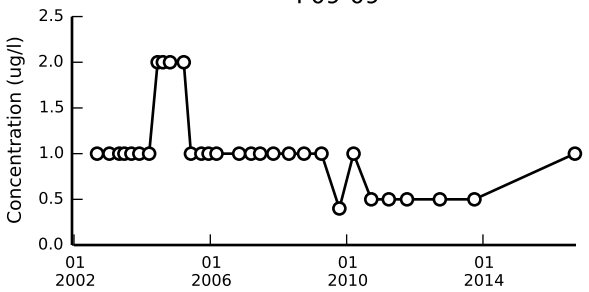
P09-07



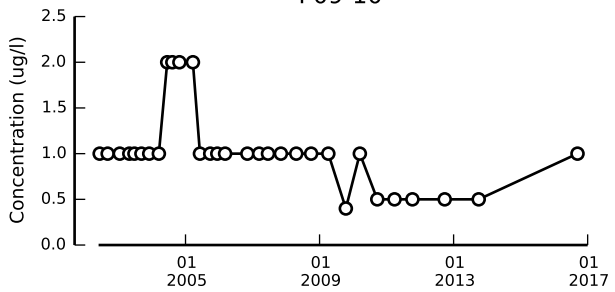
P09-08



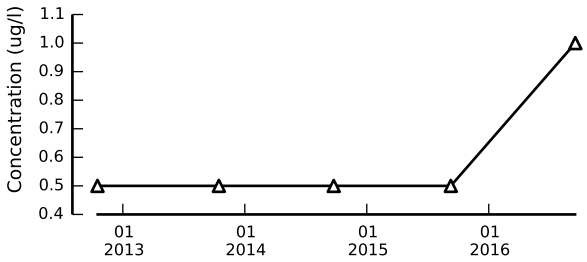
P09-09



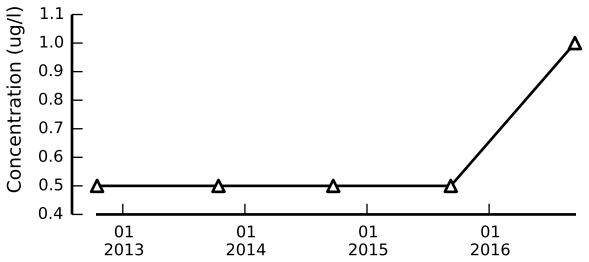
P09-10



P09-11

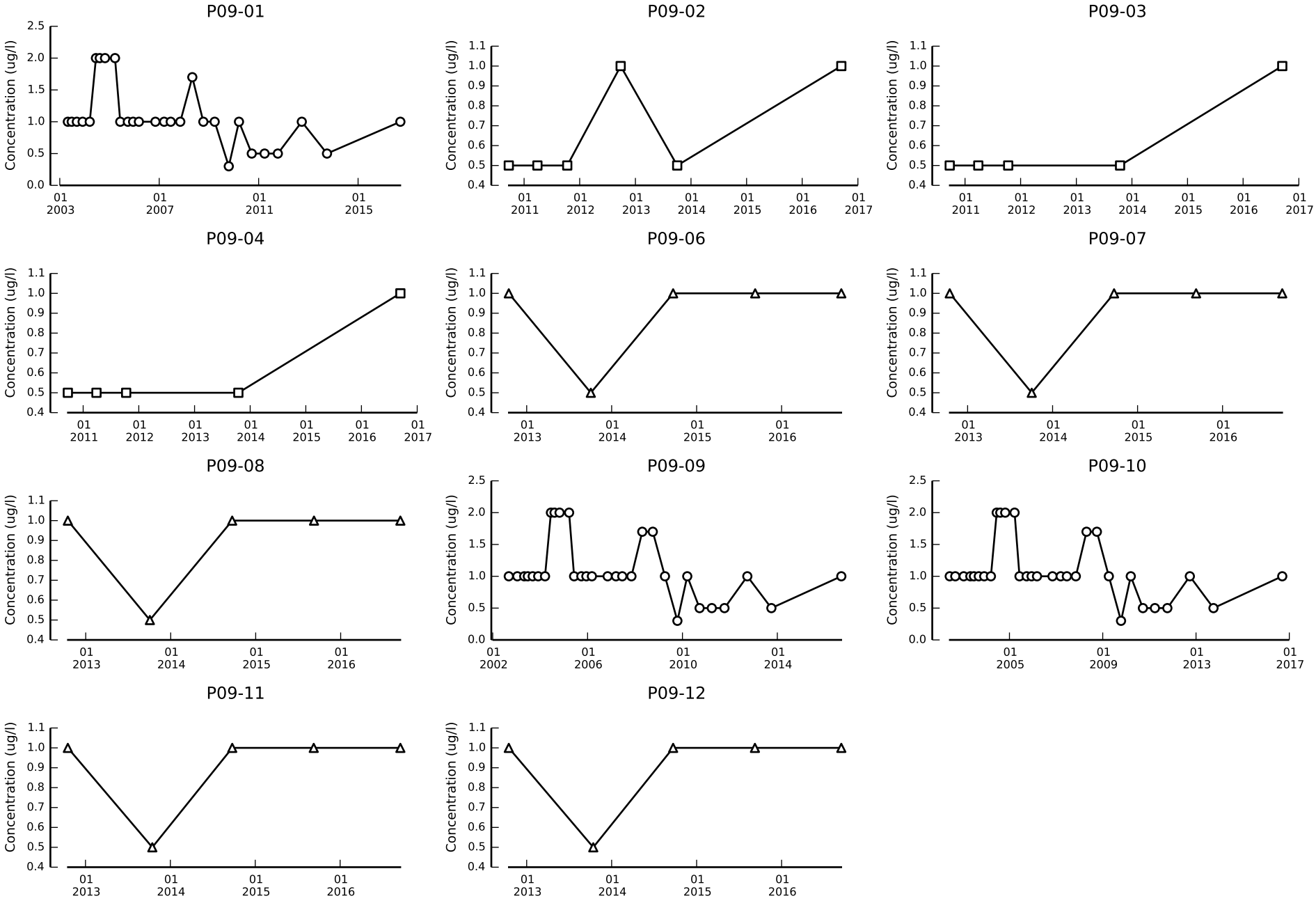


P09-12



1,1,2-TRICHLOROETHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 134

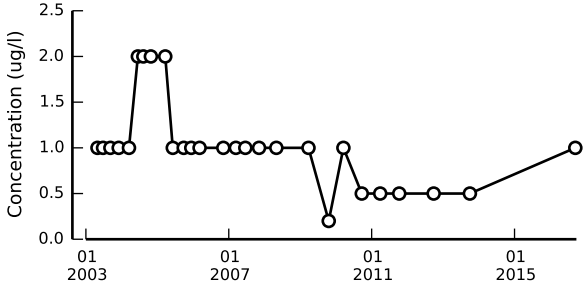
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location



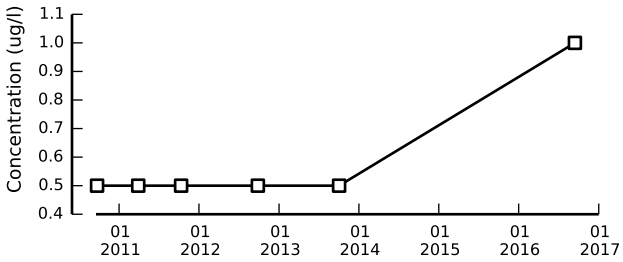
1,1-DICHLOROETHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

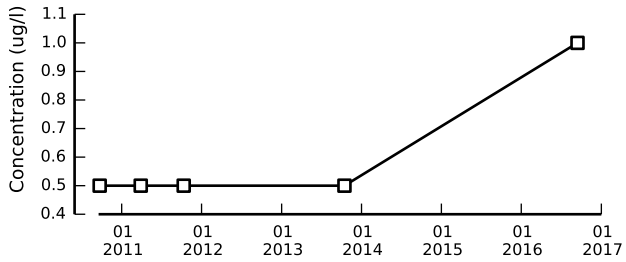
P09-01



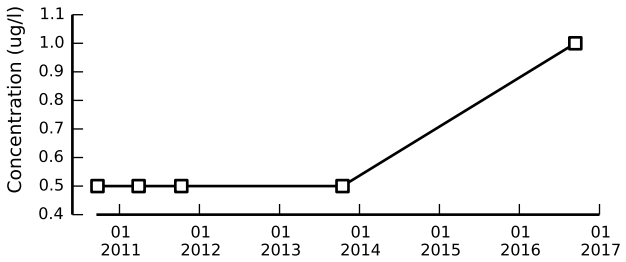
P09-02



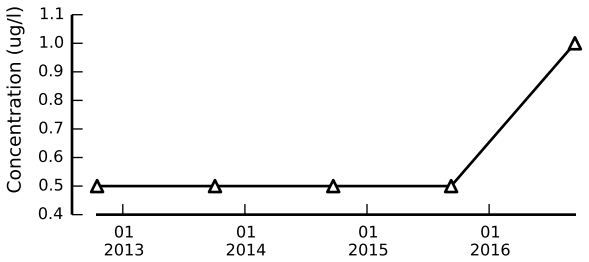
P09-03



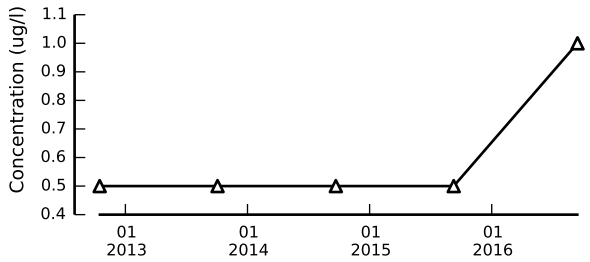
P09-04



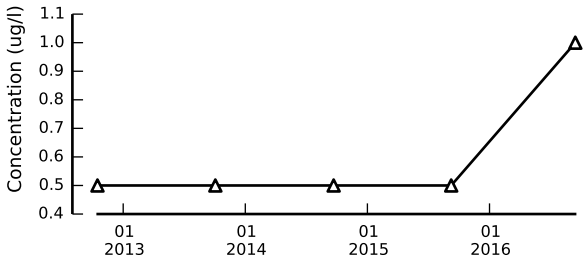
P09-06



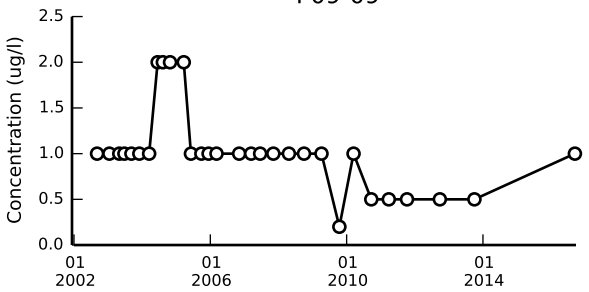
P09-07



P09-08

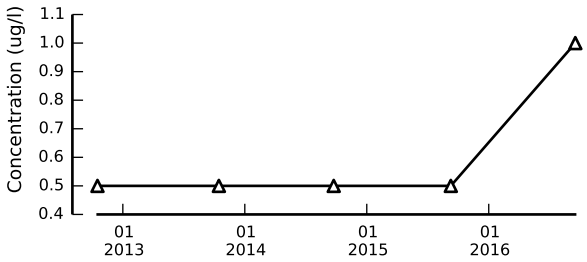


P09-09

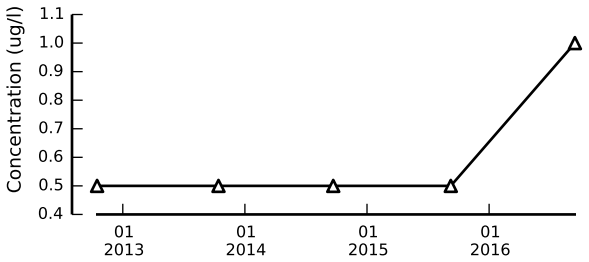


P09-10

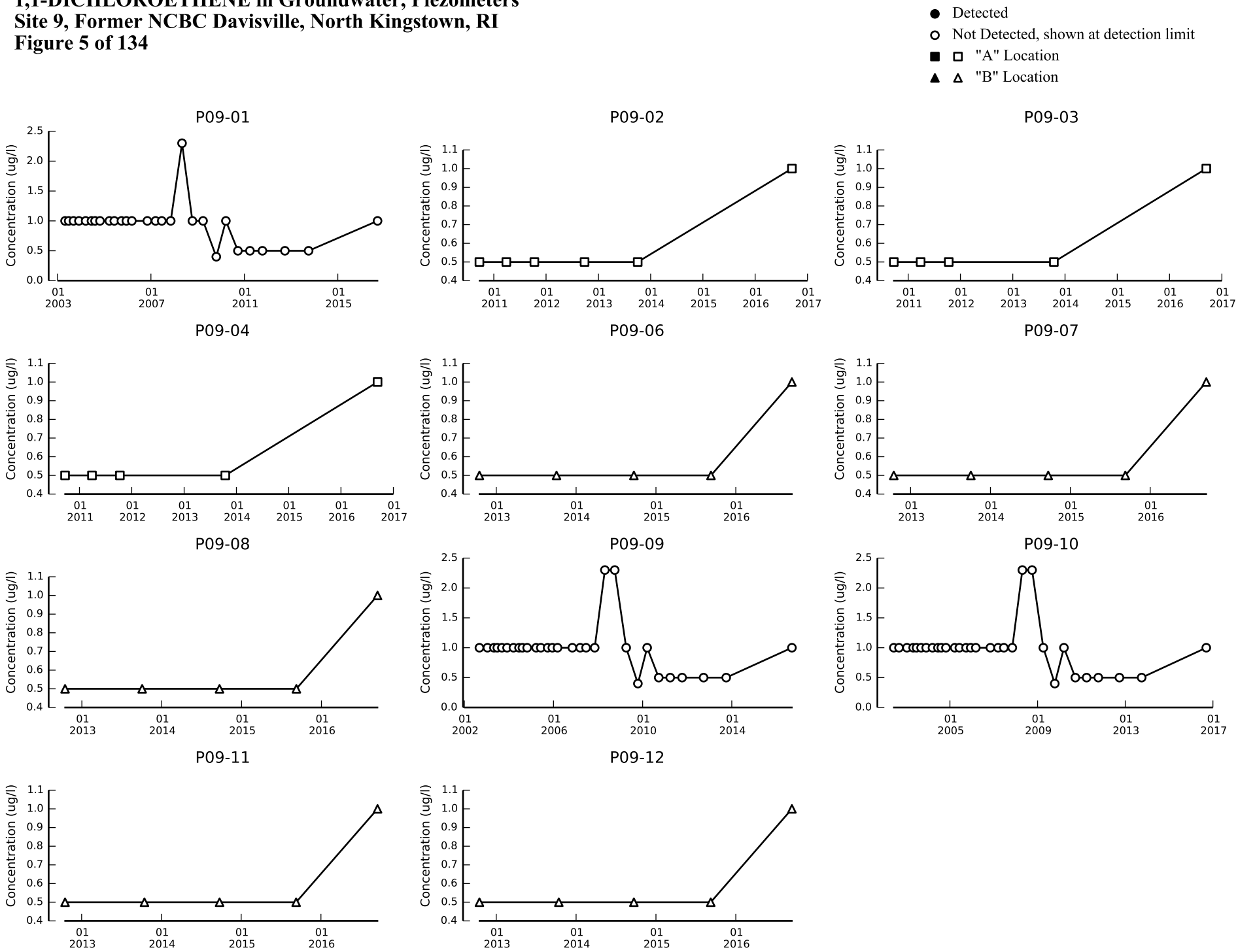
P09-11



P09-12



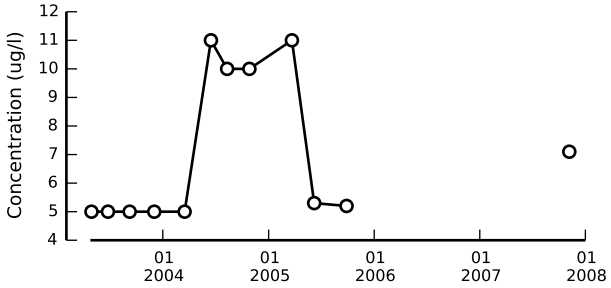
1,1-DICHLOROETHENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 134



1,2,4-TRICHLOROBENZENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

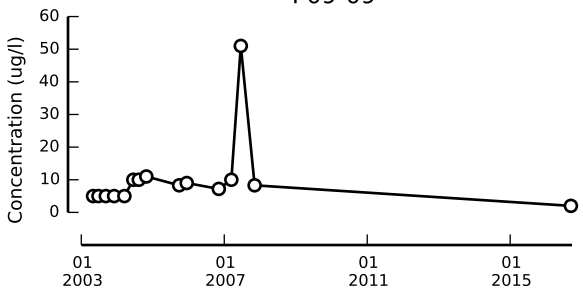
P09-07

Not Sampled

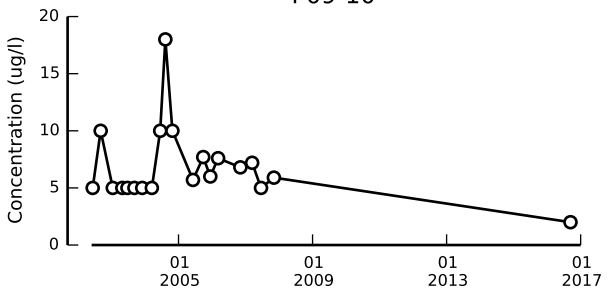
P09-08

Sampled Once

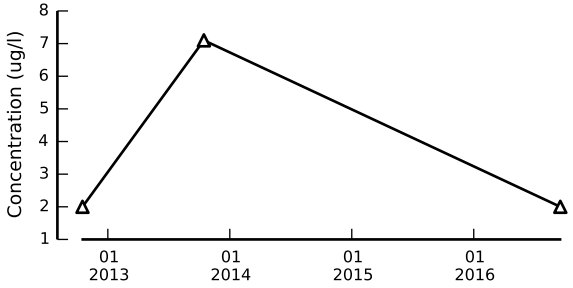
P09-09



P09-10



P09-11



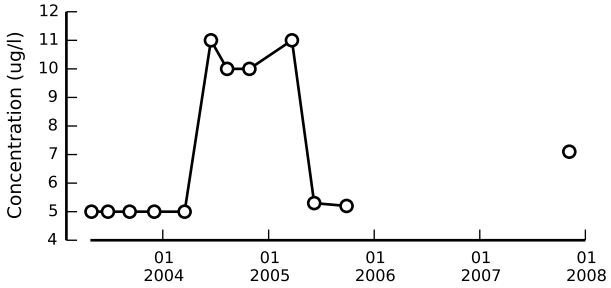
P09-12

Sampled Once

1,2-DICHLOROBENZENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

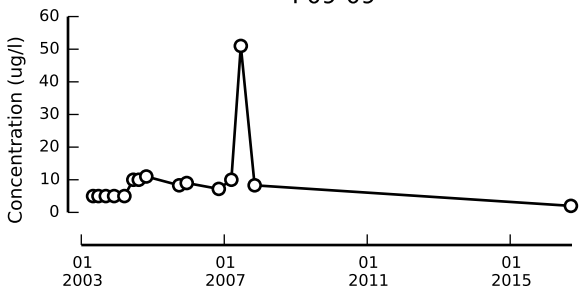
P09-07

Not Sampled

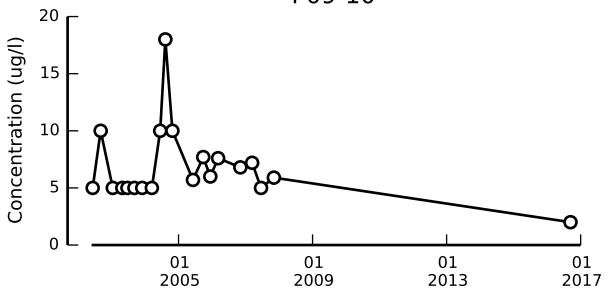
P09-08

Sampled Once

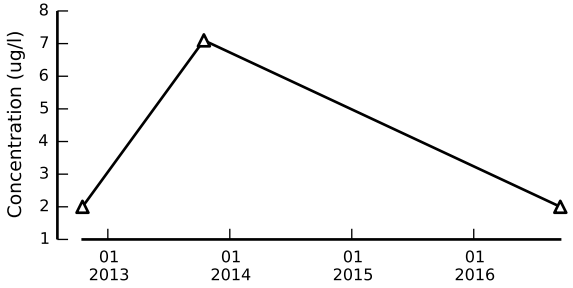
P09-09



P09-10



P09-11



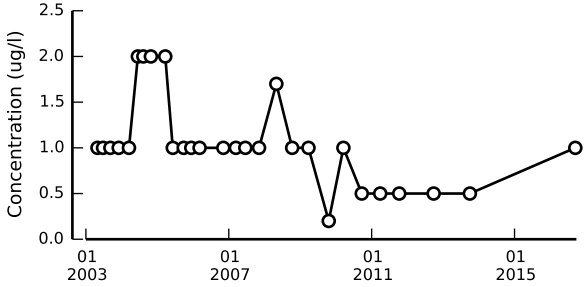
P09-12

Sampled Once

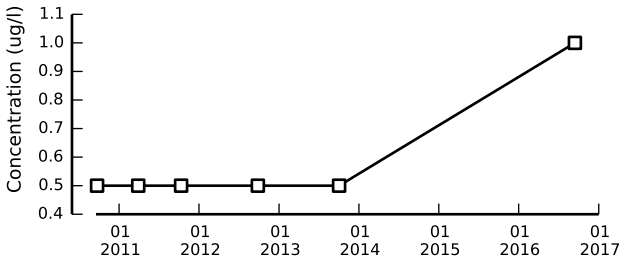
1,2-DICHLOROETHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

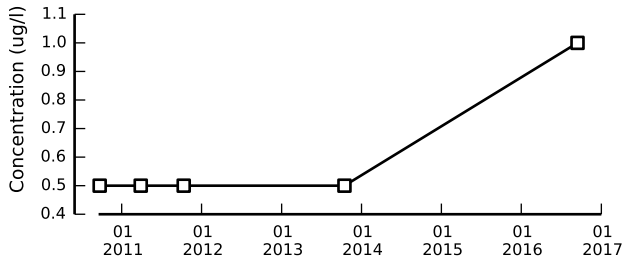
P09-01



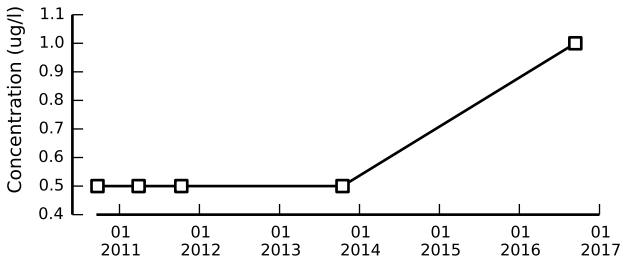
P09-02



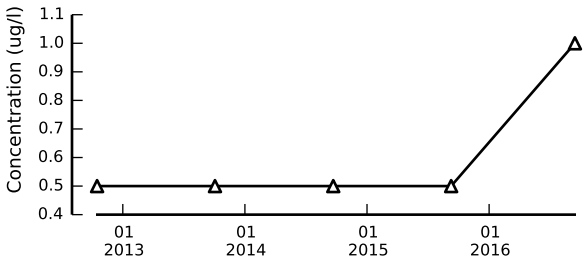
P09-03



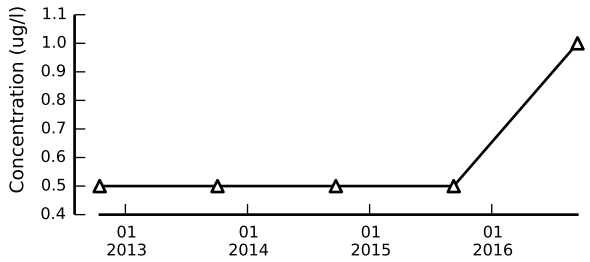
P09-04



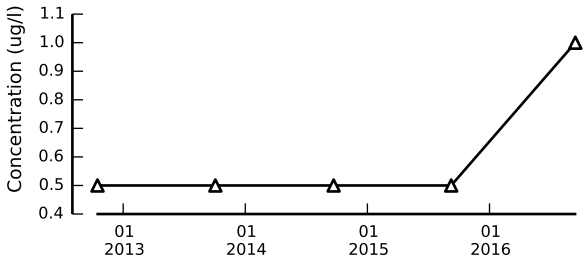
P09-06



P09-07

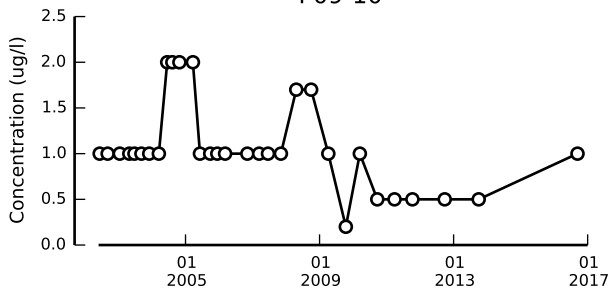


P09-08

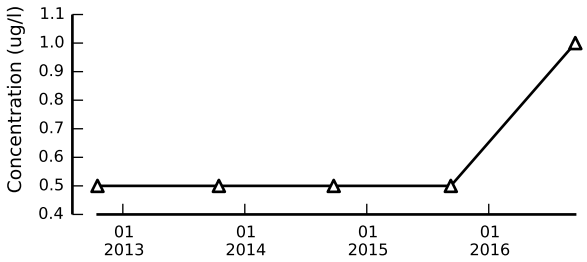


P09-09

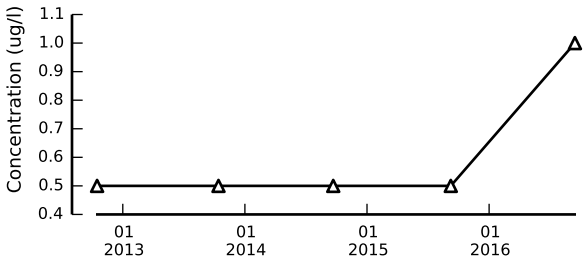
P09-10



P09-11



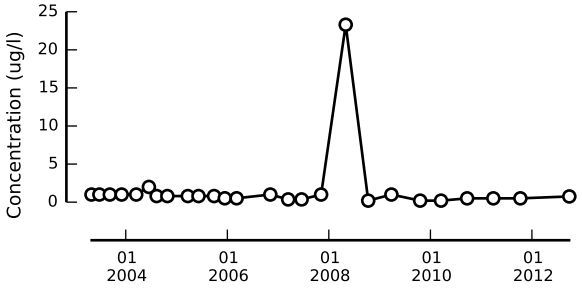
P09-12



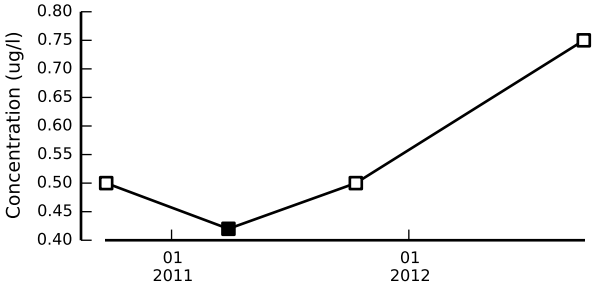
1,2-DICHLOROETHENE, TOTAL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

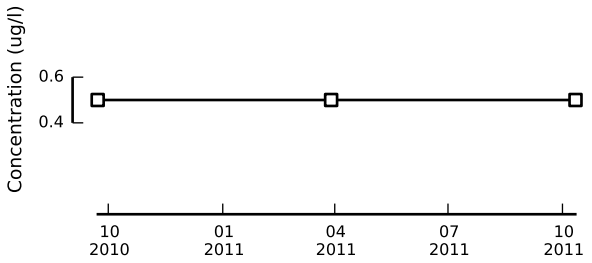
P09-01



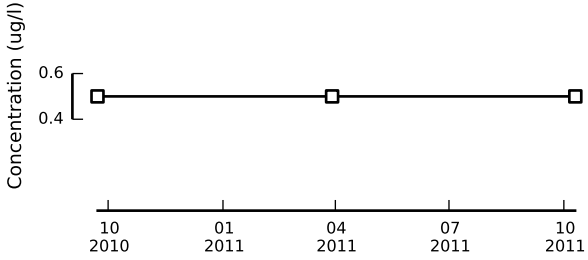
P09-02



P09-03



P09-04



P09-06

Sampled Once

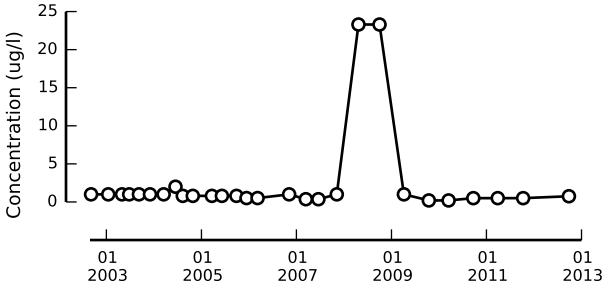
P09-07

Sampled Once

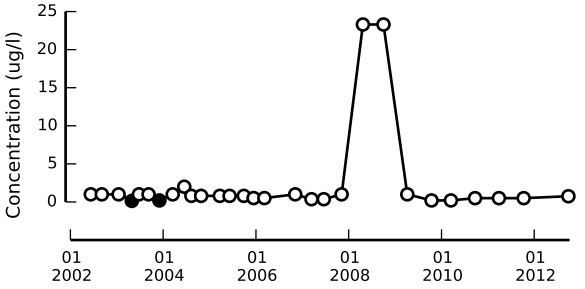
P09-08

Sampled Once

P09-09



P09-10



P09-11

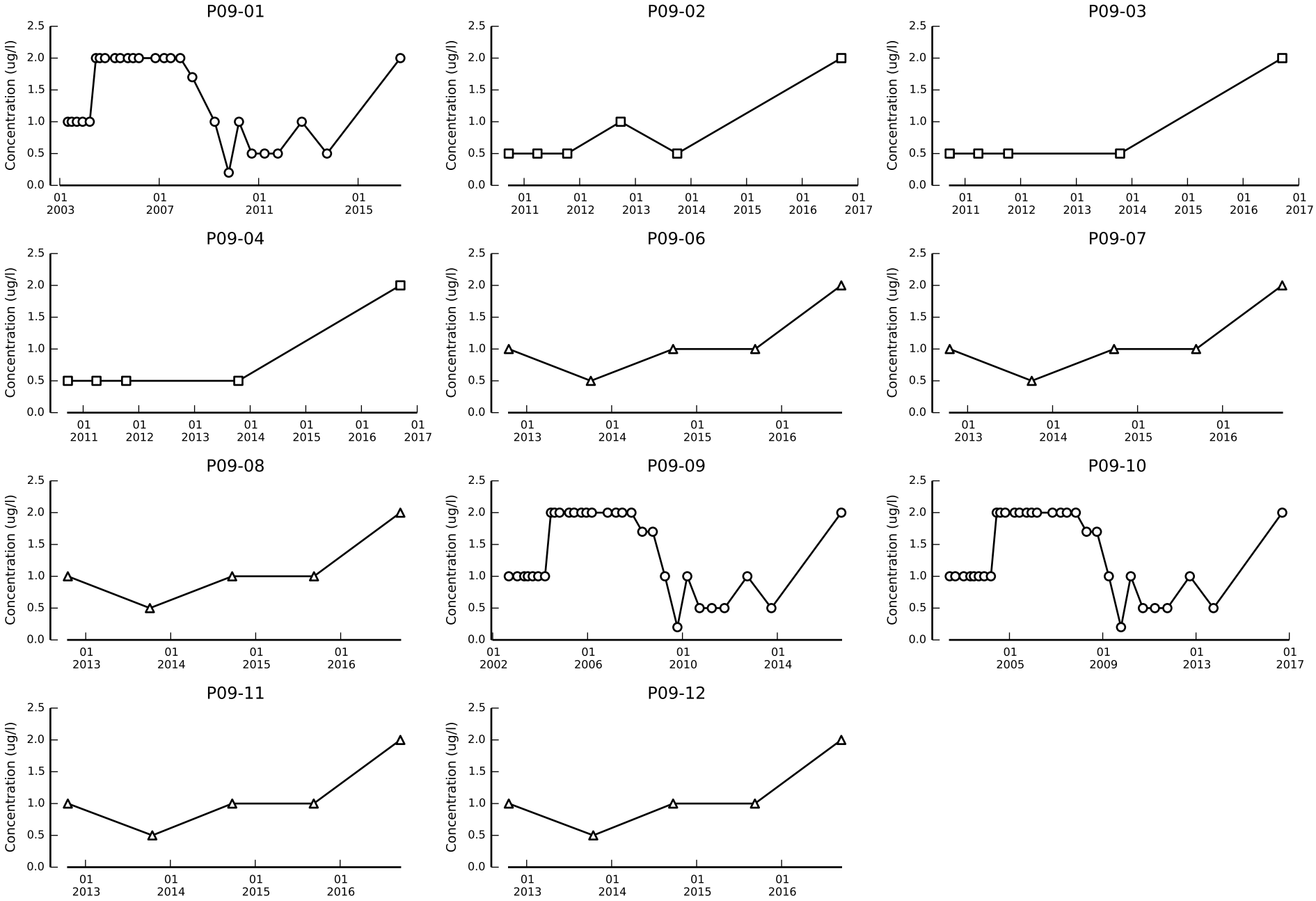
Sampled Once

P09-12

Sampled Once

1,2-DICHLOROPROPANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 134

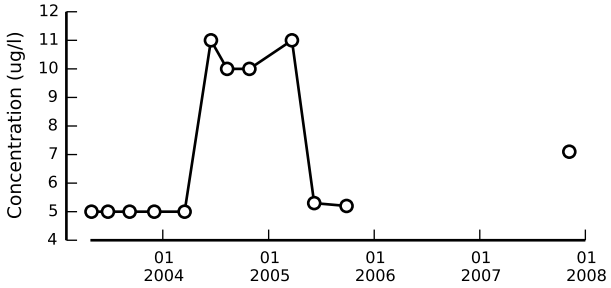
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location



1,3-DICHLOROBENZENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

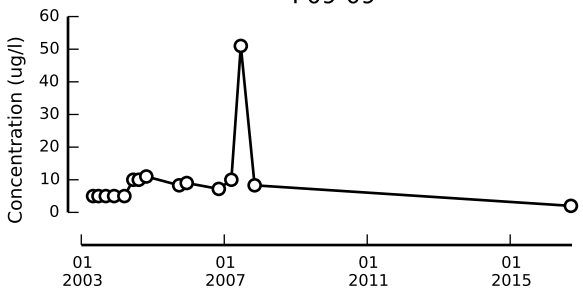
P09-07

Not Sampled

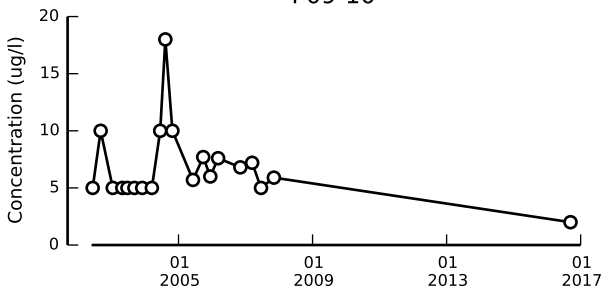
P09-08

Sampled Once

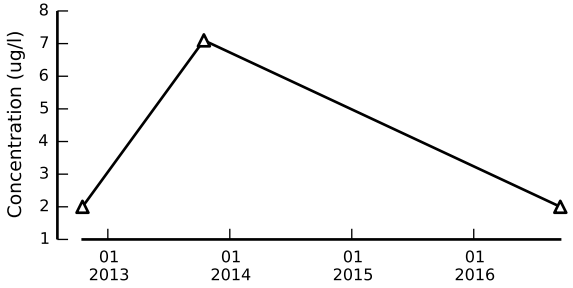
P09-09



P09-10



P09-11



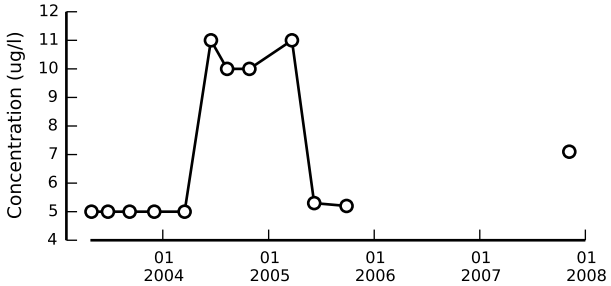
P09-12

Sampled Once

1,4-DICHLOROBENZENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

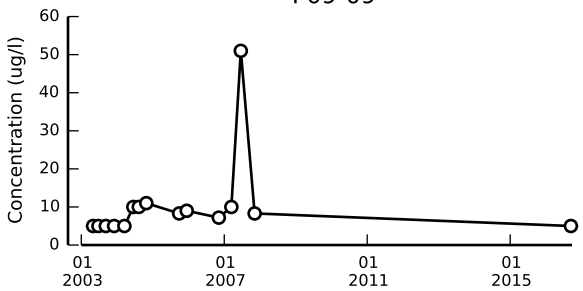
P09-07

Not Sampled

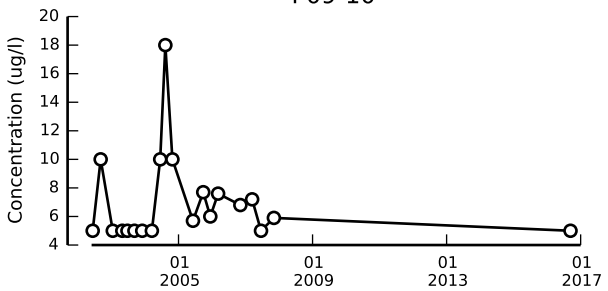
P09-08

Sampled Once

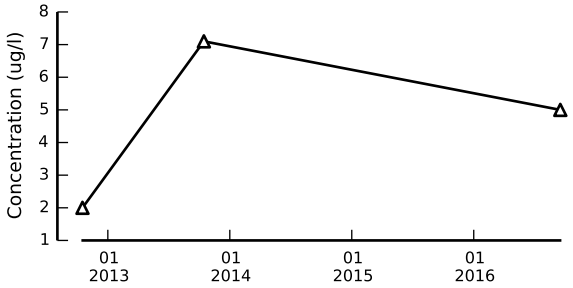
P09-09



P09-10



P09-11



P09-12

Sampled Once

1-METHYLNAPHTHALENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 134

● Detected
○ Not Detected, shown at detection limit

P09-01

Not Sampled

P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

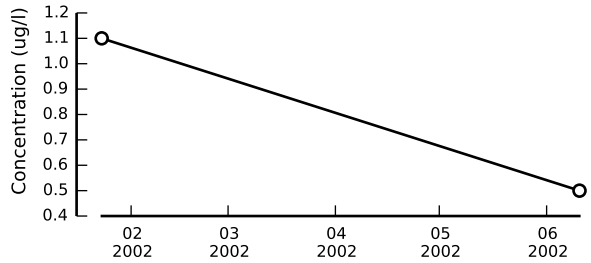
P09-08

Not Sampled

P09-09

Not Sampled

P09-10



P09-11

Not Sampled

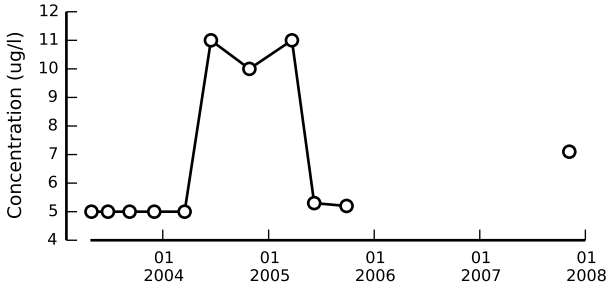
P09-12

Not Sampled

2,2'-OXYBIS(1-CHLOROPROPANE) in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 134

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

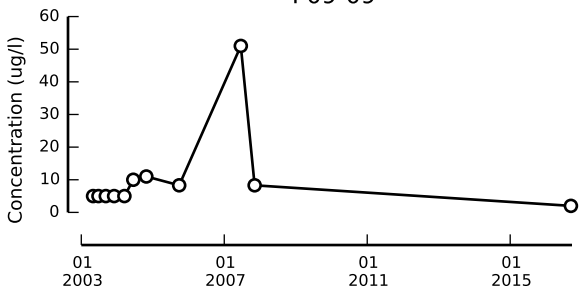
P09-07

Not Sampled

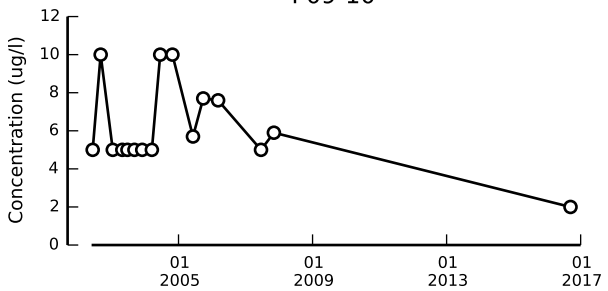
P09-08

Sampled Once

P09-09



P09-10



P09-11

Sampled Once

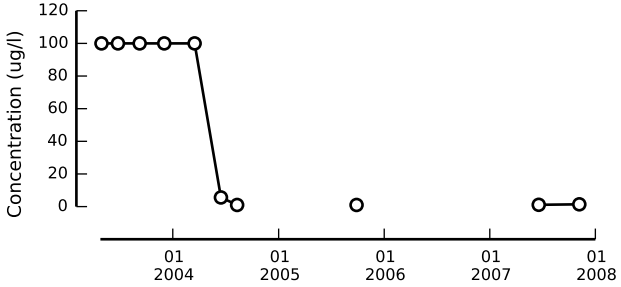
P09-12

Sampled Once

2,4,5-TRICHLOROPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

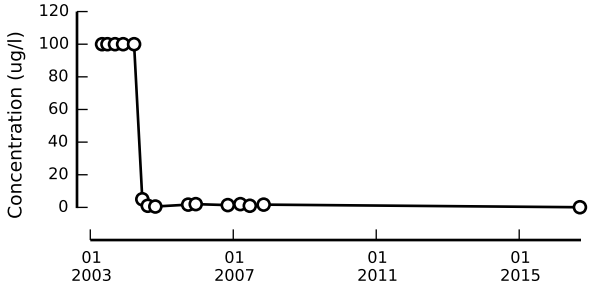
P09-07

Not Sampled

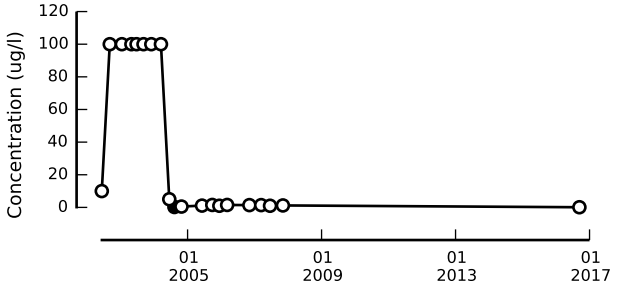
P09-08

Sampled Once

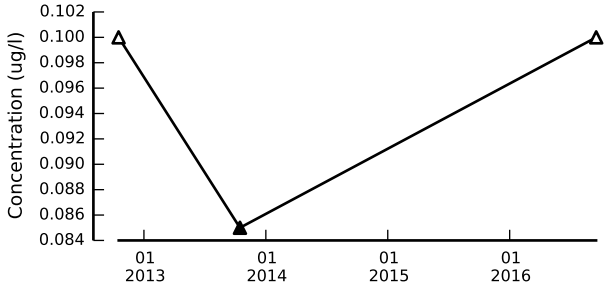
P09-09



P09-10



P09-11



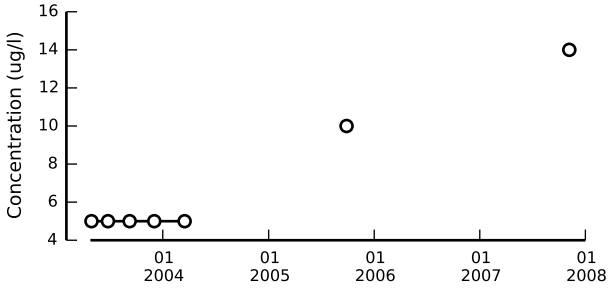
P09-12

Sampled Once

2,4,6-TRICHLOROPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

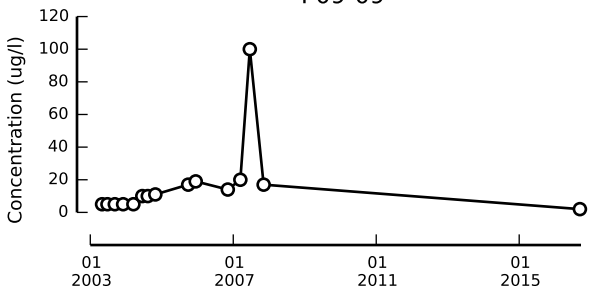
P09-07

Not Sampled

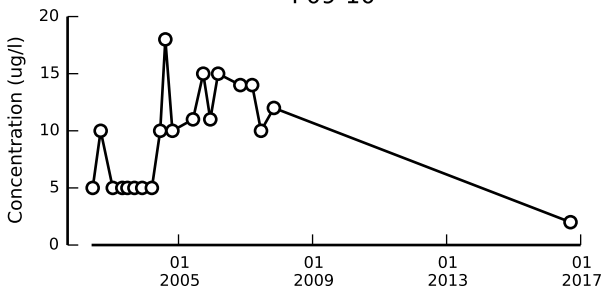
P09-08

Sampled Once

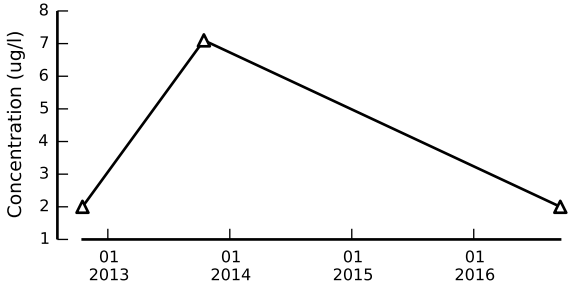
P09-09



P09-10



P09-11



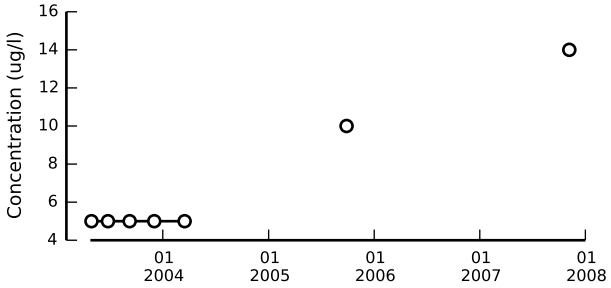
P09-12

Sampled Once

2,4-DICHLOROPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

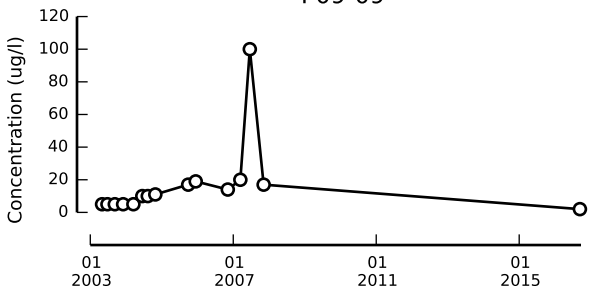
P09-07

Not Sampled

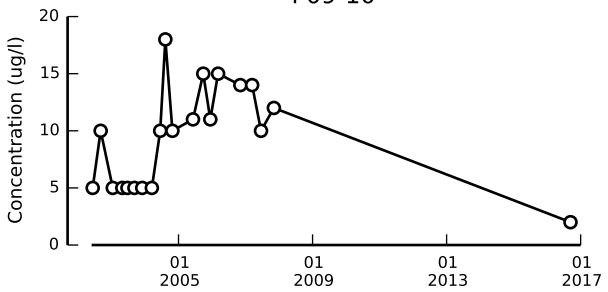
P09-08

Sampled Once

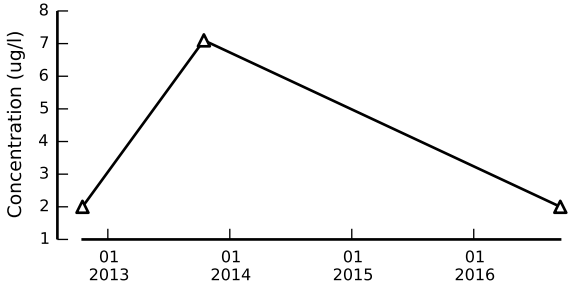
P09-09



P09-10



P09-11



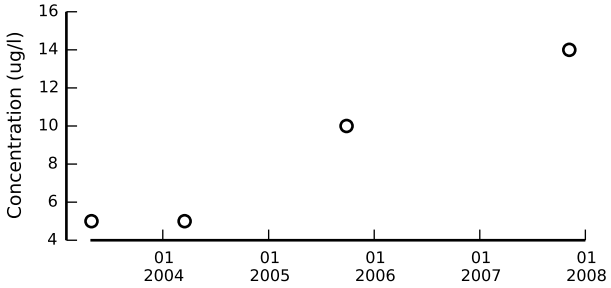
P09-12

Sampled Once

2,4-DIMETHYLPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

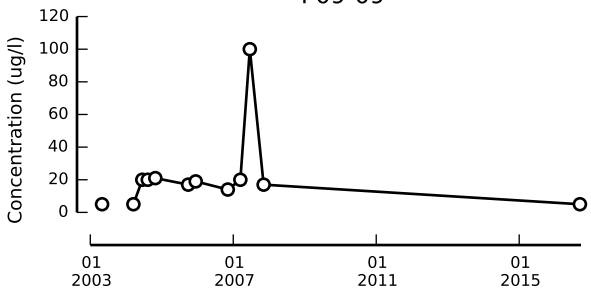
P09-07

Not Sampled

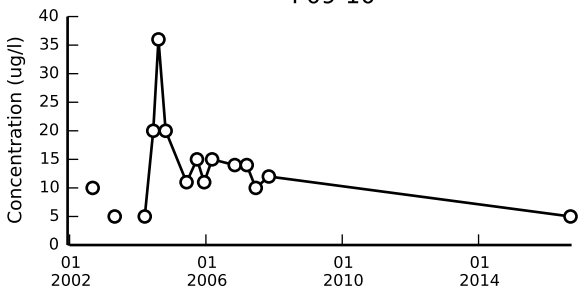
P09-08

Sampled Once

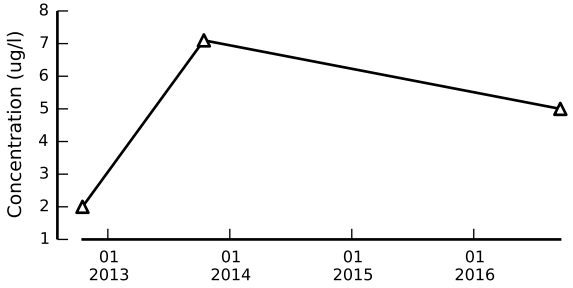
P09-09



P09-10



P09-11



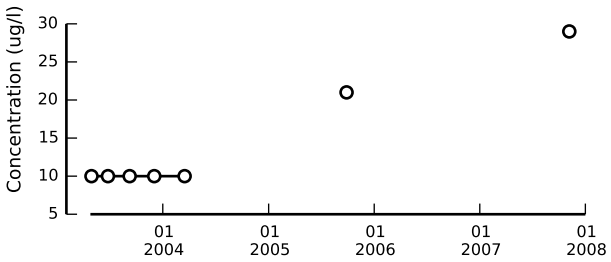
P09-12

Sampled Once

2,4-DINITROPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

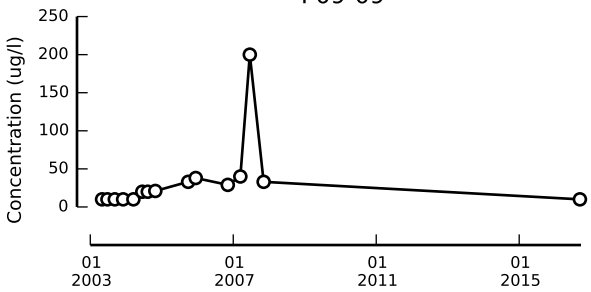
P09-07

Not Sampled

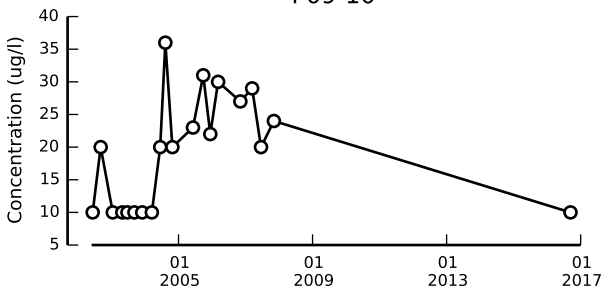
P09-08

Sampled Once

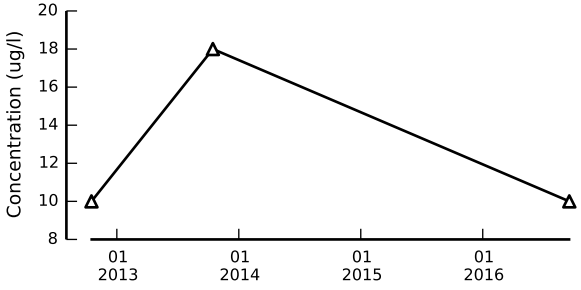
P09-09



P09-10



P09-11



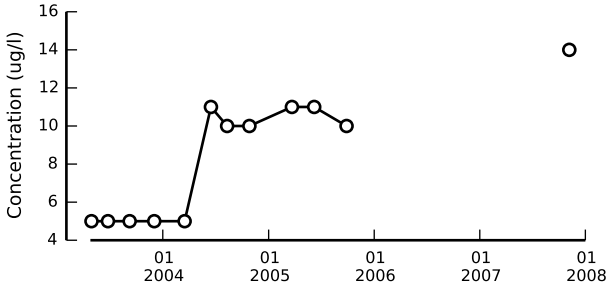
P09-12

Sampled Once

2,4-DINITROTOLUENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

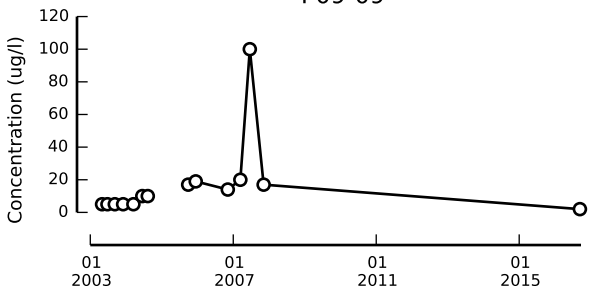
P09-07

Not Sampled

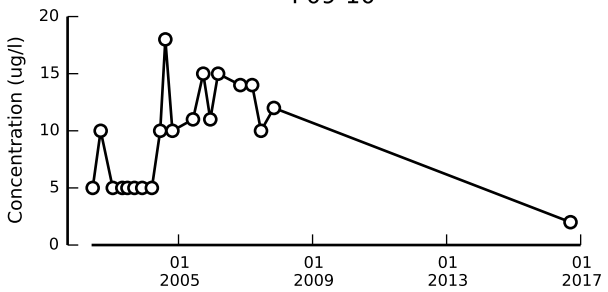
P09-08

Sampled Once

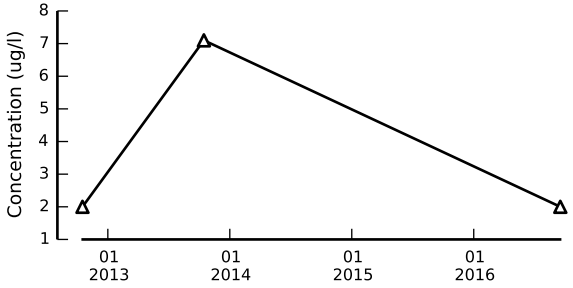
P09-09



P09-10



P09-11



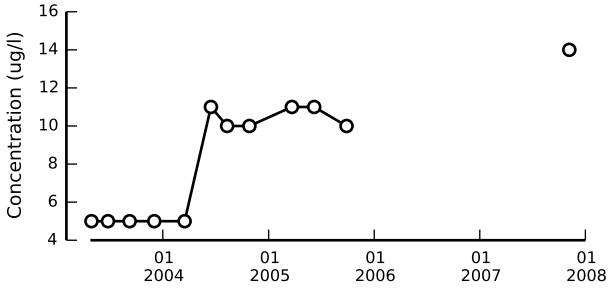
P09-12

Sampled Once

2,6-DINITROTOLUENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

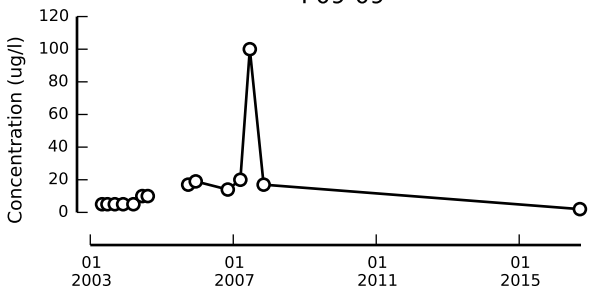
P09-07

Not Sampled

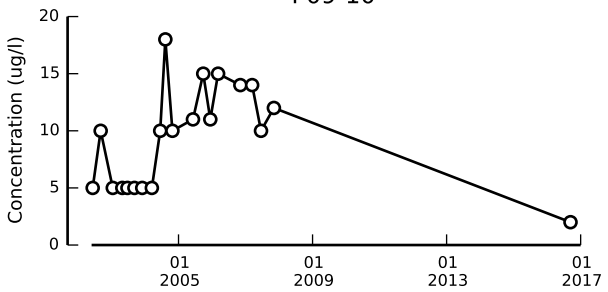
P09-08

Sampled Once

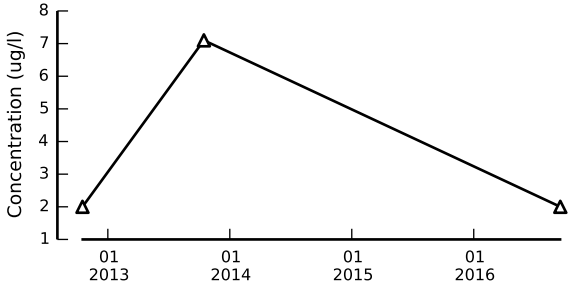
P09-09



P09-10



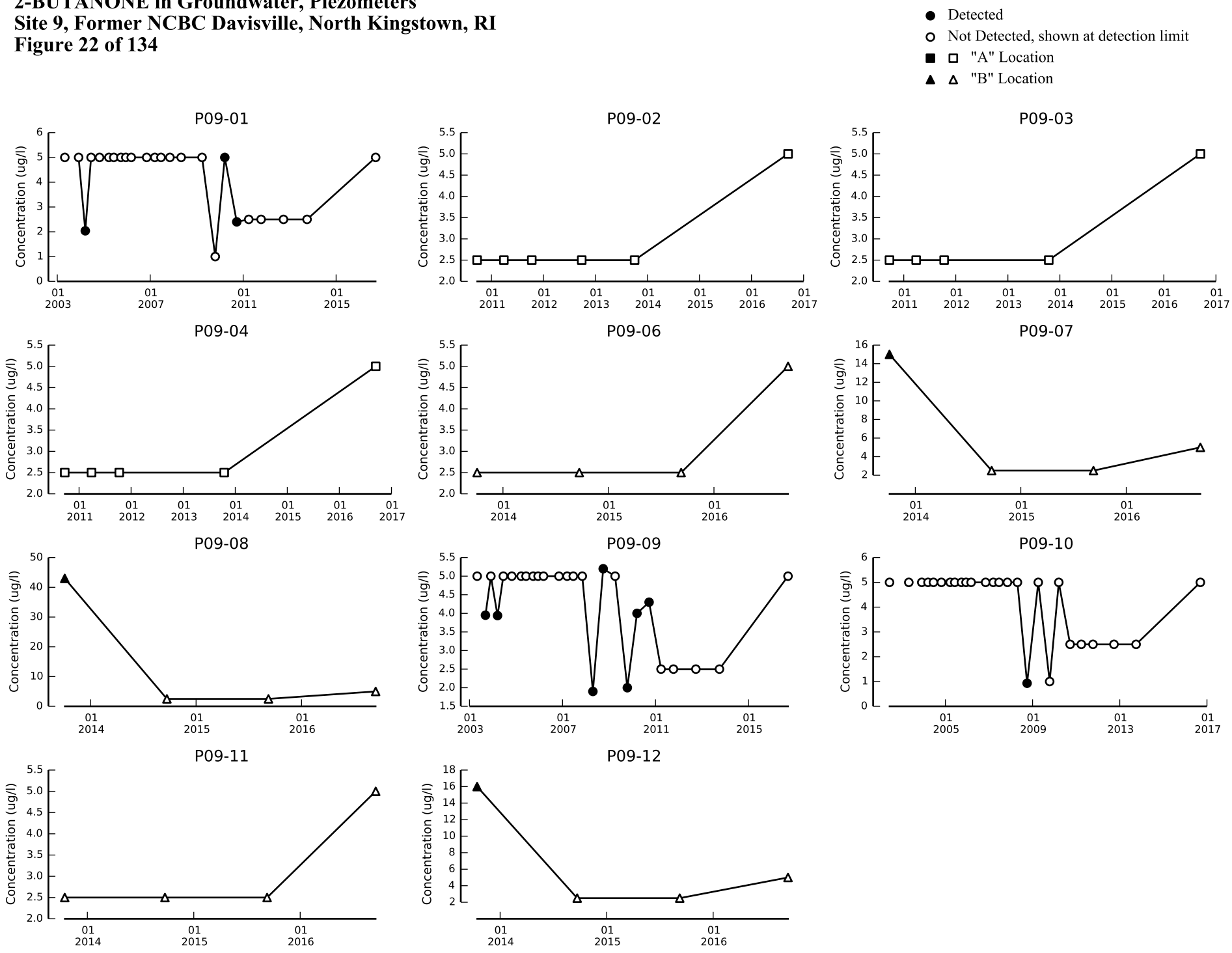
P09-11



P09-12

Sampled Once

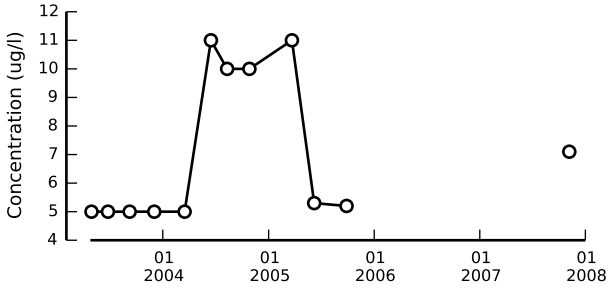
2-BUTANONE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 134



2-CHLORONAPHTHALENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 23 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

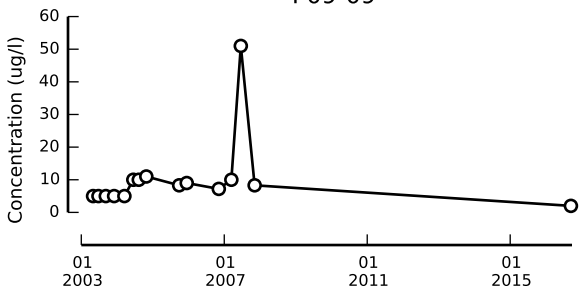
P09-07

Not Sampled

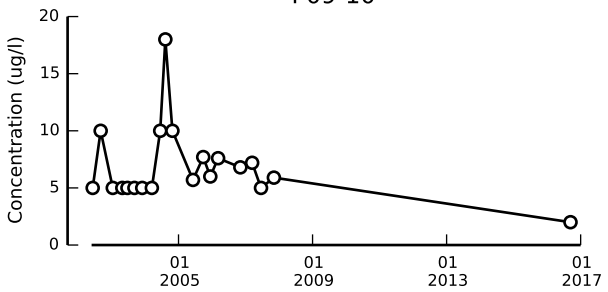
P09-08

Sampled Once

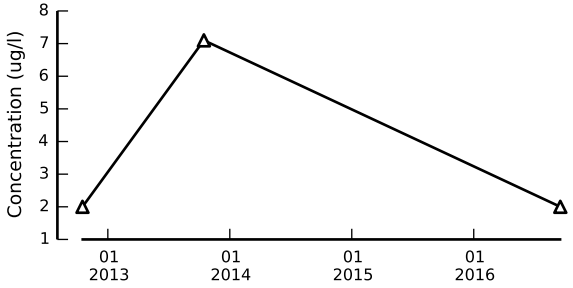
P09-09



P09-10



P09-11



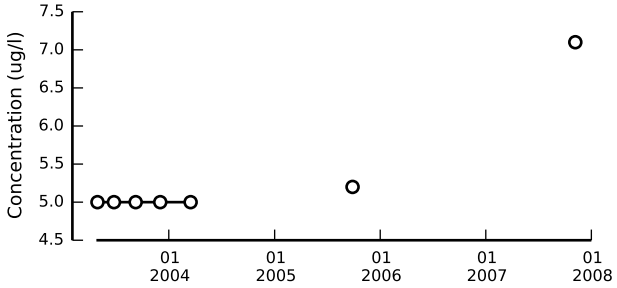
P09-12

Sampled Once

2-CHLOROPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 24 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

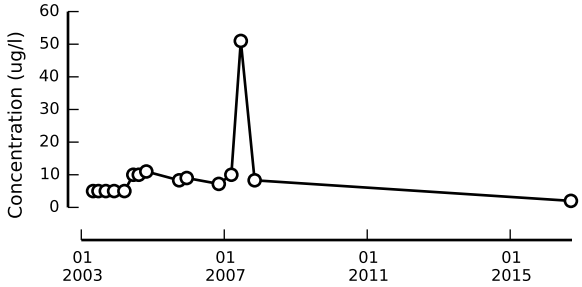
P09-07

Not Sampled

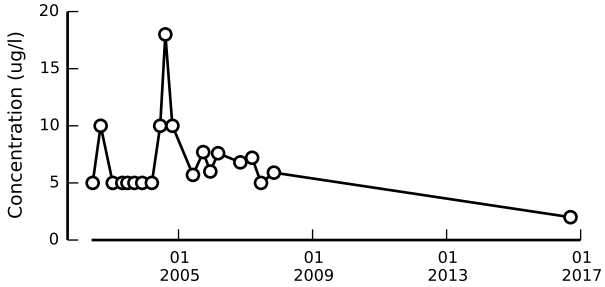
P09-08

Sampled Once

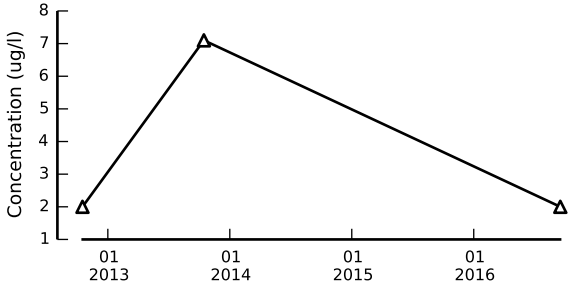
P09-09



P09-10



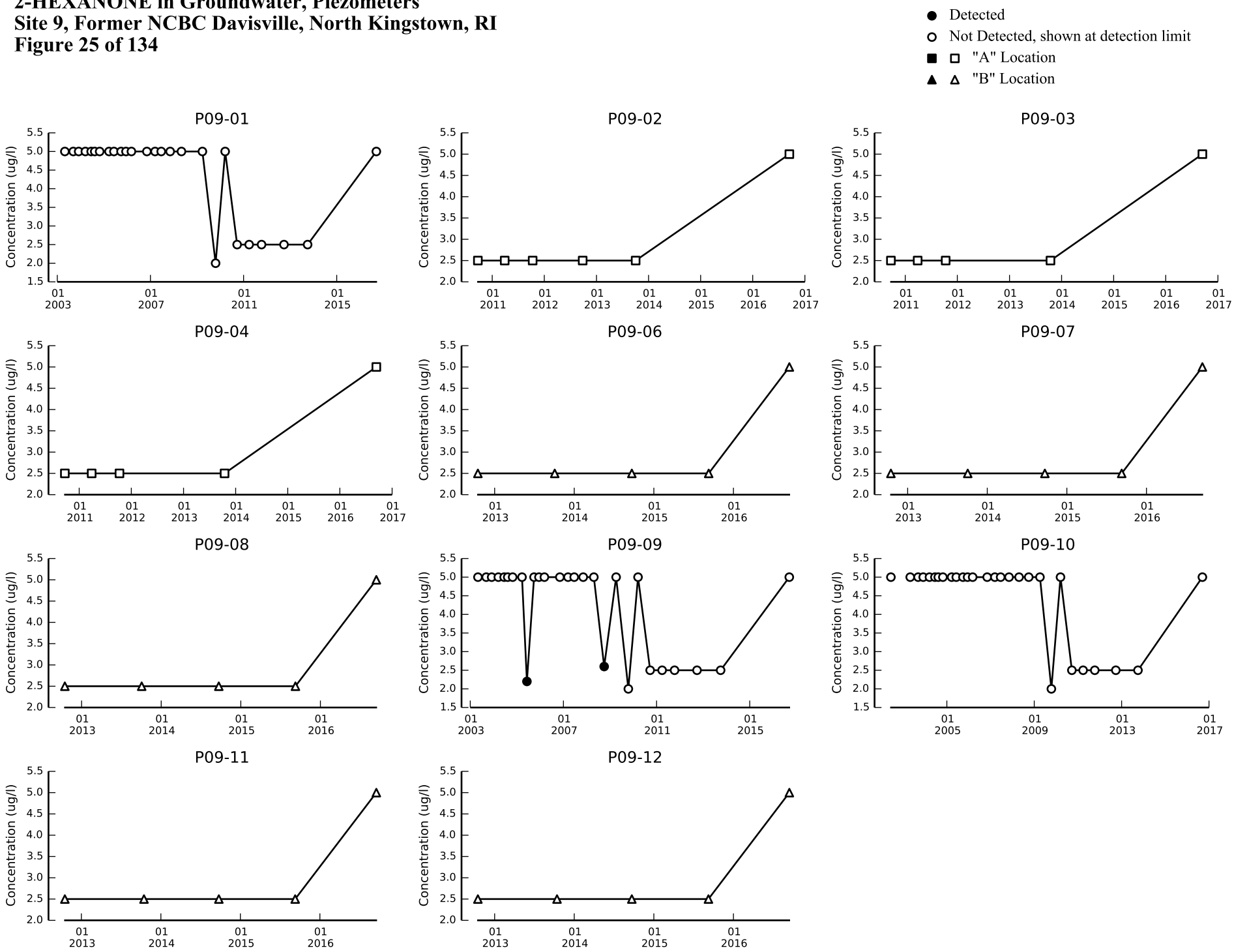
P09-11



P09-12

Sampled Once

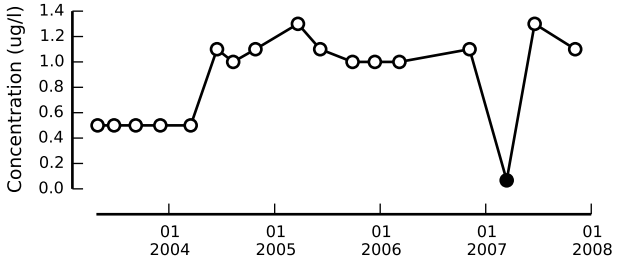
2-HEXANONE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 25 of 134



2-METHYLNAPHTHALENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 26 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

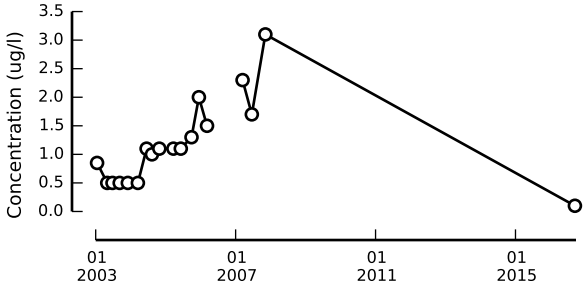
P09-07

Not Sampled

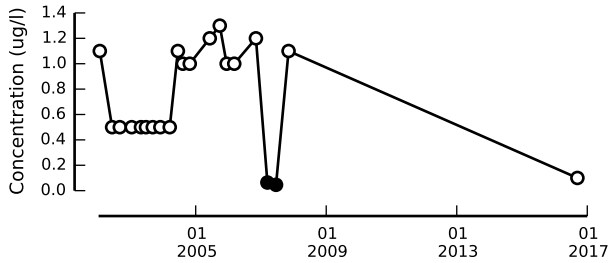
P09-08

Sampled Once

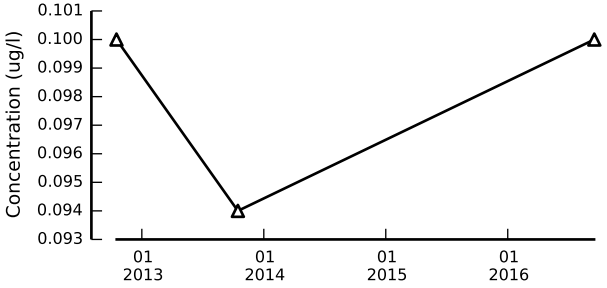
P09-09



P09-10



P09-11



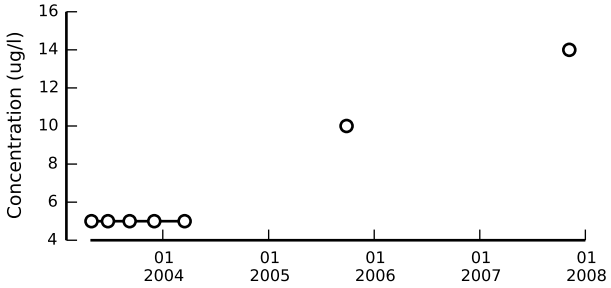
P09-12

Sampled Once

2-METHYLPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 27 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

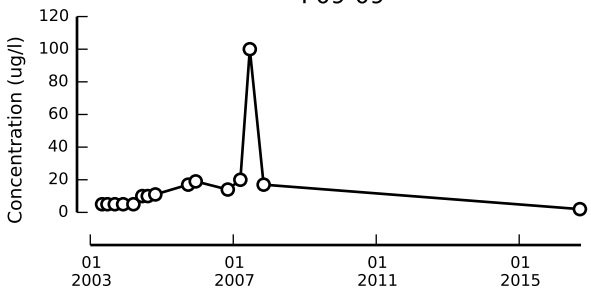
P09-07

Not Sampled

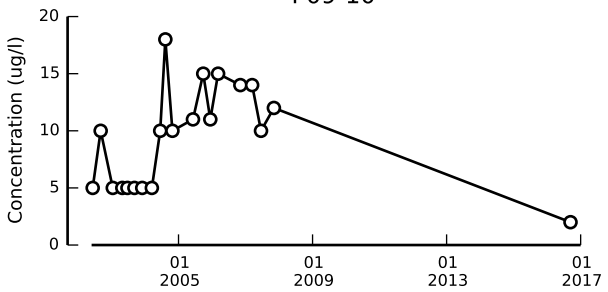
P09-08

Sampled Once

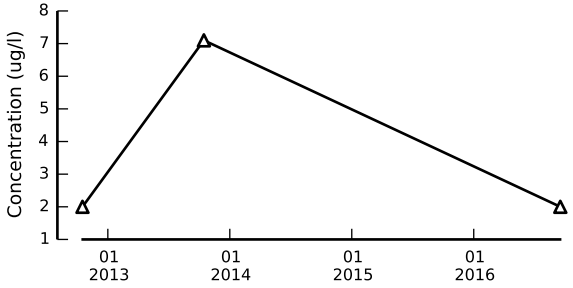
P09-09



P09-10



P09-11



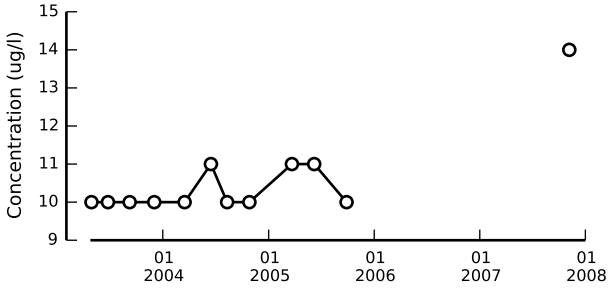
P09-12

Sampled Once

2-NITROANILINE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 28 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

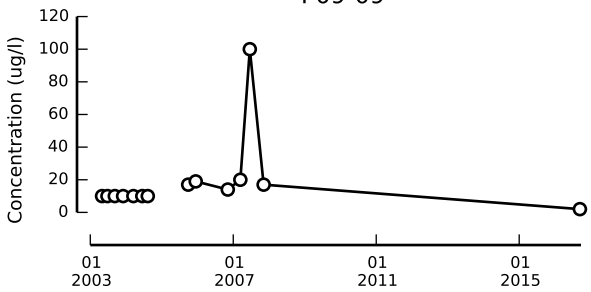
P09-07

Not Sampled

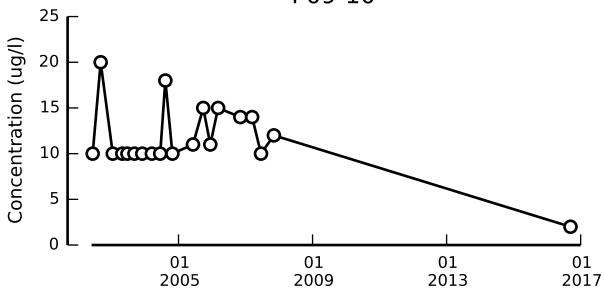
P09-08

Sampled Once

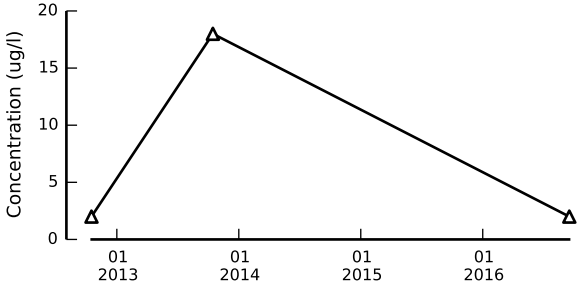
P09-09



P09-10



P09-11



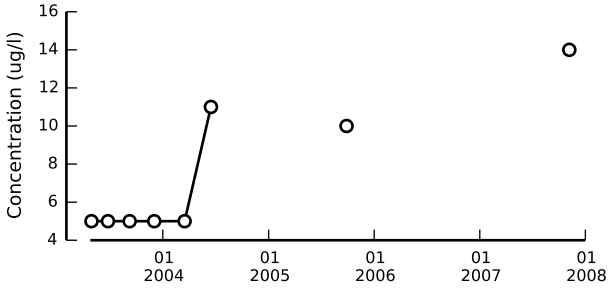
P09-12

Sampled Once

2-NITROPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 29 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

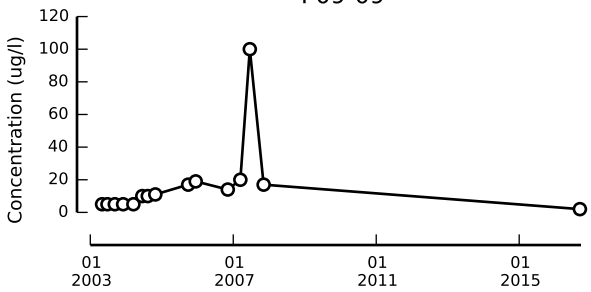
P09-07

Not Sampled

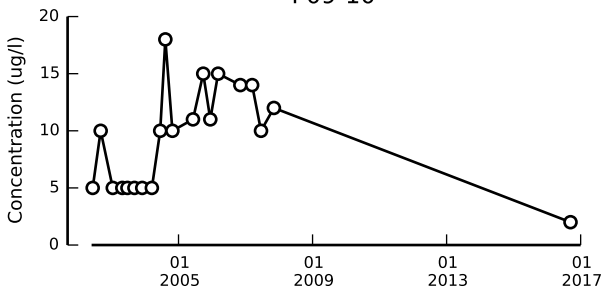
P09-08

Sampled Once

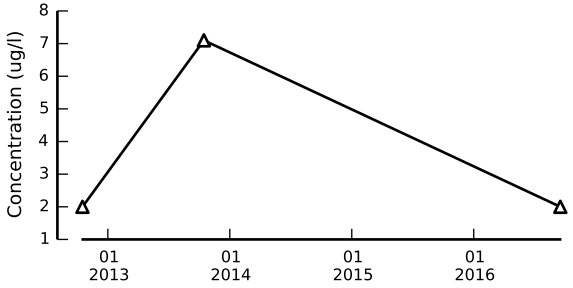
P09-09



P09-10



P09-11



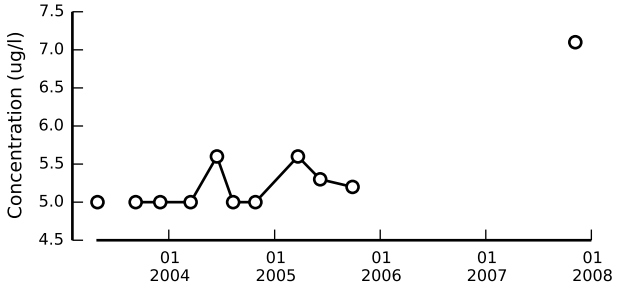
P09-12

Sampled Once

3,3-DICHLOROBENZIDINE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 30 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

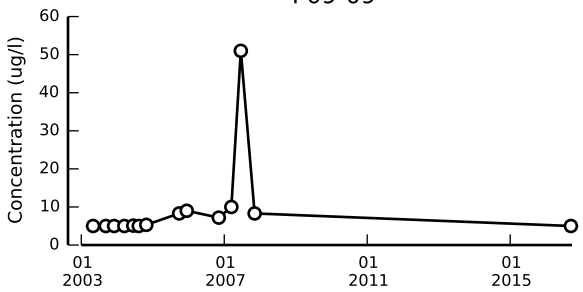
P09-07

Not Sampled

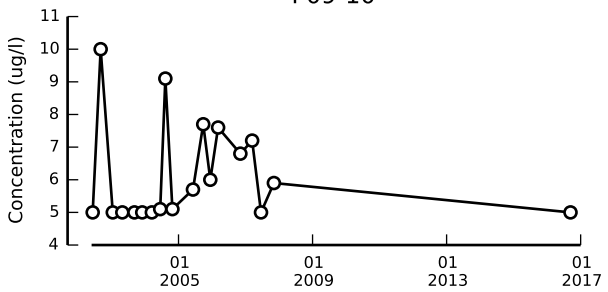
P09-08

Sampled Once

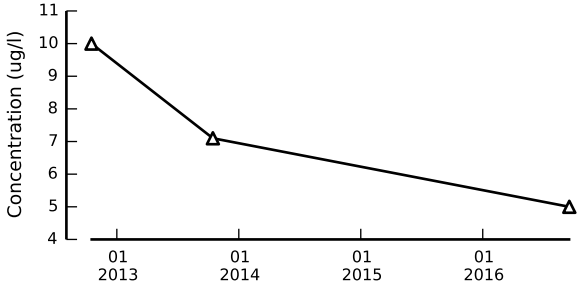
P09-09



P09-10



P09-11



P09-12

Sampled Once

3- AND 4-METHYLPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 31 of 134

● Detected
○ Not Detected, shown at detection limit

P09-01

P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

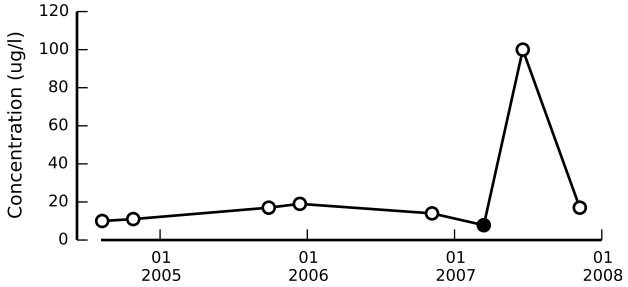
P09-07

Not Sampled

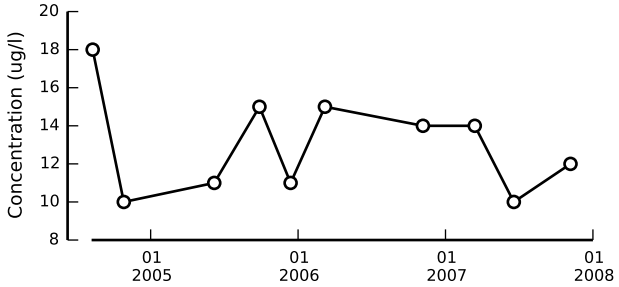
P09-08

Not Sampled

P09-09



P09-10



P09-11

Sampled Once

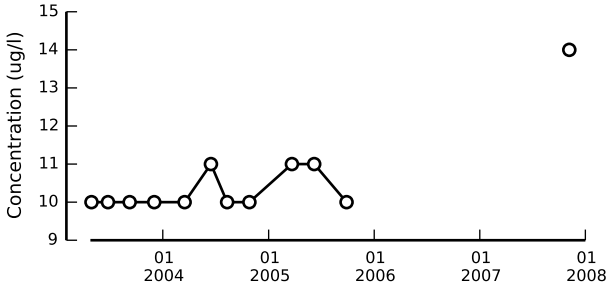
P09-12

Not Sampled

3-NITROANILINE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 32 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

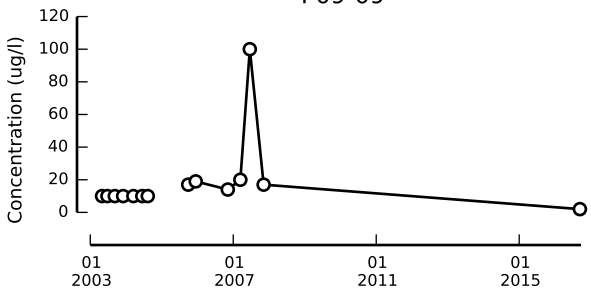
P09-07

Not Sampled

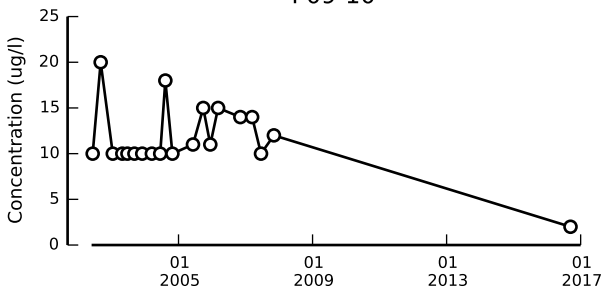
P09-08

Sampled Once

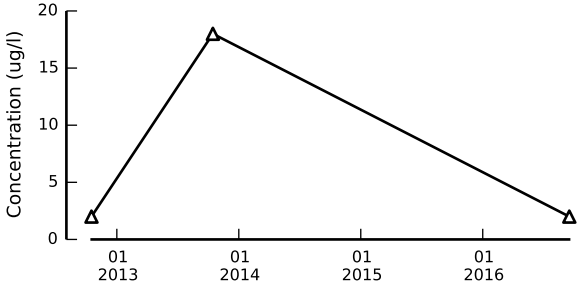
P09-09



P09-10



P09-11



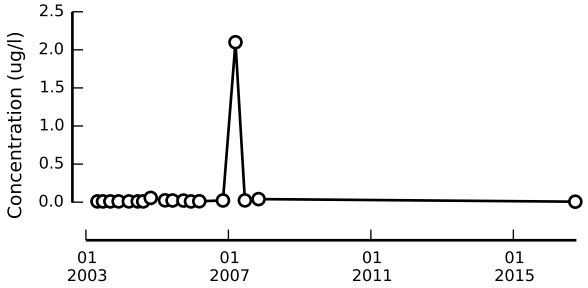
P09-12

Sampled Once

4,4-DDD in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 33 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

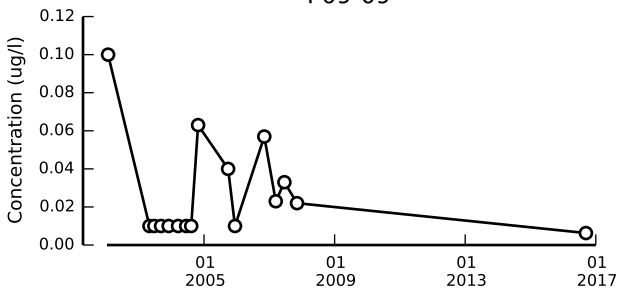
P09-07

Not Sampled

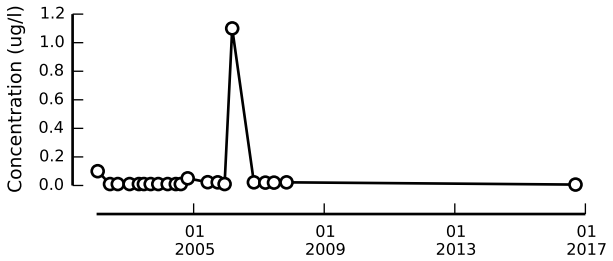
P09-08

Not Sampled

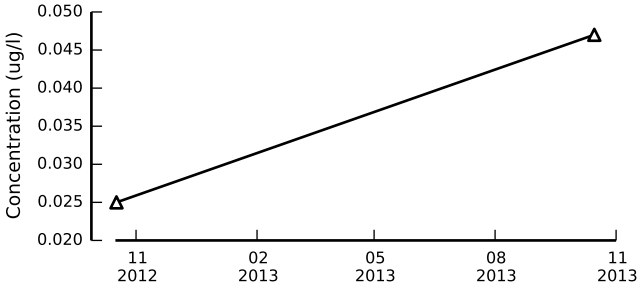
P09-09



P09-10



P09-11



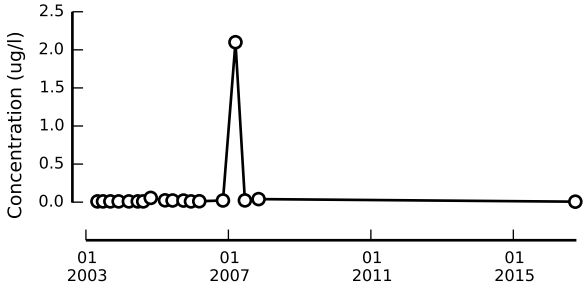
P09-12

Not Sampled

4,4-DDE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 34 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

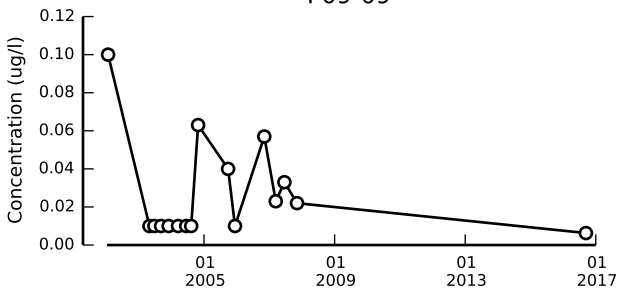
P09-07

Not Sampled

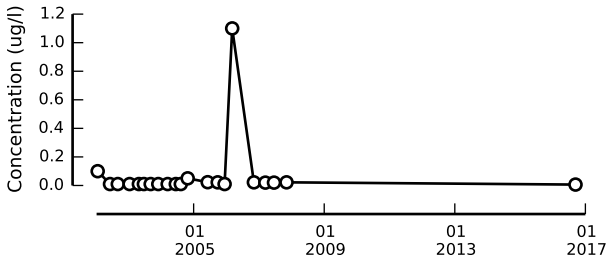
P09-08

Not Sampled

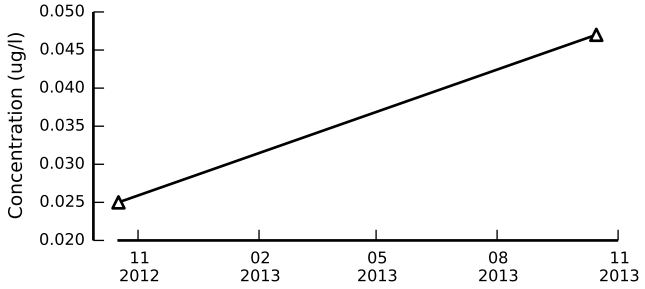
P09-09



P09-10



P09-11



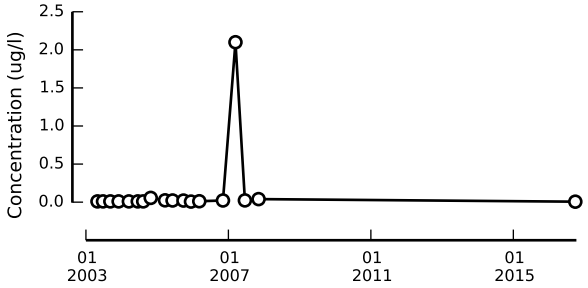
P09-12

Not Sampled

4,4-DDT in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 35 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

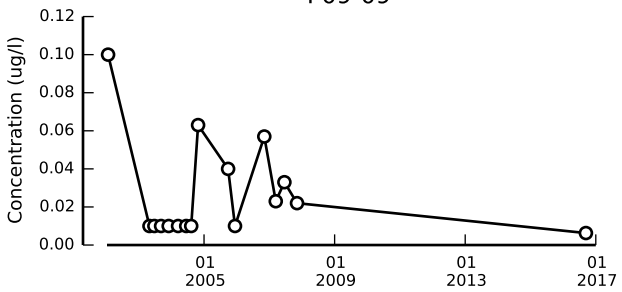
P09-07

Not Sampled

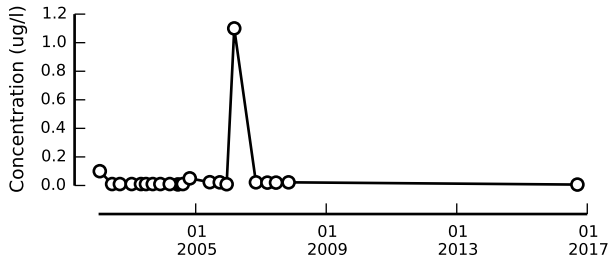
P09-08

Not Sampled

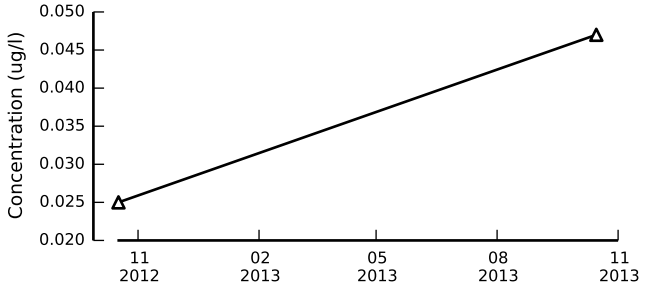
P09-09



P09-10



P09-11



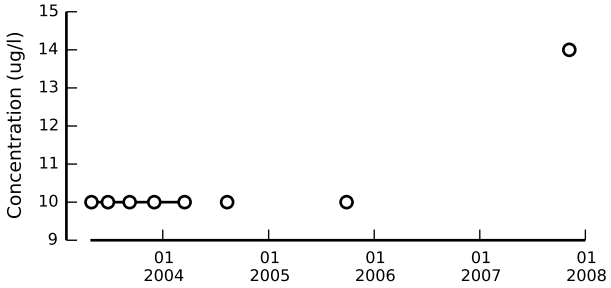
P09-12

Not Sampled

4,6-DINITRO-2-METHYLPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 36 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

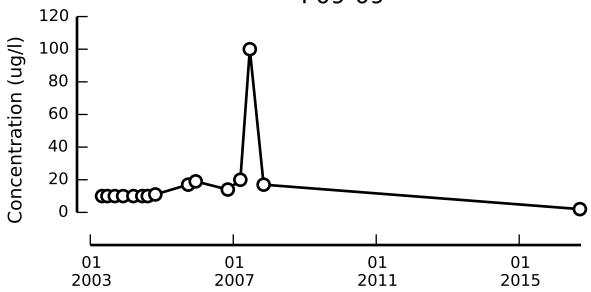
P09-07

Not Sampled

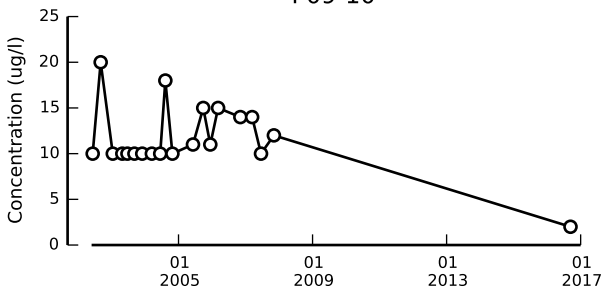
P09-08

Sampled Once

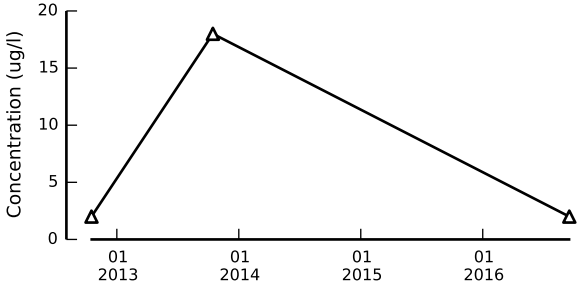
P09-09



P09-10



P09-11



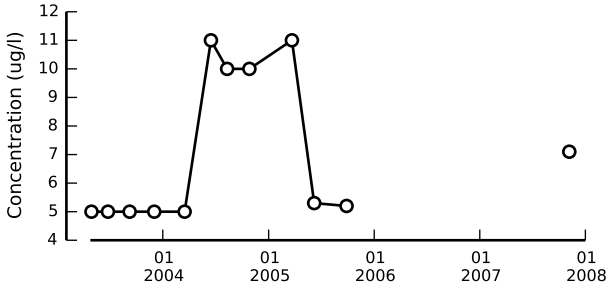
P09-12

Sampled Once

4-BROMOPHENYL-PHENYLETHER in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 37 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

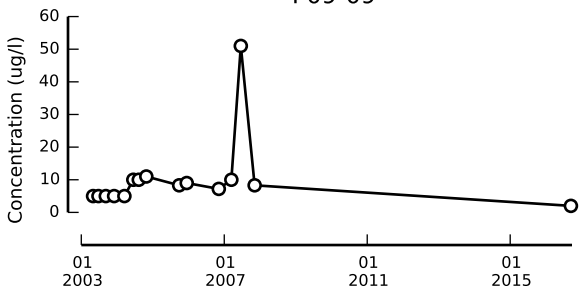
P09-07

Not Sampled

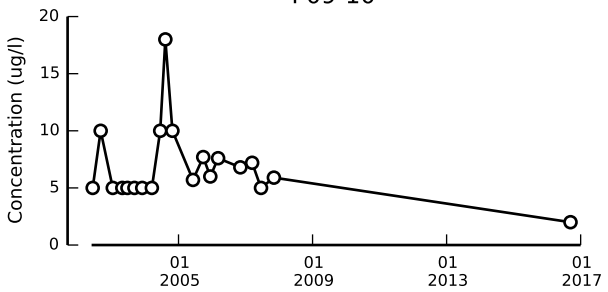
P09-08

Sampled Once

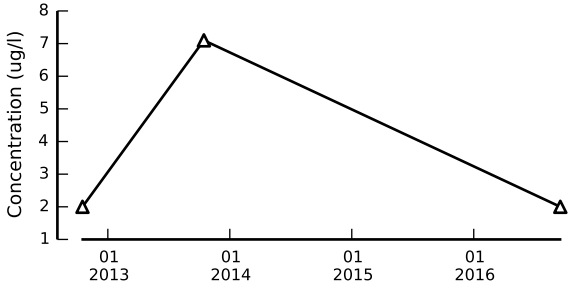
P09-09



P09-10



P09-11



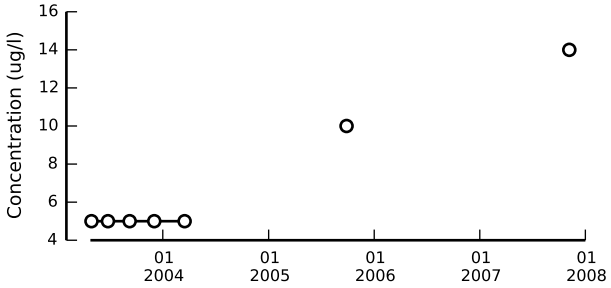
P09-12

Sampled Once

4-CHLORO-3-METHYLPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 38 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

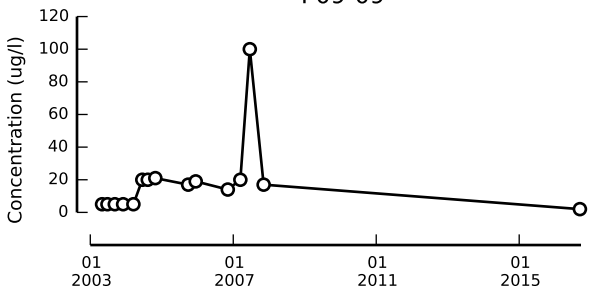
P09-07

Not Sampled

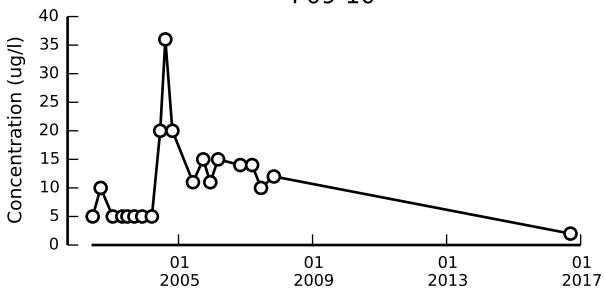
P09-08

Sampled Once

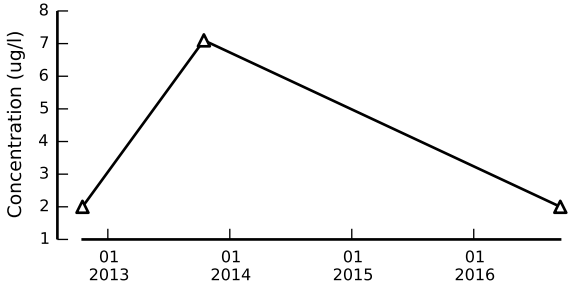
P09-09



P09-10



P09-11



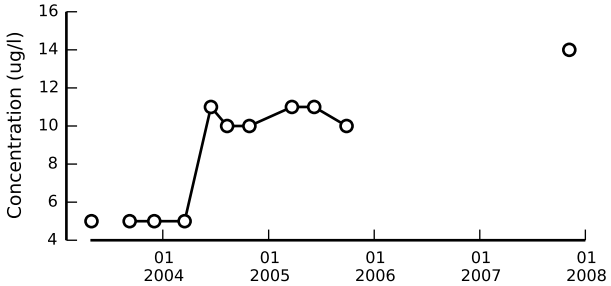
P09-12

Sampled Once

4-CHLOROANILINE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 39 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

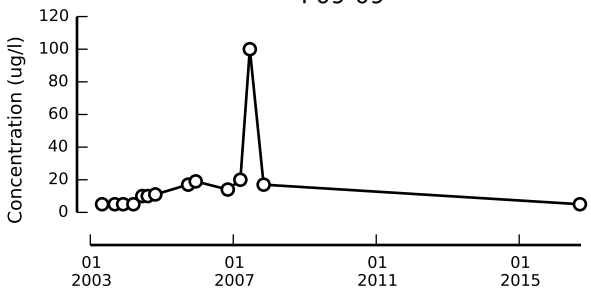
P09-07

Not Sampled

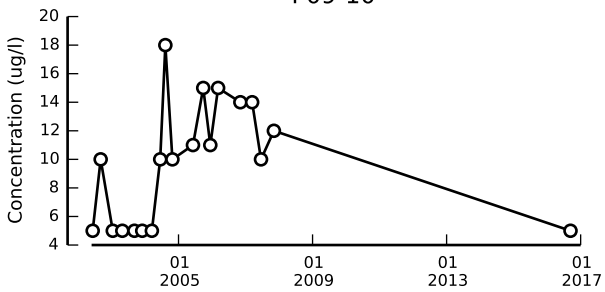
P09-08

Sampled Once

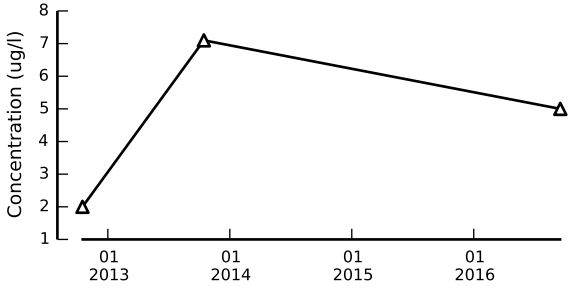
P09-09



P09-10



P09-11



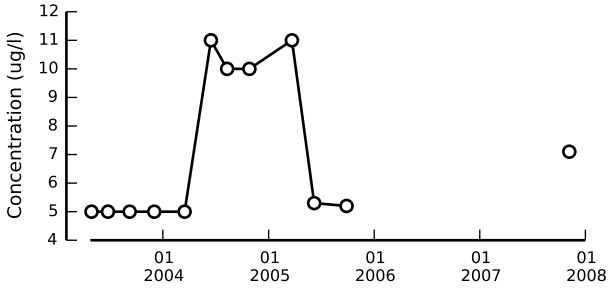
P09-12

Sampled Once

4-CHLOROPHENYL-PHENYLETHER in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 40 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

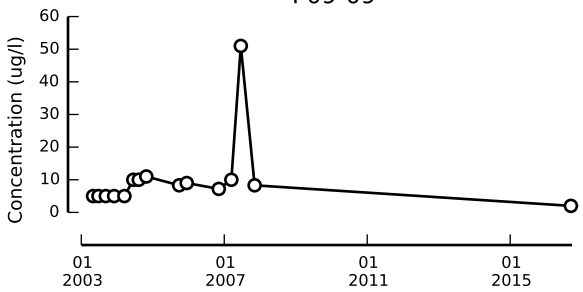
P09-07

Not Sampled

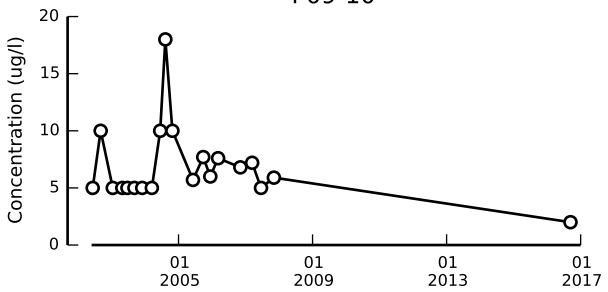
P09-08

Sampled Once

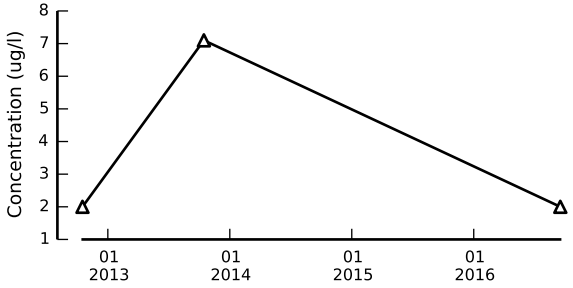
P09-09



P09-10



P09-11

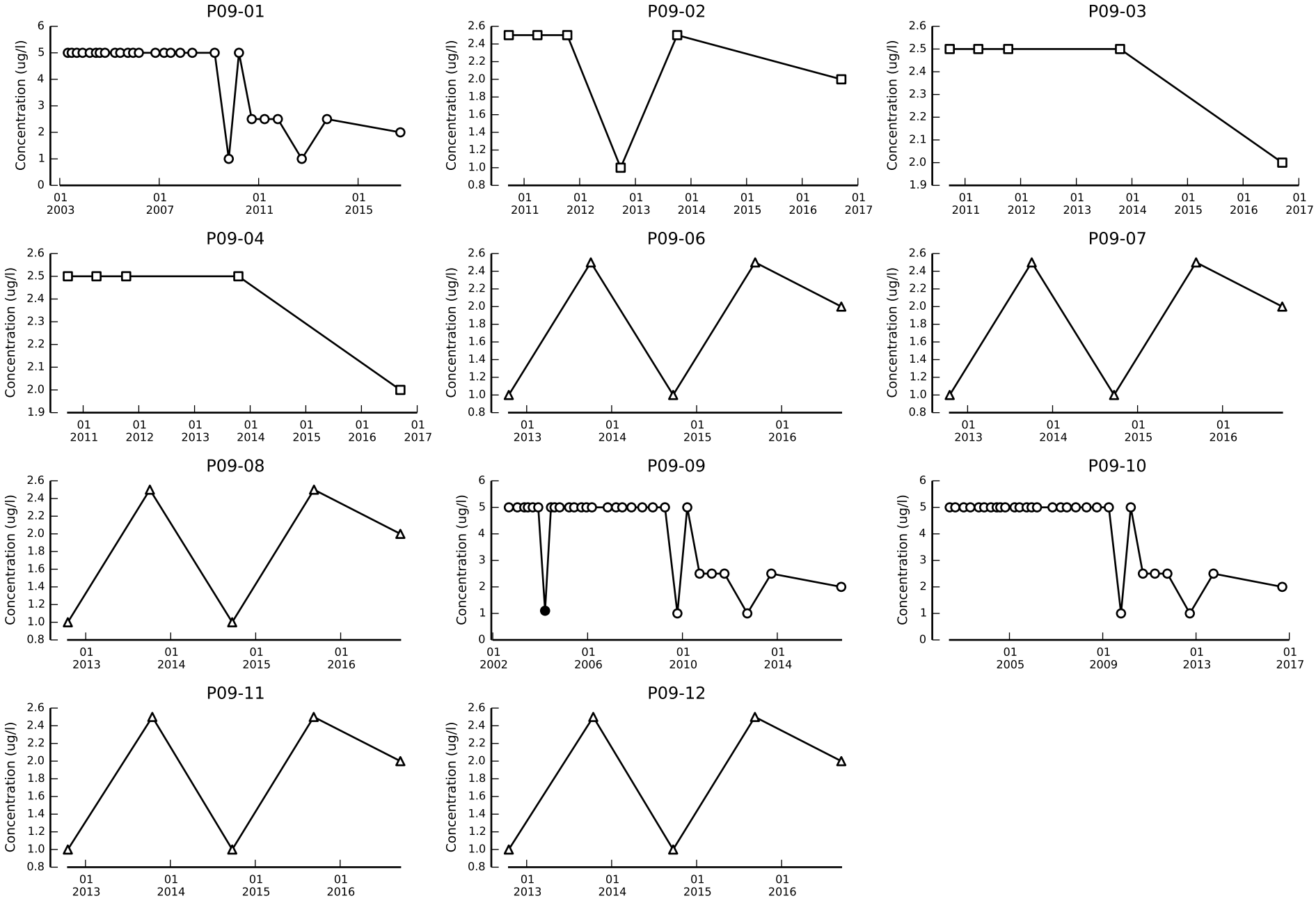


P09-12

Sampled Once

4-METHYL-2-PENTANONE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 41 of 134

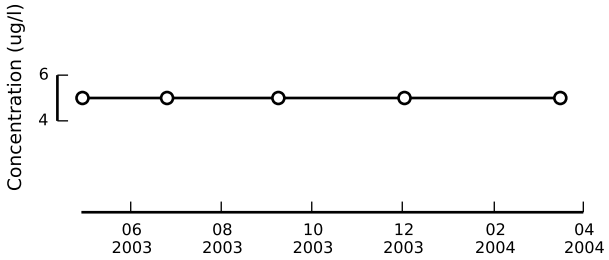
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location



4-METHYLPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 42 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

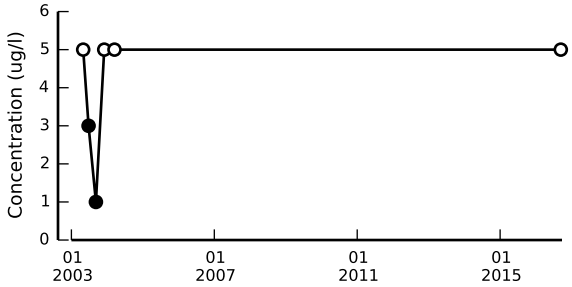
P09-07

Not Sampled

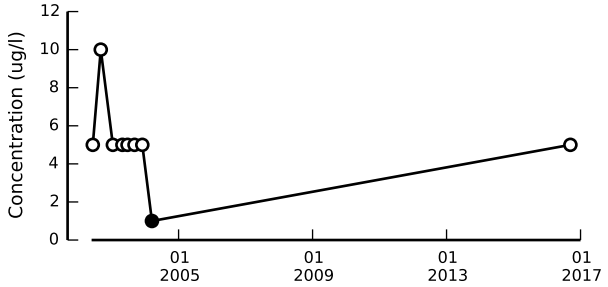
P09-08

Sampled Once

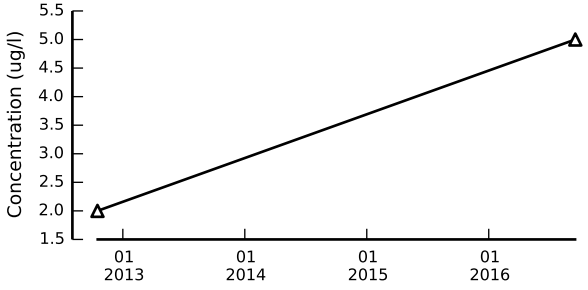
P09-09



P09-10



P09-11



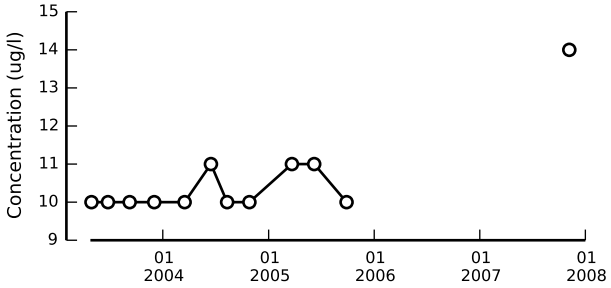
P09-12

Sampled Once

4-NITROANILINE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 43 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

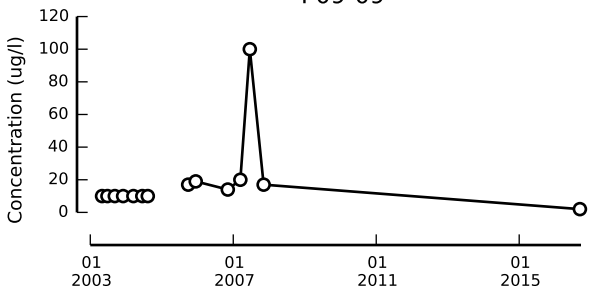
P09-07

Not Sampled

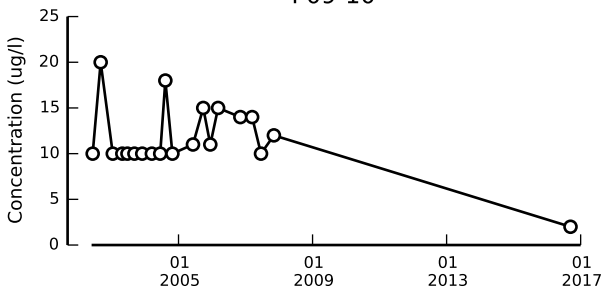
P09-08

Sampled Once

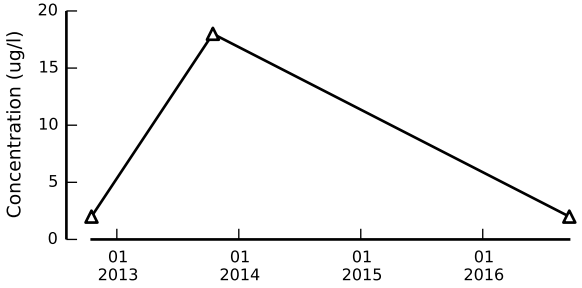
P09-09



P09-10



P09-11



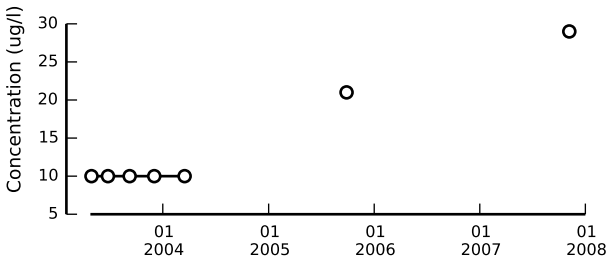
P09-12

Sampled Once

4-NITROPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 44 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

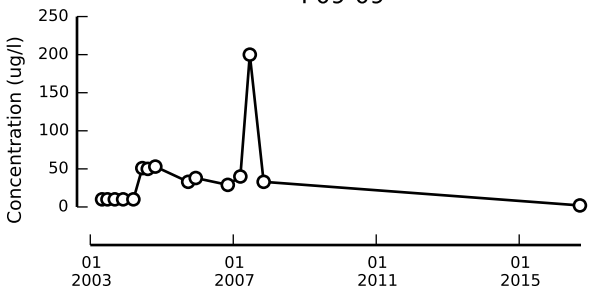
P09-07

Not Sampled

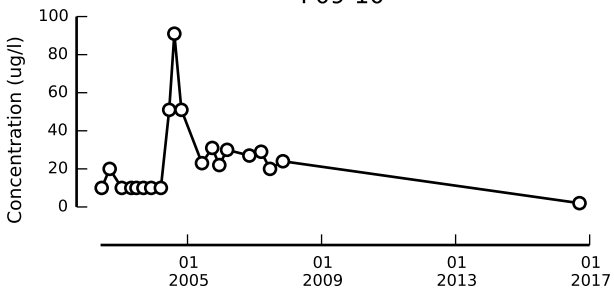
P09-08

Sampled Once

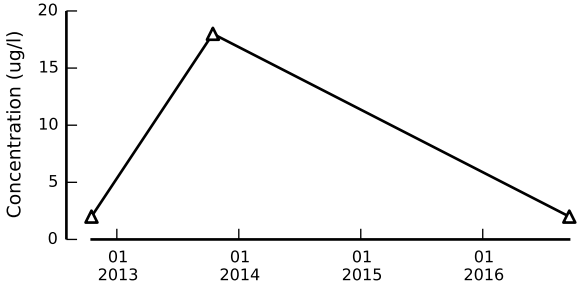
P09-09



P09-10



P09-11



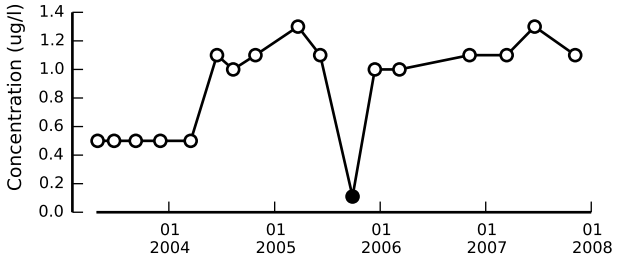
P09-12

Sampled Once

ACENAPHTHENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 45 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

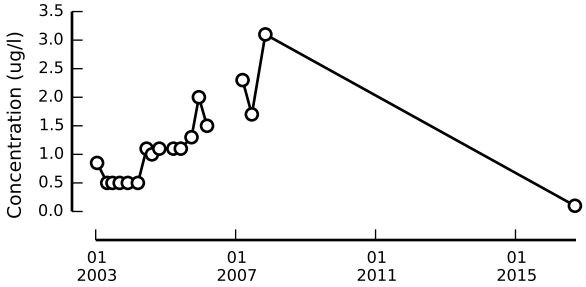
P09-07

Not Sampled

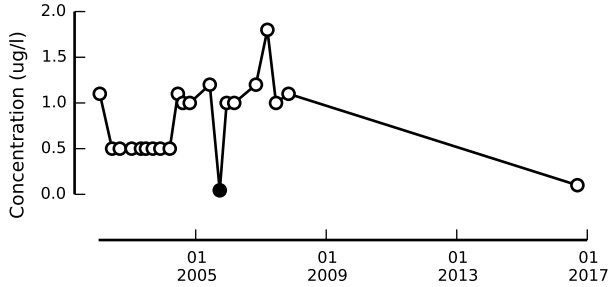
P09-08

Sampled Once

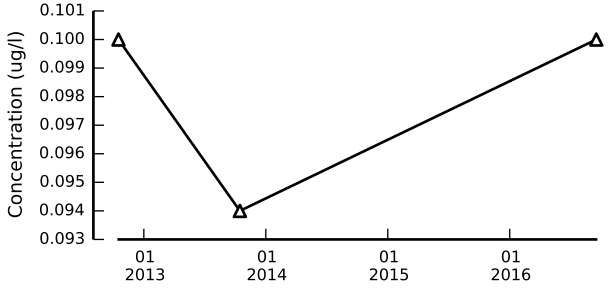
P09-09



P09-10



P09-11



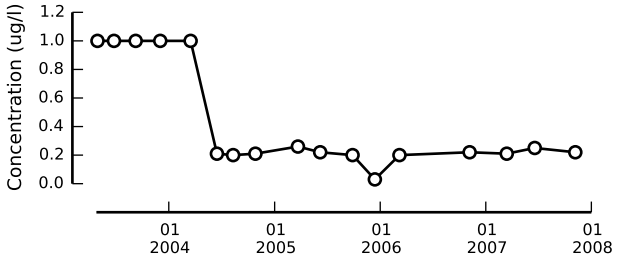
P09-12

Sampled Once

ACENAPHTHYLENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 46 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

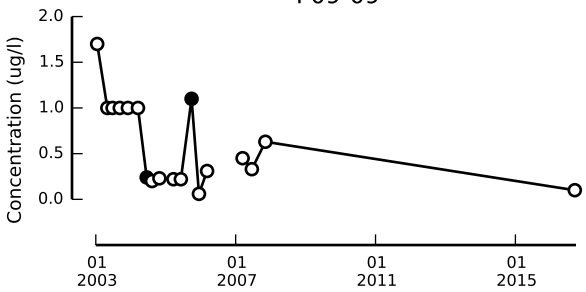
P09-07

Not Sampled

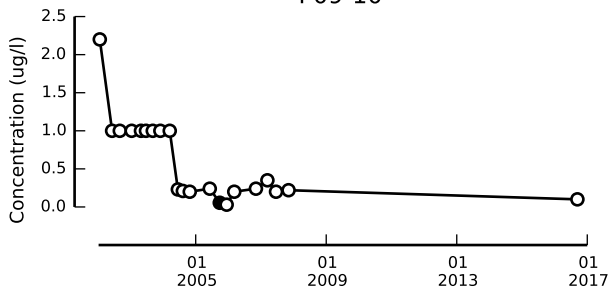
P09-08

Sampled Once

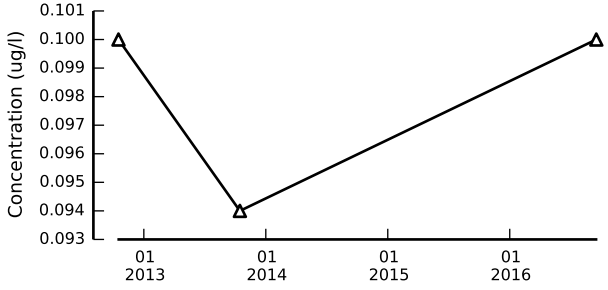
P09-09



P09-10



P09-11

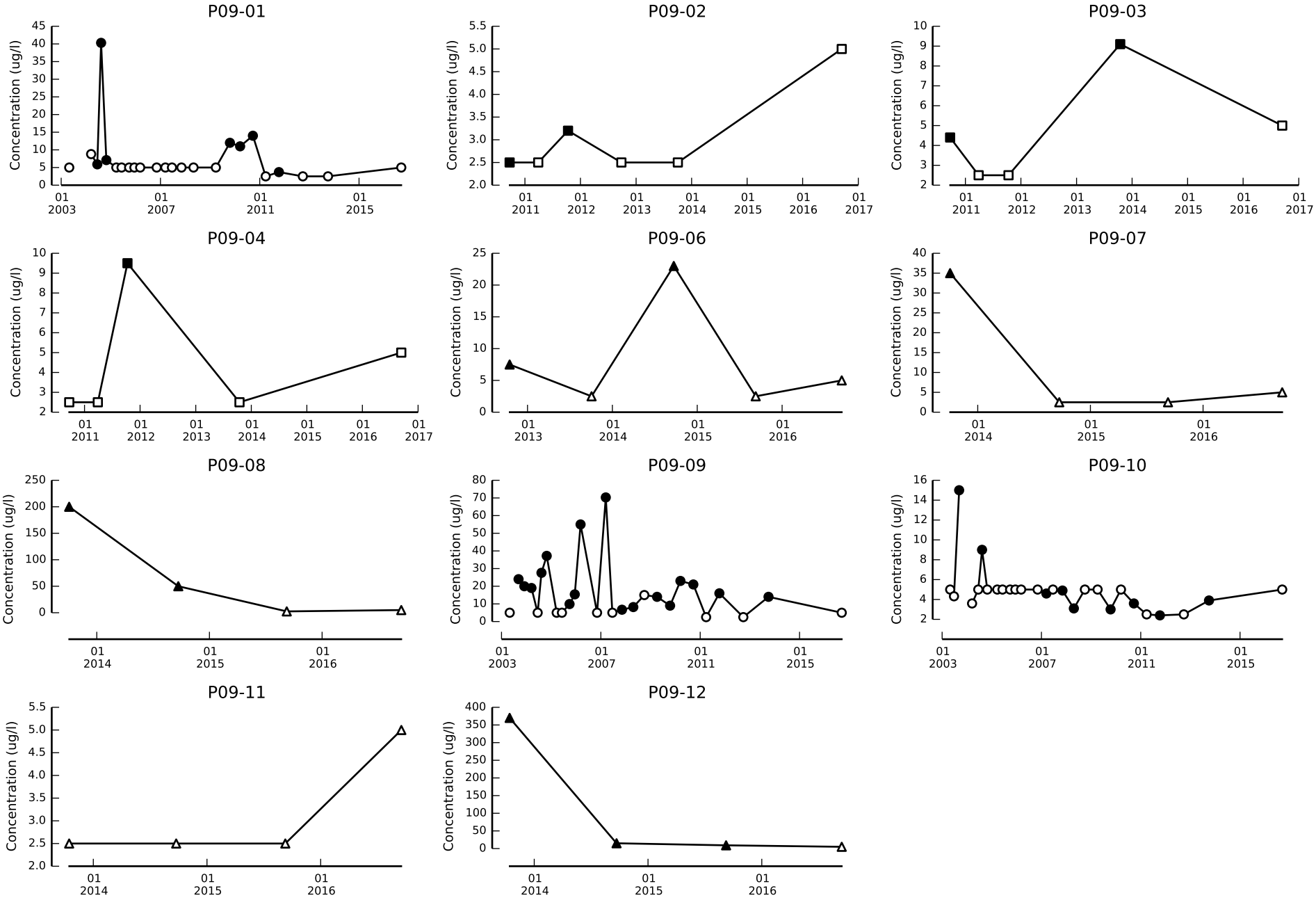


P09-12

Sampled Once

ACETONE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 47 of 134

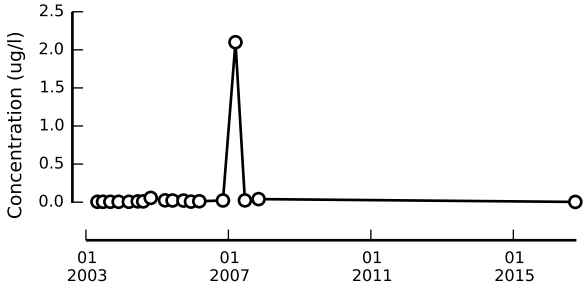
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location



ALDRIN in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 48 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

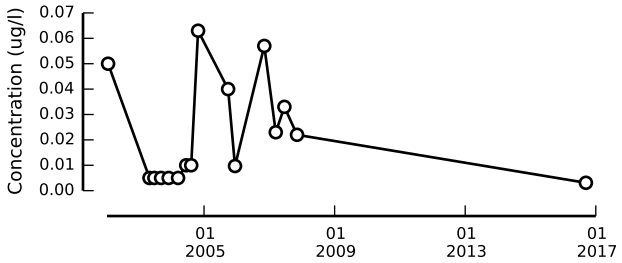
P09-07

Not Sampled

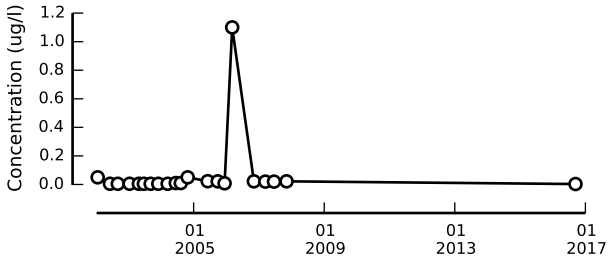
P09-08

Not Sampled

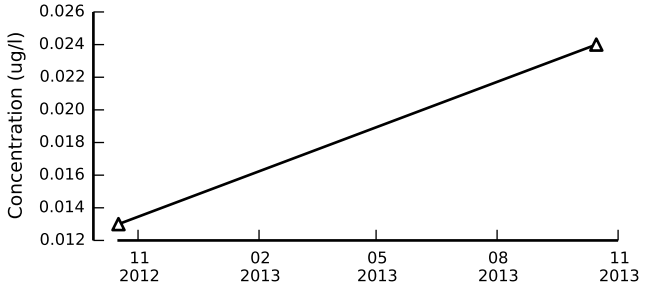
P09-09



P09-10



P09-11



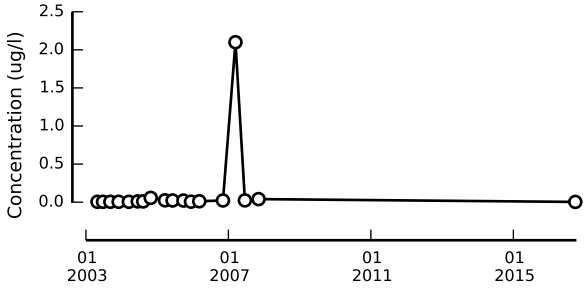
P09-12

Not Sampled

ALPHA-BHC in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 49 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

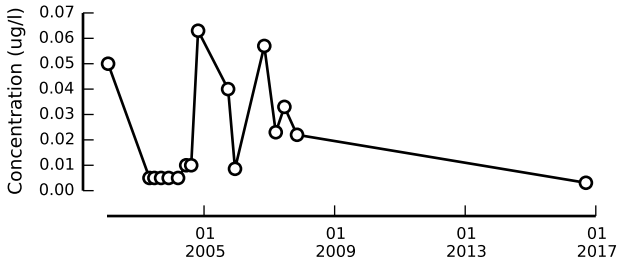
P09-07

Not Sampled

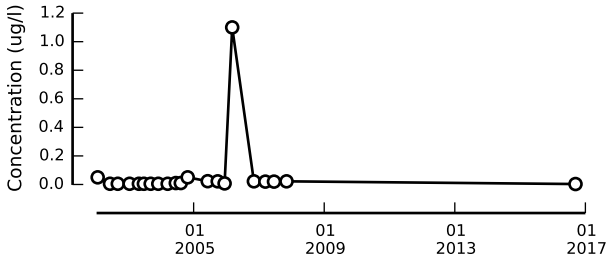
P09-08

Not Sampled

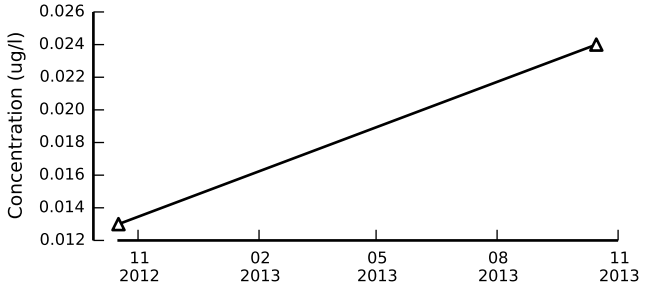
P09-09



P09-10



P09-11



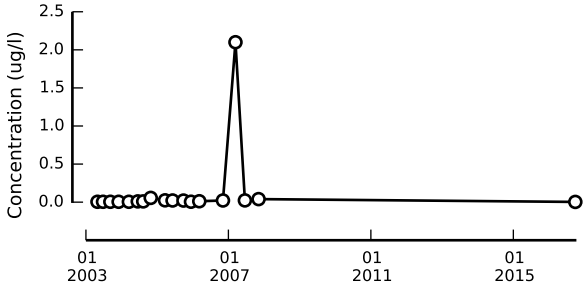
P09-12

Not Sampled

ALPHA-CHLORDANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 50 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

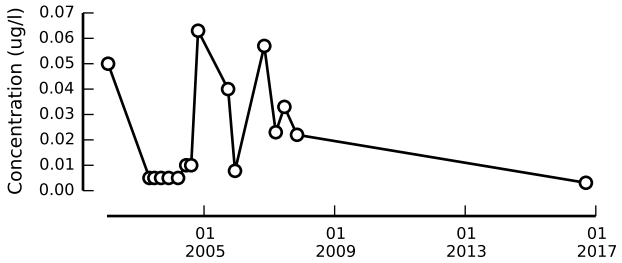
P09-07

Not Sampled

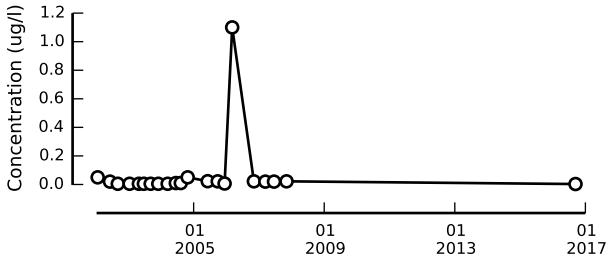
P09-08

Not Sampled

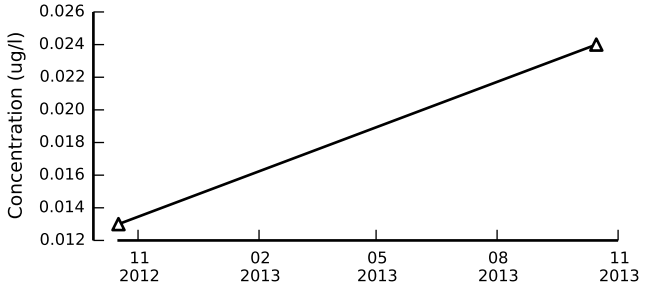
P09-09



P09-10



P09-11



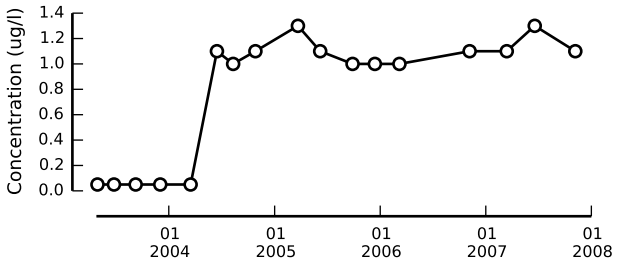
P09-12

Not Sampled

ANTHRACENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 51 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

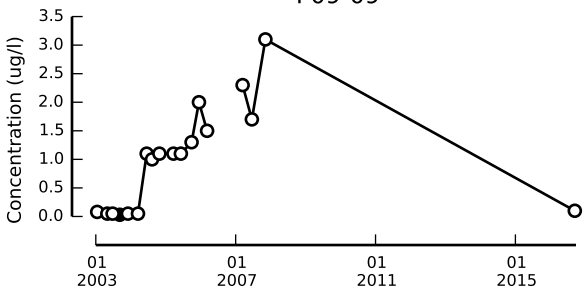
P09-07

Not Sampled

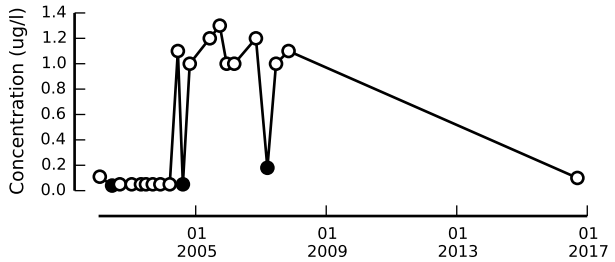
P09-08

Sampled Once

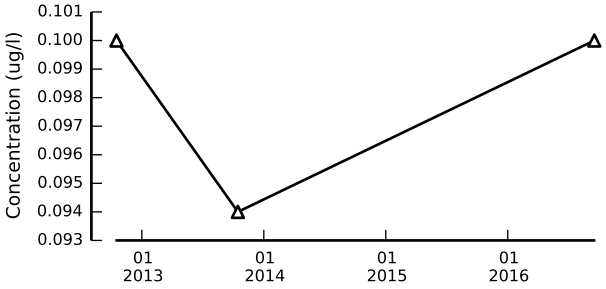
P09-09



P09-10



P09-11



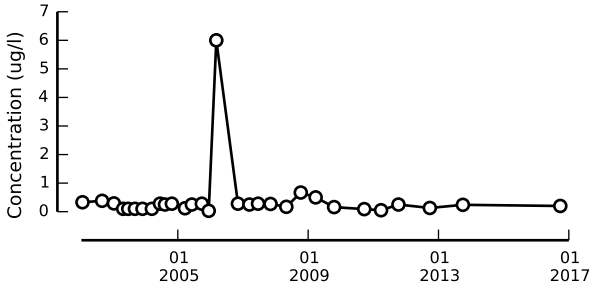
P09-12

Sampled Once

AROCLOR-1016 in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 52 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

P09-01



P09-02

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

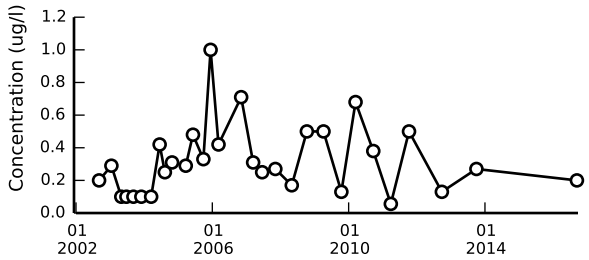
P09-07

Not Sampled

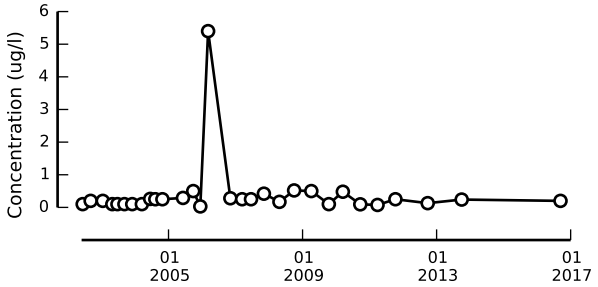
P09-08

Not Sampled

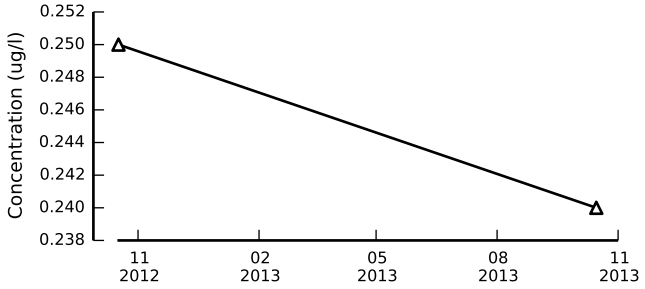
P09-09



P09-10



P09-11



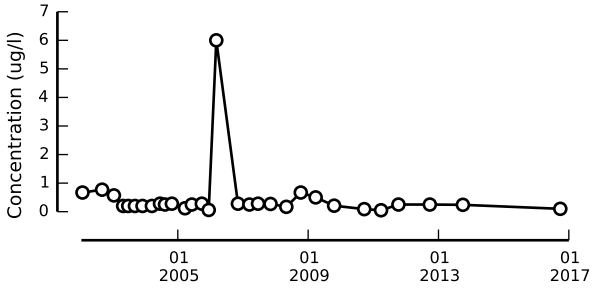
P09-12

Not Sampled

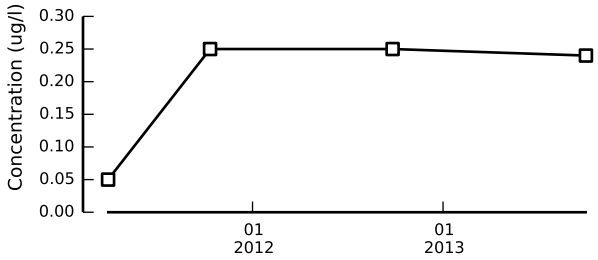
AROCLOR-1221 in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 53 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

P09-01



P09-02



P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

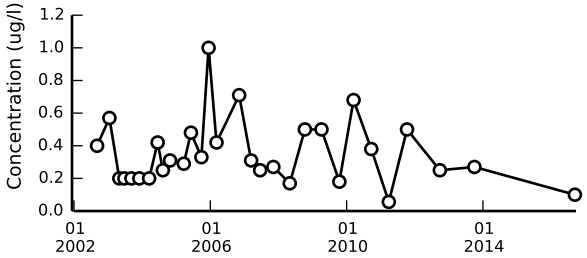
P09-07

Not Sampled

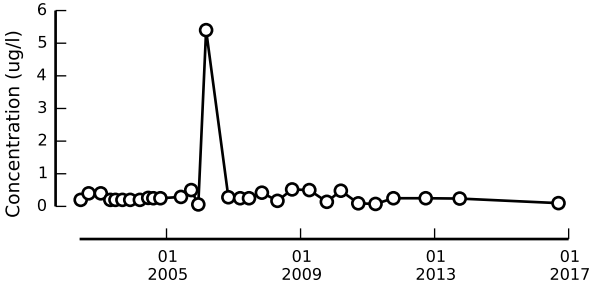
P09-08

Not Sampled

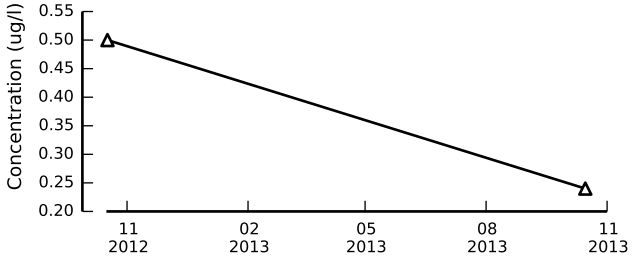
P09-09



P09-10



P09-11



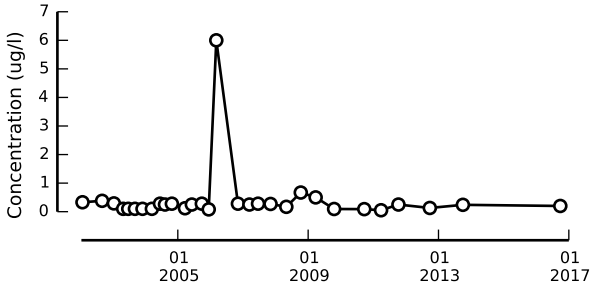
P09-12

Not Sampled

AROCLOR-1232 in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 54 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

P09-01



P09-02

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

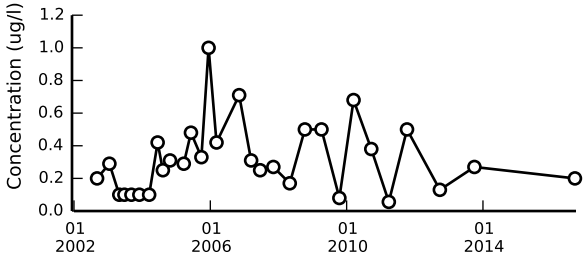
P09-07

Not Sampled

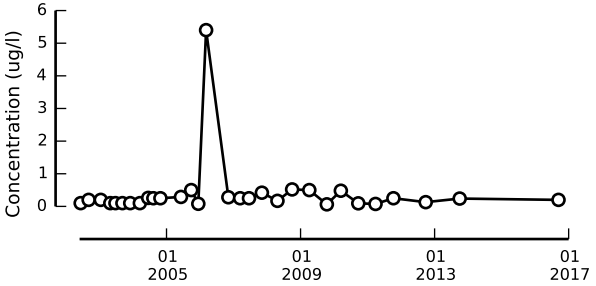
P09-08

Not Sampled

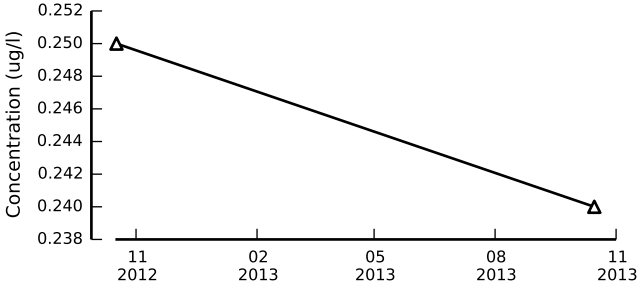
P09-09



P09-10



P09-11



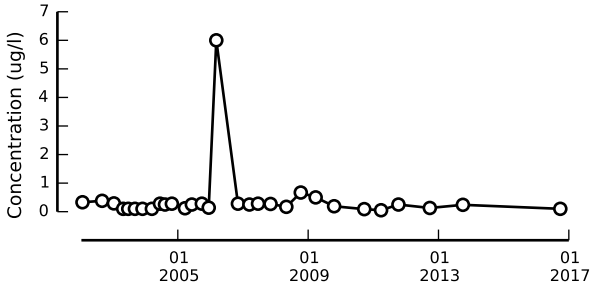
P09-12

Not Sampled

AROCLOR-1242 in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 55 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

P09-01



P09-02

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

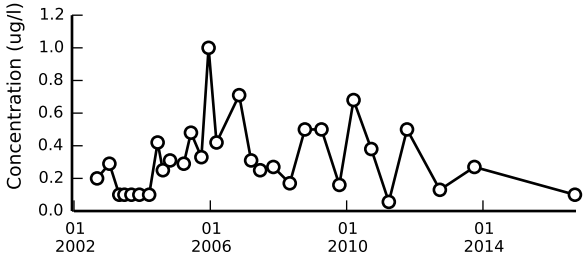
P09-07

Not Sampled

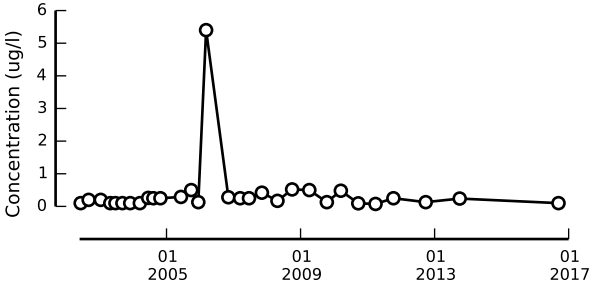
P09-08

Not Sampled

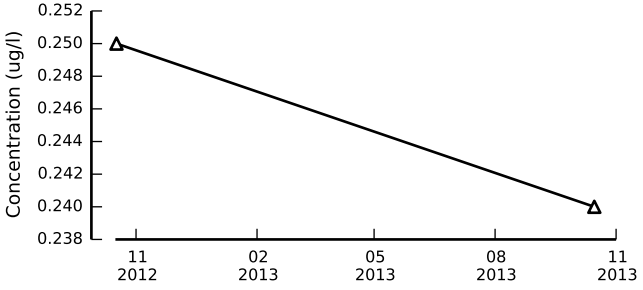
P09-09



P09-10



P09-11



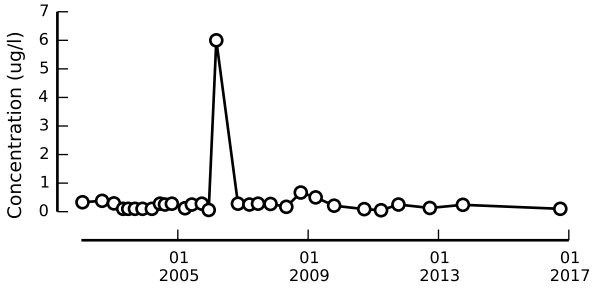
P09-12

Not Sampled

AROCLOR-1248 in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 56 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

P09-01



P09-02

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

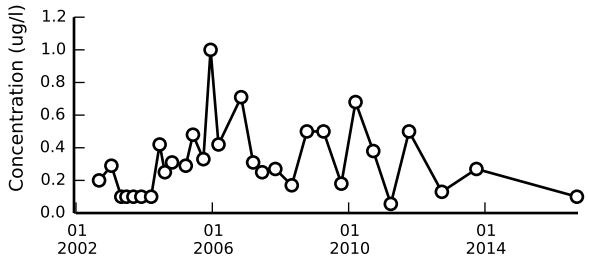
P09-07

Not Sampled

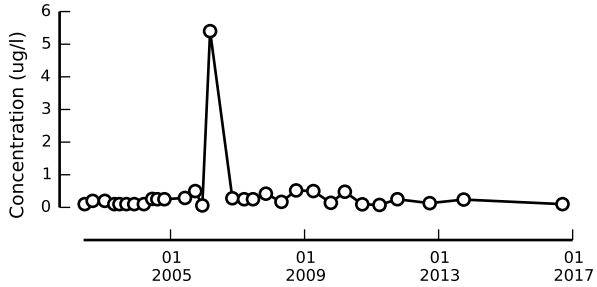
P09-08

Not Sampled

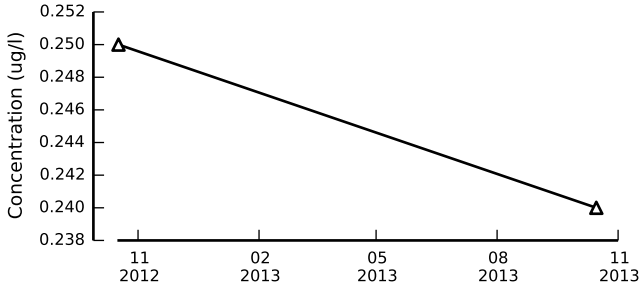
P09-09



P09-10



P09-11



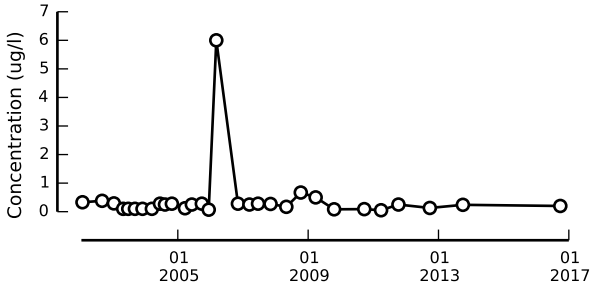
P09-12

Not Sampled

AROCLOR-1254 in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 57 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

P09-01



P09-02

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

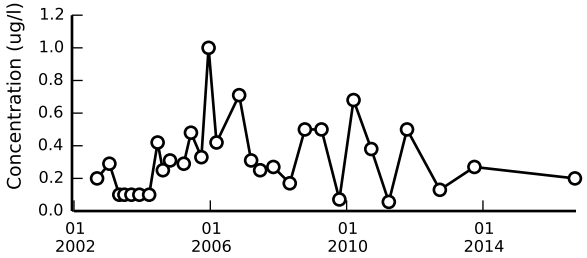
P09-07

Not Sampled

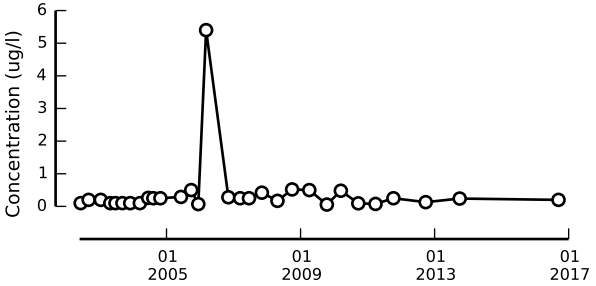
P09-08

Not Sampled

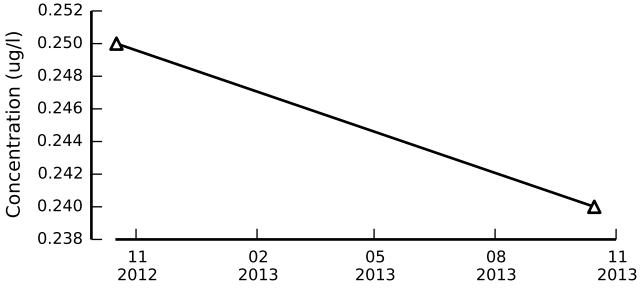
P09-09



P09-10



P09-11



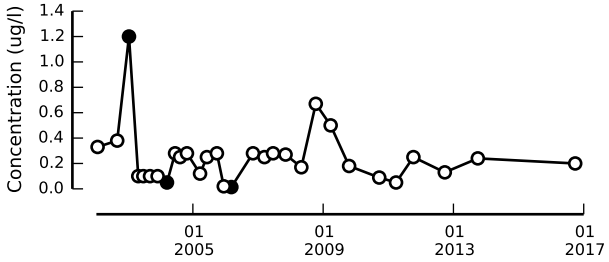
P09-12

Not Sampled

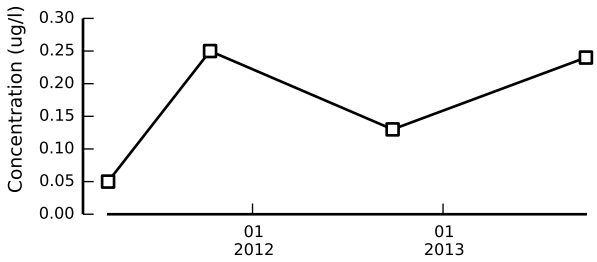
AROCLOR-1260 in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 58 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

P09-01



P09-02



P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

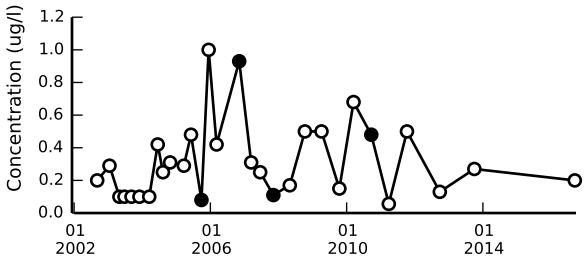
P09-07

Not Sampled

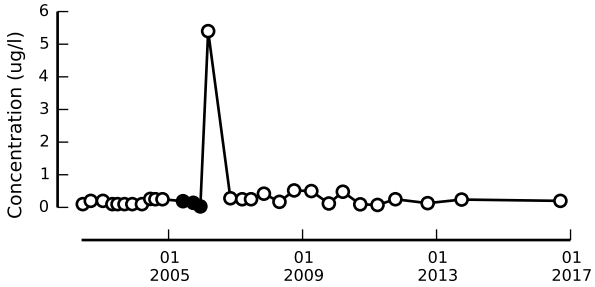
P09-08

Not Sampled

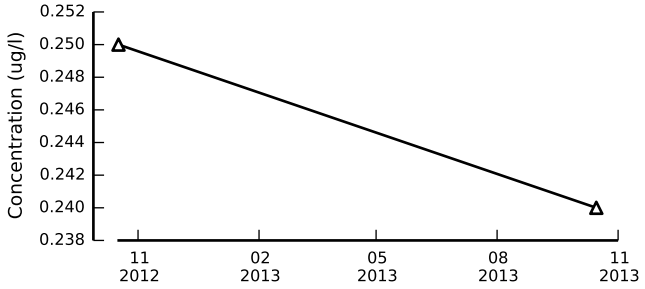
P09-09



P09-10



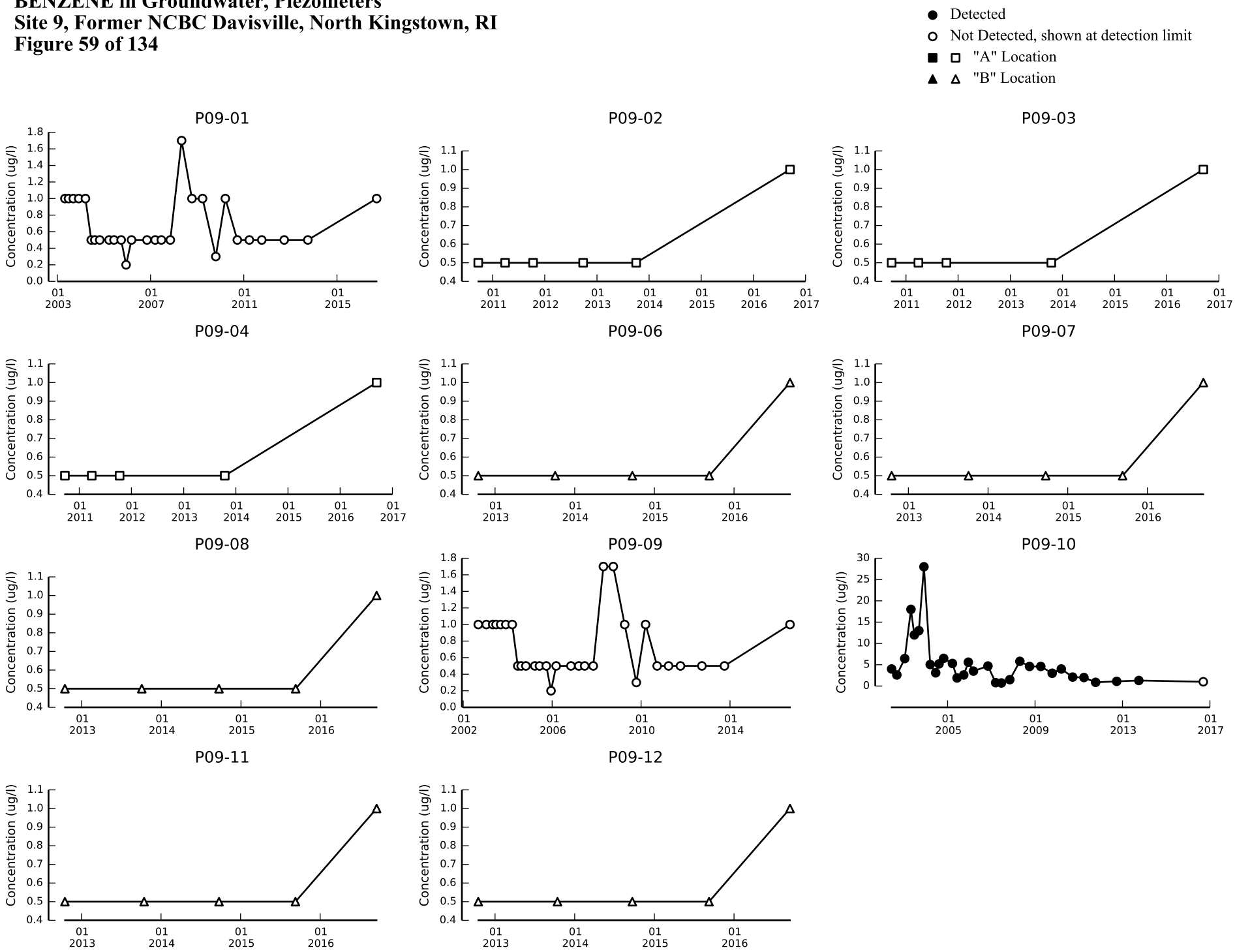
P09-11



P09-12

Not Sampled

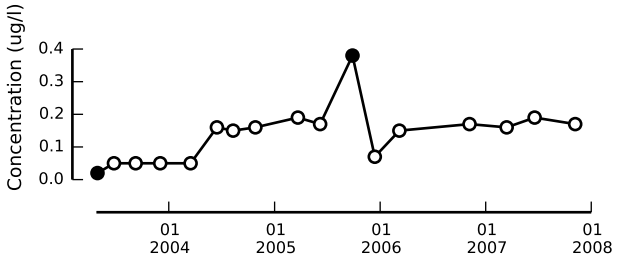
BENZENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 59 of 134



BENZO(A)ANTHRACENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 60 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

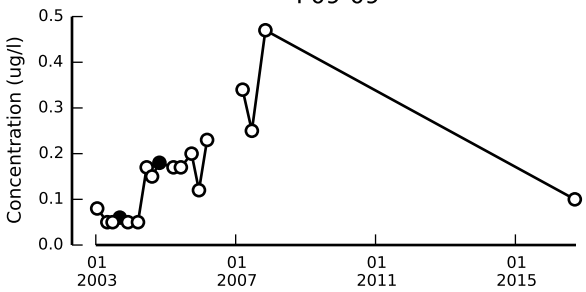
P09-07

Not Sampled

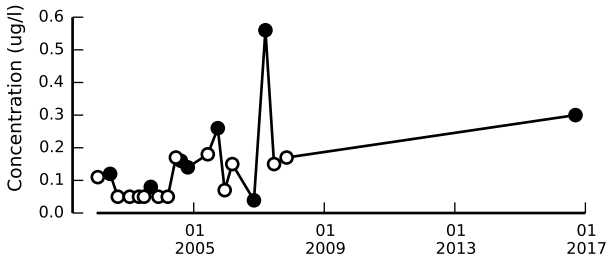
P09-08

Sampled Once

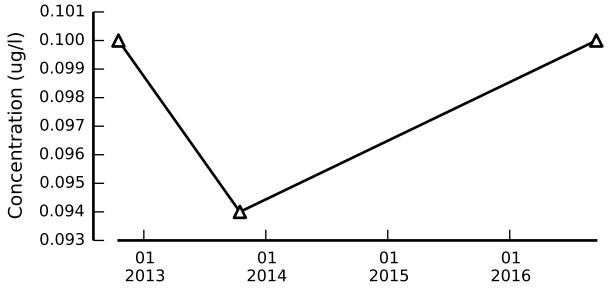
P09-09



P09-10



P09-11



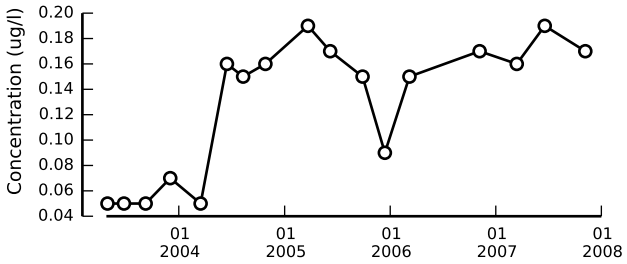
P09-12

Sampled Once

BENZO(A)PYRENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 61 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

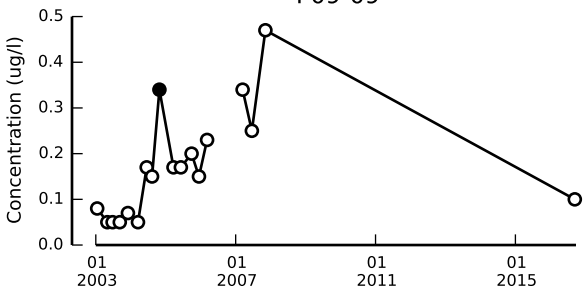
P09-07

Not Sampled

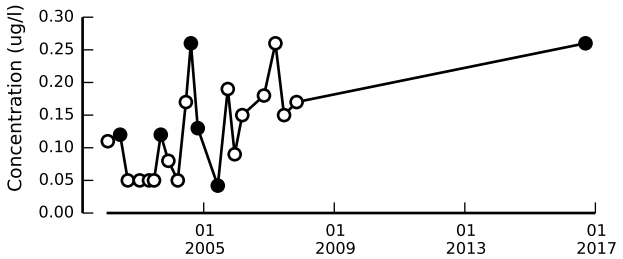
P09-08

Sampled Once

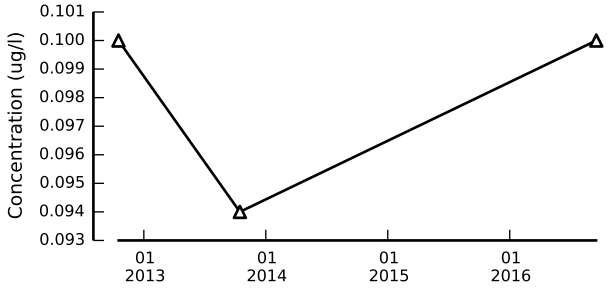
P09-09



P09-10



P09-11



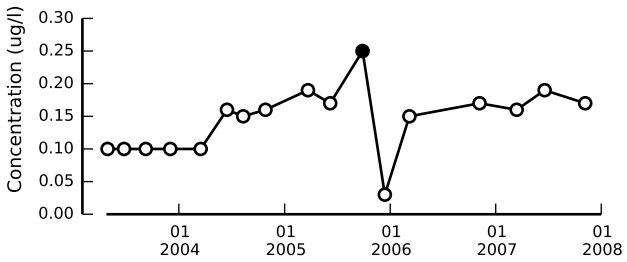
P09-12

Sampled Once

BENZO(B)FLUORANTHENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 62 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

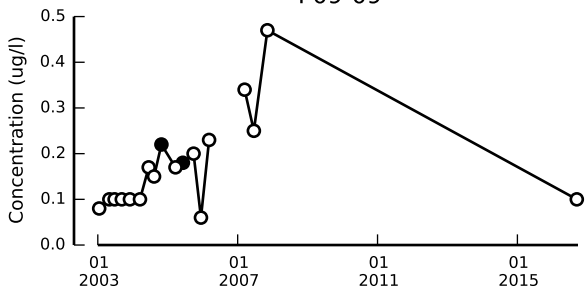
P09-07

Not Sampled

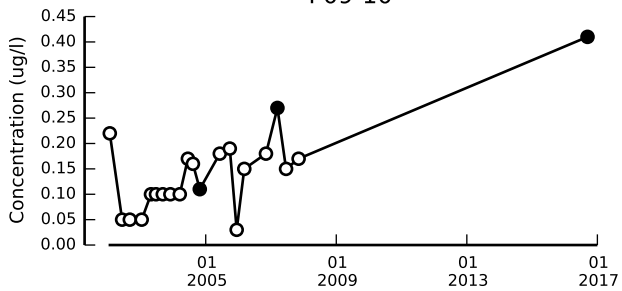
P09-08

Sampled Once

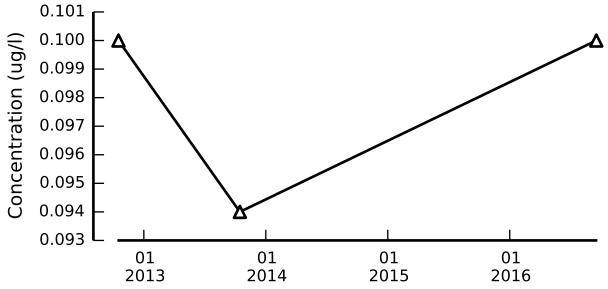
P09-09



P09-10



P09-11



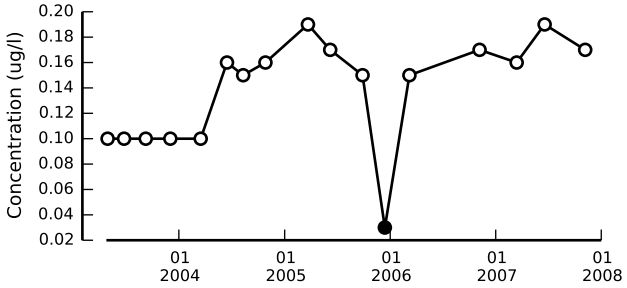
P09-12

Sampled Once

BENZO(G,H,I)PERYLENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 63 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

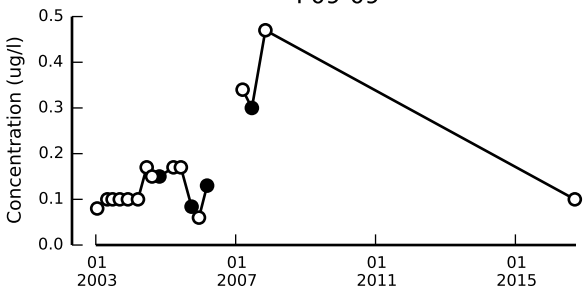
P09-07

Not Sampled

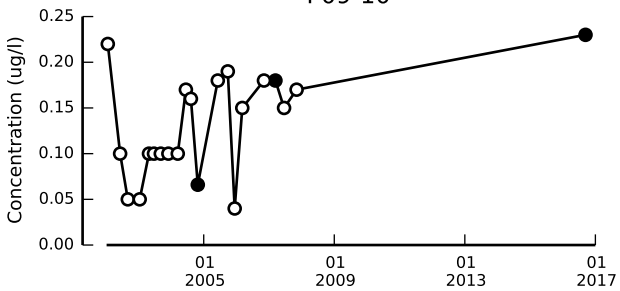
P09-08

Sampled Once

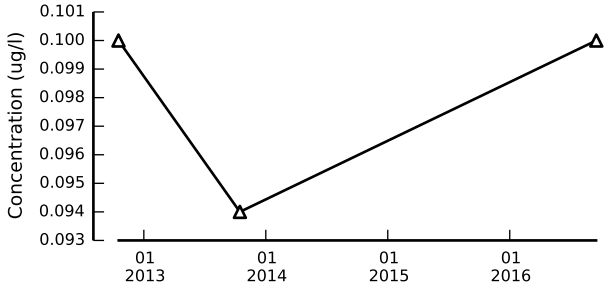
P09-09



P09-10



P09-11



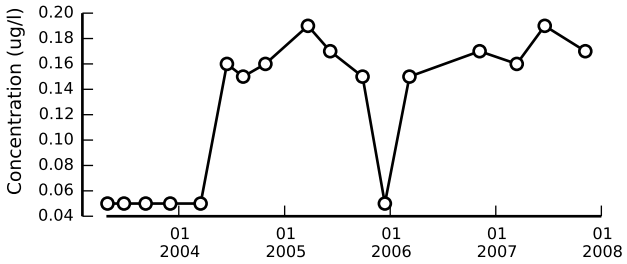
P09-12

Sampled Once

BENZO(K)FLUORANTHENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 64 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

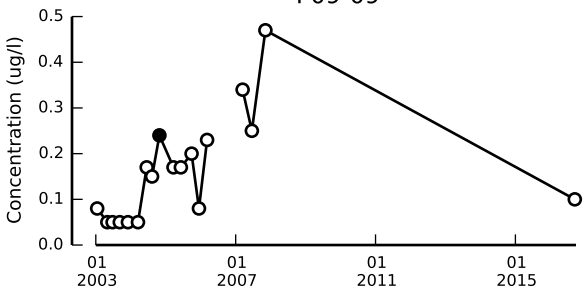
P09-07

Not Sampled

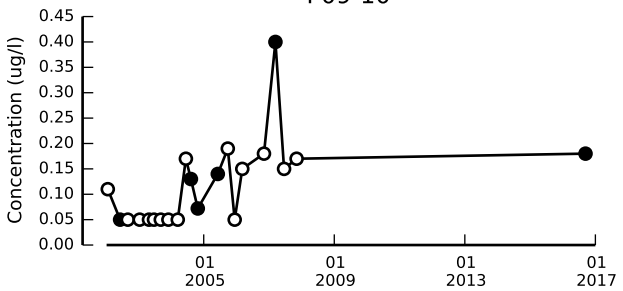
P09-08

Sampled Once

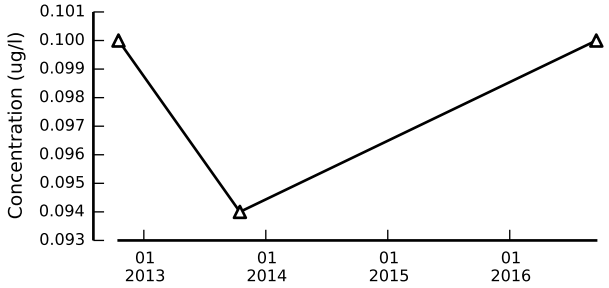
P09-09



P09-10



P09-11



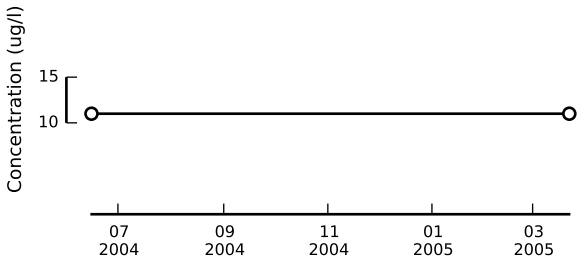
P09-12

Sampled Once

BENZOIC ACID in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 65 of 134

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

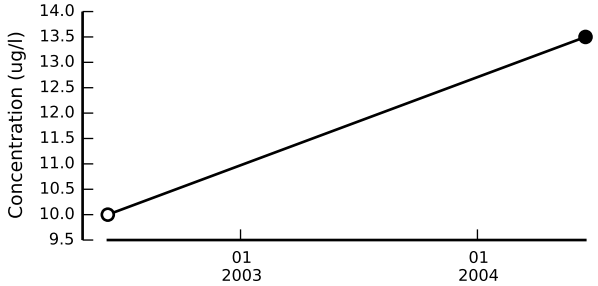
P09-08

Not Sampled

P09-09

Sampled Once

P09-10



P09-11

Not Sampled

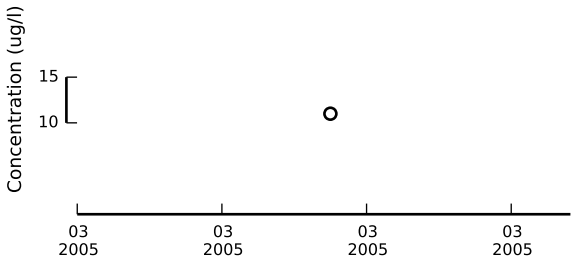
P09-12

Not Sampled

BENZYL ALCOHOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 66 of 134

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

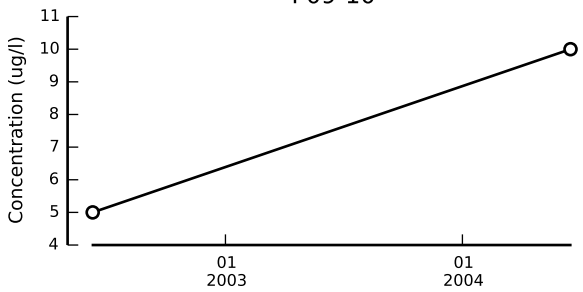
P09-08

Not Sampled

P09-09

Sampled Once

P09-10



P09-11

Not Sampled

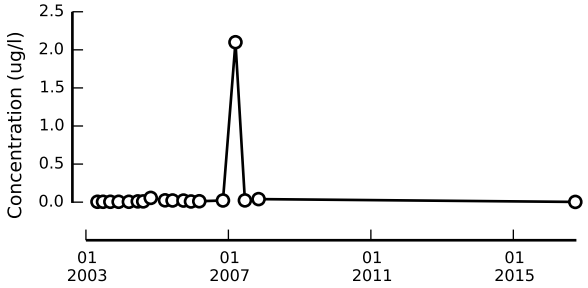
P09-12

Not Sampled

BETA-BHC in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 67 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

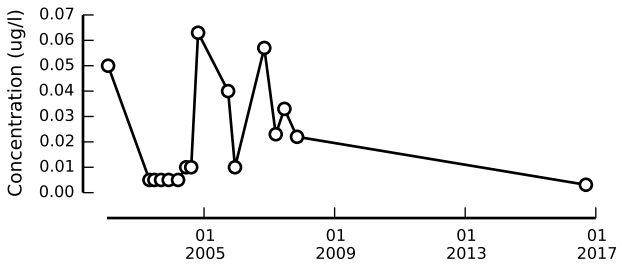
P09-07

Not Sampled

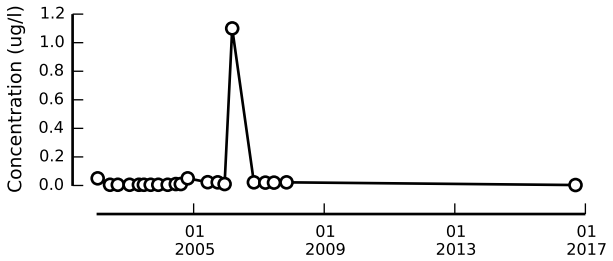
P09-08

Not Sampled

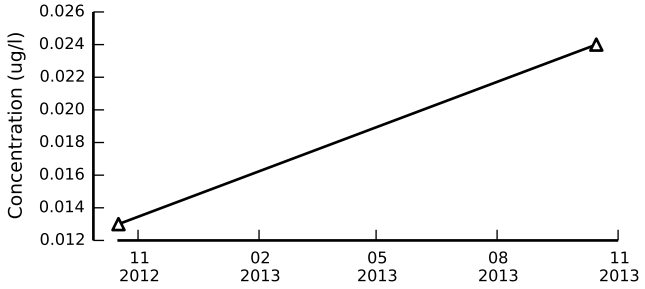
P09-09



P09-10



P09-11



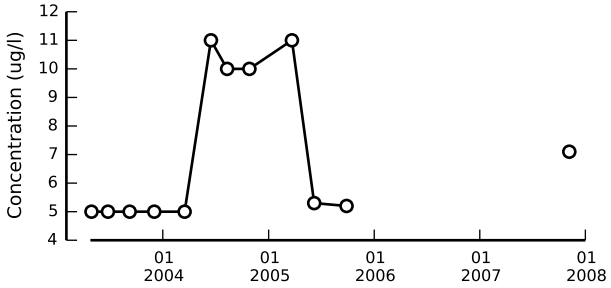
P09-12

Not Sampled

BIS(2-CHLOROETHOXY)METHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 68 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

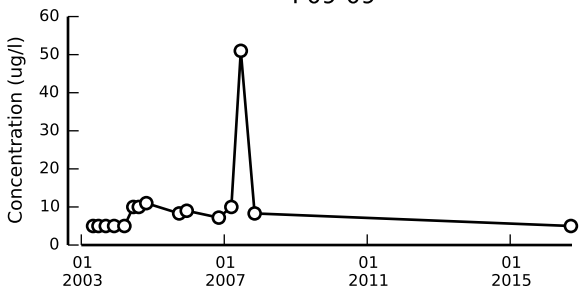
P09-07

Not Sampled

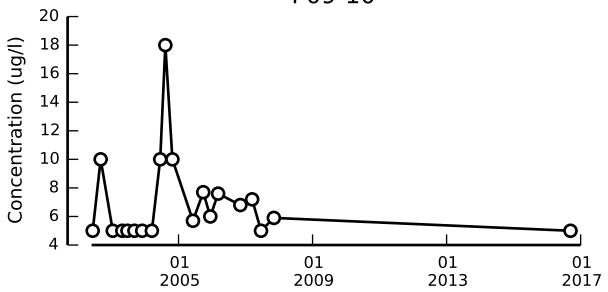
P09-08

Sampled Once

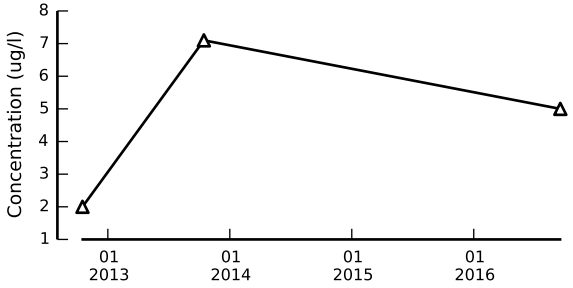
P09-09



P09-10



P09-11



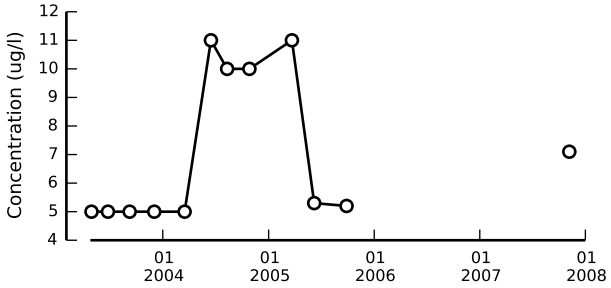
P09-12

Sampled Once

BIS(2-CHLOROETHYL)ETHER in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 69 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

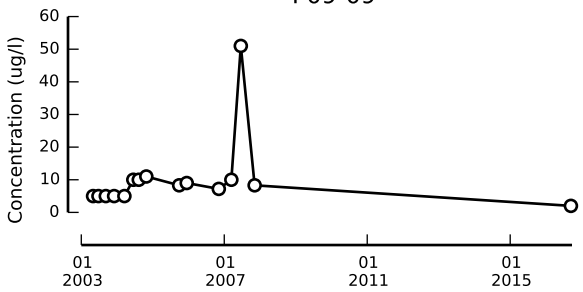
P09-07

Not Sampled

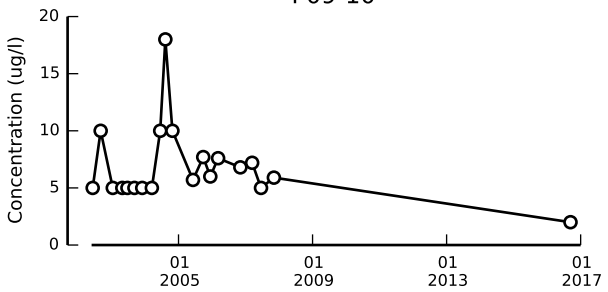
P09-08

Sampled Once

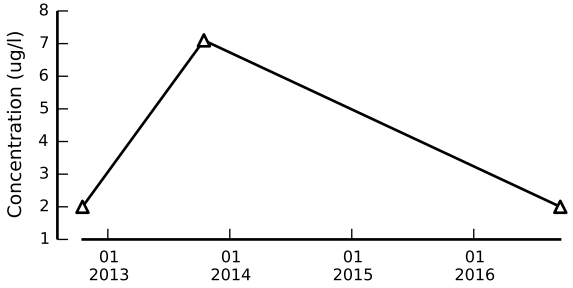
P09-09



P09-10



P09-11



P09-12

Sampled Once

BIS(2-CHLOROISOPROPYL)ETHER in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 70 of 134

● Detected
○ Not Detected, shown at detection limit

P09-01

P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

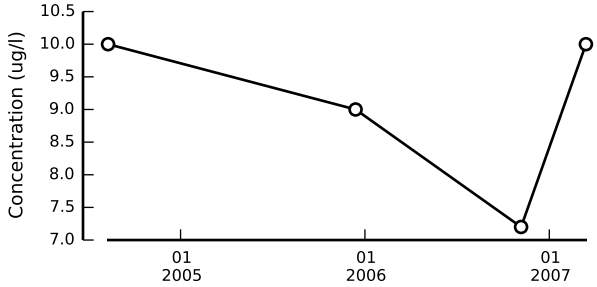
P09-07

Not Sampled

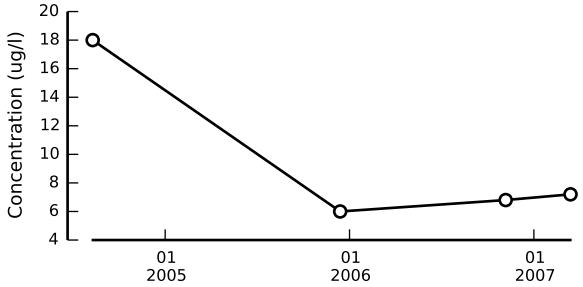
P09-08

Not Sampled

P09-09



P09-10



P09-11

Not Sampled

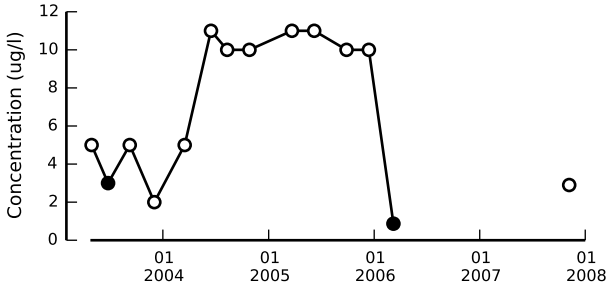
P09-12

Not Sampled

BIS(2-ETHYLHEXYL)PHTHALATE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 71 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

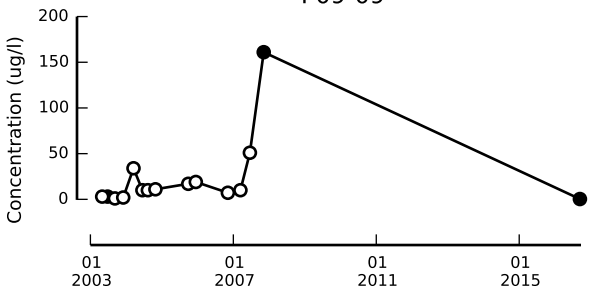
P09-07

Not Sampled

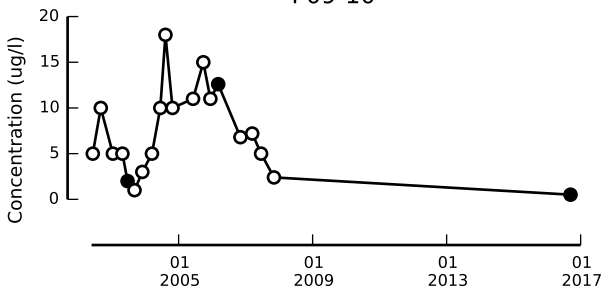
P09-08

Sampled Once

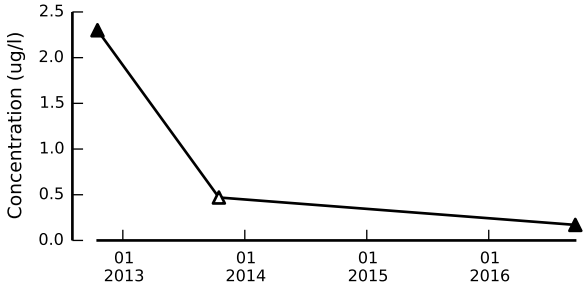
P09-09



P09-10



P09-11

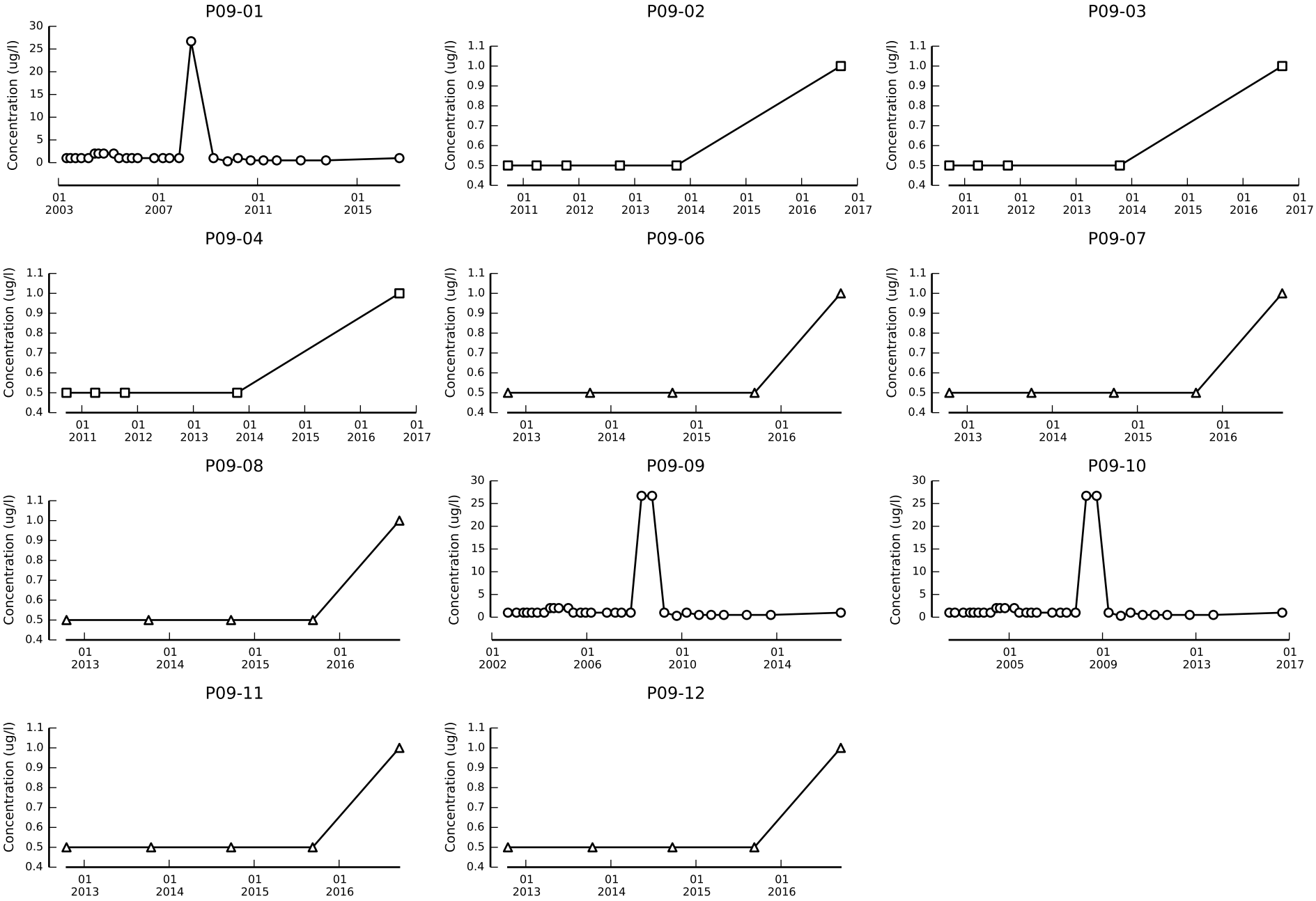


P09-12

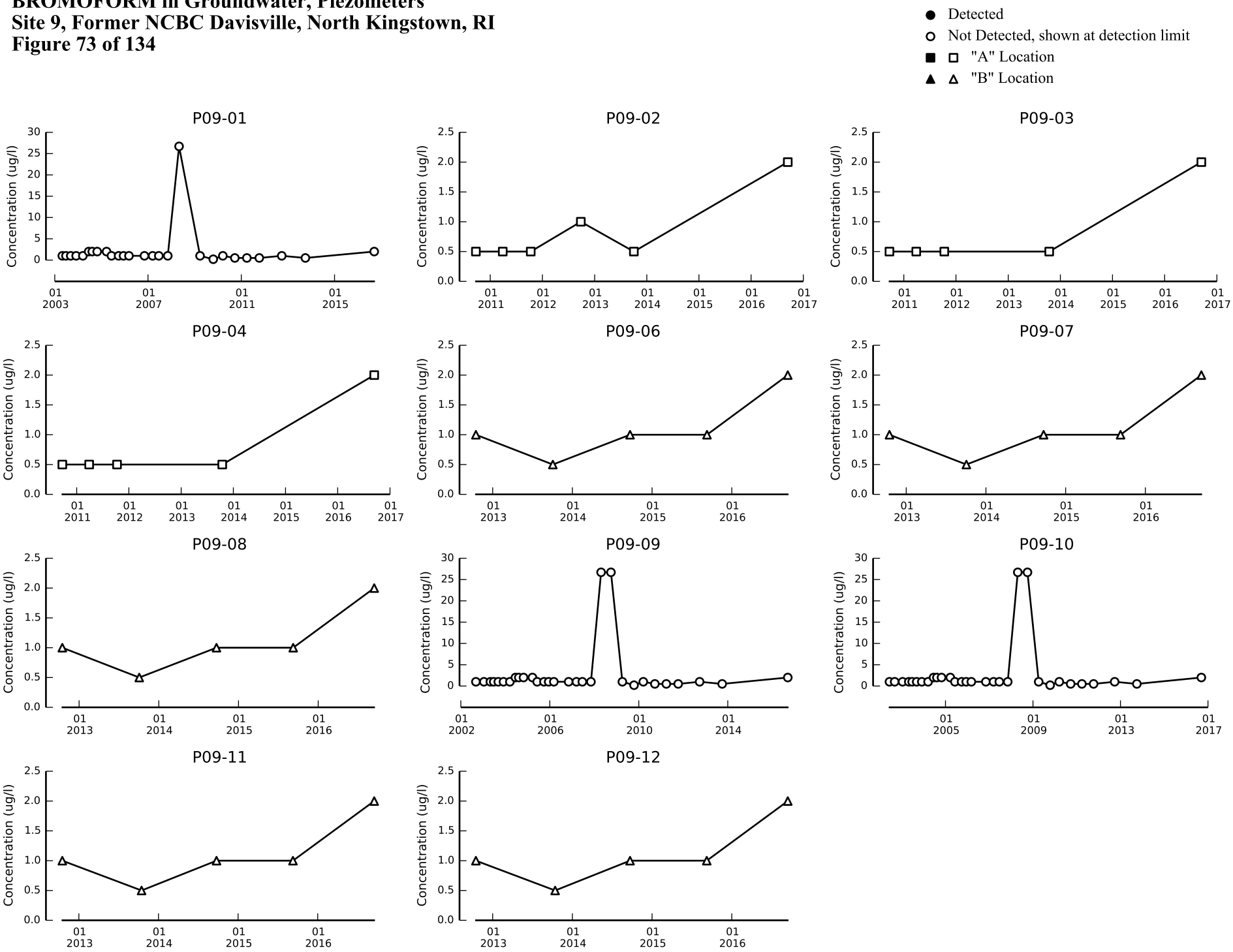
Sampled Once

BROMODICHLOROMETHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 72 of 134

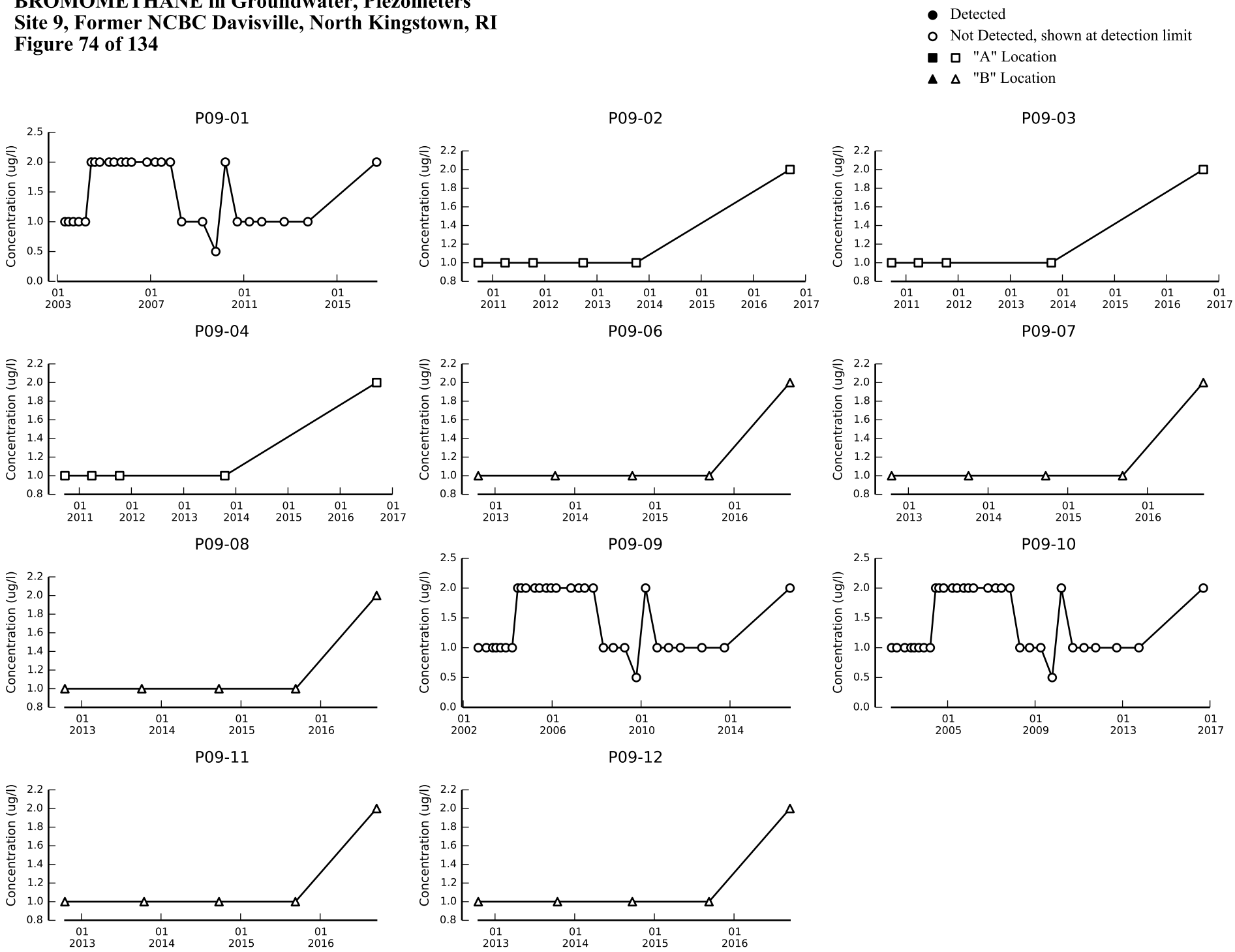
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location



BROMOFORM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 73 of 134



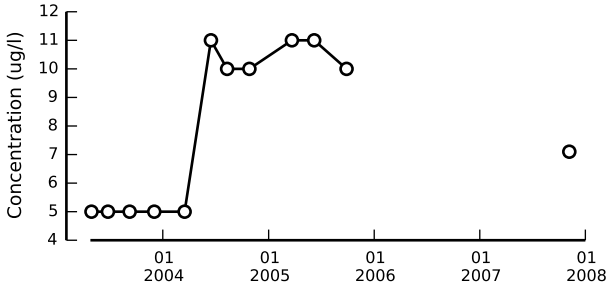
BROMOMETHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 74 of 134



BUTYLBENZYLPHTHALATE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 75 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

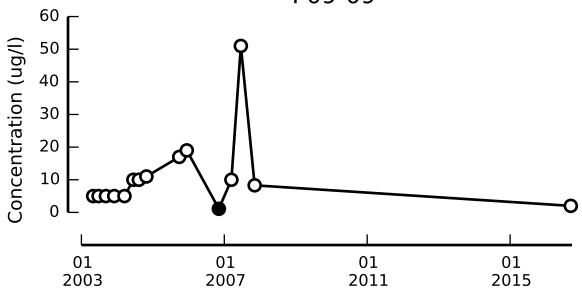
P09-07

Not Sampled

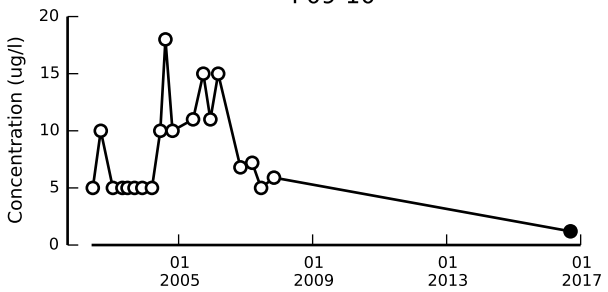
P09-08

Sampled Once

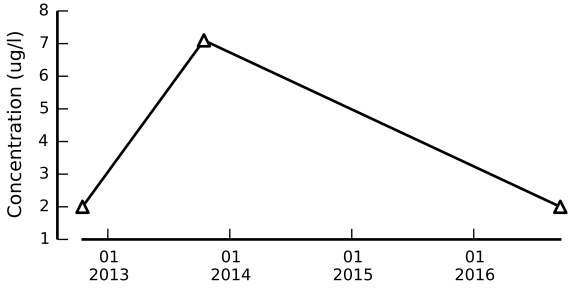
P09-09



P09-10



P09-11



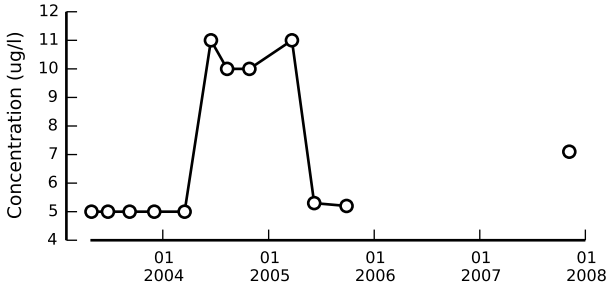
P09-12

Sampled Once

CARBAZOLE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 76 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

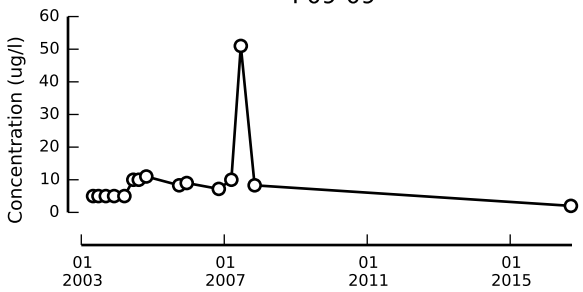
P09-07

Not Sampled

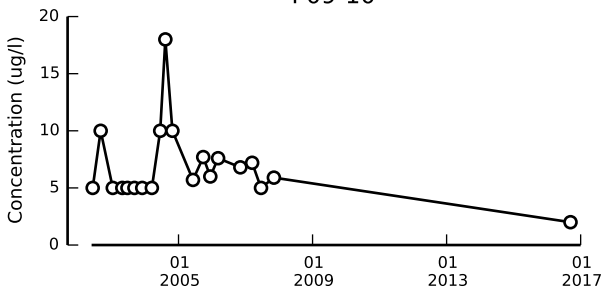
P09-08

Sampled Once

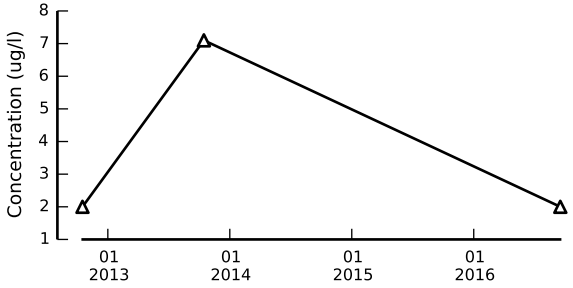
P09-09



P09-10



P09-11

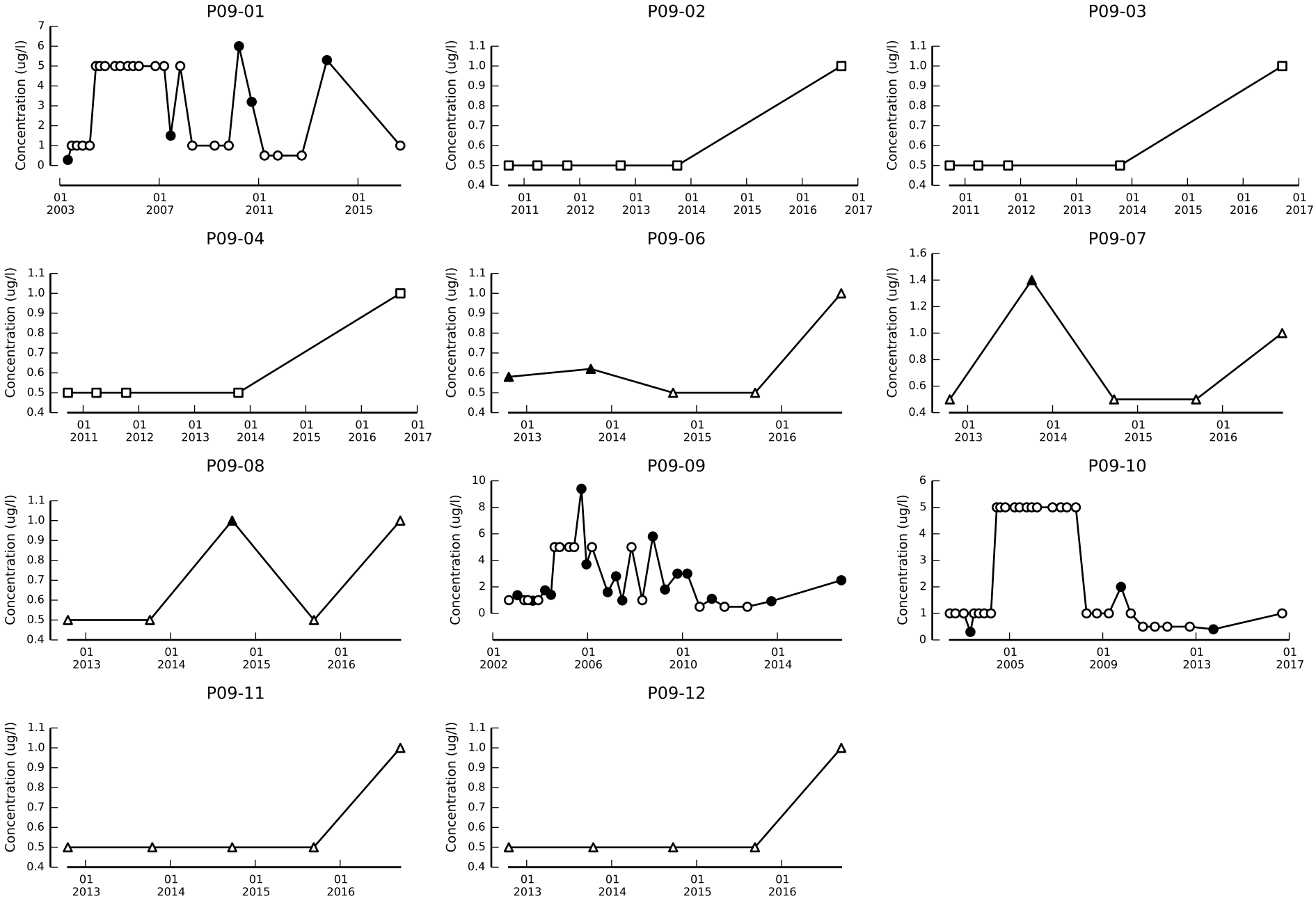


P09-12

Sampled Once

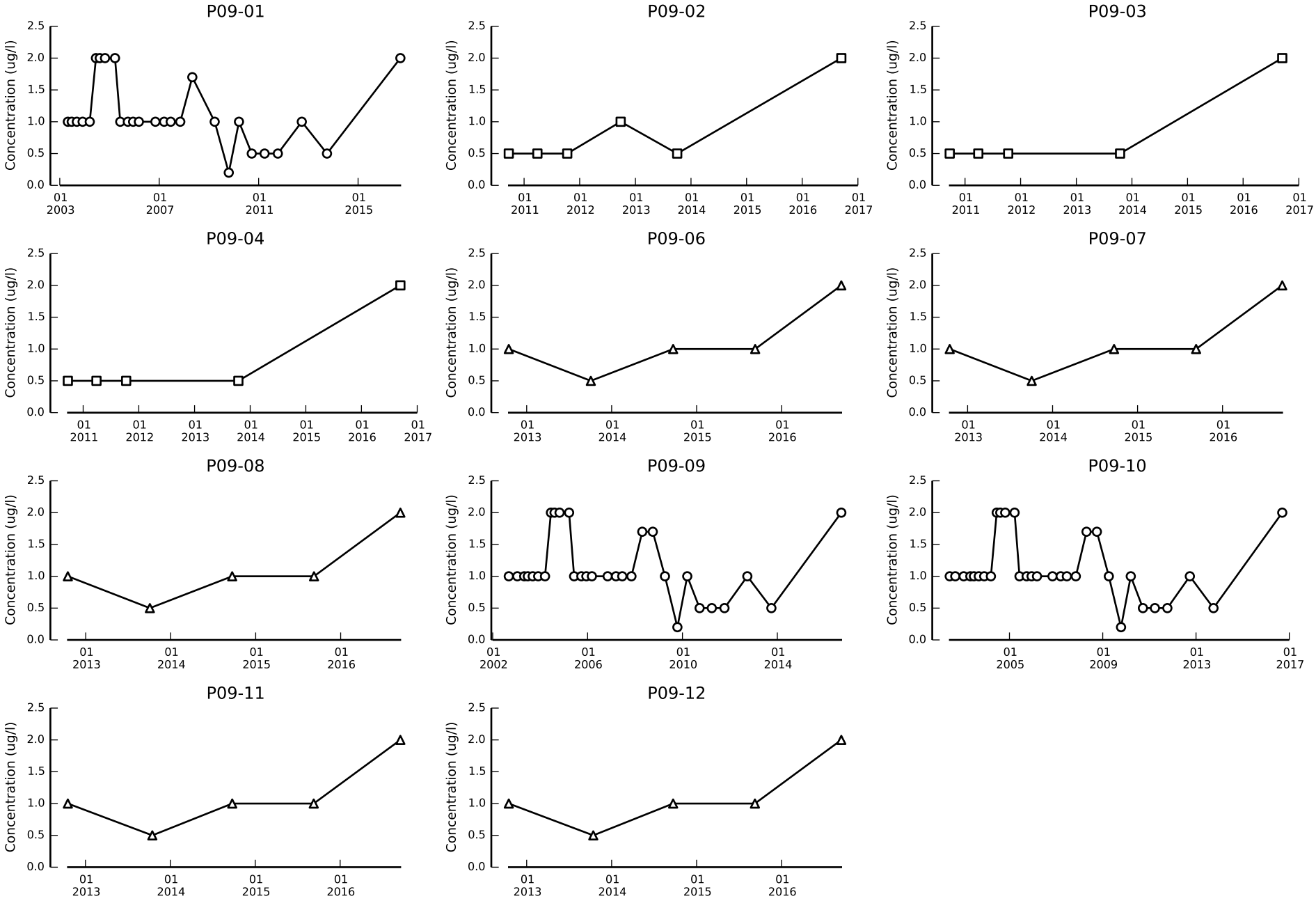
CARBON DISULFIDE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 77 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location



CARBON TETRACHLORIDE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 78 of 134

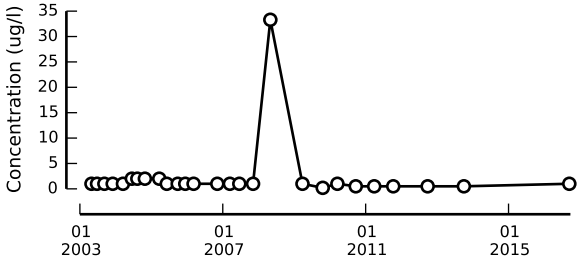
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location



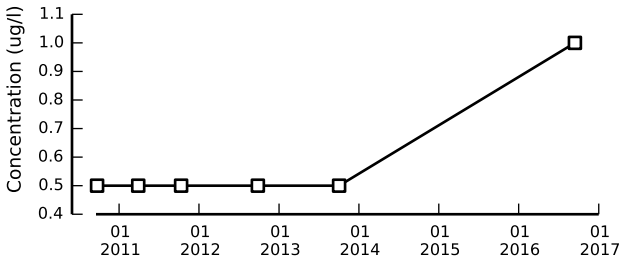
CHLOROBENZENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 79 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

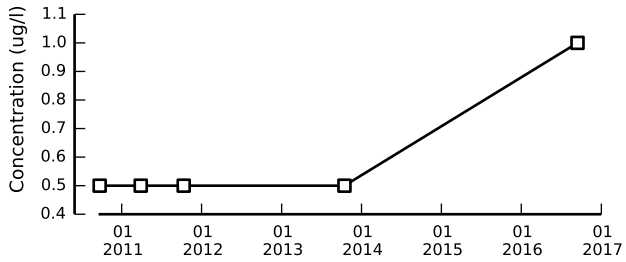
P09-01



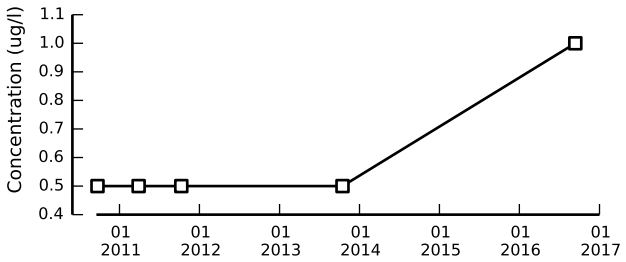
P09-02



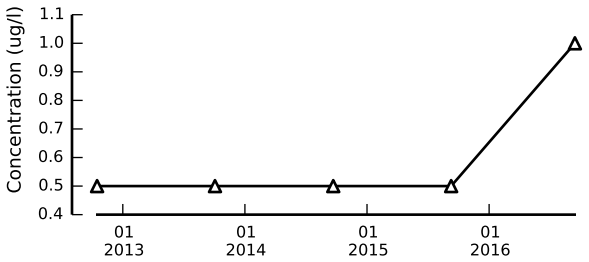
P09-03



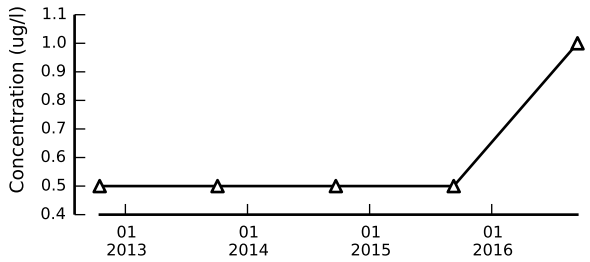
P09-04



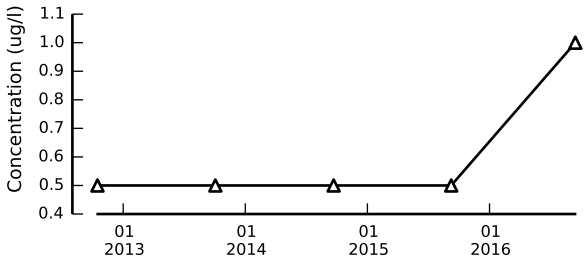
P09-06



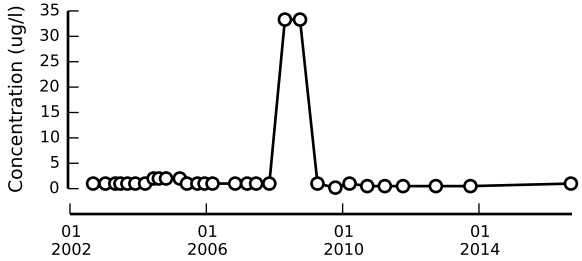
P09-07



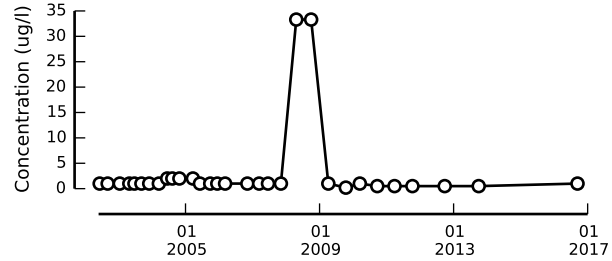
P09-08



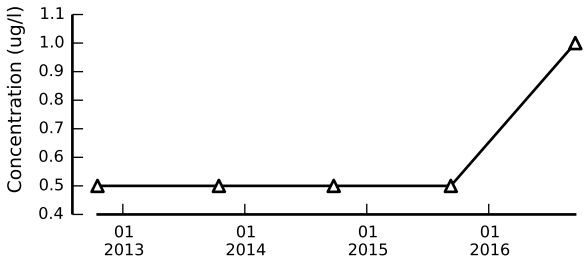
P09-09



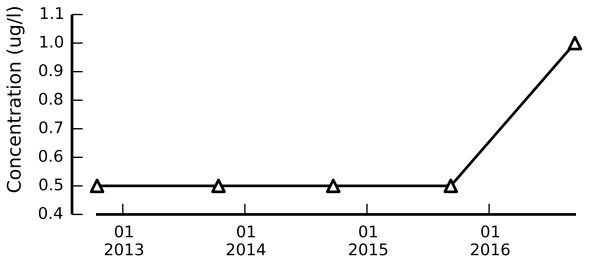
P09-10



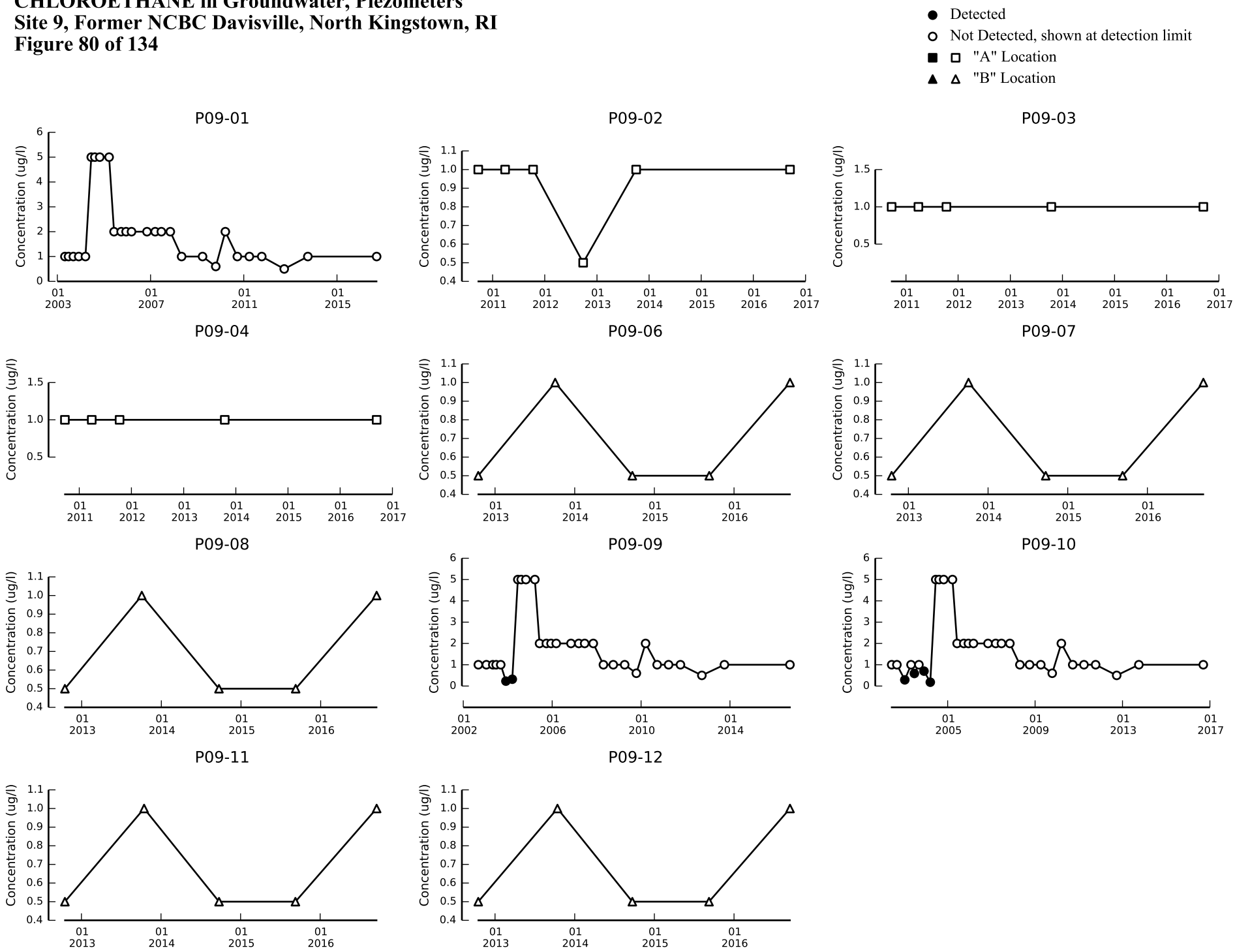
P09-11



P09-12



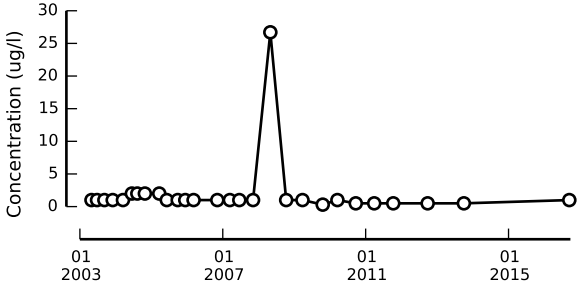
CHLOROETHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 80 of 134



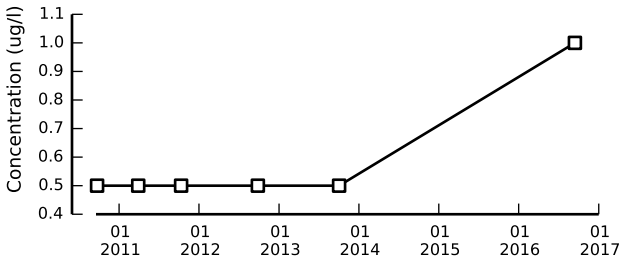
CHLOROFORM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 81 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

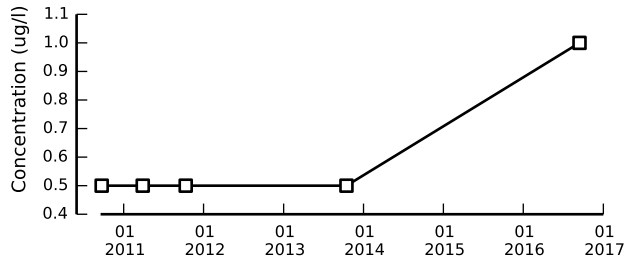
P09-01



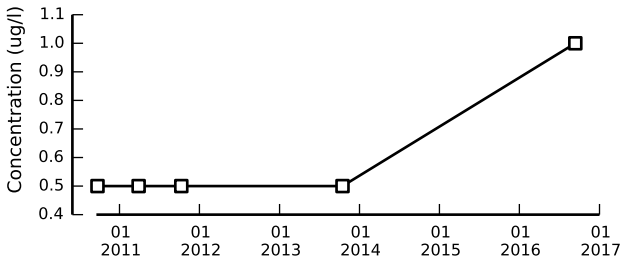
P09-02



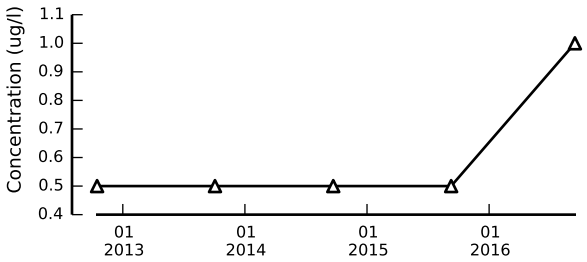
P09-03



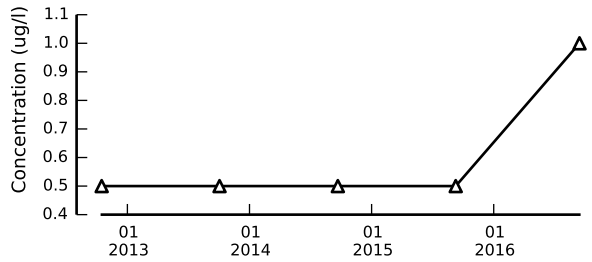
P09-04



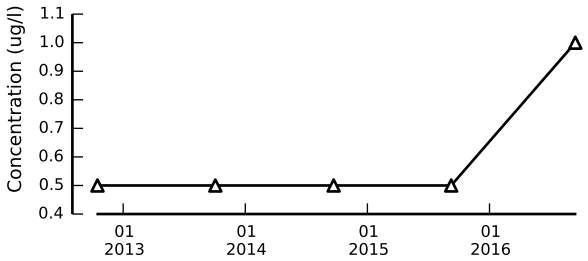
P09-06



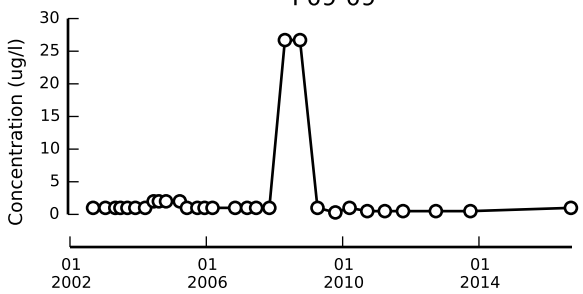
P09-07



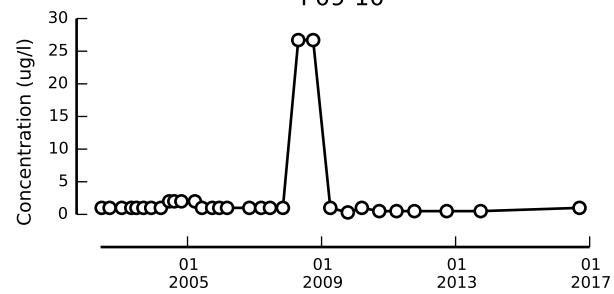
P09-08



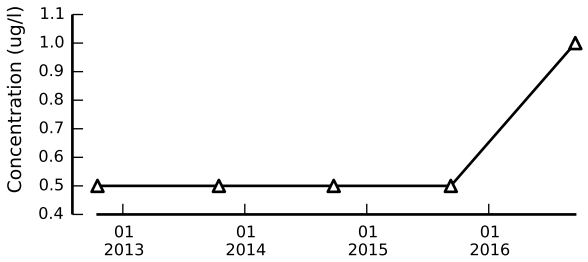
P09-09



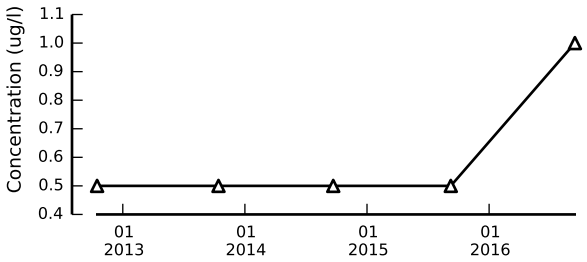
P09-10



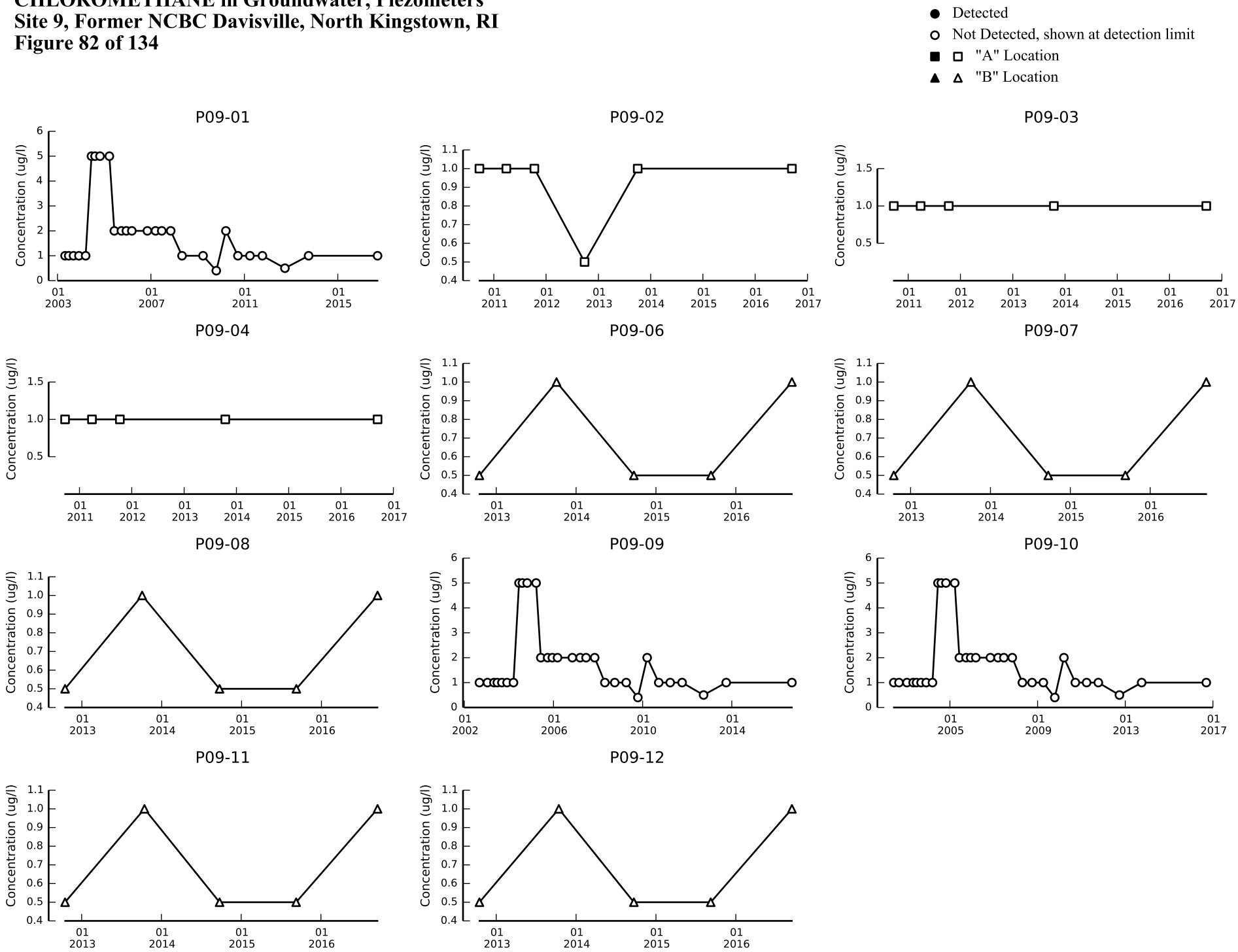
P09-11



P09-12



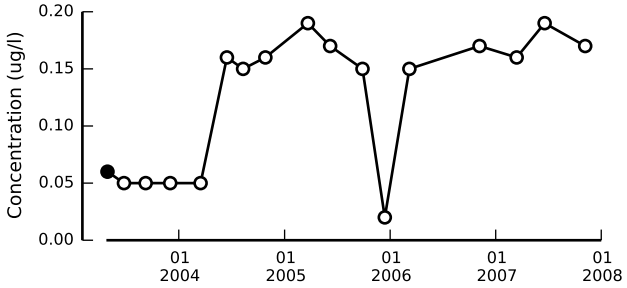
CHLOROMETHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 82 of 134



CHRYSENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 83 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

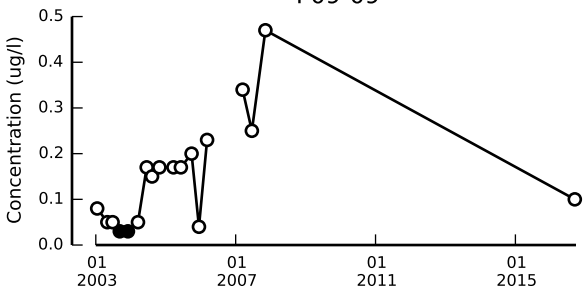
P09-07

Not Sampled

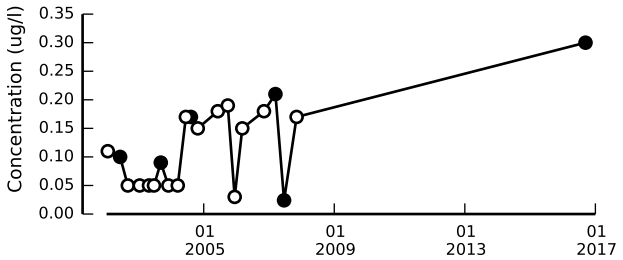
P09-08

Sampled Once

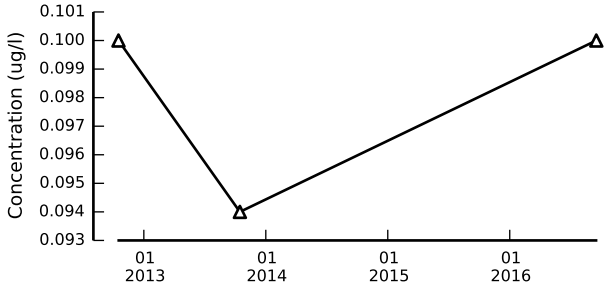
P09-09



P09-10



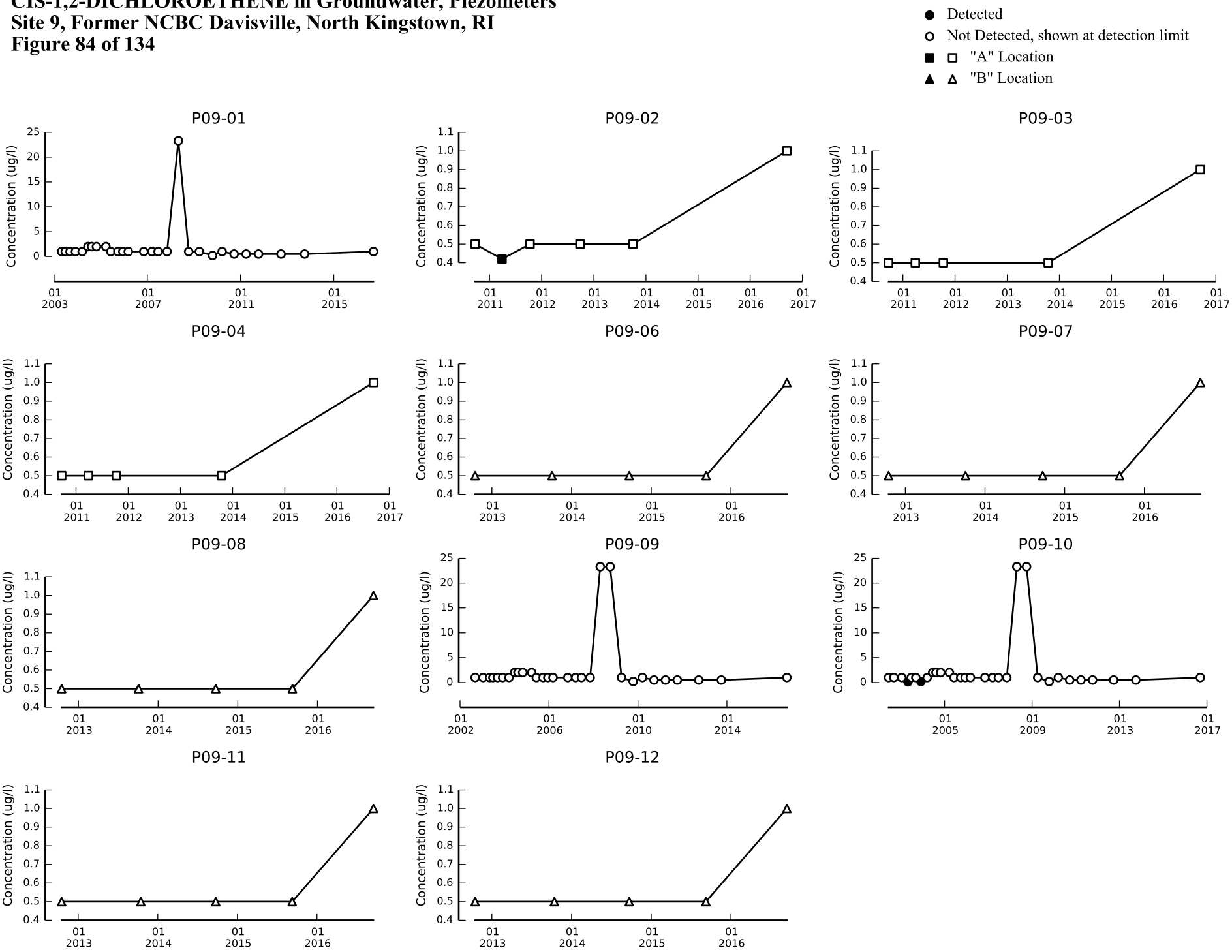
P09-11



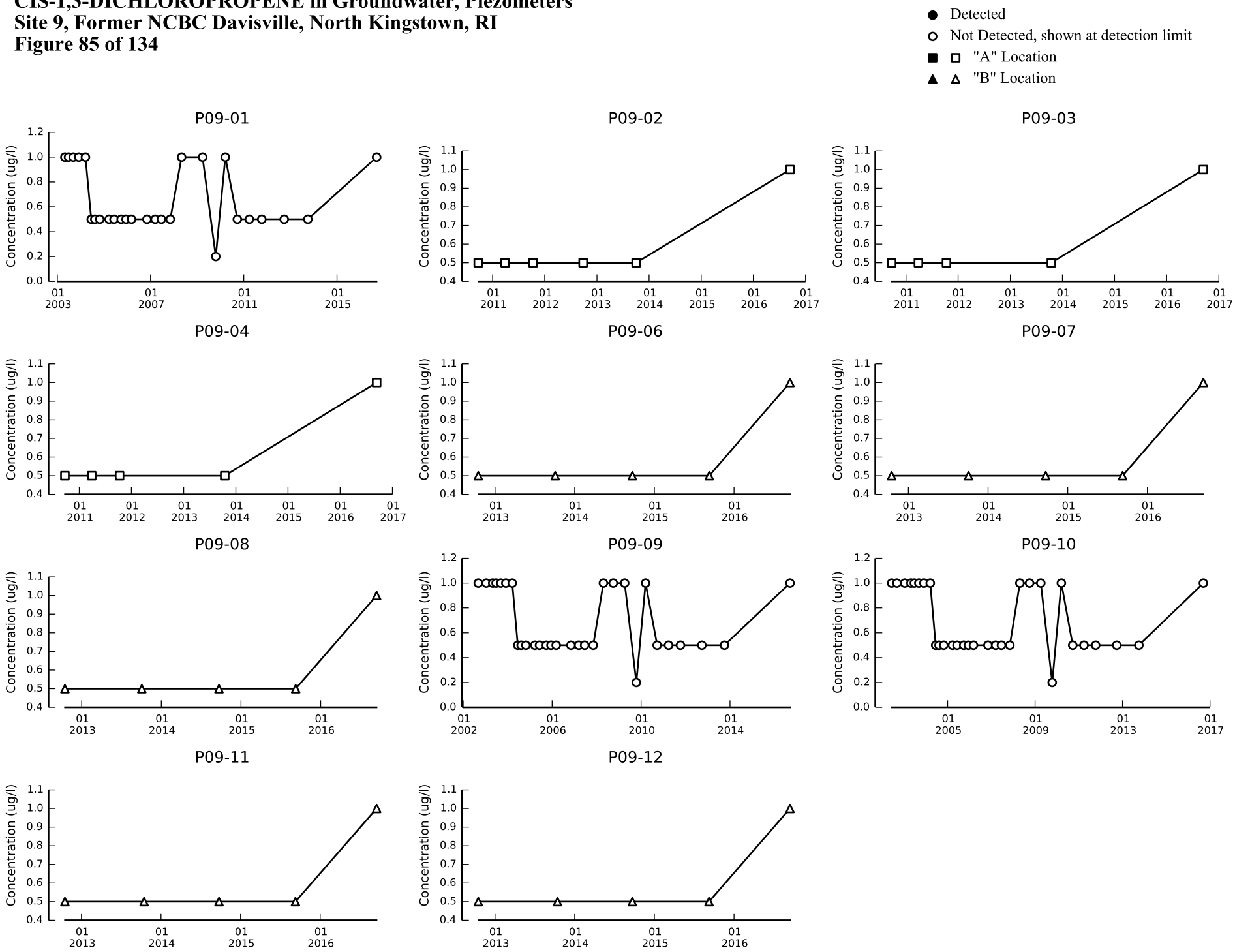
P09-12

Sampled Once

CIS-1,2-DICHLOROETHENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 84 of 134



CIS-1,3-DICHLOROPROPENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 85 of 134



CRESOLS in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 86 of 134

● Detected
○ Not Detected, shown at detection limit

P09-01

Sampled Once

P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

Not Sampled

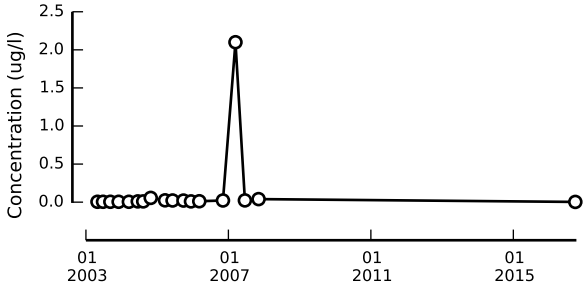
P09-12

Not Sampled

DELTA-BHC in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 87 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

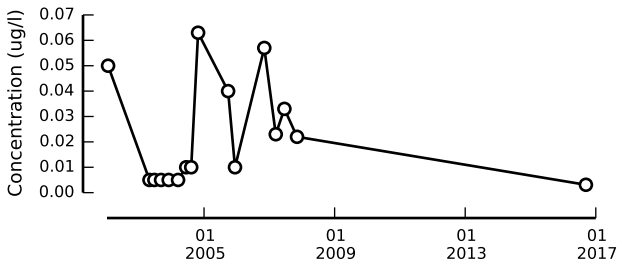
P09-07

Not Sampled

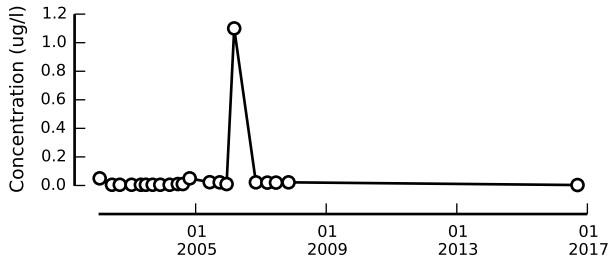
P09-08

Not Sampled

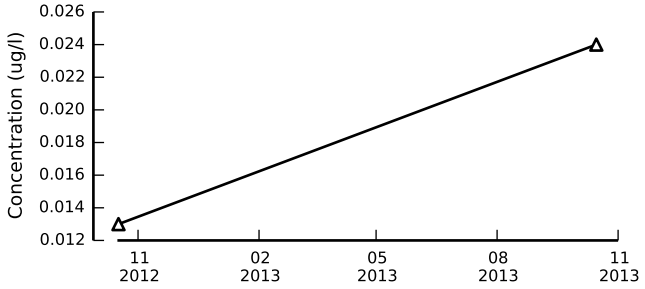
P09-09



P09-10



P09-11



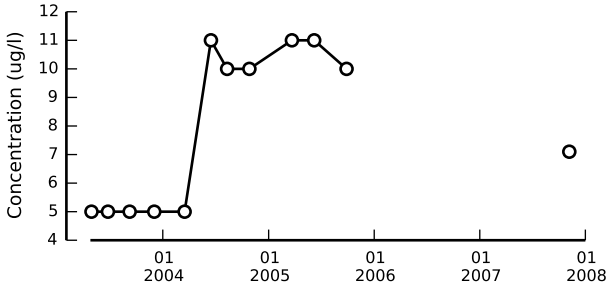
P09-12

Not Sampled

DI-N-BUTYLPHTHALATE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 88 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

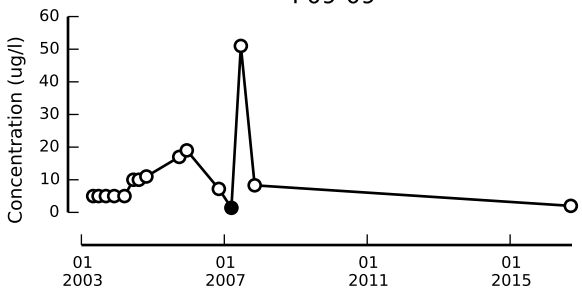
P09-07

Not Sampled

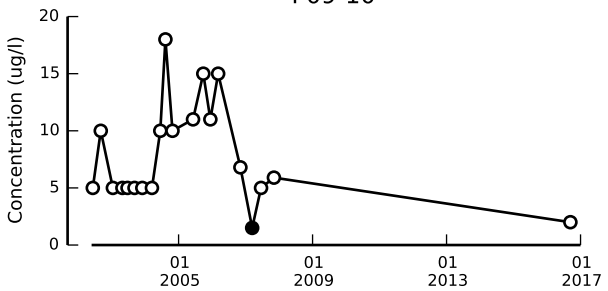
P09-08

Sampled Once

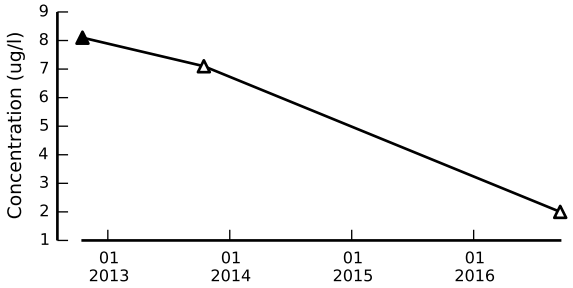
P09-09



P09-10



P09-11



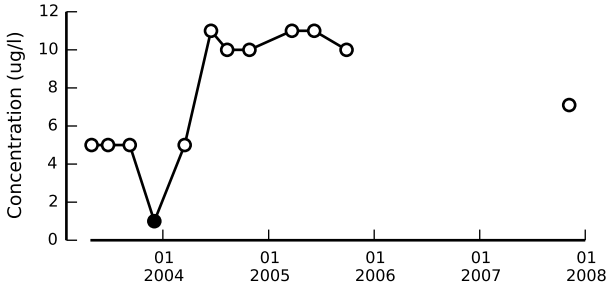
P09-12

Sampled Once

DI-N-OCTYLPHTHALATE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 89 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

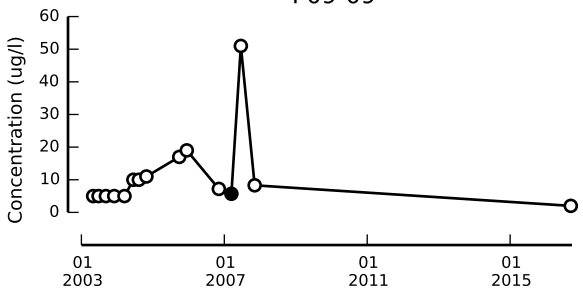
P09-07

Not Sampled

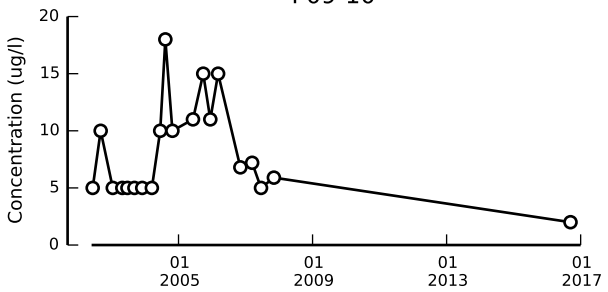
P09-08

Sampled Once

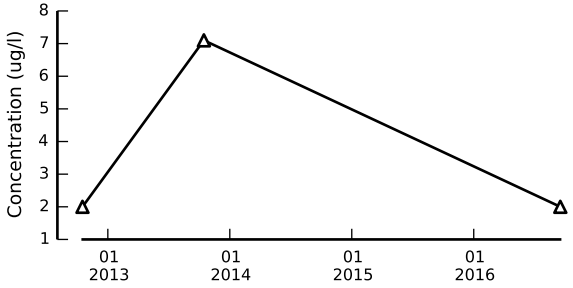
P09-09



P09-10



P09-11



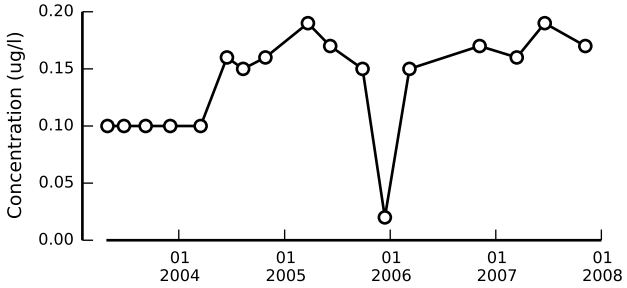
P09-12

Sampled Once

DIBENZ(A,H)ANTHRACENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 90 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

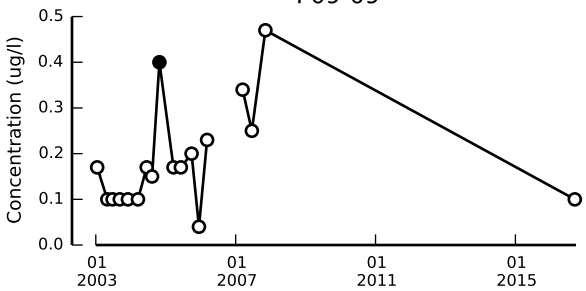
P09-07

Not Sampled

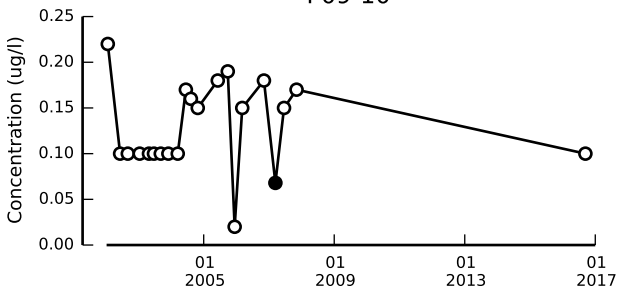
P09-08

Sampled Once

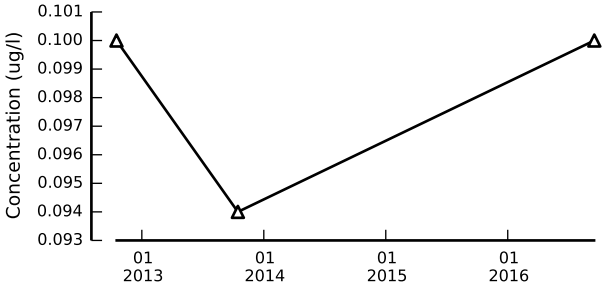
P09-09



P09-10



P09-11



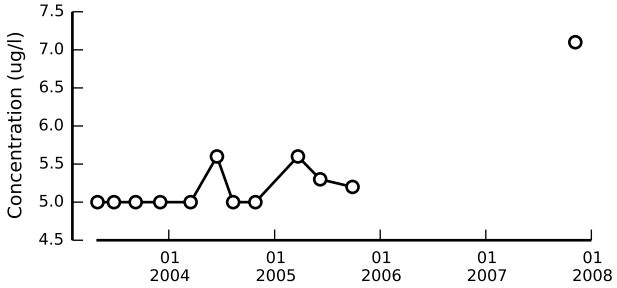
P09-12

Sampled Once

DIBENZOFURAN in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 91 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

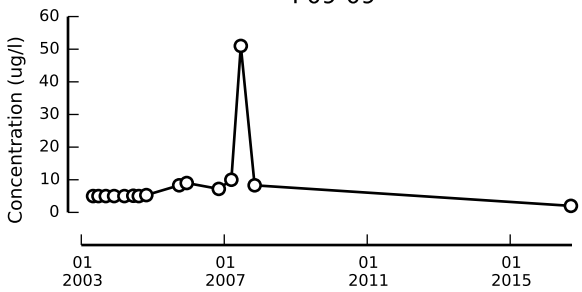
P09-07

Not Sampled

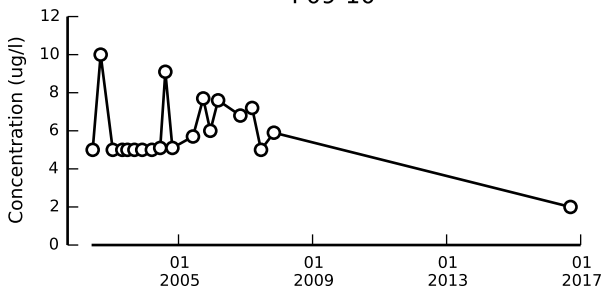
P09-08

Sampled Once

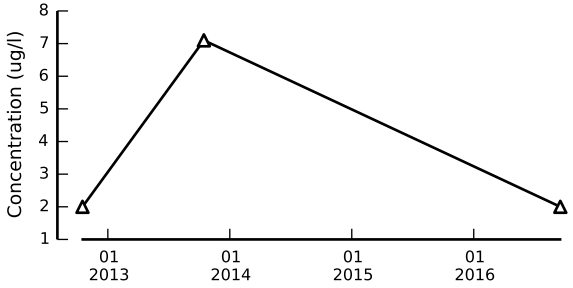
P09-09



P09-10



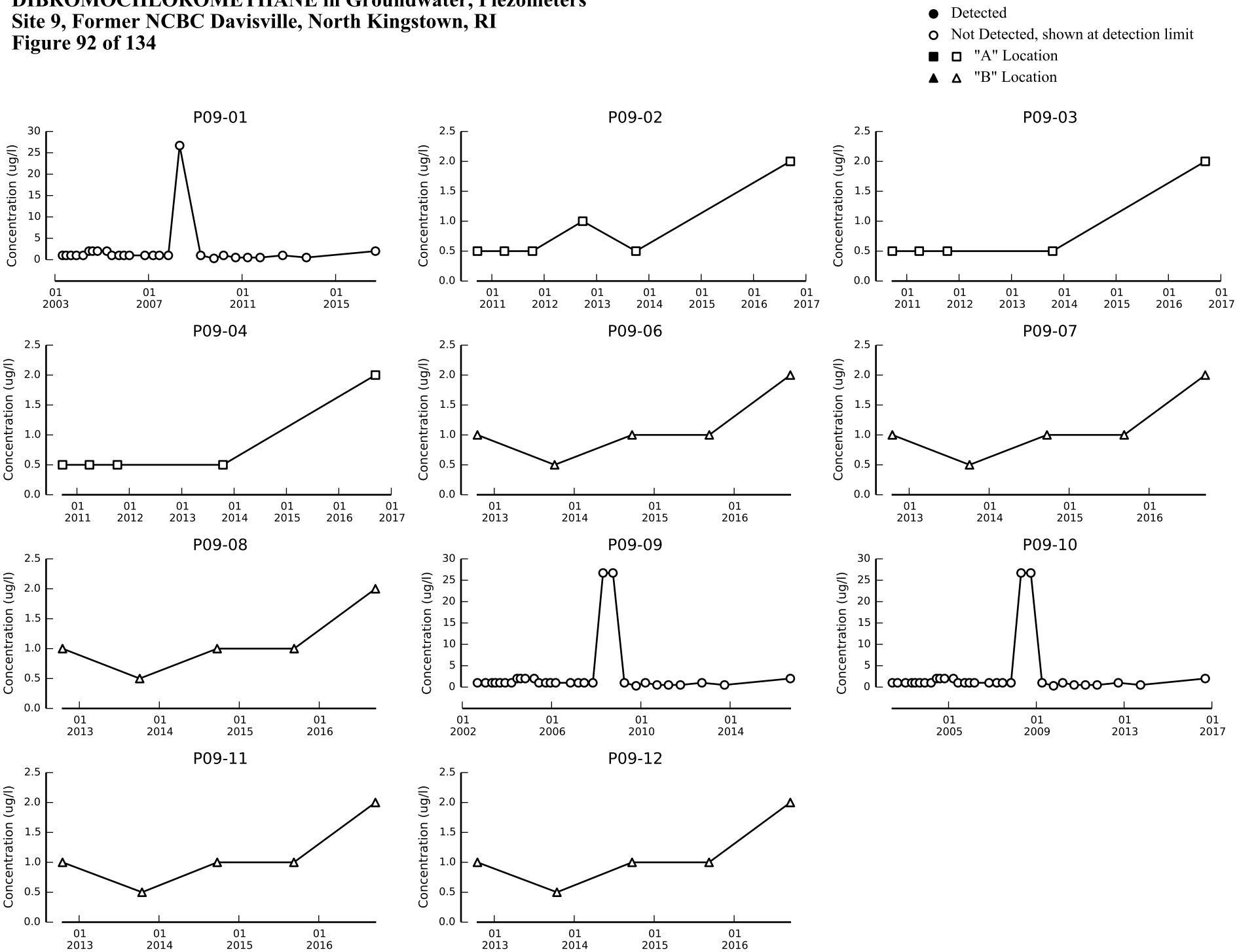
P09-11



P09-12

Sampled Once

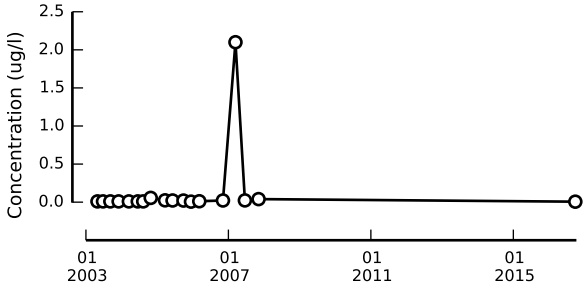
DIBROMOCHLOROMETHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 92 of 134



DIELDRIN in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 93 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

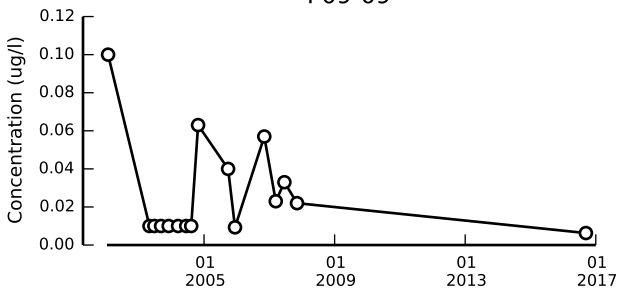
P09-07

Not Sampled

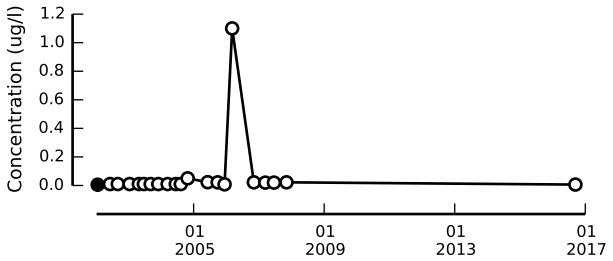
P09-08

Not Sampled

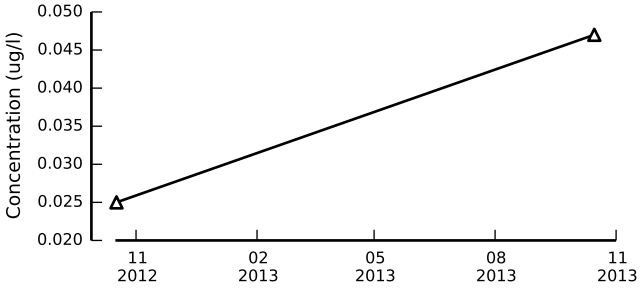
P09-09



P09-10



P09-11



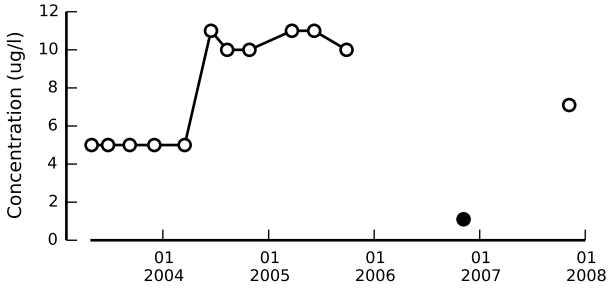
P09-12

Not Sampled

DIETHYLPHTHALATE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 94 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

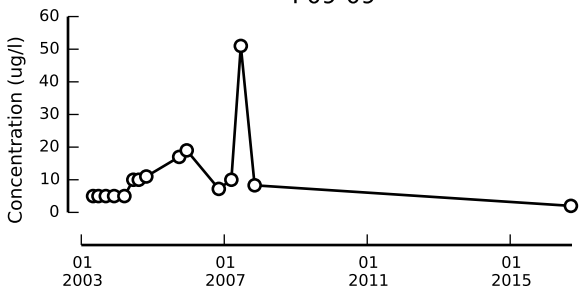
P09-07

Not Sampled

P09-08

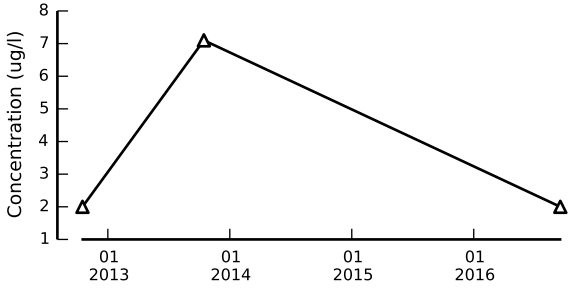
Sampled Once

P09-09



P09-10

P09-11



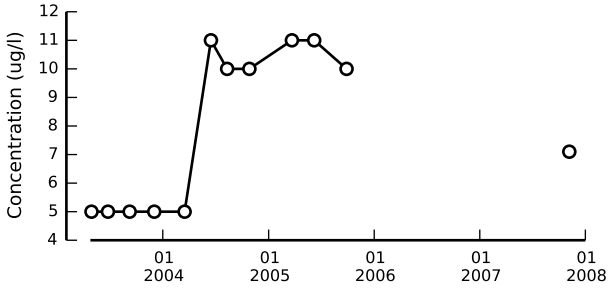
P09-12

Sampled Once

DIMETHYL PHTHALATE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 95 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

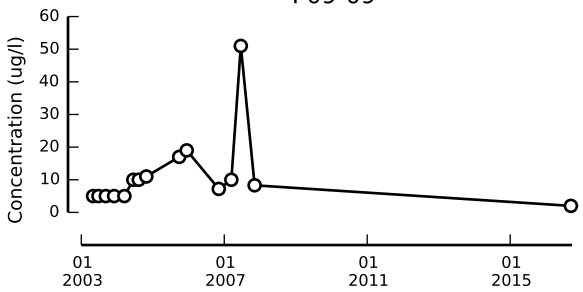
P09-07

Not Sampled

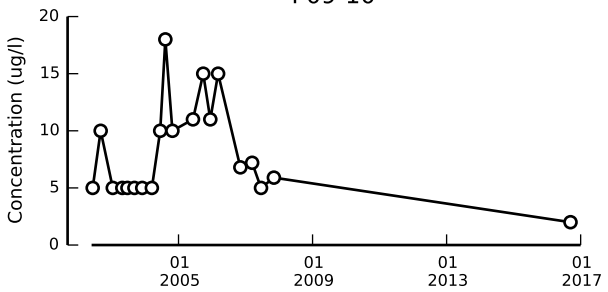
P09-08

Sampled Once

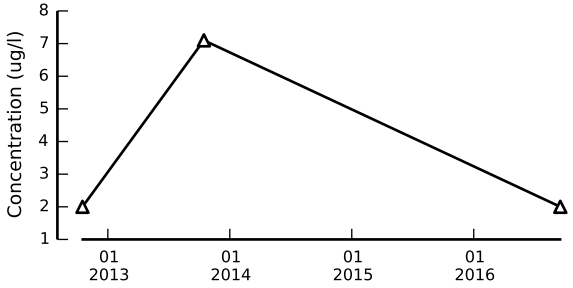
P09-09



P09-10



P09-11



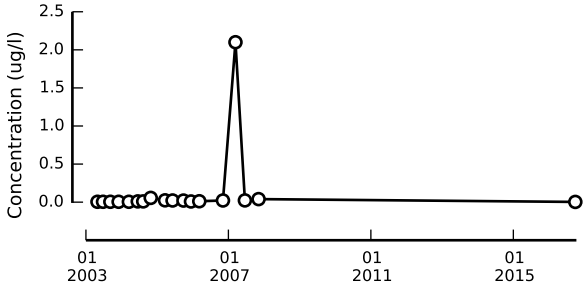
P09-12

Sampled Once

ENDOSULFAN I in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 96 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

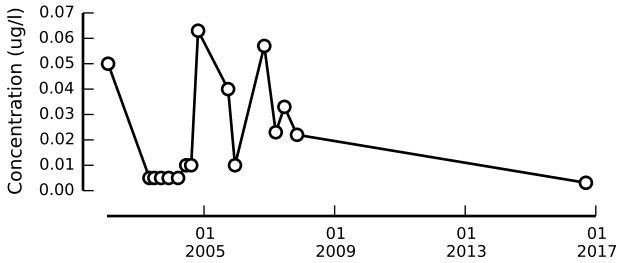
P09-07

Not Sampled

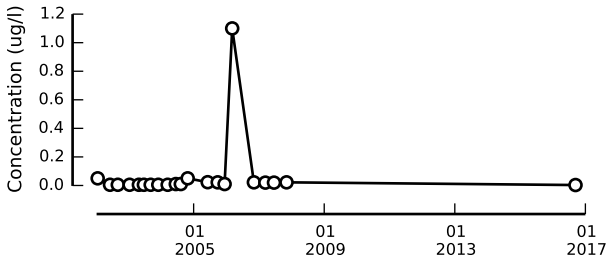
P09-08

Not Sampled

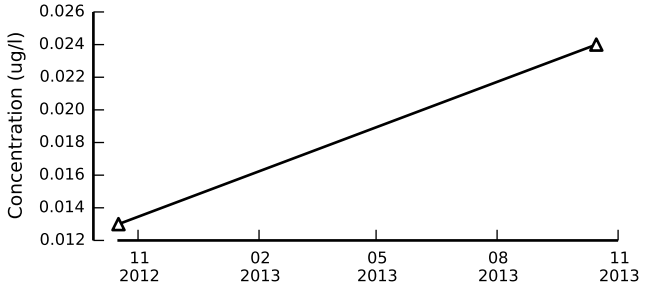
P09-09



P09-10



P09-11



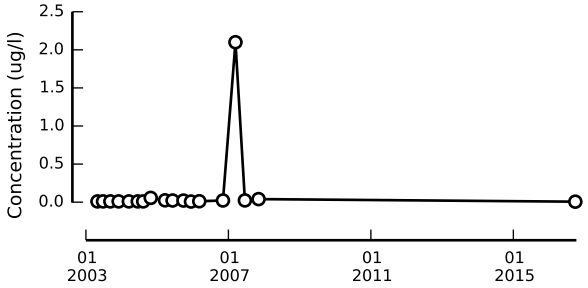
P09-12

Not Sampled

ENDOSULFAN II in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 97 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

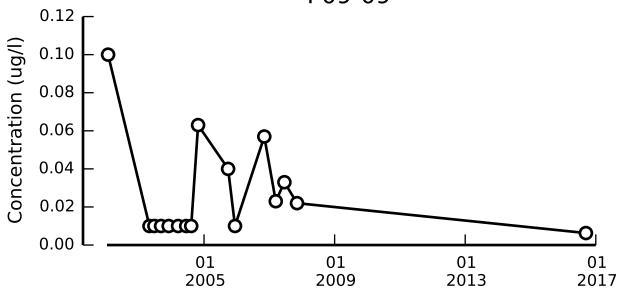
P09-07

Not Sampled

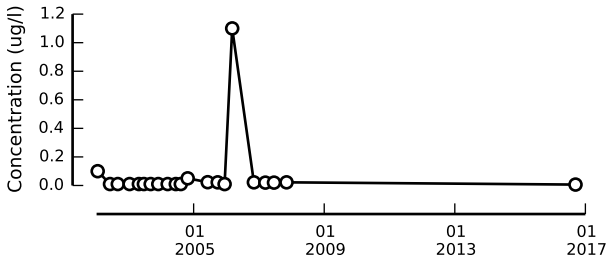
P09-08

Not Sampled

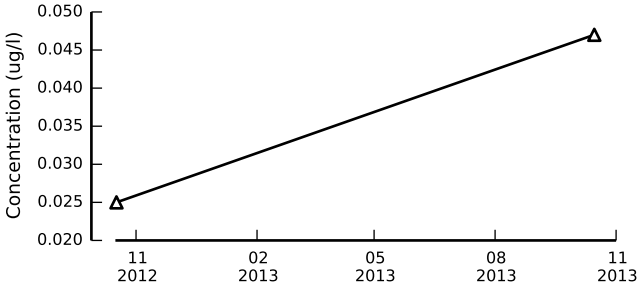
P09-09



P09-10



P09-11



P09-12

Not Sampled

ENDOSULFAN SULFATE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 98 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01

P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

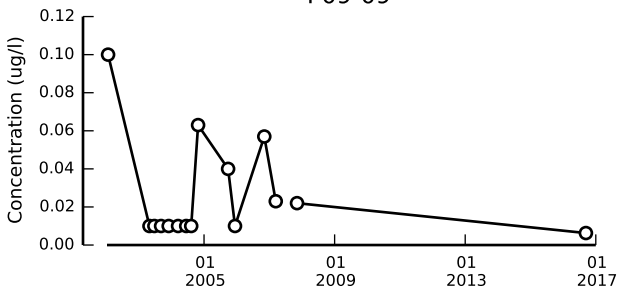
P09-07

Not Sampled

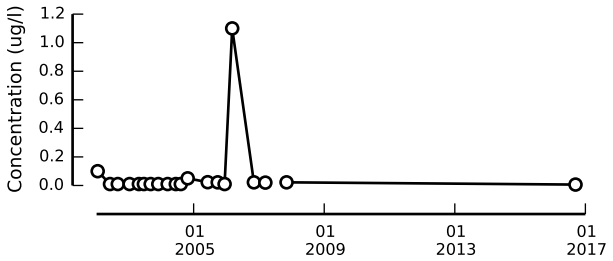
P09-08

Not Sampled

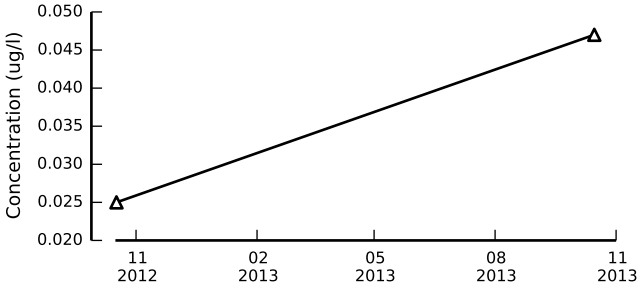
P09-09



P09-10



P09-11



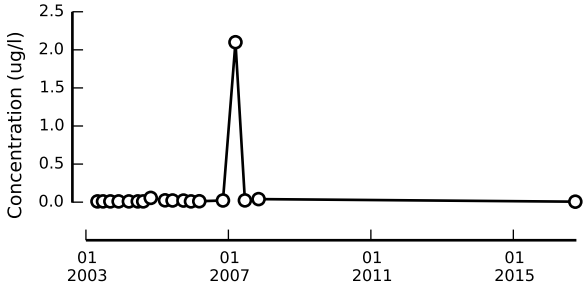
P09-12

Not Sampled

ENDRIN in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 99 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

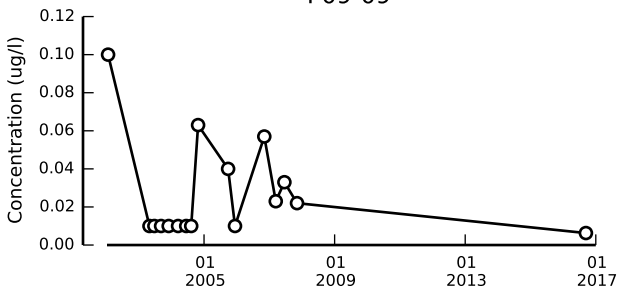
P09-07

Not Sampled

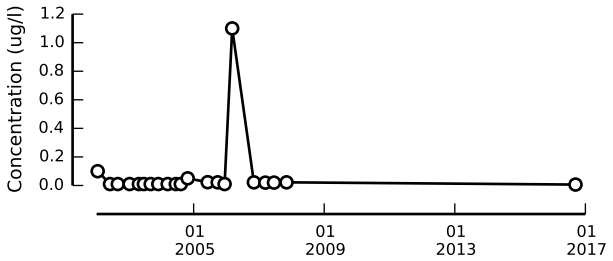
P09-08

Not Sampled

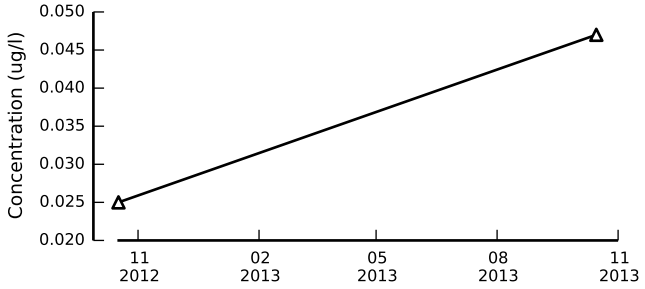
P09-09



P09-10



P09-11



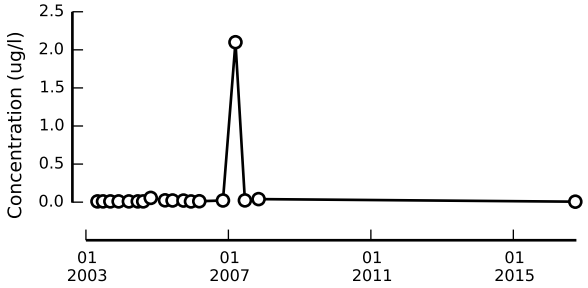
P09-12

Not Sampled

ENDRIN KETONE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 100 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

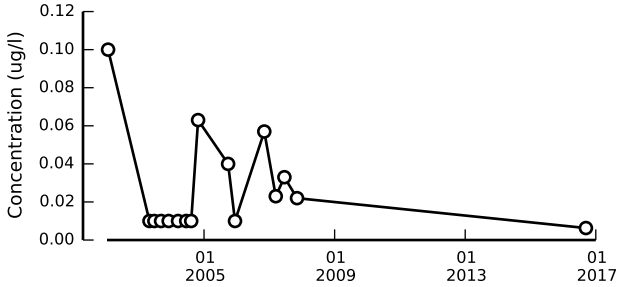
P09-07

Not Sampled

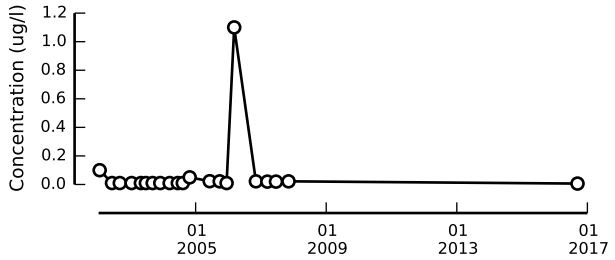
P09-08

Not Sampled

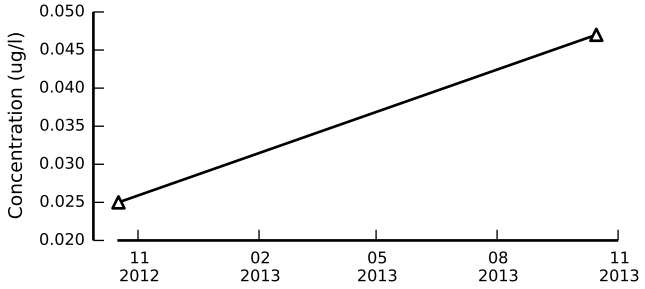
P09-09



P09-10



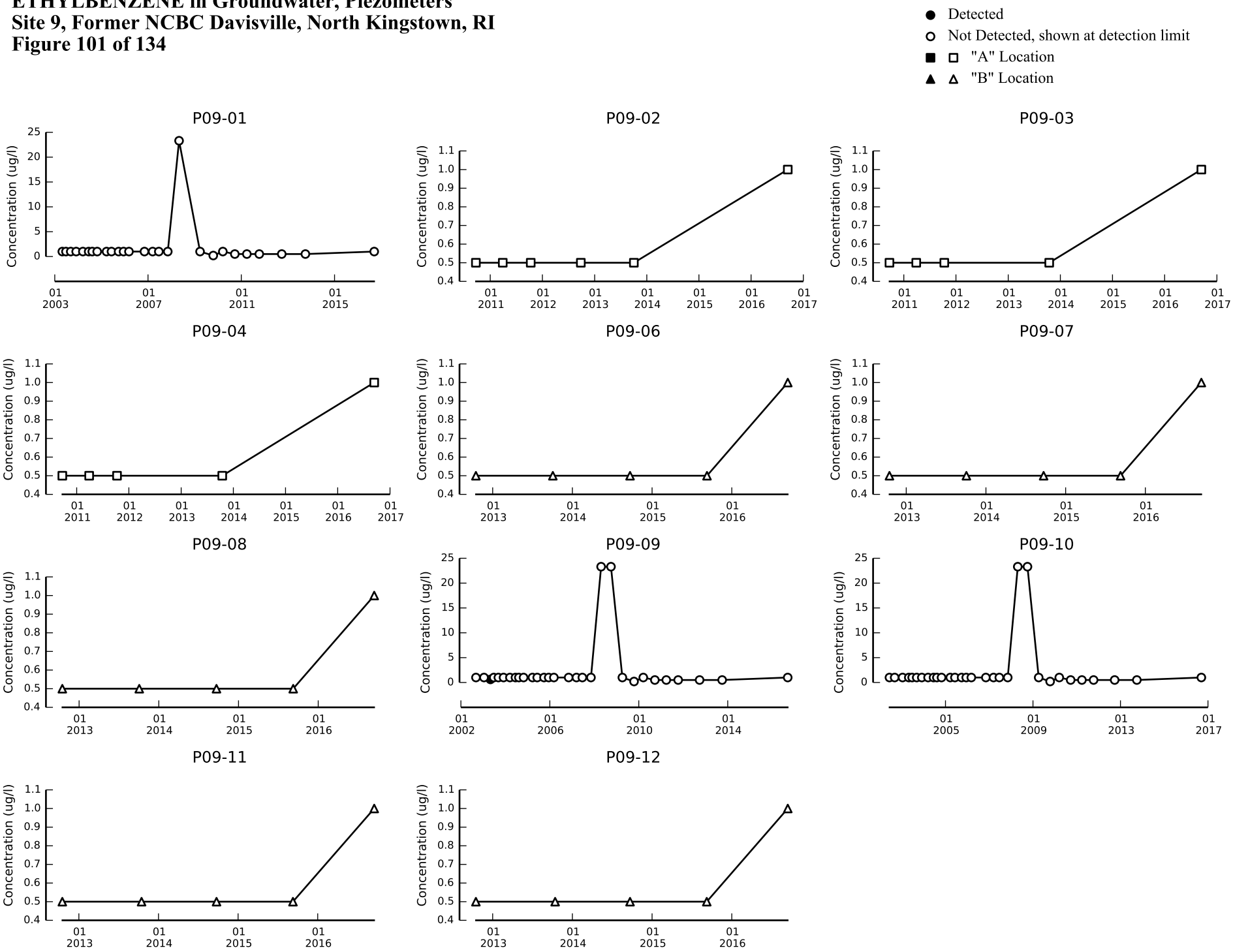
P09-11



P09-12

Not Sampled

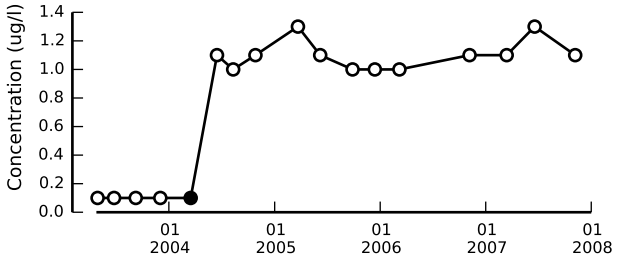
ETHYLBENZENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 101 of 134



FLUORANTHENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 102 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

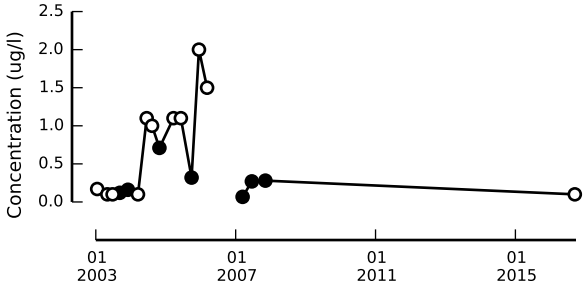
P09-07

Not Sampled

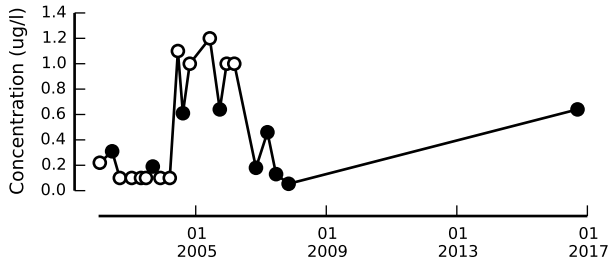
P09-08

Sampled Once

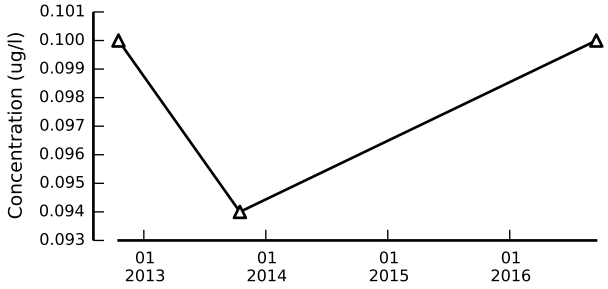
P09-09



P09-10



P09-11



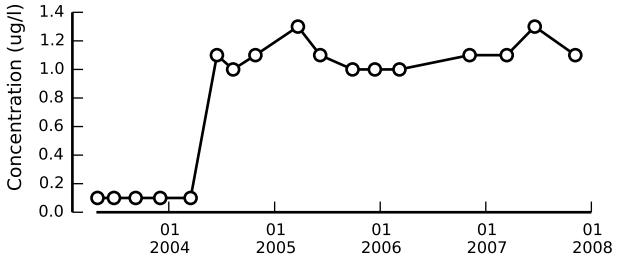
P09-12

Sampled Once

FLUORENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 103 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

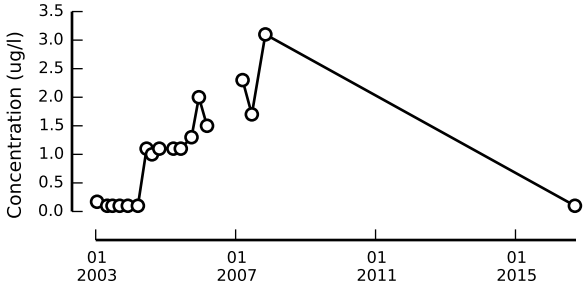
P09-07

Not Sampled

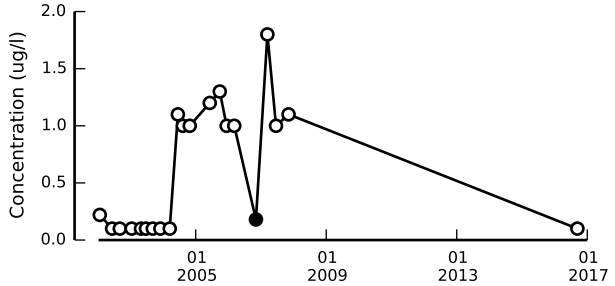
P09-08

Sampled Once

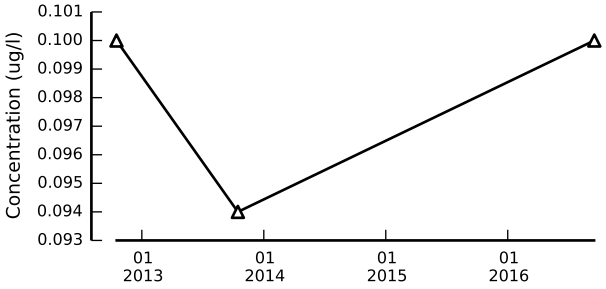
P09-09



P09-10



P09-11



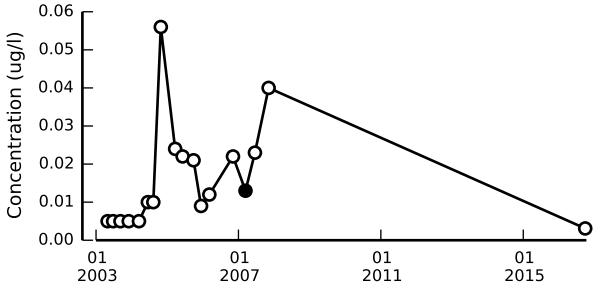
P09-12

Sampled Once

HEPTACHLOR in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 104 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

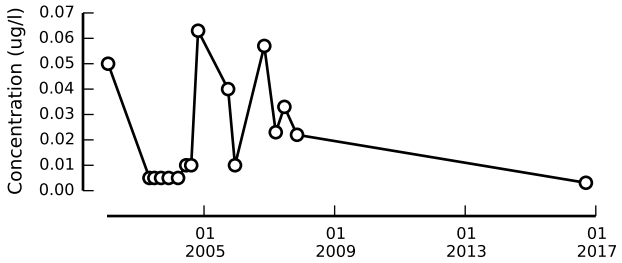
P09-07

Not Sampled

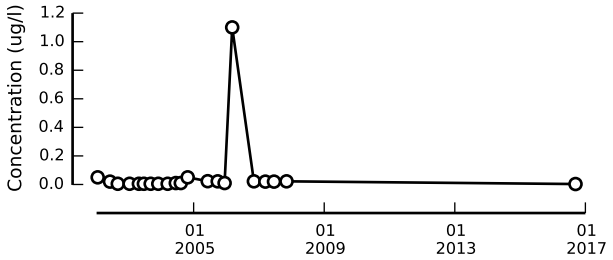
P09-08

Not Sampled

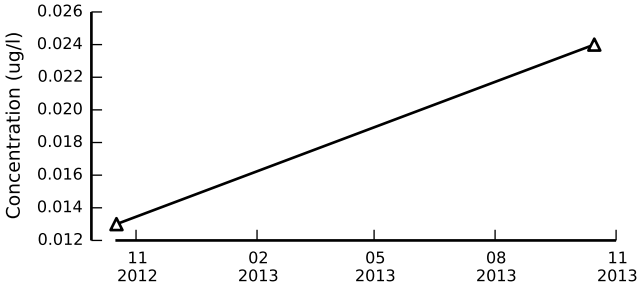
P09-09



P09-10



P09-11



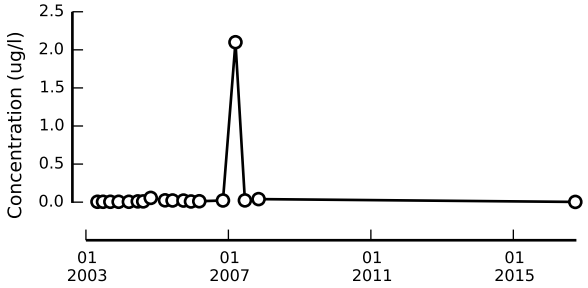
P09-12

Not Sampled

HEPTACHLOR EPOXIDE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 105 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

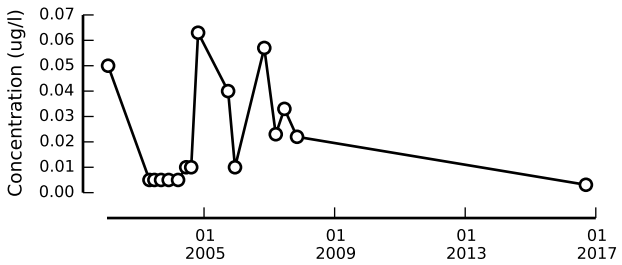
P09-07

Not Sampled

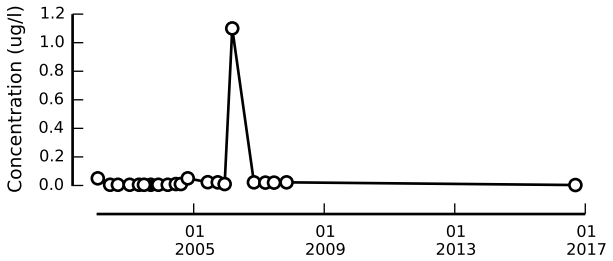
P09-08

Not Sampled

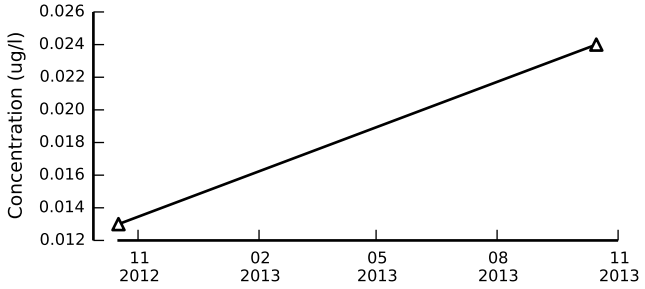
P09-09



P09-10



P09-11



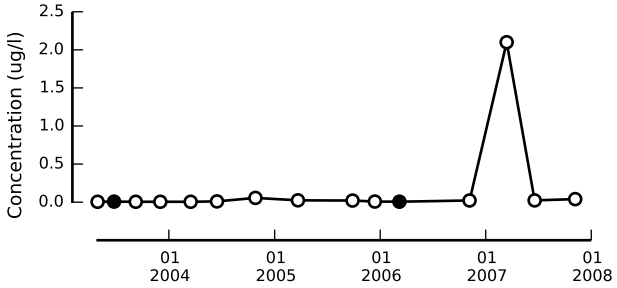
P09-12

Not Sampled

HEXACHLOROBENZENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 106 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

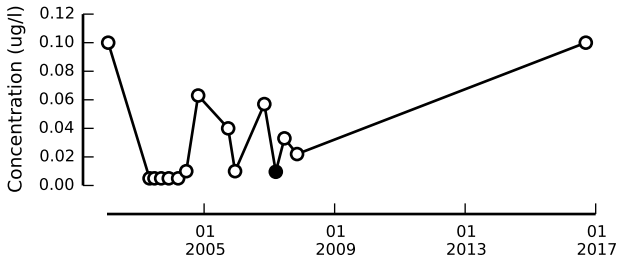
P09-07

Not Sampled

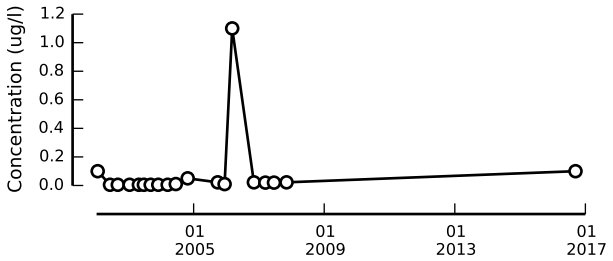
P09-08

Sampled Once

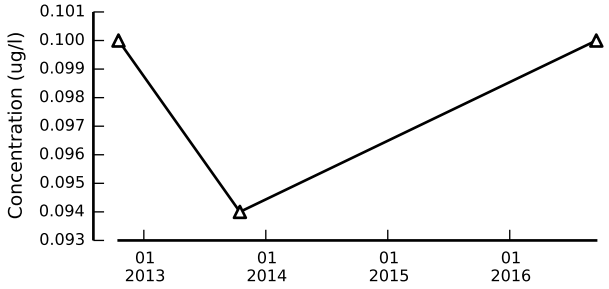
P09-09



P09-10



P09-11



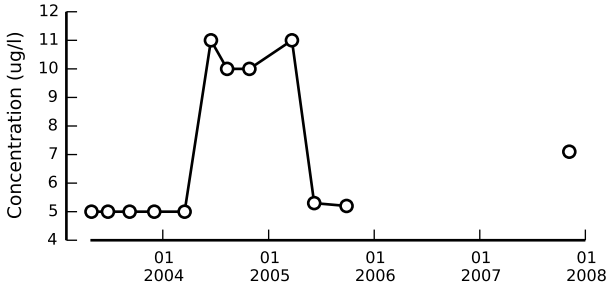
P09-12

Sampled Once

HEXACHLOROBUTADIENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 107 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

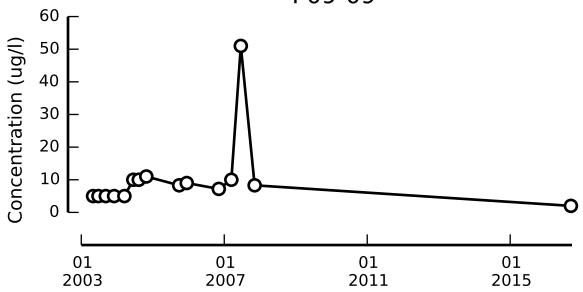
P09-07

Not Sampled

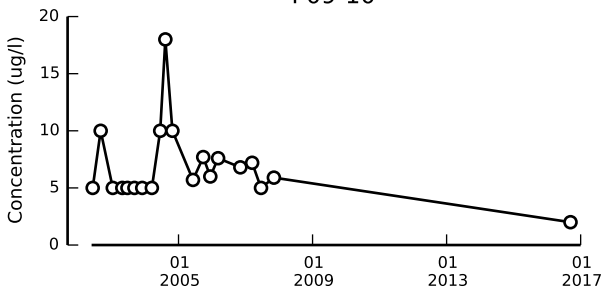
P09-08

Sampled Once

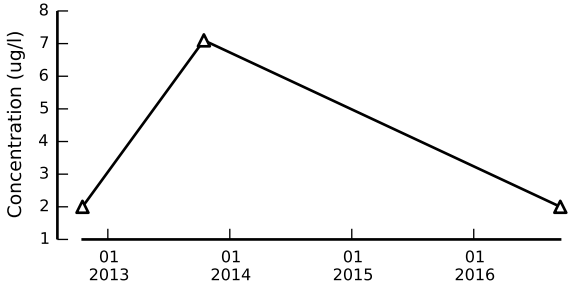
P09-09



P09-10



P09-11



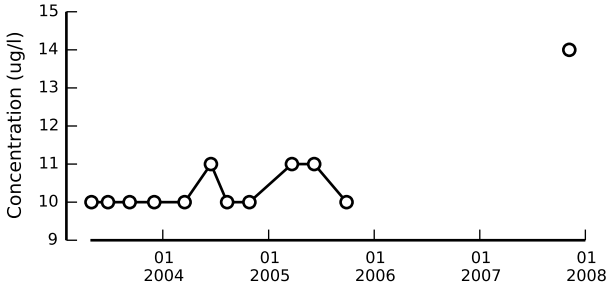
P09-12

Sampled Once

HEXACHLOROCYCLOPENTADIENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 108 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

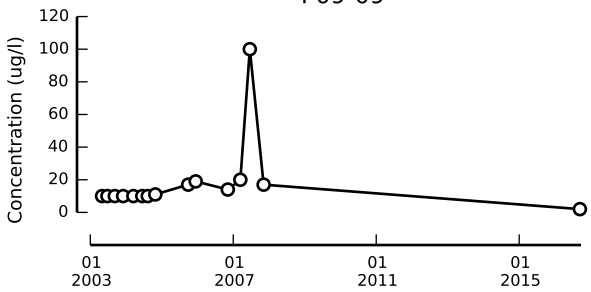
P09-07

Not Sampled

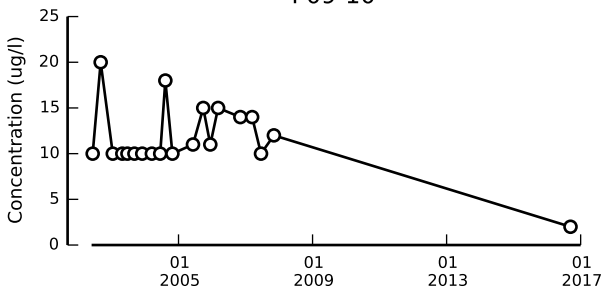
P09-08

Sampled Once

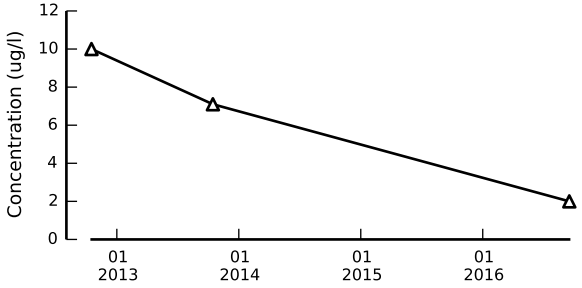
P09-09



P09-10



P09-11



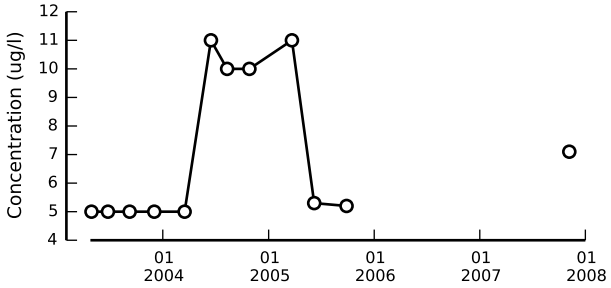
P09-12

Sampled Once

HEXACHLOROETHANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 109 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

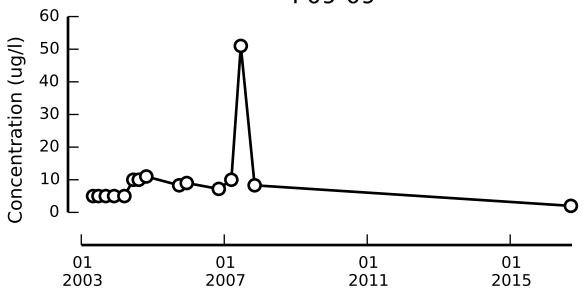
P09-07

Not Sampled

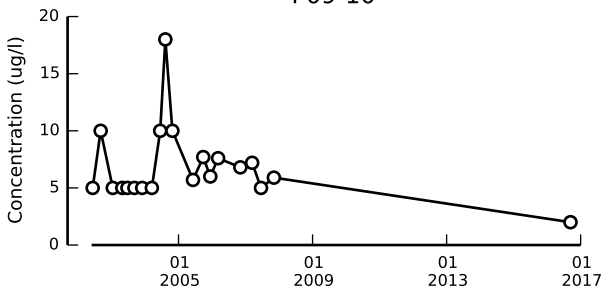
P09-08

Sampled Once

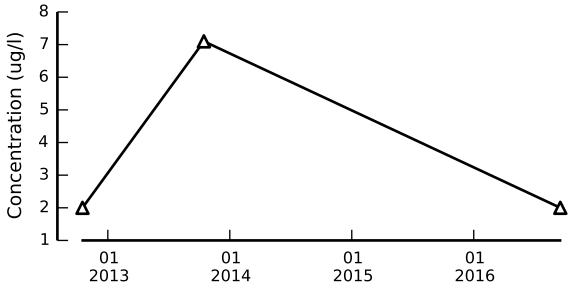
P09-09



P09-10



P09-11



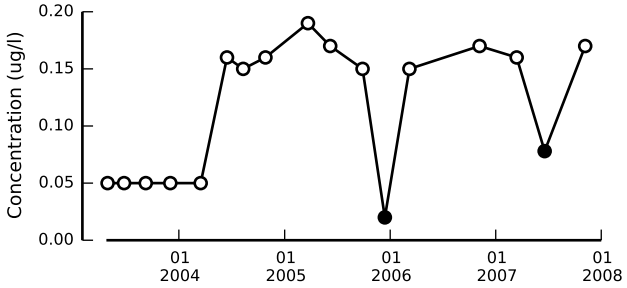
P09-12

Sampled Once

INDENO(1,2,3-CD)PYRENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 110 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

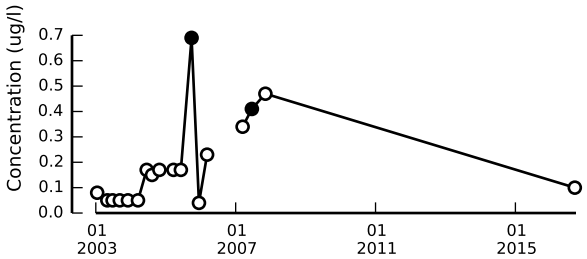
P09-07

Not Sampled

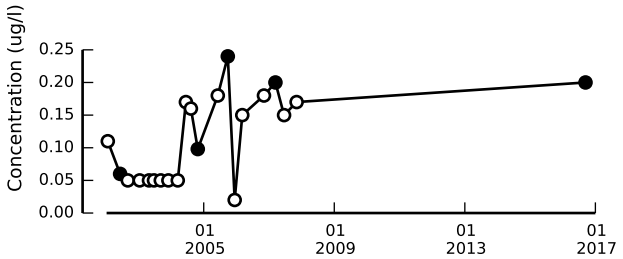
P09-08

Sampled Once

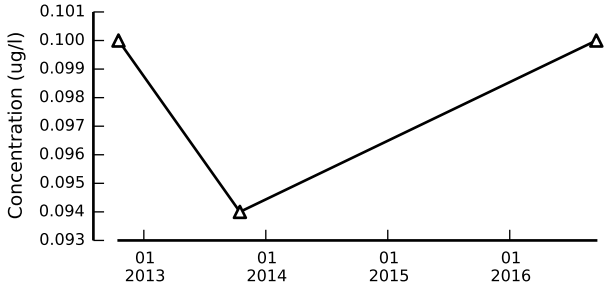
P09-09



P09-10



P09-11



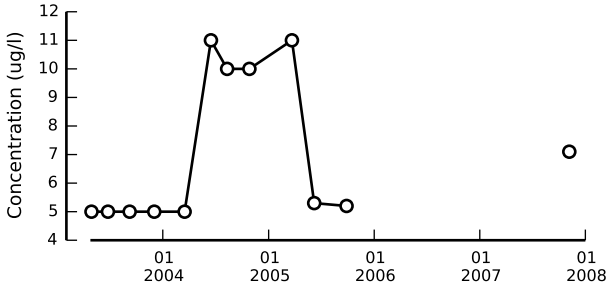
P09-12

Sampled Once

ISOPHORONE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 111 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

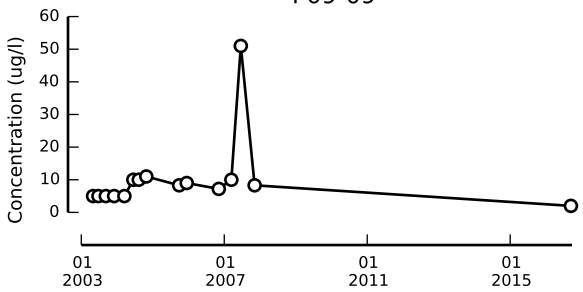
P09-07

Not Sampled

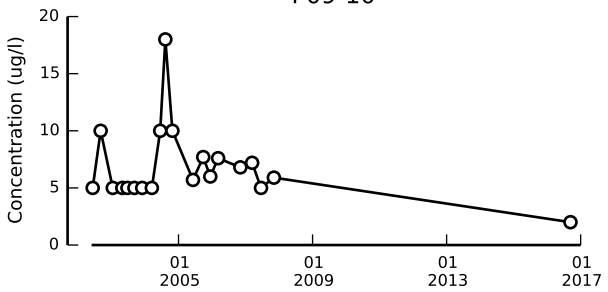
P09-08

Sampled Once

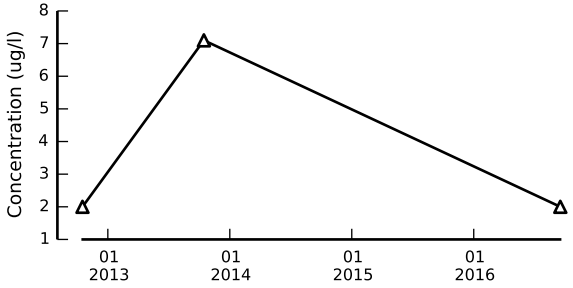
P09-09



P09-10



P09-11



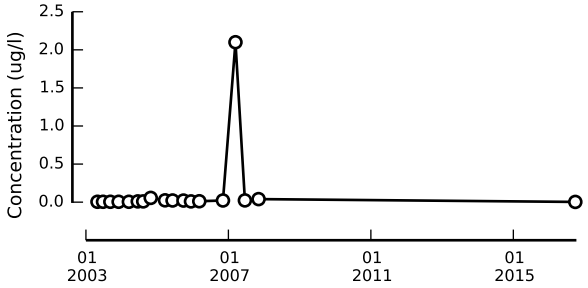
P09-12

Sampled Once

LINDANE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 112 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

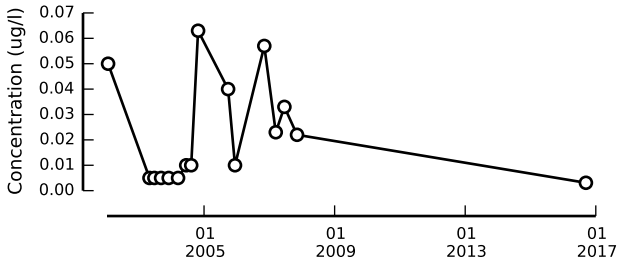
P09-07

Not Sampled

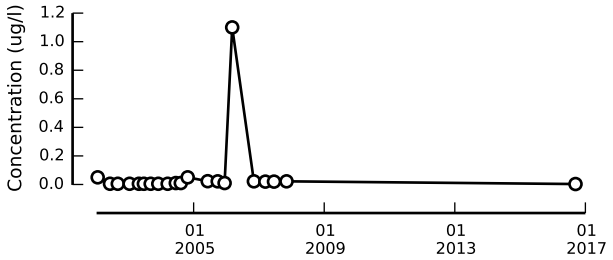
P09-08

Not Sampled

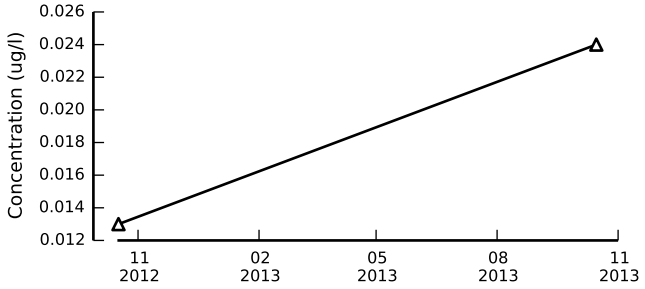
P09-09



P09-10



P09-11



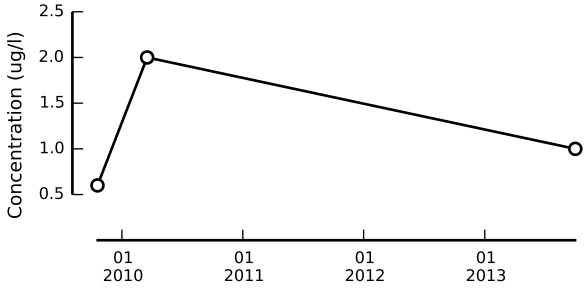
P09-12

Not Sampled

M- AND P-XYLENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 113 of 134

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Sampled Once

P09-03

Sampled Once

P09-04

Sampled Once

P09-06

Sampled Once

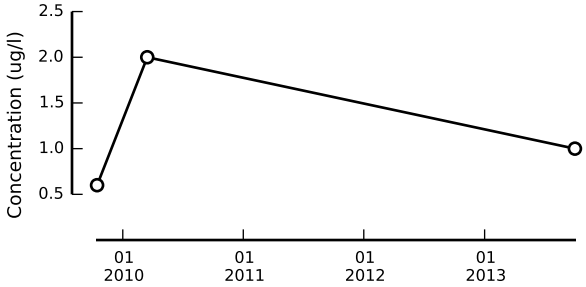
P09-07

Sampled Once

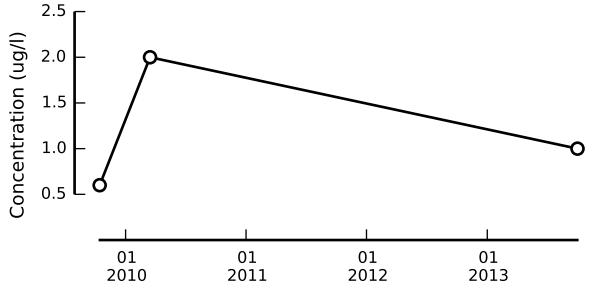
P09-08

Sampled Once

P09-09



P09-10



P09-11

Sampled Once

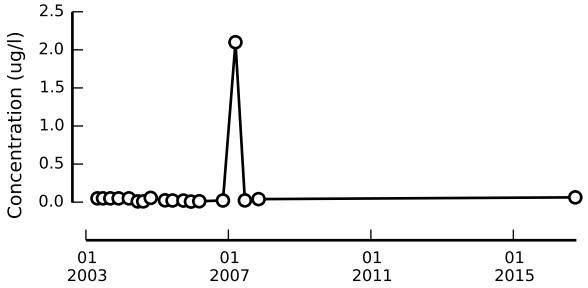
P09-12

Sampled Once

METHOXYCHLOR in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 114 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

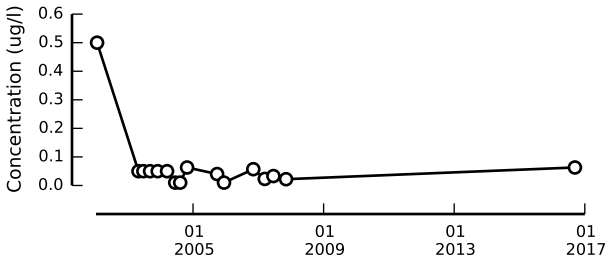
P09-07

Not Sampled

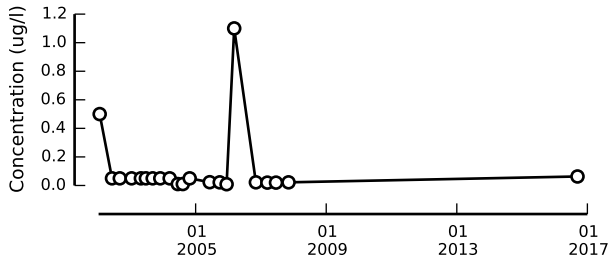
P09-08

Not Sampled

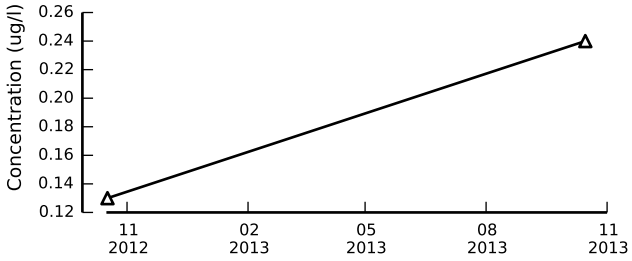
P09-09



P09-10



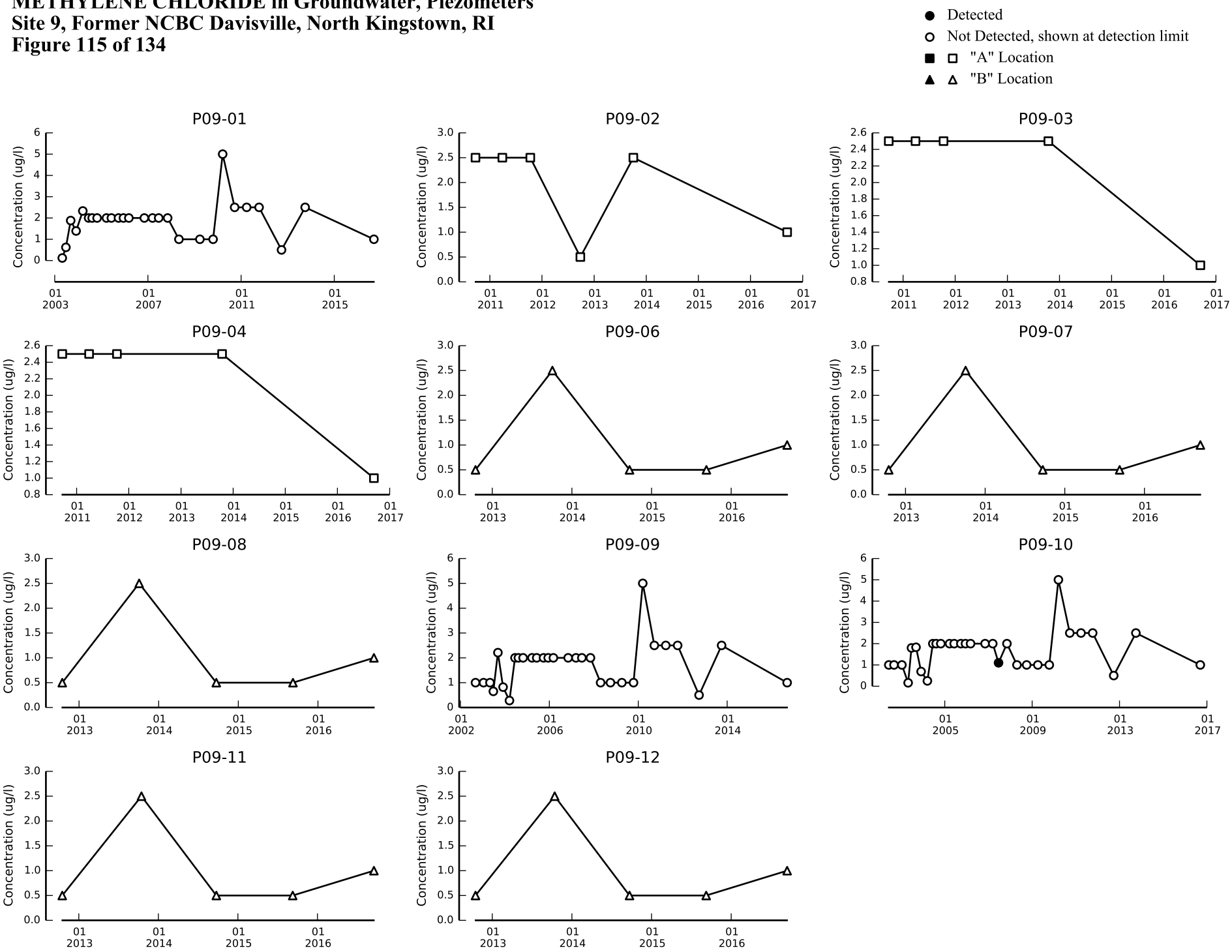
P09-11



P09-12

Not Sampled

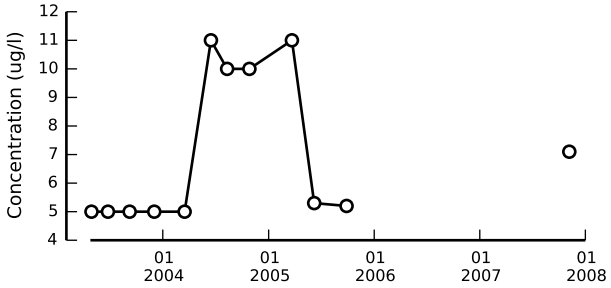
METHYLENE CHLORIDE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 115 of 134



N-NITROSODINPROPYLAMINE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 116 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

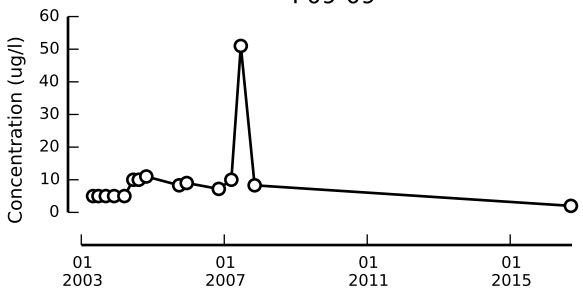
P09-07

Not Sampled

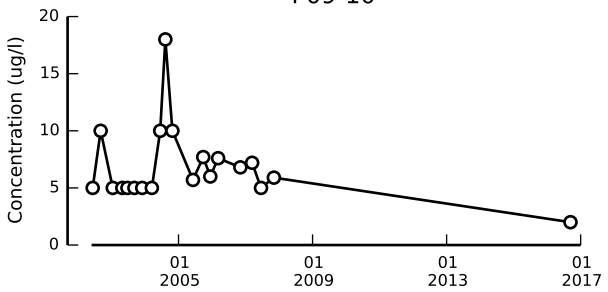
P09-08

Sampled Once

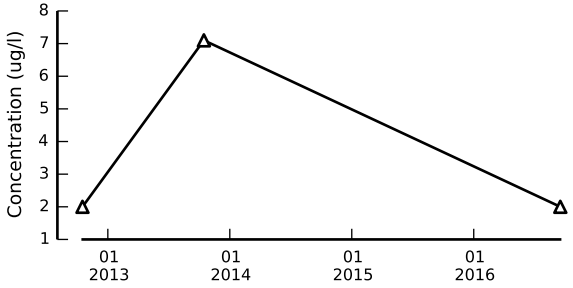
P09-09



P09-10



P09-11



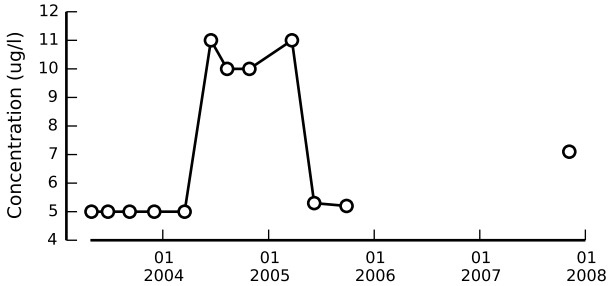
P09-12

Sampled Once

N-NITROSODIPHENYLAMINE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 117 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

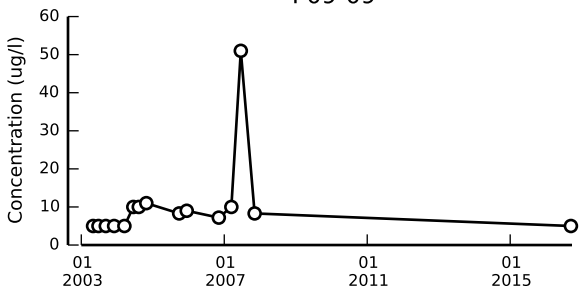
P09-07

Not Sampled

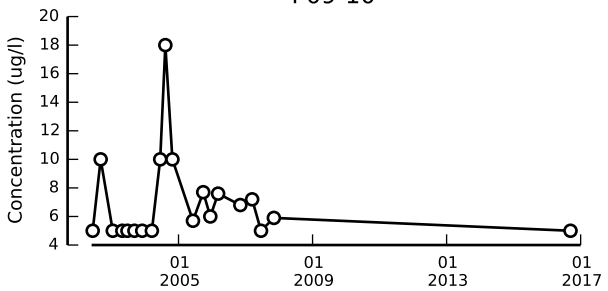
P09-08

Sampled Once

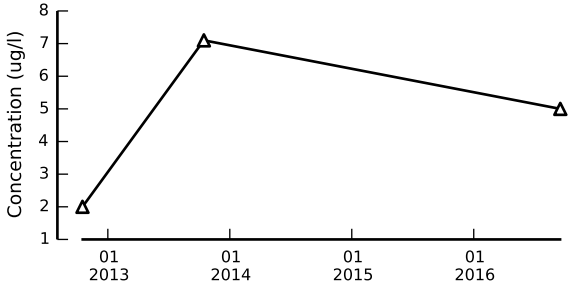
P09-09



P09-10



P09-11



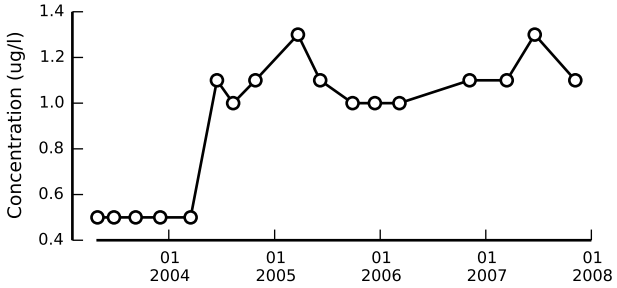
P09-12

Sampled Once

NAPHTHALENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 118 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

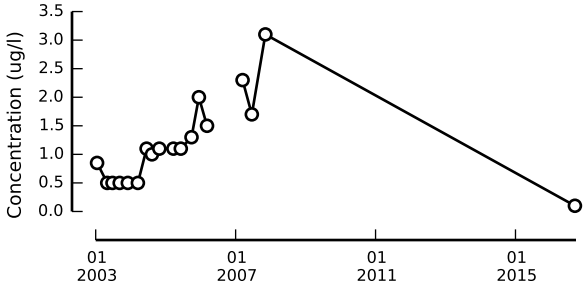
P09-07

Not Sampled

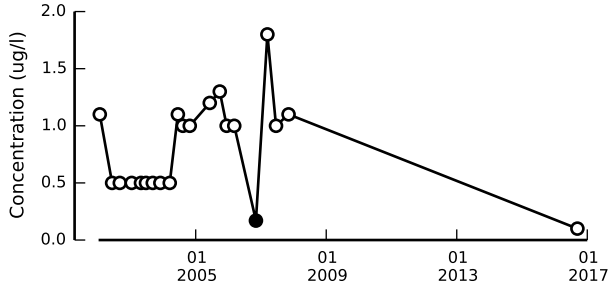
P09-08

Sampled Once

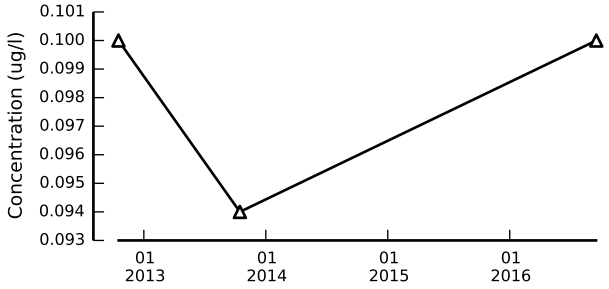
P09-09



P09-10



P09-11



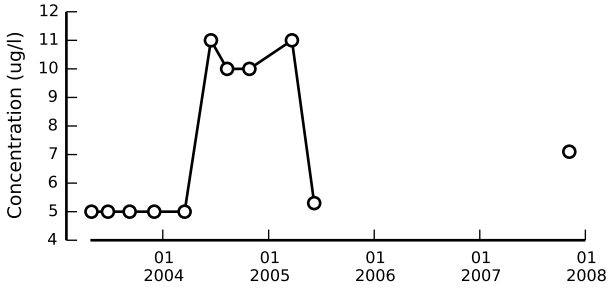
P09-12

Sampled Once

NITROBENZENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 119 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

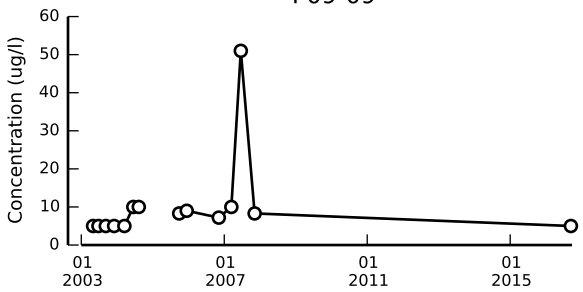
P09-07

Not Sampled

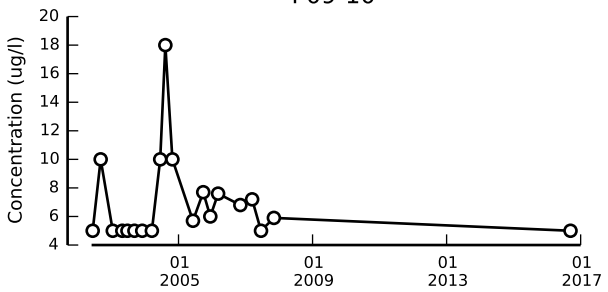
P09-08

Sampled Once

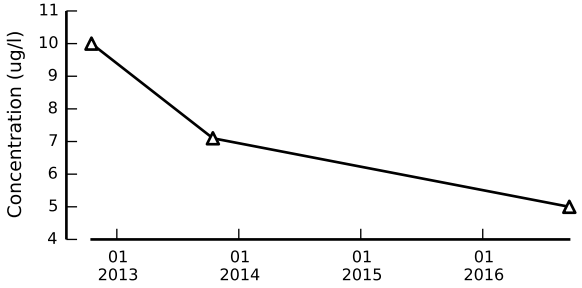
P09-09



P09-10



P09-11



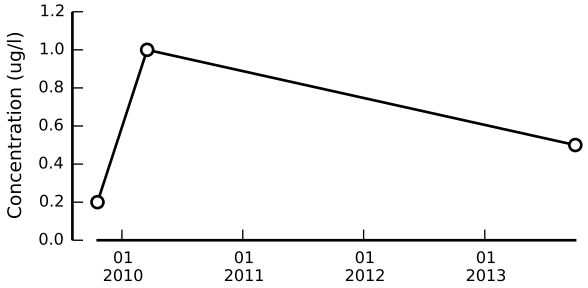
P09-12

Sampled Once

O-XYLENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 120 of 134

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Sampled Once

P09-03

Sampled Once

P09-04

Sampled Once

P09-06

Sampled Once

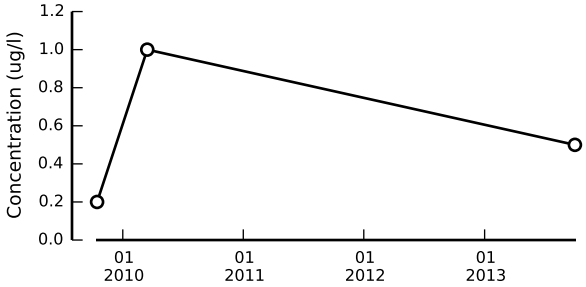
P09-07

Sampled Once

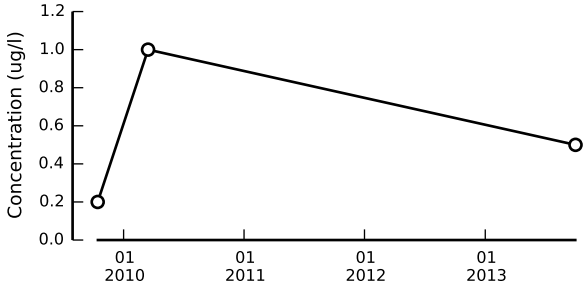
P09-08

Sampled Once

P09-09



P09-10



P09-11

Sampled Once

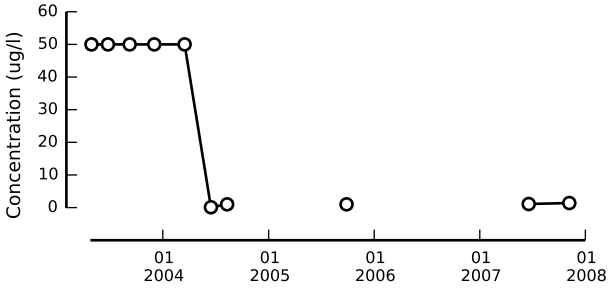
P09-12

Sampled Once

PENTACHLOROPHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 121 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

P09-07

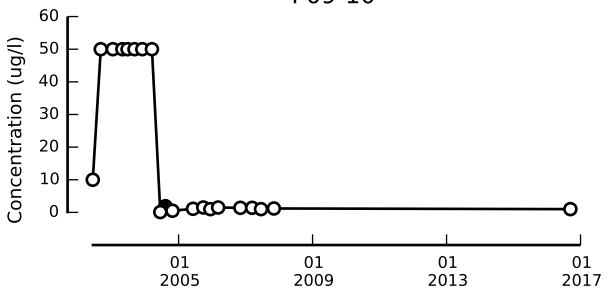
Not Sampled

P09-08

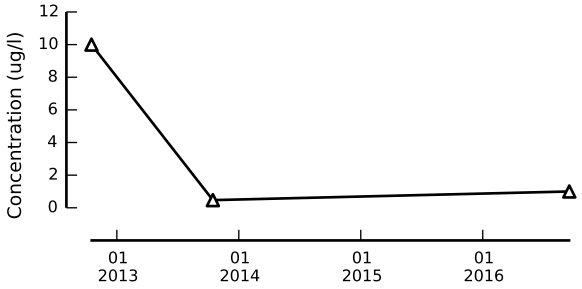
Sampled Once

P09-09

P09-10



P09-11



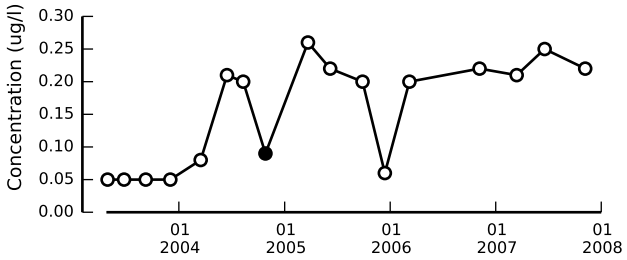
P09-12

Sampled Once

PHENANTHRENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 122 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

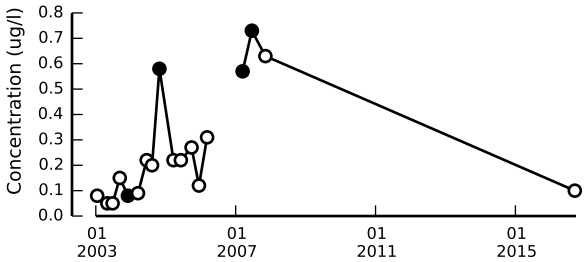
P09-07

Not Sampled

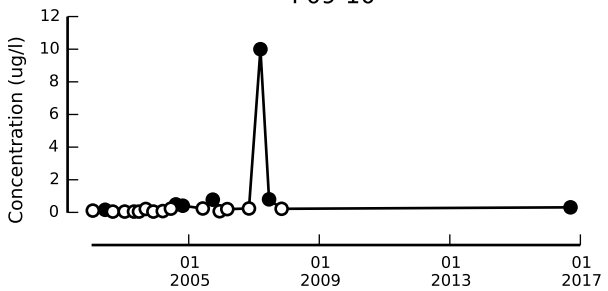
P09-08

Sampled Once

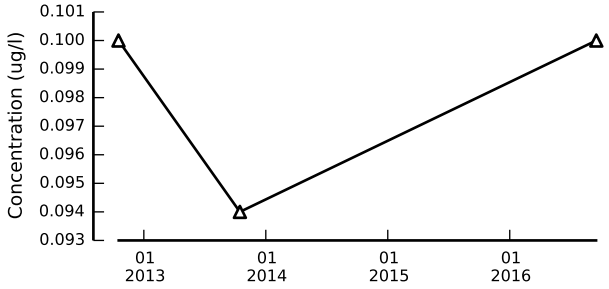
P09-09



P09-10



P09-11



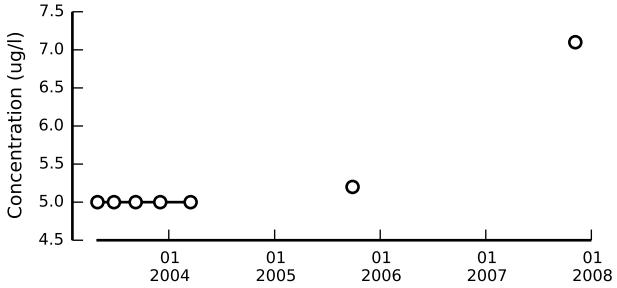
P09-12

Sampled Once

PHENOL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 123 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

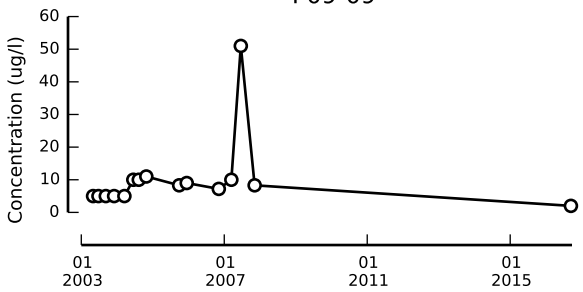
P09-07

Not Sampled

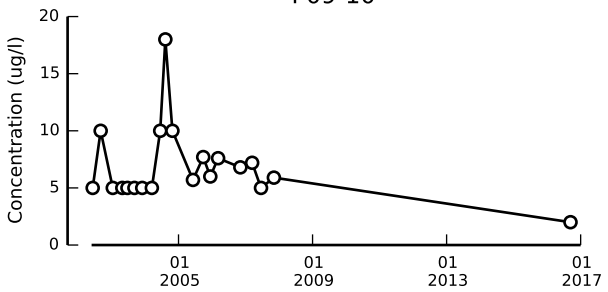
P09-08

Sampled Once

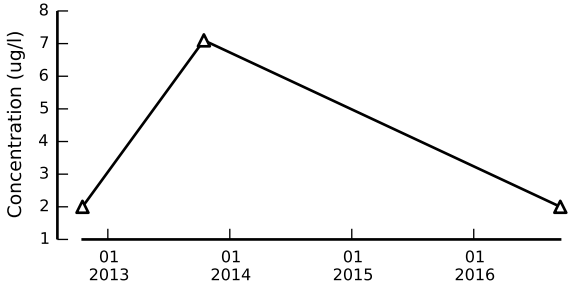
P09-09



P09-10



P09-11



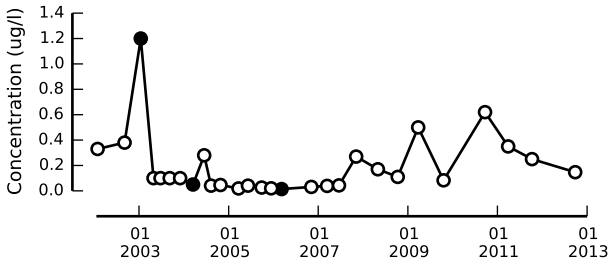
P09-12

Sampled Once

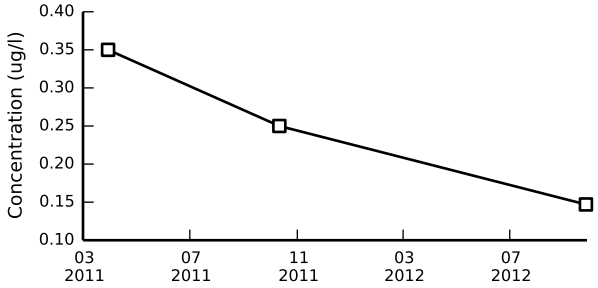
POLYCHLORINATED BIPHENYLS (PCBS) in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 124 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

P09-01



P09-02



P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

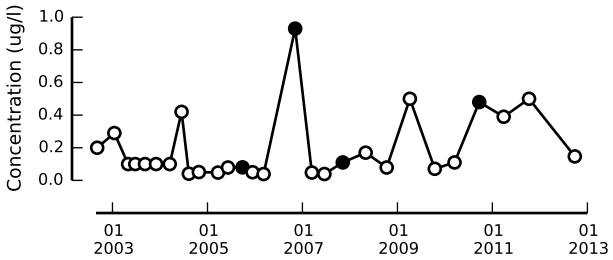
P09-07

Not Sampled

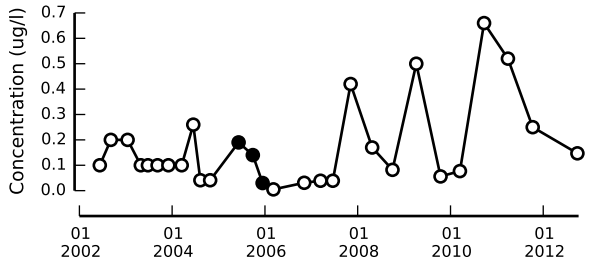
P09-08

Not Sampled

P09-09



P09-10



P09-11

Sampled Once

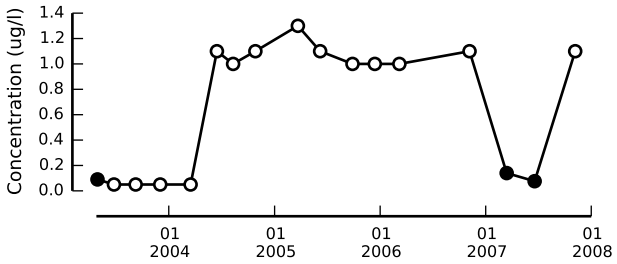
P09-12

Not Sampled

PYRENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 125 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Sampled Once

P09-06

Sampled Once

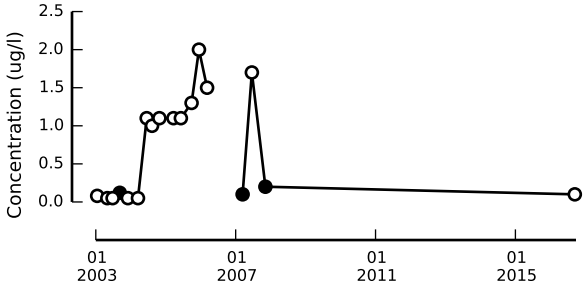
P09-07

Not Sampled

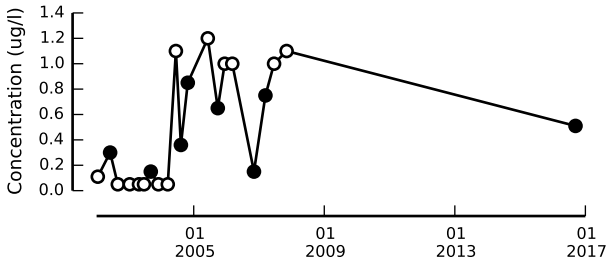
P09-08

Sampled Once

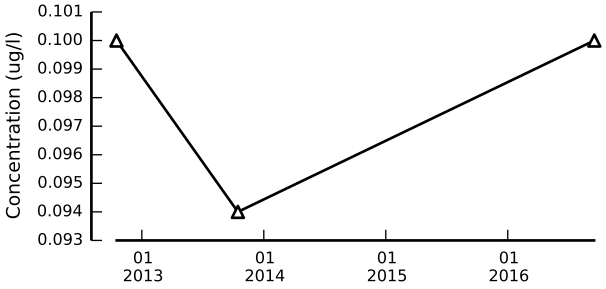
P09-09



P09-10



P09-11



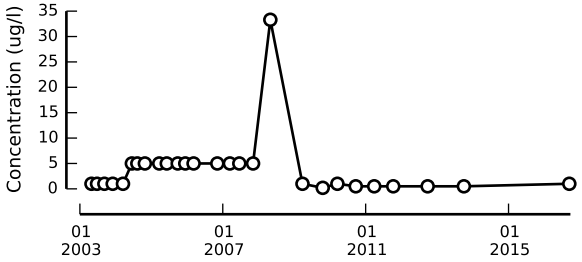
P09-12

Sampled Once

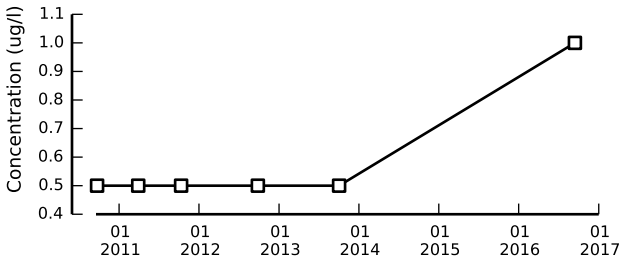
STYRENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 126 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

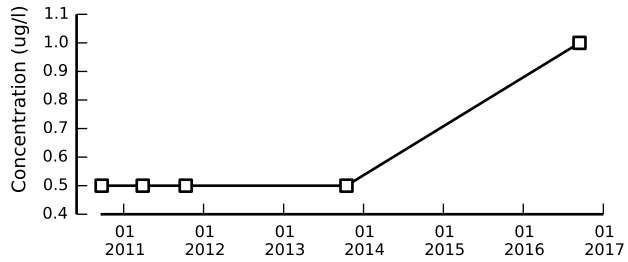
P09-01



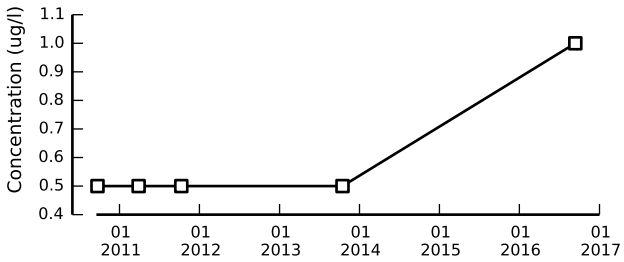
P09-02



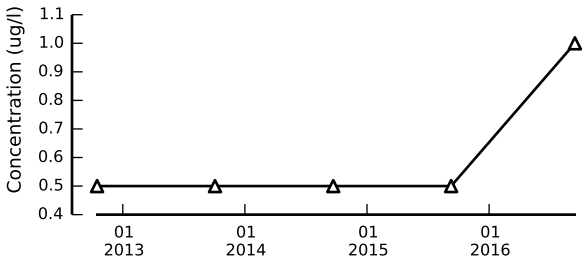
P09-03



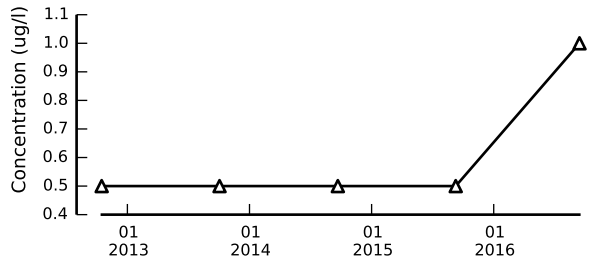
P09-04



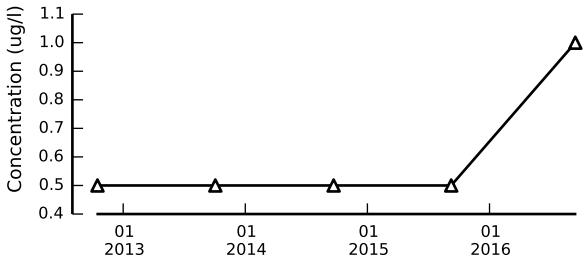
P09-06



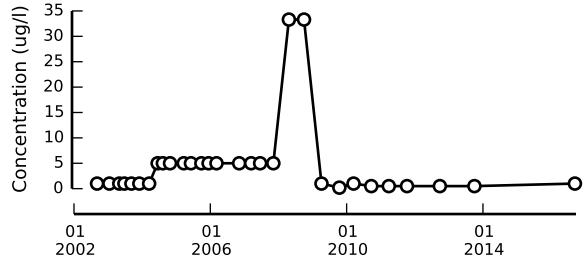
P09-07



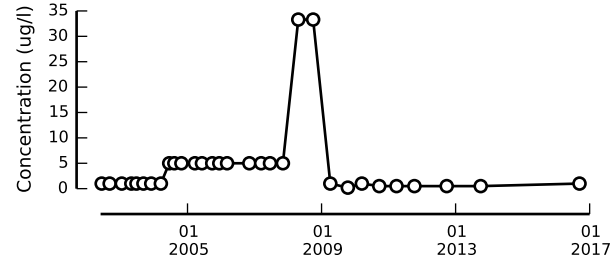
P09-08



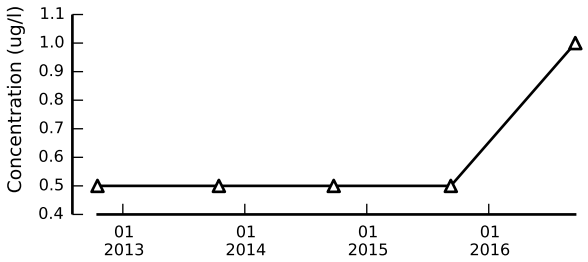
P09-09



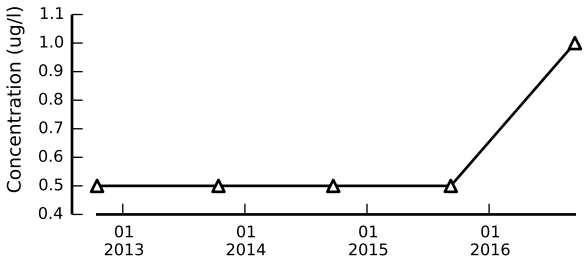
P09-10



P09-11



P09-12



SULFIDE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 127 of 134

● Detected
○ Not Detected, shown at detection limit
▲ △ "B" Location

P09-01

Not Sampled

P09-02

Not Sampled

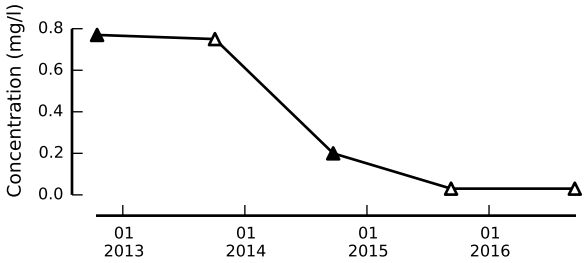
P09-03

Not Sampled

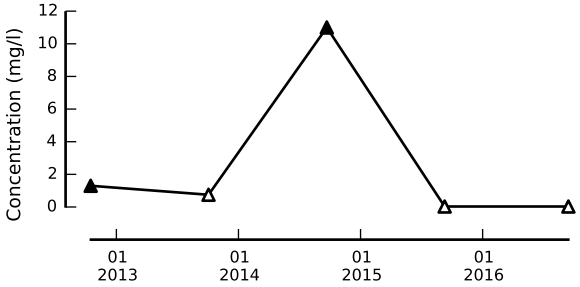
P09-04

Not Sampled

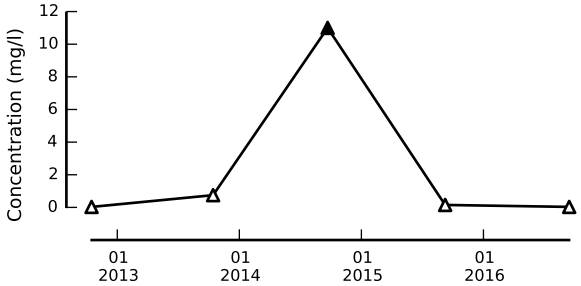
P09-06



P09-07



P09-08



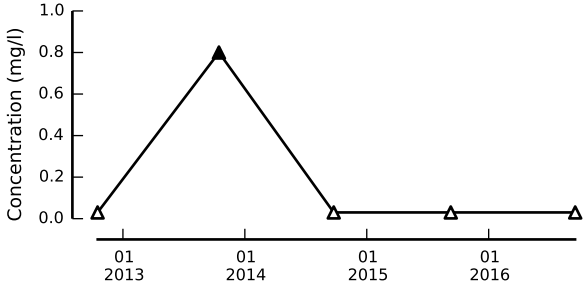
P09-09

Sampled Once

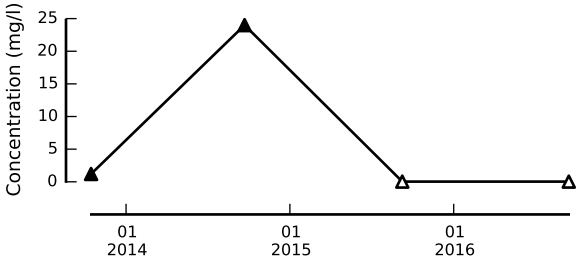
P09-10

Sampled Once

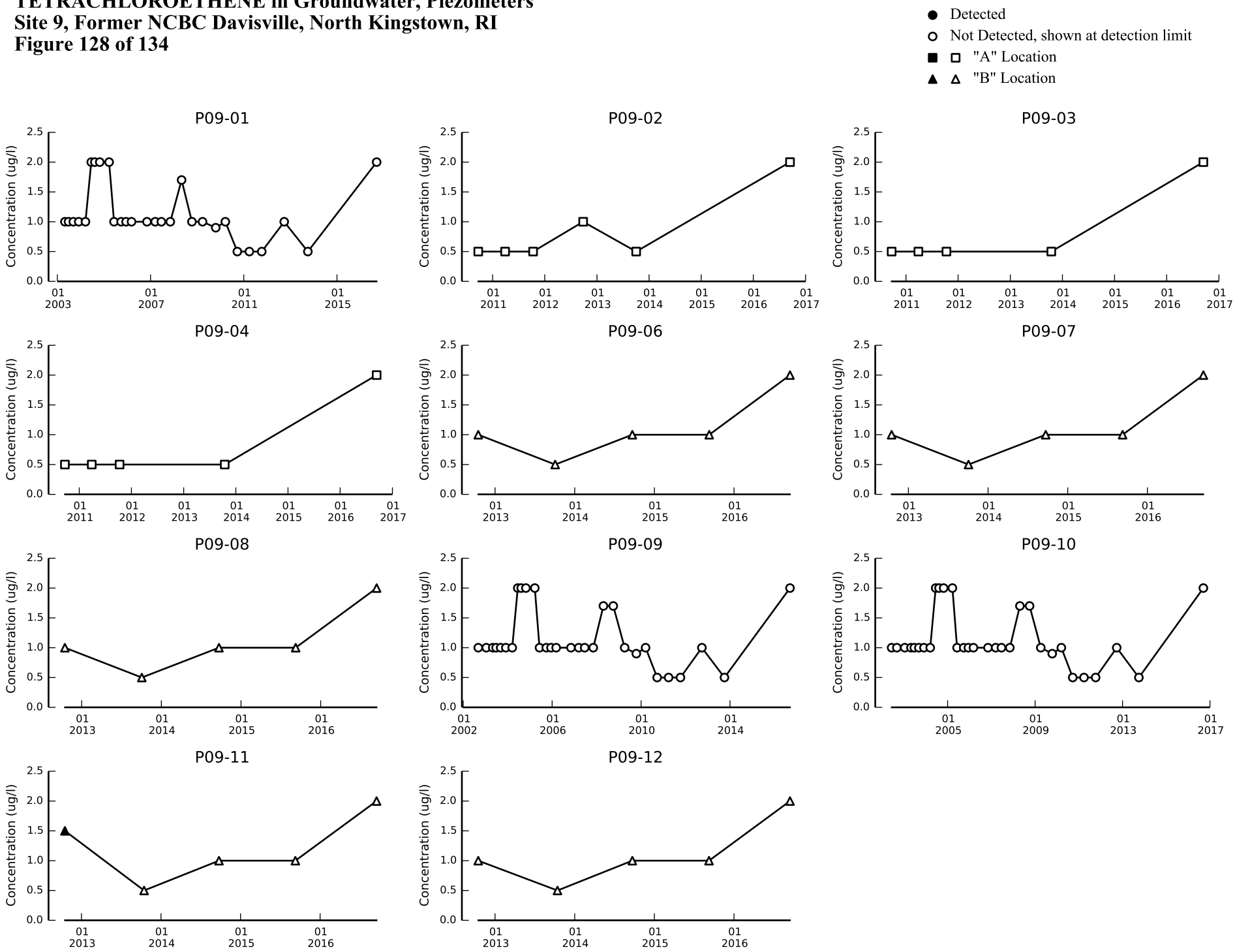
P09-11



P09-12



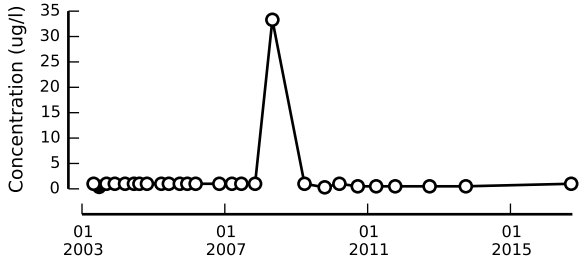
TETRACHLOROETHENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 128 of 134



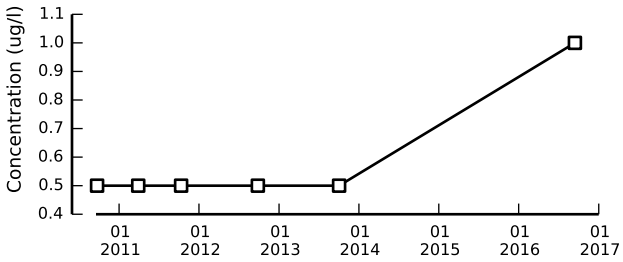
TOLUENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 129 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

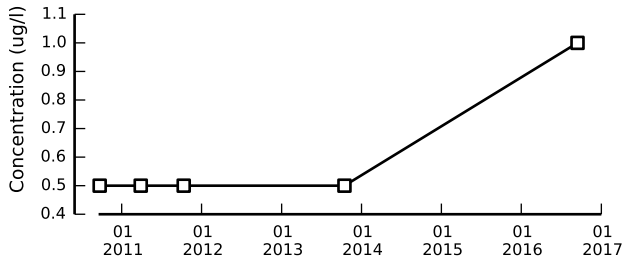
P09-01



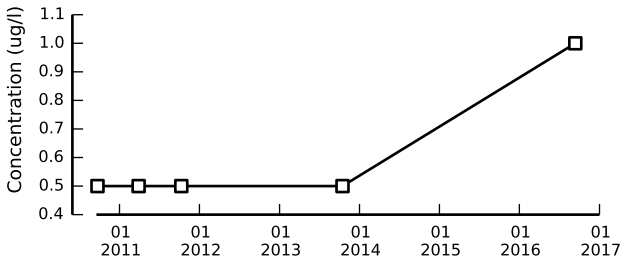
P09-02



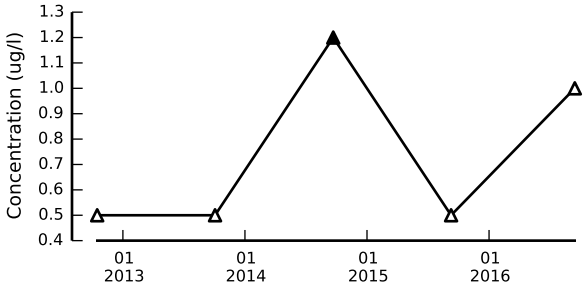
P09-03



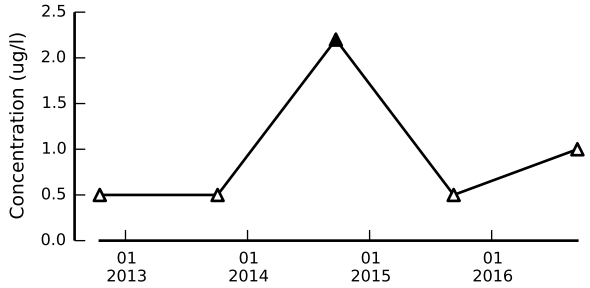
P09-04



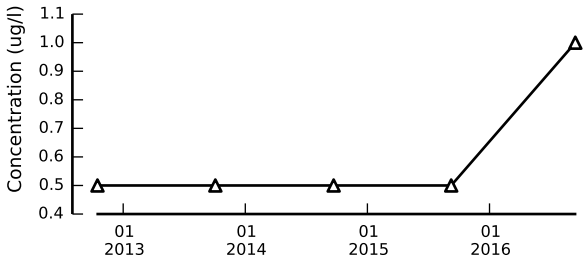
P09-06



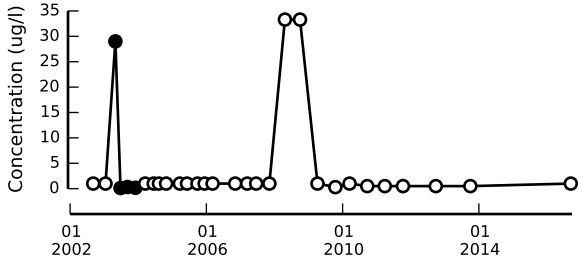
P09-07



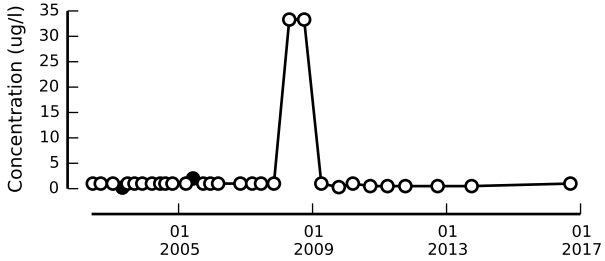
P09-08



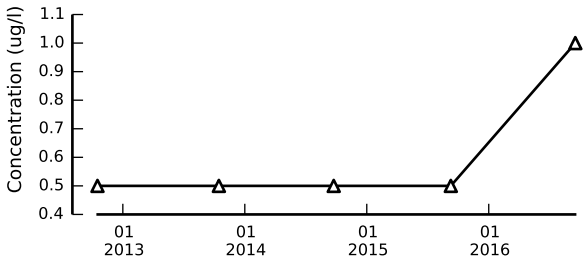
P09-09



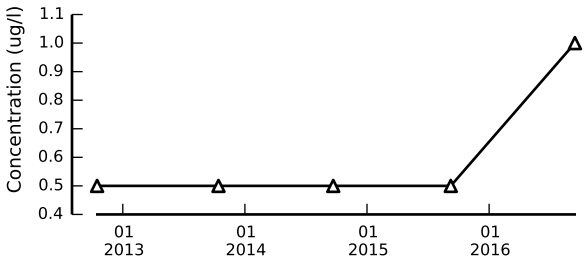
P09-10



P09-11

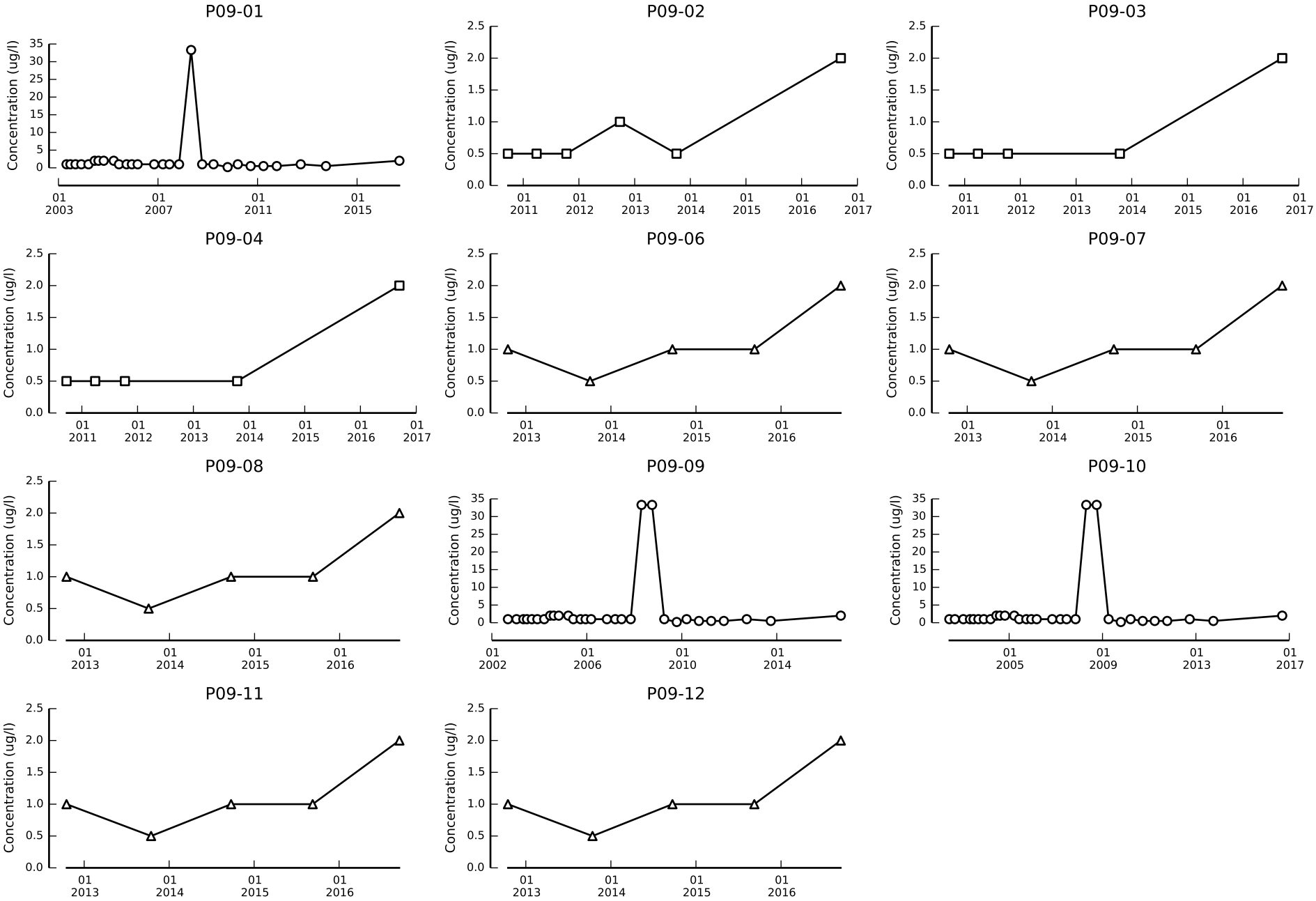


P09-12

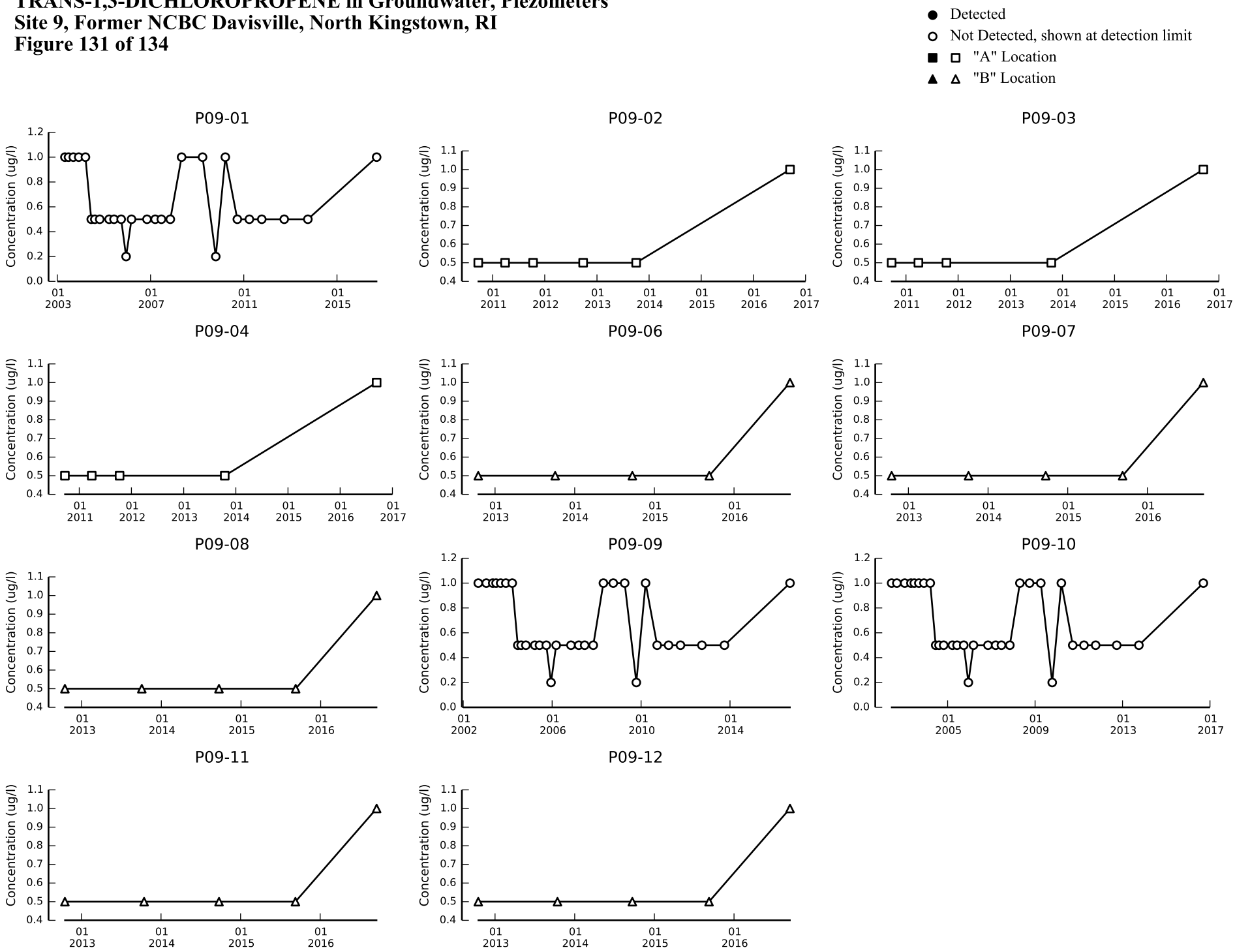


TRANS-1,2-DICHLOROETHENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 130 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

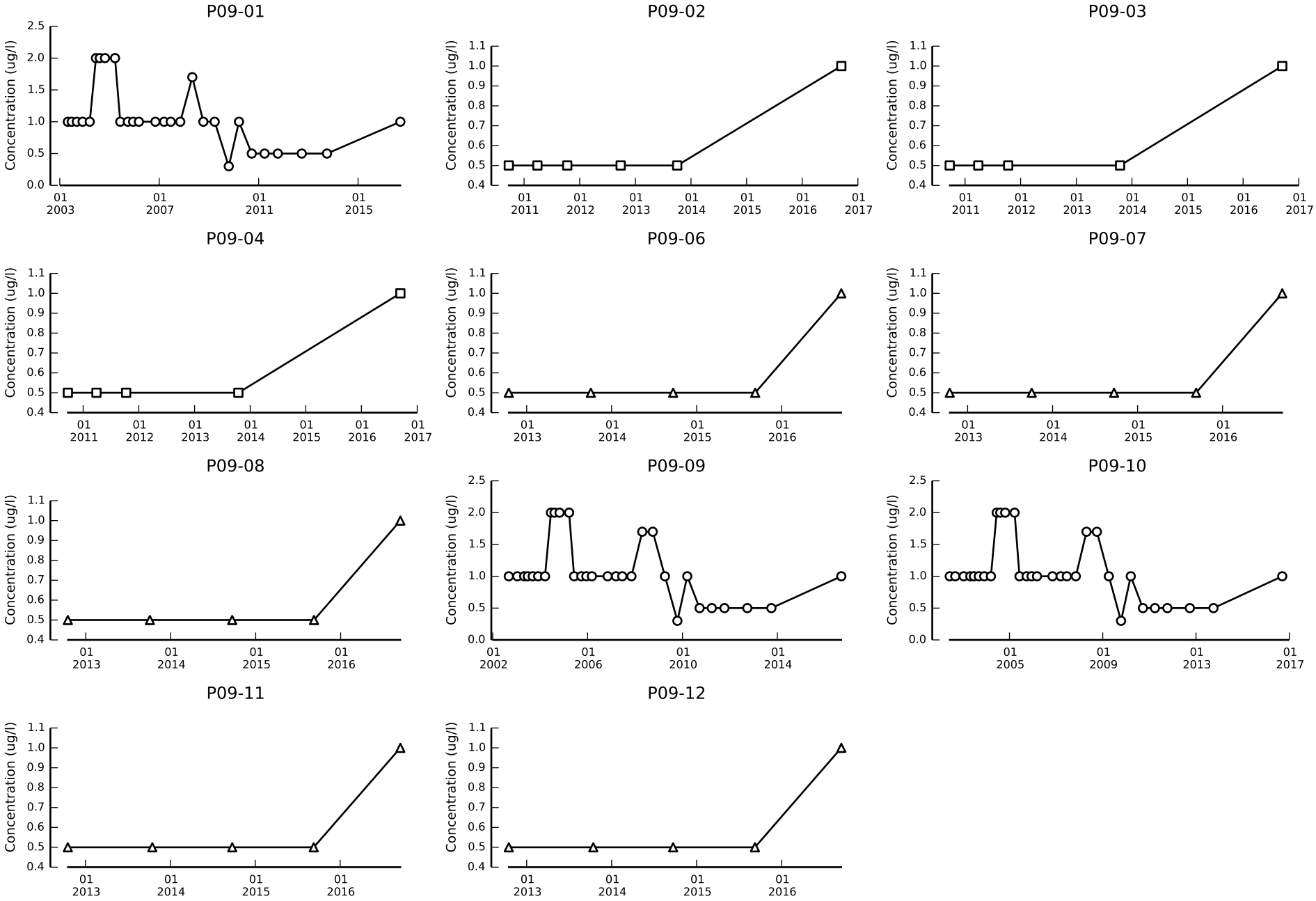


TRANS-1,3-DICHLOROPROPENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 131 of 134

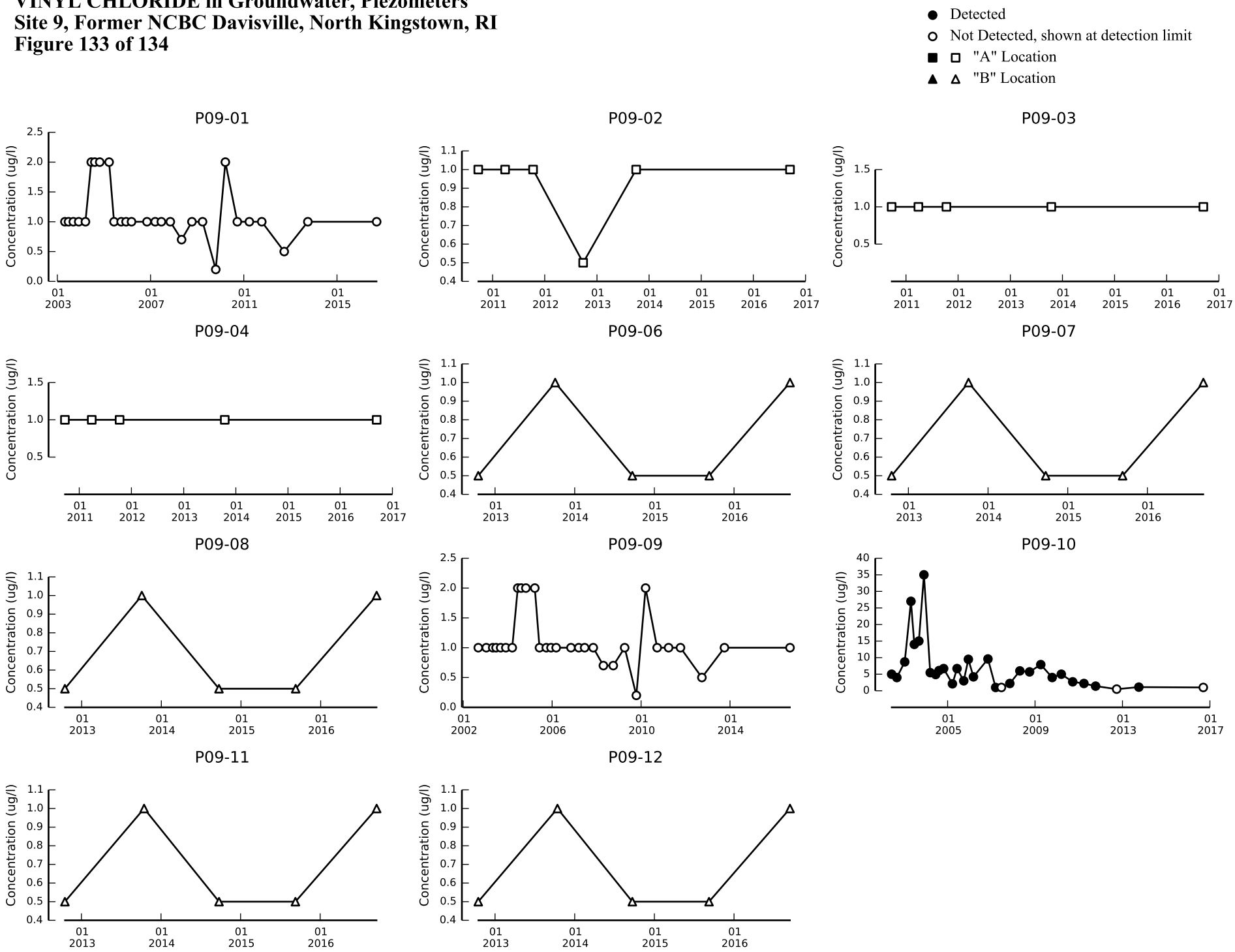


TRICHLOROETHENE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 132 of 134

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

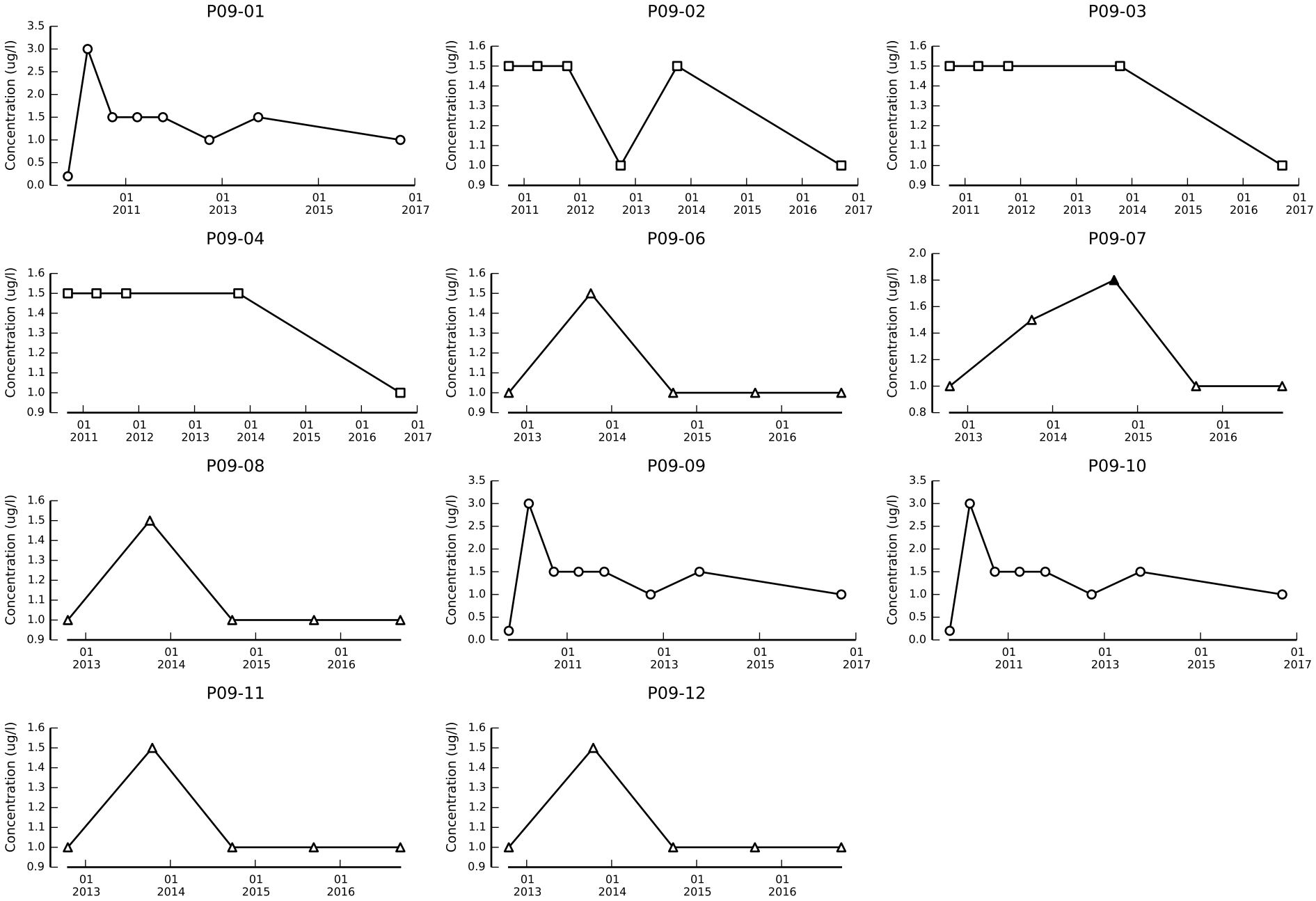


VINYL CHLORIDE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 133 of 134

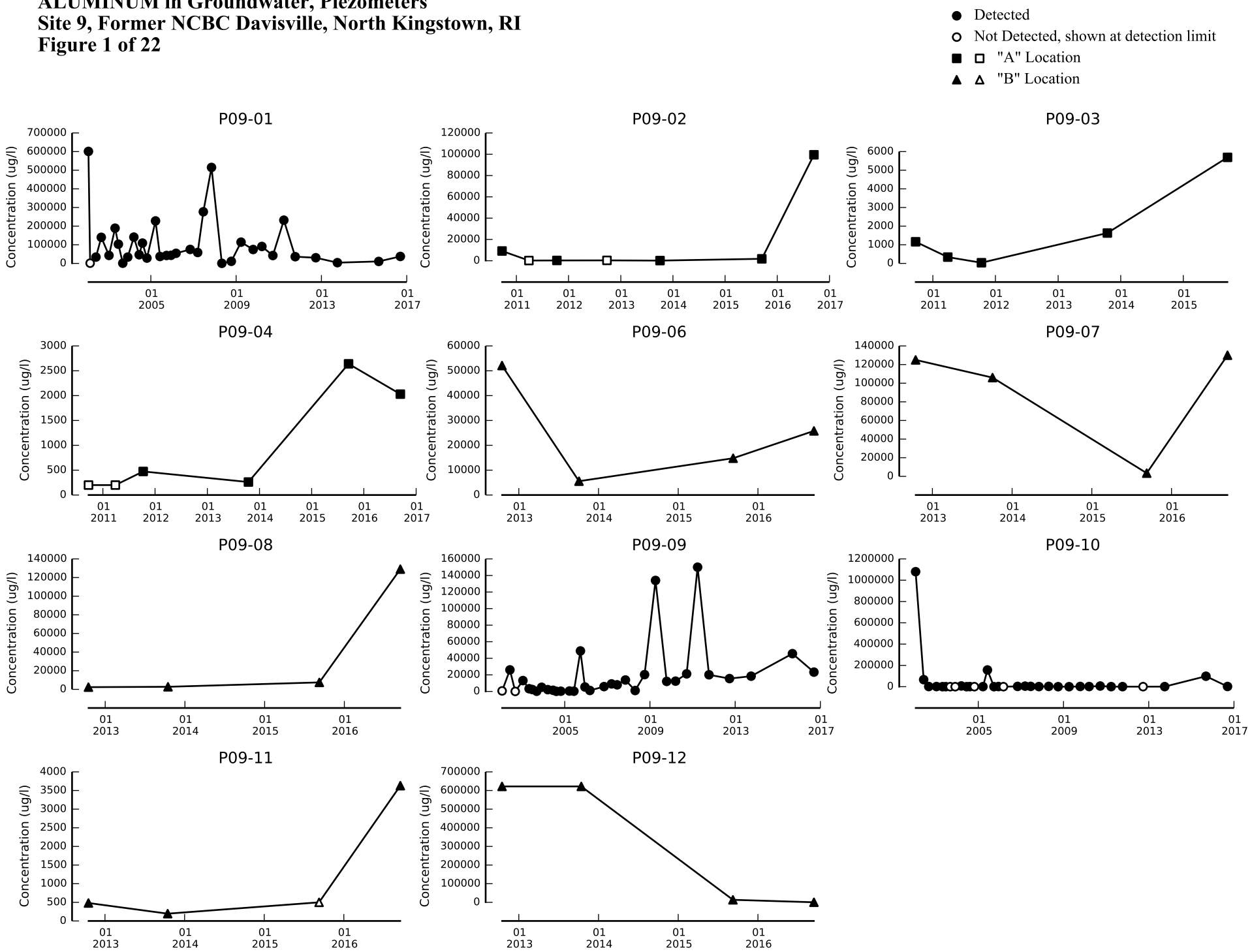


XYLENES, TOTAL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 134 of 134

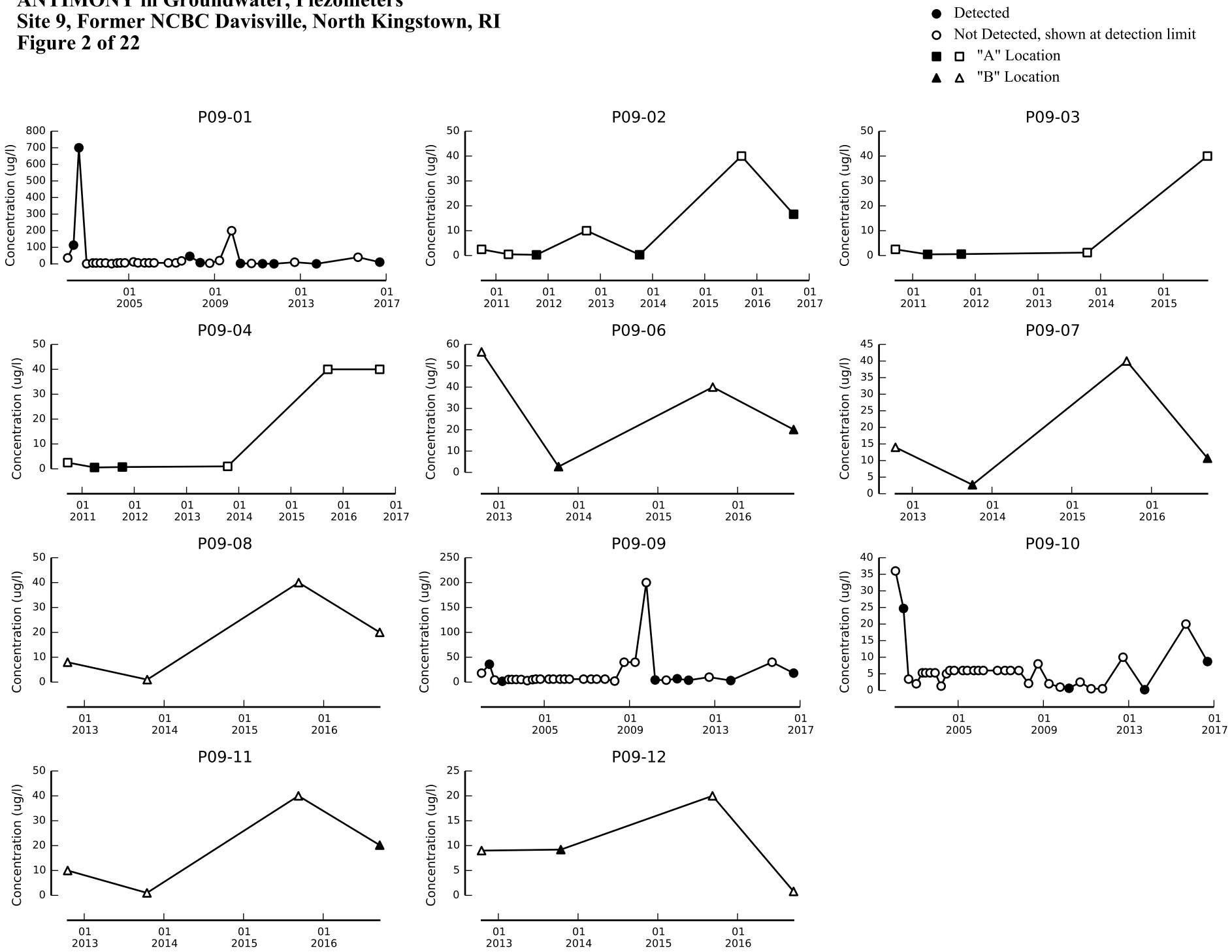
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location



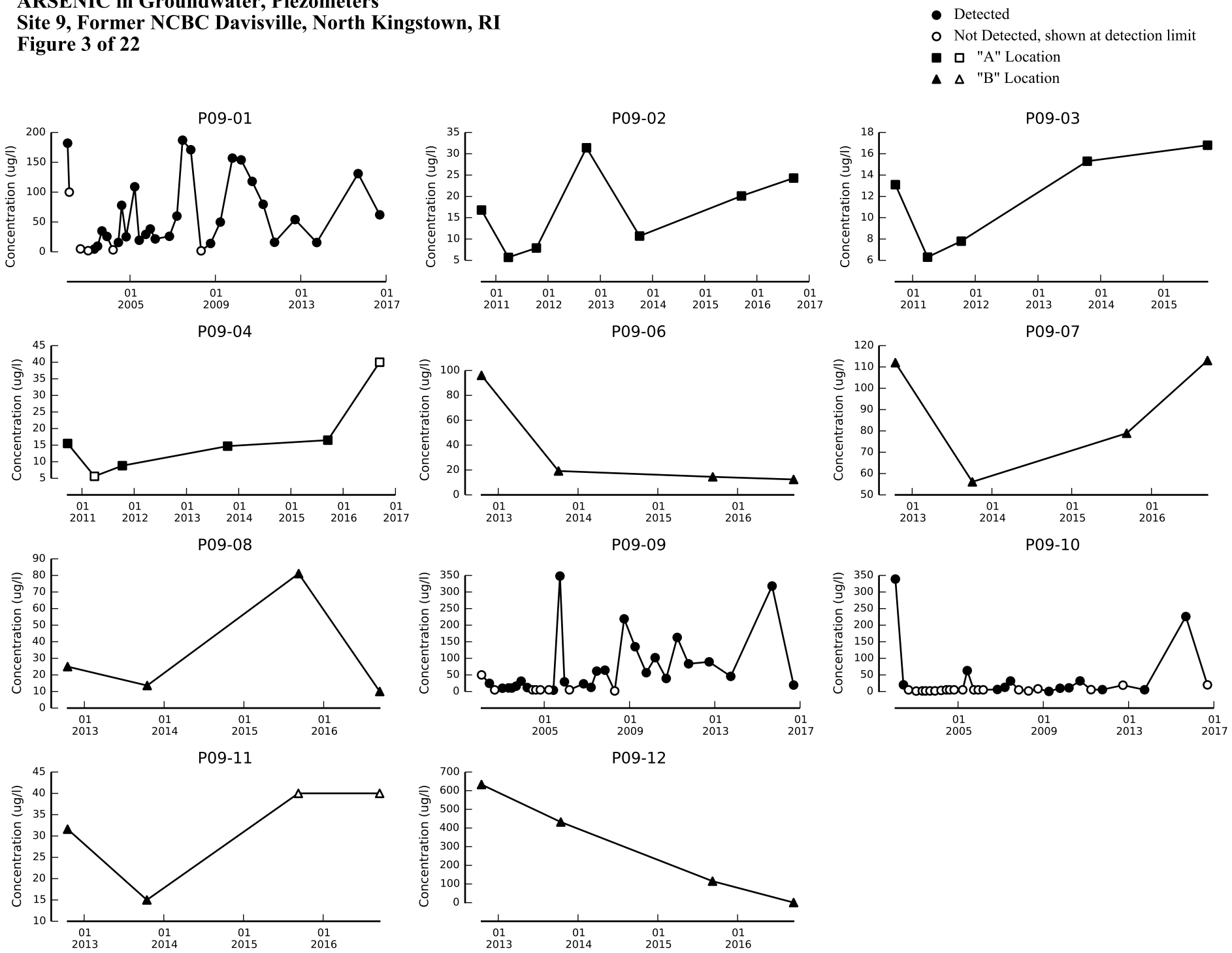
ALUMINUM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 22



ANTIMONY in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 22



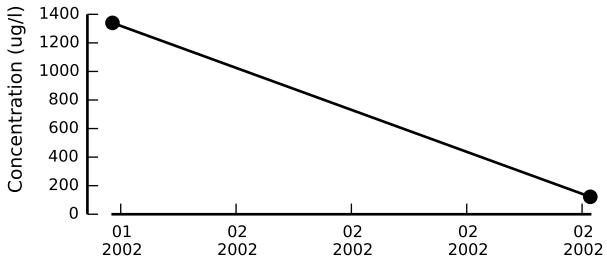
ARSENIC in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 22



BARIUM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

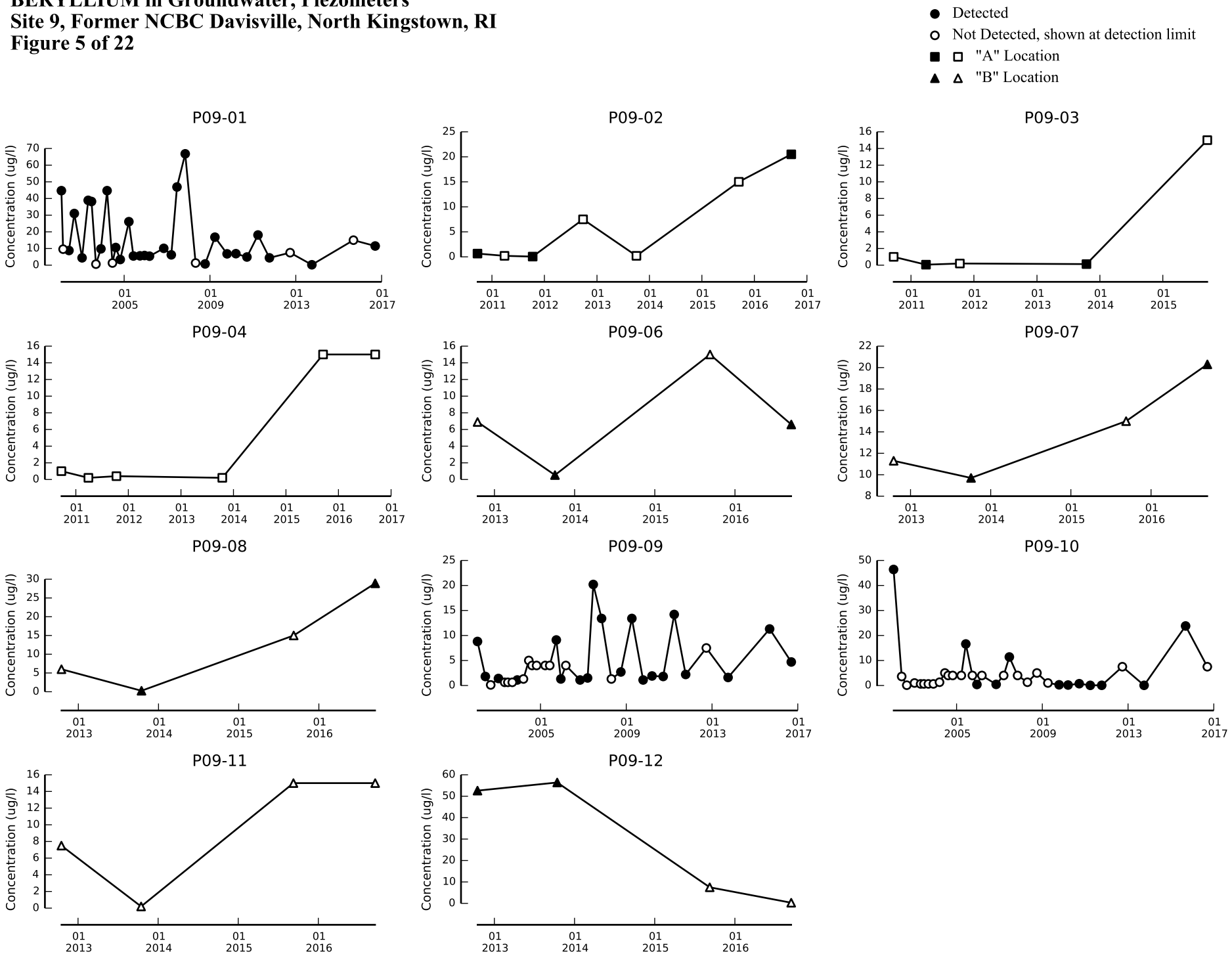
P09-11

Not Sampled

P09-12

Not Sampled

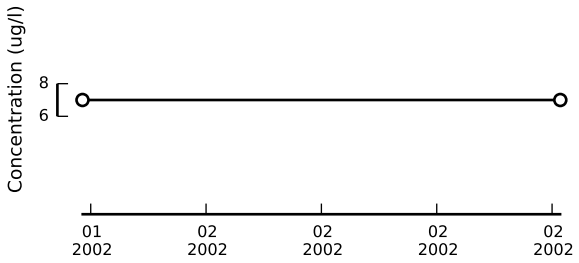
BERYLLIUM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 22



CADMIUM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

Not Sampled

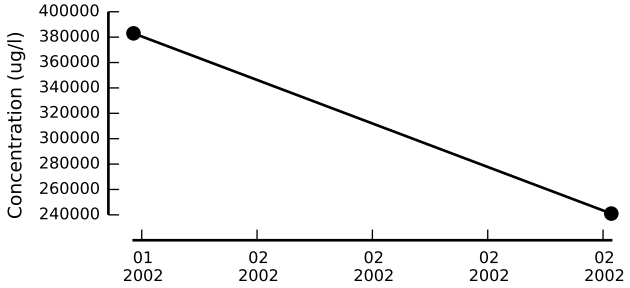
P09-12

Not Sampled

CALCIUM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

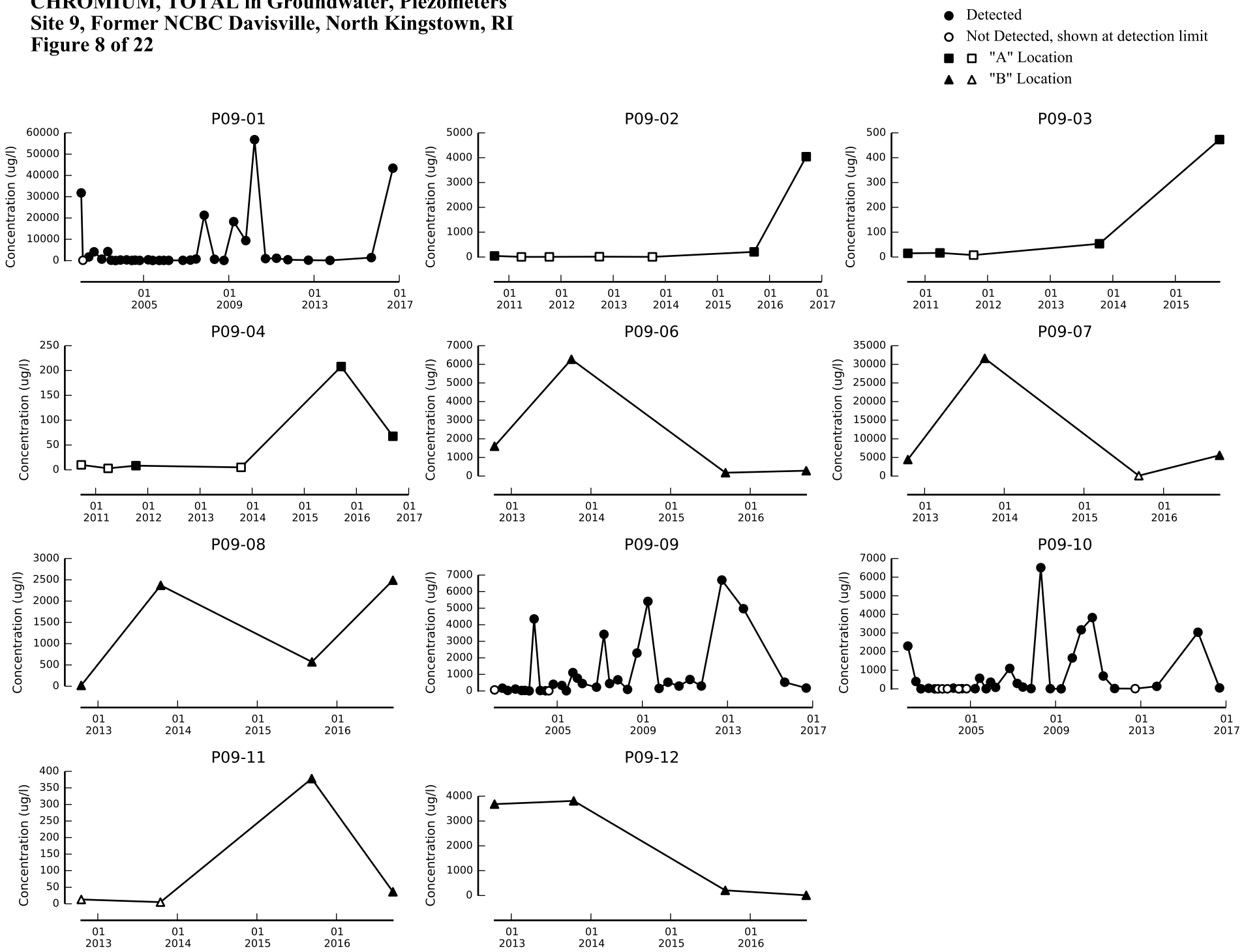
P09-11

Not Sampled

P09-12

Not Sampled

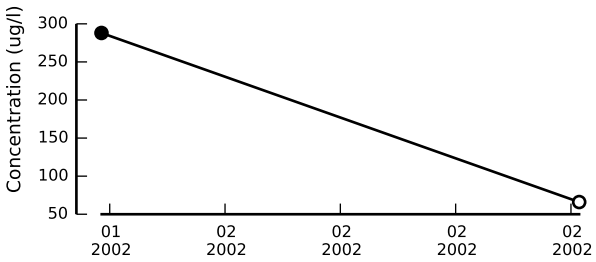
CHROMIUM, TOTAL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 22



COBALT in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

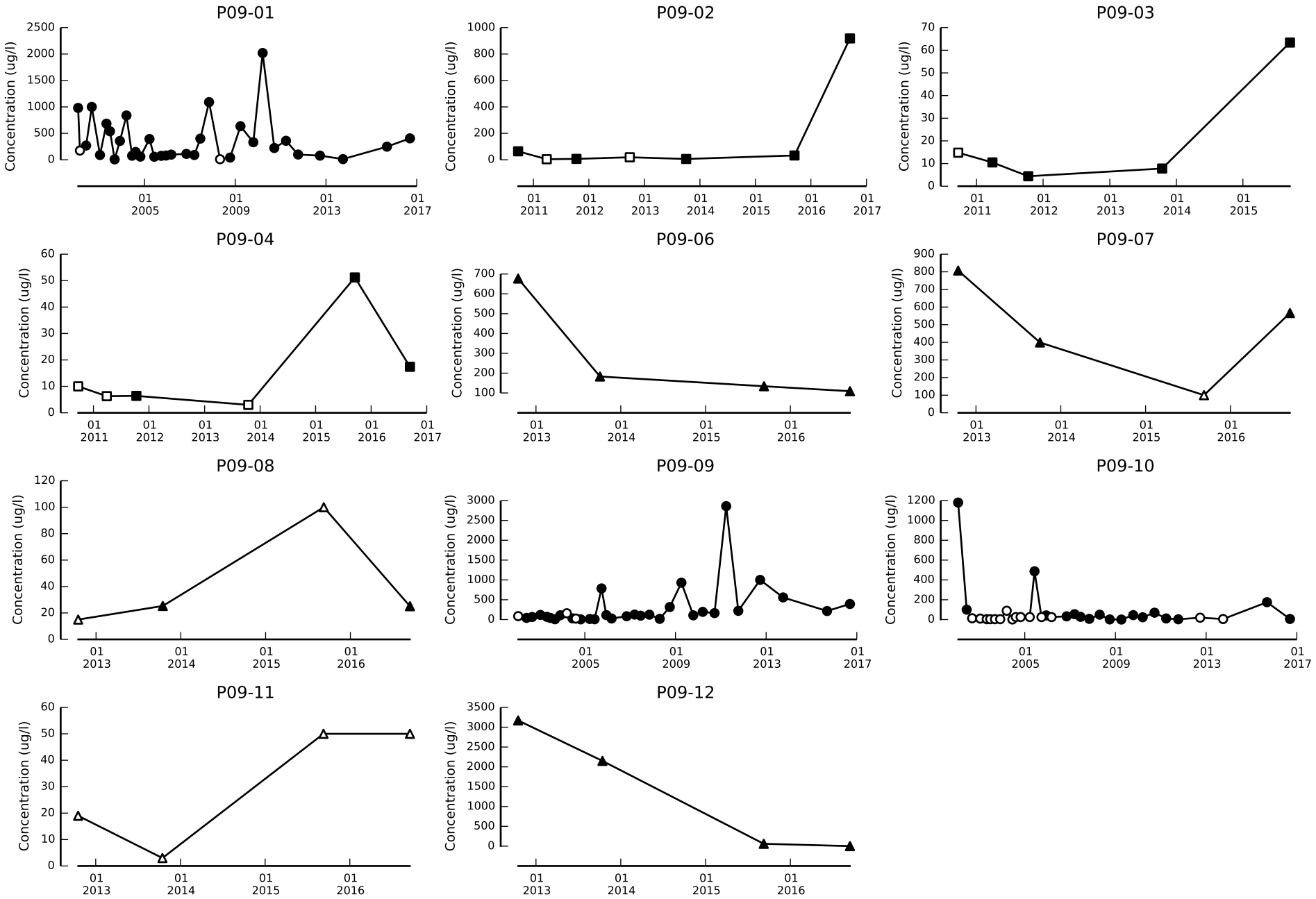
Not Sampled

P09-12

Not Sampled

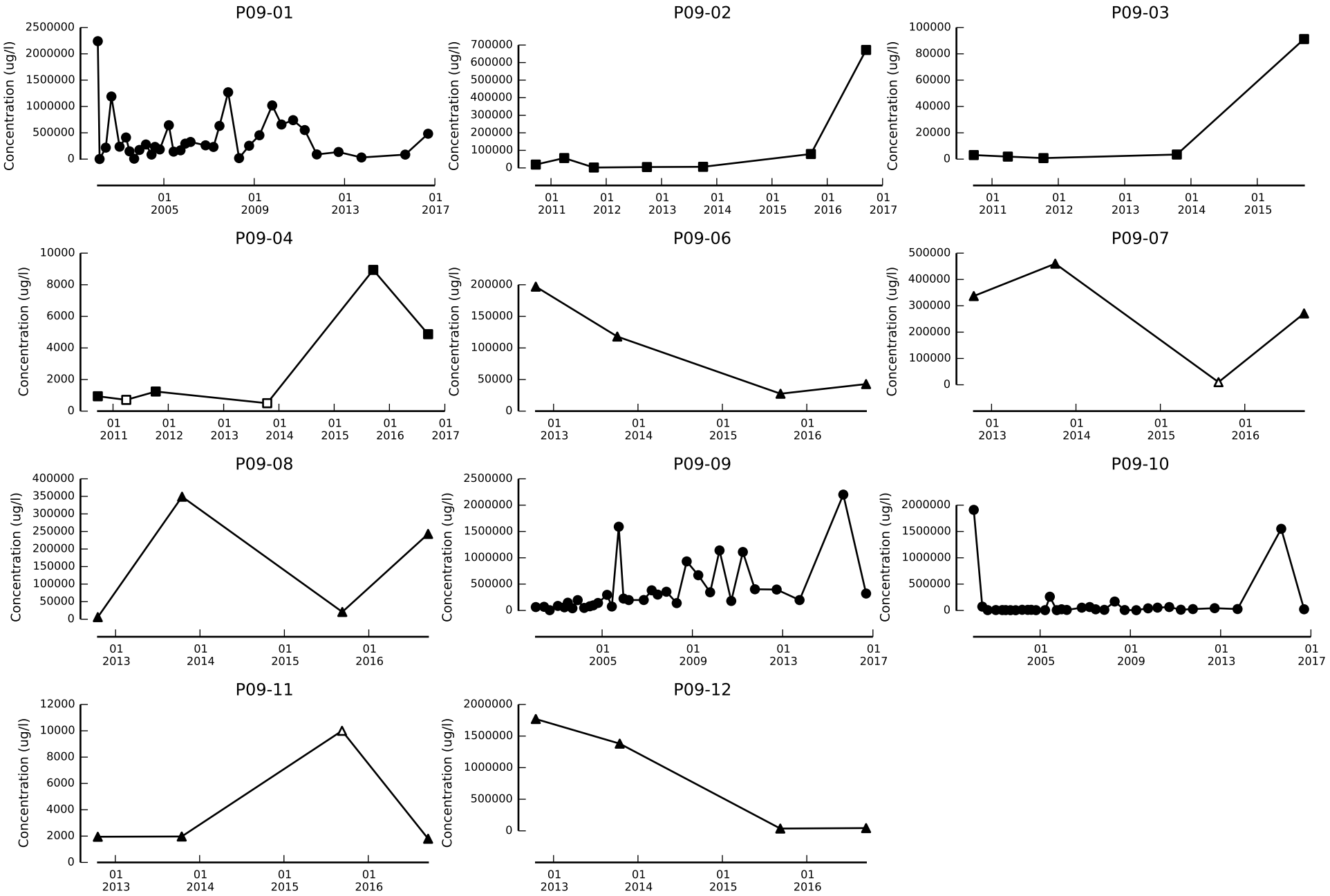
COPPER in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

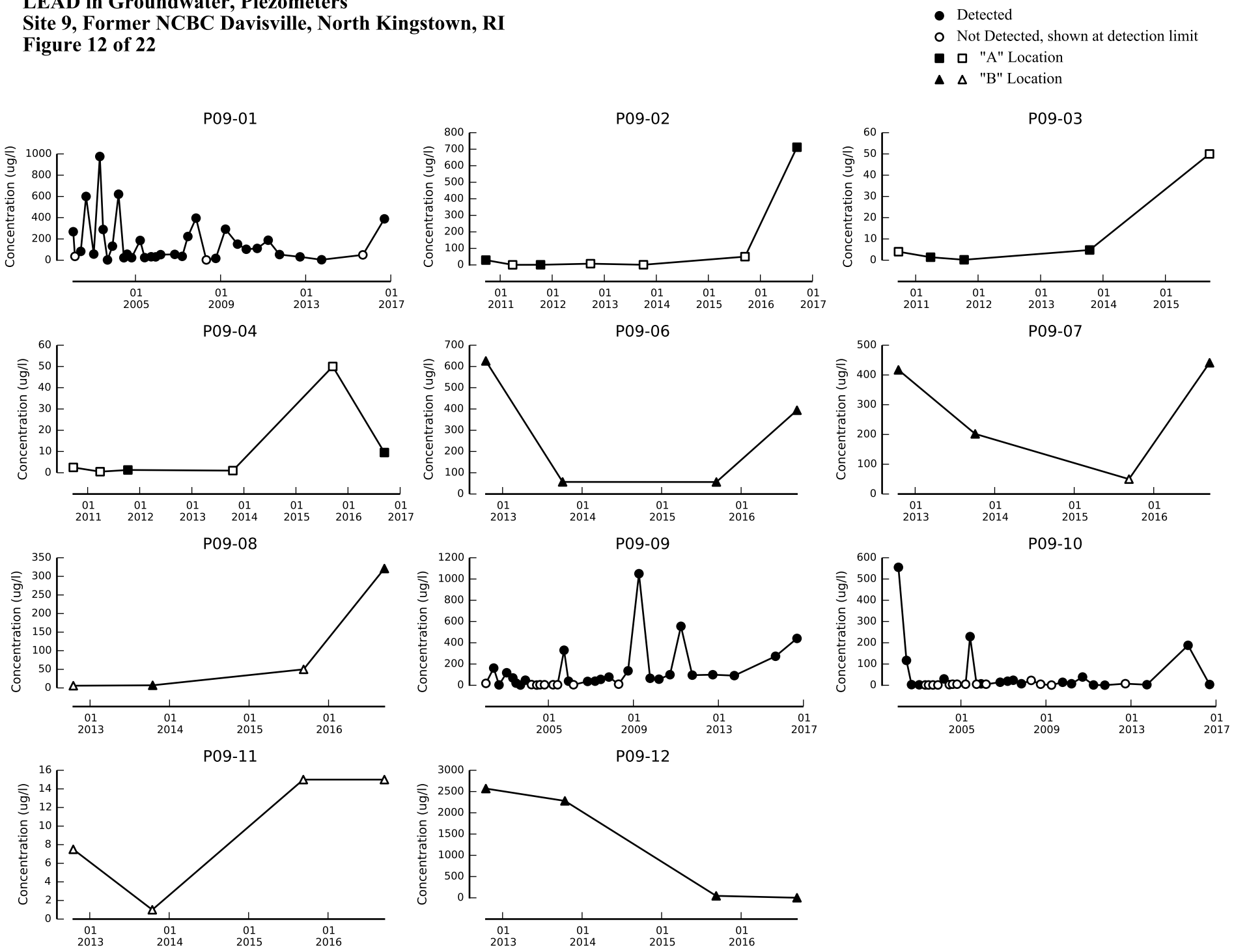


IRON in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location



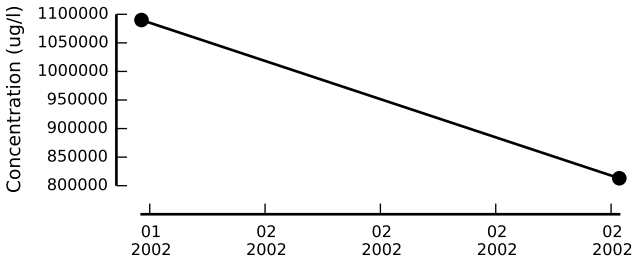
LEAD in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 22



MAGNESIUM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

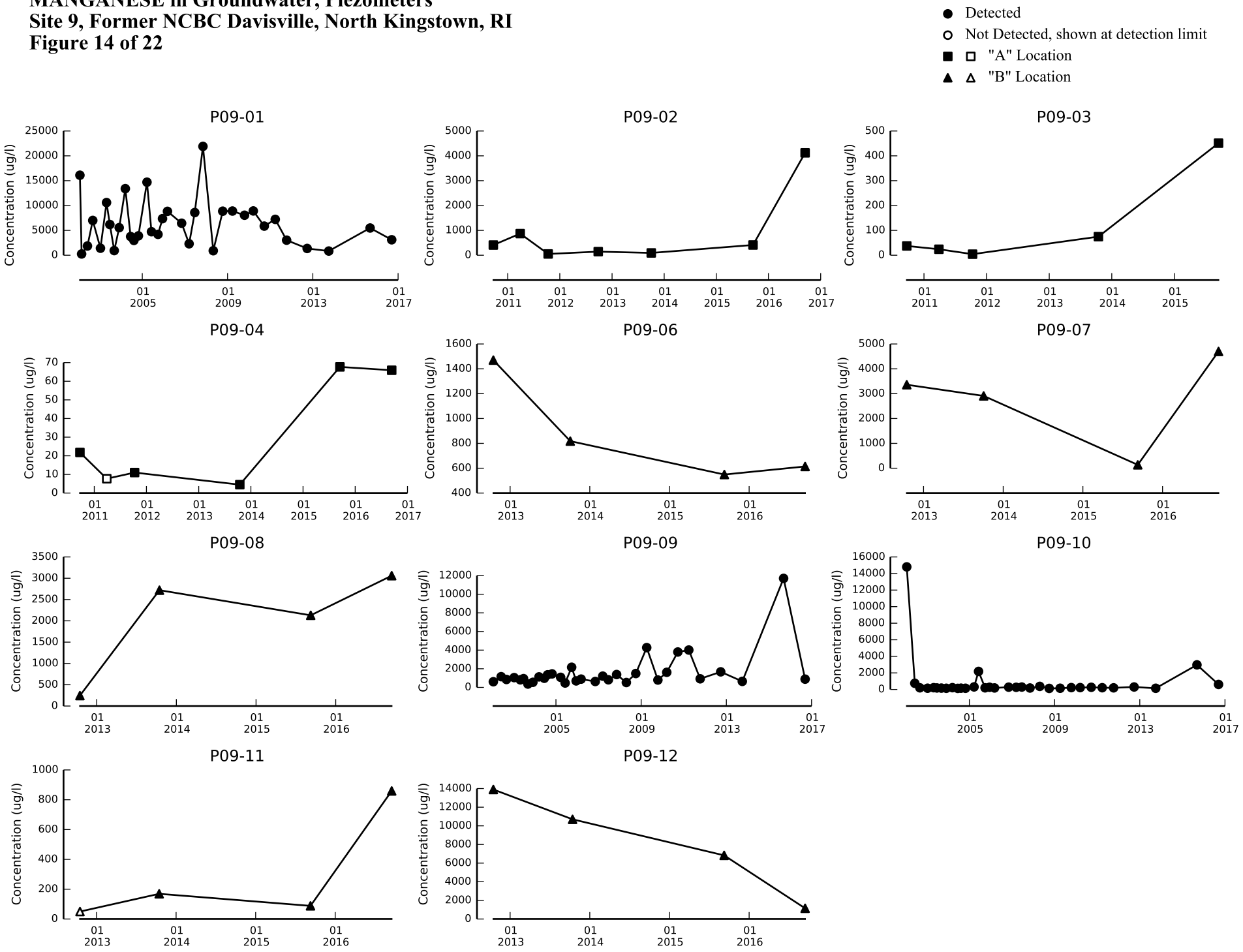
P09-11

Not Sampled

P09-12

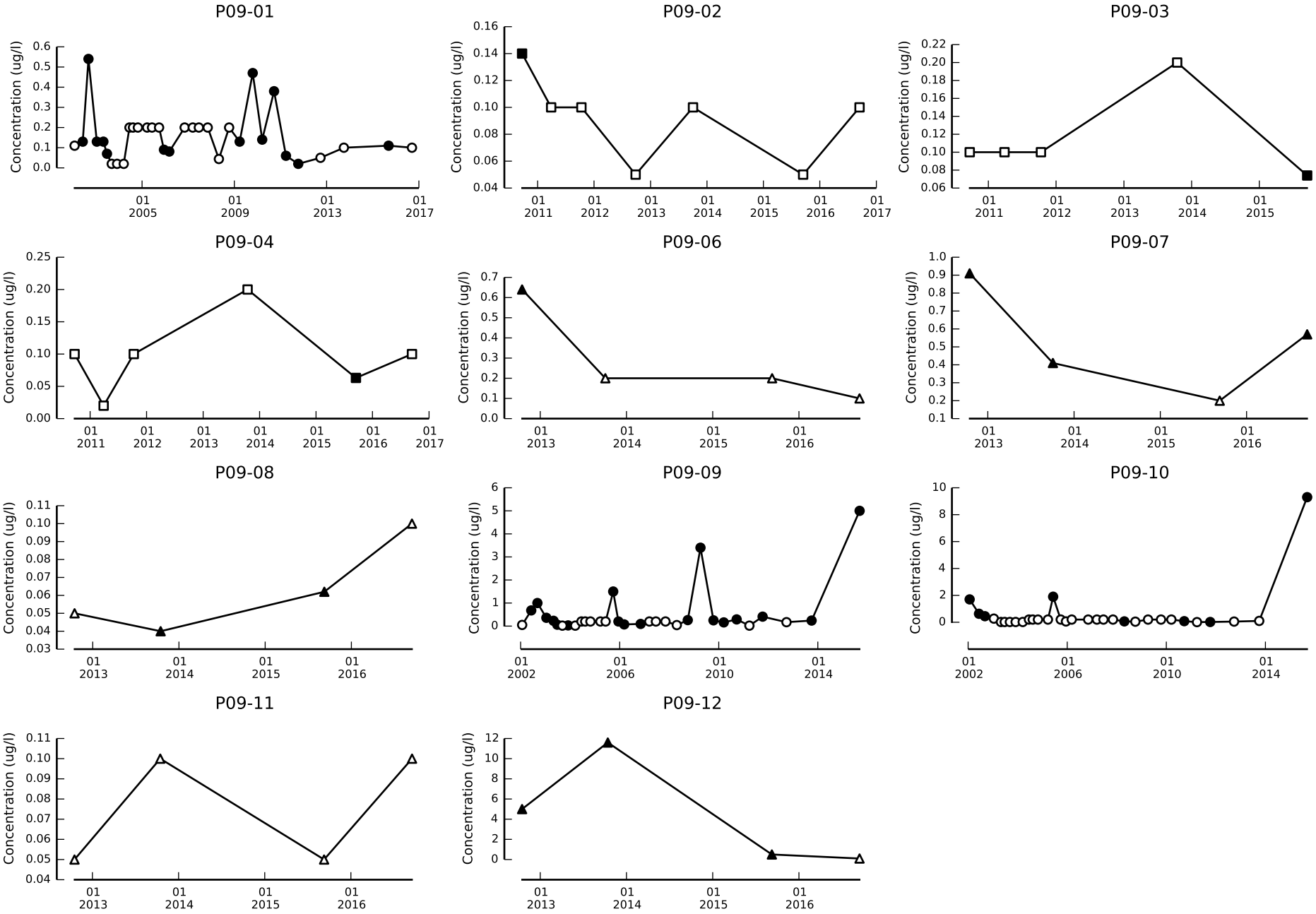
Not Sampled

MANGANESE in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 22

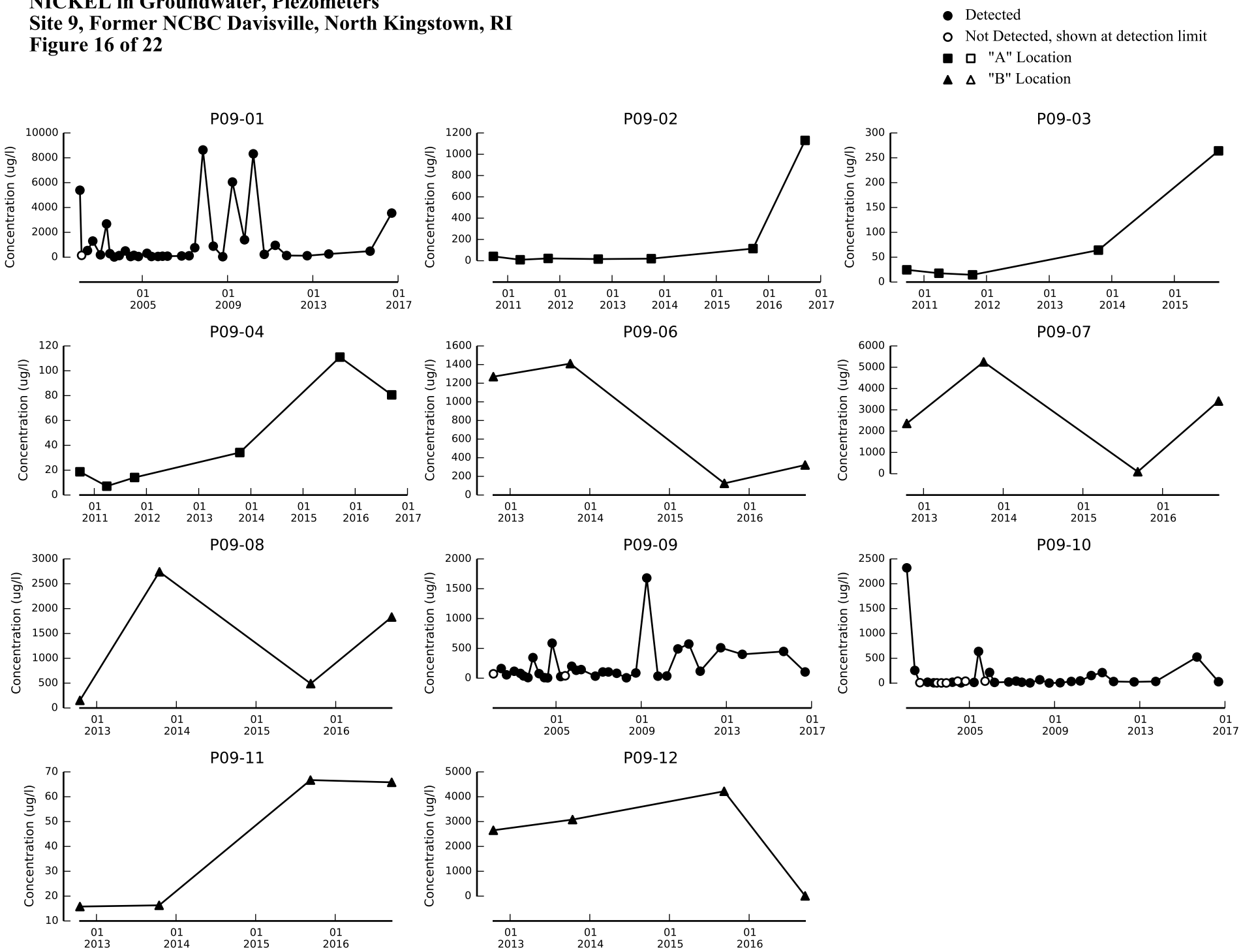


MERCURY in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 22

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location



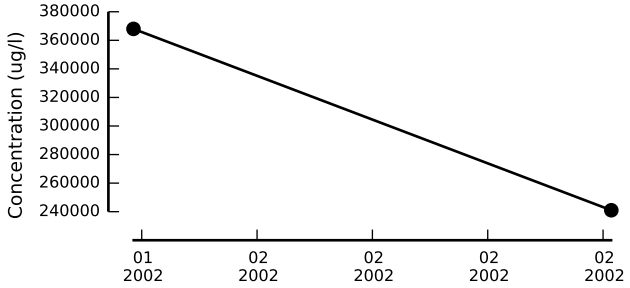
NICKEL in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 22



POTASSIUM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

Not Sampled

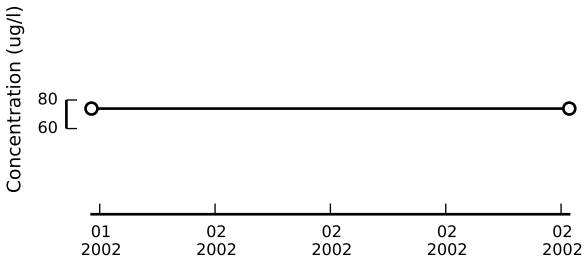
P09-12

Not Sampled

SELENIUM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

Not Sampled

P09-12

Not Sampled

SILVER in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01

P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

Not Sampled

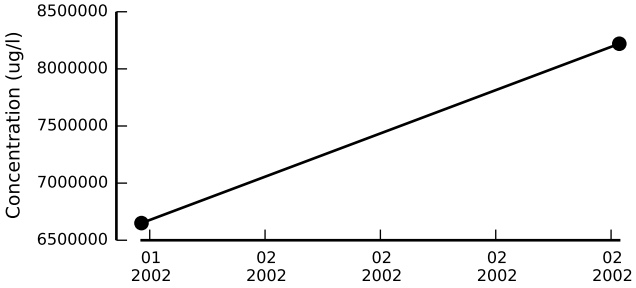
P09-12

Not Sampled

SODIUM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

P09-11

Not Sampled

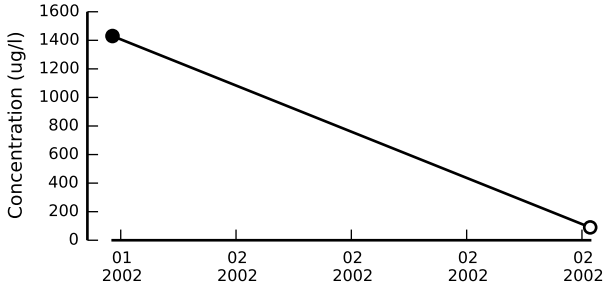
P09-12

Not Sampled

VANADIUM in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 22

● Detected
○ Not Detected, shown at detection limit

P09-01



P09-02

Not Sampled

P09-03

Not Sampled

P09-04

Not Sampled

P09-06

Not Sampled

P09-07

Not Sampled

P09-08

Not Sampled

P09-09

Sampled Once

P09-10

Sampled Once

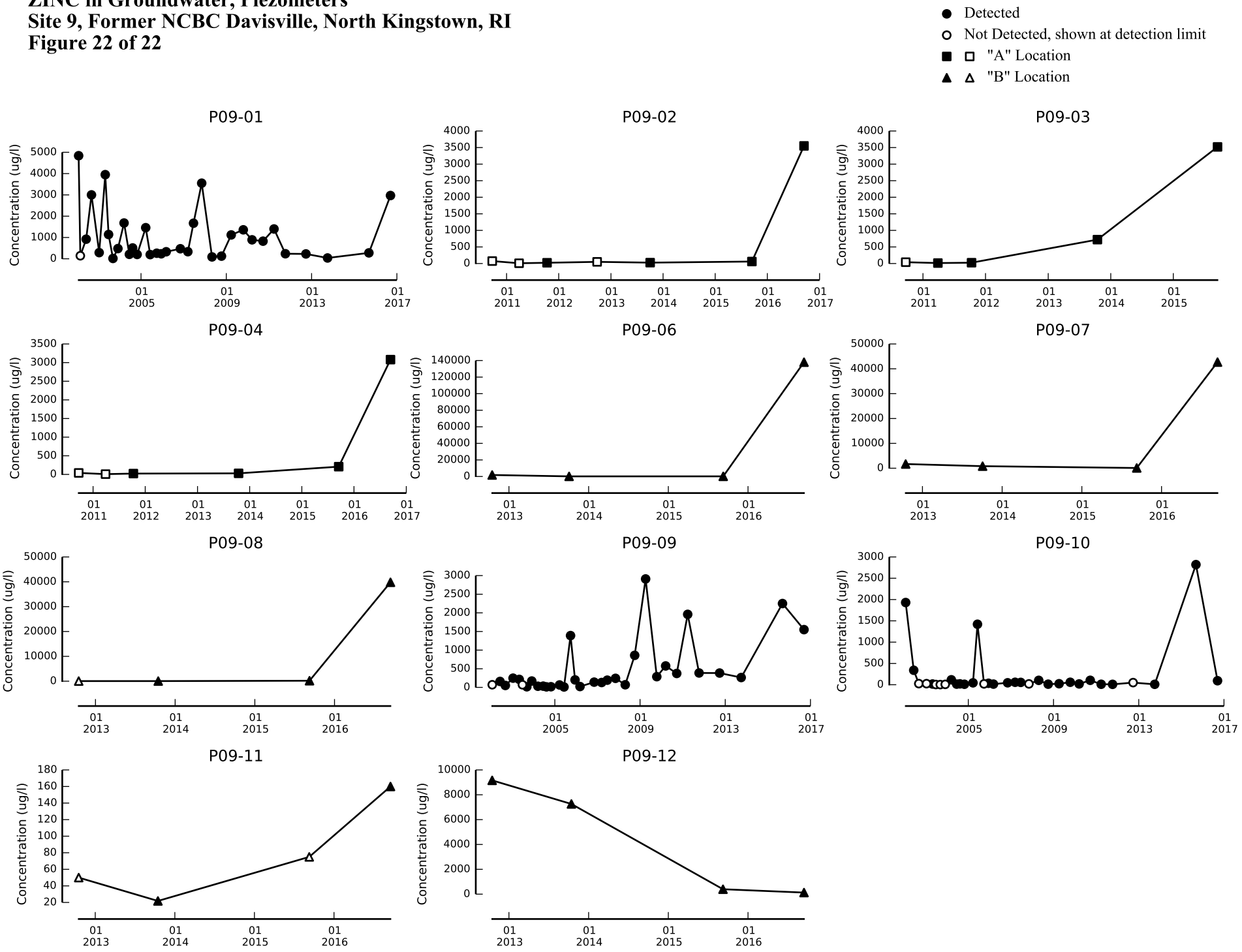
P09-11

Not Sampled

P09-12

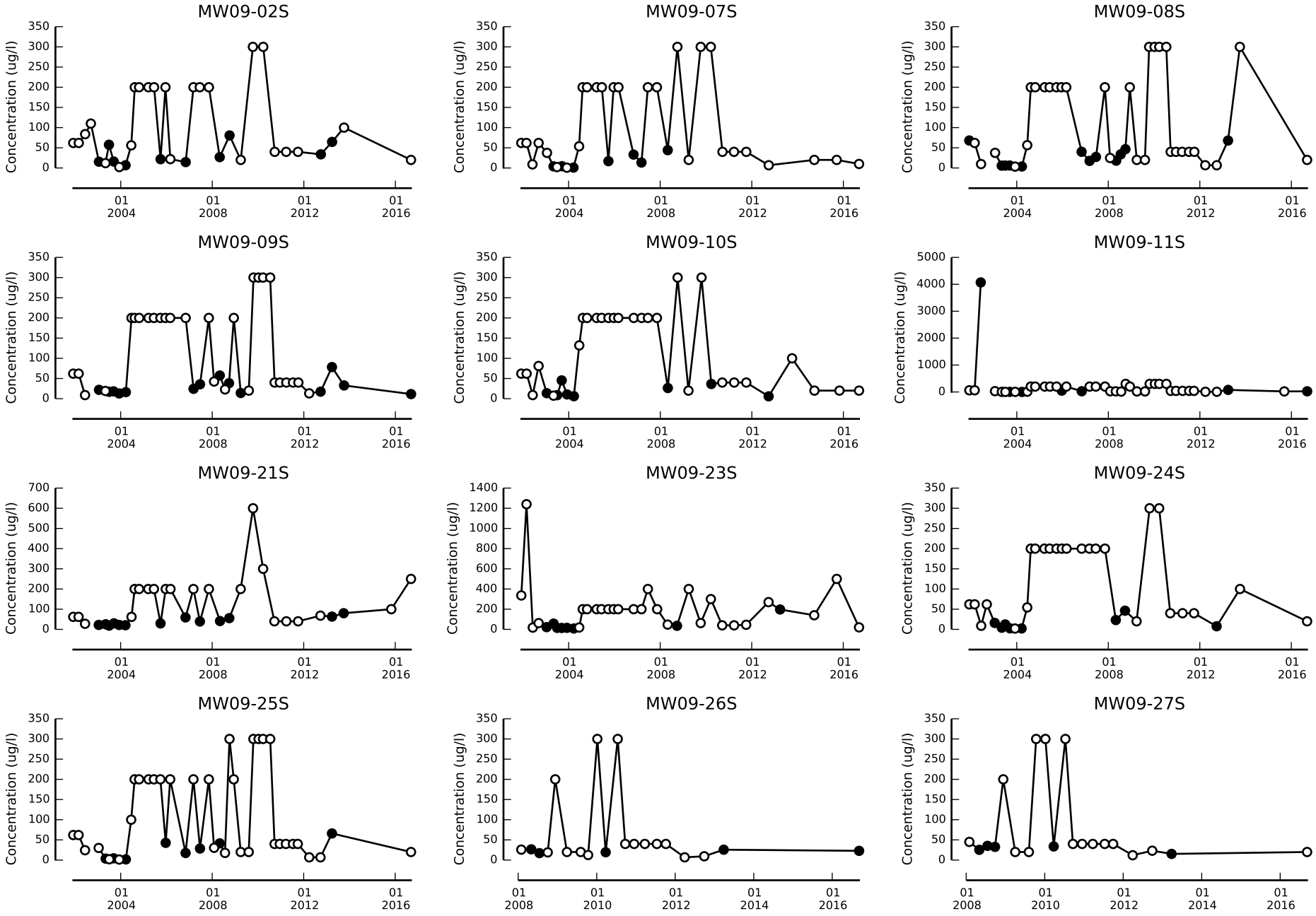
Not Sampled

ZINC in Groundwater, Piezometers
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 22



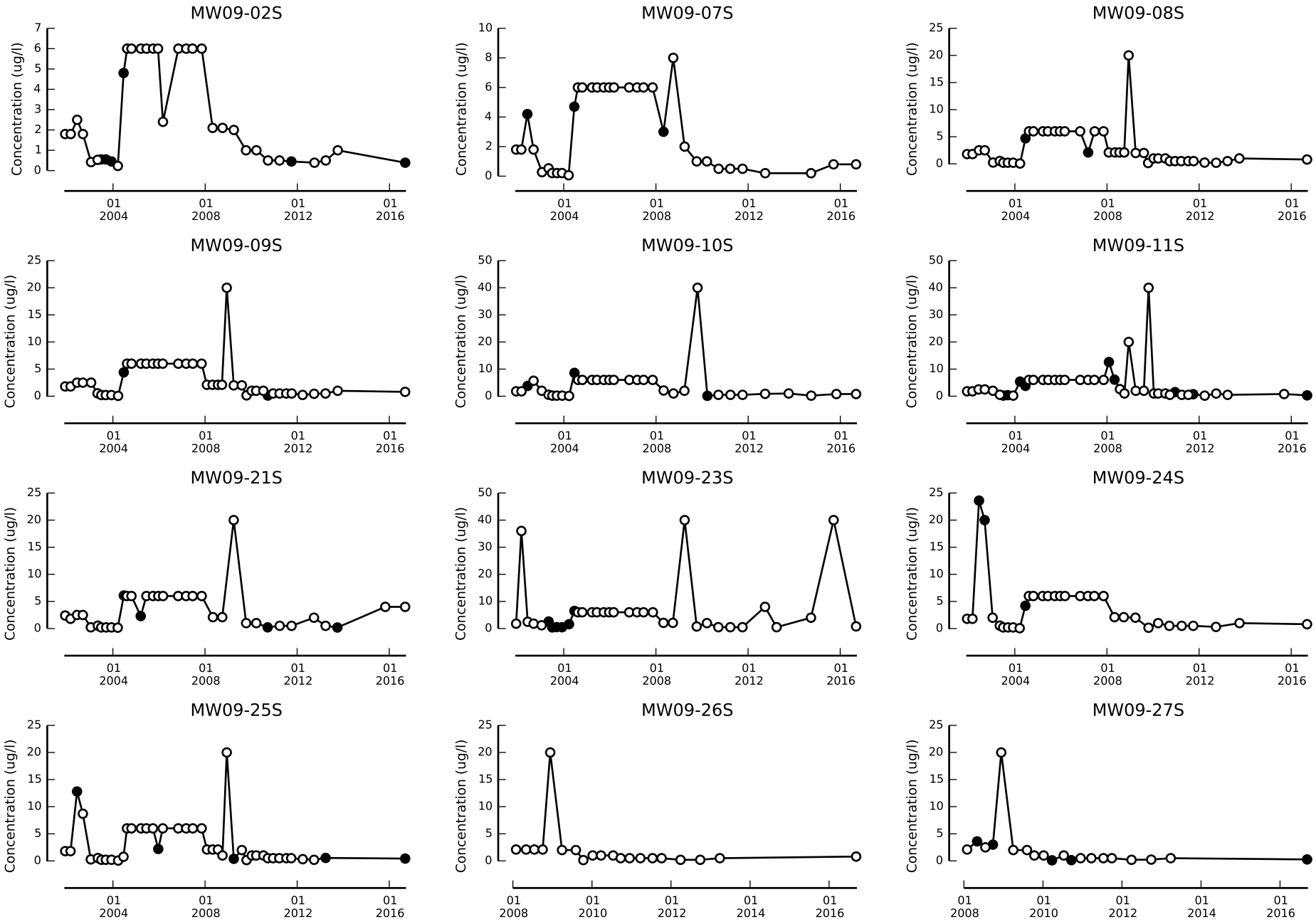
ALUMINUM in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 22

● Detected
○ Not Detected, shown at detection limit



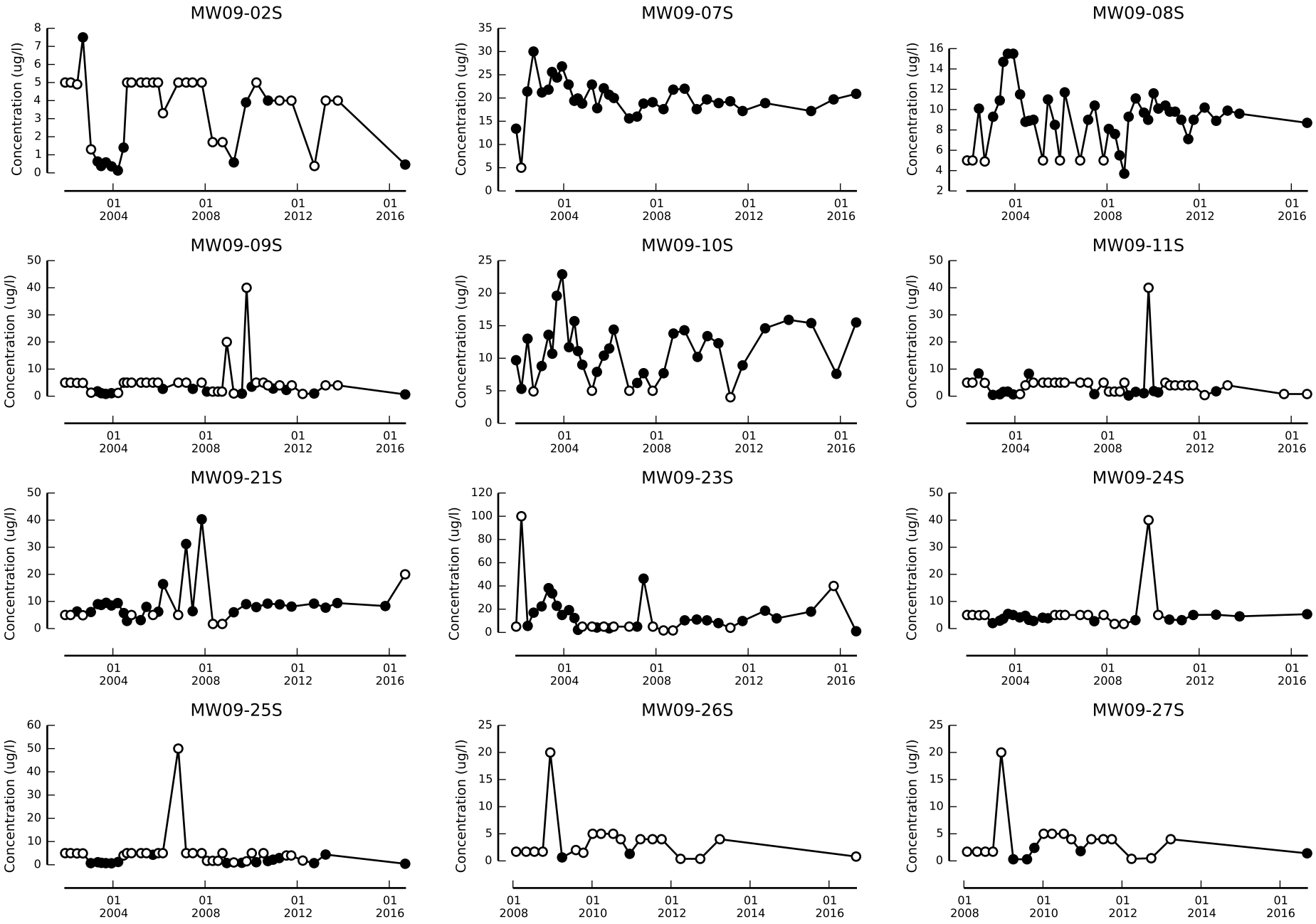
ANTIMONY in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 22

● Detected
○ Not Detected, shown at detection limit



ARSENIC in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 22

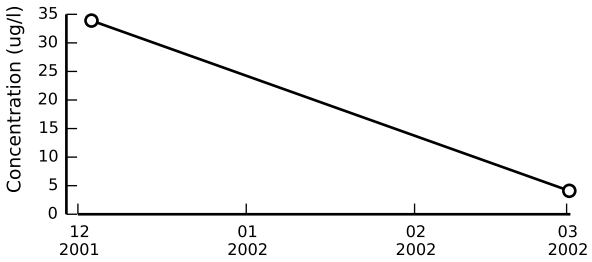
● Detected
○ Not Detected, shown at detection limit



BARIUM in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 22

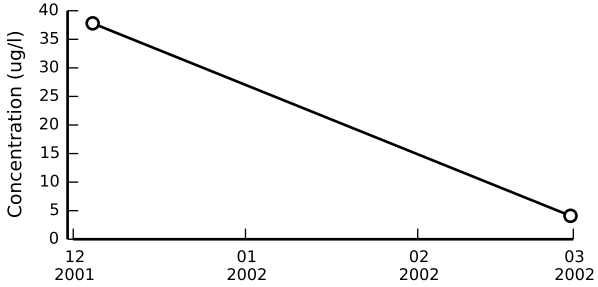
● Detected
○ Not Detected, shown at detection limit

MW09-02S

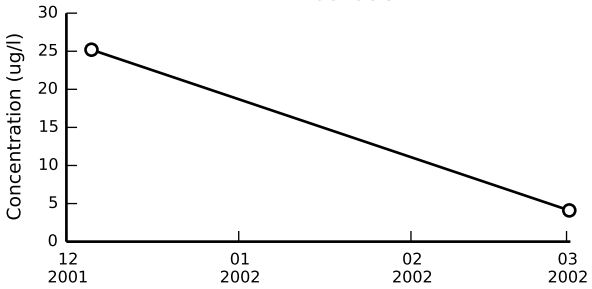


MW09-07S

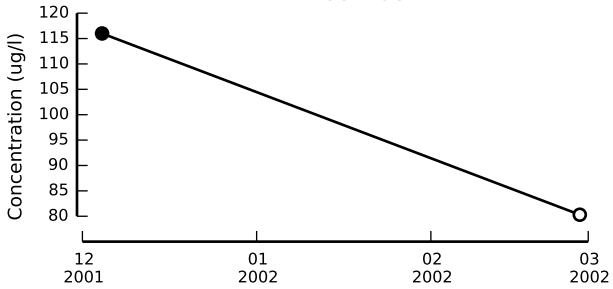
MW09-08S



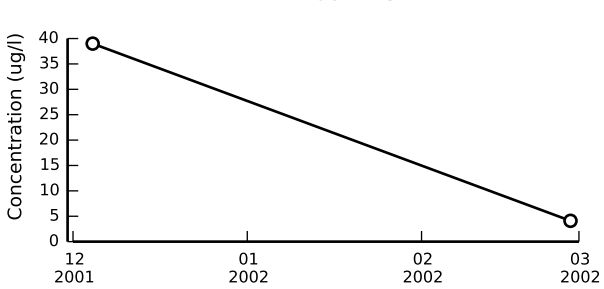
MW09-09S



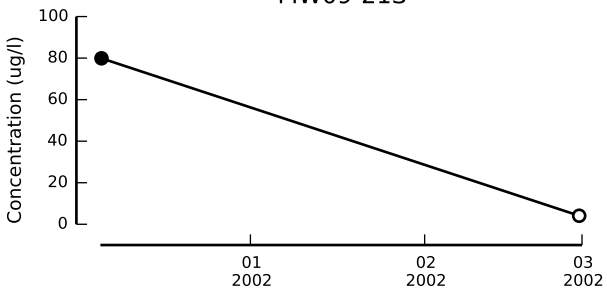
MW09-10S



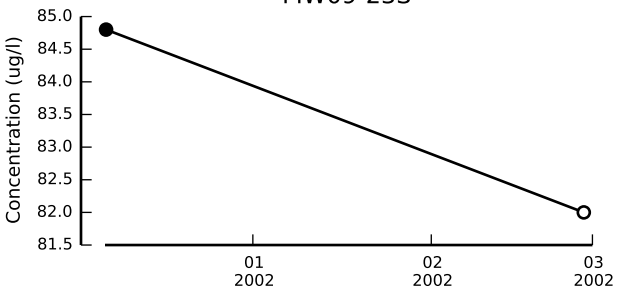
MW09-11S



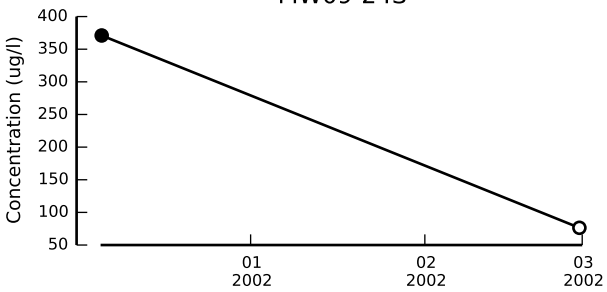
MW09-21S



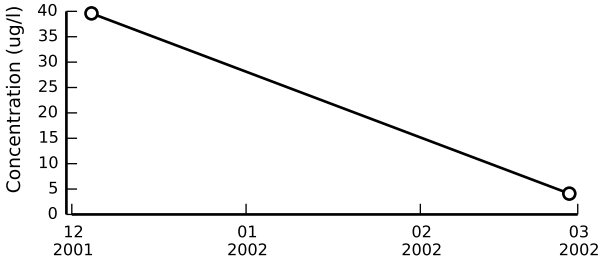
MW09-23S



MW09-24S



MW09-25S



MW09-26S

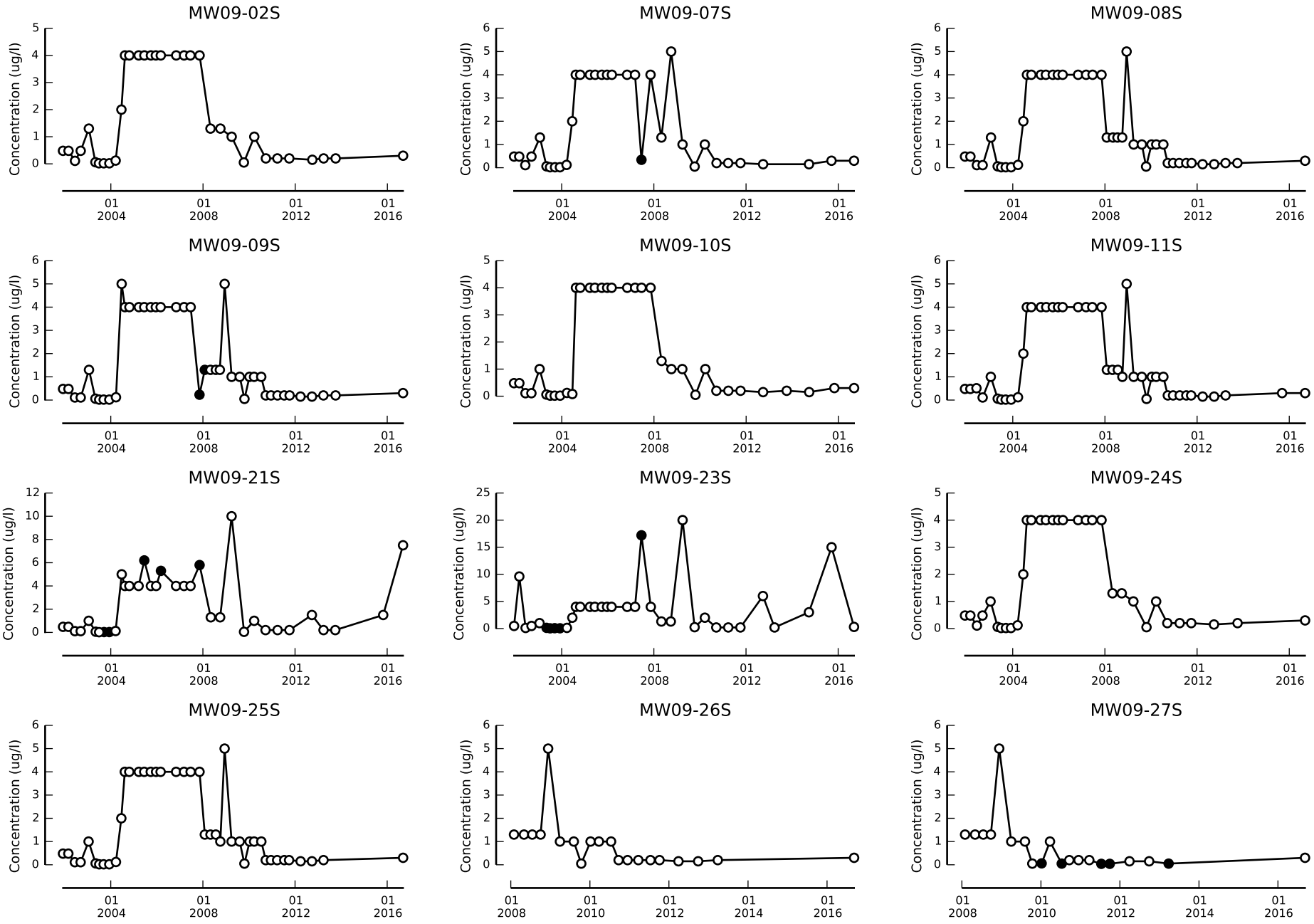
Not Sampled

MW09-27S

Not Sampled

BERYLLIUM in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 22

● Detected
○ Not Detected, shown at detection limit

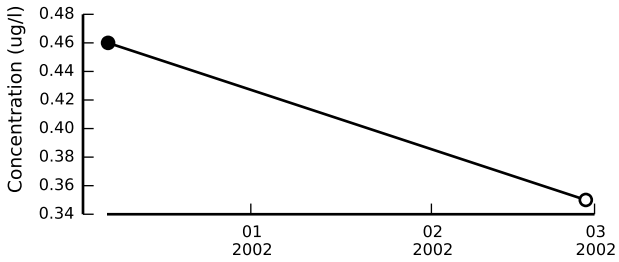


CADMIUM in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 22

● Detected
○ Not Detected, shown at detection limit

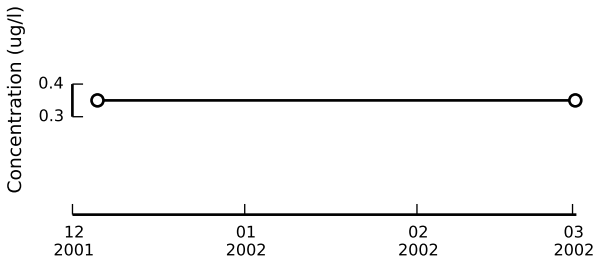
MW09-02S

MW09-07S

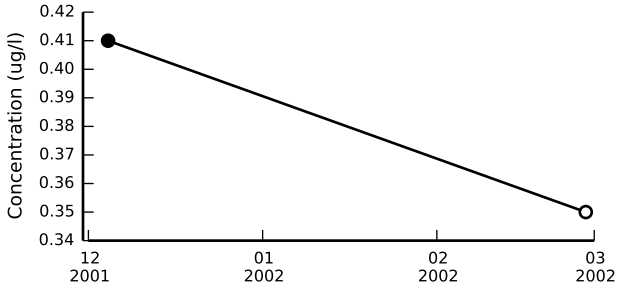


MW09-08S

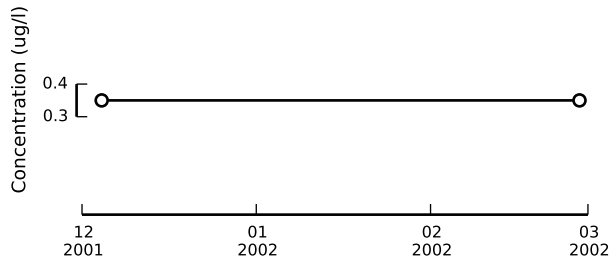
MW09-09S



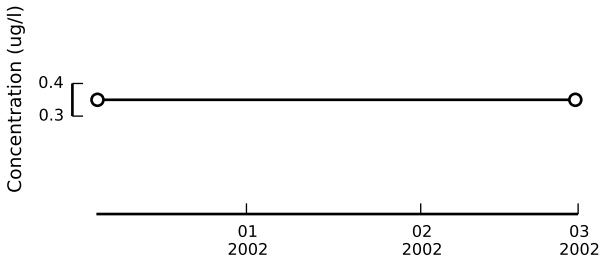
MW09-10S



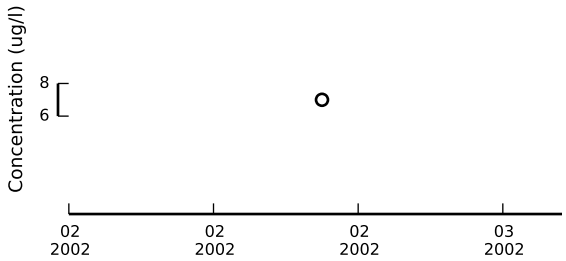
MW09-11S



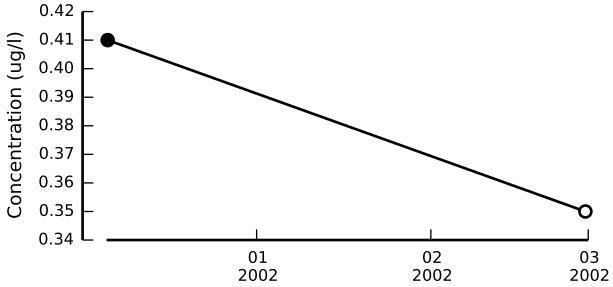
MW09-21S



MW09-23S



MW09-24S



MW09-25S

MW09-26S

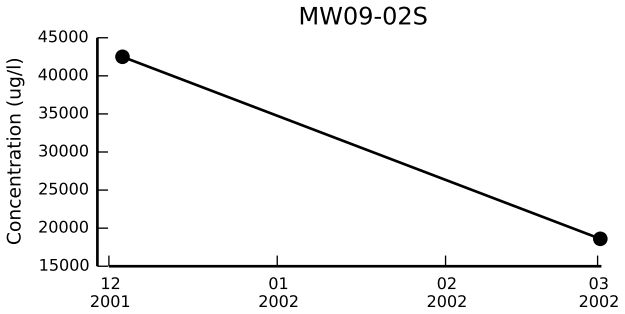
Not Sampled

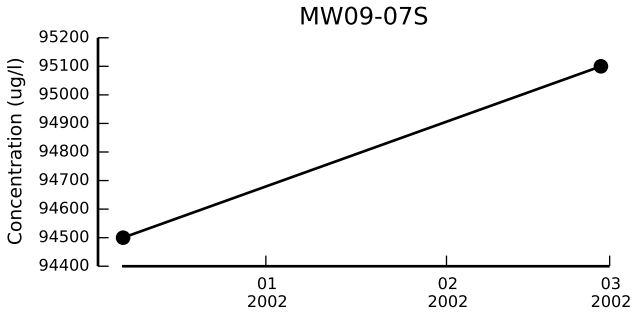
MW09-27S

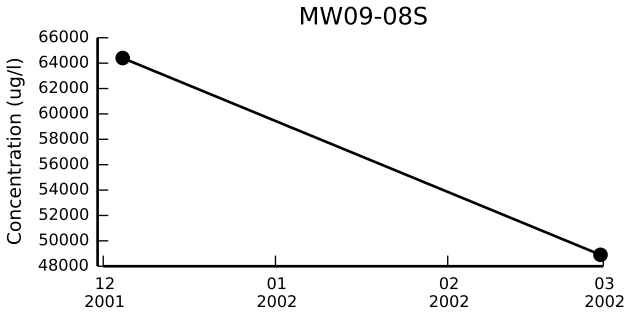
Not Sampled

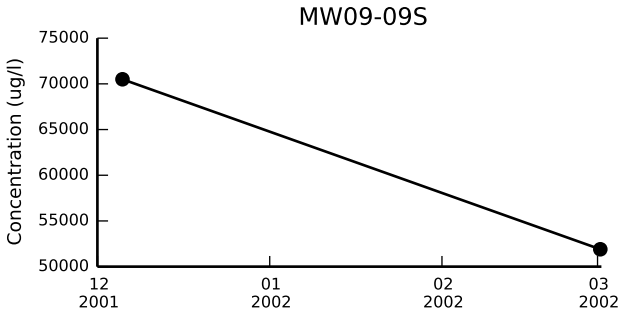
CALCIUM in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 22

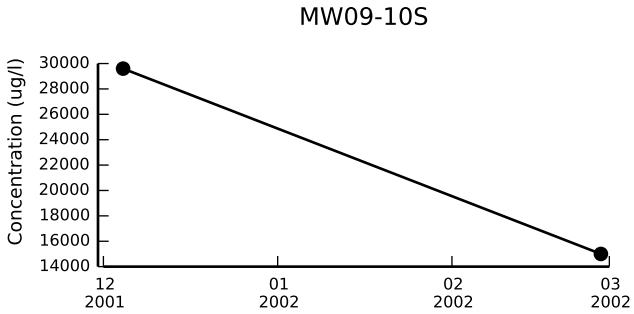
● Detected
○ Not Detected, shown at detection limit

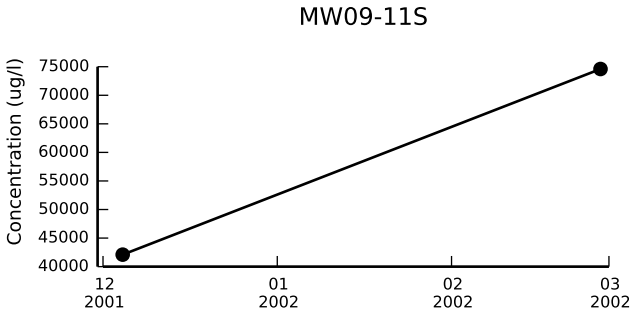


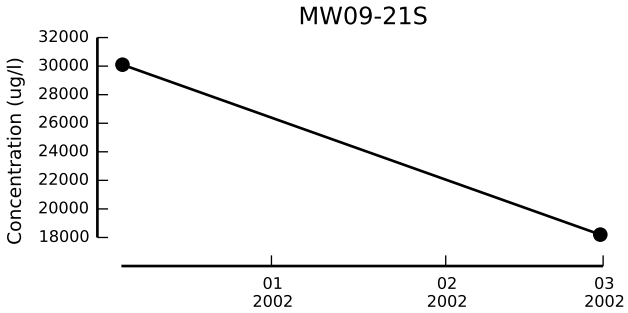


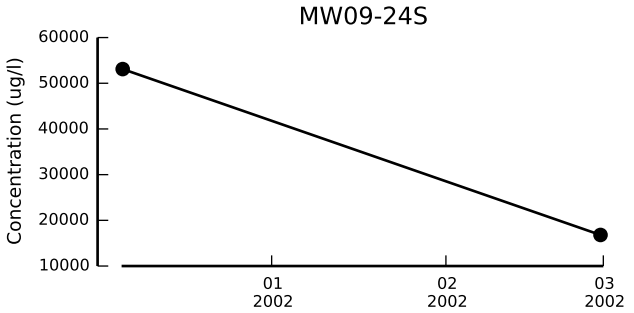


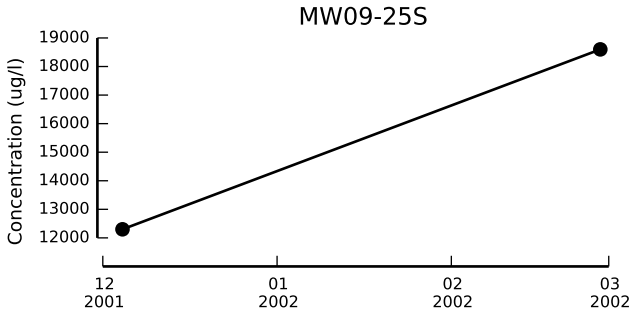












MW09-26S

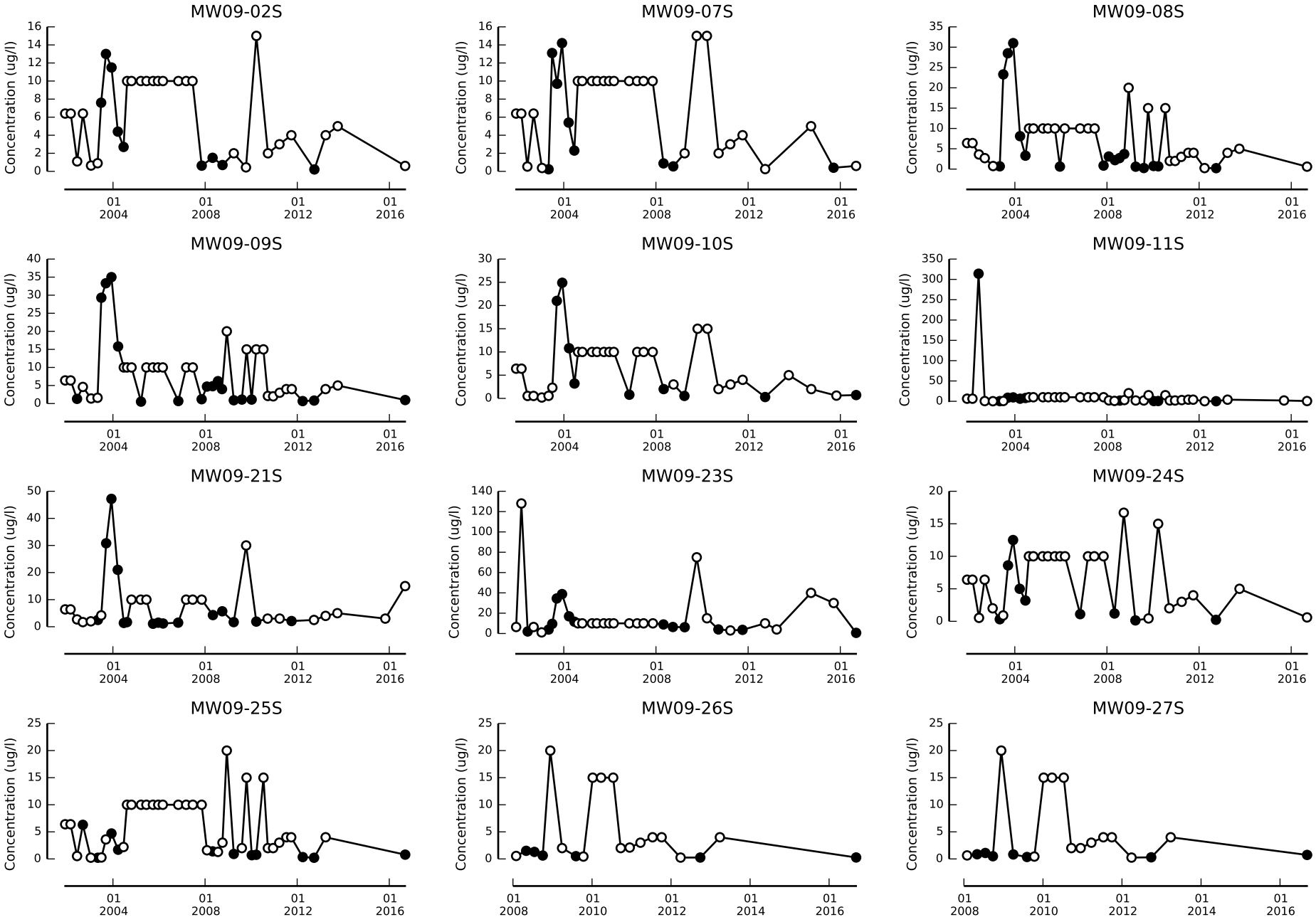
Not Sampled

MW09-27S

Not Sampled

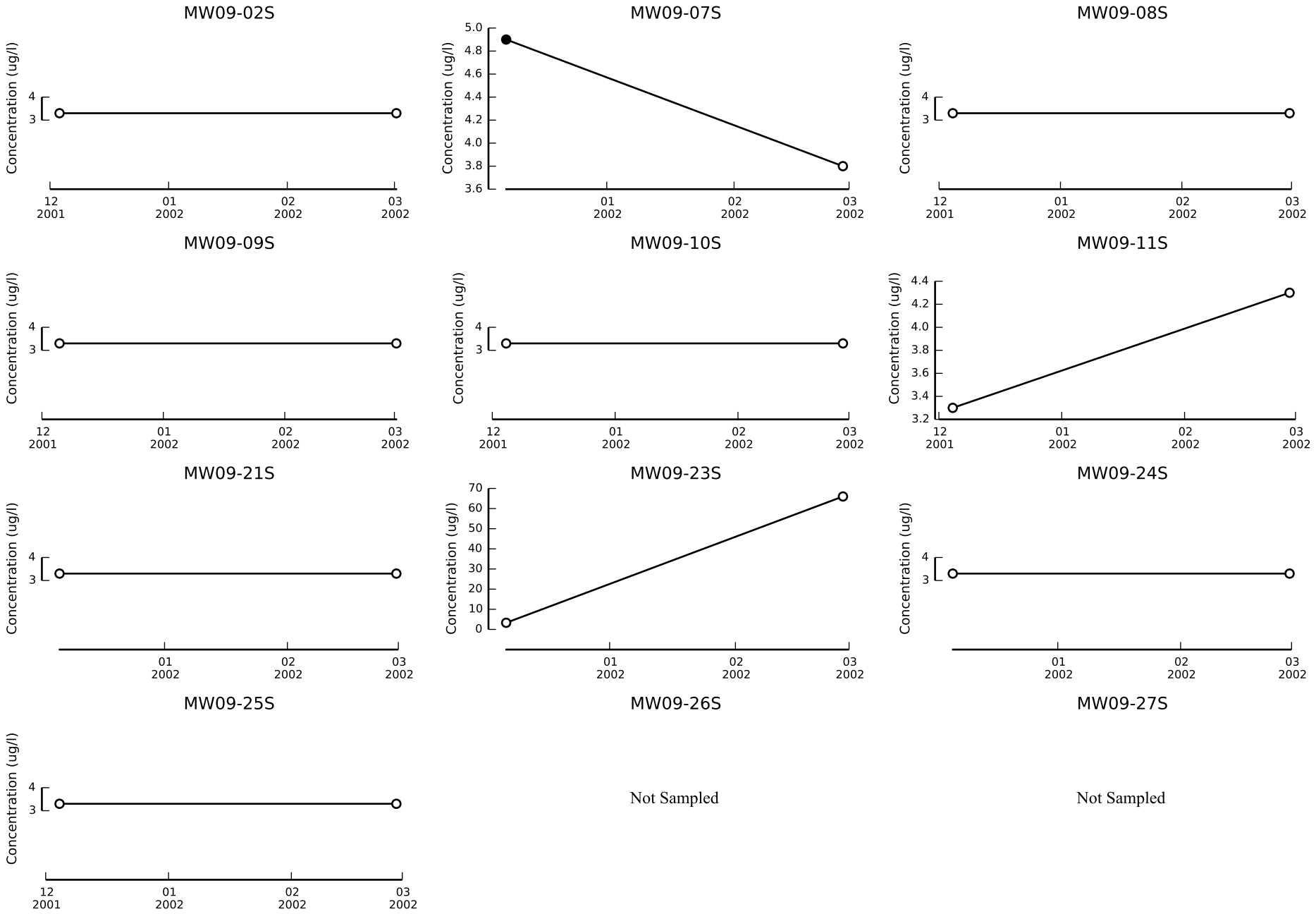
CHROMIUM, TOTAL in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 22

● Detected
○ Not Detected, shown at detection limit



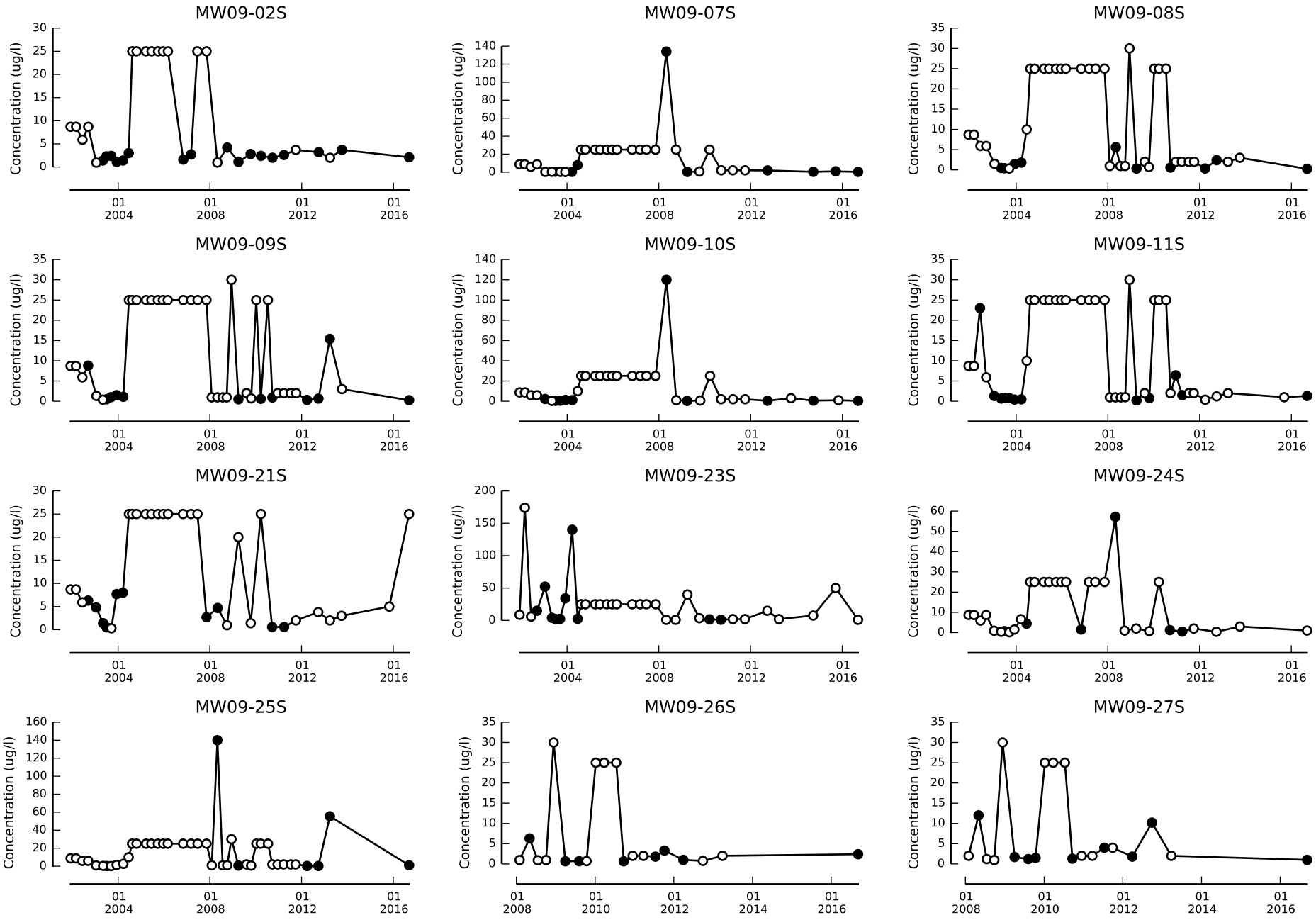
COBALT in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 22

● Detected
○ Not Detected, shown at detection limit



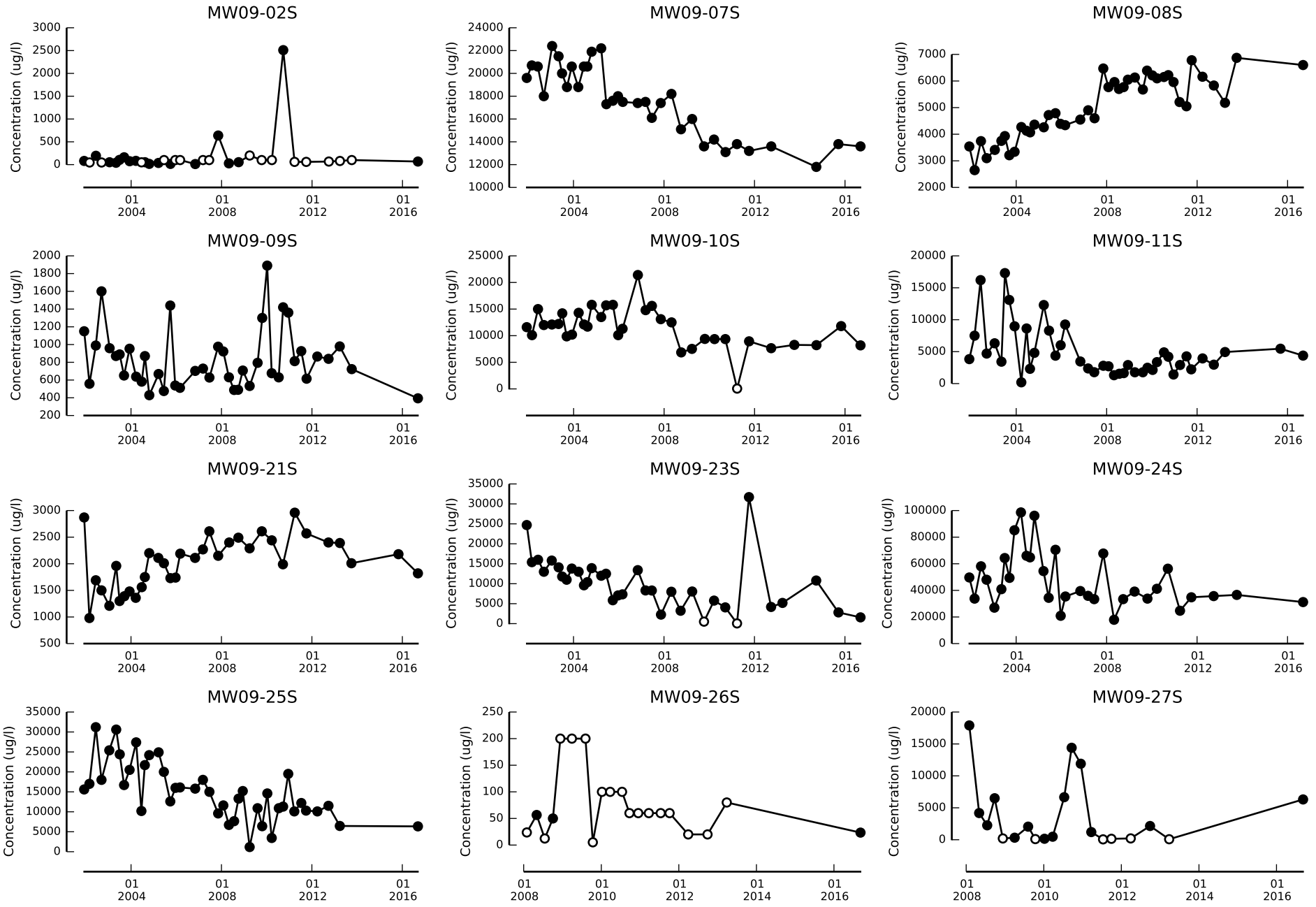
COPPER in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 22

● Detected
○ Not Detected, shown at detection limit



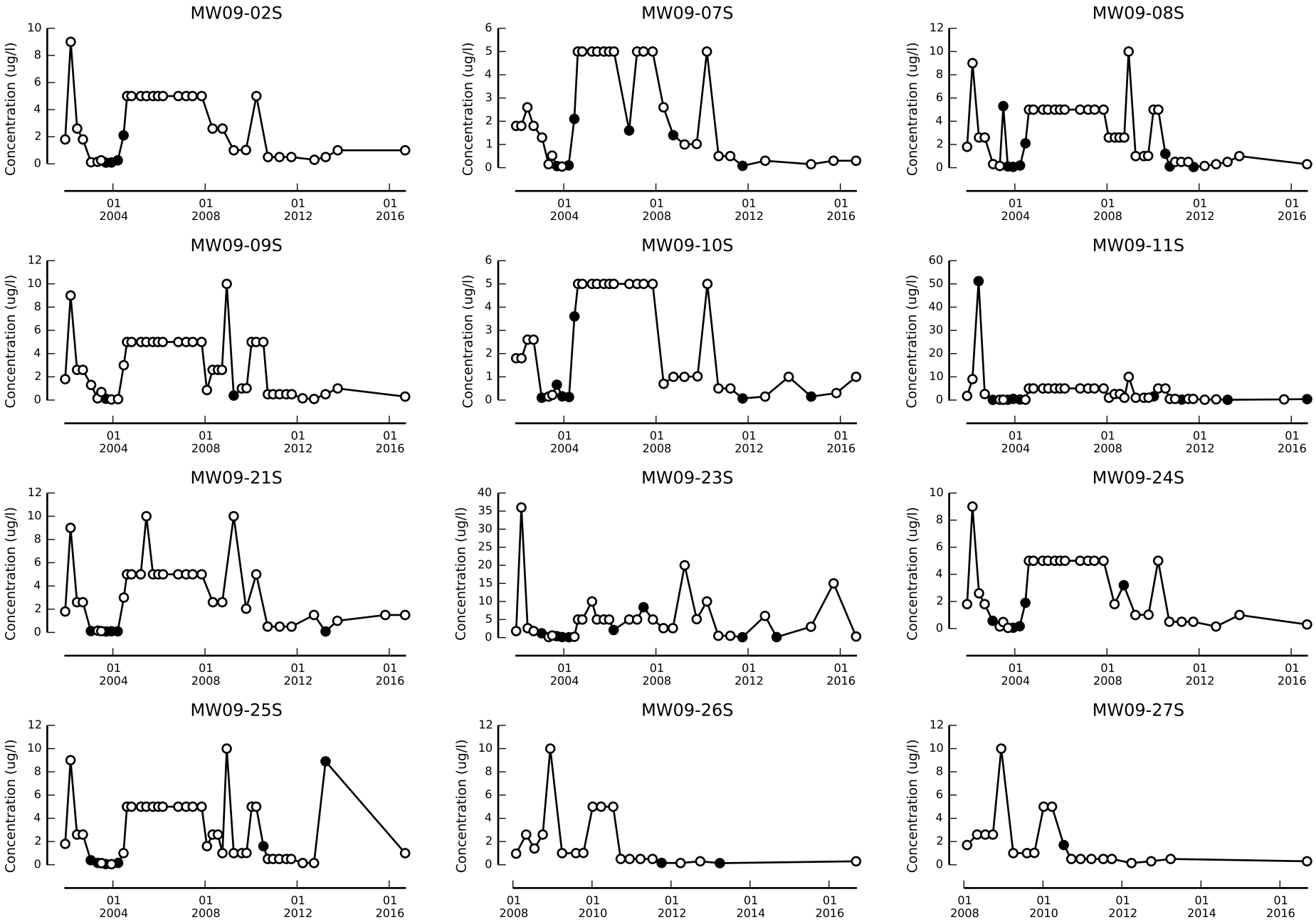
IRON in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 22

● Detected
○ Not Detected, shown at detection limit



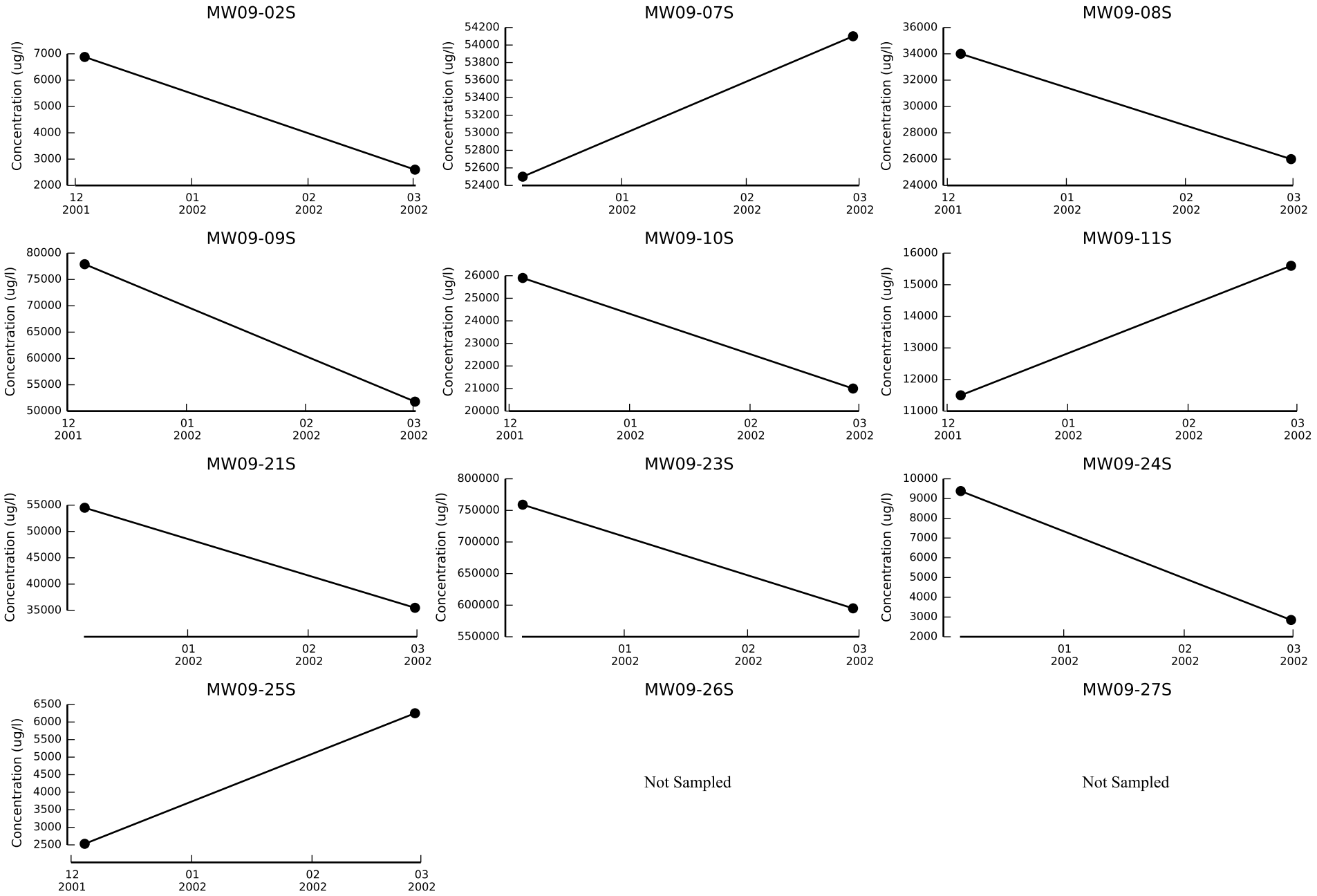
LEAD in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 22

● Detected
○ Not Detected, shown at detection limit



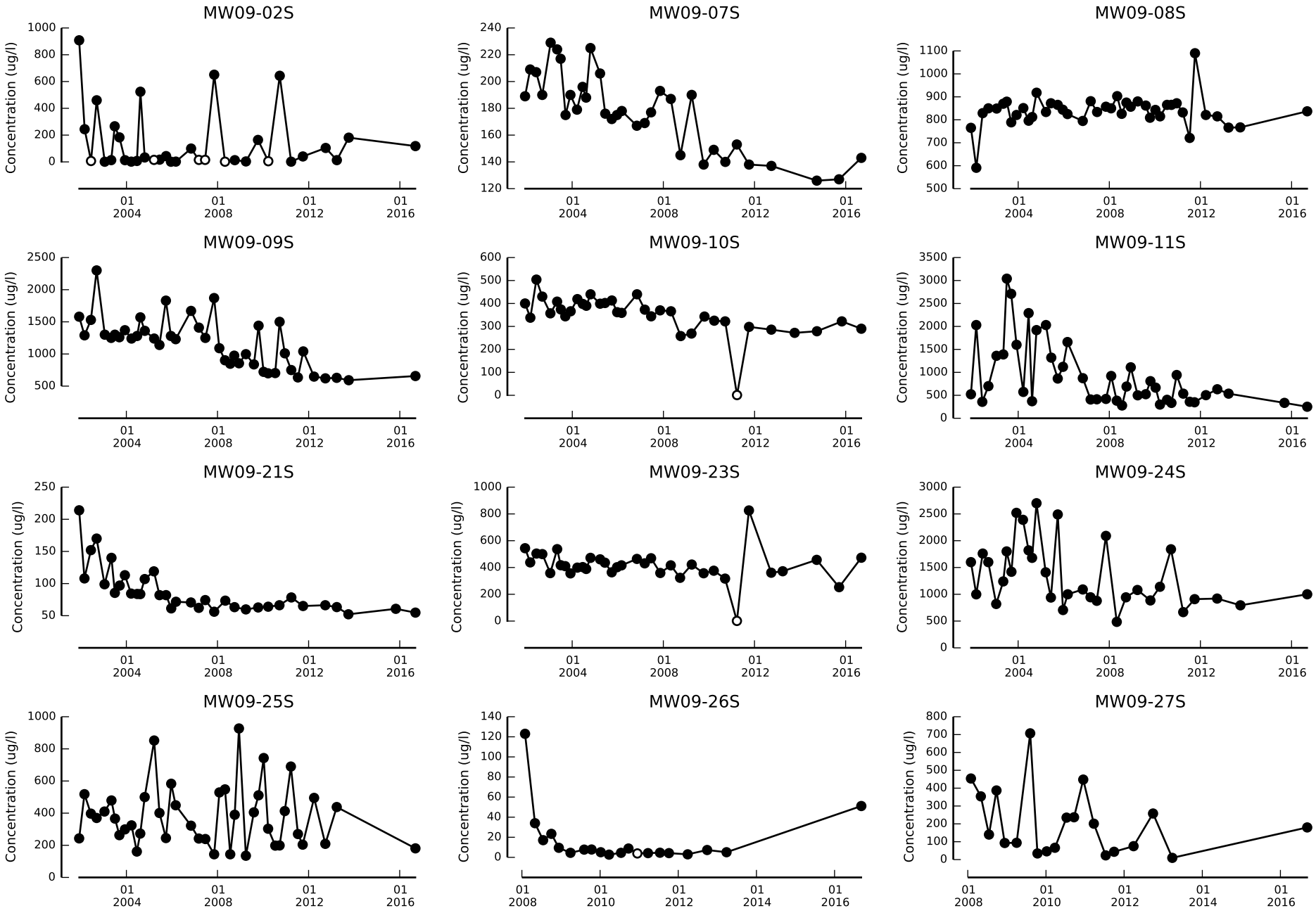
MAGNESIUM in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 22

● Detected
○ Not Detected, shown at detection limit



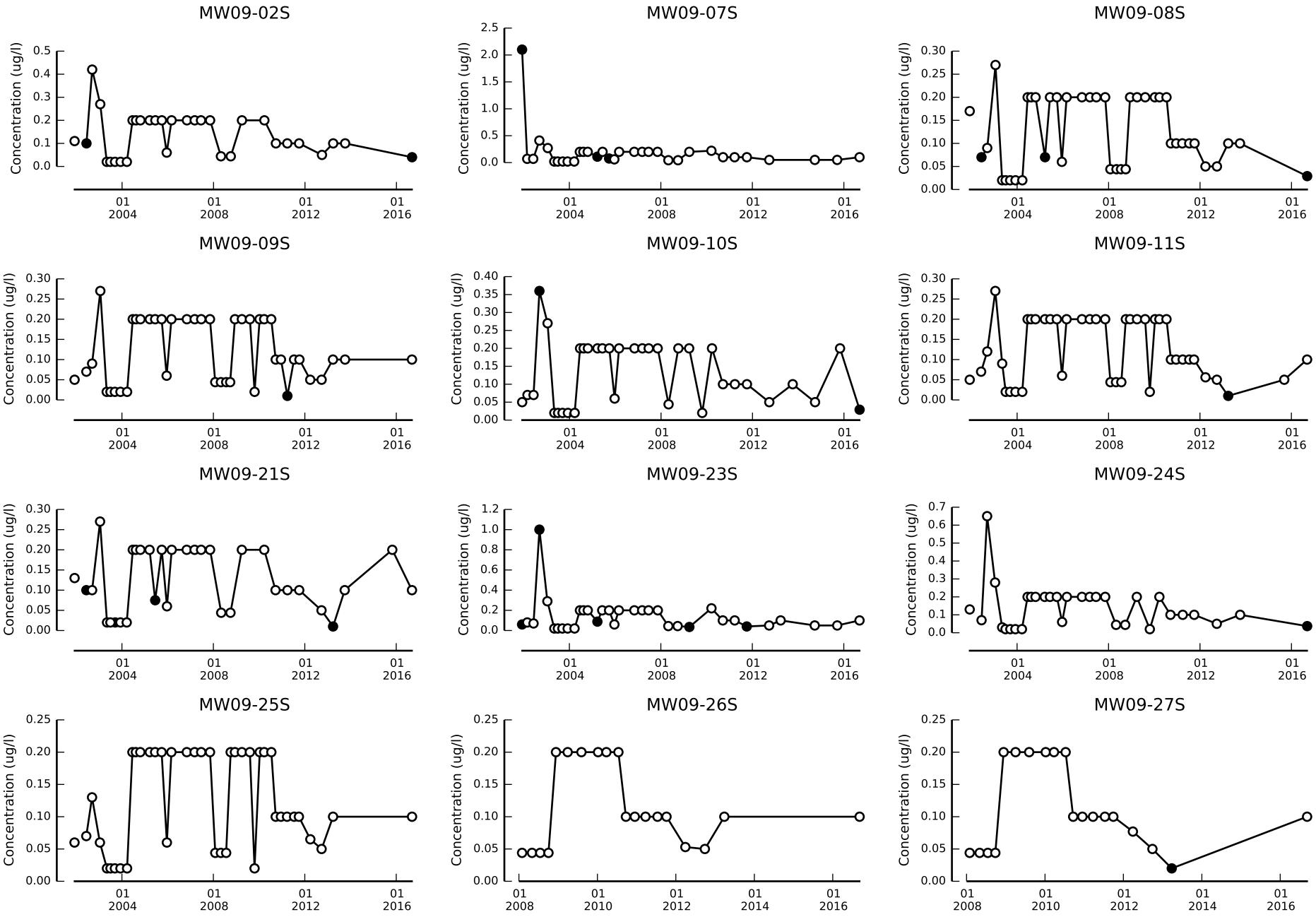
MANGANESE in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 22

● Detected
○ Not Detected, shown at detection limit



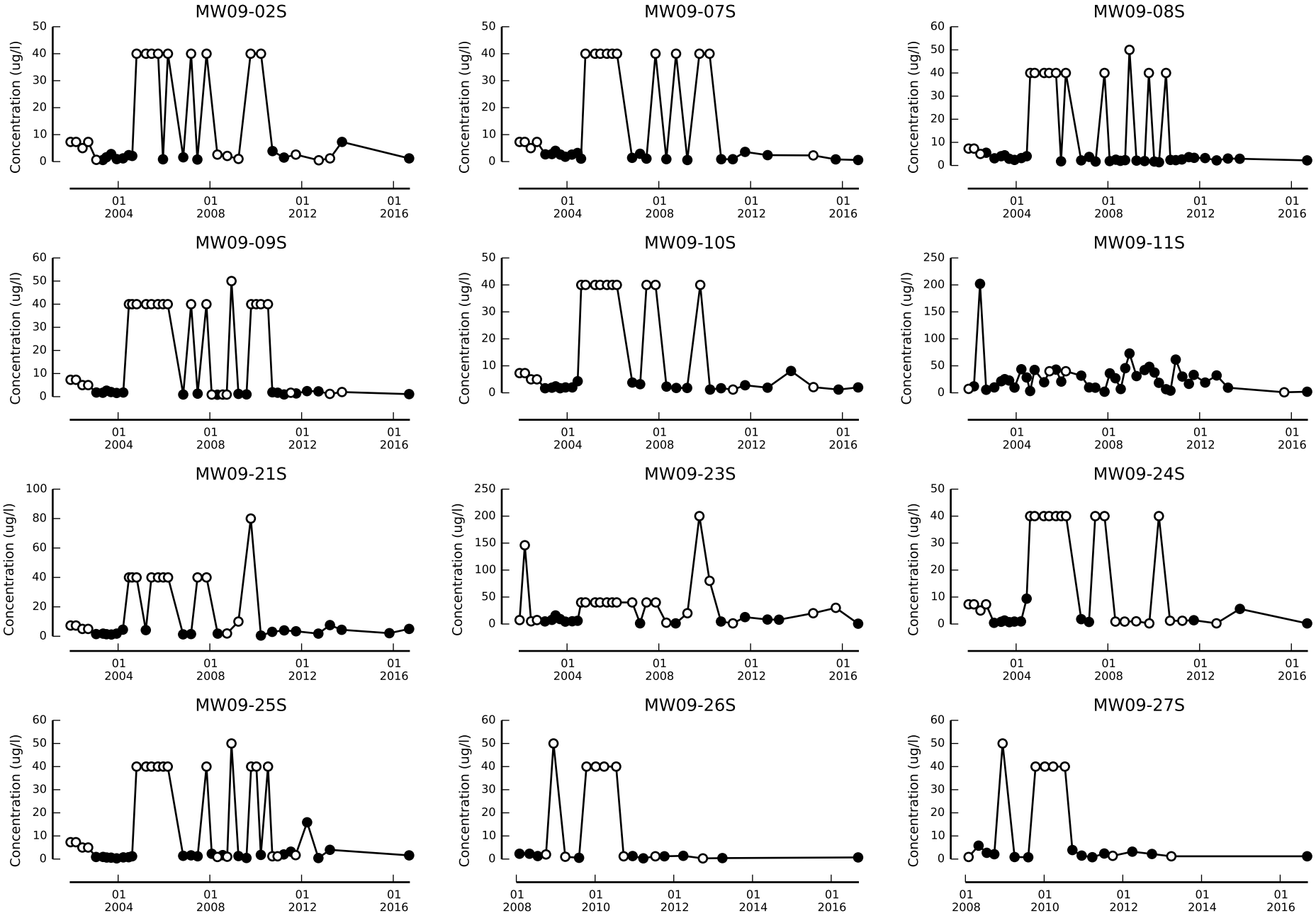
MERCURY in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 22

● Detected
○ Not Detected, shown at detection limit



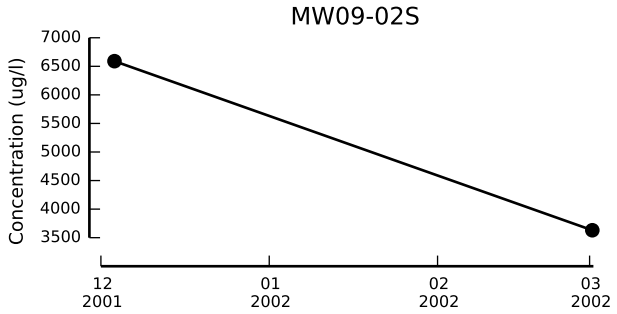
NICKEL in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 22

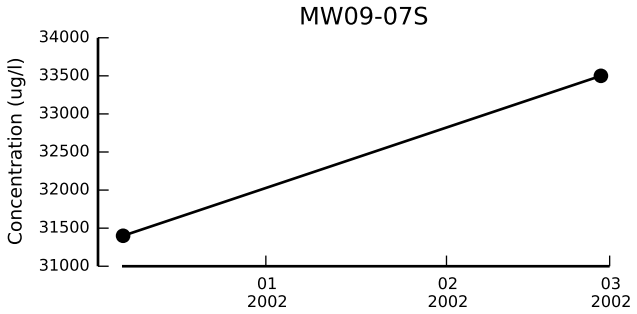
● Detected
○ Not Detected, shown at detection limit

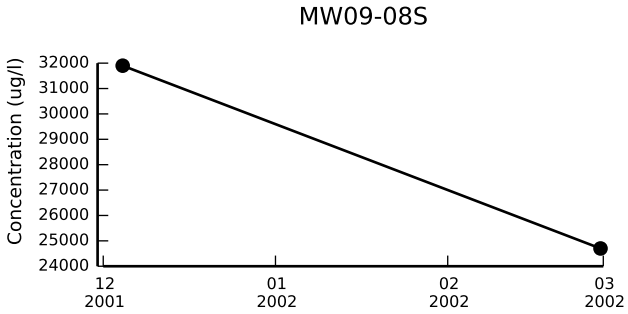


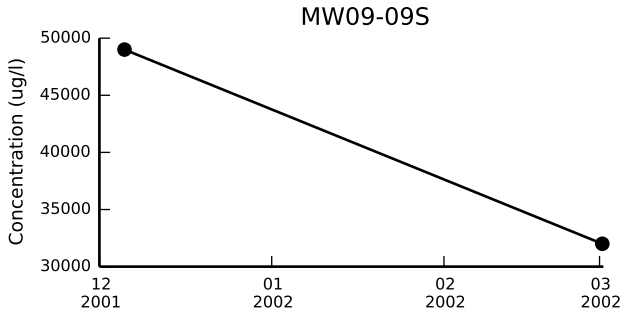
POTASSIUM in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 22

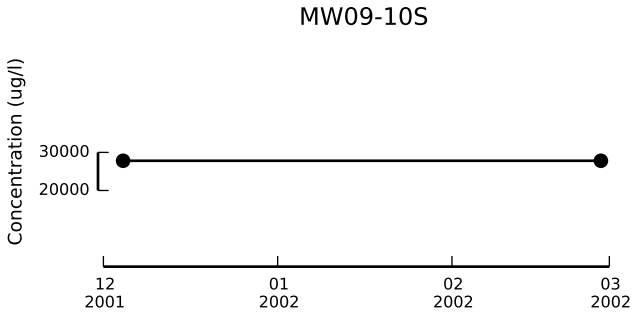
● Detected
○ Not Detected, shown at detection limit

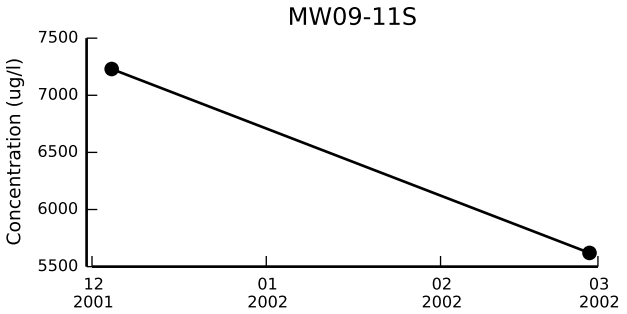


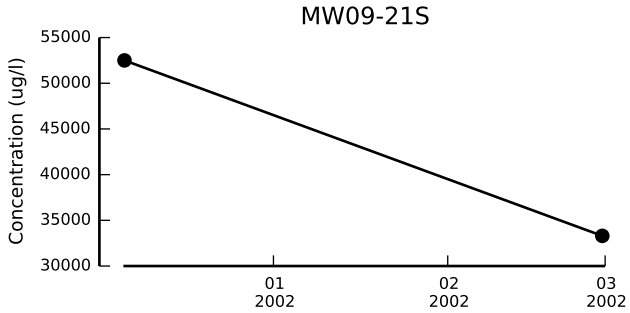


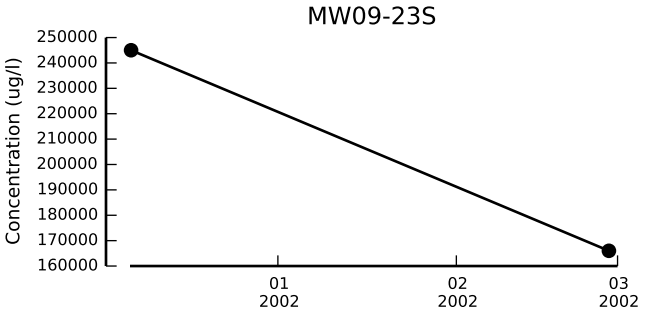


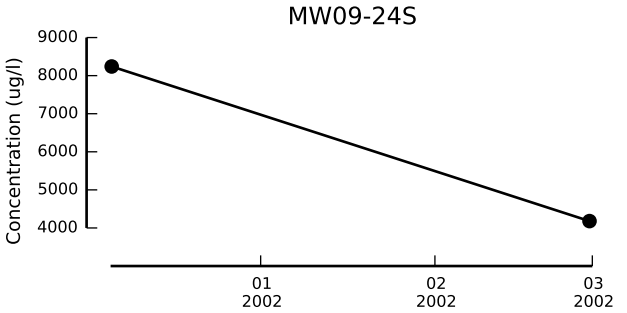


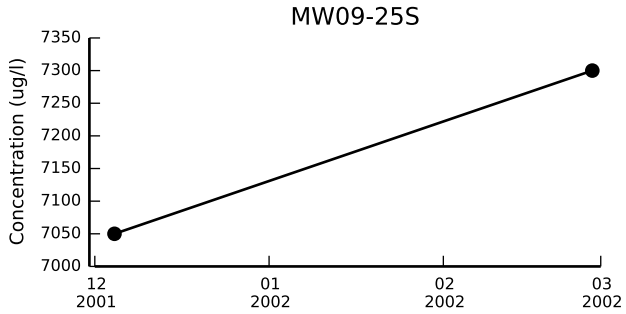












MW09-26S

Not Sampled

MW09-27S

Not Sampled

SELENIUM in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 22

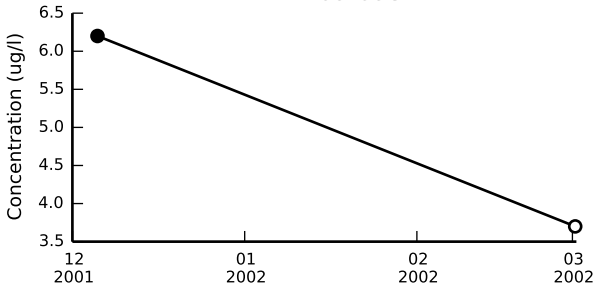
● Detected
○ Not Detected, shown at detection limit

MW09-02S

MW09-07S

MW09-08S

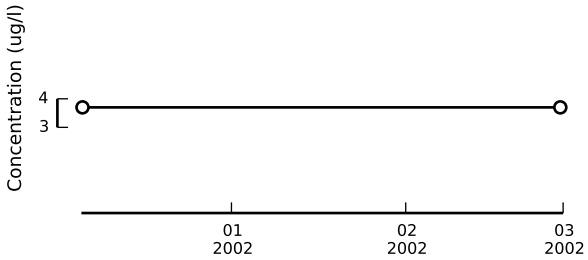
MW09-09S



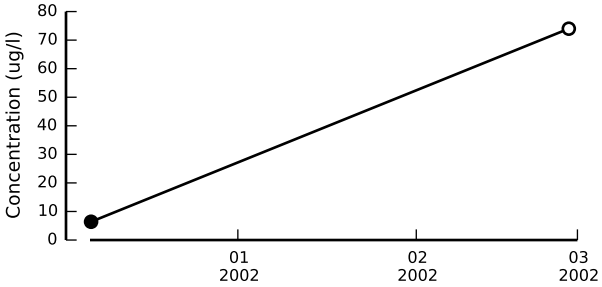
MW09-10S

MW09-11S

MW09-21S



MW09-23S



MW09-24S

MW09-25S

MW09-26S

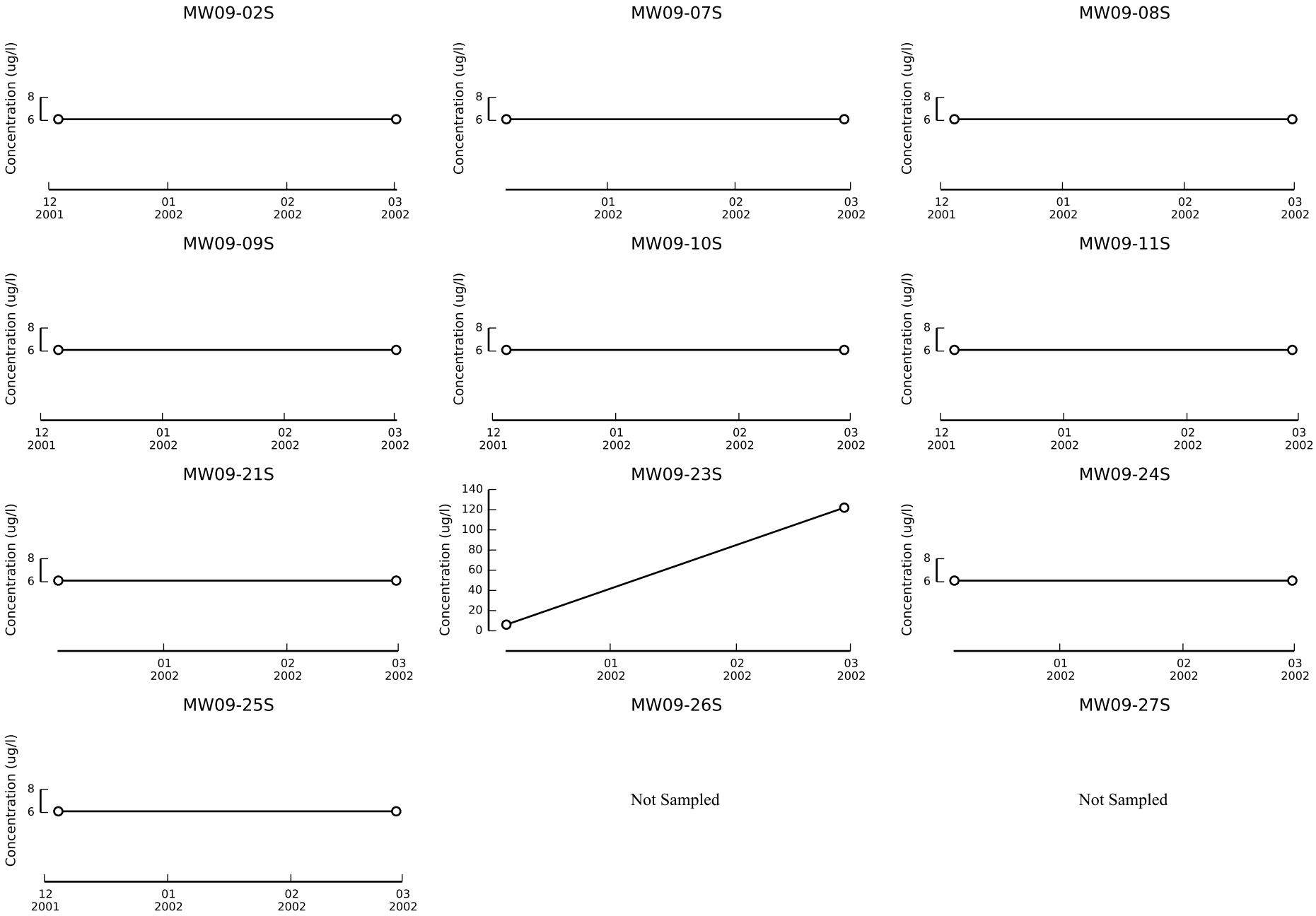
Not Sampled

MW09-27S

Not Sampled

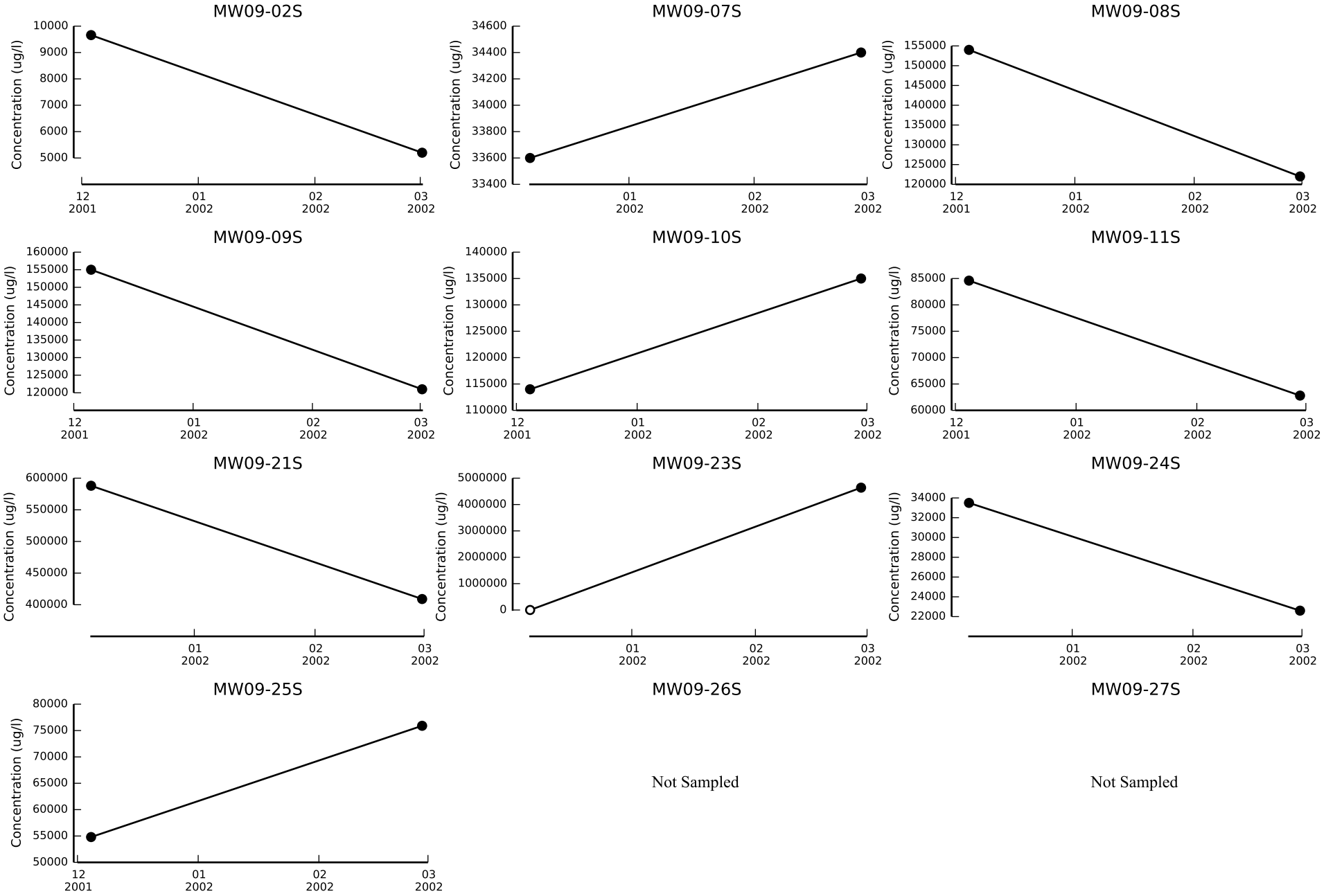
SILVER in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 22

● Detected
○ Not Detected, shown at detection limit



SODIUM in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 22

● Detected
○ Not Detected, shown at detection limit



VANADIUM in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 22

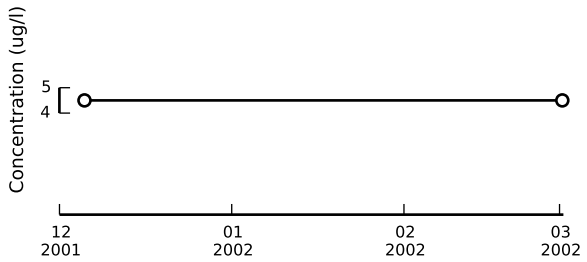
● Detected
○ Not Detected, shown at detection limit

MW09-02S

MW09-07S

MW09-08S

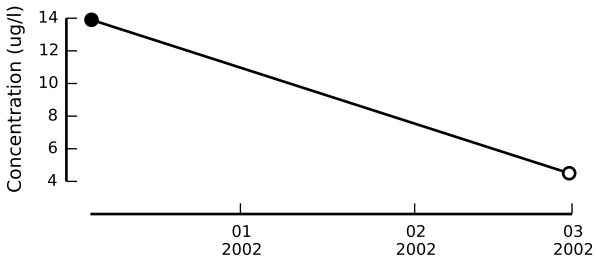
MW09-09S



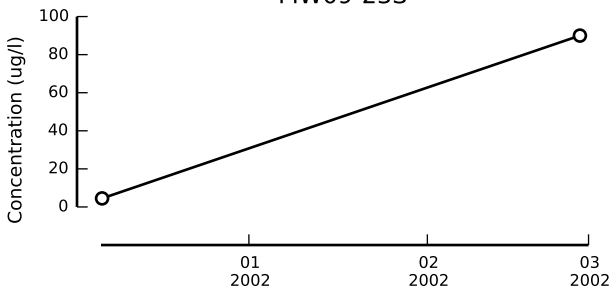
MW09-10S

MW09-11S

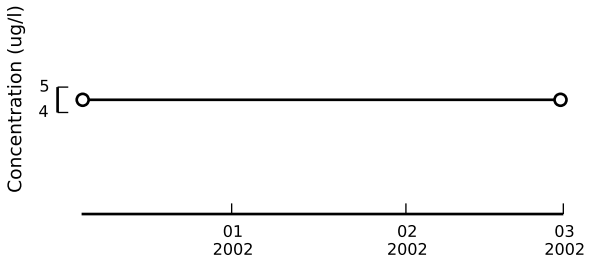
MW09-21S



MW09-23S



MW09-24S



MW09-25S

MW09-26S

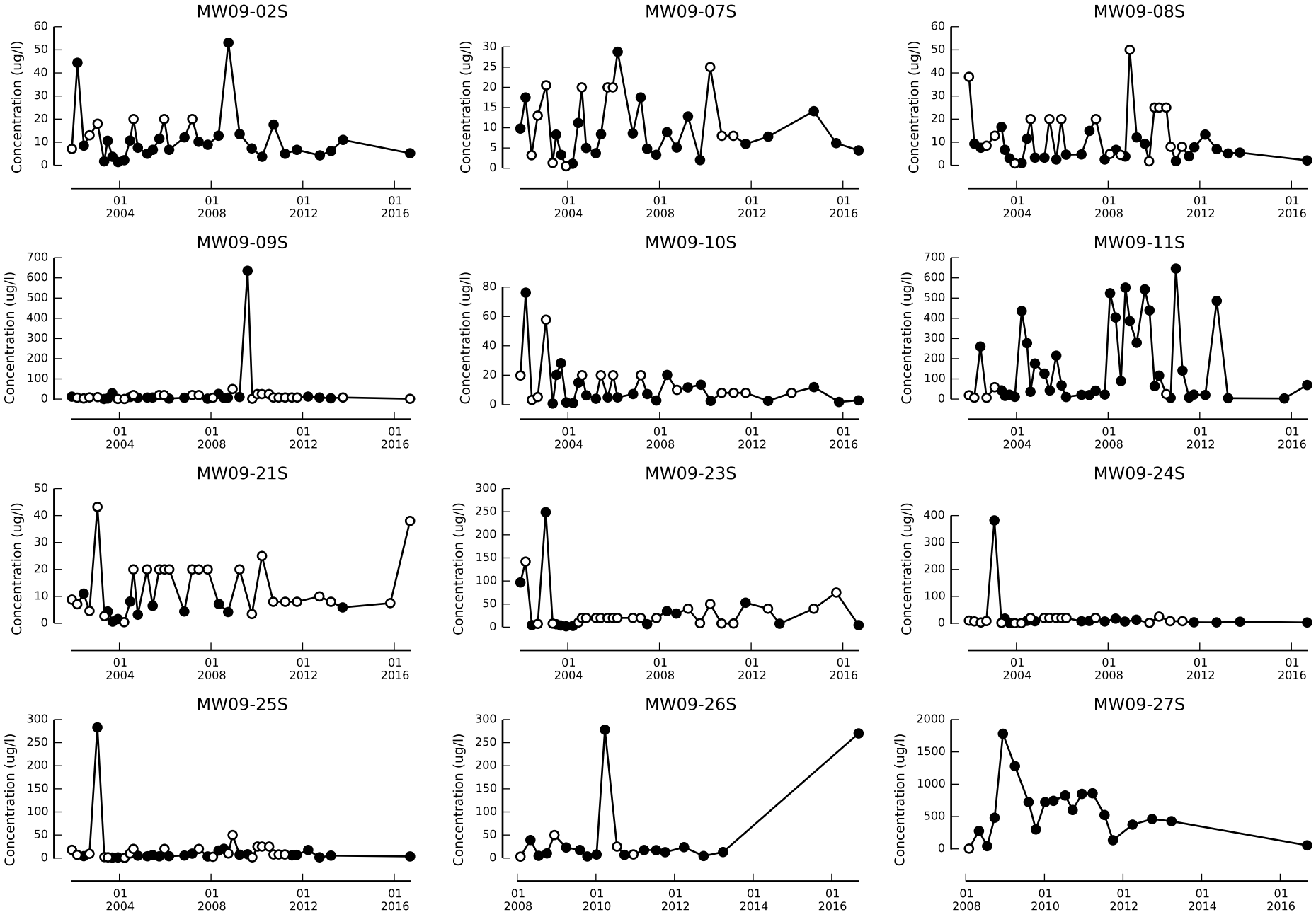
Not Sampled

MW09-27S

Not Sampled

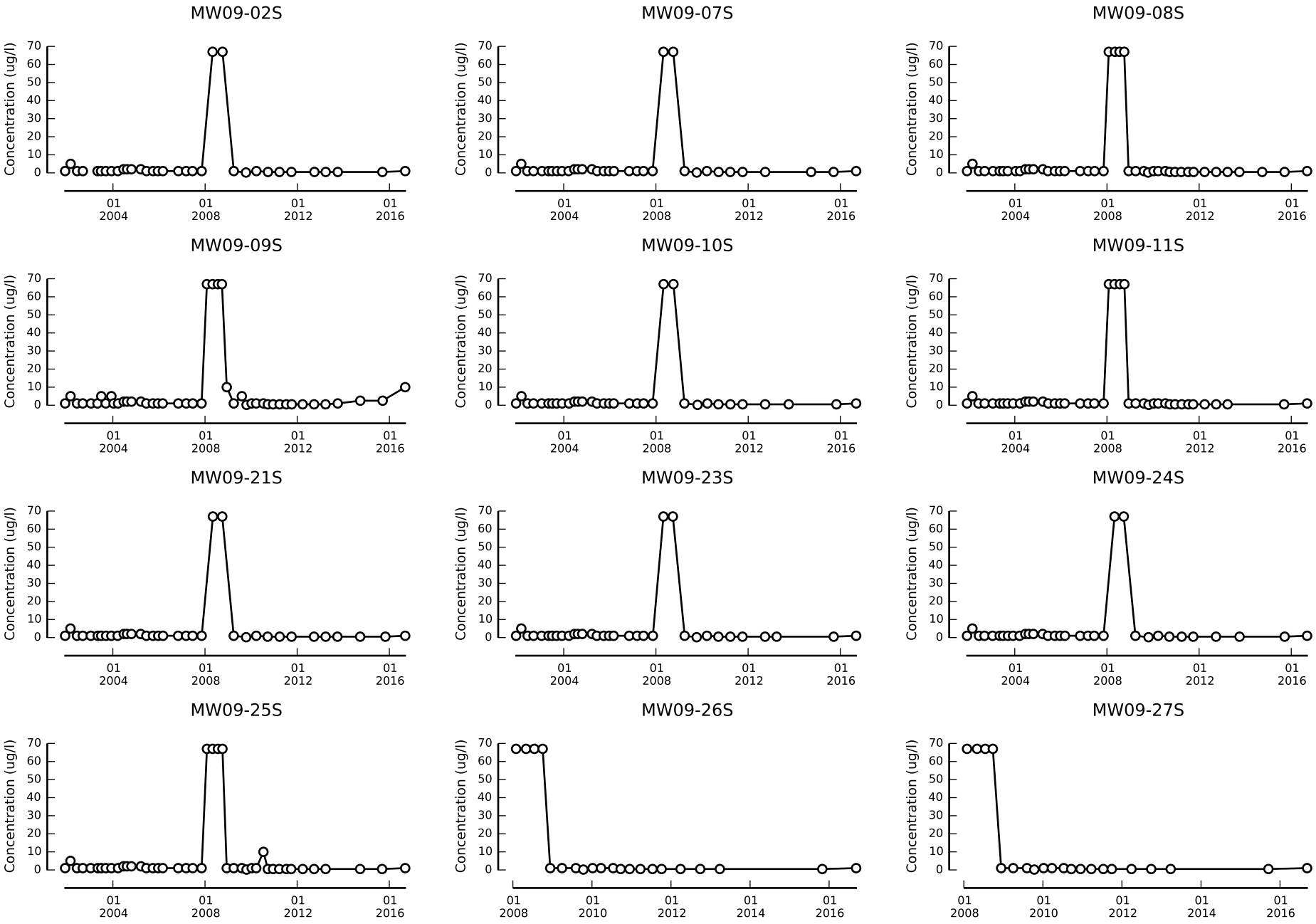
ZINC in Groundwater, Shallow Wells (Dissolved)
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 22

● Detected
○ Not Detected, shown at detection limit



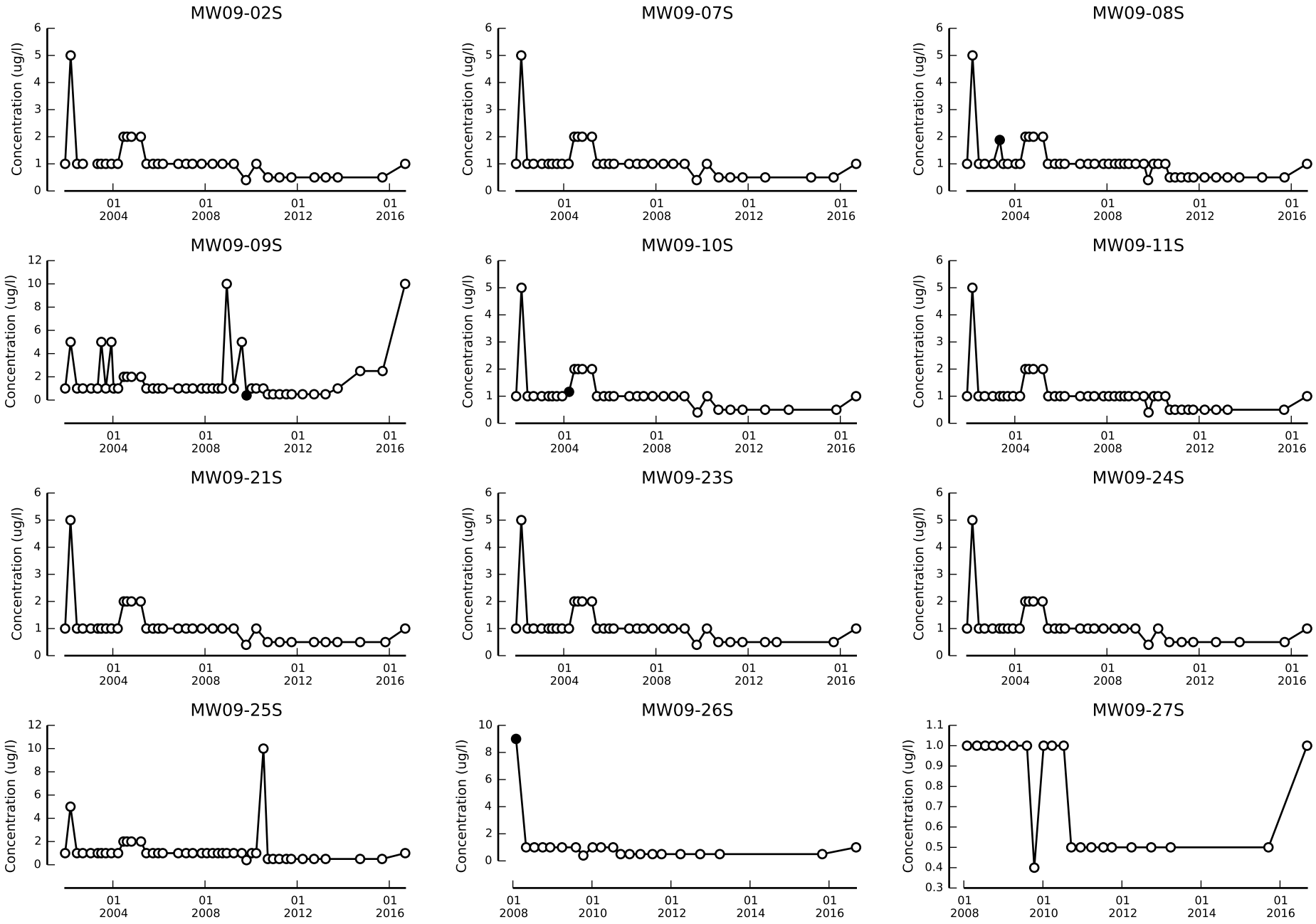
1,1,1-TRICHLOROETHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 133

● Detected
○ Not Detected, shown at detection limit



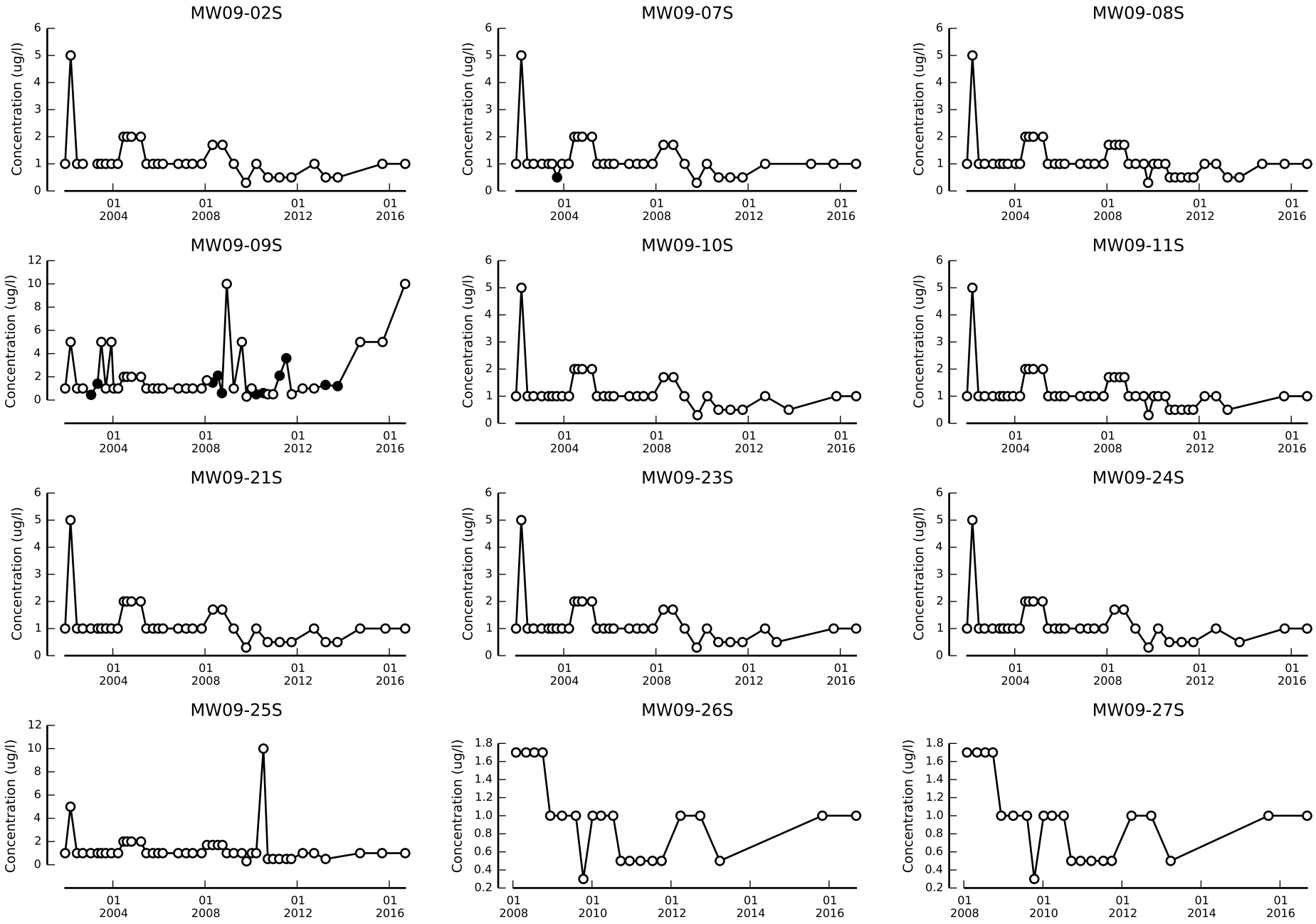
1,1,2,2-TETRACHLOROETHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 133

● Detected
○ Not Detected, shown at detection limit



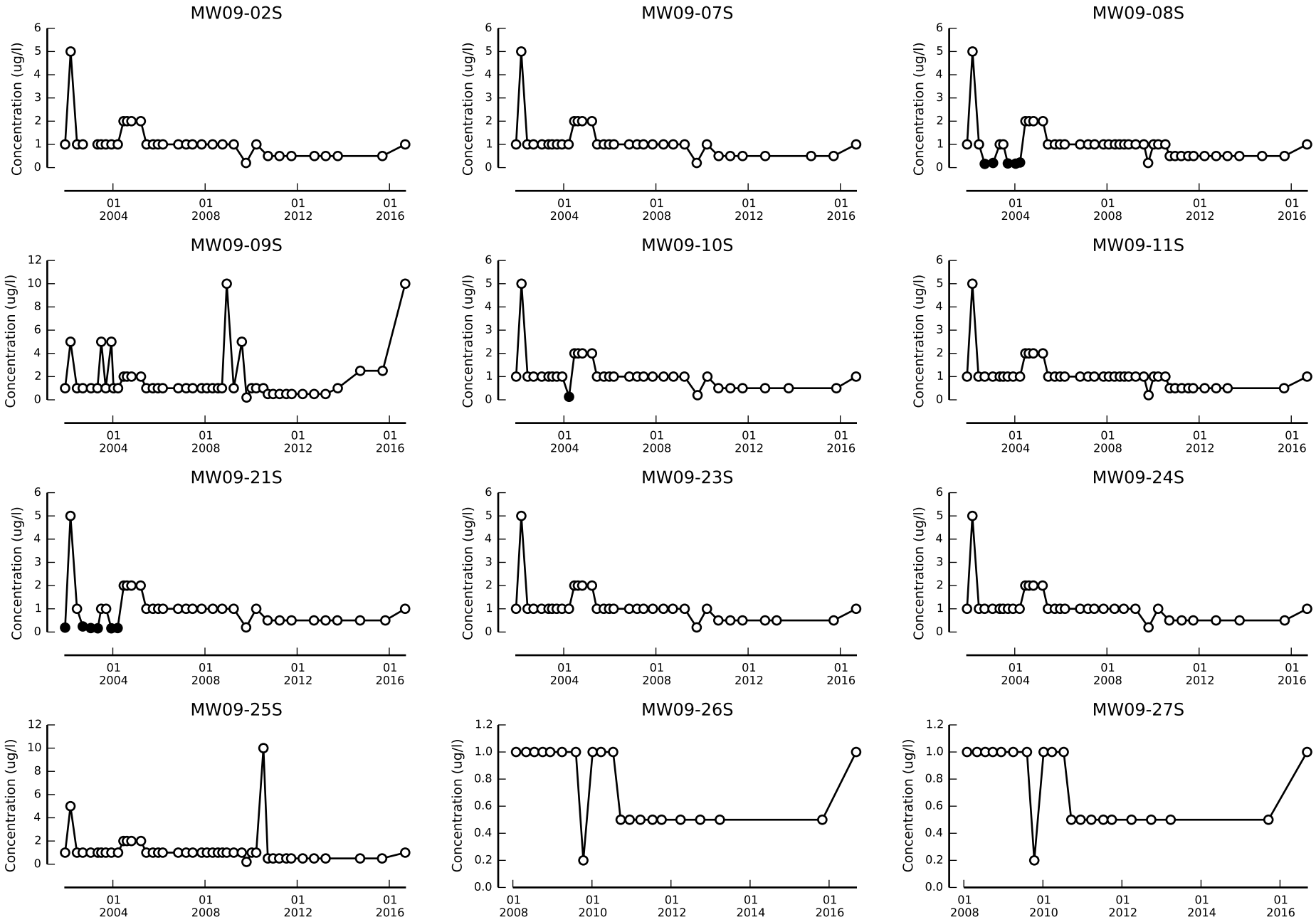
1,1,2-TRICHLOROETHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 133

● Detected
○ Not Detected, shown at detection limit



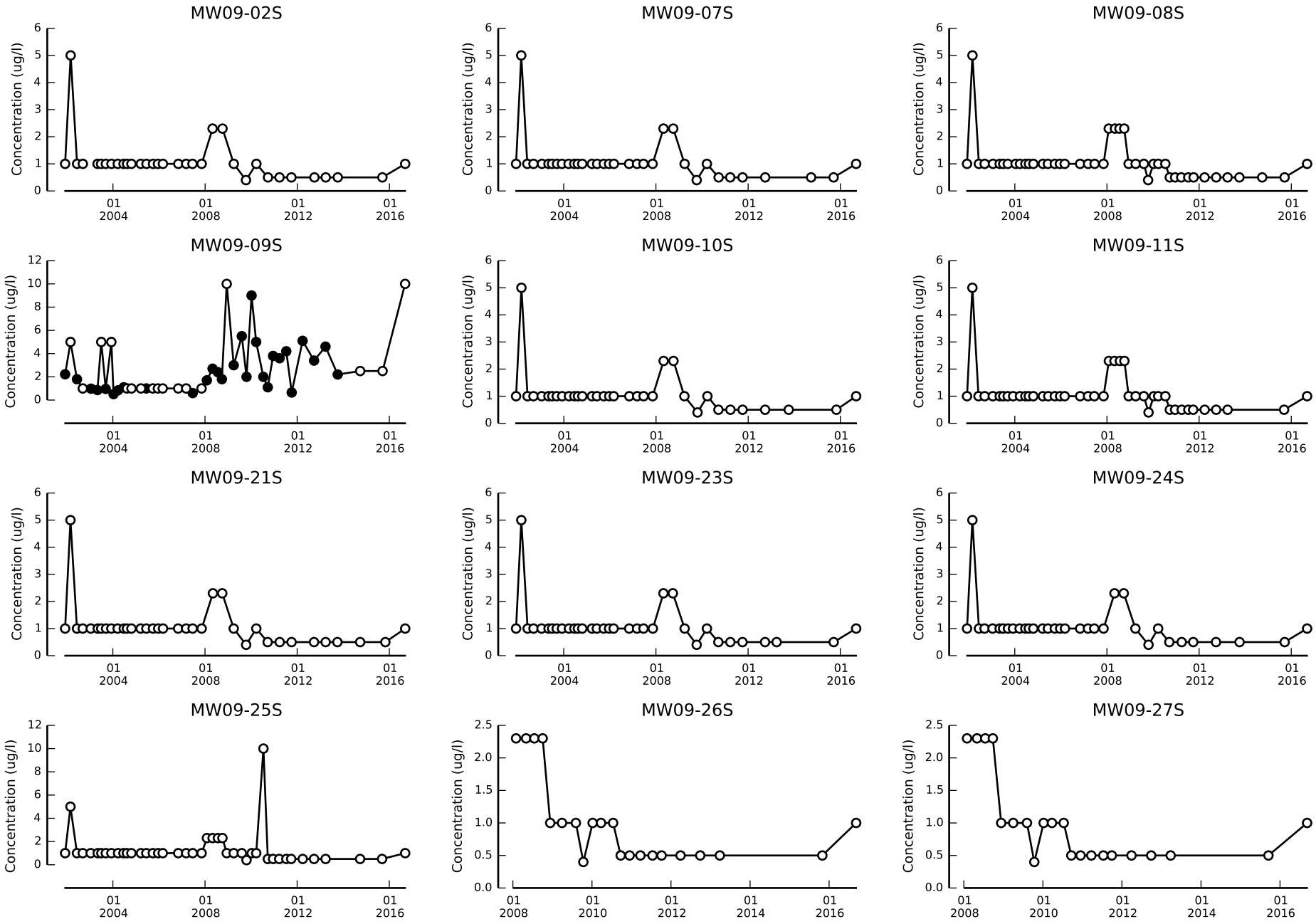
1,1-DICHLOROETHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 133

● Detected
○ Not Detected, shown at detection limit



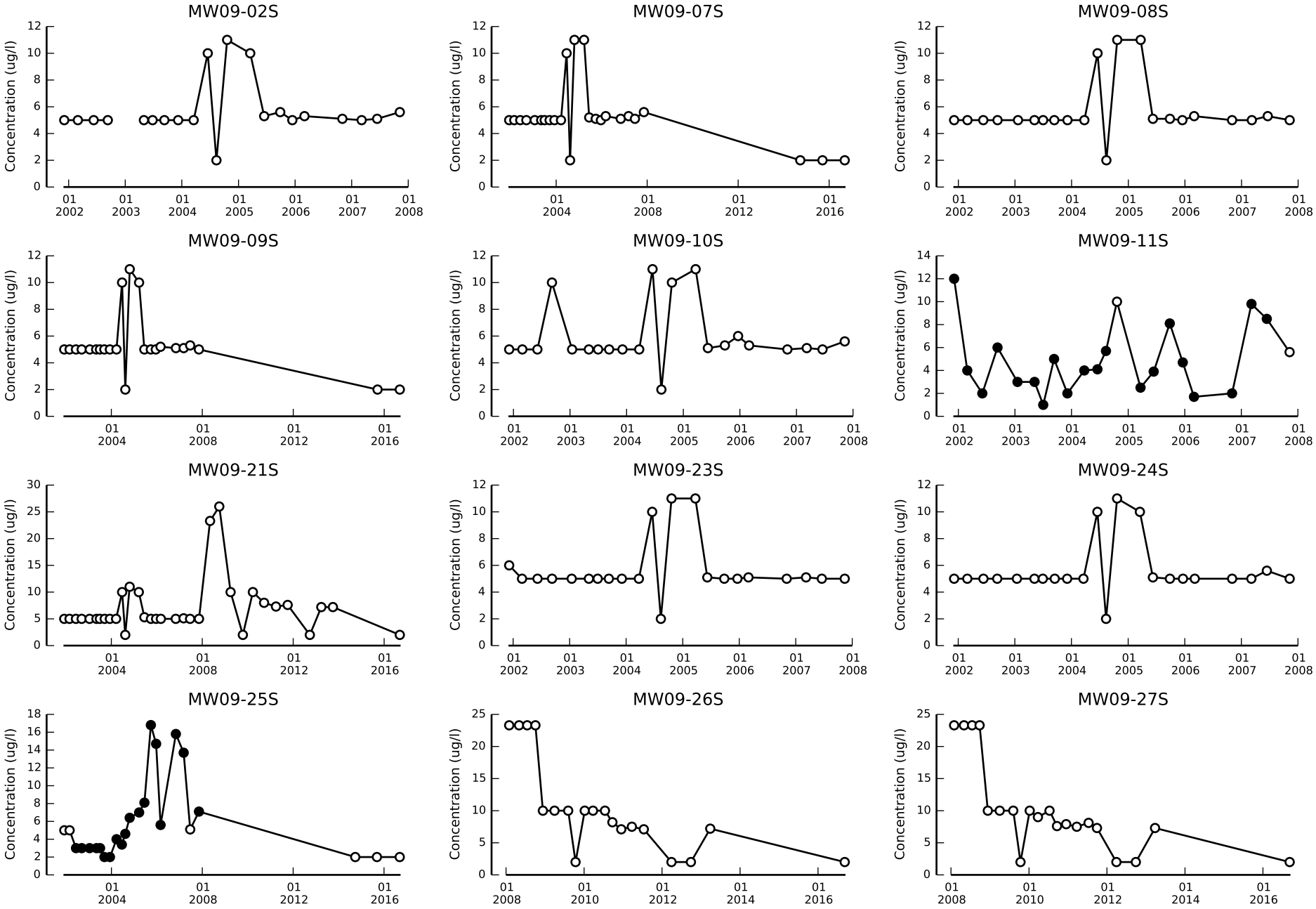
1,1-DICHLOROETHENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 133

● Detected
○ Not Detected, shown at detection limit



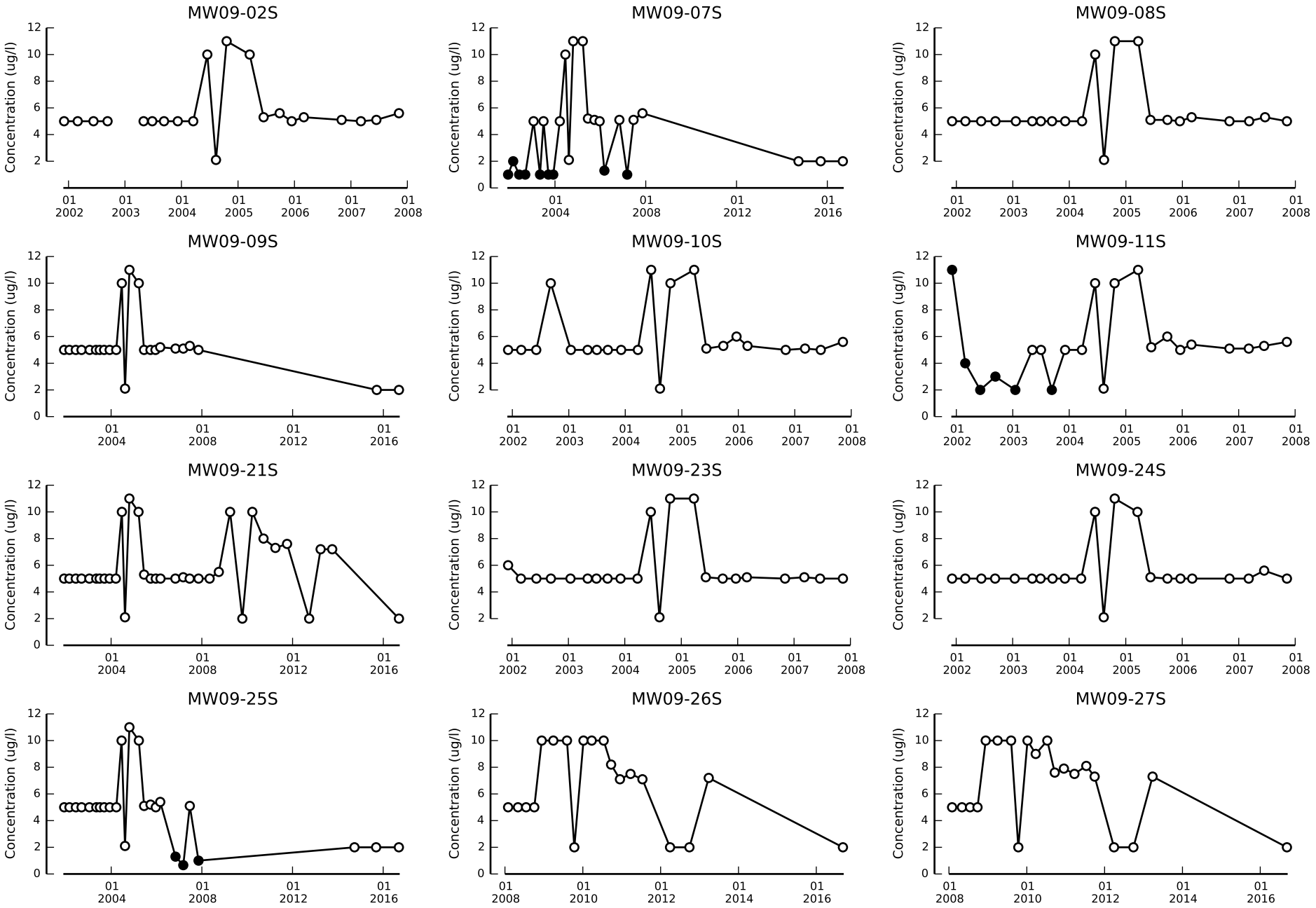
1,2,4-TRICHLOROBENZENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 133

● Detected
○ Not Detected, shown at detection limit



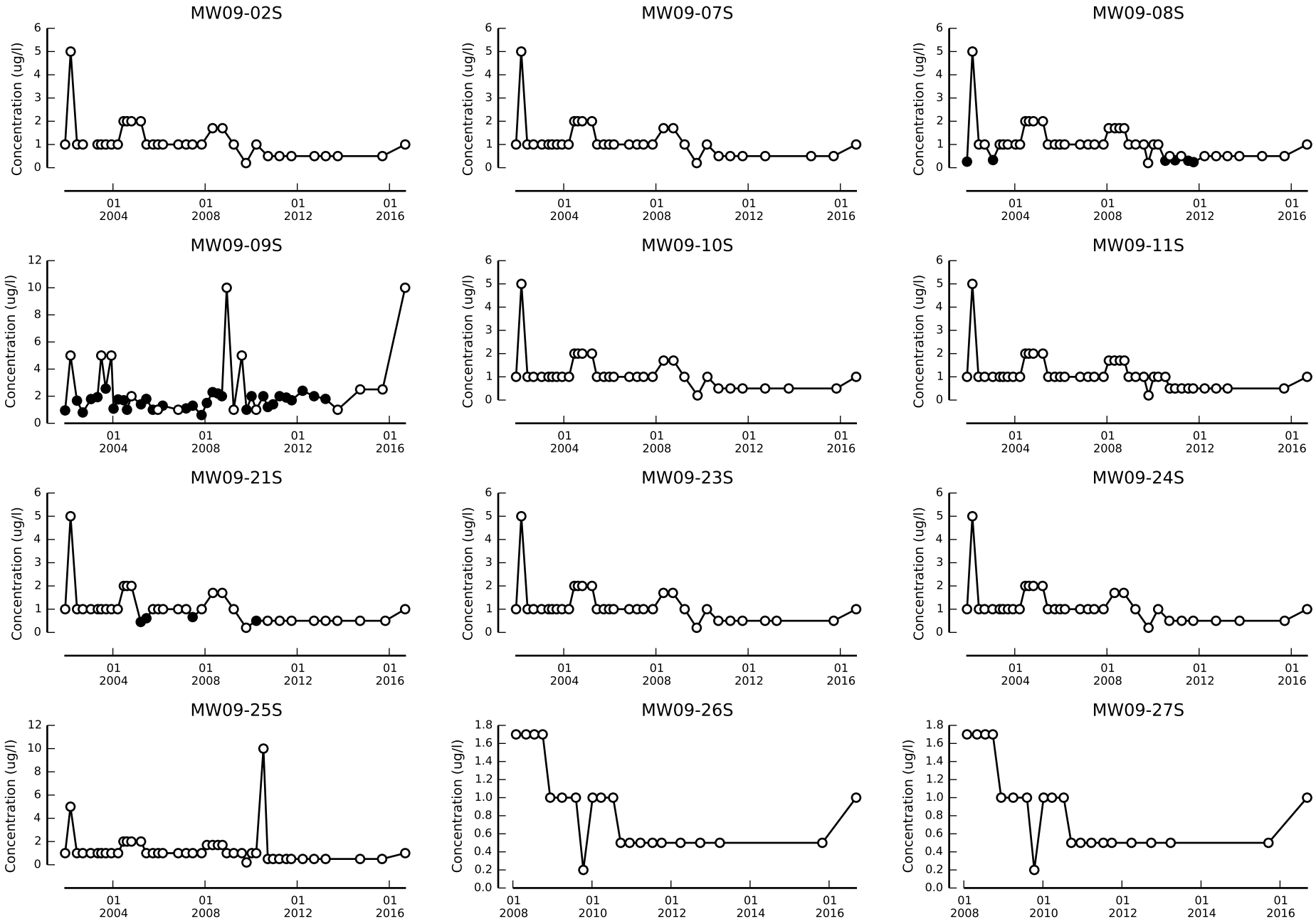
1,2-DICHLOROBENZENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 133

● Detected
○ Not Detected, shown at detection limit



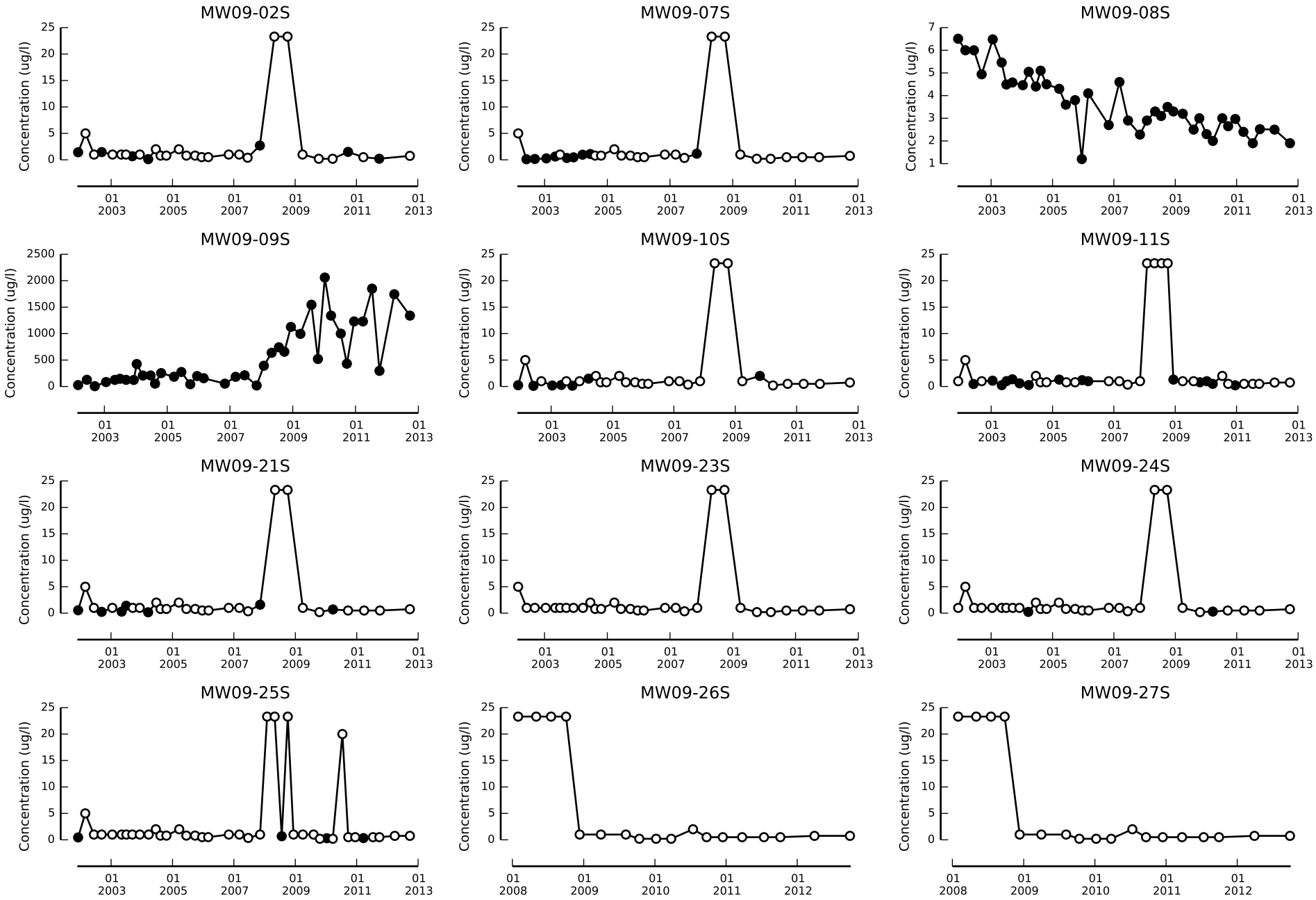
1,2-DICHLOROETHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 133

● Detected
○ Not Detected, shown at detection limit



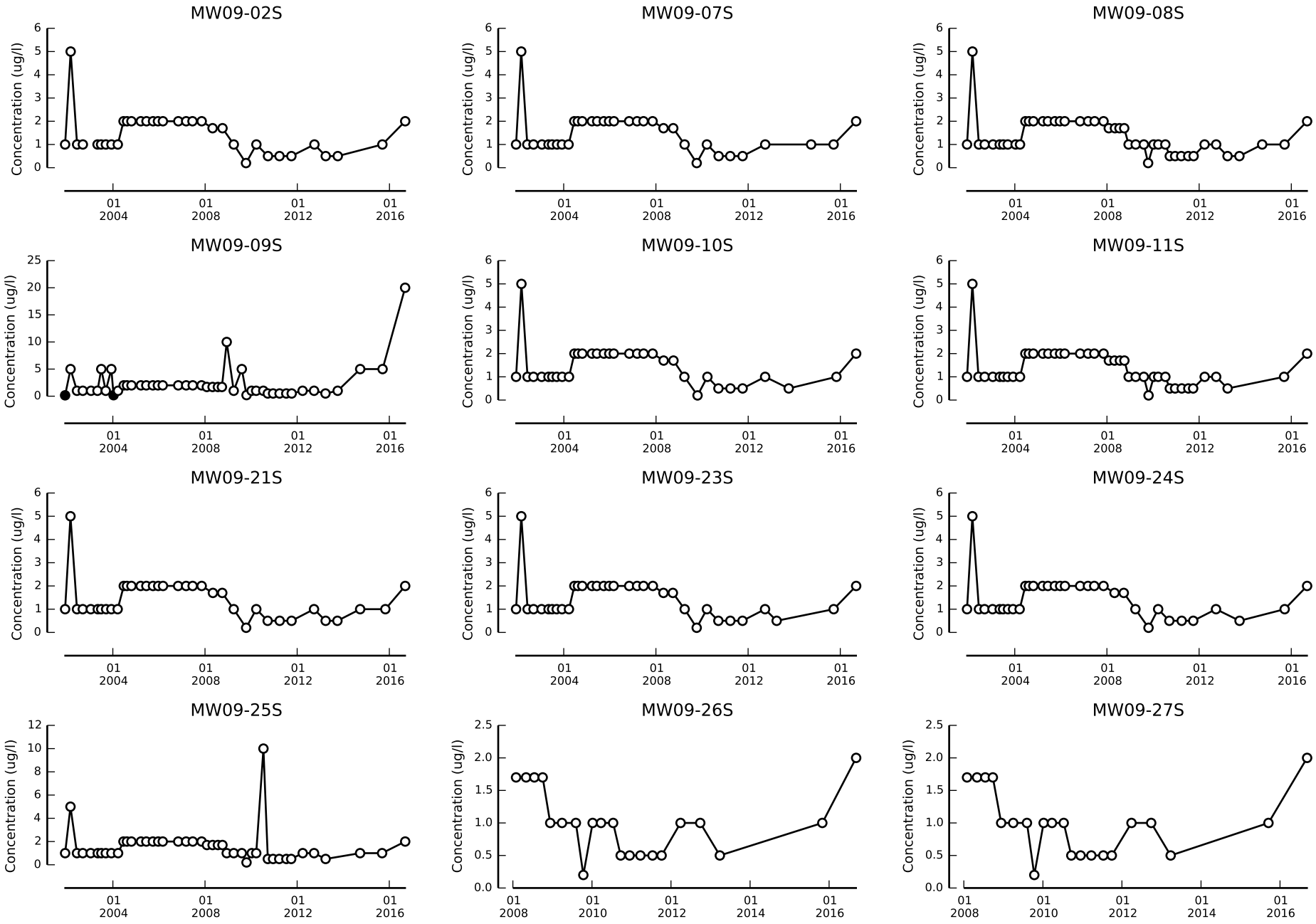
1,2-DICHLOROETHENE, TOTAL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 133

● Detected
○ Not Detected, shown at detection limit



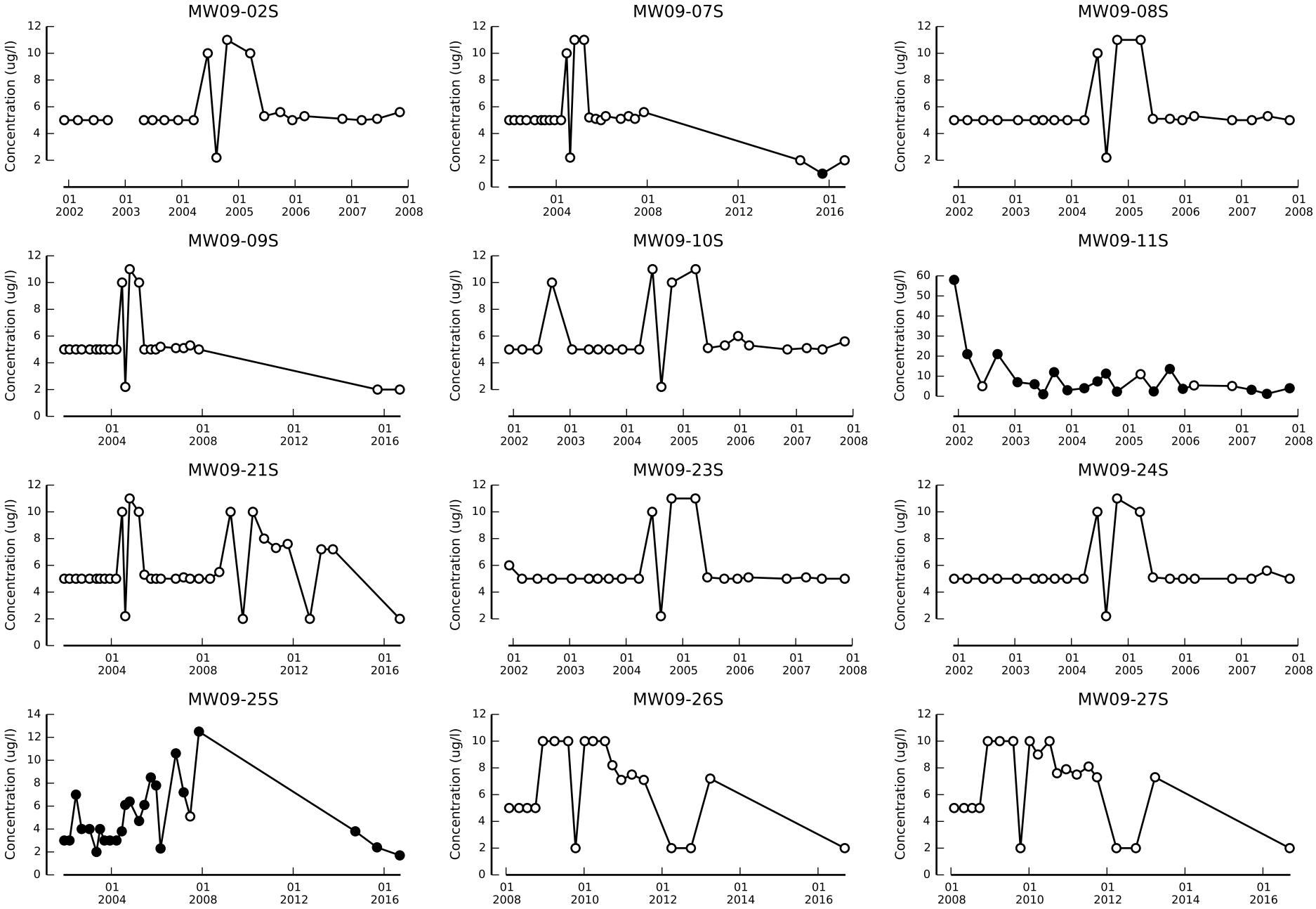
1,2-DICHLOROPROPANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 133

● Detected
○ Not Detected, shown at detection limit



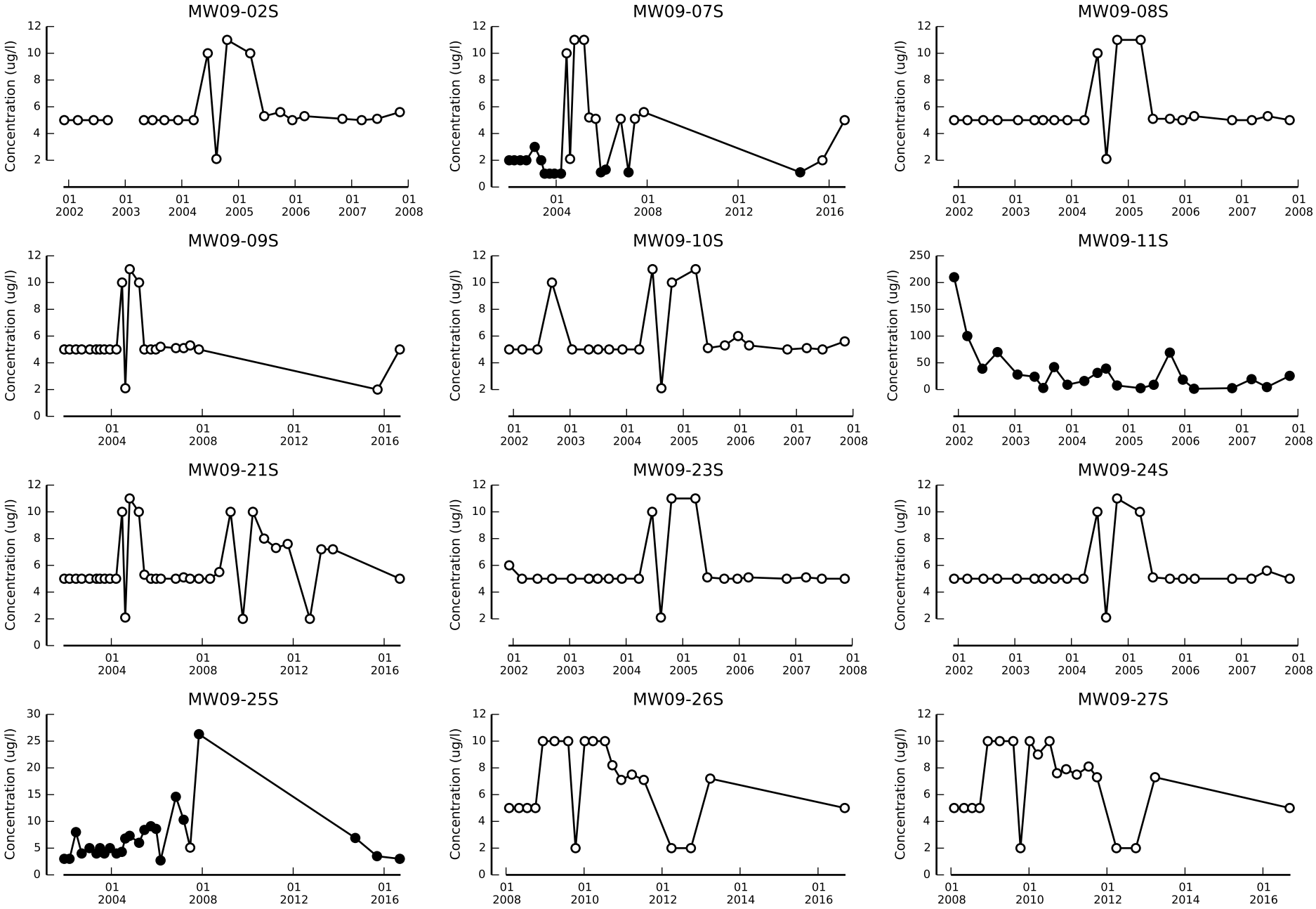
1,3-DICHLOROBENZENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 133

● Detected
○ Not Detected, shown at detection limit



1,4-DICHLOROBENZENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 133

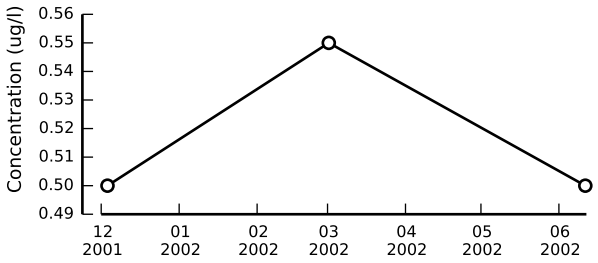
● Detected
○ Not Detected, shown at detection limit



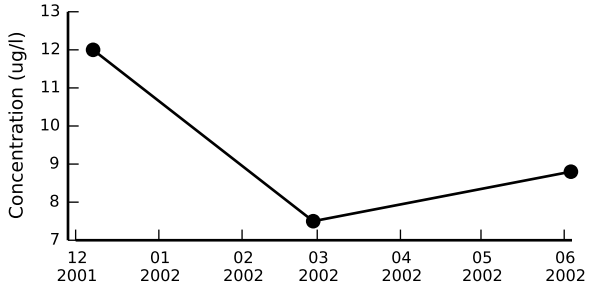
1-METHYLNAPHTHALENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 133

● Detected
○ Not Detected, shown at detection limit

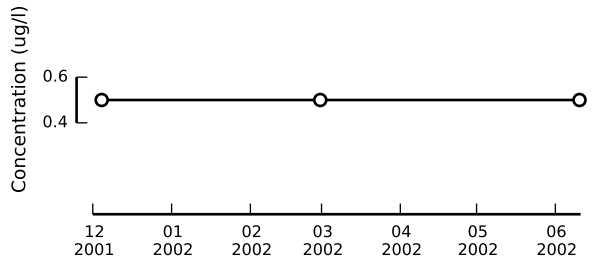
MW09-02S



MW09-07S

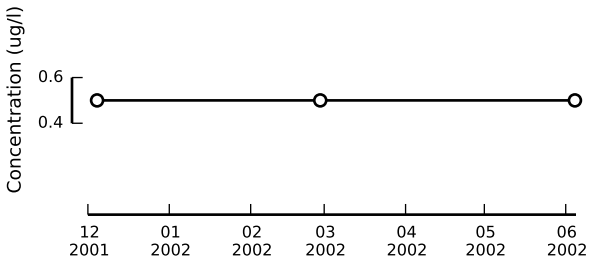


MW09-08S

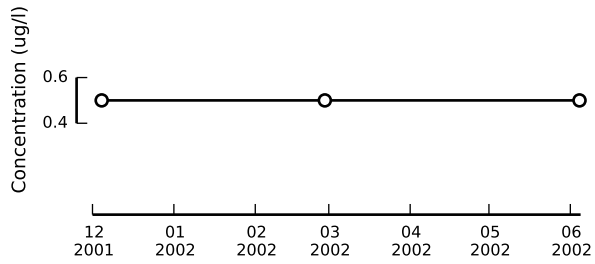


MW09-09S

MW09-10S

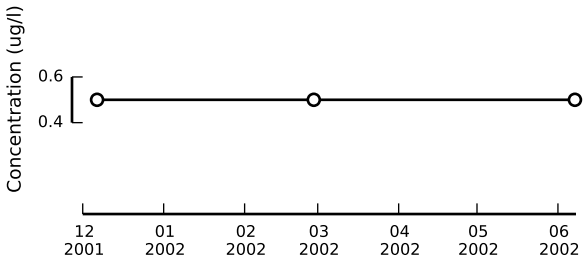


MW09-11S

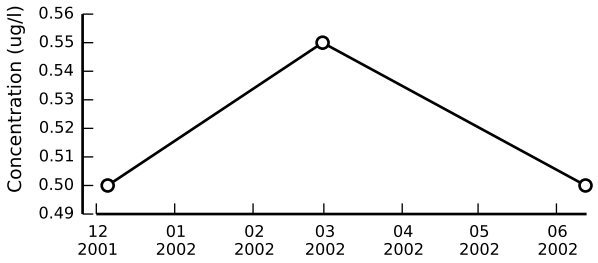


MW09-21S

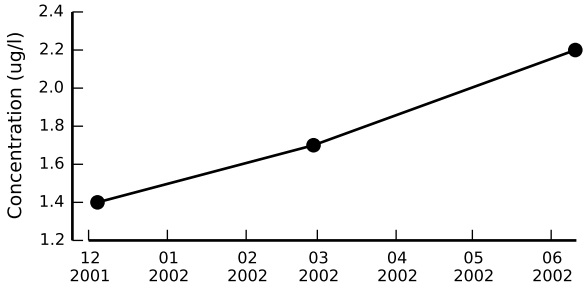
MW09-23S



MW09-24S



MW09-25S



MW09-26S

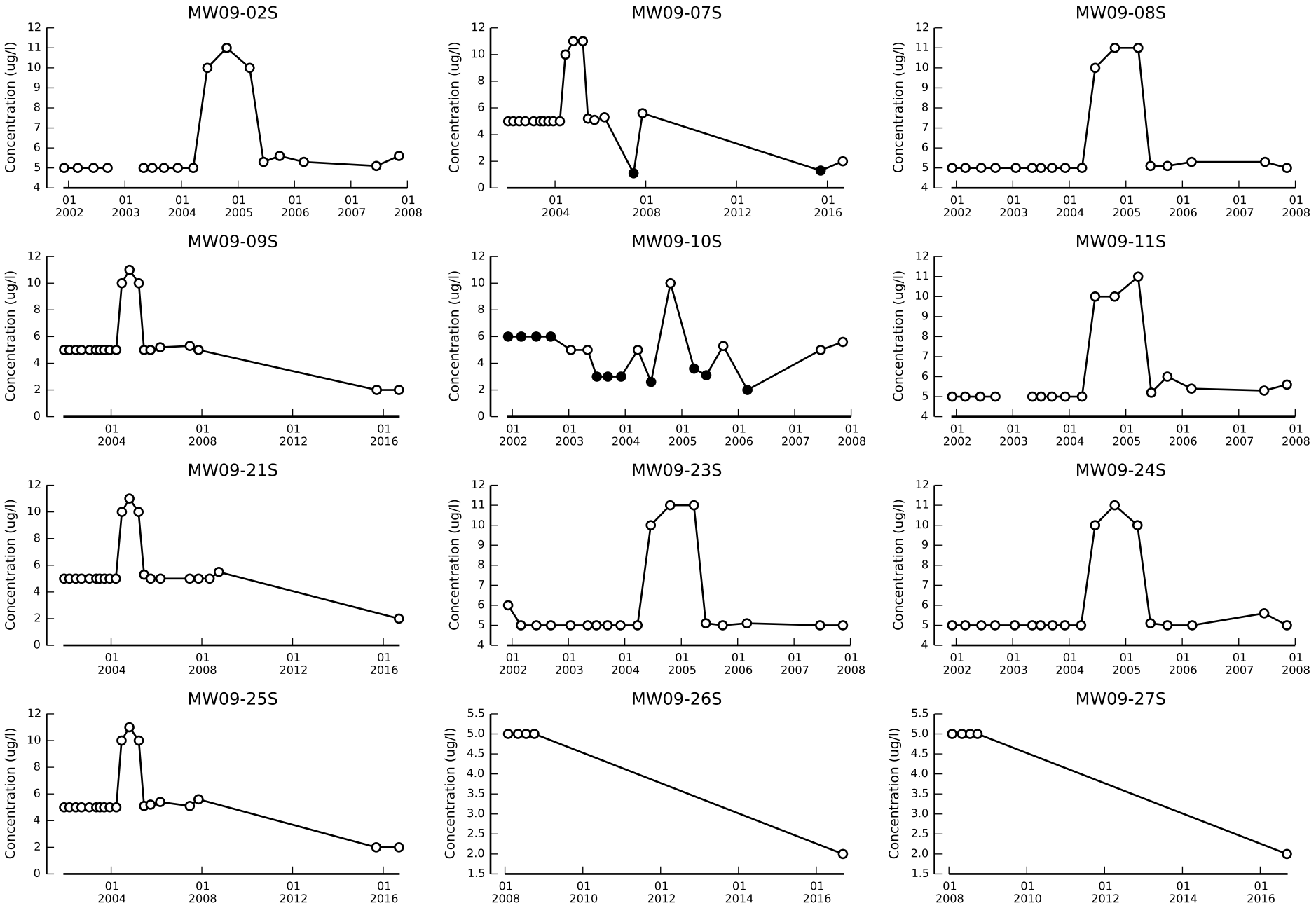
Not Sampled

MW09-27S

Not Sampled

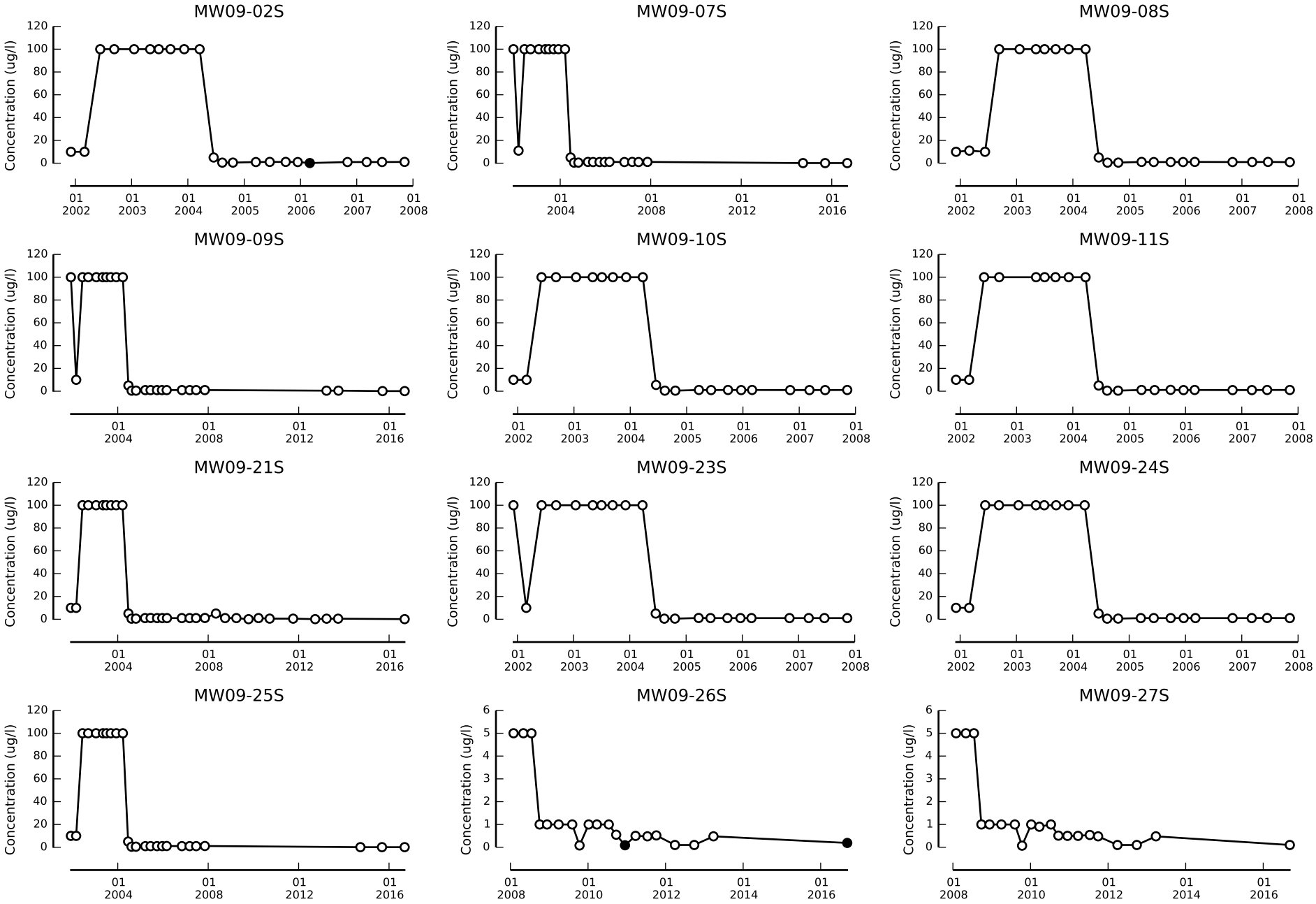
2,2'-OXYBIS(1-CHLOROPROPANE) in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 133

● Detected
○ Not Detected, shown at detection limit



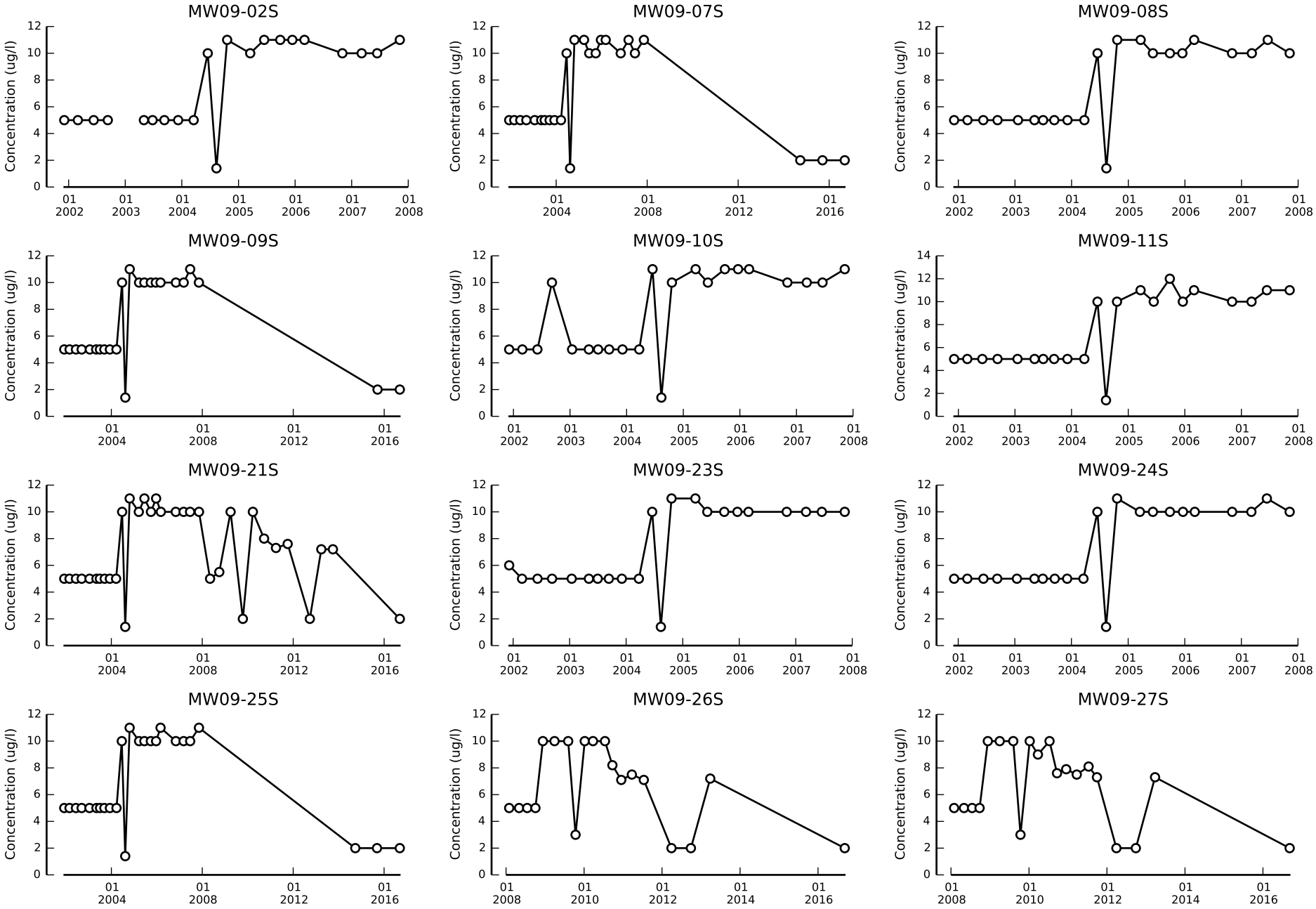
2,4,5-TRICHLOROPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 133

● Detected
○ Not Detected, shown at detection limit



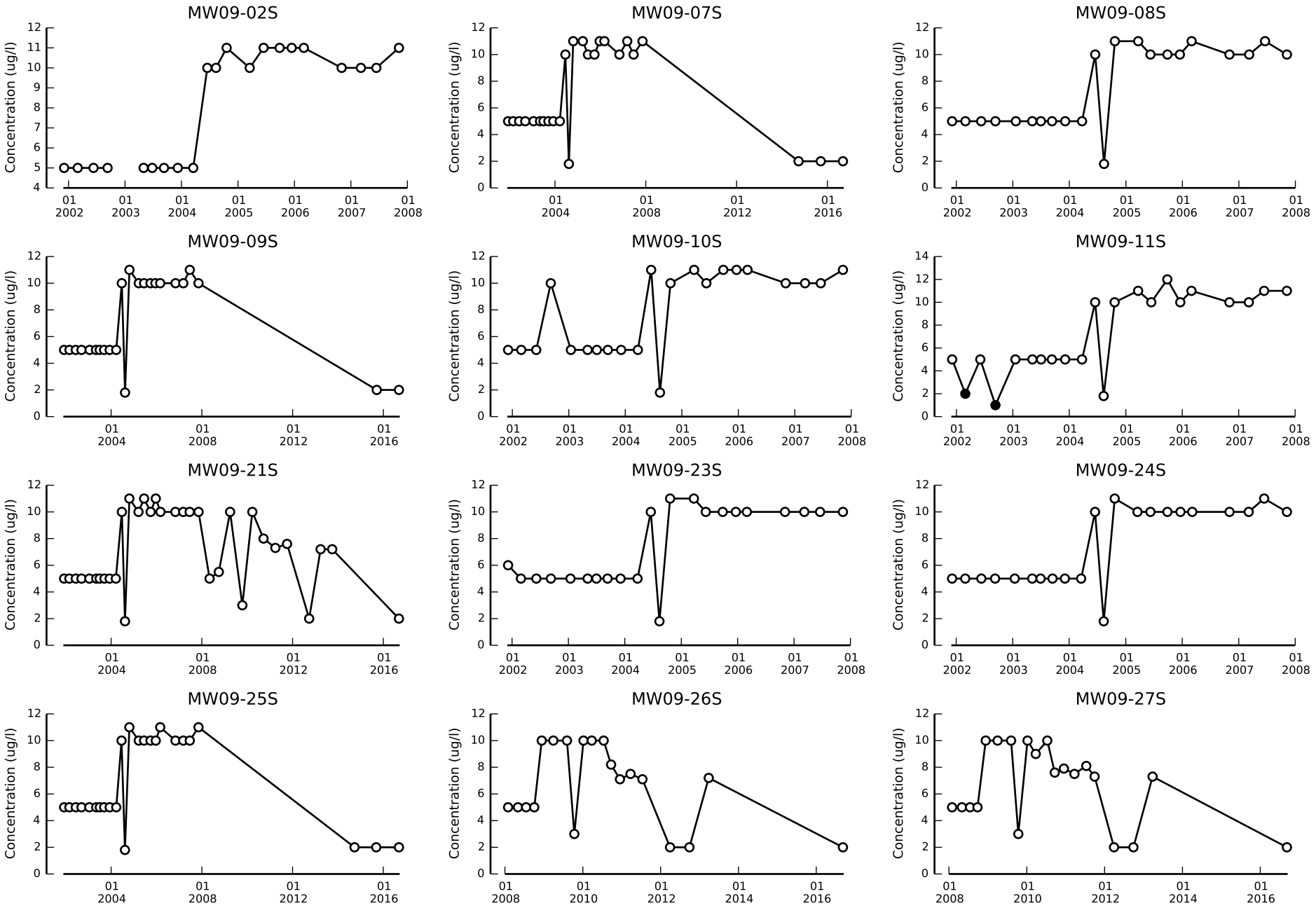
2,4,6-TRICHLOROPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 133

● Detected
○ Not Detected, shown at detection limit



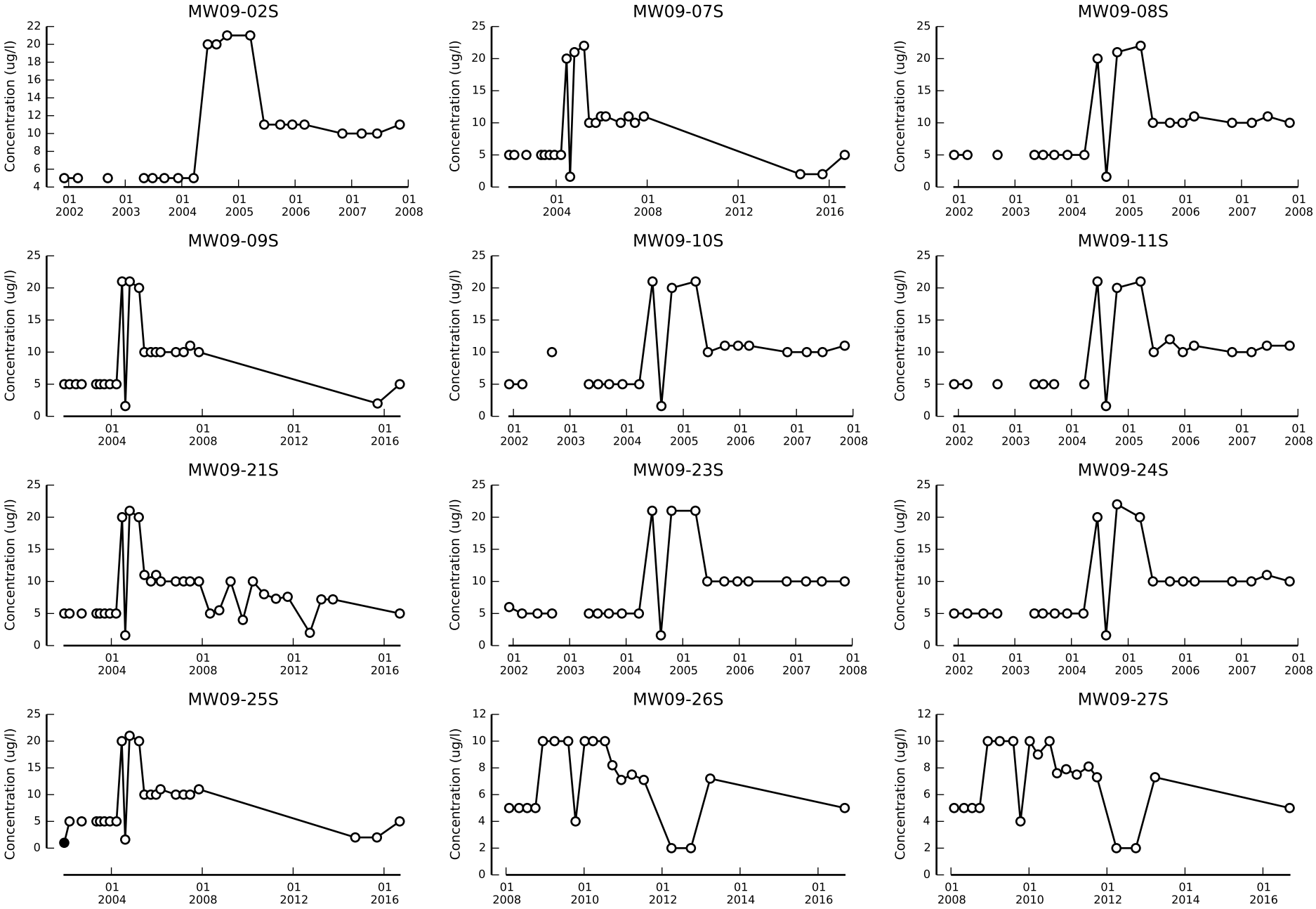
2,4-DICHLOROPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 133

● Detected
○ Not Detected, shown at detection limit



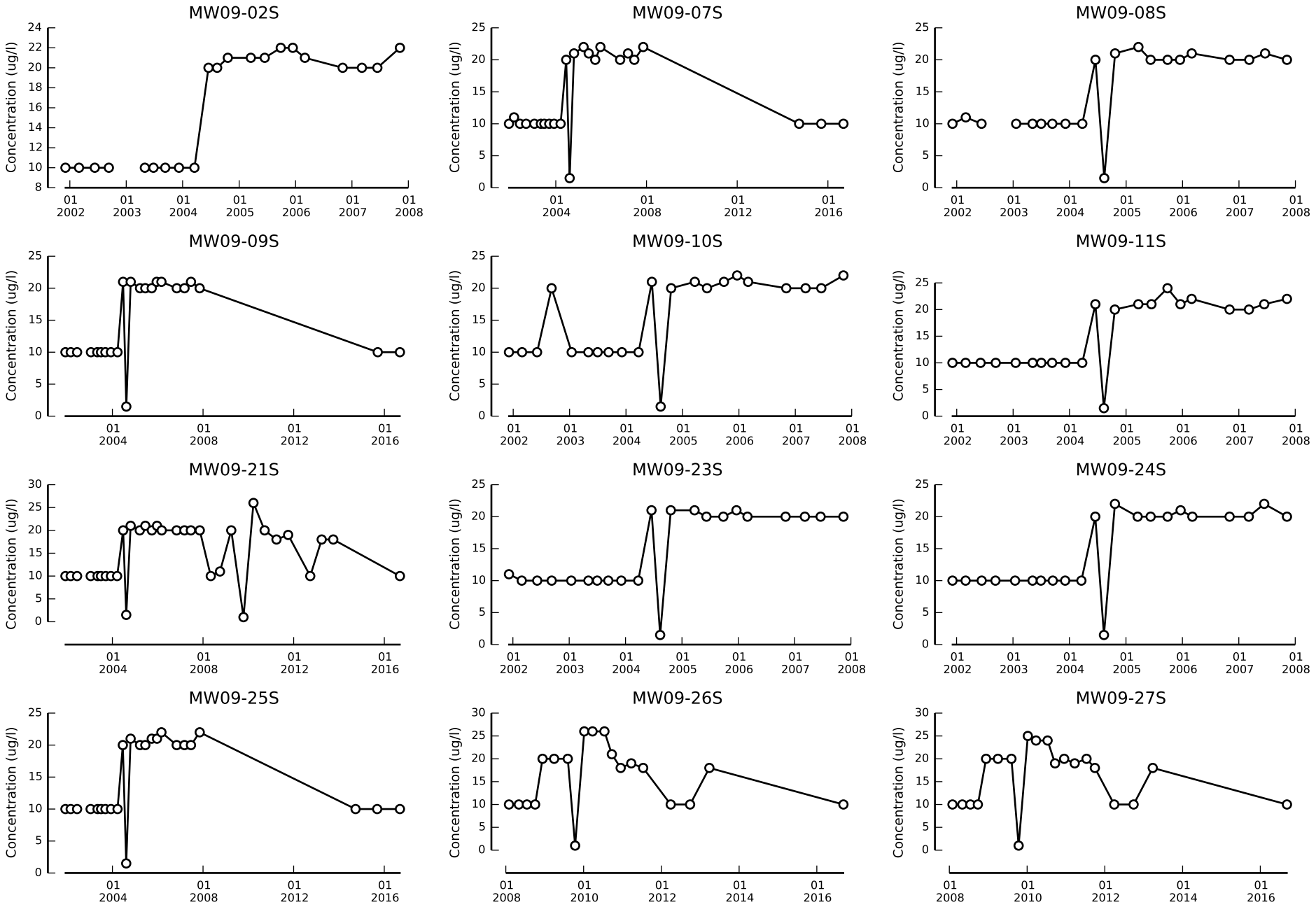
2,4-DIMETHYLPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 133

● Detected
○ Not Detected, shown at detection limit



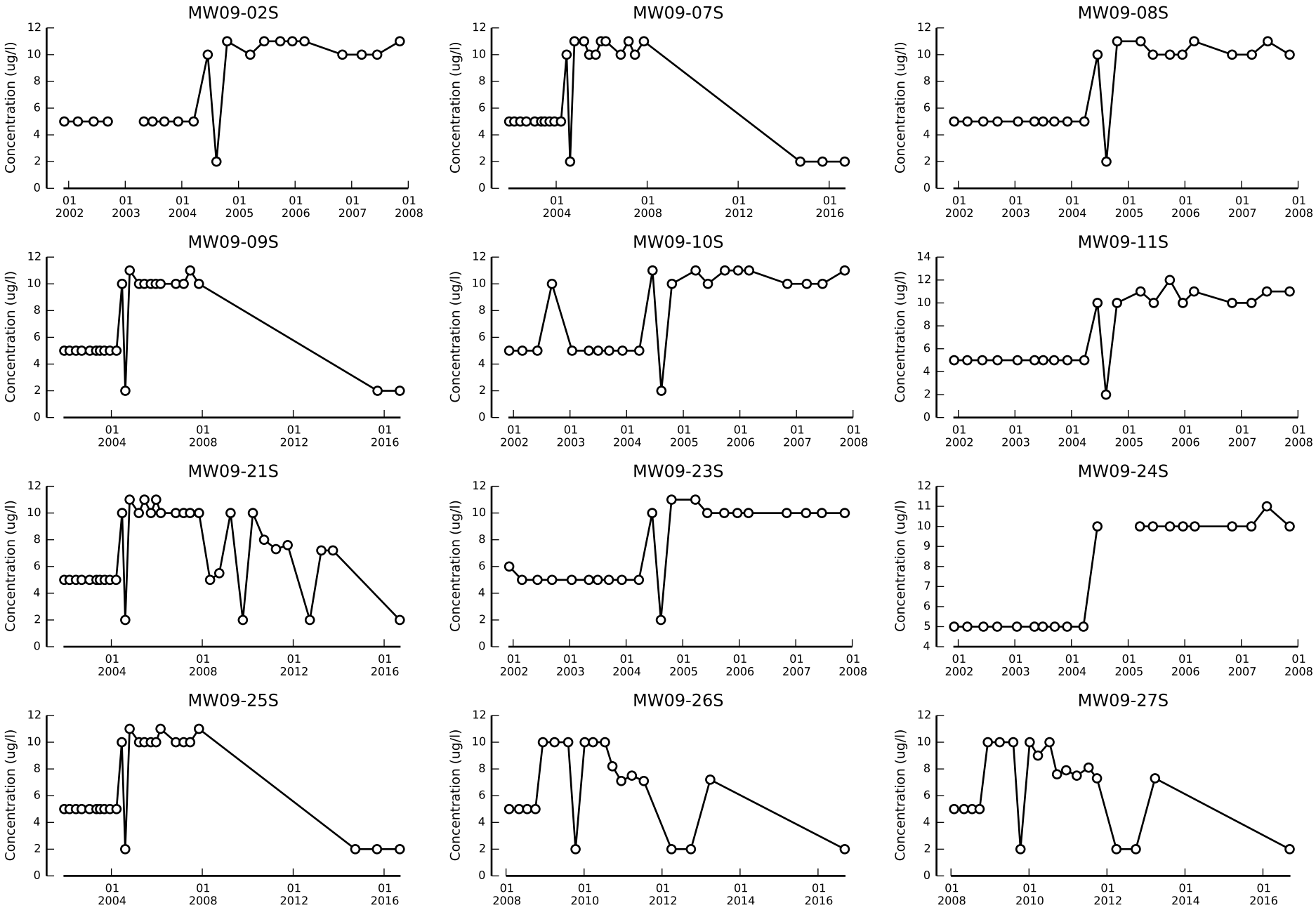
2,4-DINITROPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 133

● Detected
○ Not Detected, shown at detection limit



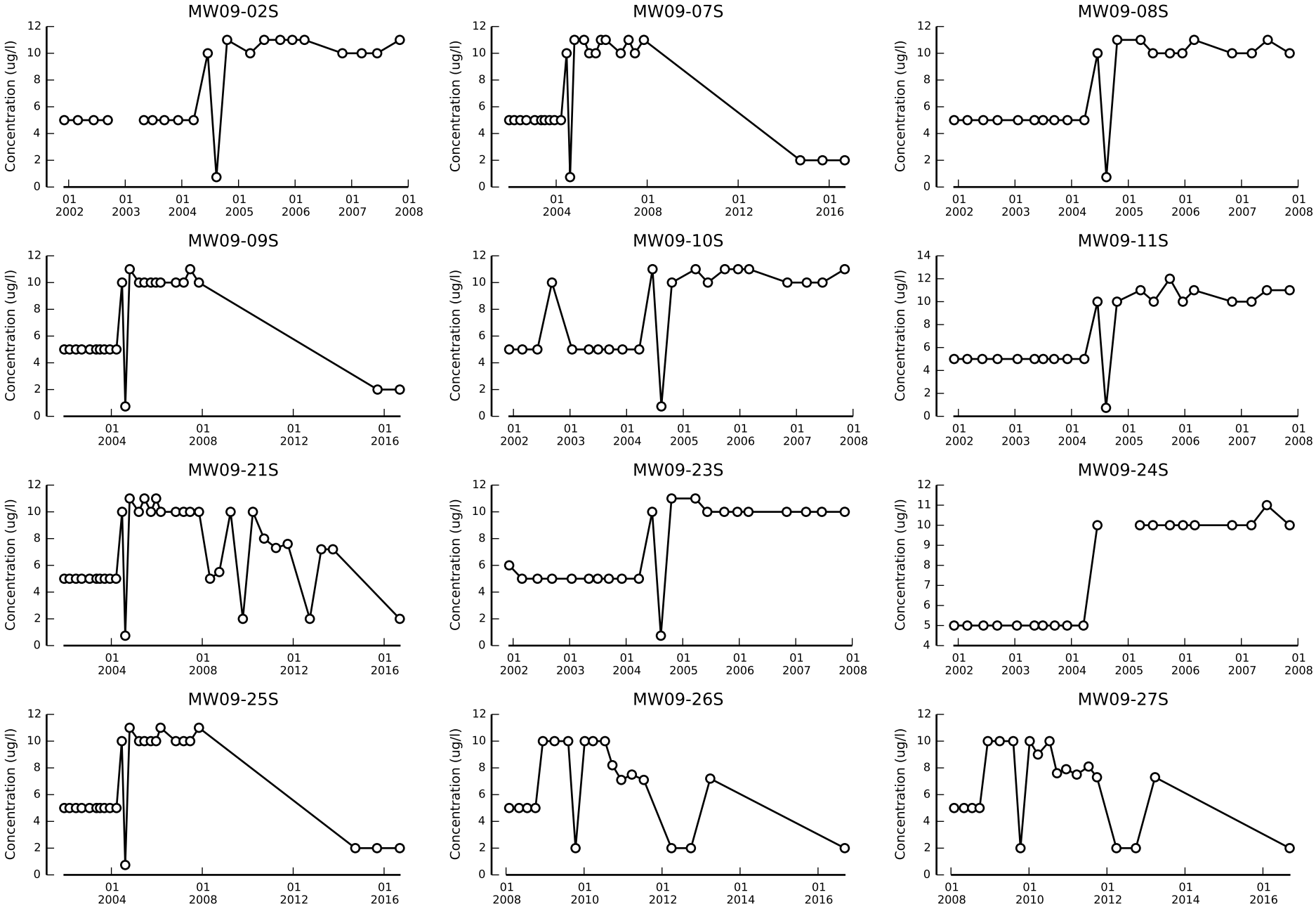
2,4-DINITROTOLUENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 133

● Detected
○ Not Detected, shown at detection limit



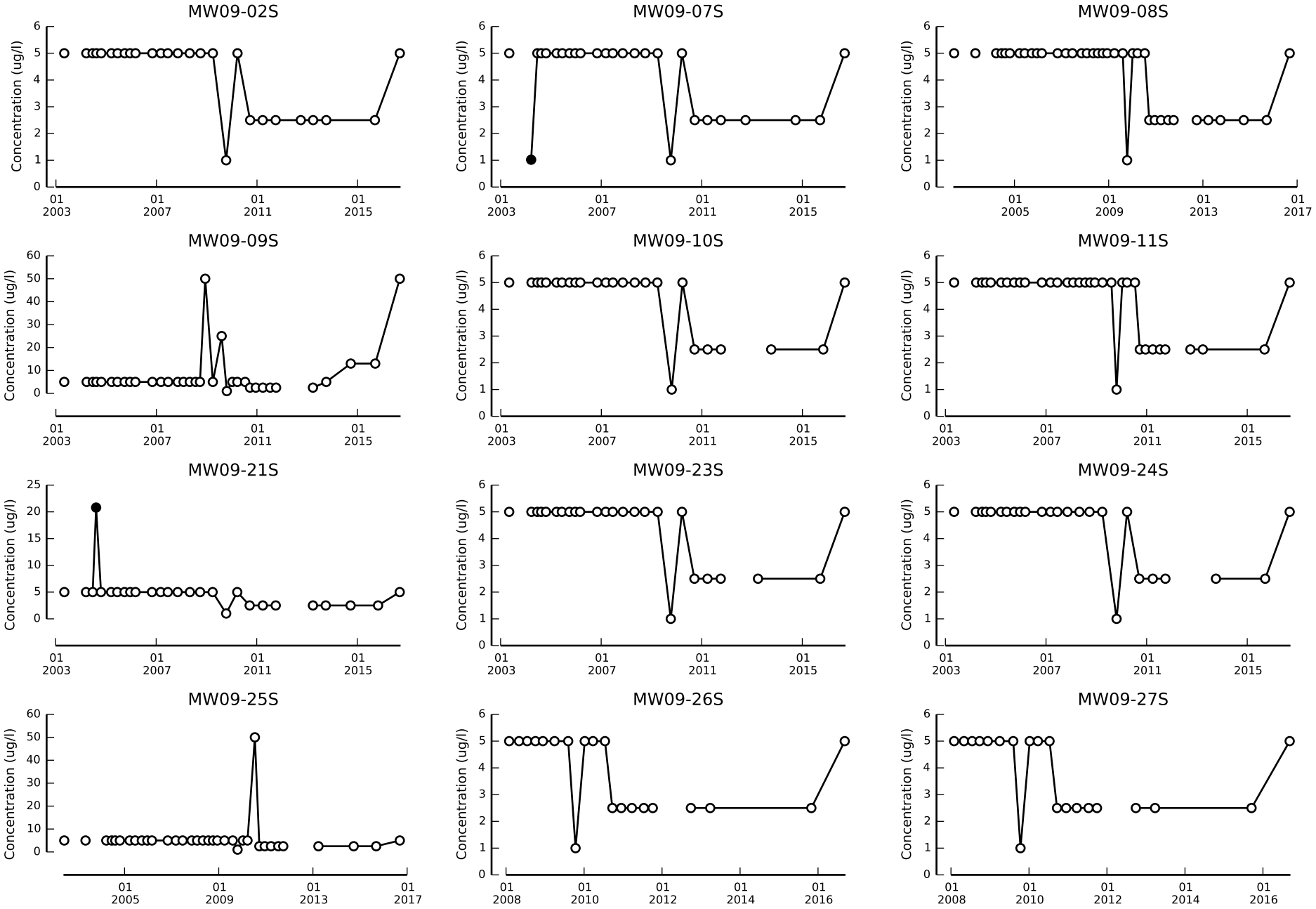
2,6-DINITROTOLUENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 133

● Detected
○ Not Detected, shown at detection limit



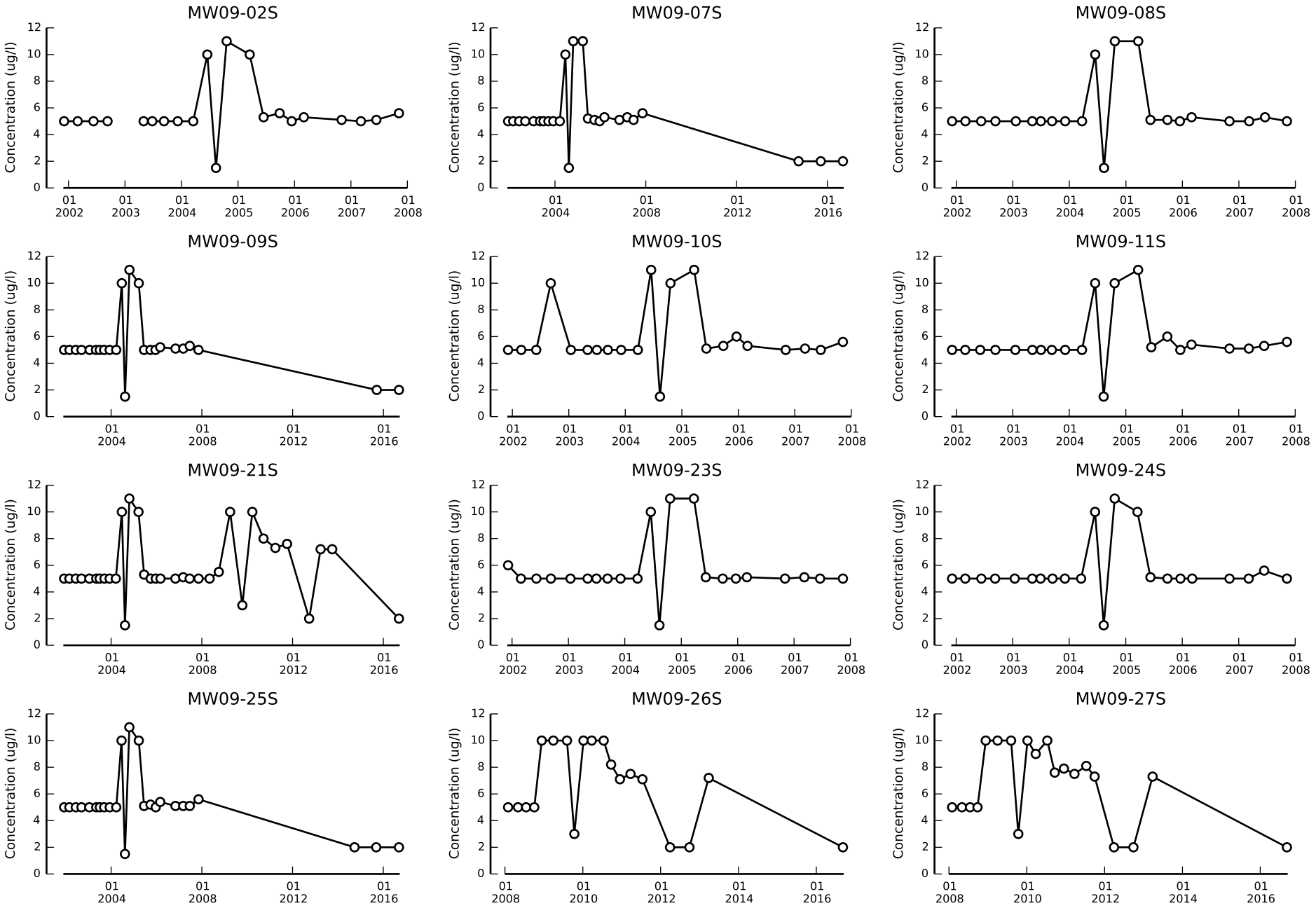
2-BUTANONE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 133

● Detected
○ Not Detected, shown at detection limit



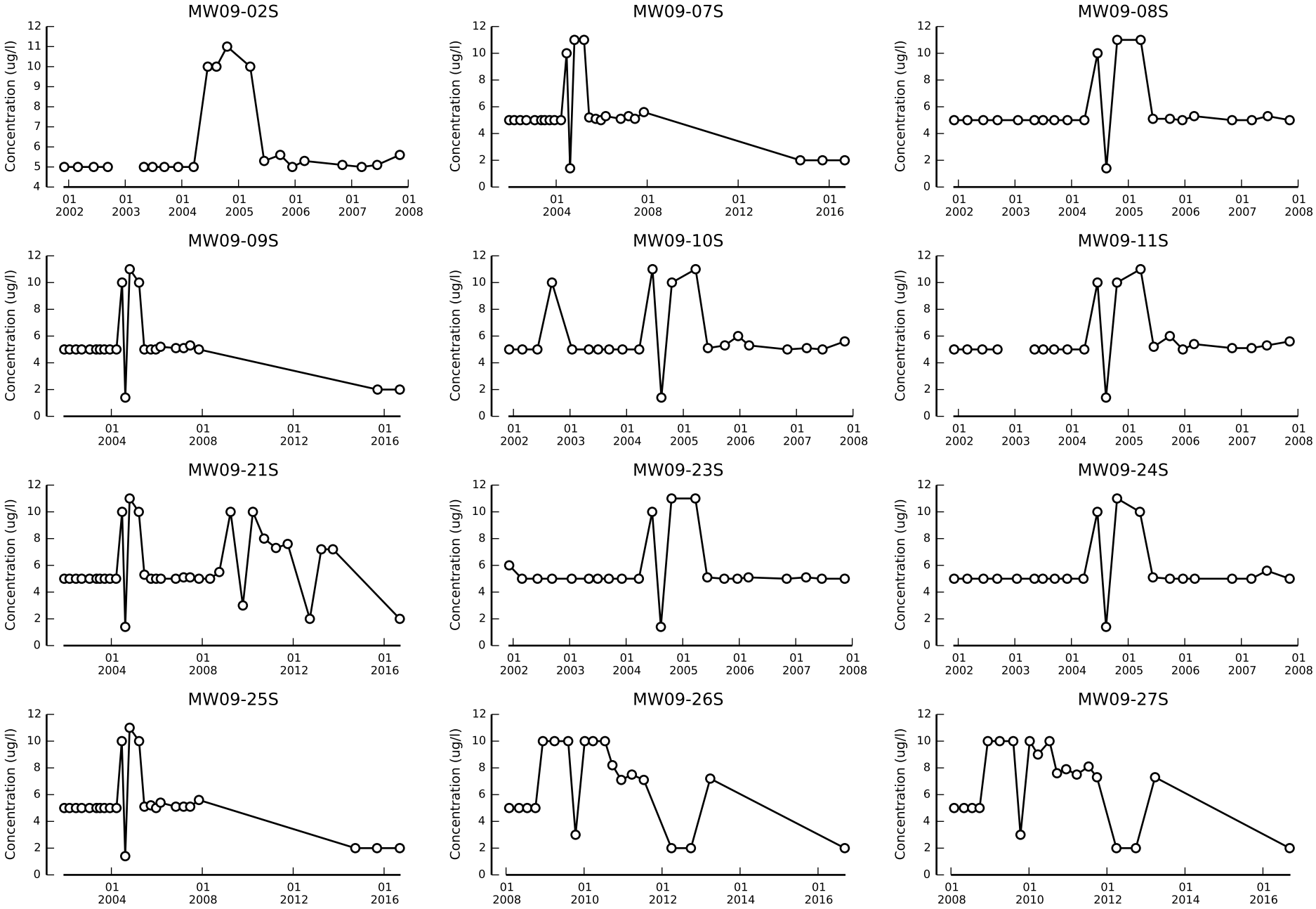
2-CHLORONAPHTHALENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 23 of 133

● Detected
○ Not Detected, shown at detection limit



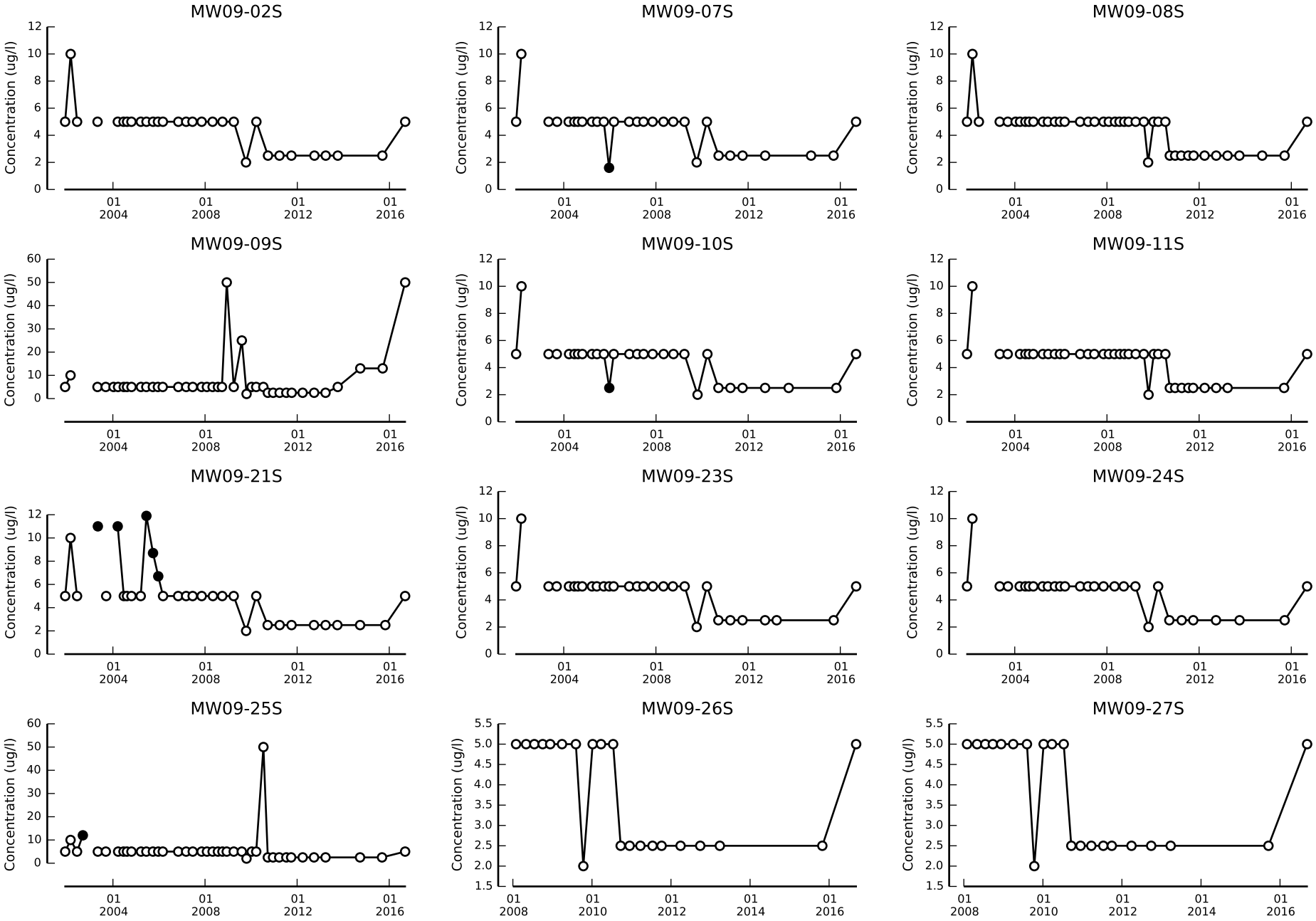
2-CHLOROPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 24 of 133

● Detected
○ Not Detected, shown at detection limit



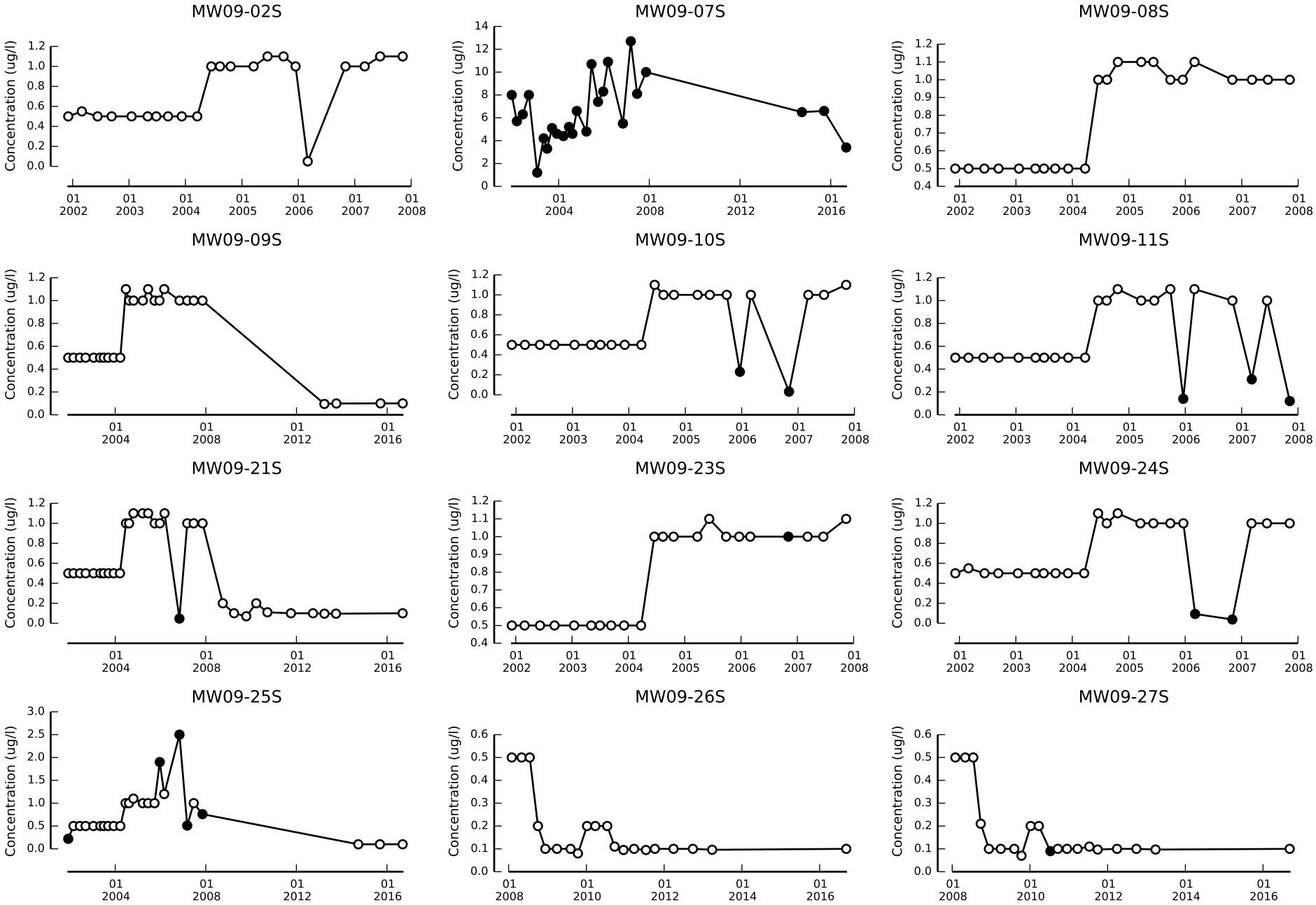
2-HEXANONE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 25 of 133

● Detected
○ Not Detected, shown at detection limit



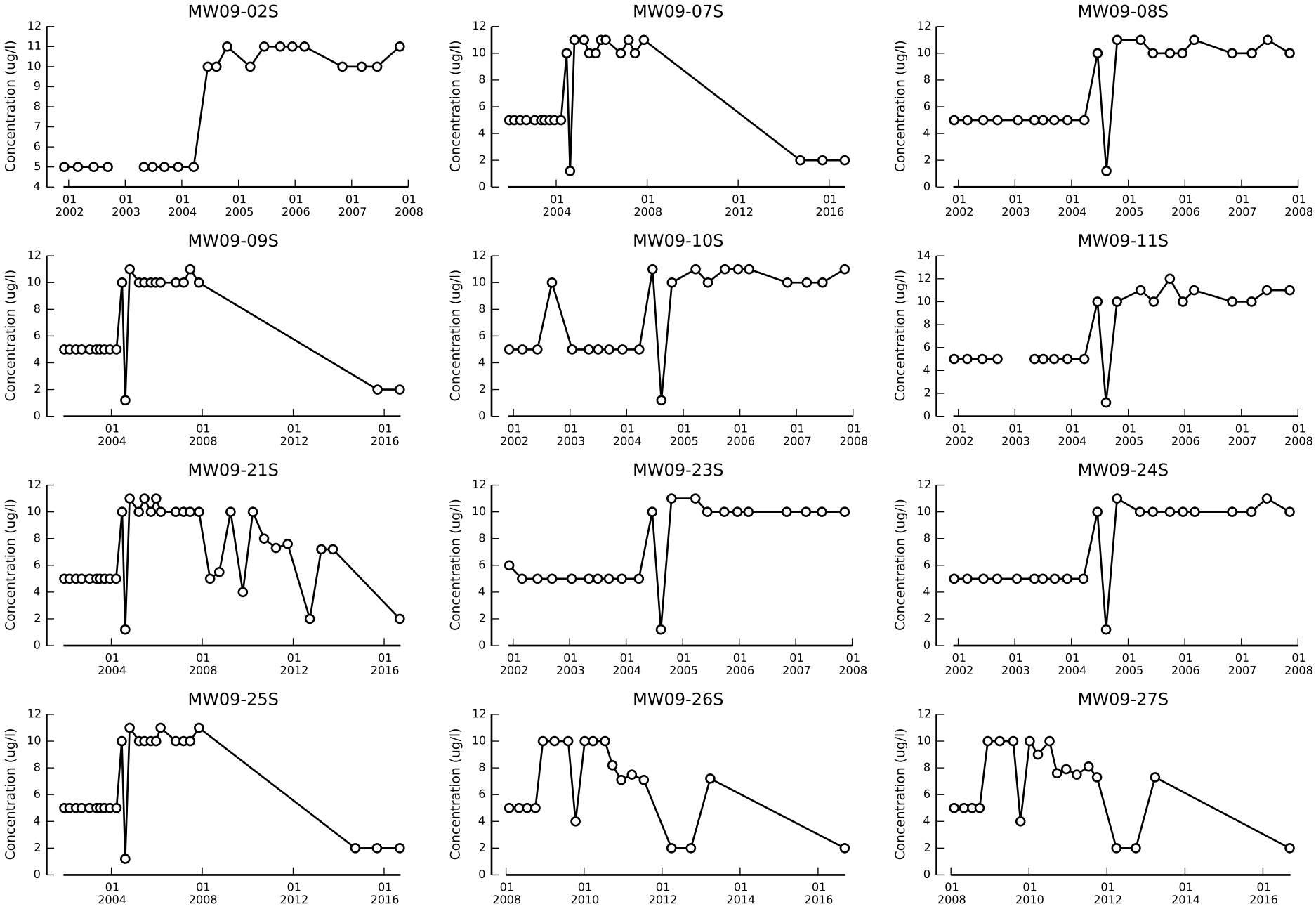
2-METHYLNAPHTHALENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 26 of 133

● Detected
○ Not Detected, shown at detection limit



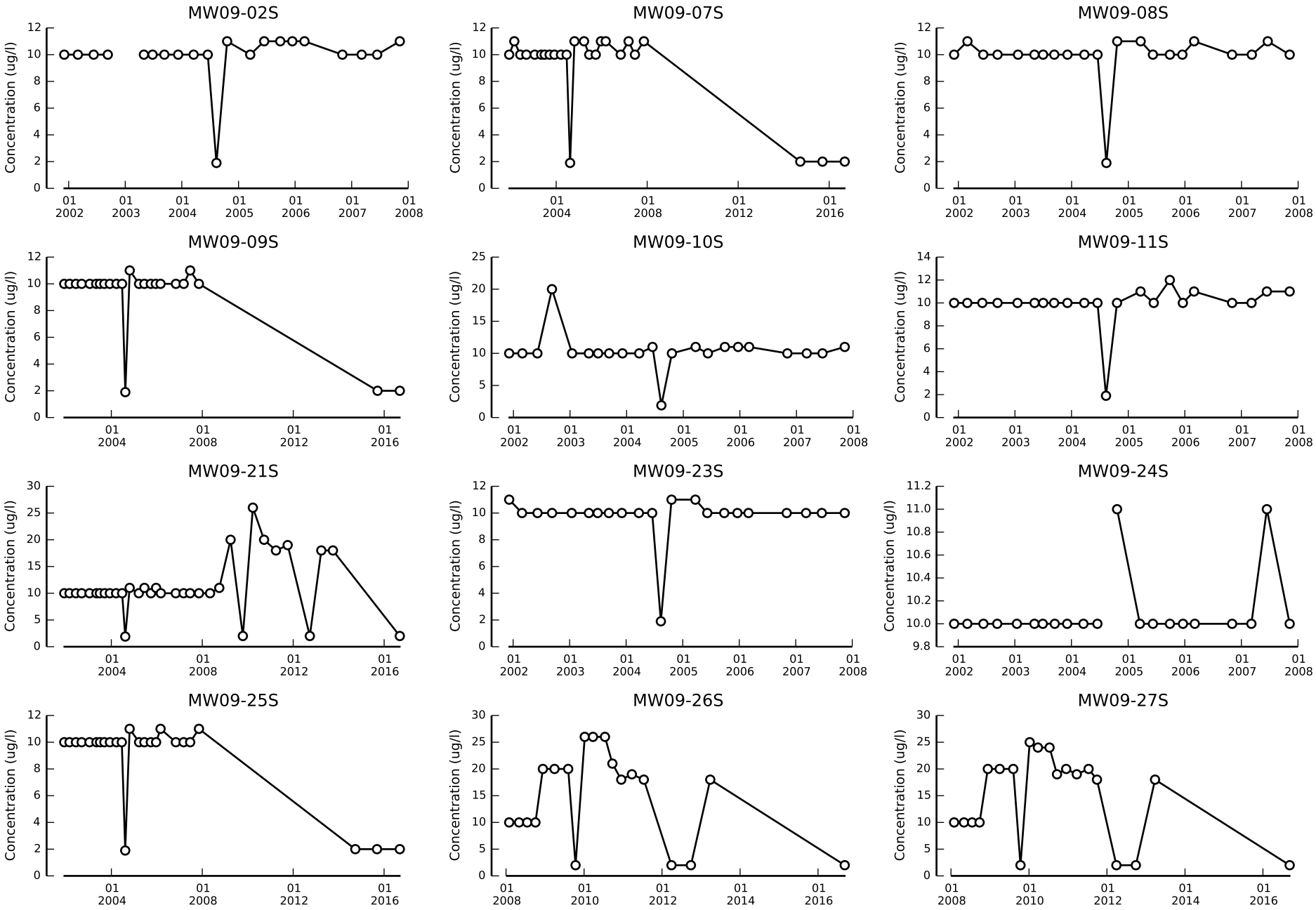
2-METHYLPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 27 of 133

● Detected
○ Not Detected, shown at detection limit



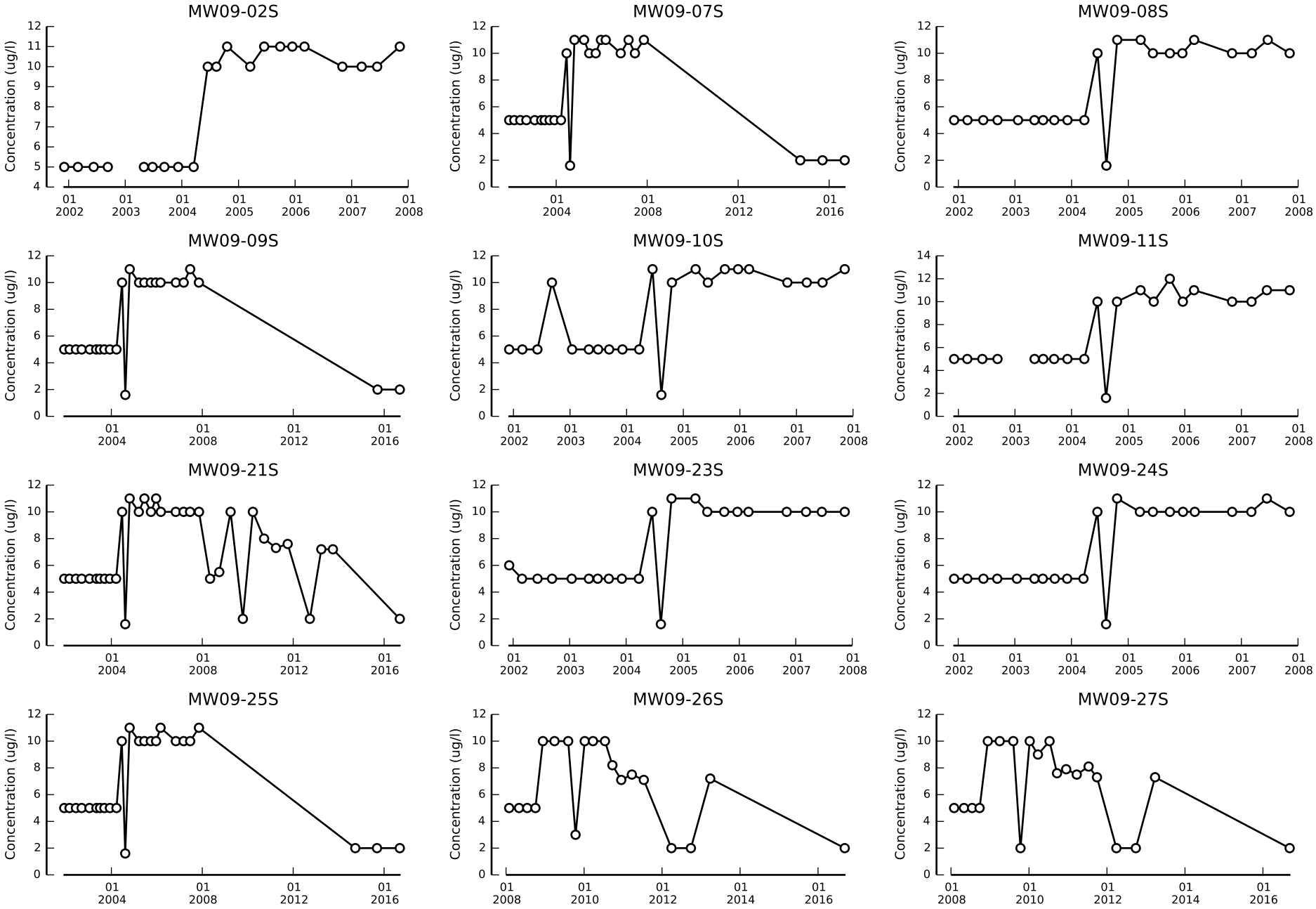
2-NITROANILINE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 28 of 133

● Detected
○ Not Detected, shown at detection limit



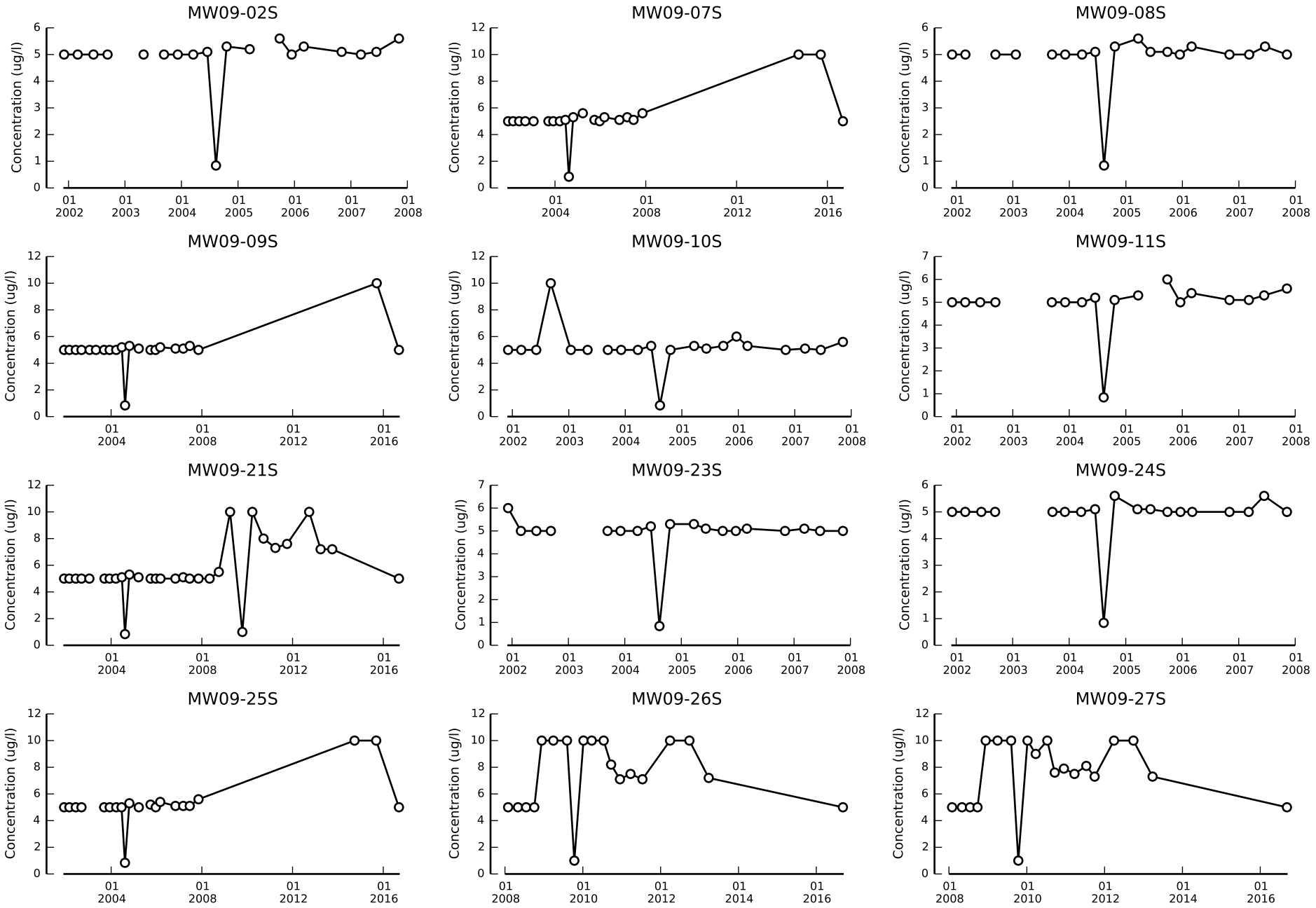
2-NITROPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 29 of 133

● Detected
○ Not Detected, shown at detection limit



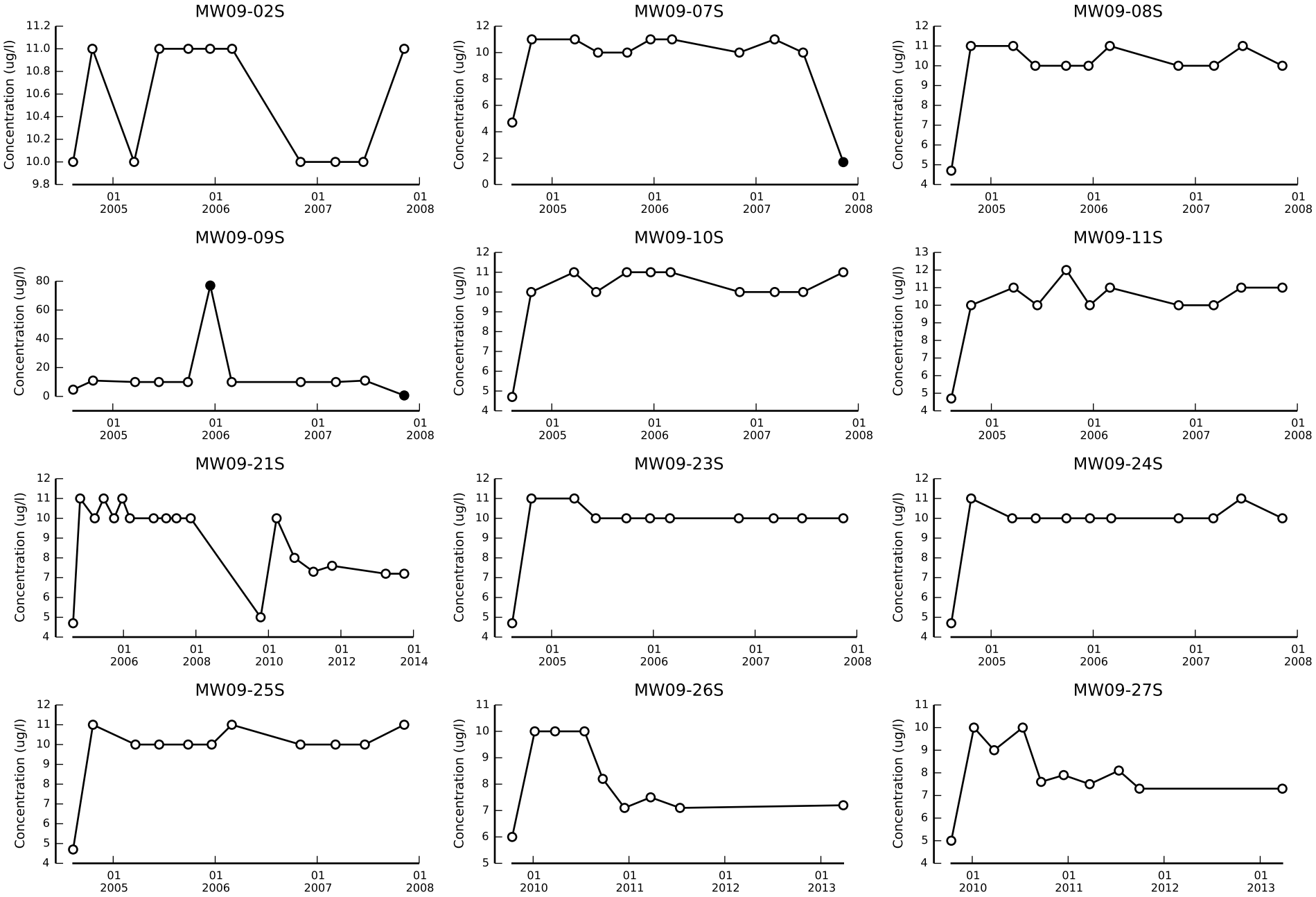
3,3-DICHLOROBENZIDINE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 30 of 133

● Detected
○ Not Detected, shown at detection limit



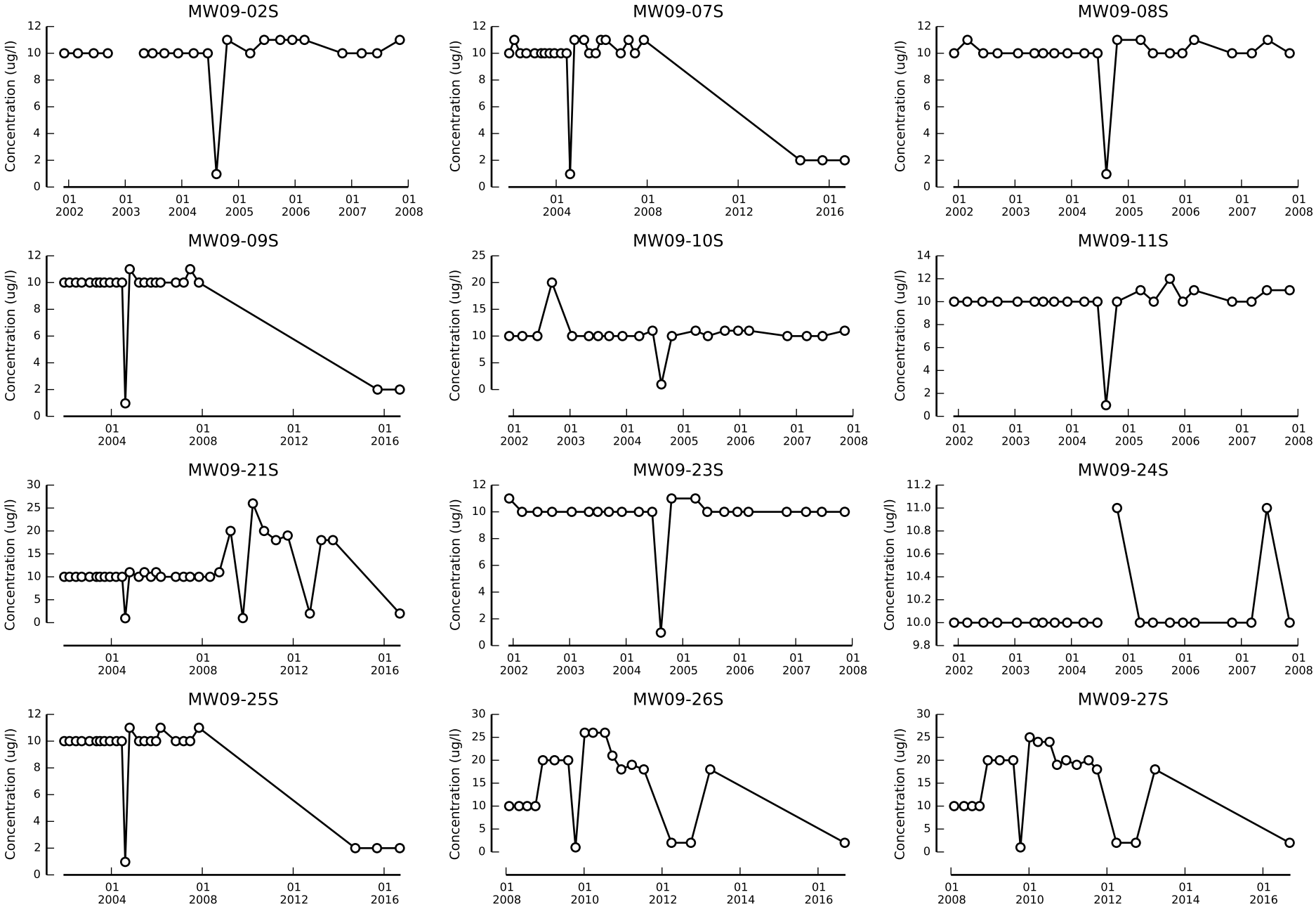
3- AND 4-METHYLPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 31 of 133

● Detected
○ Not Detected, shown at detection limit



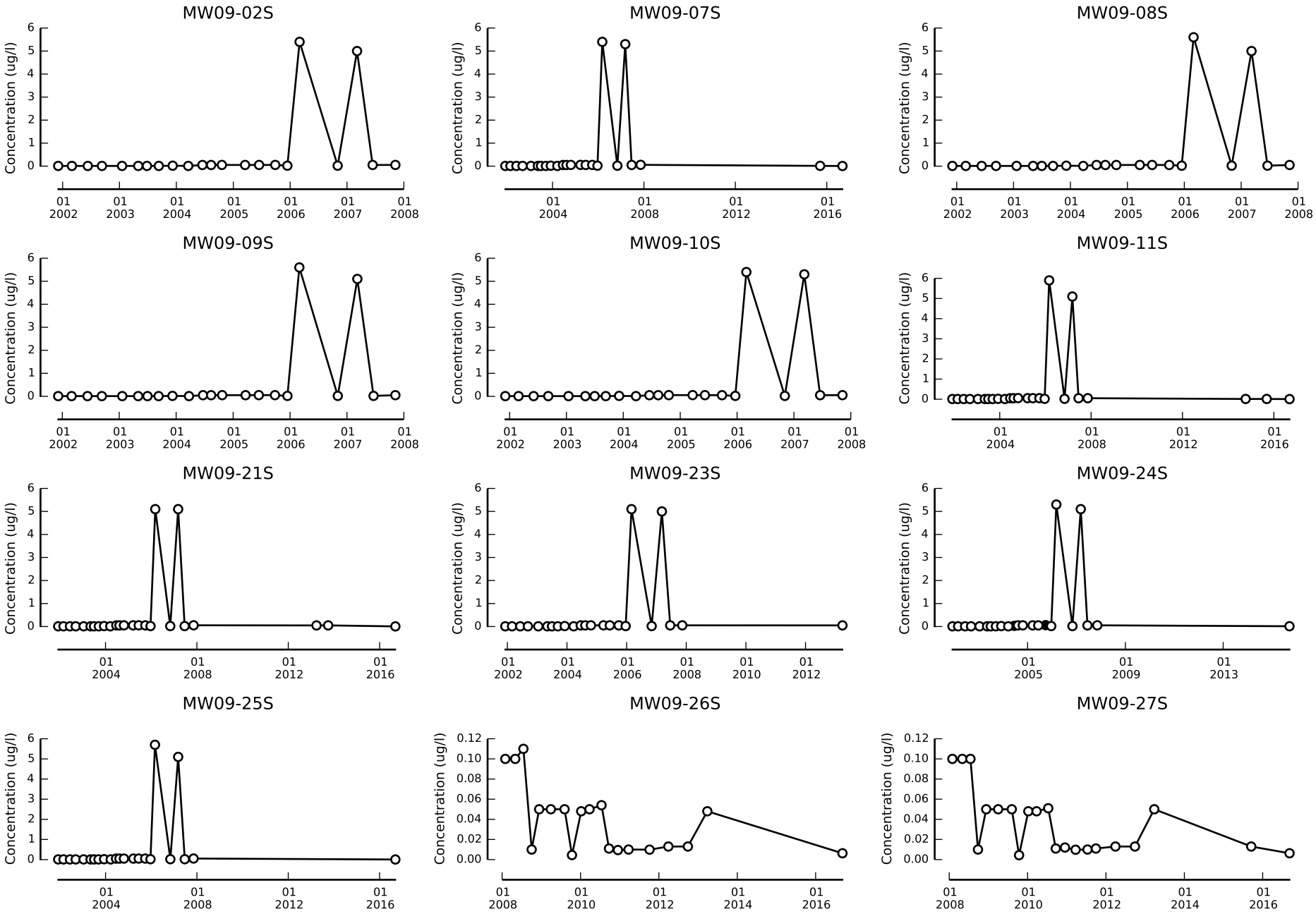
3-NITROANILINE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 32 of 133

● Detected
○ Not Detected, shown at detection limit



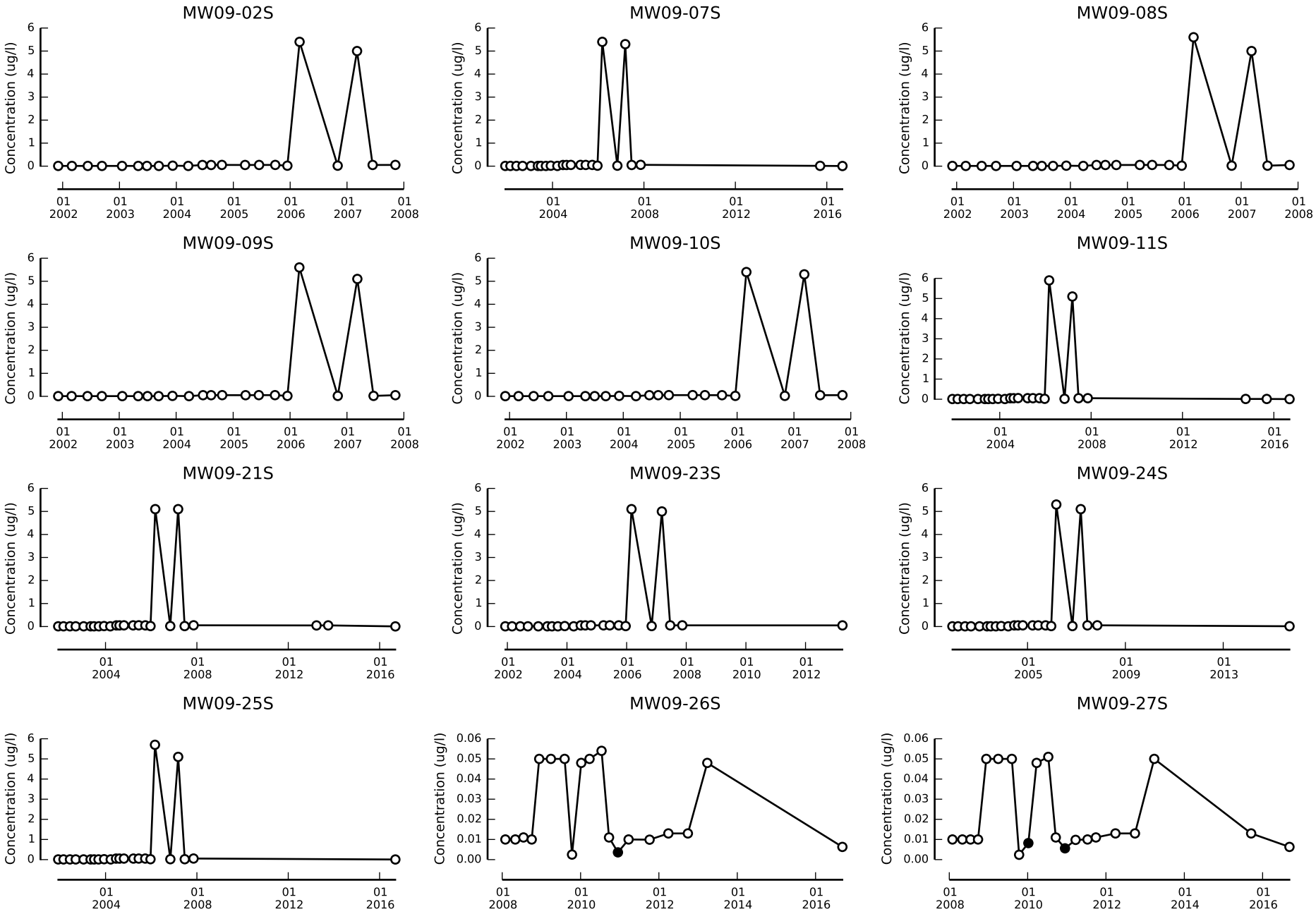
4,4-DDD in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 33 of 133

● Detected
○ Not Detected, shown at detection limit



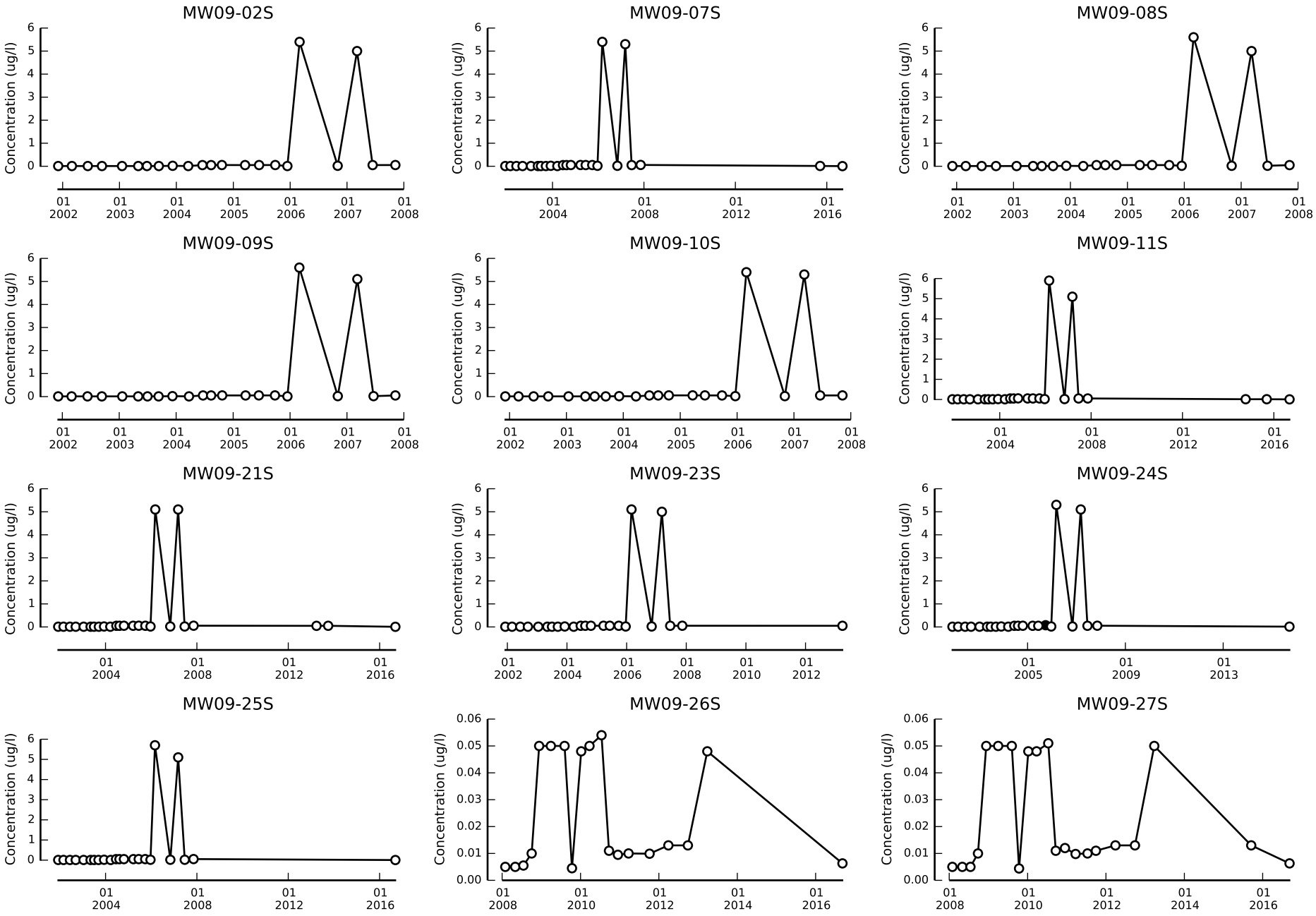
4,4-DDE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 34 of 133

● Detected
○ Not Detected, shown at detection limit



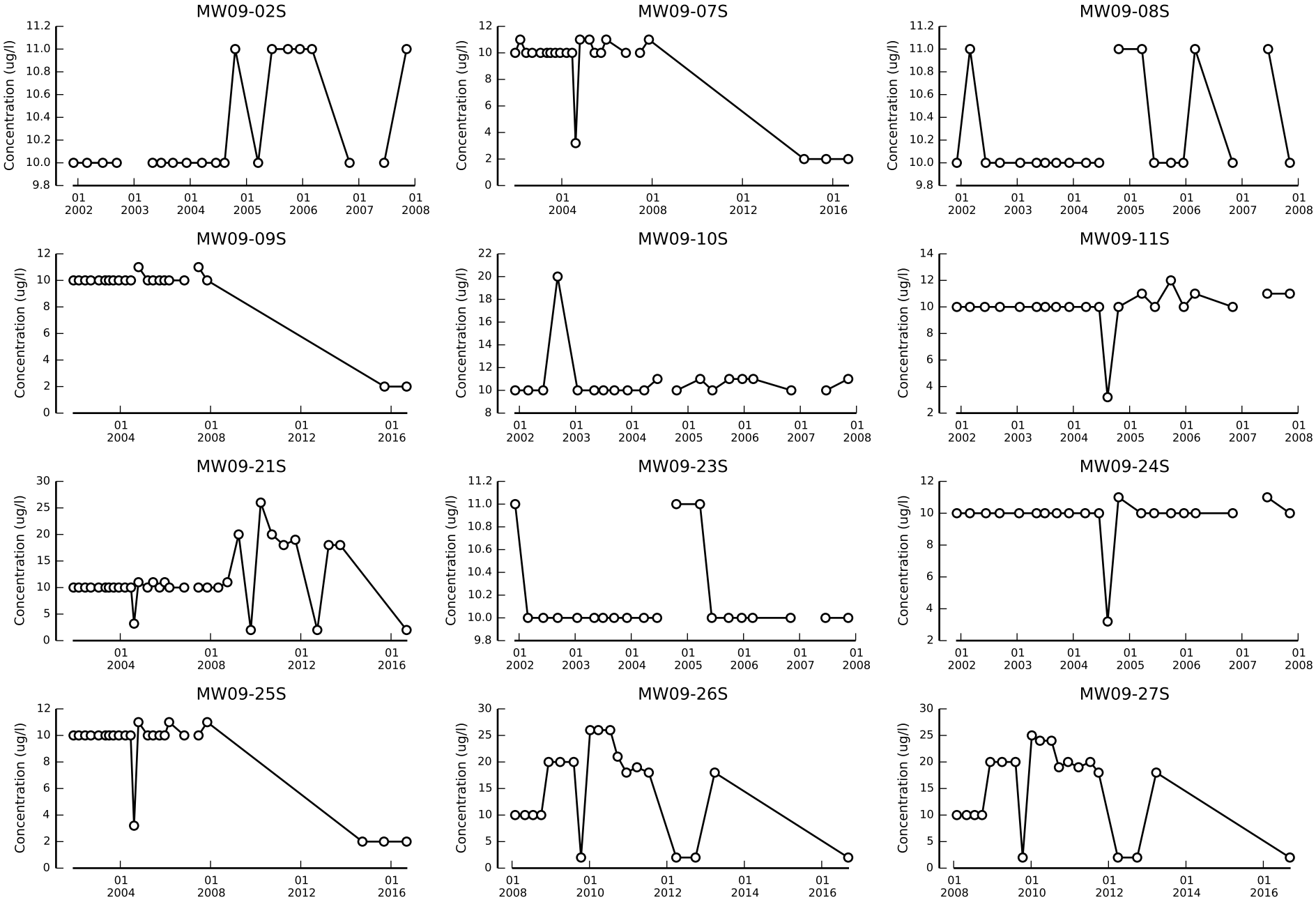
4,4-DDT in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 35 of 133

● Detected
○ Not Detected, shown at detection limit



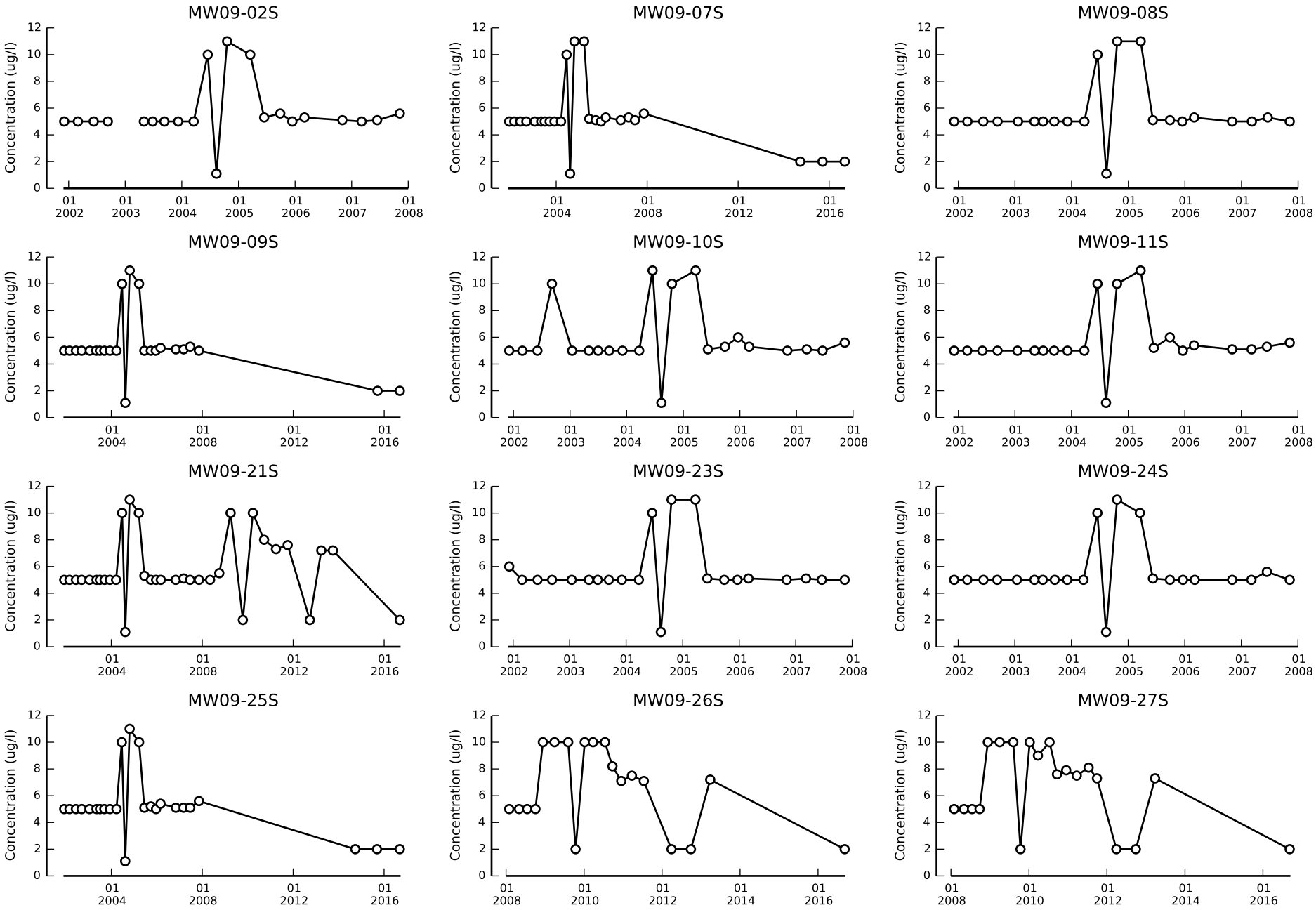
4,6-DINITRO-2-METHYLPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 36 of 133

● Detected
○ Not Detected, shown at detection limit



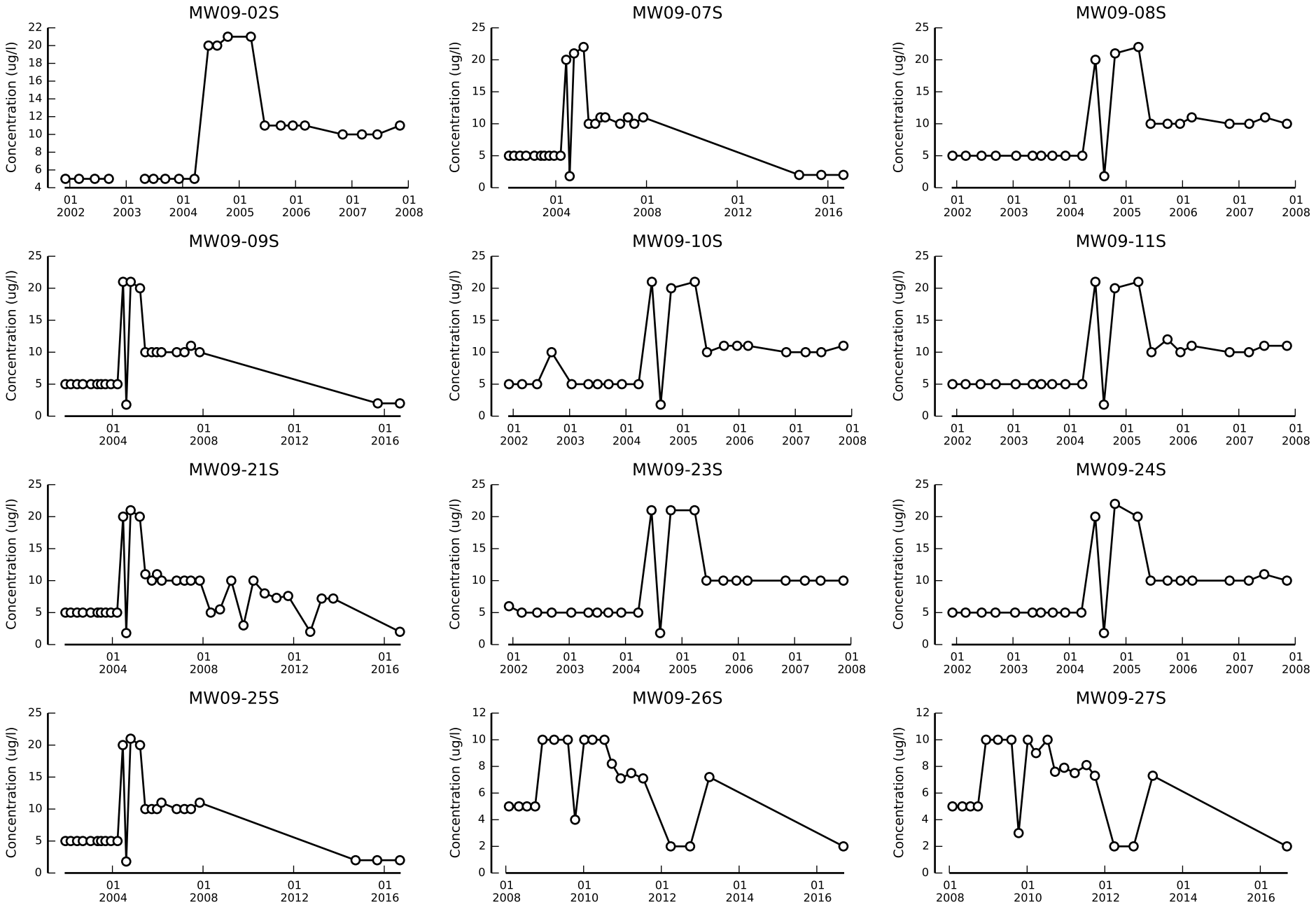
4-BROMOPHENYL-PHENYLETHER in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 37 of 133

● Detected
○ Not Detected, shown at detection limit



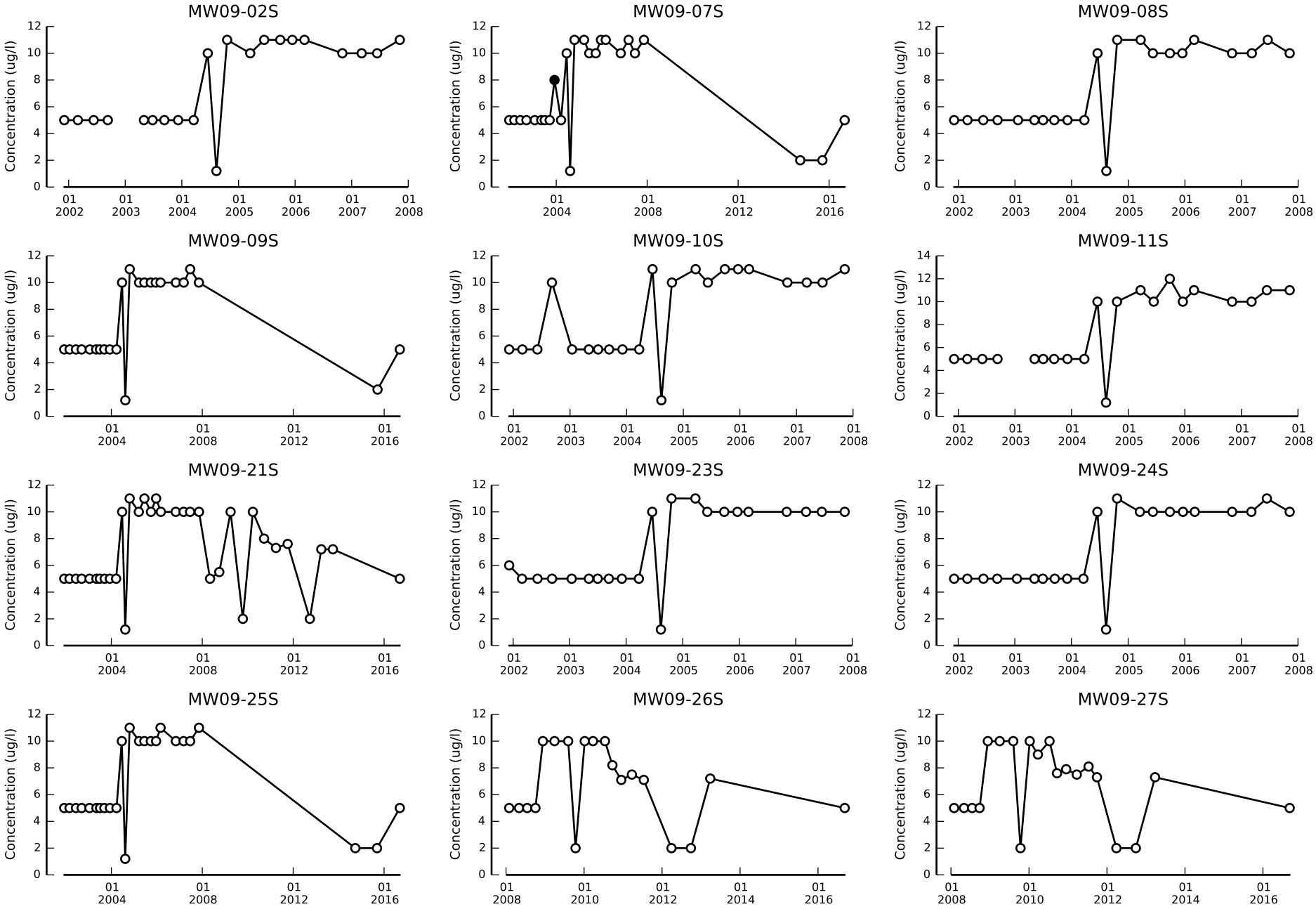
4-CHLORO-3-METHYLPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 38 of 133

● Detected
○ Not Detected, shown at detection limit



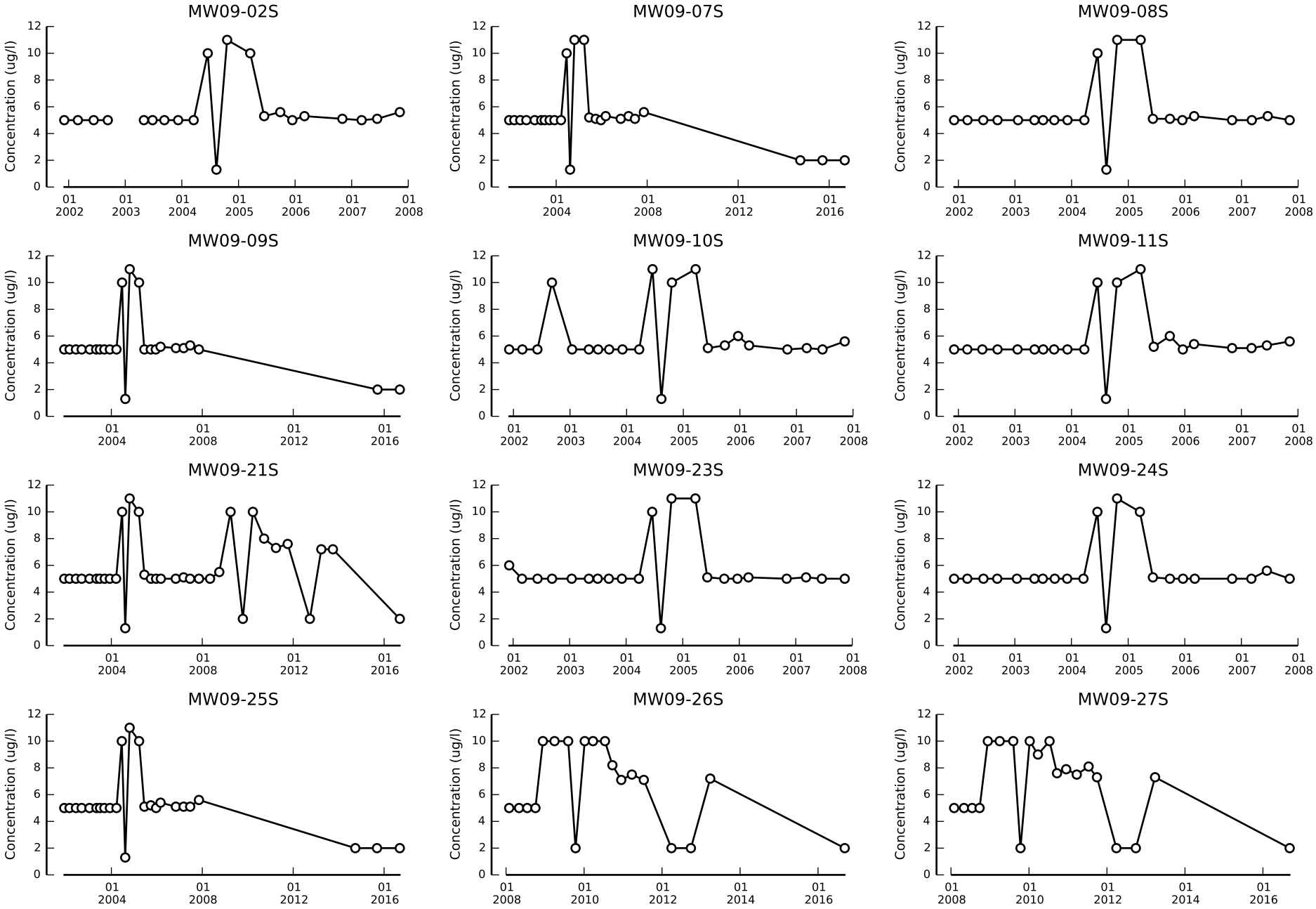
4-CHLOROANILINE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 39 of 133

● Detected
○ Not Detected, shown at detection limit



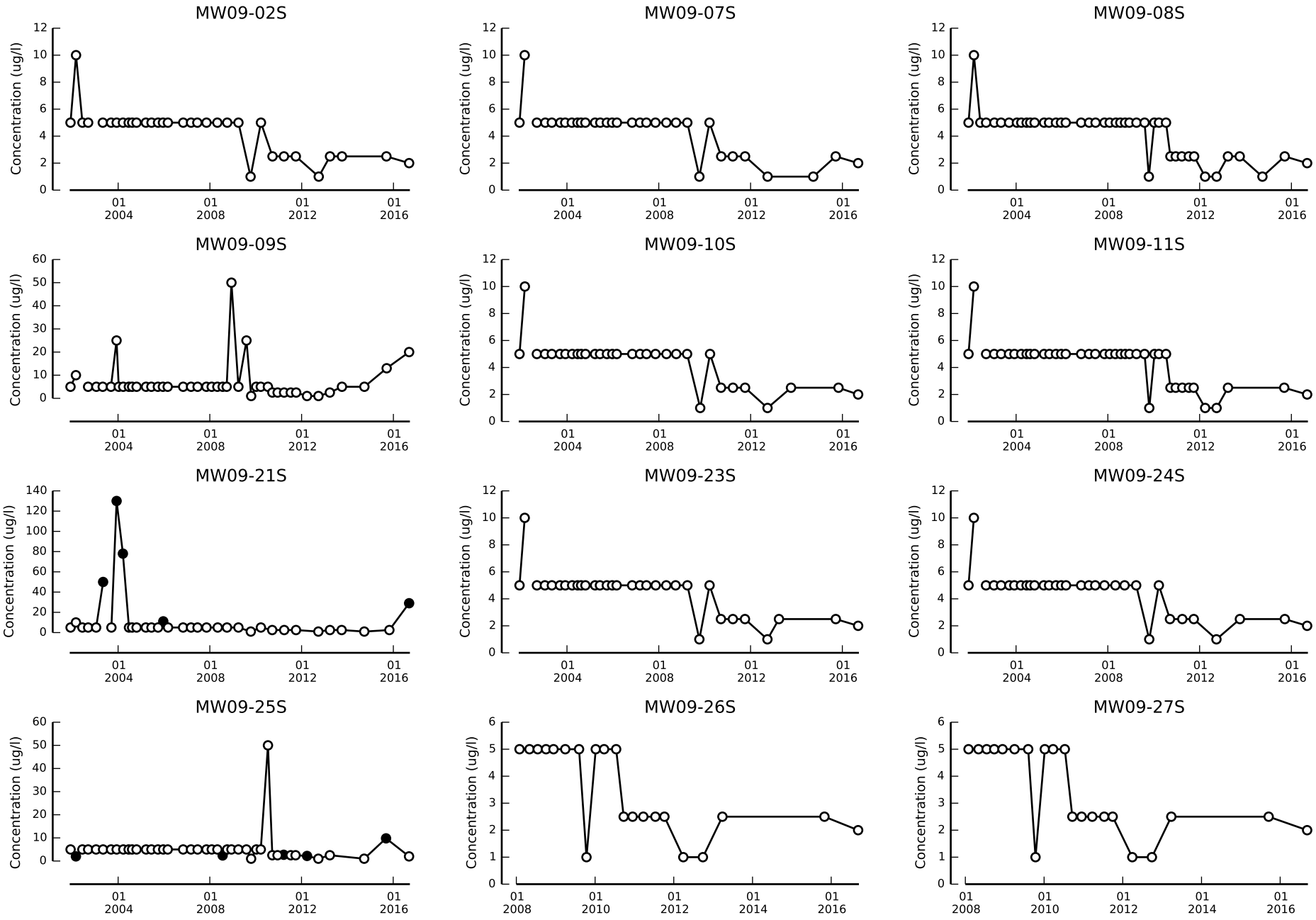
4-CHLOROPHENYL-PHENYLETHER in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 40 of 133

● Detected
○ Not Detected, shown at detection limit



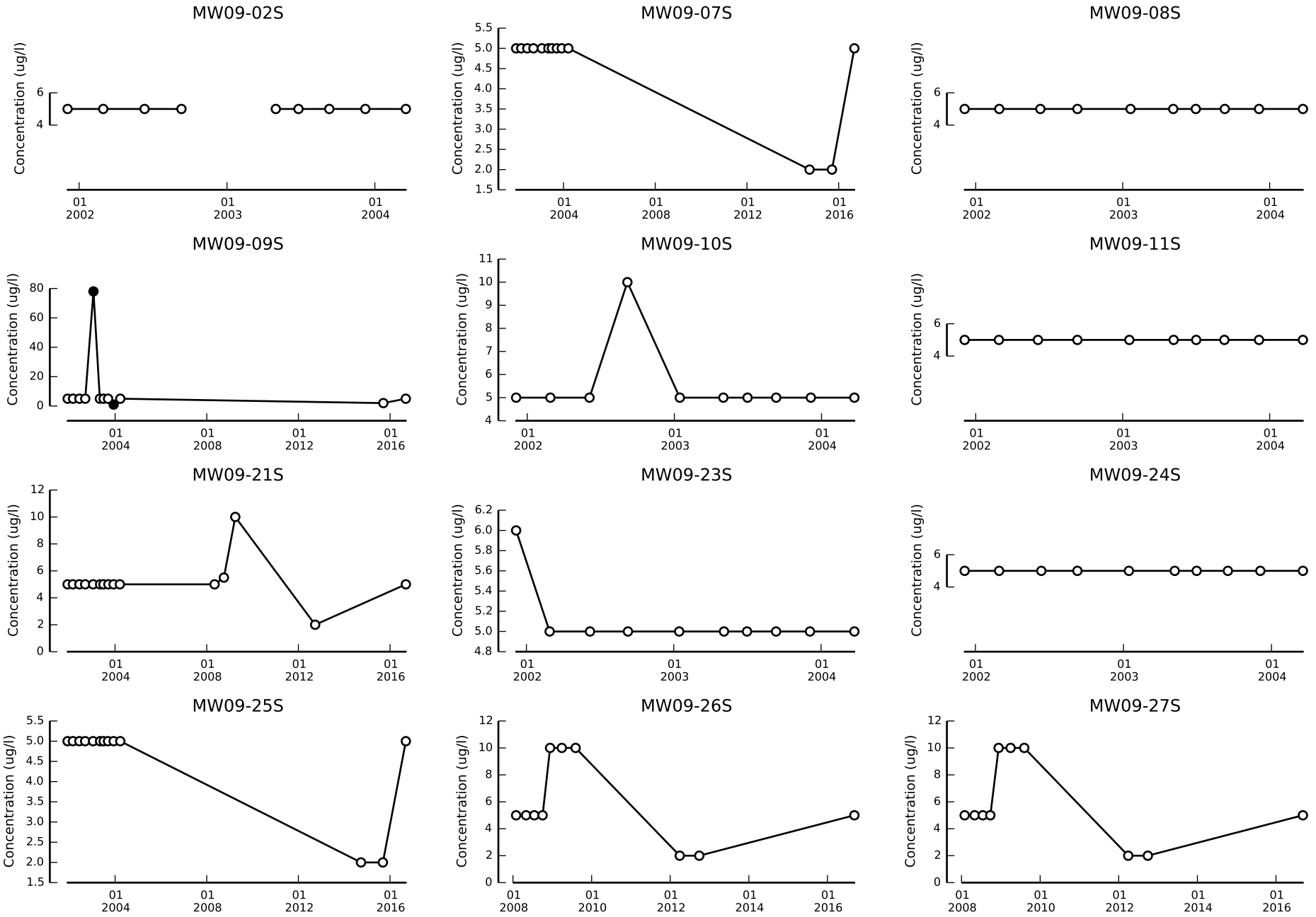
4-METHYL-2-PENTANONE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 41 of 133

● Detected
○ Not Detected, shown at detection limit



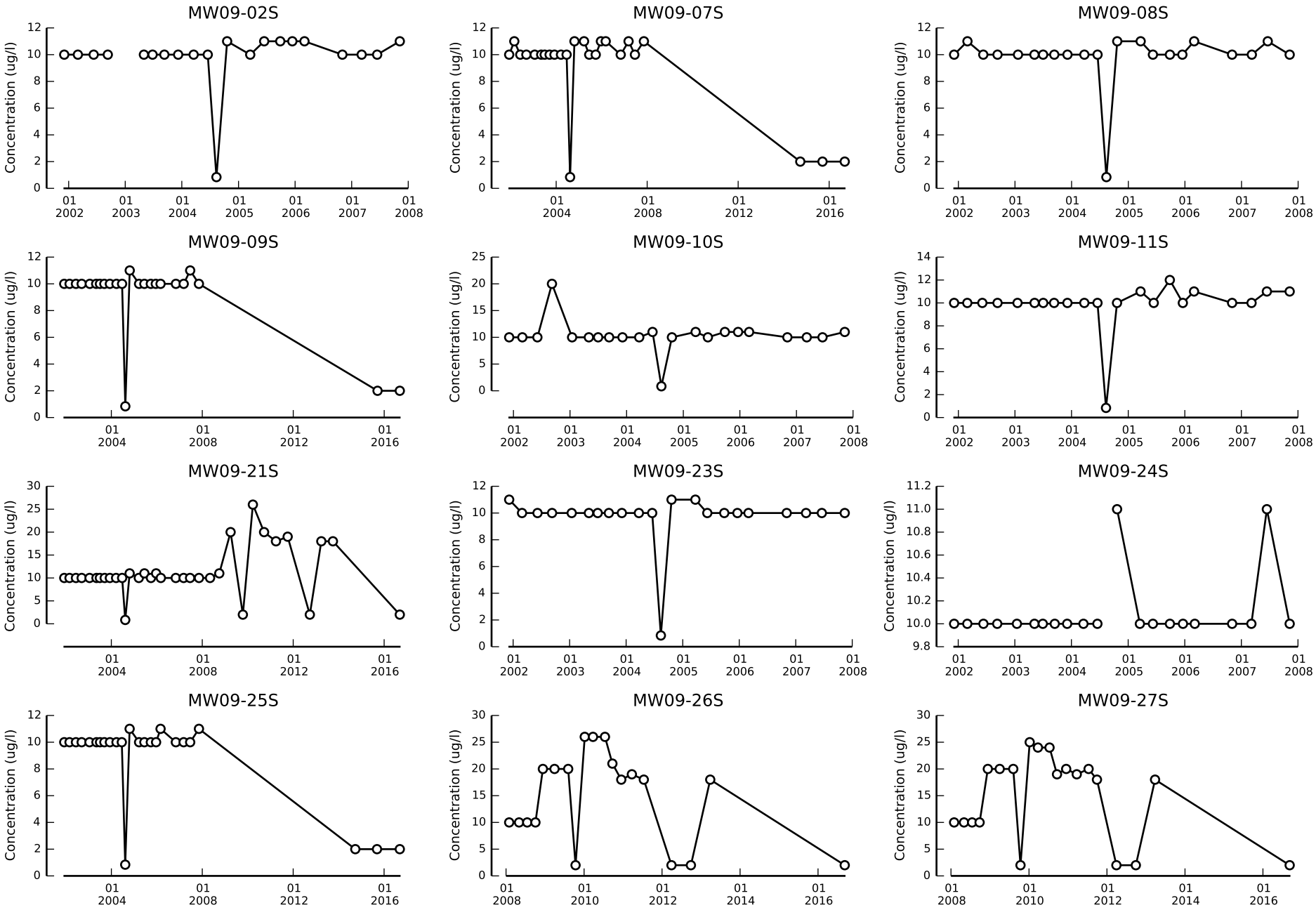
4-METHYLPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 42 of 133

● Detected
○ Not Detected, shown at detection limit



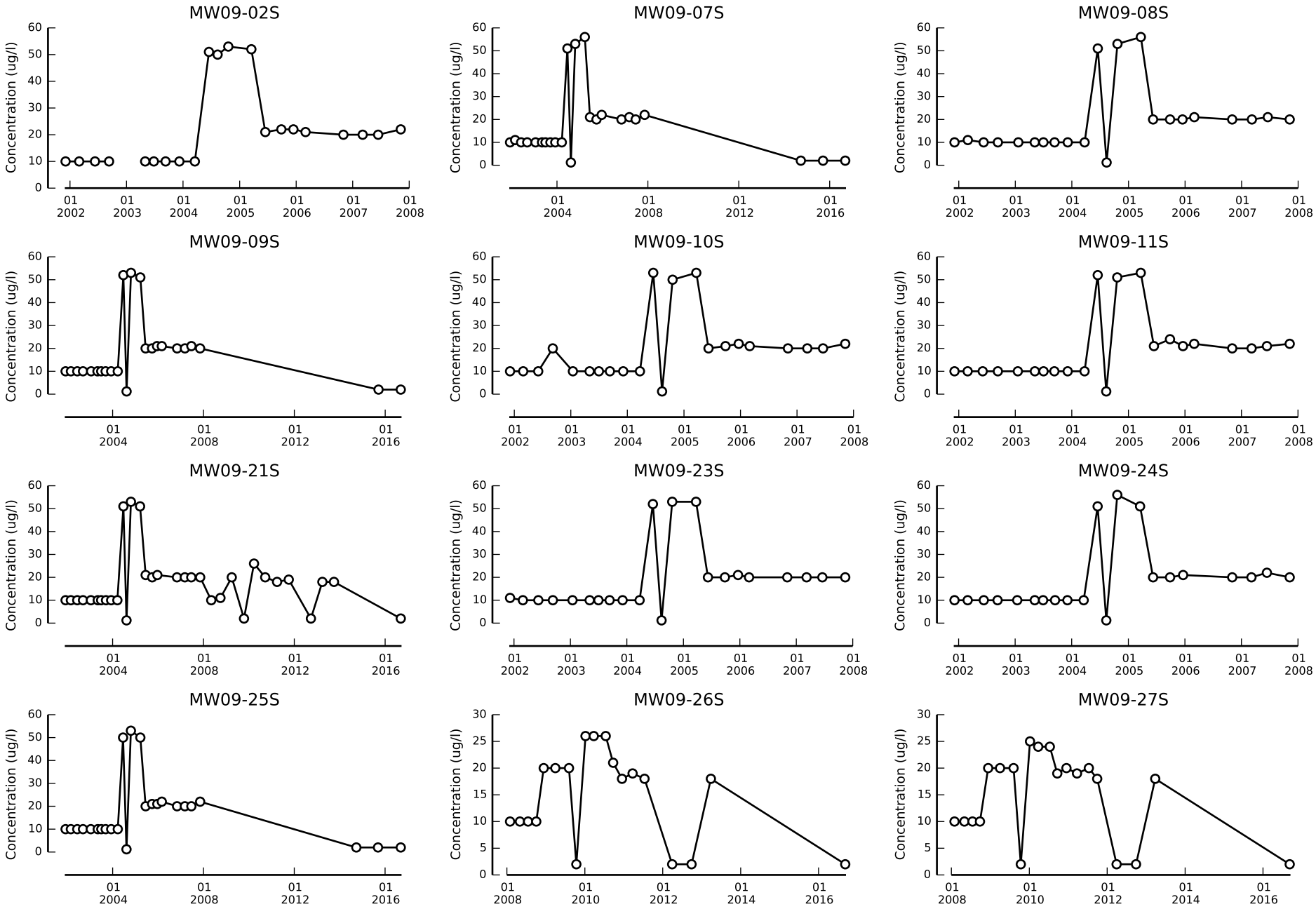
4-NITROANILINE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 43 of 133

● Detected
○ Not Detected, shown at detection limit



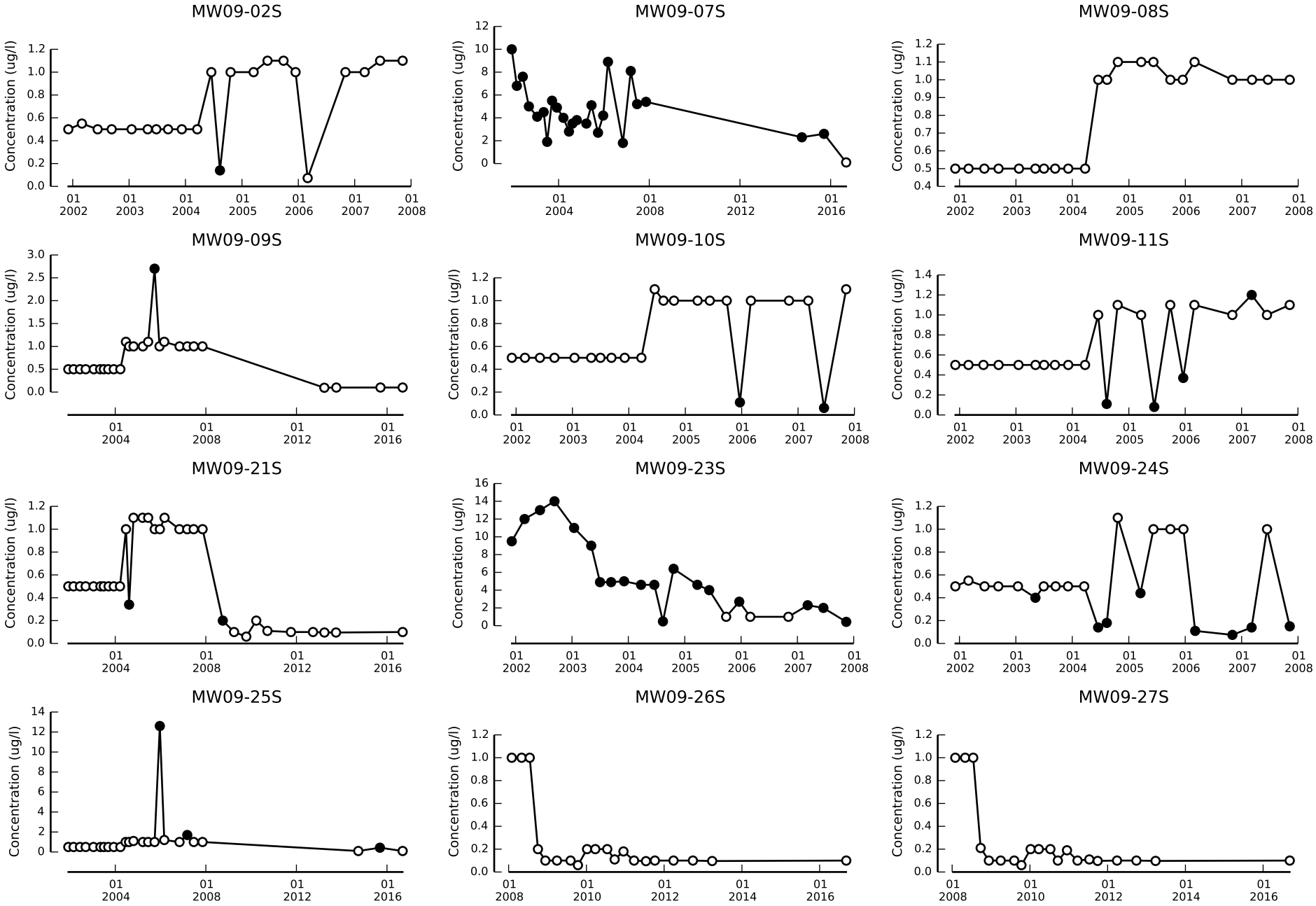
4-NITROPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 44 of 133

● Detected
○ Not Detected, shown at detection limit



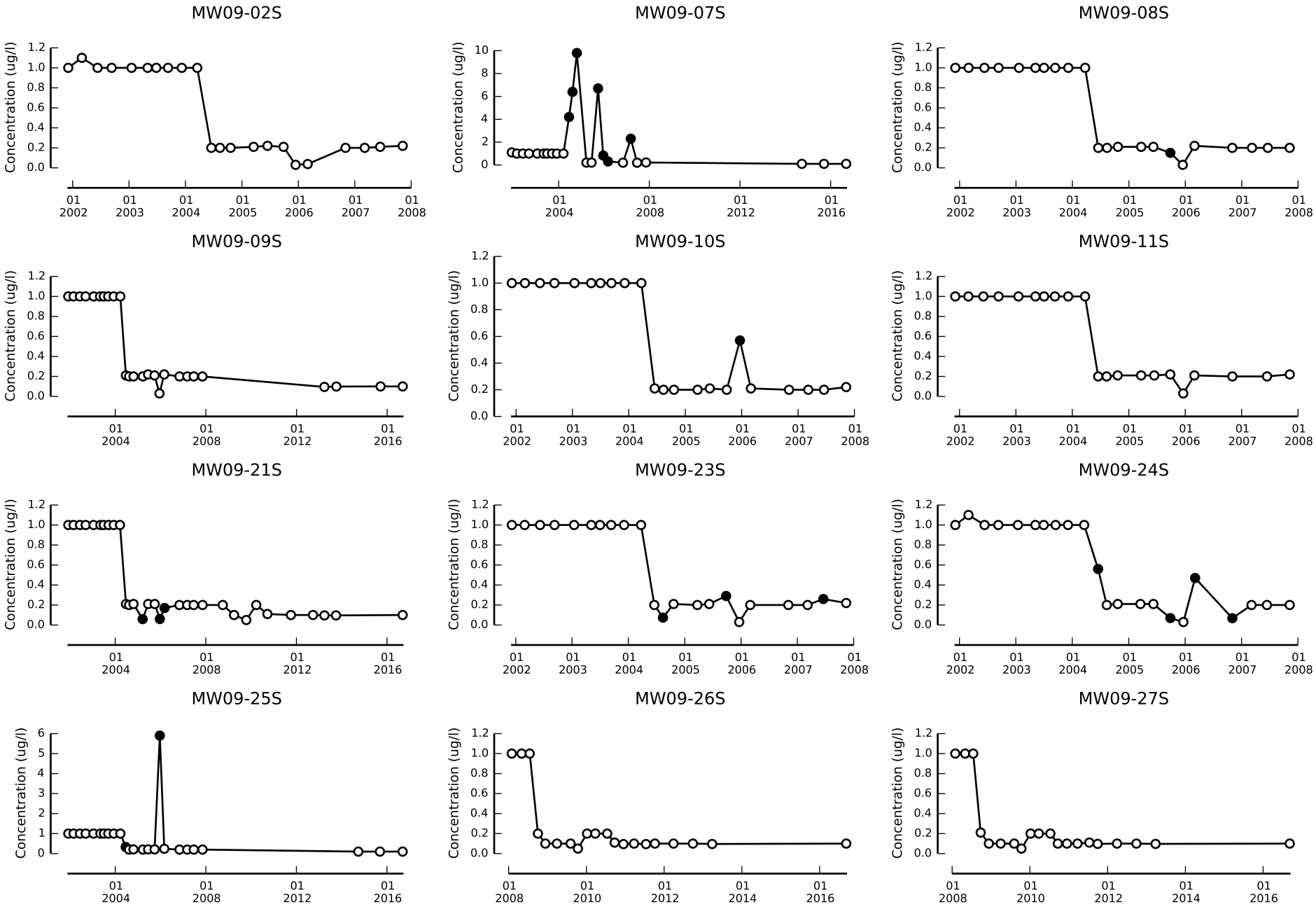
ACENAPHTHENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 45 of 133

● Detected
○ Not Detected, shown at detection limit



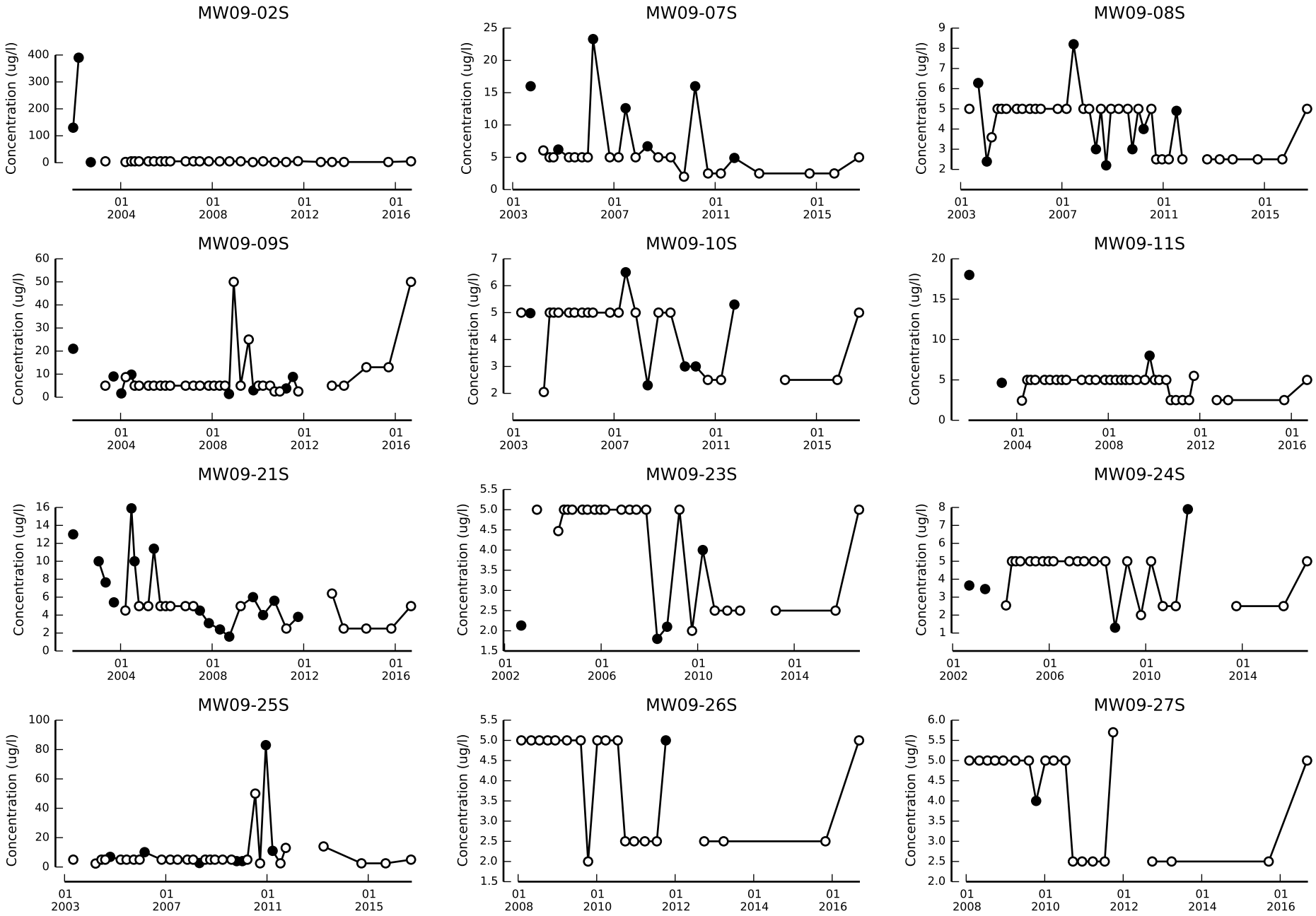
ACENAPHTHYLENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 46 of 133

● Detected
○ Not Detected, shown at detection limit



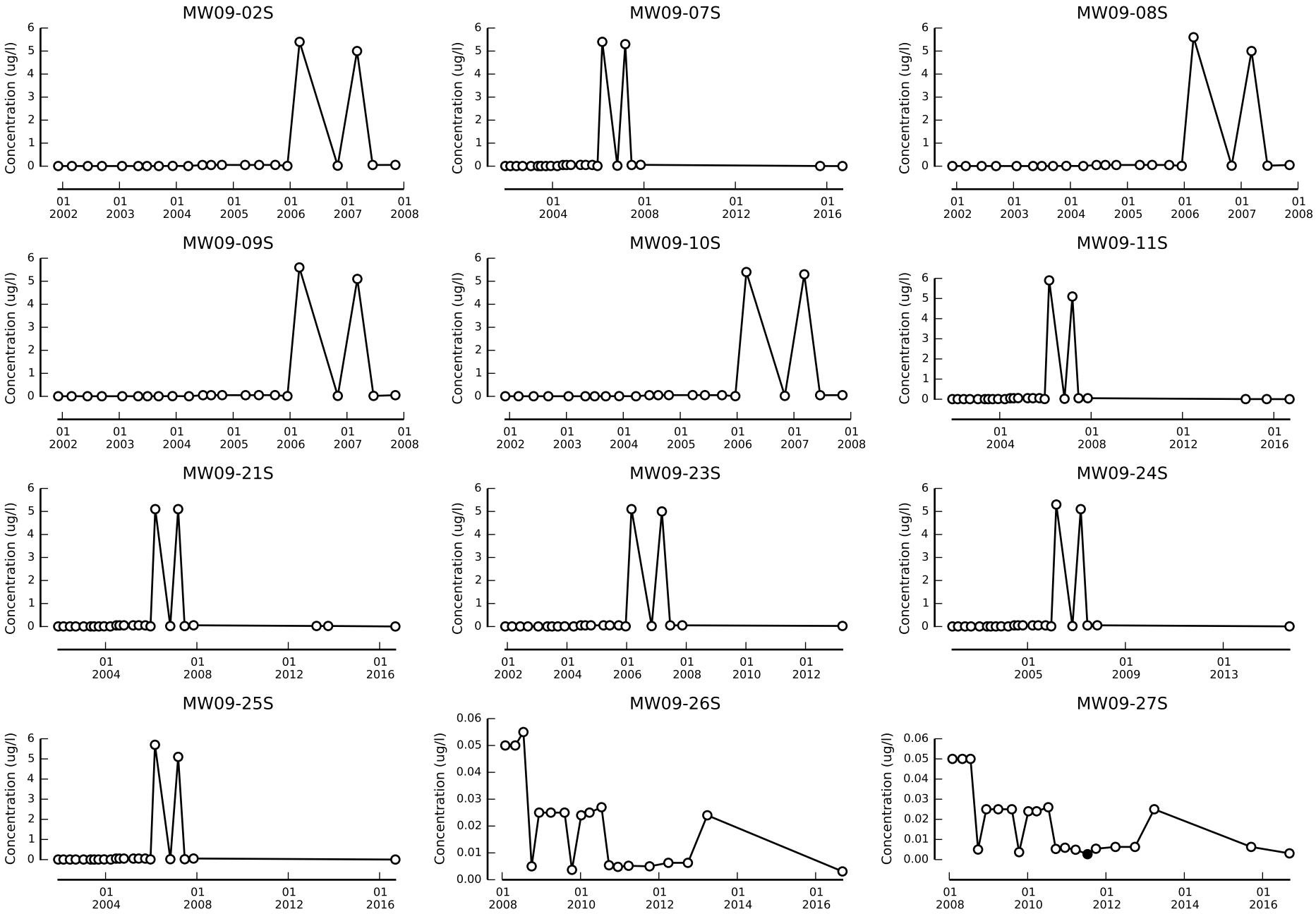
ACETONE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 47 of 133

● Detected
○ Not Detected, shown at detection limit



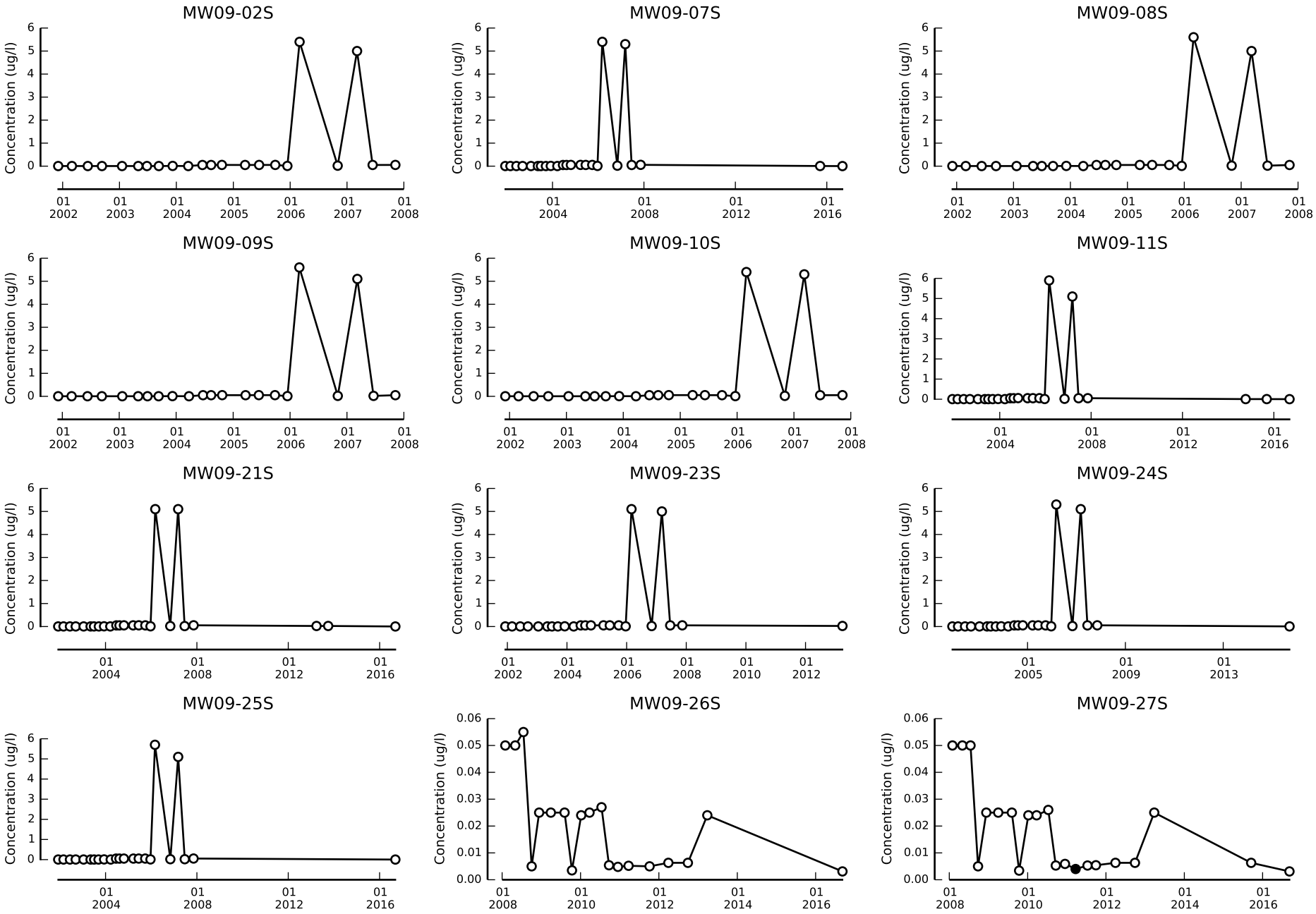
ALDRIN in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 48 of 133

● Detected
○ Not Detected, shown at detection limit



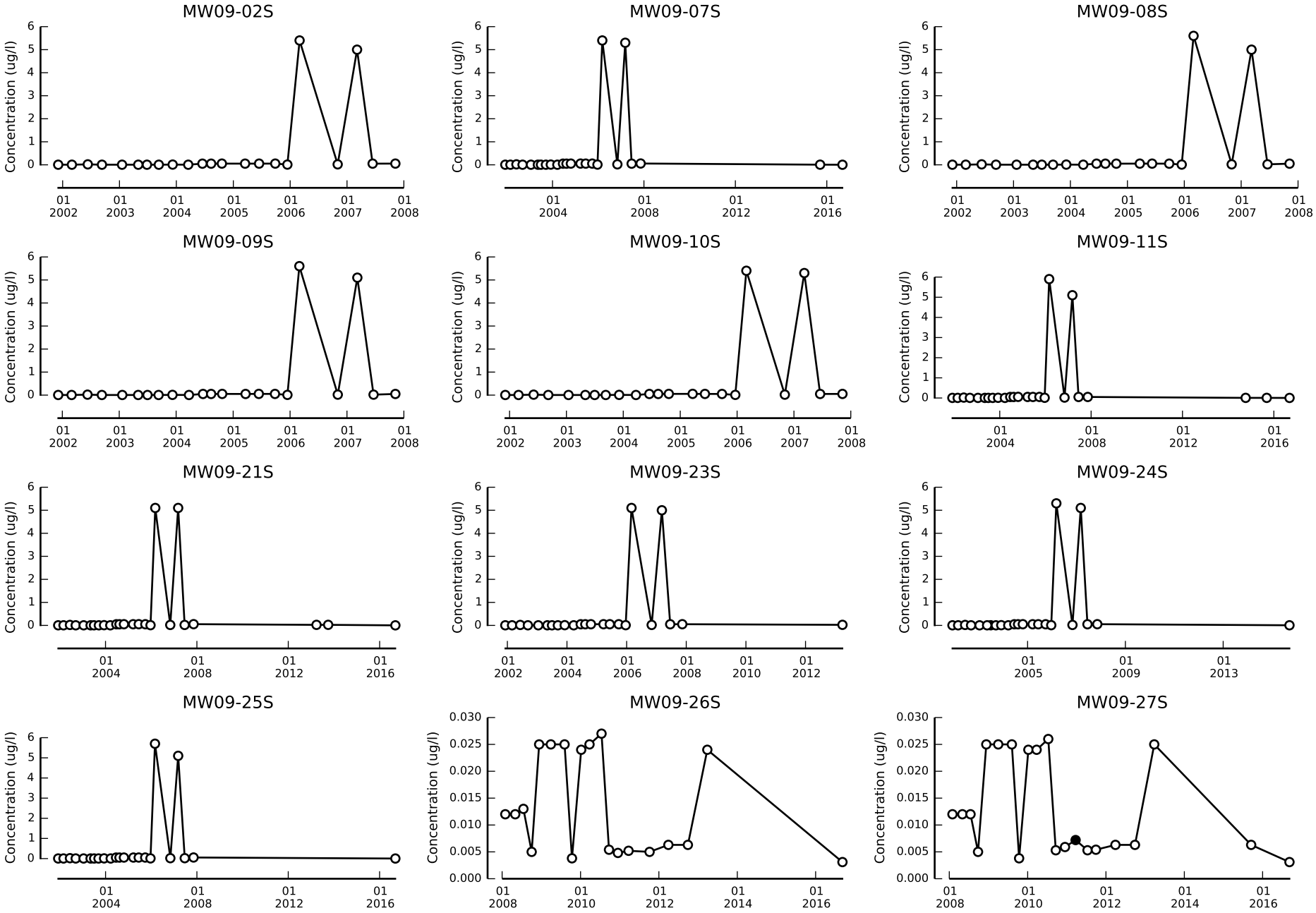
ALPHA-BHC in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 49 of 133

● Detected
○ Not Detected, shown at detection limit



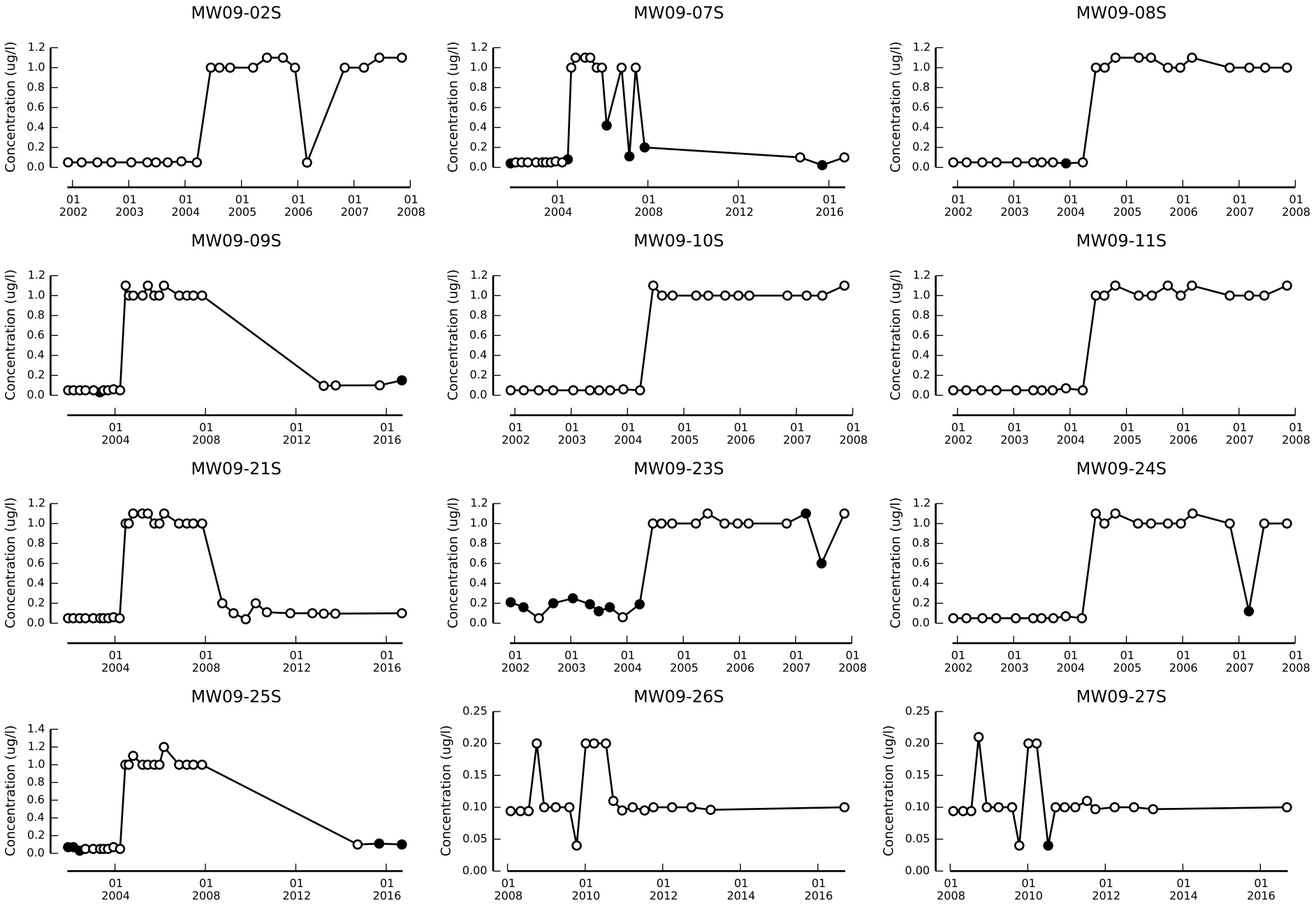
ALPHA-CHLORDANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 50 of 133

● Detected
○ Not Detected, shown at detection limit



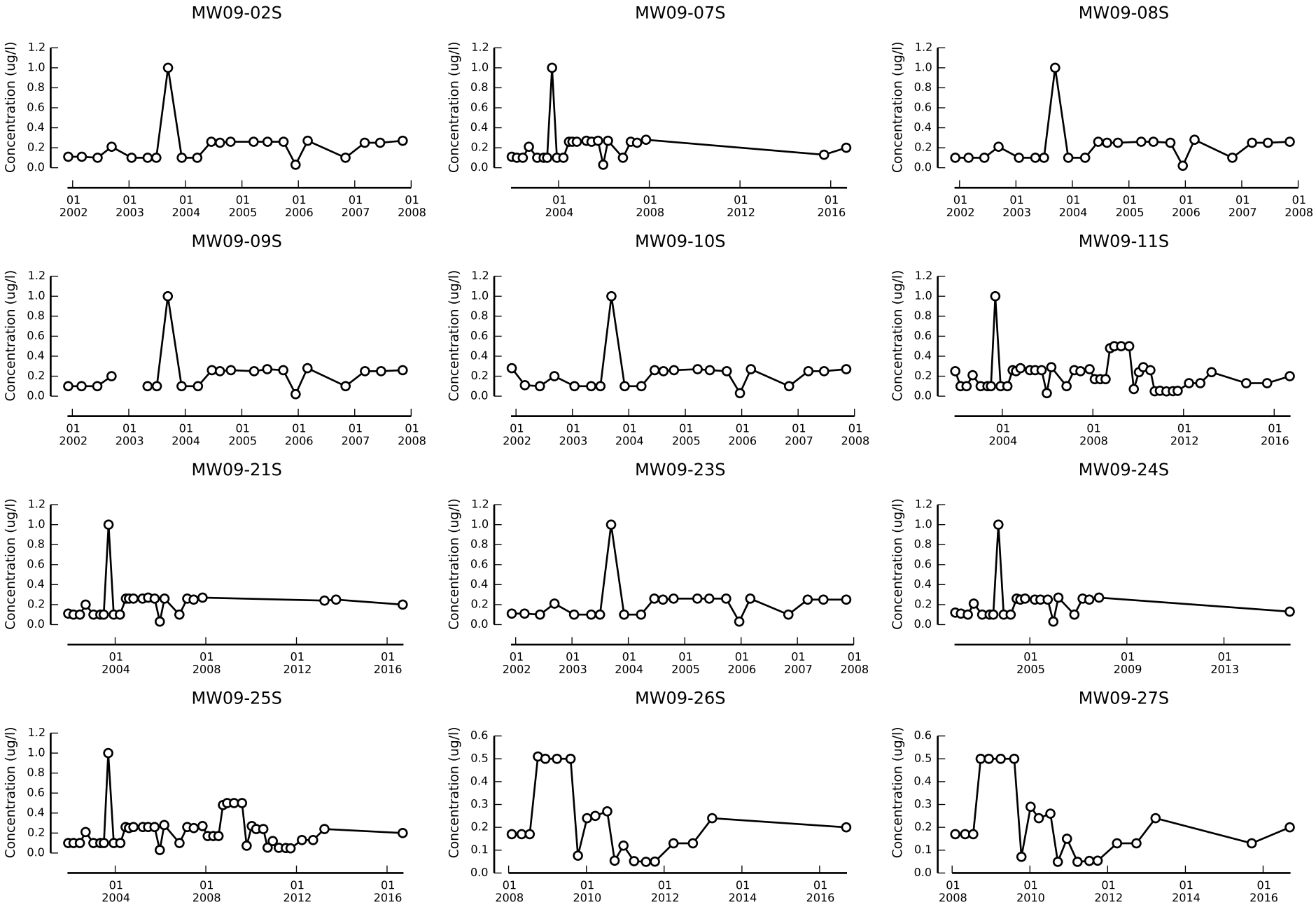
ANTHRACENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 51 of 133

● Detected
○ Not Detected, shown at detection limit



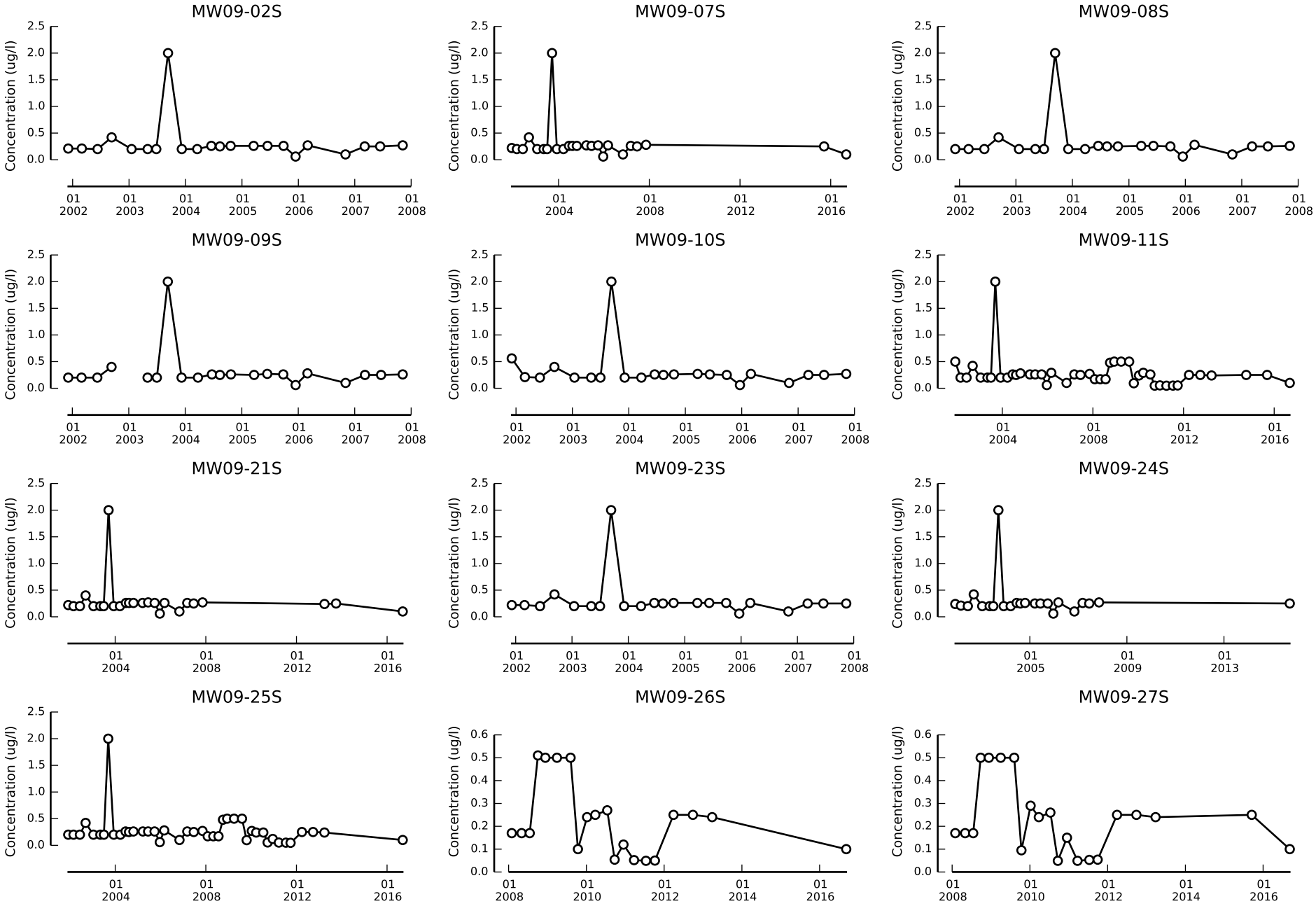
AROCLOR-1016 in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 52 of 133

● Detected
○ Not Detected, shown at detection limit



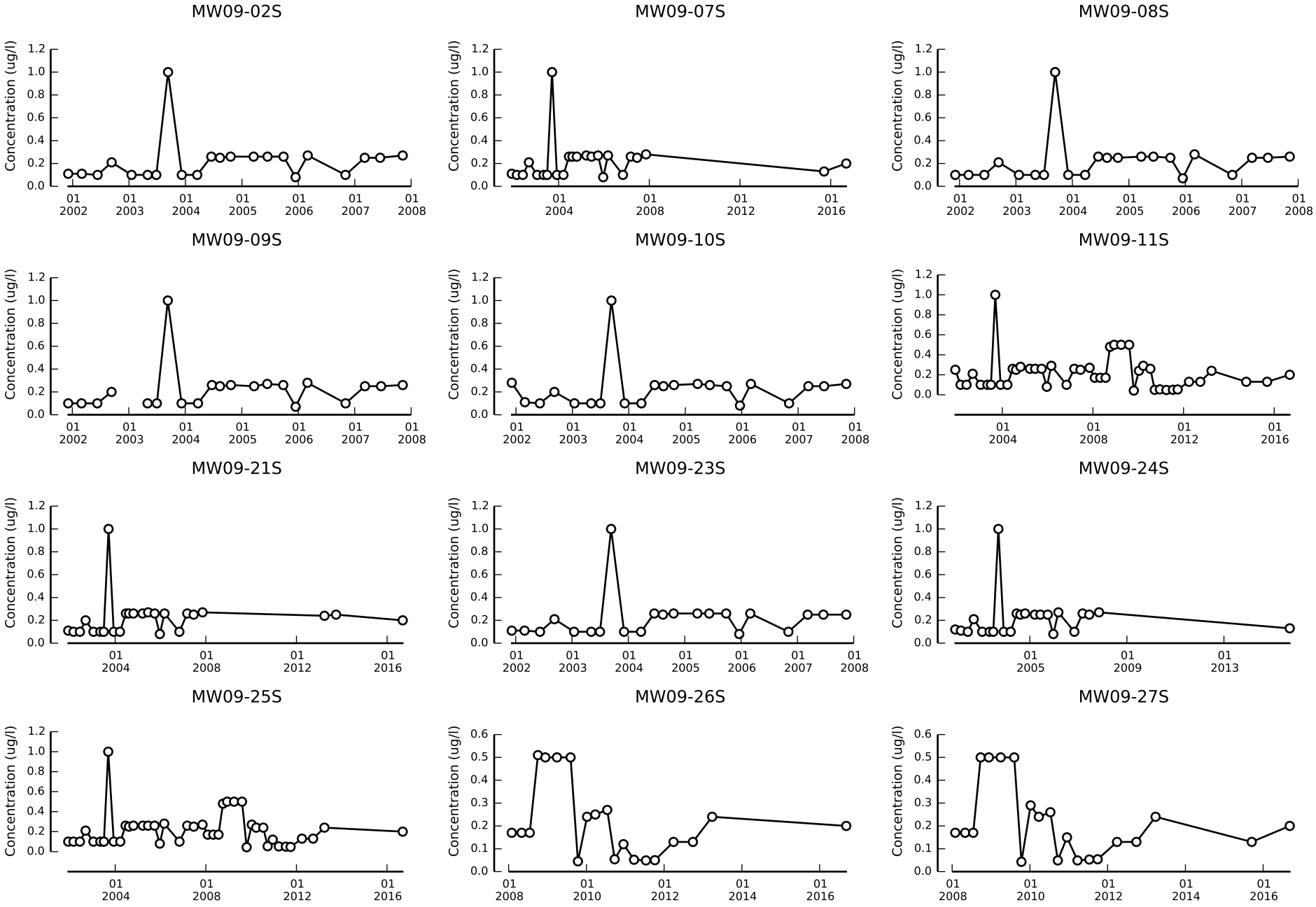
AROCLOR-1221 in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 53 of 133

● Detected
○ Not Detected, shown at detection limit



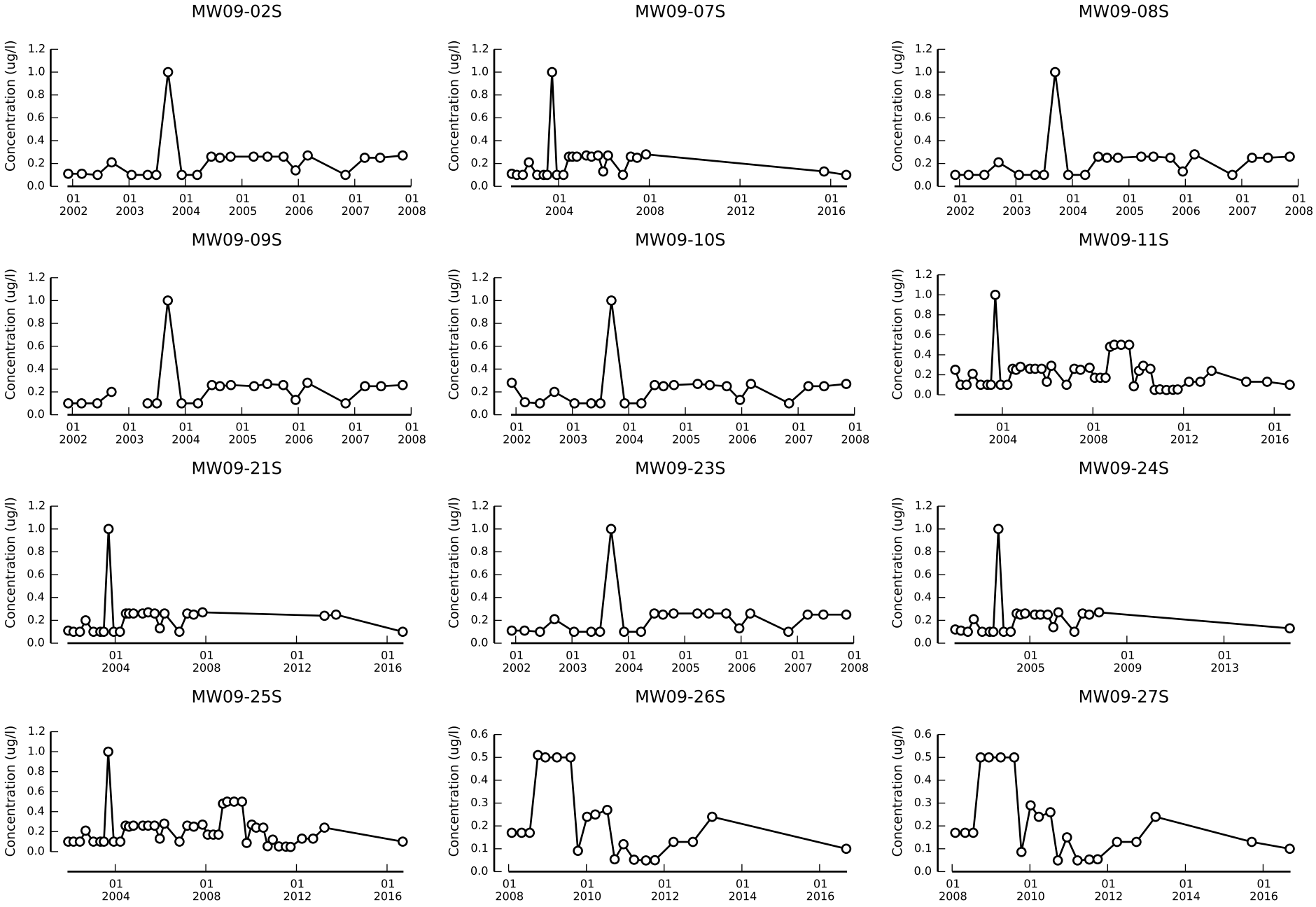
AROCLOR-1232 in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 54 of 133

● Detected
○ Not Detected, shown at detection limit



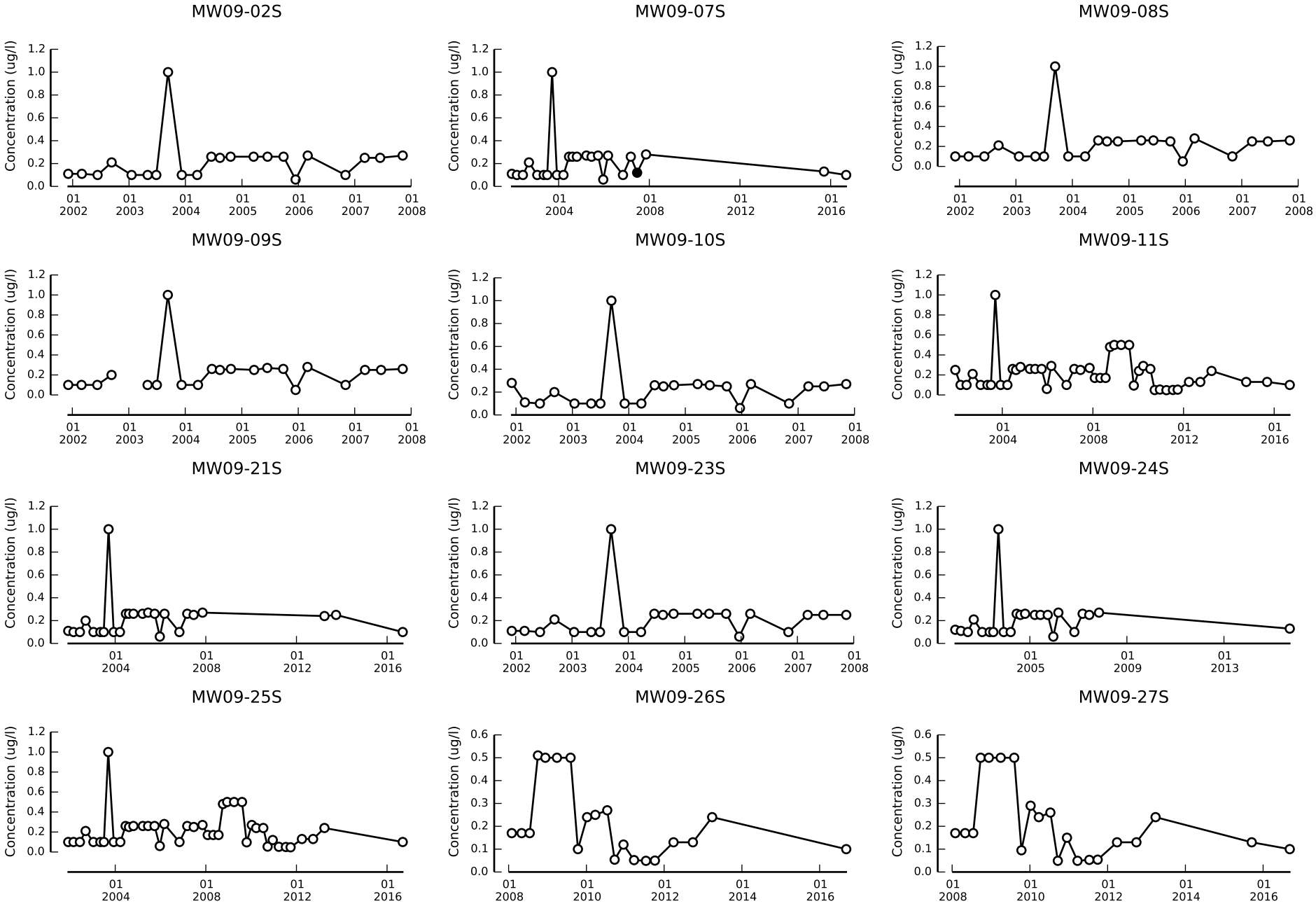
AROCLOR-1242 in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 55 of 133

● Detected
○ Not Detected, shown at detection limit



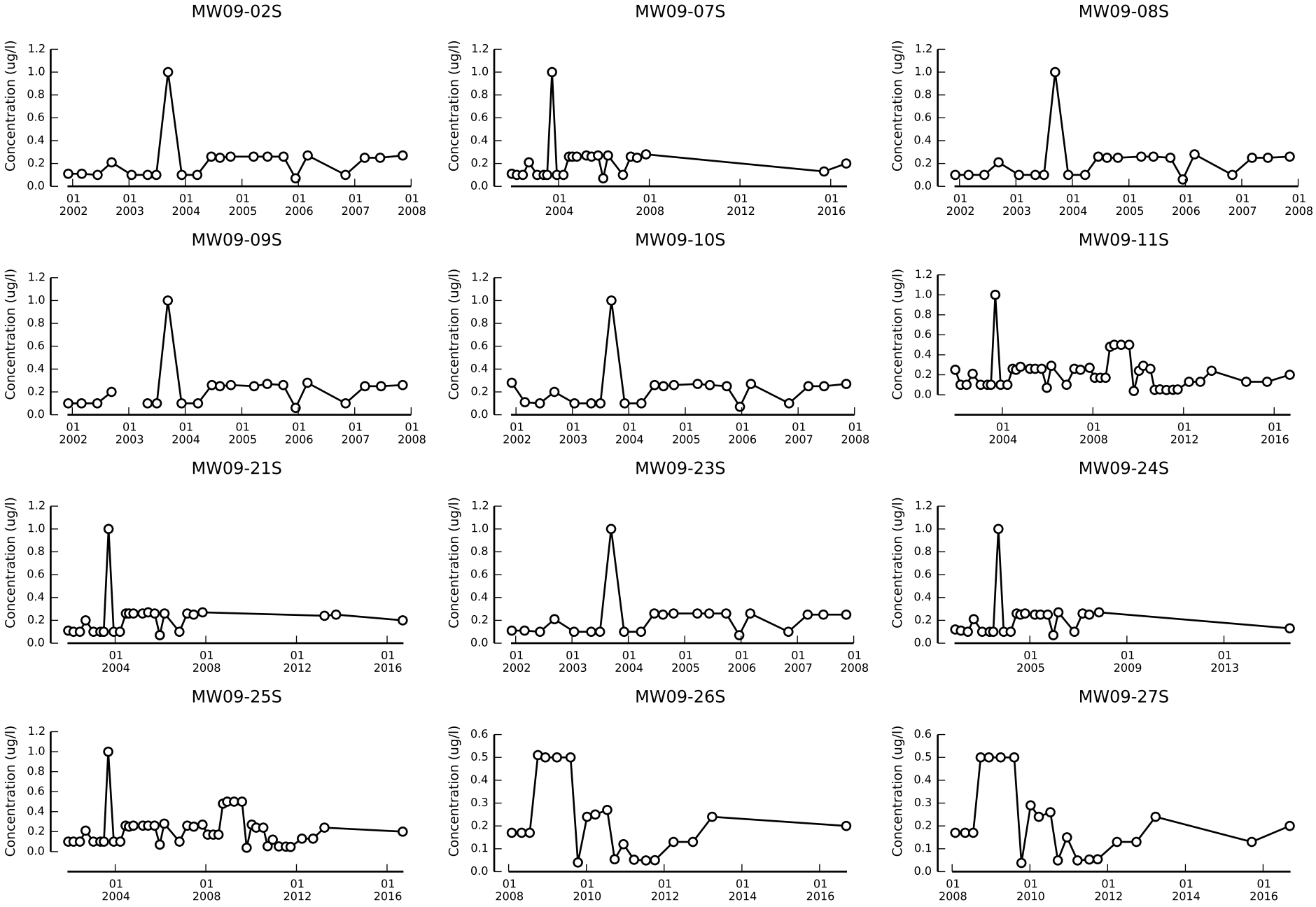
AROCLOR-1248 in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 56 of 133

● Detected
○ Not Detected, shown at detection limit



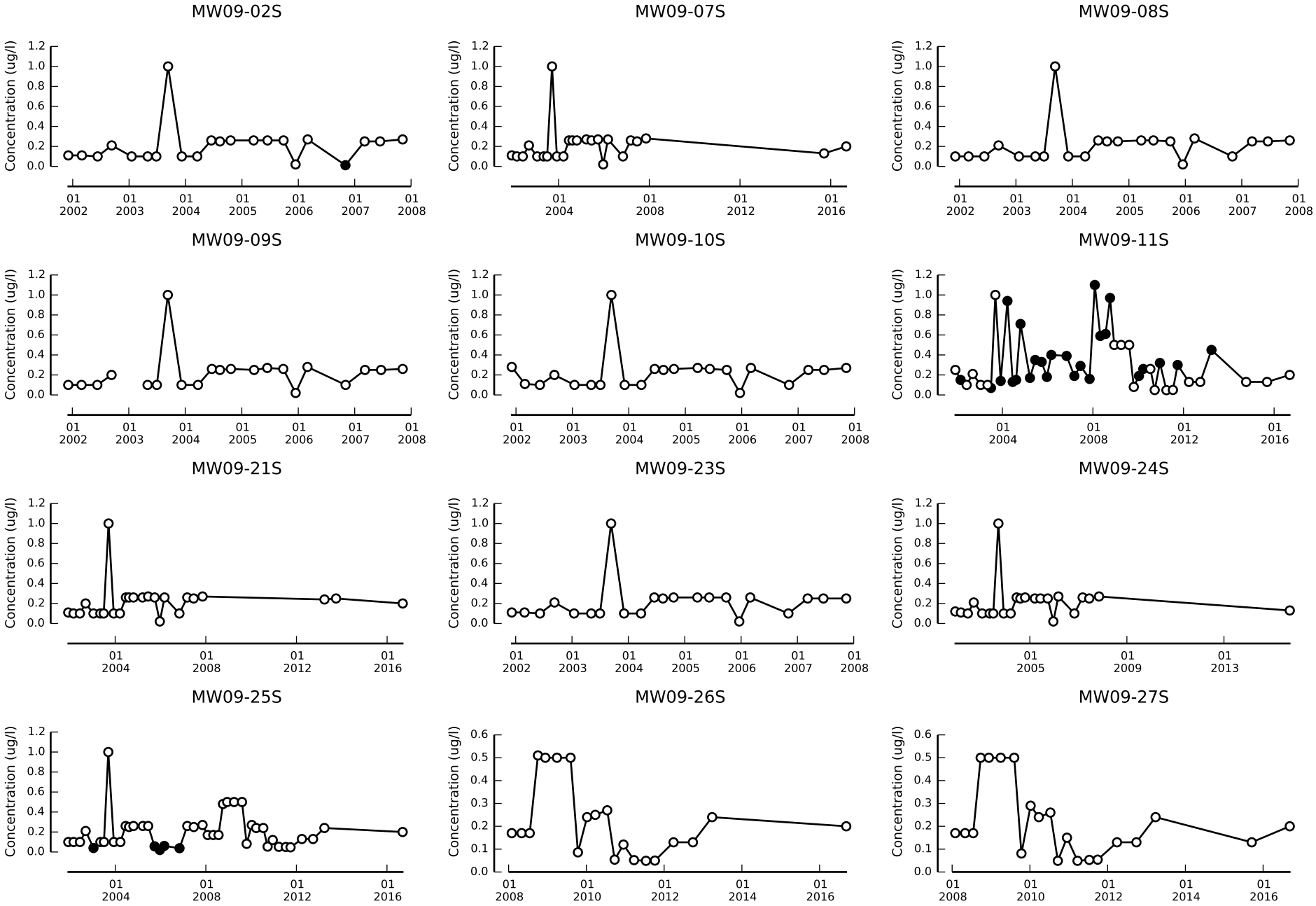
AROCLOR-1254 in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 57 of 133

● Detected
○ Not Detected, shown at detection limit



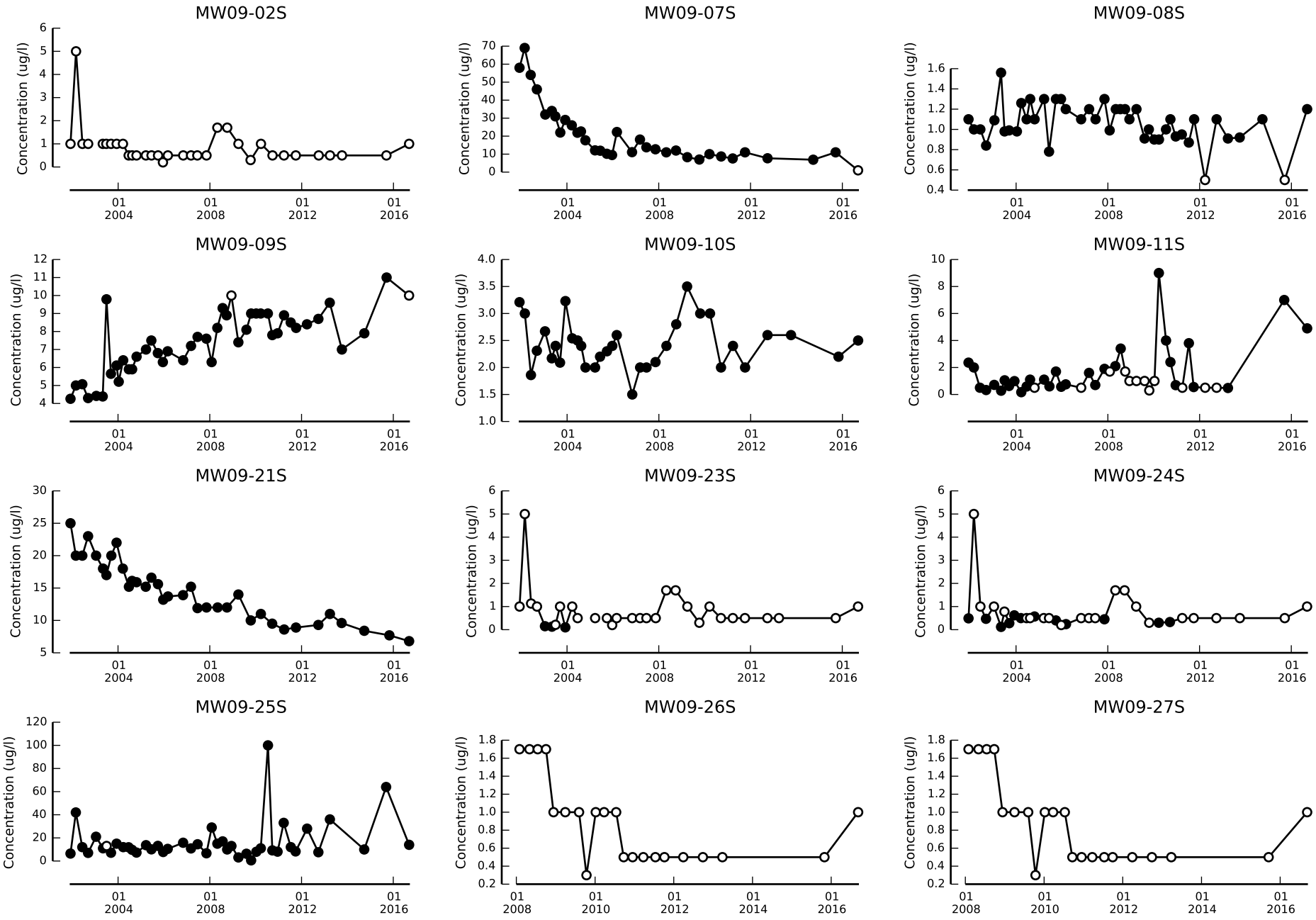
AROCLOR-1260 in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 58 of 133

● Detected
○ Not Detected, shown at detection limit



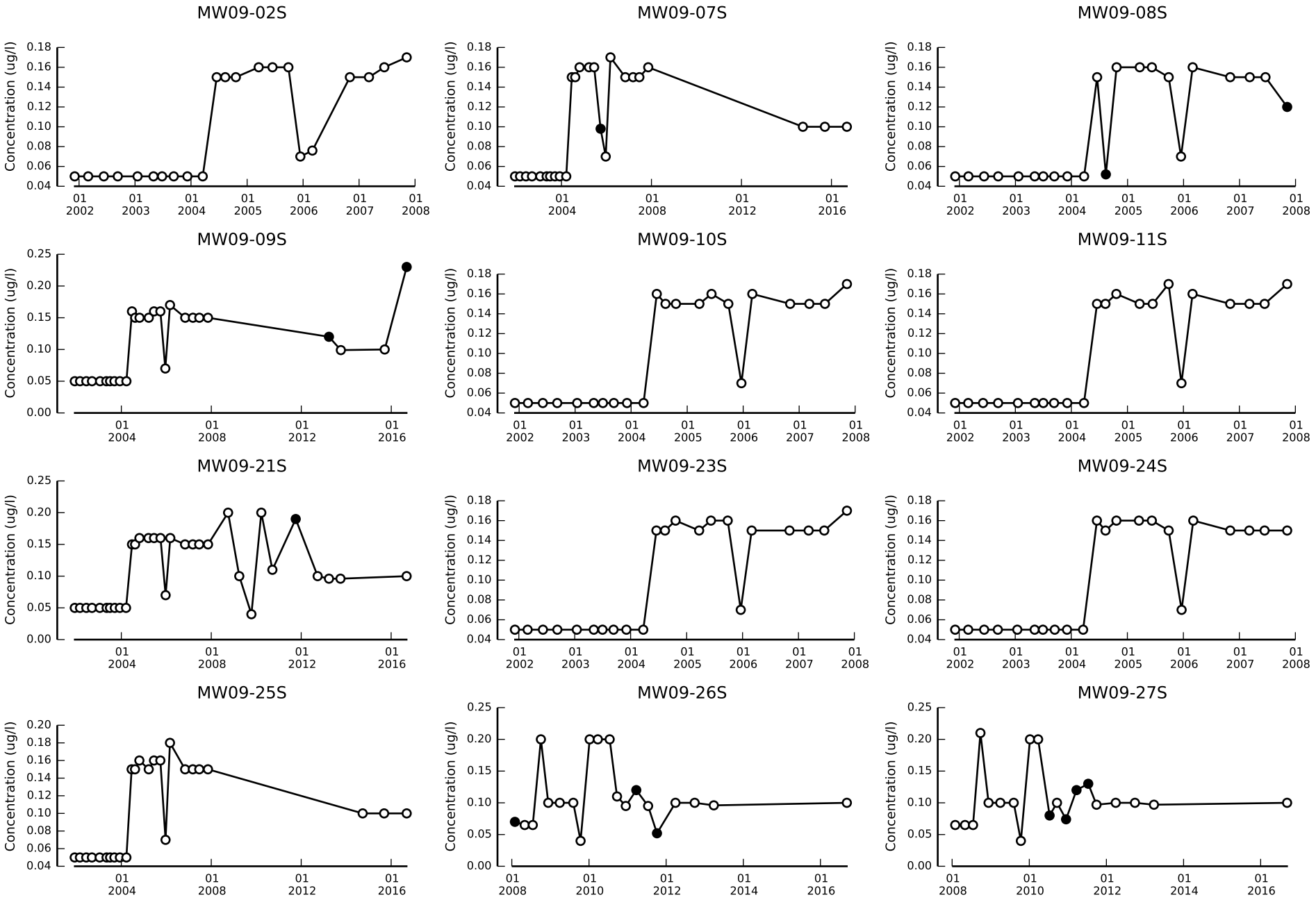
BENZENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 59 of 133

● Detected
○ Not Detected, shown at detection limit



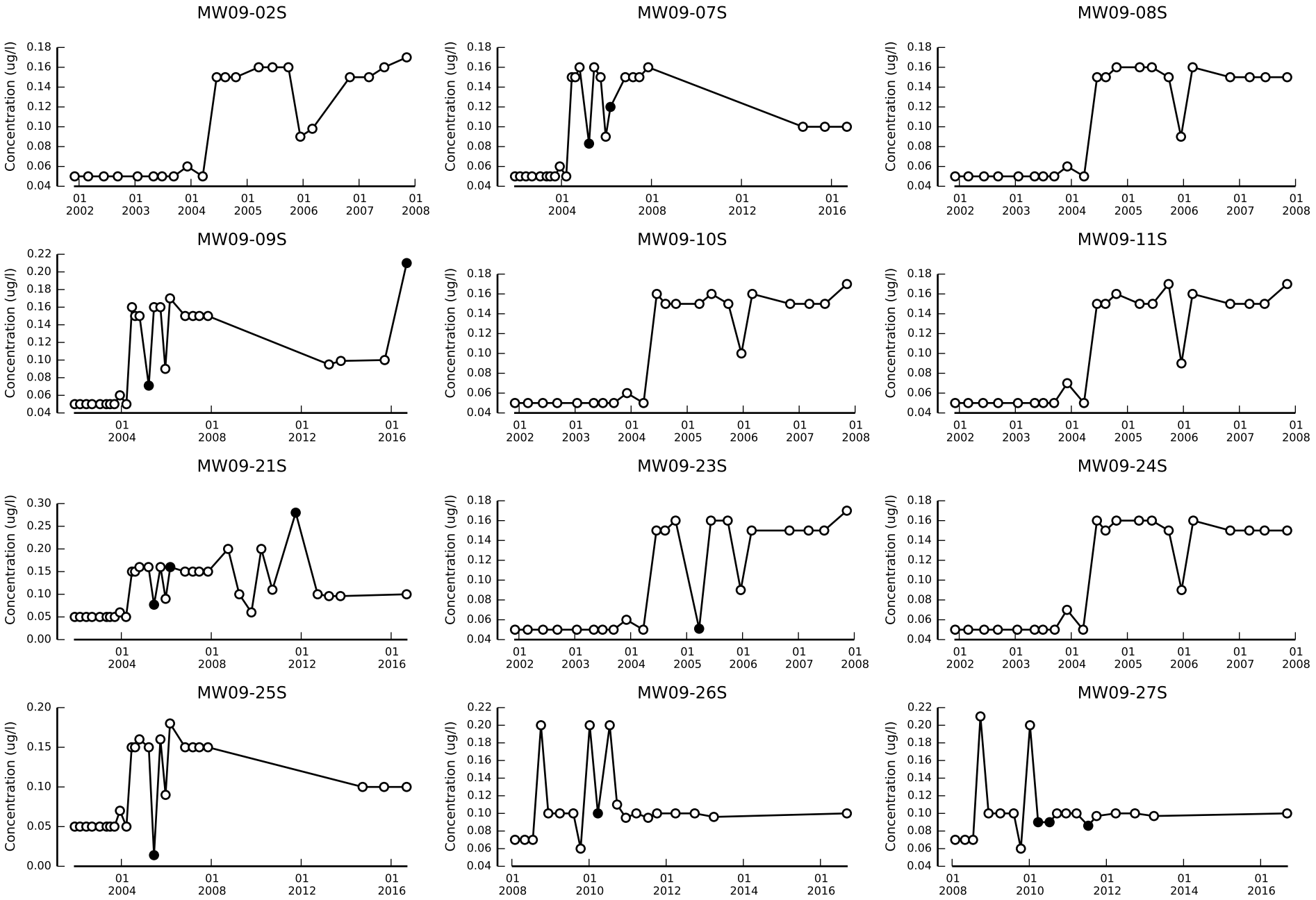
BENZO(A)ANTHRACENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 60 of 133

● Detected
○ Not Detected, shown at detection limit



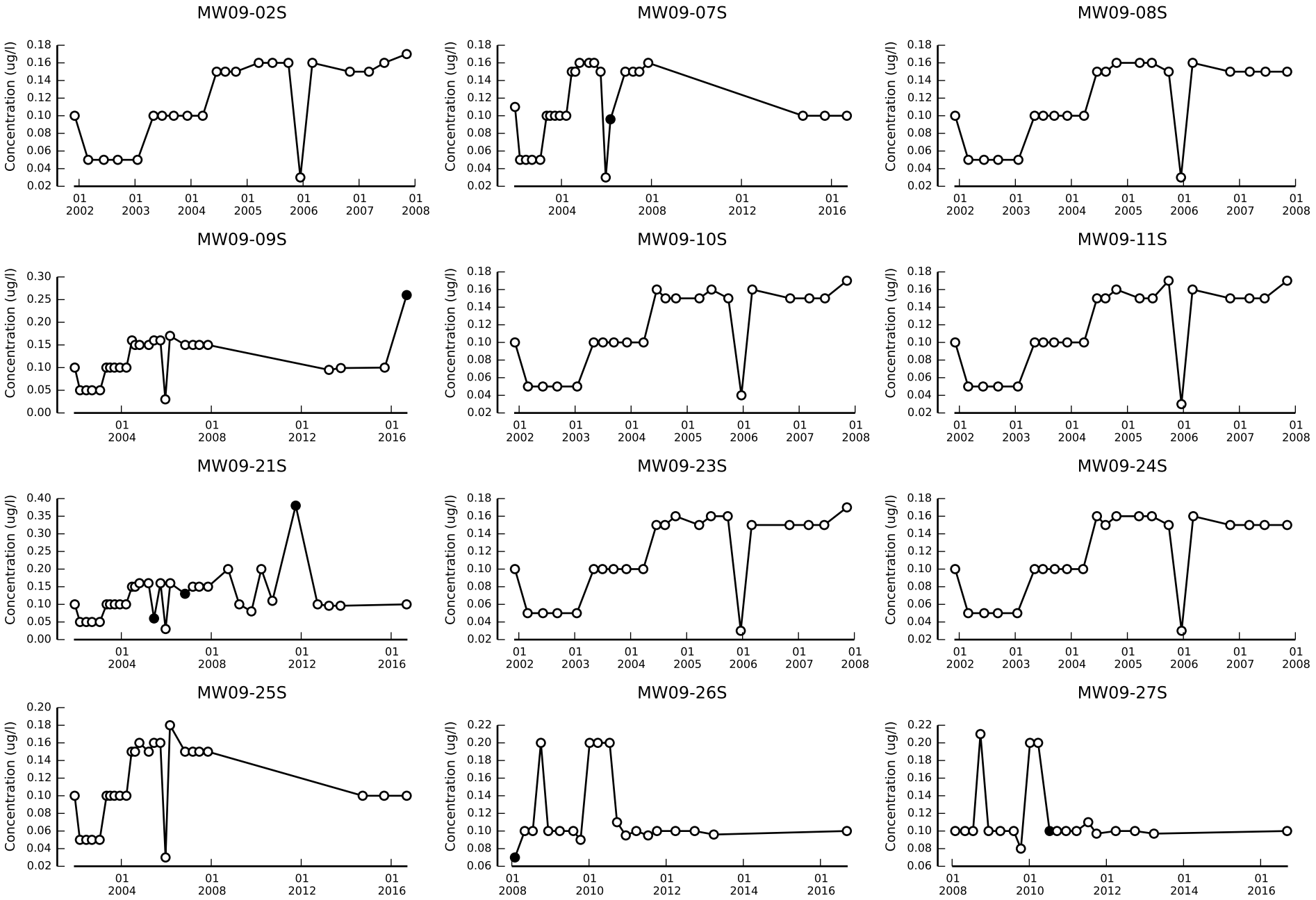
BENZO(A)PYRENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 61 of 133

● Detected
○ Not Detected, shown at detection limit



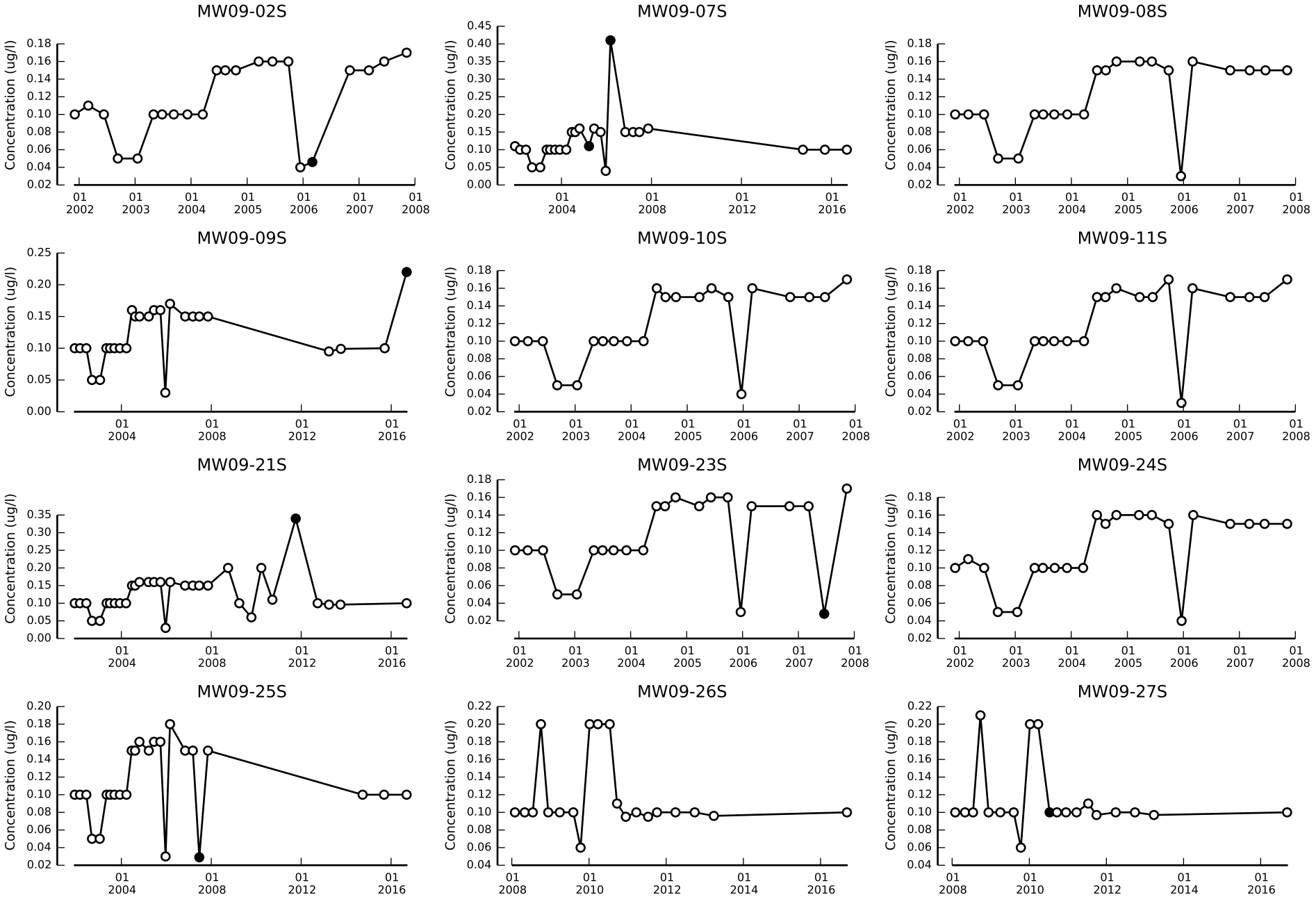
BENZO(B)FLUORANTHENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 62 of 133

● Detected
○ Not Detected, shown at detection limit



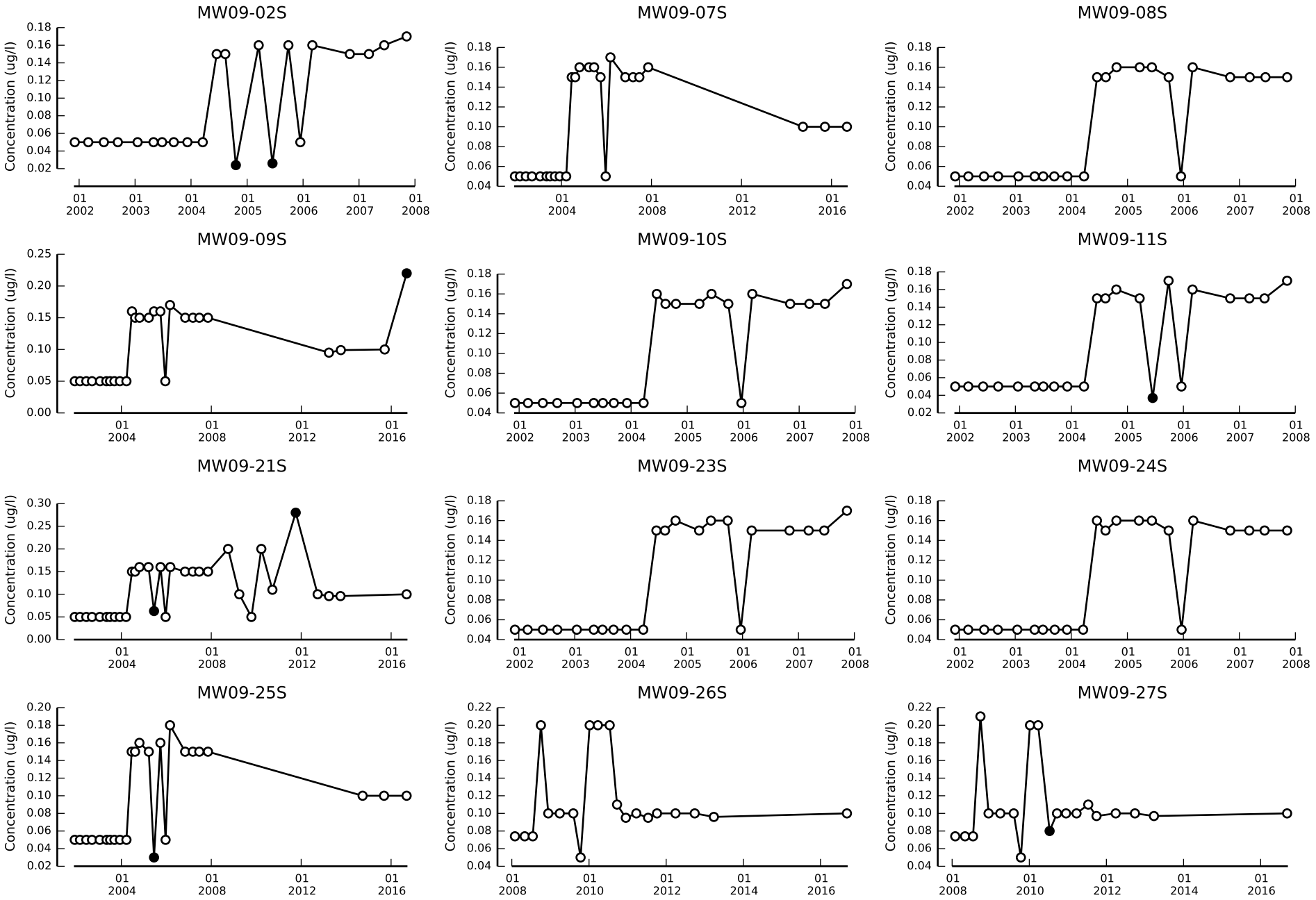
BENZO(G,H,I)PERYLENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 63 of 133

● Detected
○ Not Detected, shown at detection limit



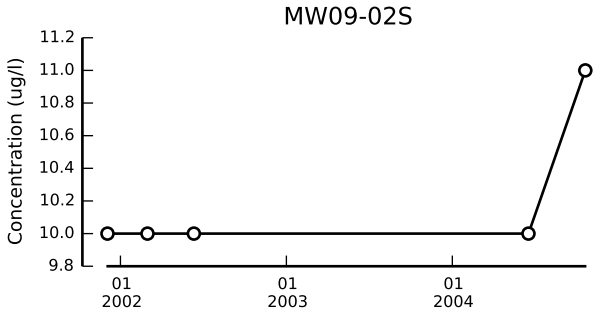
BENZO(K)FLUORANTHENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 64 of 133

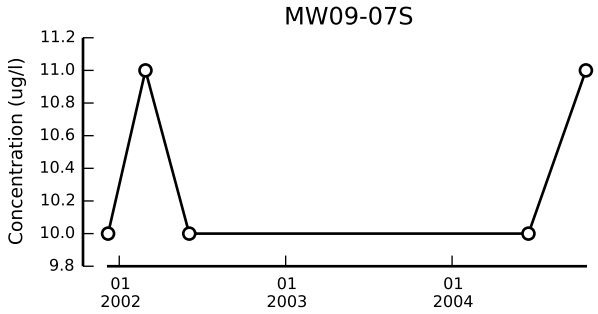
● Detected
○ Not Detected, shown at detection limit

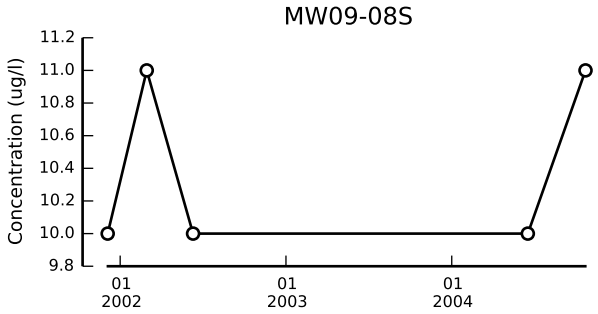


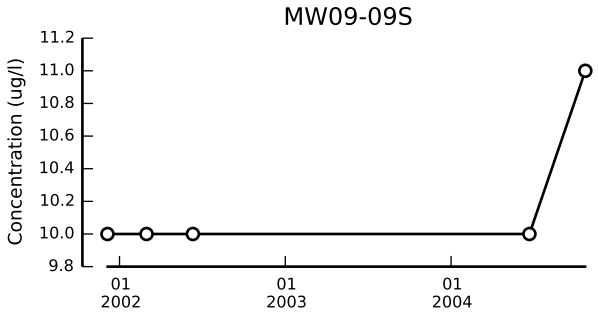
BENZOIC ACID in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 65 of 133

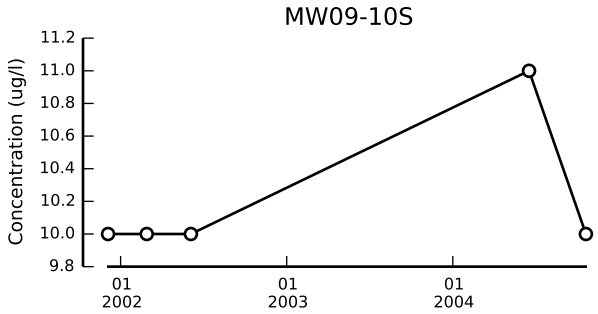
● Detected
○ Not Detected, shown at detection limit

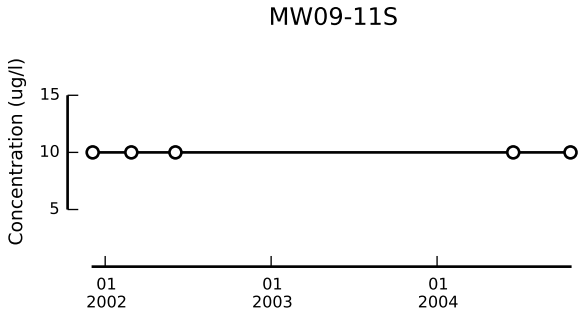


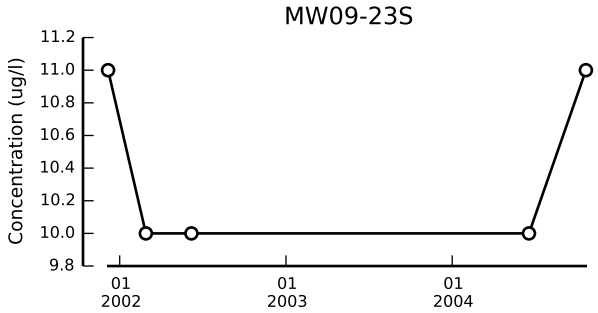


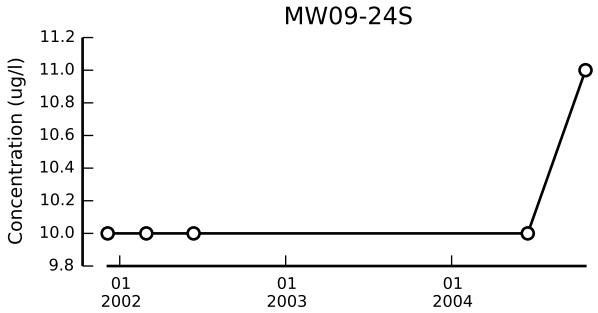


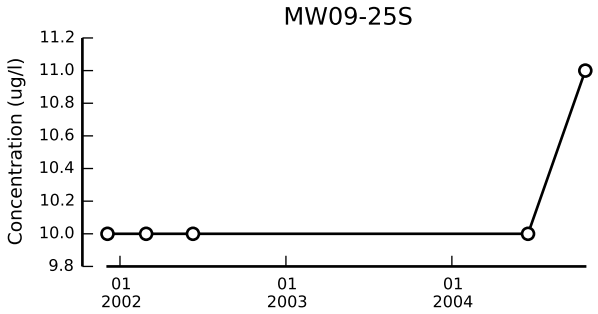












MW09-26S

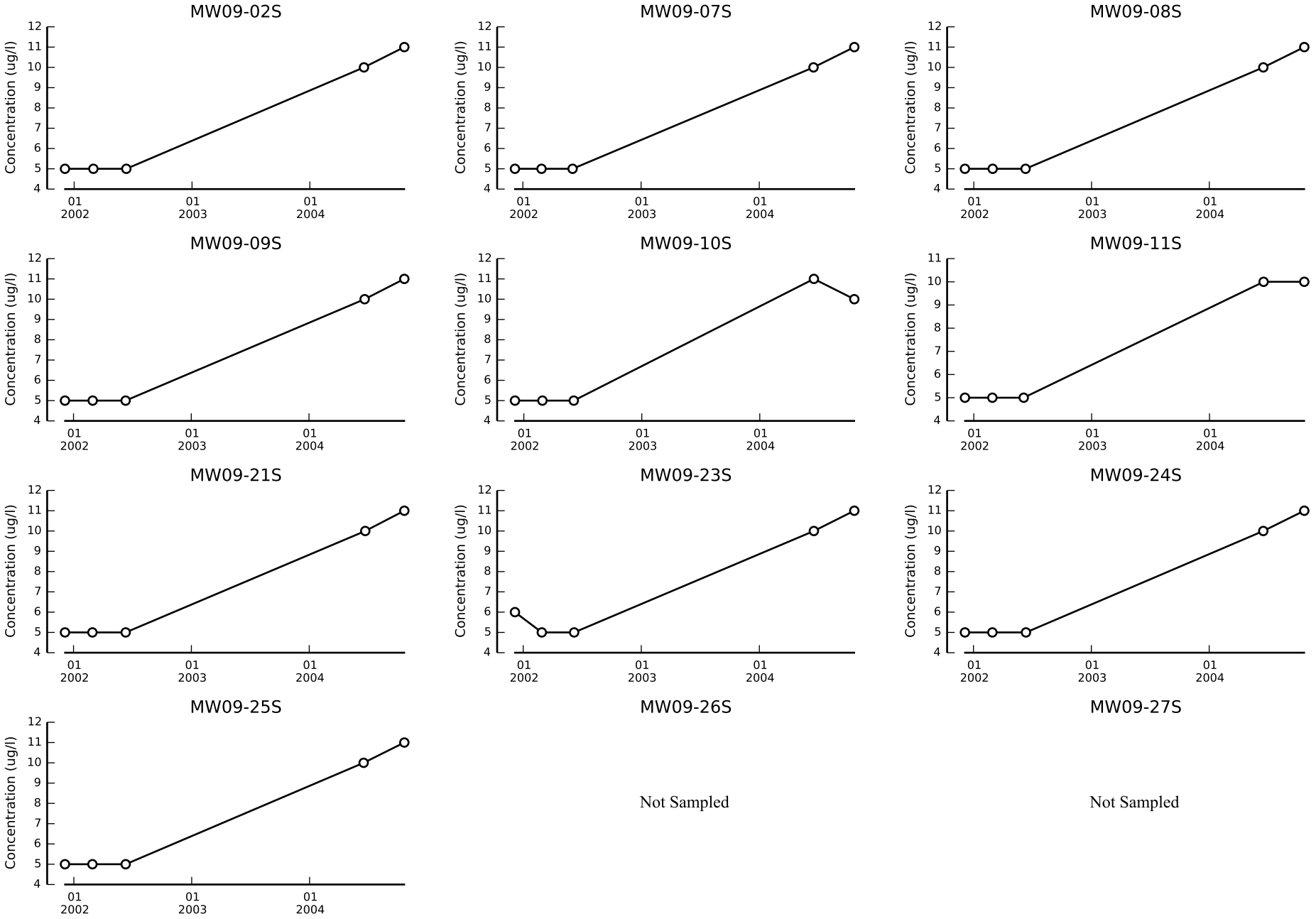
Not Sampled

MW09-27S

Not Sampled

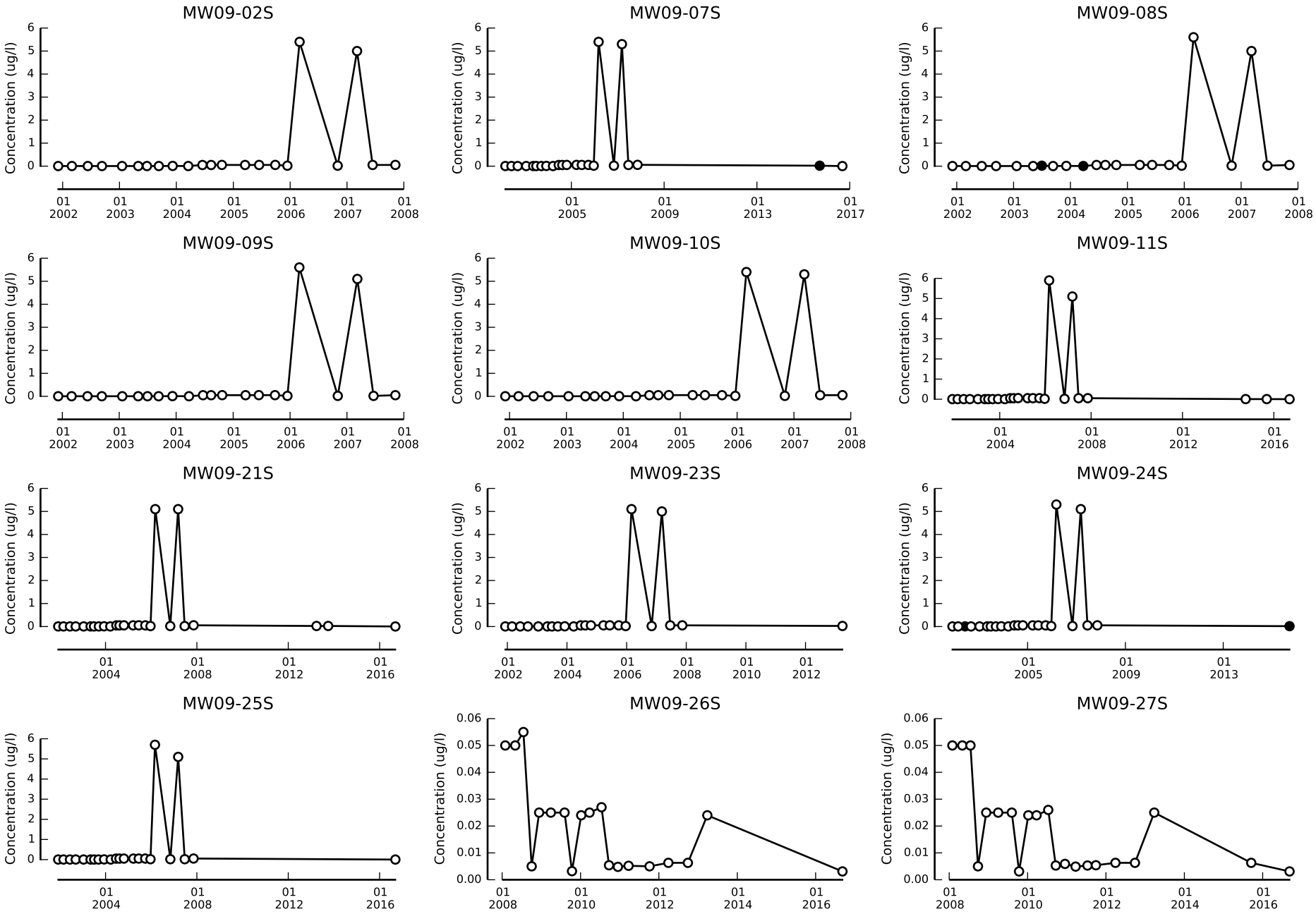
BENZYL ALCOHOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 66 of 133

● Detected
○ Not Detected, shown at detection limit



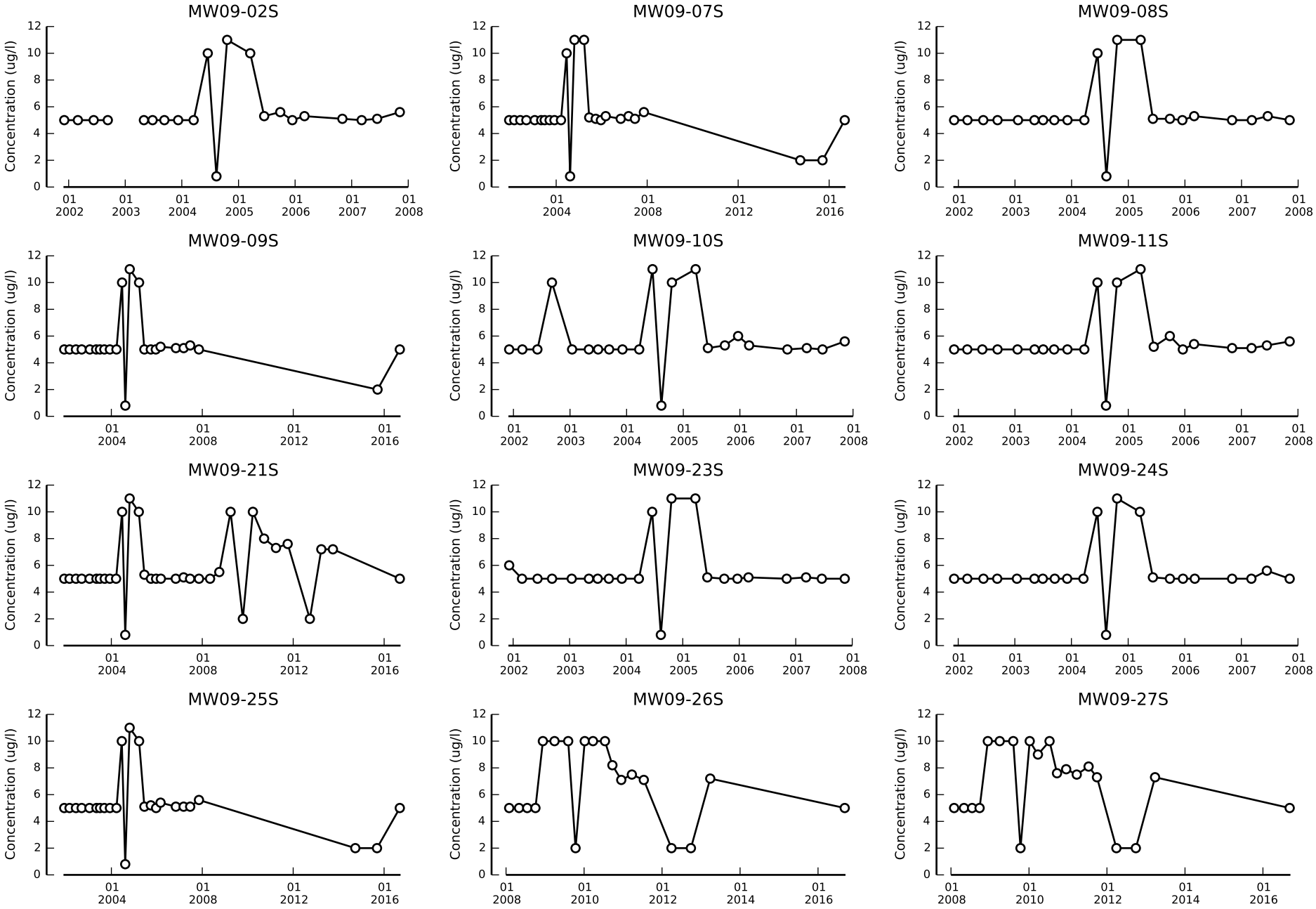
BETA-BHC in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 67 of 133

● Detected
○ Not Detected, shown at detection limit



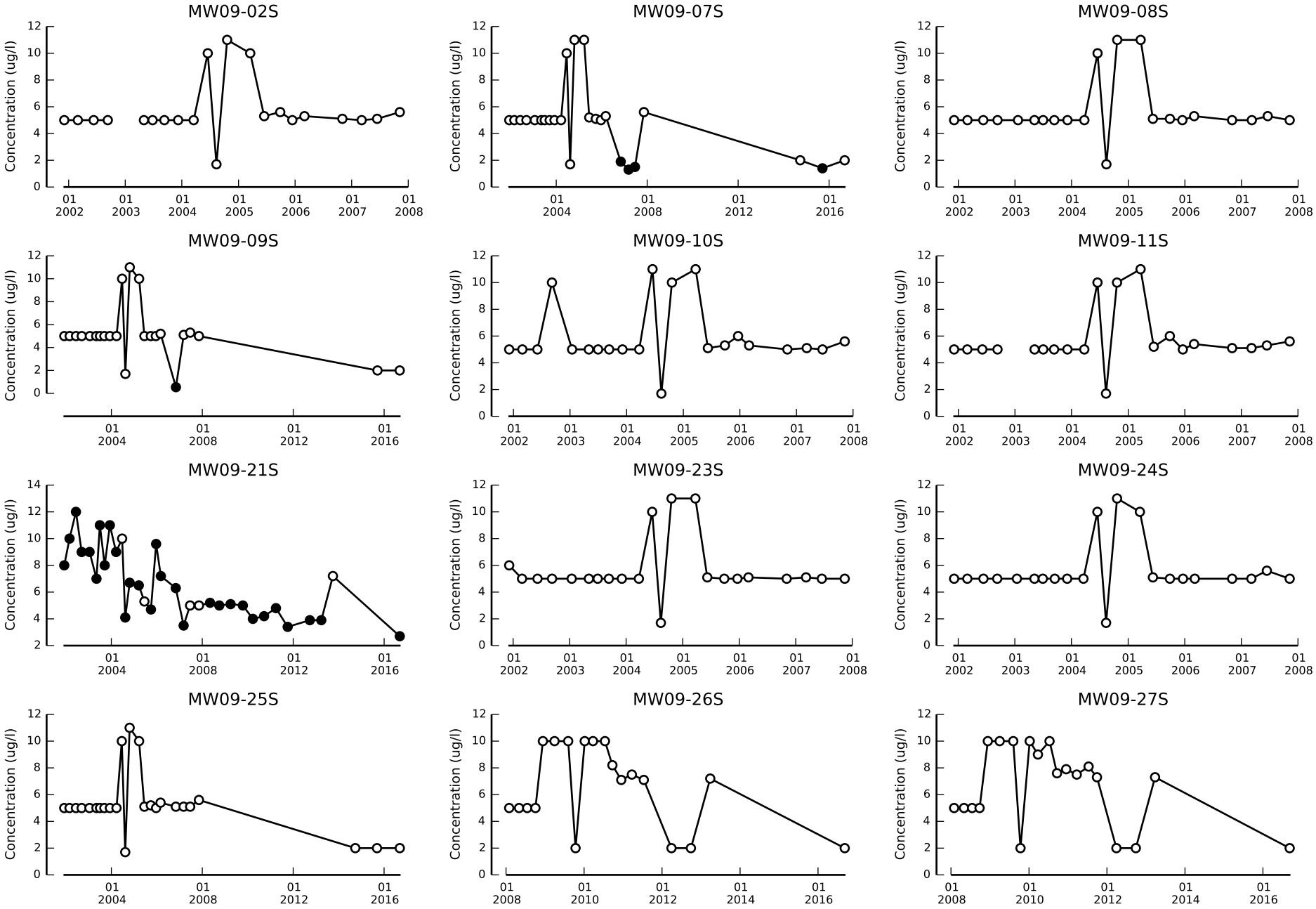
BIS(2-CHLOROETHOXY)METHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 68 of 133

● Detected
○ Not Detected, shown at detection limit



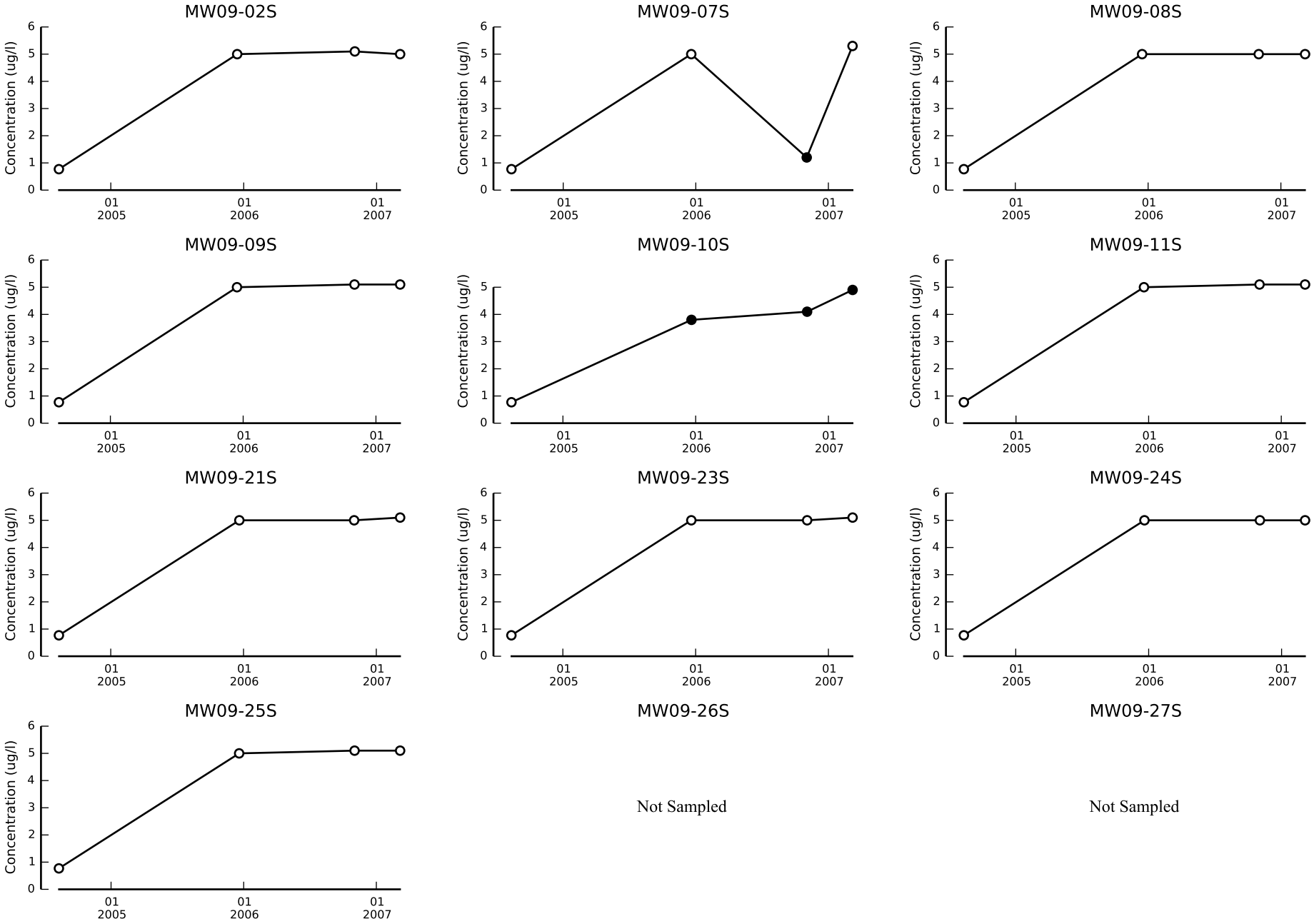
BIS(2-CHLOROETHYL)ETHER in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 69 of 133

● Detected
○ Not Detected, shown at detection limit



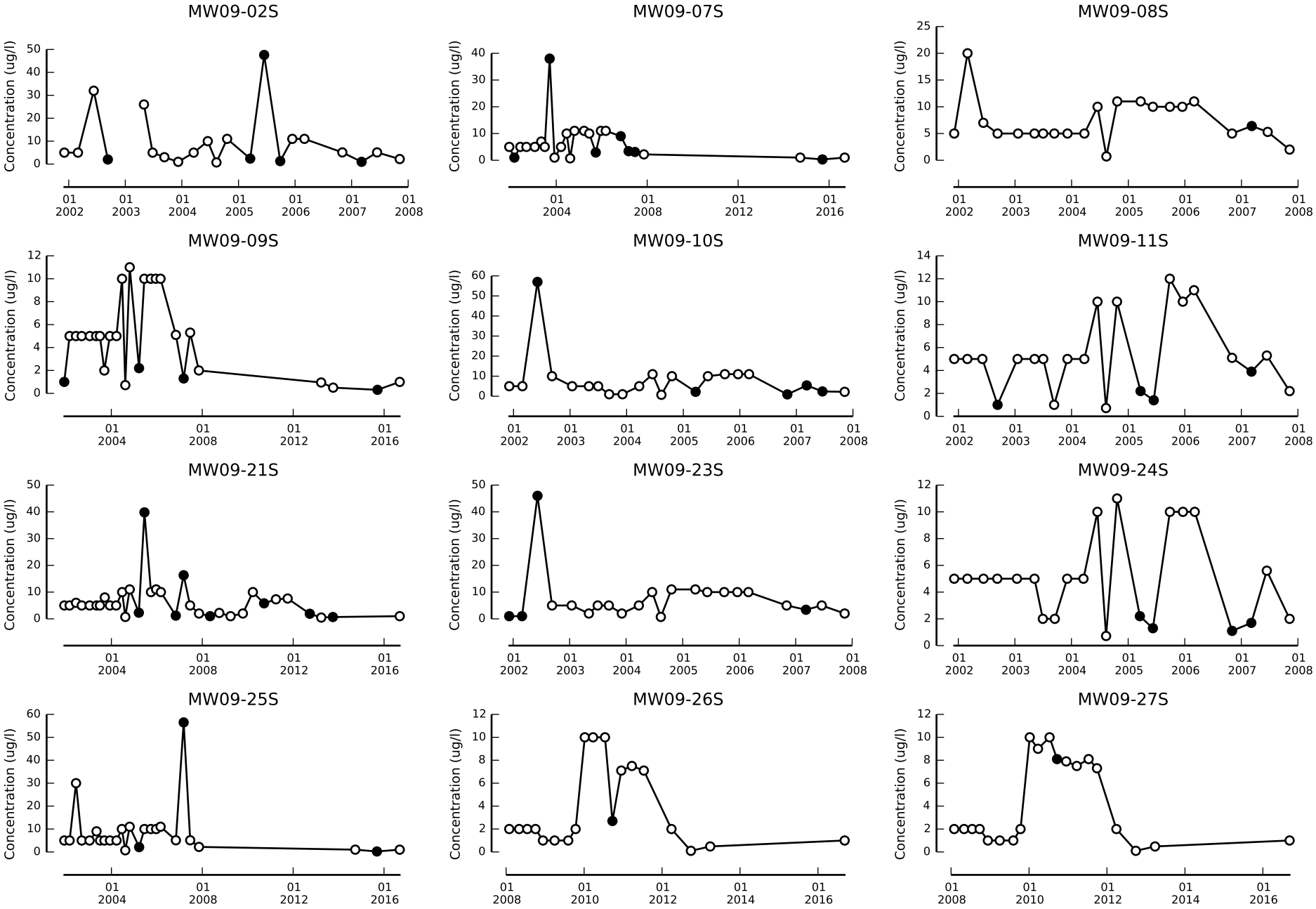
BIS(2-CHLOROISOPROPYL)ETHER in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 70 of 133

● Detected
○ Not Detected, shown at detection limit



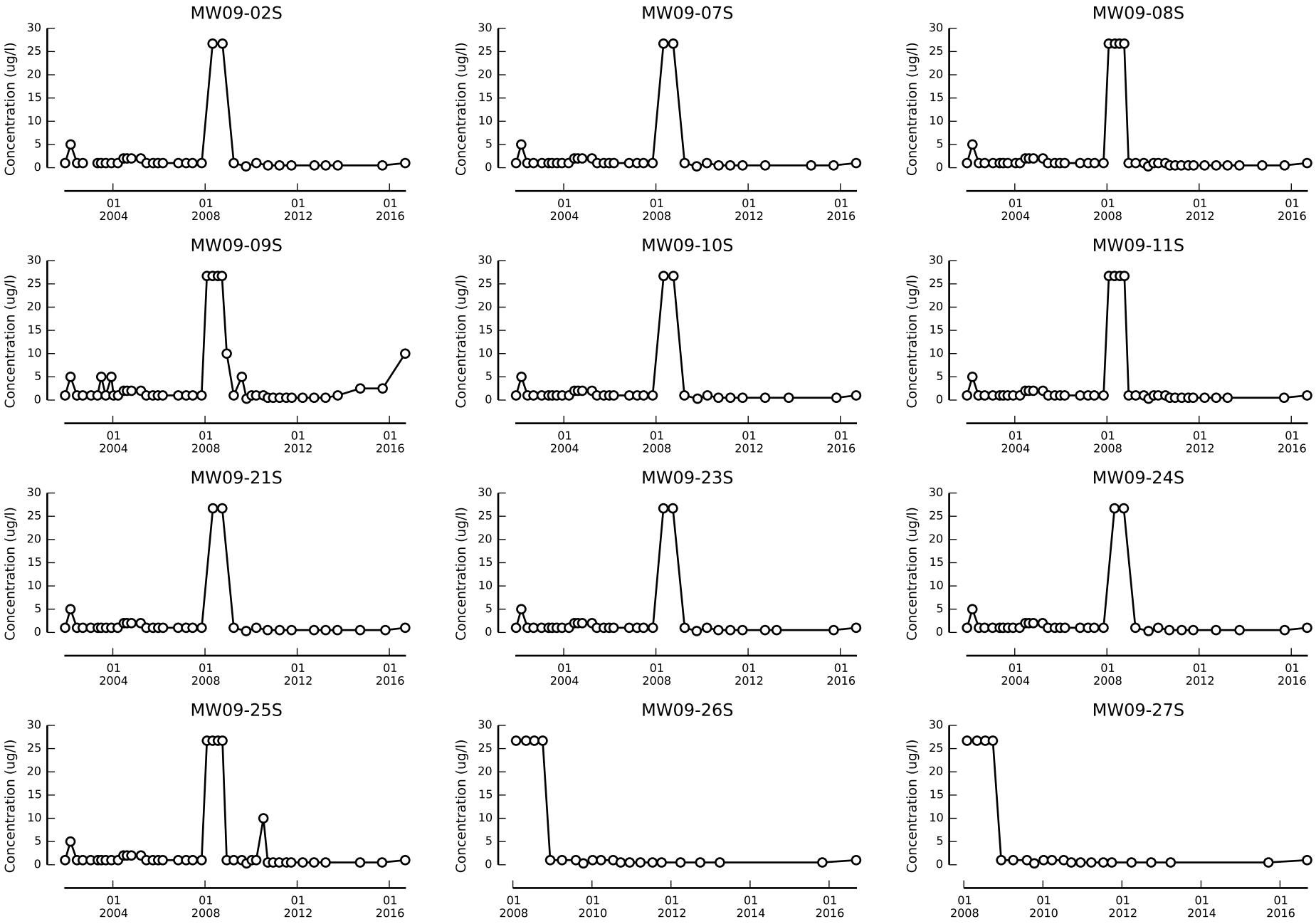
BIS(2-ETHYLHEXYL)PHTHALATE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 71 of 133

● Detected
○ Not Detected, shown at detection limit



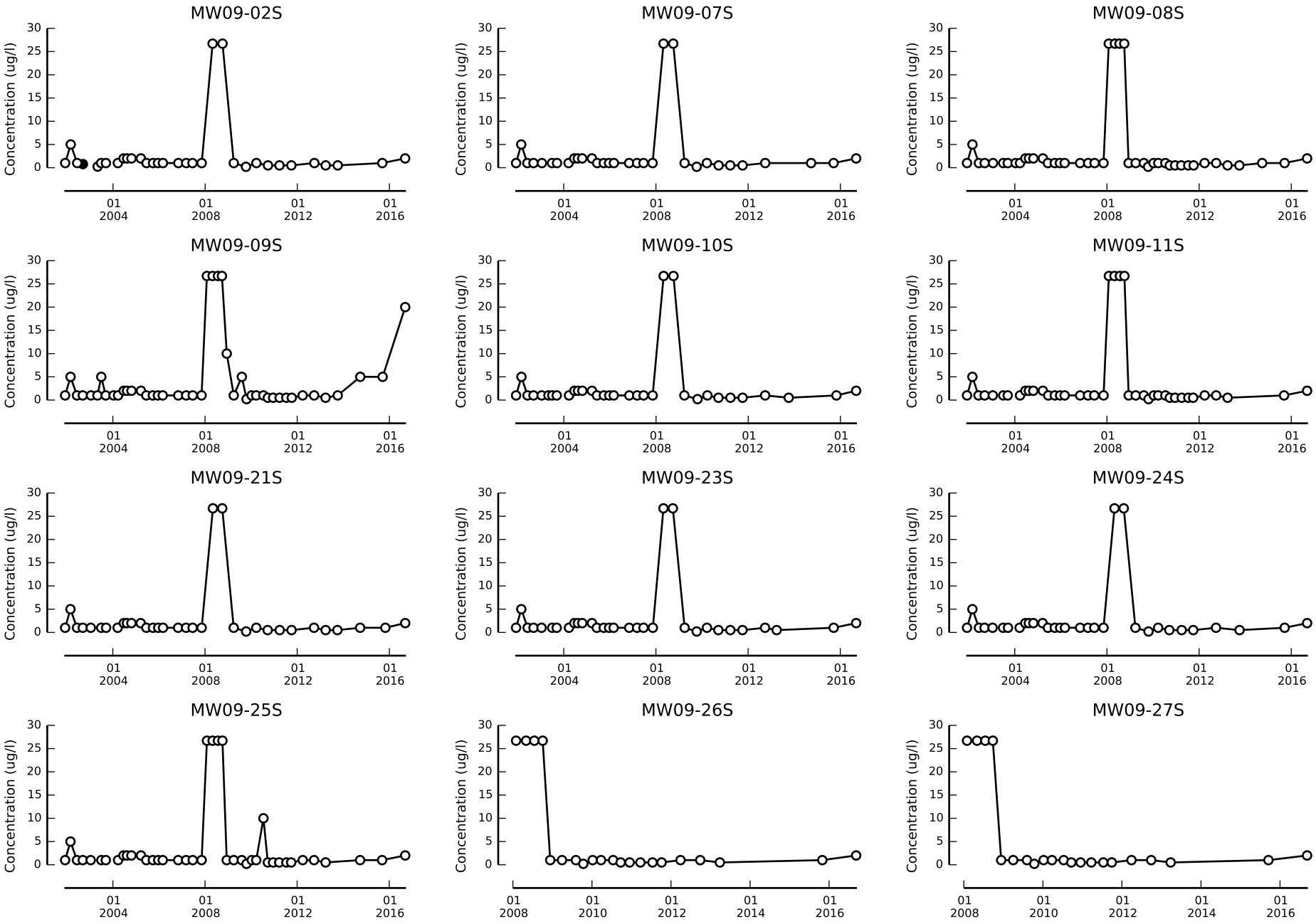
BROMODICHLOROMETHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 72 of 133

● Detected
○ Not Detected, shown at detection limit



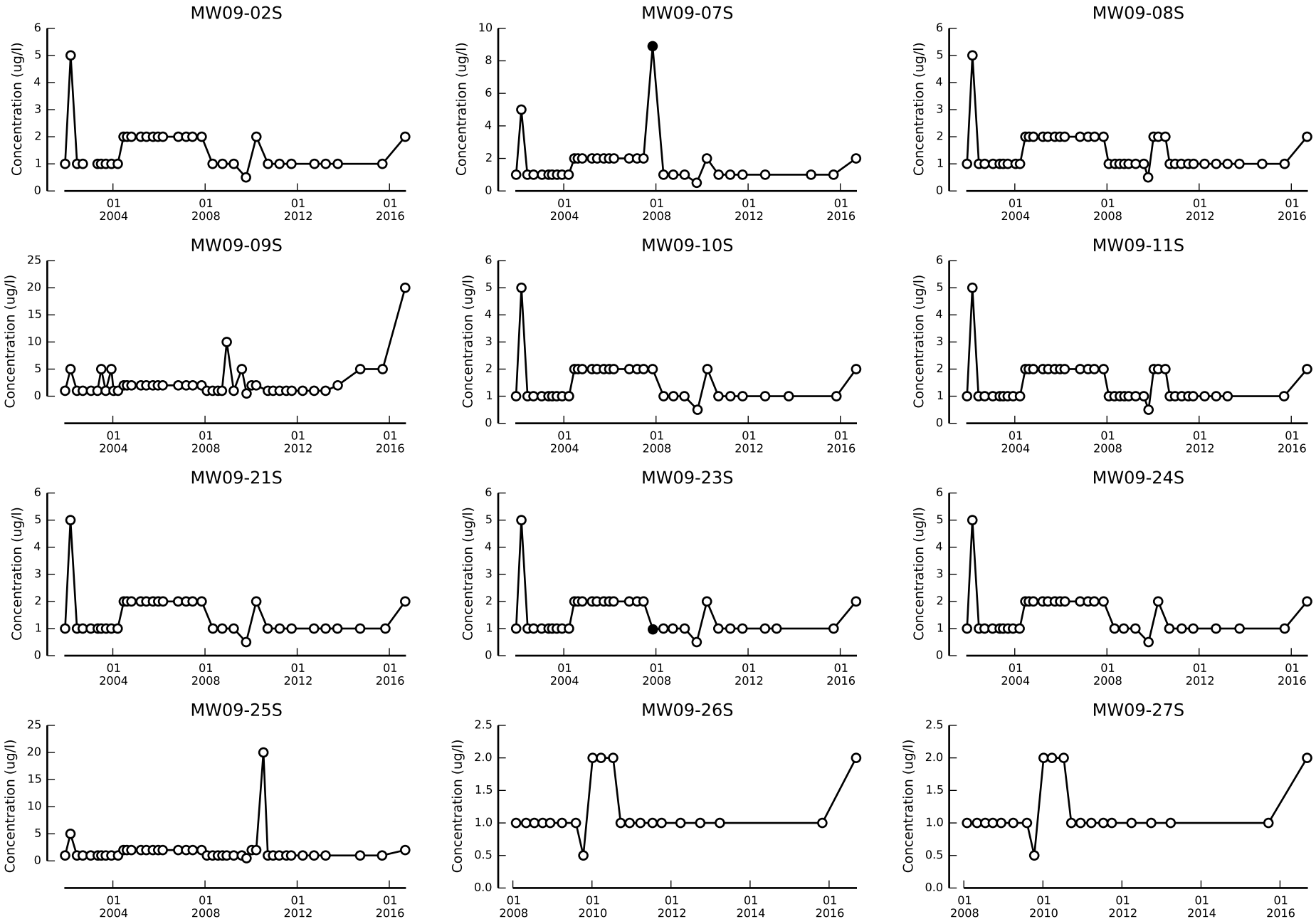
BROMOFORM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 73 of 133

● Detected
○ Not Detected, shown at detection limit



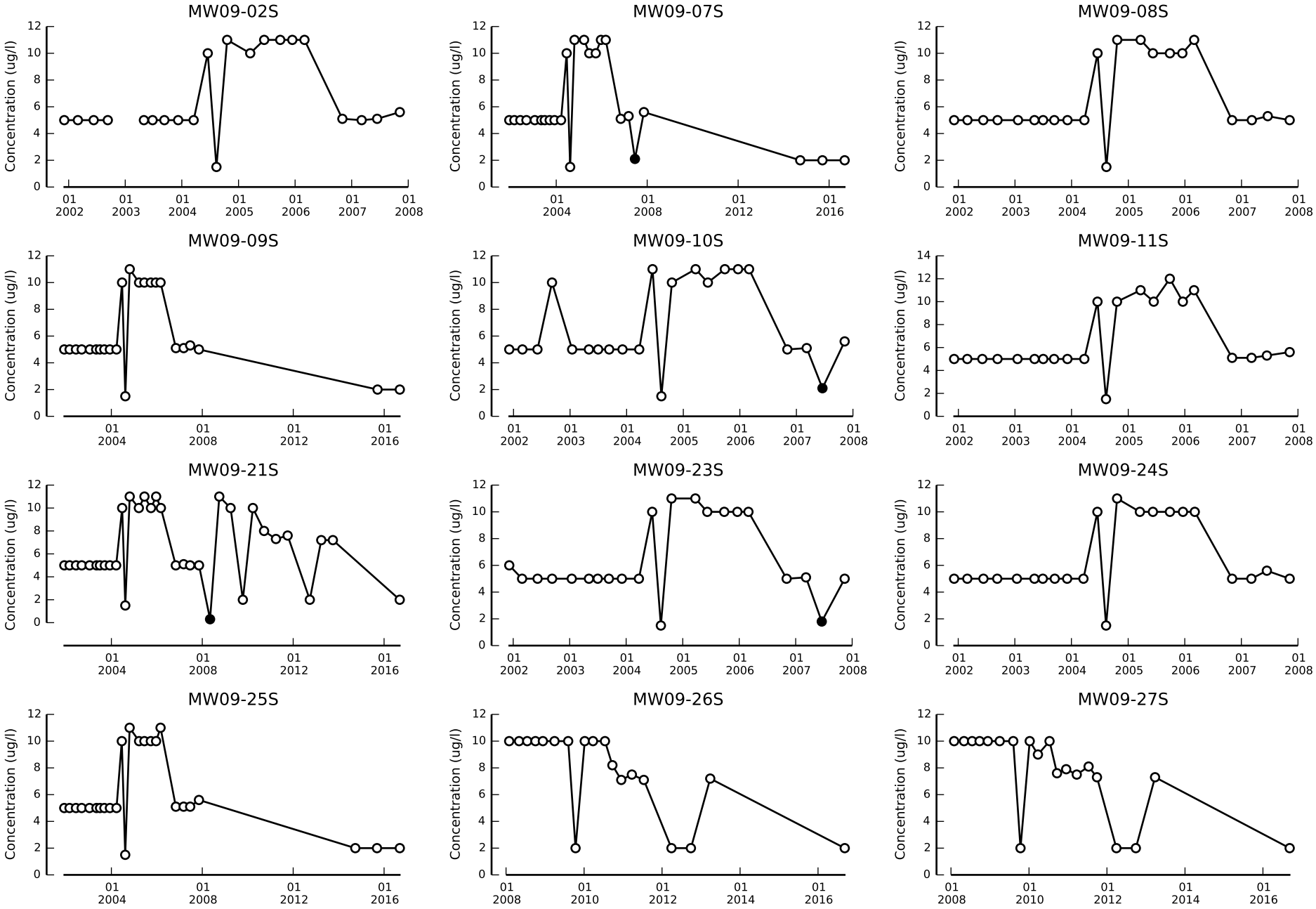
BROMOMETHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 74 of 133

● Detected
○ Not Detected, shown at detection limit



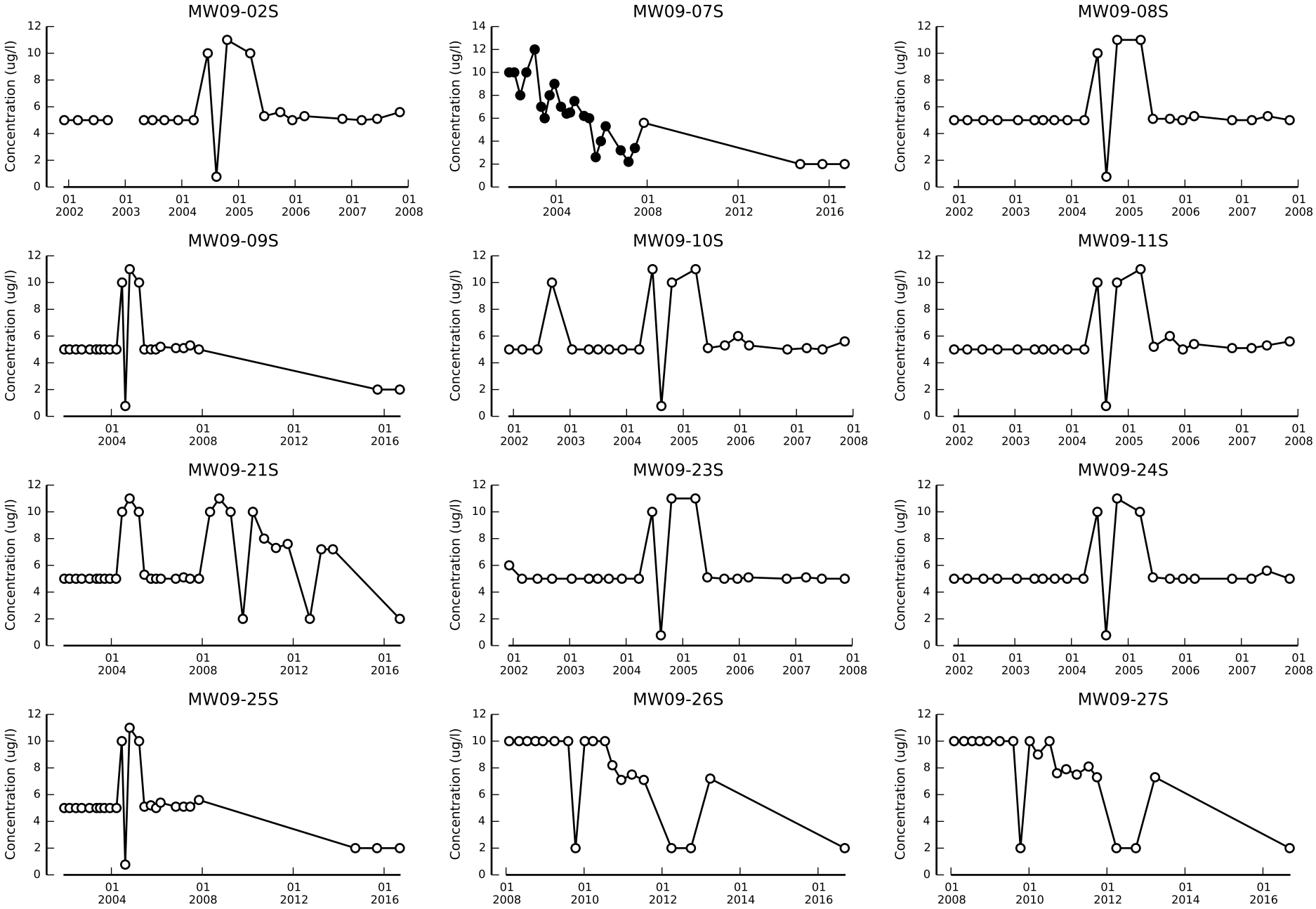
BUTYLBENZYLPHTHALATE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 75 of 133

● Detected
○ Not Detected, shown at detection limit



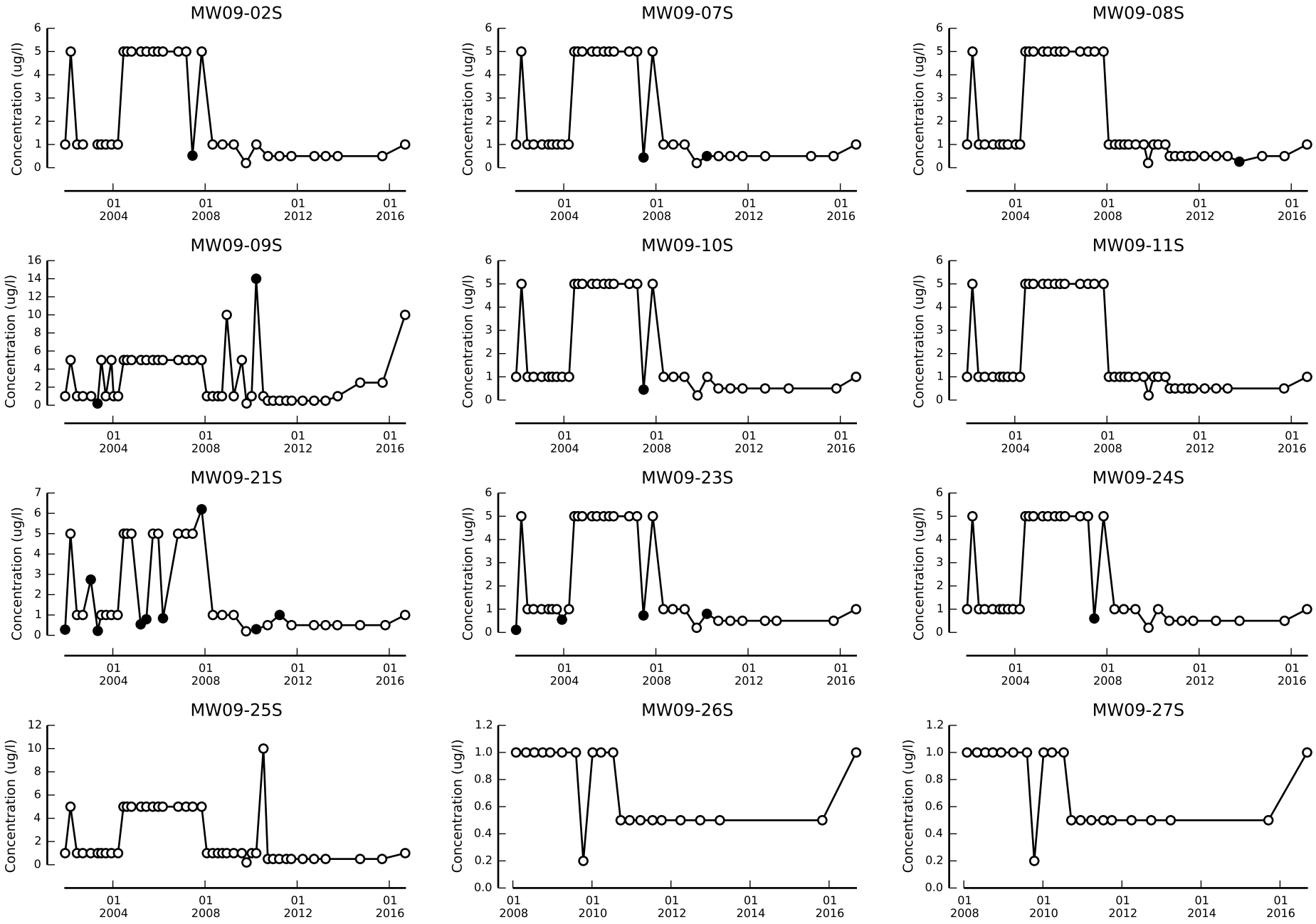
CARBAZOLE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 76 of 133

● Detected
○ Not Detected, shown at detection limit



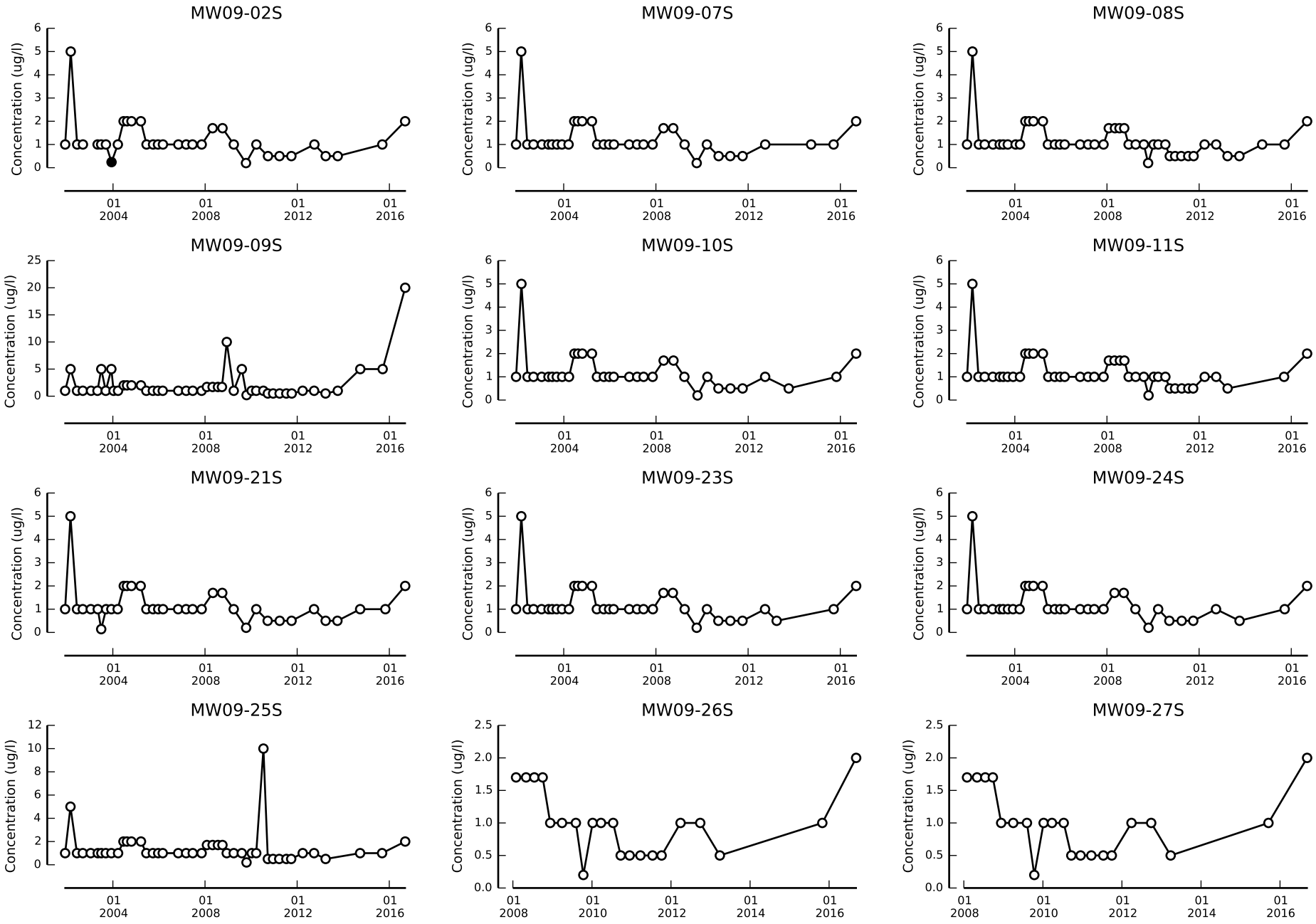
CARBON DISULFIDE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 77 of 133

● Detected
○ Not Detected, shown at detection limit



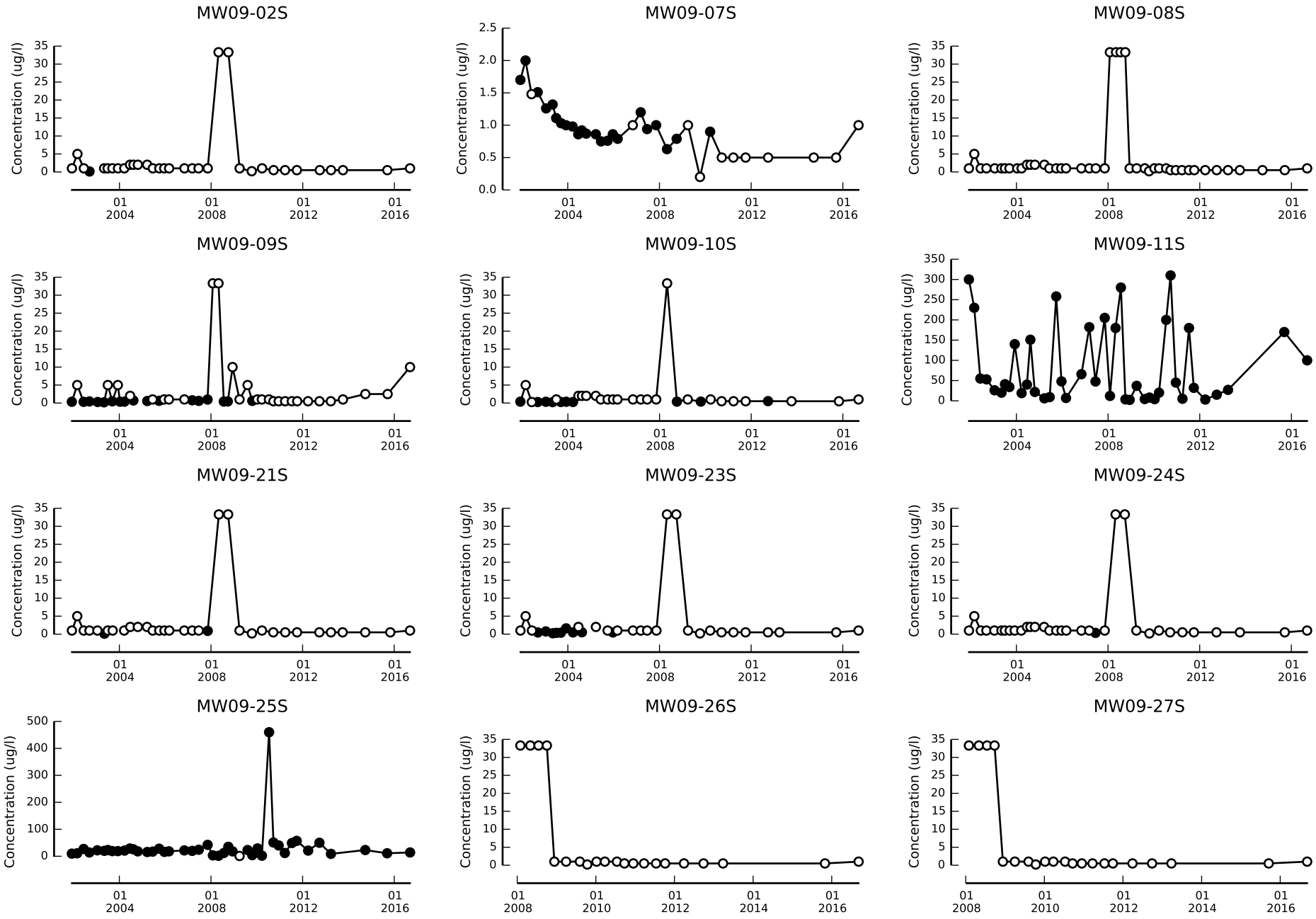
CARBON TETRACHLORIDE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 78 of 133

● Detected
○ Not Detected, shown at detection limit



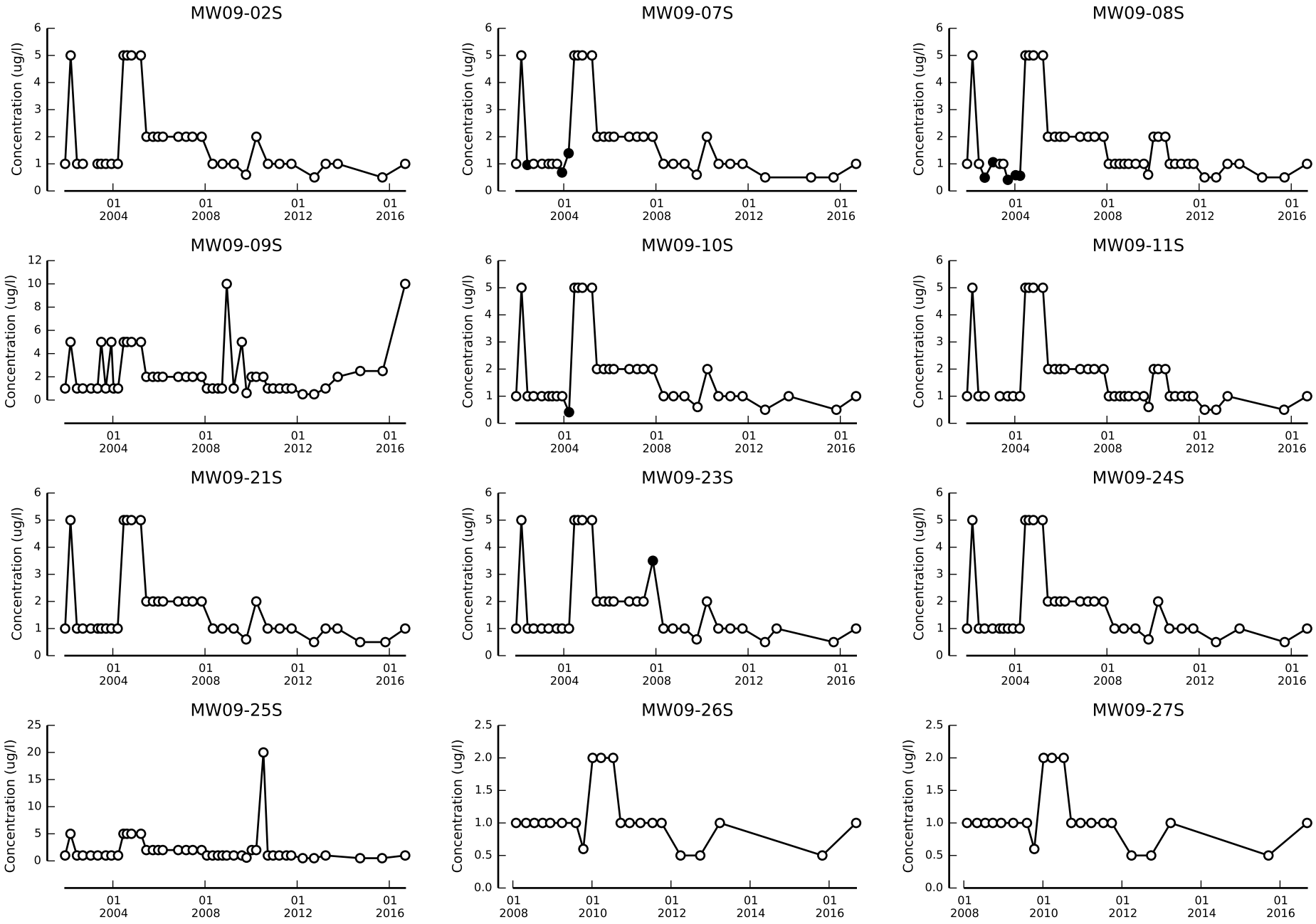
CHLOROBENZENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 79 of 133

● Detected
○ Not Detected, shown at detection limit



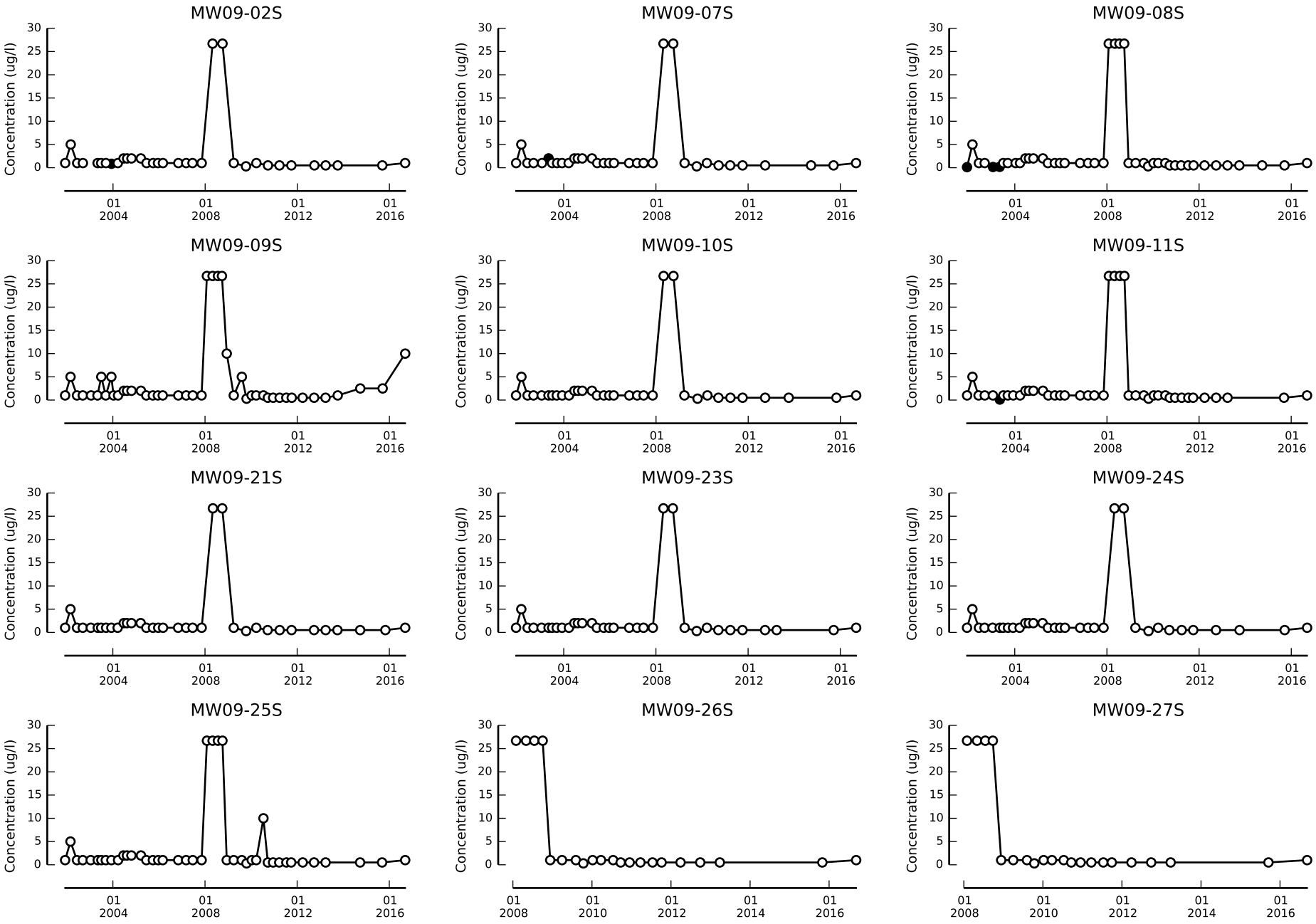
CHLOROETHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 80 of 133

● Detected
○ Not Detected, shown at detection limit



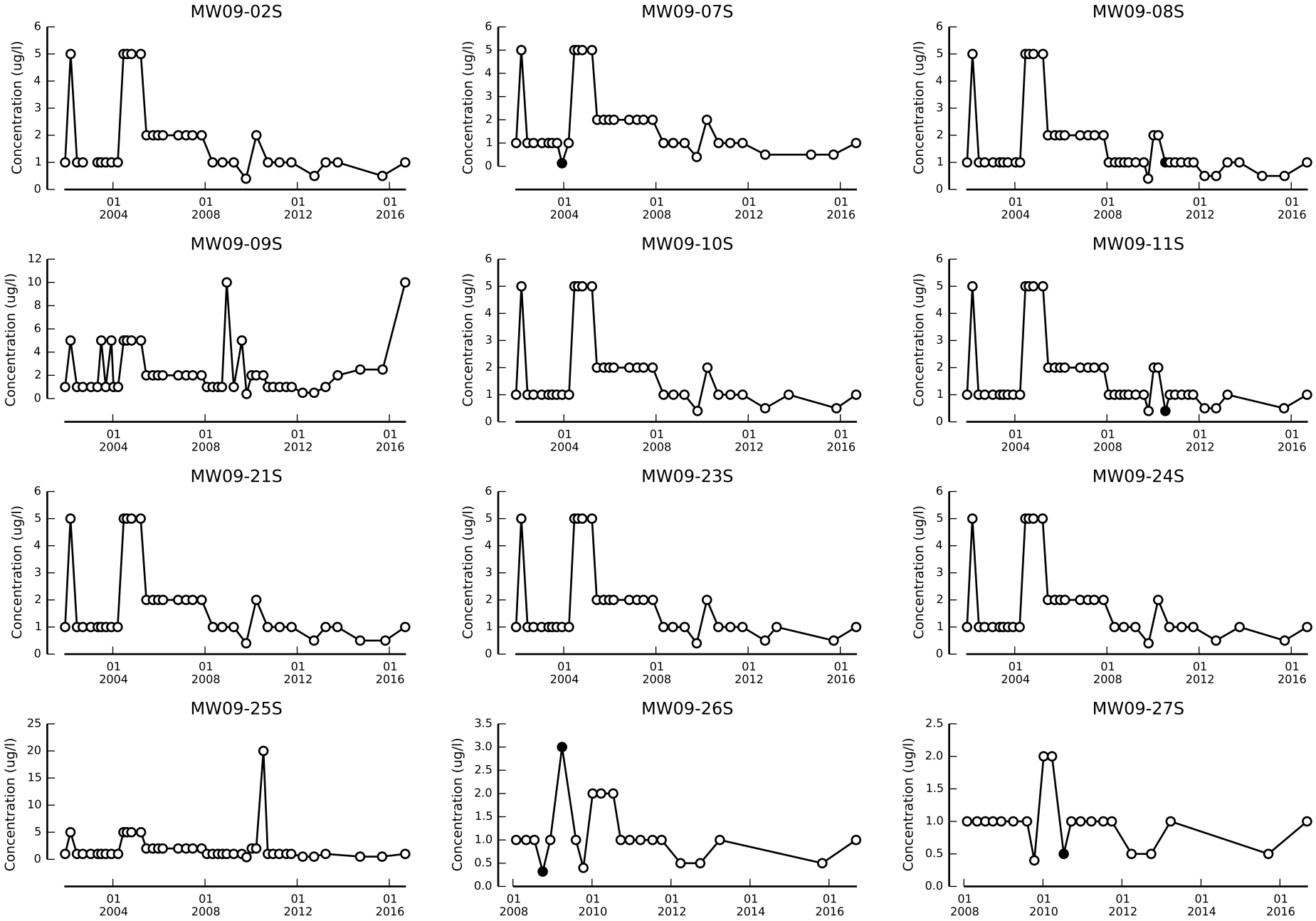
CHLOROFORM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 81 of 133

● Detected
○ Not Detected, shown at detection limit



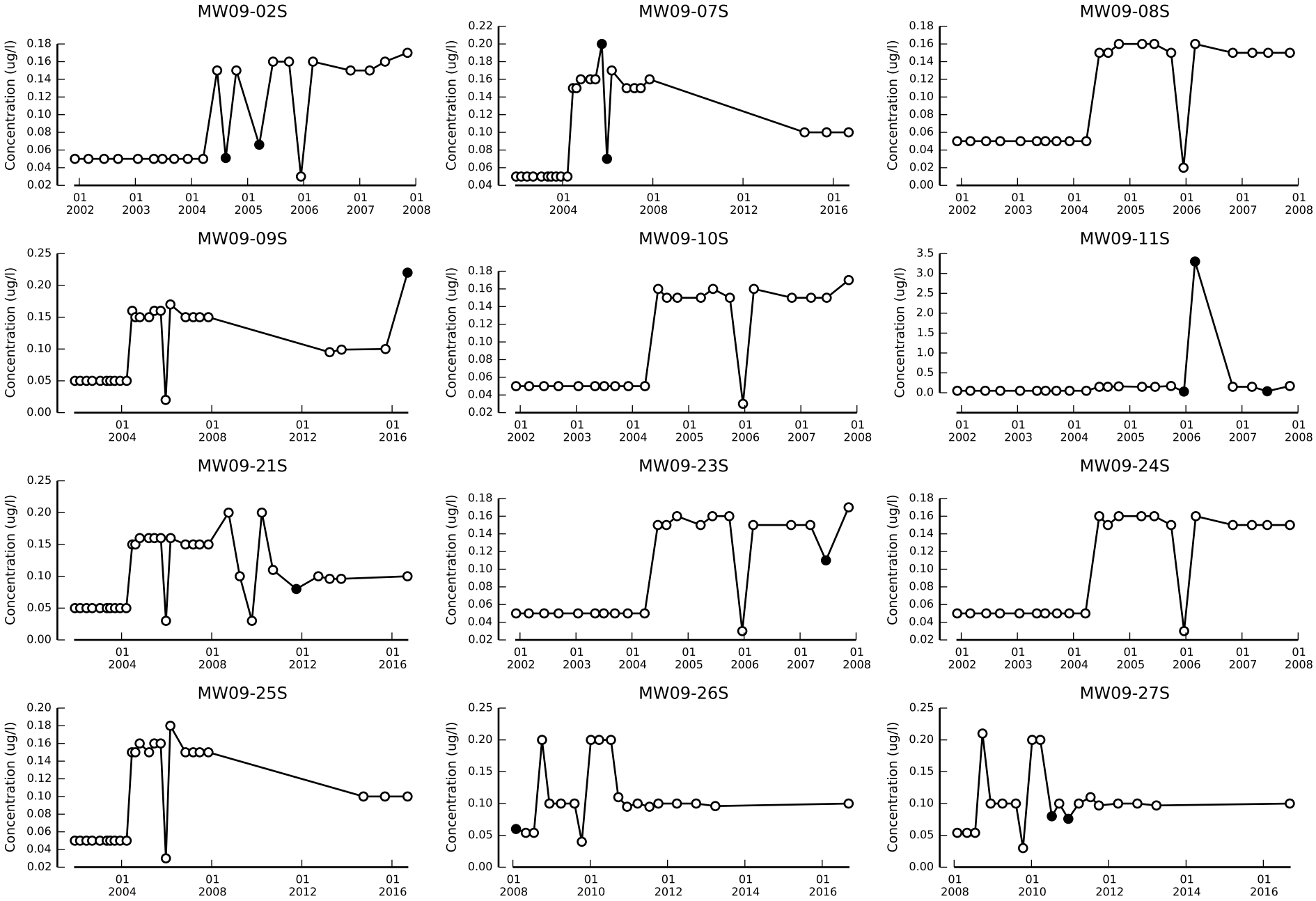
CHLOROMETHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 82 of 133

● Detected
○ Not Detected, shown at detection limit



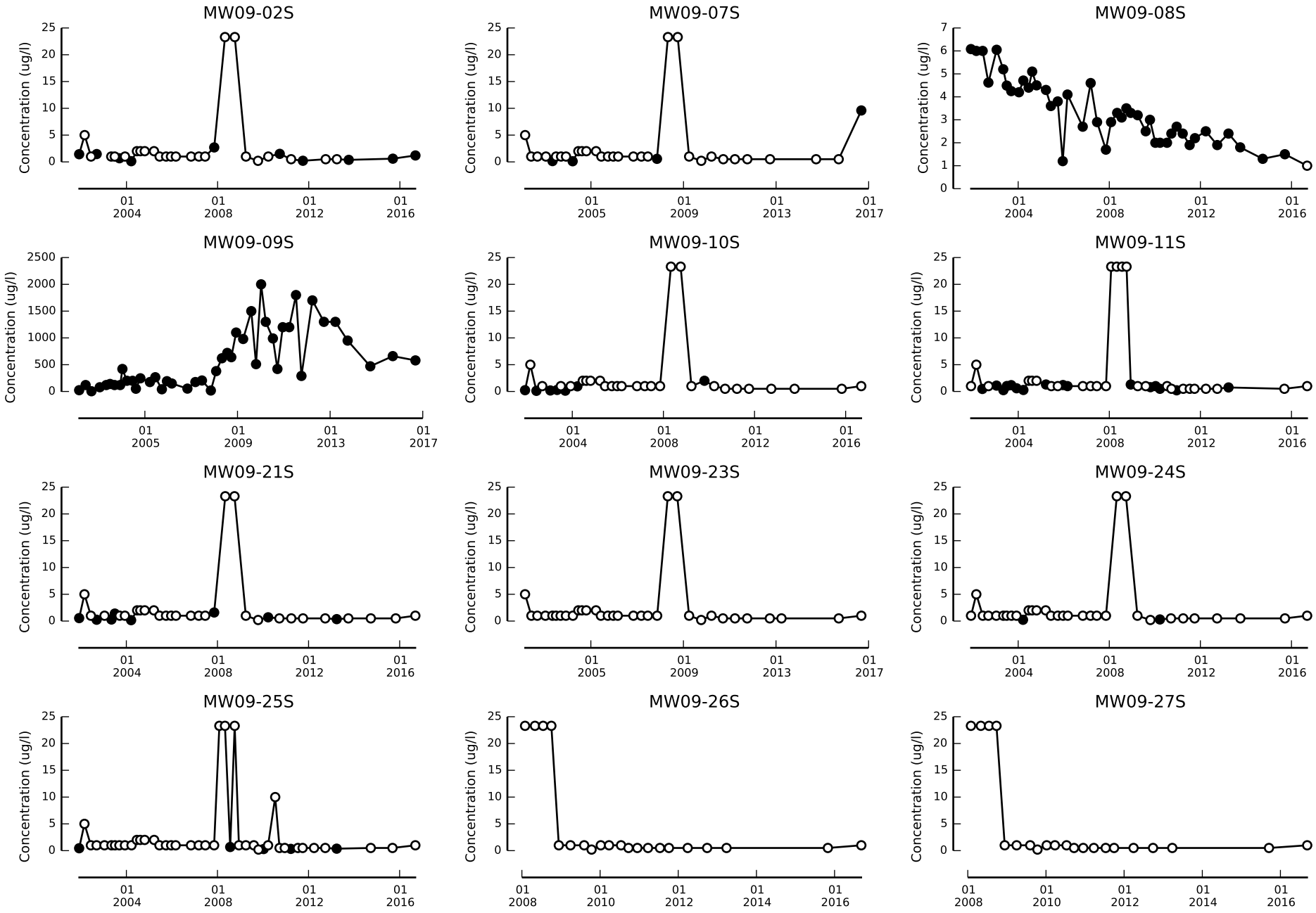
CHRYSENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 83 of 133

● Detected
○ Not Detected, shown at detection limit



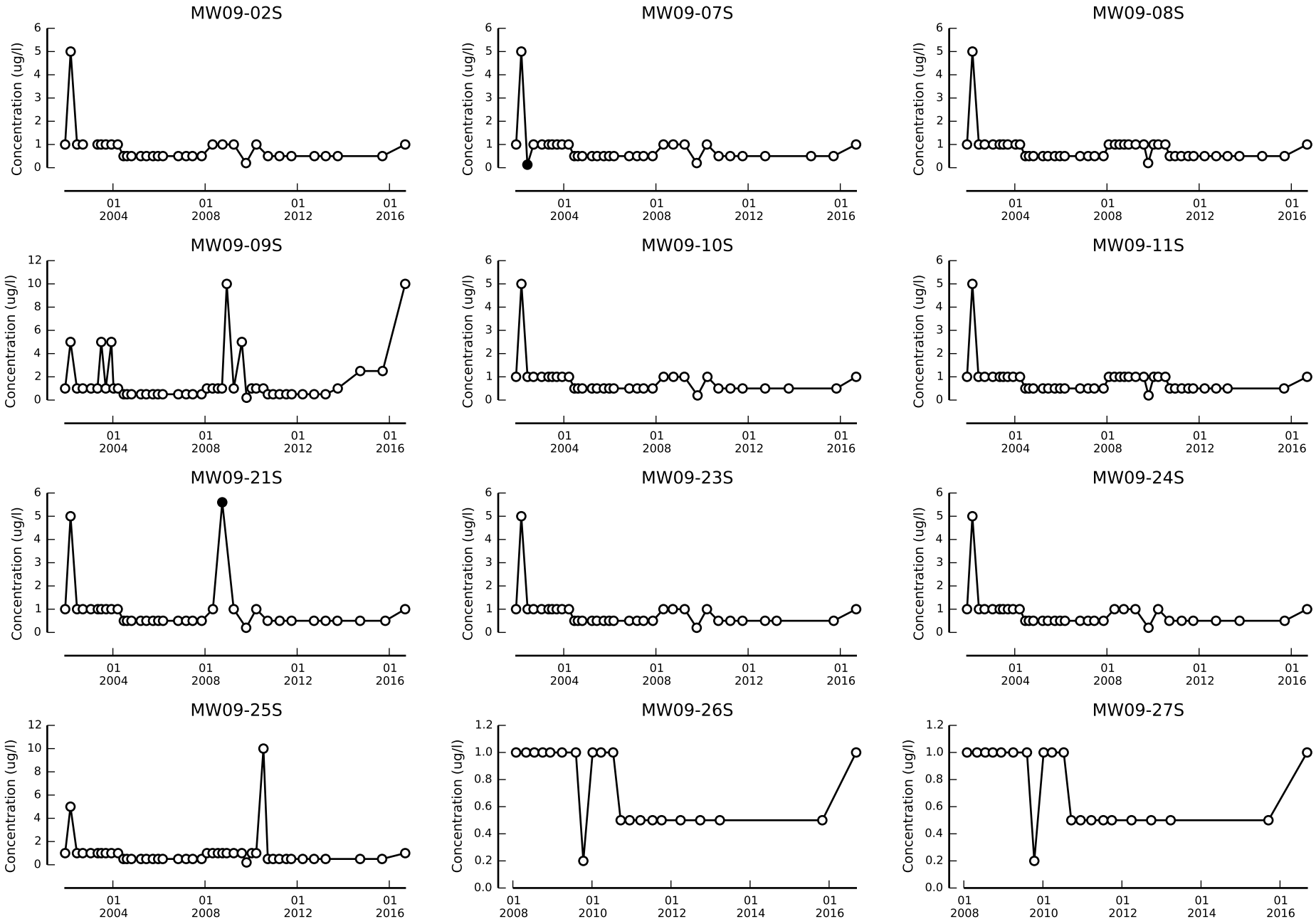
CIS-1,2-DICHLOROETHENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 84 of 133

● Detected
○ Not Detected, shown at detection limit



CIS-1,3-DICHLOROPROPENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 85 of 133

● Detected
○ Not Detected, shown at detection limit



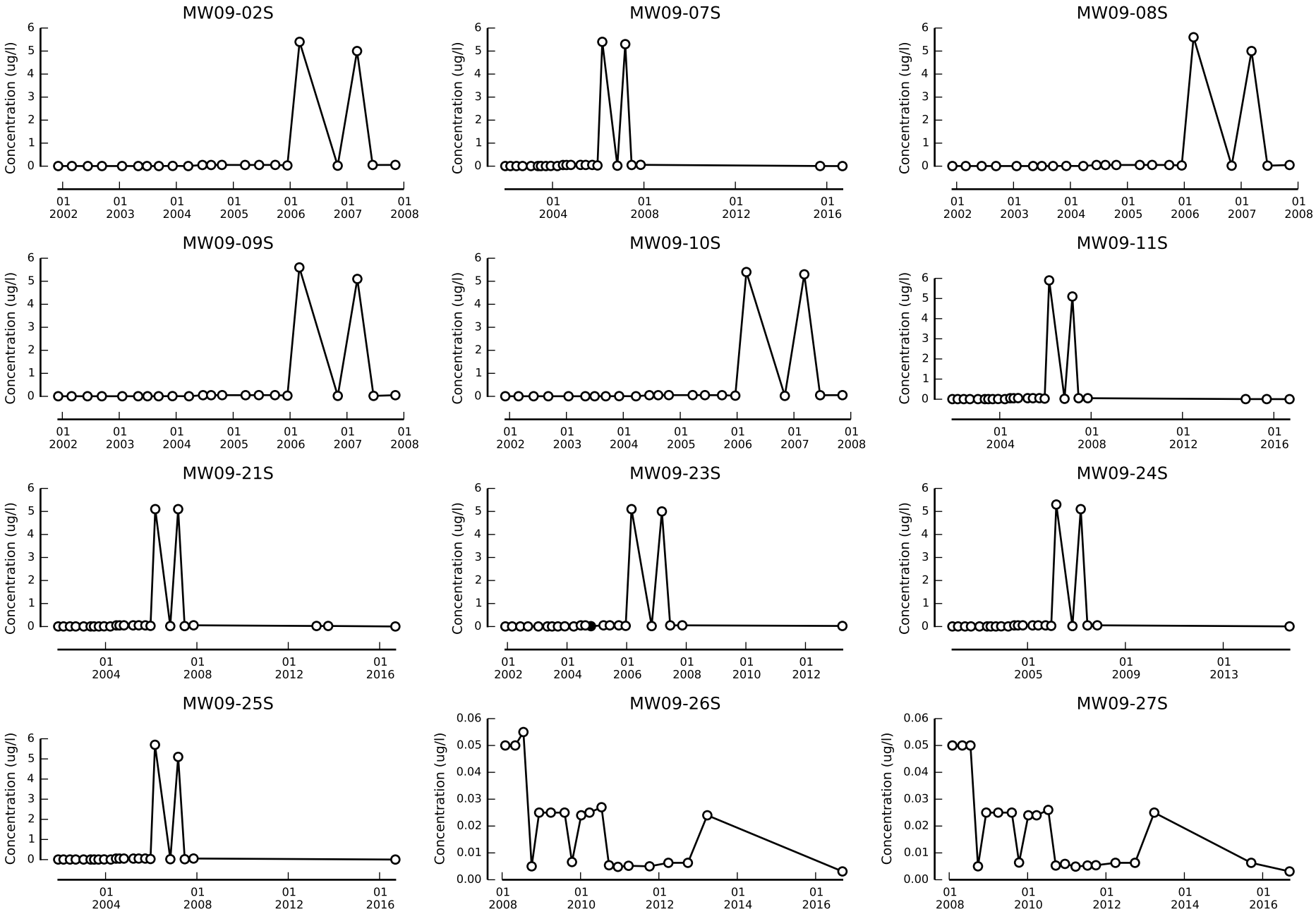
CRESOLS in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 86 of 133

● Detected
○ Not Detected, shown at detection limit

MW09-02S	MW09-07S	MW09-08S
Sampled Once	Sampled Once	Sampled Once
MW09-09S	MW09-10S	MW09-11S
Sampled Once	Sampled Once	Sampled Once
MW09-21S	MW09-23S	MW09-24S
Sampled Once	Sampled Once	Sampled Once
MW09-25S	MW09-26S	MW09-27S
Sampled Once	Not Sampled	Not Sampled

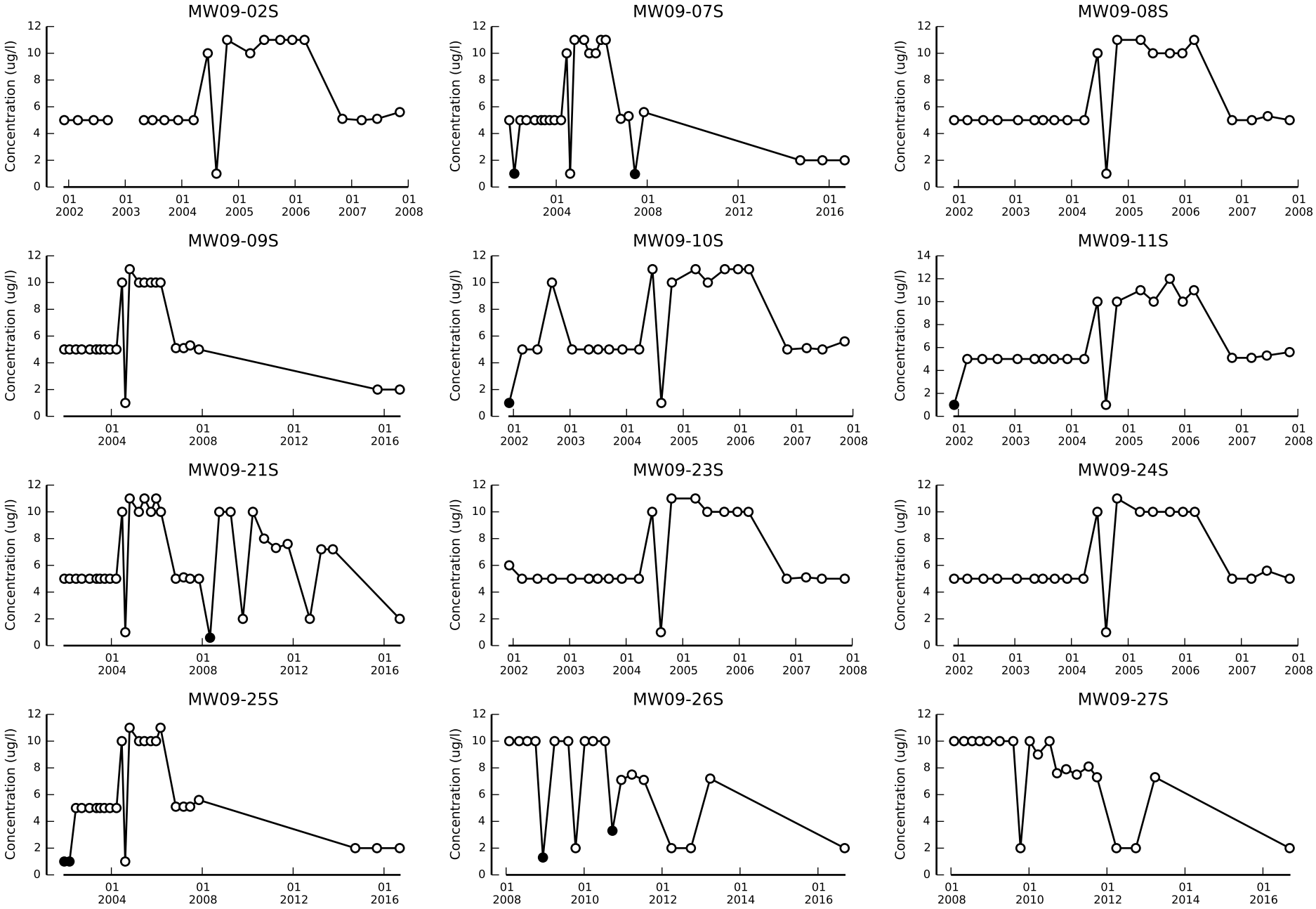
DELTA-BHC in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 87 of 133

● Detected
○ Not Detected, shown at detection limit



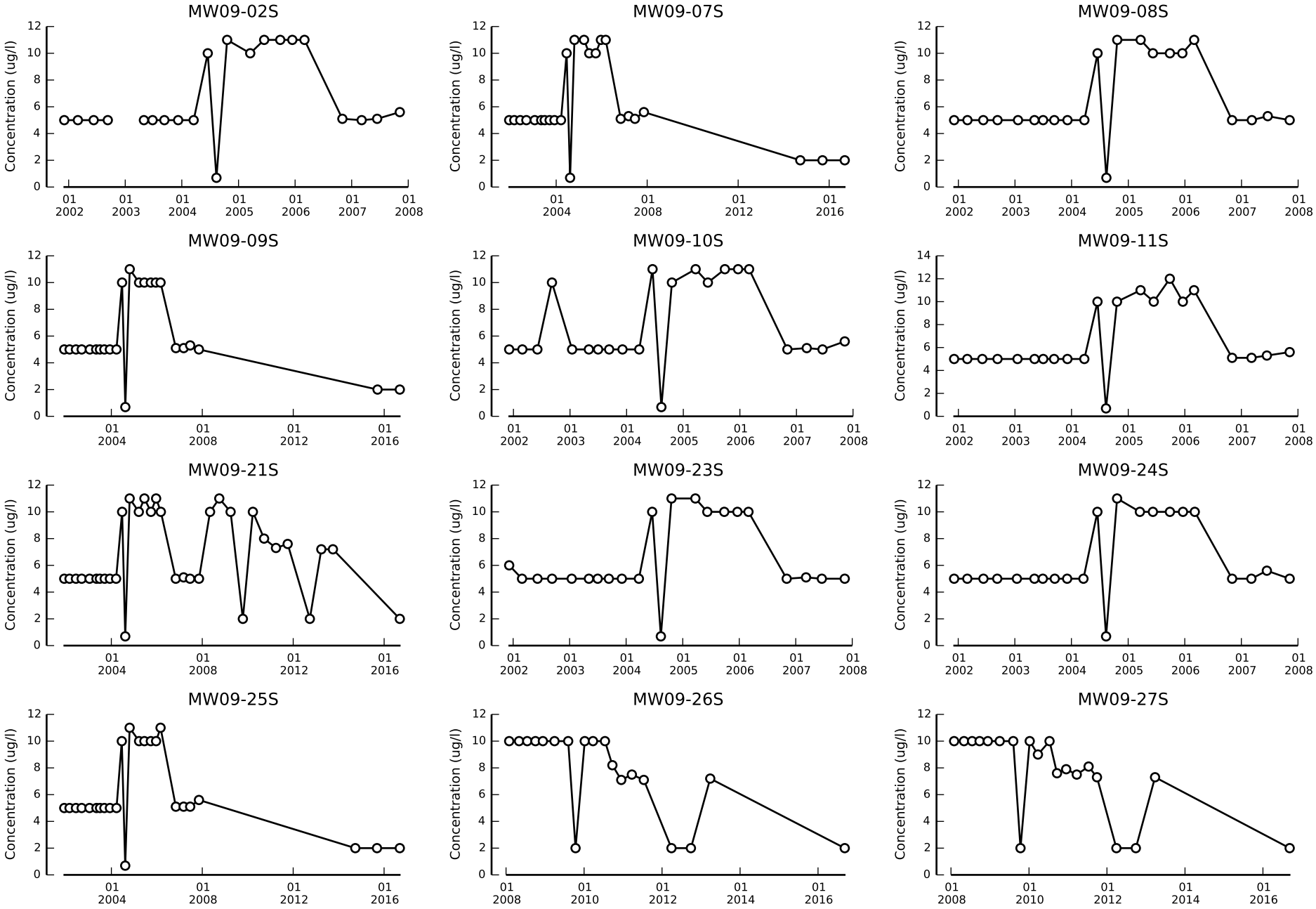
DI-N-BUTYLPHTHALATE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 88 of 133

● Detected
○ Not Detected, shown at detection limit



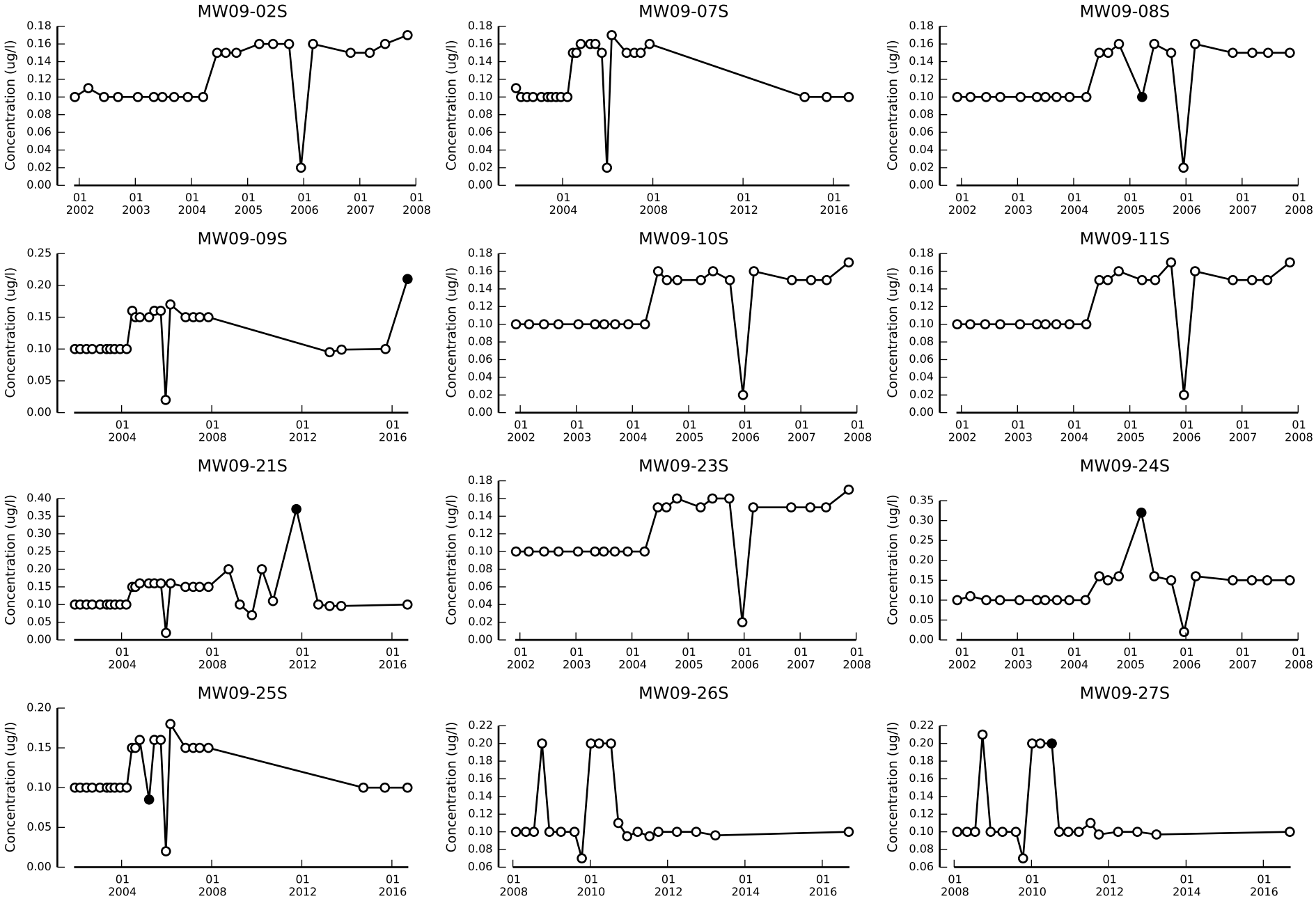
DI-N-OCTYLPHTHALATE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 89 of 133

● Detected
○ Not Detected, shown at detection limit



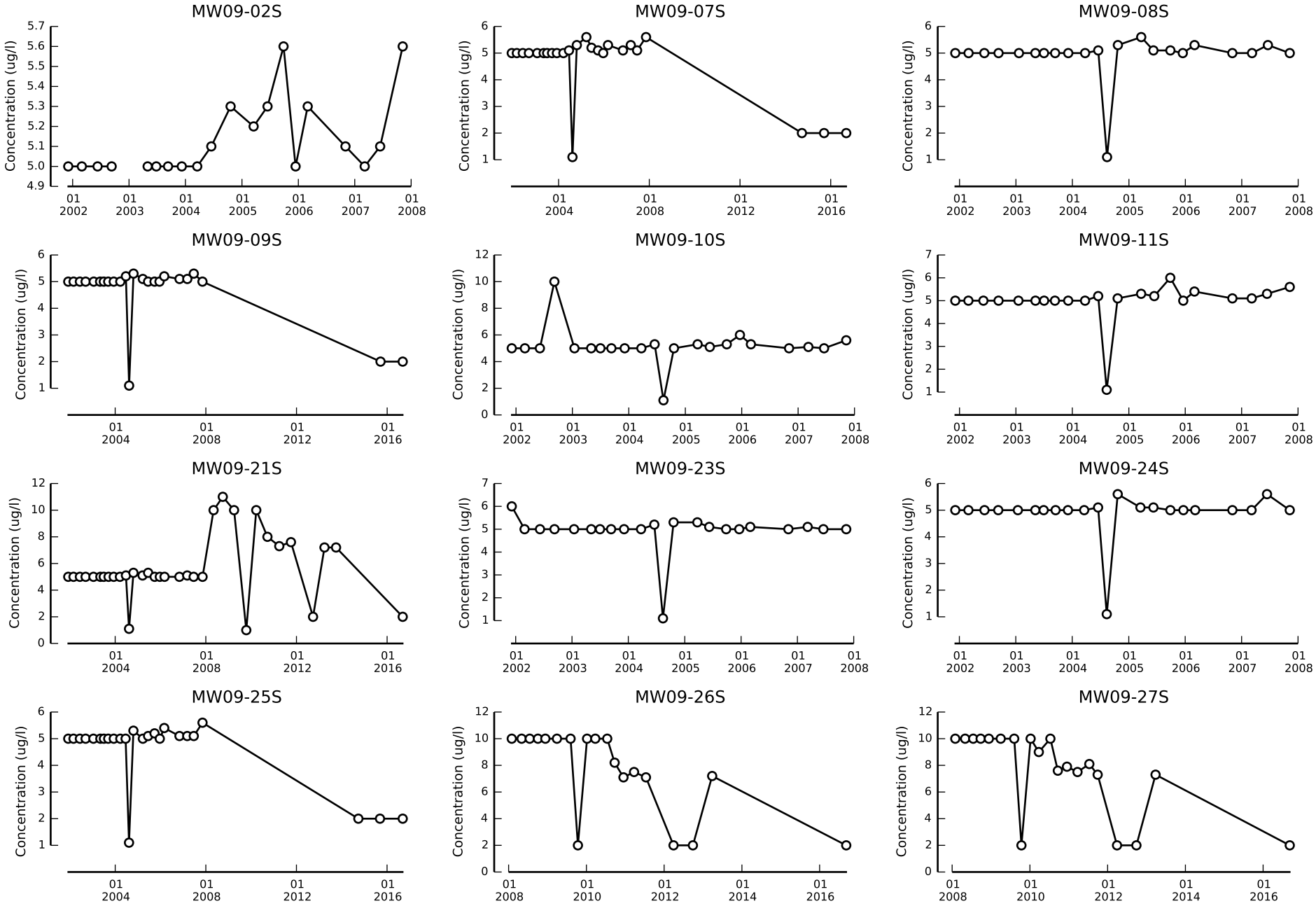
DIBENZ(A,H)ANTHRACENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 90 of 133

● Detected
○ Not Detected, shown at detection limit



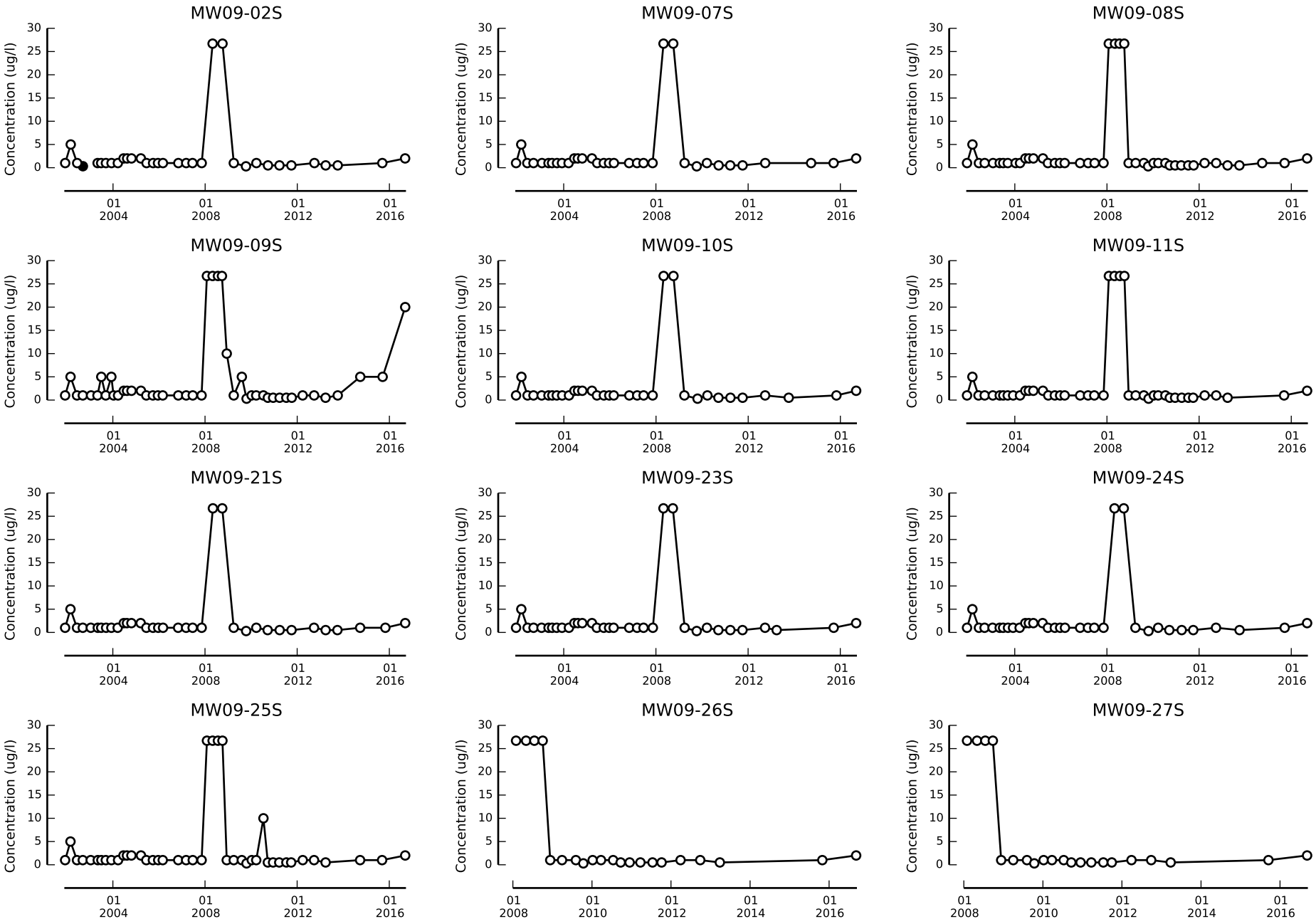
DIBENZOFURAN in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 91 of 133

● Detected
○ Not Detected, shown at detection limit



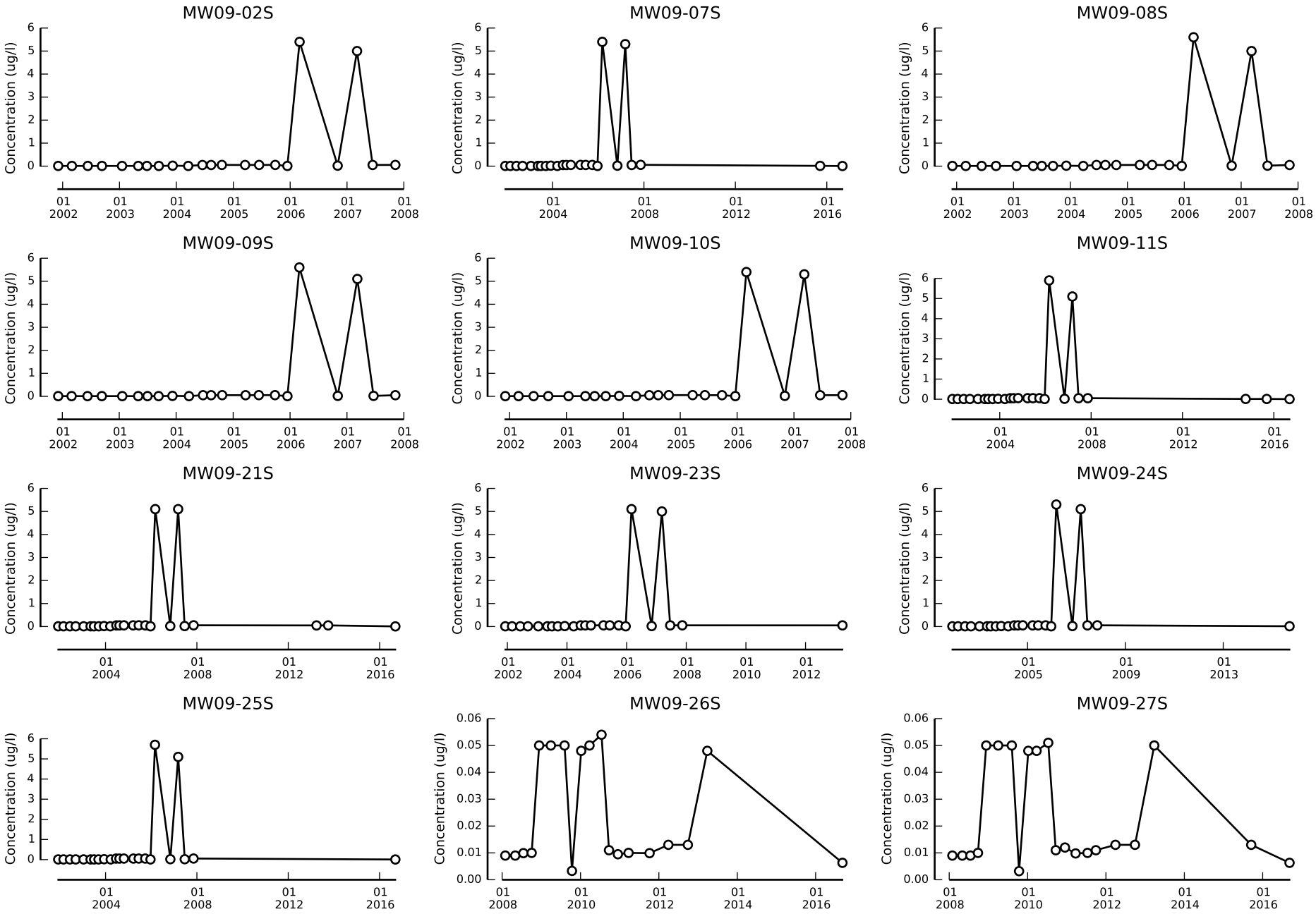
DIBROMOCHLOROMETHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 92 of 133

● Detected
○ Not Detected, shown at detection limit



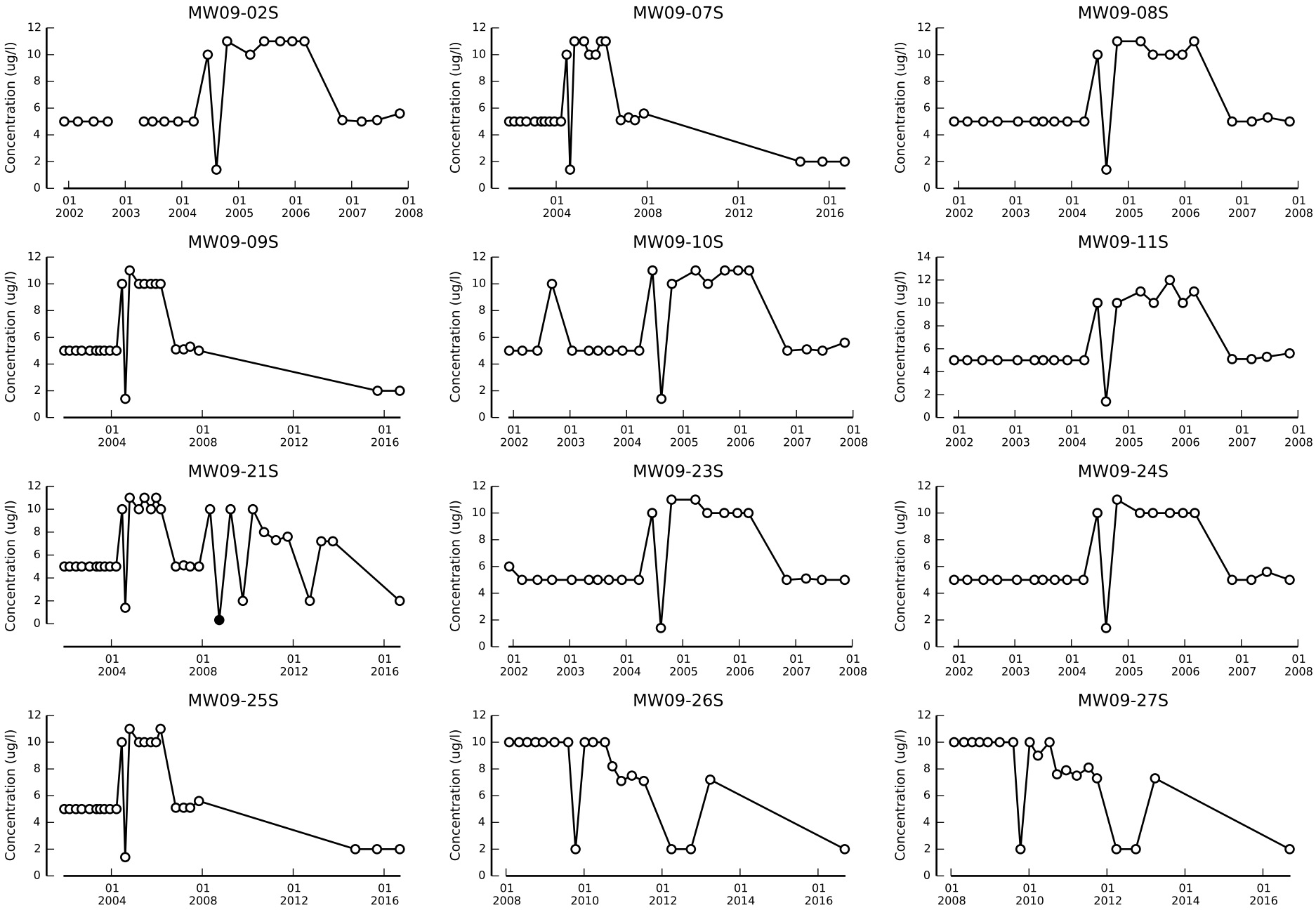
DIELDRIN in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 93 of 133

● Detected
○ Not Detected, shown at detection limit



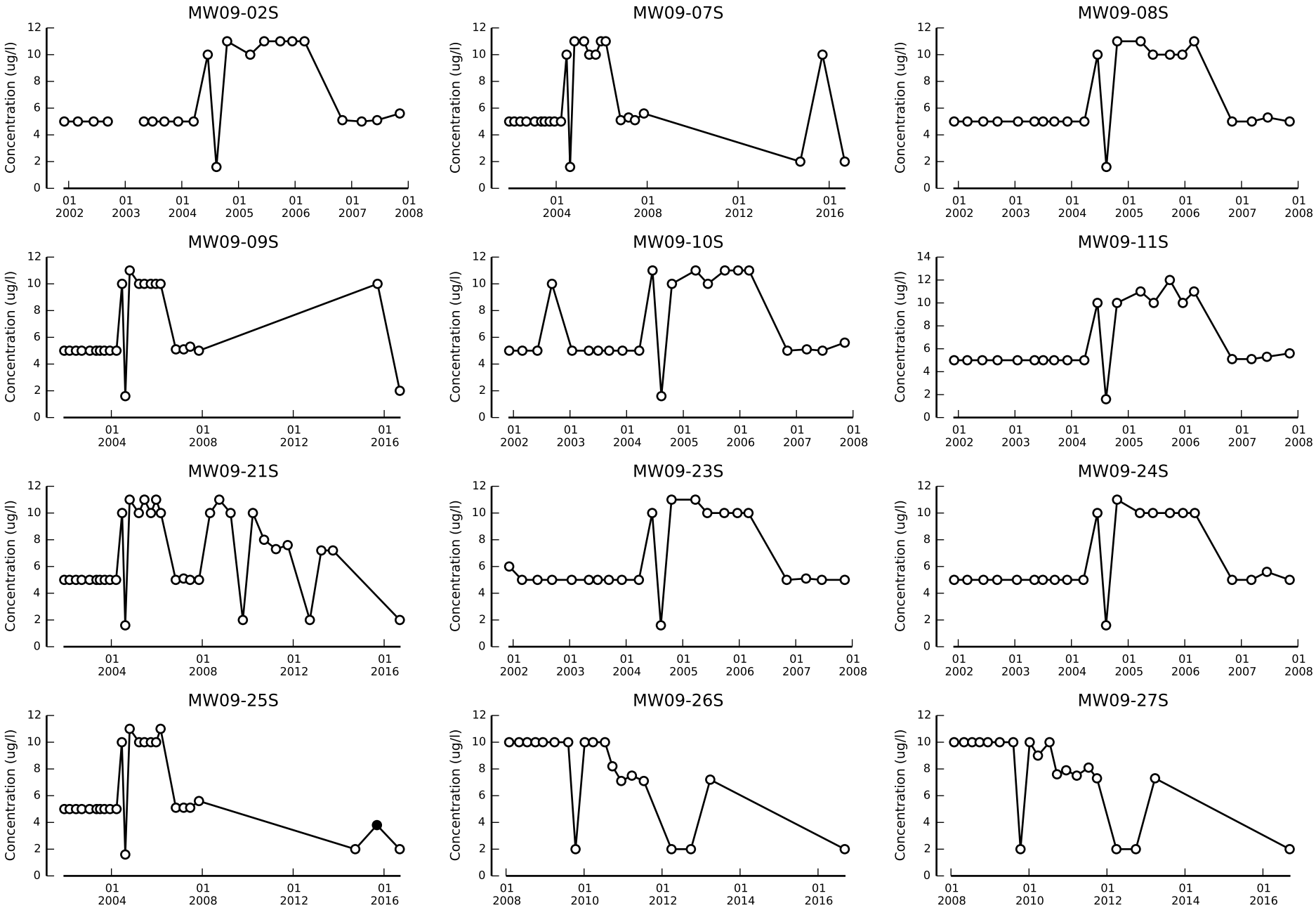
DIETHYLPHTHALATE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 94 of 133

● Detected
○ Not Detected, shown at detection limit



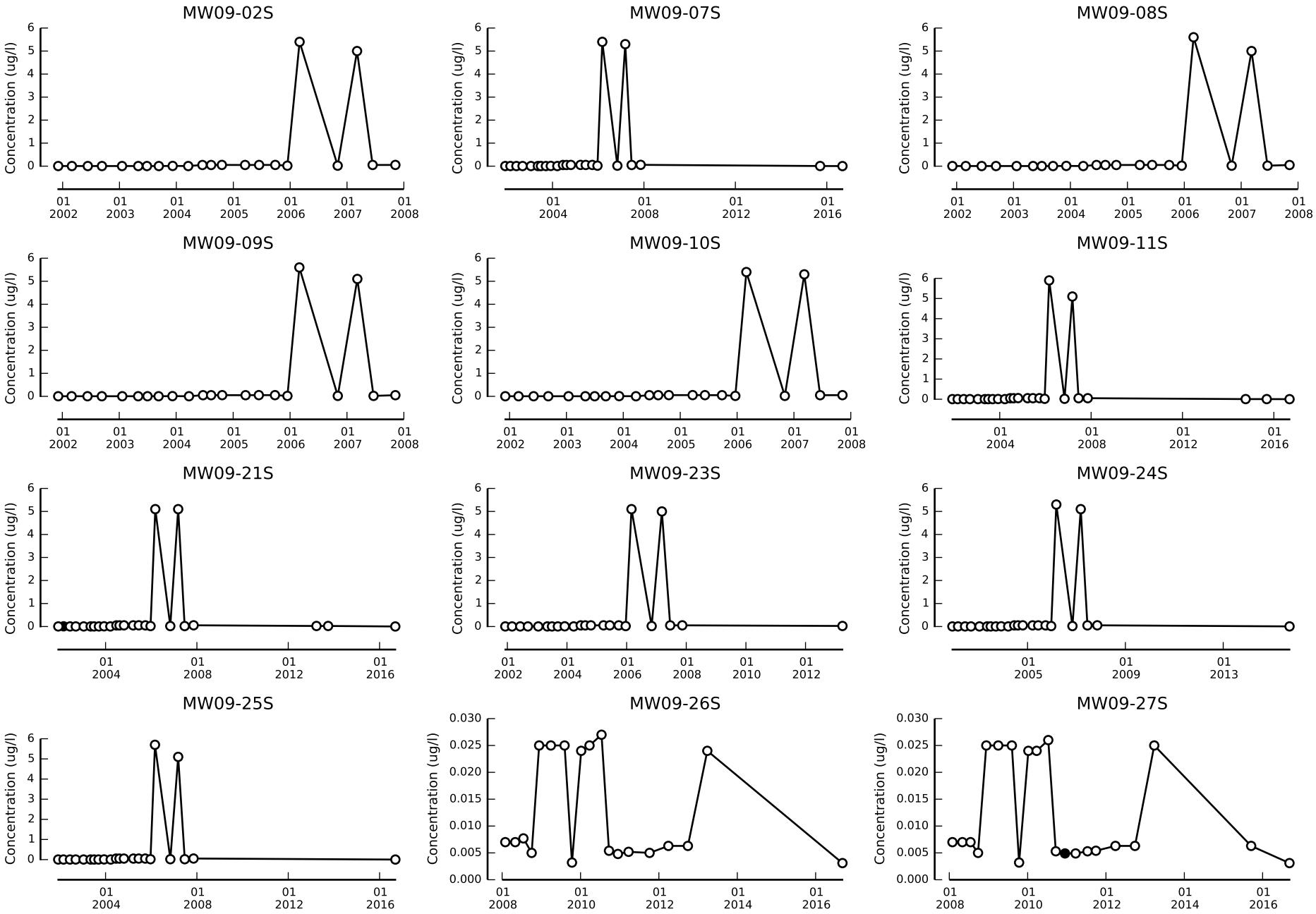
DIMETHYL PHTHALATE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 95 of 133

● Detected
○ Not Detected, shown at detection limit



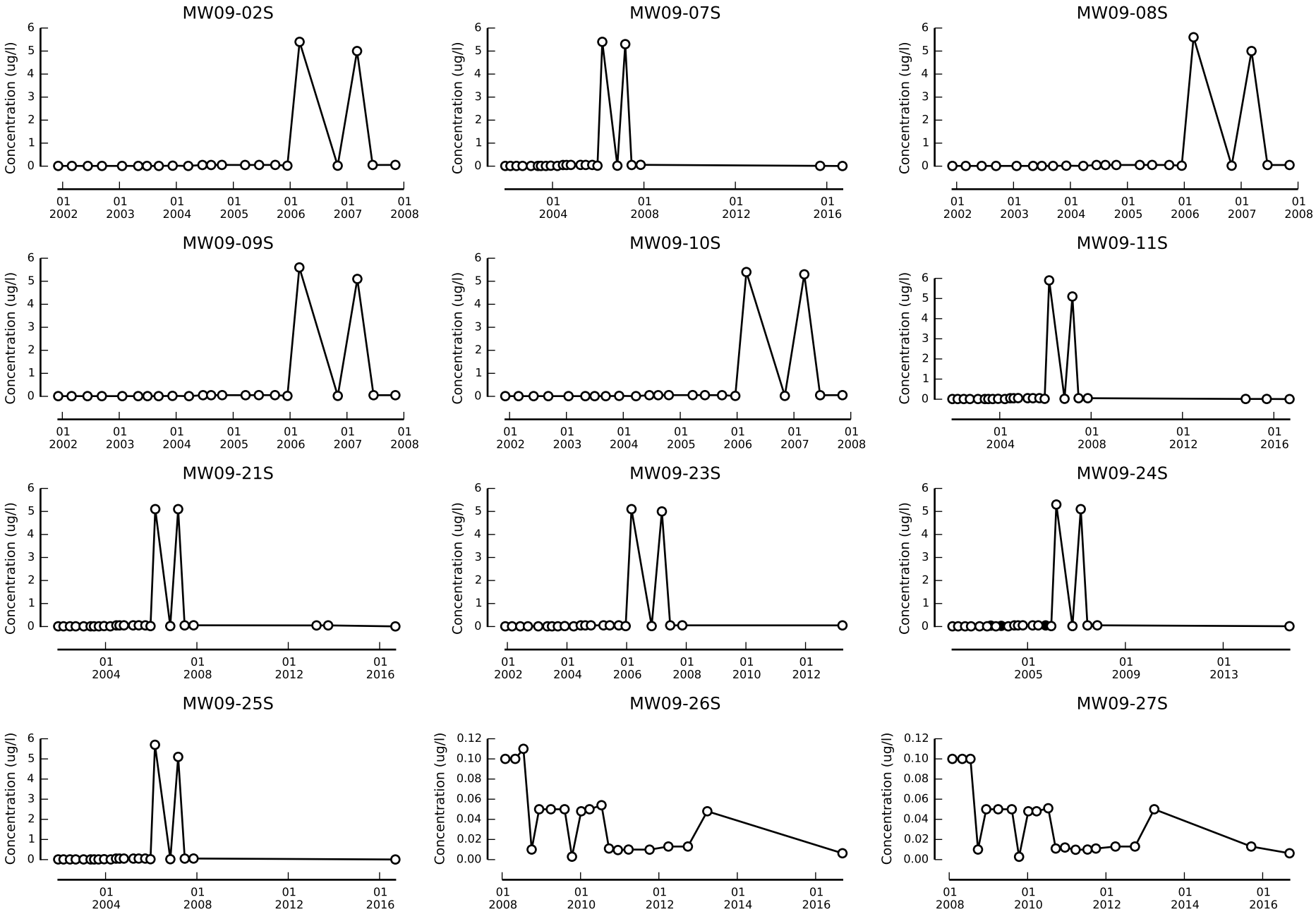
ENDOSULFAN I in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 96 of 133

● Detected
○ Not Detected, shown at detection limit



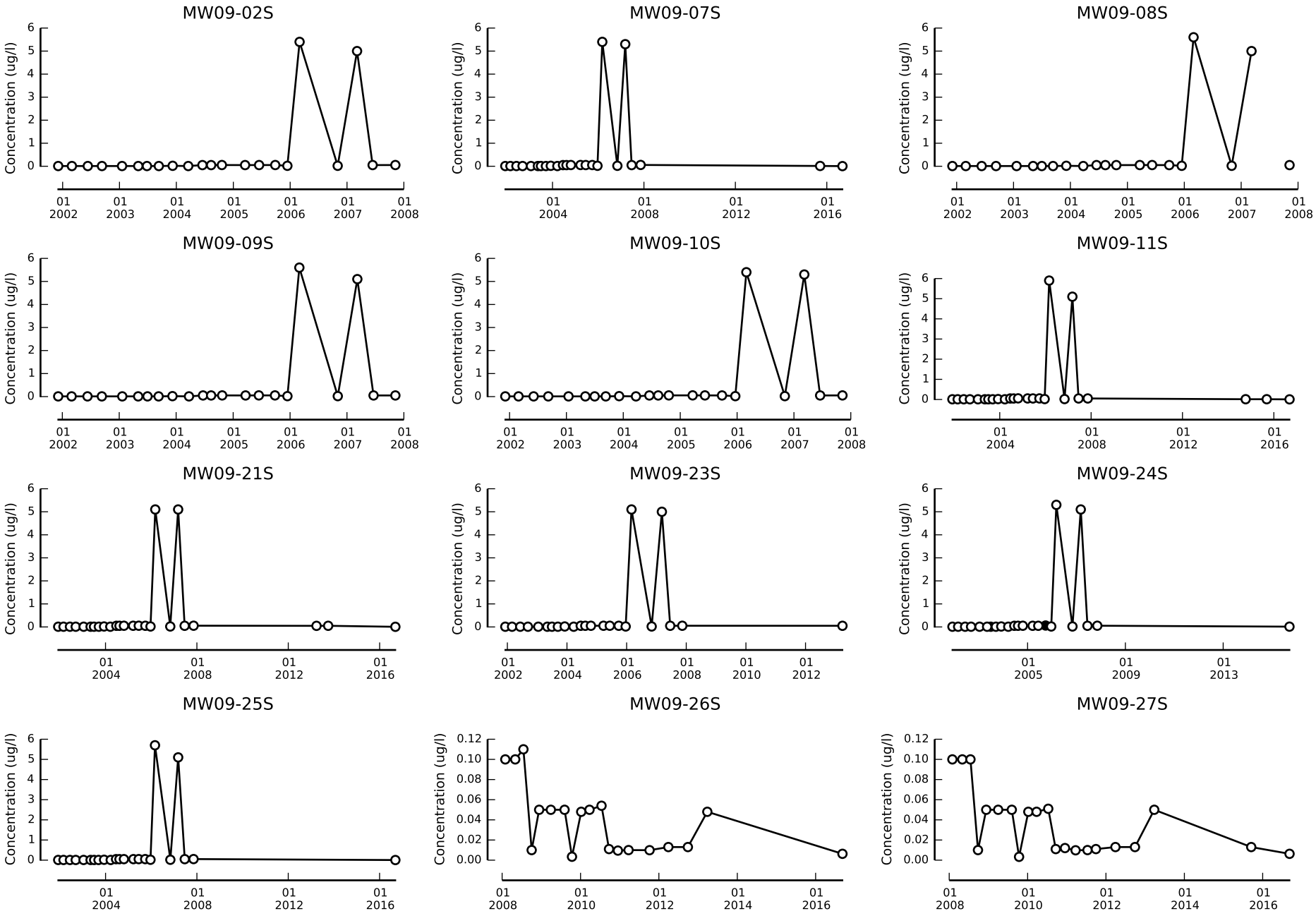
ENDOSULFAN II in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 97 of 133

● Detected
○ Not Detected, shown at detection limit



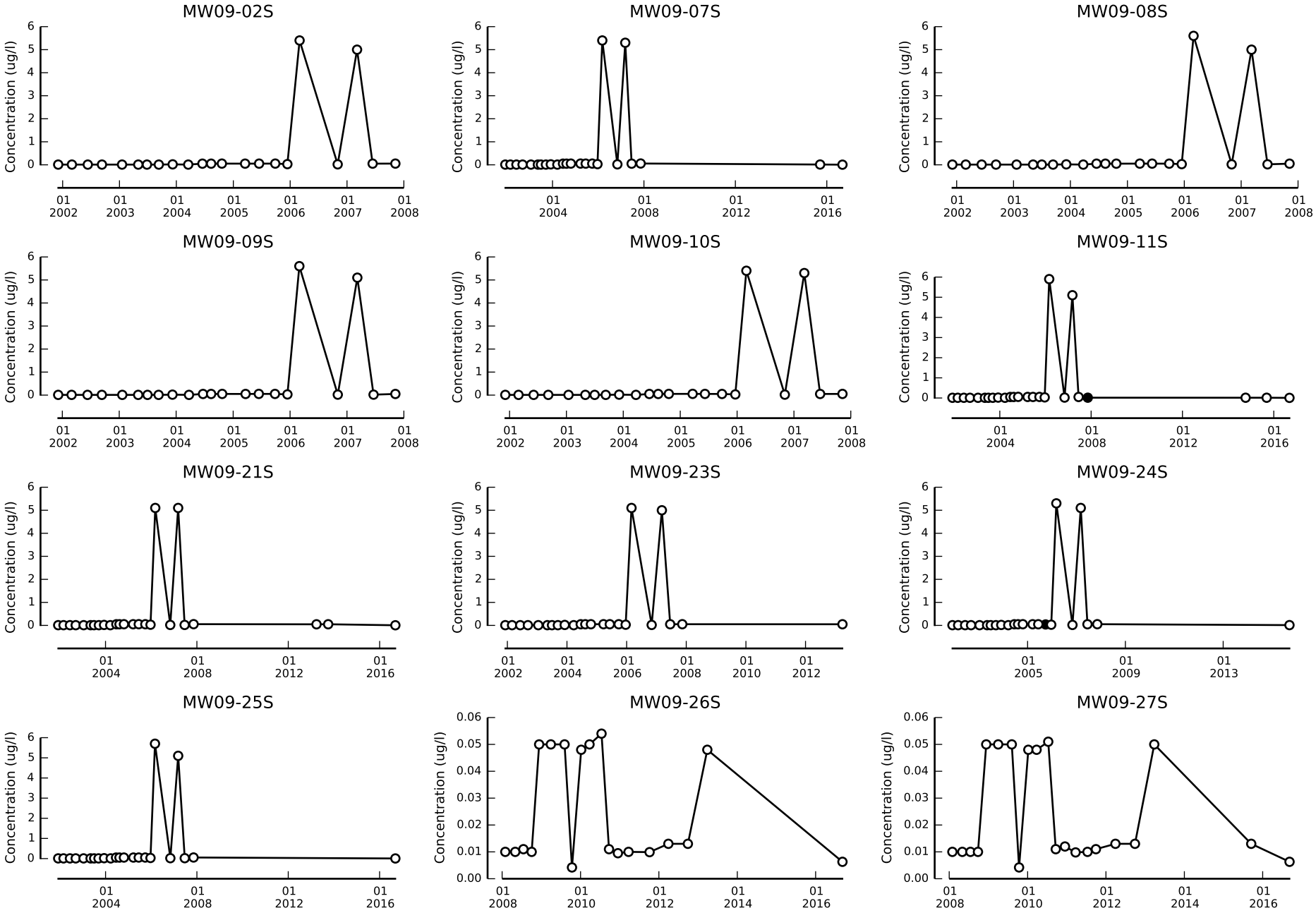
ENDOSULFAN SULFATE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 98 of 133

● Detected
○ Not Detected, shown at detection limit



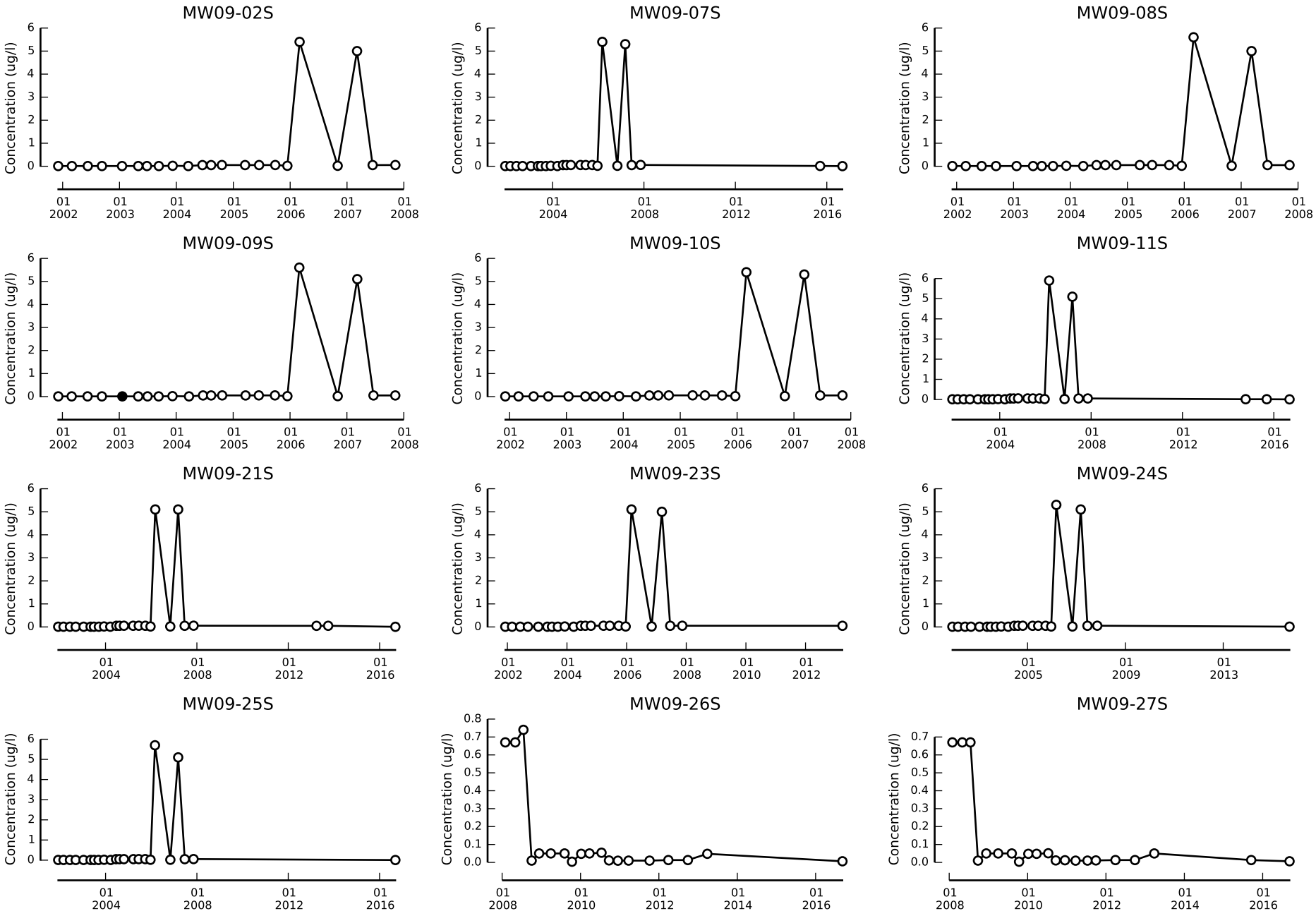
ENDRIN in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 99 of 133

● Detected
○ Not Detected, shown at detection limit



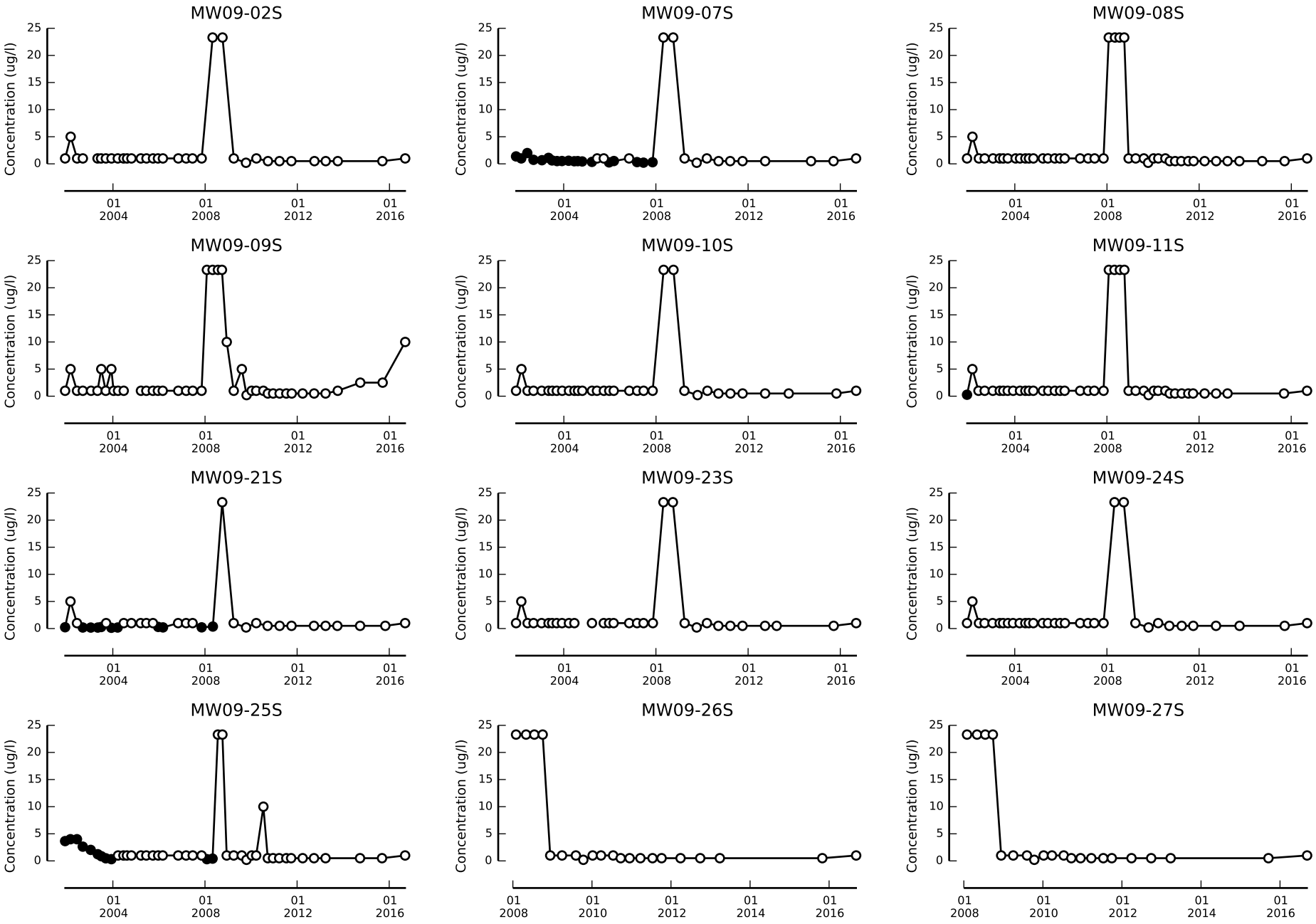
ENDRIN KETONE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 100 of 133

● Detected
○ Not Detected, shown at detection limit



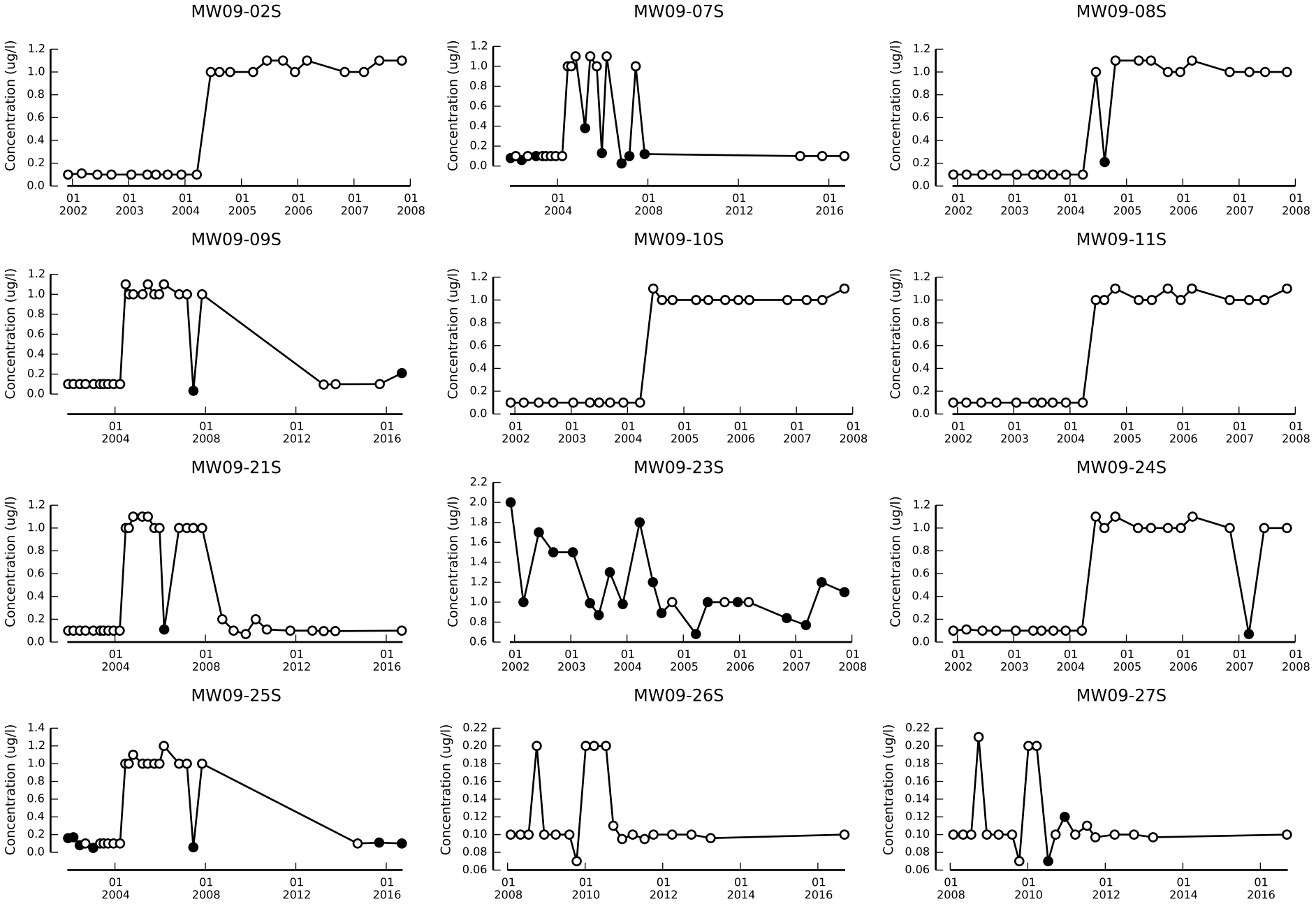
ETHYLBENZENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 101 of 133

● Detected
○ Not Detected, shown at detection limit



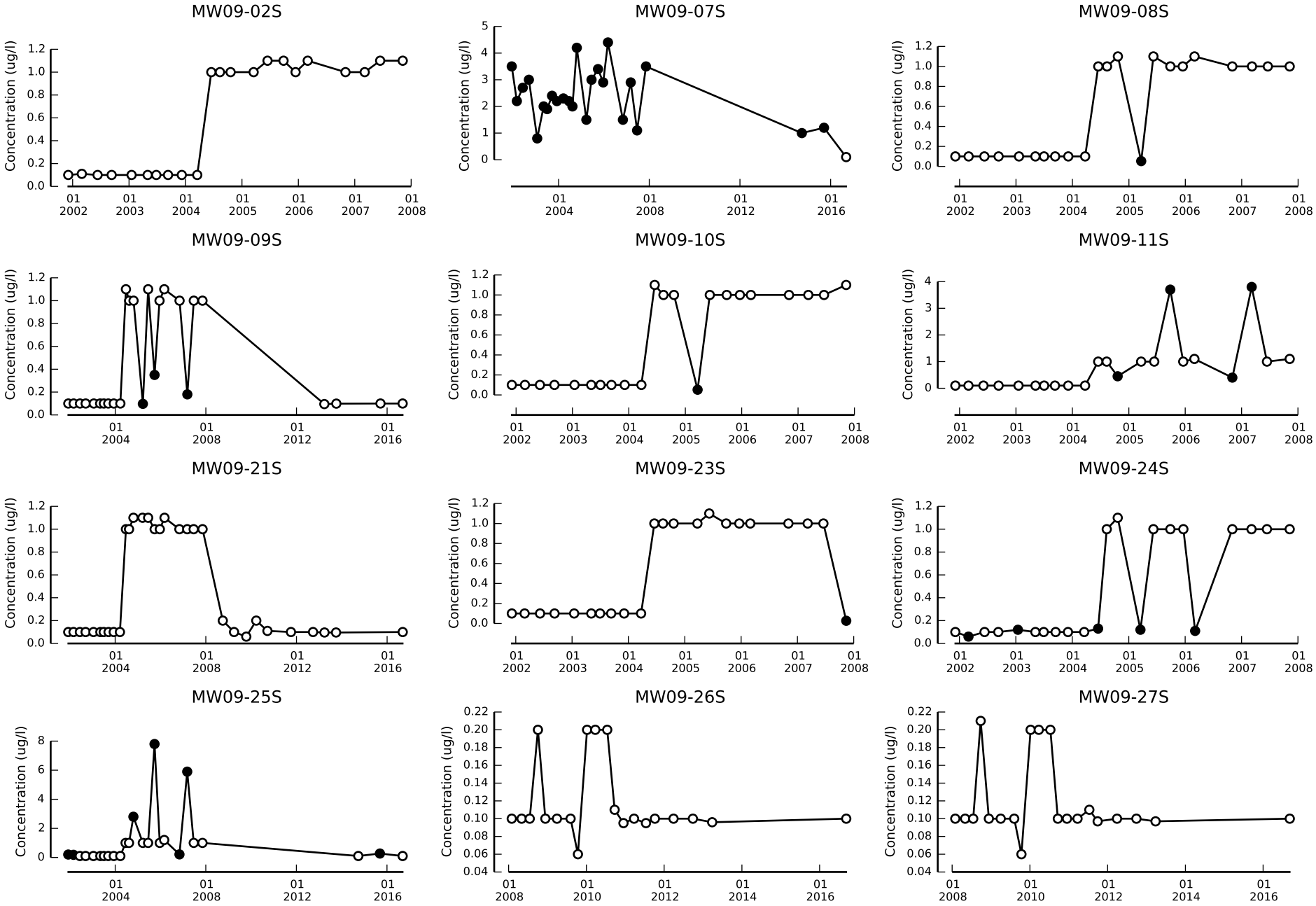
FLUORANTHENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 102 of 133

● Detected
○ Not Detected, shown at detection limit



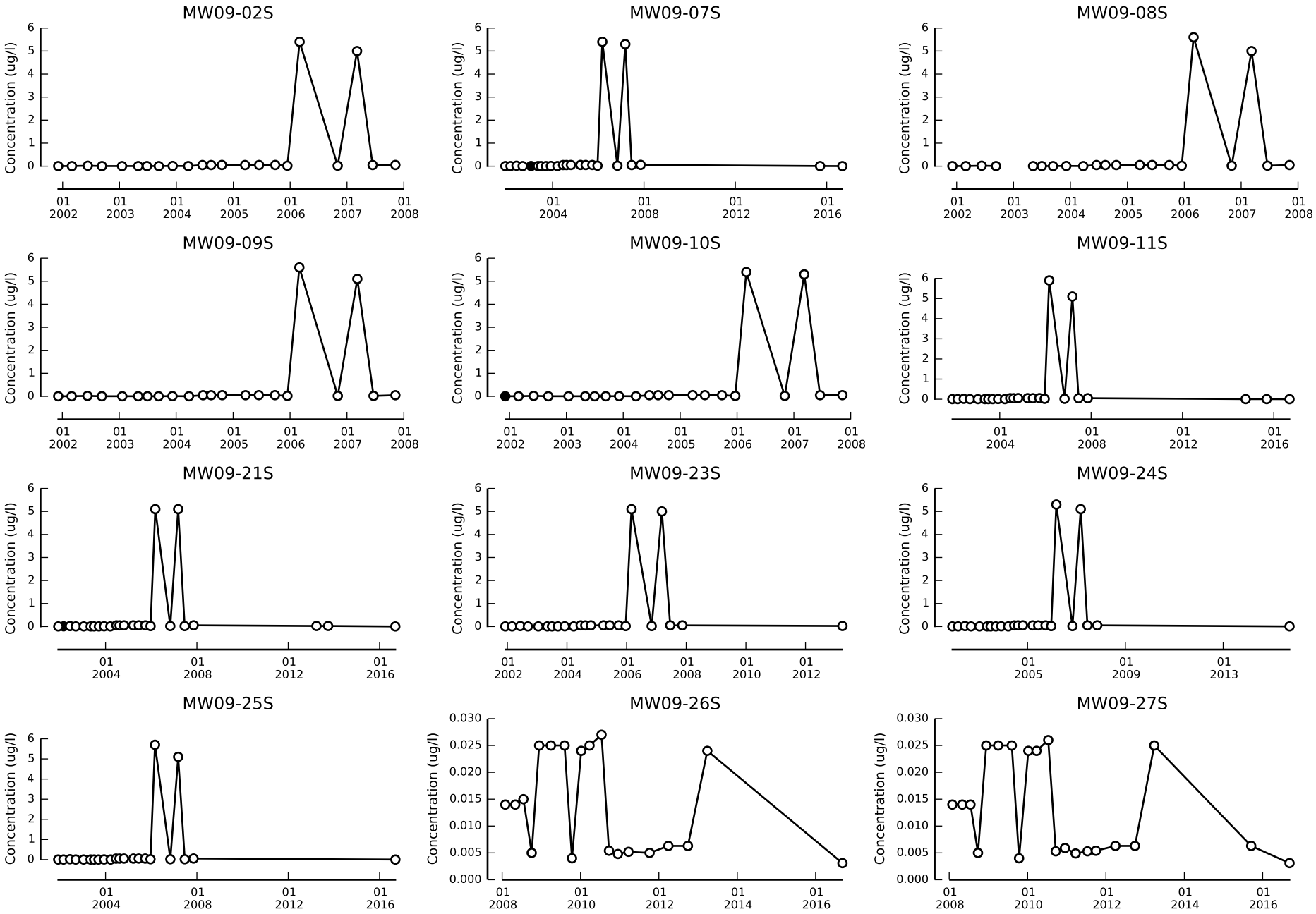
FLUORENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 103 of 133

● Detected
○ Not Detected, shown at detection limit



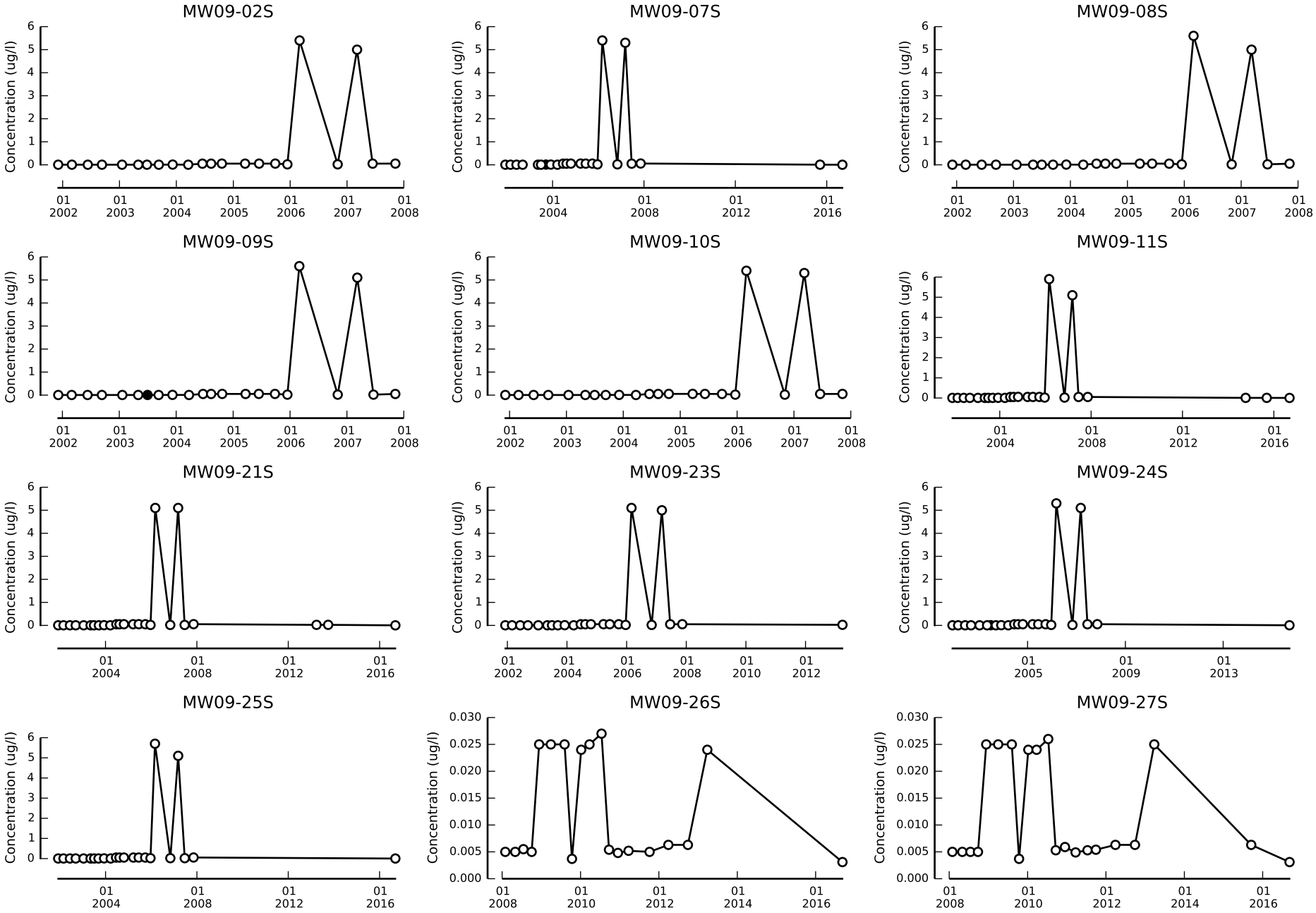
HEPTACHLOR in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 104 of 133

● Detected
○ Not Detected, shown at detection limit



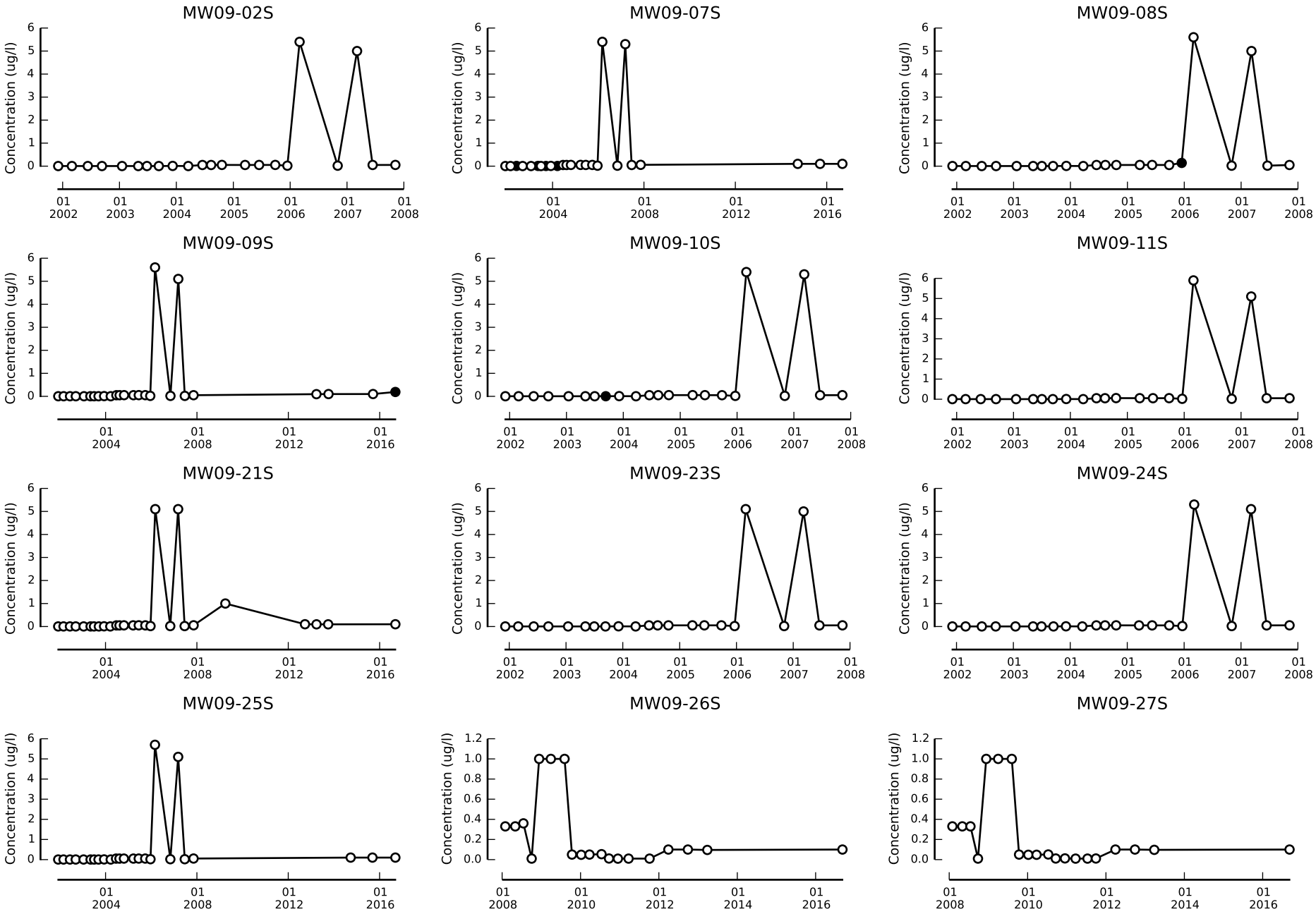
HEPTACHLOR EPOXIDE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 105 of 133

● Detected
○ Not Detected, shown at detection limit



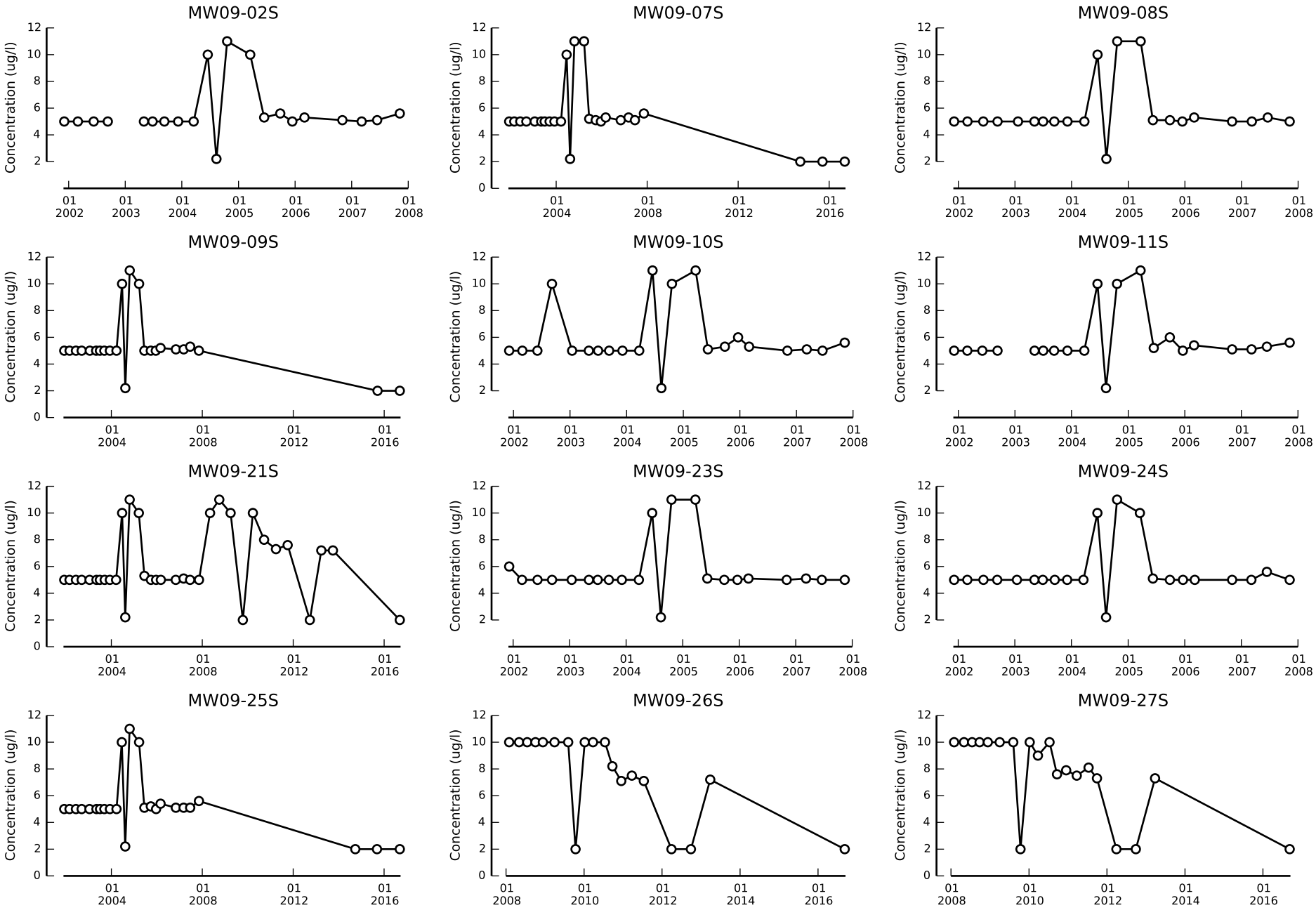
HEXACHLOROBENZENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 106 of 133

● Detected
○ Not Detected, shown at detection limit



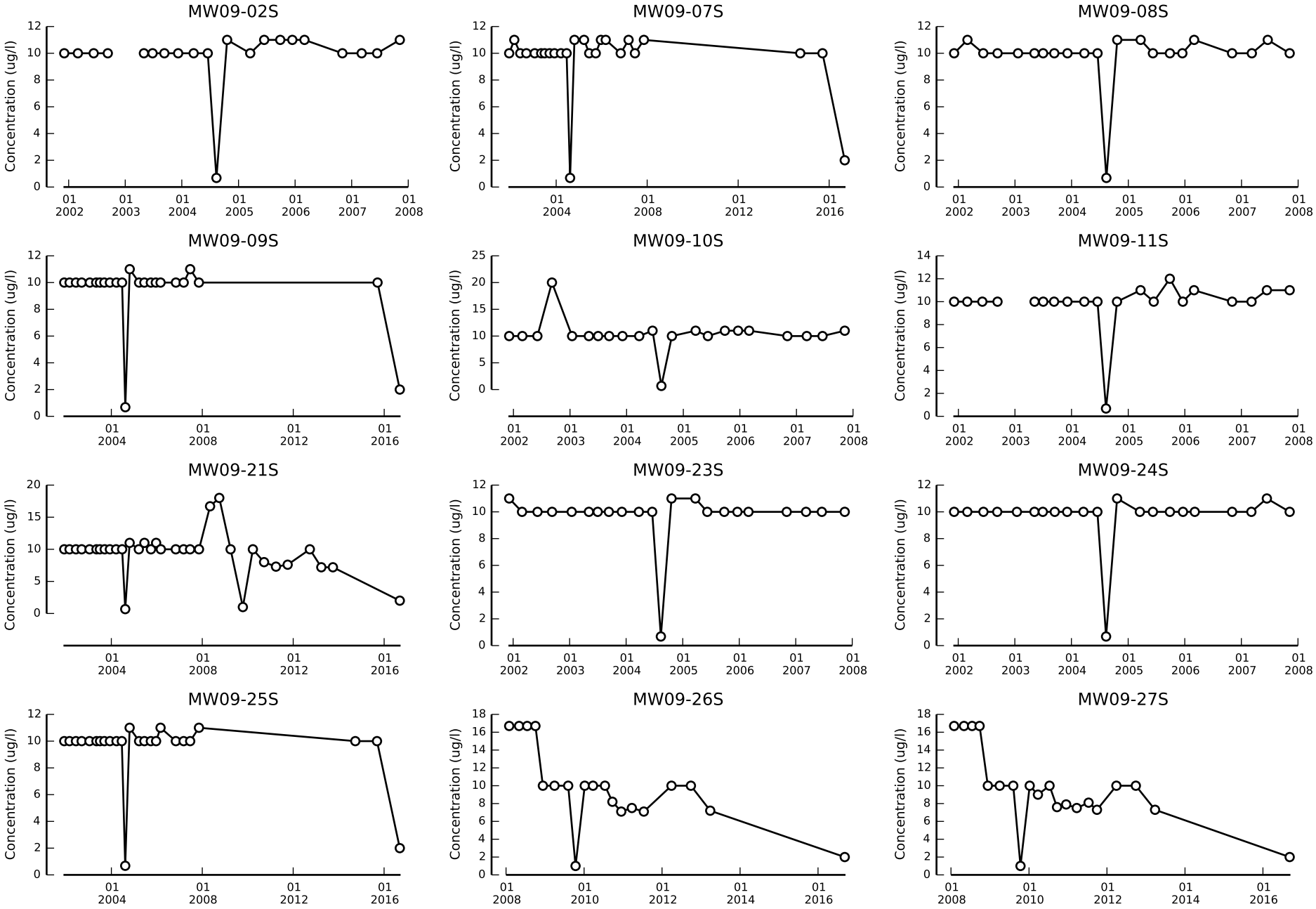
HEXACHLOROBUTADIENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 107 of 133

● Detected
○ Not Detected, shown at detection limit



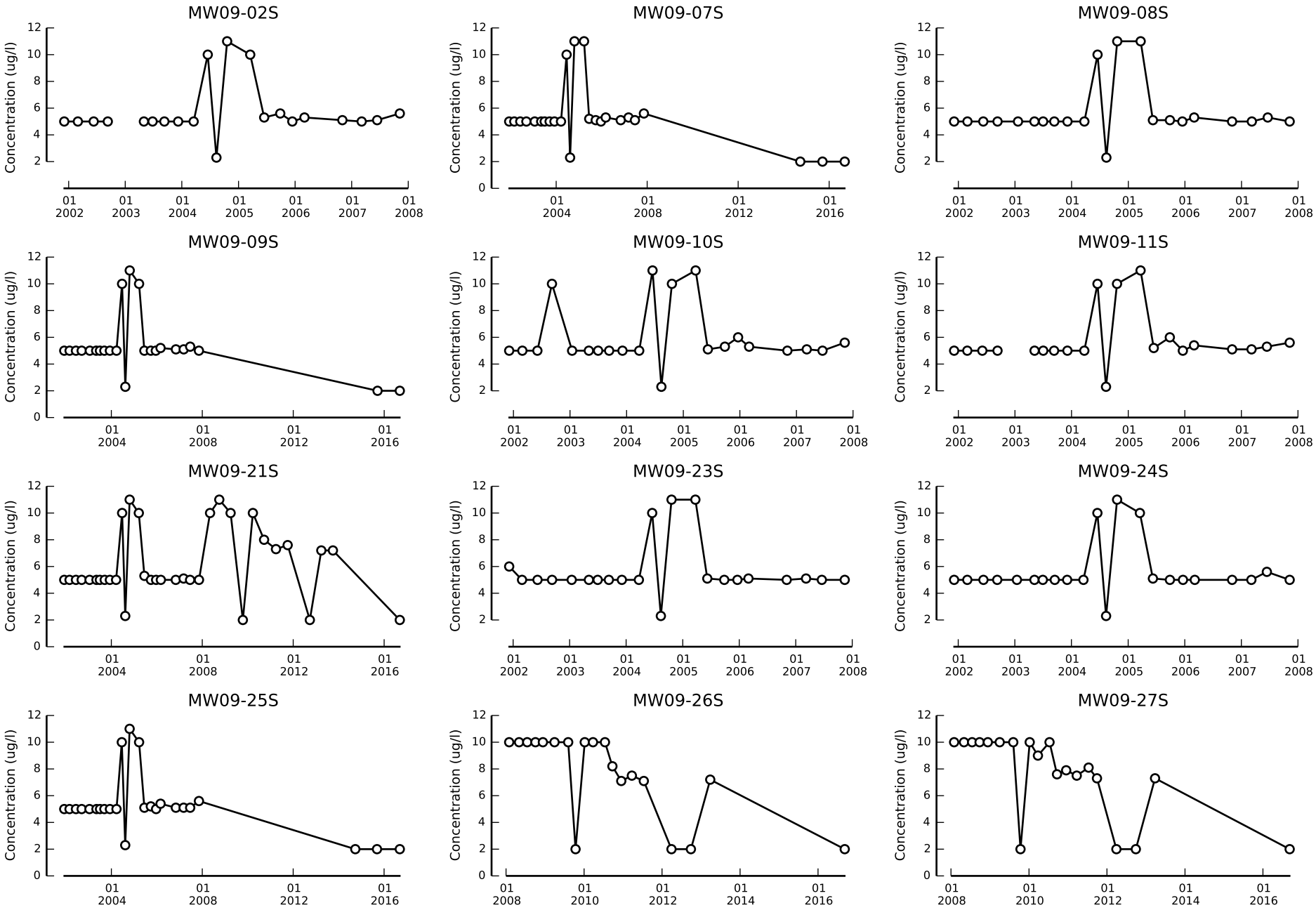
HEXACHLOROCYCLOPENTADIENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 108 of 133

● Detected
○ Not Detected, shown at detection limit



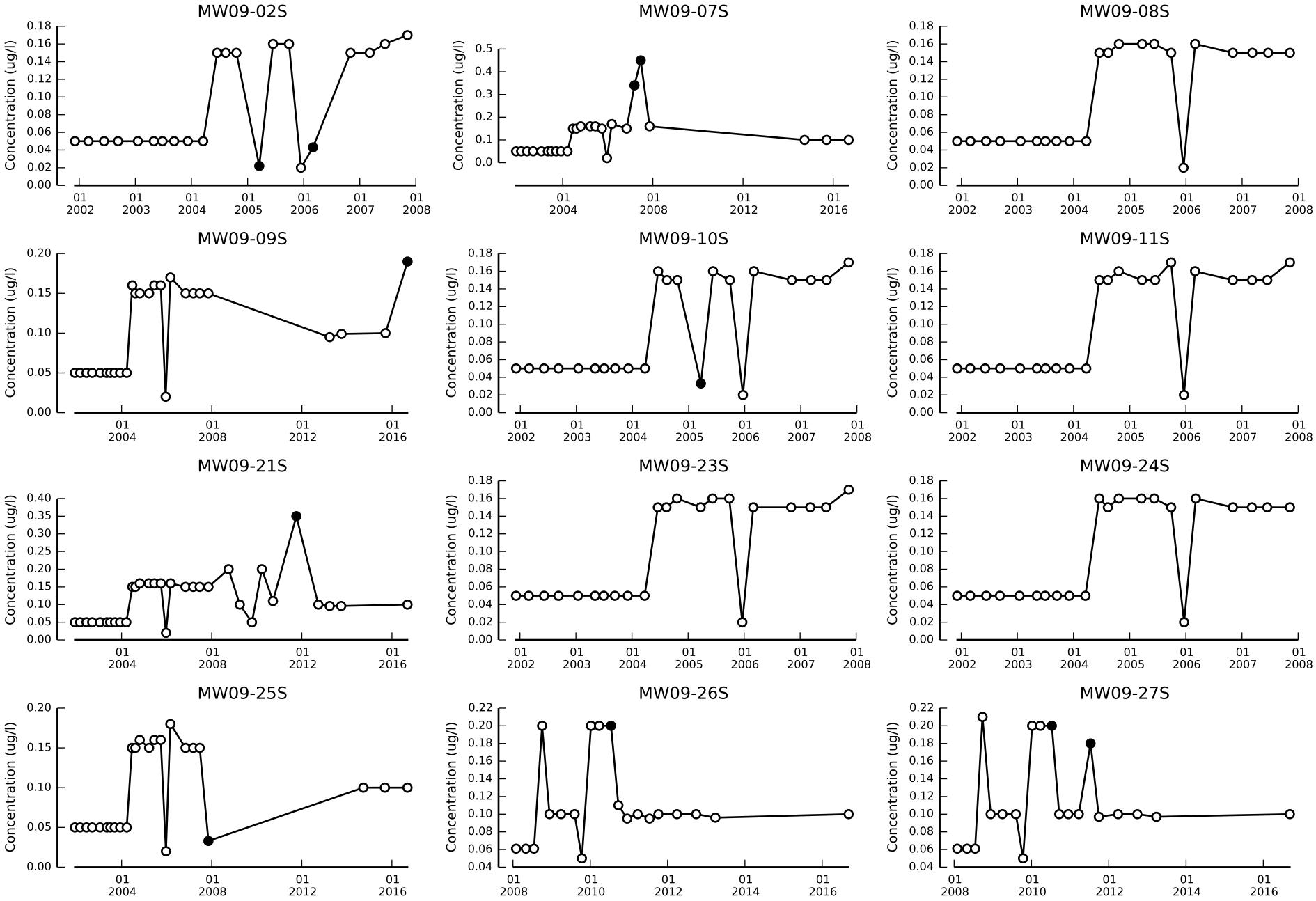
HEXACHLOROETHANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 109 of 133

● Detected
○ Not Detected, shown at detection limit



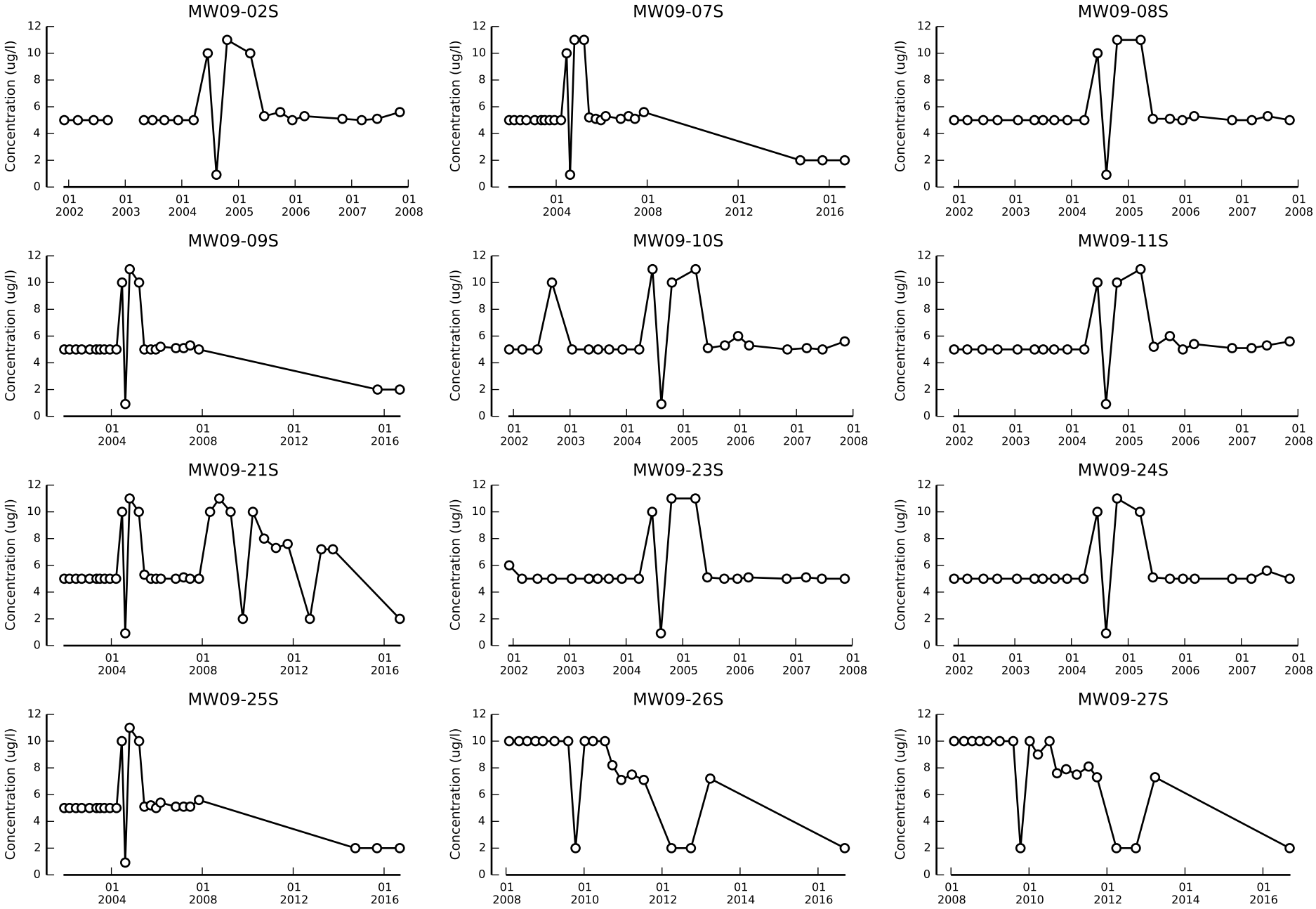
INDENO(1,2,3-CD)PYRENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 110 of 133

● Detected
○ Not Detected, shown at detection limit



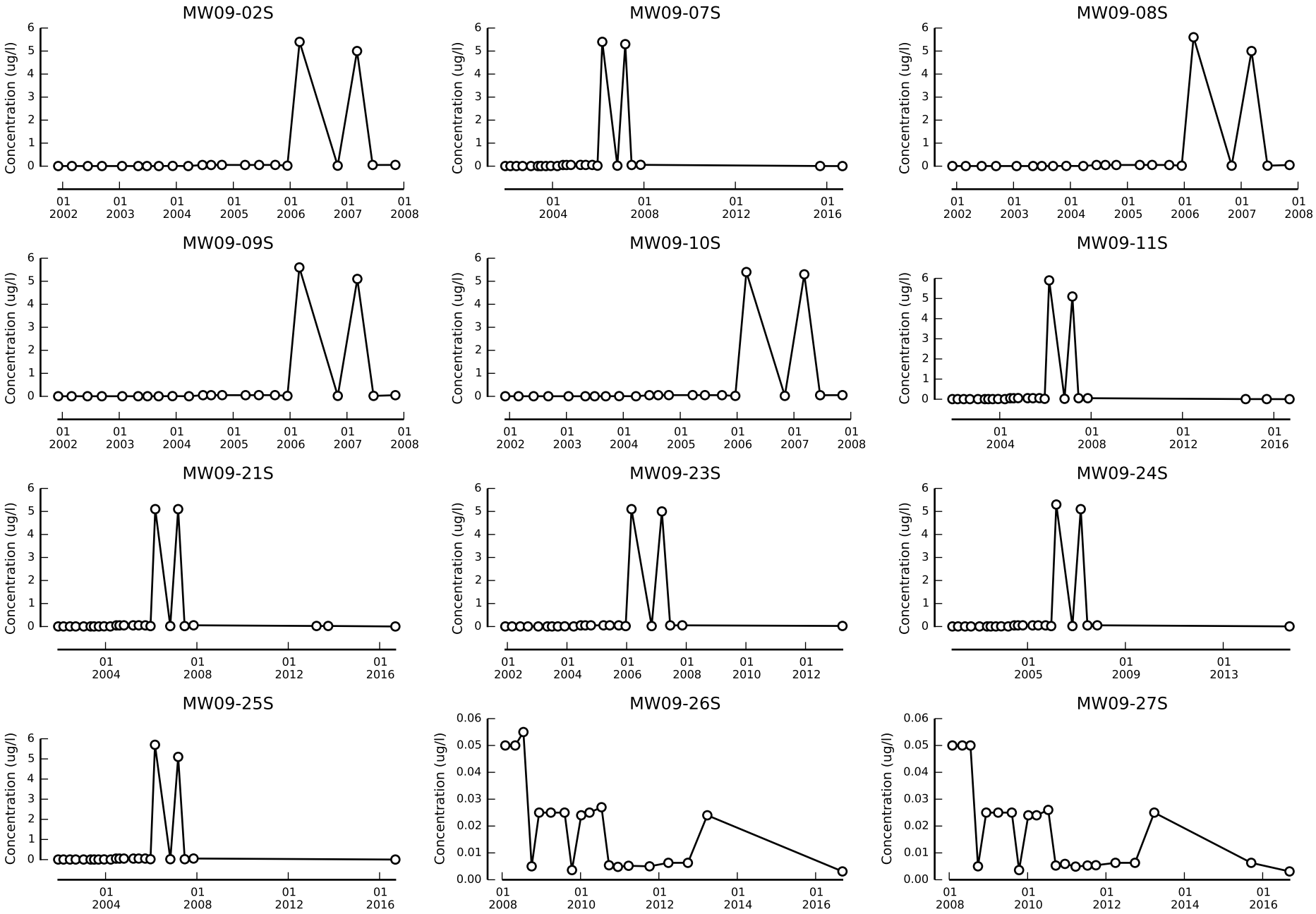
ISOPHORONE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 111 of 133

● Detected
○ Not Detected, shown at detection limit



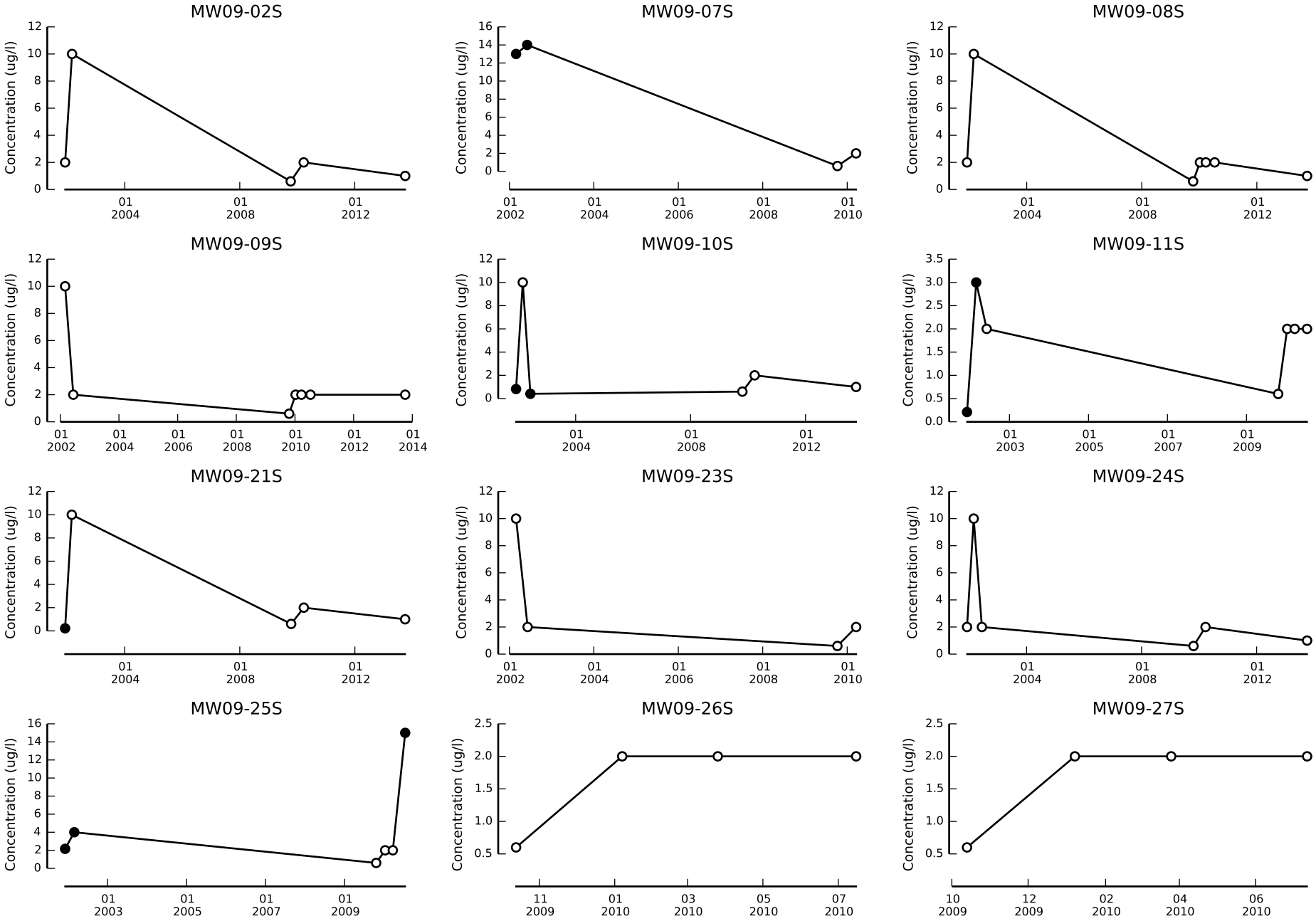
LINDANE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 112 of 133

● Detected
○ Not Detected, shown at detection limit



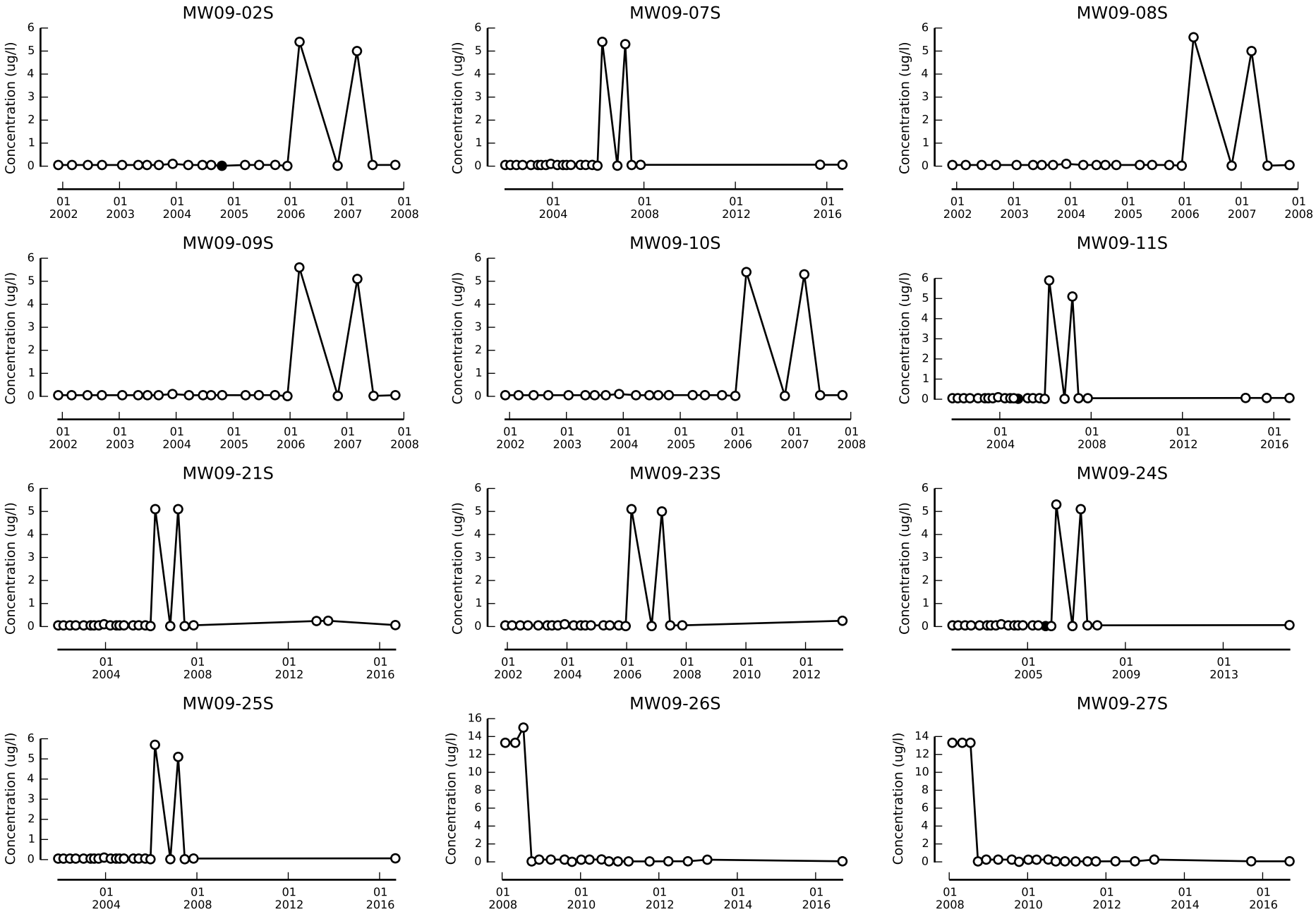
M- AND P-XYLENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 113 of 133

● Detected
○ Not Detected, shown at detection limit



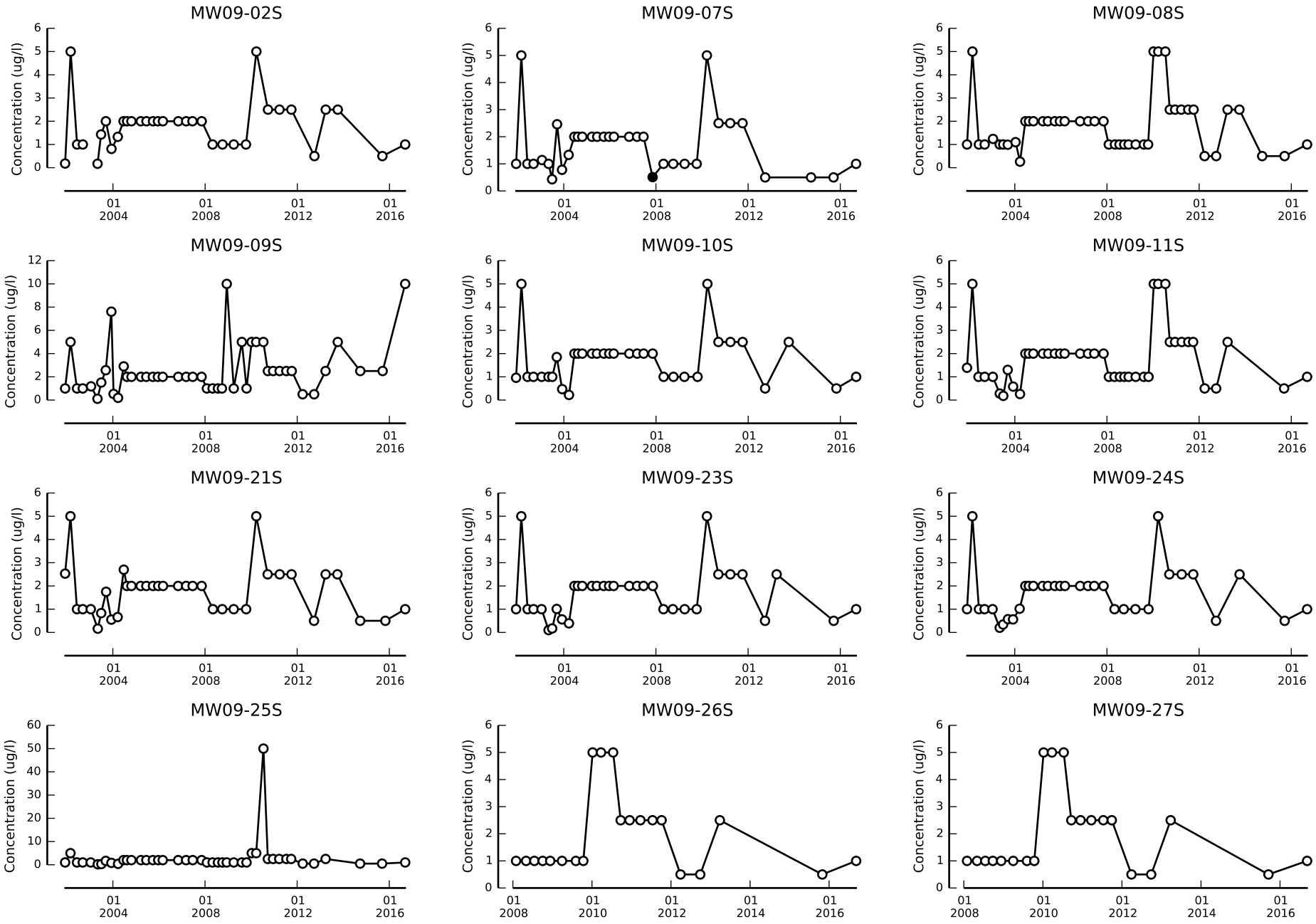
METHOXYCHLOR in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 114 of 133

● Detected
○ Not Detected, shown at detection limit



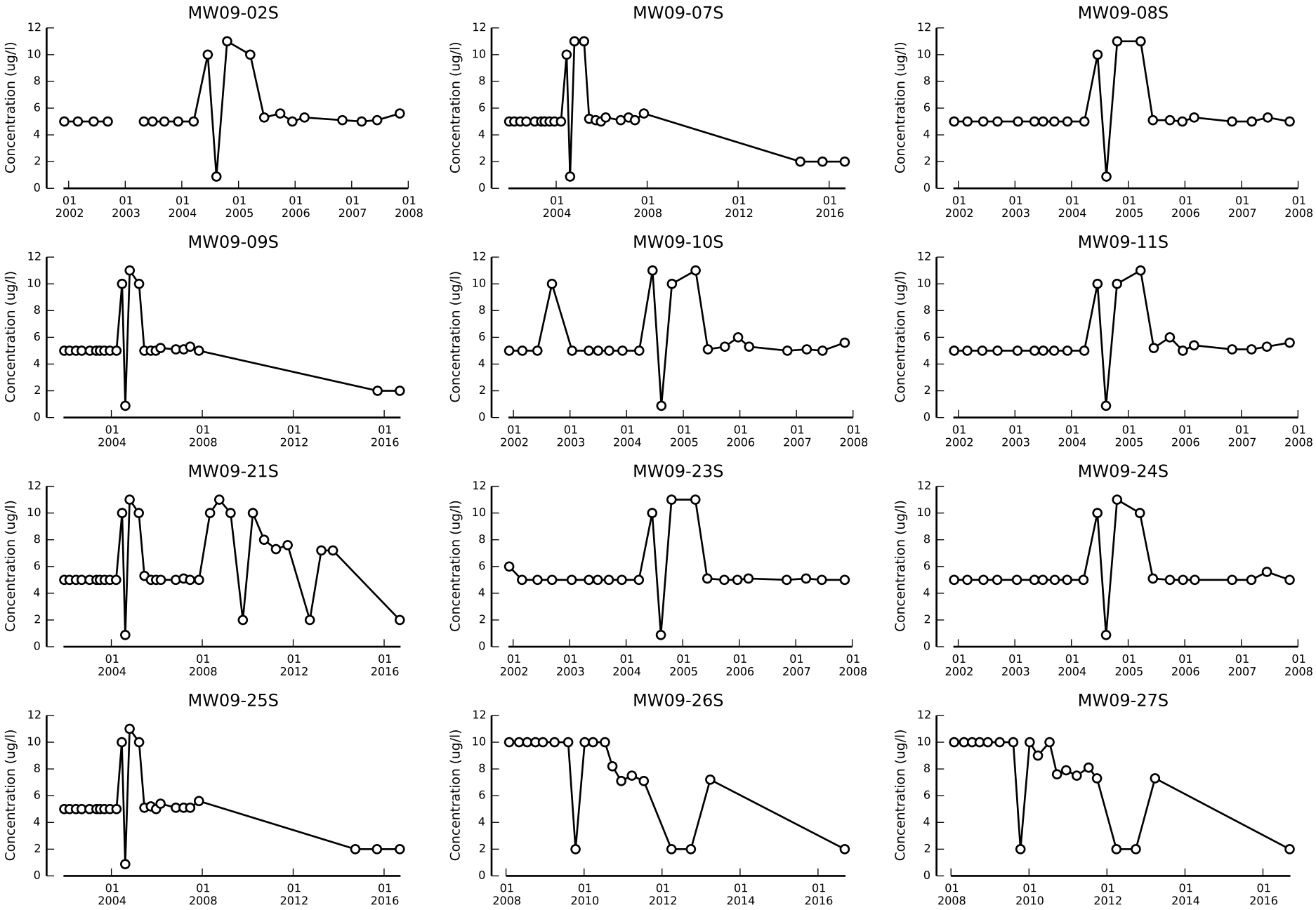
METHYLENE CHLORIDE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 115 of 133

● Detected
○ Not Detected, shown at detection limit



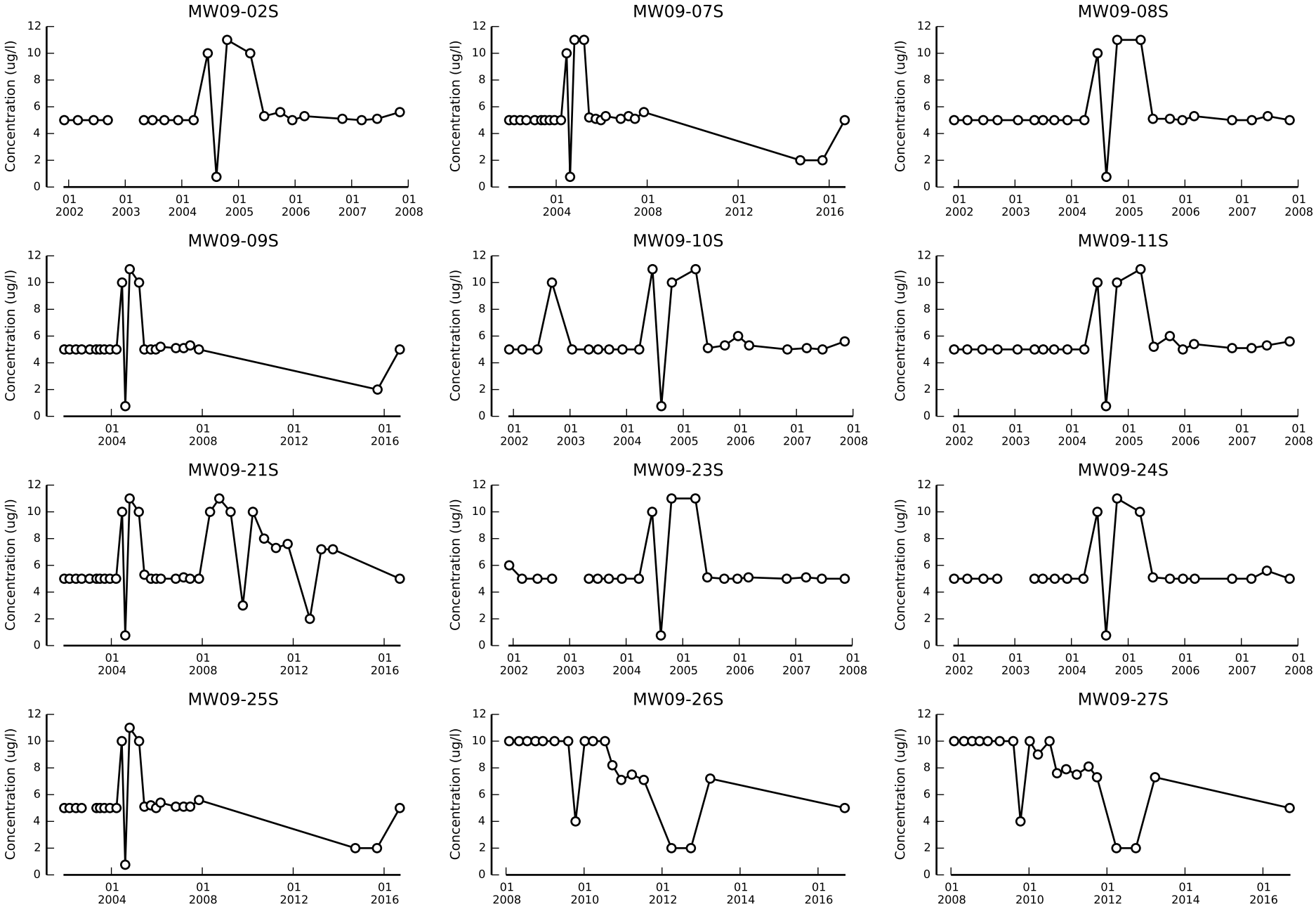
N-NITROSODINPROPYLAMINE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 116 of 133

● Detected
○ Not Detected, shown at detection limit



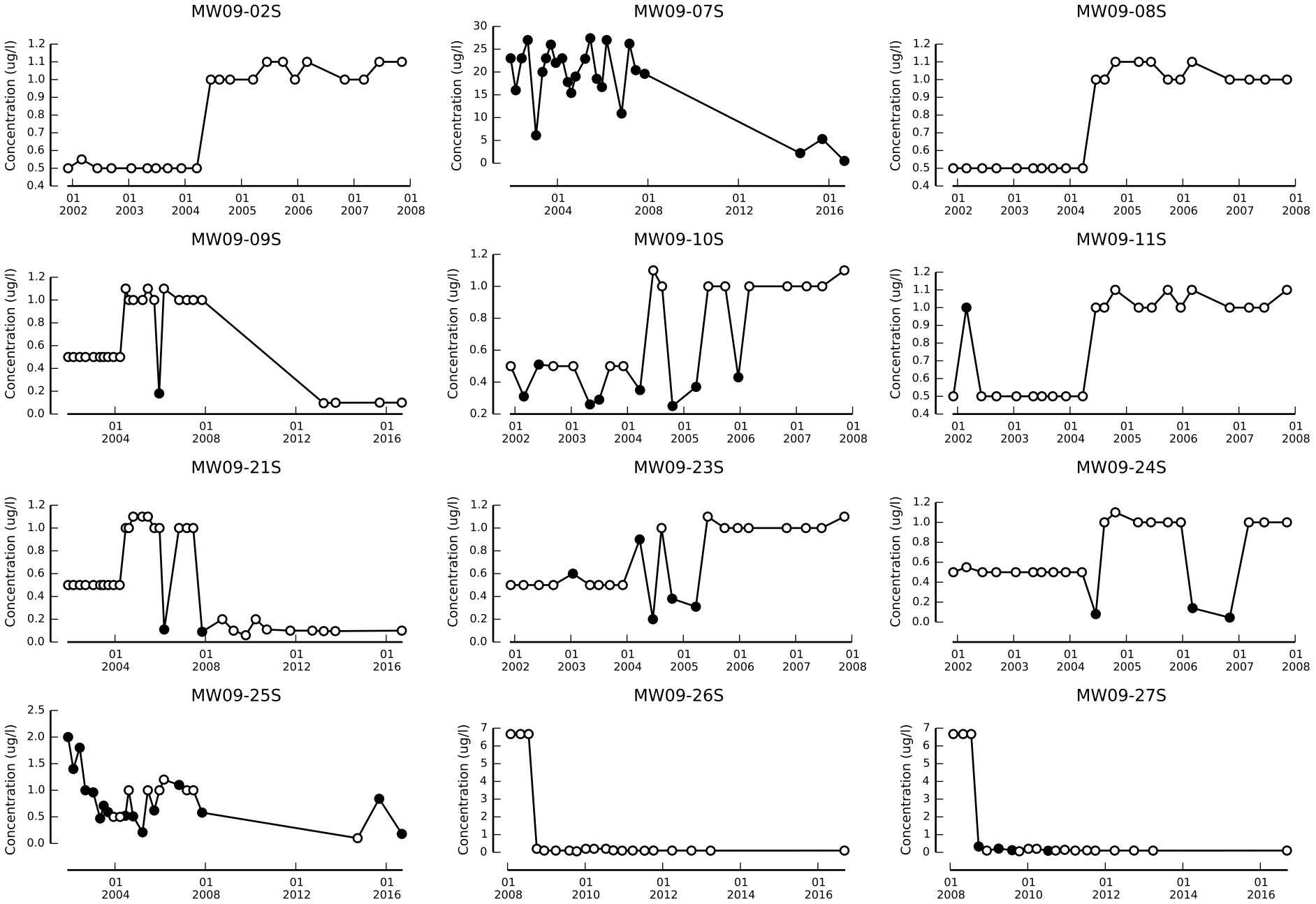
N-NITROSODIPHENYLAMINE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 117 of 133

● Detected
○ Not Detected, shown at detection limit



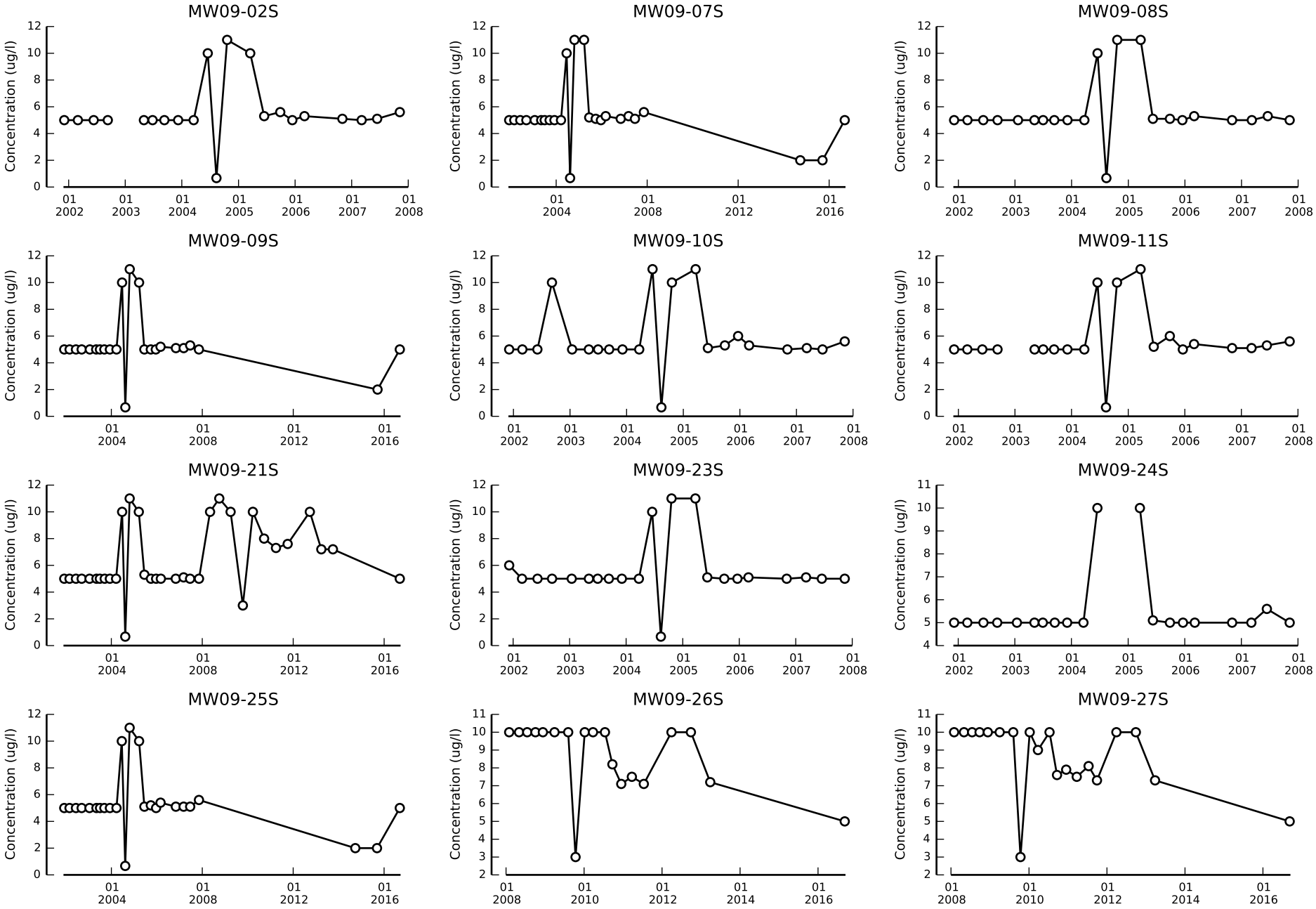
NAPHTHALENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 118 of 133

● Detected
○ Not Detected, shown at detection limit



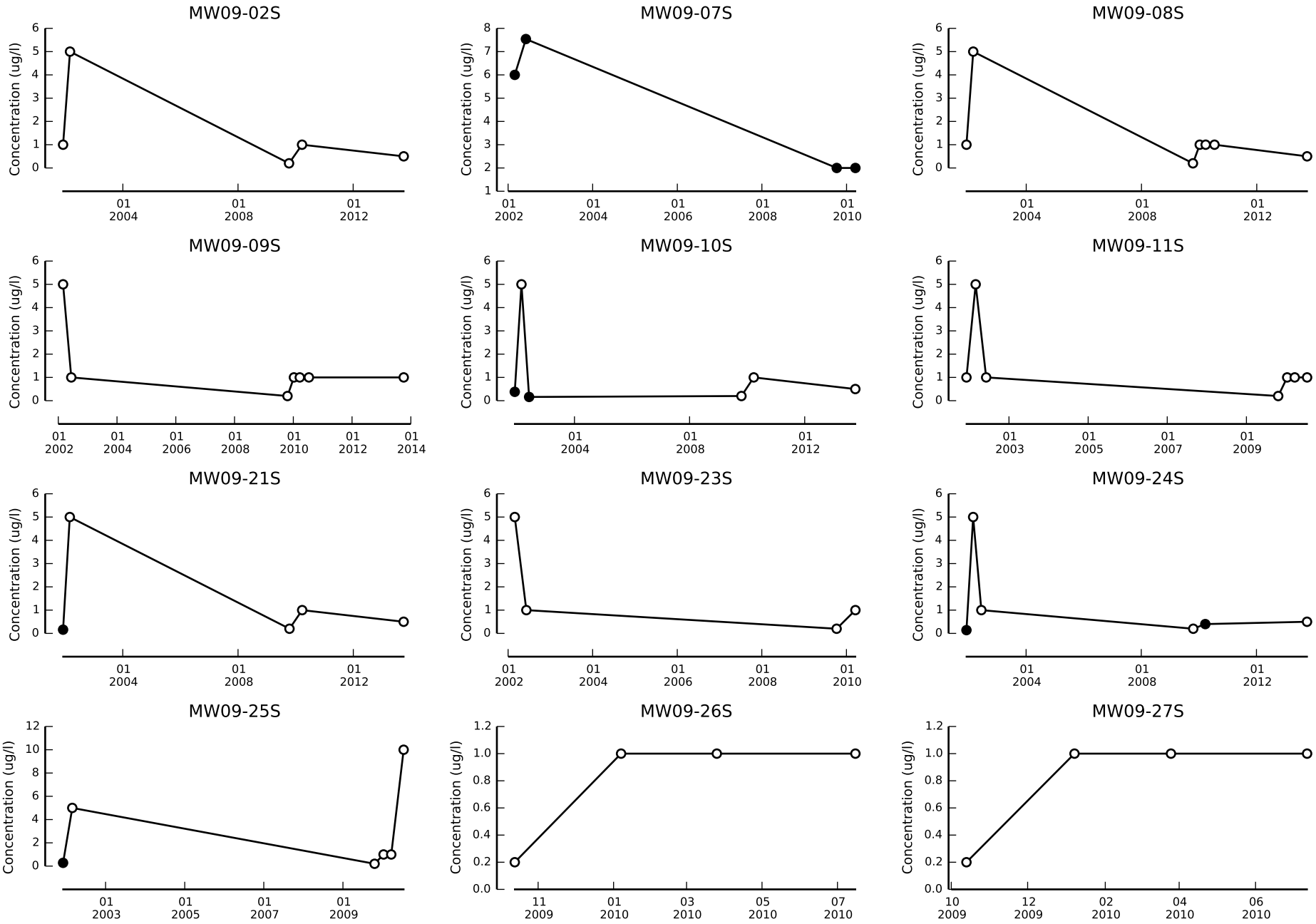
NITROBENZENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 119 of 133

● Detected
○ Not Detected, shown at detection limit



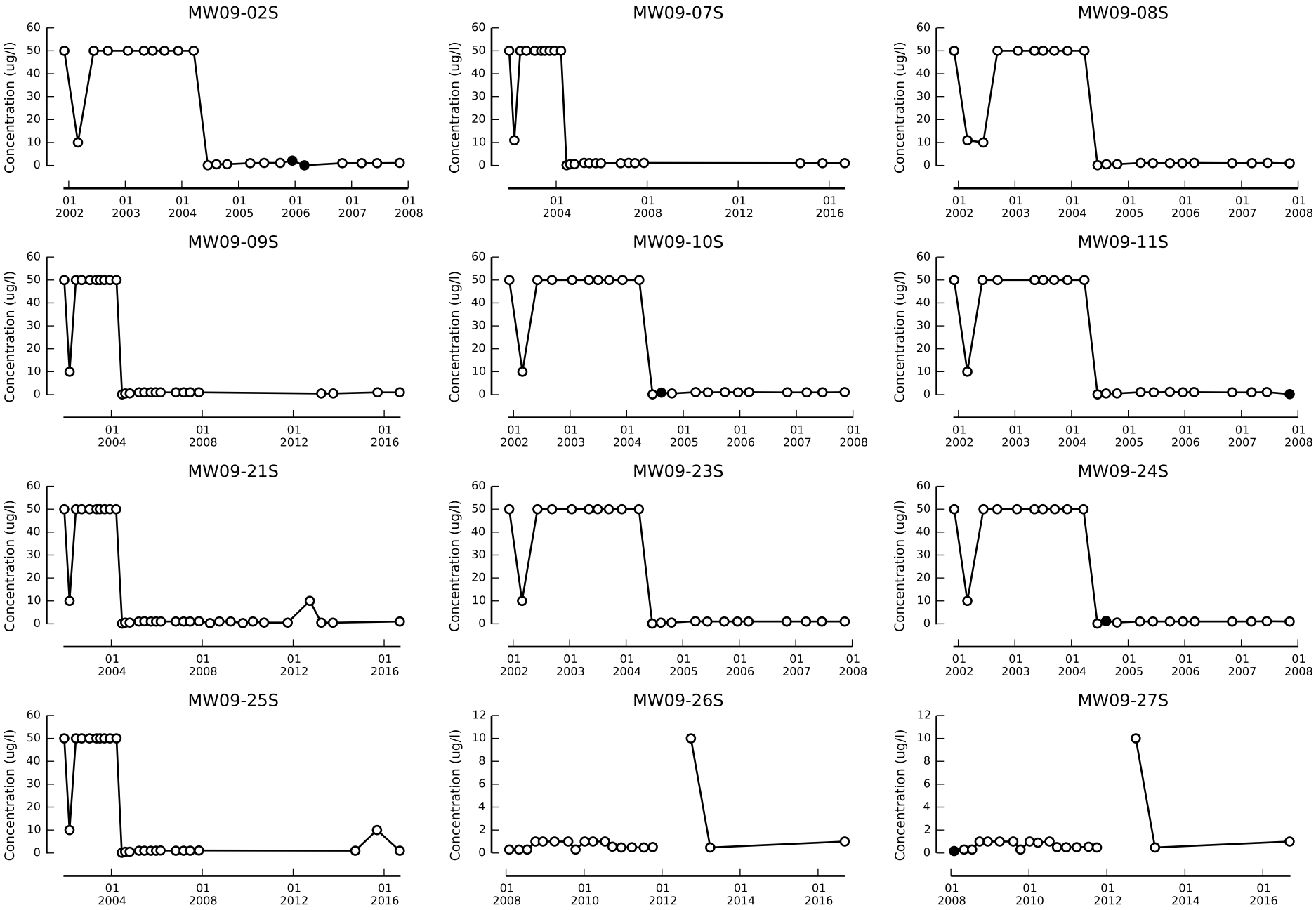
O-XYLENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 120 of 133

● Detected
○ Not Detected, shown at detection limit



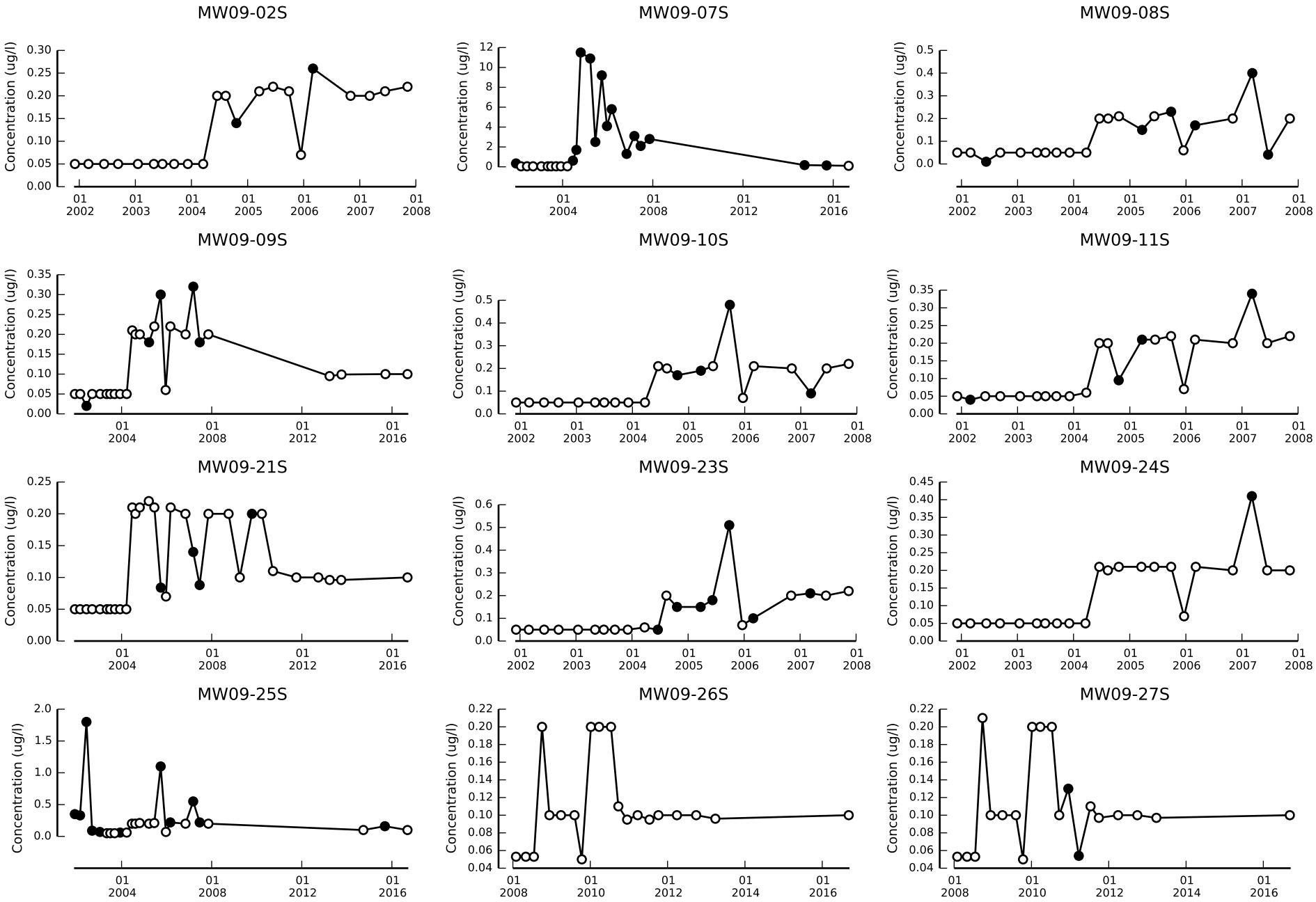
PENTACHLOROPHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 121 of 133

● Detected
○ Not Detected, shown at detection limit



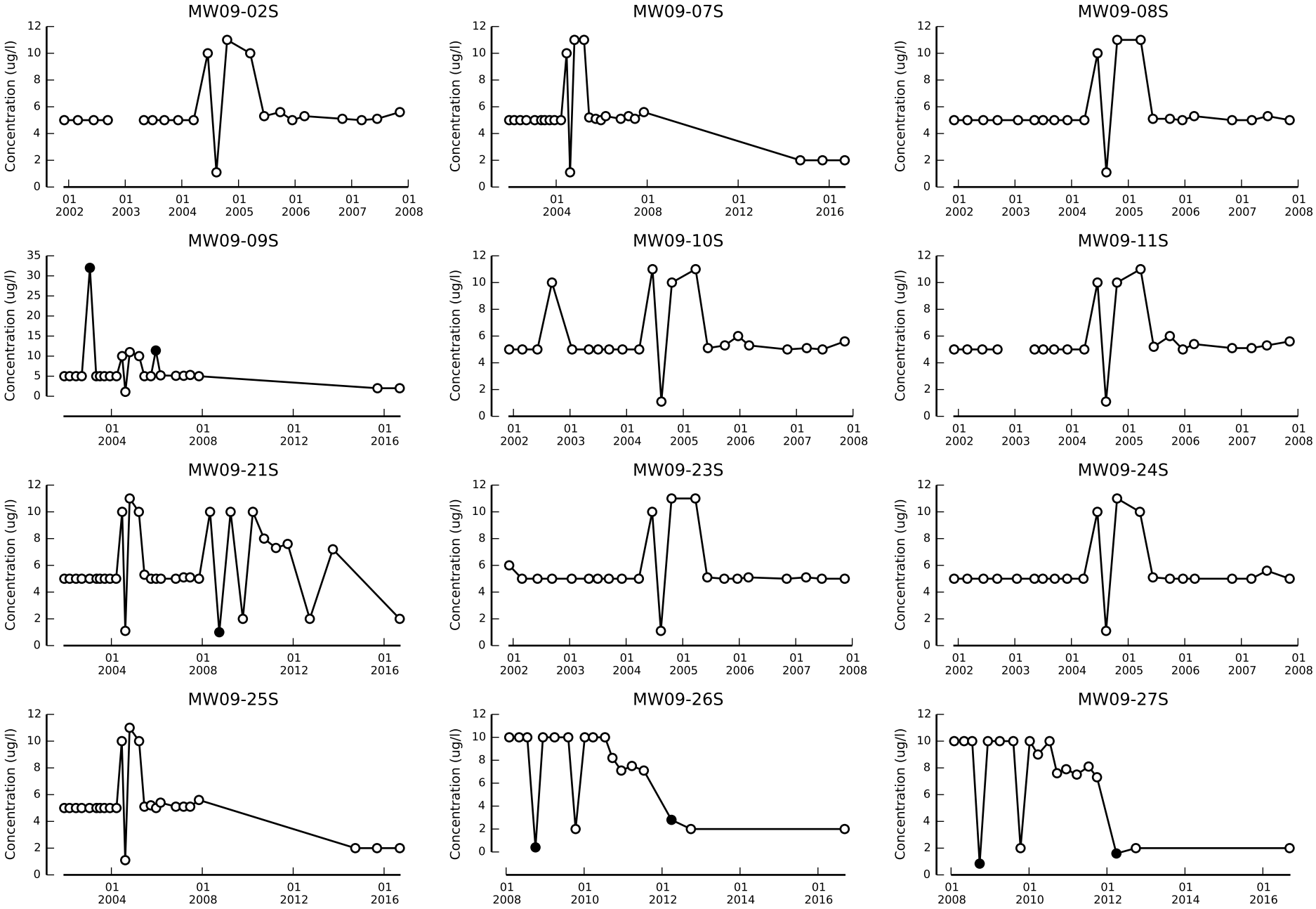
PHENANTHRENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 122 of 133

● Detected
○ Not Detected, shown at detection limit



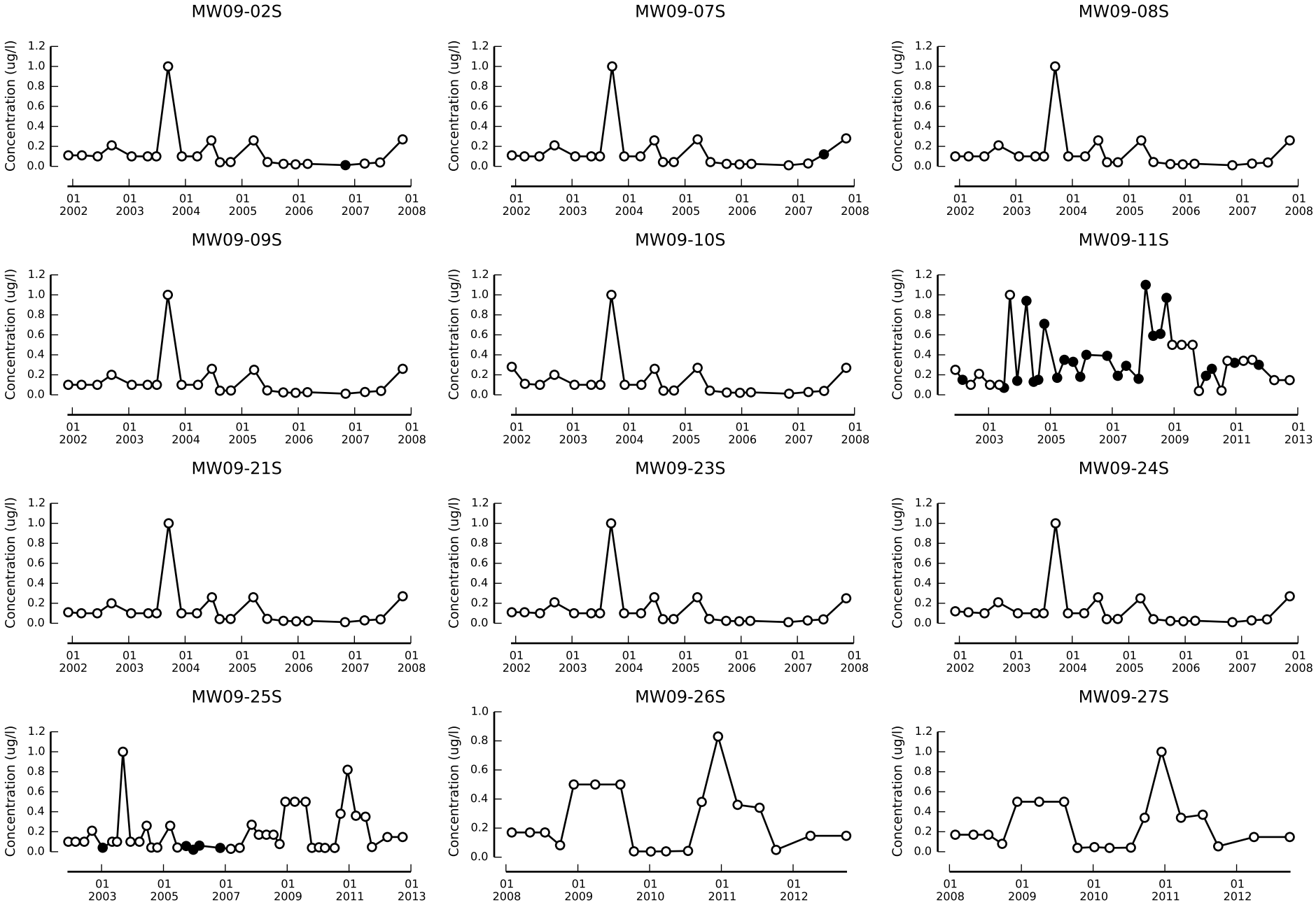
PHENOL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 123 of 133

● Detected
○ Not Detected, shown at detection limit



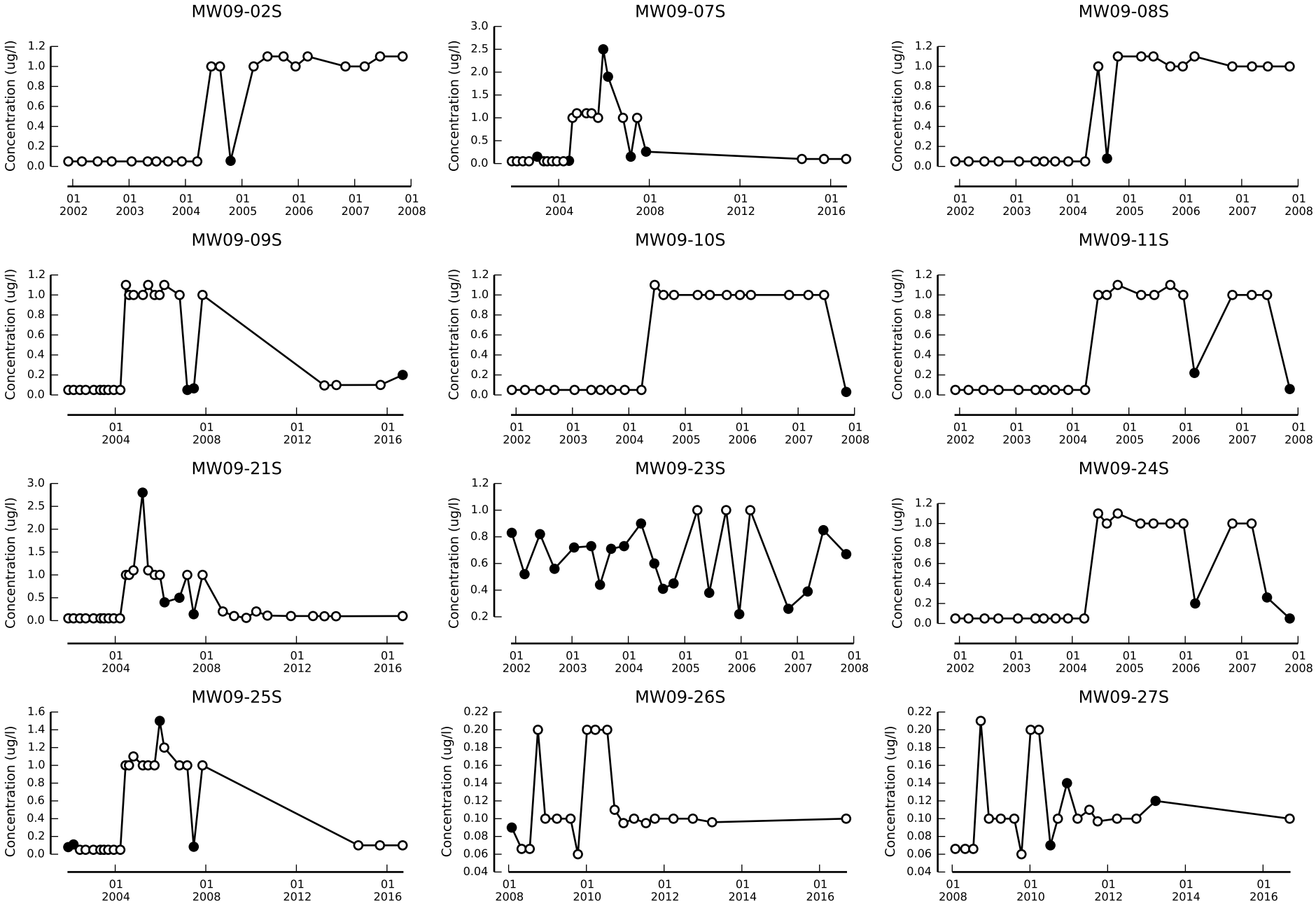
POLYCHLORINATED BIPHENYLS (PCBS) in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 124 of 133

● Detected
○ Not Detected, shown at detection limit



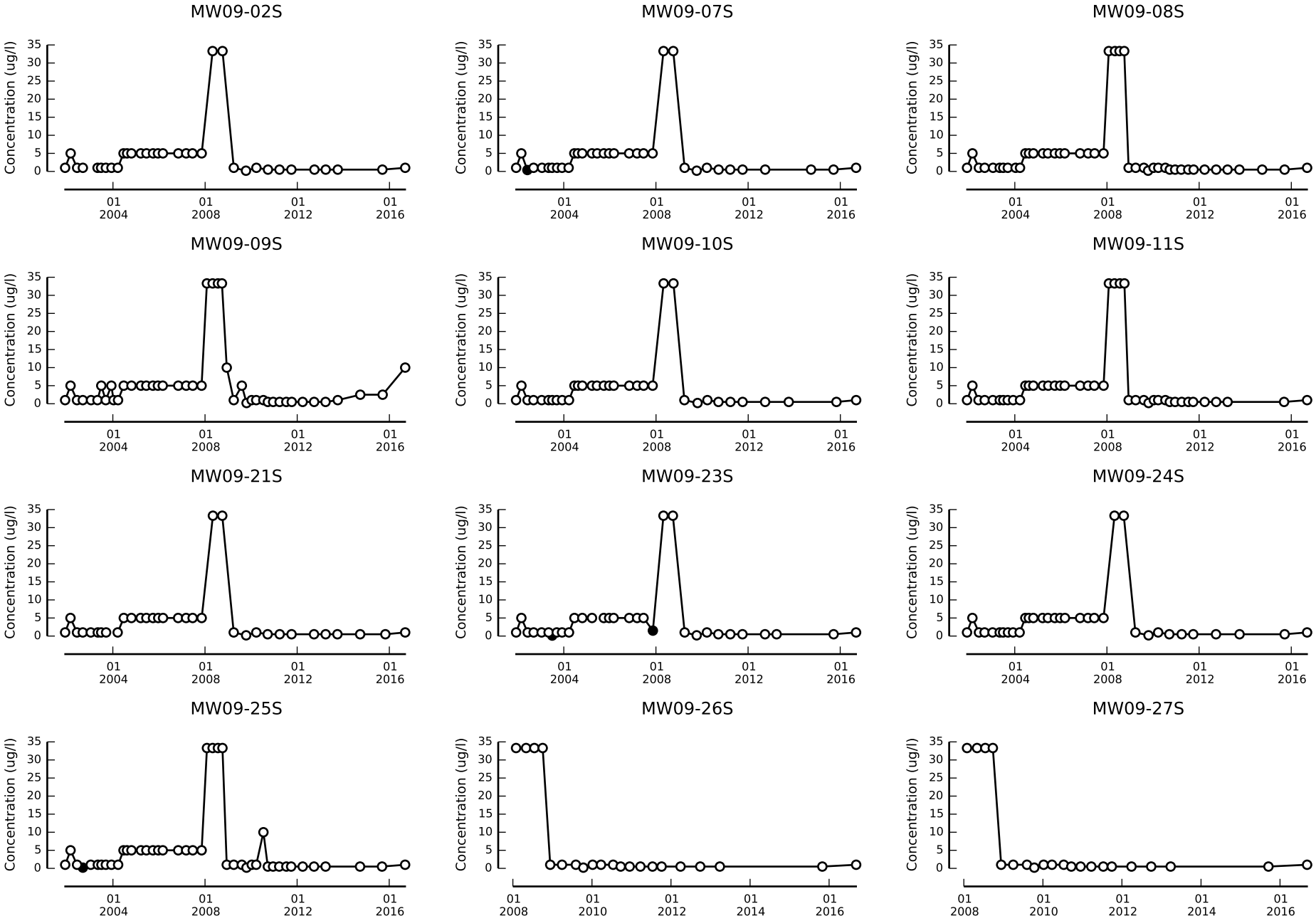
PYRENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 125 of 133

● Detected
○ Not Detected, shown at detection limit



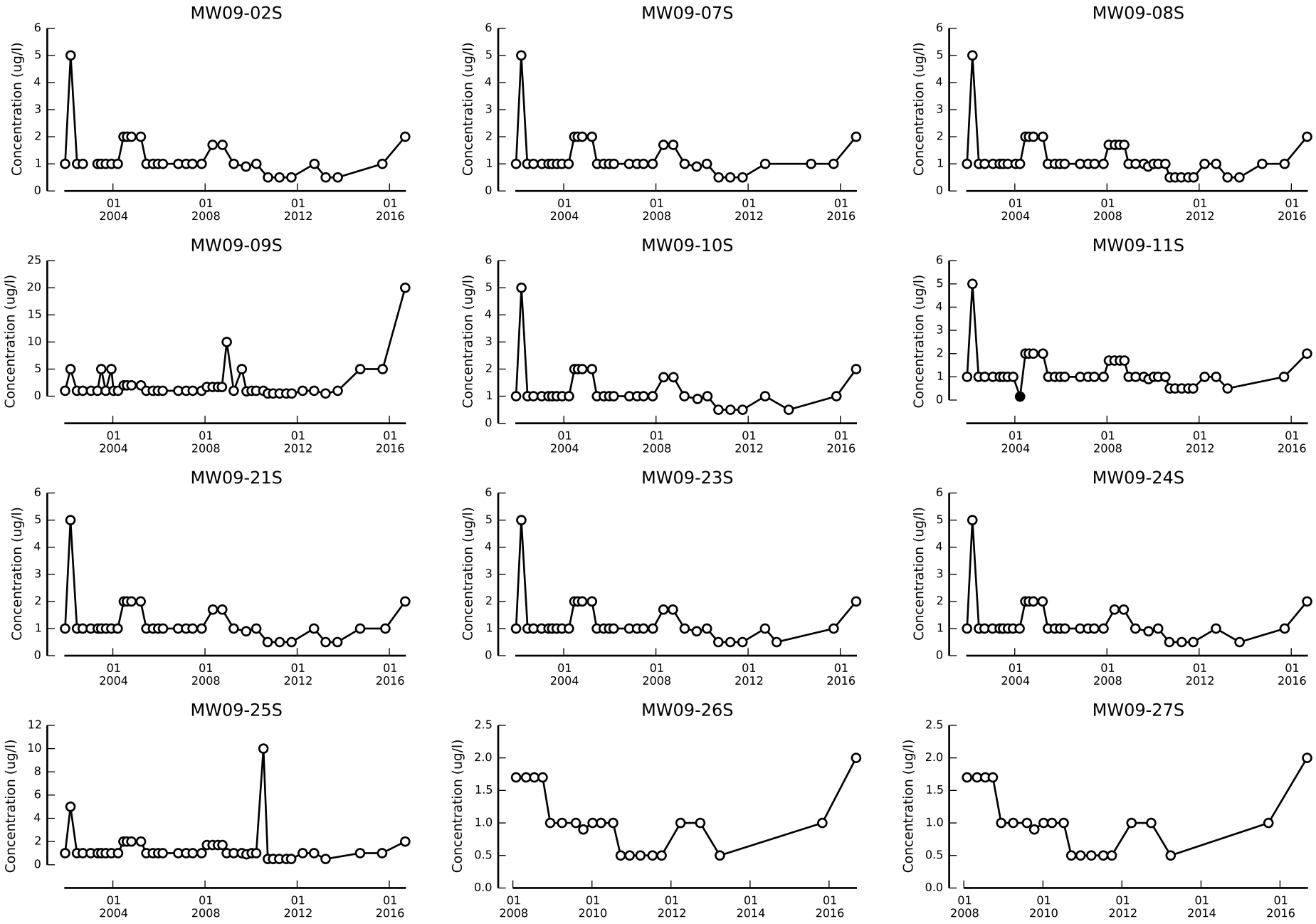
STYRENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 126 of 133

● Detected
○ Not Detected, shown at detection limit



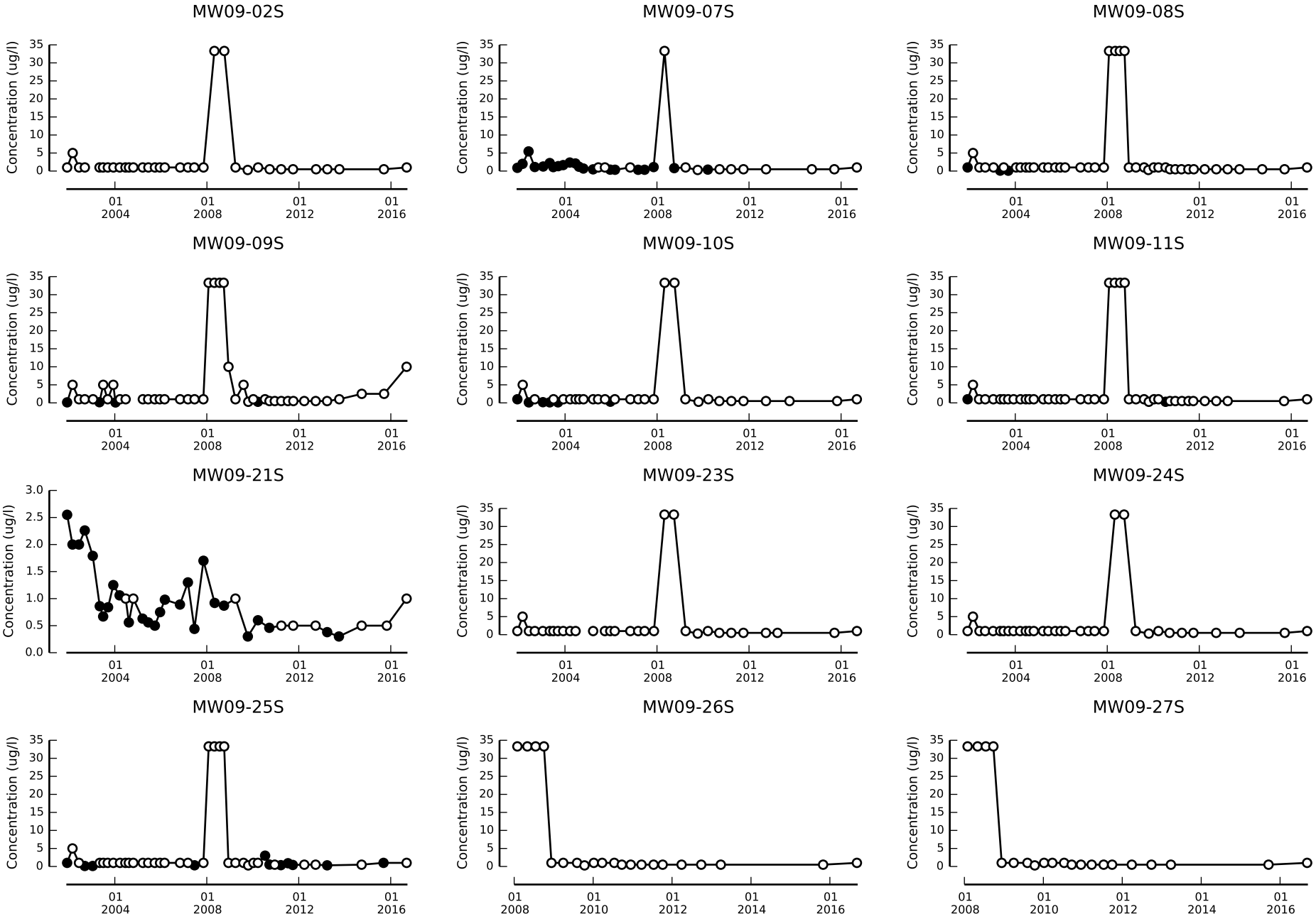
TETRACHLOROETHENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 127 of 133

● Detected
○ Not Detected, shown at detection limit



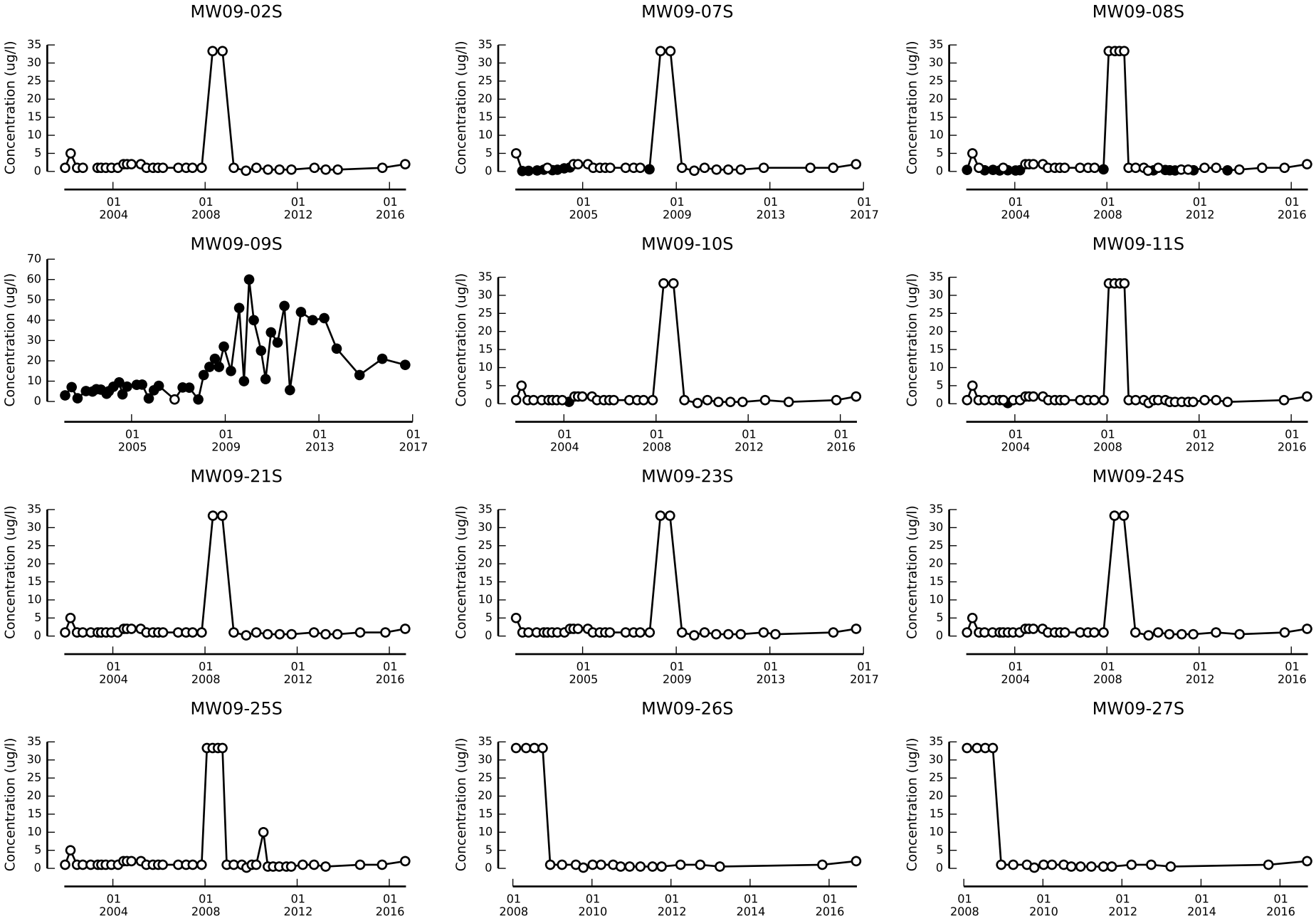
TOLUENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 128 of 133

● Detected
○ Not Detected, shown at detection limit



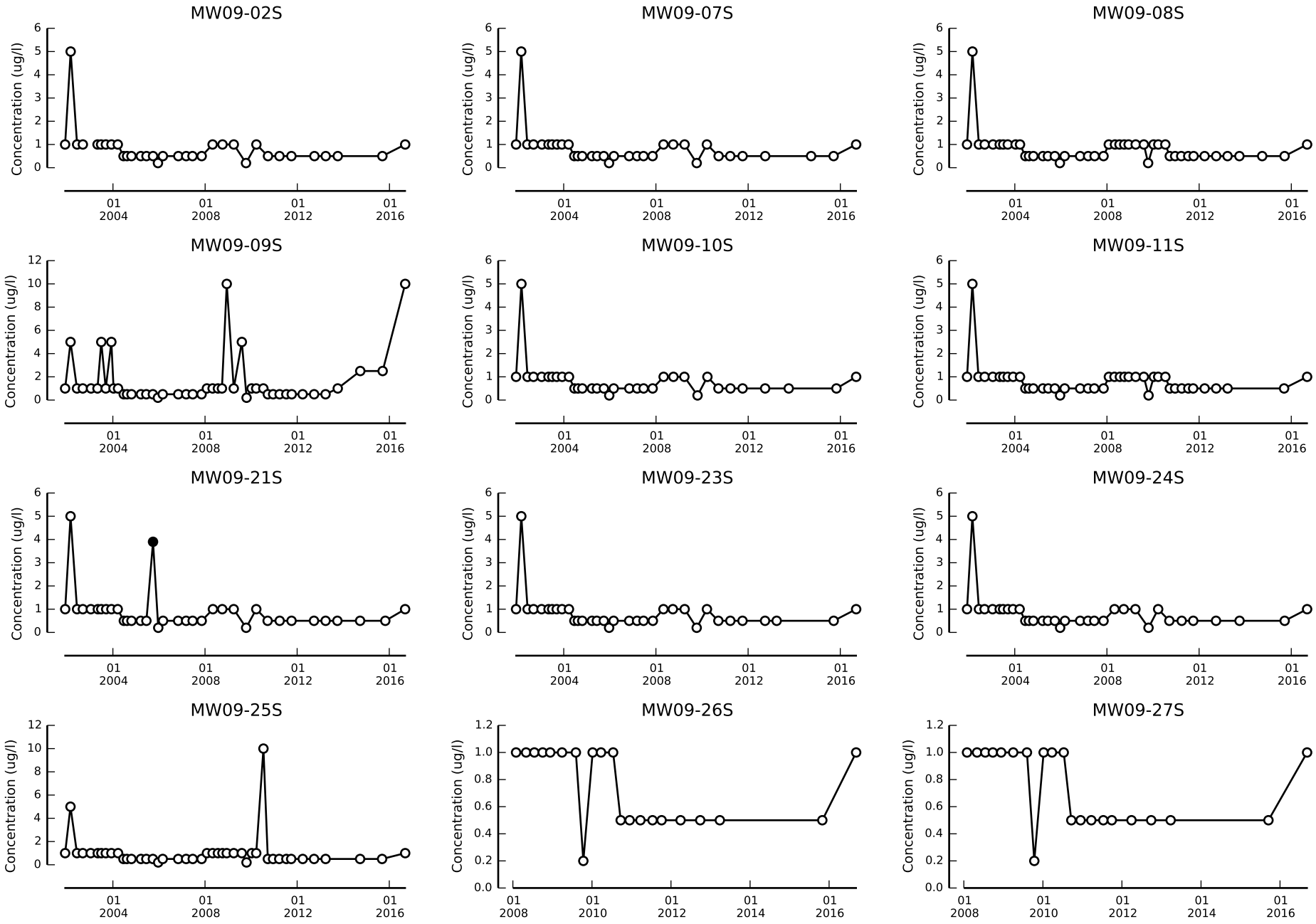
TRANS-1,2-DICHLOROETHENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 129 of 133

● Detected
○ Not Detected, shown at detection limit



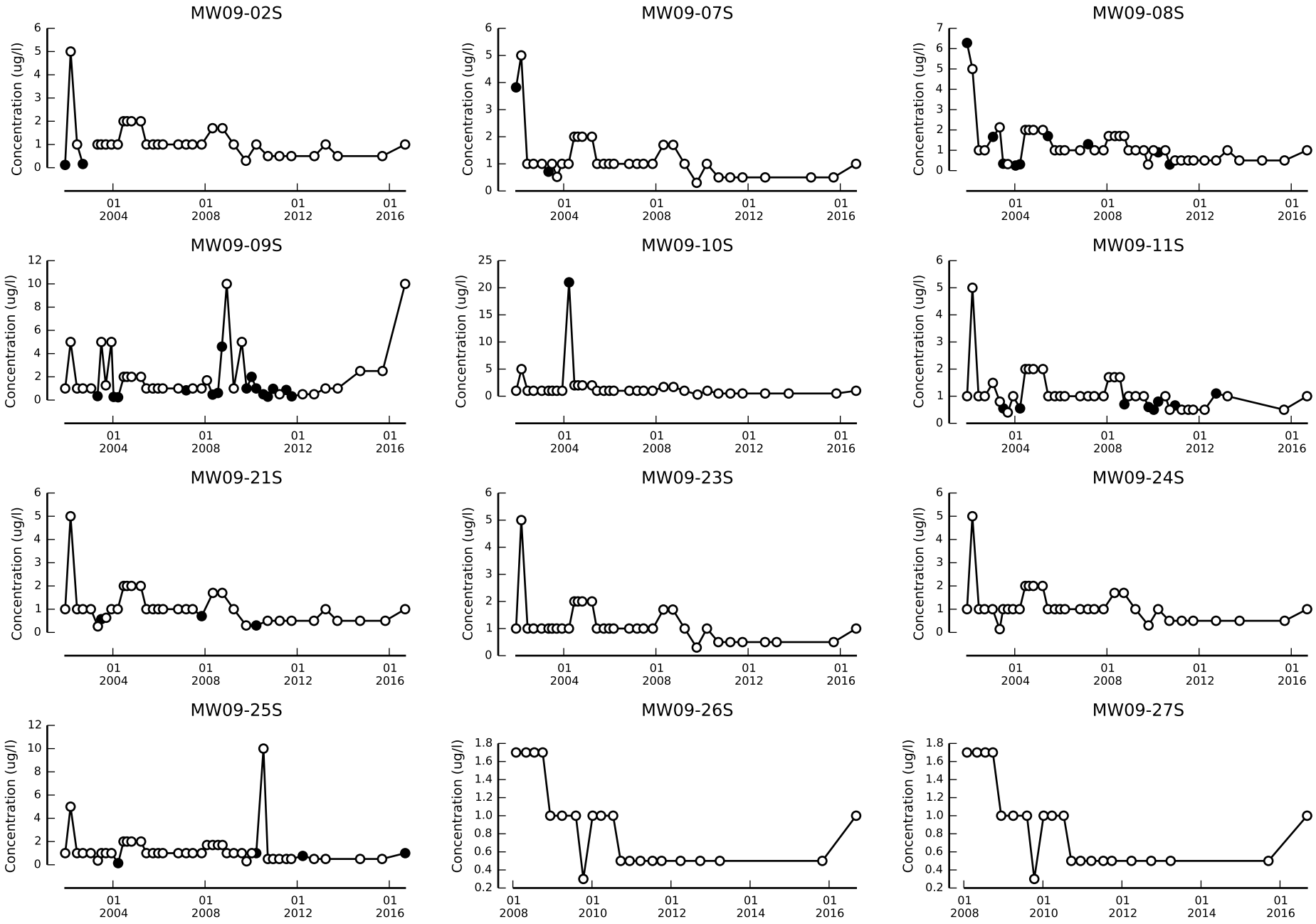
TRANS-1,3-DICHLOROPROPENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 130 of 133

● Detected
○ Not Detected, shown at detection limit



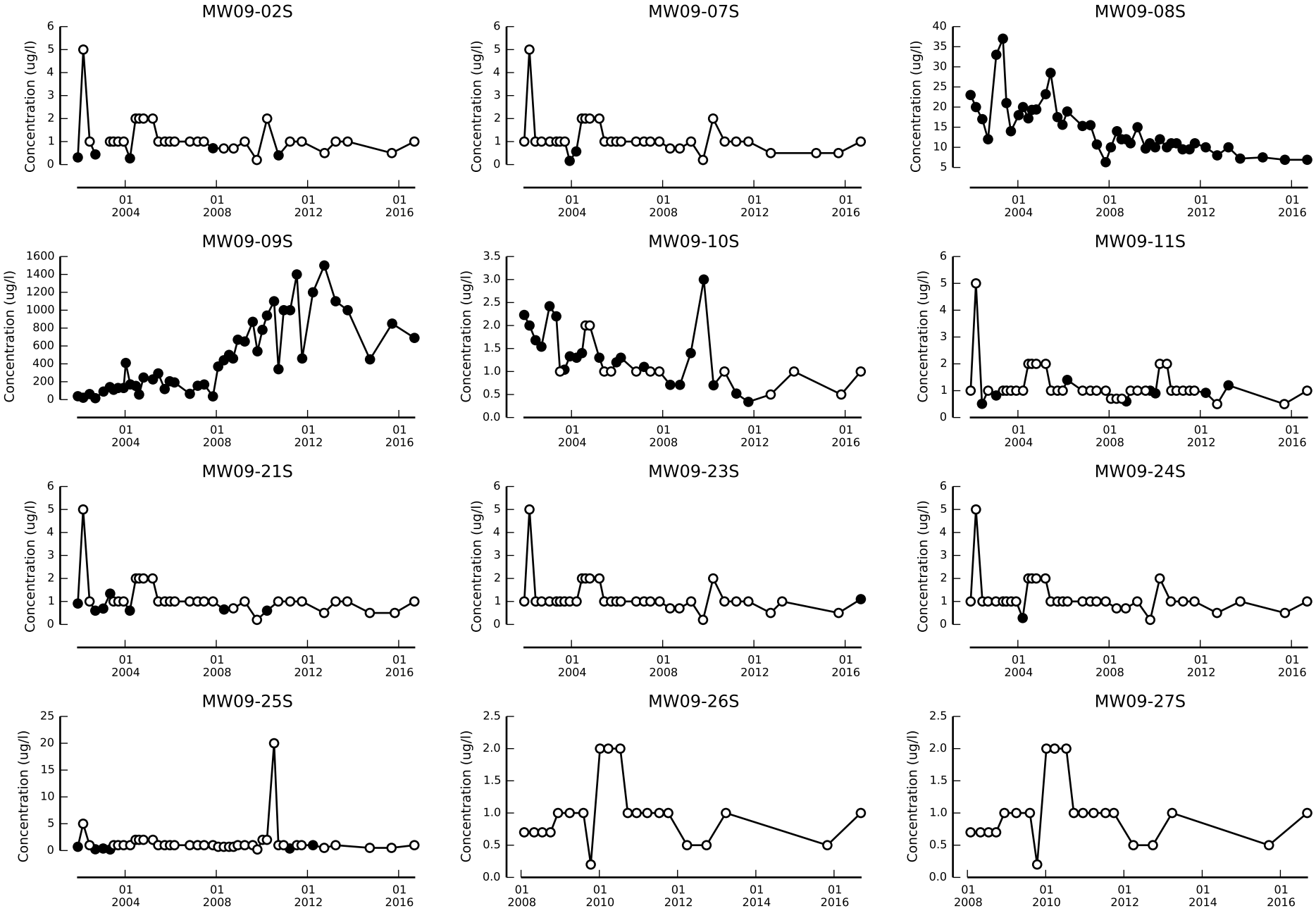
TRICHLOROETHENE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 131 of 133

● Detected
○ Not Detected, shown at detection limit



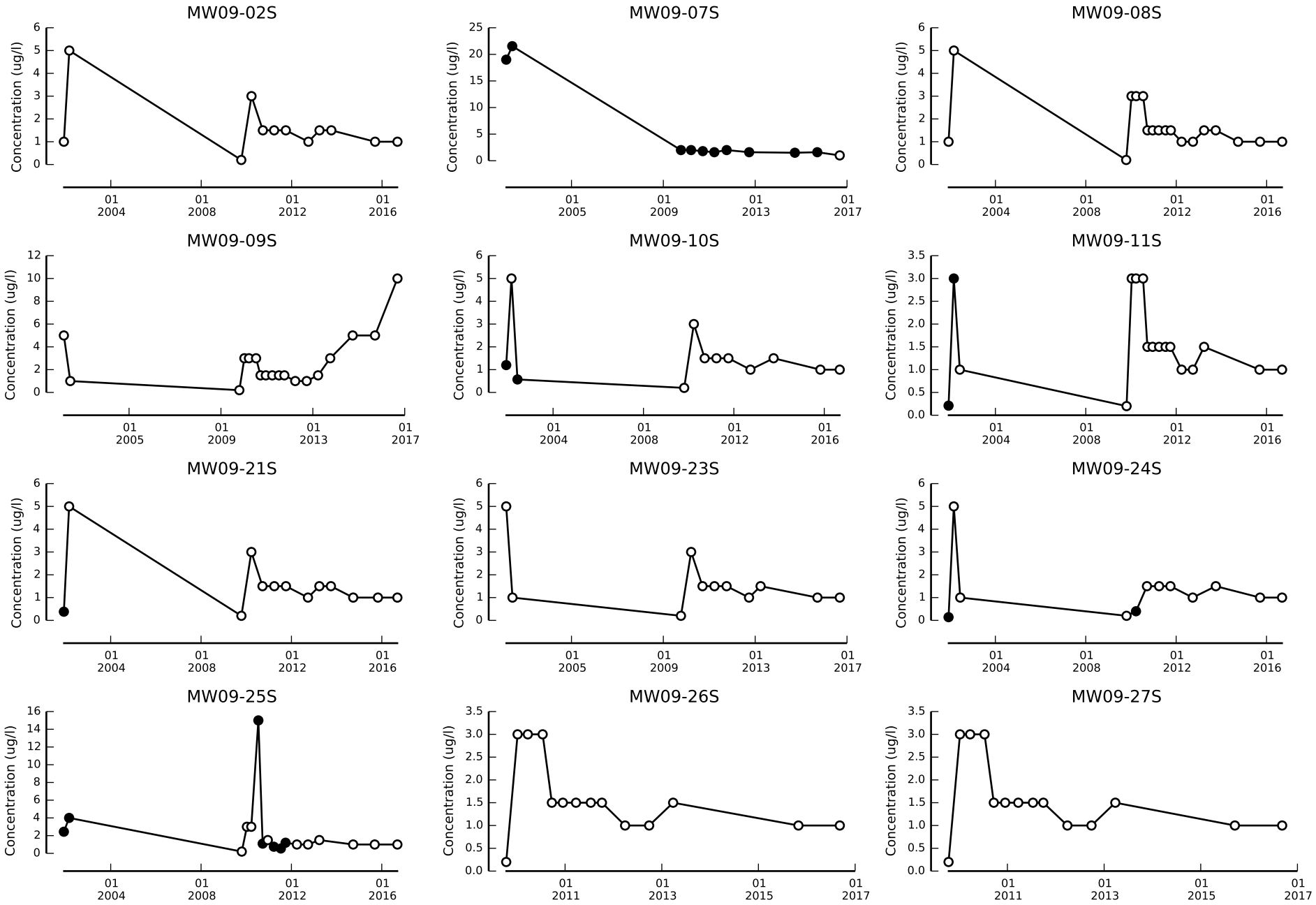
VINYL CHLORIDE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 132 of 133

● Detected
○ Not Detected, shown at detection limit



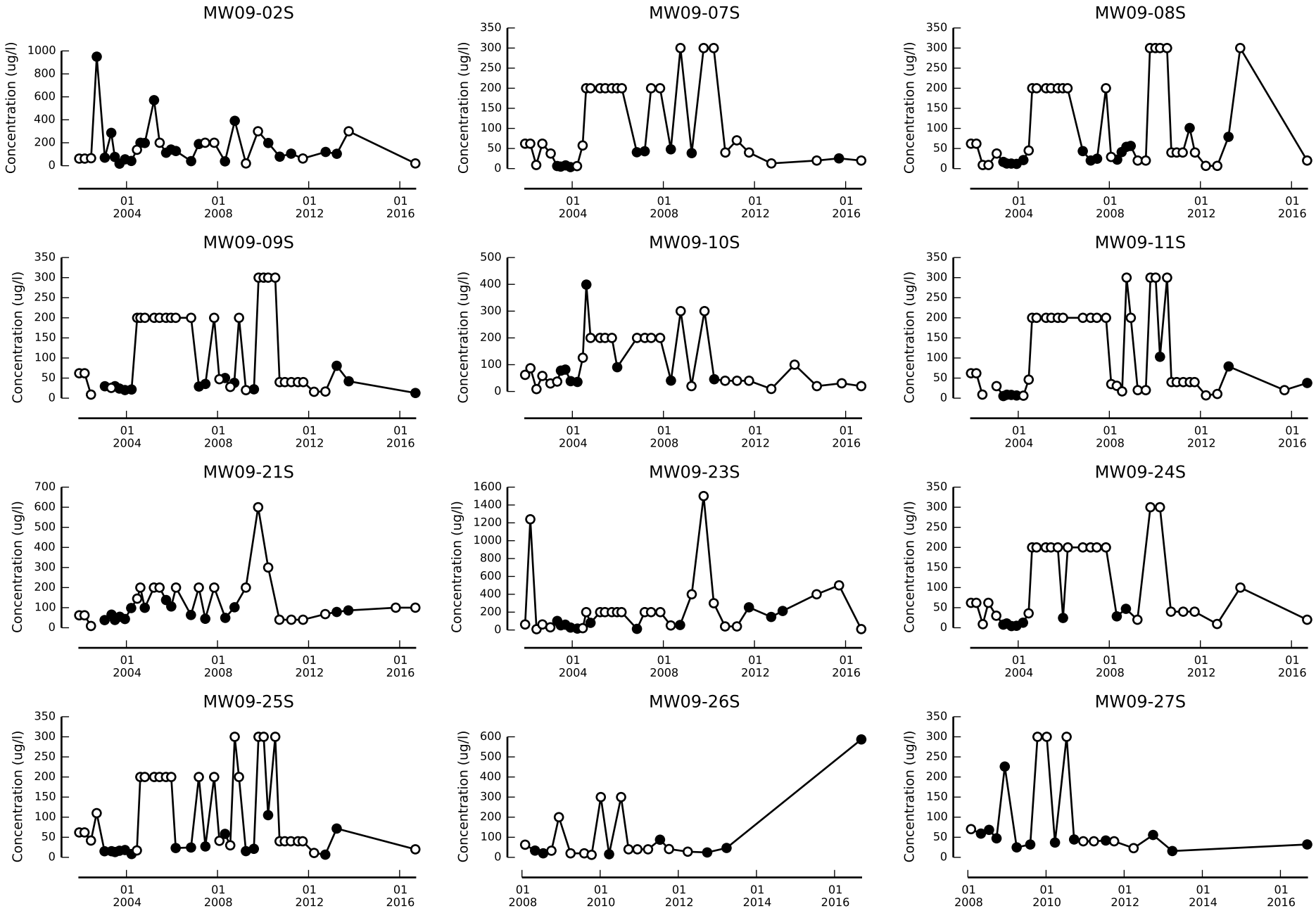
XYLENES, TOTAL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 133 of 133

● Detected
○ Not Detected, shown at detection limit



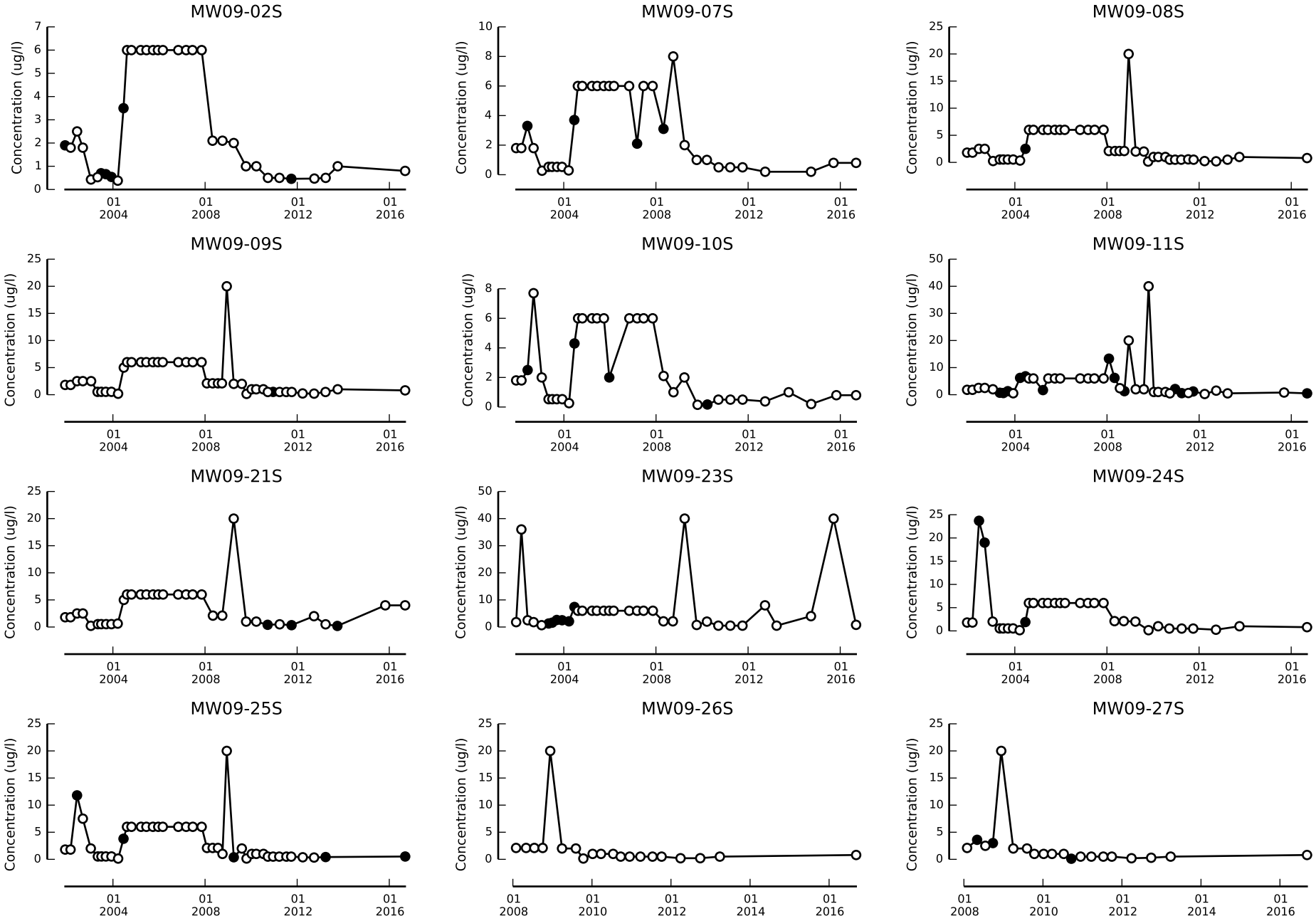
ALUMINUM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 22

● Detected
○ Not Detected, shown at detection limit



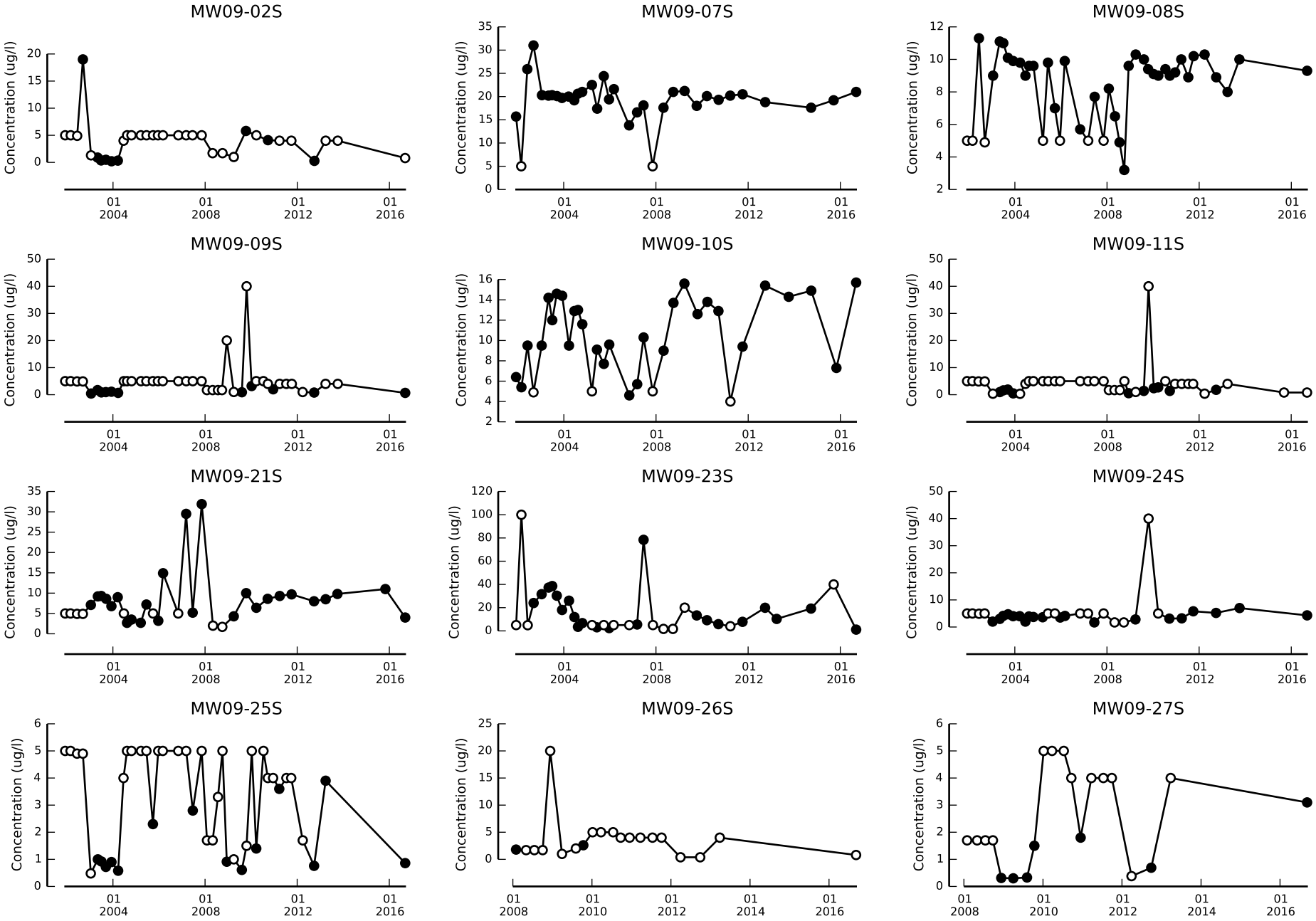
ANTIMONY in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 22

● Detected
○ Not Detected, shown at detection limit



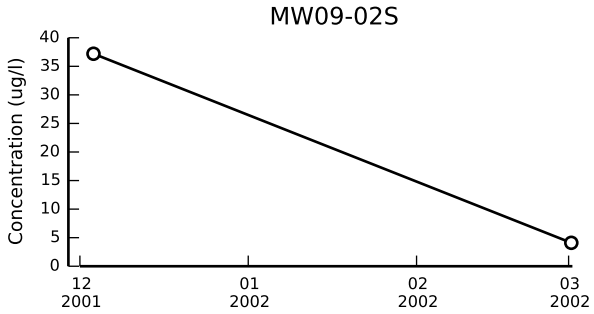
ARSENIC in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 22

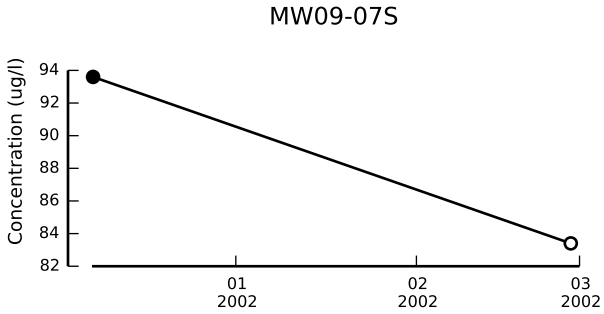
● Detected
○ Not Detected, shown at detection limit

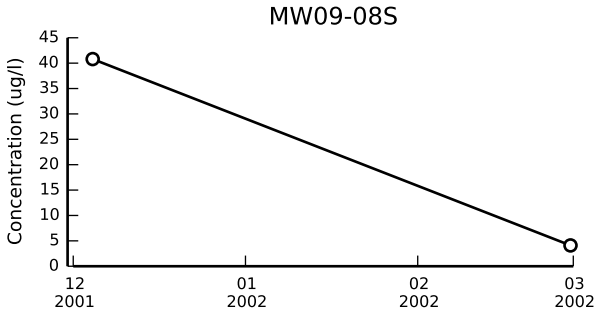


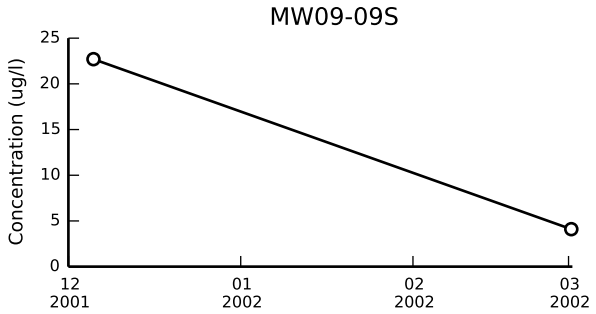
BARIUM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 22

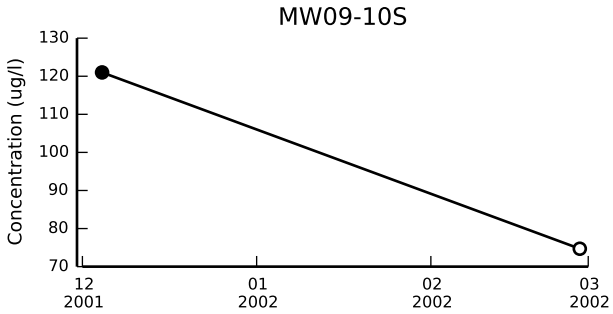
● Detected
○ Not Detected, shown at detection limit

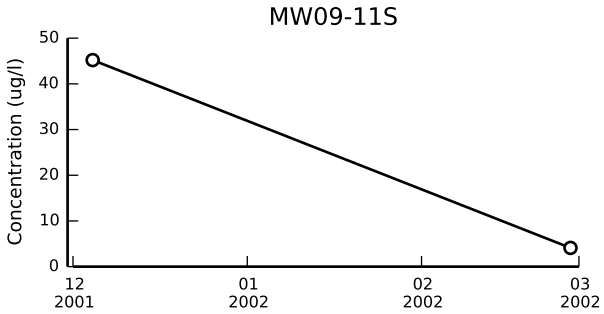


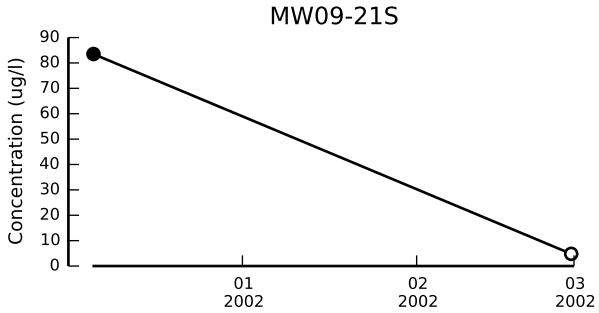


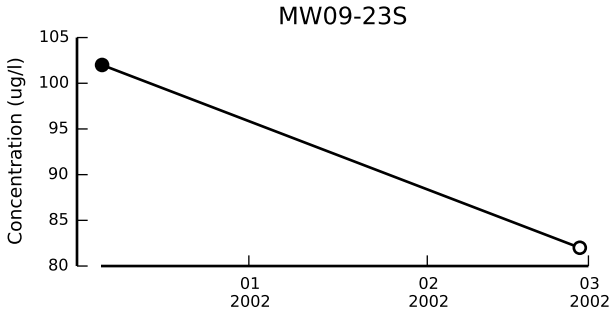


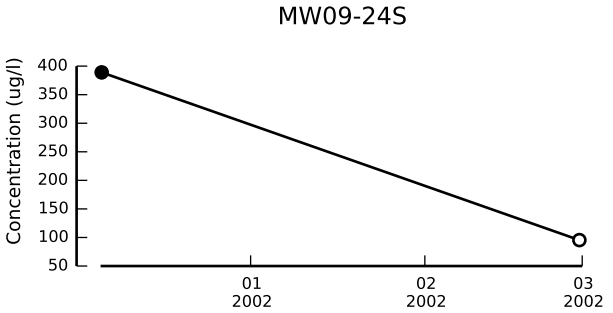


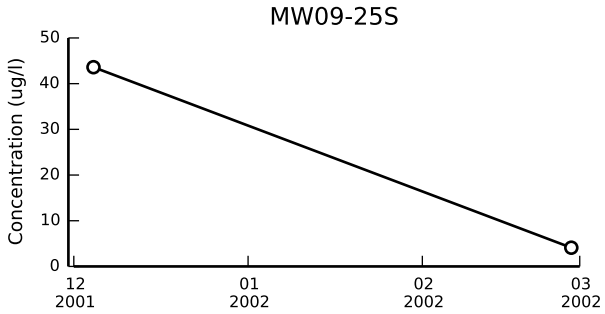












MW09-26S

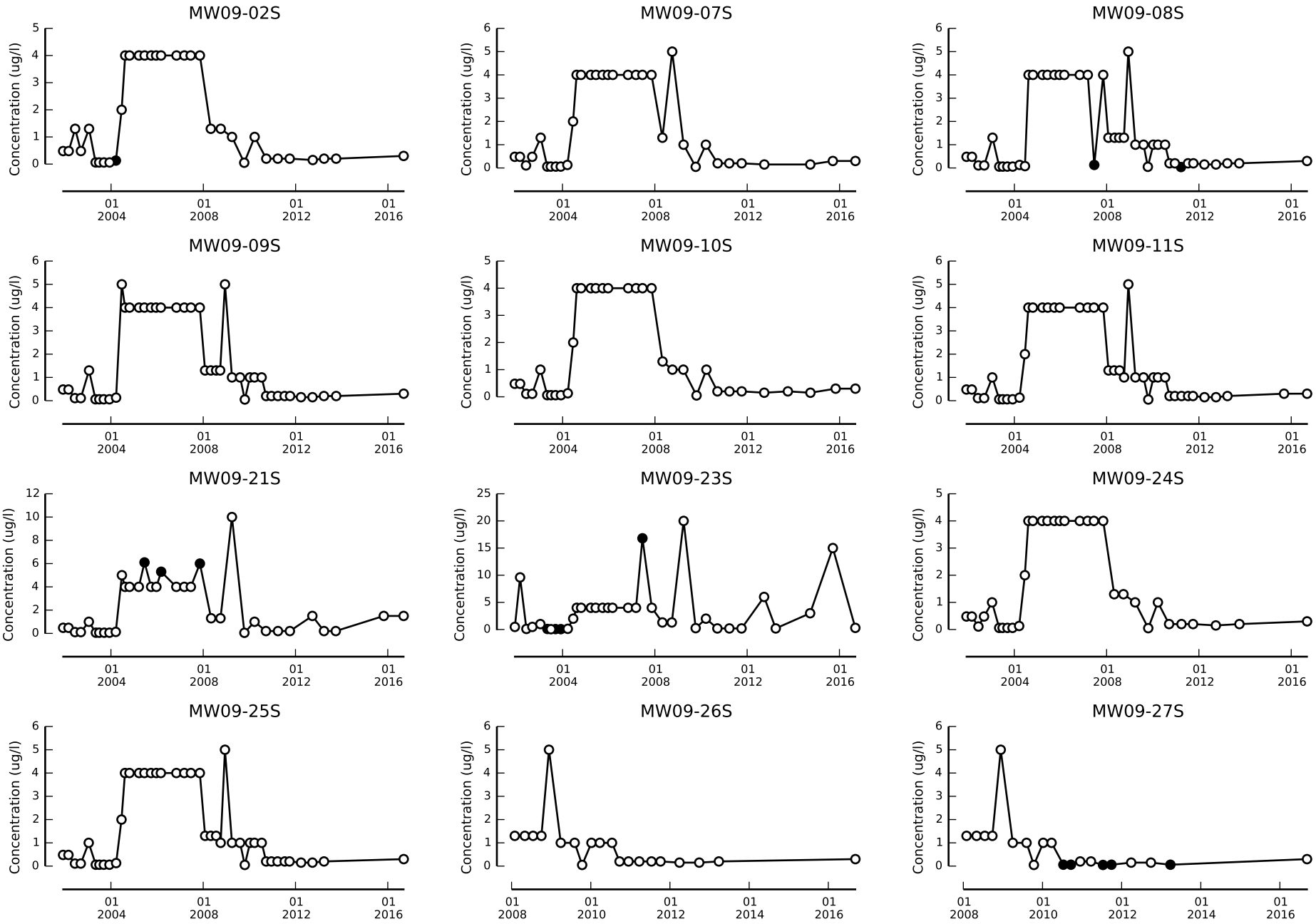
Not Sampled

MW09-27S

Not Sampled

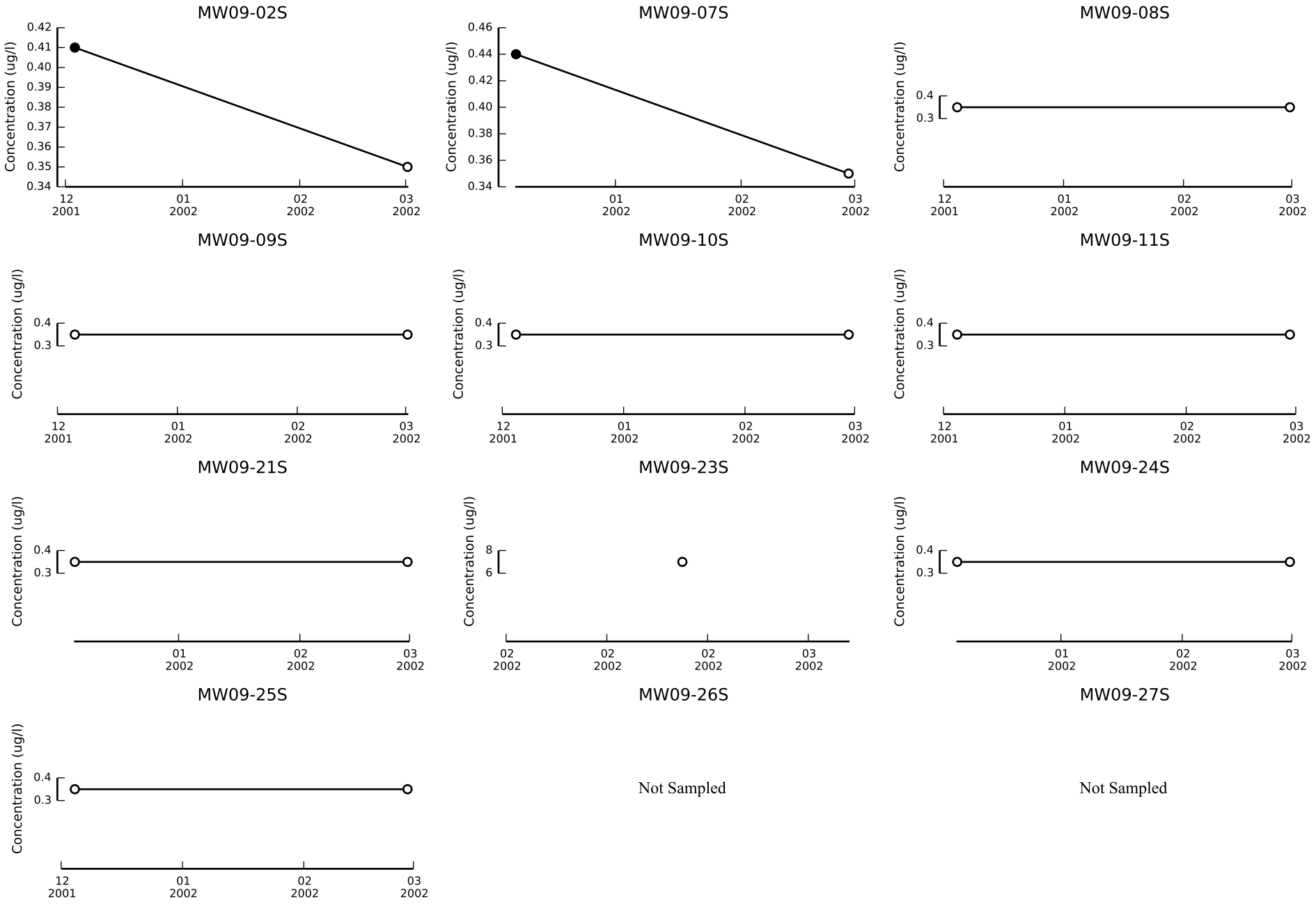
BERYLLIUM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 22

● Detected
○ Not Detected, shown at detection limit



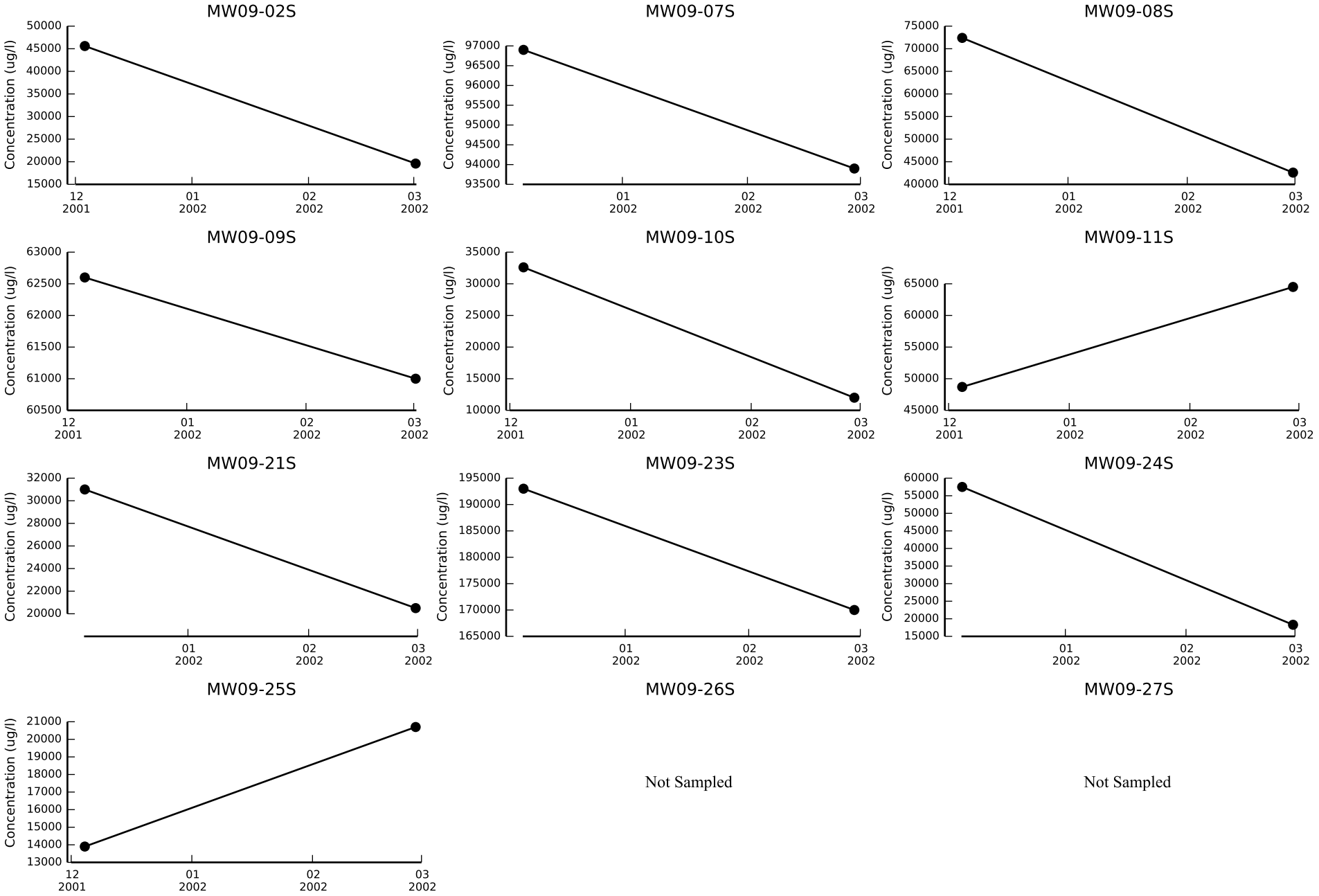
CADMIUM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 22

● Detected
○ Not Detected, shown at detection limit



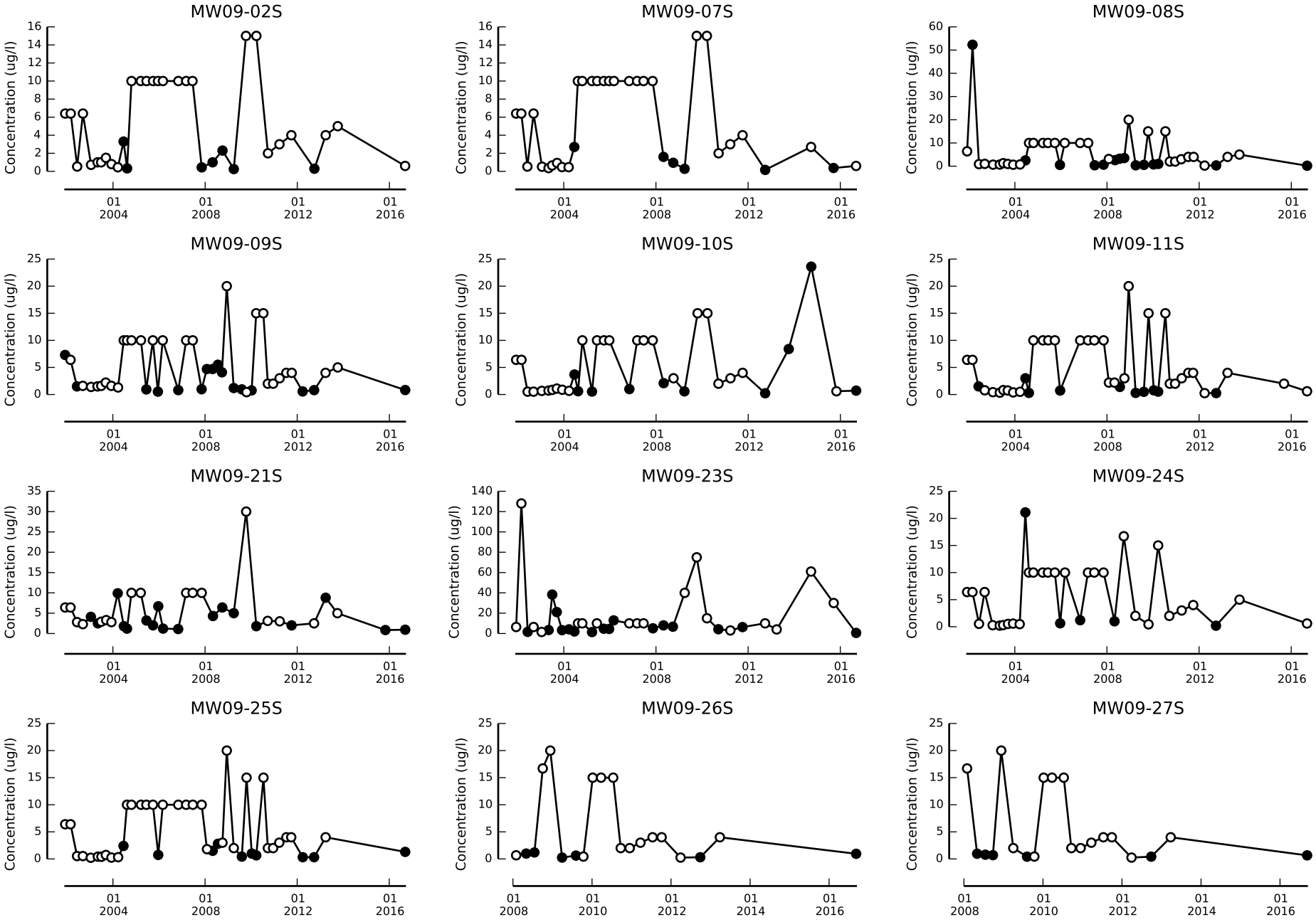
CALCIUM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 22

● Detected
○ Not Detected, shown at detection limit



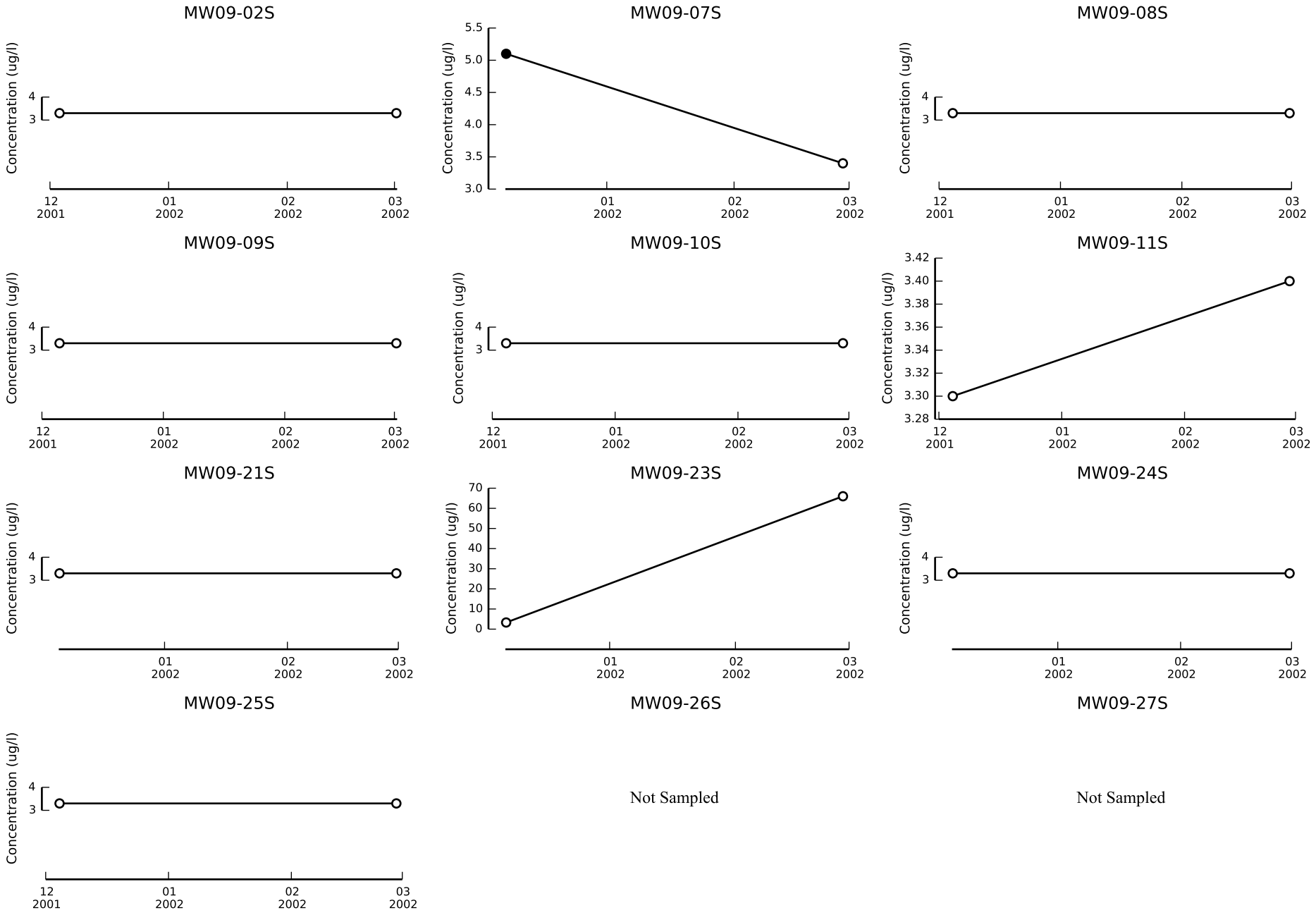
CHROMIUM, TOTAL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 22

● Detected
○ Not Detected, shown at detection limit



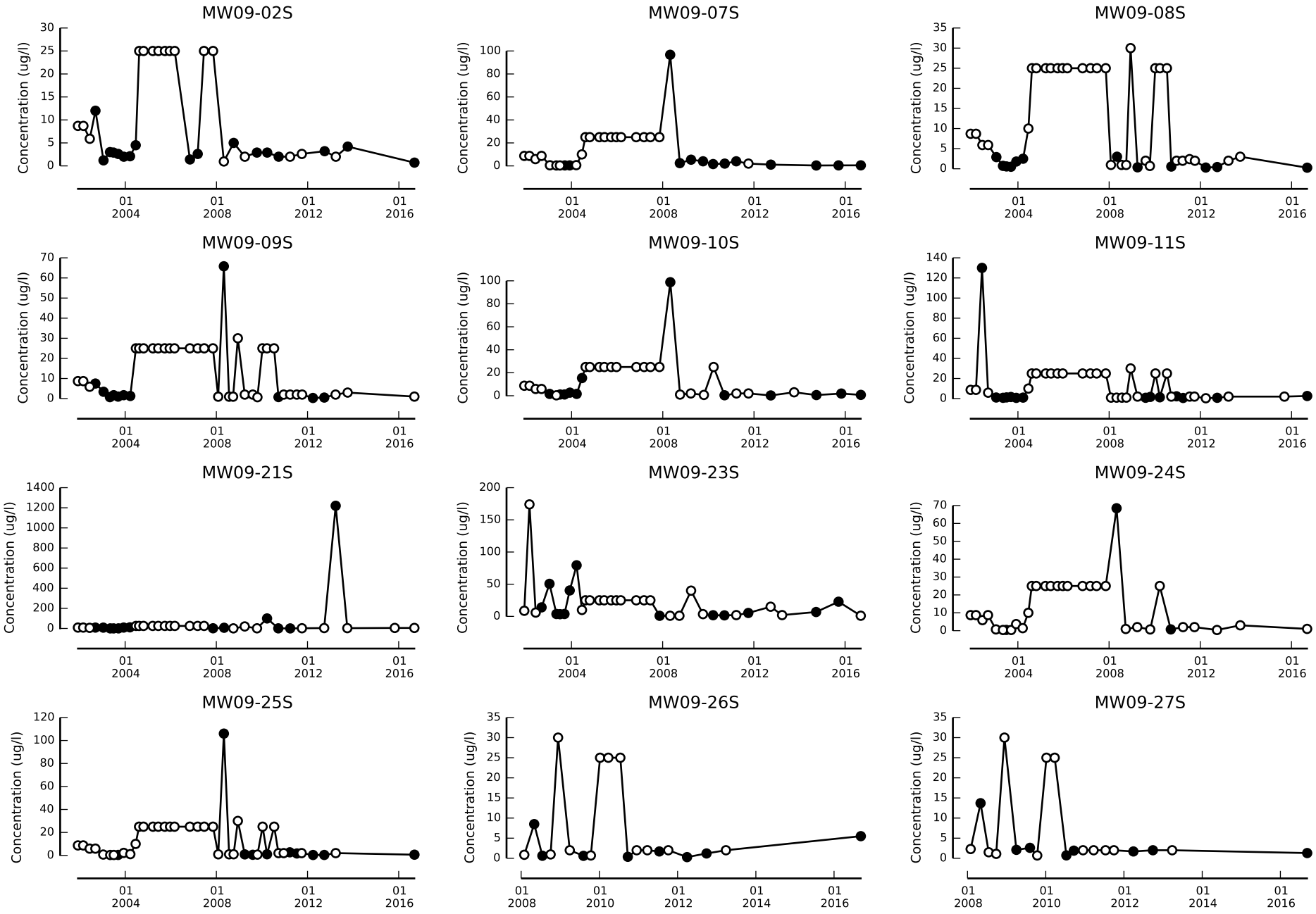
COBALT in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 22

● Detected
○ Not Detected, shown at detection limit



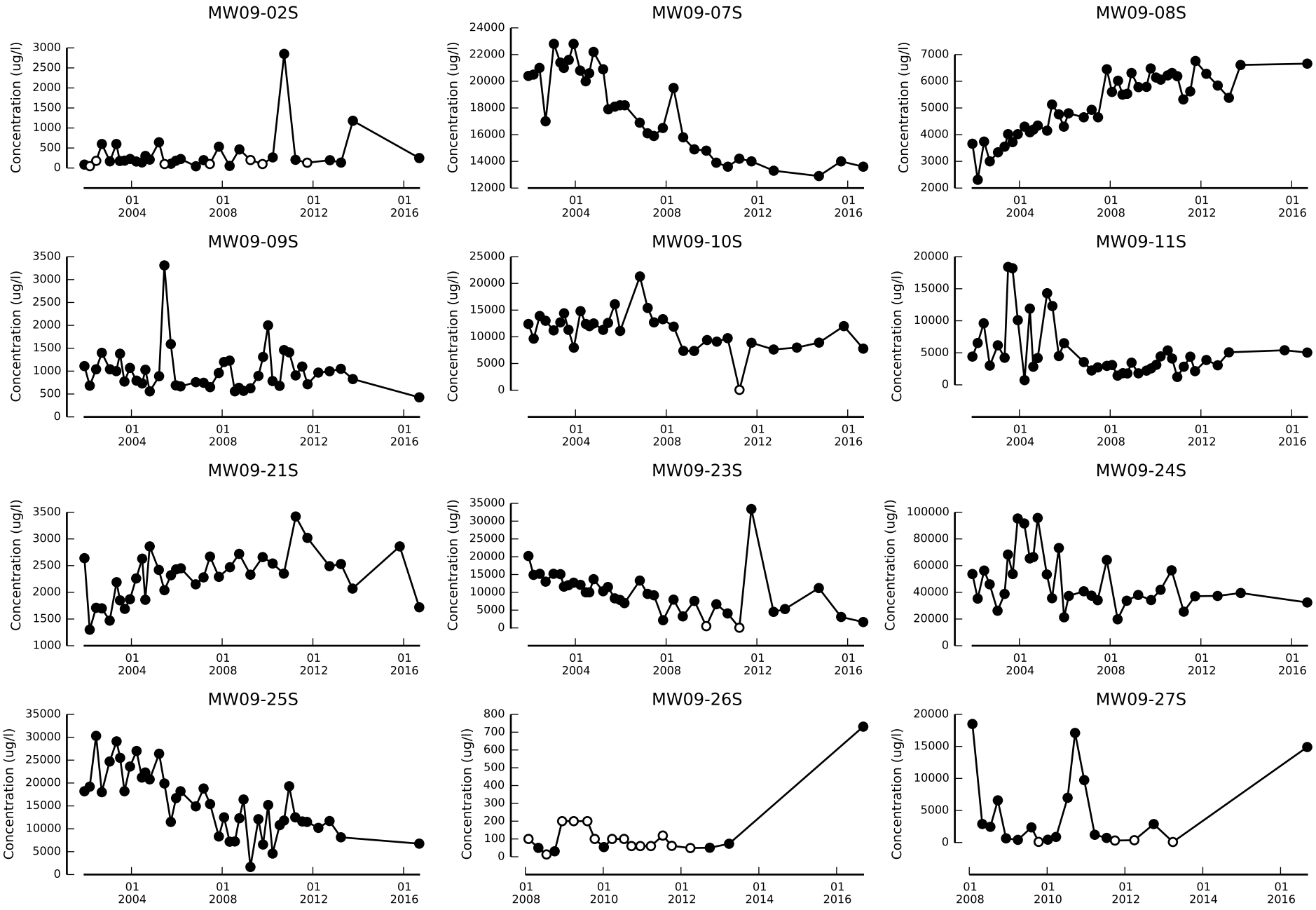
COPPER in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 22

● Detected
○ Not Detected, shown at detection limit



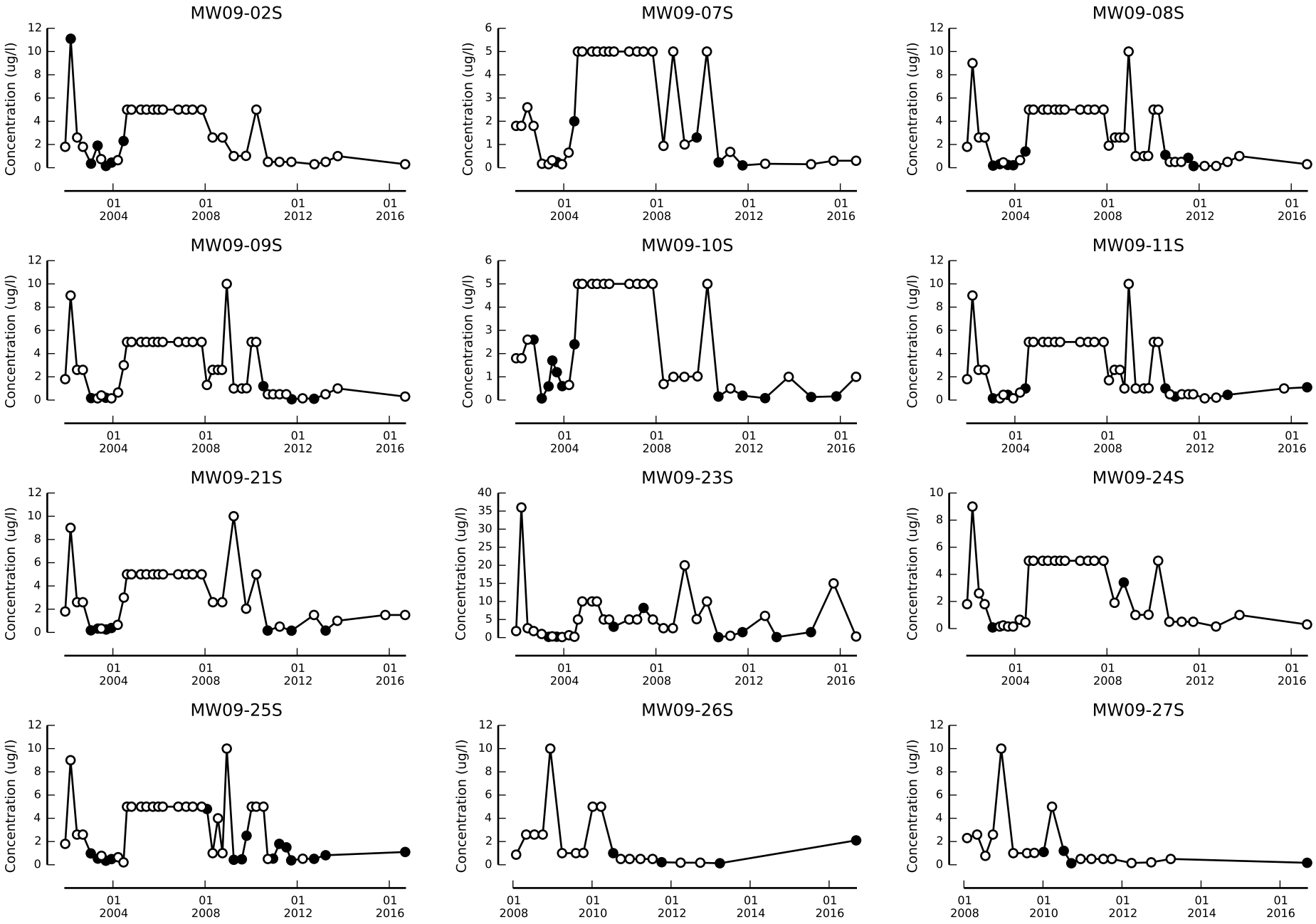
IRON in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 22

● Detected
○ Not Detected, shown at detection limit



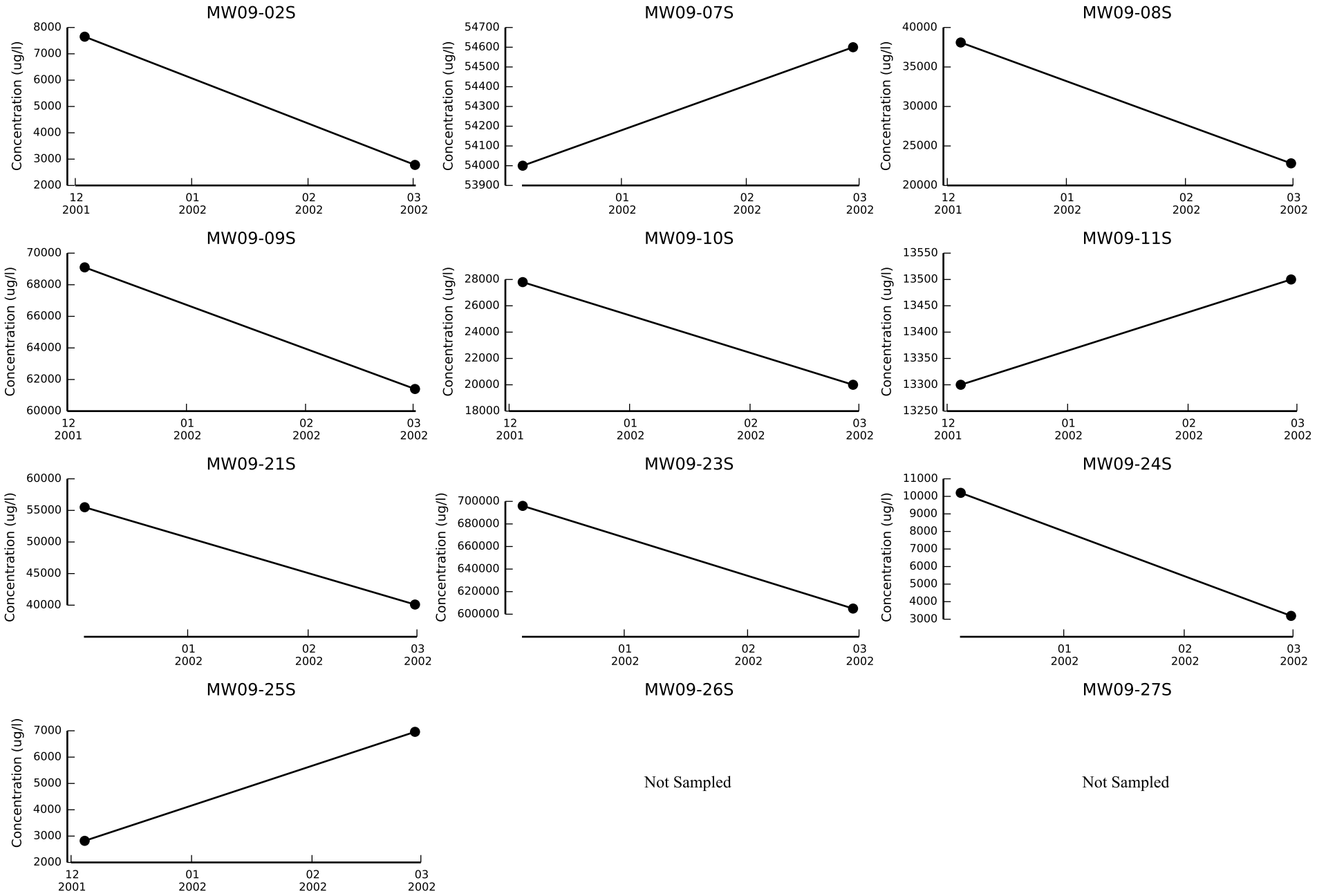
LEAD in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 22

● Detected
○ Not Detected, shown at detection limit



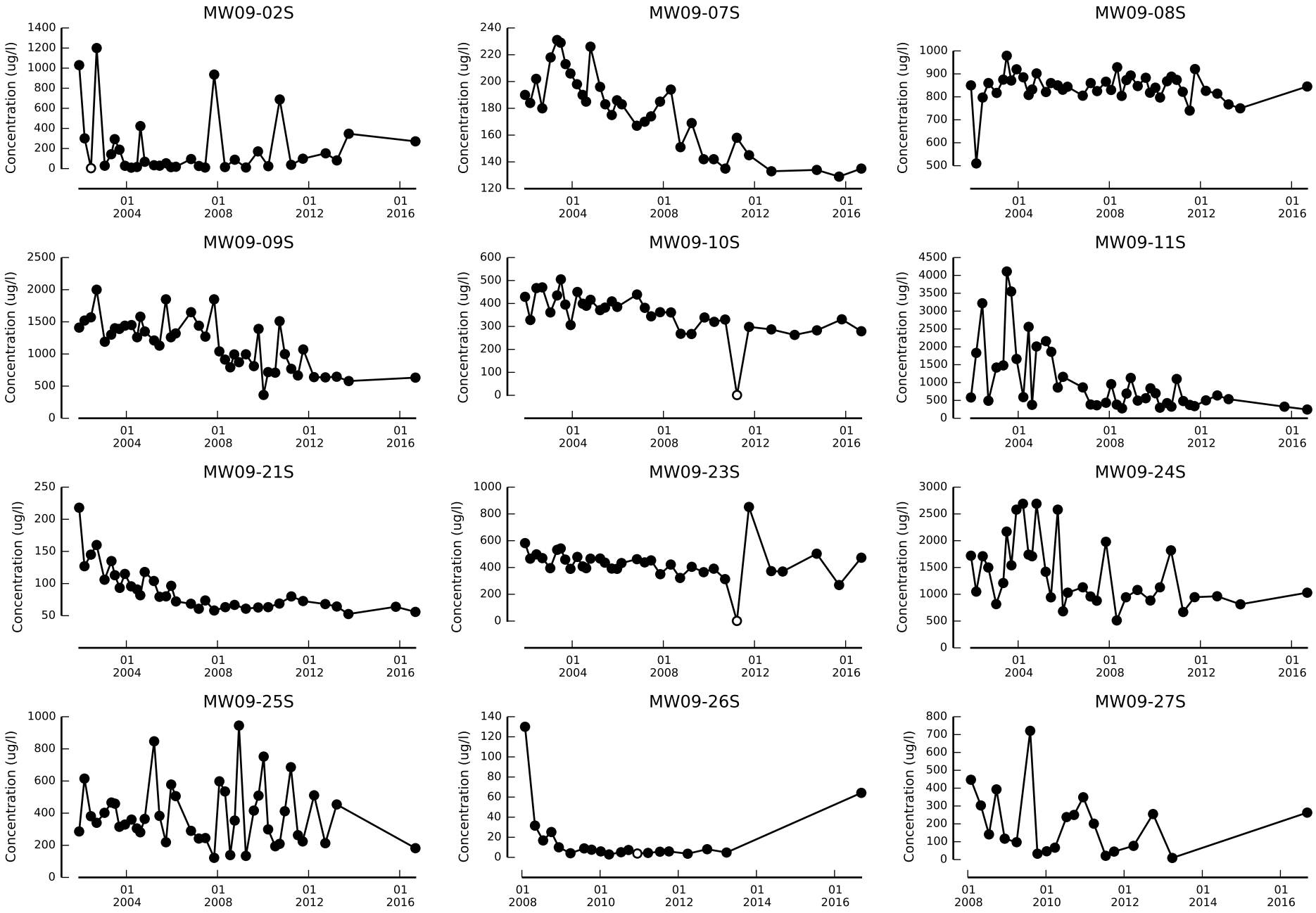
MAGNESIUM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 22

● Detected
○ Not Detected, shown at detection limit



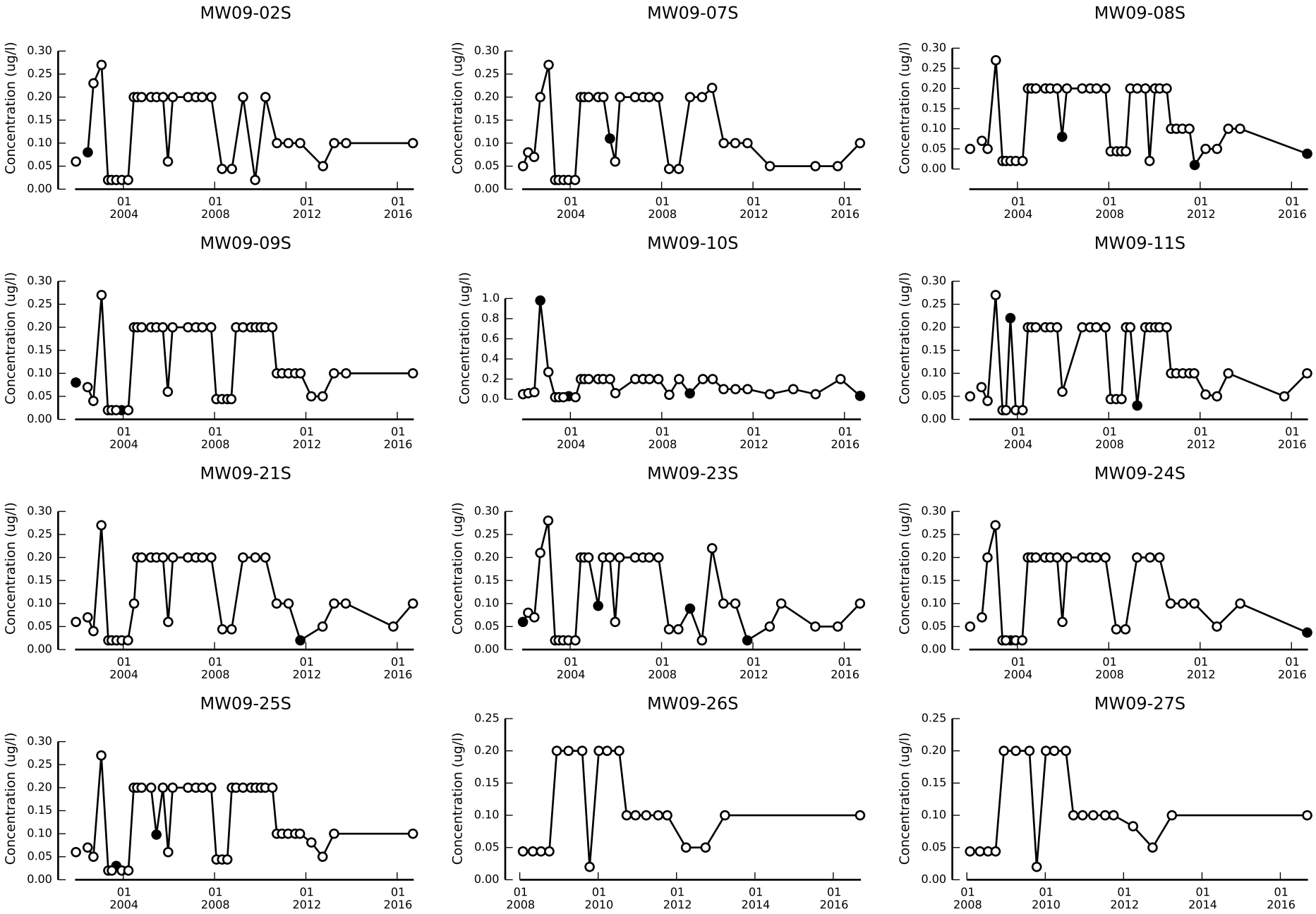
MANGANESE in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 22

● Detected
○ Not Detected, shown at detection limit



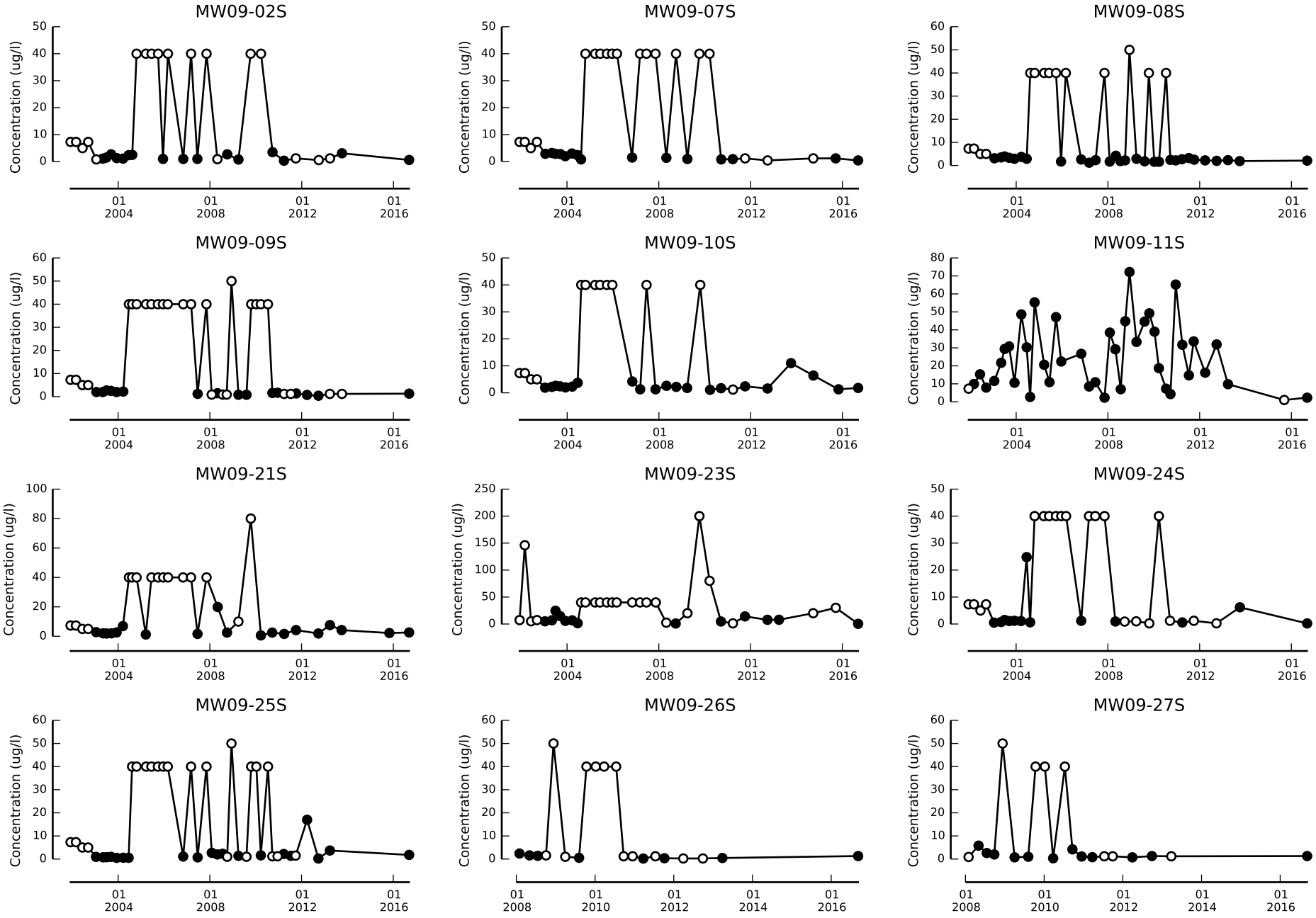
MERCURY in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 22

● Detected
○ Not Detected, shown at detection limit



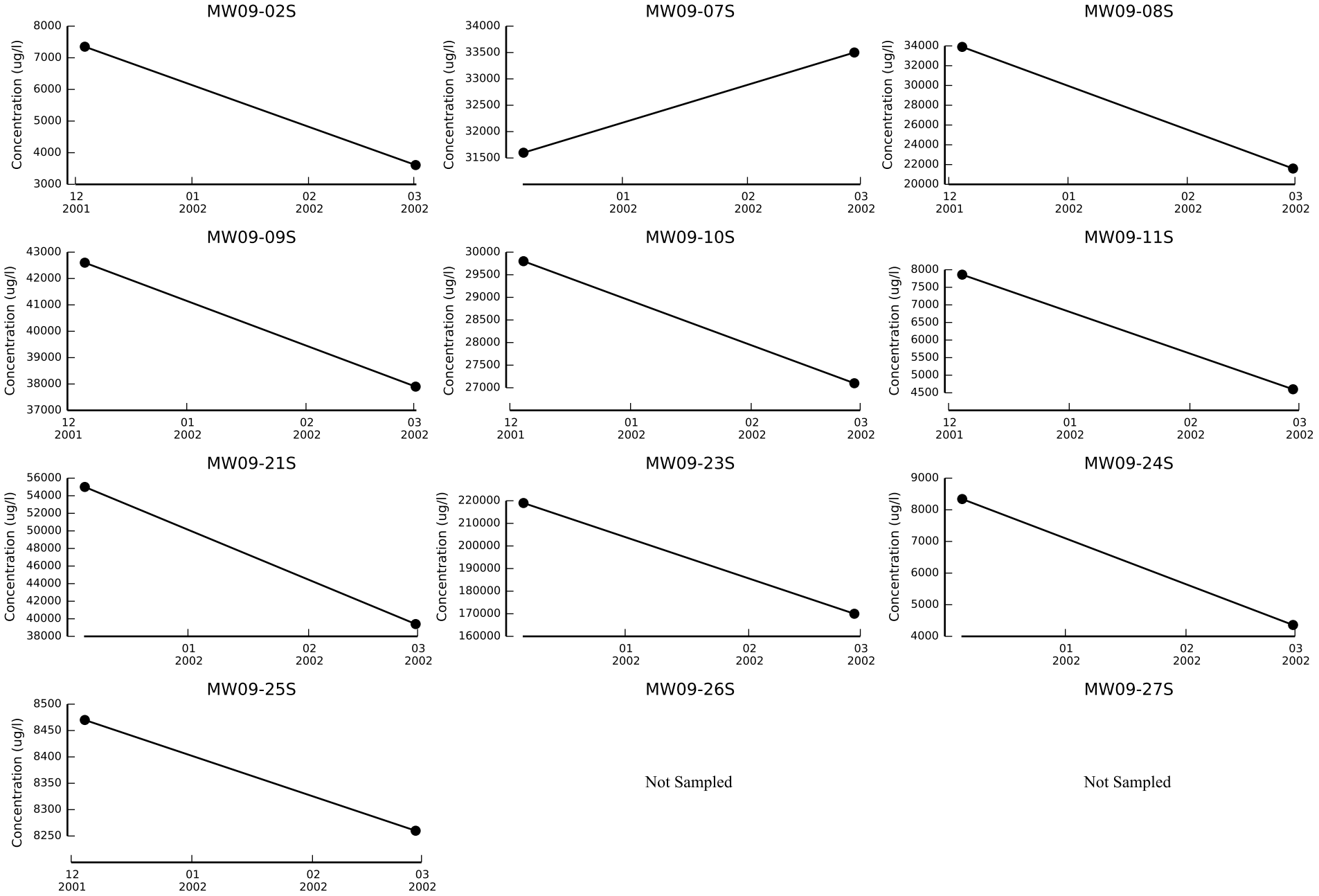
NICKEL in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 22

● Detected
○ Not Detected, shown at detection limit



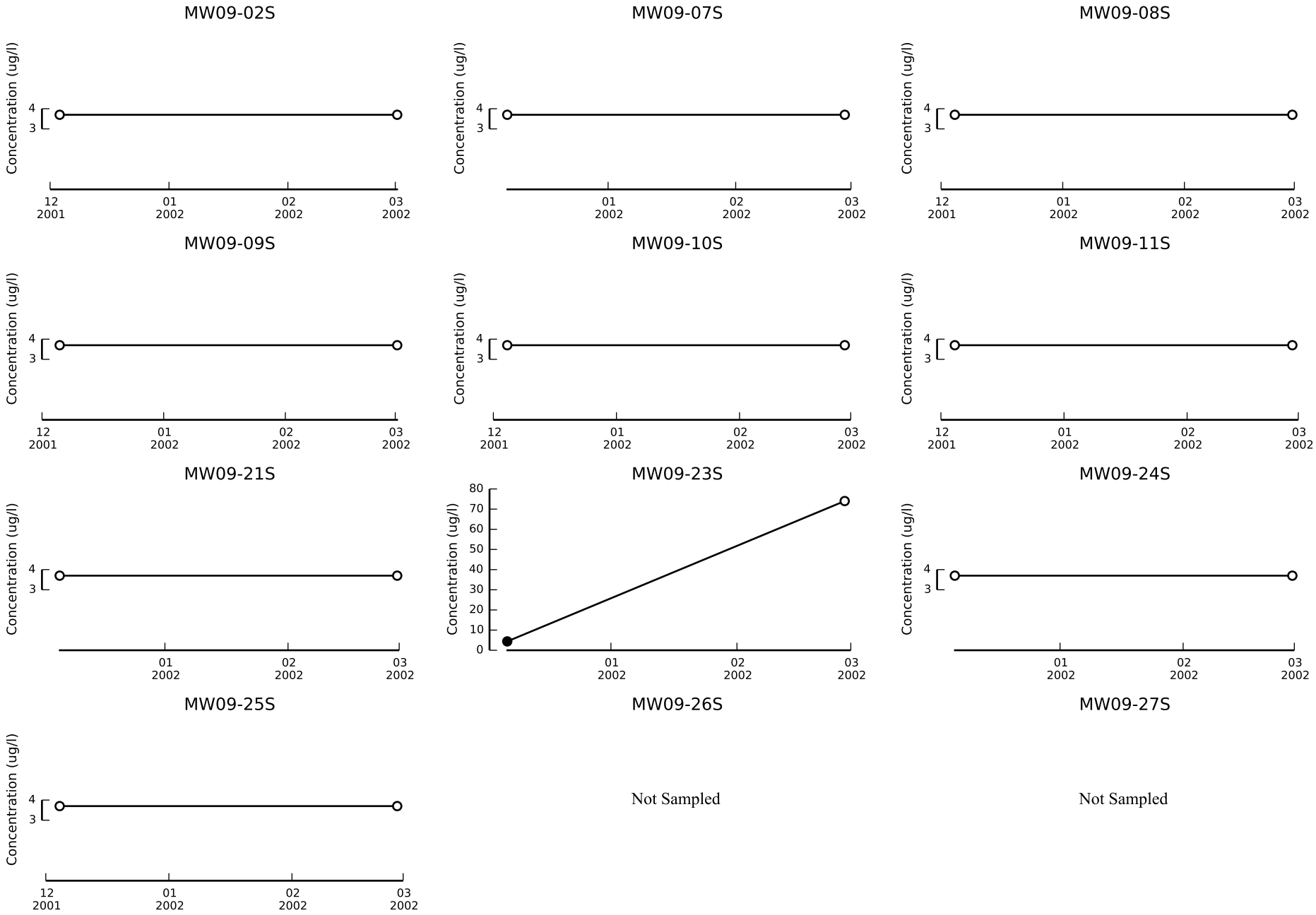
POTASSIUM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 22

● Detected
○ Not Detected, shown at detection limit



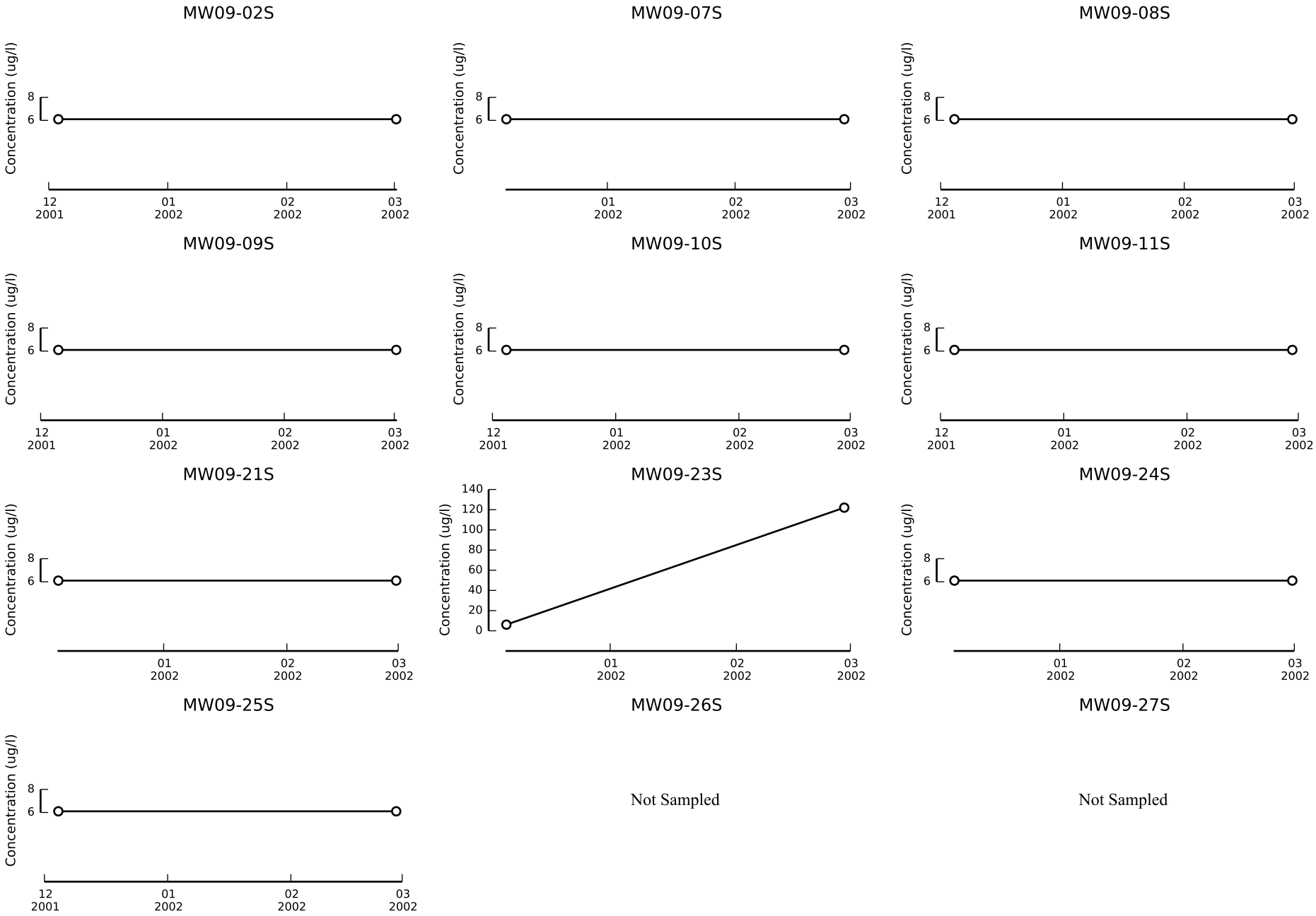
SELENIUM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 22

● Detected
○ Not Detected, shown at detection limit



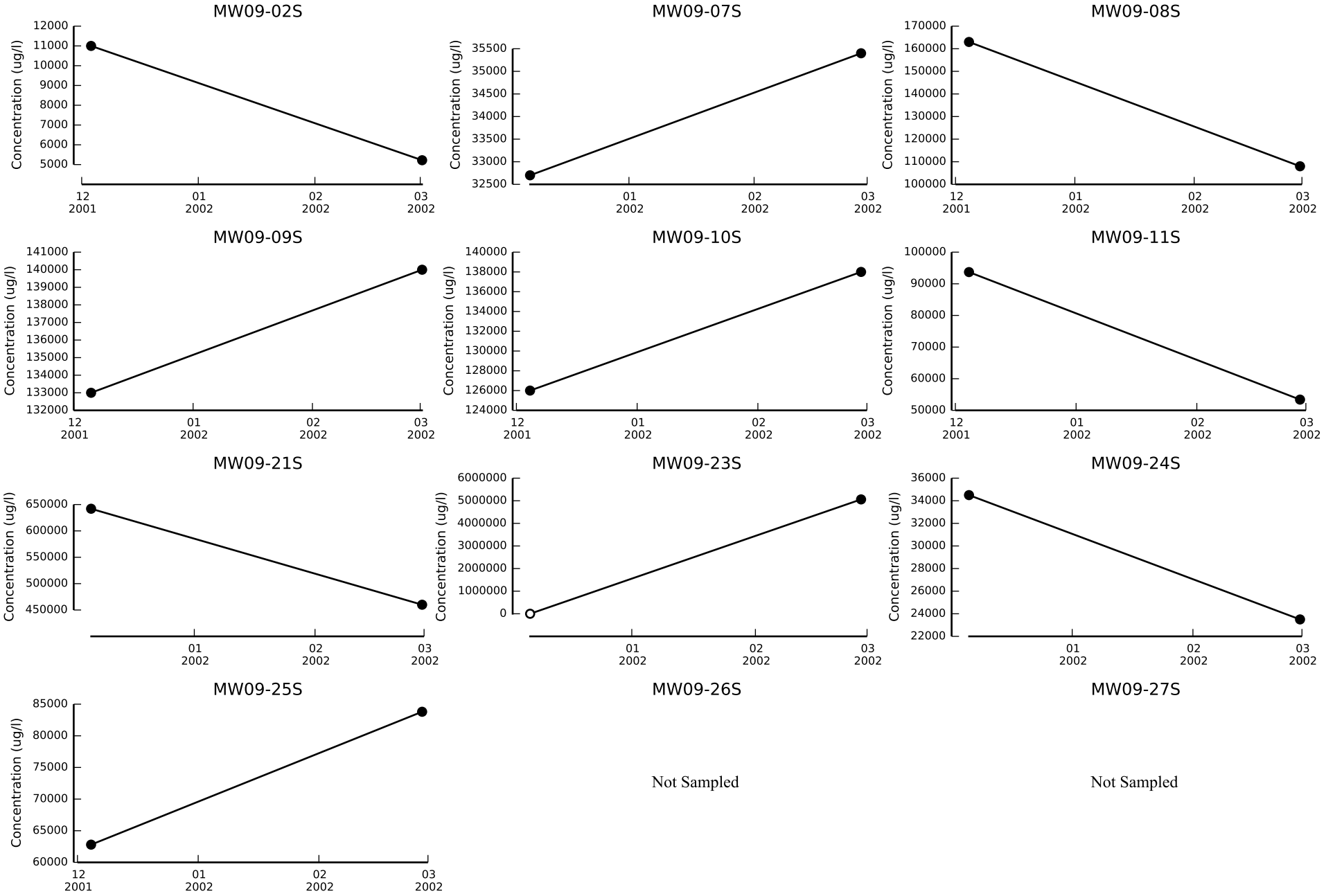
SILVER in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 22

● Detected
○ Not Detected, shown at detection limit



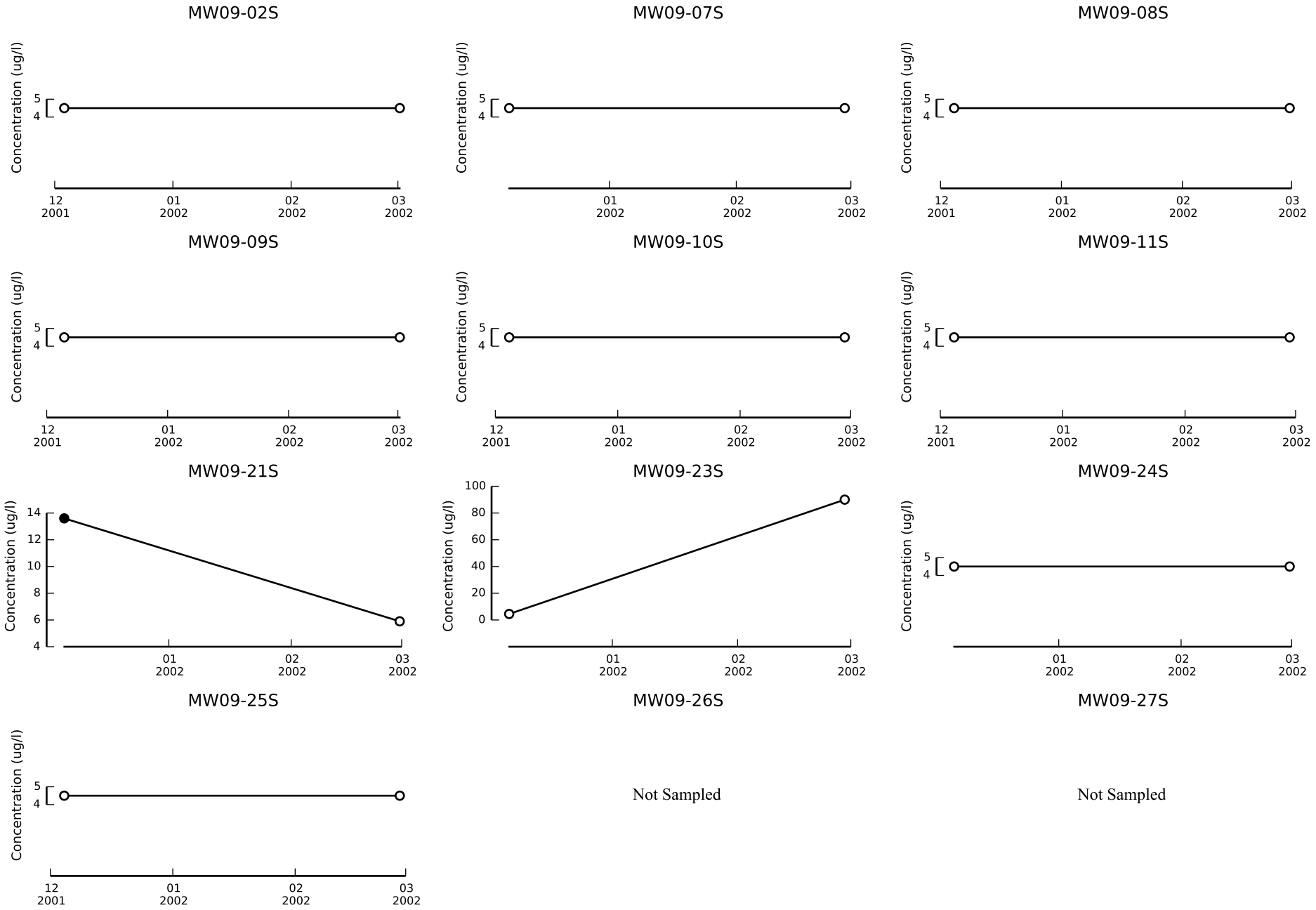
SODIUM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 22

● Detected
○ Not Detected, shown at detection limit



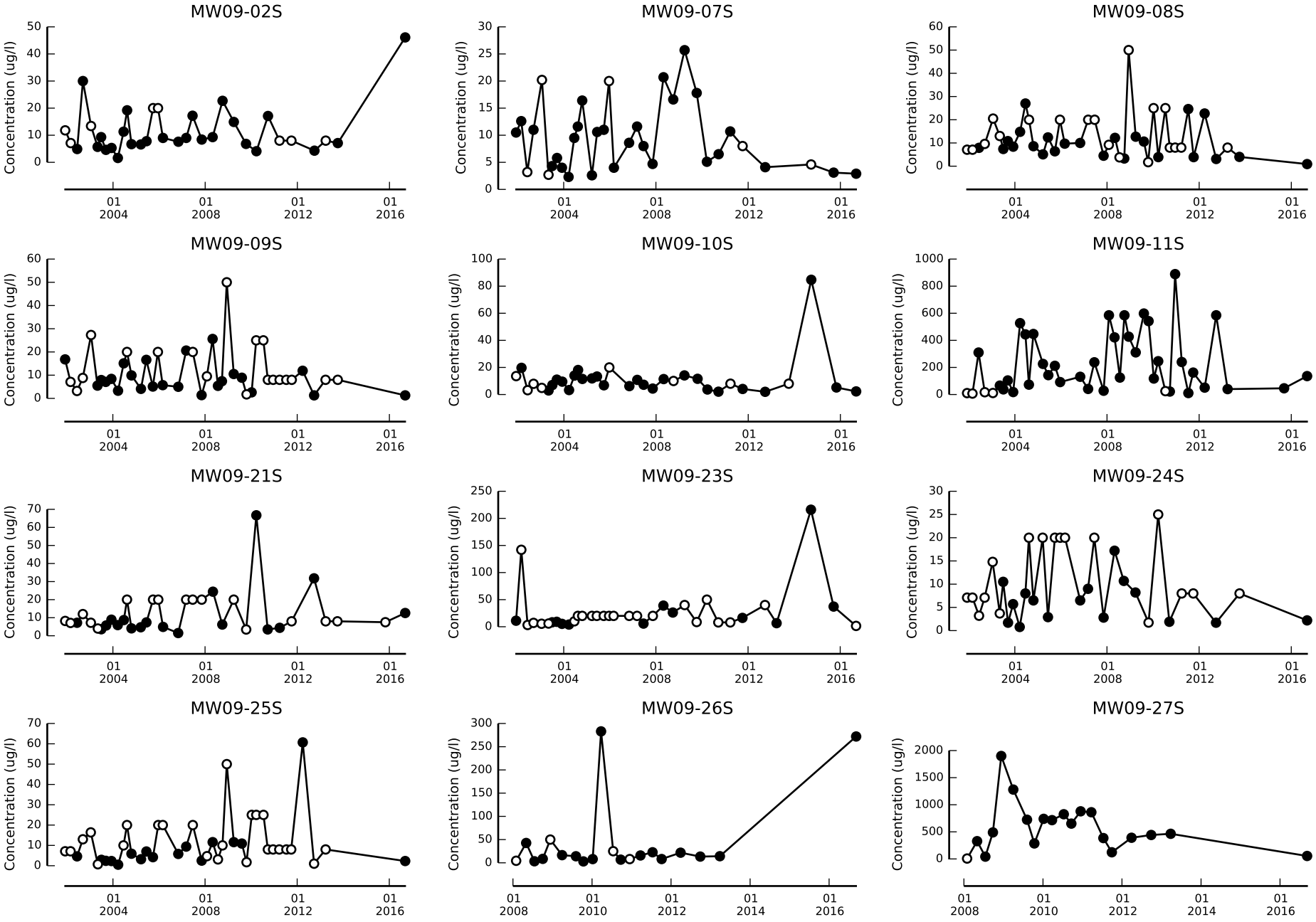
VANADIUM in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 22

● Detected
○ Not Detected, shown at detection limit



ZINC in Groundwater, Shallow Wells
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 22

● Detected
○ Not Detected, shown at detection limit



1,1,1-TRICHLOROETHANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

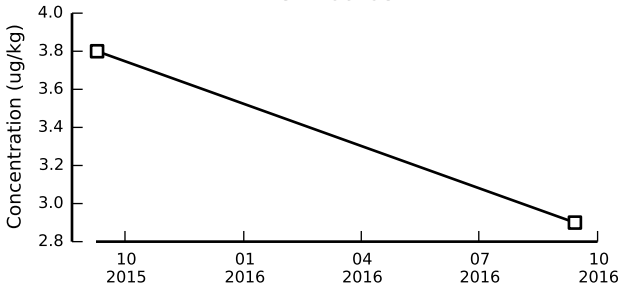
SED09-03

Sampled Once

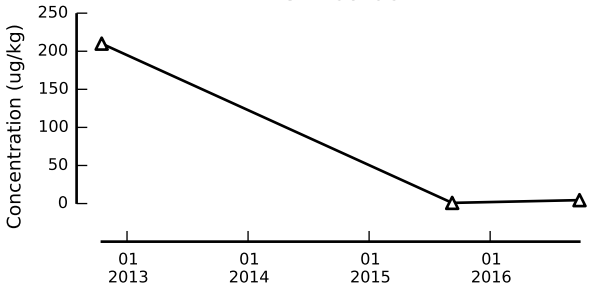
SED09-04

Sampled Once

SED09-05

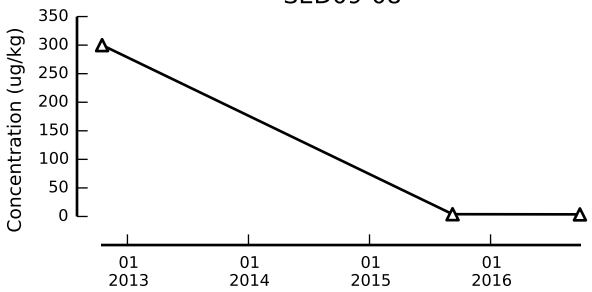


SED09-06

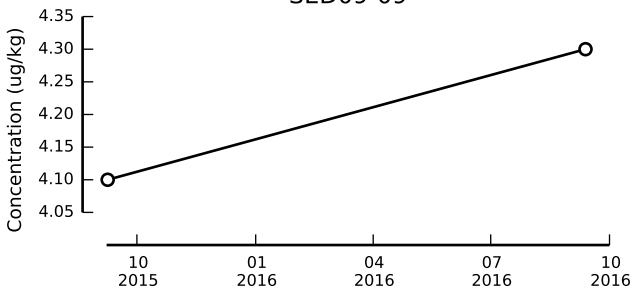


SED09-07

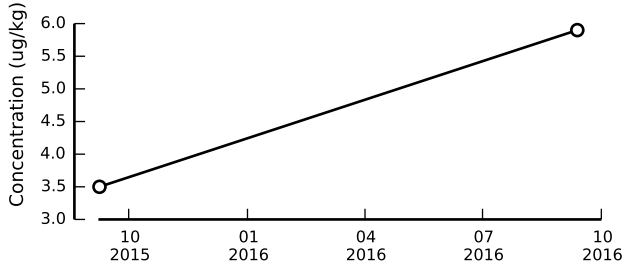
SED09-08



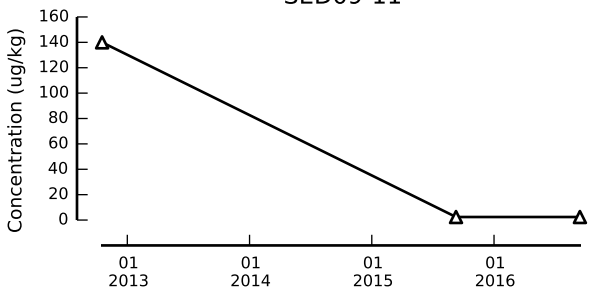
SED09-09



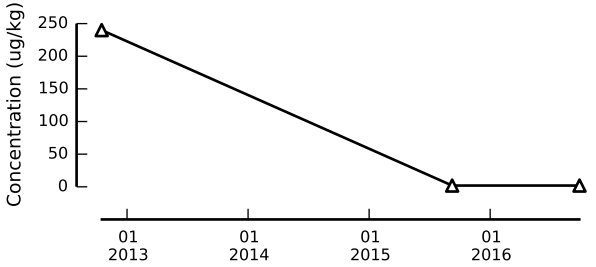
SED09-10



SED09-11



SED09-12



1,1,2,2-TETRACHLOROETHANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

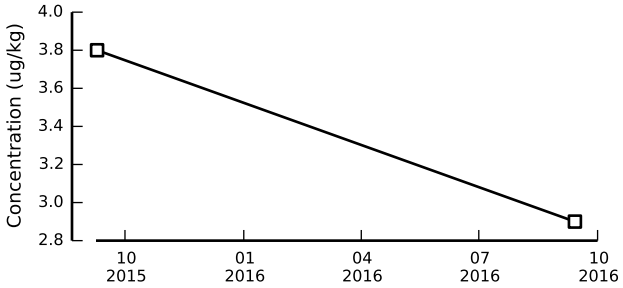
SED09-03

Sampled Once

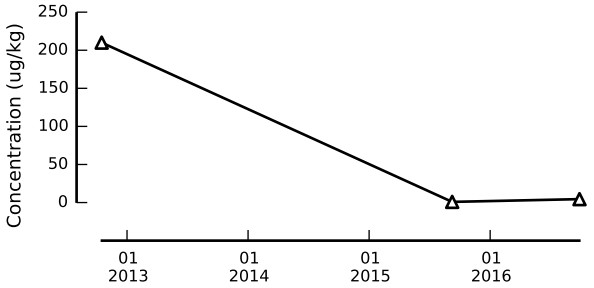
SED09-04

Sampled Once

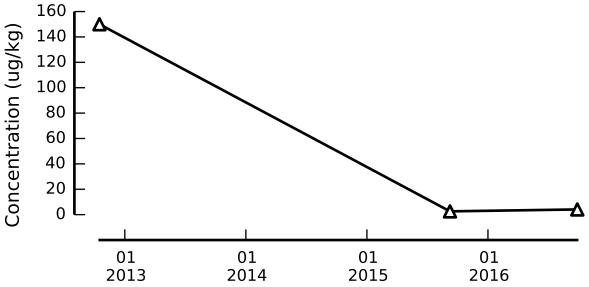
SED09-05



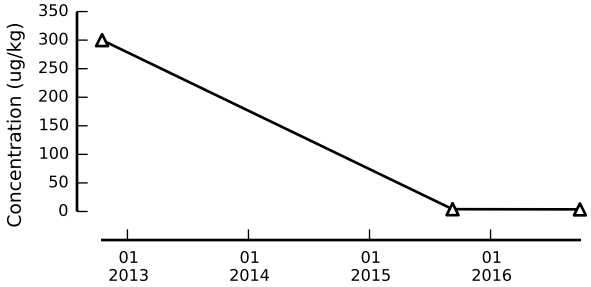
SED09-06



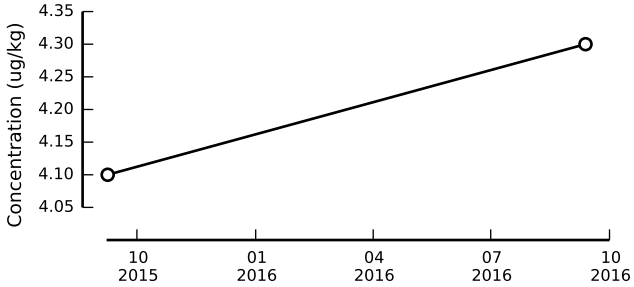
SED09-07



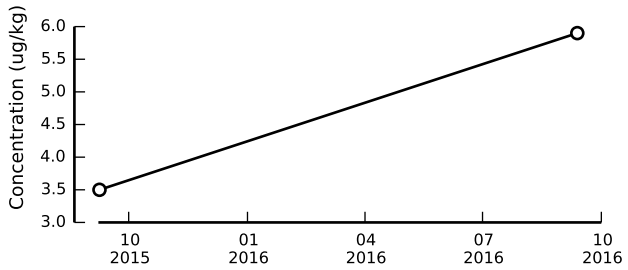
SED09-08



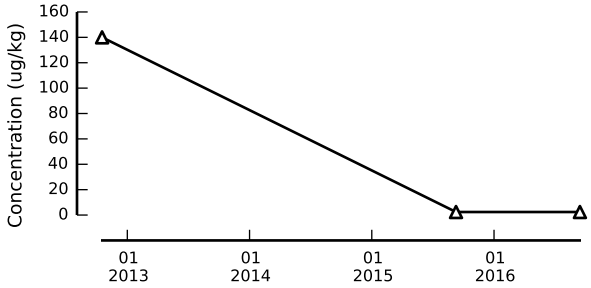
SED09-09



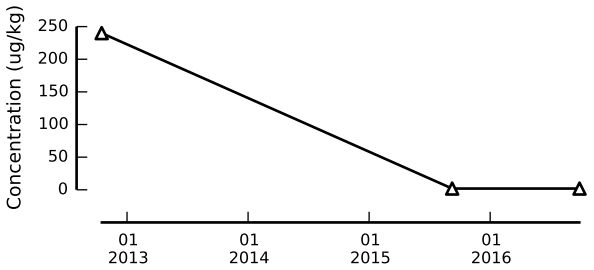
SED09-10



SED09-11



SED09-12



1,1,2-TRICHLOROETHANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

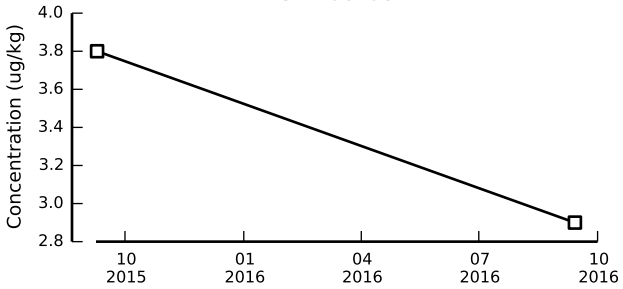
SED09-03

Sampled Once

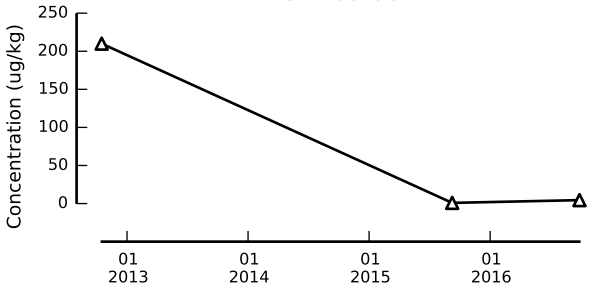
SED09-04

Sampled Once

SED09-05

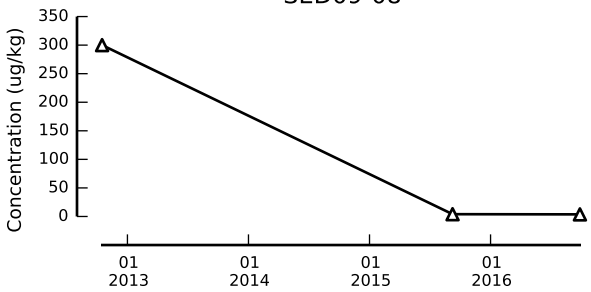


SED09-06

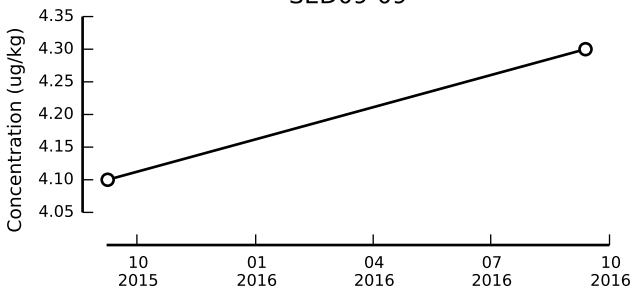


SED09-07

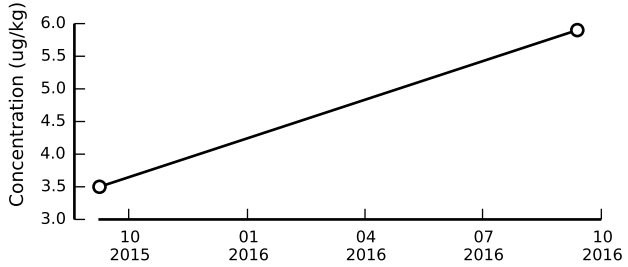
SED09-08



SED09-09

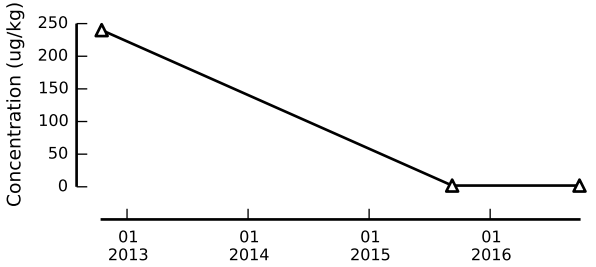


SED09-10



SED09-11

SED09-12



1,1-DICHLOROETHANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

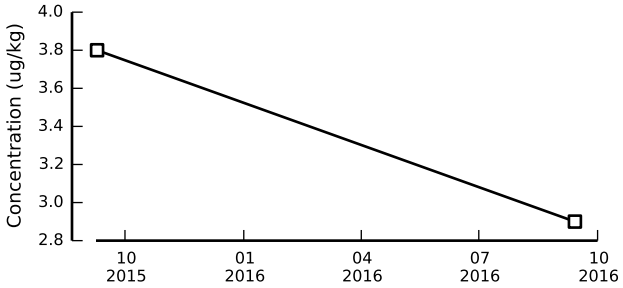
SED09-03

Sampled Once

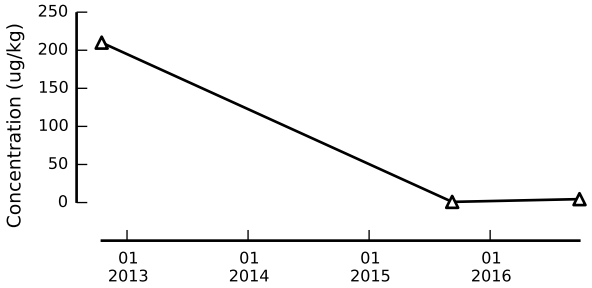
SED09-04

Sampled Once

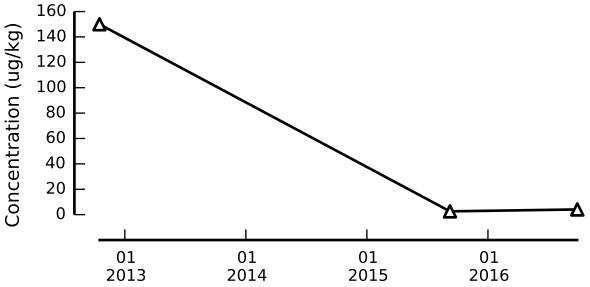
SED09-05



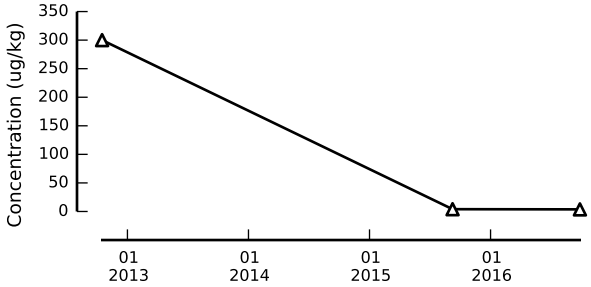
SED09-06



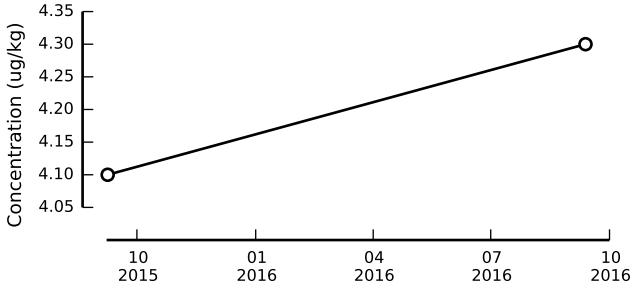
SED09-07



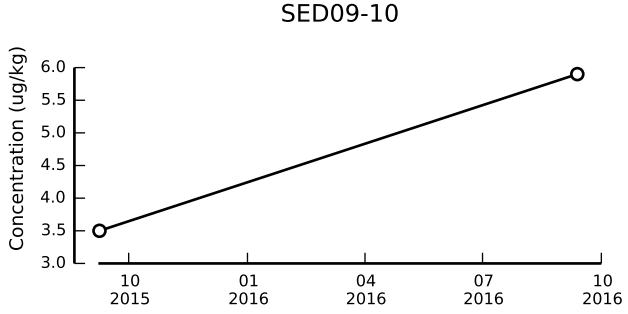
SED09-08



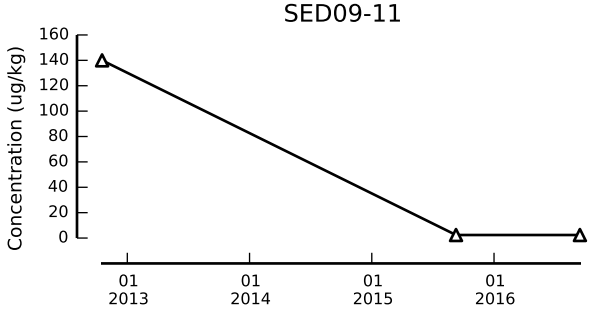
SED09-09



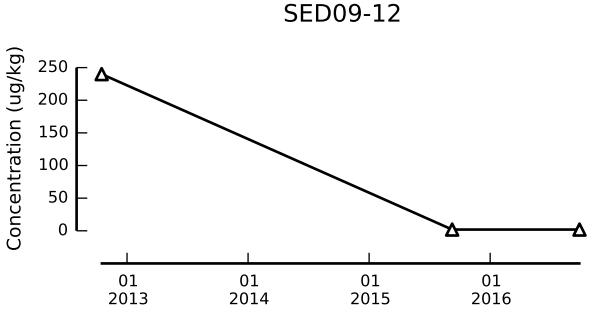
SED09-10



SED09-11



SED09-12



1,1-DICHLOROETHENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

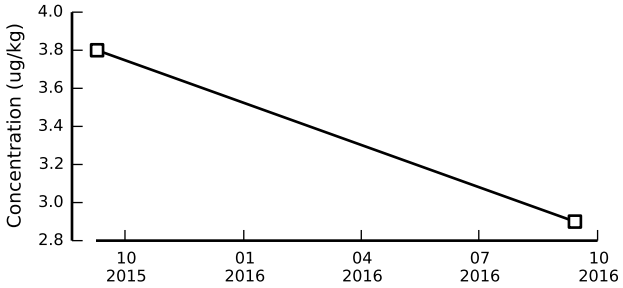
SED09-03

Sampled Once

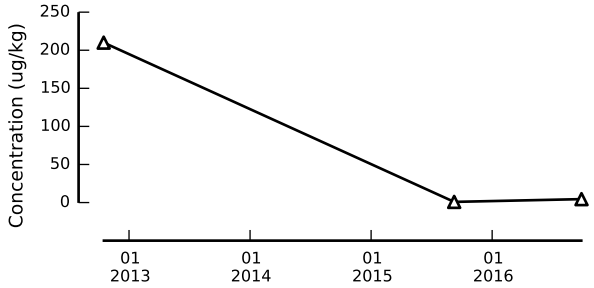
SED09-04

Sampled Once

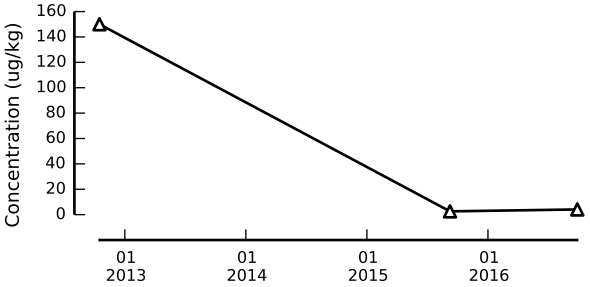
SED09-05



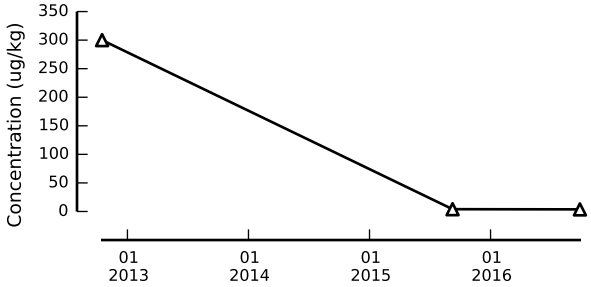
SED09-06



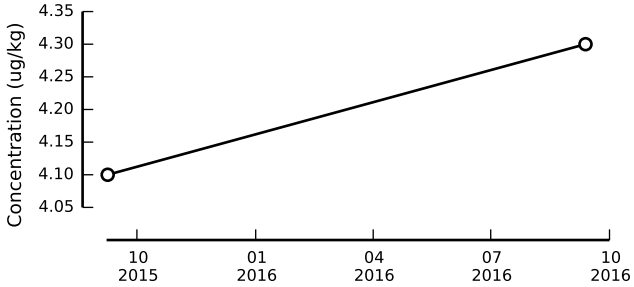
SED09-07



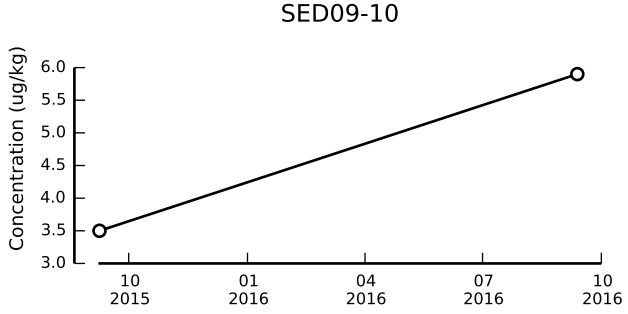
SED09-08



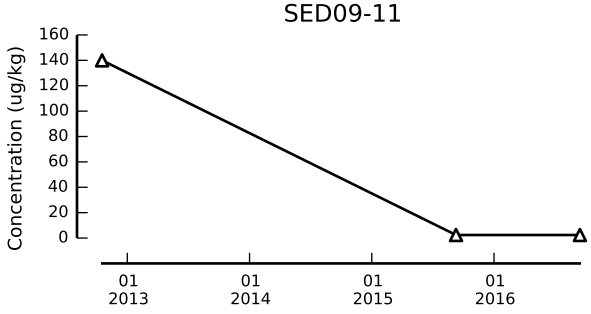
SED09-09



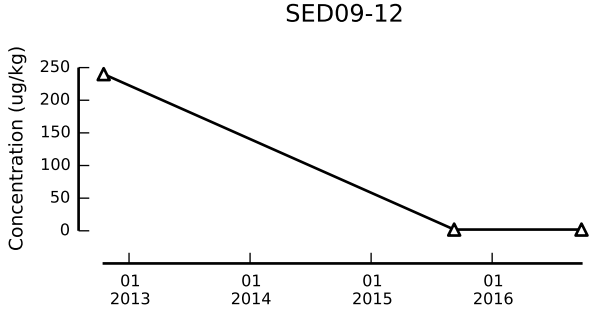
SED09-10



SED09-11



SED09-12



1,2-DICHLOROETHANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

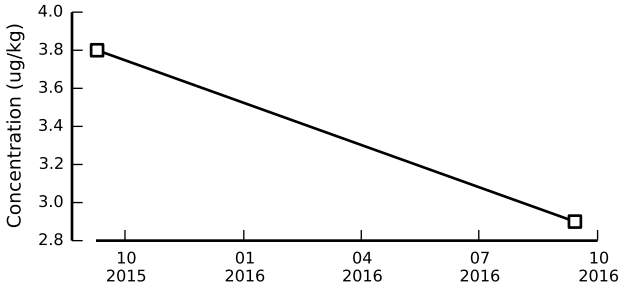
SED09-03

Sampled Once

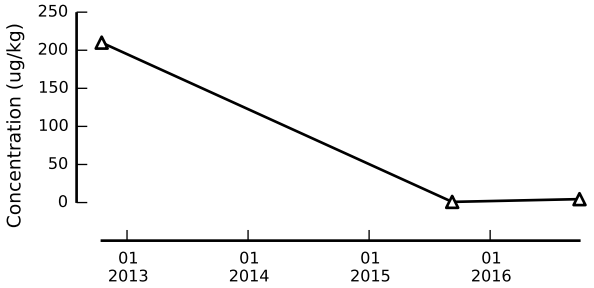
SED09-04

Sampled Once

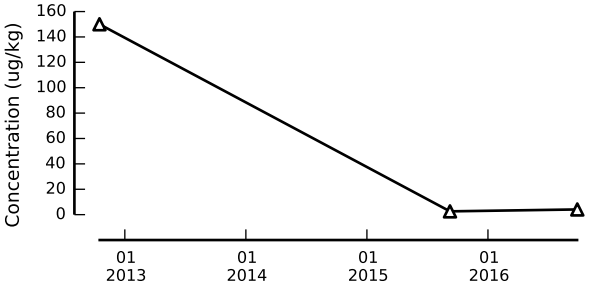
SED09-05



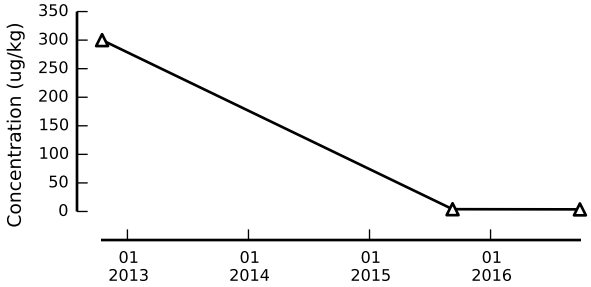
SED09-06



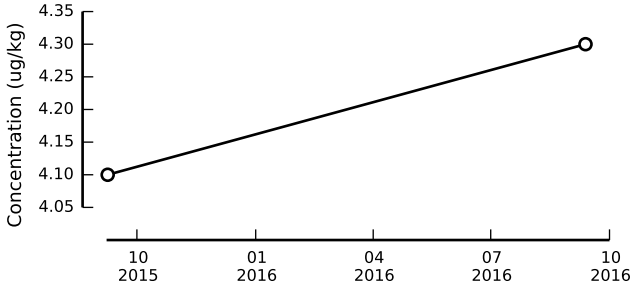
SED09-07



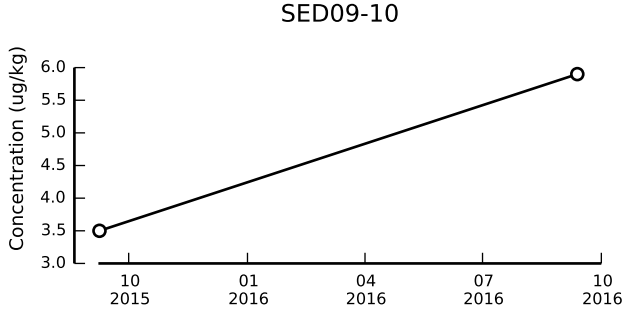
SED09-08



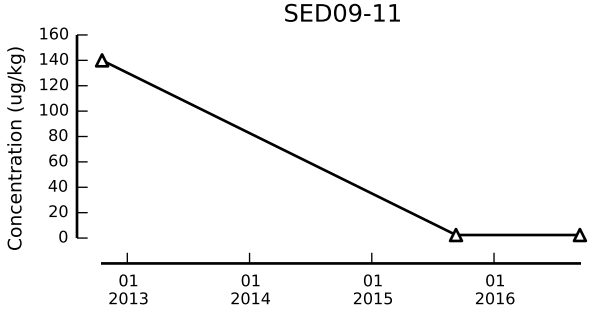
SED09-09



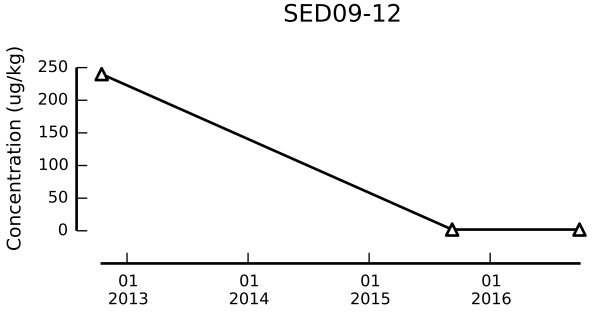
SED09-10



SED09-11



SED09-12



1,2-DICHLOROPROPANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

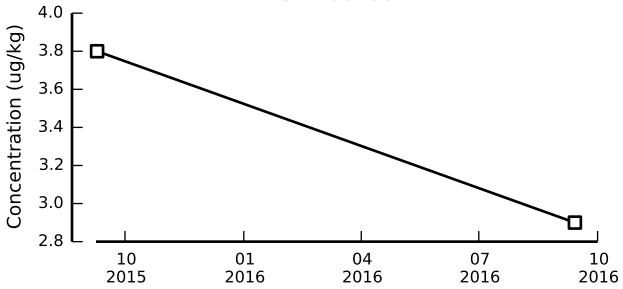
SED09-03

Sampled Once

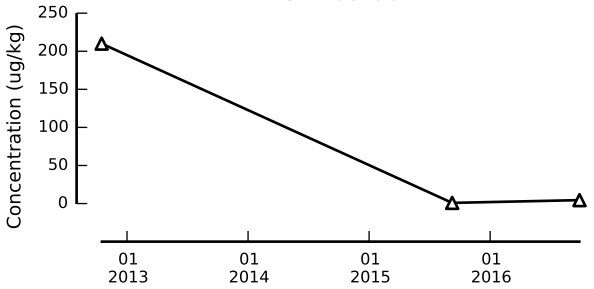
SED09-04

Sampled Once

SED09-05

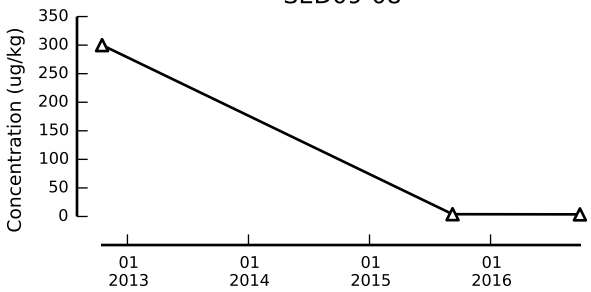


SED09-06

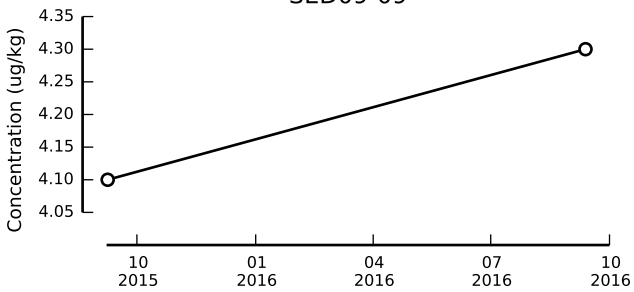


SED09-07

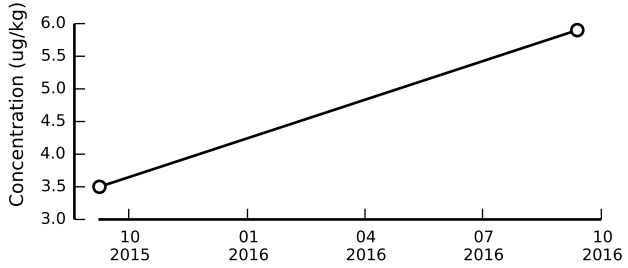
SED09-08



SED09-09

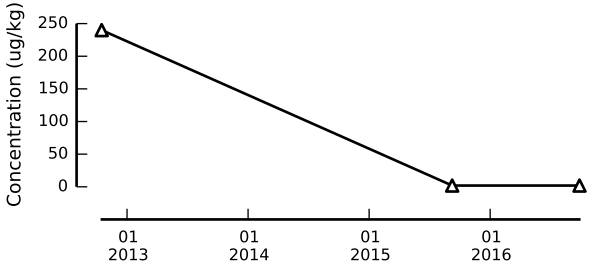


SED09-10



SED09-11

SED09-12



2-BUTANONE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

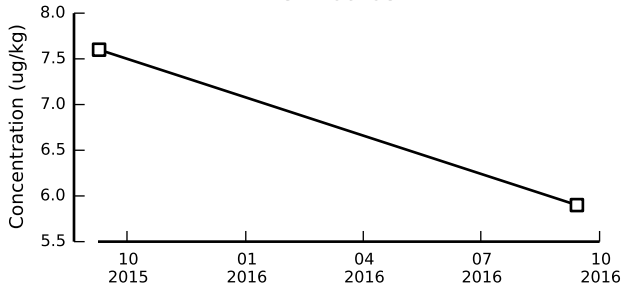
Sampled Once

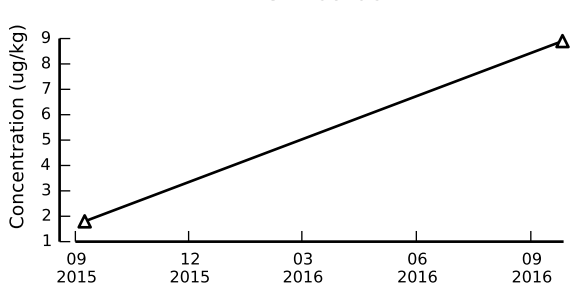
SED09-03

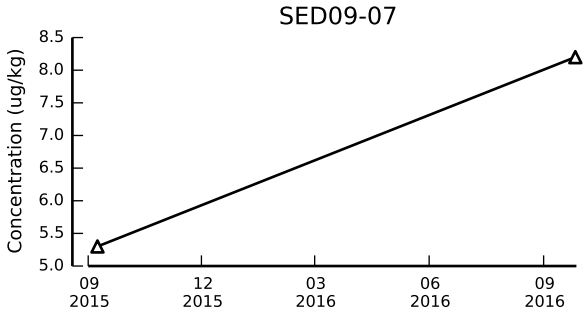
Sampled Once

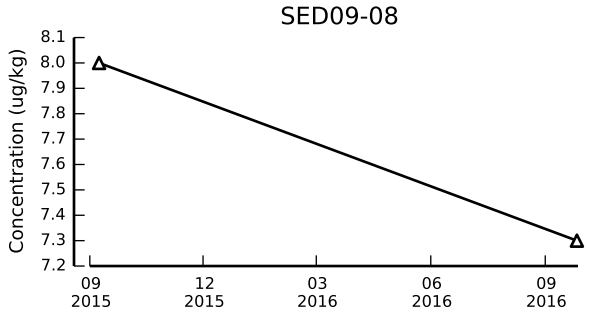
SED09-04

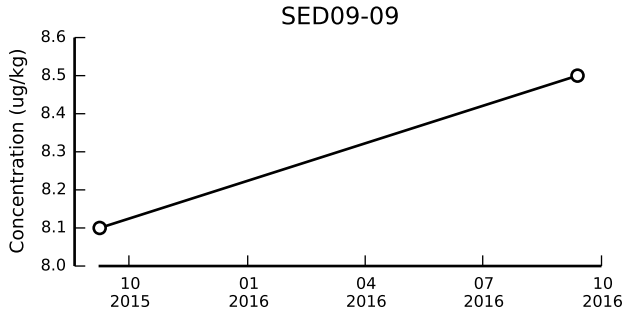
Sampled Once

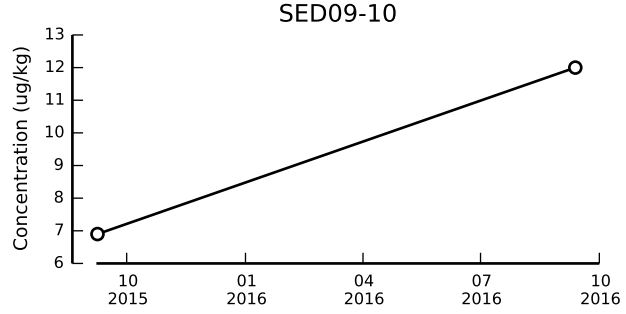


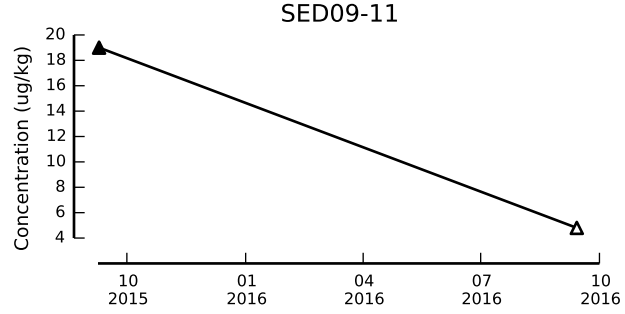


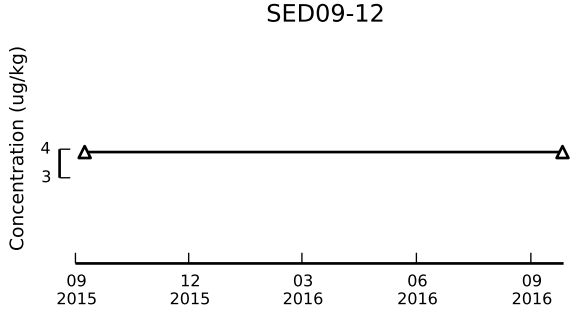












2-HEXANONE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

SED09-03

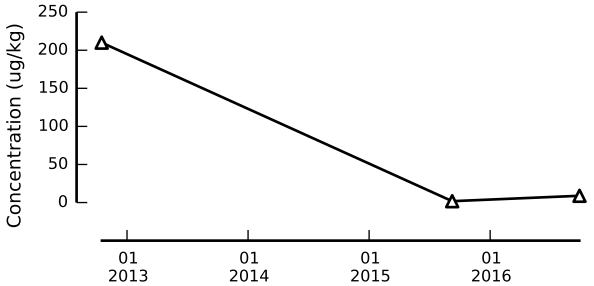
Sampled Once

SED09-04

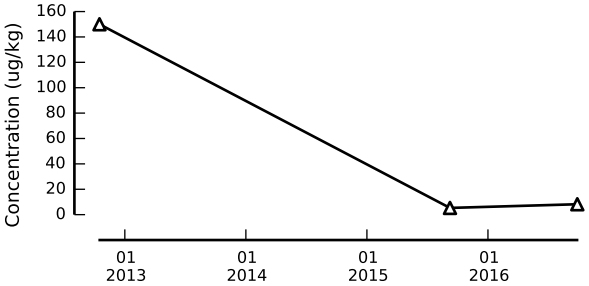
Sampled Once

SED09-05

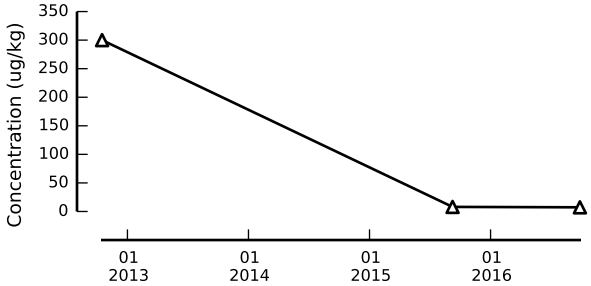
SED09-06



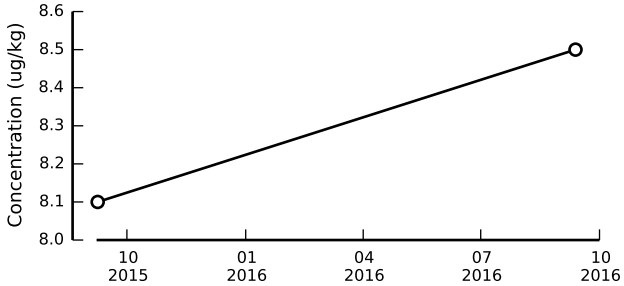
SED09-07



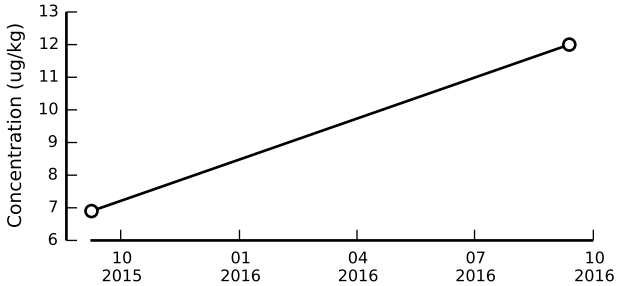
SED09-08



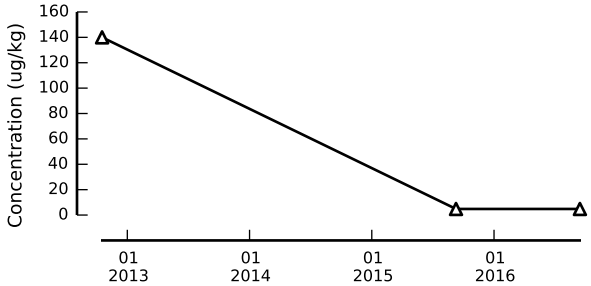
SED09-09



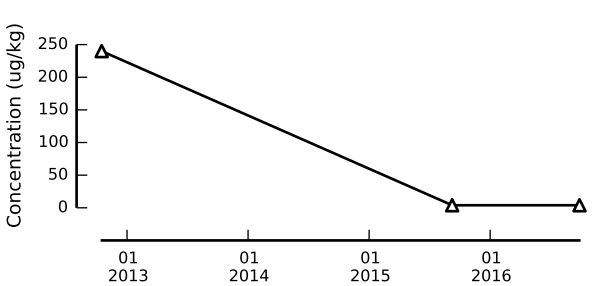
SED09-10



SED09-11



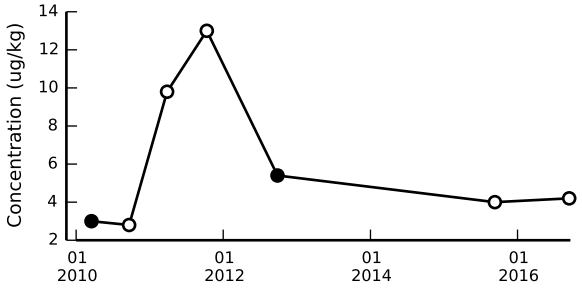
SED09-12



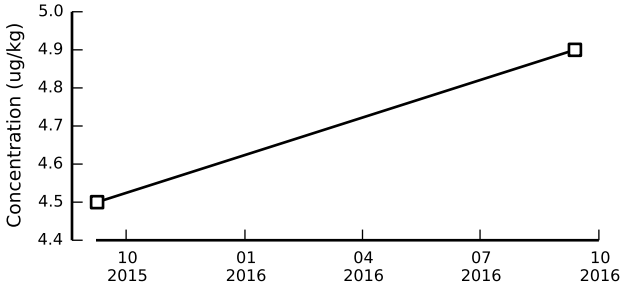
2-METHYLNAPHTHALENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

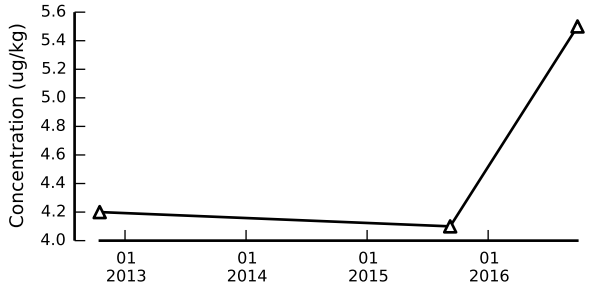
SED09-04

Sampled Once

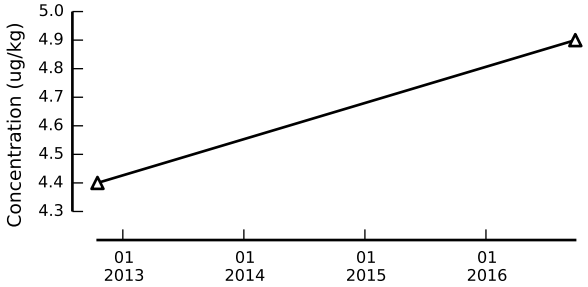
SED09-05

Sampled Once

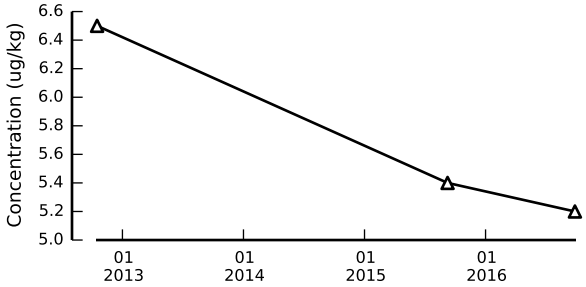
SED09-06



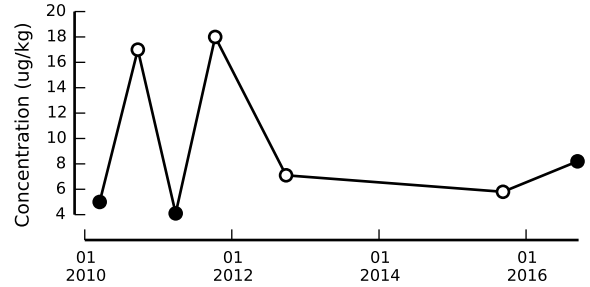
SED09-07



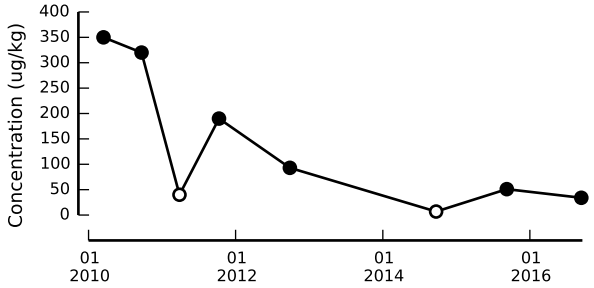
SED09-08



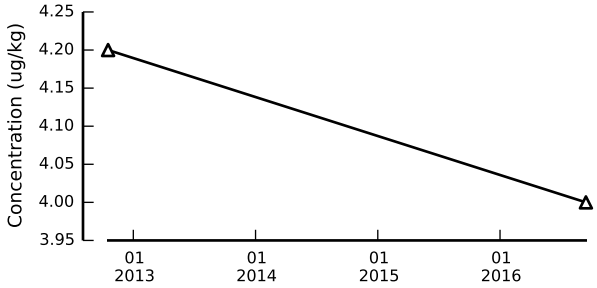
SED09-09



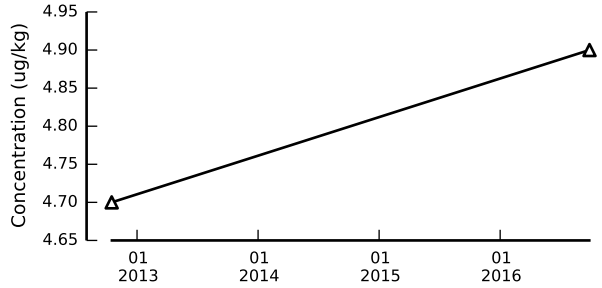
SED09-10



SED09-11



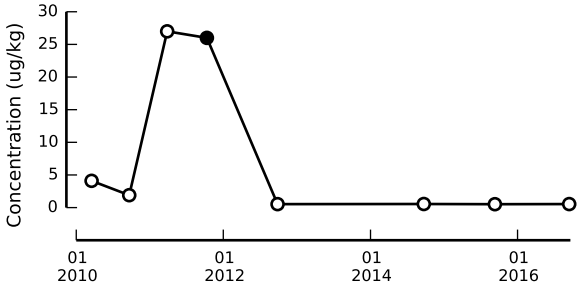
SED09-12



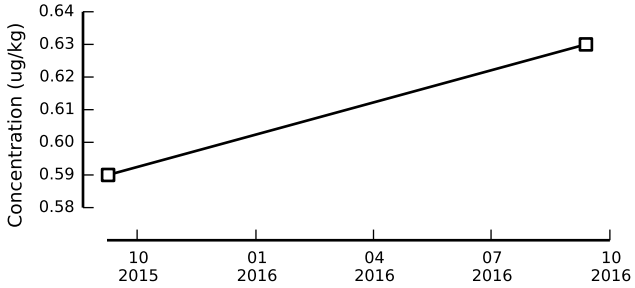
4,4-DDD in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

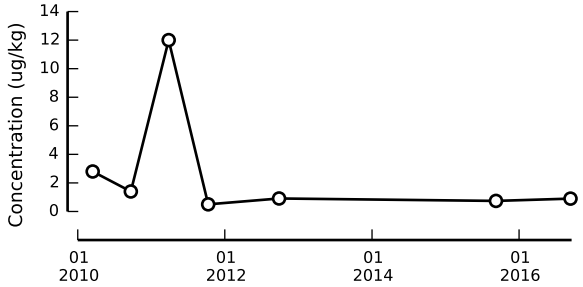
SED09-07

Sampled Once

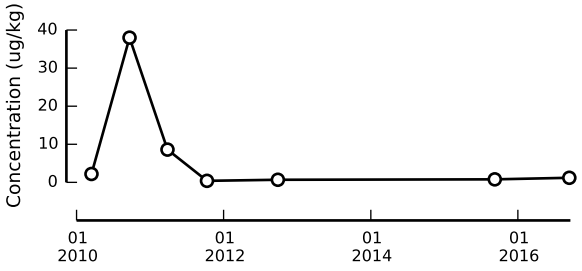
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

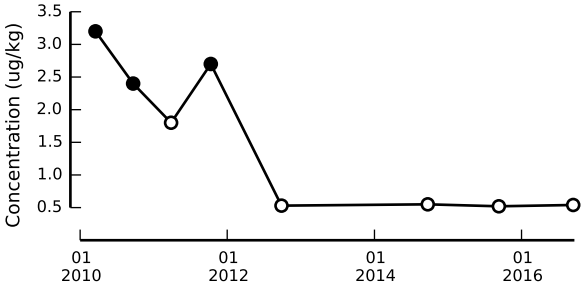
SED09-12

Sampled Once

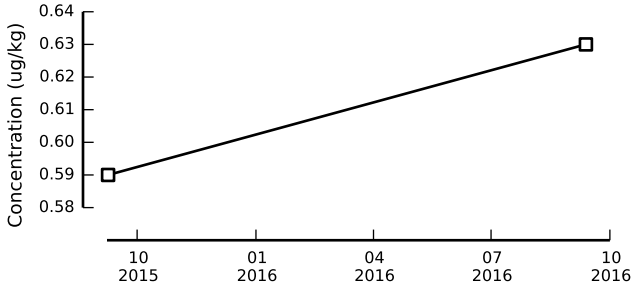
4,4-DDE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

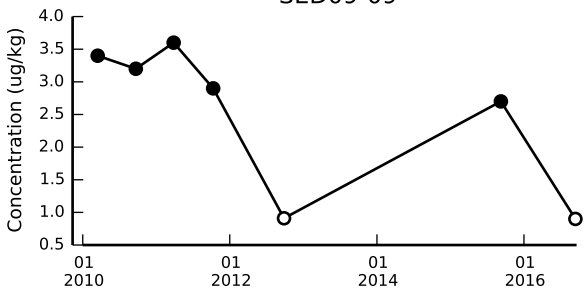
SED09-07

Sampled Once

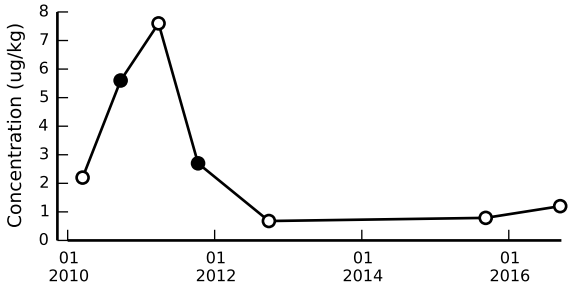
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

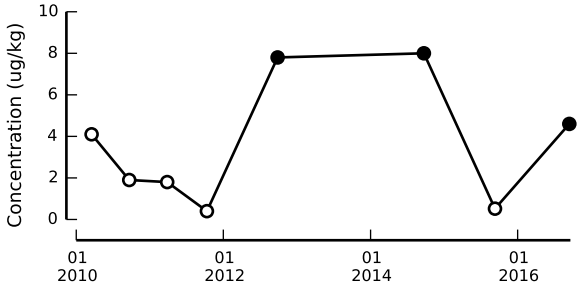
SED09-12

Sampled Once

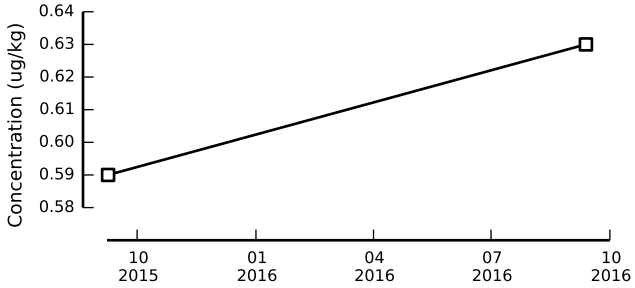
4,4-DDT in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

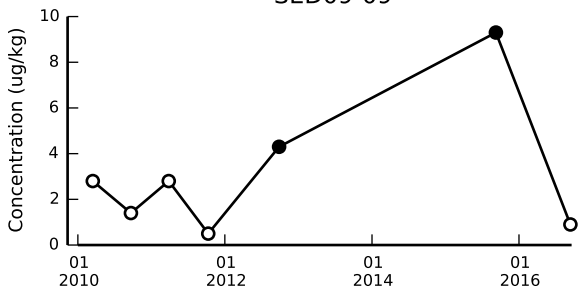
SED09-07

Sampled Once

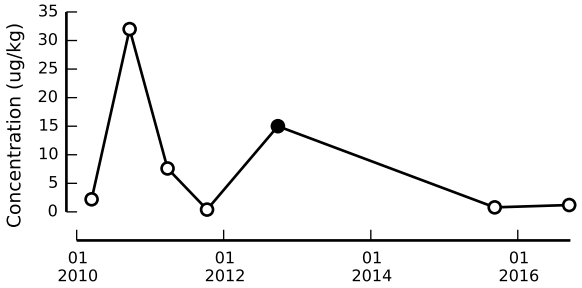
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

SED09-12

Sampled Once

4-METHYL-2-PENTANONE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

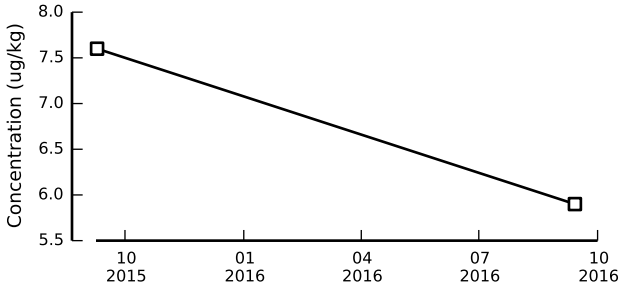
SED09-03

Sampled Once

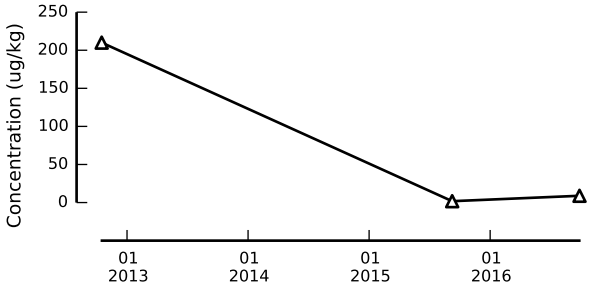
SED09-04

Sampled Once

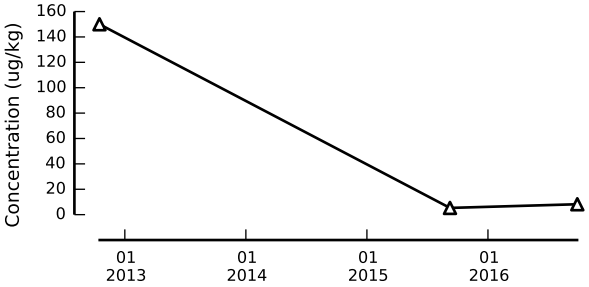
SED09-05



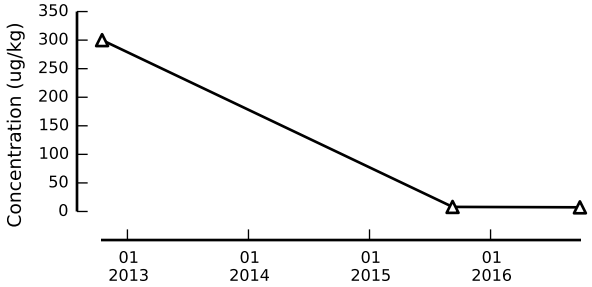
SED09-06



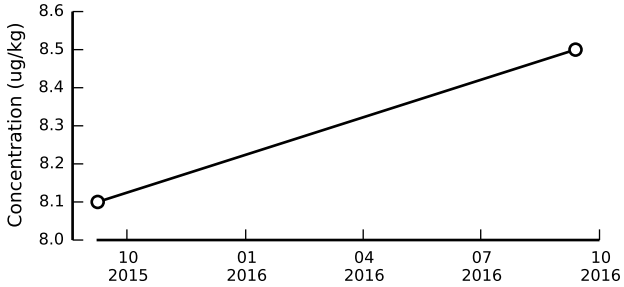
SED09-07



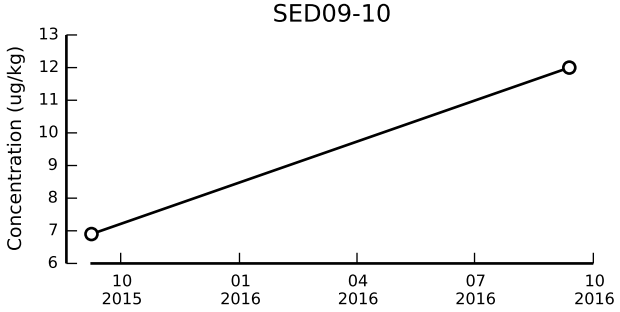
SED09-08



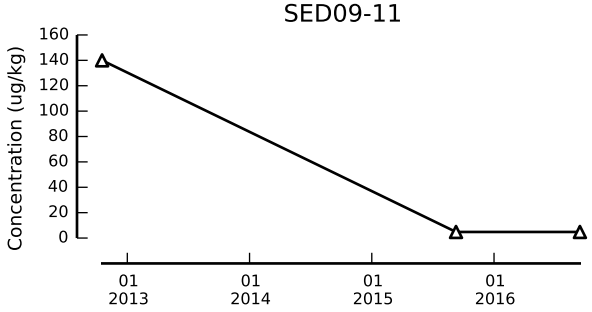
SED09-09



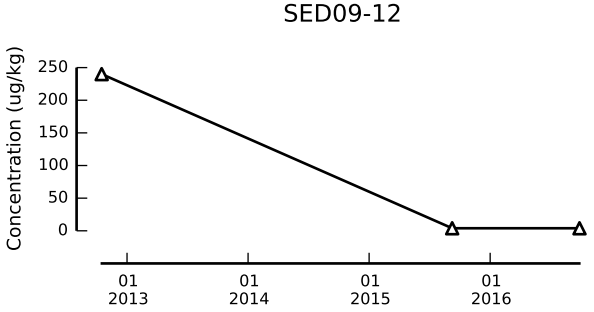
SED09-10



SED09-11



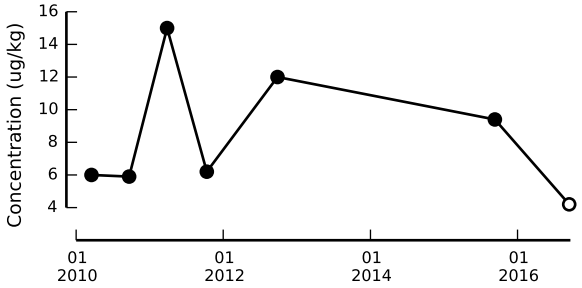
SED09-12



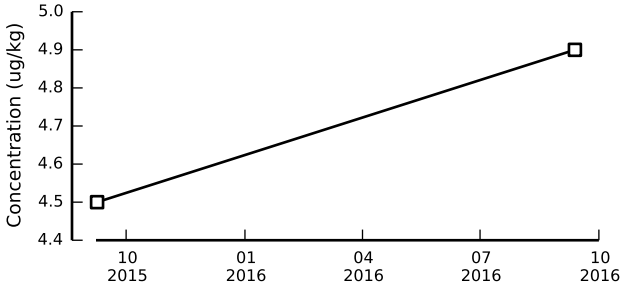
ACENAPHTHENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

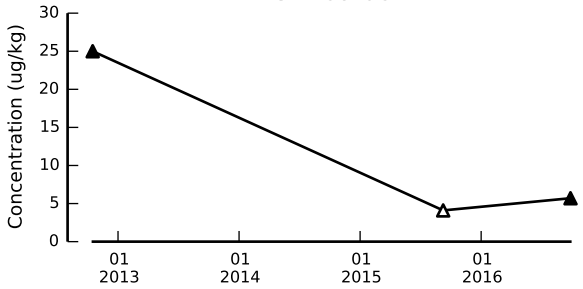
SED09-04

Sampled Once

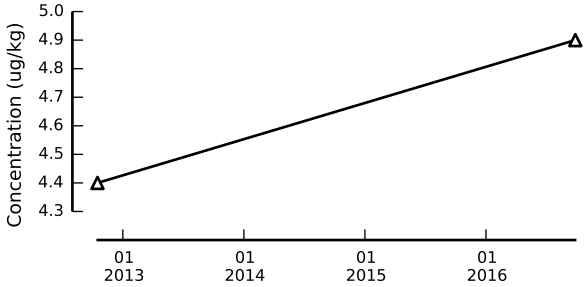
SED09-05

Sampled Once

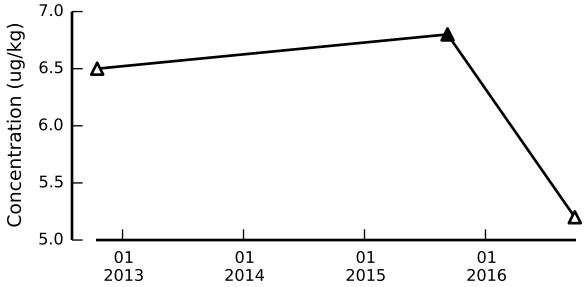
SED09-06



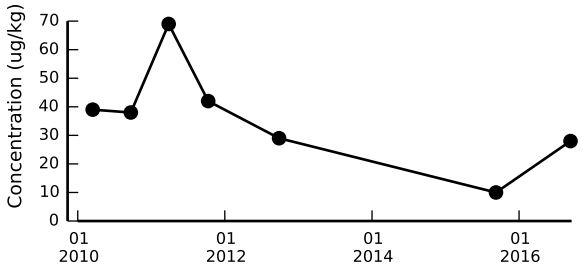
SED09-07



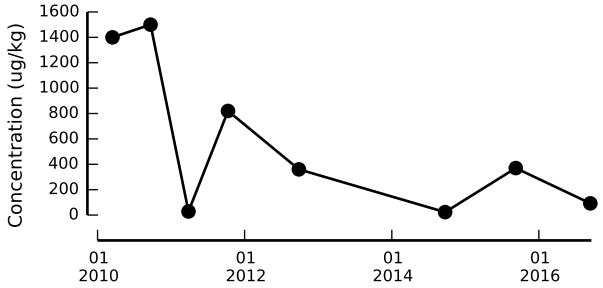
SED09-08



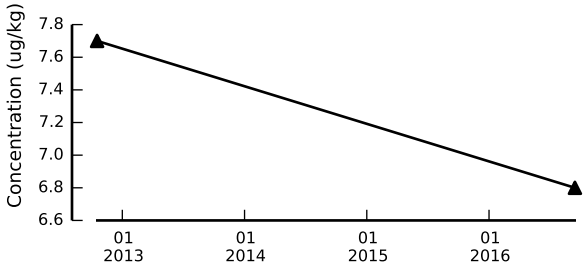
SED09-09



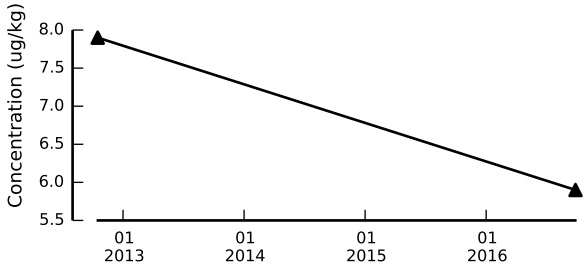
SED09-10



SED09-11



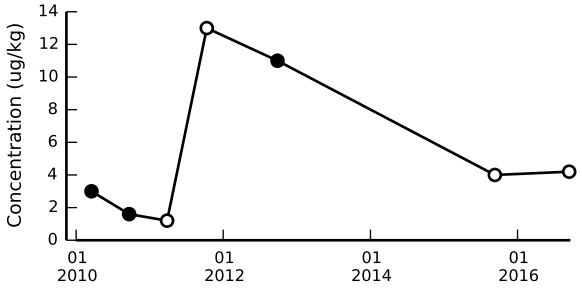
SED09-12



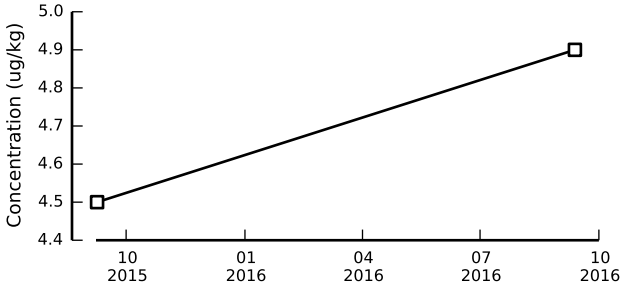
ACENAPHTHYLENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

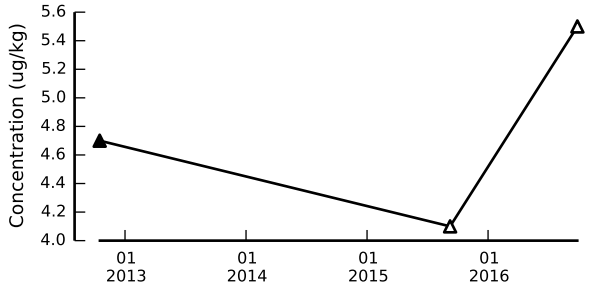
SED09-04

Sampled Once

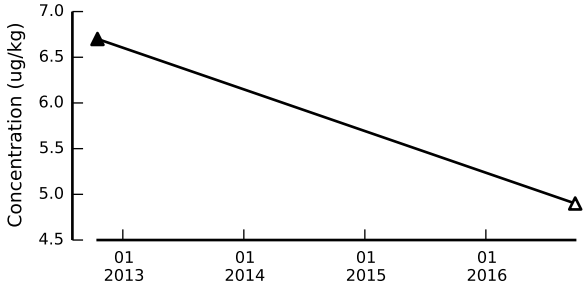
SED09-05

Sampled Once

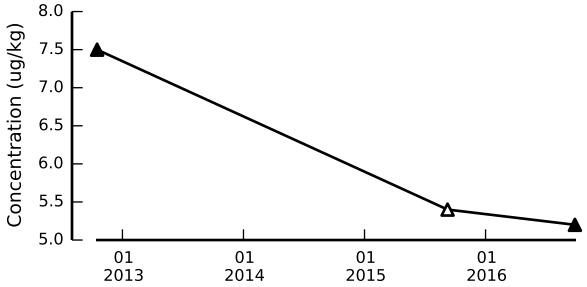
SED09-06



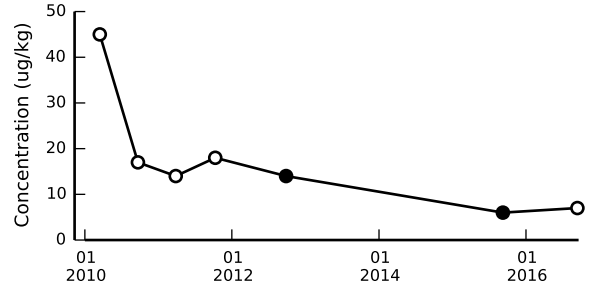
SED09-07



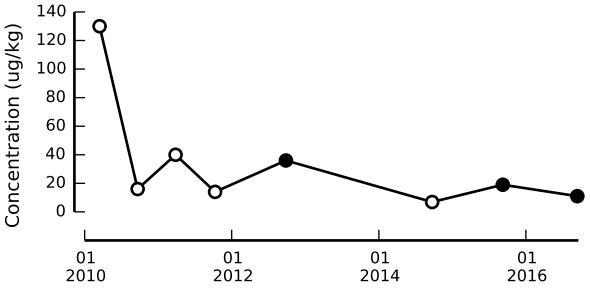
SED09-08



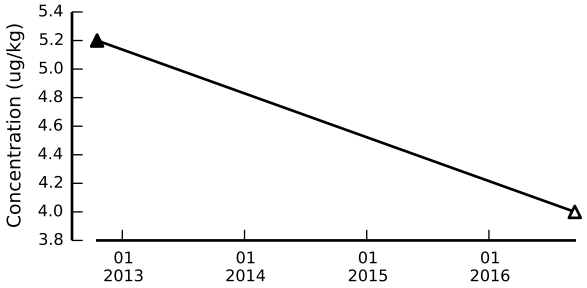
SED09-09



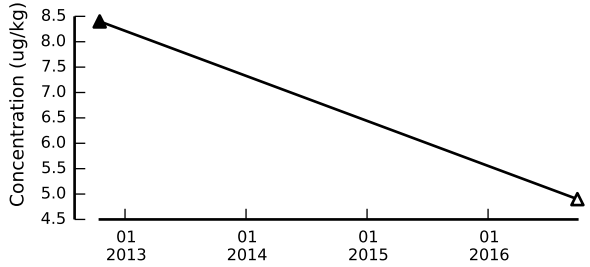
SED09-10



SED09-11



SED09-12



ACETONE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

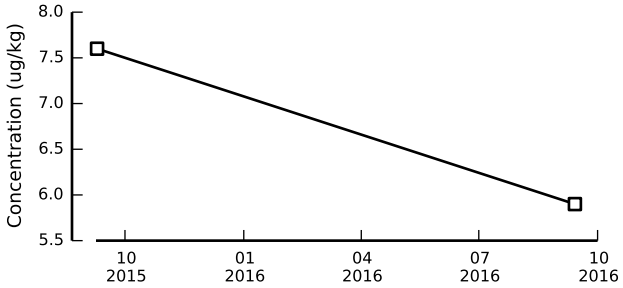
SED09-03

Sampled Once

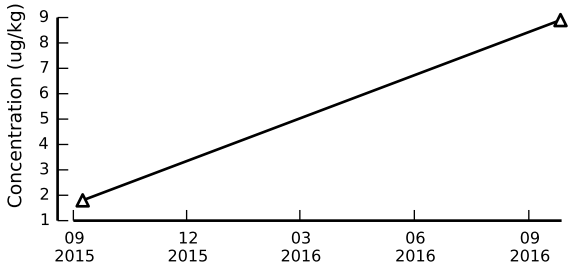
SED09-04

Sampled Once

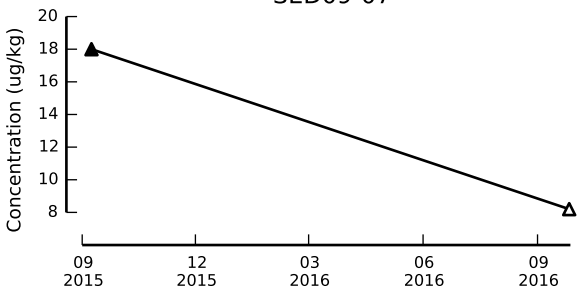
SED09-05



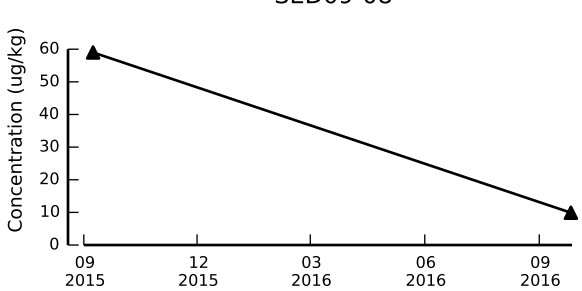
SED09-06



SED09-07

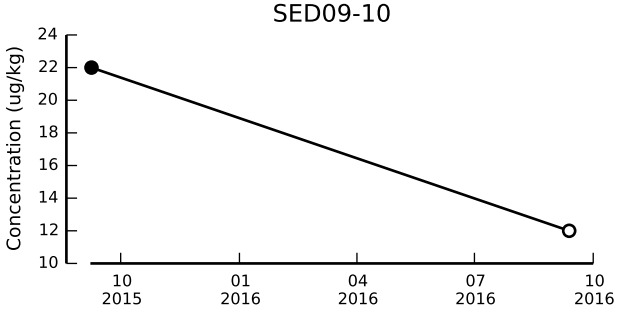


SED09-08

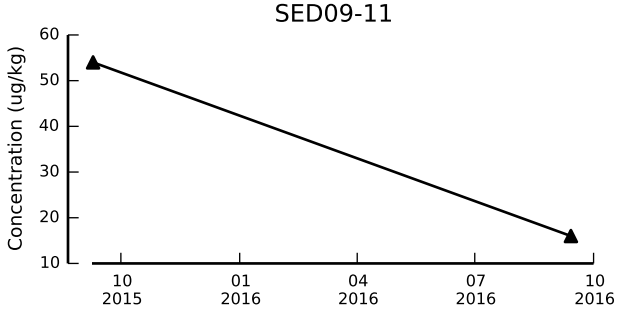


SED09-09

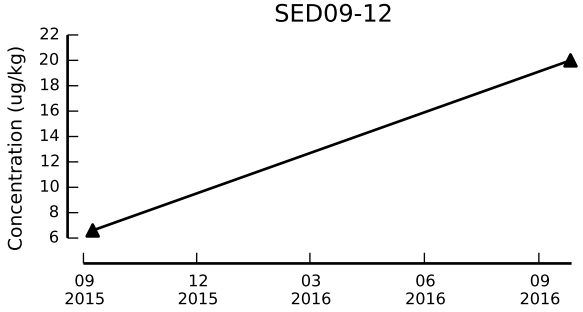
SED09-10



SED09-11



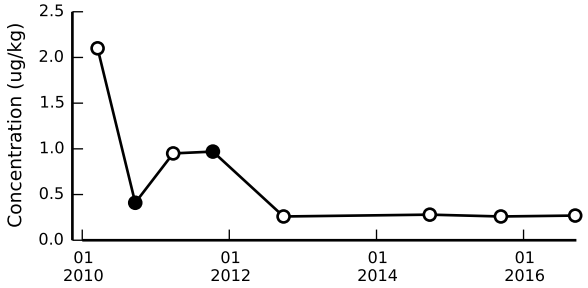
SED09-12



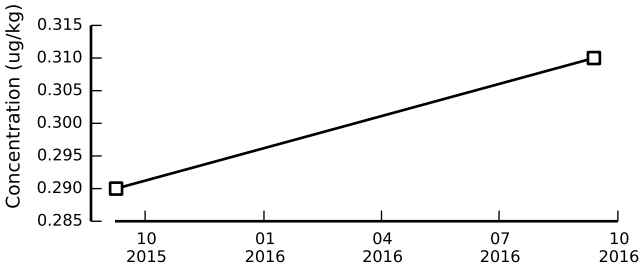
ALDRIN in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

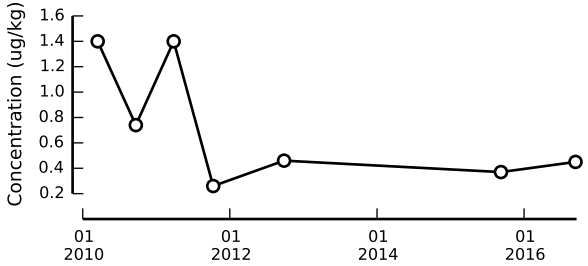
SED09-07

Sampled Once

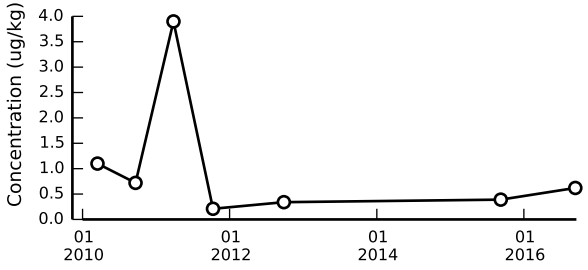
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

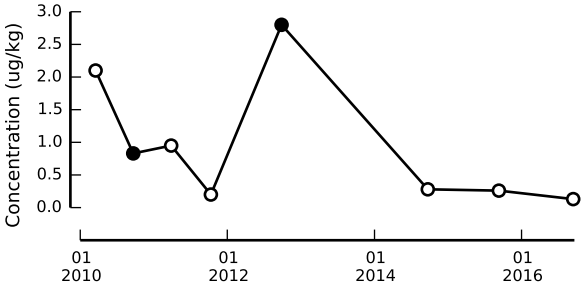
SED09-12

Sampled Once

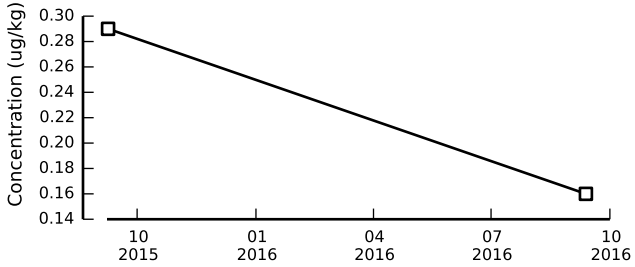
ALPHA-CHLORDANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

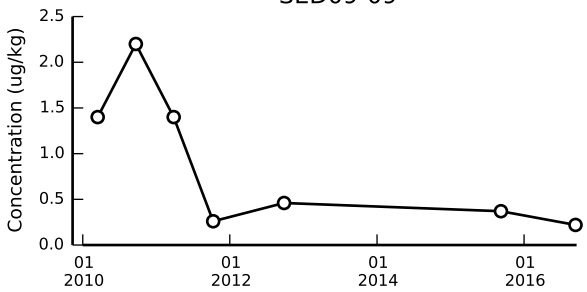
SED09-07

Sampled Once

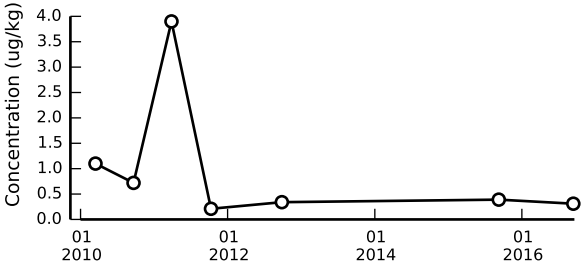
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

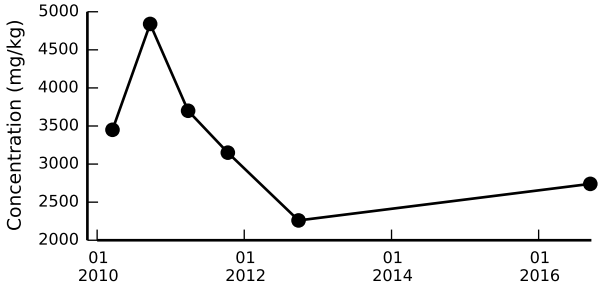
SED09-12

Sampled Once

ALUMINUM in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



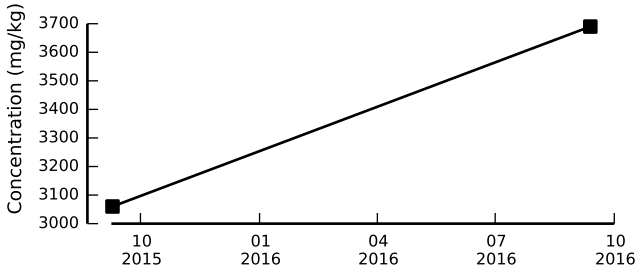
SED09-02

Sampled Once

SED09-03

Sampled Once

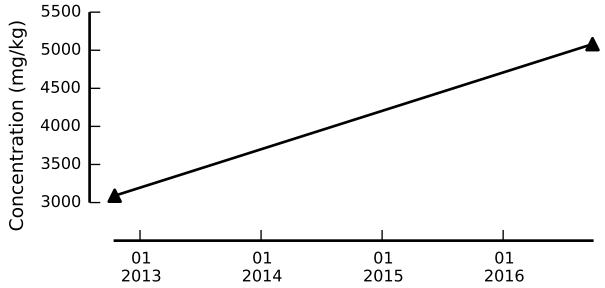
SED09-04



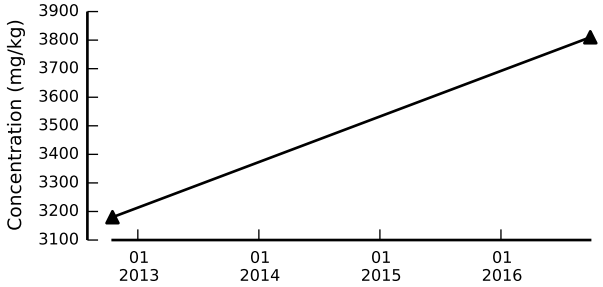
SED09-05

Sampled Once

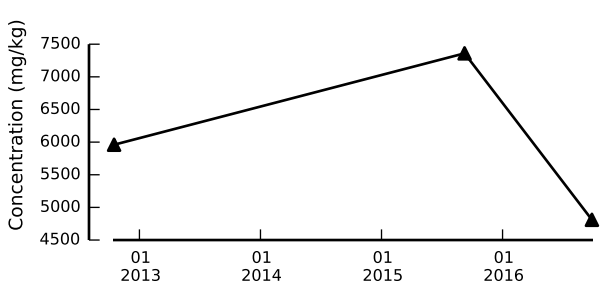
SED09-06



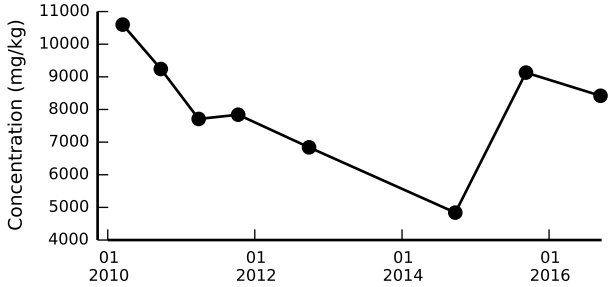
SED09-07



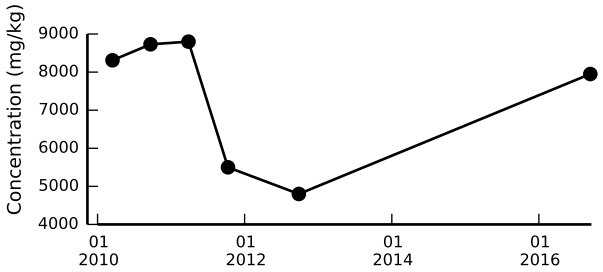
SED09-08



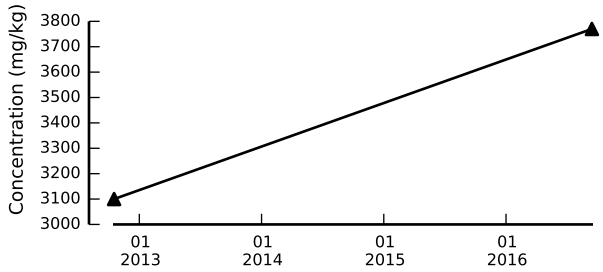
SED09-09



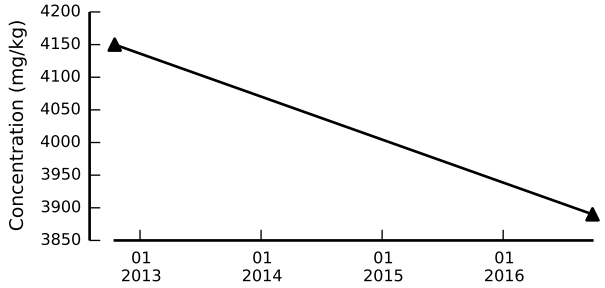
SED09-10



SED09-11



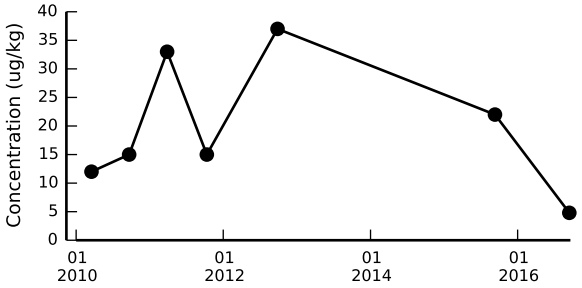
SED09-12



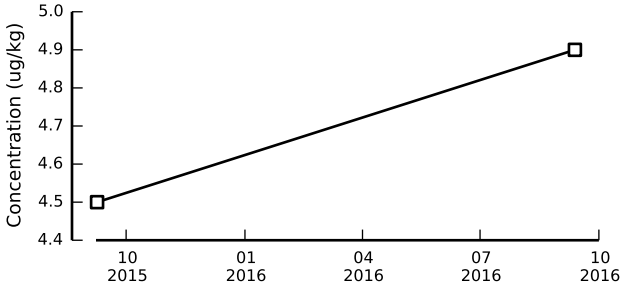
ANTHRACENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

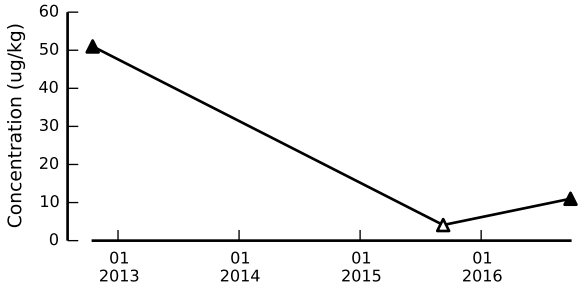
SED09-04

Sampled Once

SED09-05

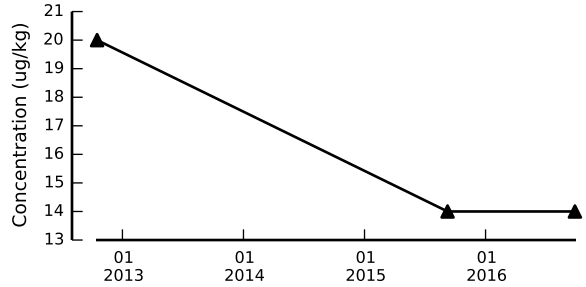
Sampled Once

SED09-06

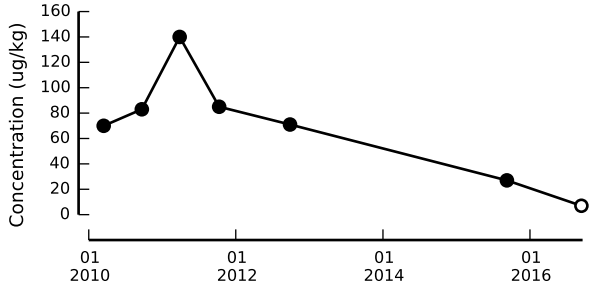


SED09-07

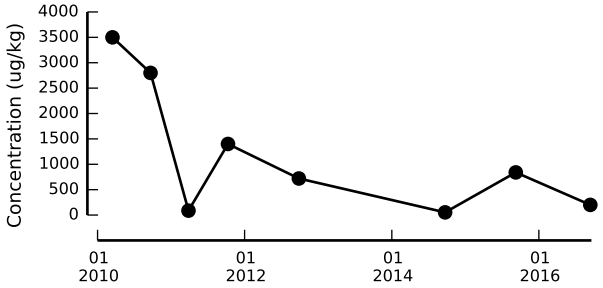
SED09-08



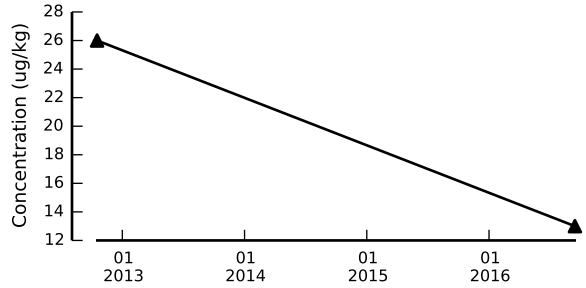
SED09-09



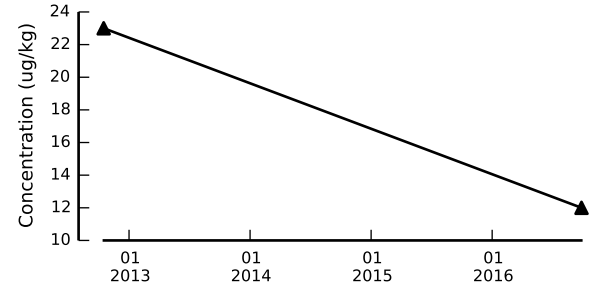
SED09-10



SED09-11



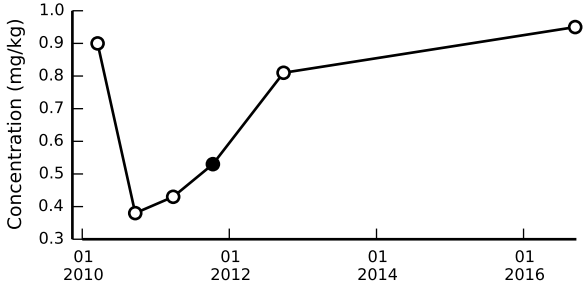
SED09-12



ANTIMONY in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



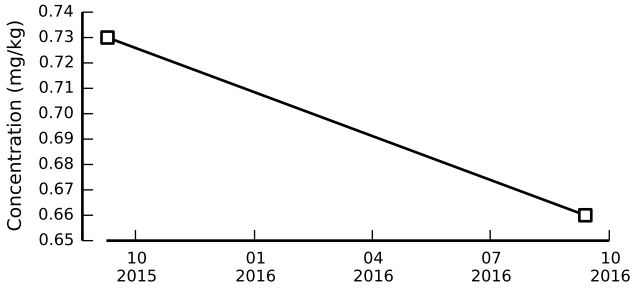
SED09-02

Sampled Once

SED09-03

Sampled Once

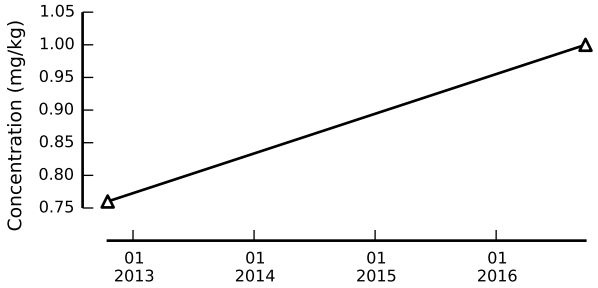
SED09-04



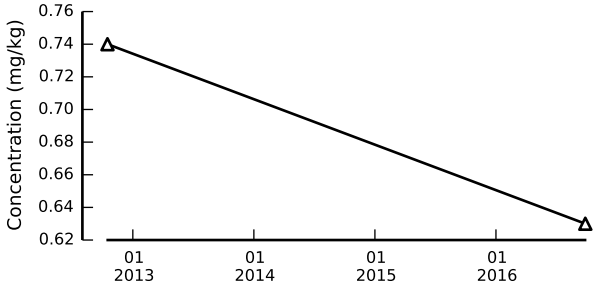
SED09-05

Sampled Once

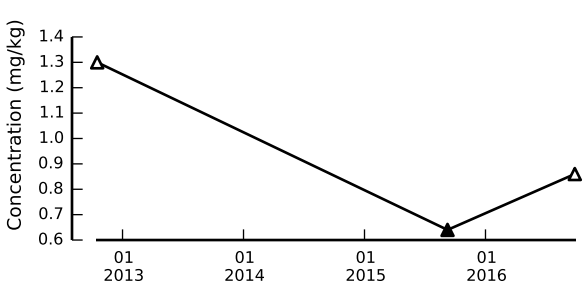
SED09-06



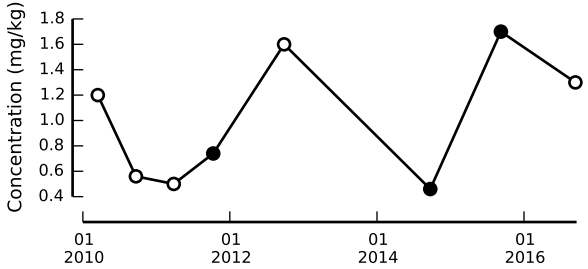
SED09-07



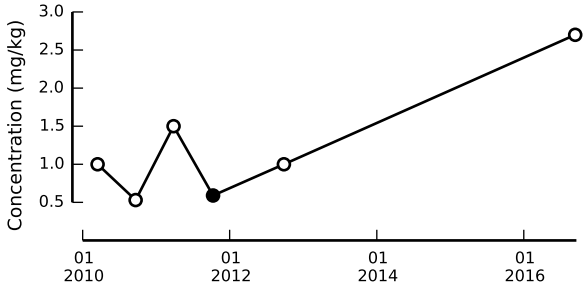
SED09-08



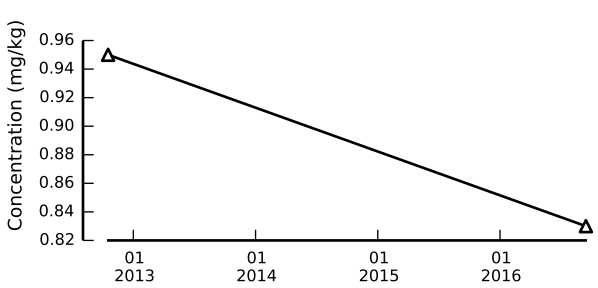
SED09-09



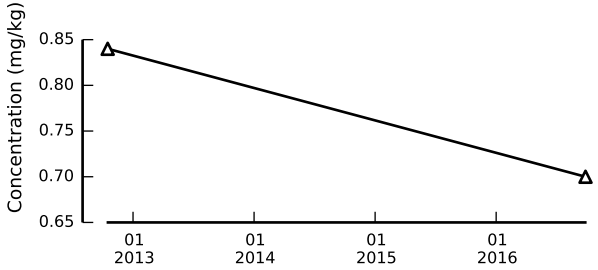
SED09-10



SED09-11



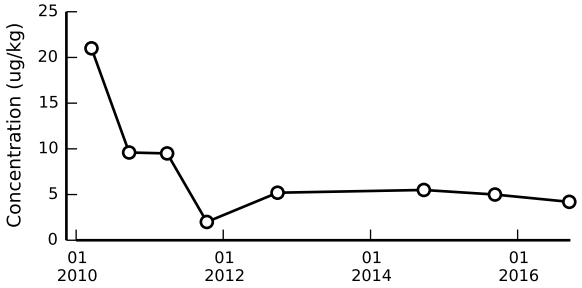
SED09-12



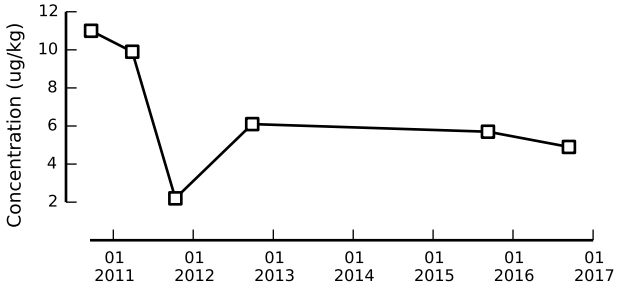
AROCLOR-1242 in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 23 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

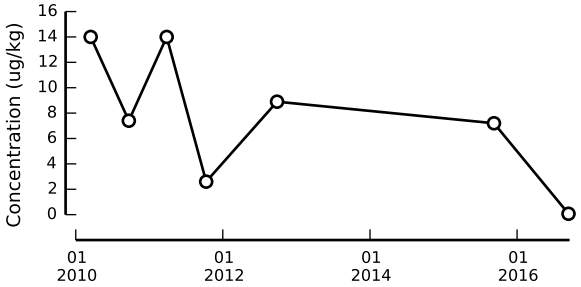
SED09-07

Sampled Once

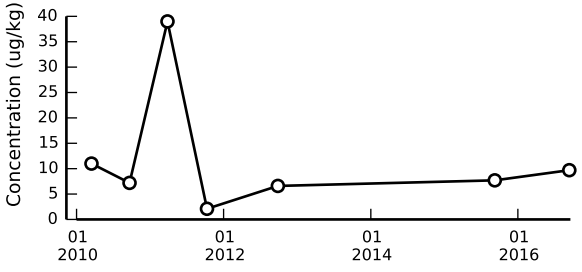
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

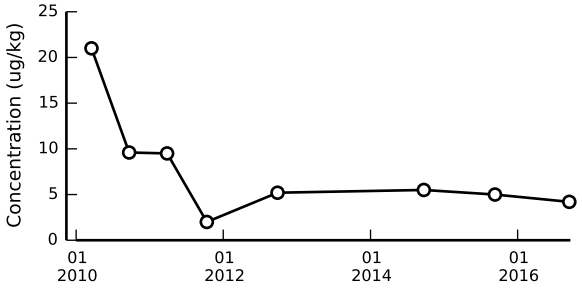
SED09-12

Sampled Once

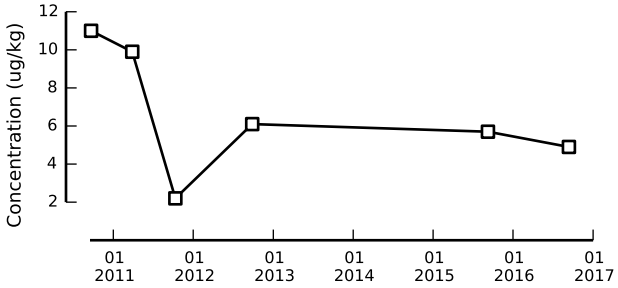
AROCLOR-1248 in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 24 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

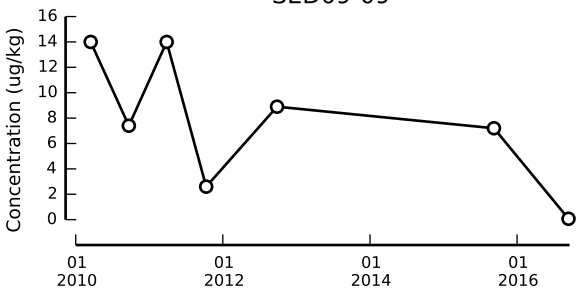
SED09-07

Sampled Once

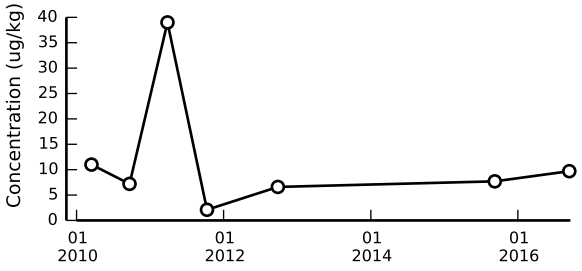
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

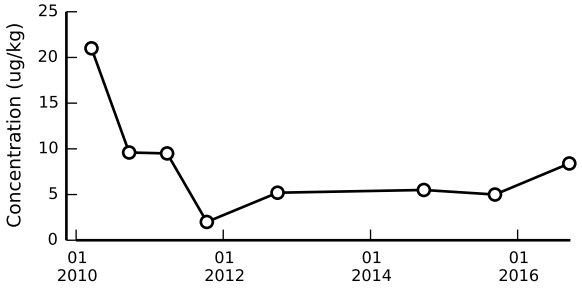
SED09-12

Sampled Once

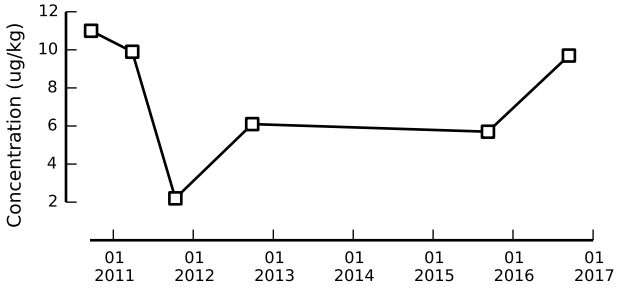
AROCLOR-1254 in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 25 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

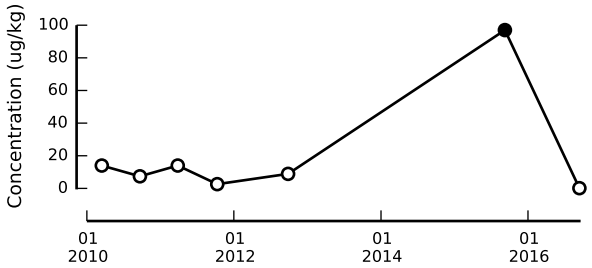
SED09-07

Sampled Once

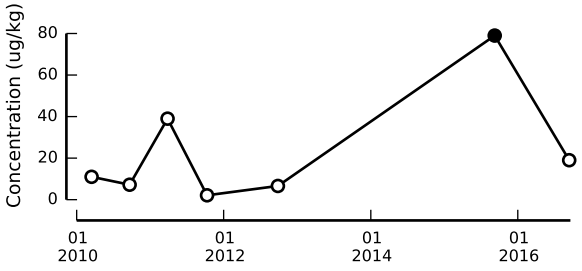
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

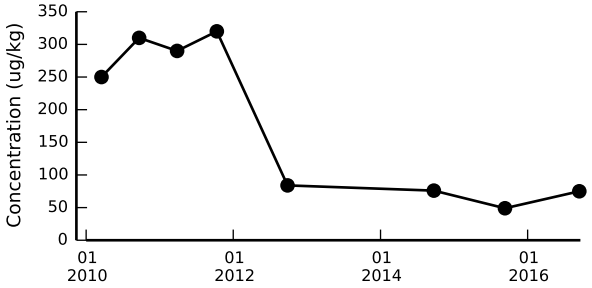
SED09-12

Sampled Once

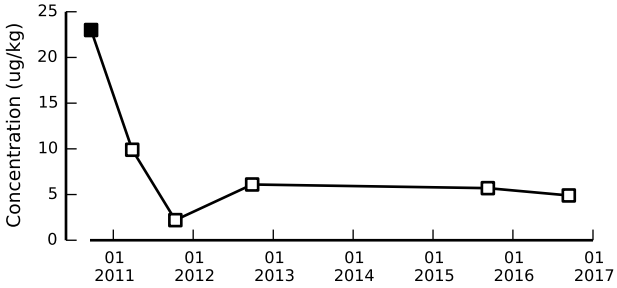
AROCLOR-1260 in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 26 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

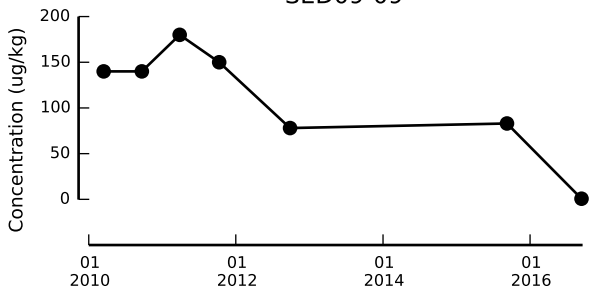
SED09-07

Sampled Once

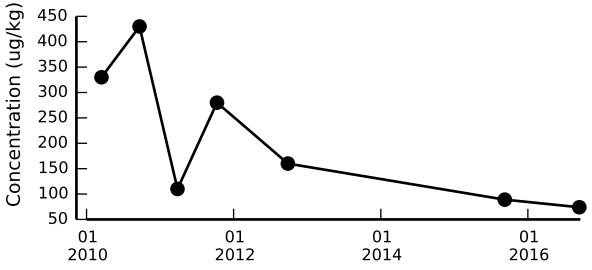
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

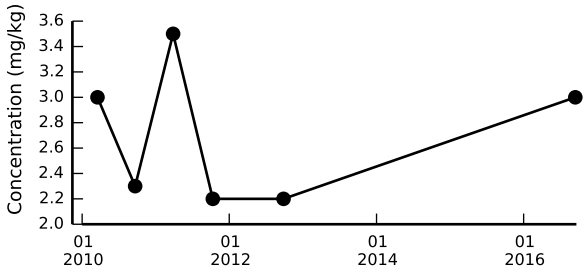
SED09-12

Sampled Once

ARSENIC in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 27 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



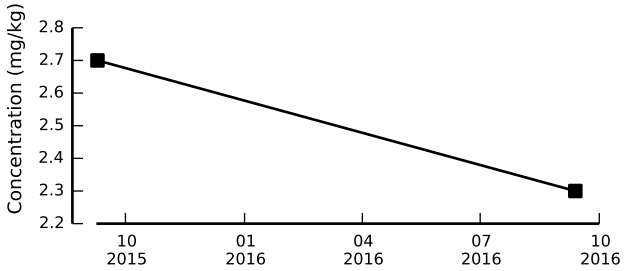
SED09-02

Sampled Once

SED09-03

Sampled Once

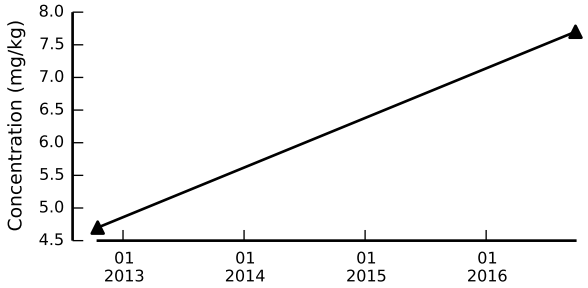
SED09-04



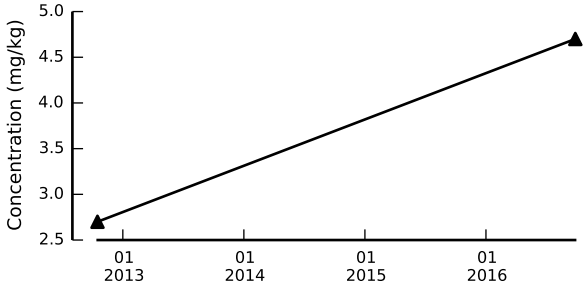
SED09-05

Sampled Once

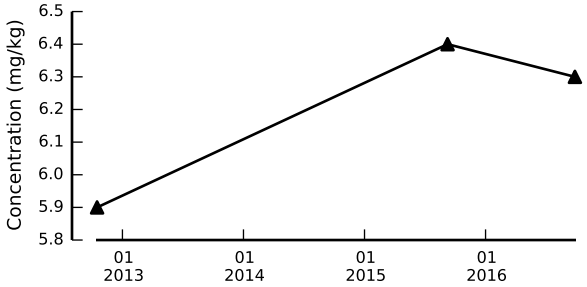
SED09-06



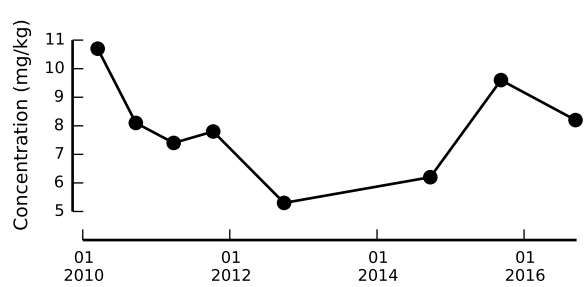
SED09-07



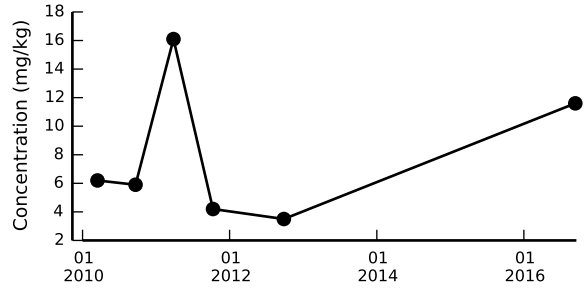
SED09-08



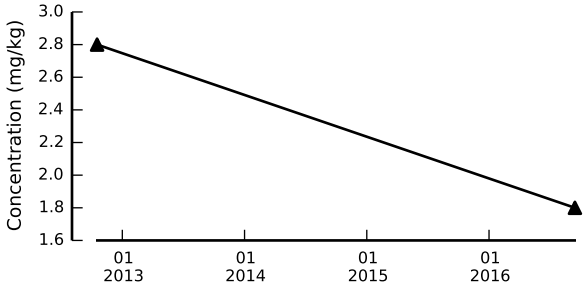
SED09-09



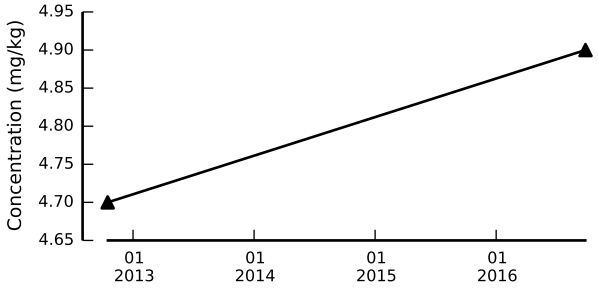
SED09-10



SED09-11



SED09-12



BENZENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 28 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

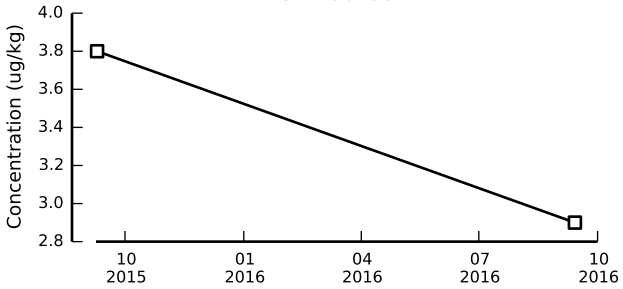
SED09-03

Sampled Once

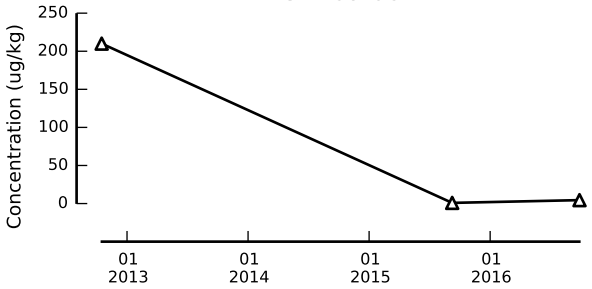
SED09-04

Sampled Once

SED09-05

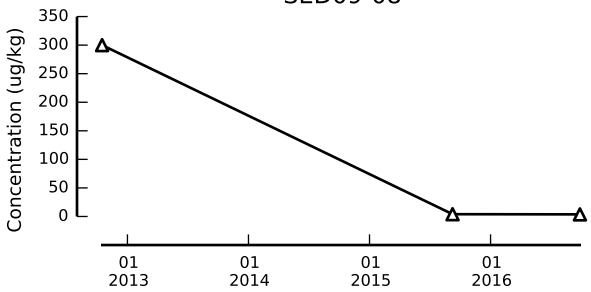


SED09-06

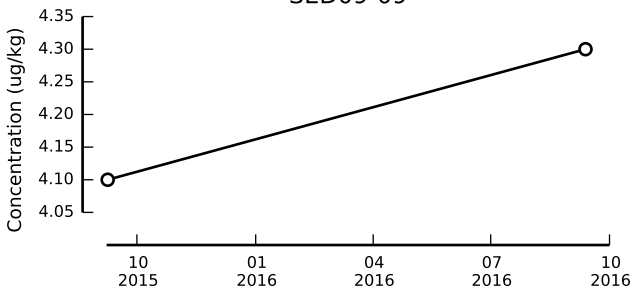


SED09-07

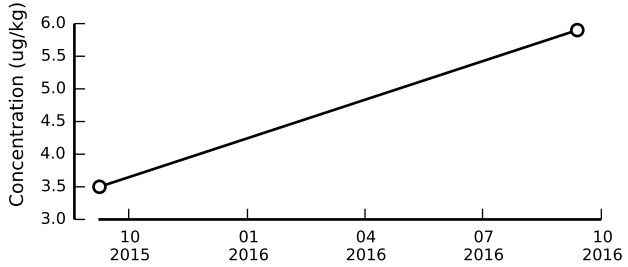
SED09-08



SED09-09

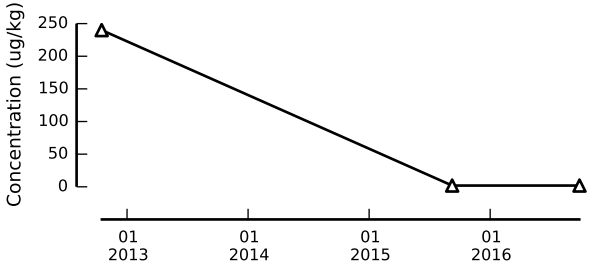


SED09-10



SED09-11

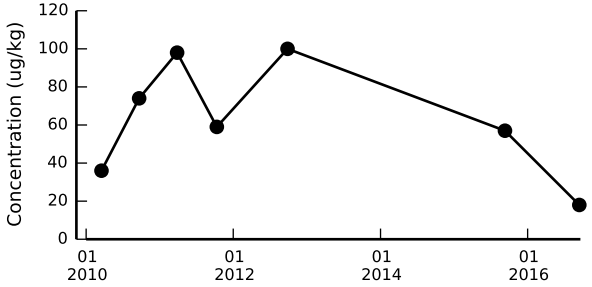
SED09-12



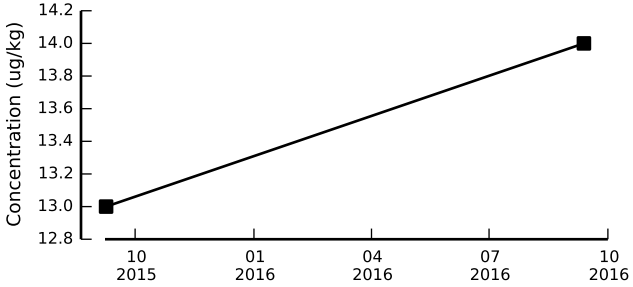
BENZO(A)ANTHRACENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 29 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

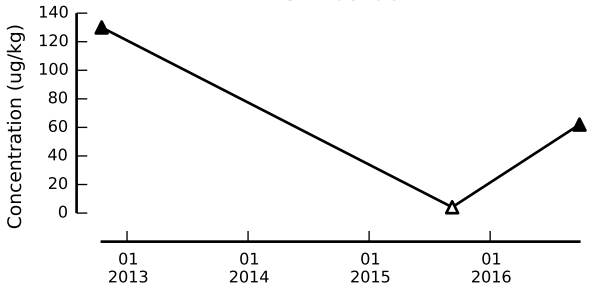
SED09-04

Sampled Once

SED09-05

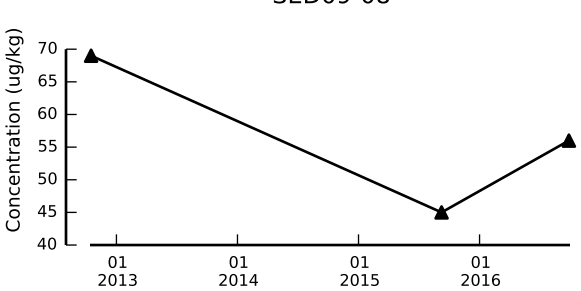
Sampled Once

SED09-06

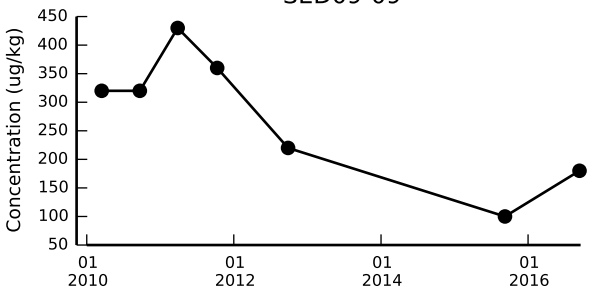


SED09-07

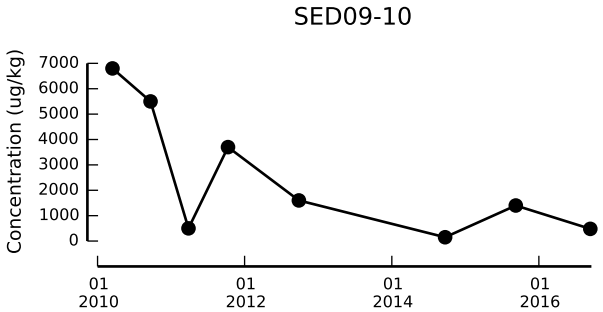
SED09-08



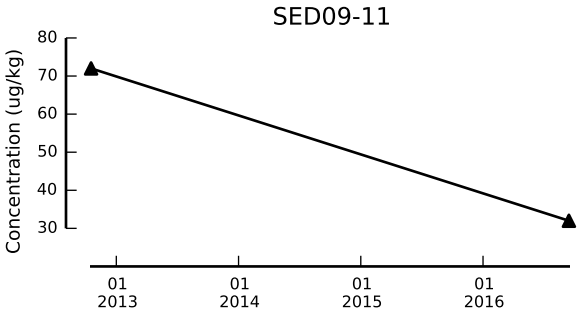
SED09-09



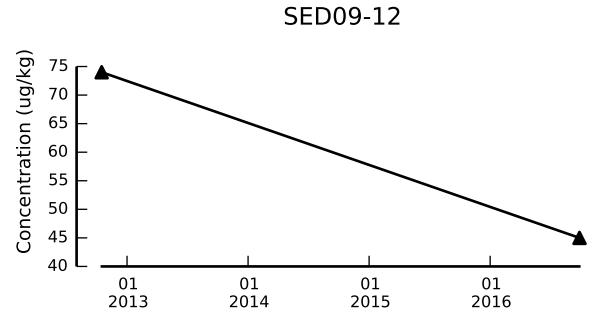
SED09-10



SED09-11



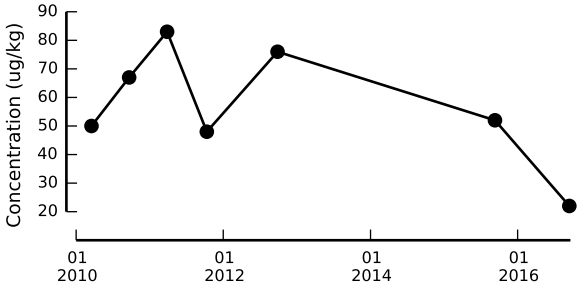
SED09-12



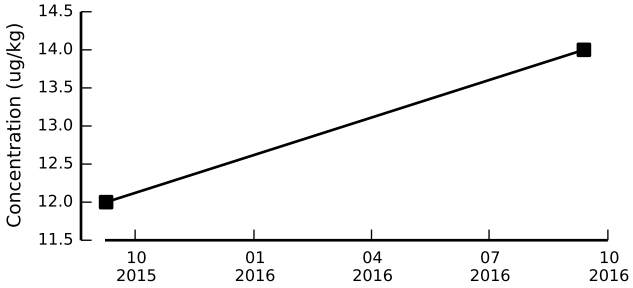
BENZO(A)PYRENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 30 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

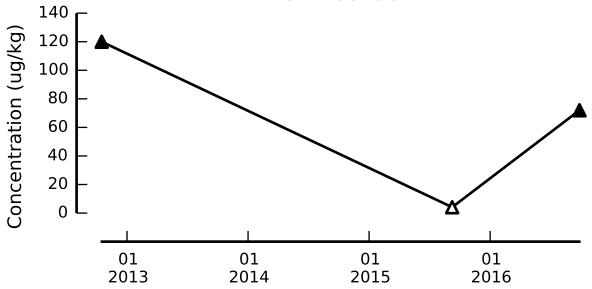
SED09-04

Sampled Once

SED09-05

Sampled Once

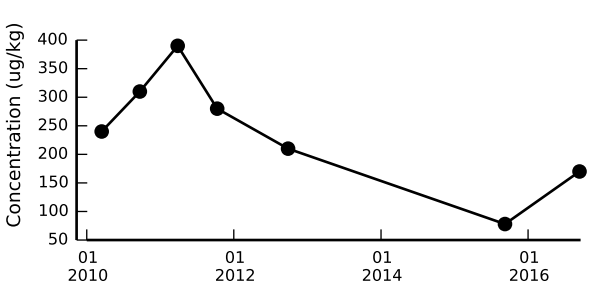
SED09-06



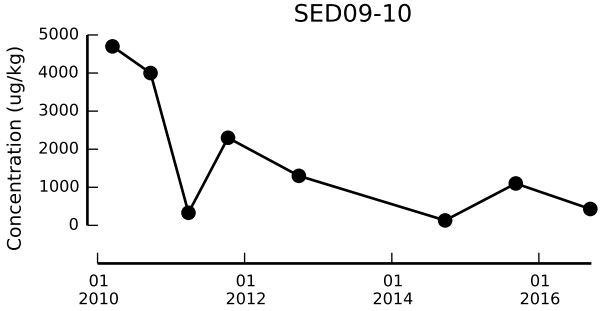
SED09-07

SED09-08

SED09-09

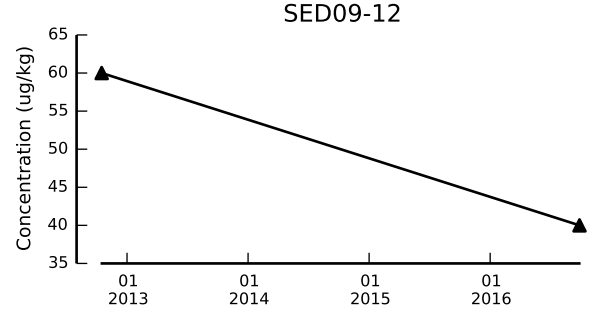


SED09-10



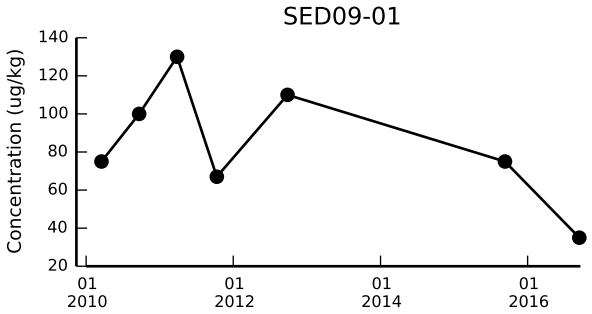
SED09-11

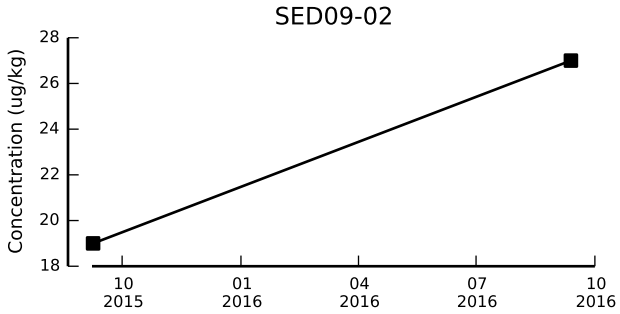
SED09-12

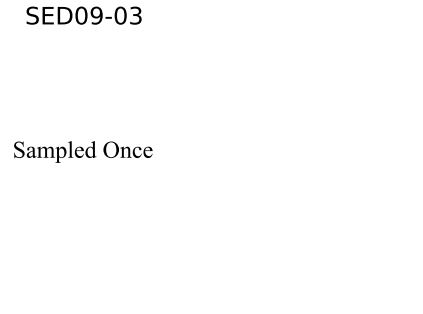


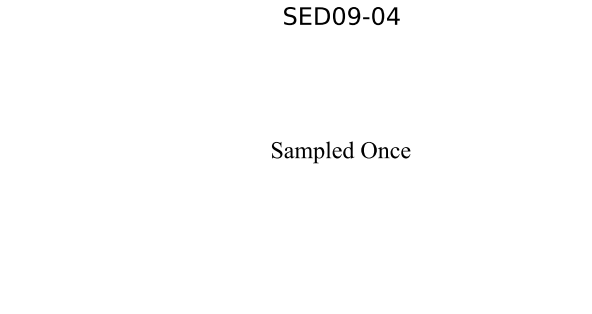
BENZO(B)FLUORANTHENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 31 of 86

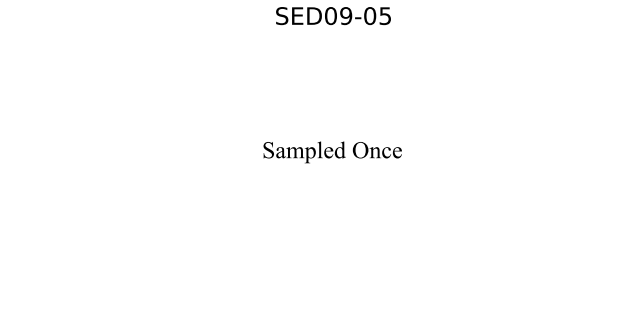
● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

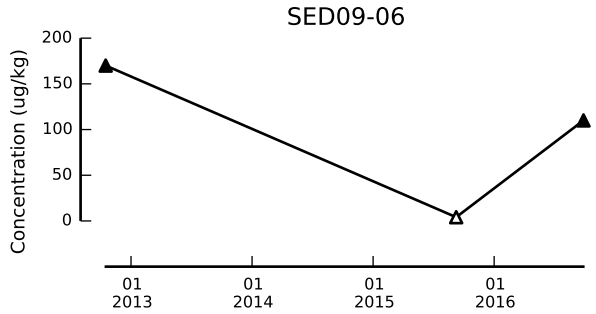


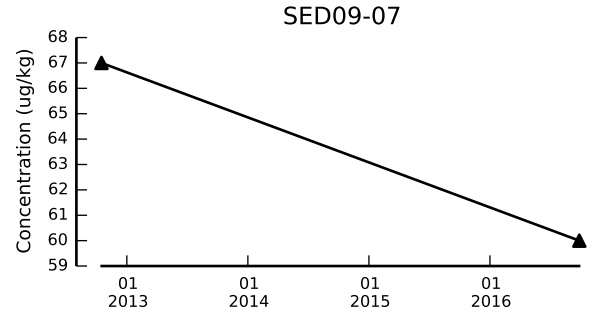


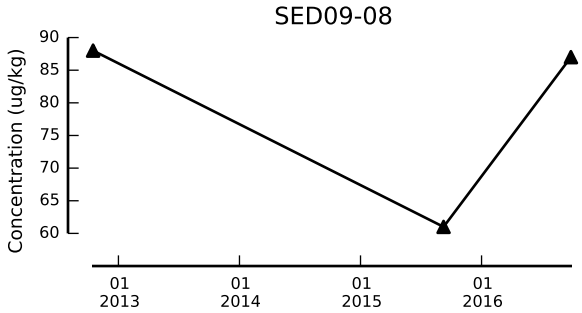


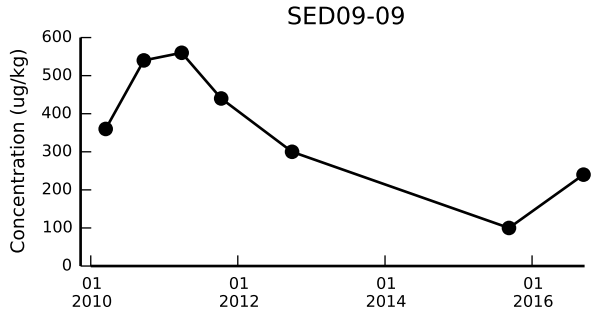


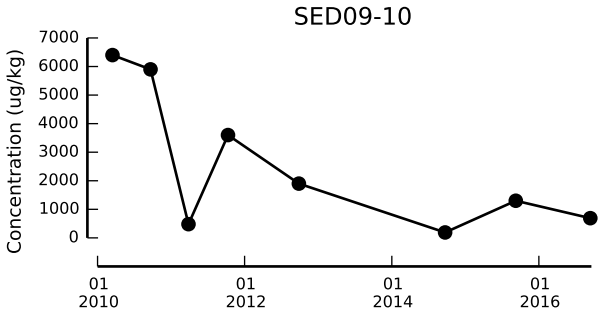


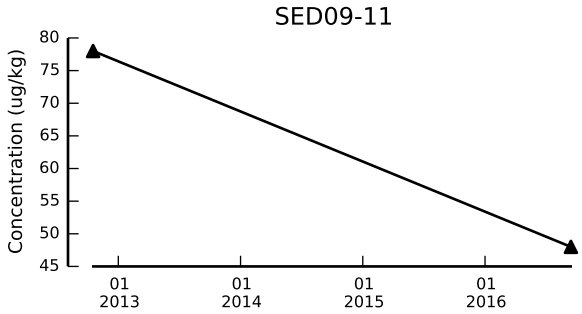


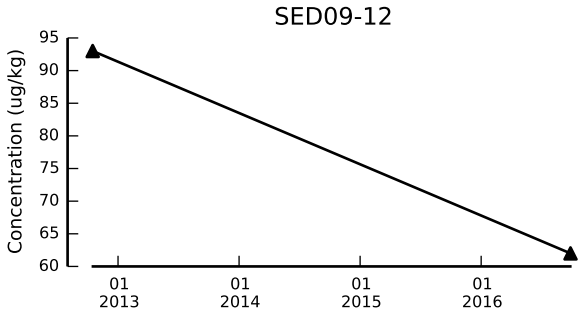








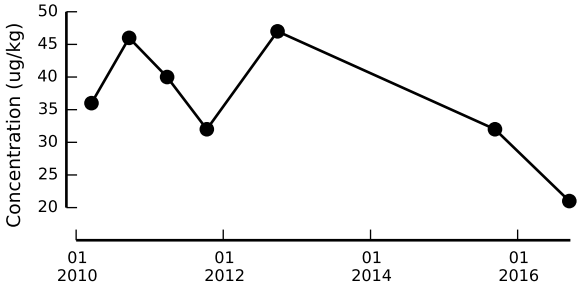




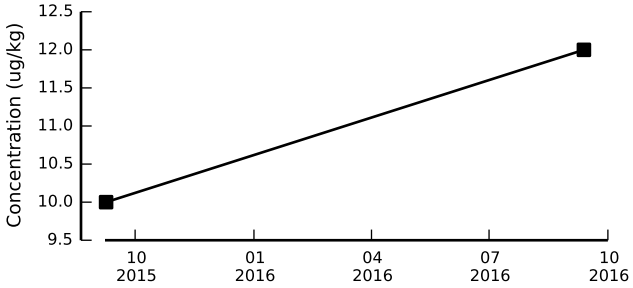
BENZO(G,H,I)PERYLENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 32 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

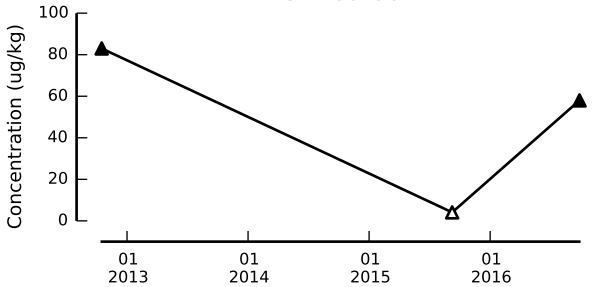
SED09-04

Sampled Once

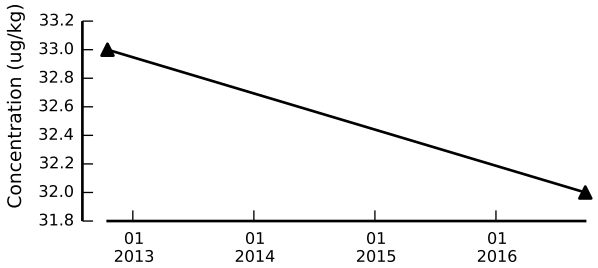
SED09-05

Sampled Once

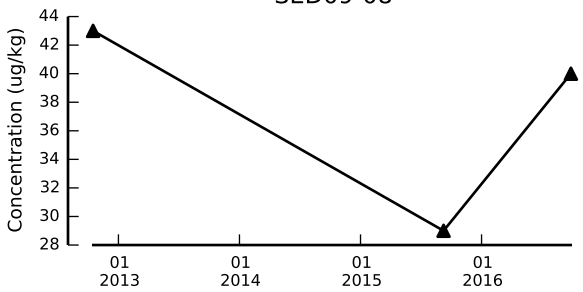
SED09-06



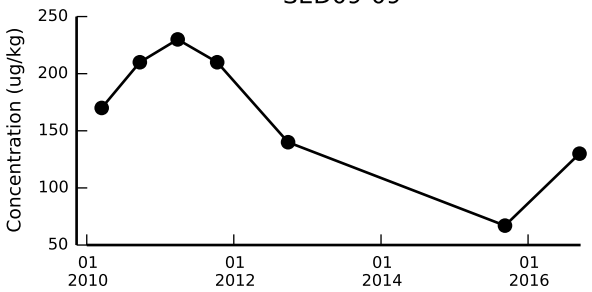
SED09-07



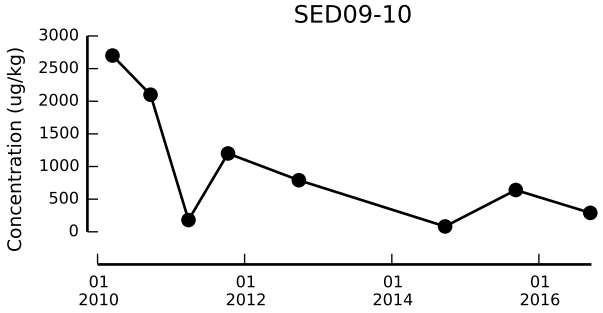
SED09-08



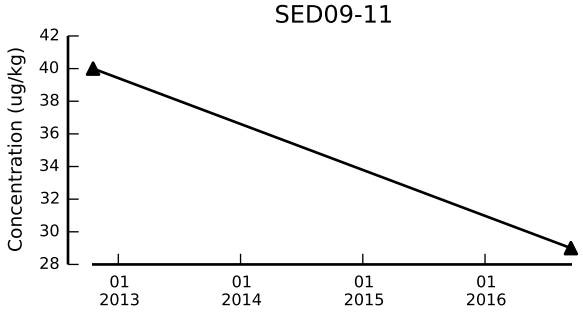
SED09-09



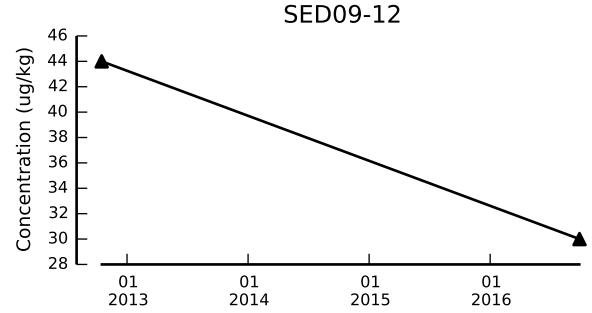
SED09-10



SED09-11



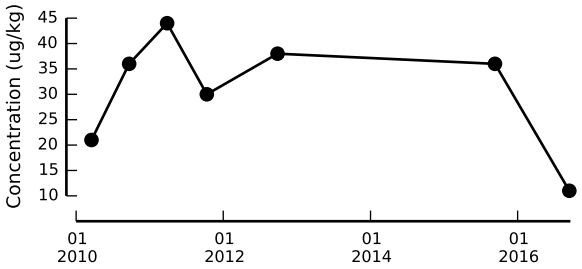
SED09-12



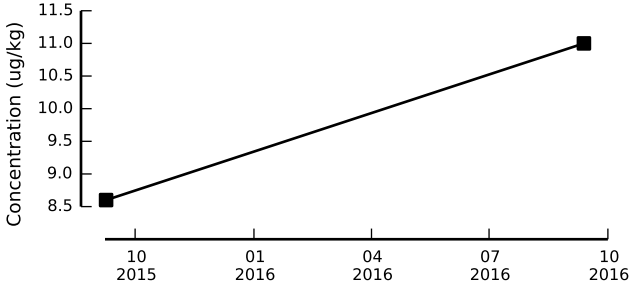
BENZO(K)FLUORANTHENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 33 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

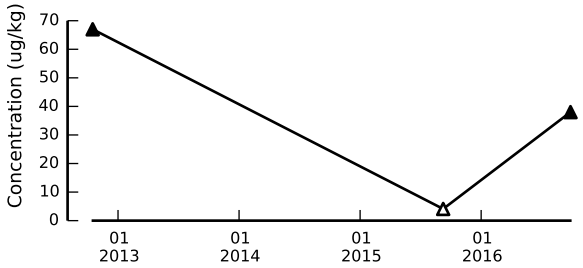
SED09-04

Sampled Once

SED09-05

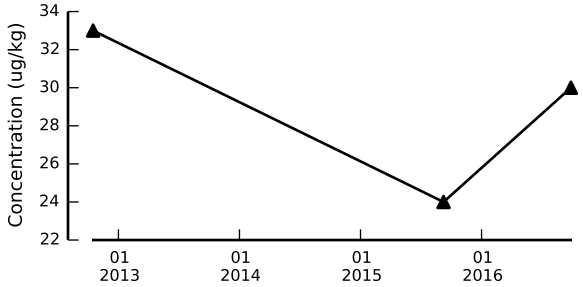
Sampled Once

SED09-06

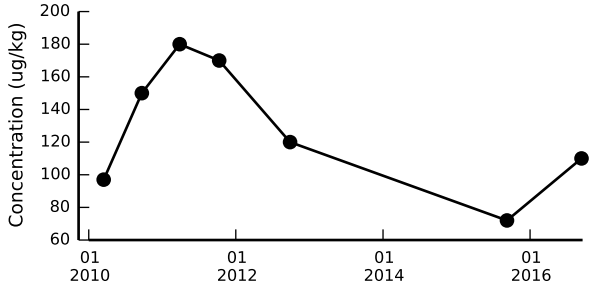


SED09-07

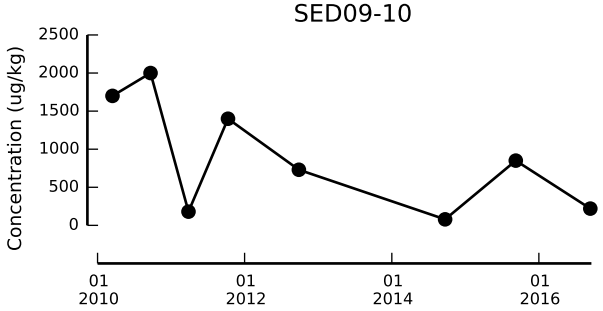
SED09-08



SED09-09

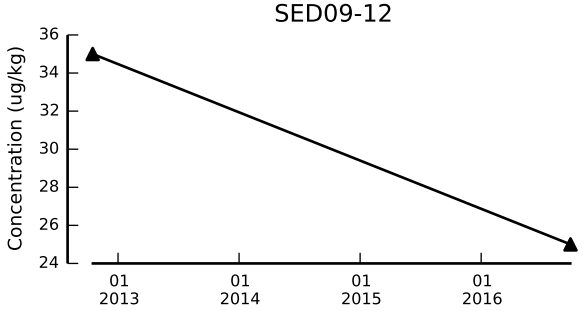


SED09-10



SED09-11

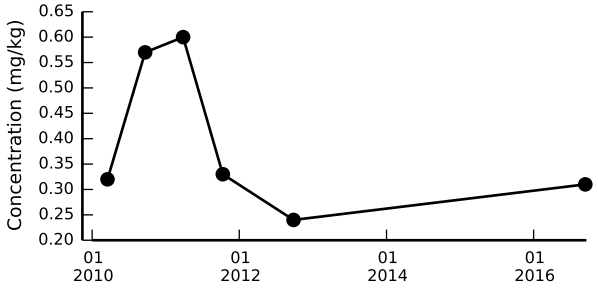
SED09-12



BERYLLIUM in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 34 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



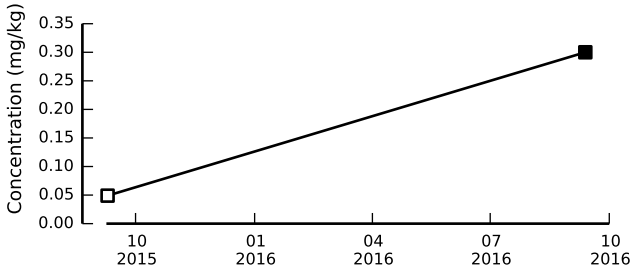
SED09-02

Sampled Once

SED09-03

Sampled Once

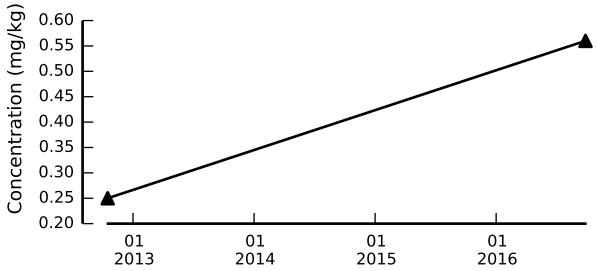
SED09-04



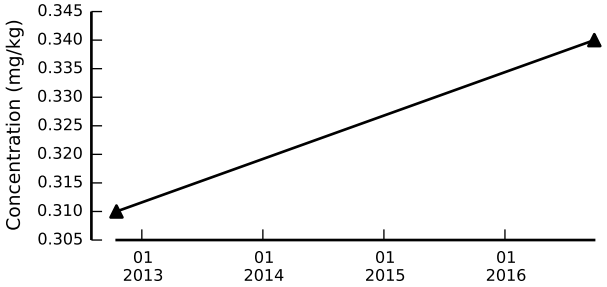
SED09-05

Sampled Once

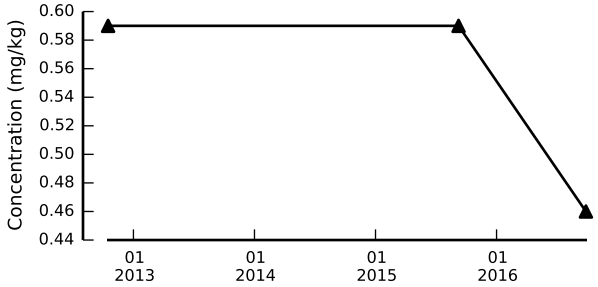
SED09-06



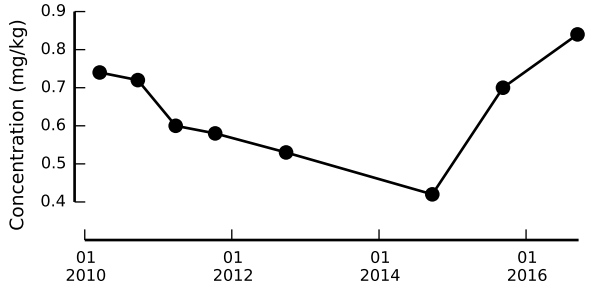
SED09-07



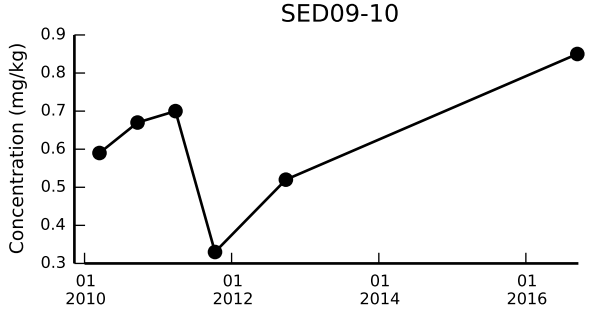
SED09-08



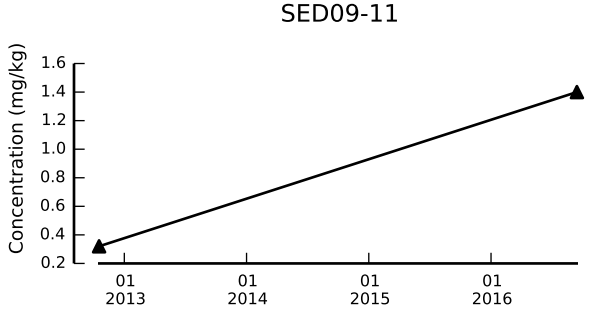
SED09-09



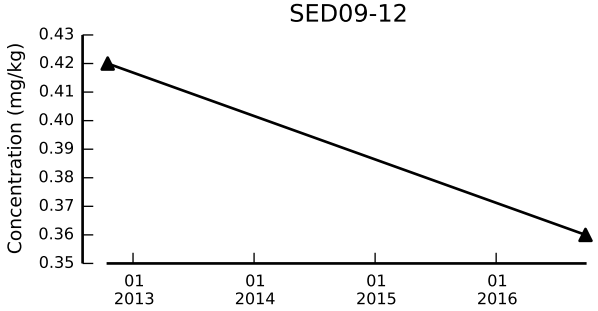
SED09-10



SED09-11



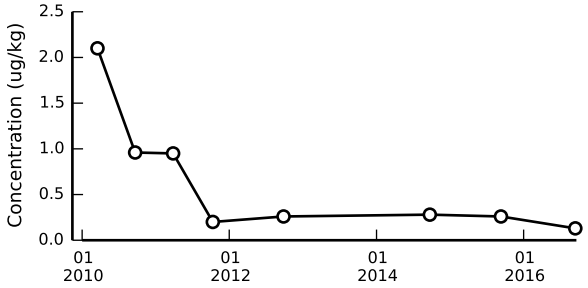
SED09-12



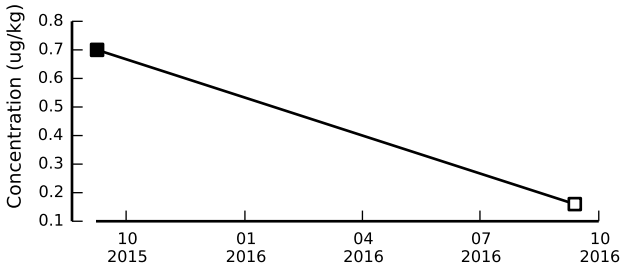
BETA-BHC in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 35 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

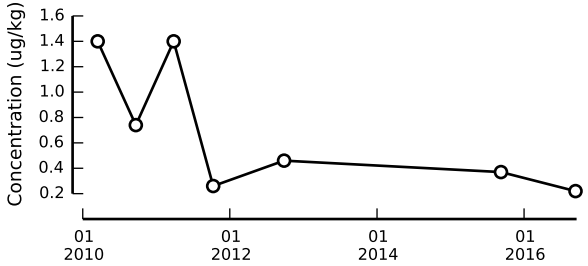
SED09-07

Sampled Once

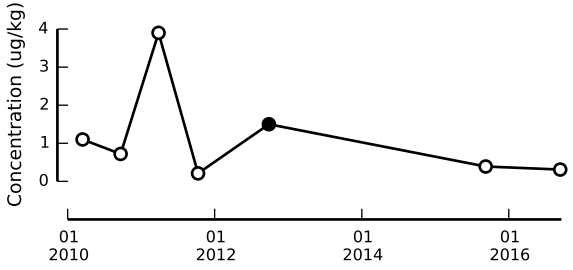
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

SED09-12

Sampled Once

BROMODICHLOROMETHANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 36 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

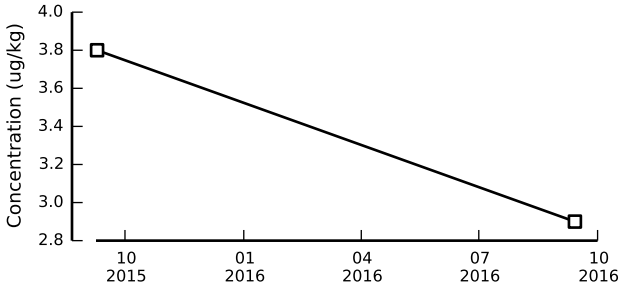
SED09-03

Sampled Once

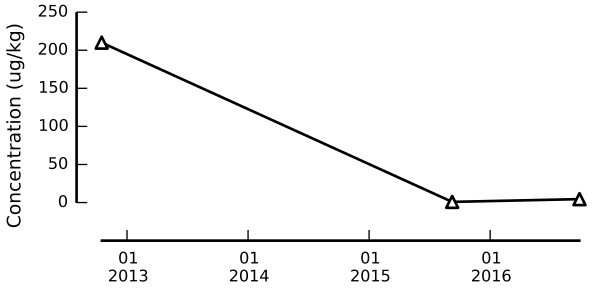
SED09-04

Sampled Once

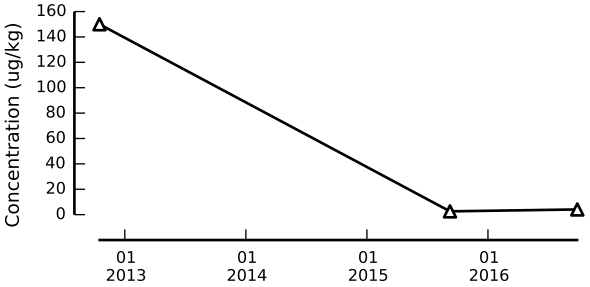
SED09-05



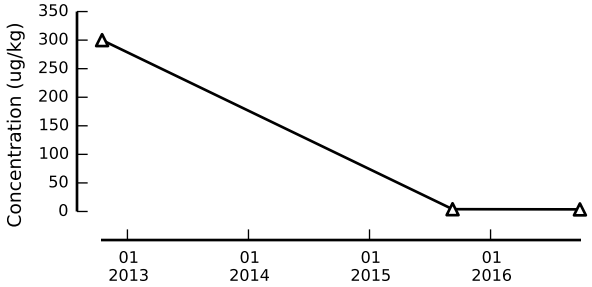
SED09-06



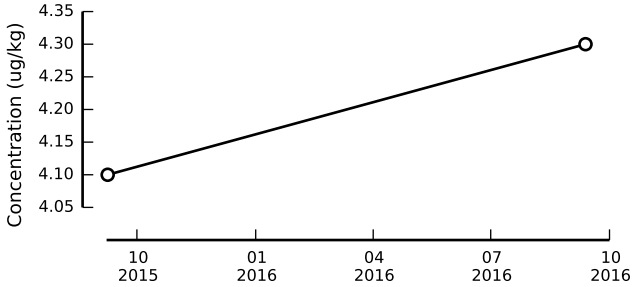
SED09-07



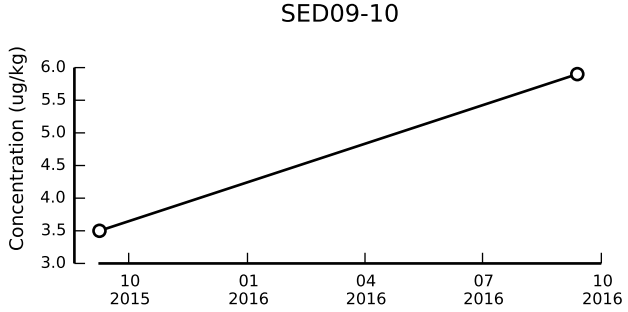
SED09-08



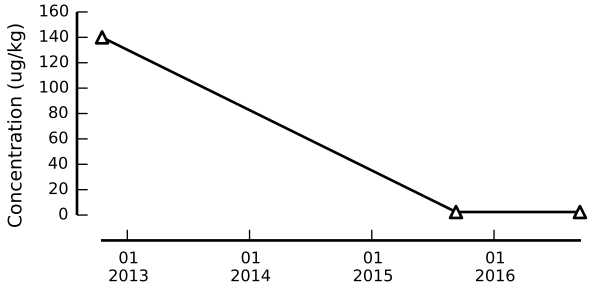
SED09-09



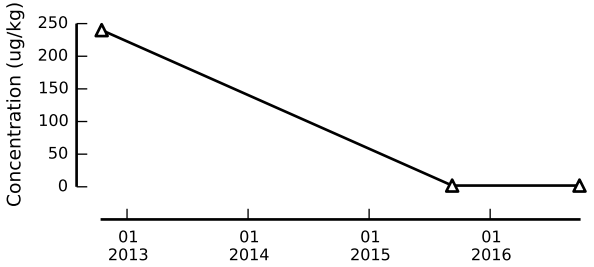
SED09-10



SED09-11



SED09-12



BROMOFORM in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 37 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

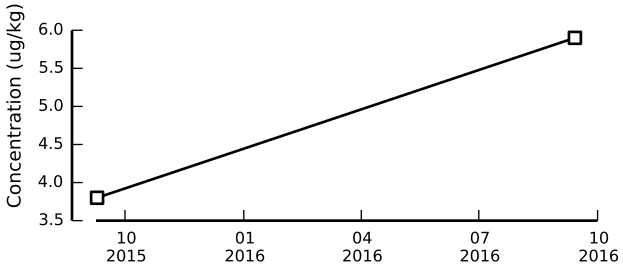
SED09-03

Sampled Once

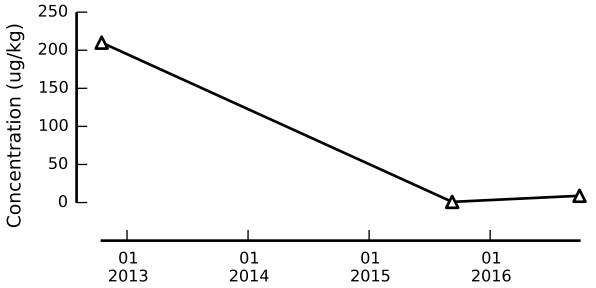
SED09-04

Sampled Once

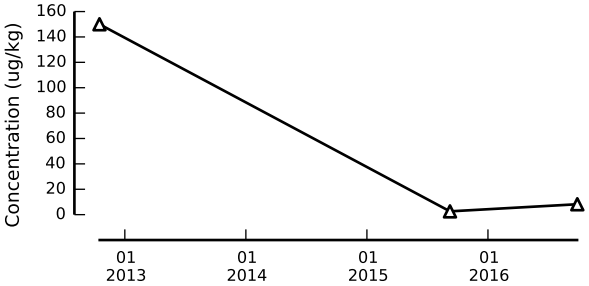
SED09-05



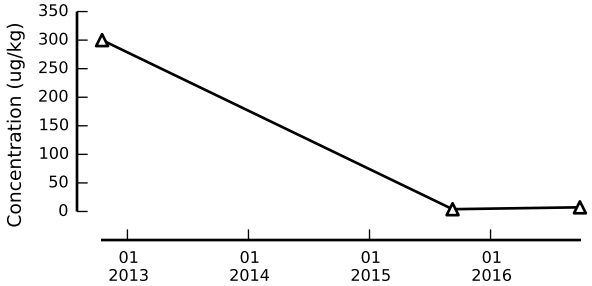
SED09-06



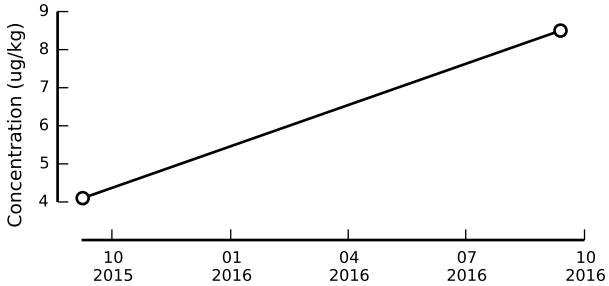
SED09-07



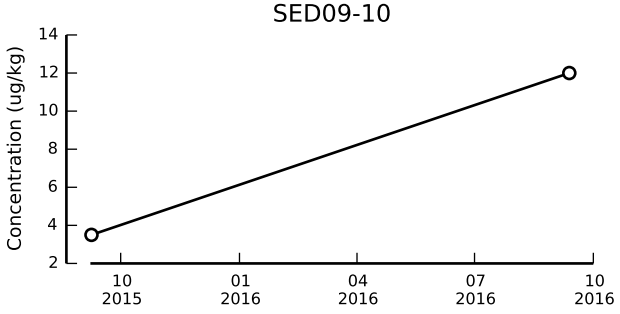
SED09-08



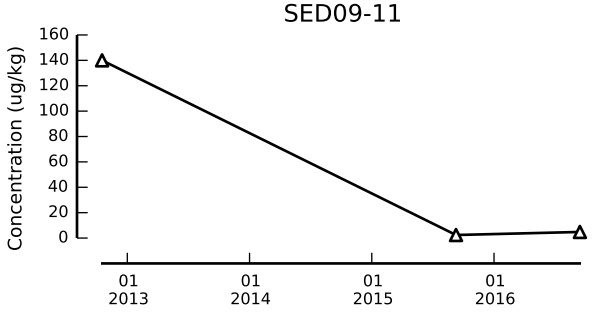
SED09-09



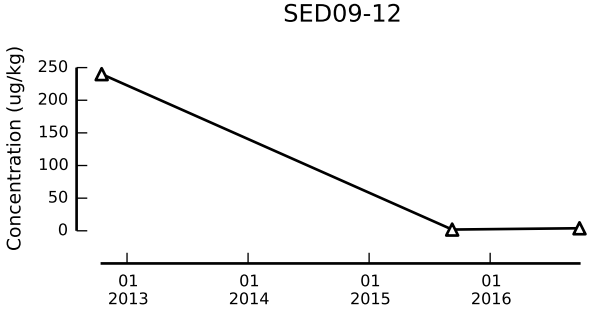
SED09-10



SED09-11



SED09-12



BROMOMETHANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 38 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

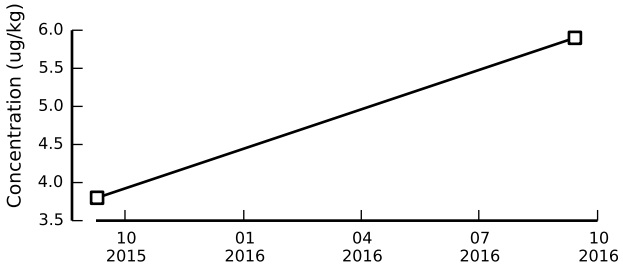
SED09-03

Sampled Once

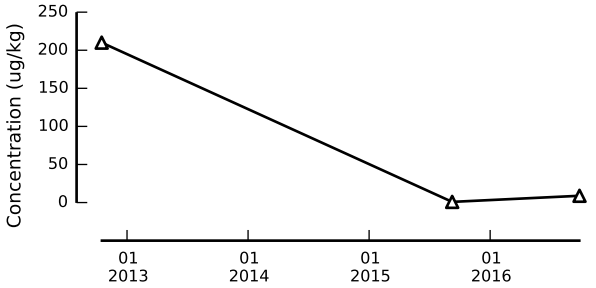
SED09-04

Sampled Once

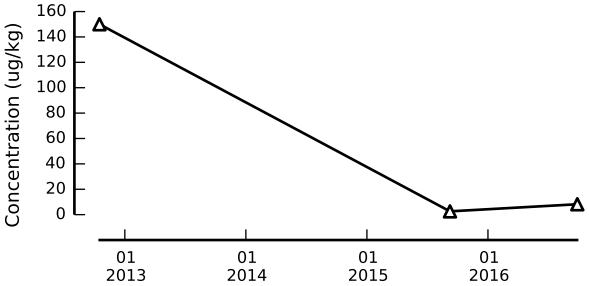
SED09-05



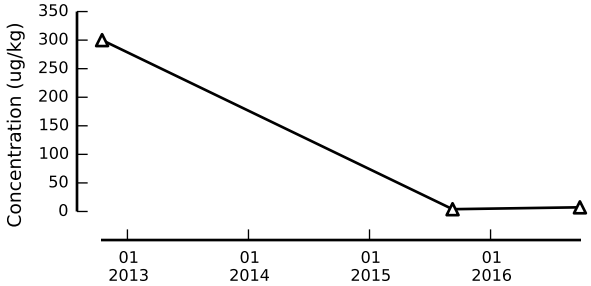
SED09-06



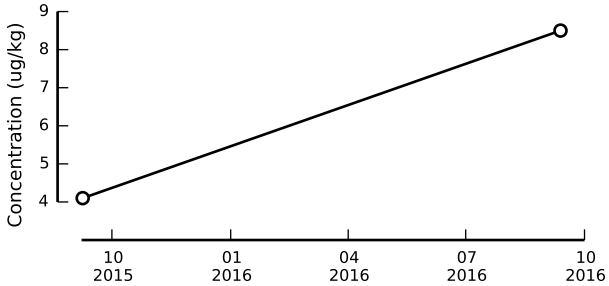
SED09-07



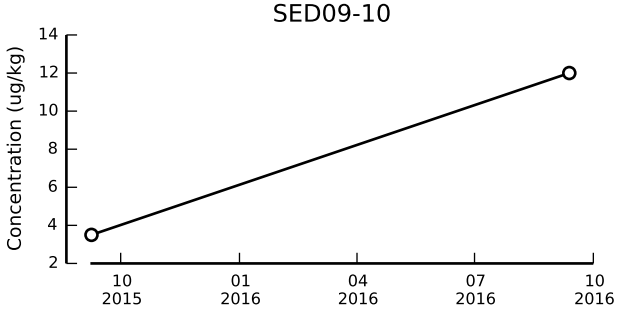
SED09-08



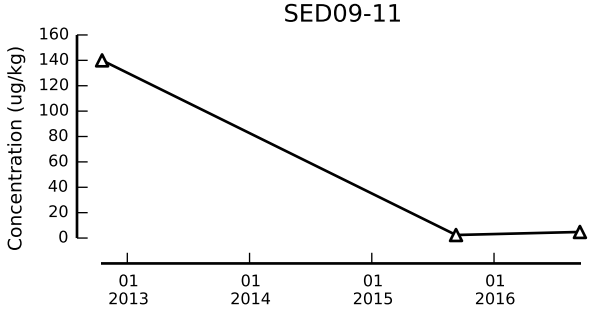
SED09-09



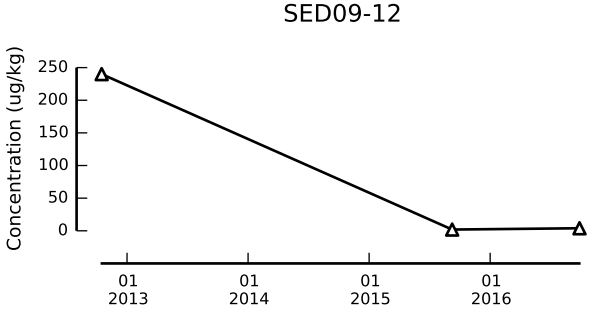
SED09-10



SED09-11



SED09-12



CARBON DISULFIDE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 39 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

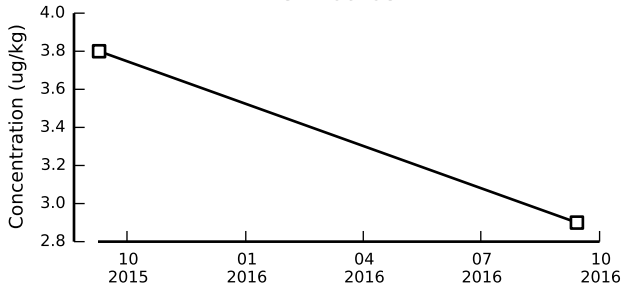
Sampled Once

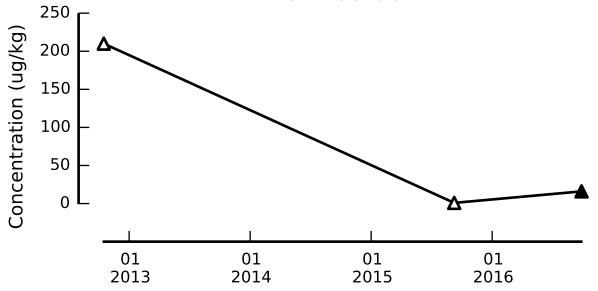
SED09-03

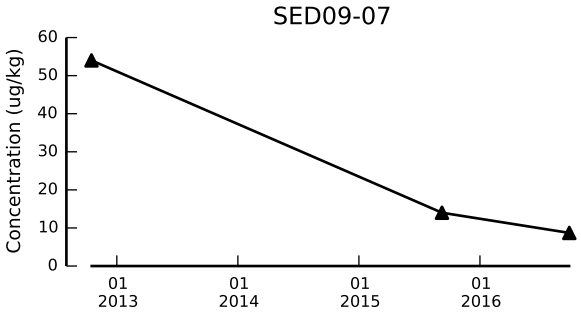
Sampled Once

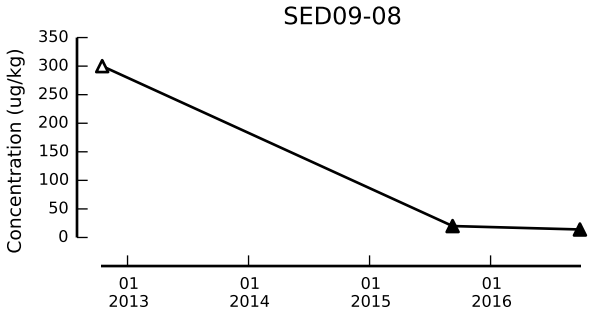
SED09-04

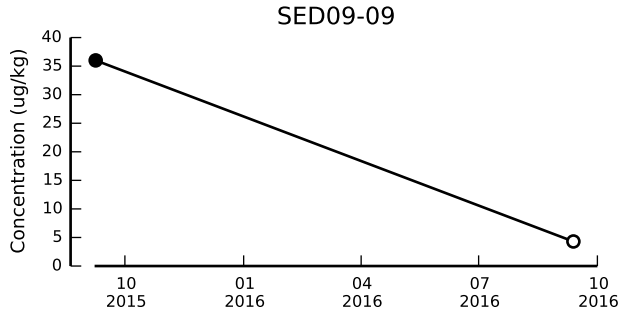
Sampled Once

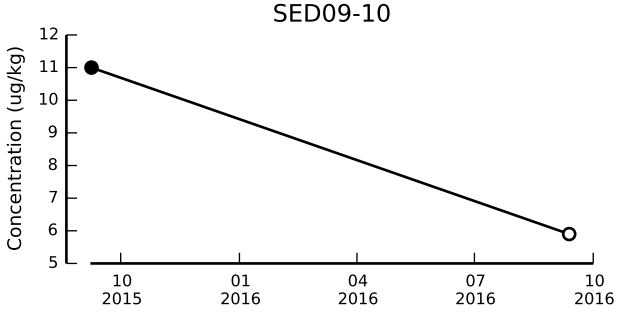


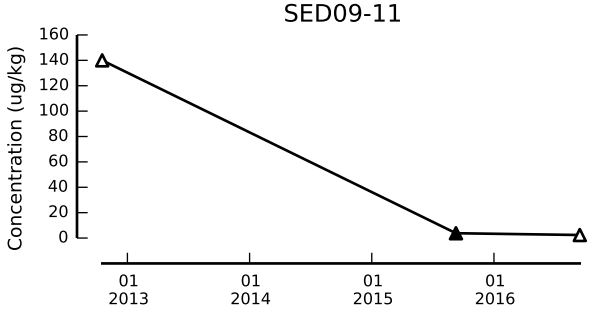


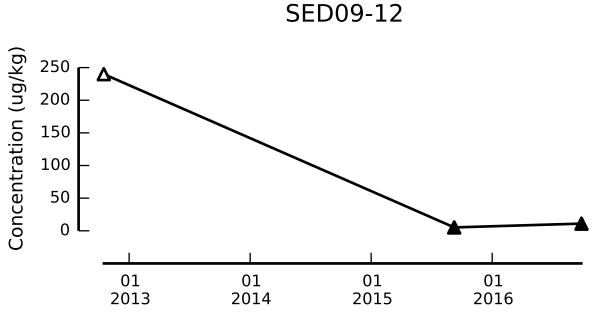












CARBON TETRACHLORIDE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 40 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

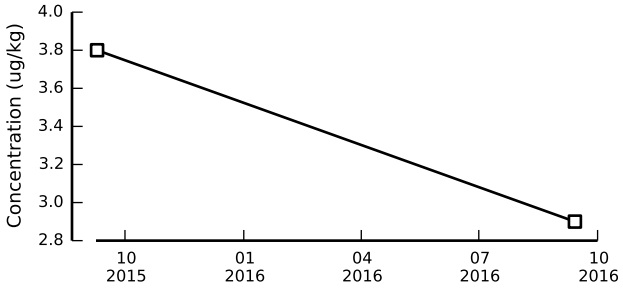
SED09-03

Sampled Once

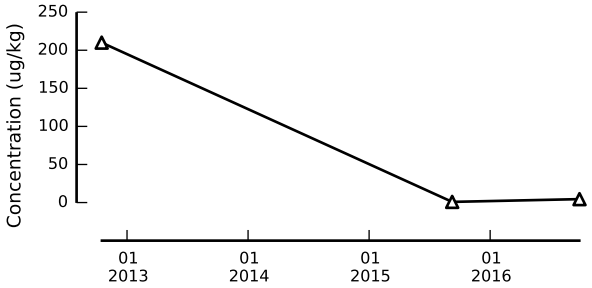
SED09-04

Sampled Once

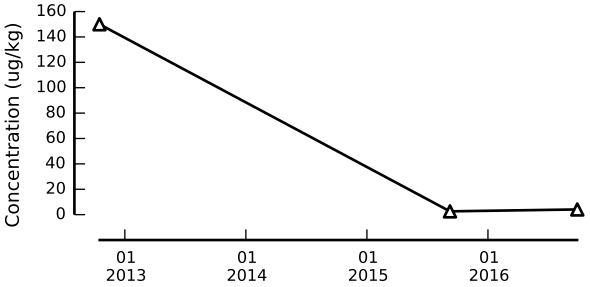
SED09-05



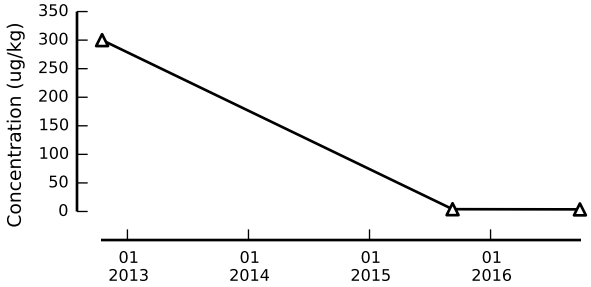
SED09-06



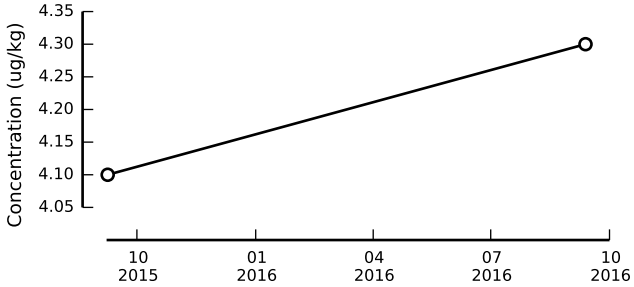
SED09-07



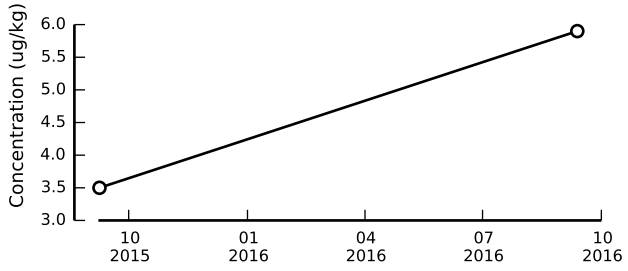
SED09-08



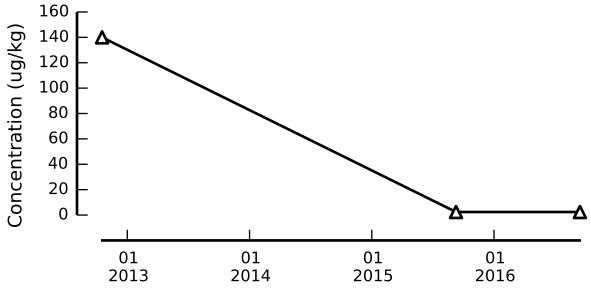
SED09-09



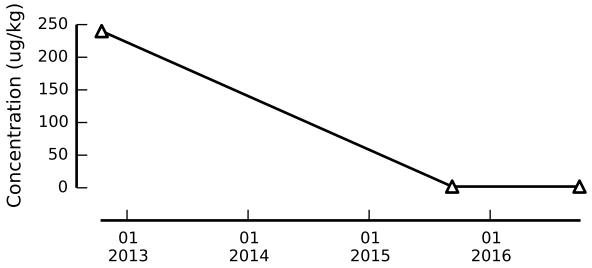
SED09-10



SED09-11



SED09-12



CHLOROBENZENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 41 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

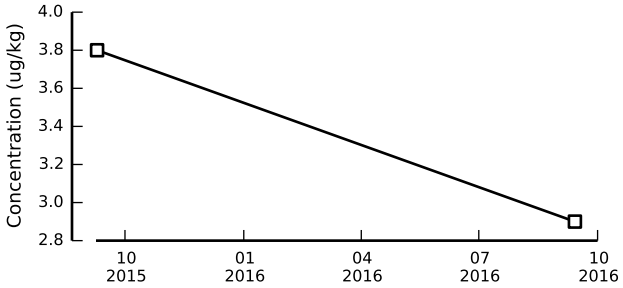
SED09-03

Sampled Once

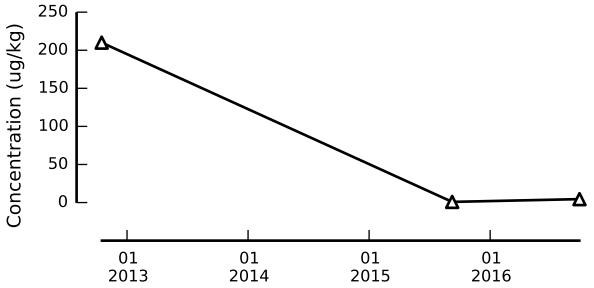
SED09-04

Sampled Once

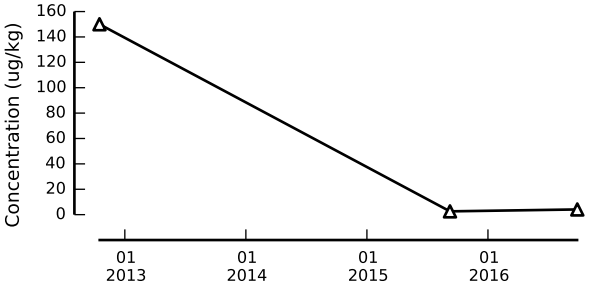
SED09-05



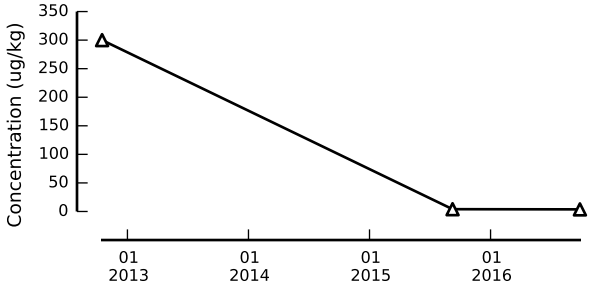
SED09-06



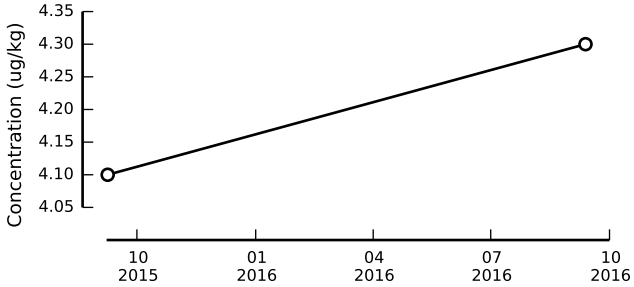
SED09-07



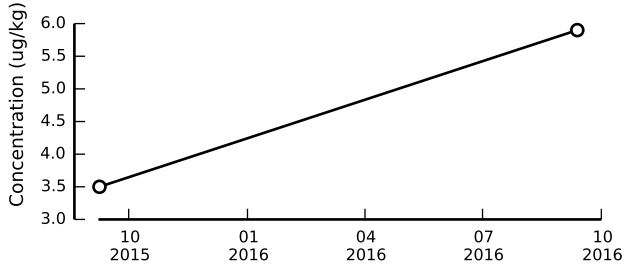
SED09-08



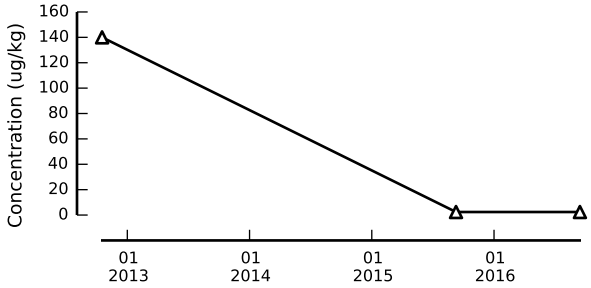
SED09-09



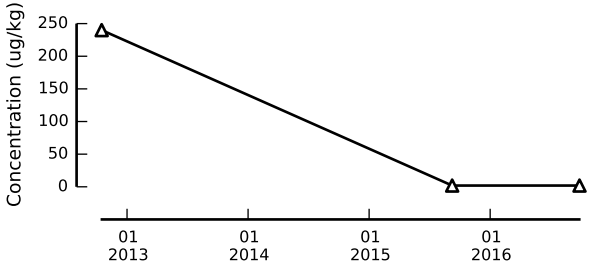
SED09-10



SED09-11



SED09-12



CHLOROETHANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 42 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

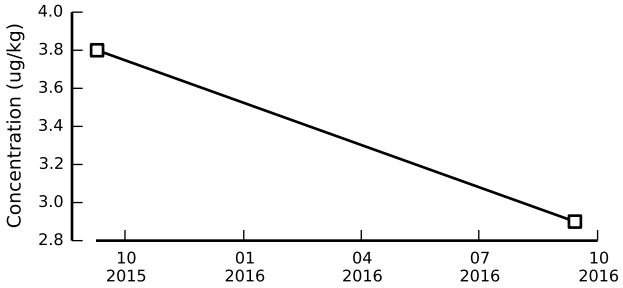
SED09-03

Sampled Once

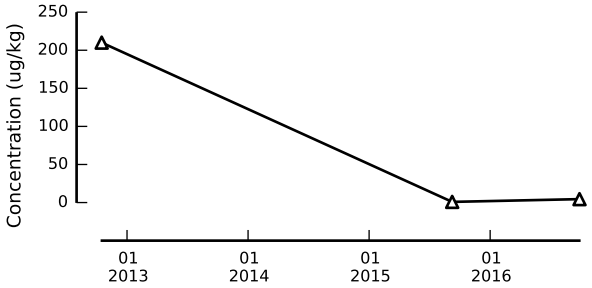
SED09-04

Sampled Once

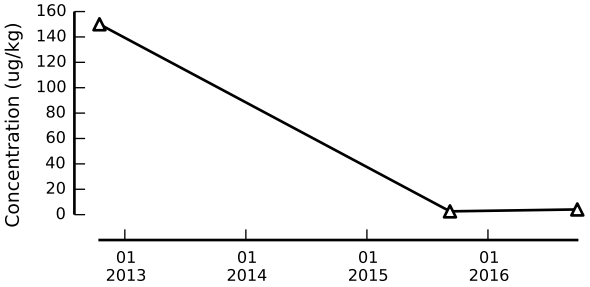
SED09-05



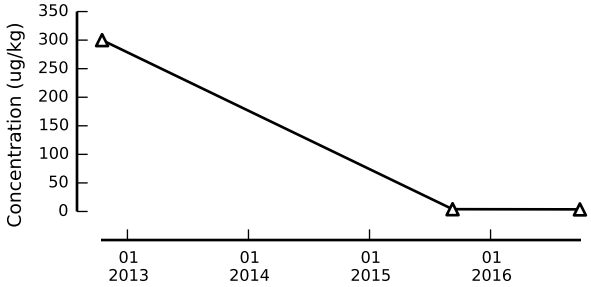
SED09-06



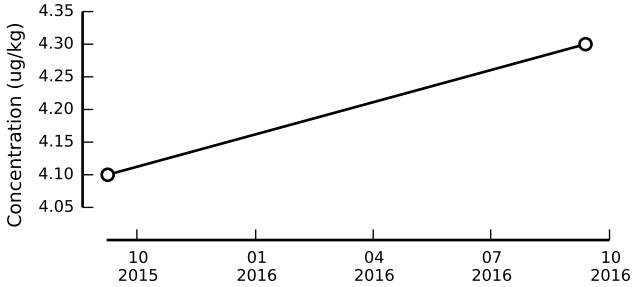
SED09-07



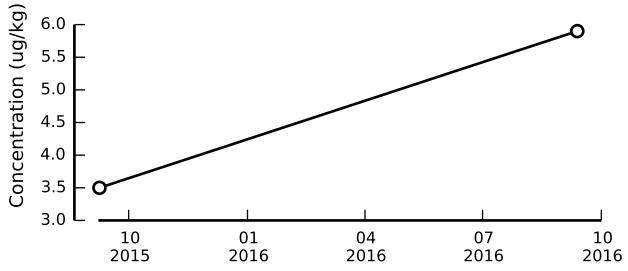
SED09-08



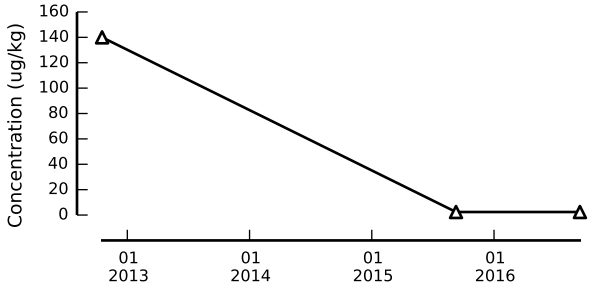
SED09-09



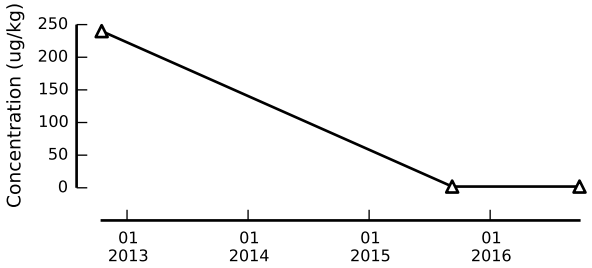
SED09-10



SED09-11



SED09-12



CHLOROFORM in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 43 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

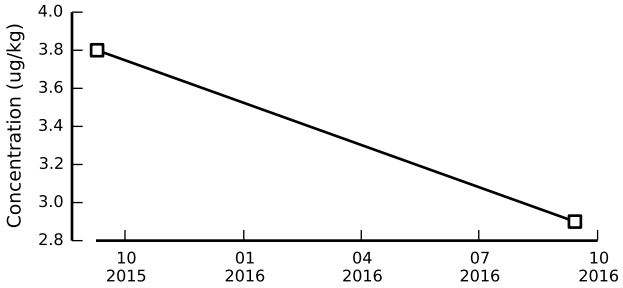
SED09-03

Sampled Once

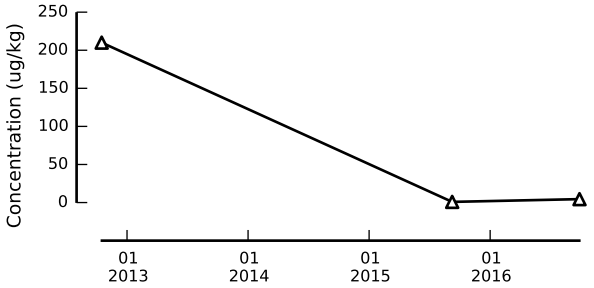
SED09-04

Sampled Once

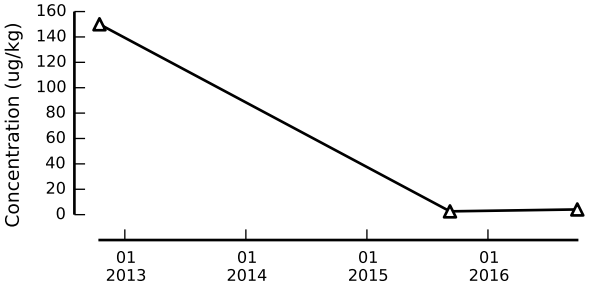
SED09-05



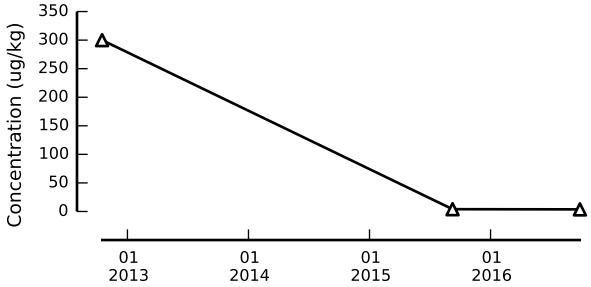
SED09-06



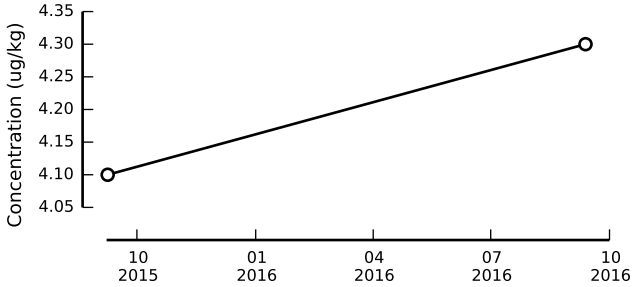
SED09-07



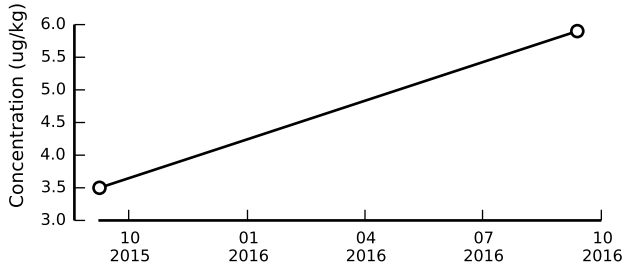
SED09-08



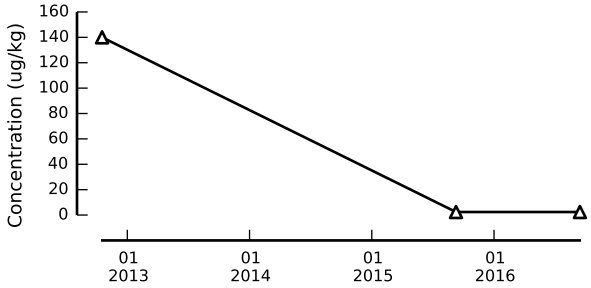
SED09-09



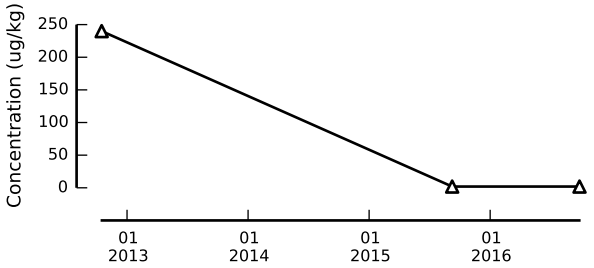
SED09-10



SED09-11



SED09-12



CHLOROMETHANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 44 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

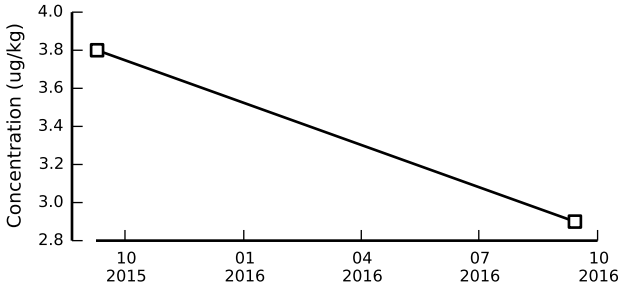
SED09-03

Sampled Once

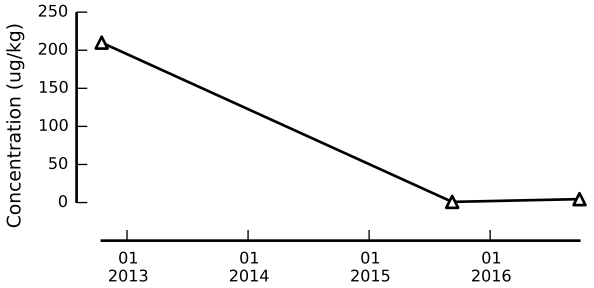
SED09-04

Sampled Once

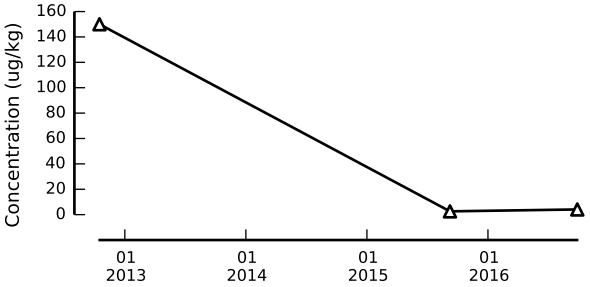
SED09-05



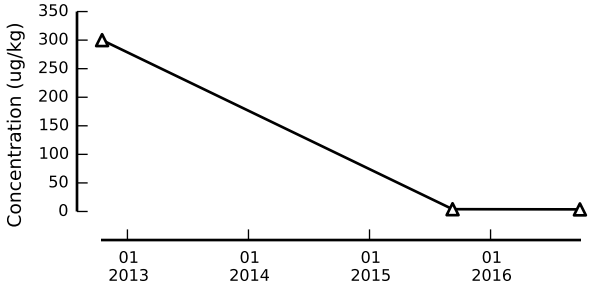
SED09-06



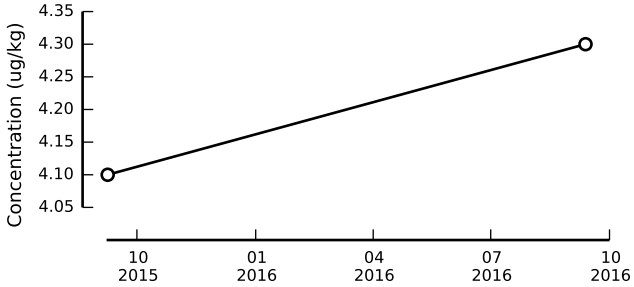
SED09-07



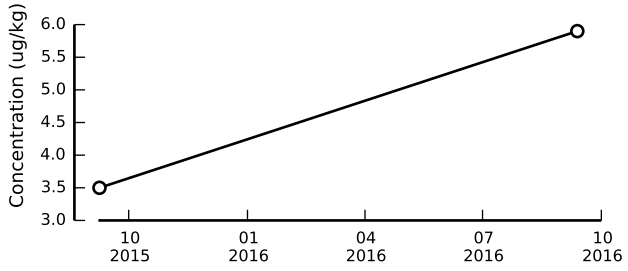
SED09-08



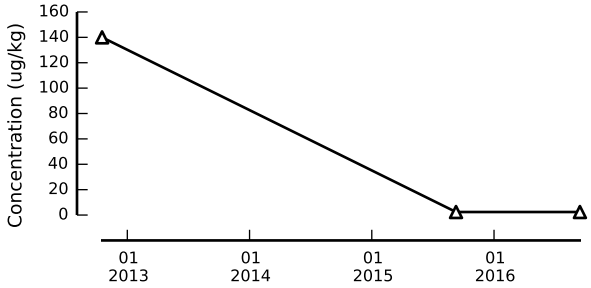
SED09-09



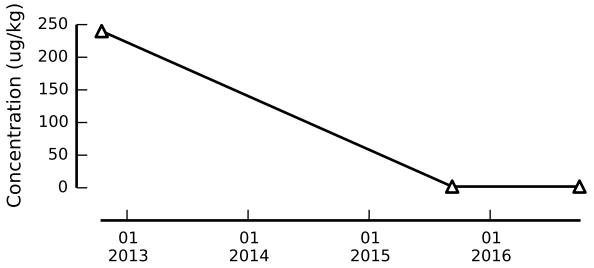
SED09-10



SED09-11



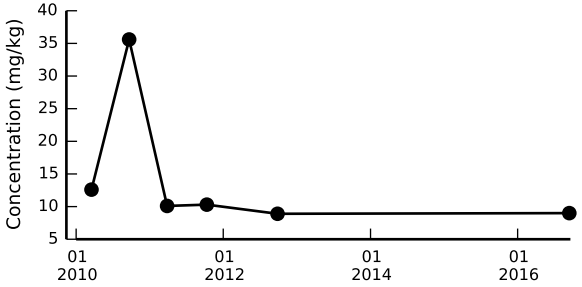
SED09-12



CHROMIUM, TOTAL in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 45 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



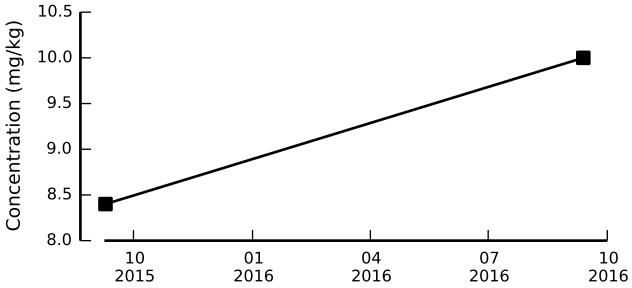
SED09-02

Sampled Once

SED09-03

Sampled Once

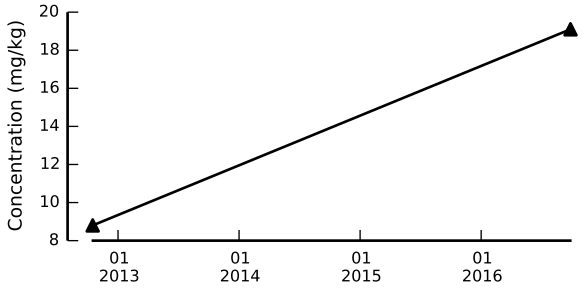
SED09-04



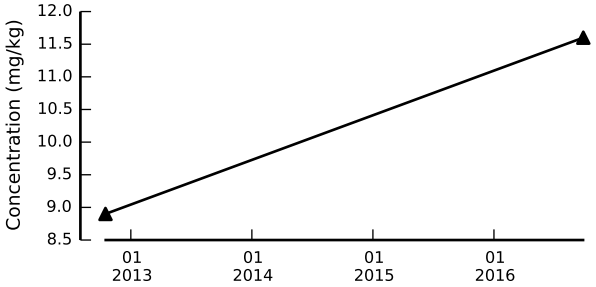
SED09-05

Sampled Once

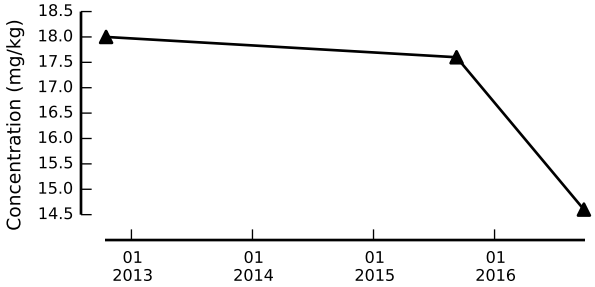
SED09-06



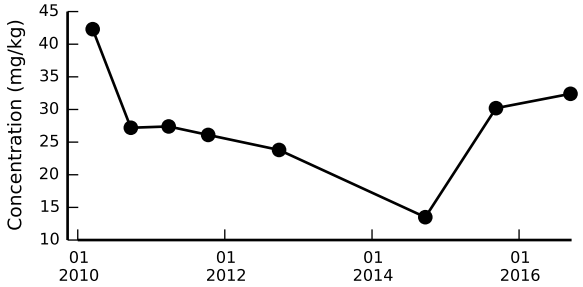
SED09-07



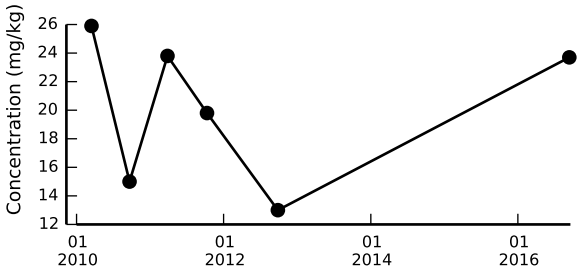
SED09-08



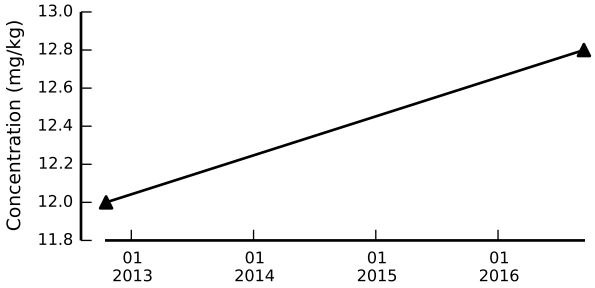
SED09-09



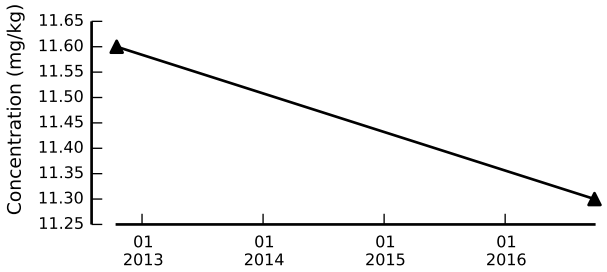
SED09-10



SED09-11



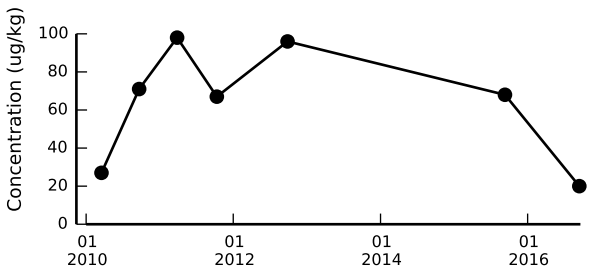
SED09-12



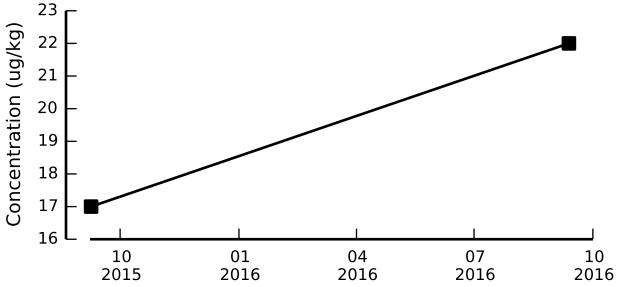
CHRYSENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 46 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

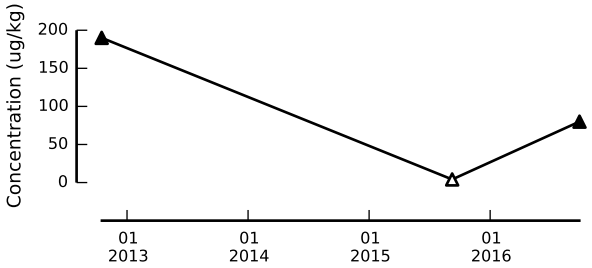
SED09-04

Sampled Once

SED09-05

Sampled Once

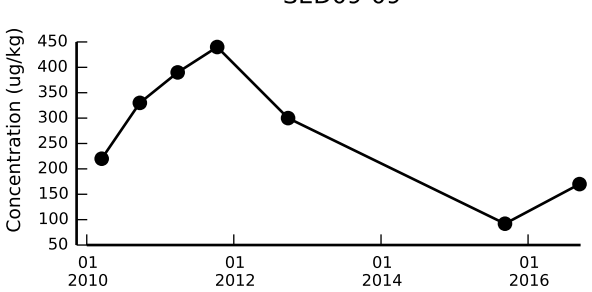
SED09-06



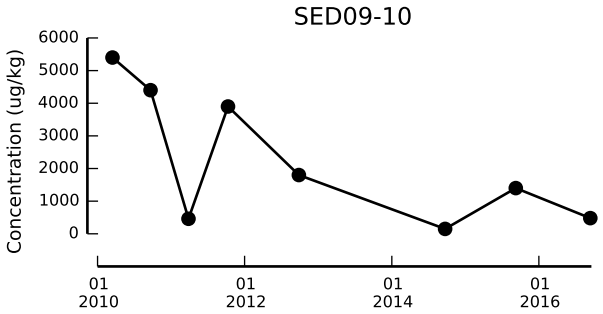
SED09-07

SED09-08

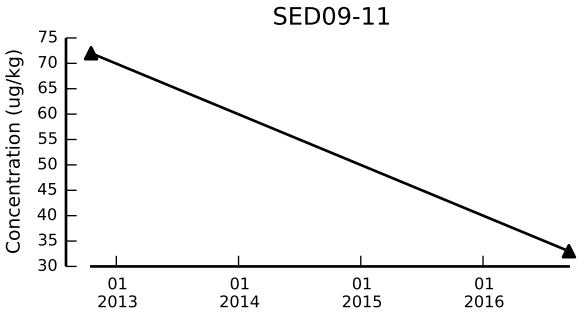
SED09-09



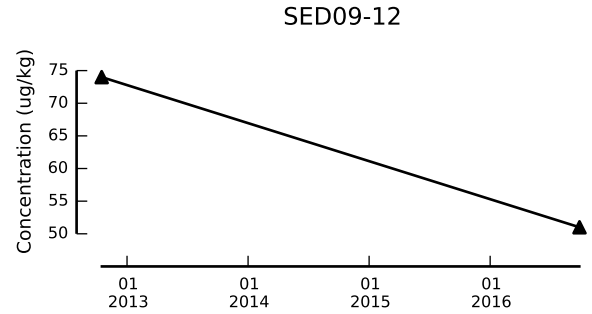
SED09-10



SED09-11



SED09-12



CIS-1,2-DICHLOROETHENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 47 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

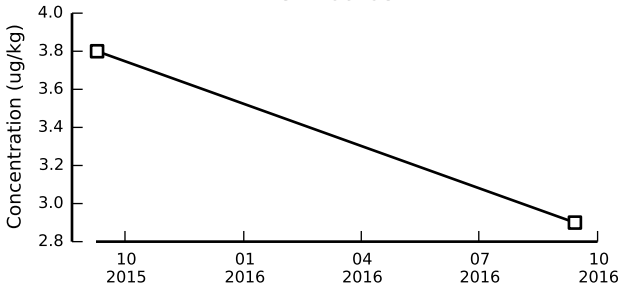
SED09-03

Sampled Once

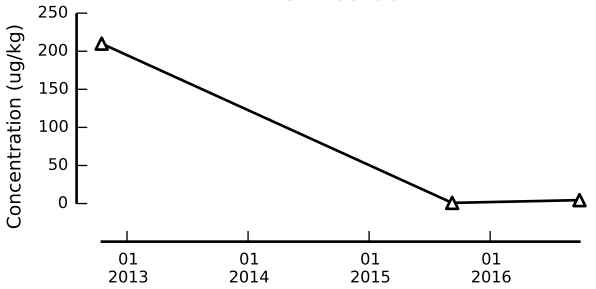
SED09-04

Sampled Once

SED09-05

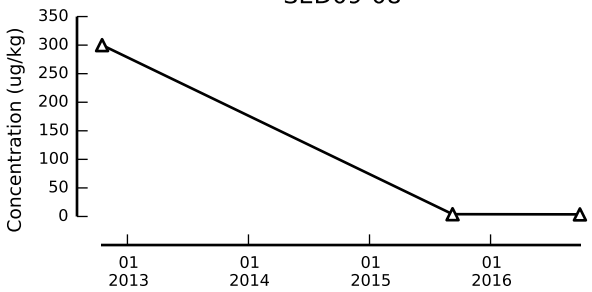


SED09-06

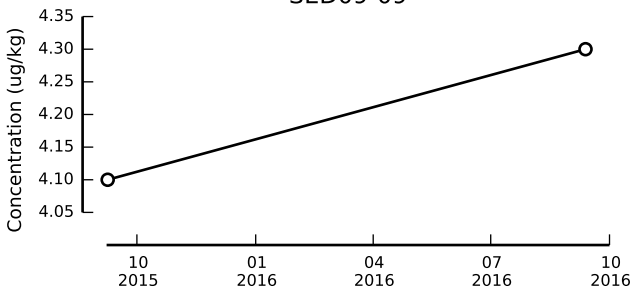


SED09-07

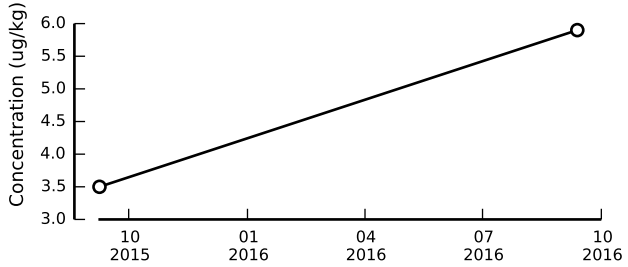
SED09-08



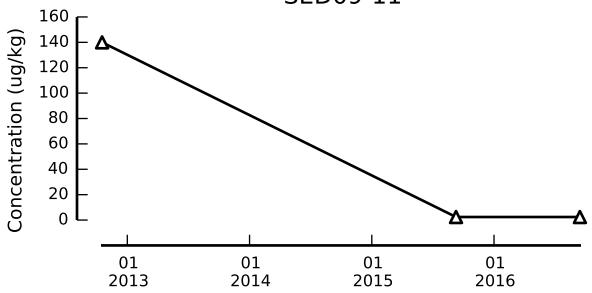
SED09-09



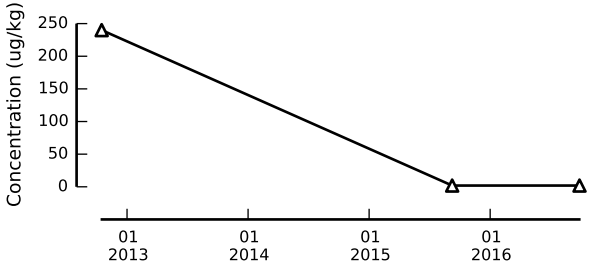
SED09-10



SED09-11



SED09-12



CIS-1,3-DICHLOROPROPENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 48 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

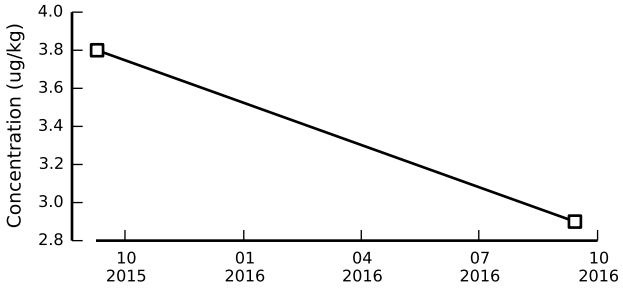
SED09-03

Sampled Once

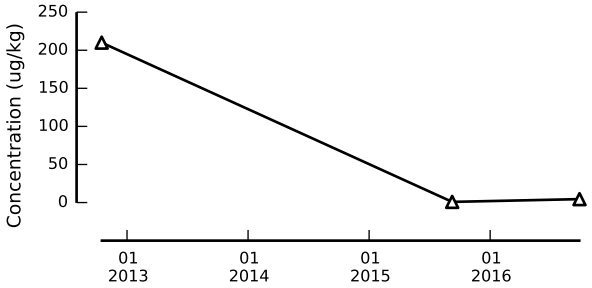
SED09-04

Sampled Once

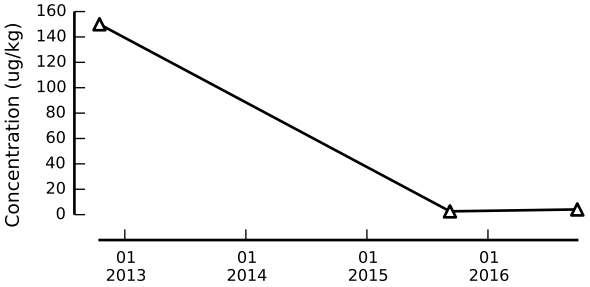
SED09-05



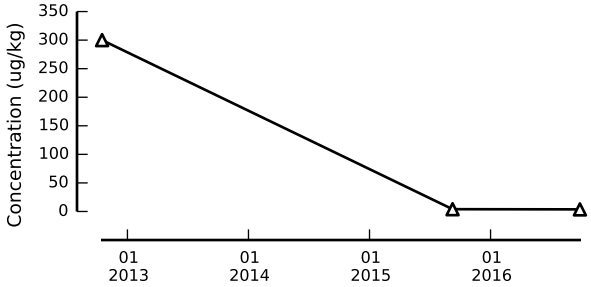
SED09-06



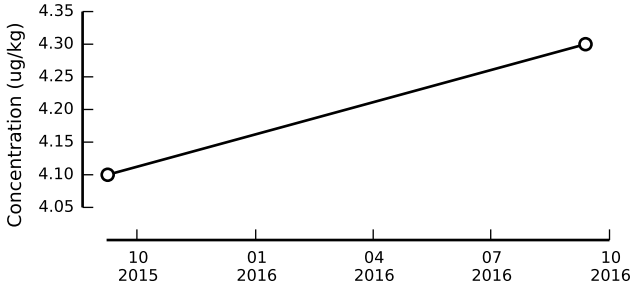
SED09-07



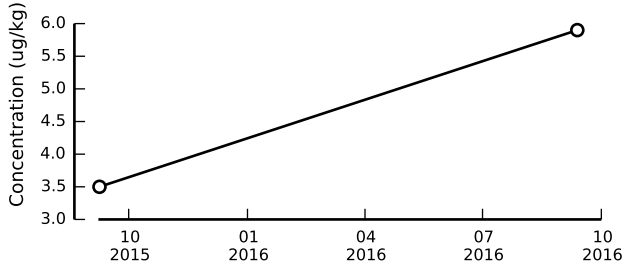
SED09-08



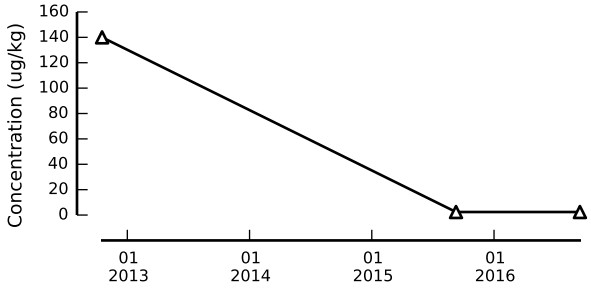
SED09-09



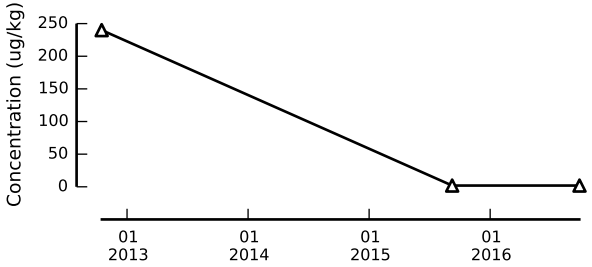
SED09-10



SED09-11



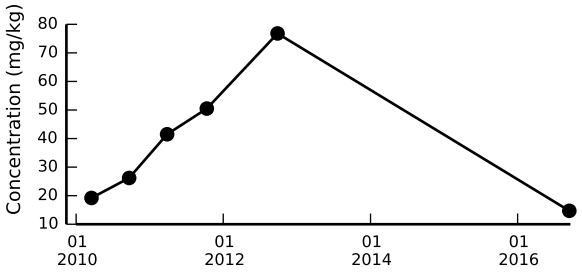
SED09-12



COPPER in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 49 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02

Sampled Once

SED09-03

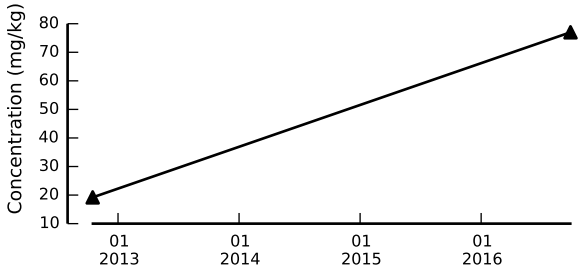
Sampled Once

SED09-04

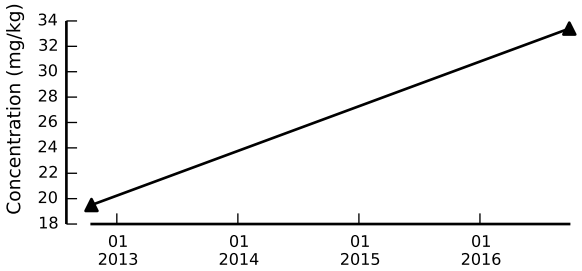
SED09-05

Sampled Once

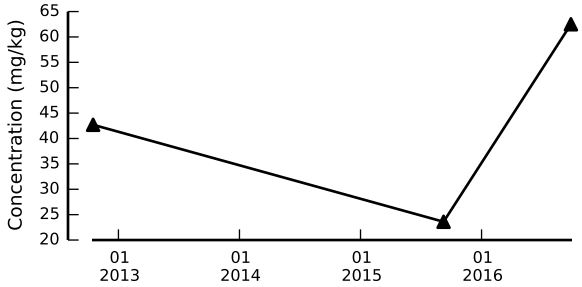
SED09-06



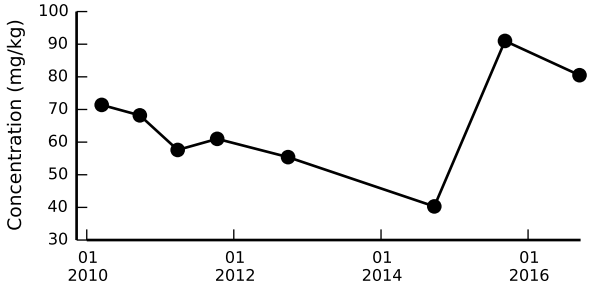
SED09-07



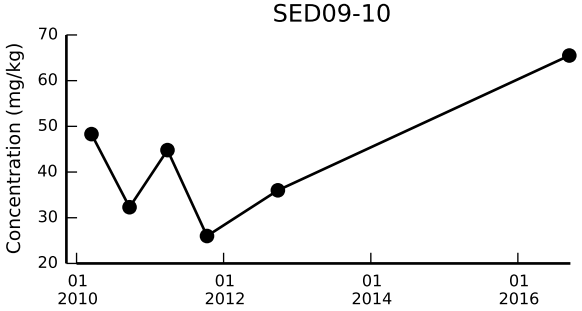
SED09-08



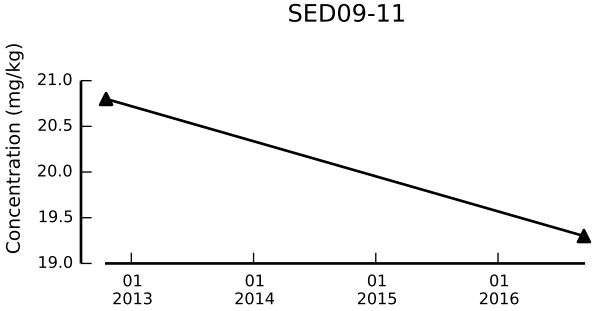
SED09-09



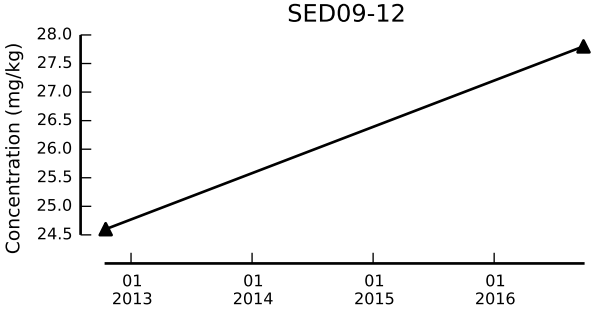
SED09-10



SED09-11



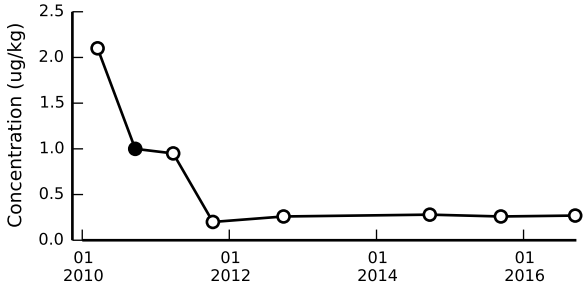
SED09-12



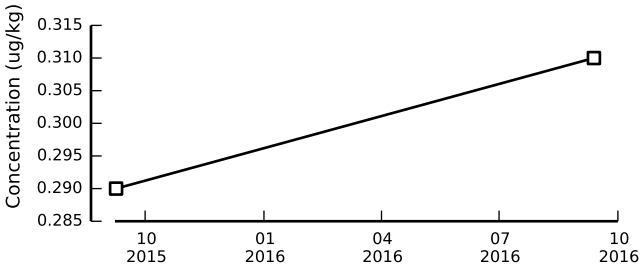
DELTA-BHC in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 50 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

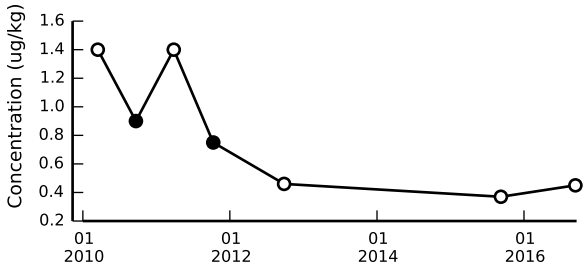
SED09-07

Sampled Once

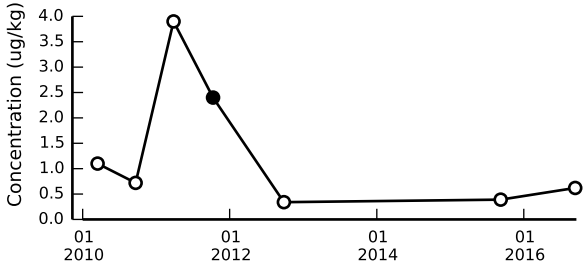
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

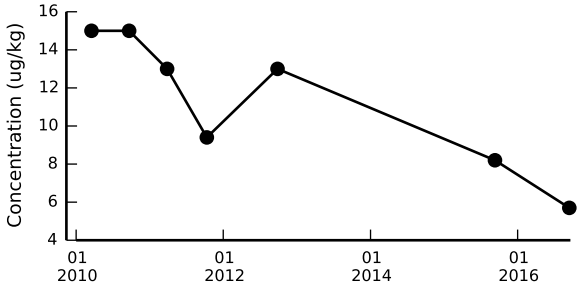
SED09-12

Sampled Once

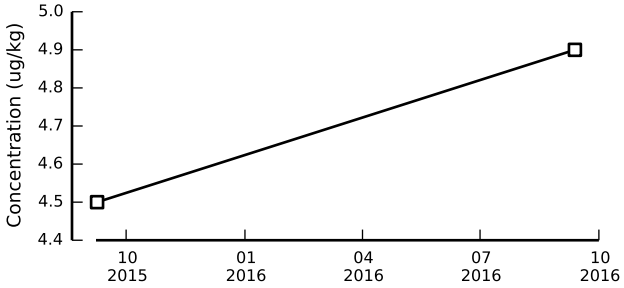
DIBENZ(A,H)ANTHRACENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 51 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

SED09-04

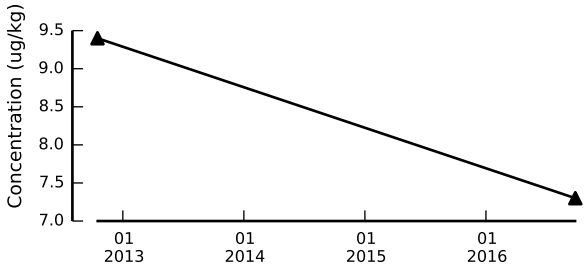
Sampled Once

SED09-05

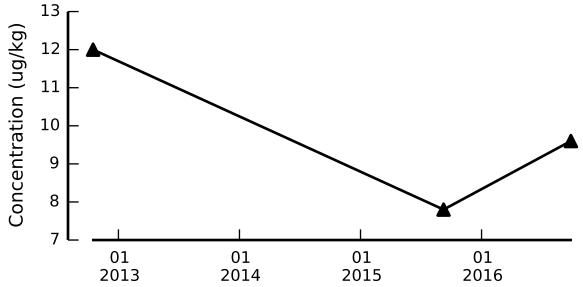
Sampled Once

SED09-06

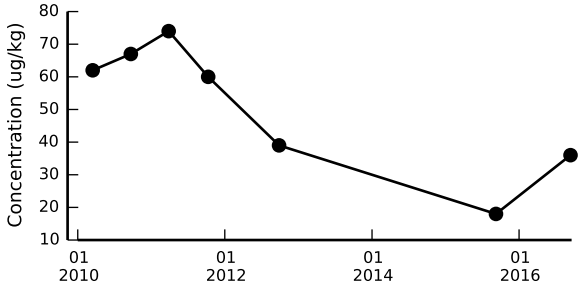
SED09-07



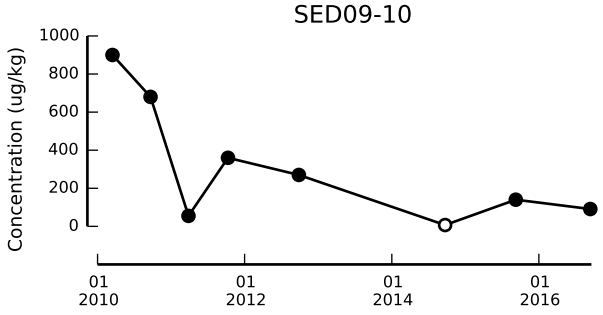
SED09-08



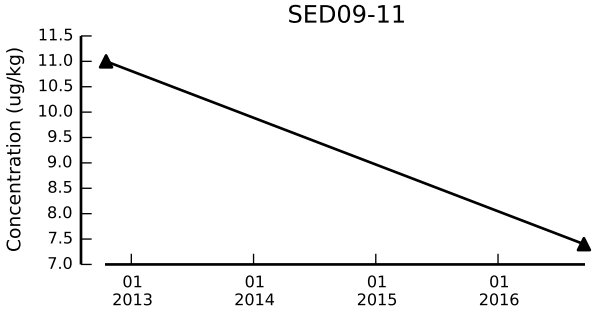
SED09-09



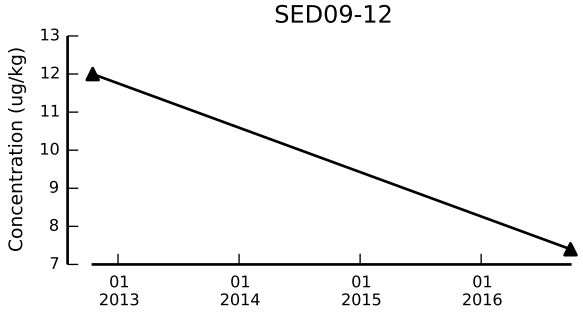
SED09-10



SED09-11



SED09-12



DIBROMOCHLOROMETHANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 52 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

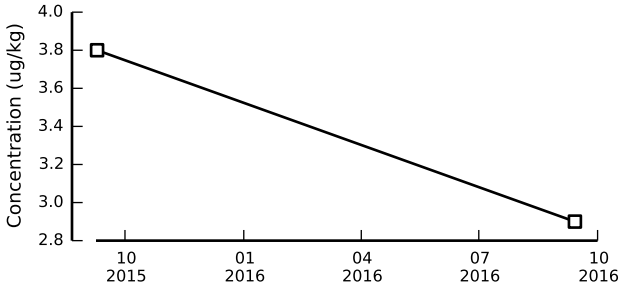
SED09-03

Sampled Once

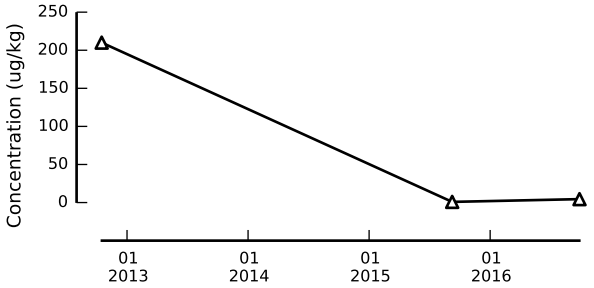
SED09-04

Sampled Once

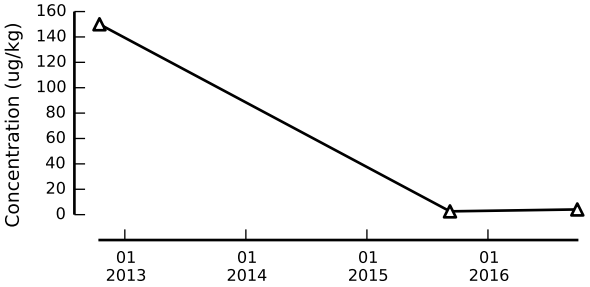
SED09-05



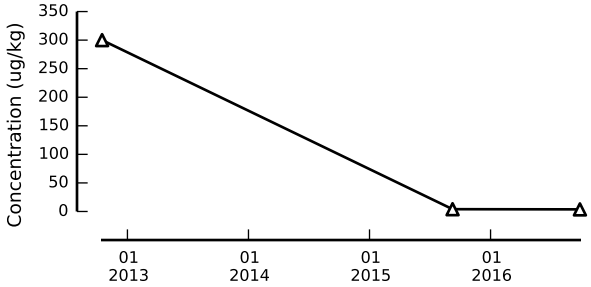
SED09-06



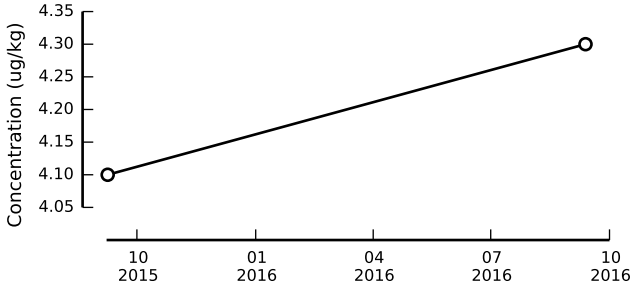
SED09-07



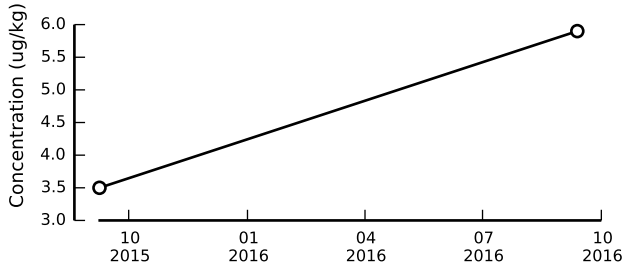
SED09-08



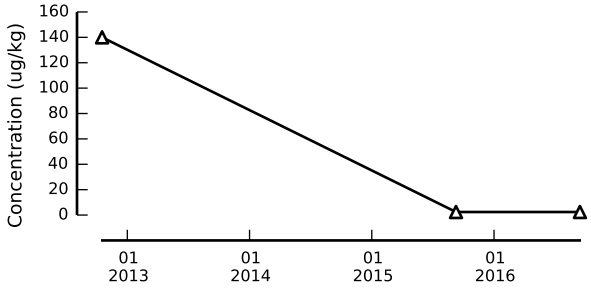
SED09-09



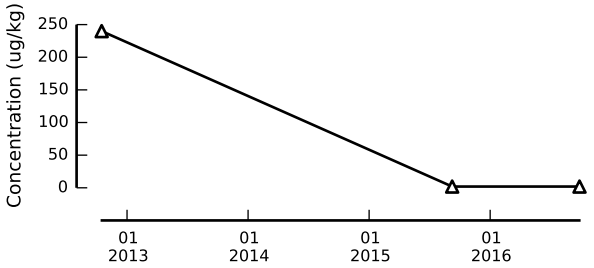
SED09-10



SED09-11



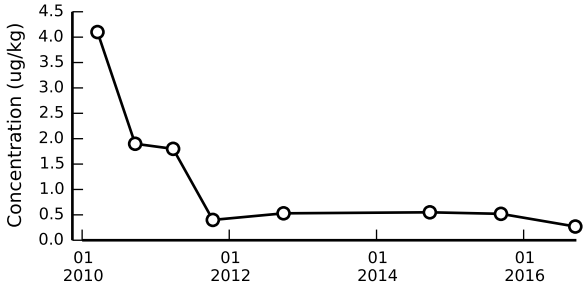
SED09-12



DIELDRIN in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 53 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02

SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

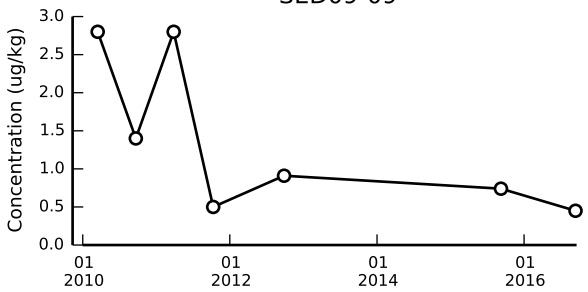
SED09-07

Sampled Once

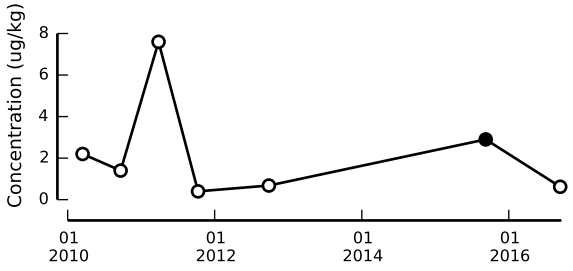
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

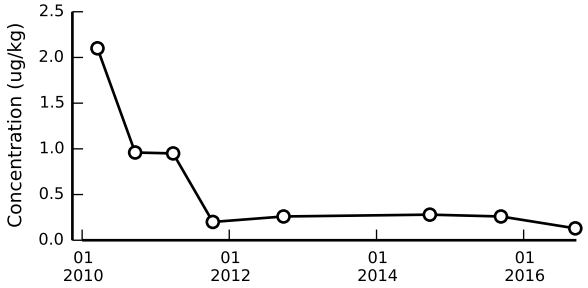
SED09-12

Sampled Once

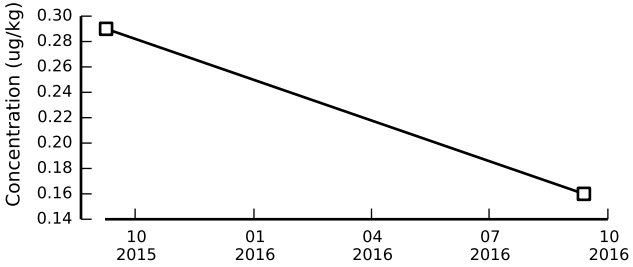
ENDOSULFAN I in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 54 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

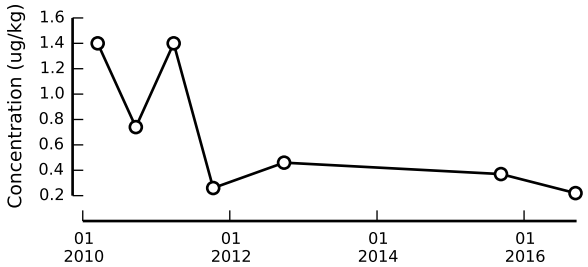
SED09-07

Sampled Once

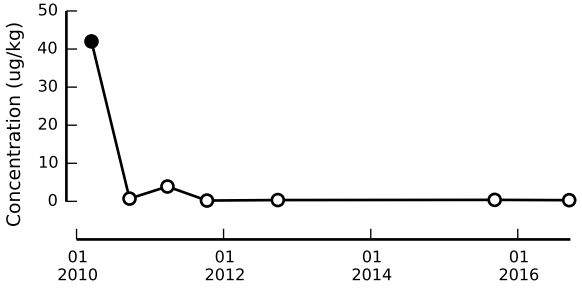
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

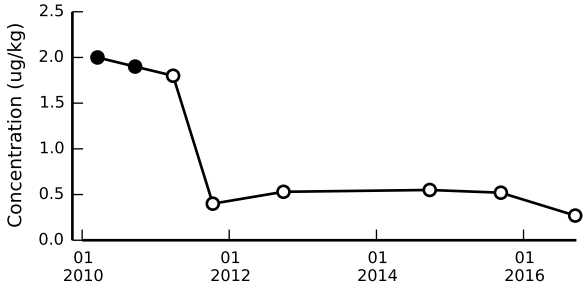
SED09-12

Sampled Once

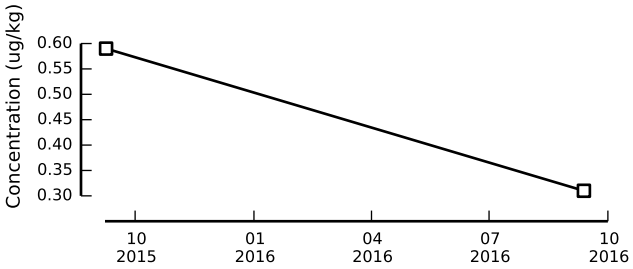
ENDOSULFAN II in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 55 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

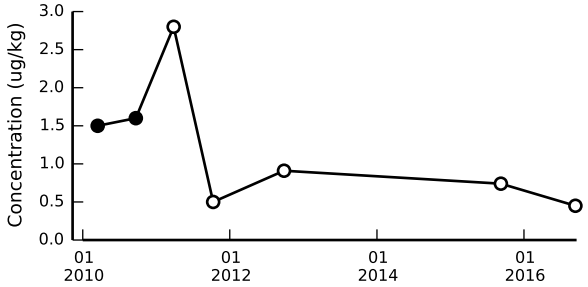
SED09-07

Sampled Once

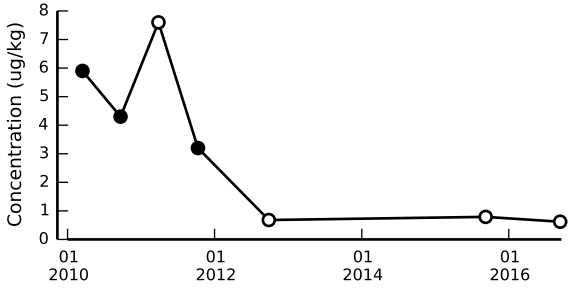
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

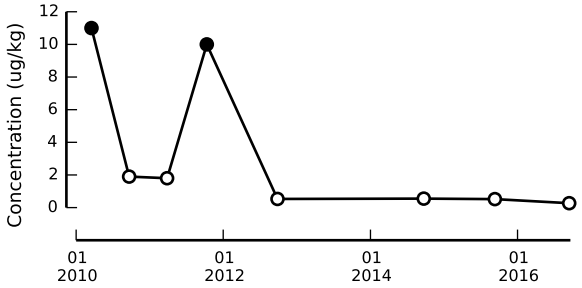
SED09-12

Sampled Once

ENDOSULFAN SULFATE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 56 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02

SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

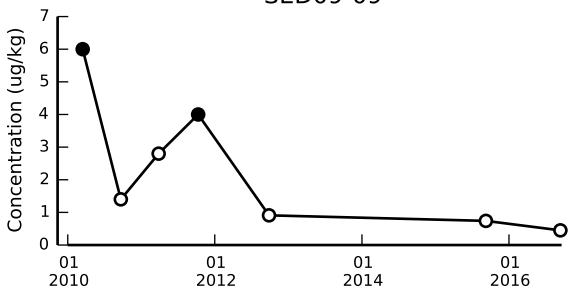
SED09-07

Sampled Once

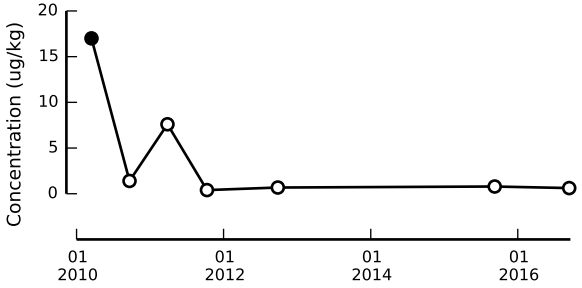
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

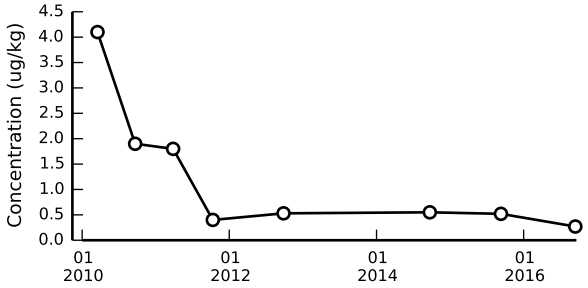
SED09-12

Sampled Once

ENDRIN in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 57 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02

SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

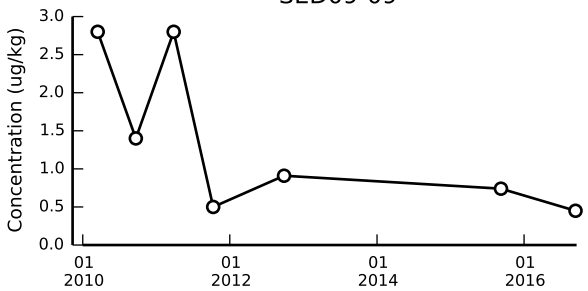
SED09-07

Sampled Once

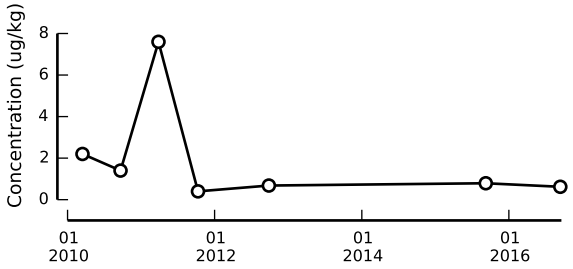
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

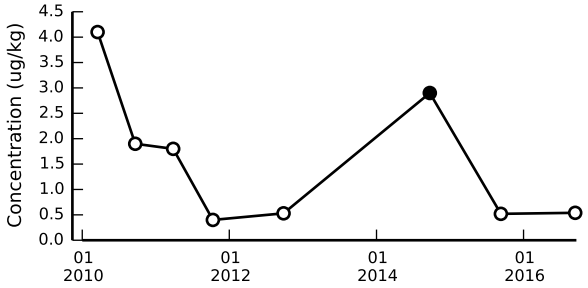
SED09-12

Sampled Once

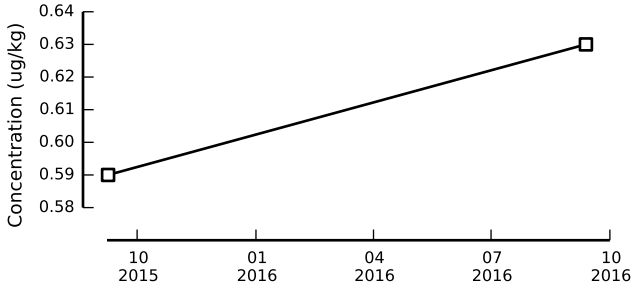
ENDRIN ALDEHYDE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 58 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

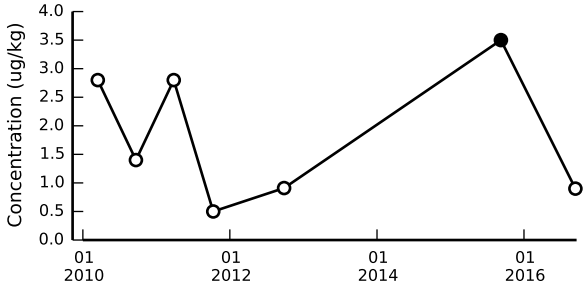
SED09-07

Sampled Once

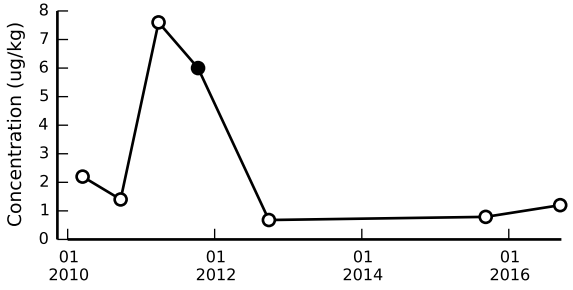
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

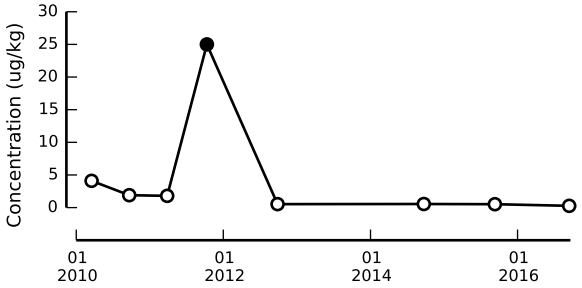
SED09-12

Sampled Once

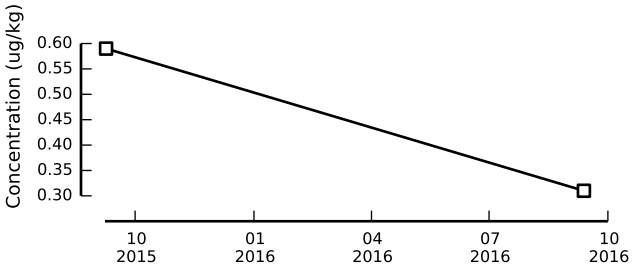
ENDRIN KETONE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 59 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

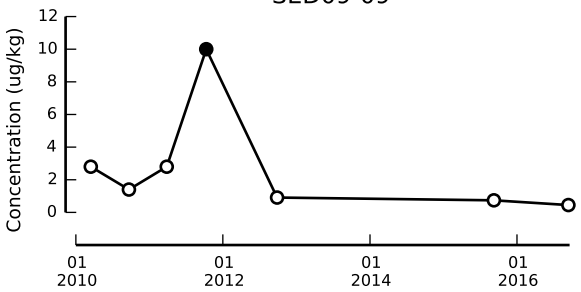
SED09-07

Sampled Once

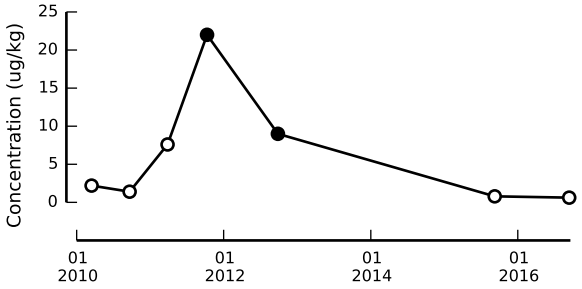
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

SED09-12

Sampled Once

ETHYLBENZENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 60 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

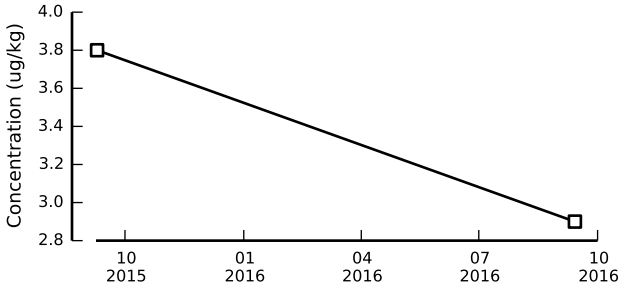
SED09-03

Sampled Once

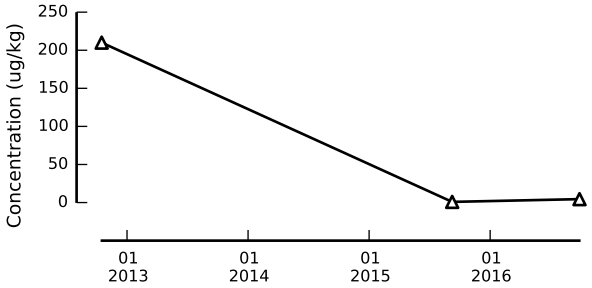
SED09-04

Sampled Once

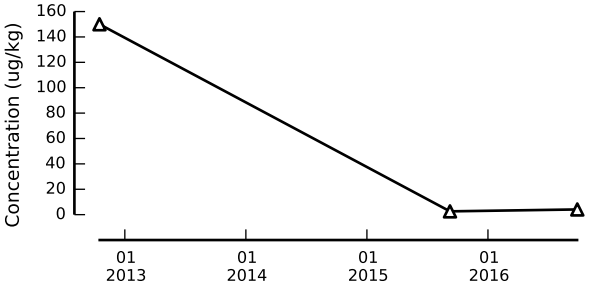
SED09-05



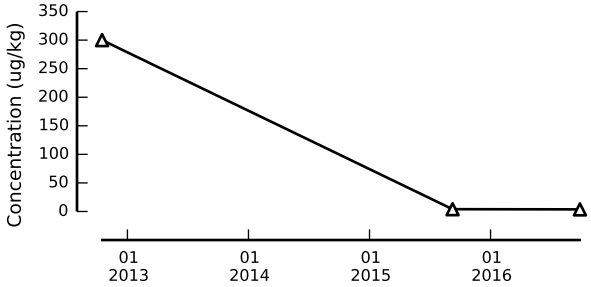
SED09-06



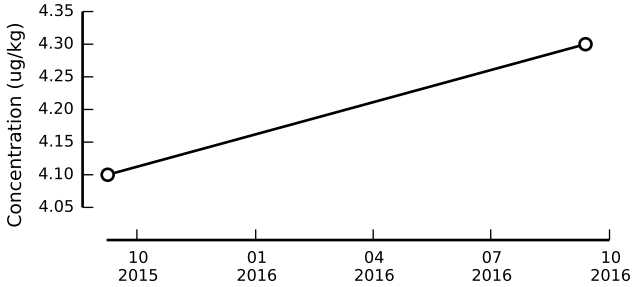
SED09-07



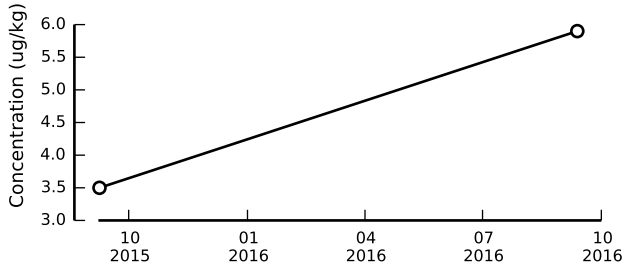
SED09-08



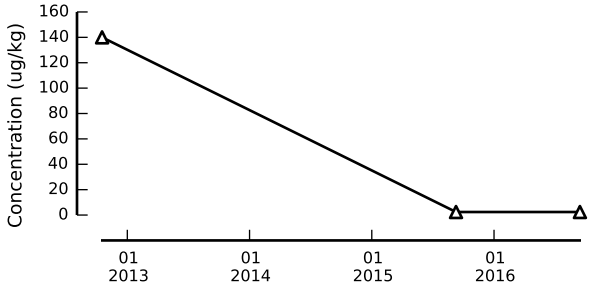
SED09-09



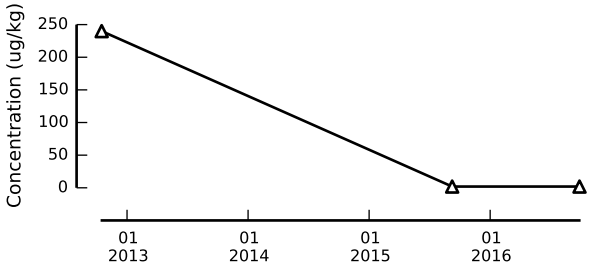
SED09-10



SED09-11



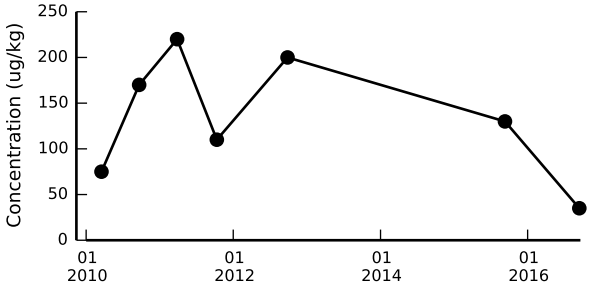
SED09-12



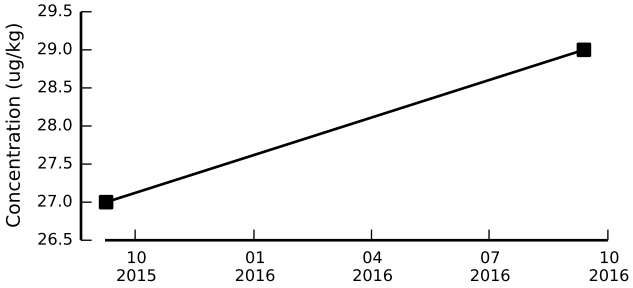
FLUORANTHENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 61 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

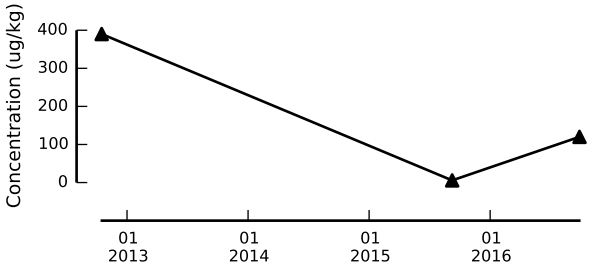
SED09-04

Sampled Once

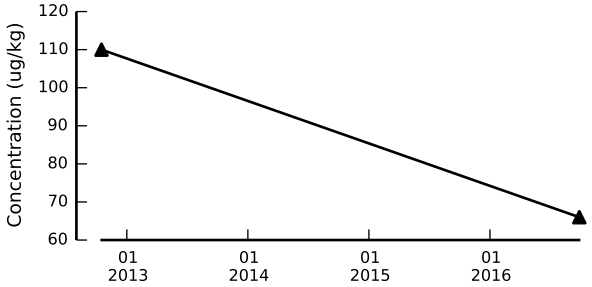
SED09-05

Sampled Once

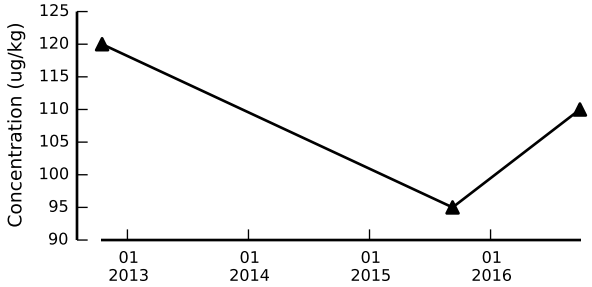
SED09-06



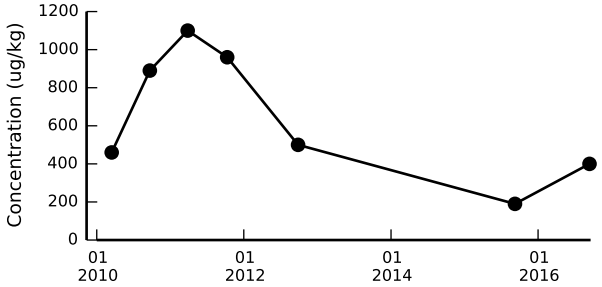
SED09-07



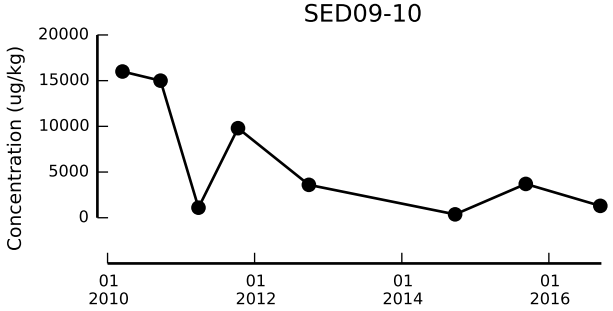
SED09-08



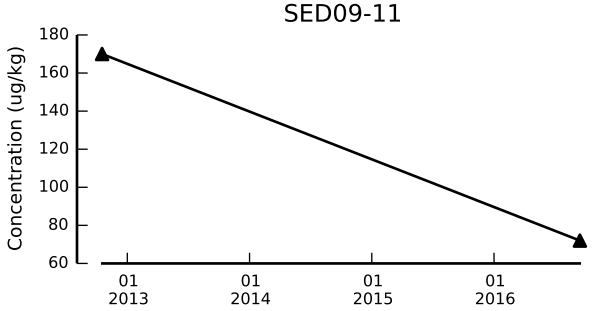
SED09-09



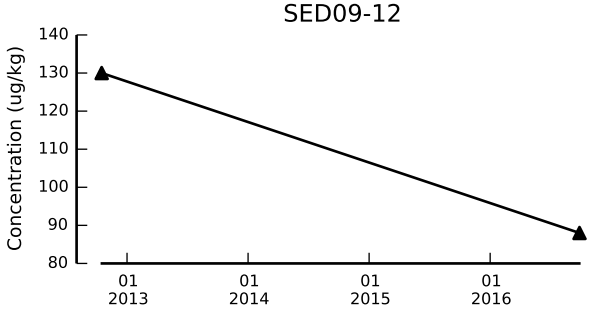
SED09-10



SED09-11



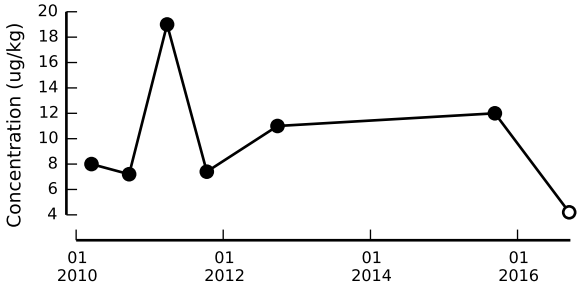
SED09-12



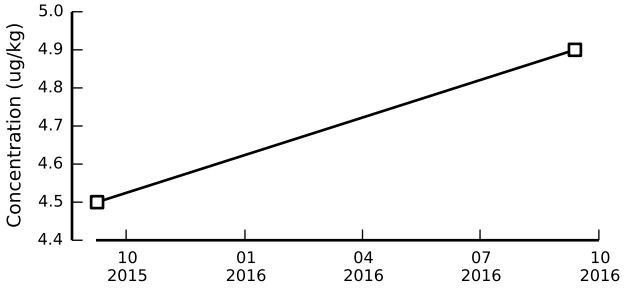
FLUORENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 62 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

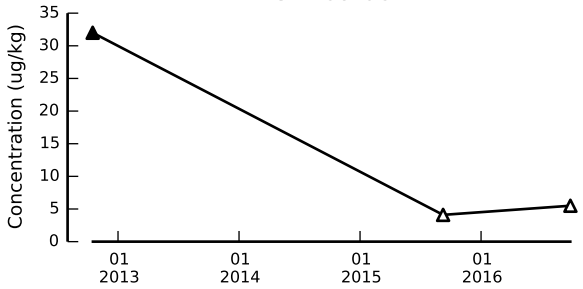
SED09-04

Sampled Once

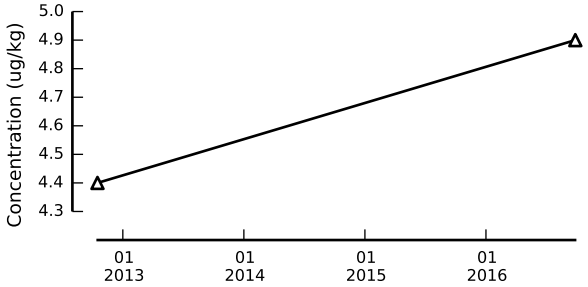
SED09-05

Sampled Once

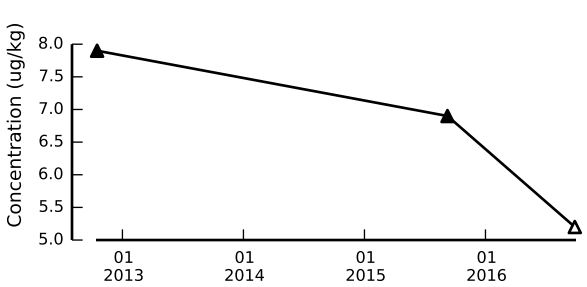
SED09-06



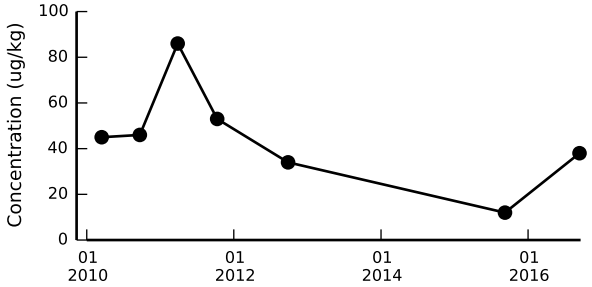
SED09-07



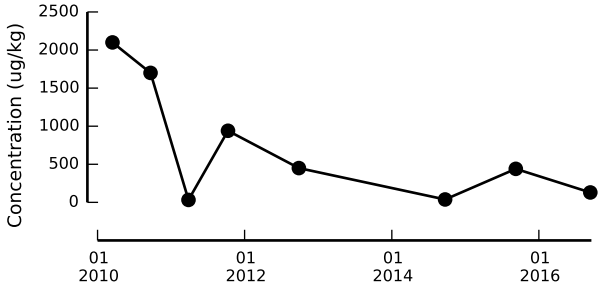
SED09-08



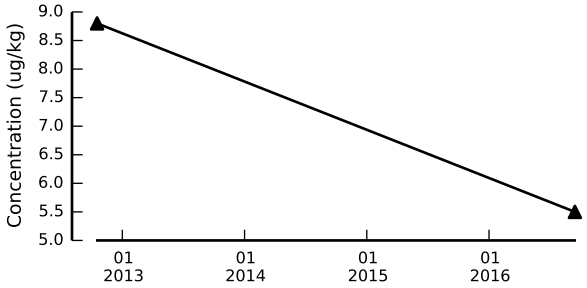
SED09-09



SED09-10



SED09-11

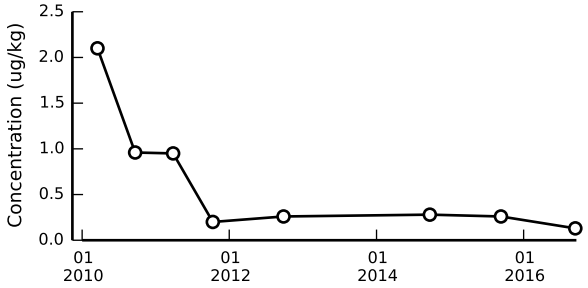


SED09-12

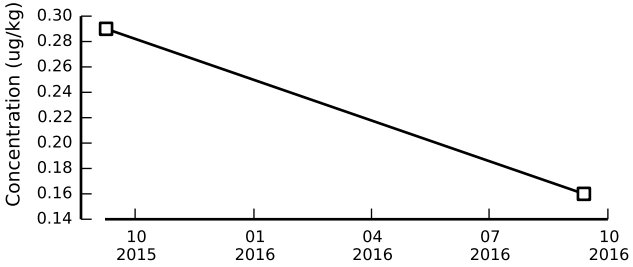
HEPTACHLOR in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 63 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

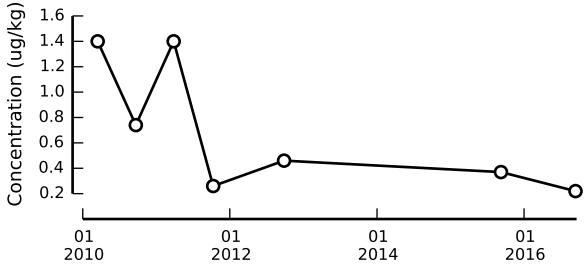
SED09-07

Sampled Once

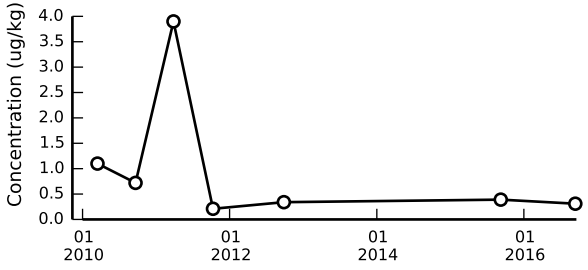
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

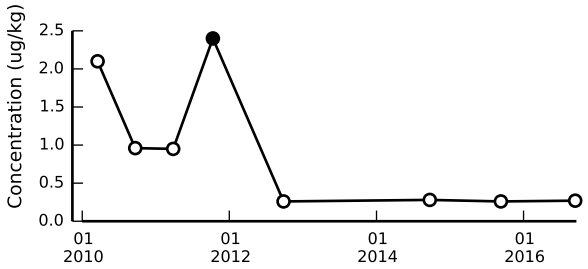
SED09-12

Sampled Once

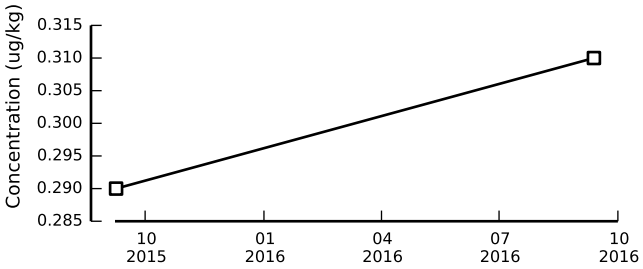
HEPTACHLOR EPOXIDE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 64 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

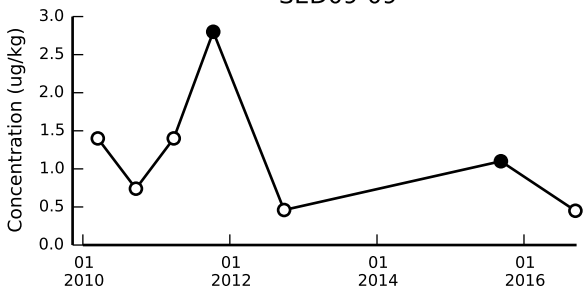
SED09-07

Sampled Once

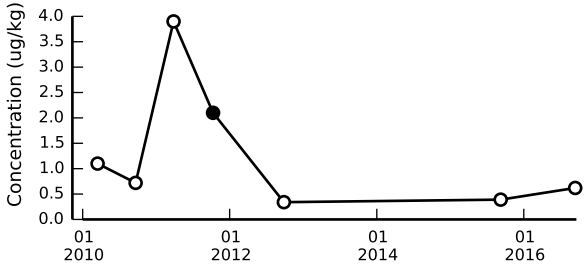
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

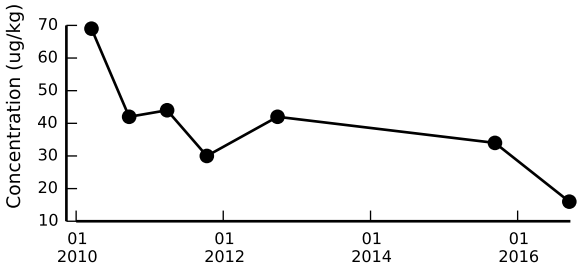
SED09-12

Sampled Once

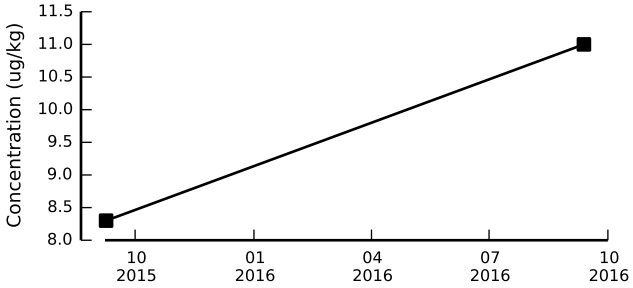
INDENO(1,2,3-CD)PYRENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 65 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

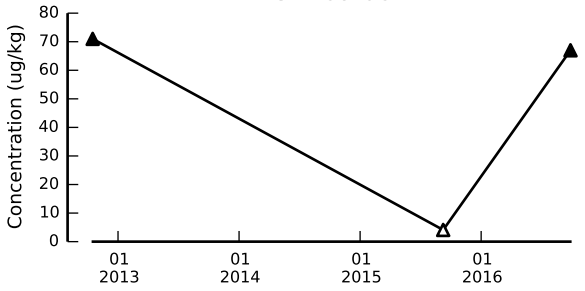
SED09-04

Sampled Once

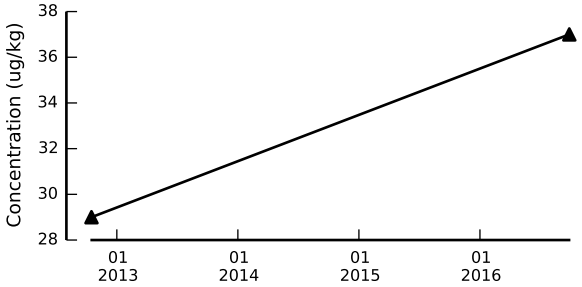
SED09-05

Sampled Once

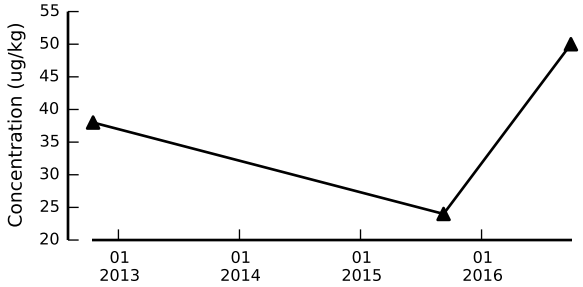
SED09-06



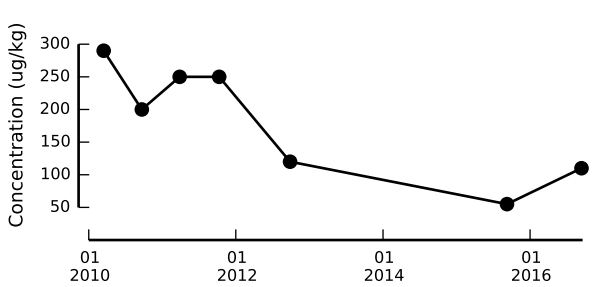
SED09-07



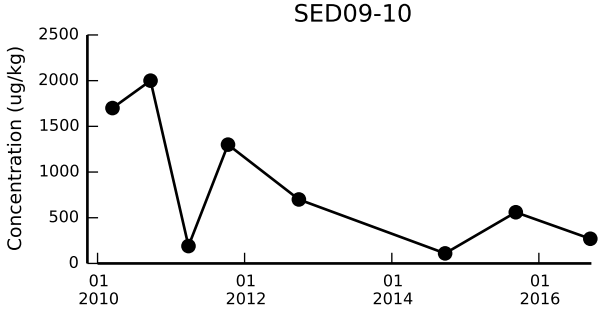
SED09-08



SED09-09

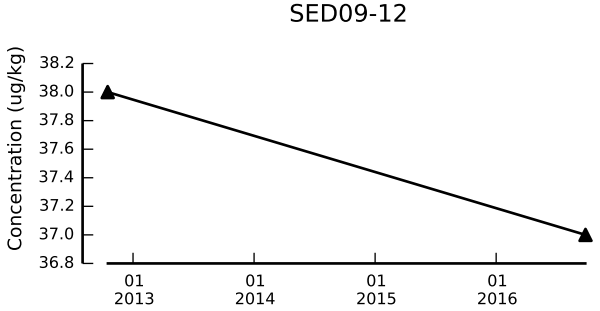


SED09-10



SED09-11

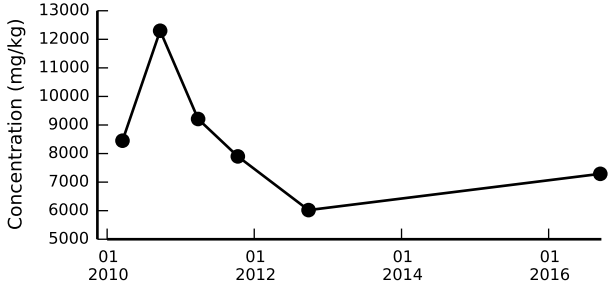
SED09-12



IRON in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 66 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



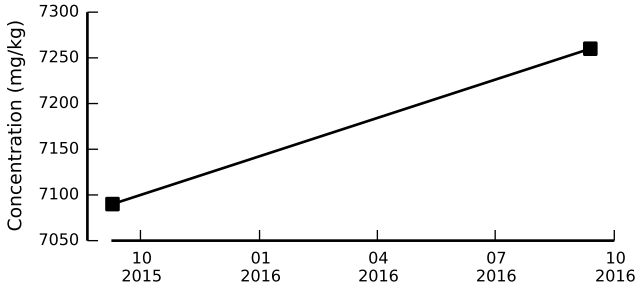
SED09-02

Sampled Once

SED09-03

Sampled Once

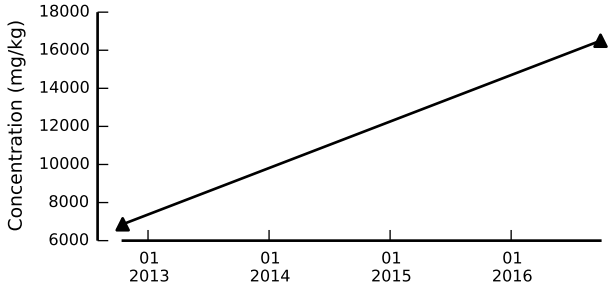
SED09-04



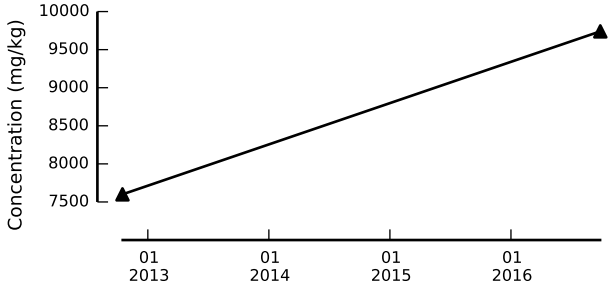
SED09-05

Sampled Once

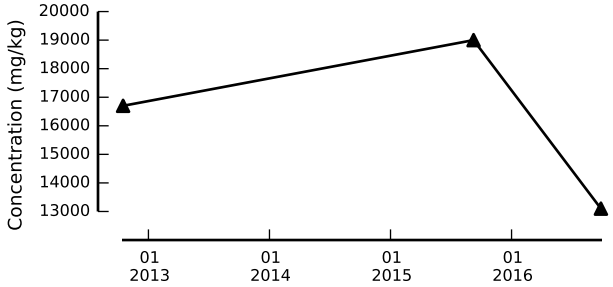
SED09-06



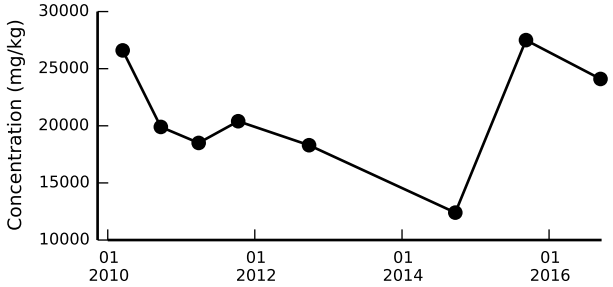
SED09-07



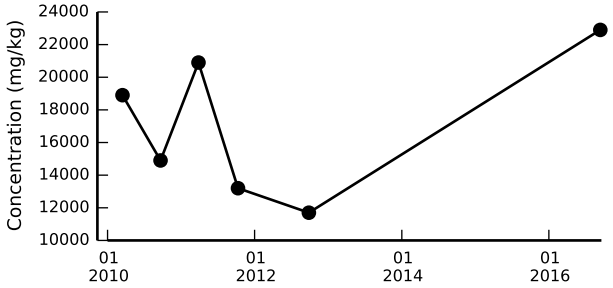
SED09-08



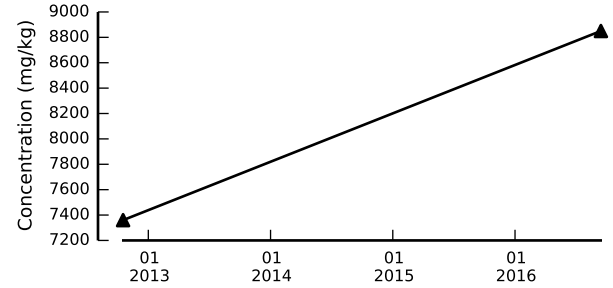
SED09-09



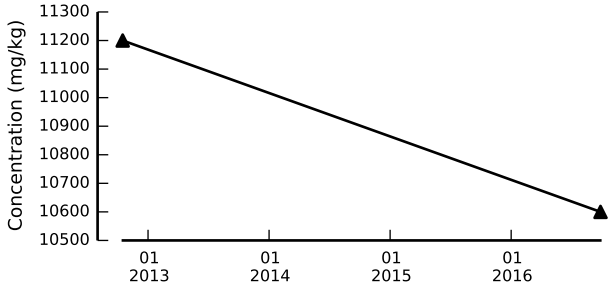
SED09-10



SED09-11



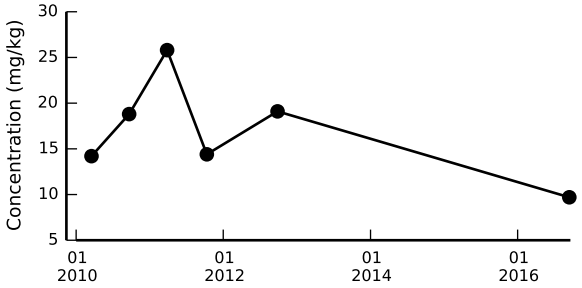
SED09-12



LEAD in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 67 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



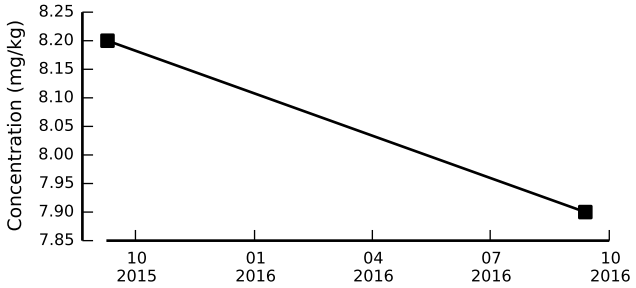
SED09-02

Sampled Once

SED09-03

Sampled Once

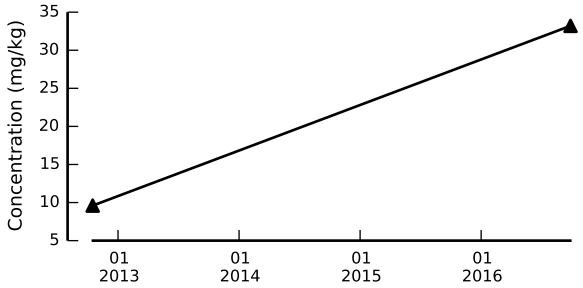
SED09-04



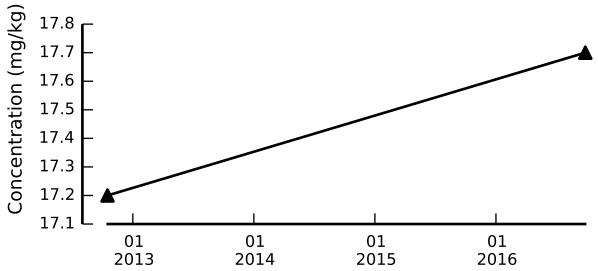
SED09-05

Sampled Once

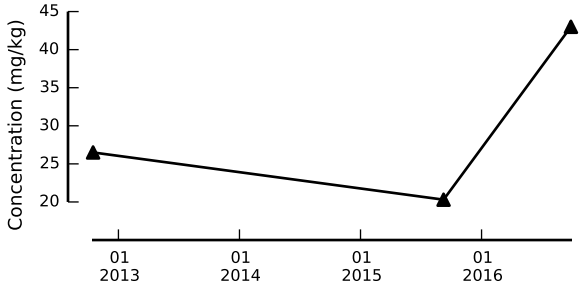
SED09-06



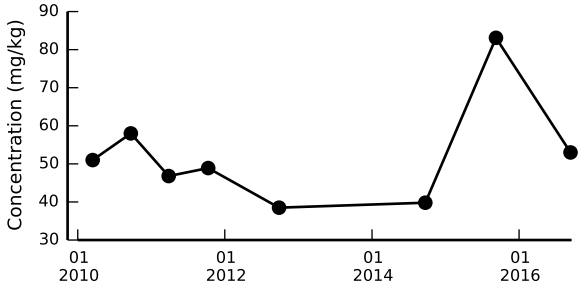
SED09-07



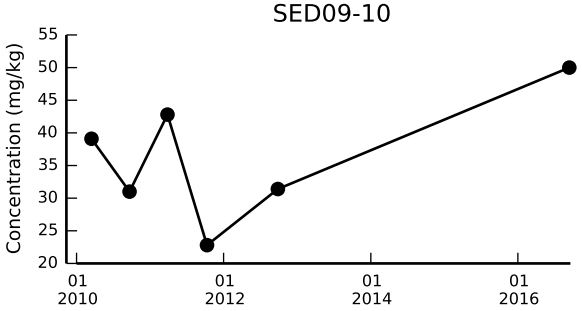
SED09-08



SED09-09

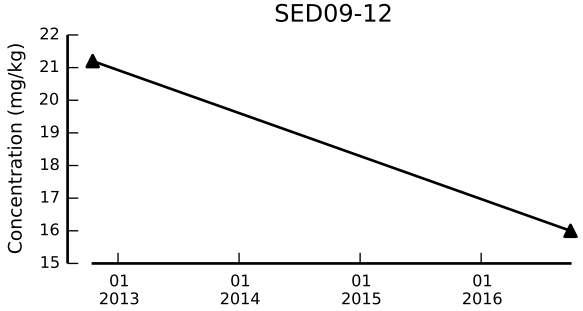


SED09-10



SED09-11

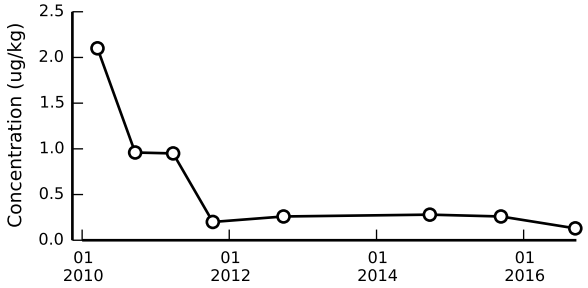
SED09-12



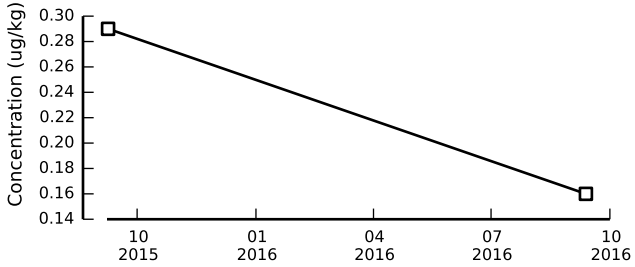
LINDANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 68 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

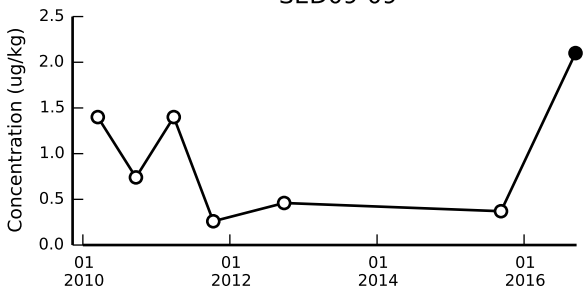
SED09-07

Sampled Once

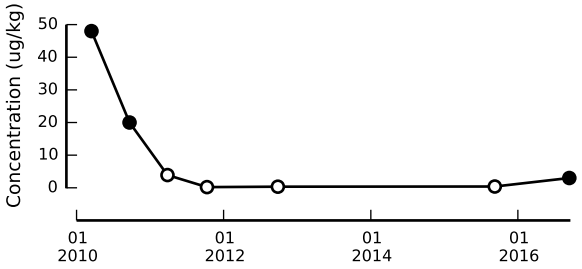
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

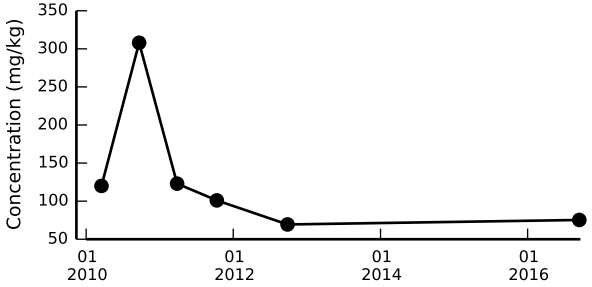
SED09-12

Sampled Once

MANGANESE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 69 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



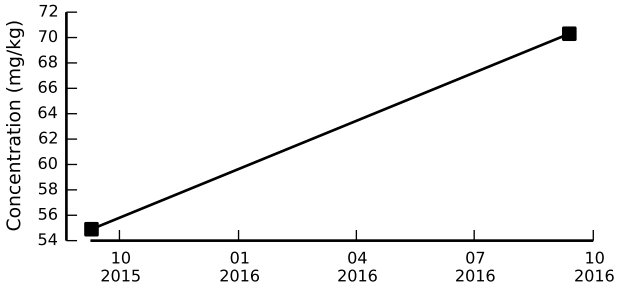
SED09-02

Sampled Once

SED09-03

Sampled Once

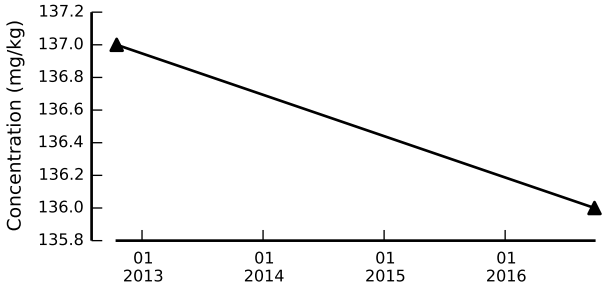
SED09-04



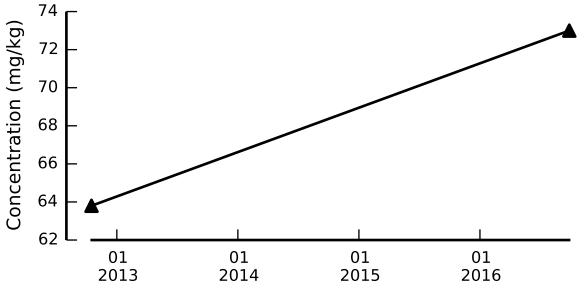
SED09-05

Sampled Once

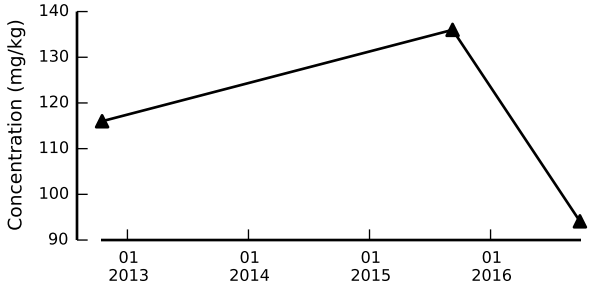
SED09-06



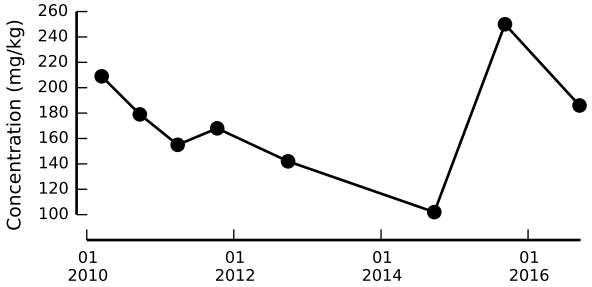
SED09-07



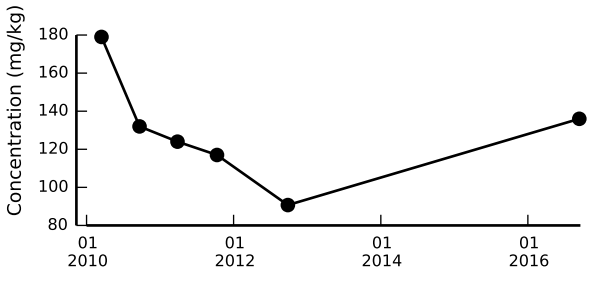
SED09-08



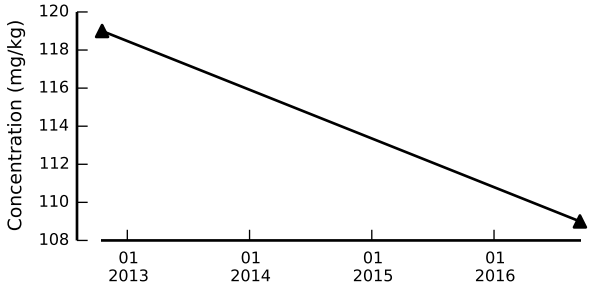
SED09-09



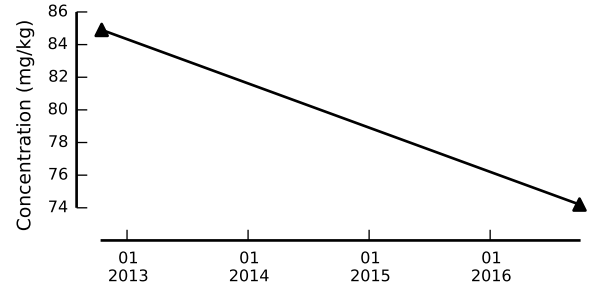
SED09-10



SED09-11



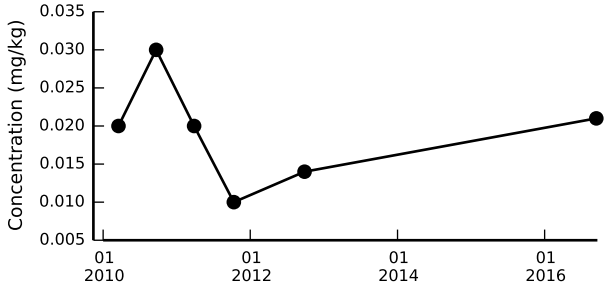
SED09-12



MERCURY in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 70 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



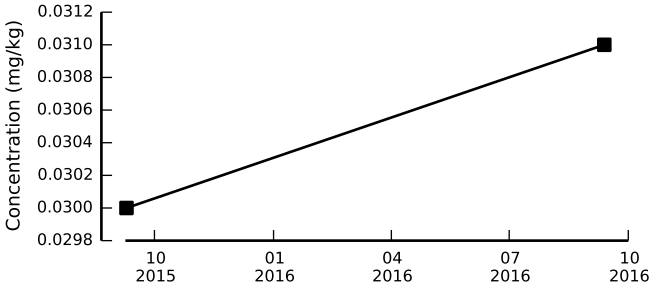
SED09-02

Sampled Once

SED09-03

Sampled Once

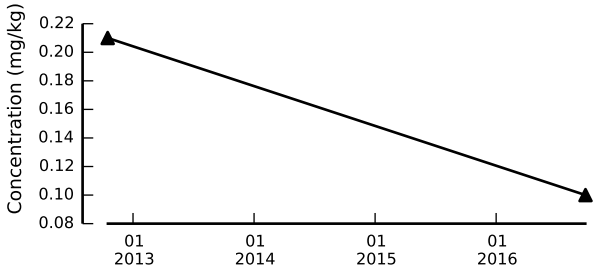
SED09-04



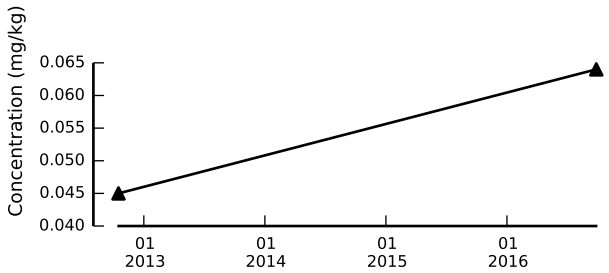
SED09-05

Sampled Once

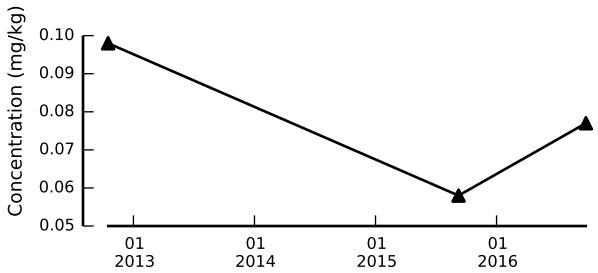
SED09-06



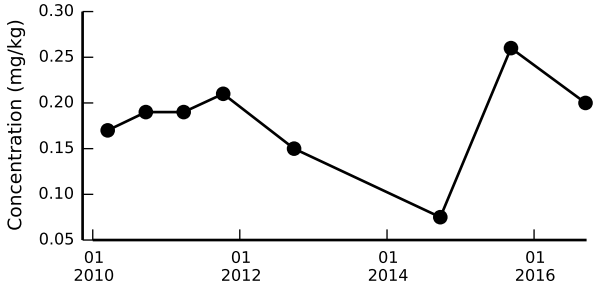
SED09-07



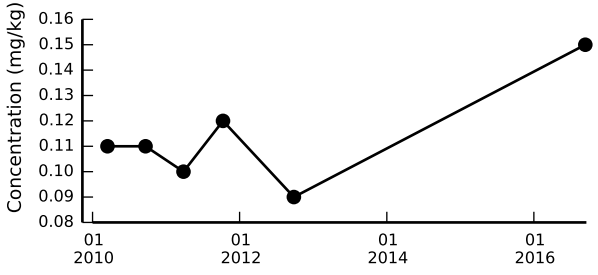
SED09-08



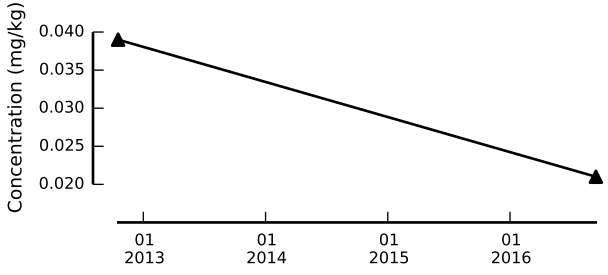
SED09-09



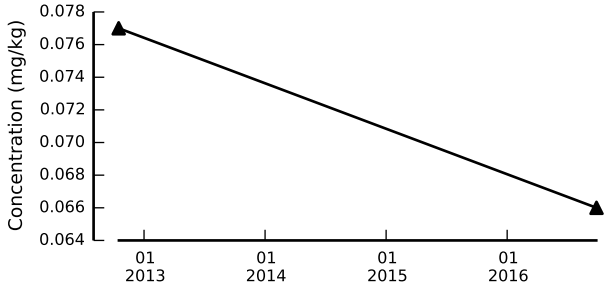
SED09-10



SED09-11



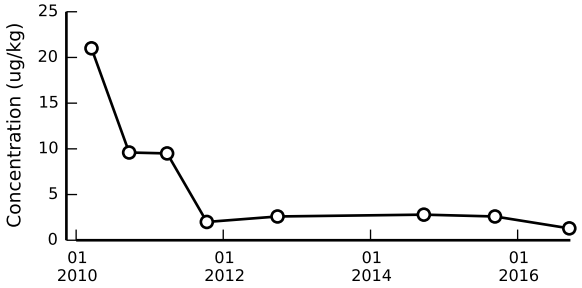
SED09-12



METHOXYCHLOR in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 71 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02

SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

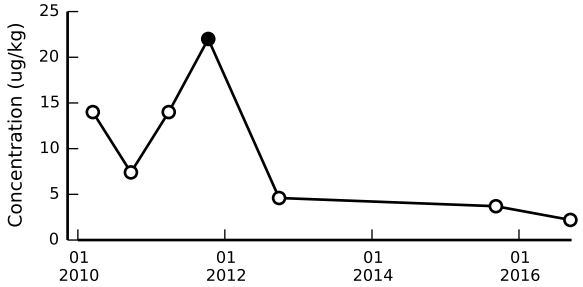
SED09-07

Sampled Once

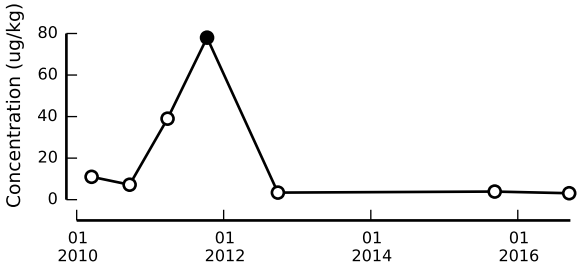
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

SED09-12

Sampled Once

METHYLENE CHLORIDE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 72 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

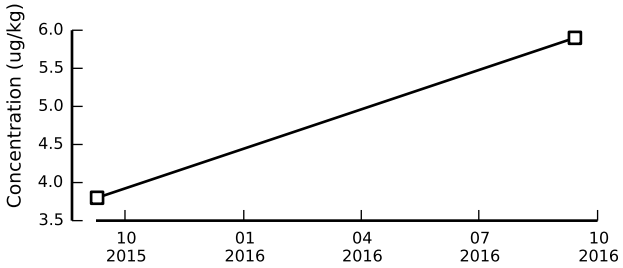
SED09-03

Sampled Once

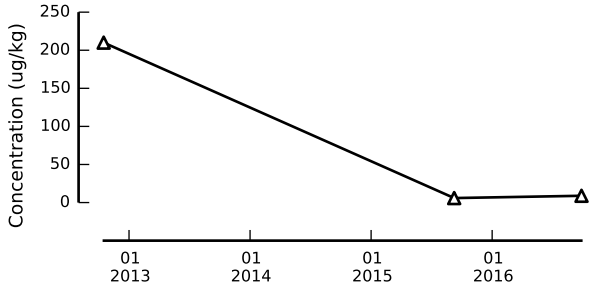
SED09-04

Sampled Once

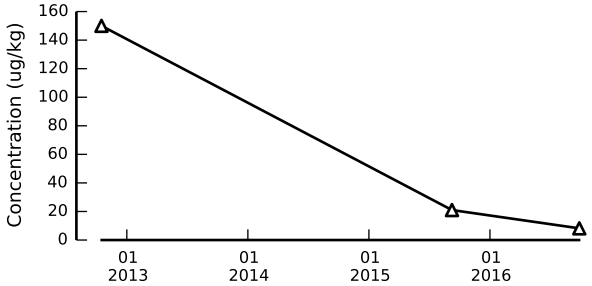
SED09-05



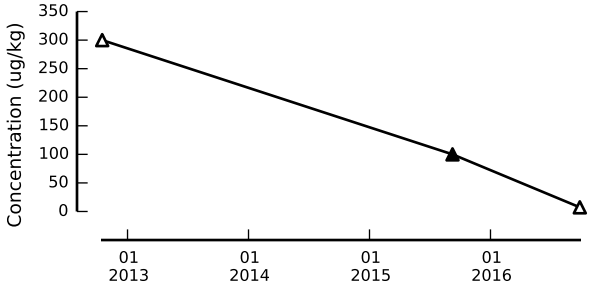
SED09-06



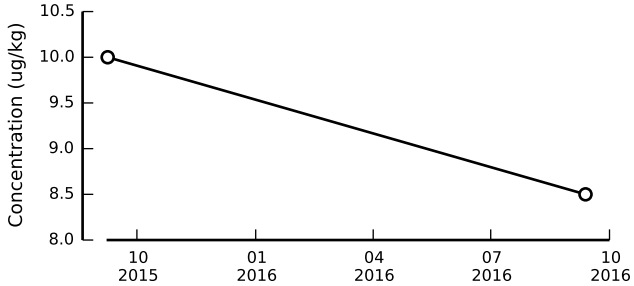
SED09-07



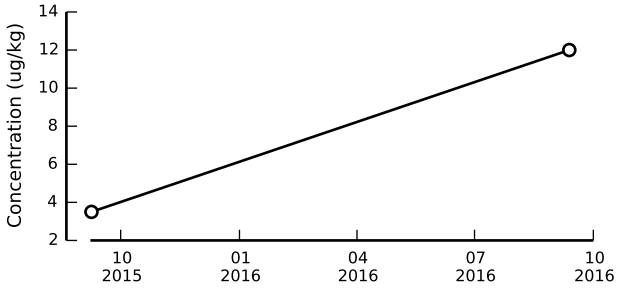
SED09-08



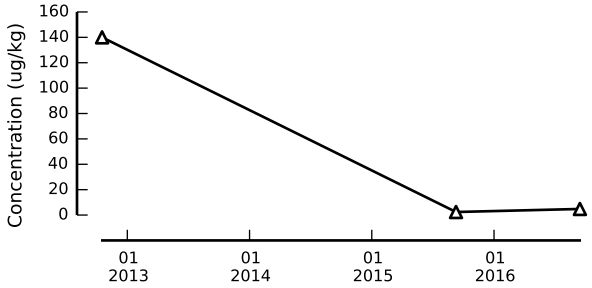
SED09-09



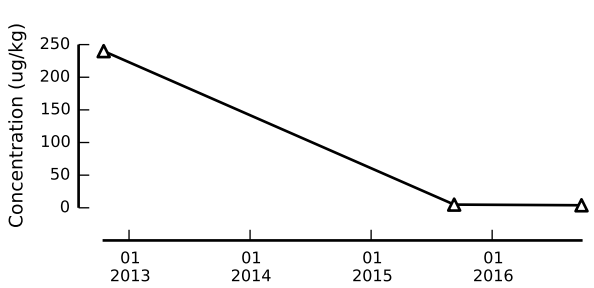
SED09-10



SED09-11



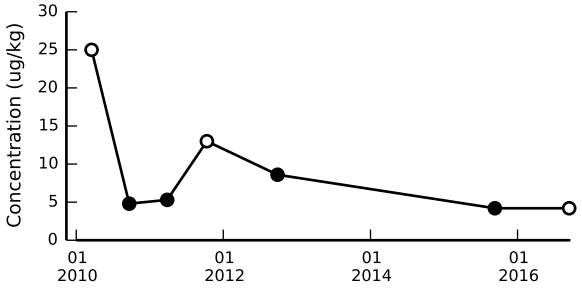
SED09-12



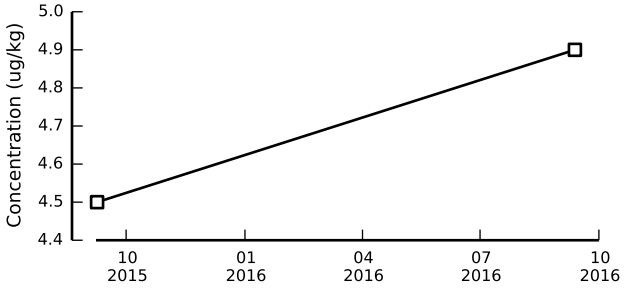
NAPHTHALENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 73 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

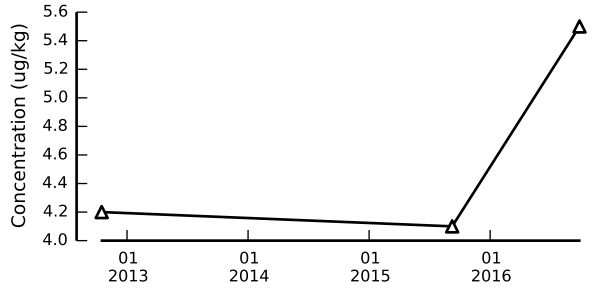
SED09-04

Sampled Once

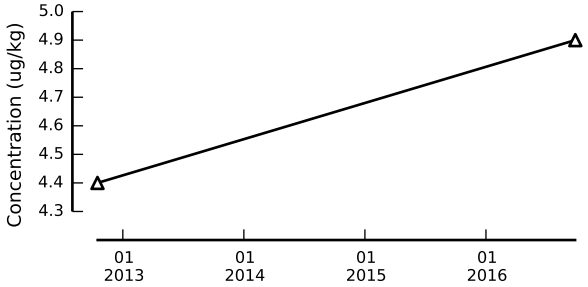
SED09-05

Sampled Once

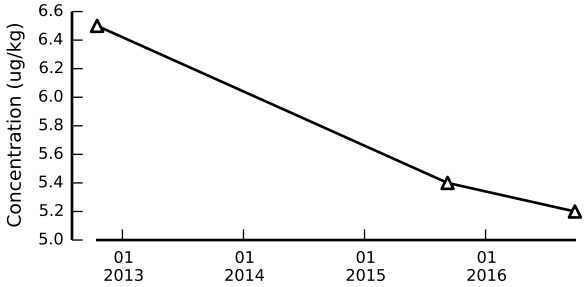
SED09-06



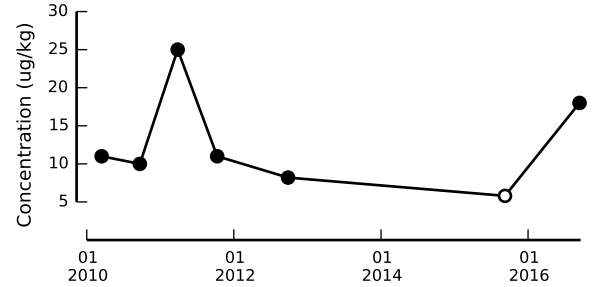
SED09-07



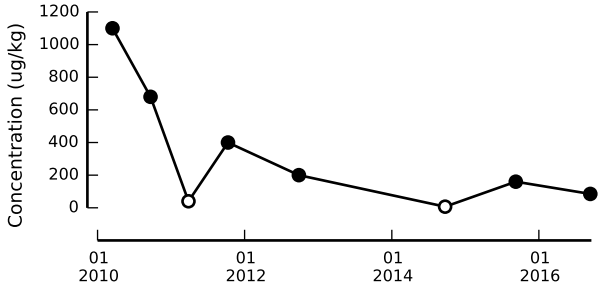
SED09-08



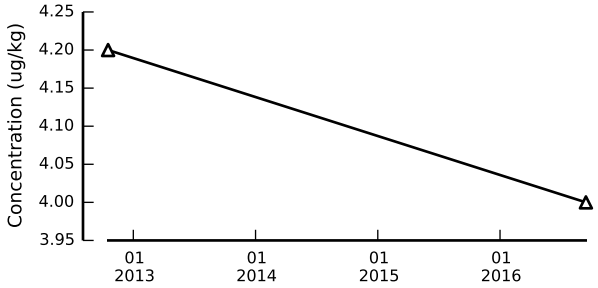
SED09-09



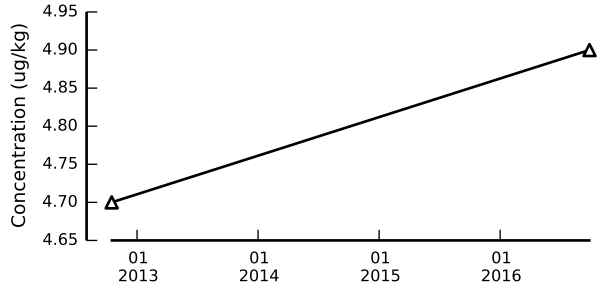
SED09-10



SED09-11



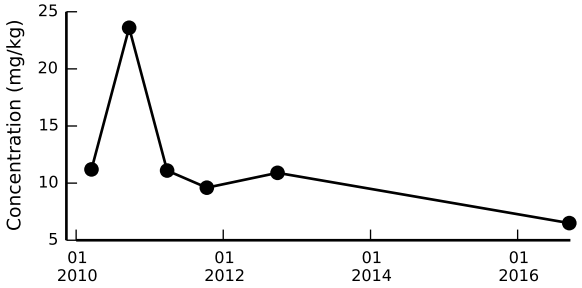
SED09-12



NICKEL in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 74 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



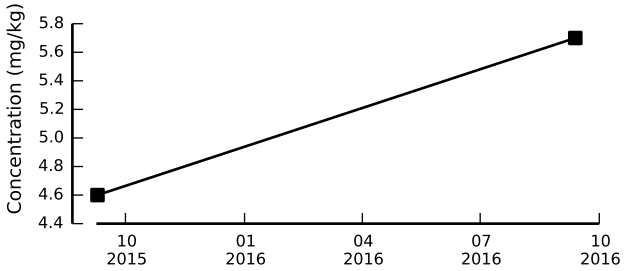
SED09-02

Sampled Once

SED09-03

Sampled Once

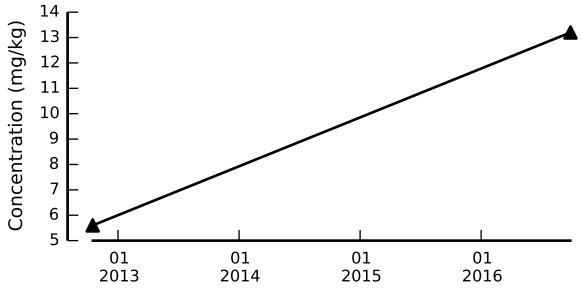
SED09-04



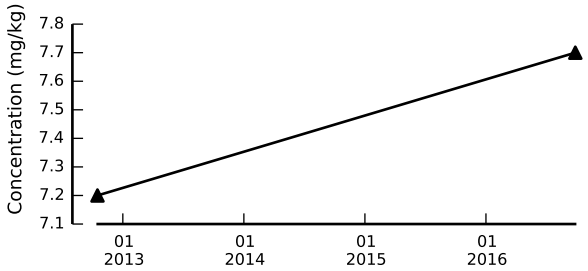
SED09-05

Sampled Once

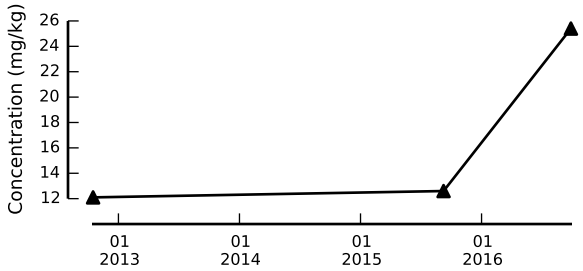
SED09-06



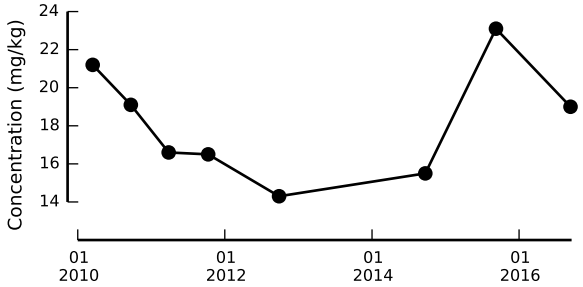
SED09-07



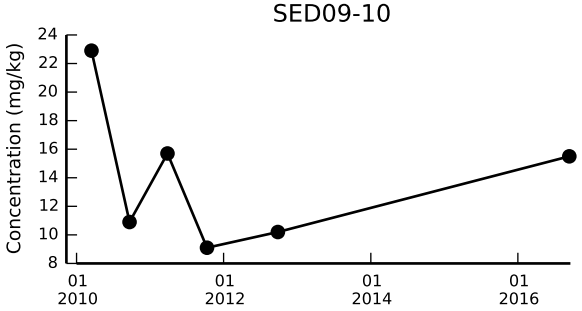
SED09-08



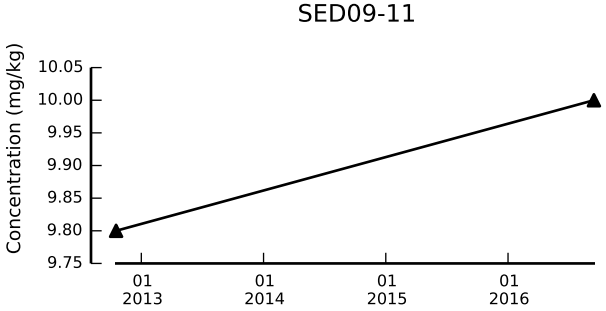
SED09-09



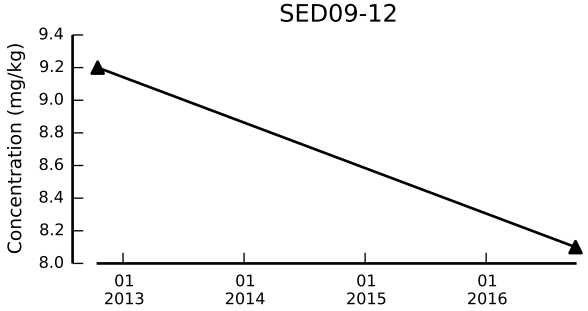
SED09-10



SED09-11



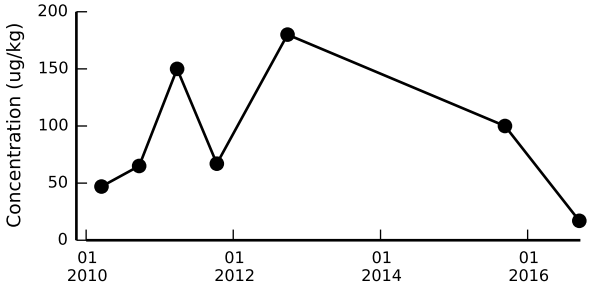
SED09-12



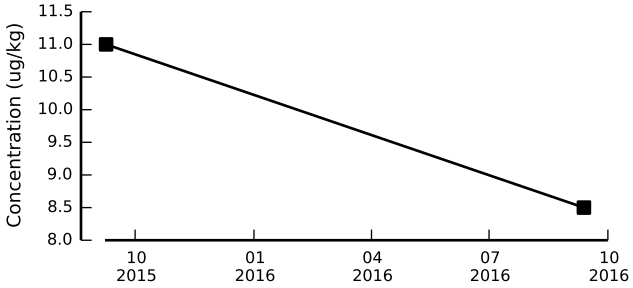
PHENANTHRENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 75 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

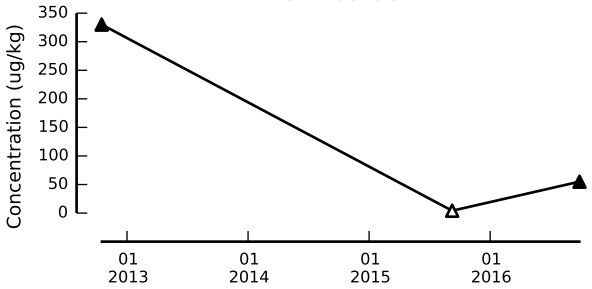
SED09-04

Sampled Once

SED09-05

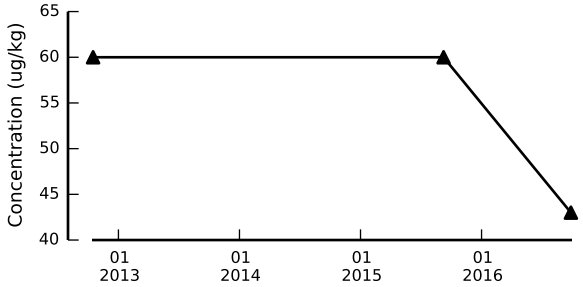
Sampled Once

SED09-06

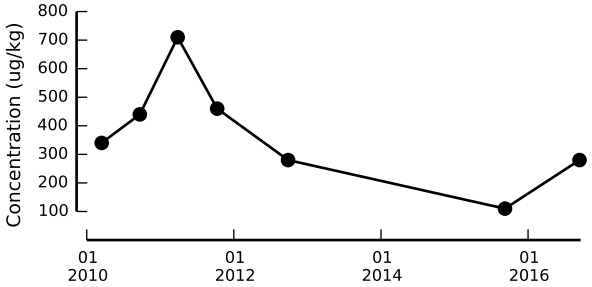


SED09-07

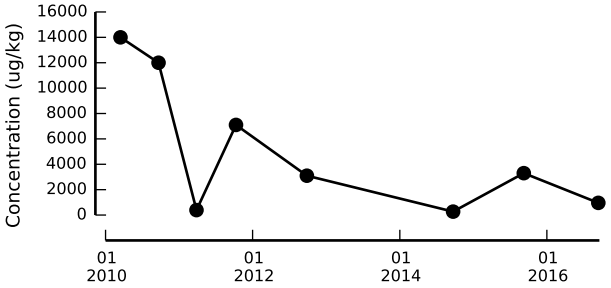
SED09-08



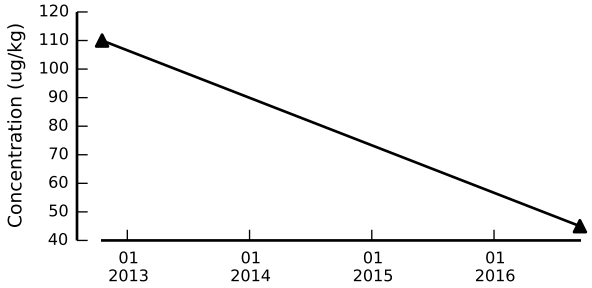
SED09-09



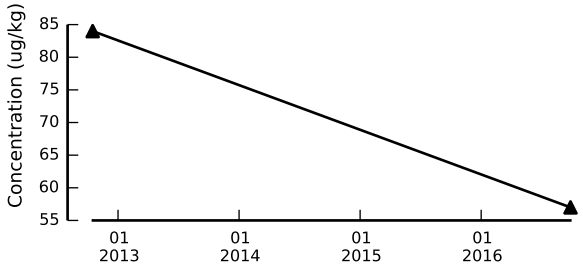
SED09-10



SED09-11



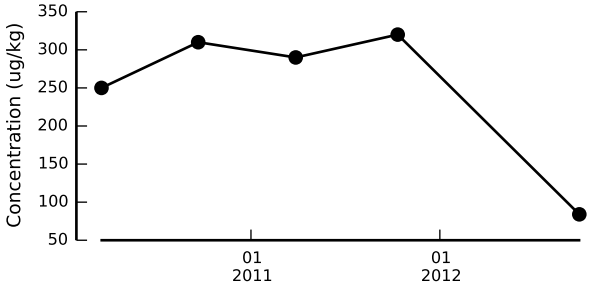
SED09-12



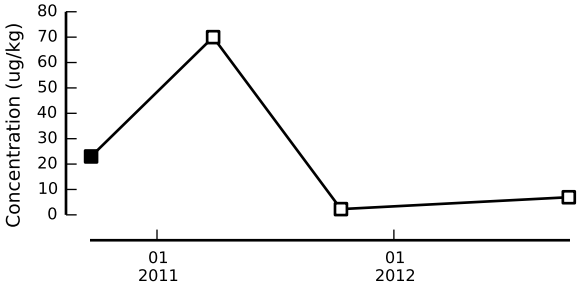
POLYCHLORINATED BIPHENYLS (PCBS) in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 76 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

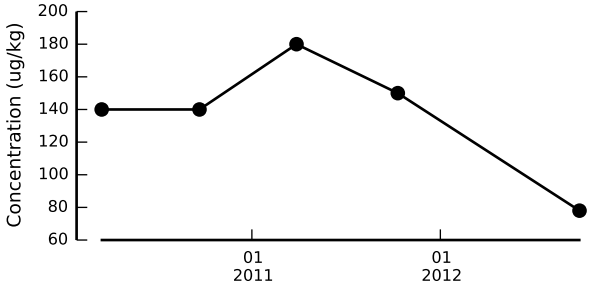
SED09-07

Sampled Once

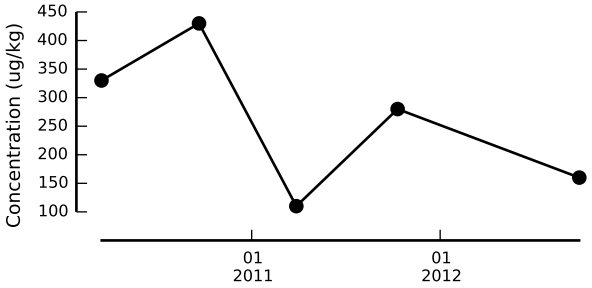
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

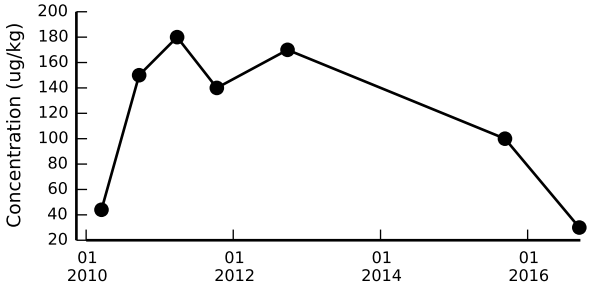
SED09-12

Sampled Once

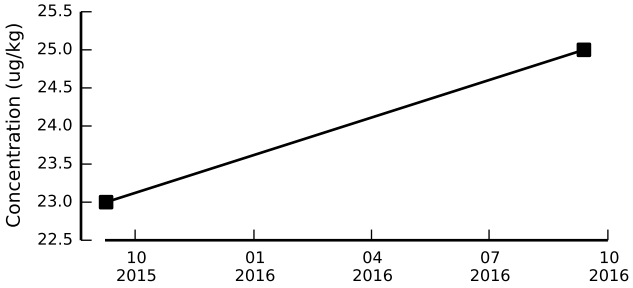
PYRENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 77 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



SED09-02



SED09-03

Sampled Once

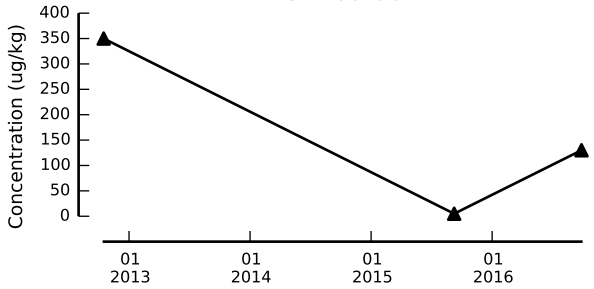
SED09-04

Sampled Once

SED09-05

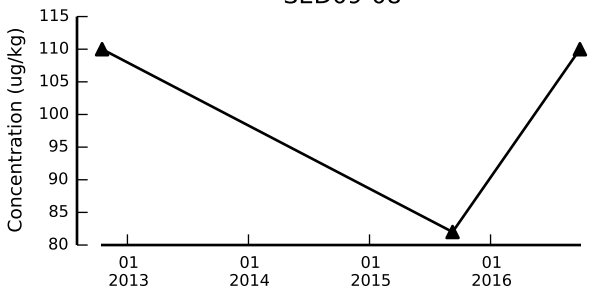
Sampled Once

SED09-06

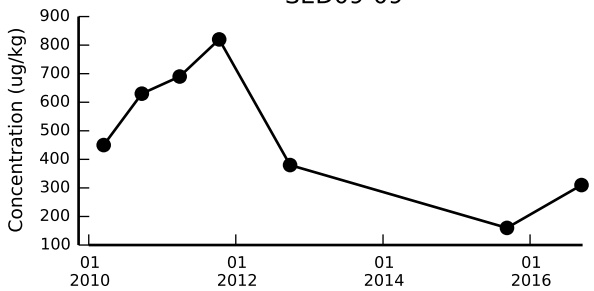


SED09-07

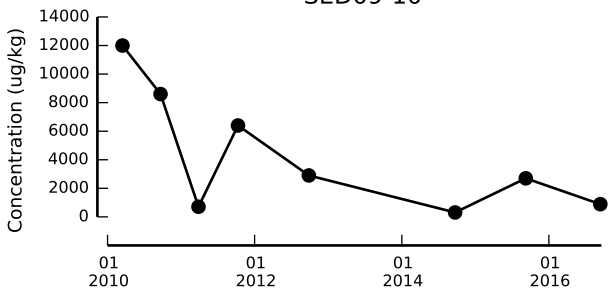
SED09-08



SED09-09

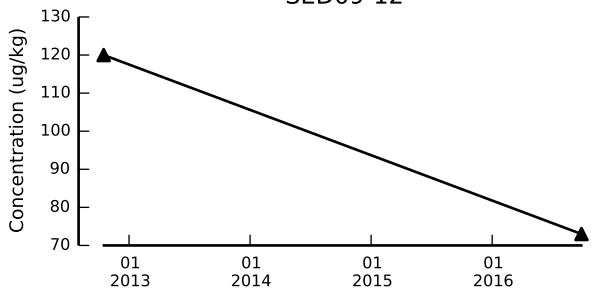


SED09-10



SED09-11

SED09-12



STYRENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 78 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

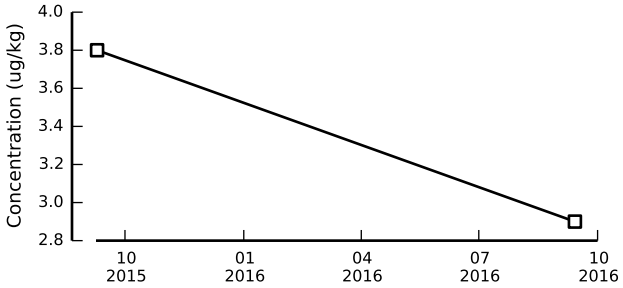
SED09-03

Sampled Once

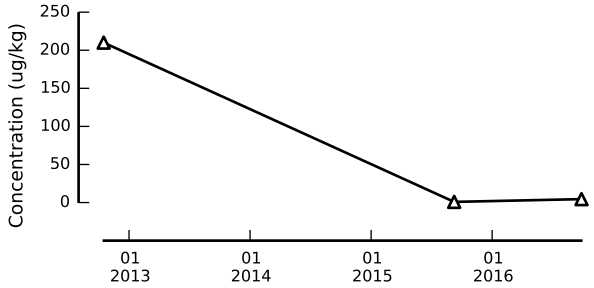
SED09-04

Sampled Once

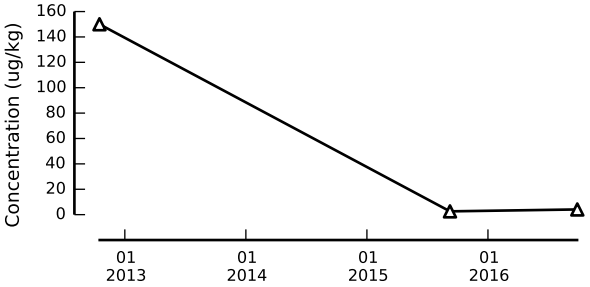
SED09-05



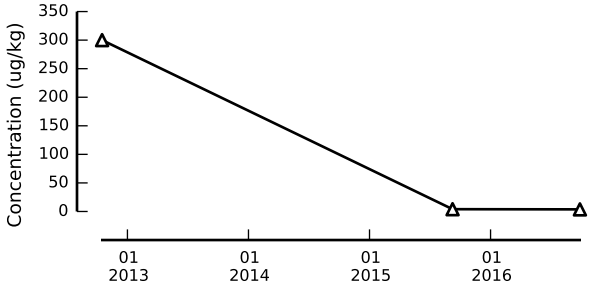
SED09-06



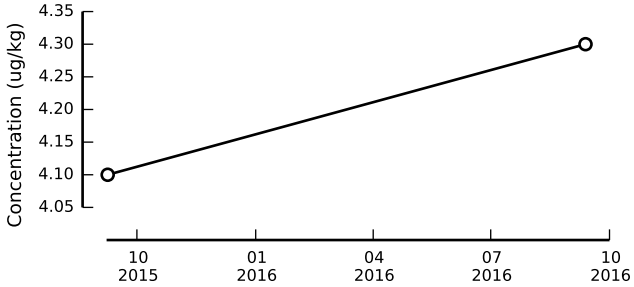
SED09-07



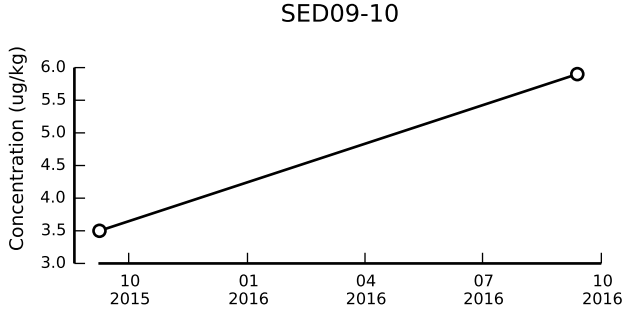
SED09-08



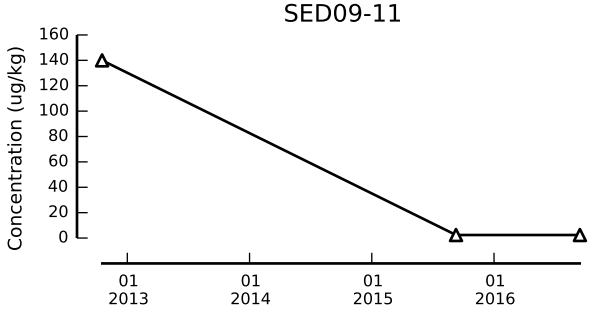
SED09-09



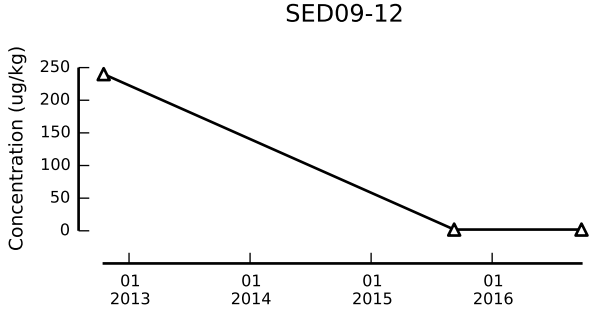
SED09-10



SED09-11



SED09-12



TETRACHLOROETHENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 79 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

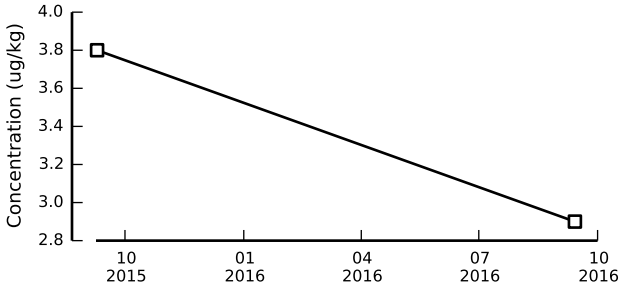
SED09-03

Sampled Once

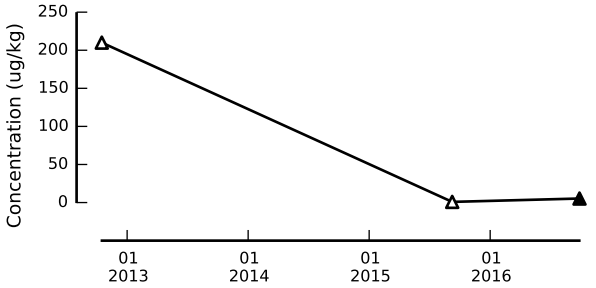
SED09-04

Sampled Once

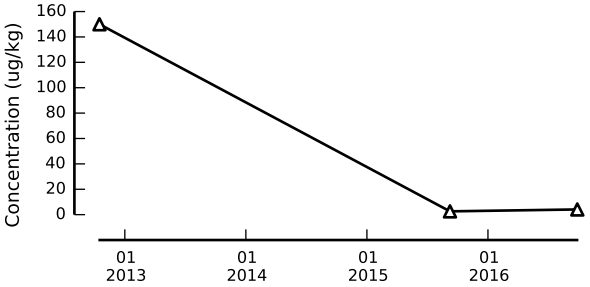
SED09-05



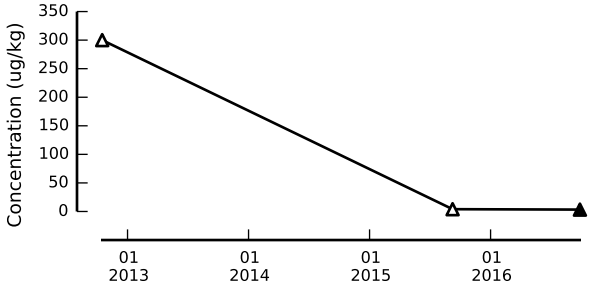
SED09-06



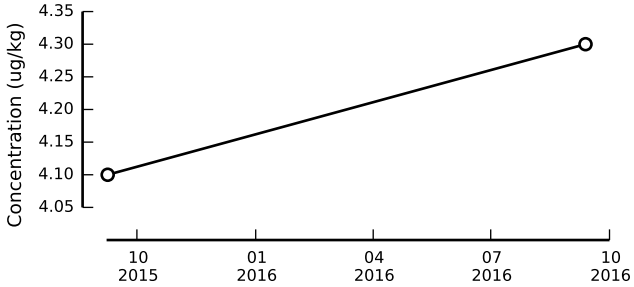
SED09-07



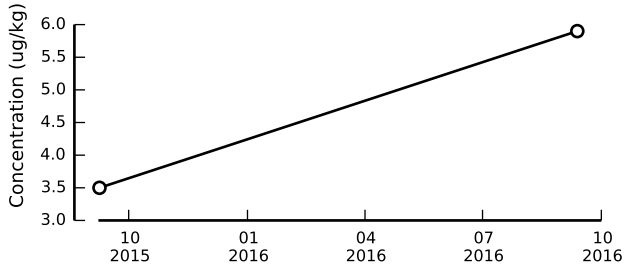
SED09-08



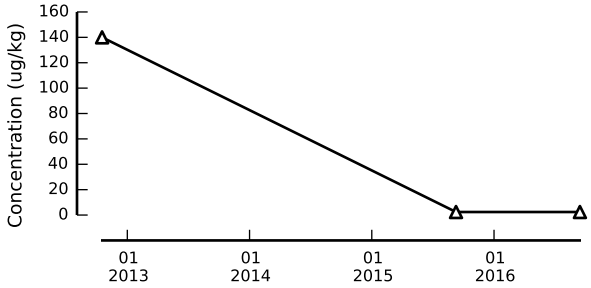
SED09-09



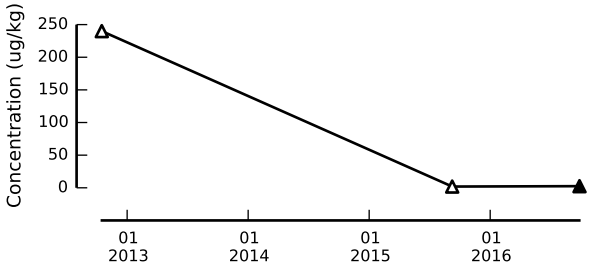
SED09-10



SED09-11



SED09-12



TOLUENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 80 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

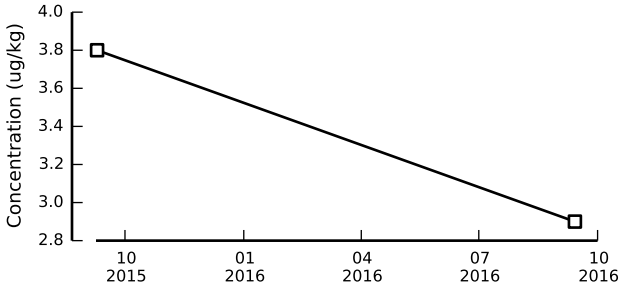
SED09-03

Sampled Once

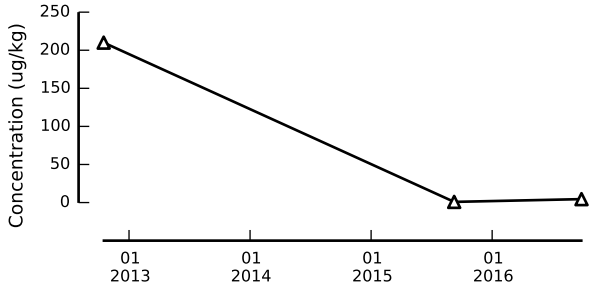
SED09-04

Sampled Once

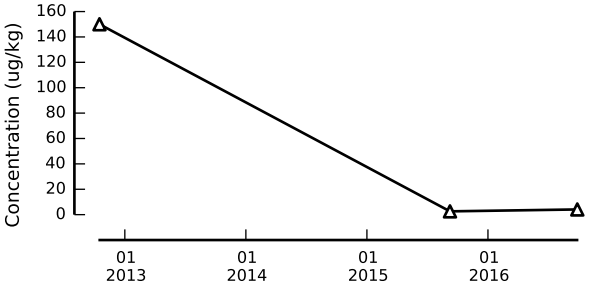
SED09-05



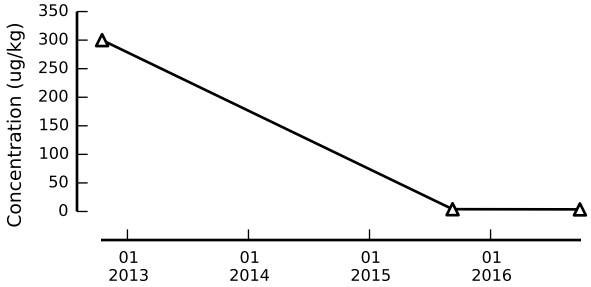
SED09-06



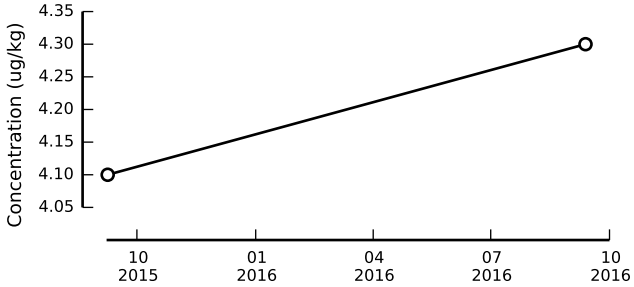
SED09-07



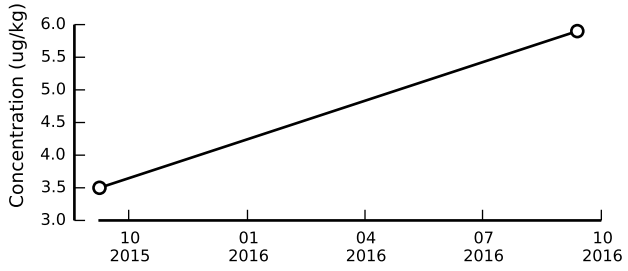
SED09-08



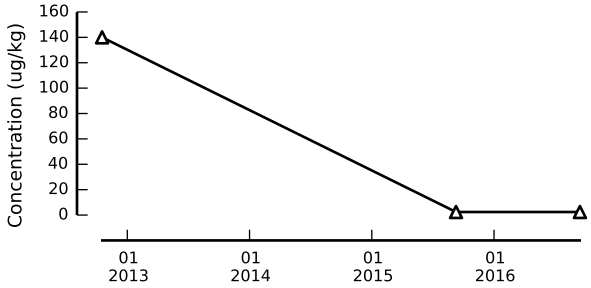
SED09-09



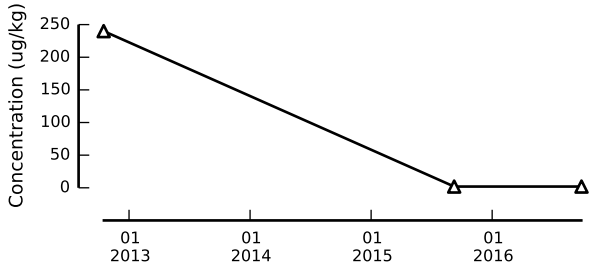
SED09-10



SED09-11



SED09-12



TRANS-1,2-DICHLOROETHENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 81 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

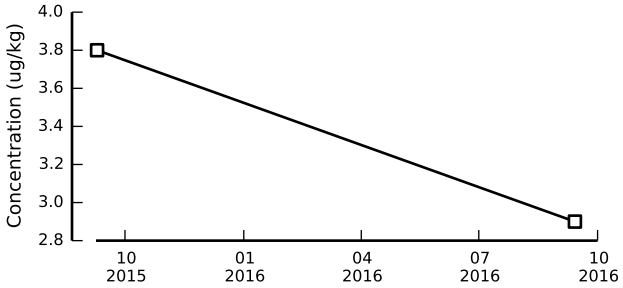
SED09-03

Sampled Once

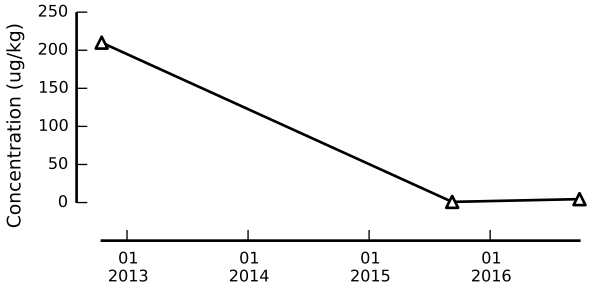
SED09-04

Sampled Once

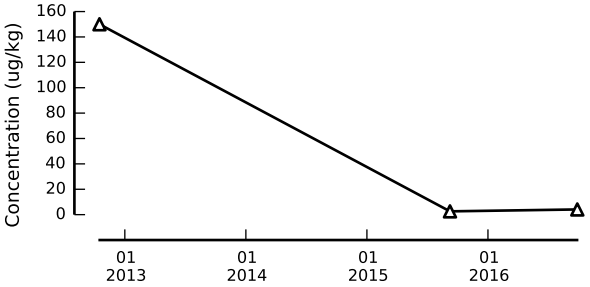
SED09-05



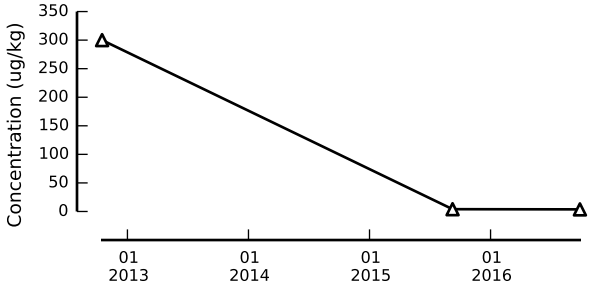
SED09-06



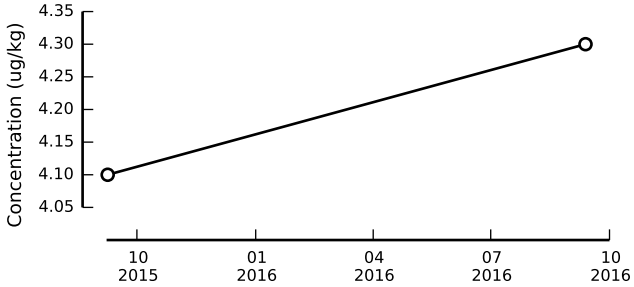
SED09-07



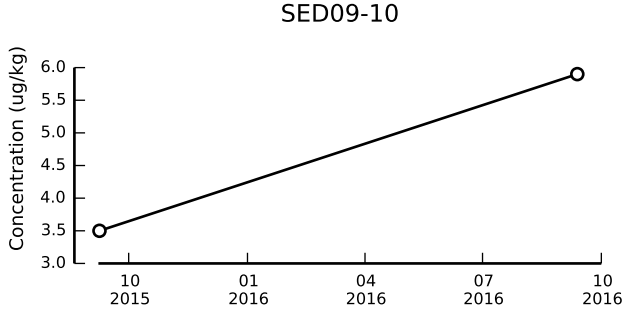
SED09-08



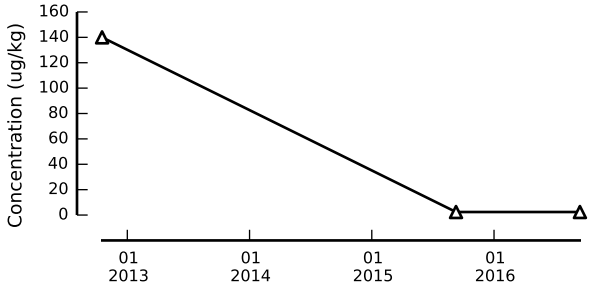
SED09-09



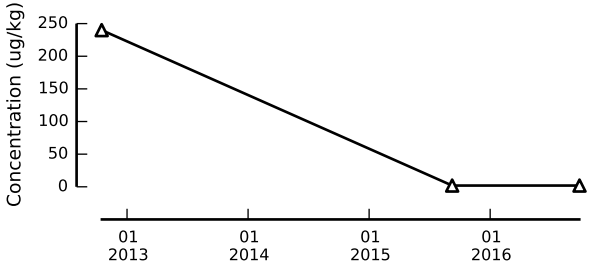
SED09-10



SED09-11



SED09-12



TRANS-1,3-DICHLOROPROPENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 82 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

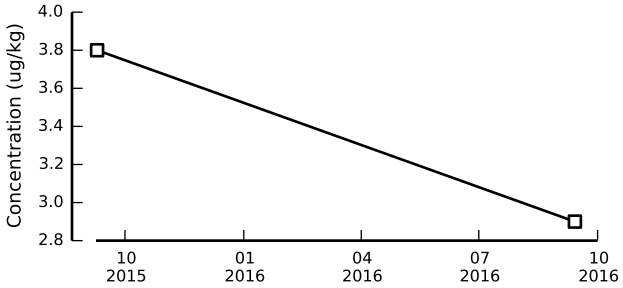
SED09-03

Sampled Once

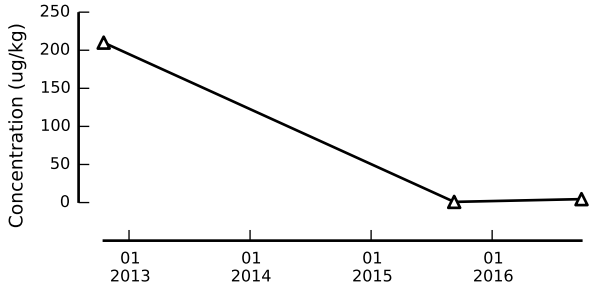
SED09-04

Sampled Once

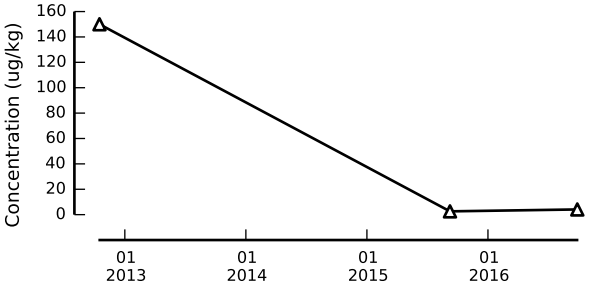
SED09-05



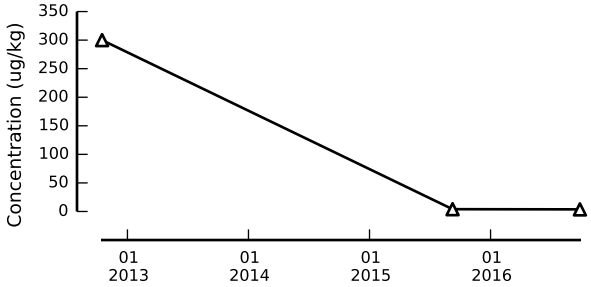
SED09-06



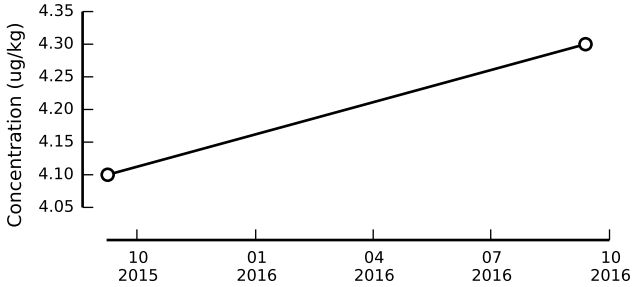
SED09-07



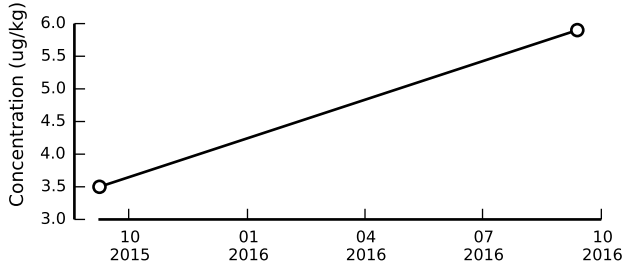
SED09-08



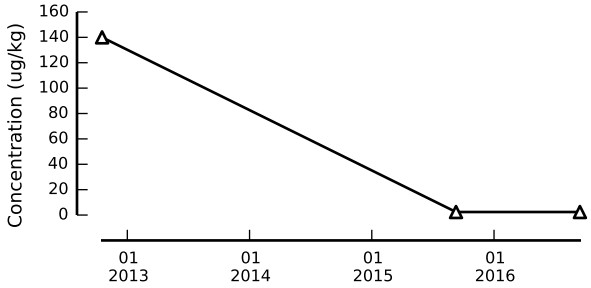
SED09-09



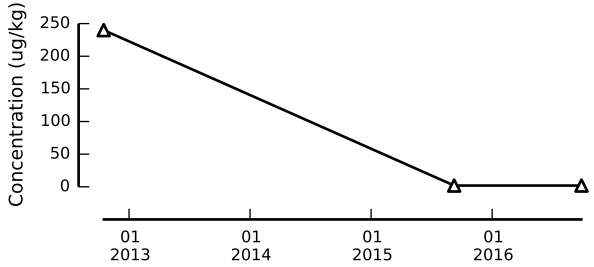
SED09-10



SED09-11



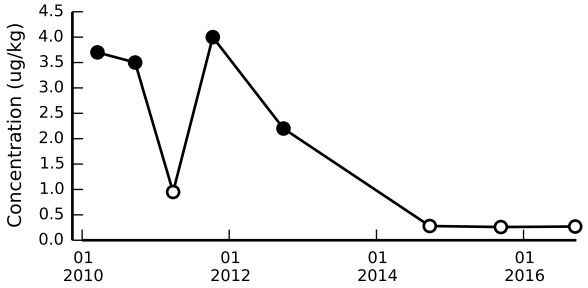
SED09-12



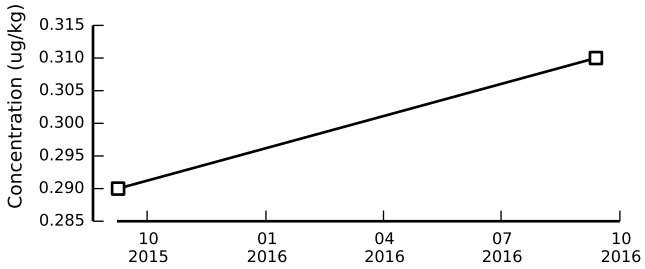
TRANS-CHLORDANE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 83 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location

SED09-01



SED09-02



SED09-03

Not Sampled

SED09-04

Not Sampled

SED09-05

Not Sampled

SED09-06

Sampled Once

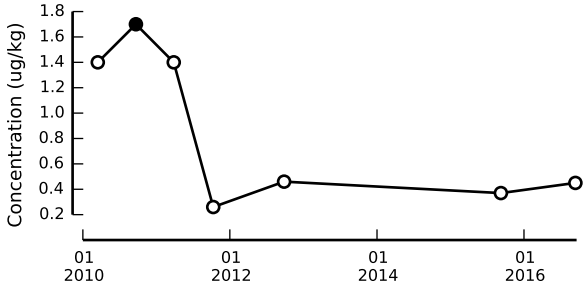
SED09-07

Sampled Once

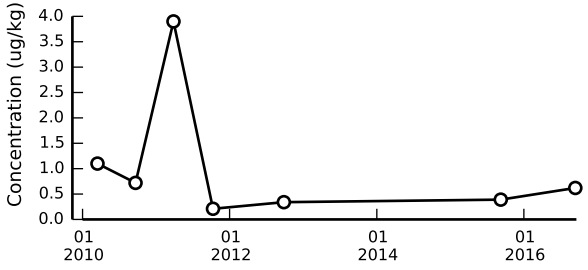
SED09-08

Sampled Once

SED09-09



SED09-10



SED09-11

Sampled Once

SED09-12

Sampled Once

TRICHLOROETHENE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 84 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

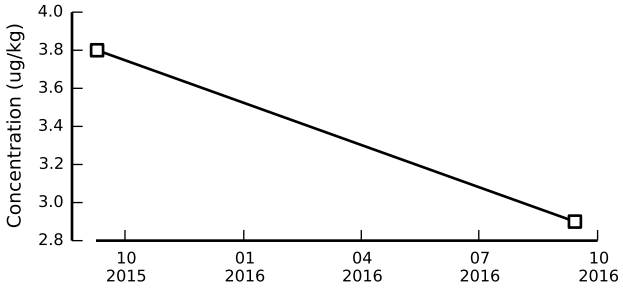
SED09-03

Sampled Once

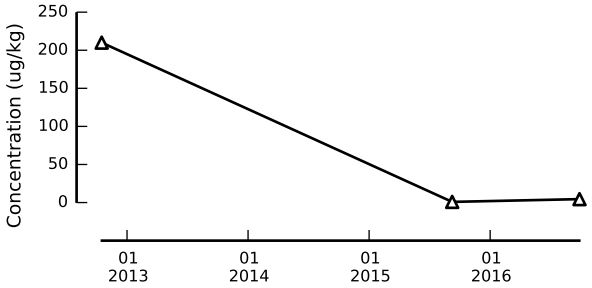
SED09-04

Sampled Once

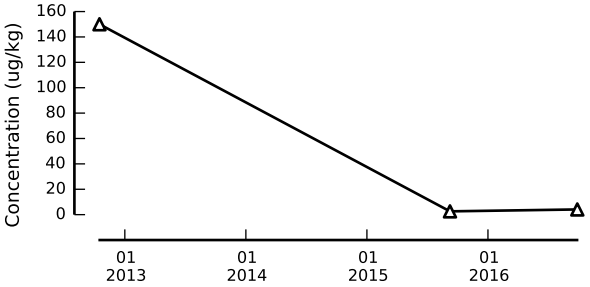
SED09-05



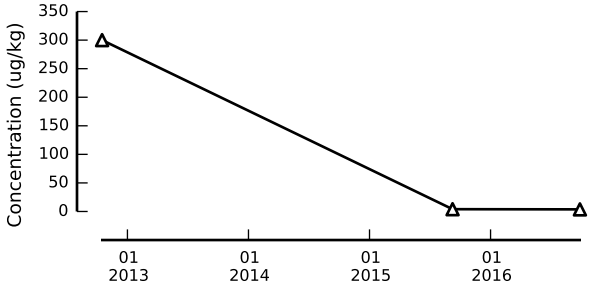
SED09-06



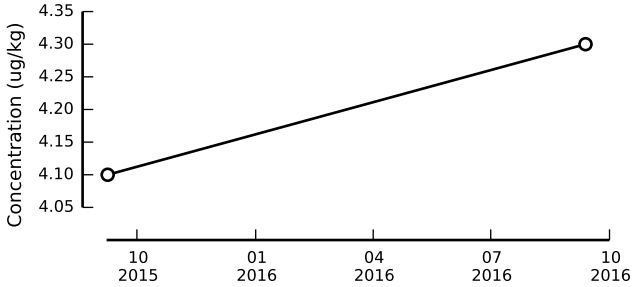
SED09-07



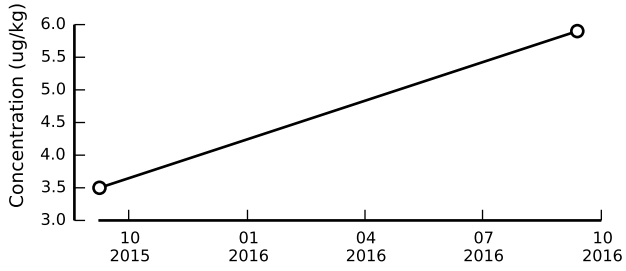
SED09-08



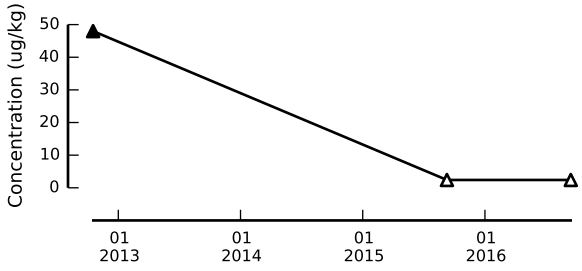
SED09-09



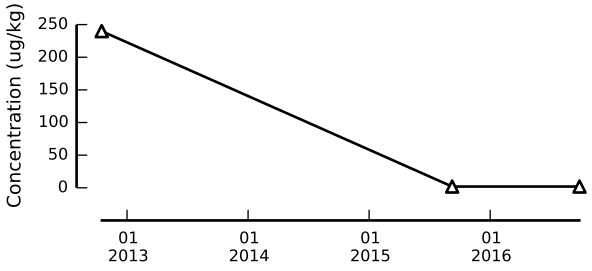
SED09-10



SED09-11



SED09-12



VINYL CHLORIDE in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 85 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01

Sampled Once

SED09-02

Sampled Once

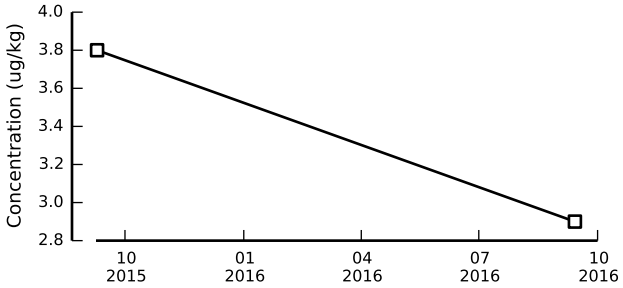
SED09-03

Sampled Once

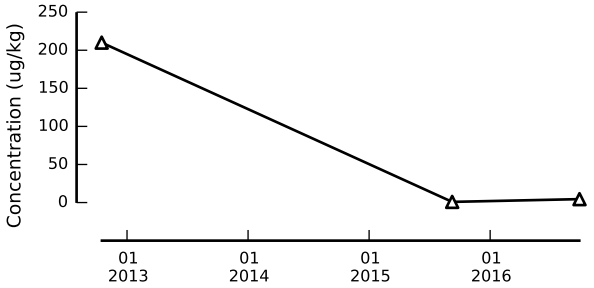
SED09-04

Sampled Once

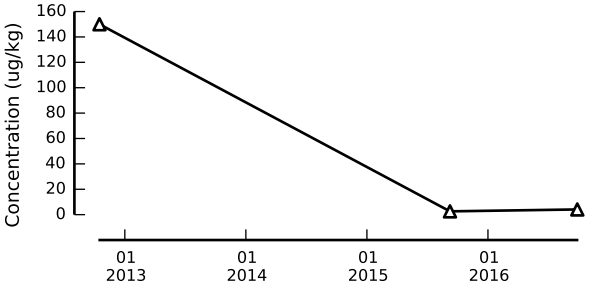
SED09-05



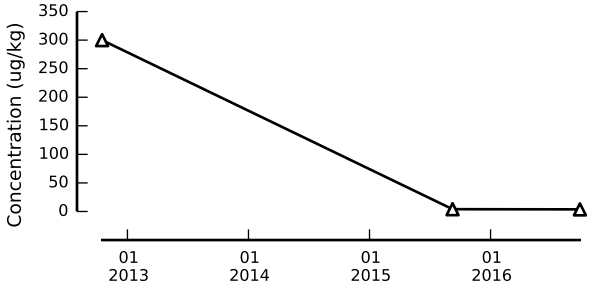
SED09-06



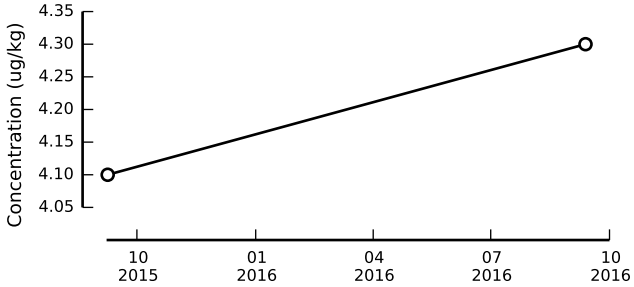
SED09-07



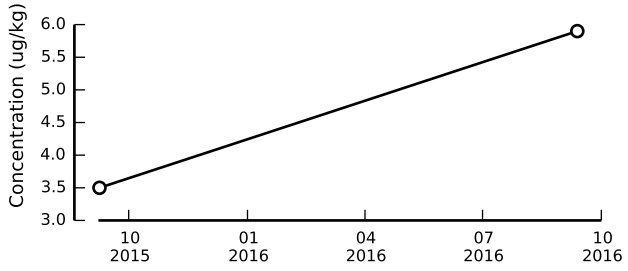
SED09-08



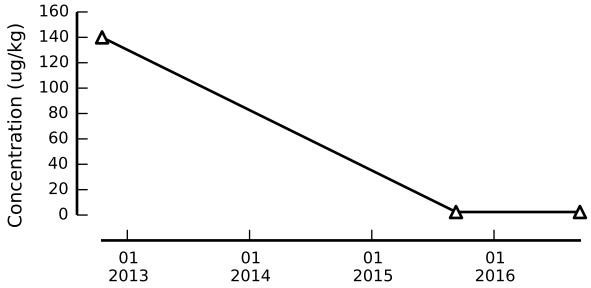
SED09-09



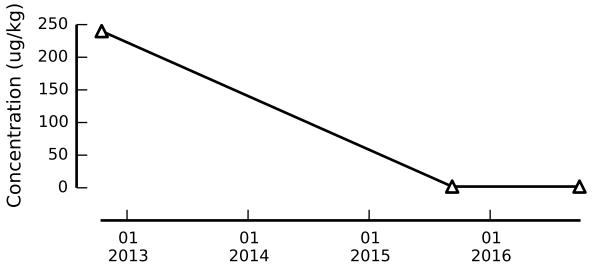
SED09-10



SED09-11



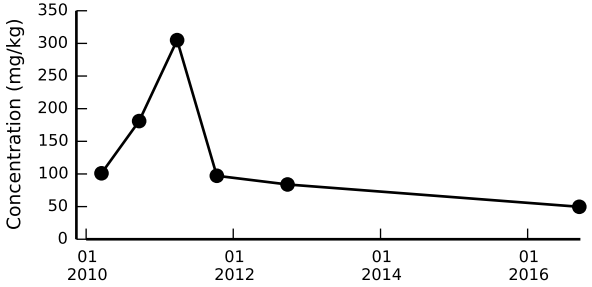
SED09-12



ZINC in Shallow Sediment
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 86 of 86

● Detected
○ Not Detected, shown at detection limit
■ □ "A" Location
▲ △ "B" Location

SED09-01



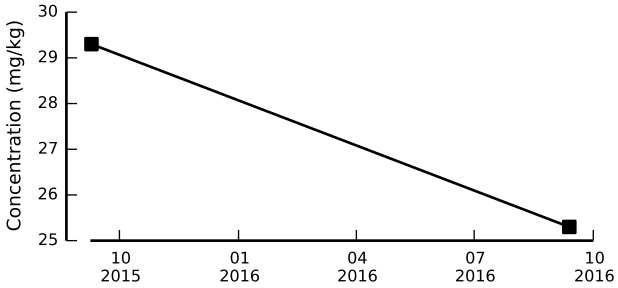
SED09-02

Sampled Once

SED09-03

Sampled Once

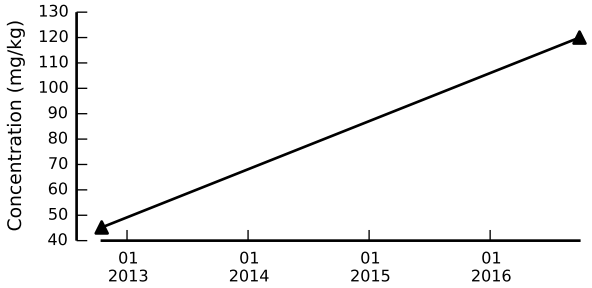
SED09-04



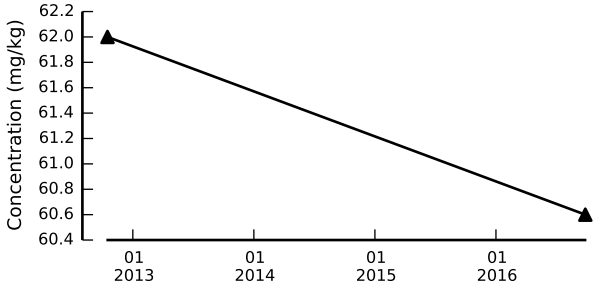
SED09-05

Sampled Once

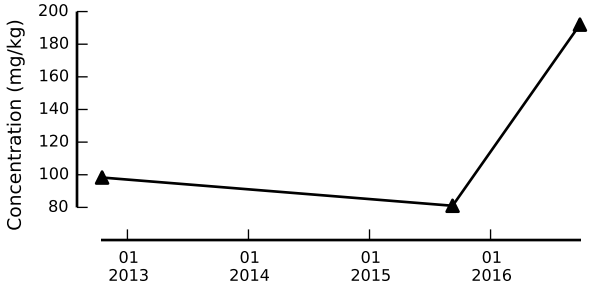
SED09-06



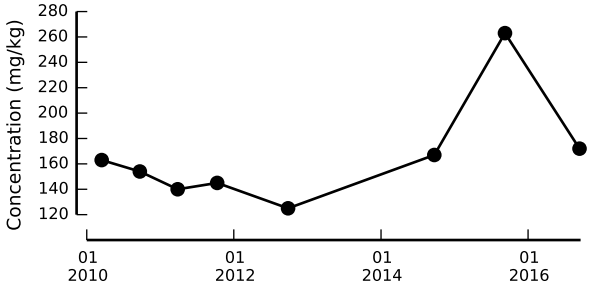
SED09-07



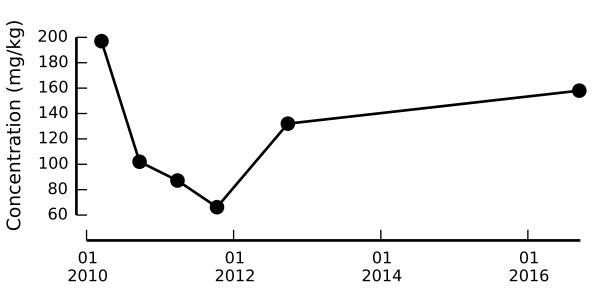
SED09-08



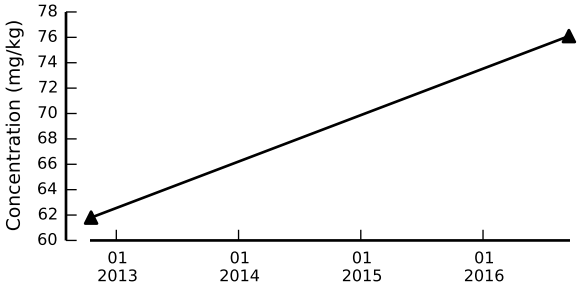
SED09-09



SED09-10



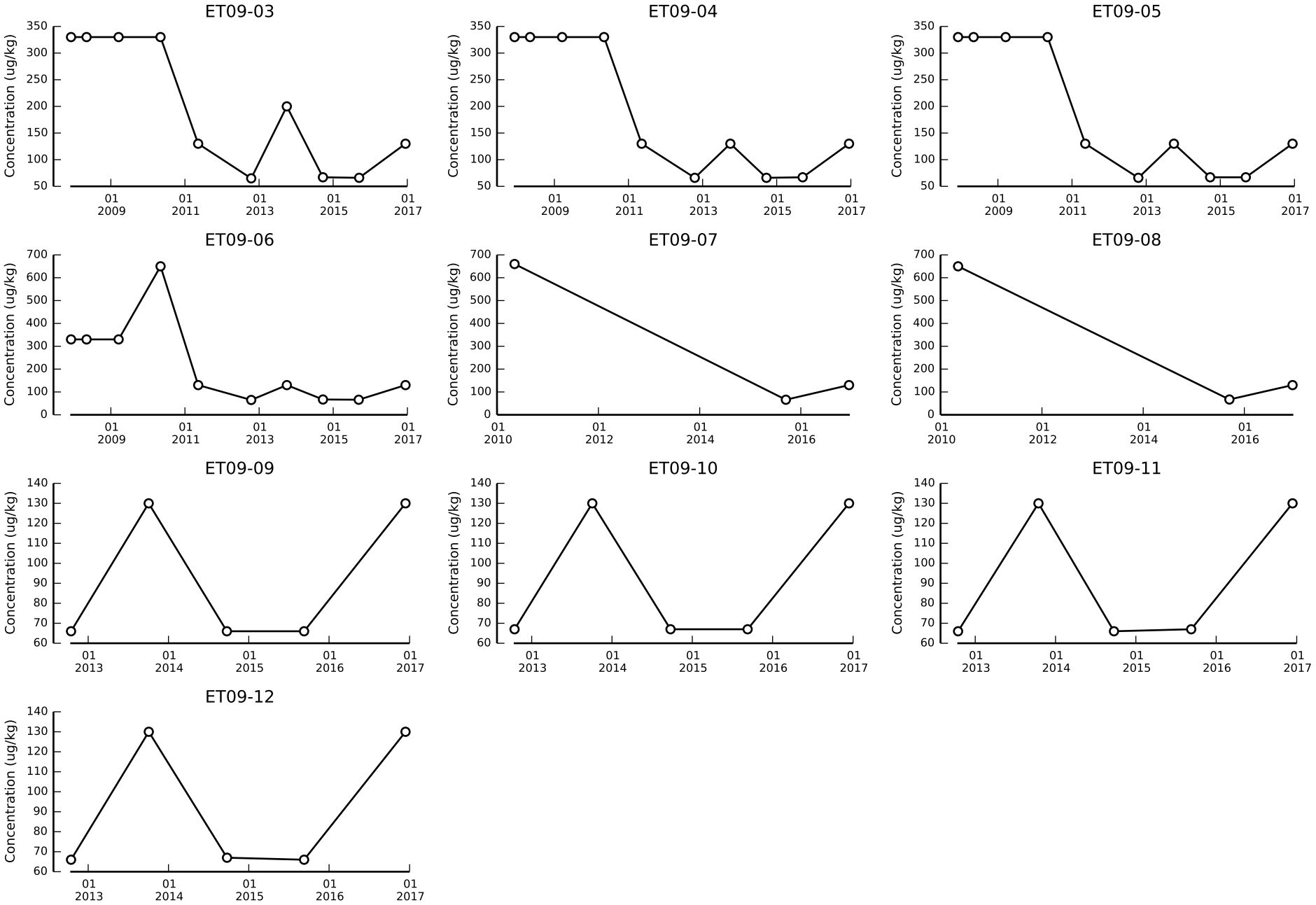
SED09-11



SED09-12

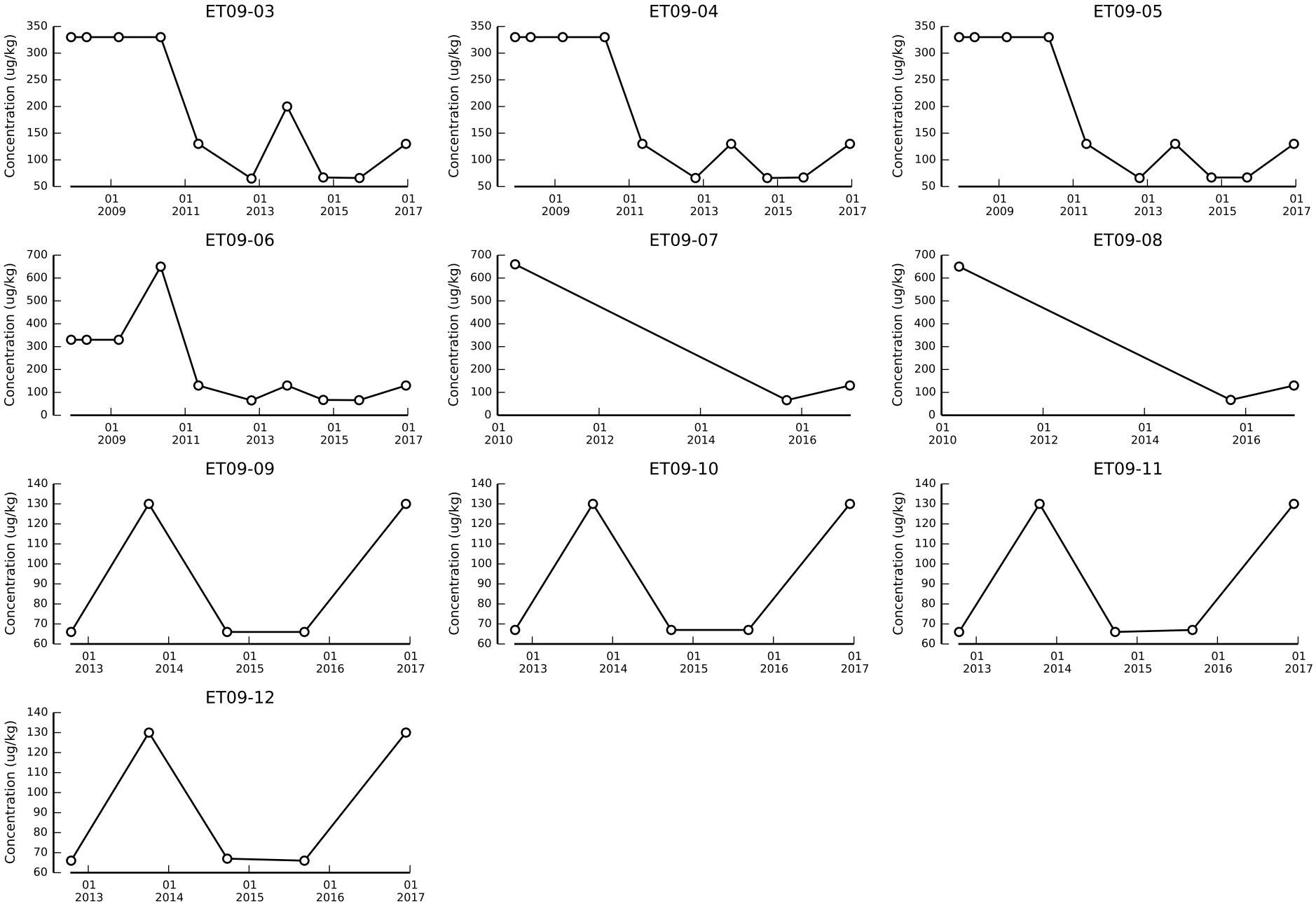
1,2,4-TRICHLOROBENZENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 1 of 105

● Detected
○ Not Detected, shown at detection limit



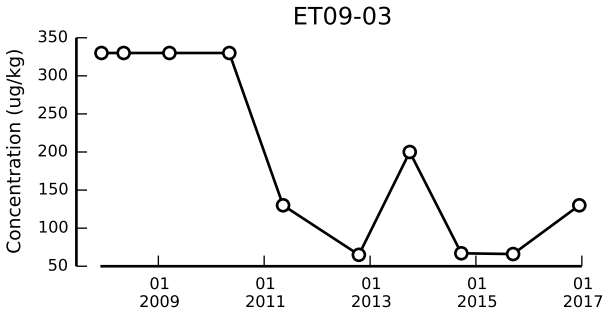
1,2-DICHLOROBENZENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 2 of 105

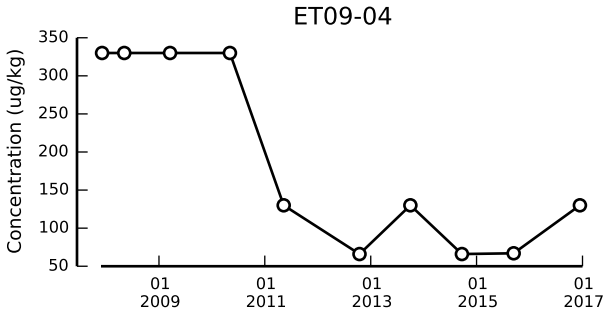
● Detected
○ Not Detected, shown at detection limit

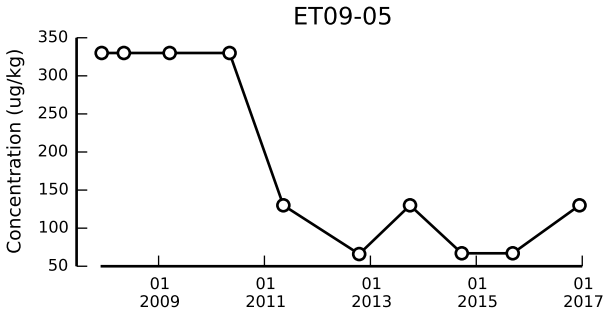


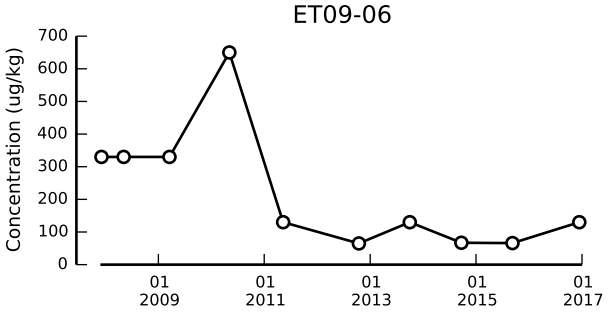
1,3-DICHLOROBENZENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 3 of 105

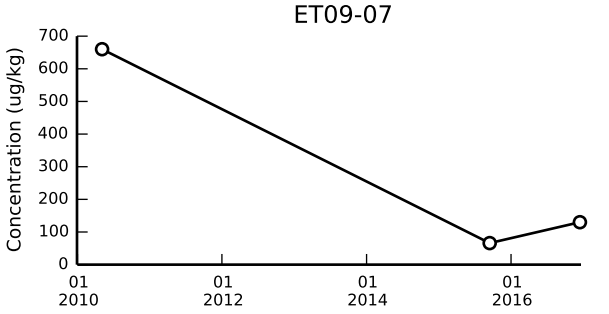
● Detected
○ Not Detected, shown at detection limit

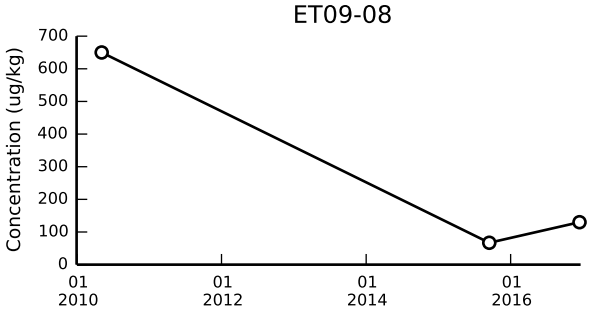


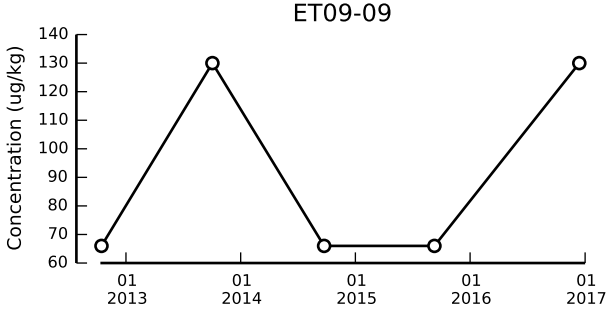


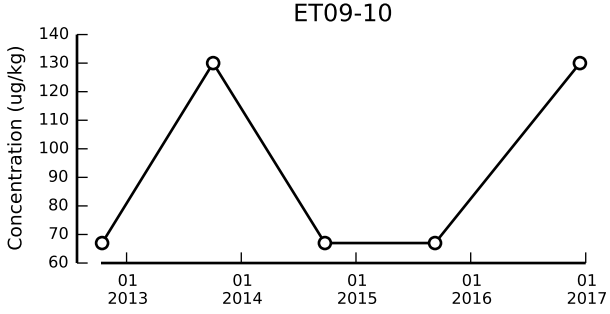


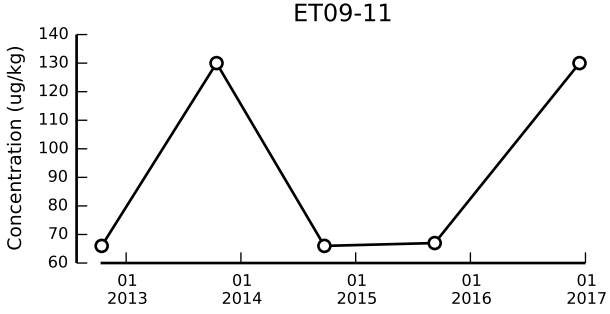


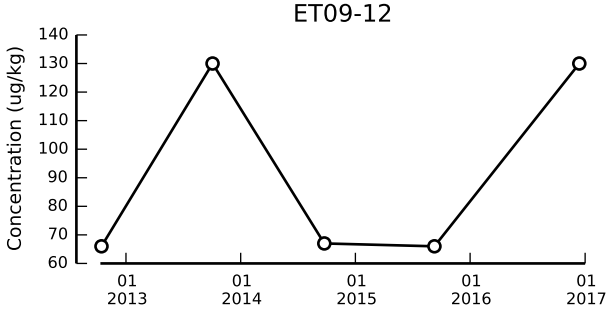






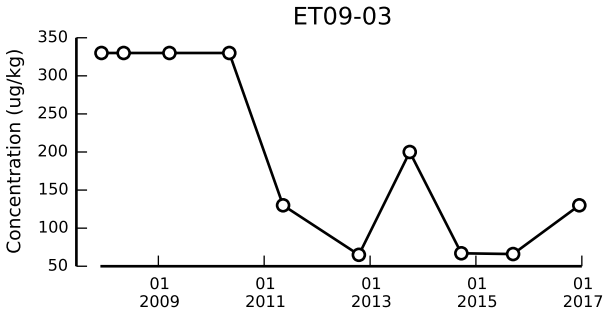


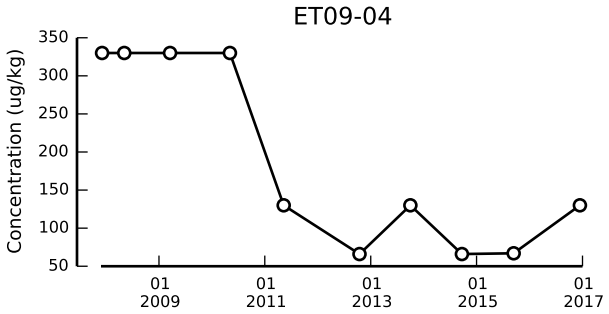


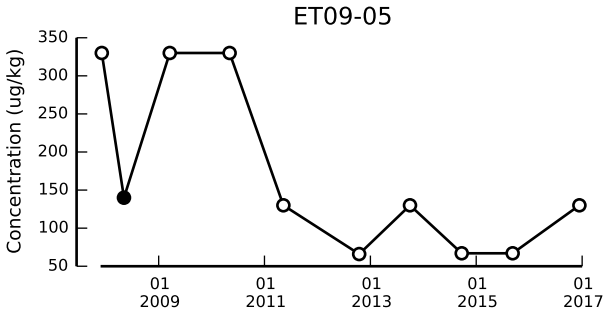


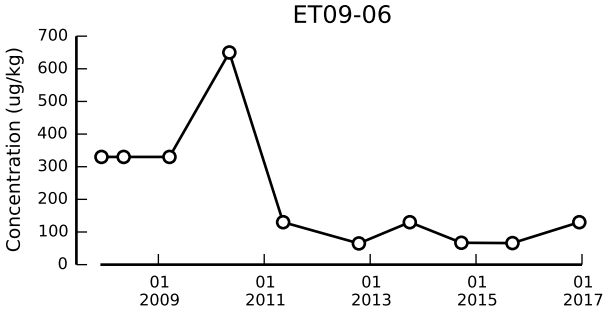
1,4-DICHLOROBENZENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 4 of 105

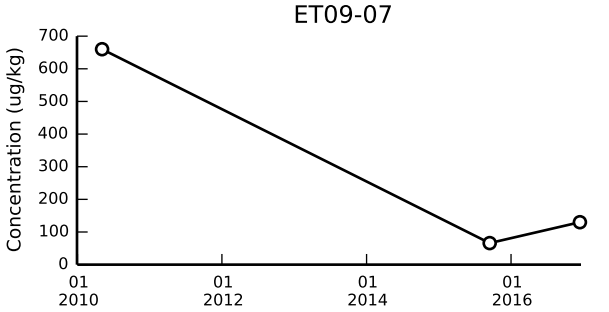
● Detected
○ Not Detected, shown at detection limit

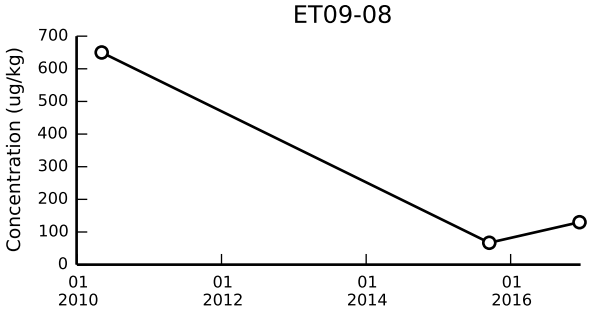


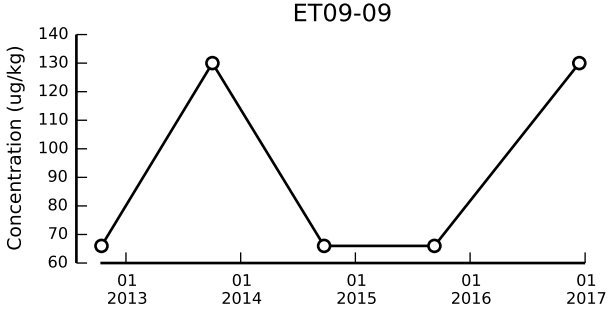


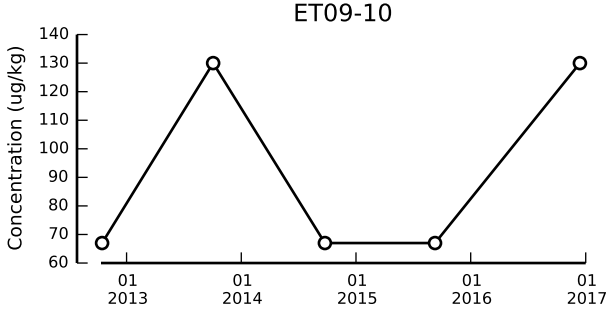


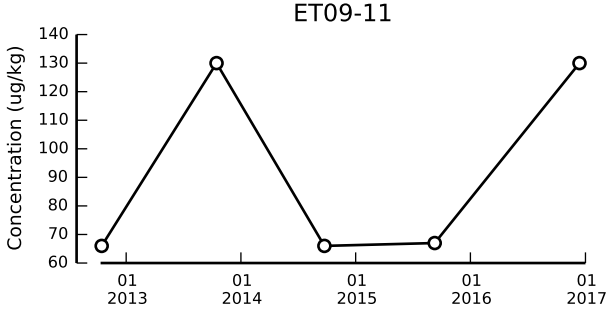


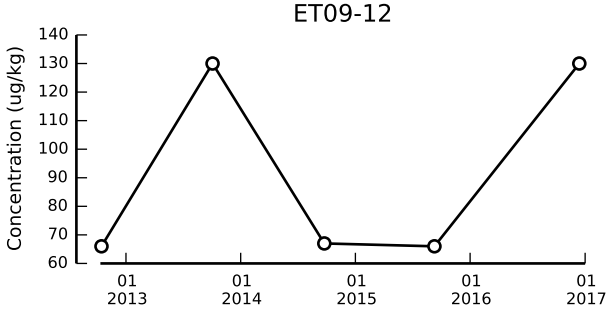






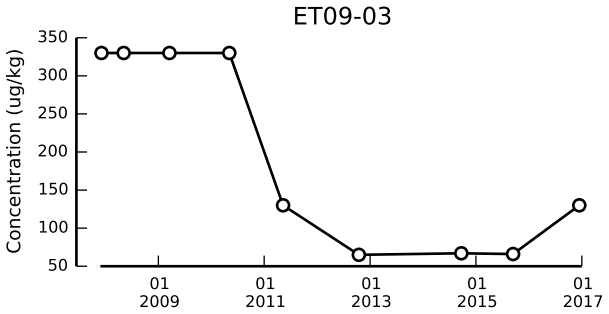


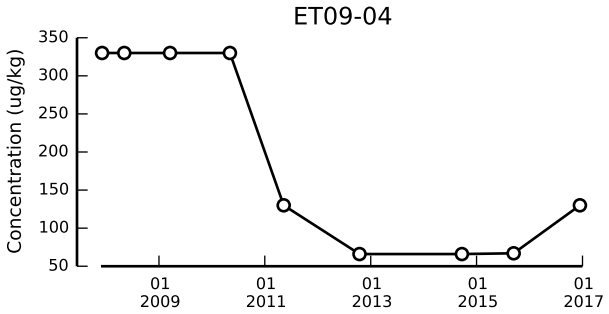


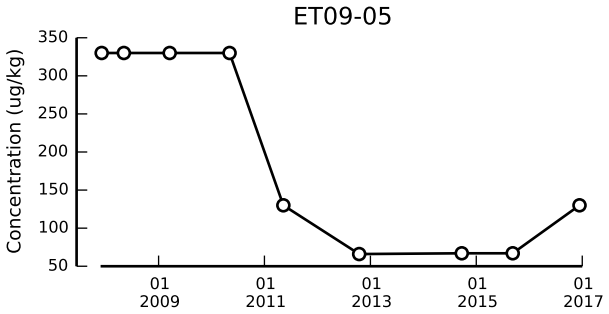


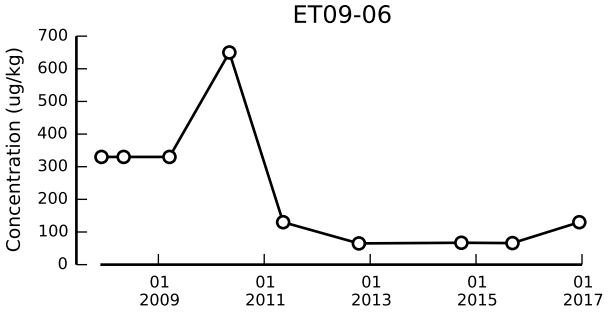
2,2'-OXYBIS(1-CHLOROPROPANE) in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 5 of 105

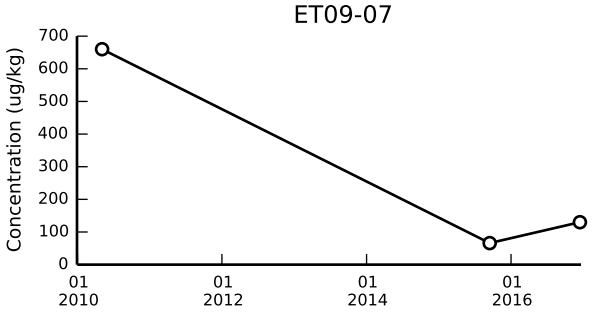
● Detected
○ Not Detected, shown at detection limit

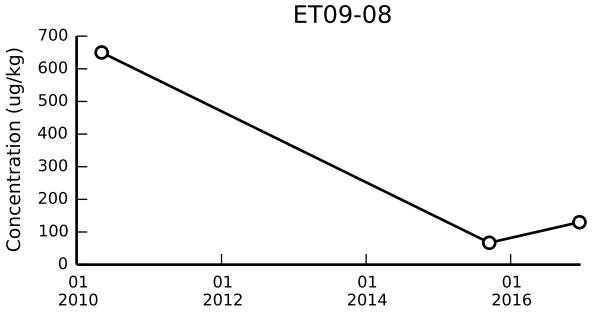


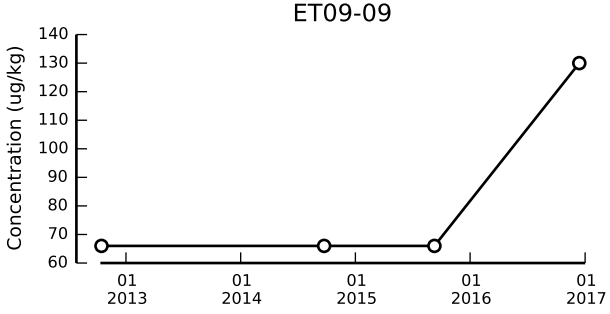


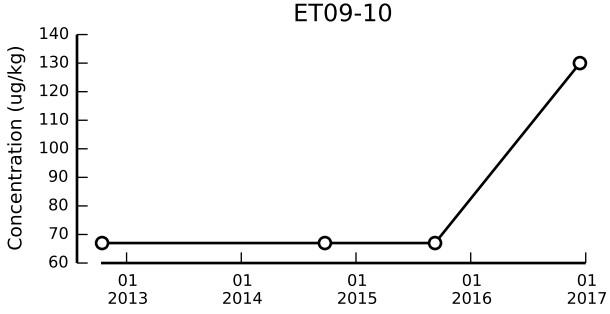


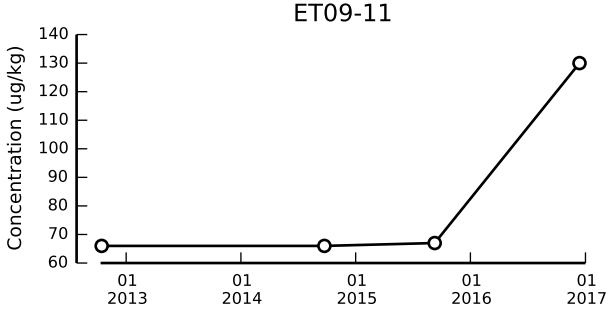


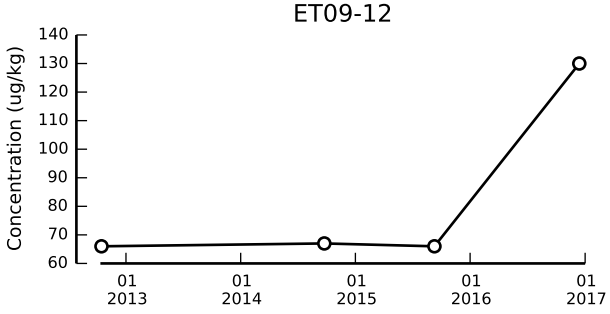






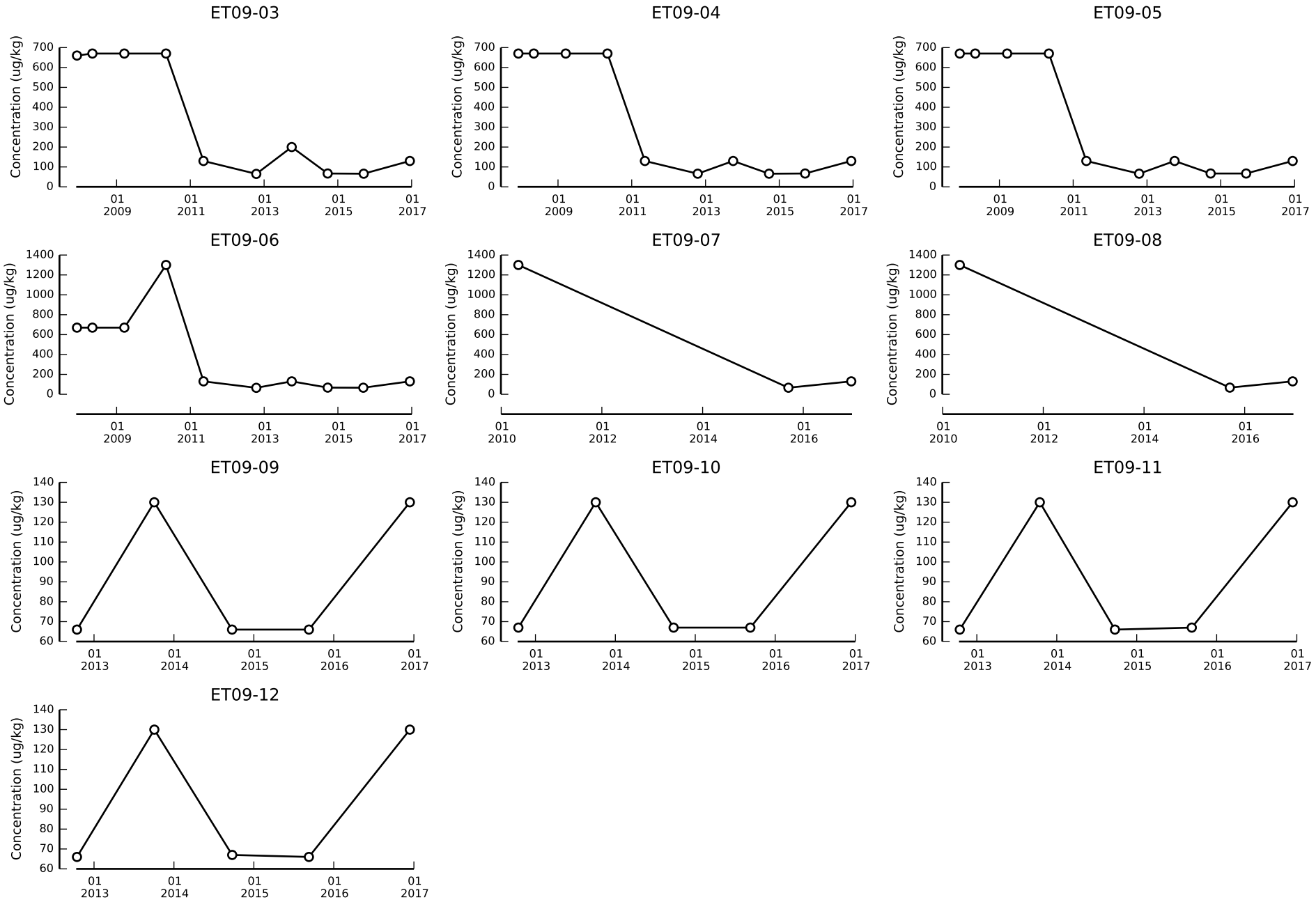






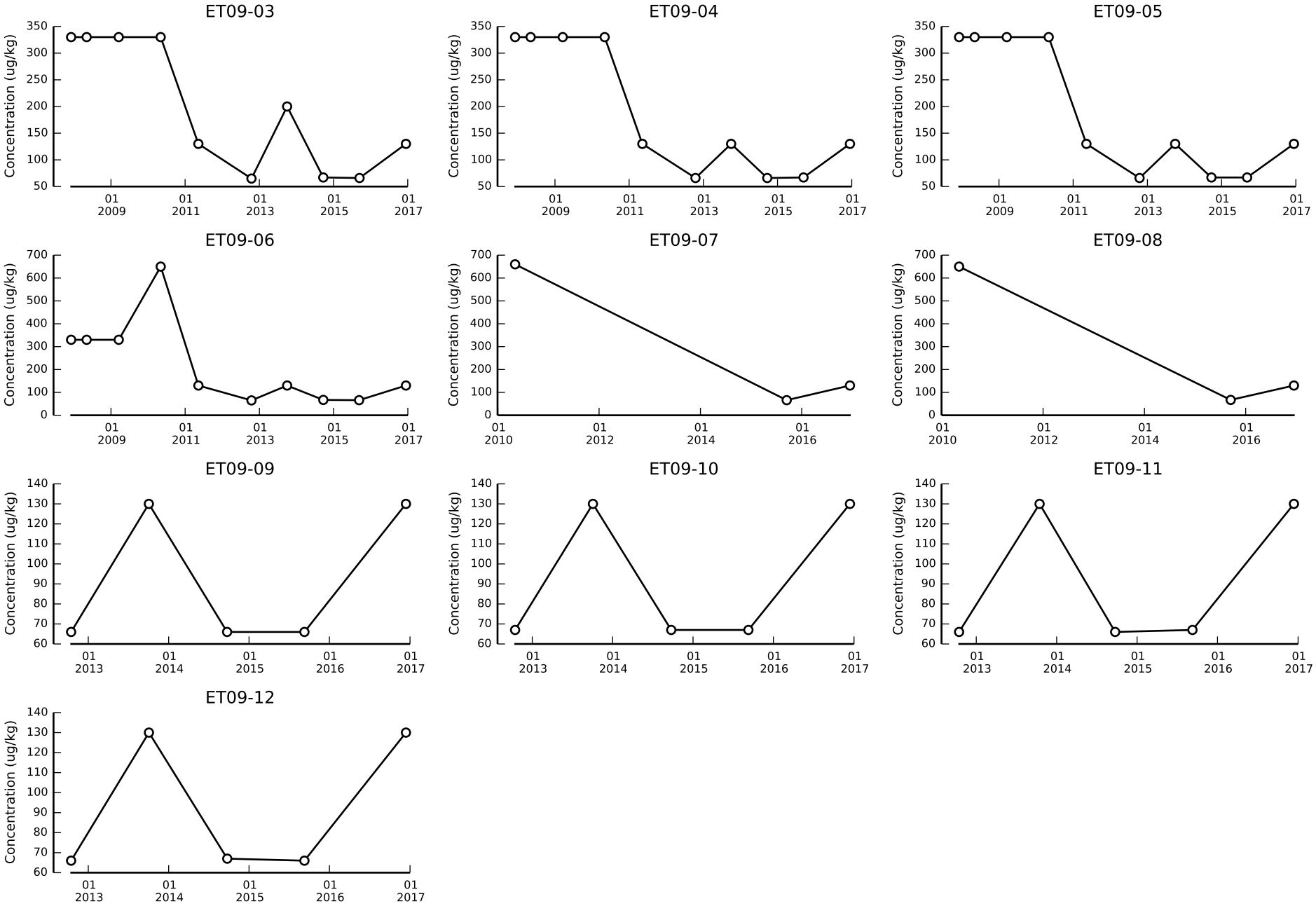
2,4,5-TRICHLOROPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 6 of 105

● Detected
○ Not Detected, shown at detection limit



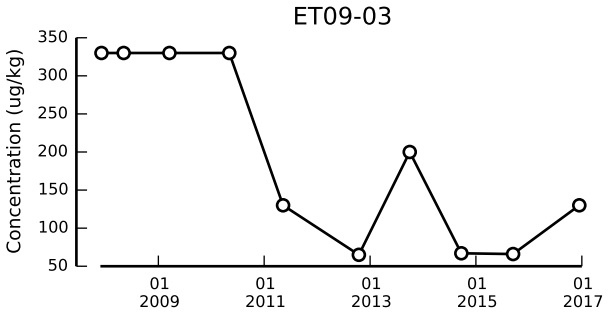
2,4,6-TRICHLOROPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 7 of 105

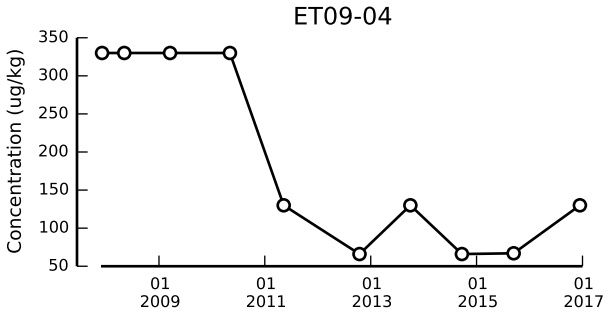
● Detected
○ Not Detected, shown at detection limit

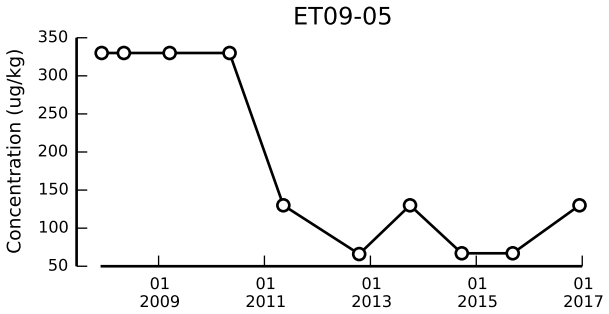


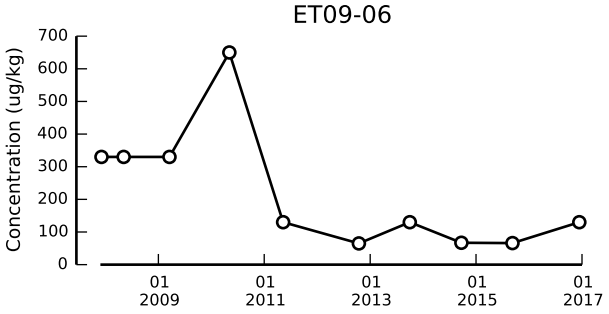
2,4-DICHLOROPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 8 of 105

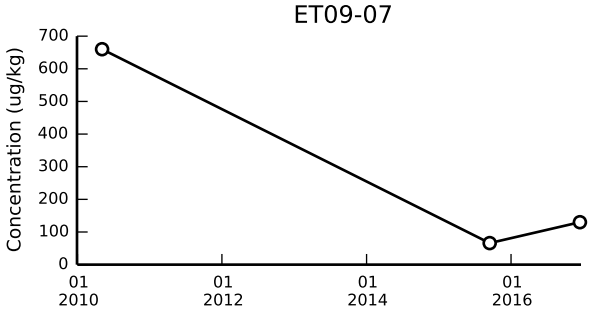
● Detected
○ Not Detected, shown at detection limit

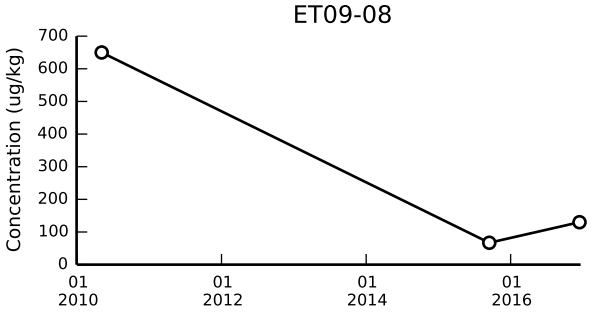


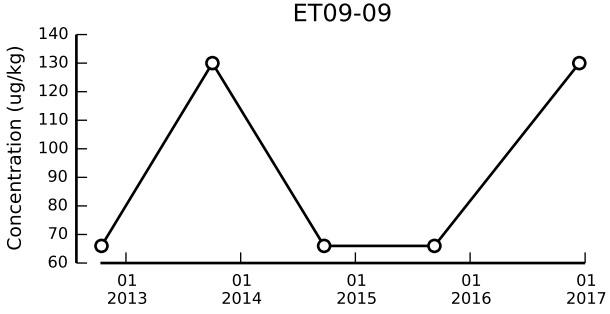


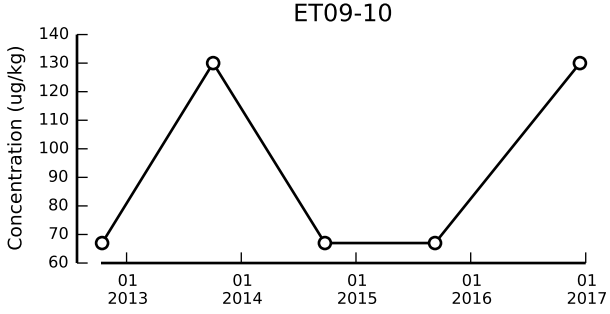


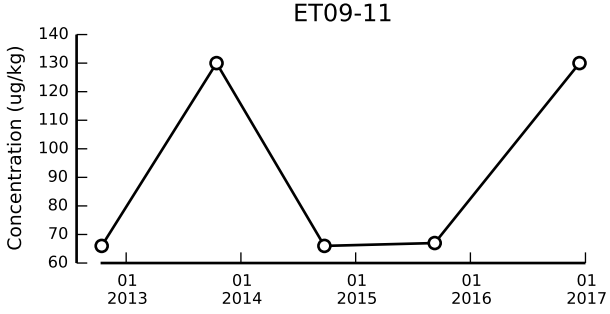


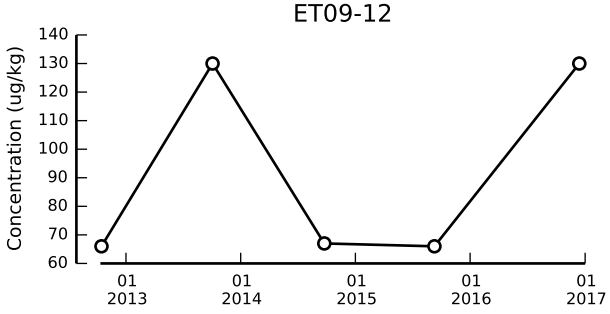






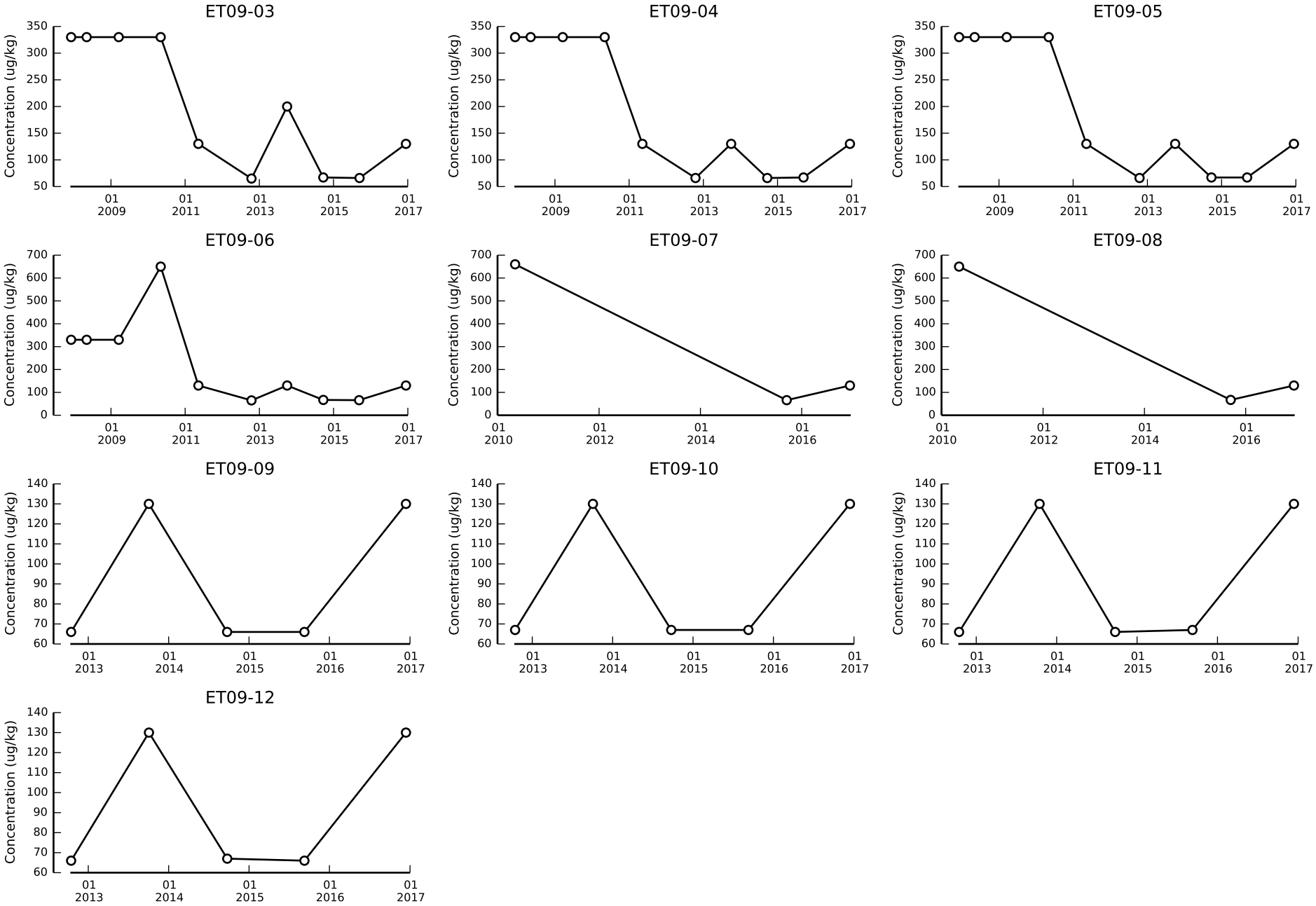






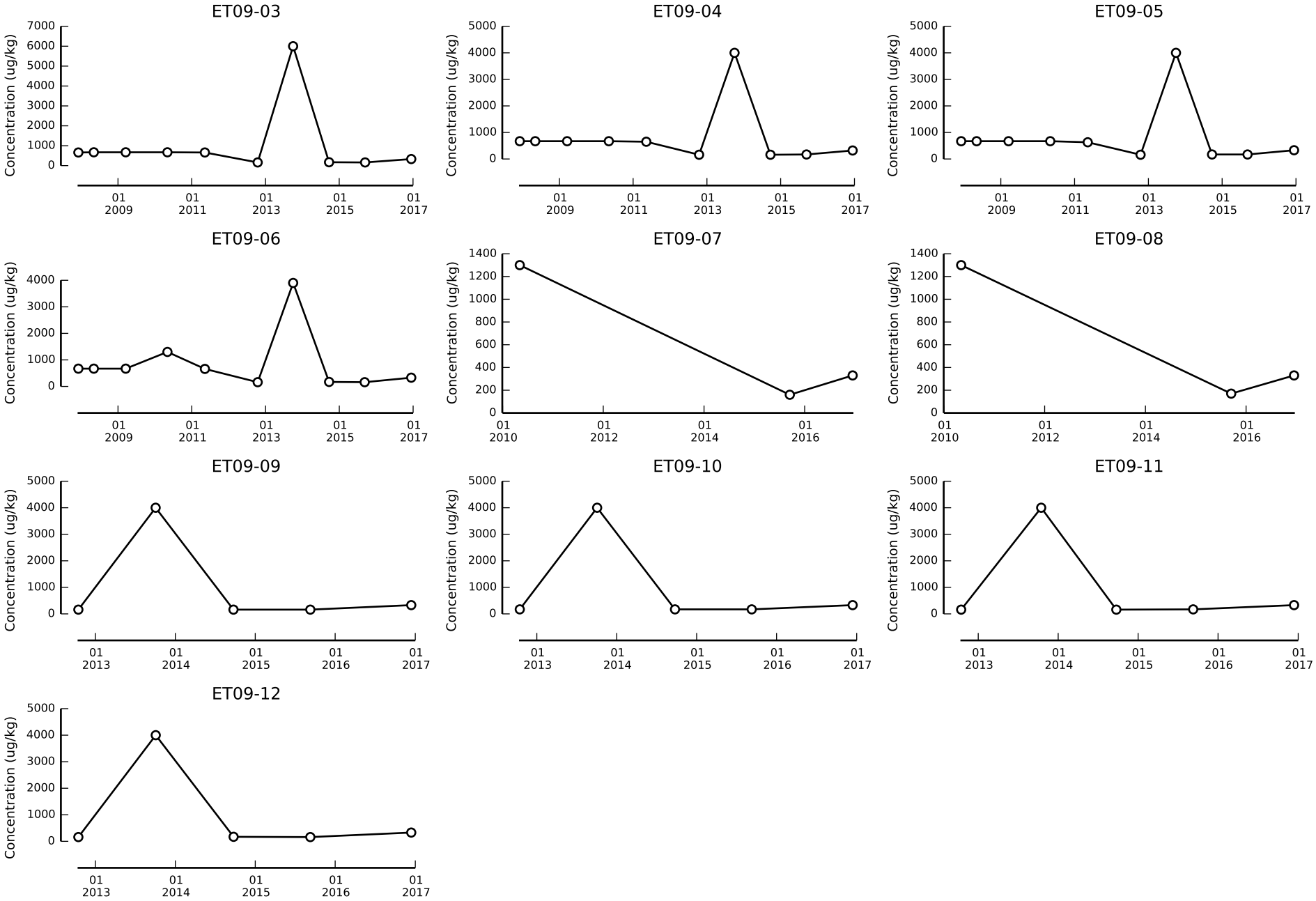
2,4-DIMETHYLPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 9 of 105

● Detected
○ Not Detected, shown at detection limit



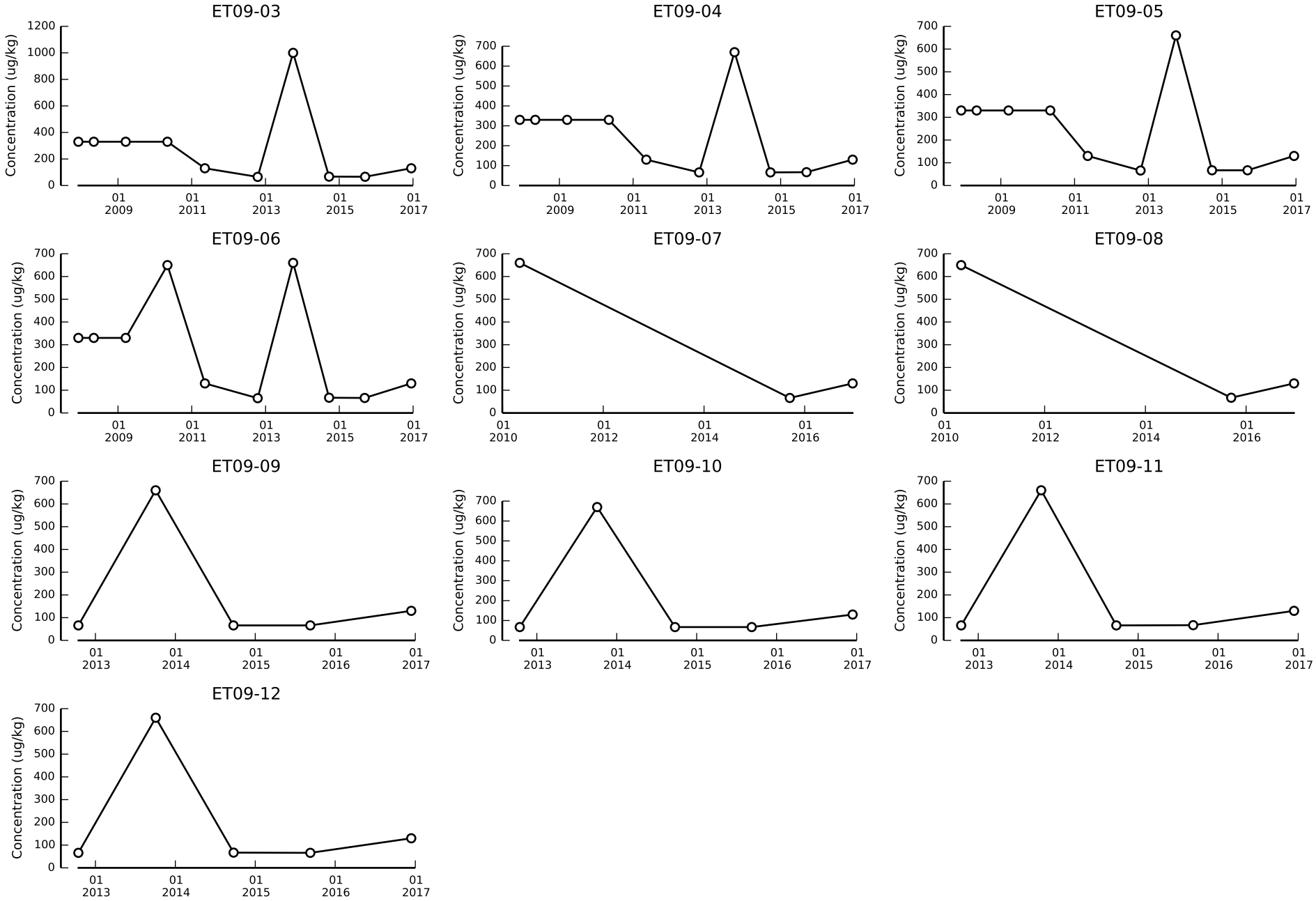
2,4-DINITROPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 10 of 105

● Detected
○ Not Detected, shown at detection limit



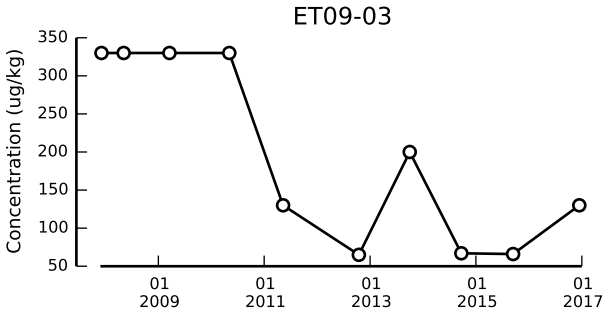
2,4-DINITROTOLUENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 11 of 105

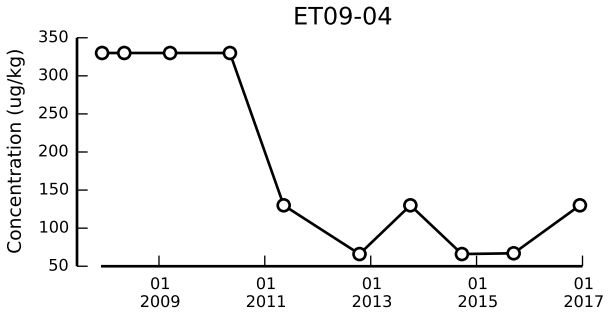
● Detected
○ Not Detected, shown at detection limit

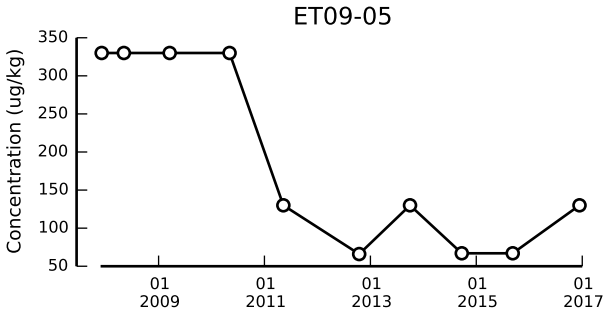


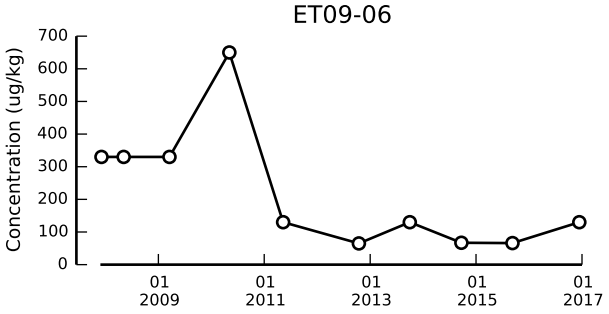
2,6-DINITROTOLUENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 12 of 105

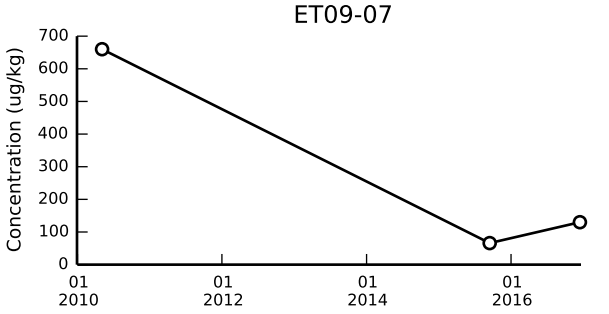
● Detected
○ Not Detected, shown at detection limit

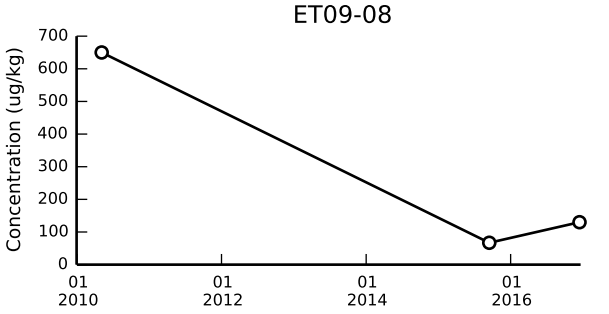


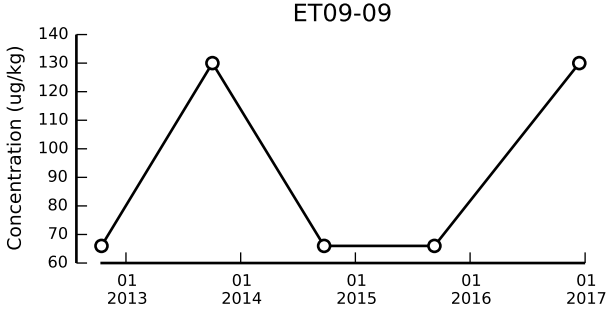


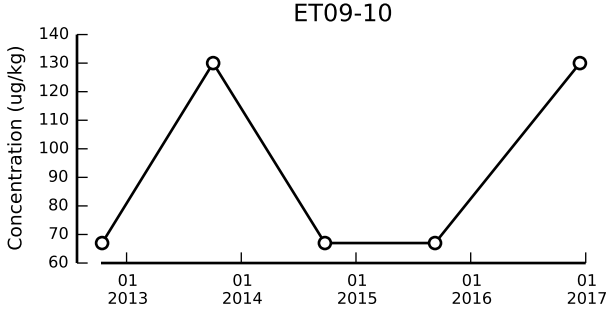


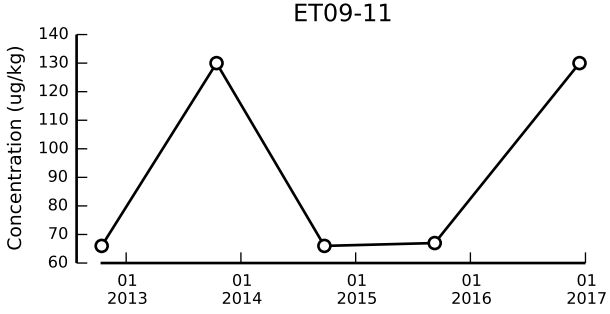


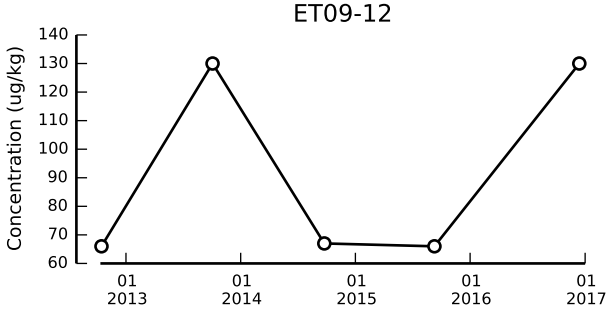






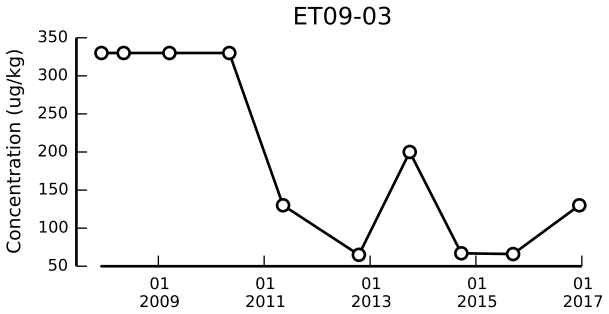


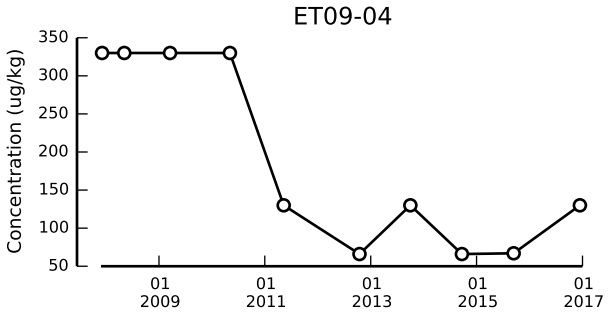


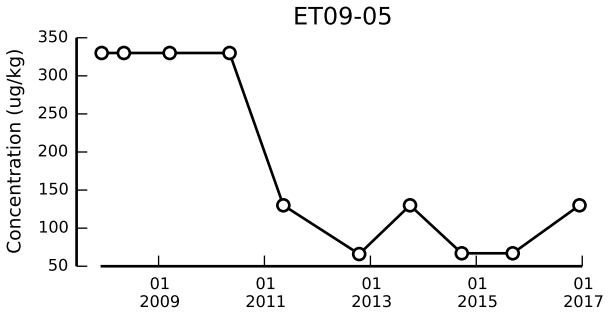


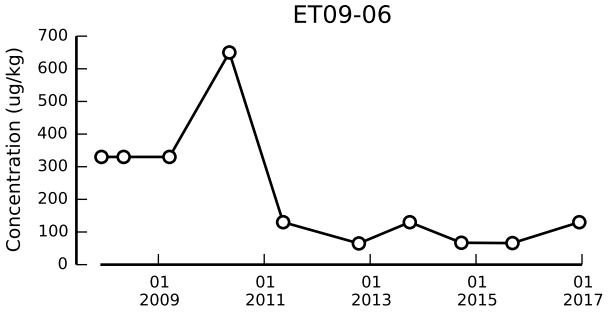
2-CHLORONAPHTHALENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 13 of 105

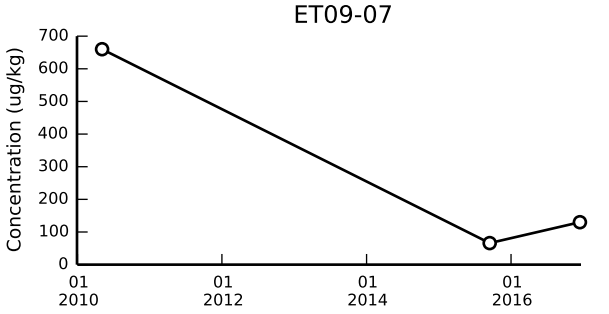
● Detected
○ Not Detected, shown at detection limit

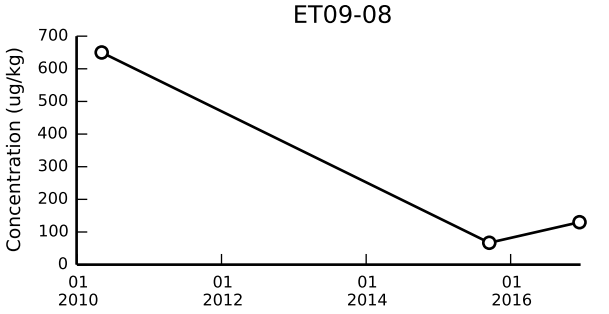


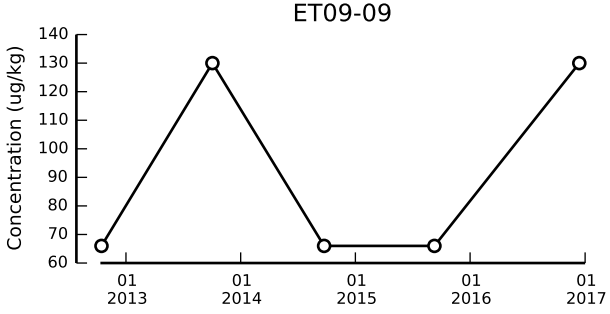


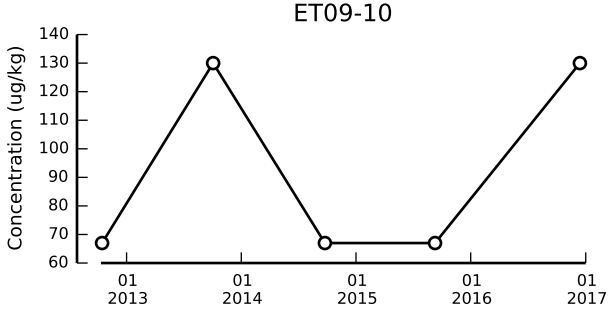


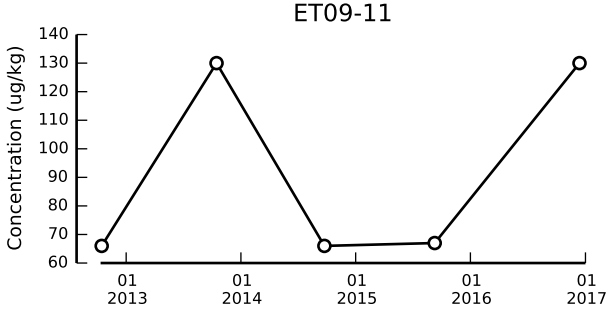


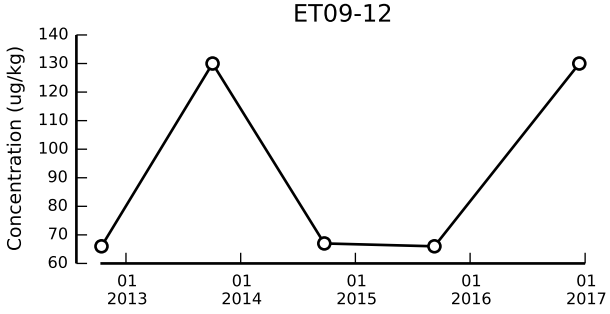






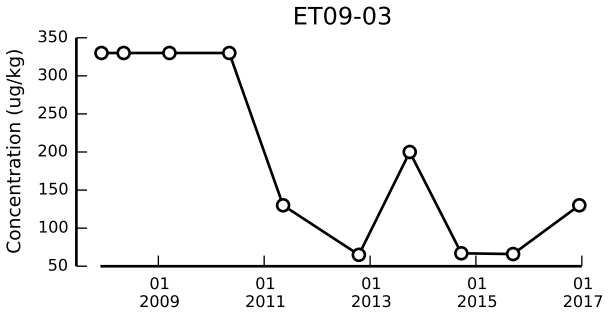


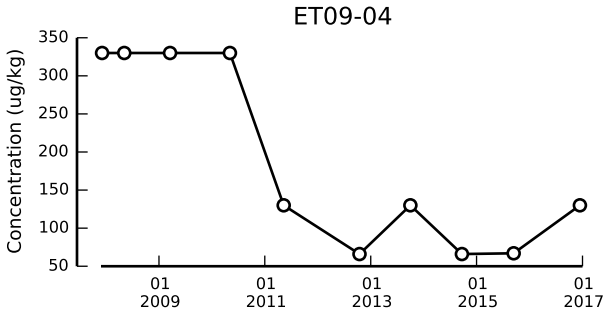


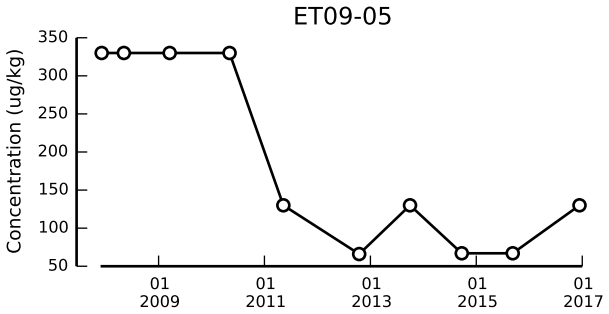


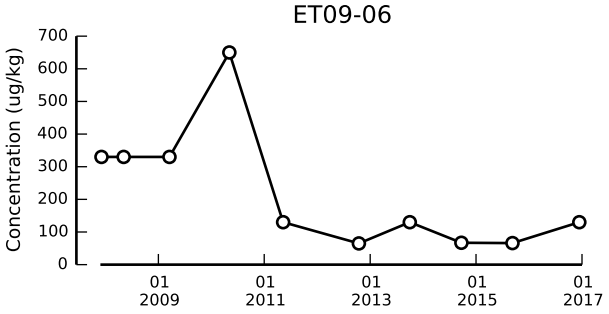
2-CHLOROPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 14 of 105

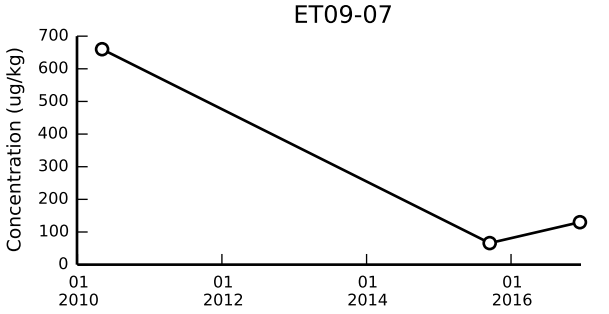
● Detected
○ Not Detected, shown at detection limit

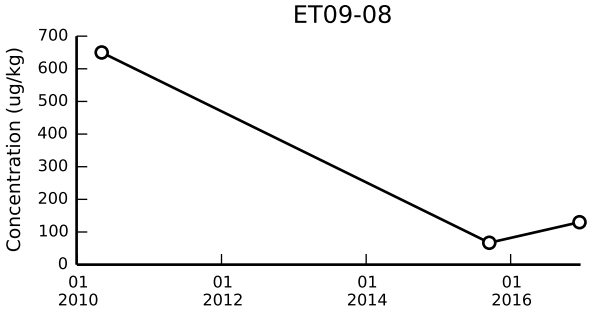


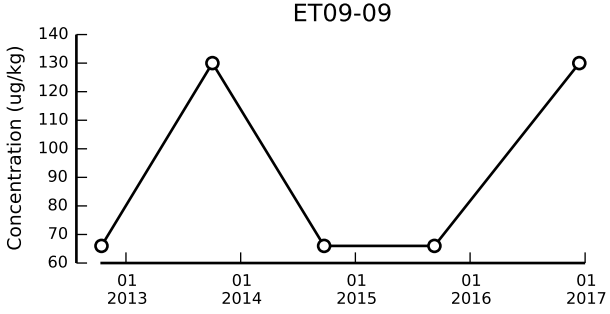


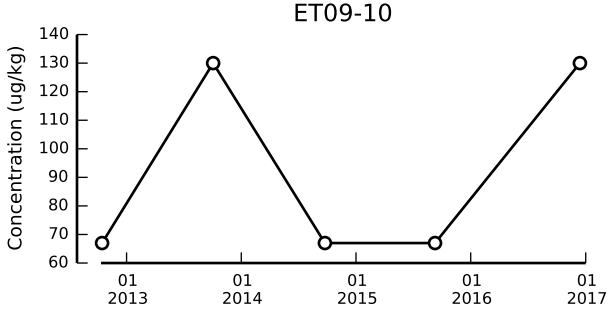


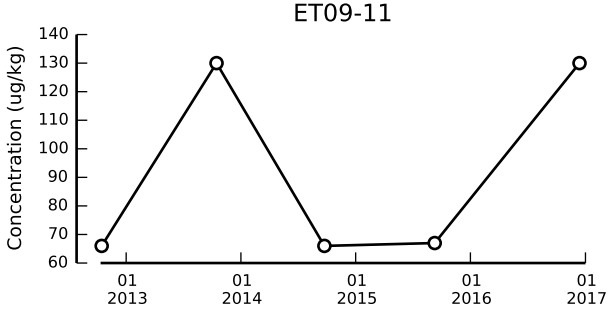


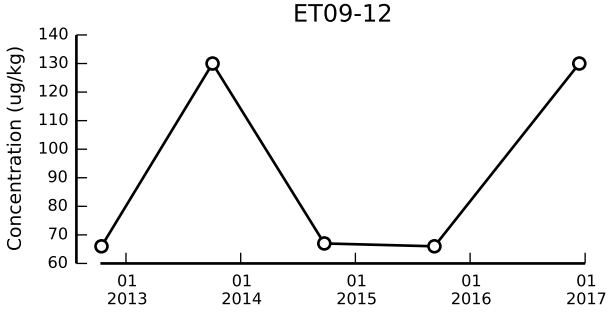






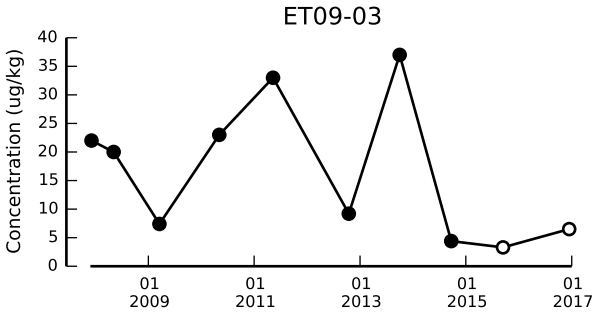


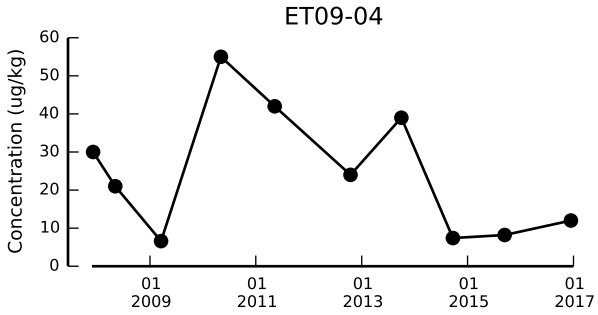


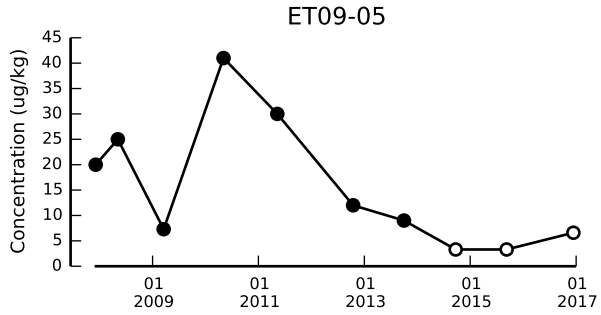


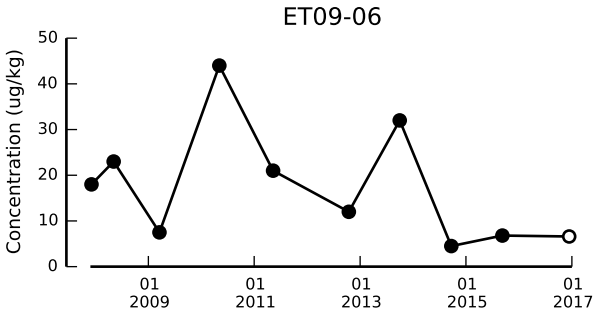
2-METHYLNAPHTHALENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 15 of 105

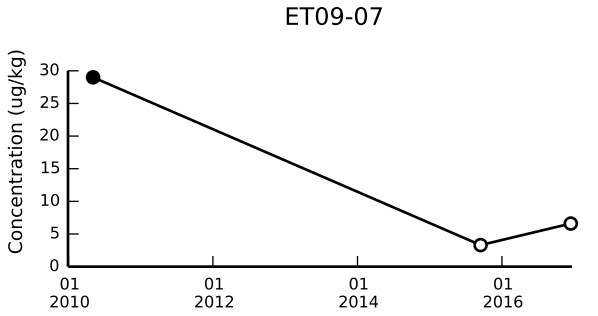
● Detected
○ Not Detected, shown at detection limit

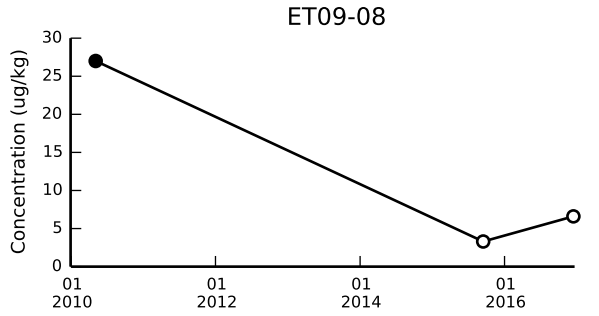


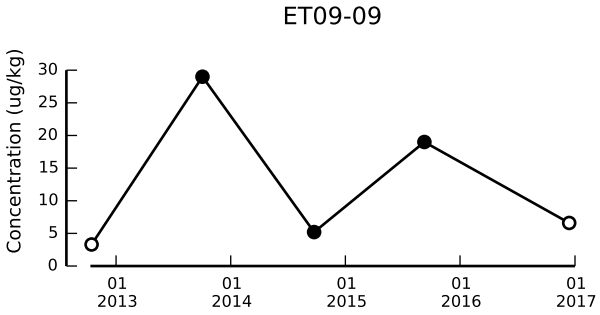


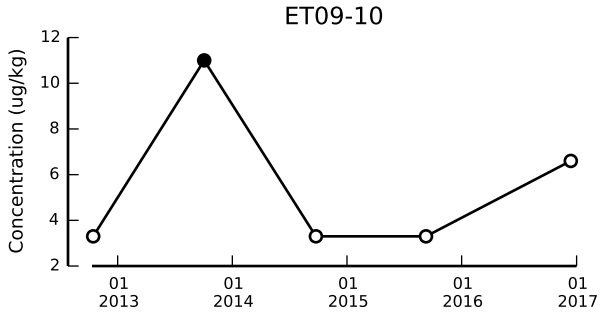


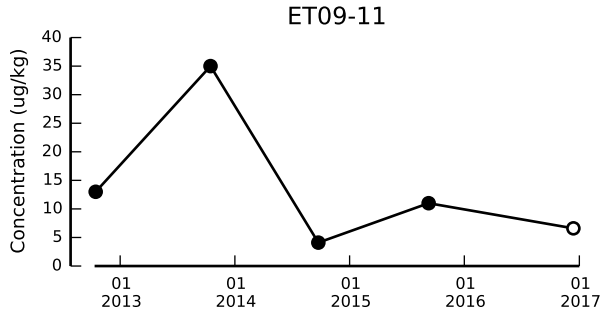


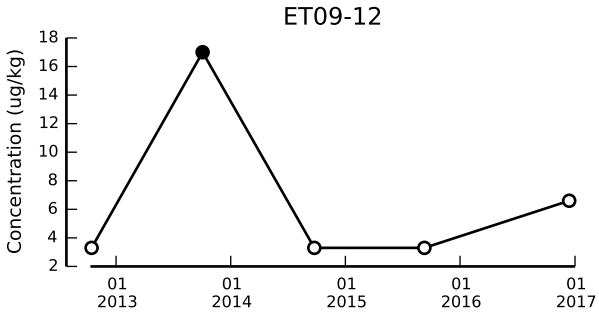






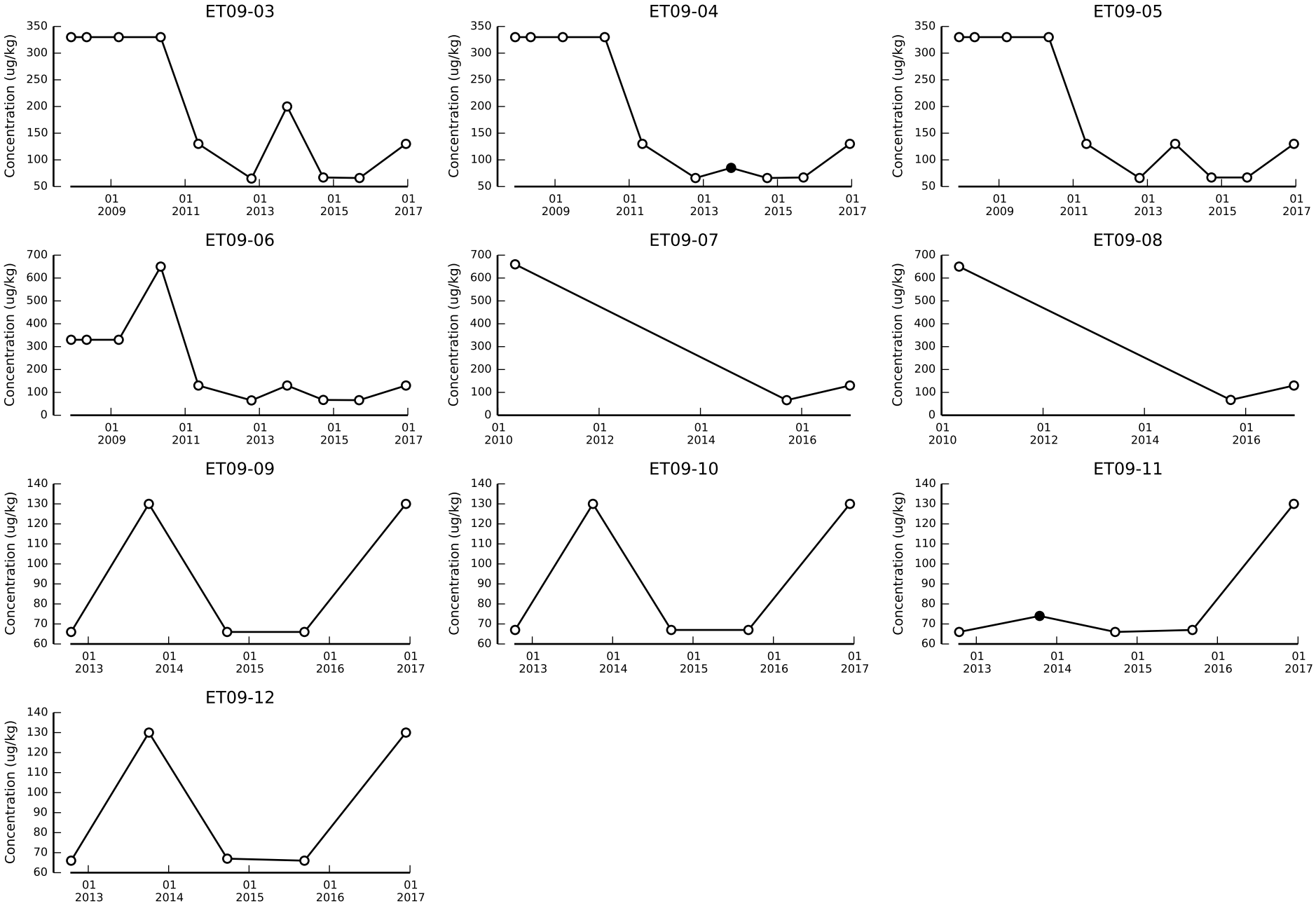






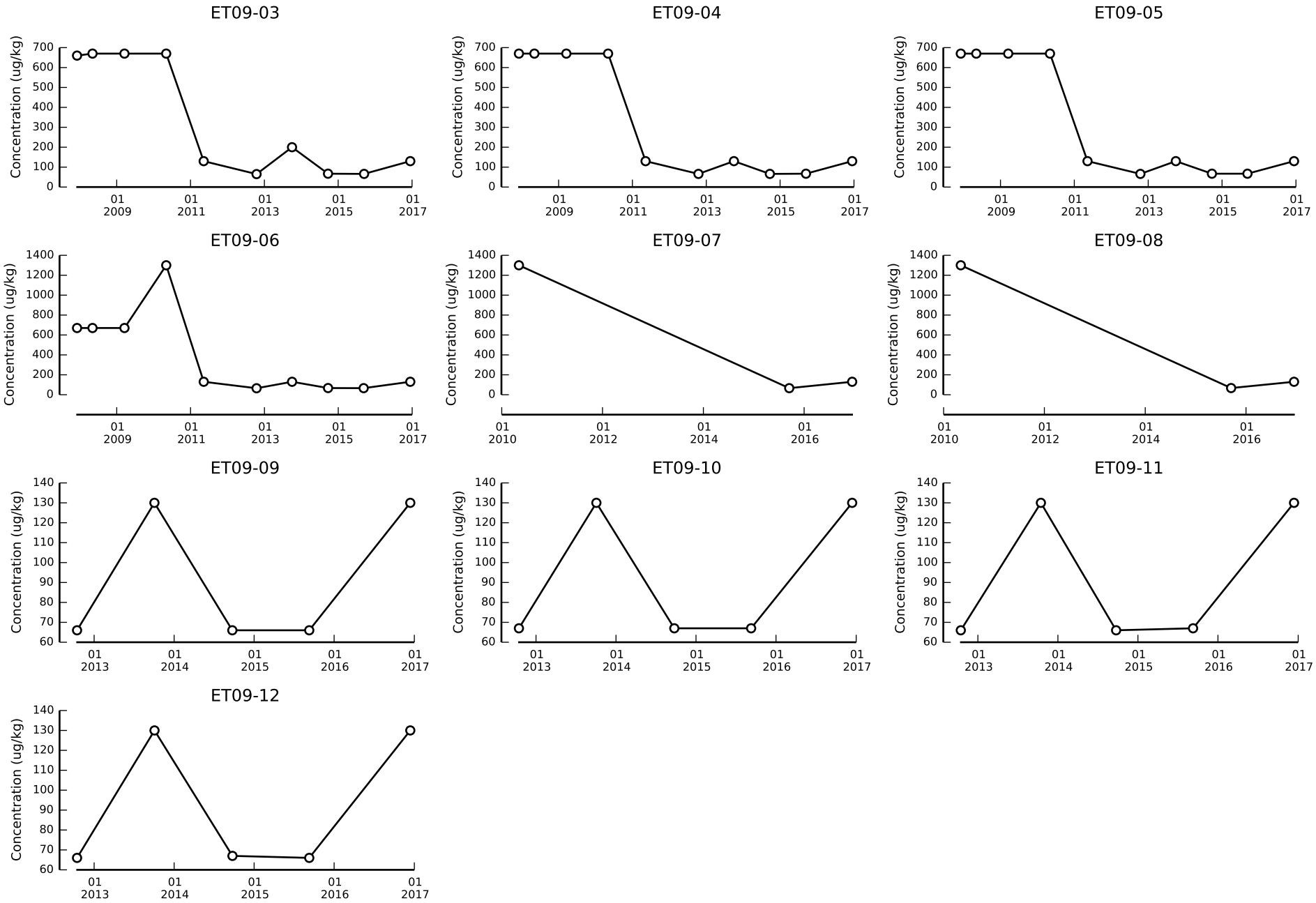
2-METHYLPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 16 of 105

● Detected
○ Not Detected, shown at detection limit



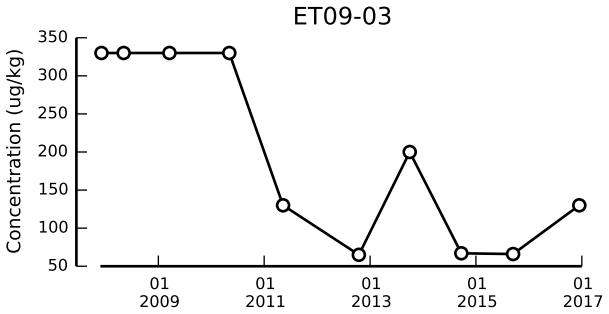
2-NITROANILINE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 17 of 105

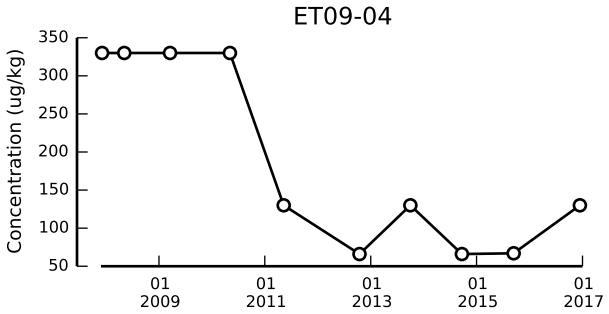
● Detected
○ Not Detected, shown at detection limit

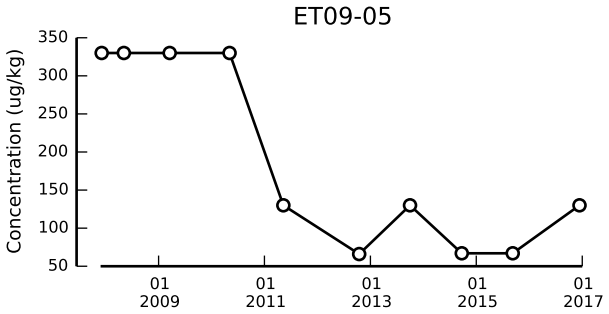


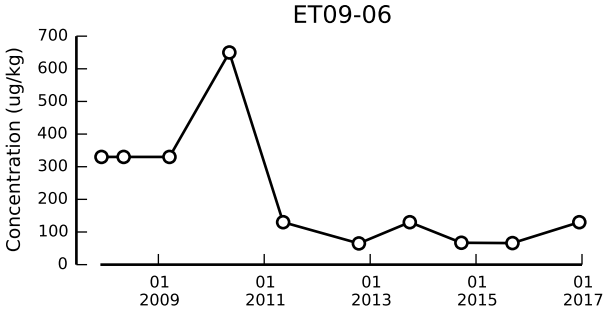
2-NITROPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 18 of 105

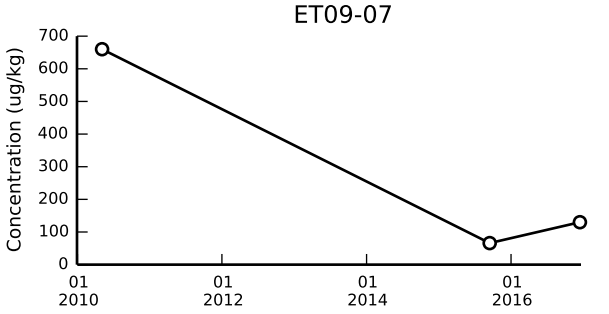
● Detected
○ Not Detected, shown at detection limit

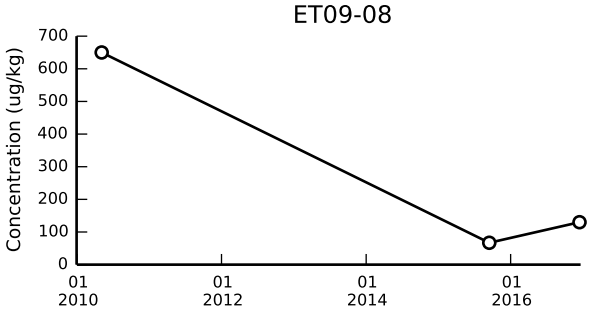


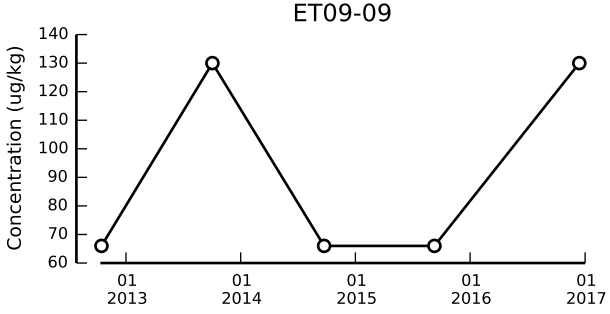


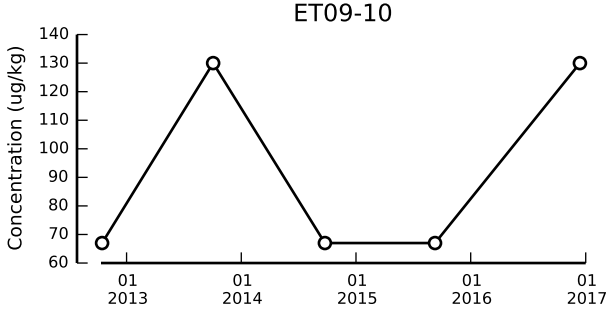


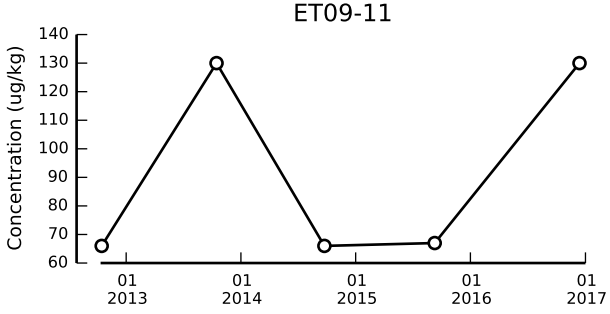


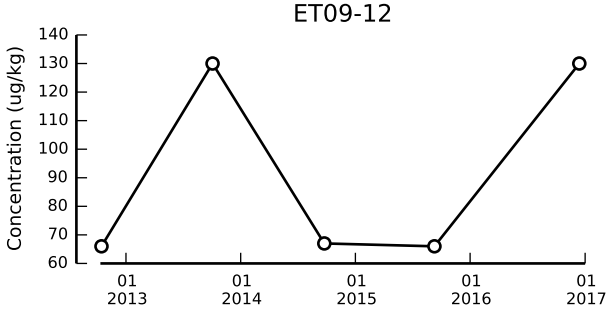






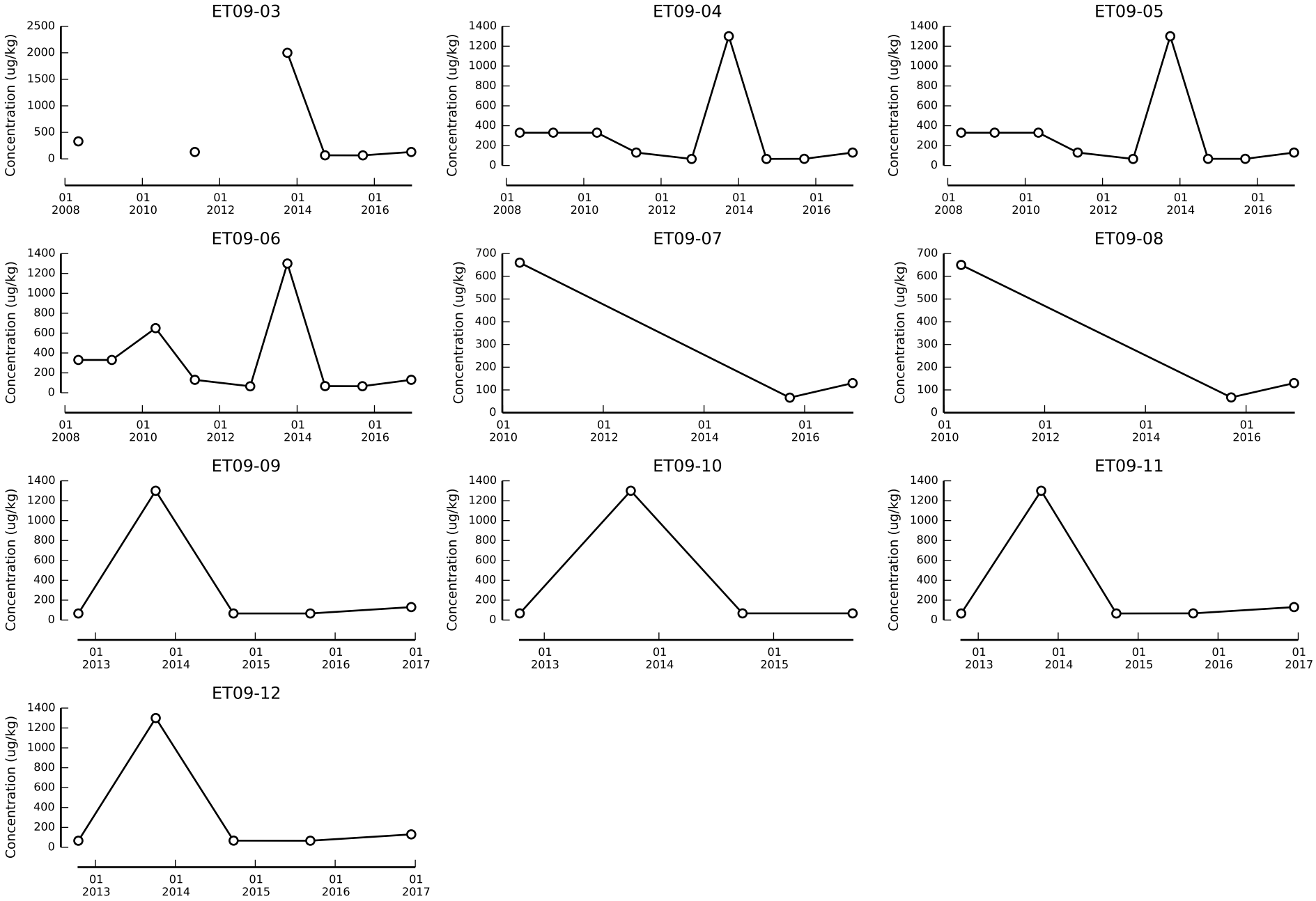






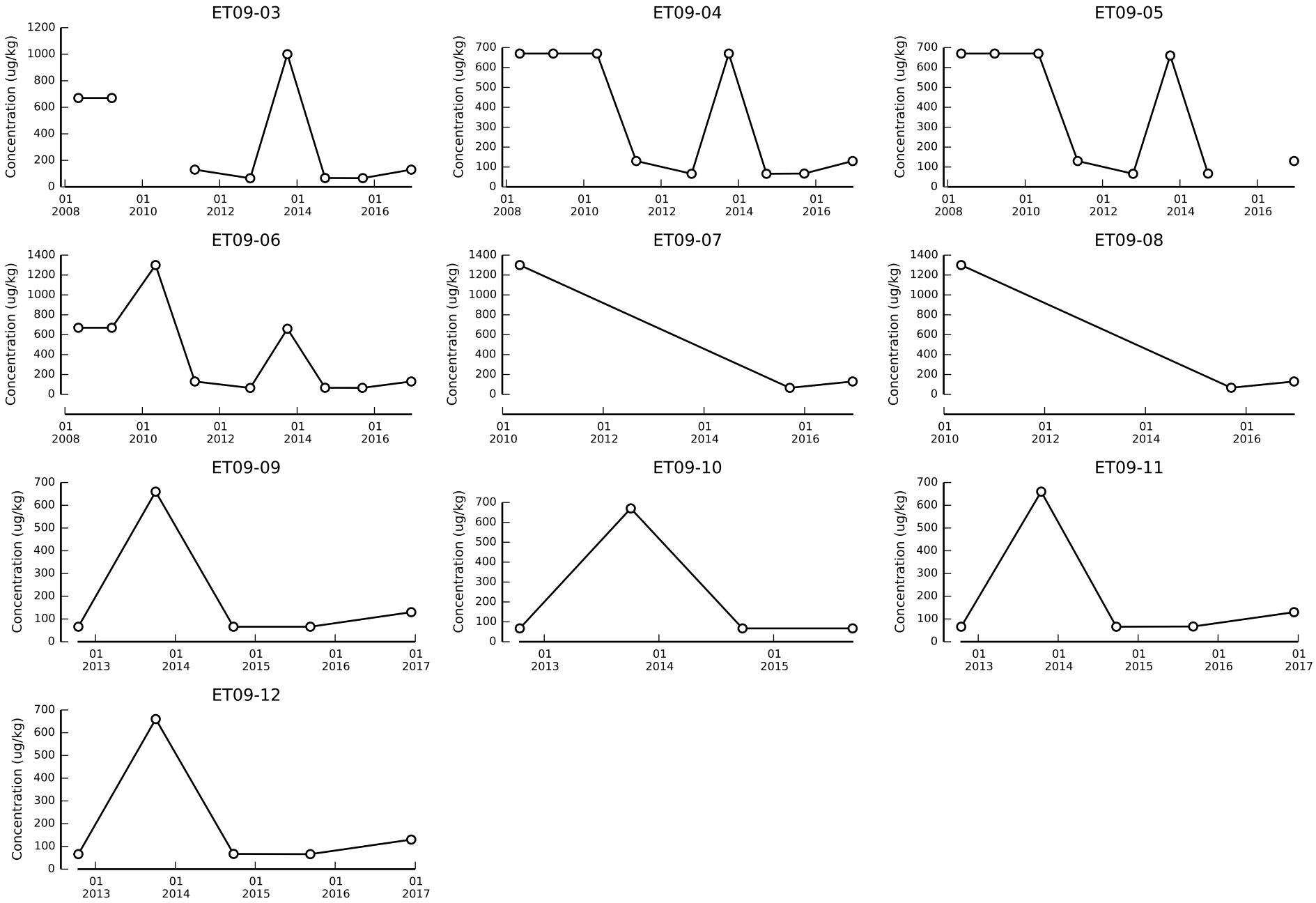
3,3-DICHLOROBENZIDINE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 19 of 105

● Detected
○ Not Detected, shown at detection limit



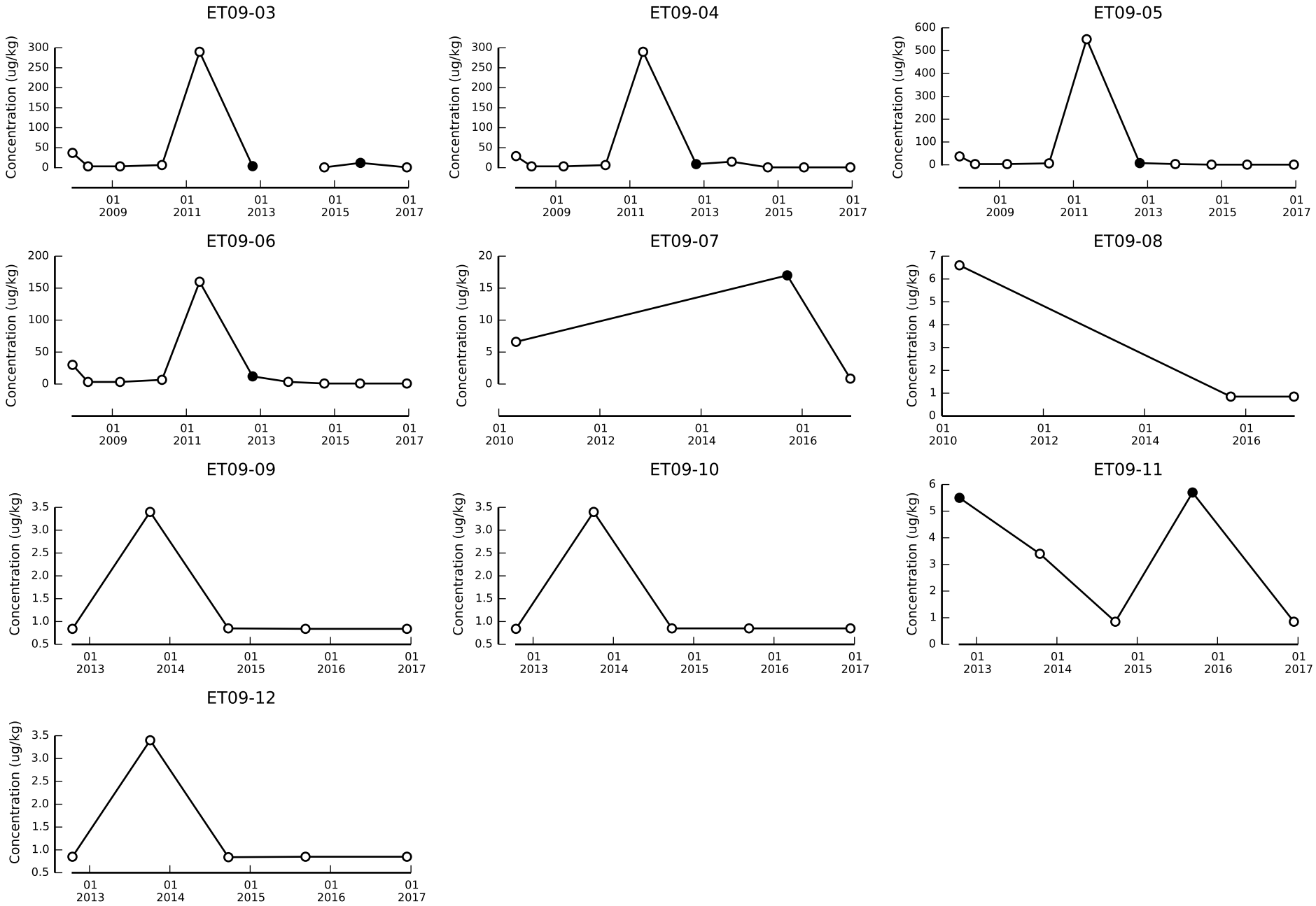
3-NITROANILINE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 20 of 105

● Detected
○ Not Detected, shown at detection limit



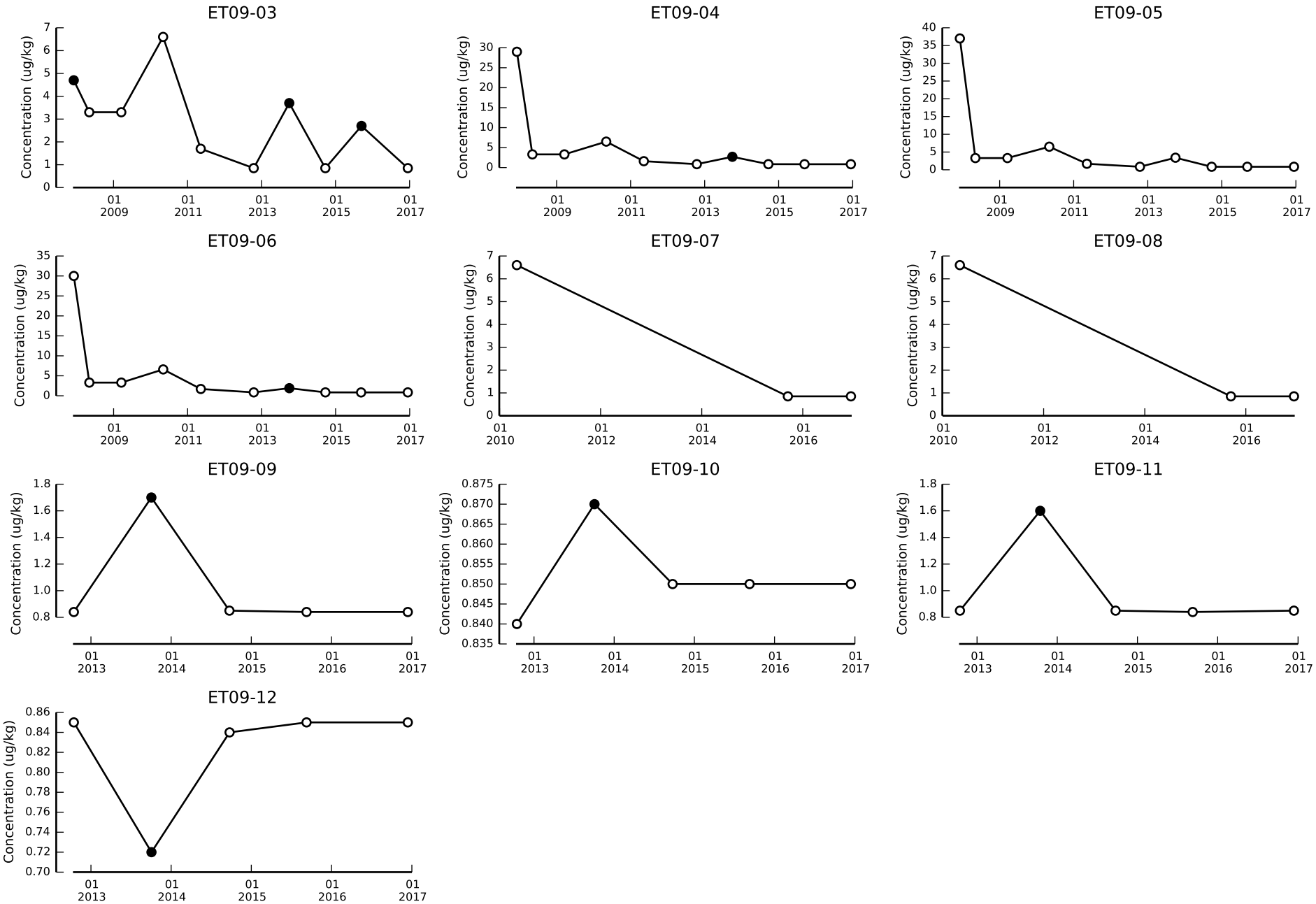
4,4-DDD in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 21 of 105

● Detected
○ Not Detected, shown at detection limit



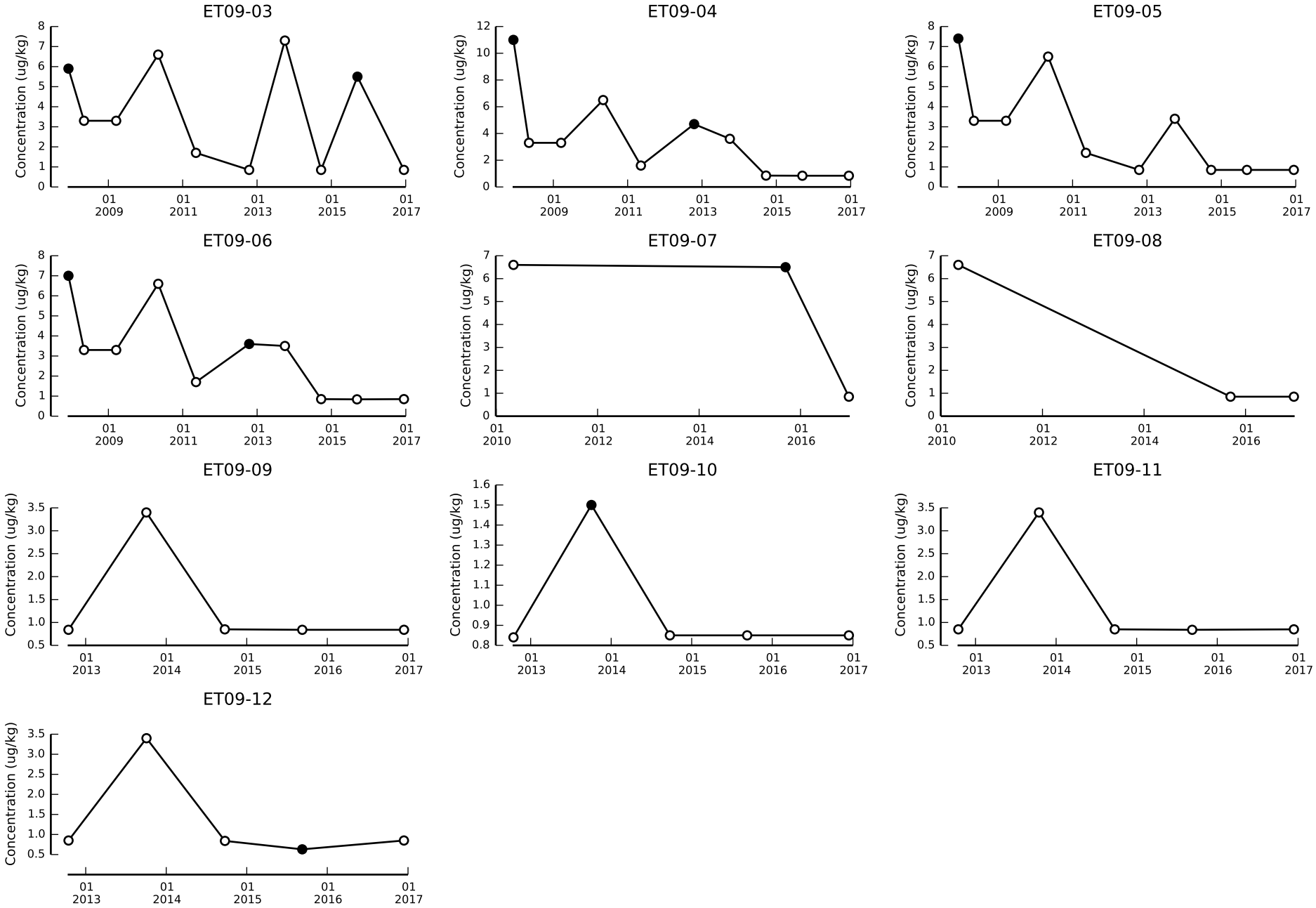
4,4-DDE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 22 of 105

● Detected
○ Not Detected, shown at detection limit



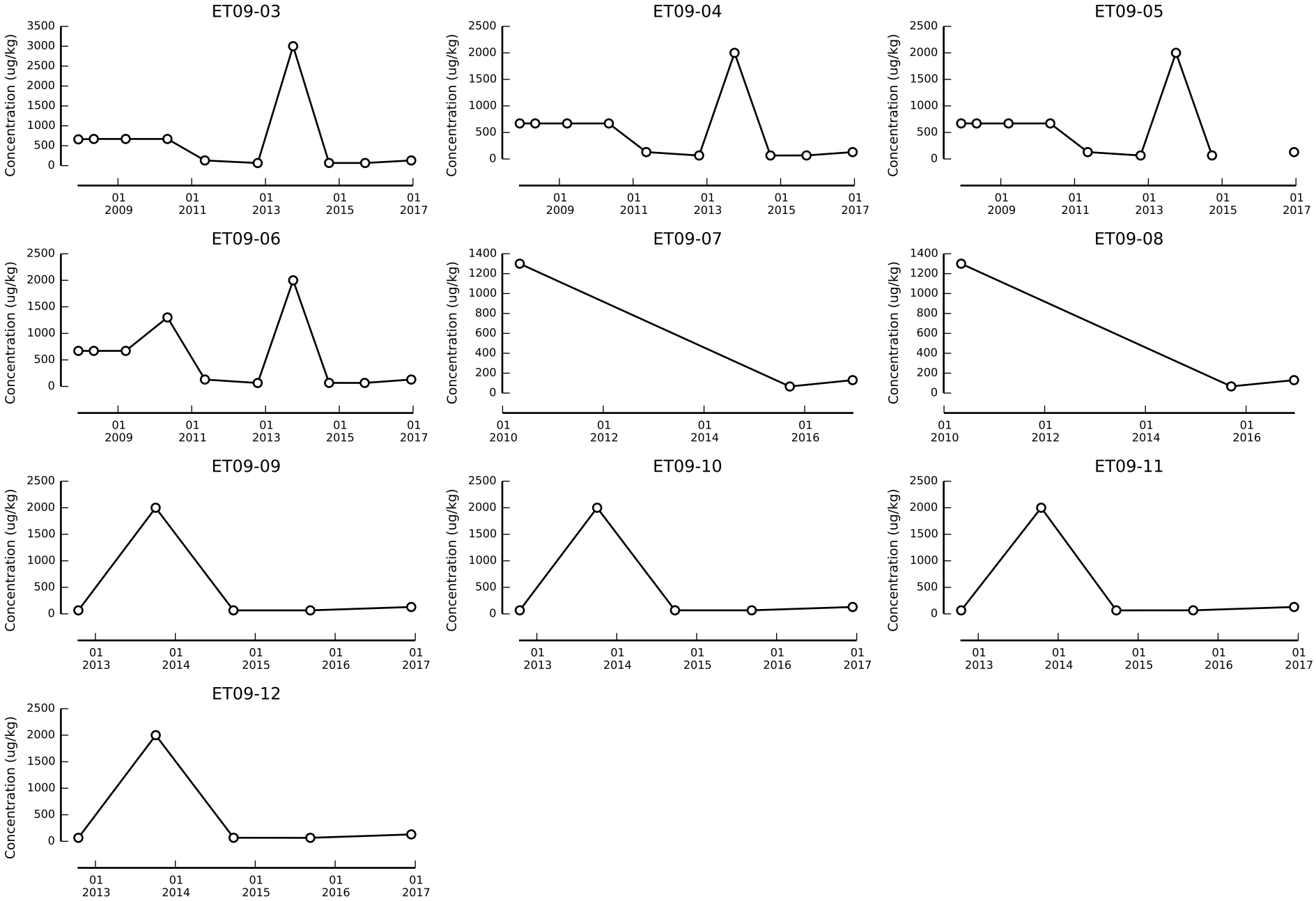
4,4-DDT in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 23 of 105

● Detected
○ Not Detected, shown at detection limit



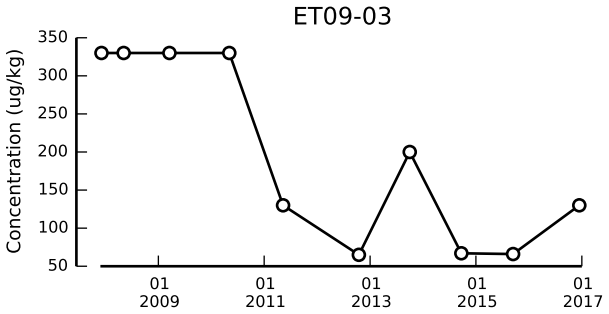
4,6-DINITRO-2-METHYLPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 24 of 105

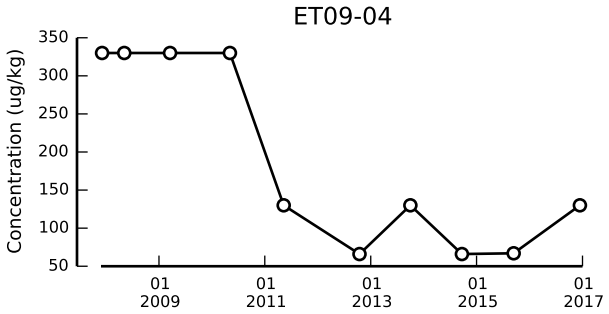
● Detected
○ Not Detected, shown at detection limit

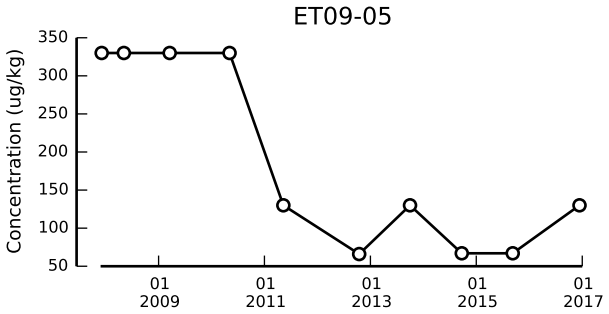


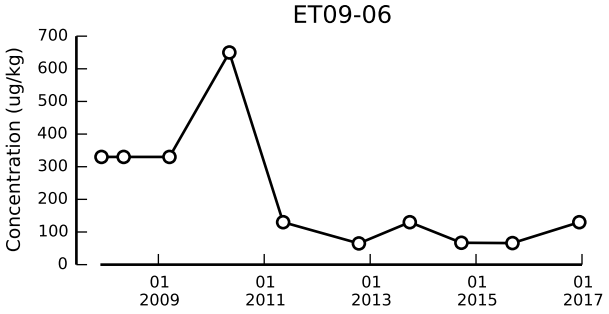
4-BROMOPHENYL-PHENYLETHER in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 25 of 105

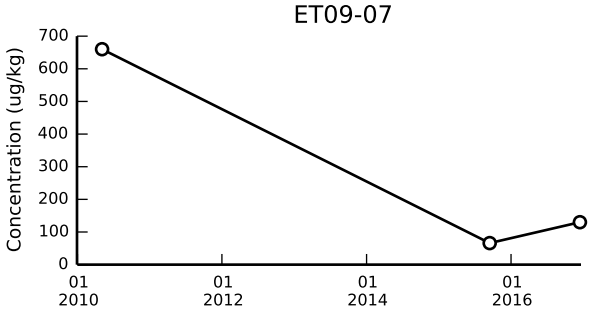
● Detected
○ Not Detected, shown at detection limit

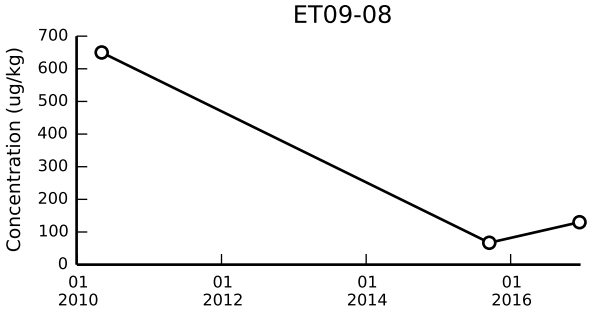


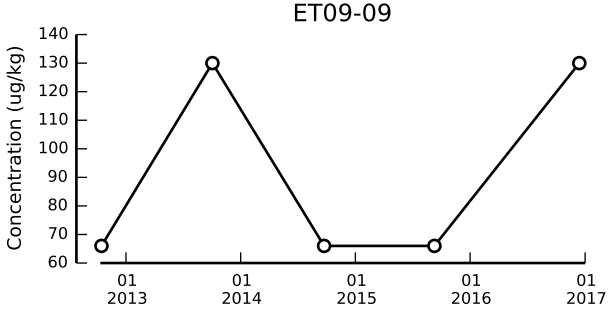


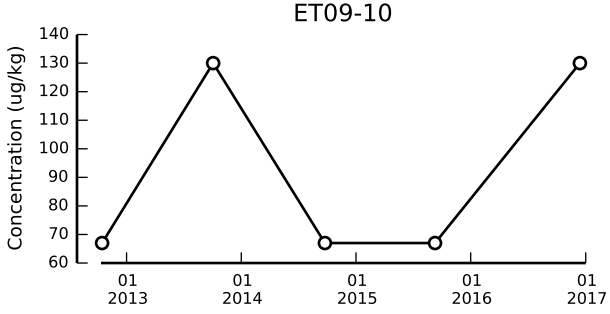


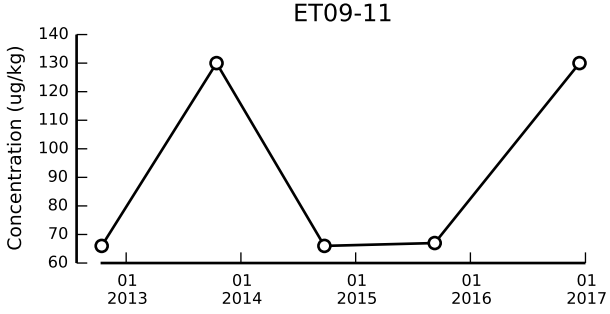


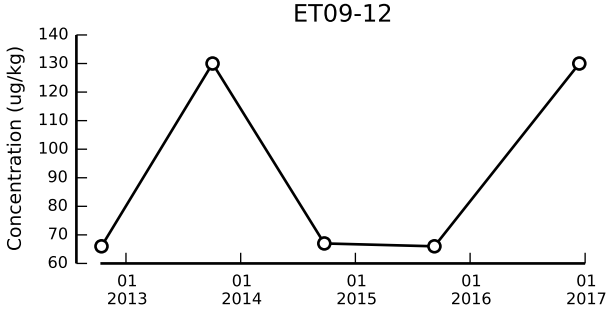






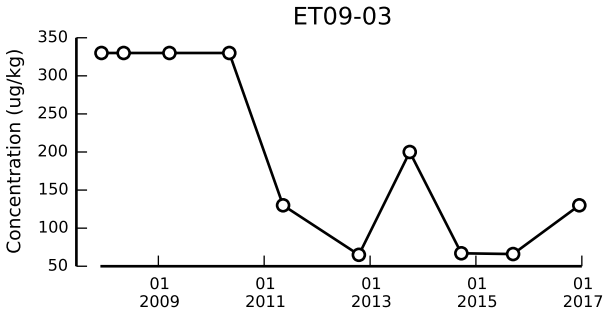


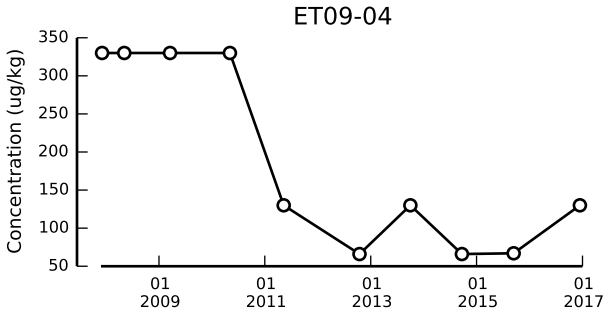


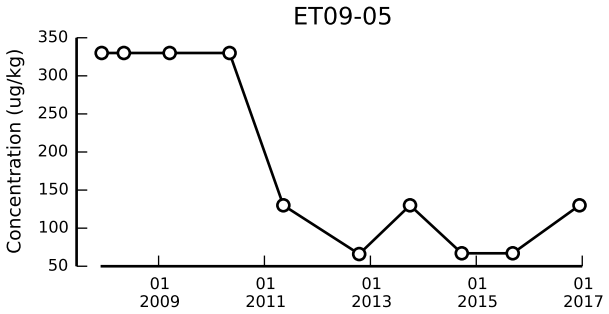


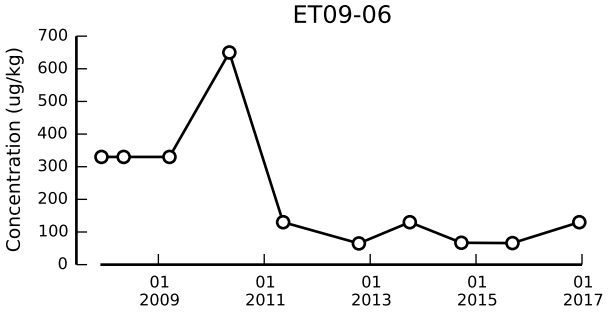
4-CHLORO-3-METHYLPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 26 of 105

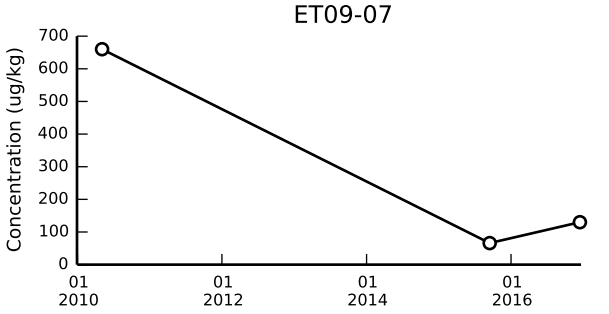
● Detected
○ Not Detected, shown at detection limit

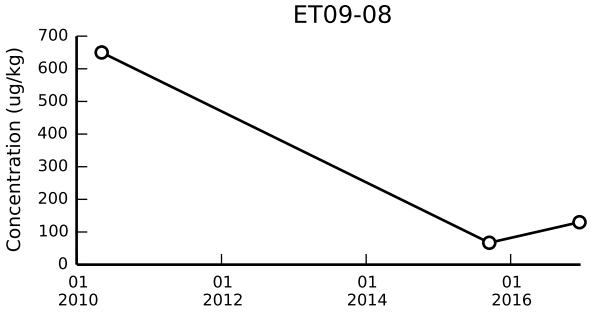


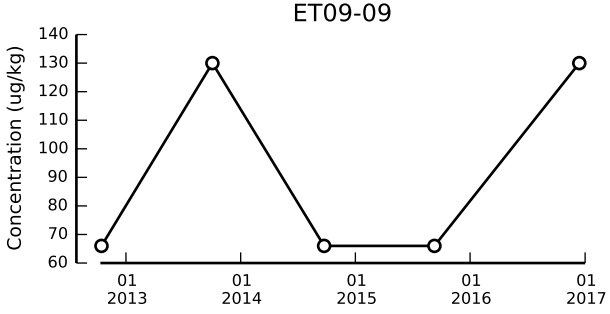


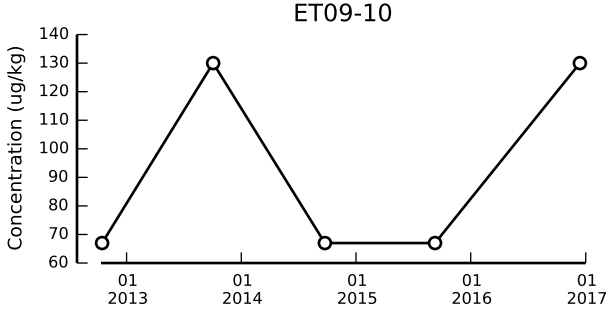


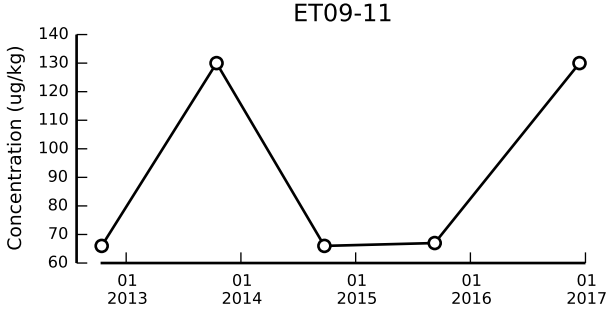


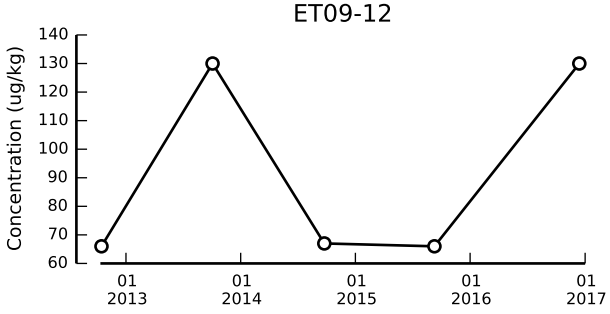






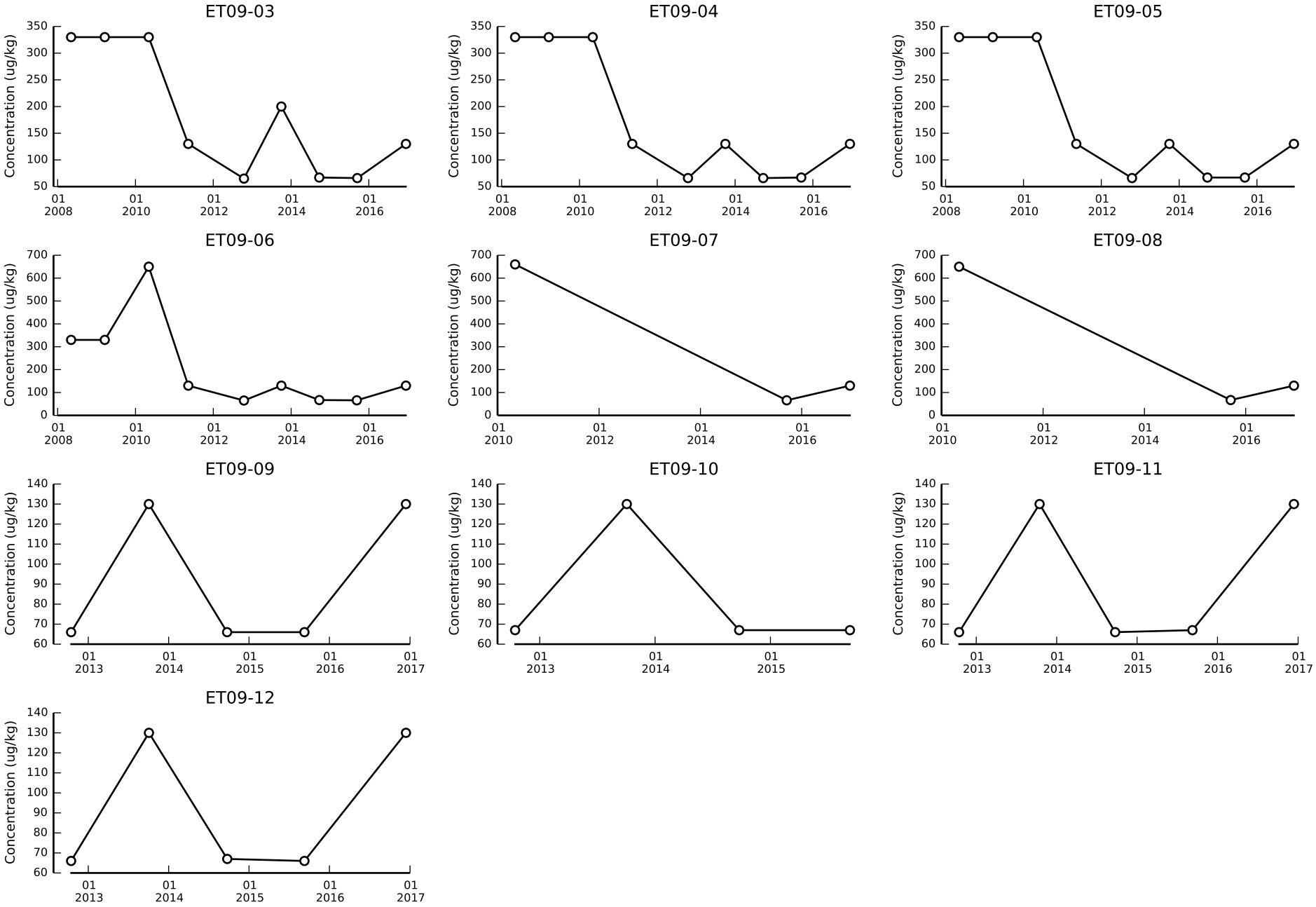






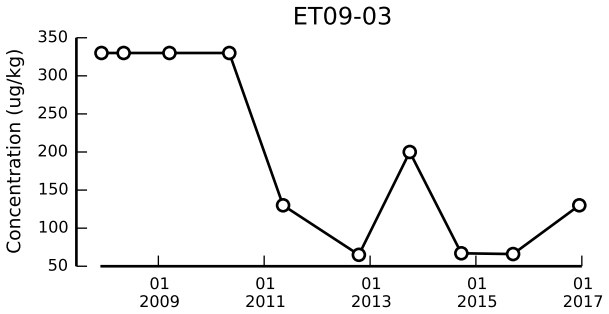
4-CHLOROANILINE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 27 of 105

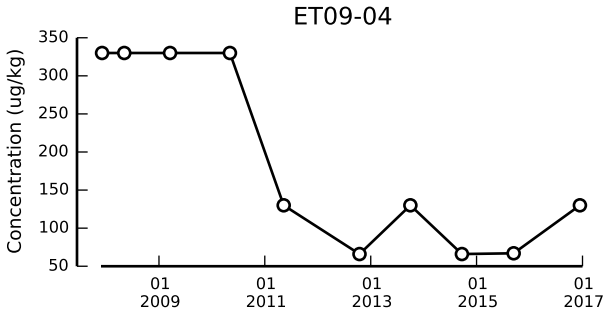
● Detected
○ Not Detected, shown at detection limit

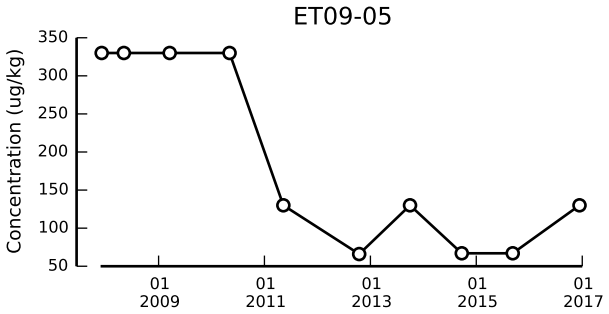


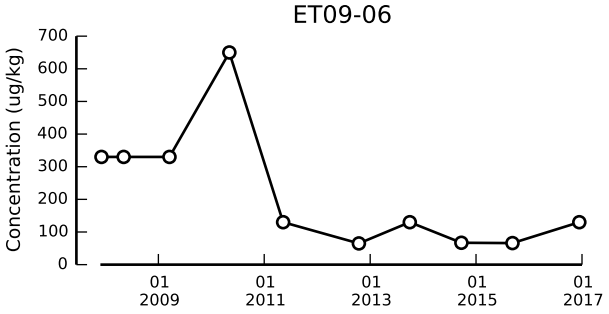
4-CHLOROPHENYL-PHENYLETHER in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 28 of 105

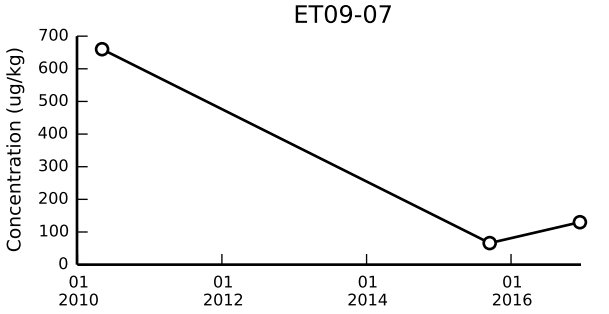
● Detected
○ Not Detected, shown at detection limit

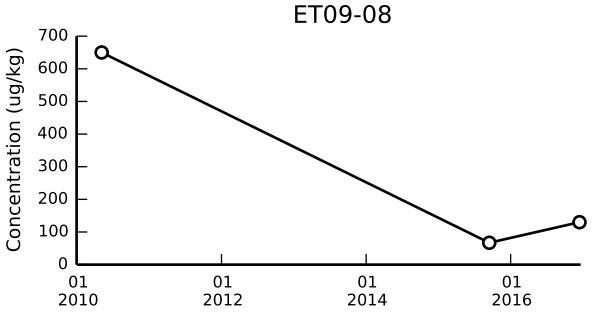


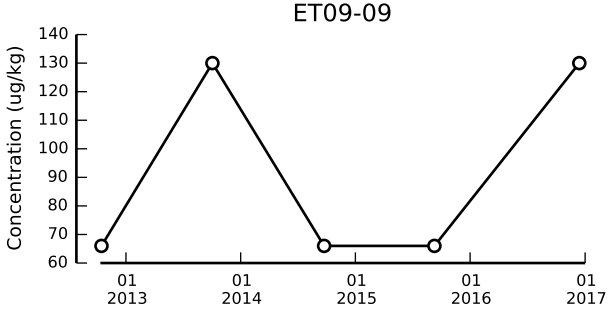


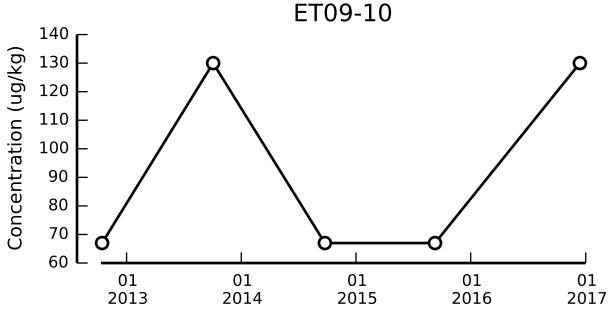


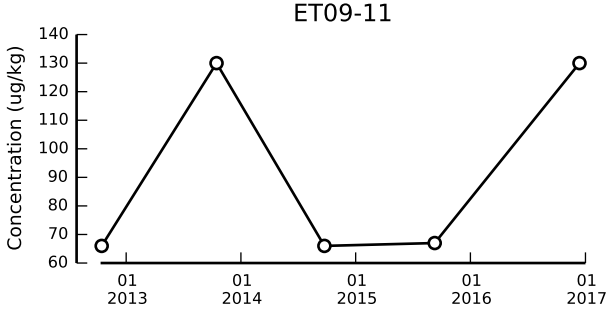


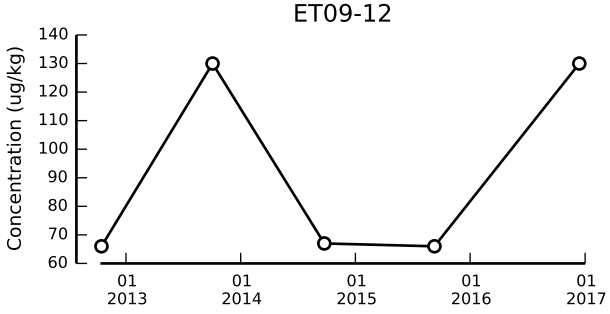






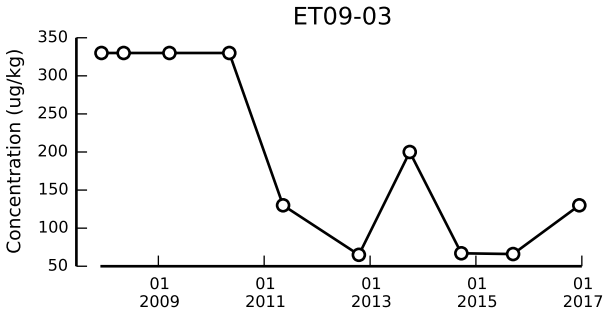


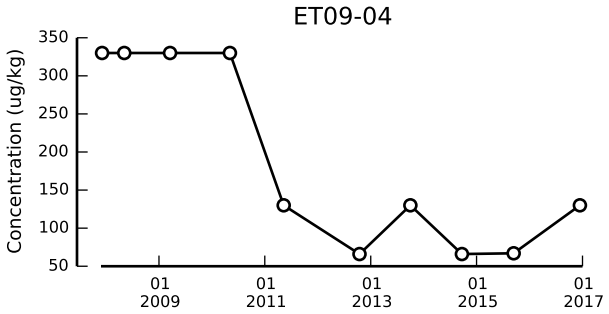


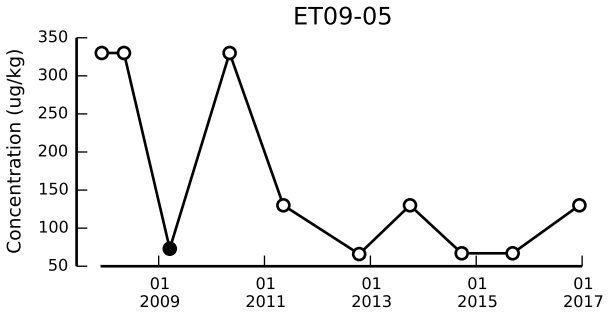


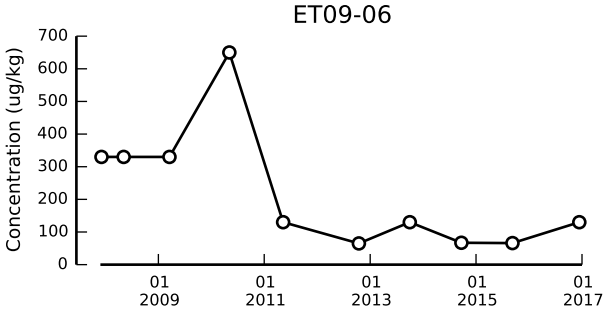
4-METHYLPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 29 of 105

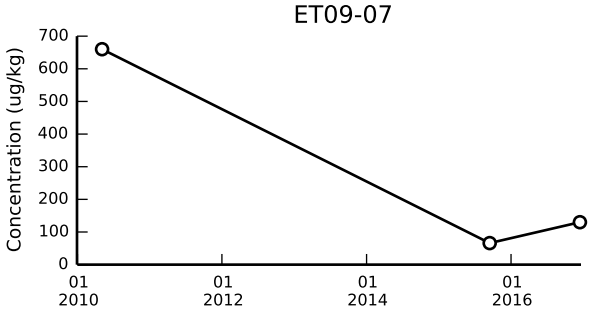
● Detected
○ Not Detected, shown at detection limit

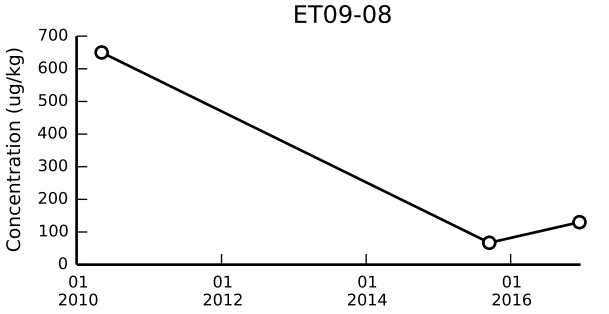


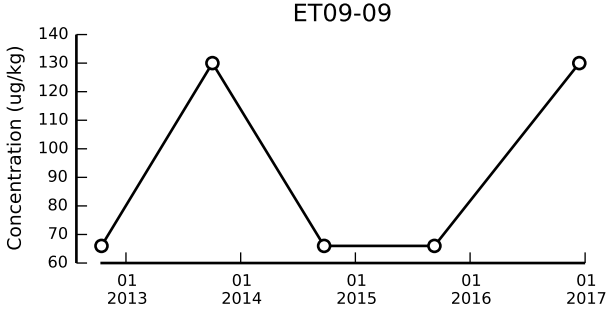


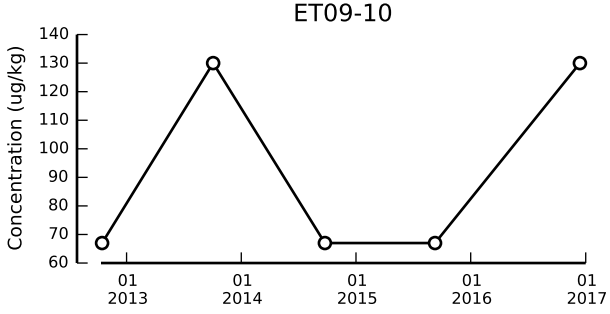


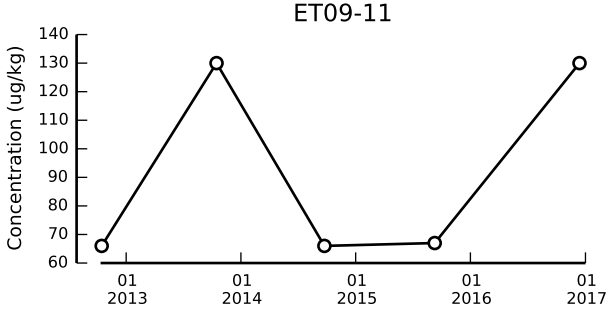


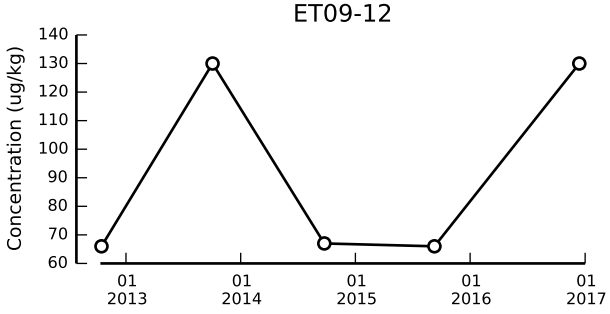






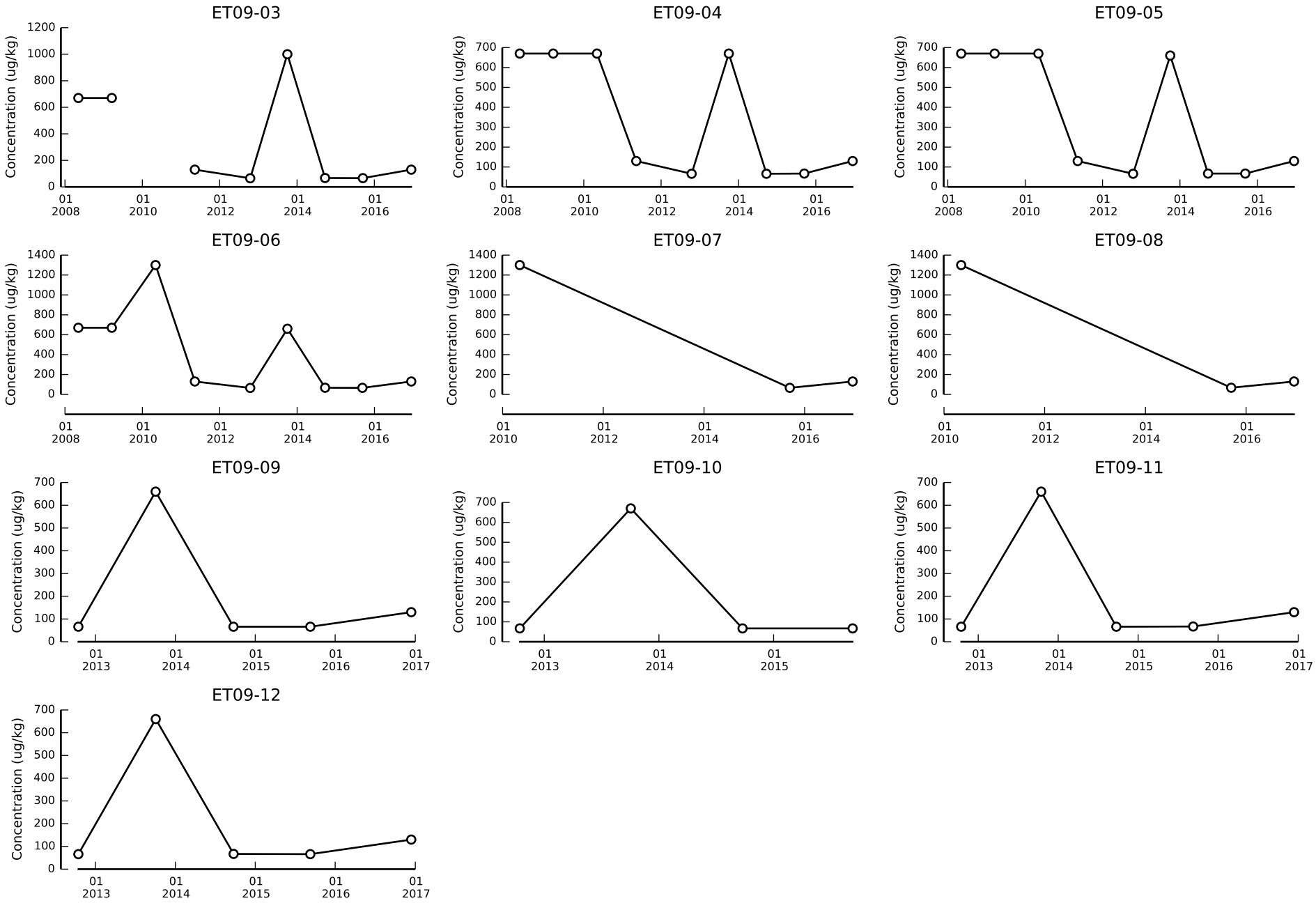






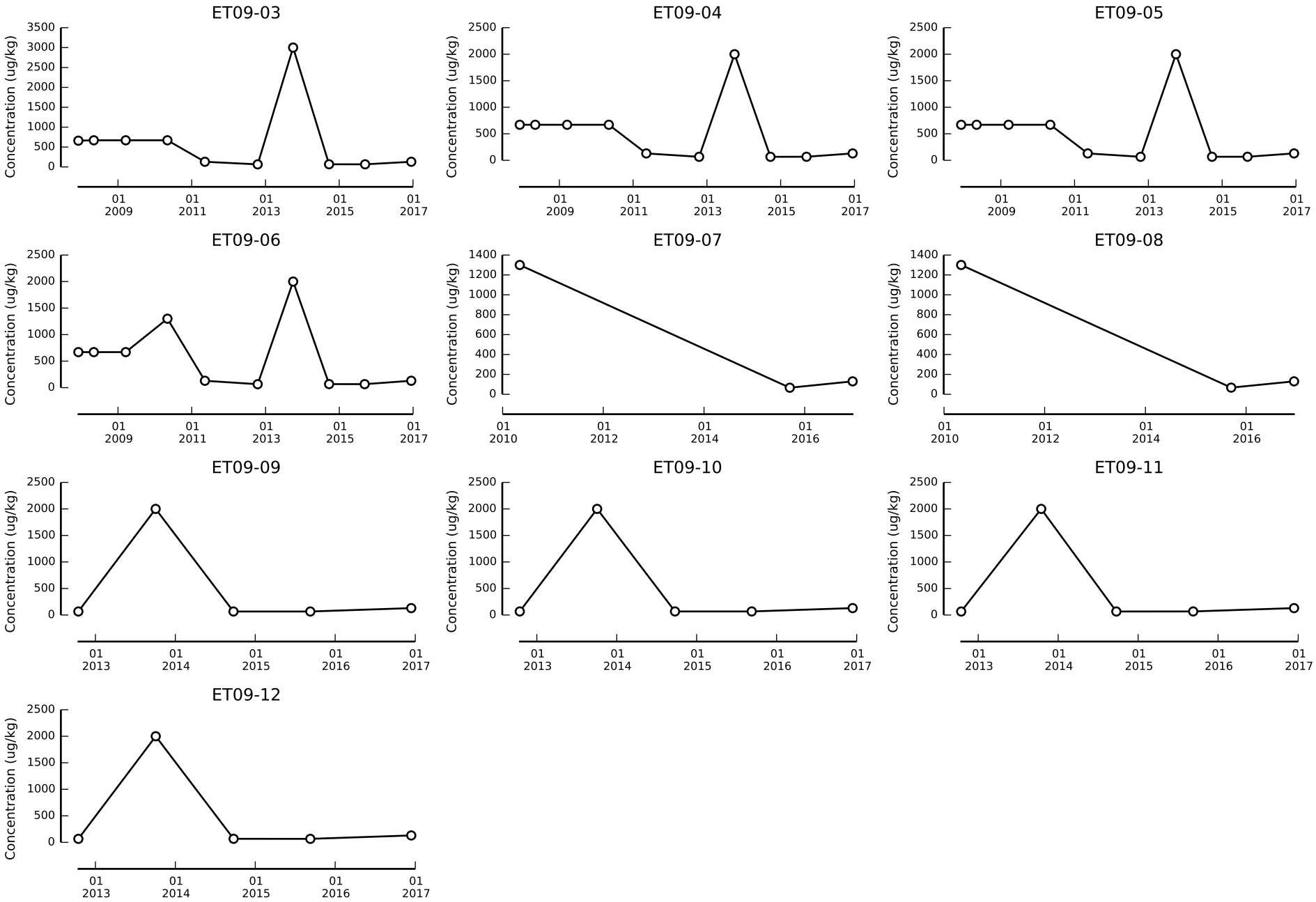
4-NITROANILINE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 30 of 105

● Detected
○ Not Detected, shown at detection limit



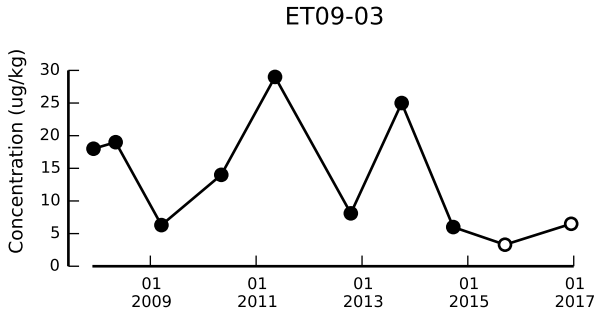
4-NITROPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 31 of 105

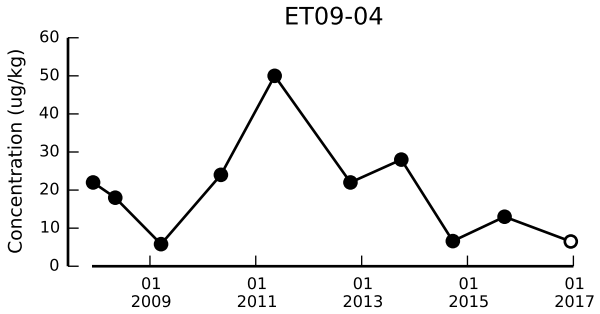
● Detected
○ Not Detected, shown at detection limit

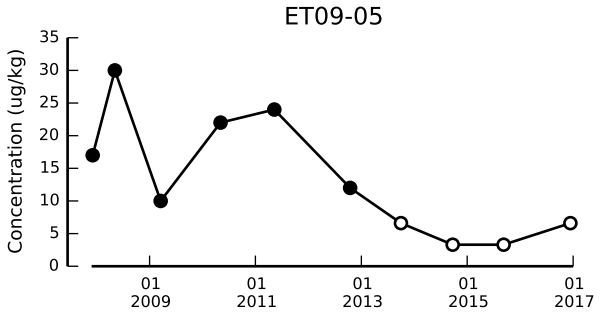


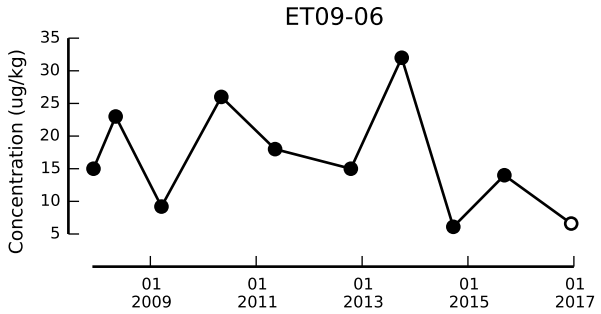
ACENAPHTHENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 32 of 105

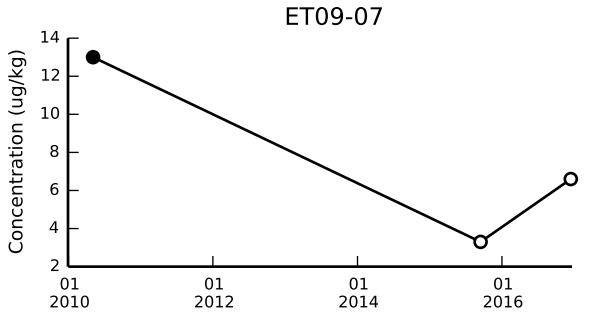
● Detected
○ Not Detected, shown at detection limit

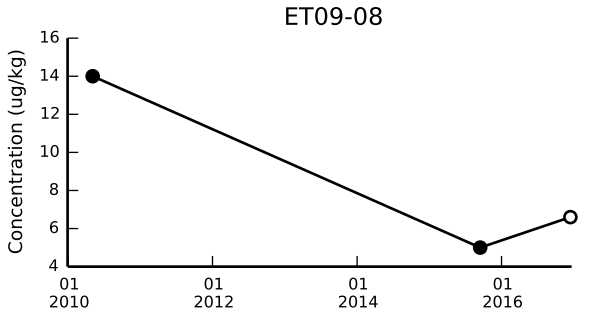


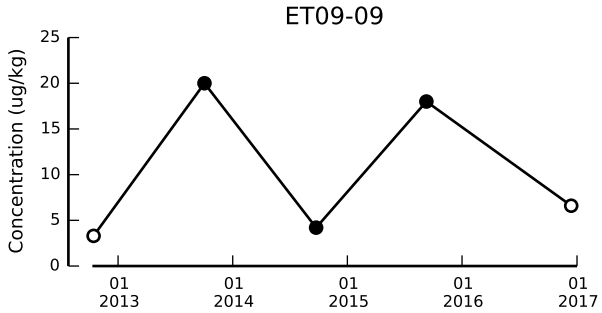


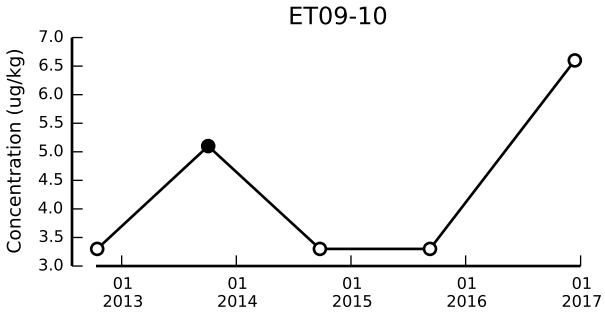


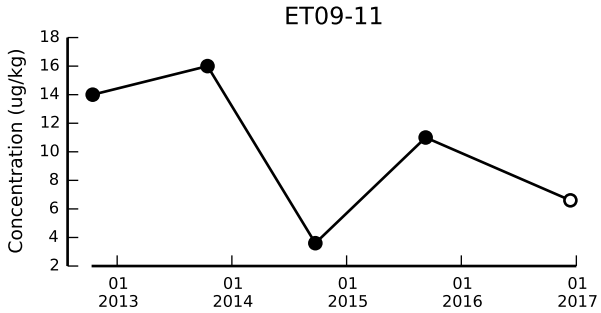


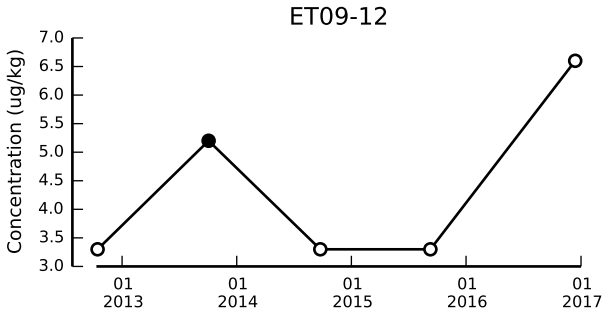






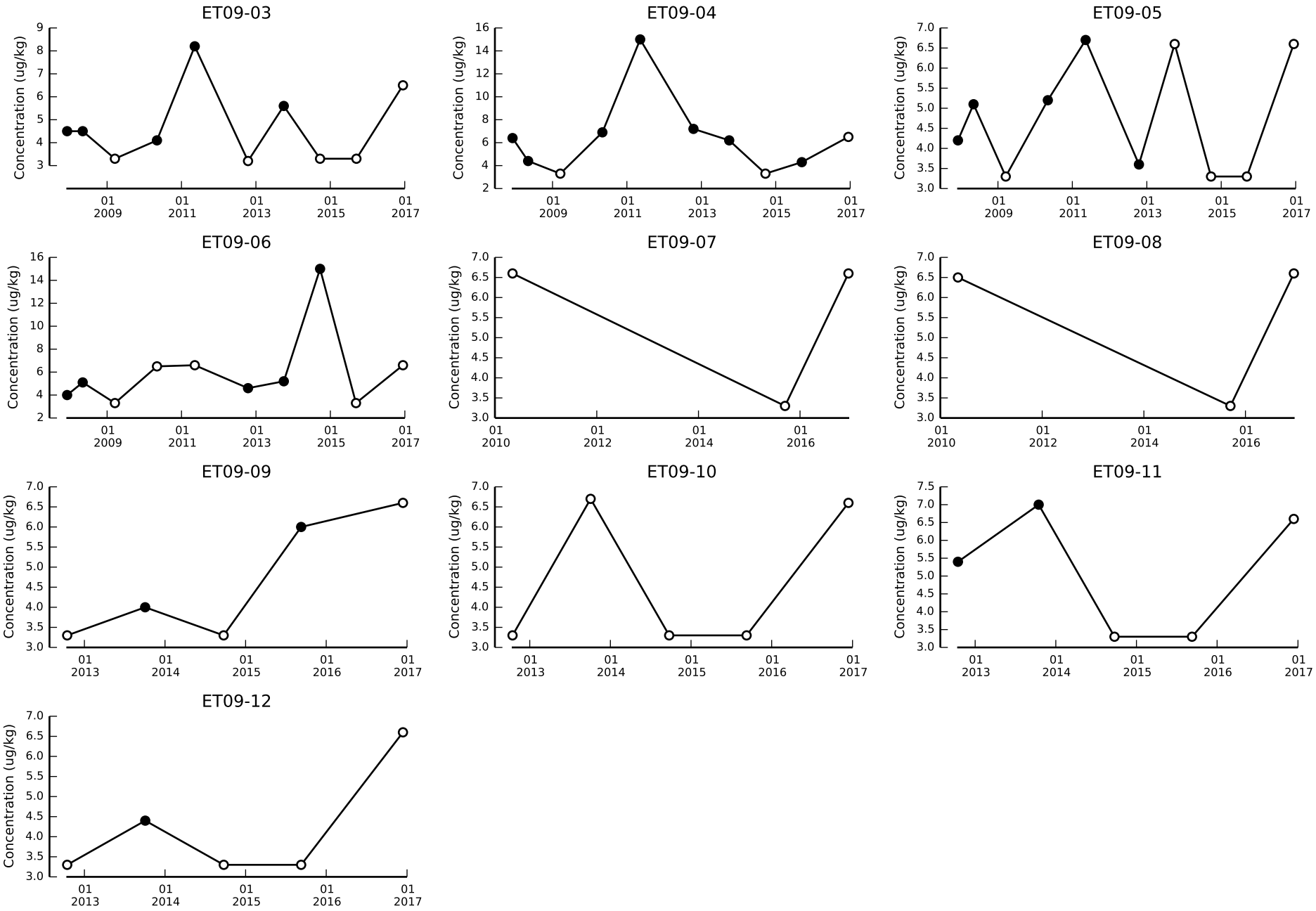






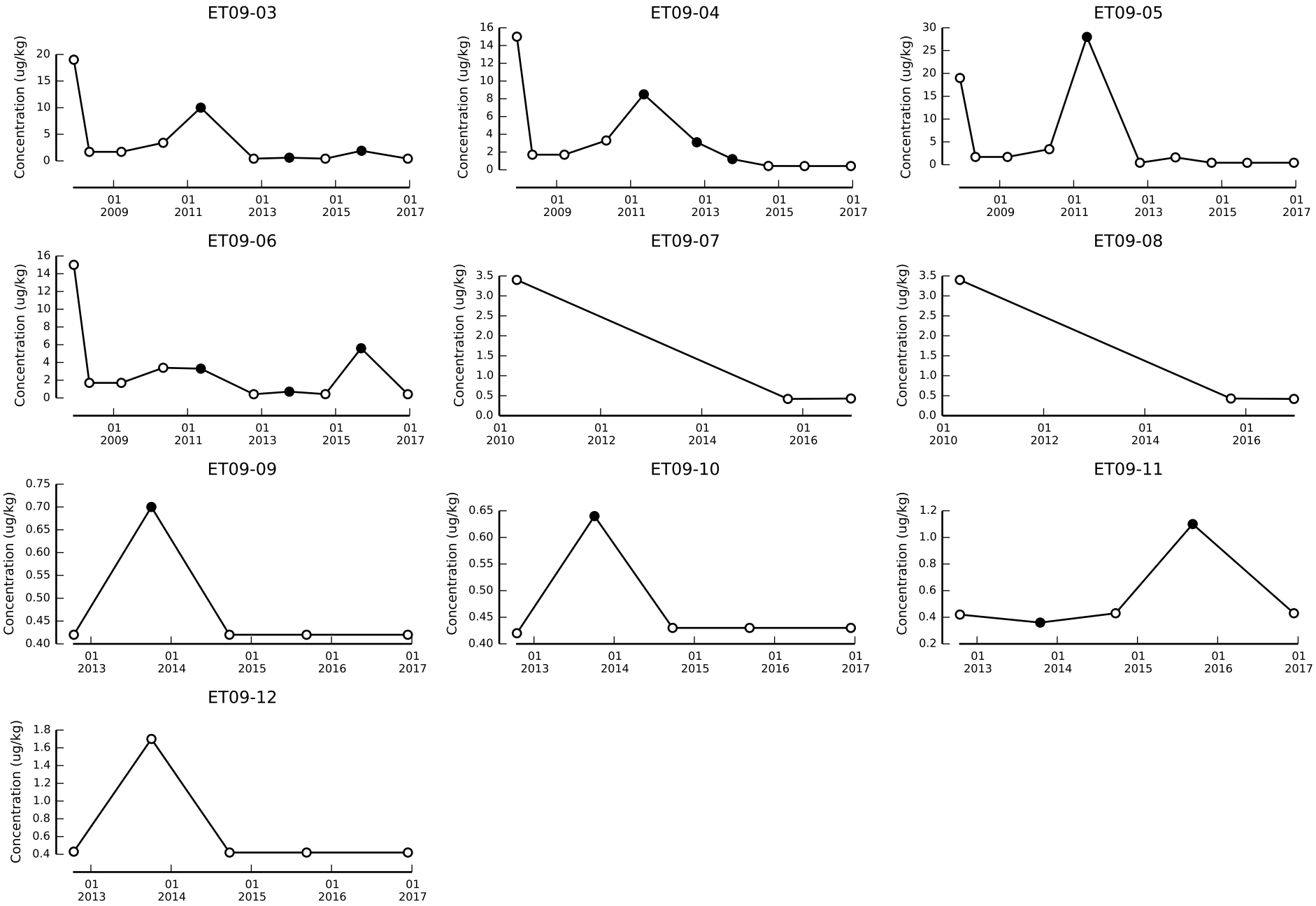
ACENAPHTHYLENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 33 of 105

● Detected
○ Not Detected, shown at detection limit



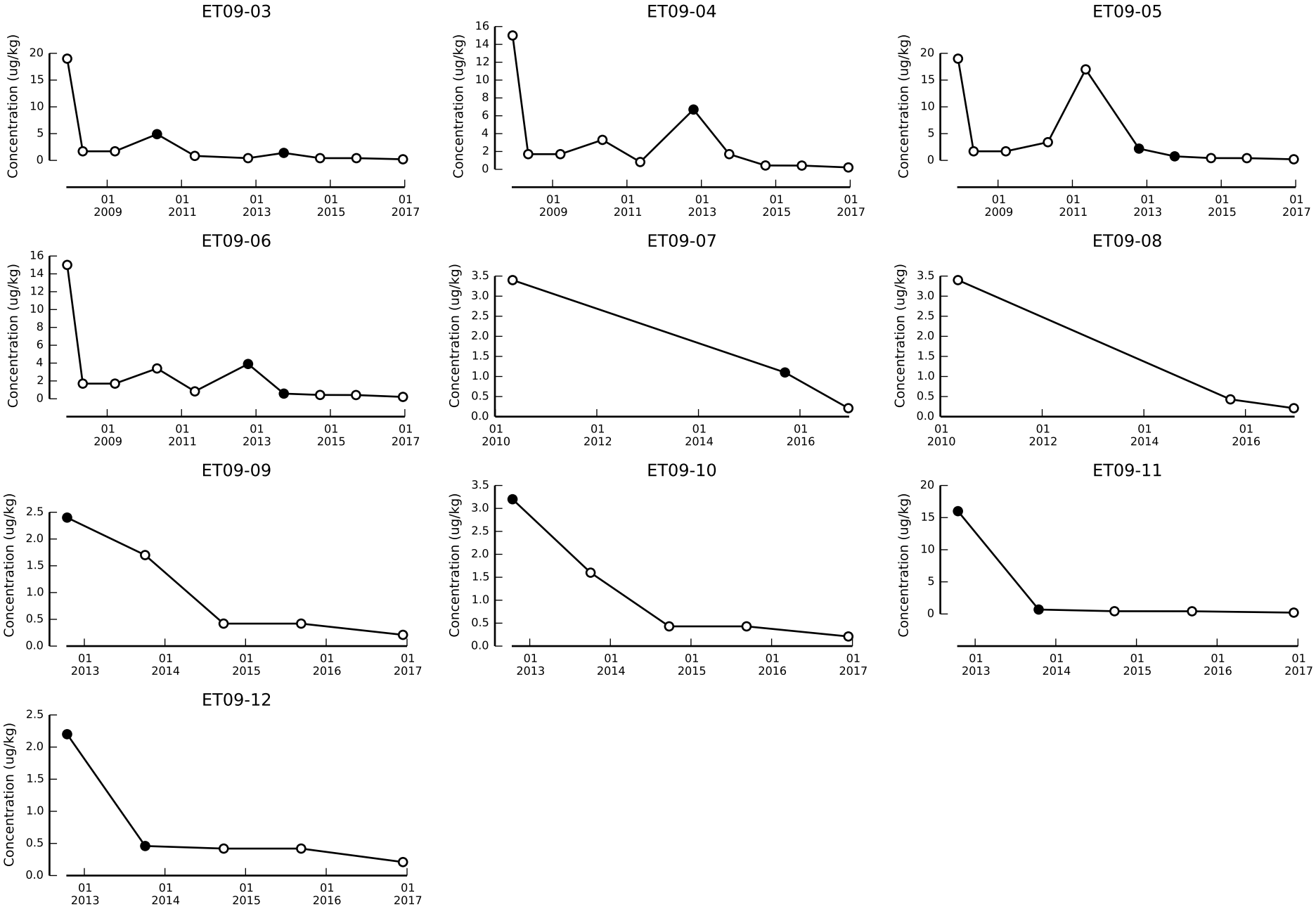
ALDRIN in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 34 of 105

● Detected
○ Not Detected, shown at detection limit



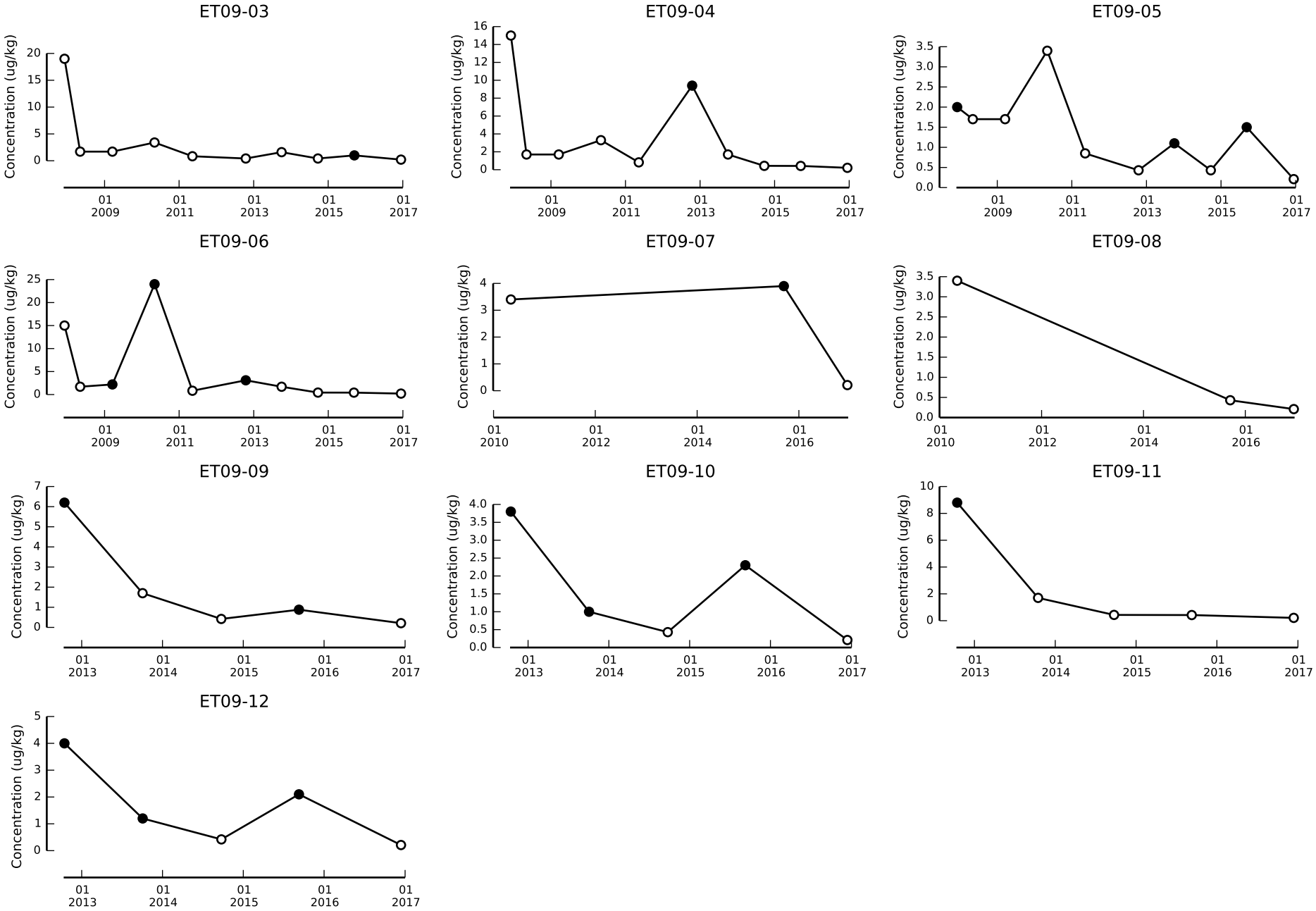
ALPHA-BHC in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 35 of 105

● Detected
○ Not Detected, shown at detection limit



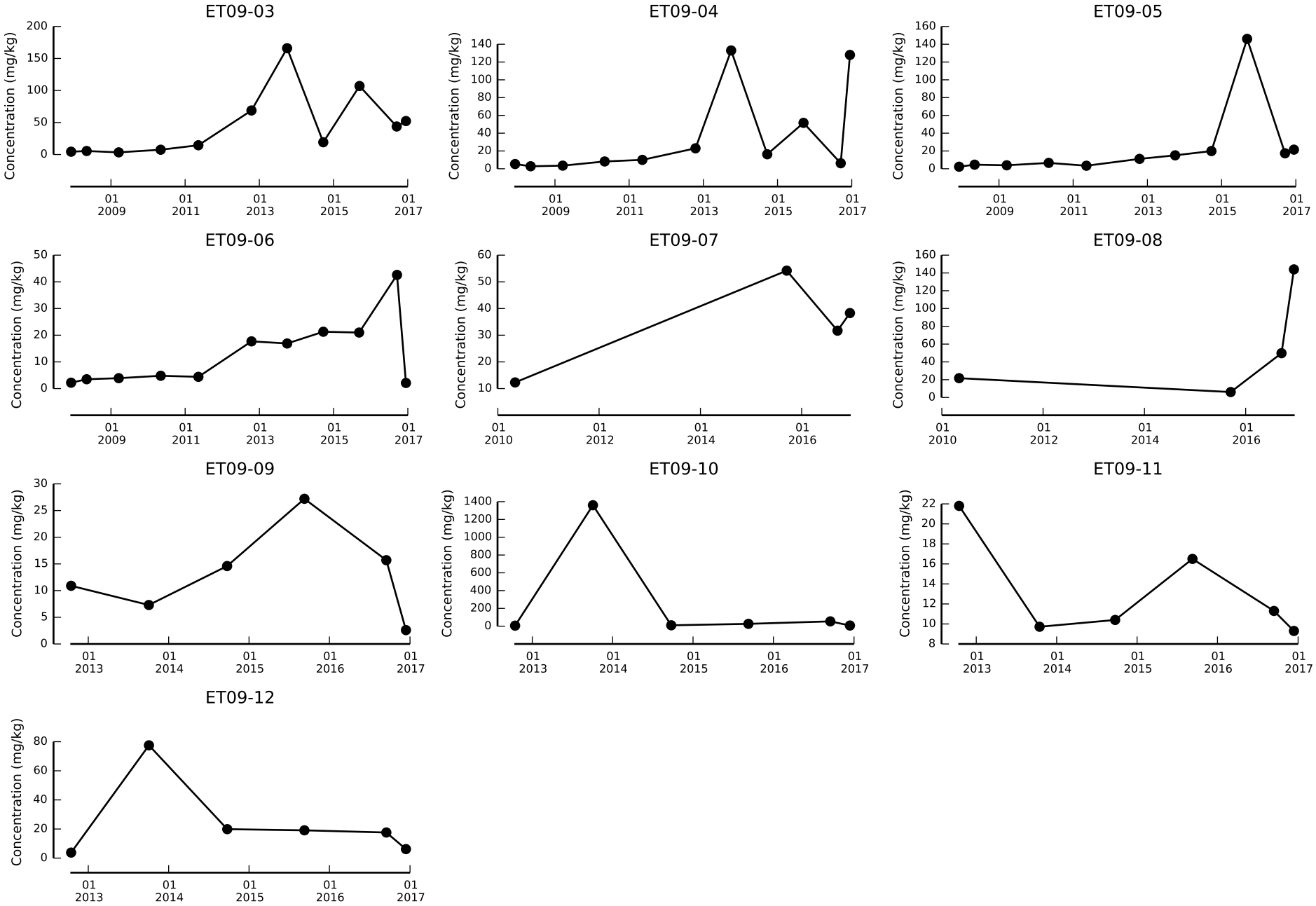
ALPHA-CHLORDANE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 36 of 105

● Detected
○ Not Detected, shown at detection limit



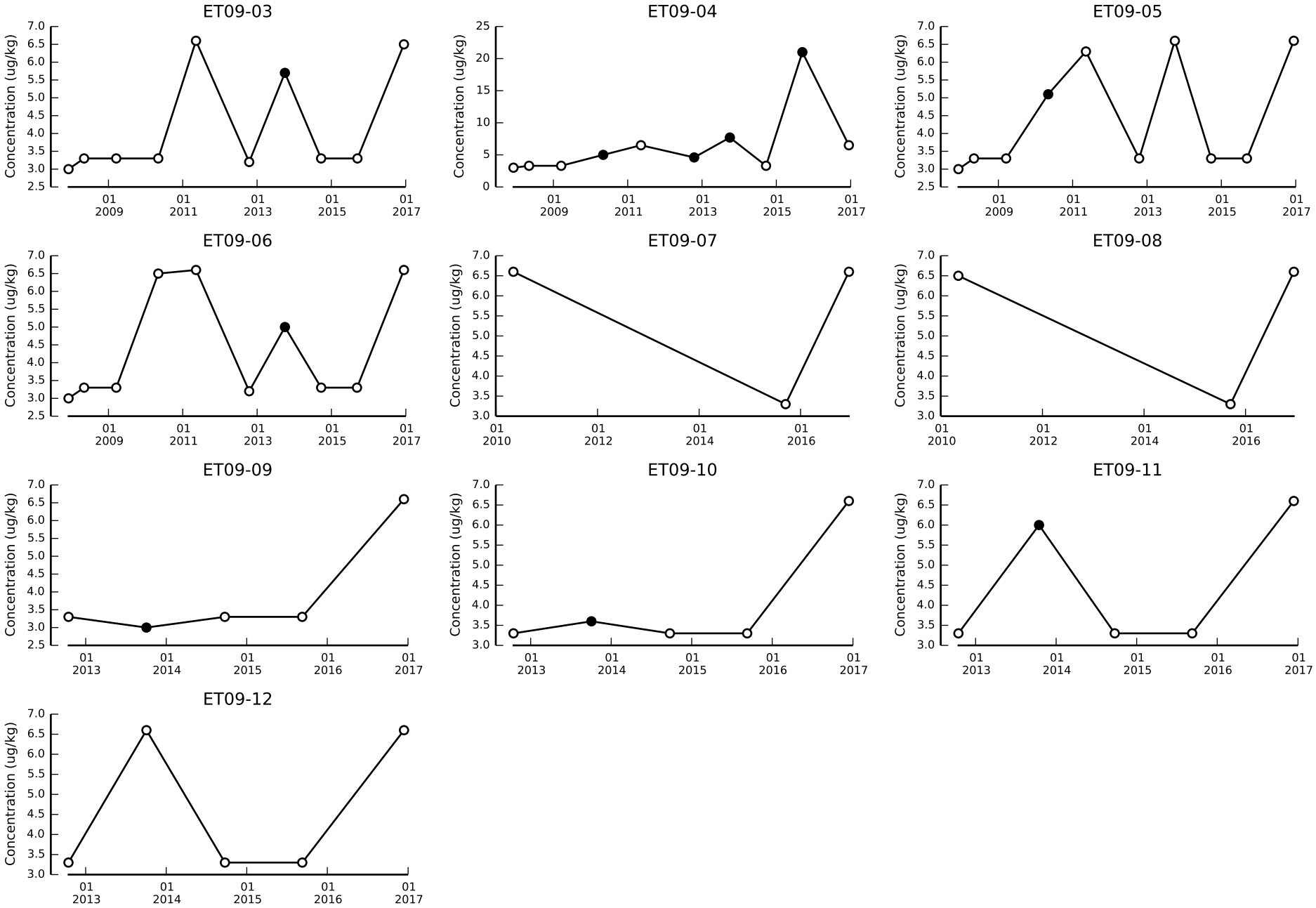
ALUMINUM in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 37 of 105

● Detected
○ Not Detected, shown at detection limit



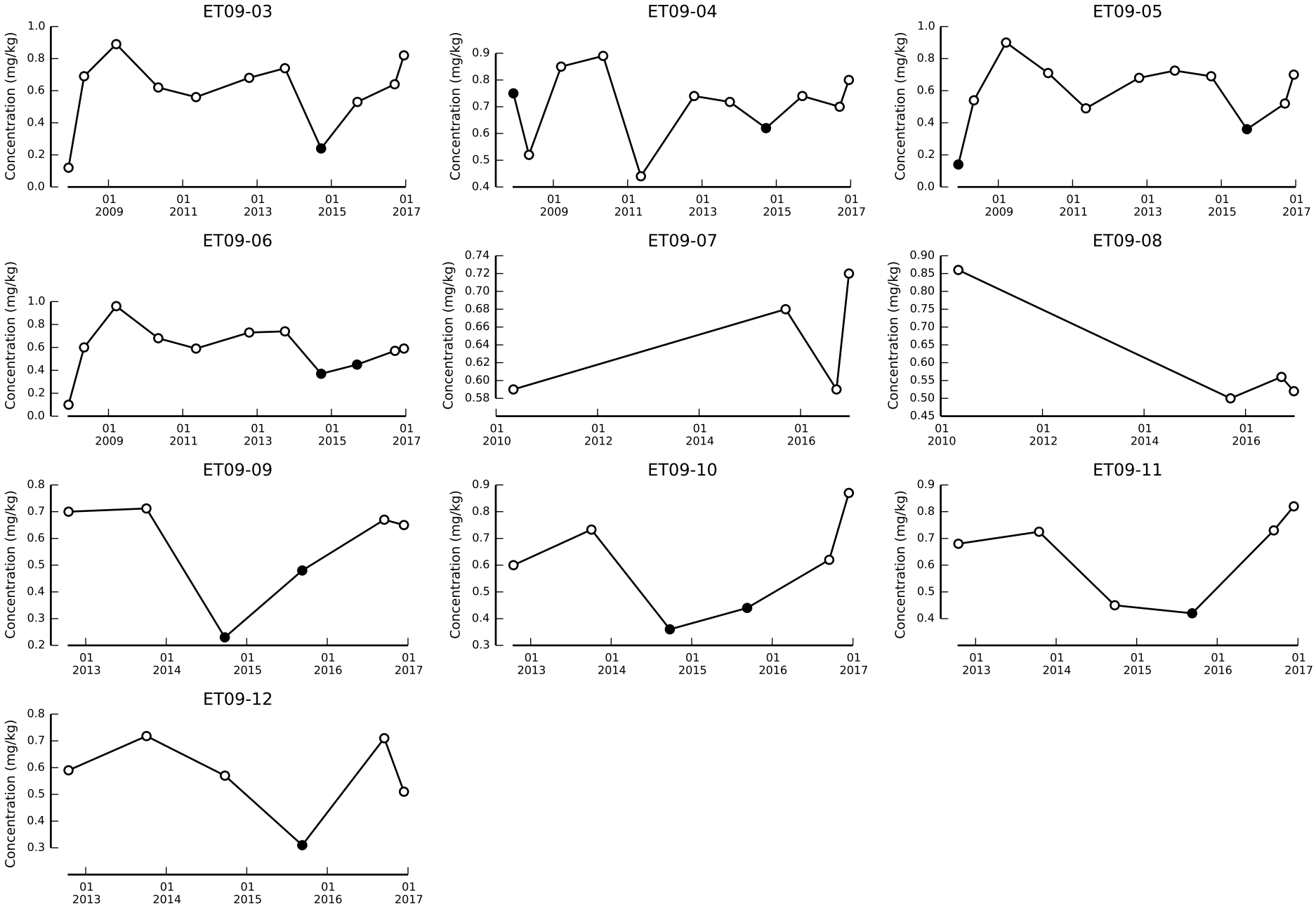
ANTHRACENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 38 of 105

● Detected
○ Not Detected, shown at detection limit



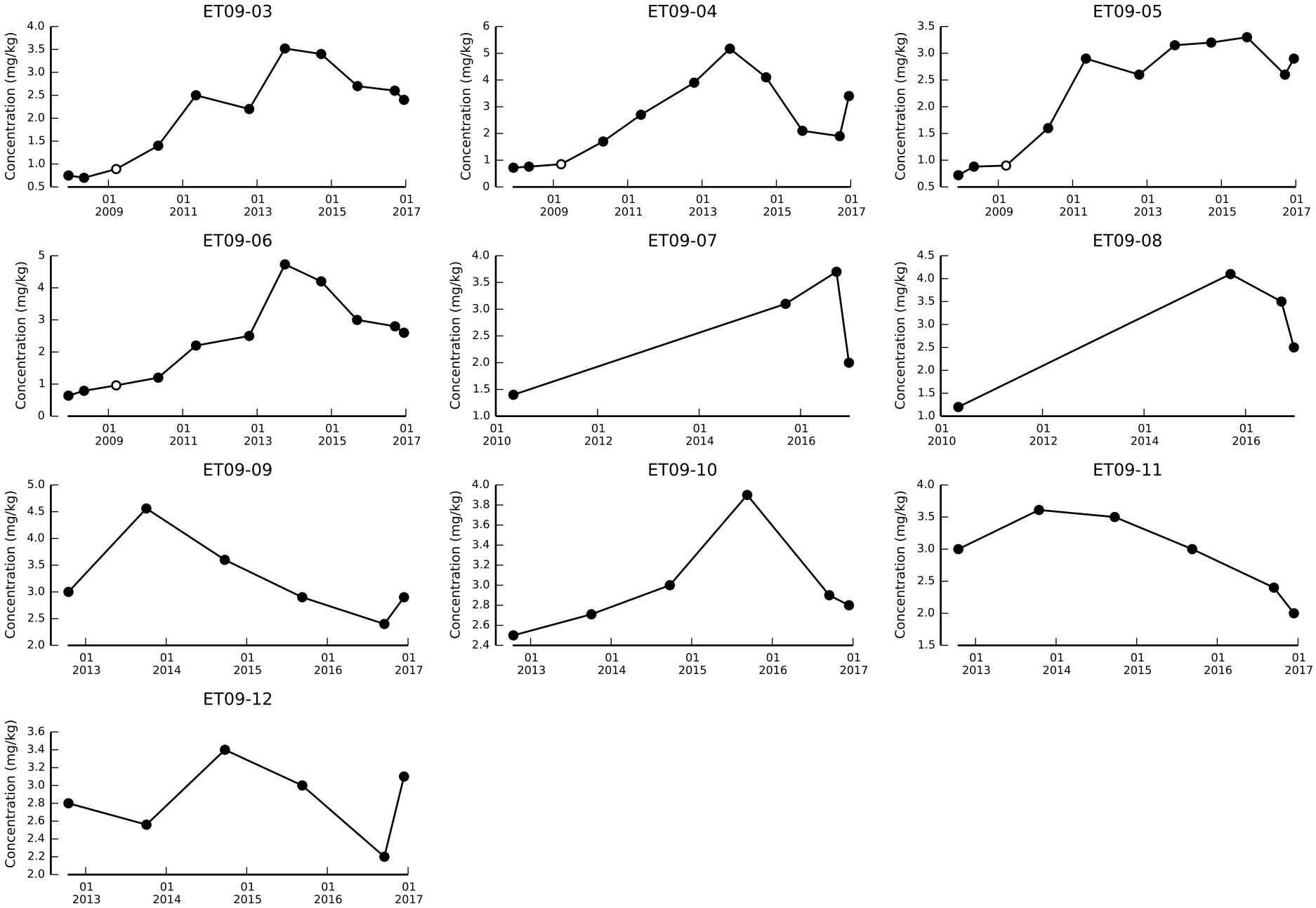
ANTIMONY in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 39 of 105

● Detected
○ Not Detected, shown at detection limit



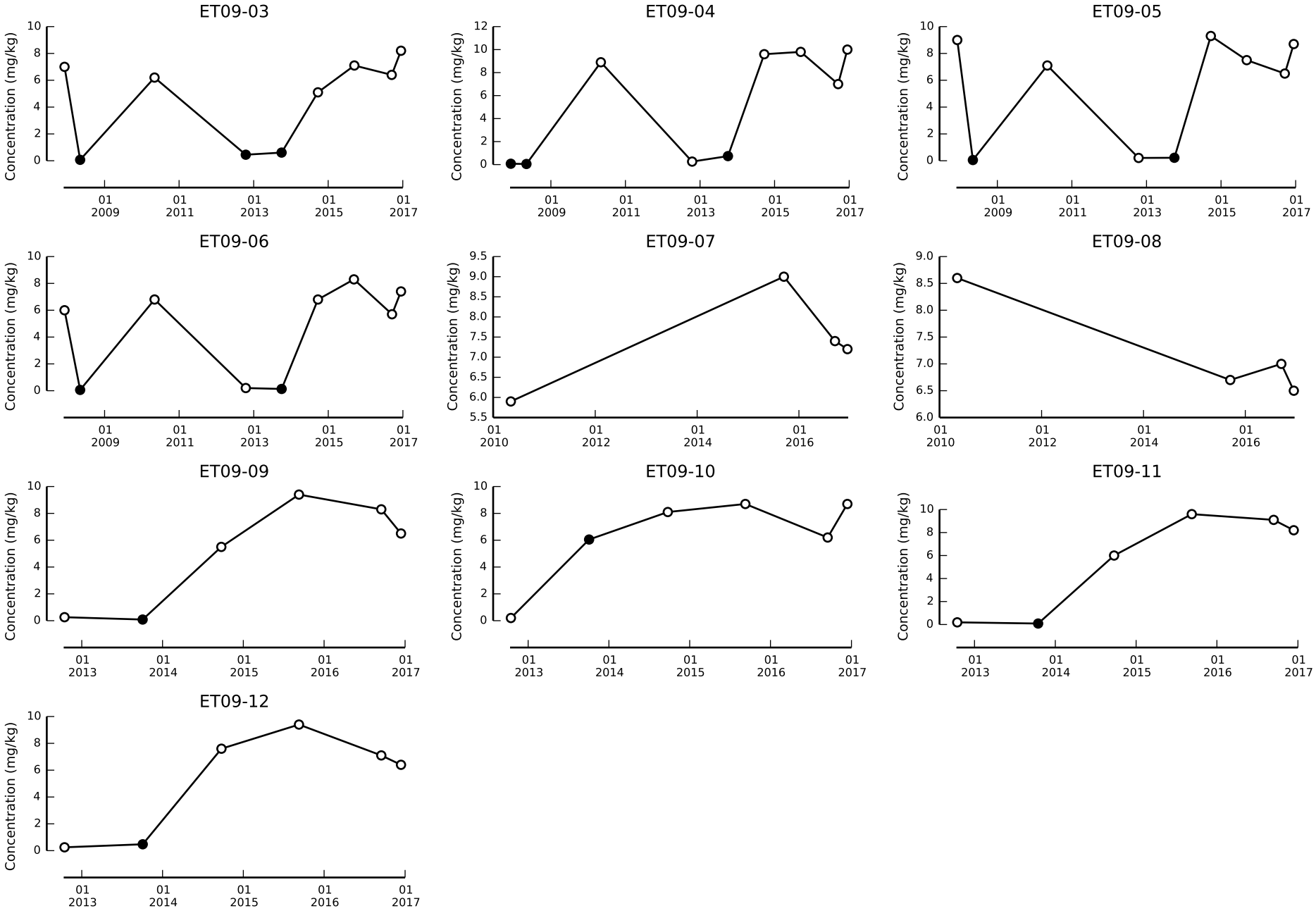
ARSENIC in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 40 of 105

● Detected
○ Not Detected, shown at detection limit



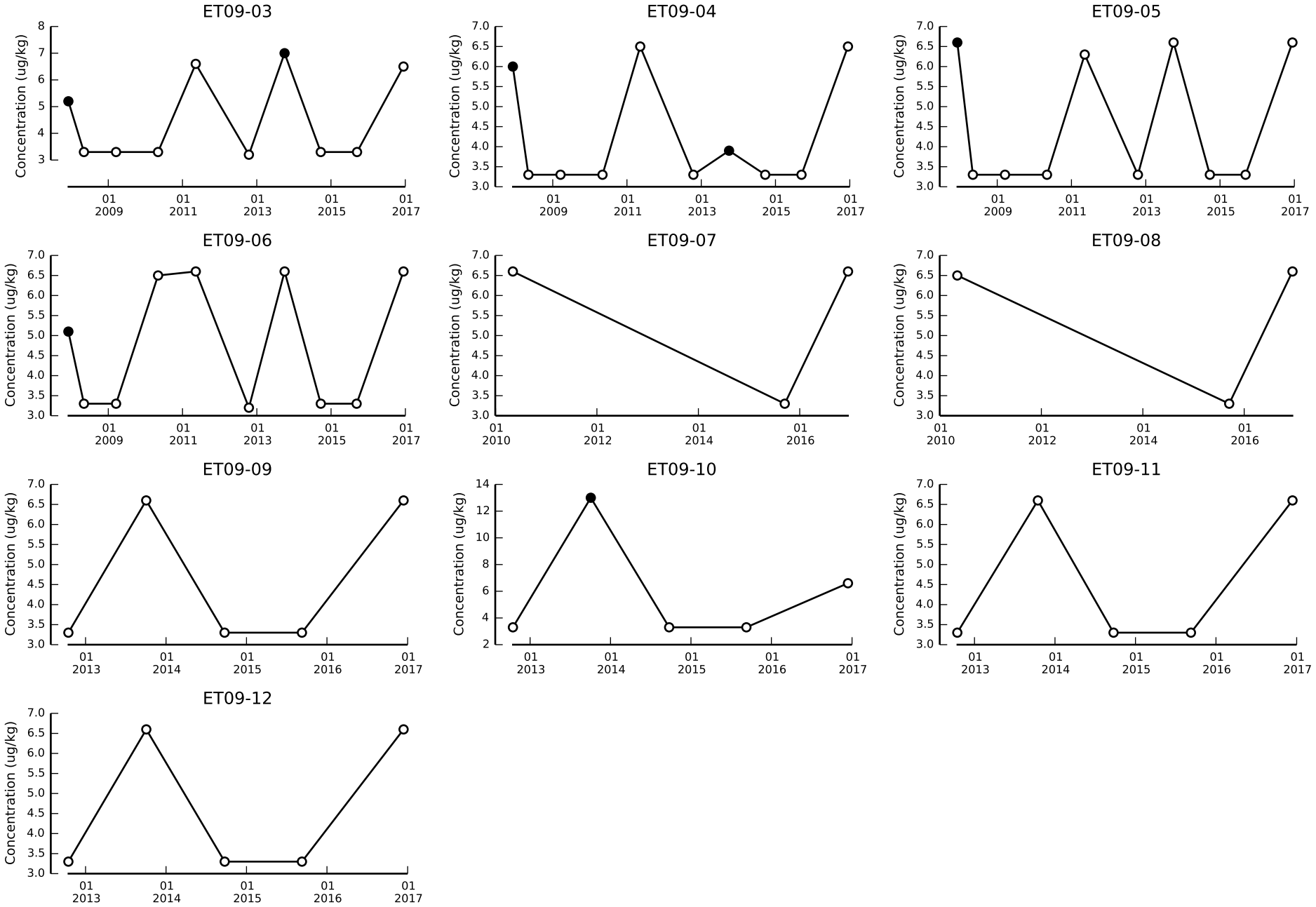
BARIUM in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 41 of 105

● Detected
○ Not Detected, shown at detection limit



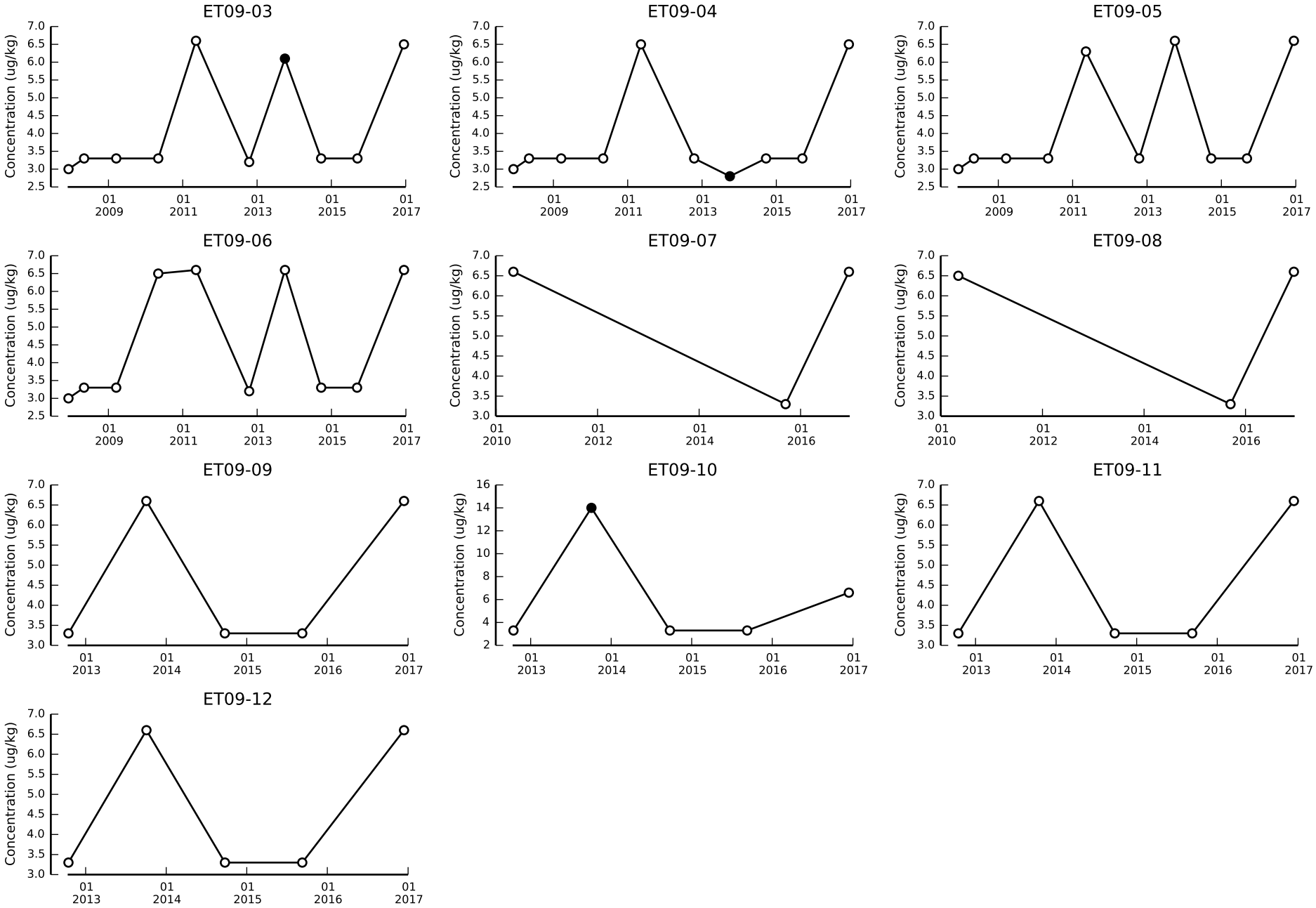
BENZO(A)ANTHRACENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 42 of 105

● Detected
○ Not Detected, shown at detection limit



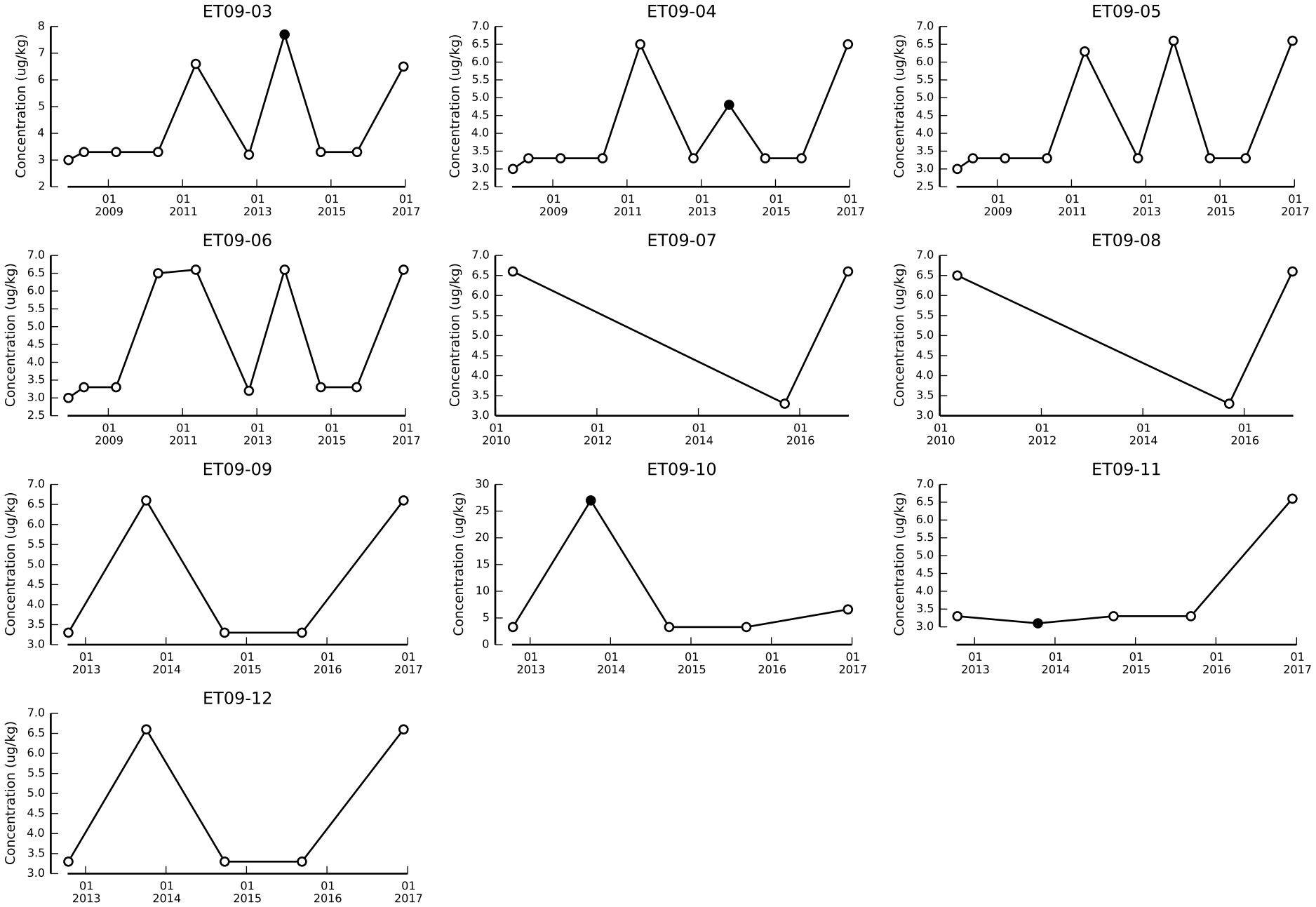
BENZO(A)PYRENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 43 of 105

● Detected
○ Not Detected, shown at detection limit



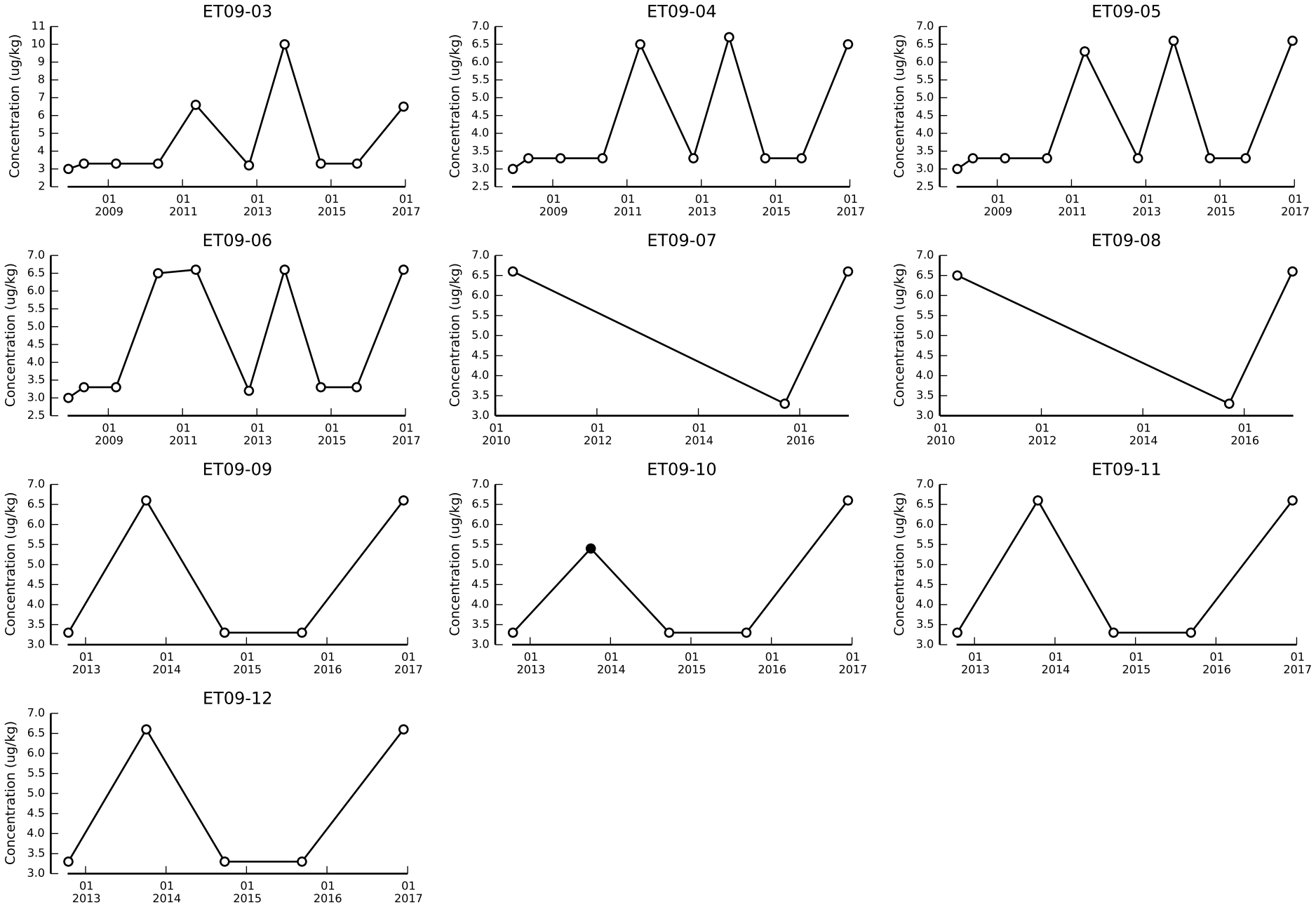
BENZO(B)FLUORANTHENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 44 of 105

● Detected
○ Not Detected, shown at detection limit



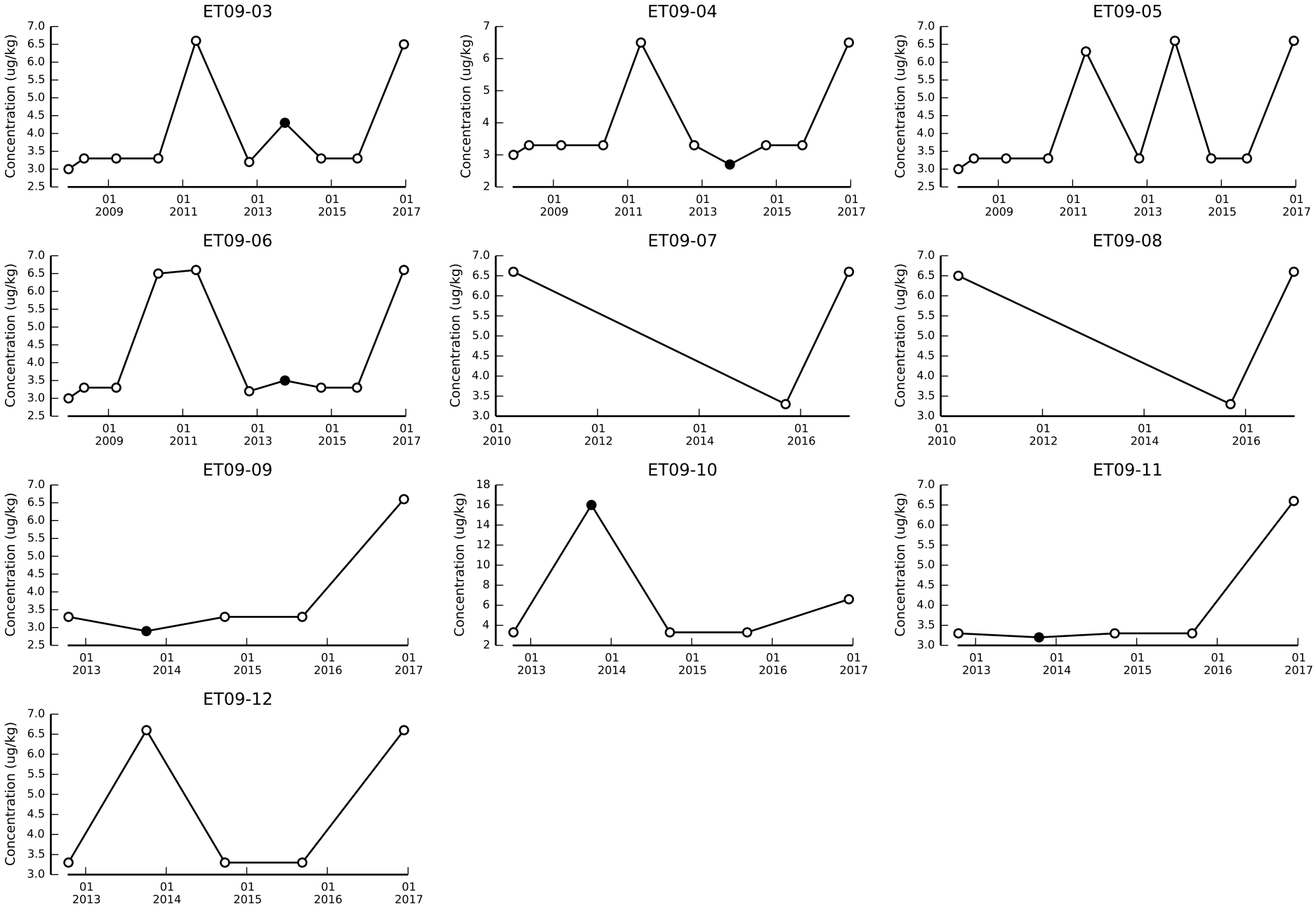
BENZO(G,H,I)PERYLENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 45 of 105

● Detected
○ Not Detected, shown at detection limit



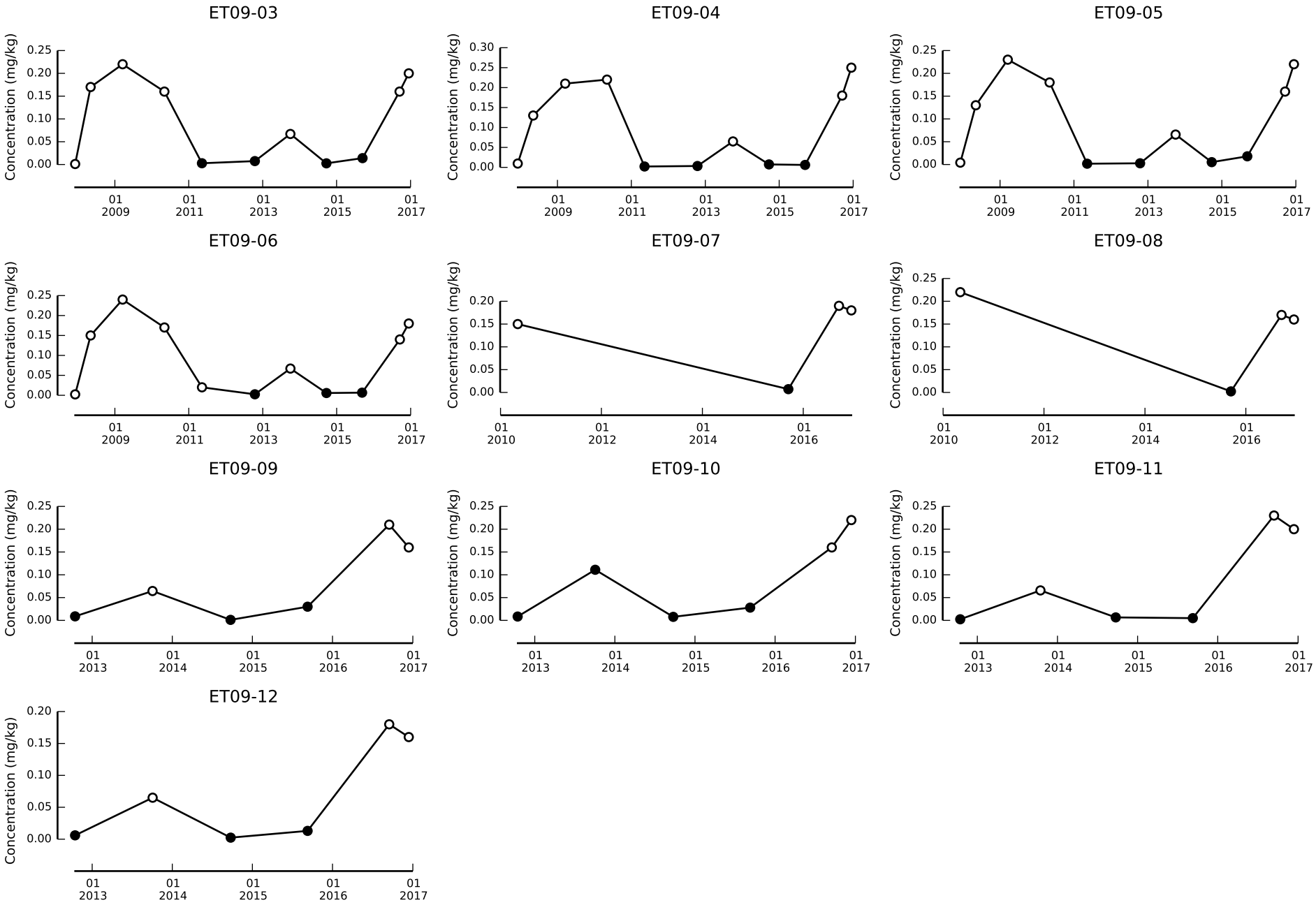
BENZO(K)FLUORANTHENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 46 of 105

● Detected
○ Not Detected, shown at detection limit



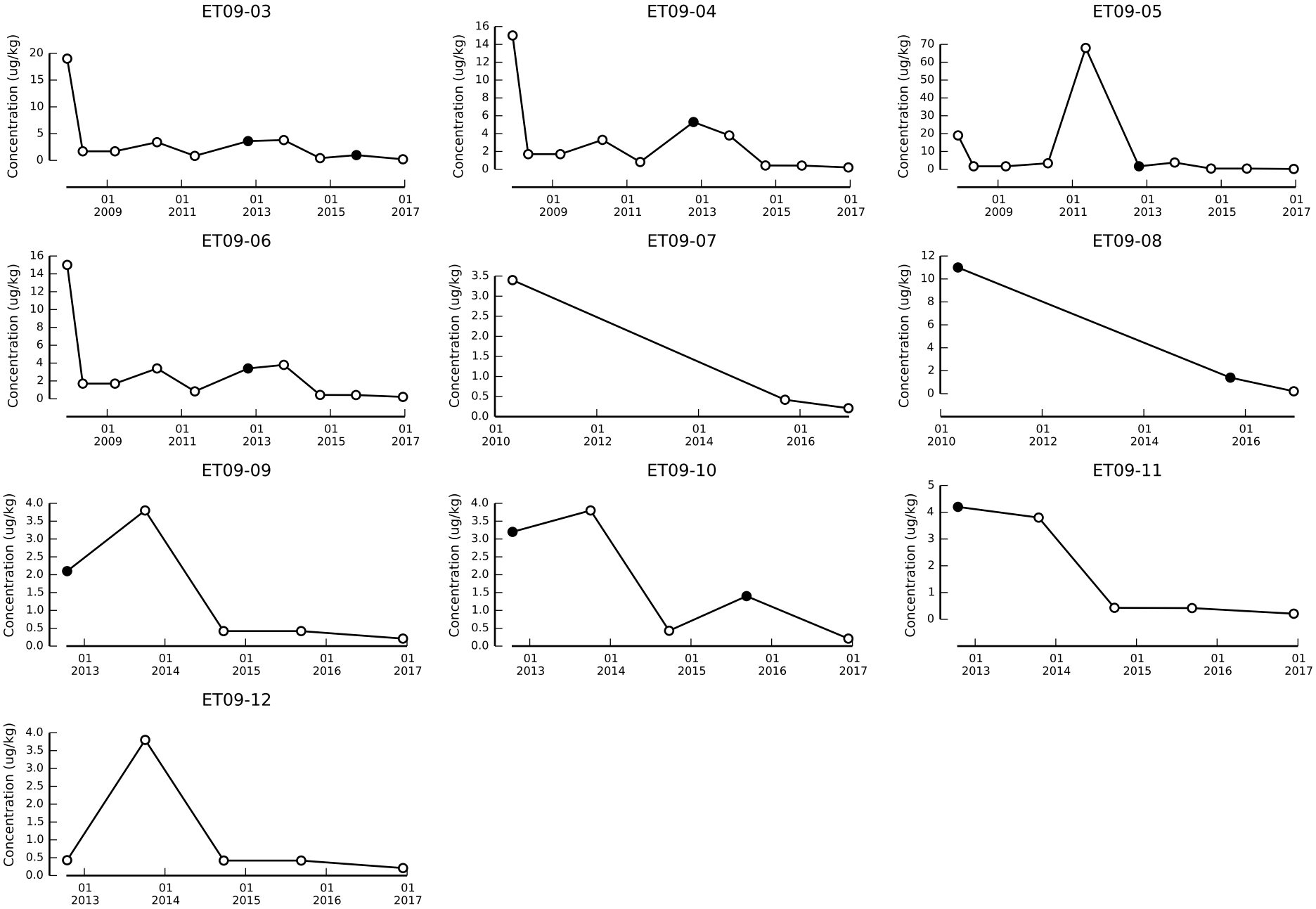
BERYLLIUM in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 47 of 105

● Detected
○ Not Detected, shown at detection limit



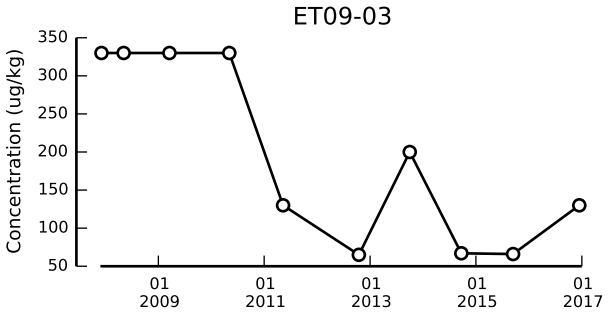
BETA-BHC in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 48 of 105

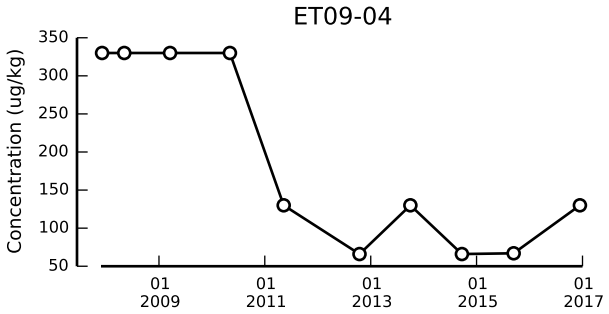
● Detected
○ Not Detected, shown at detection limit

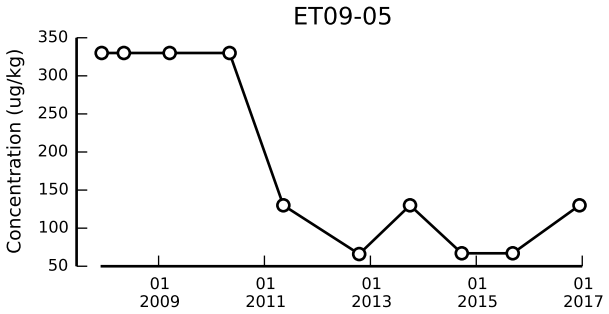


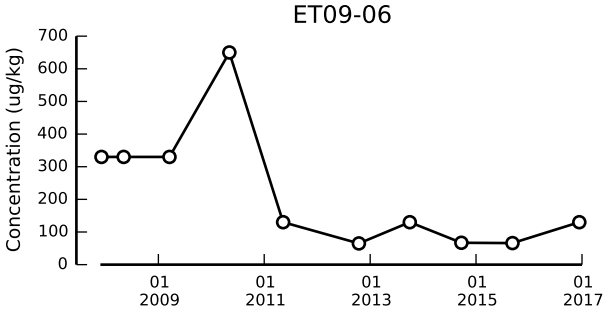
BIS(2-CHLOROETHOXY)METHANE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 49 of 105

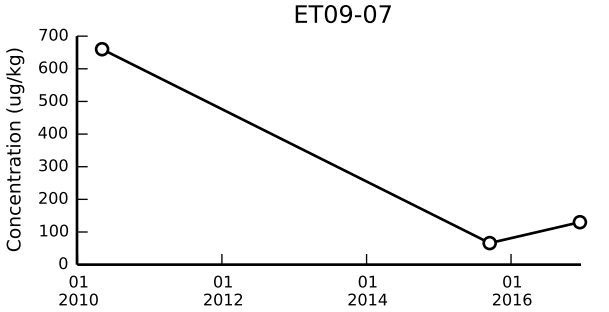
● Detected
○ Not Detected, shown at detection limit

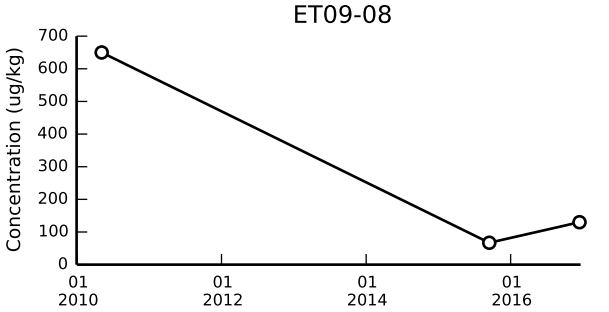


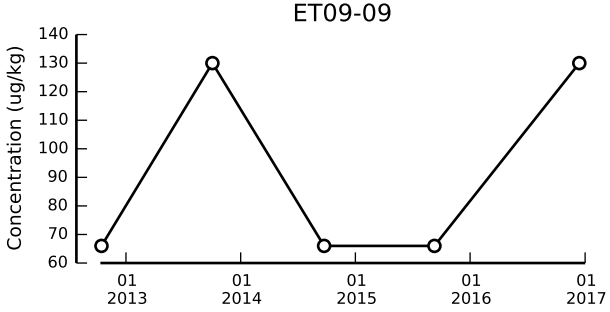


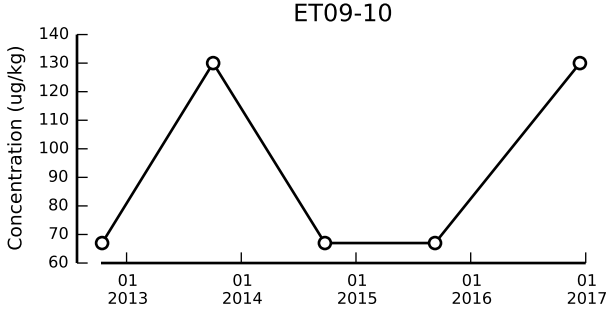


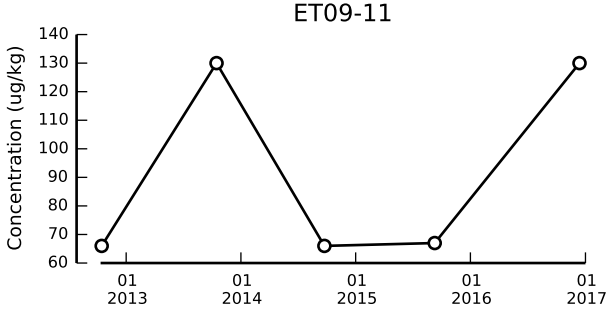


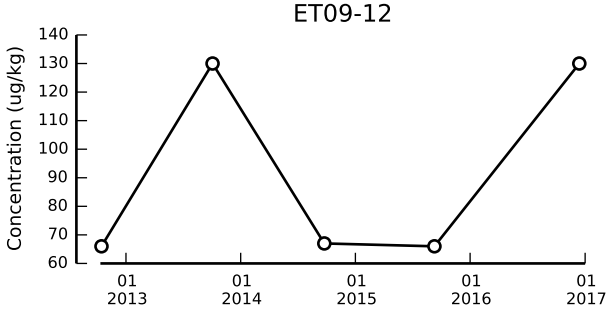






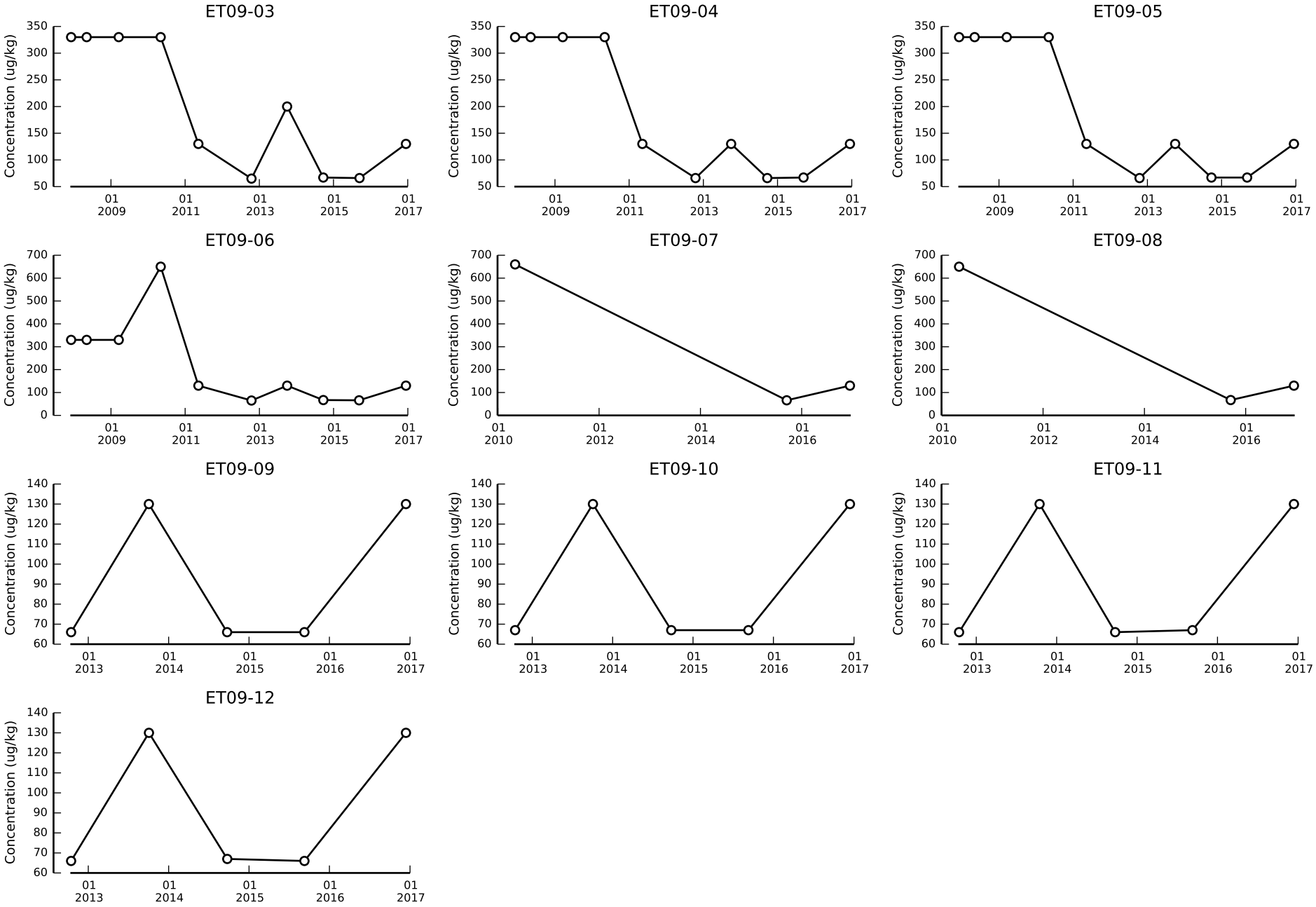






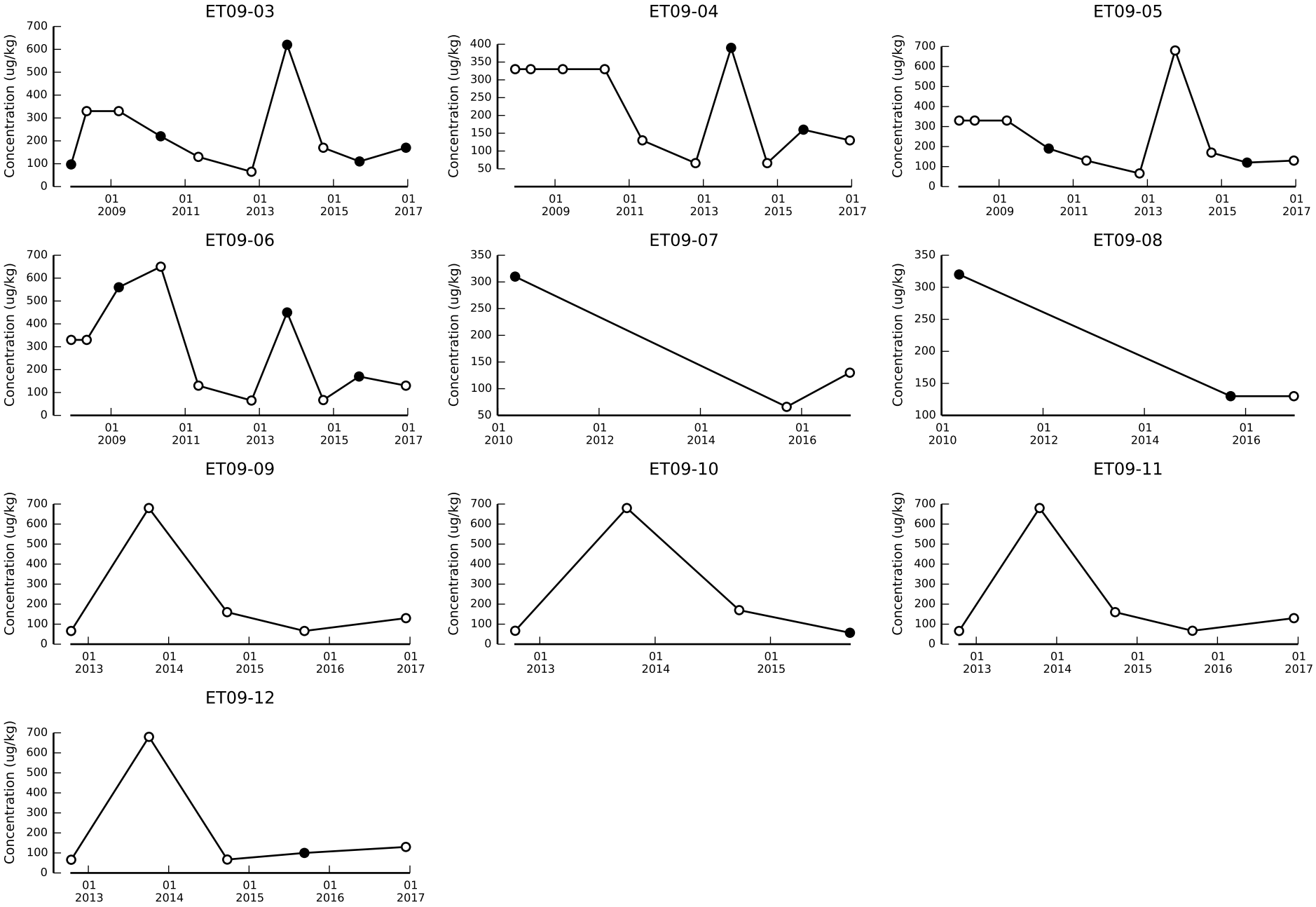
BIS(2-CHLOROETHYL)ETHER in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 50 of 105

● Detected
○ Not Detected, shown at detection limit



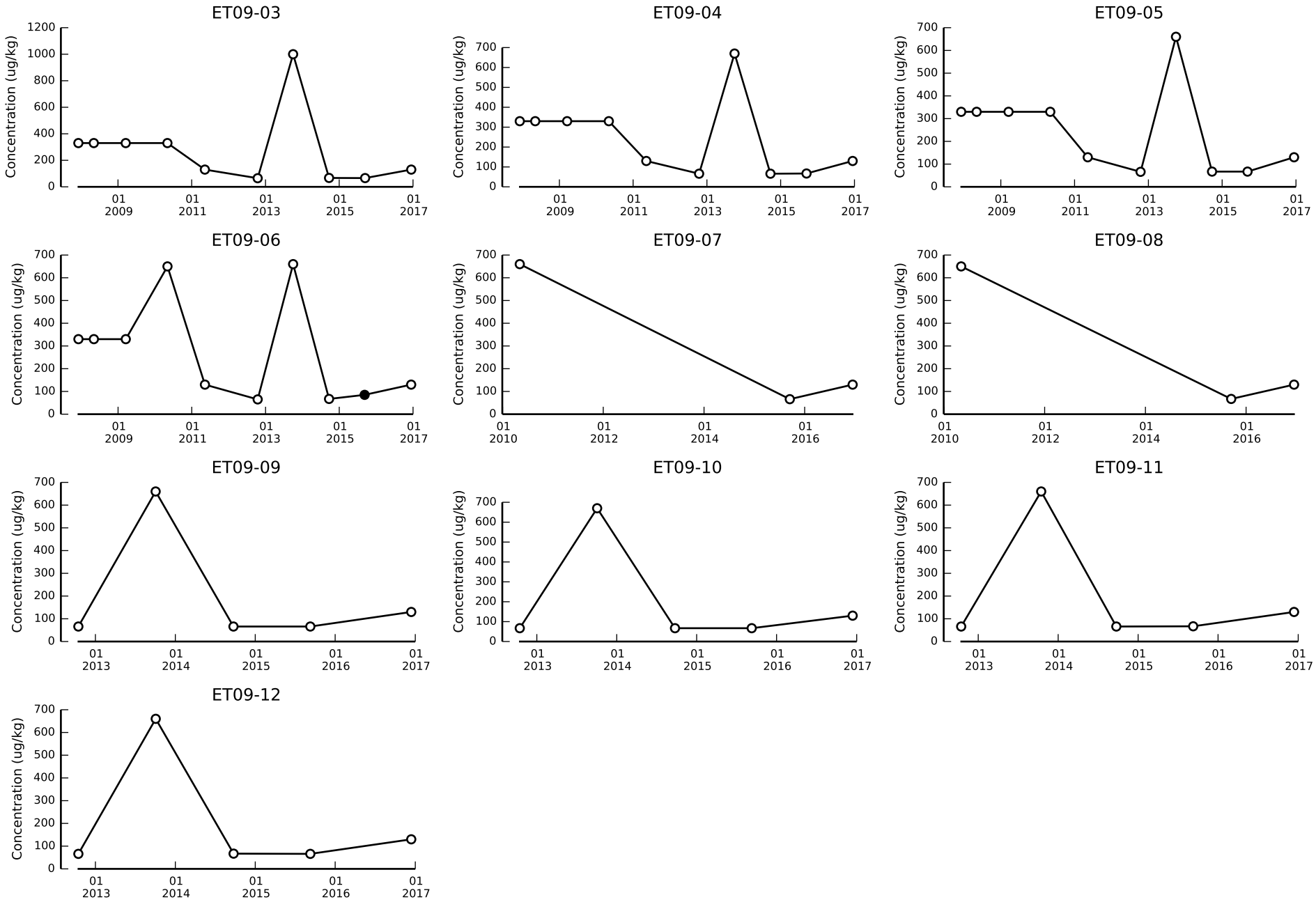
BIS(2-ETHYLHEXYL)PHTHALATE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 51 of 105

● Detected
○ Not Detected, shown at detection limit



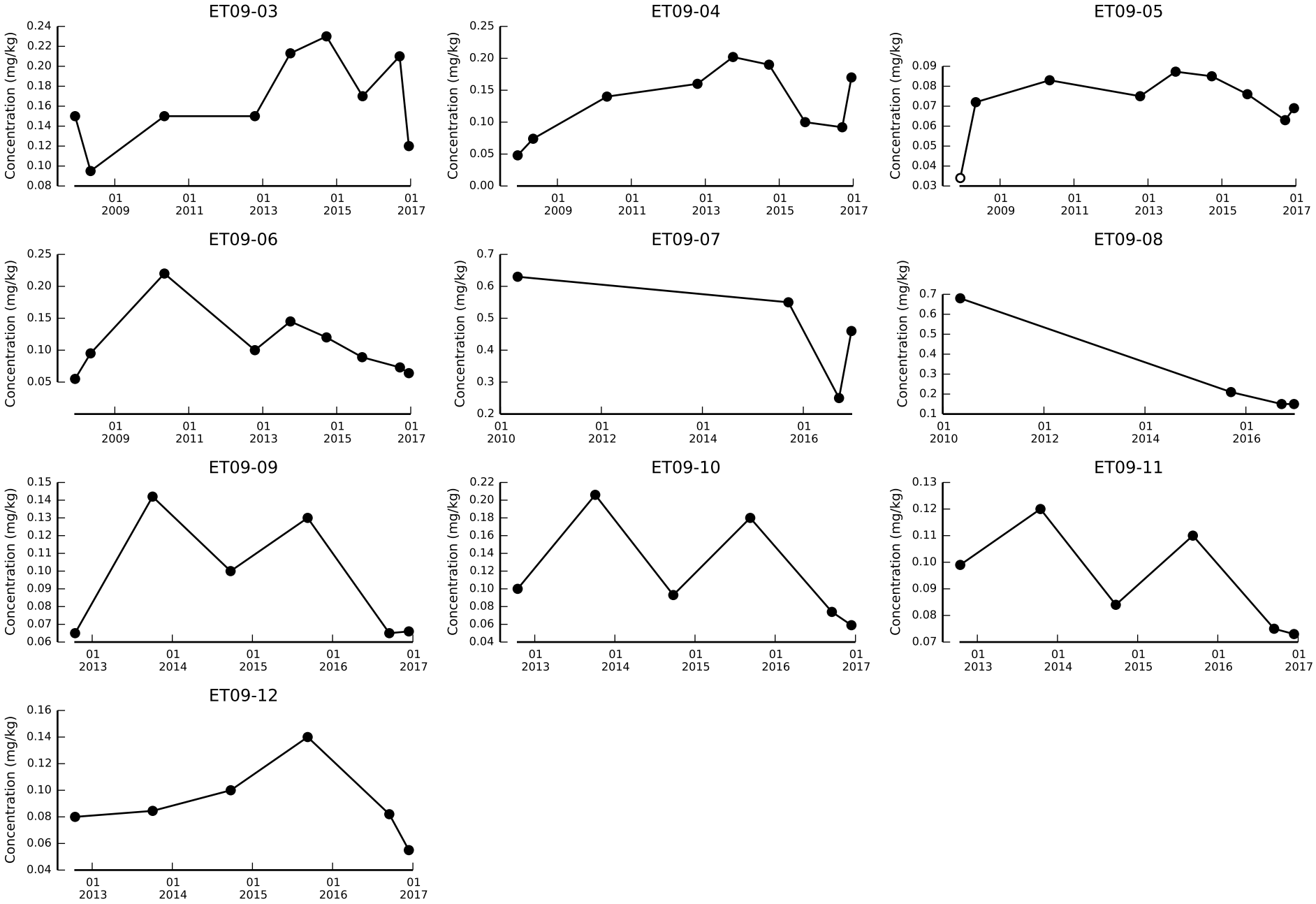
BUTYLBENZYLPHTHALATE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 52 of 105

● Detected
○ Not Detected, shown at detection limit



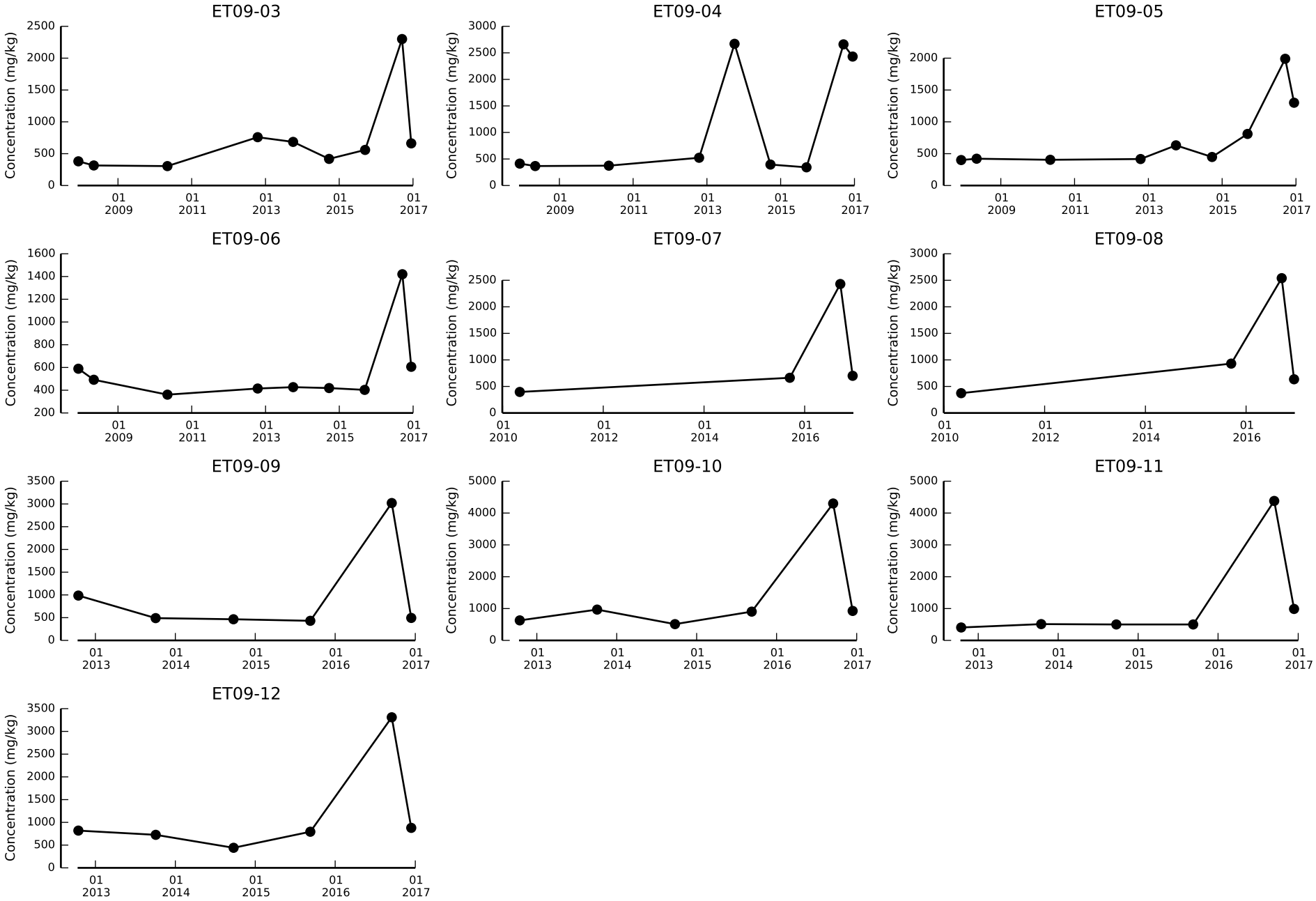
CADMIUM in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 53 of 105

● Detected
○ Not Detected, shown at detection limit



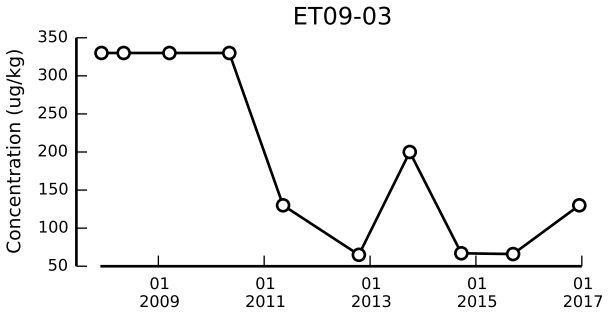
CALCIUM in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 54 of 105

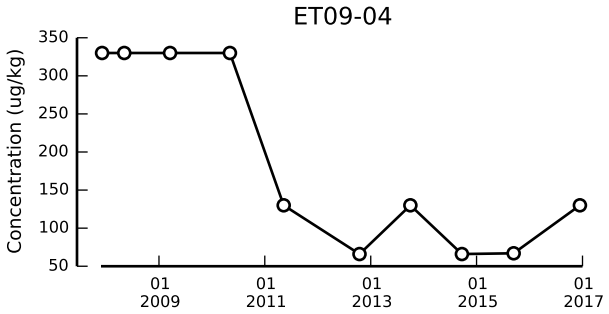
● Detected
○ Not Detected, shown at detection limit

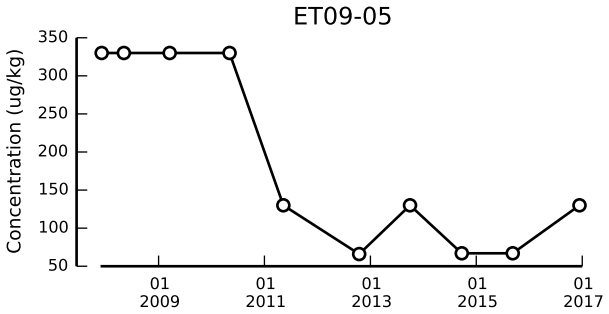


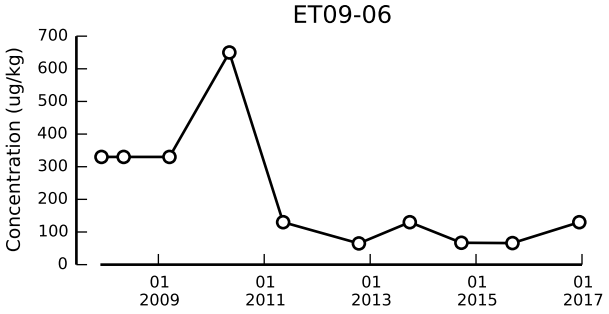
CARBAZOLE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 55 of 105

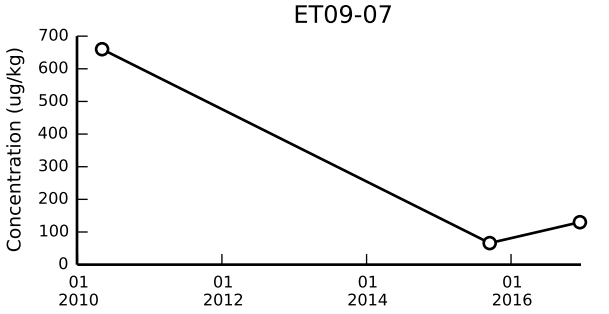
● Detected
○ Not Detected, shown at detection limit

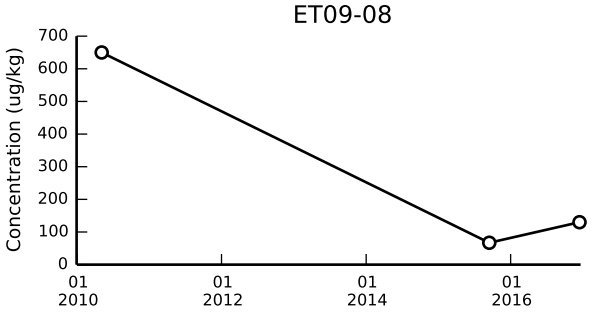


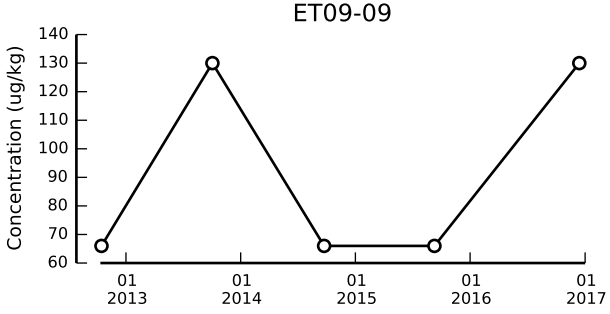


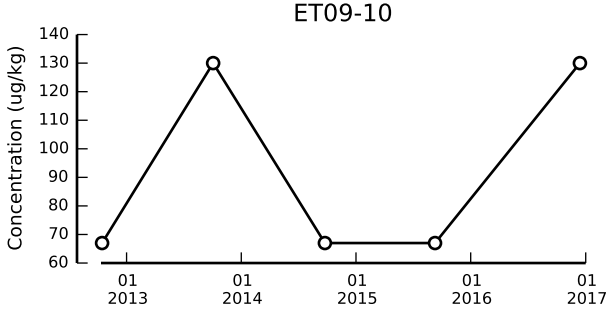


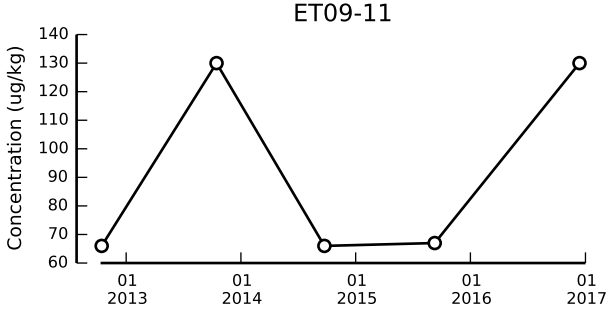


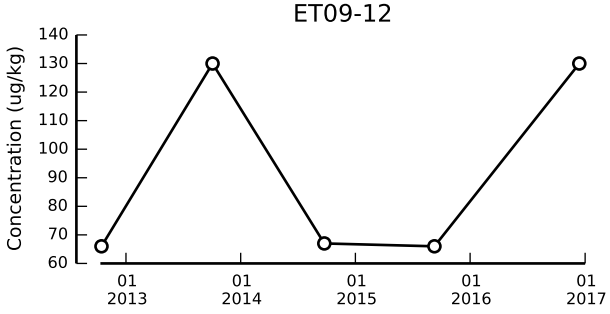






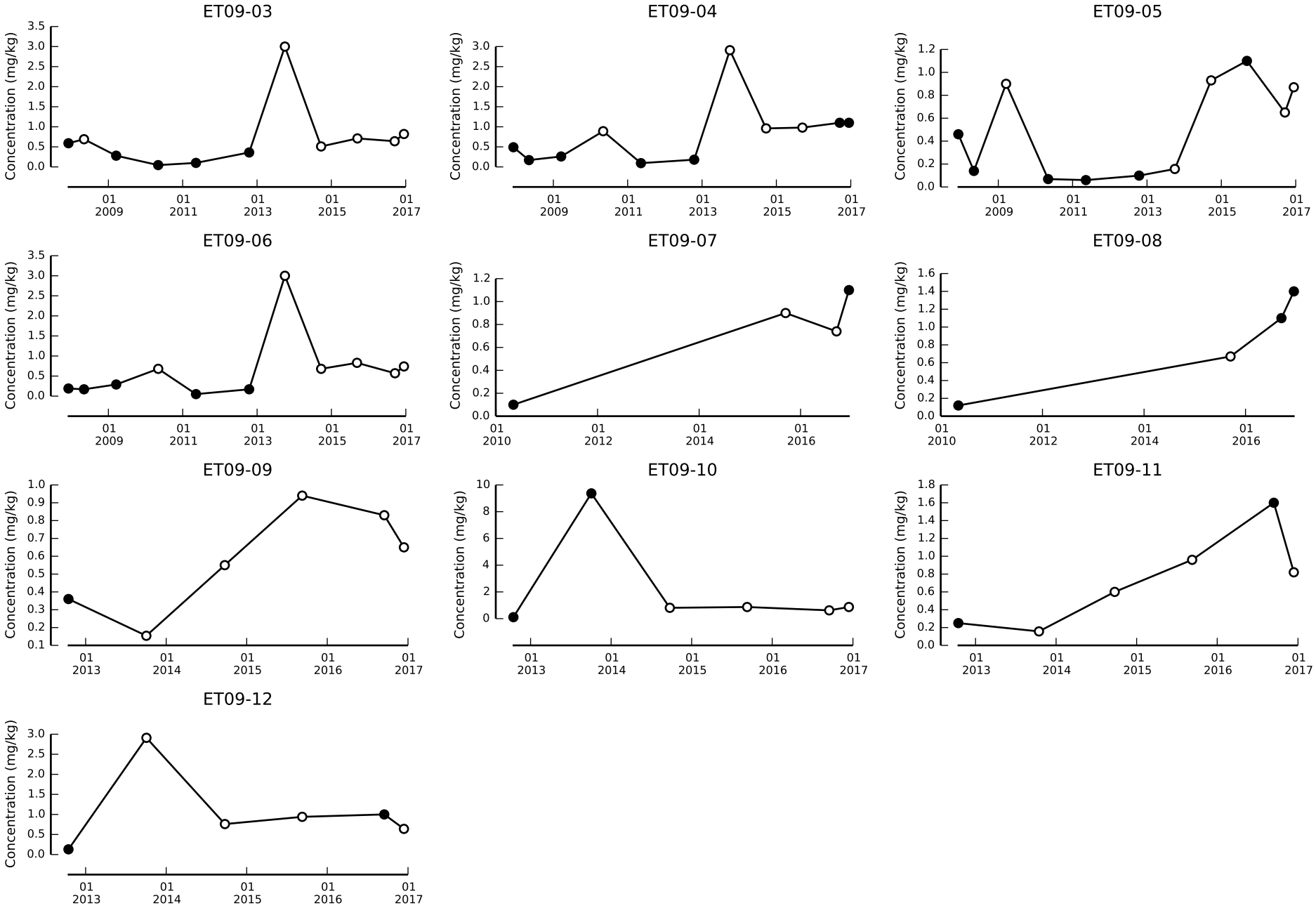






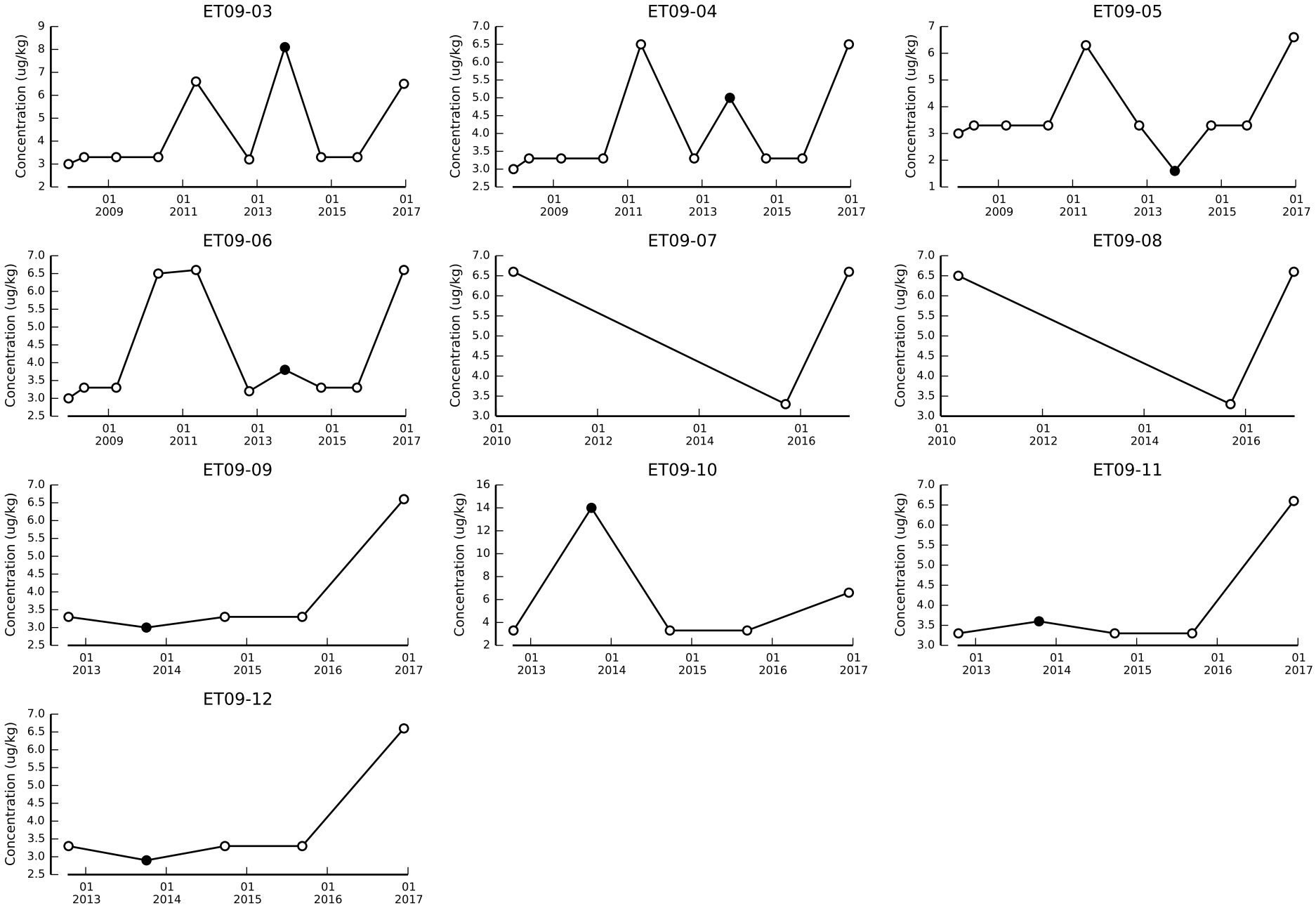
CHROMIUM, TOTAL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 56 of 105

● Detected
○ Not Detected, shown at detection limit



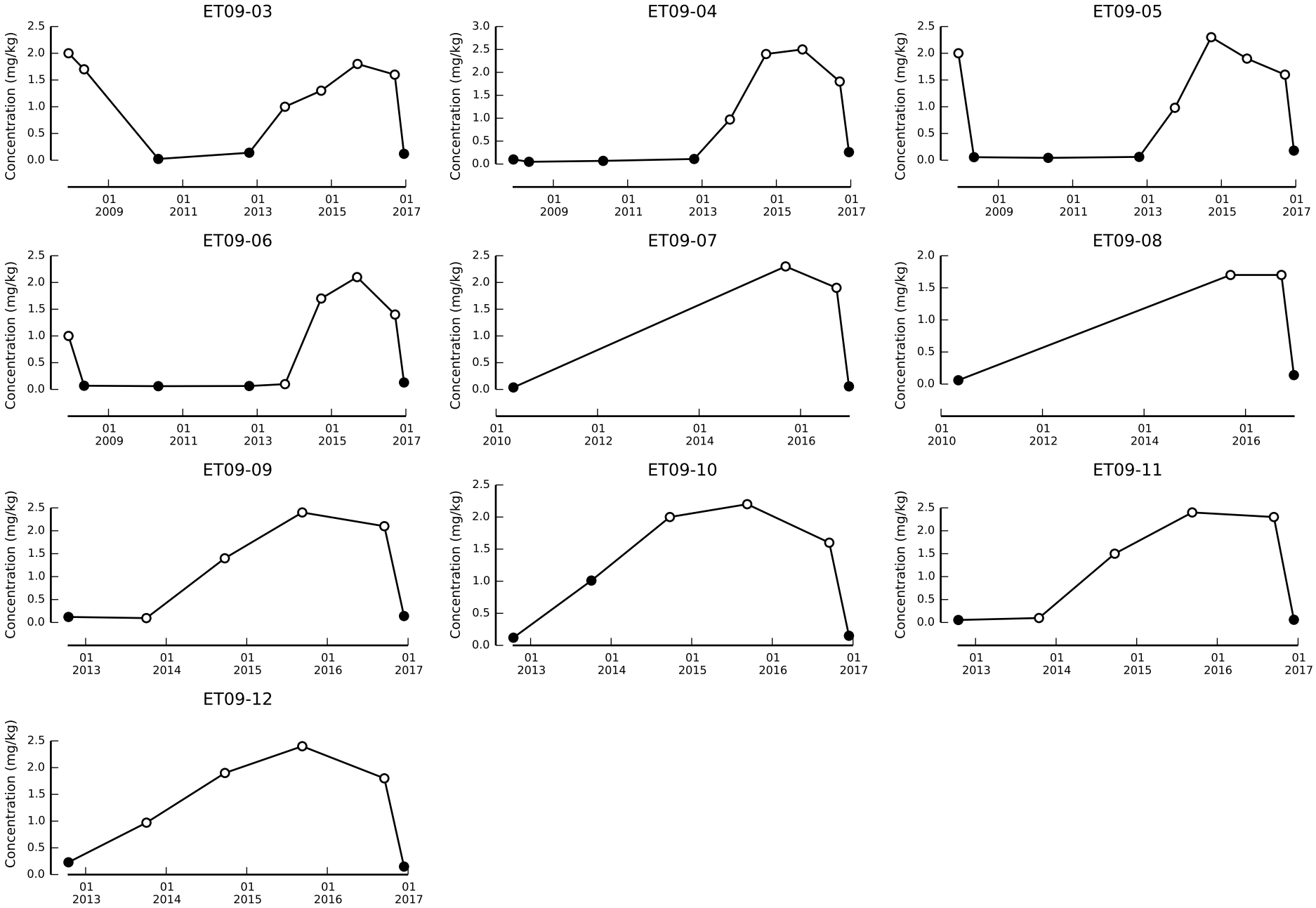
CHRYSENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 57 of 105

● Detected
○ Not Detected, shown at detection limit



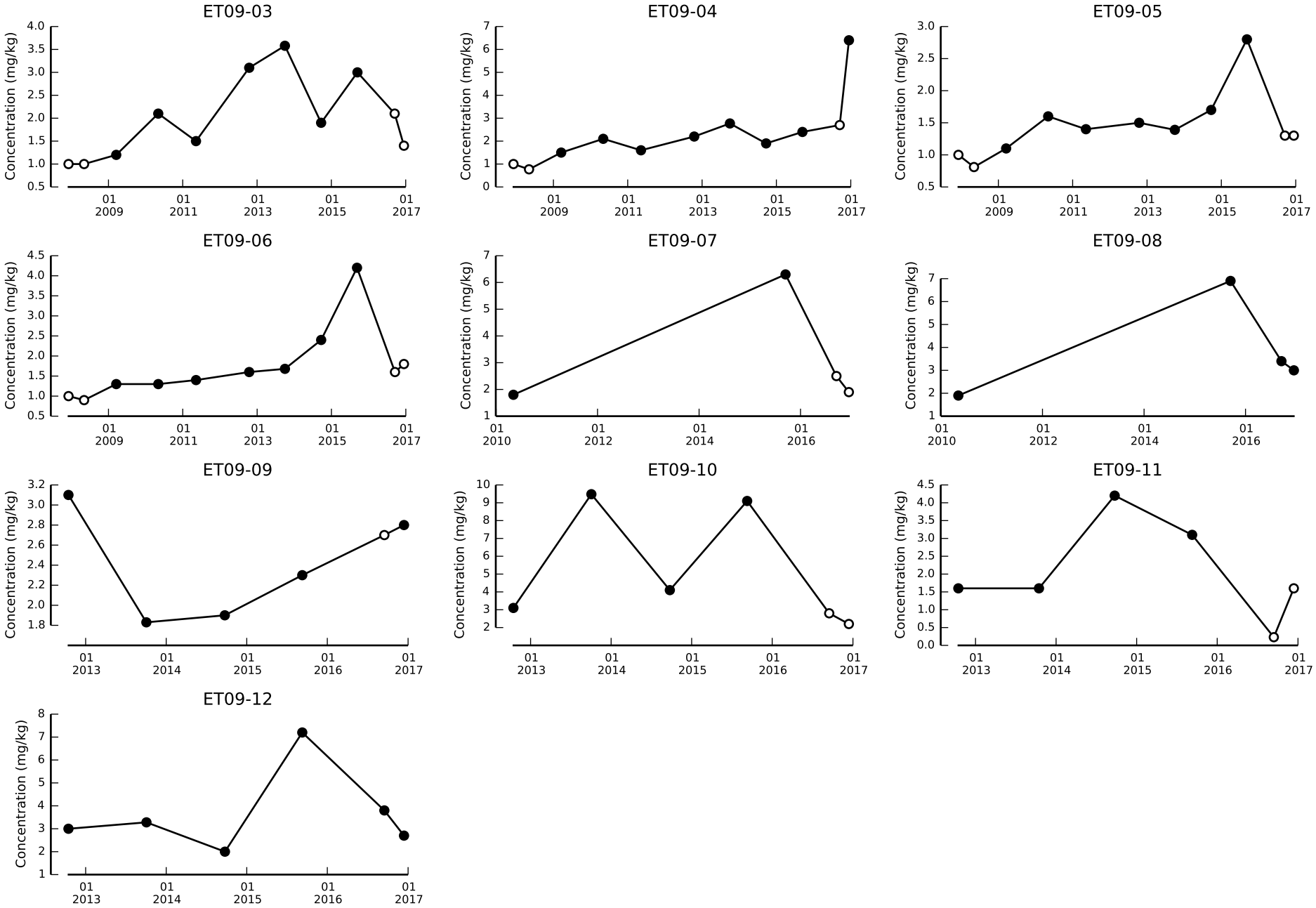
COBALT in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 58 of 105

● Detected
○ Not Detected, shown at detection limit



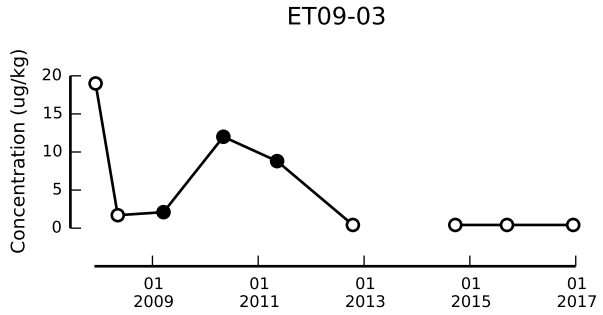
COPPER in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 59 of 105

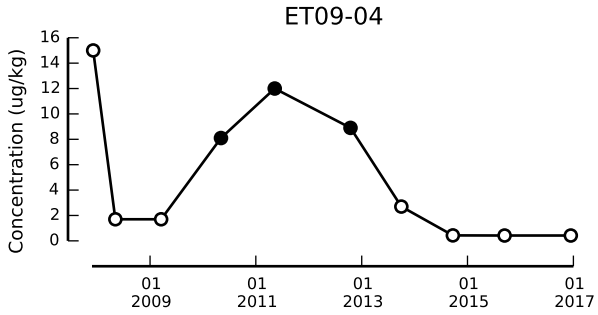
● Detected
○ Not Detected, shown at detection limit

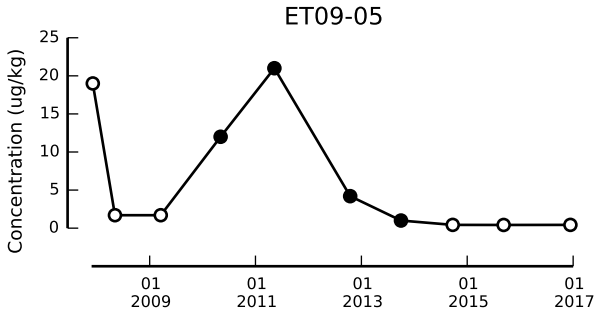


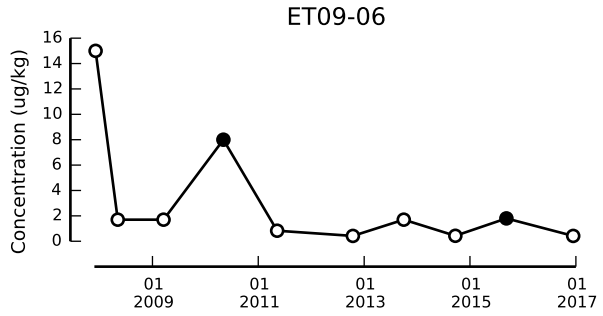
DELTA-BHC in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 60 of 105

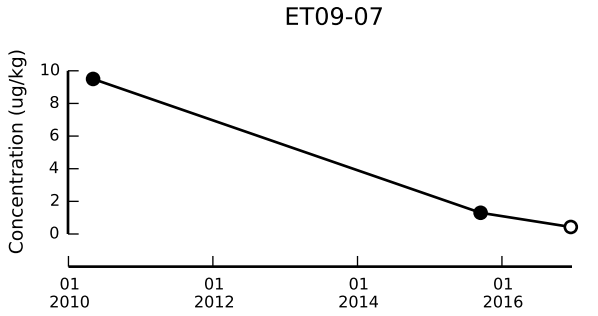
● Detected
○ Not Detected, shown at detection limit

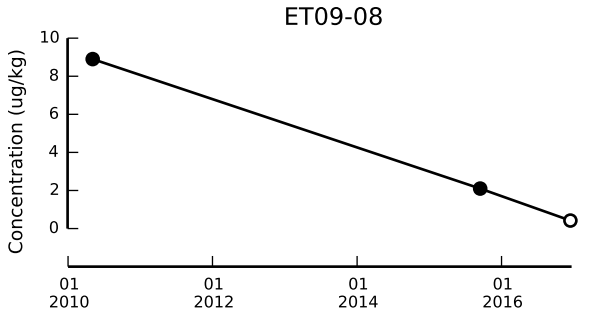


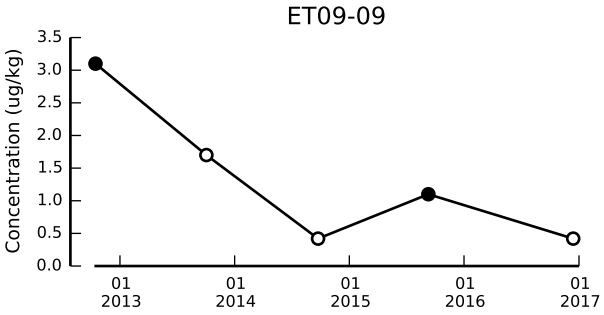


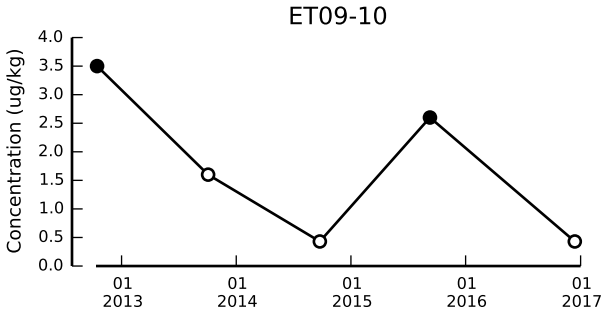


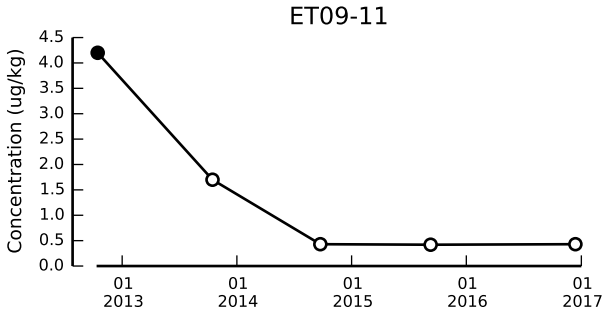


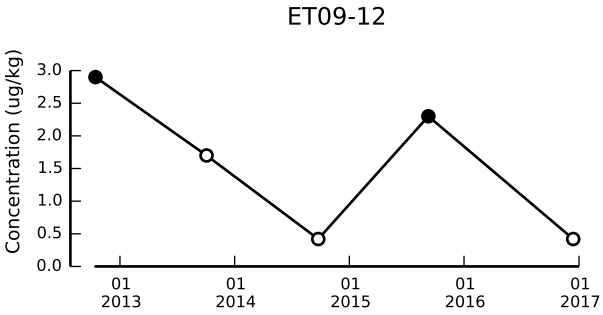






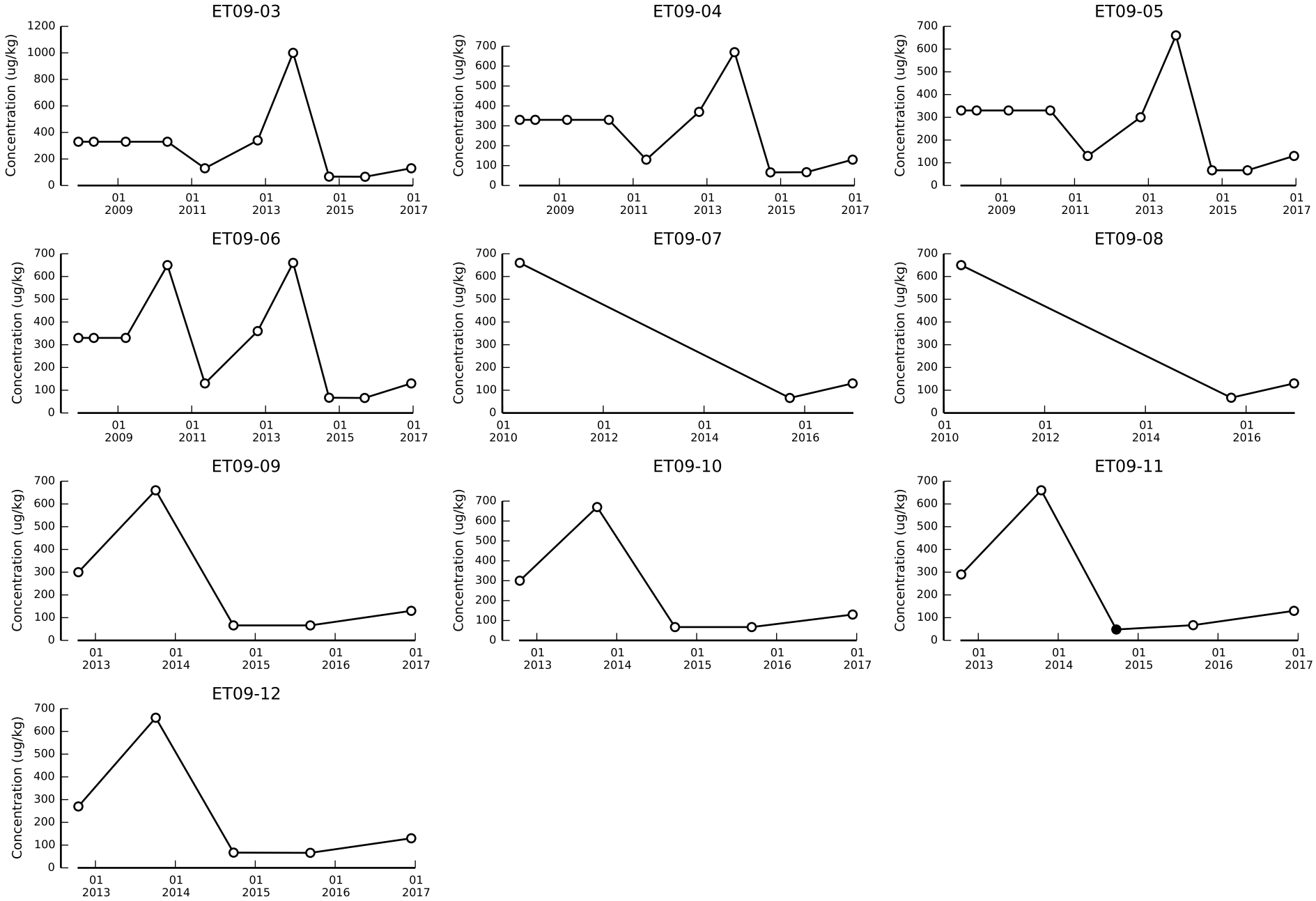






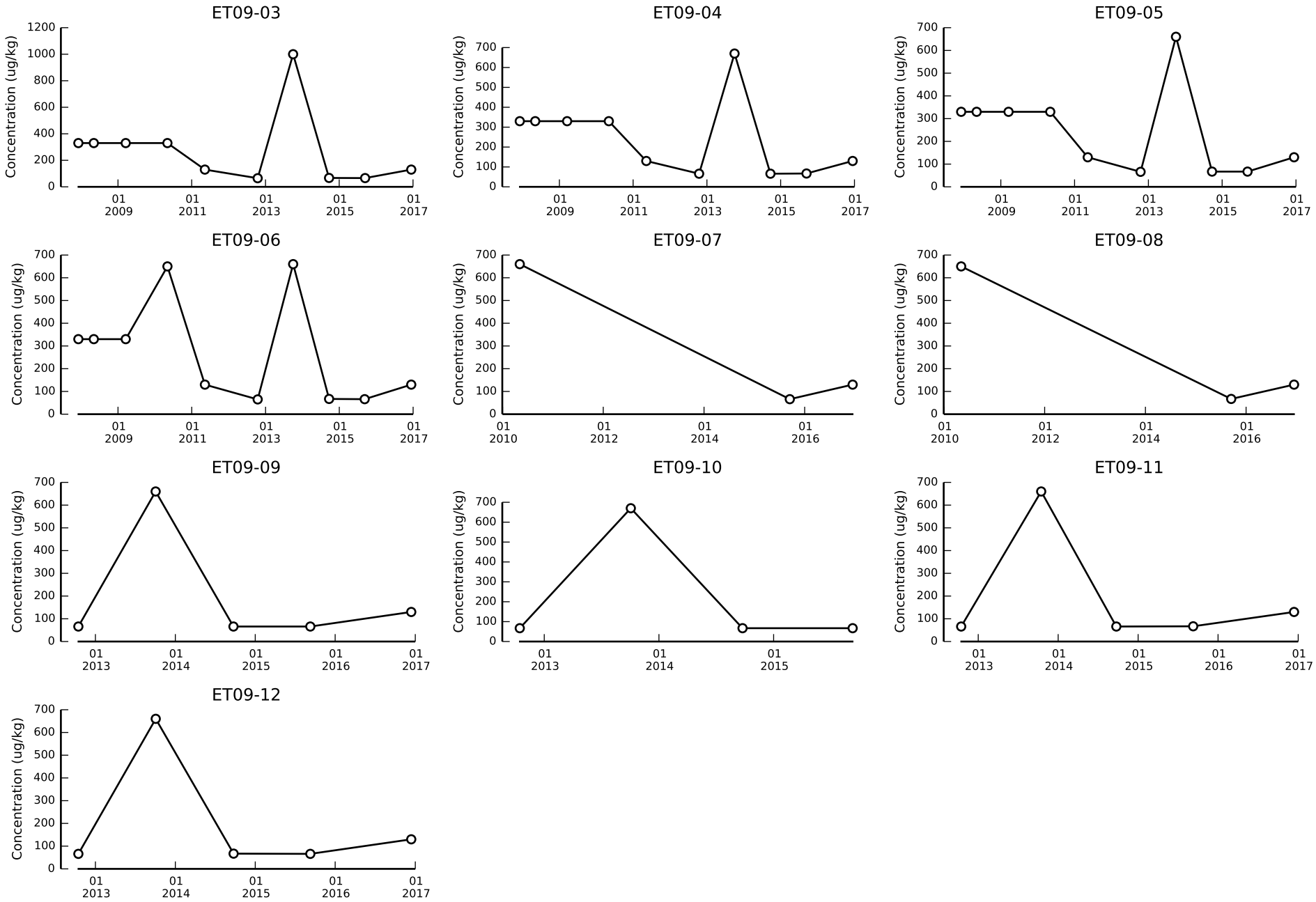
DI-N-BUTYLPHTHALATE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 61 of 105

● Detected
○ Not Detected, shown at detection limit



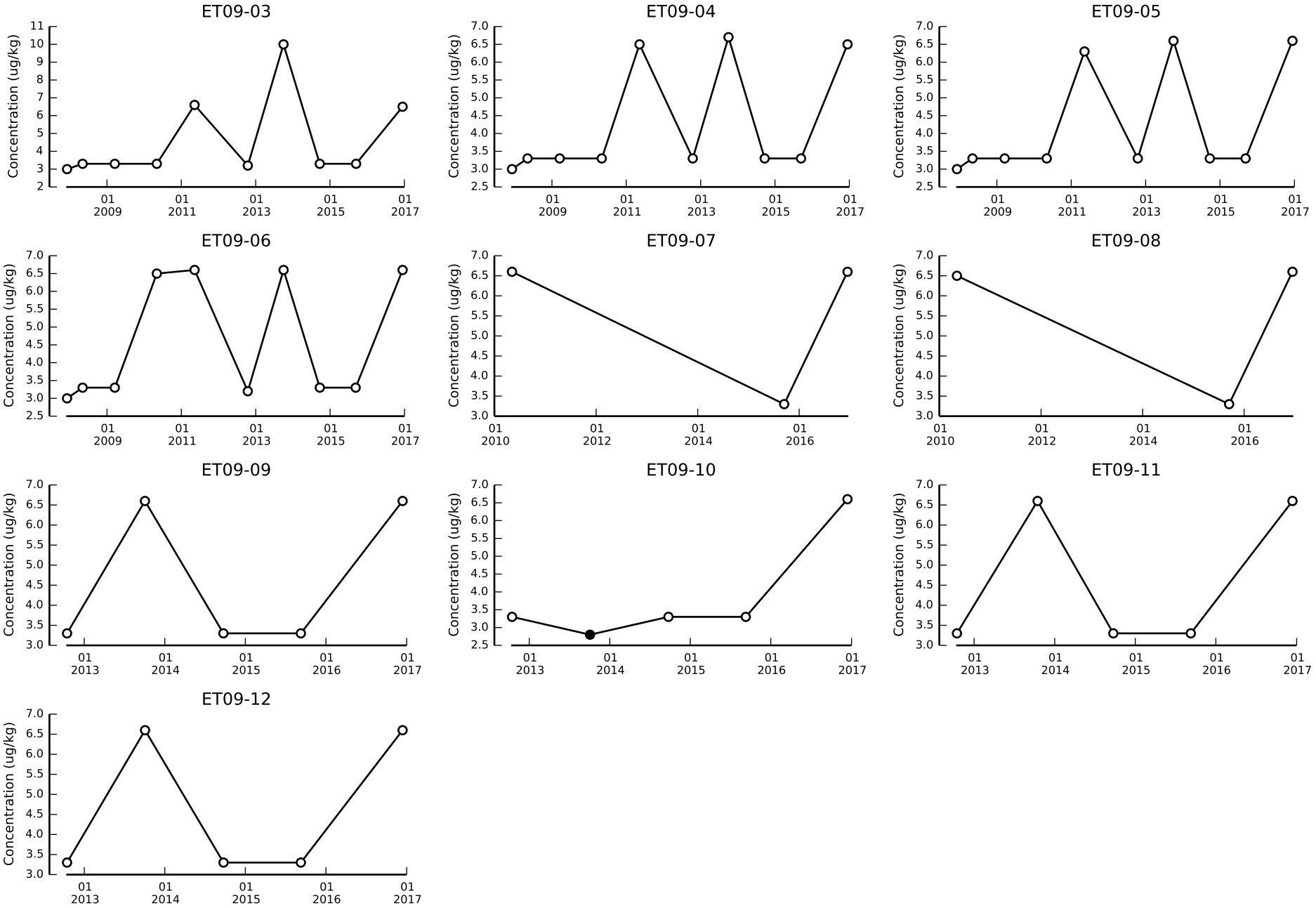
DI-N-OCTYLPHTHALATE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 62 of 105

● Detected
○ Not Detected, shown at detection limit



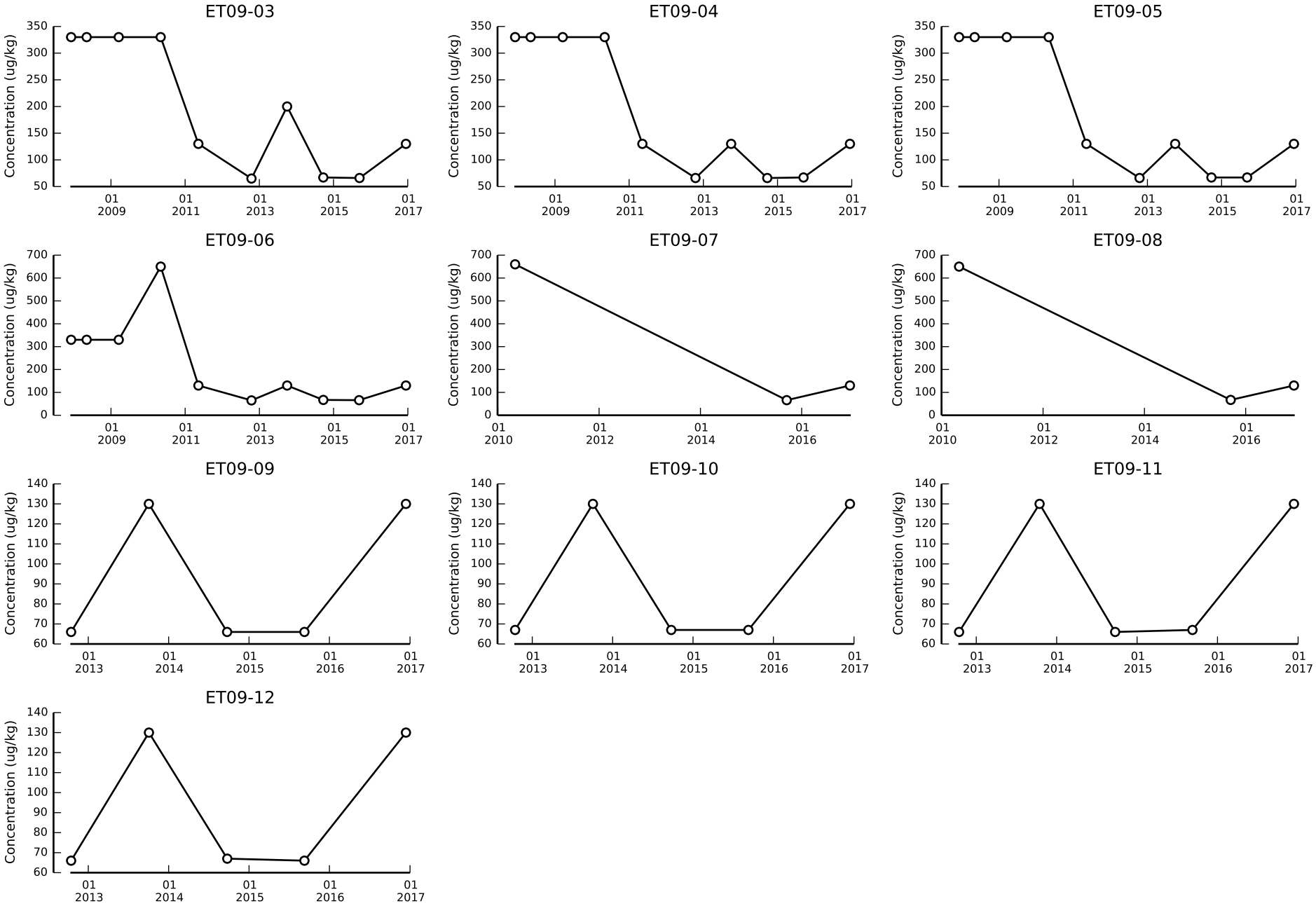
DIBENZ(A,H)ANTHRACENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 63 of 105

● Detected
○ Not Detected, shown at detection limit



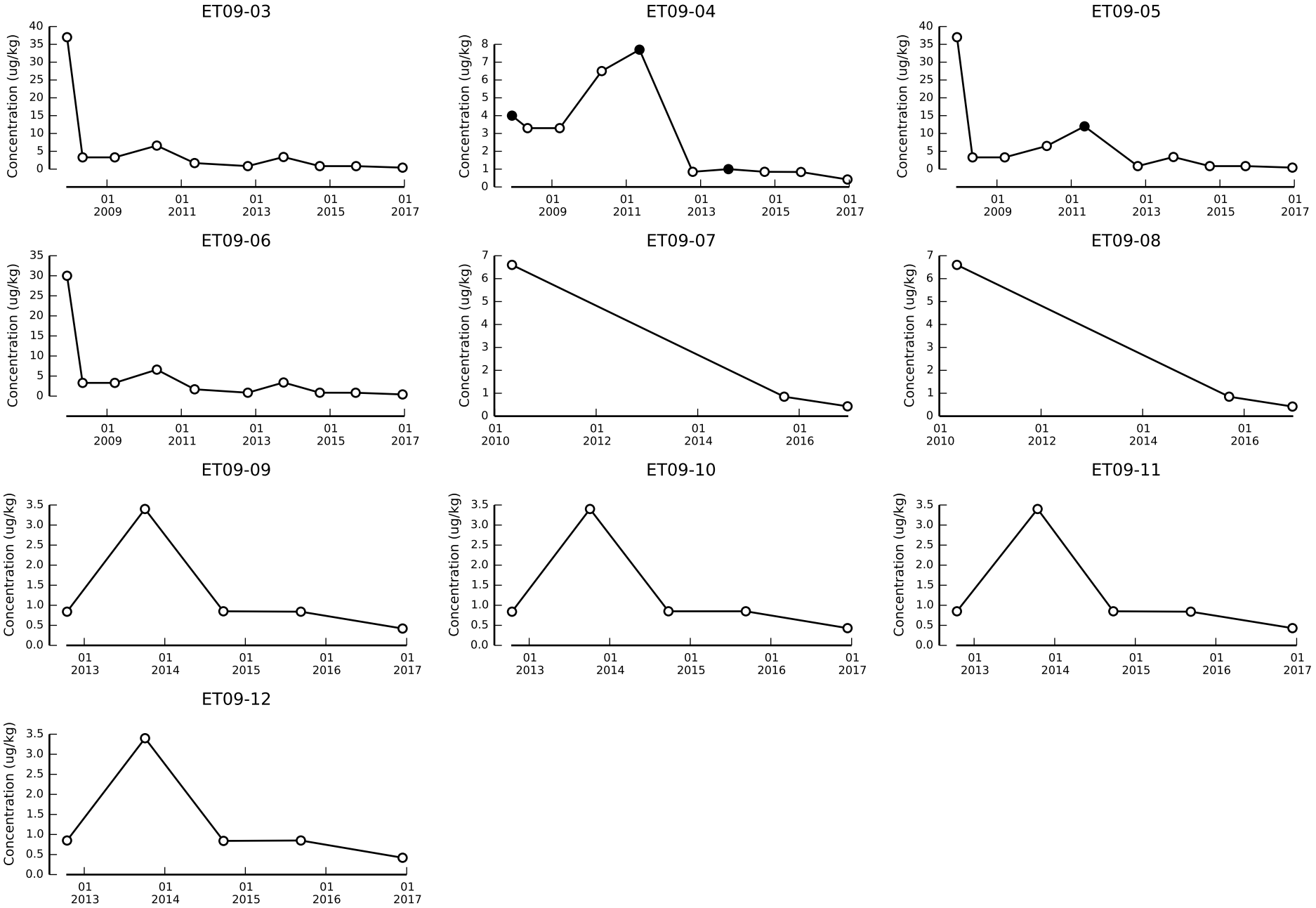
DIBENZOFURAN in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 64 of 105

● Detected
○ Not Detected, shown at detection limit



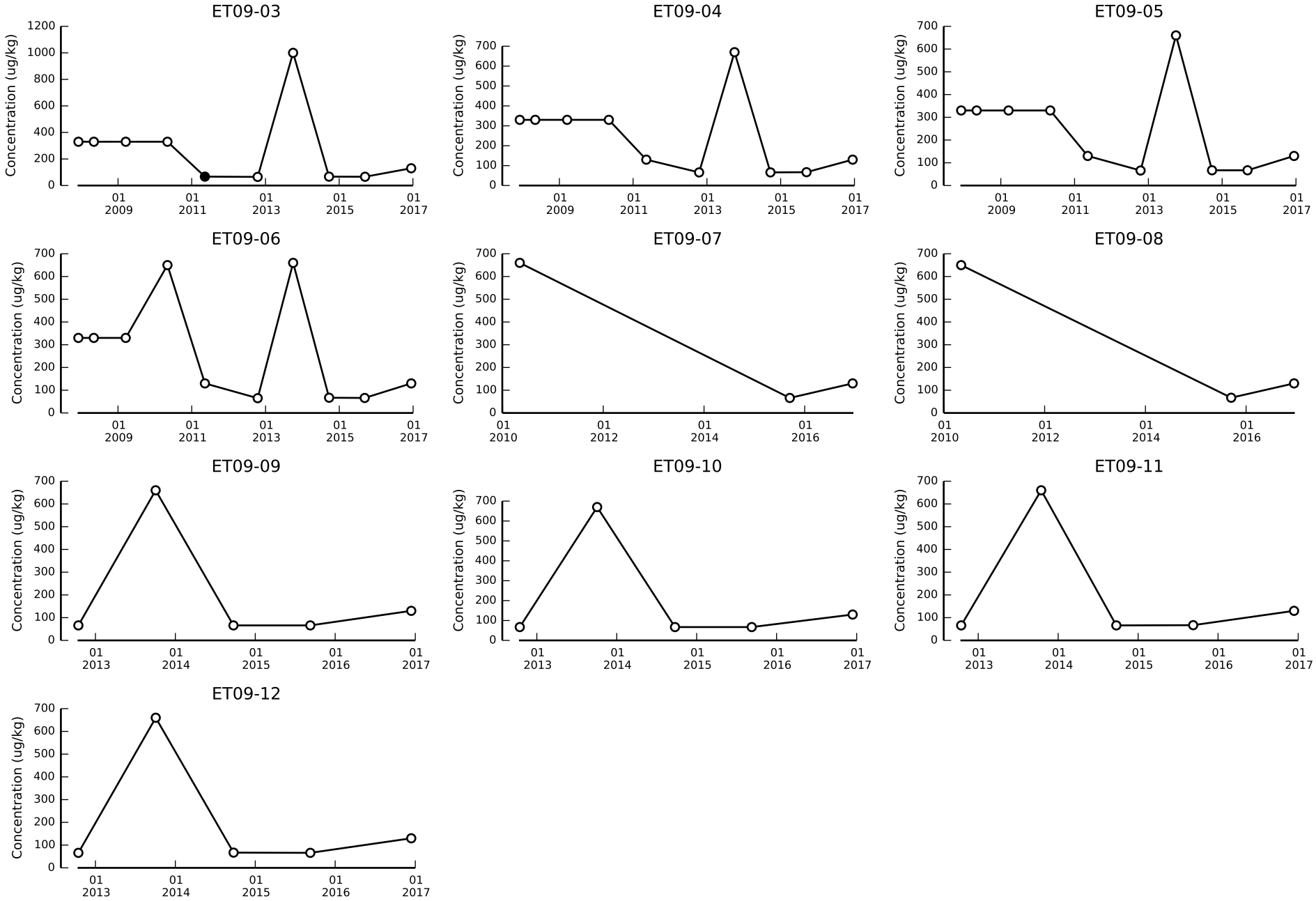
DIELDRIN in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 65 of 105

● Detected
○ Not Detected, shown at detection limit



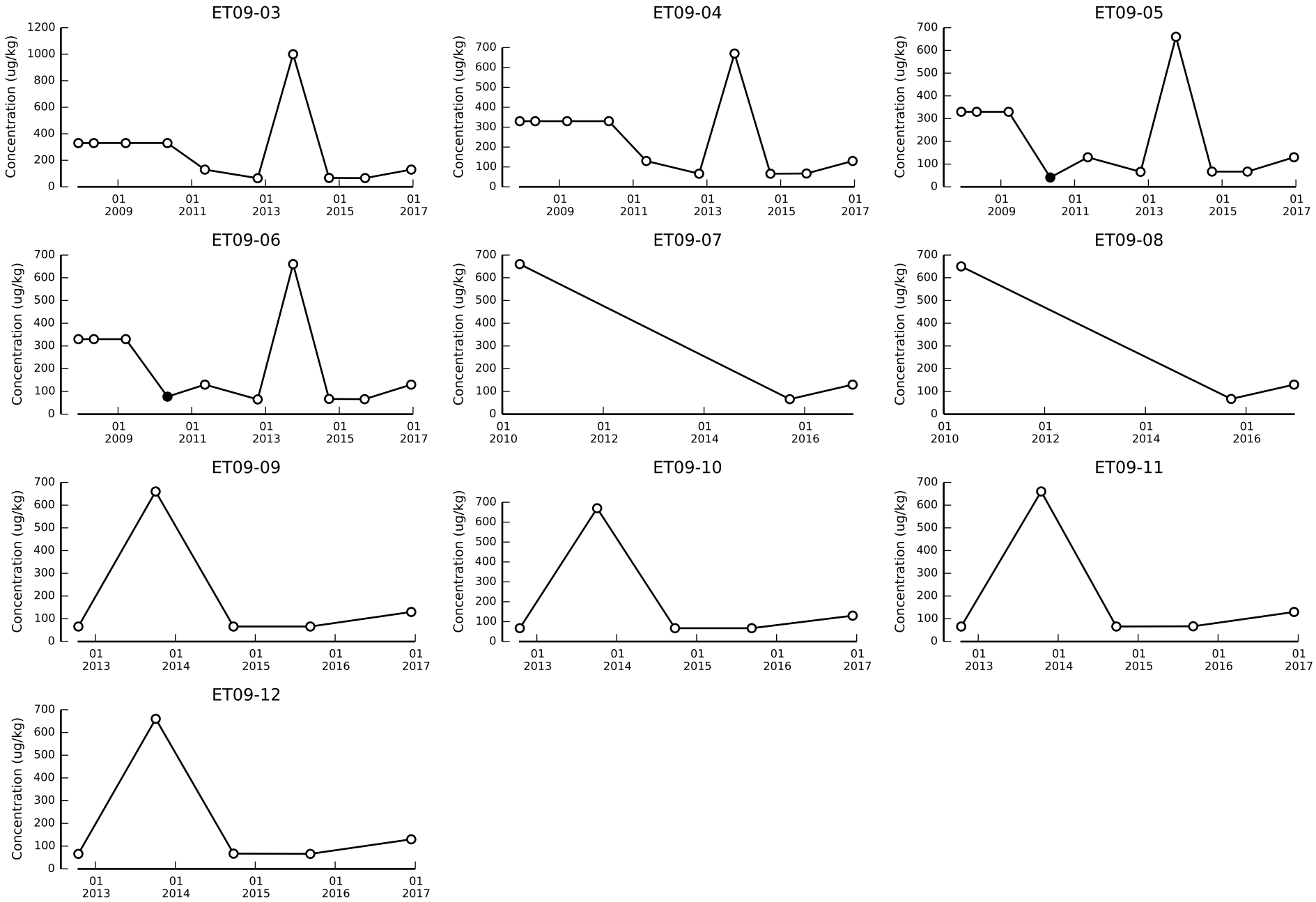
DIETHYLPHTHALATE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 66 of 105

● Detected
○ Not Detected, shown at detection limit



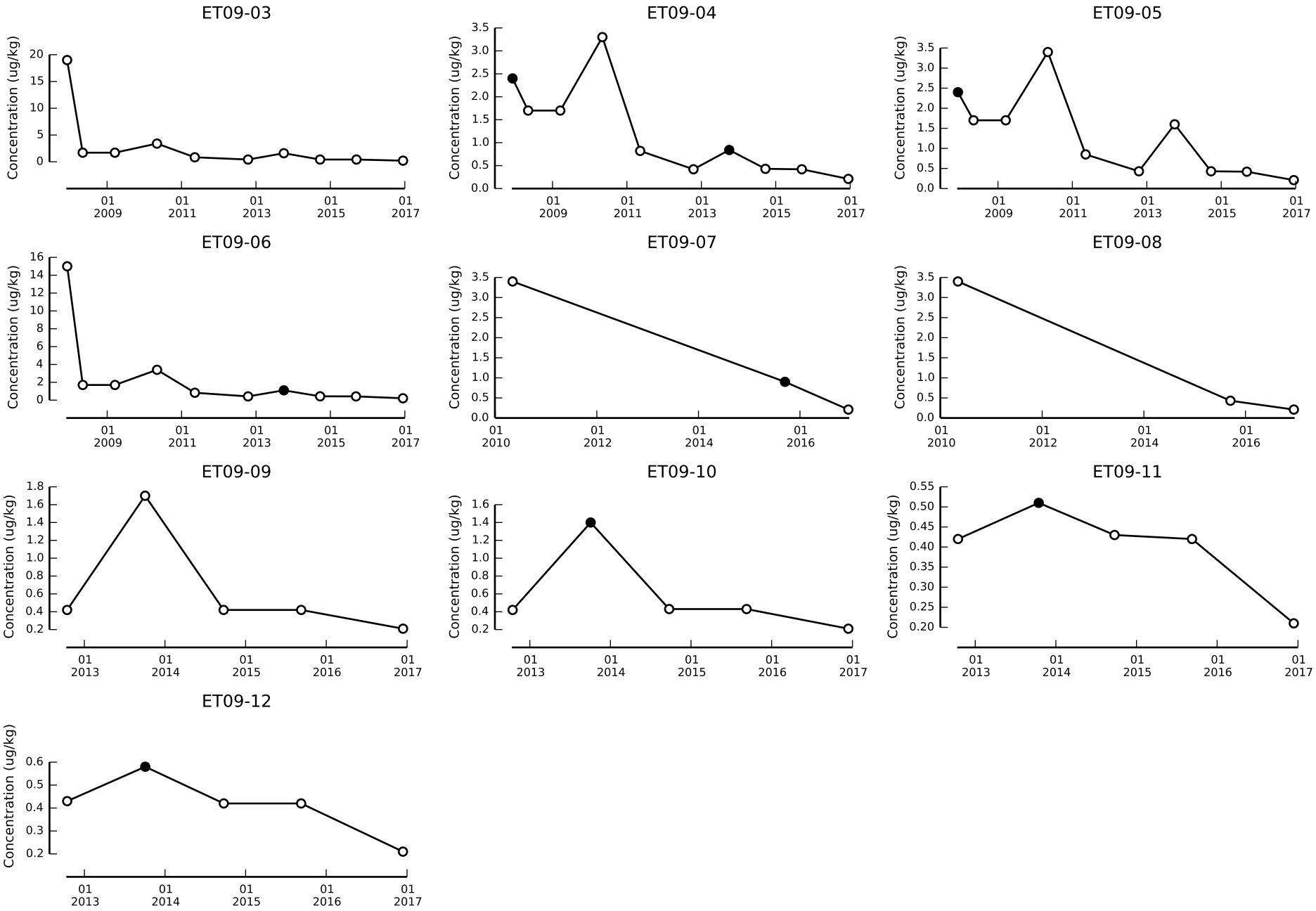
DIMETHYL PHTHALATE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 67 of 105

● Detected
○ Not Detected, shown at detection limit



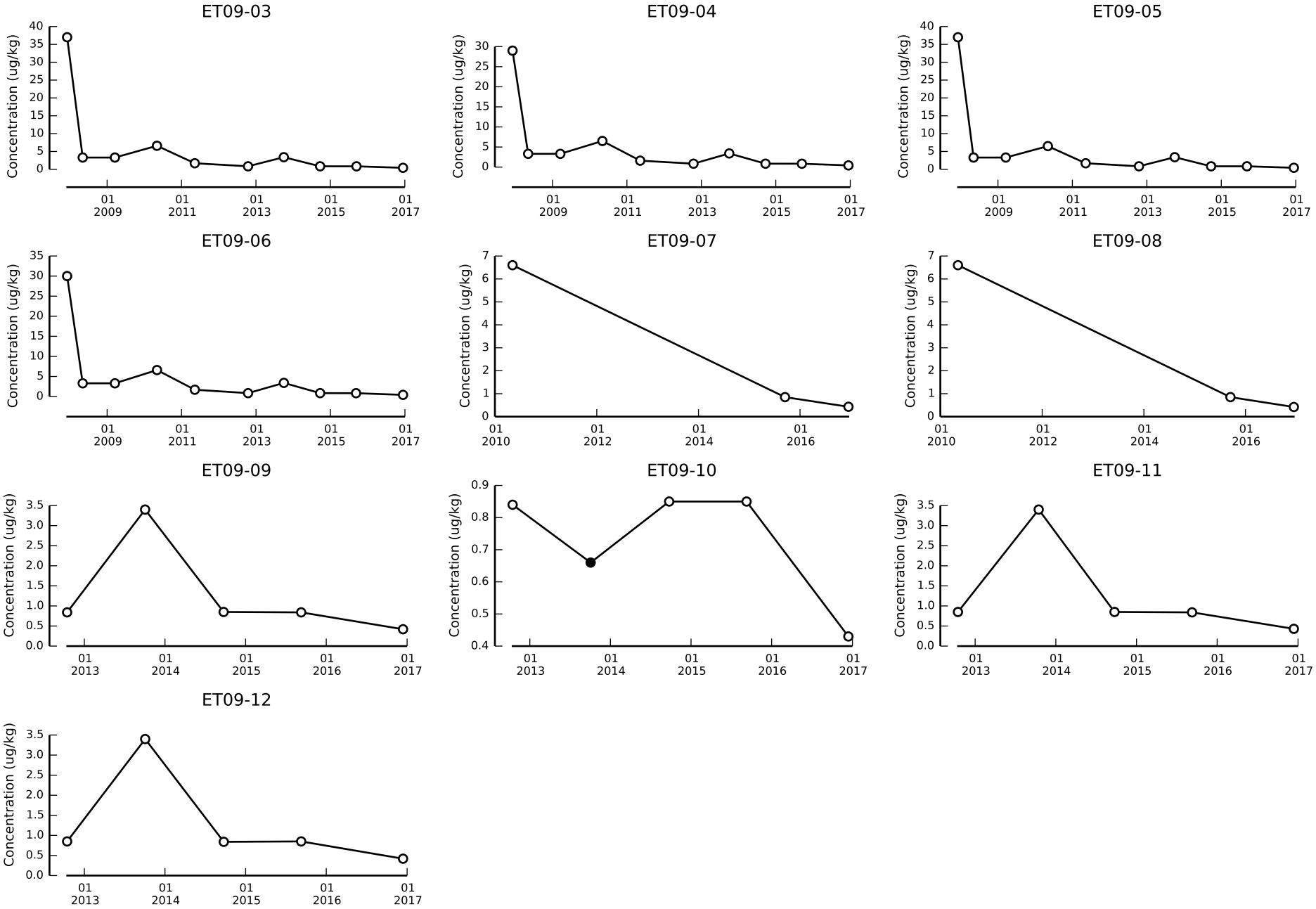
ENDOSULFAN I in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 68 of 105

● Detected
○ Not Detected, shown at detection limit



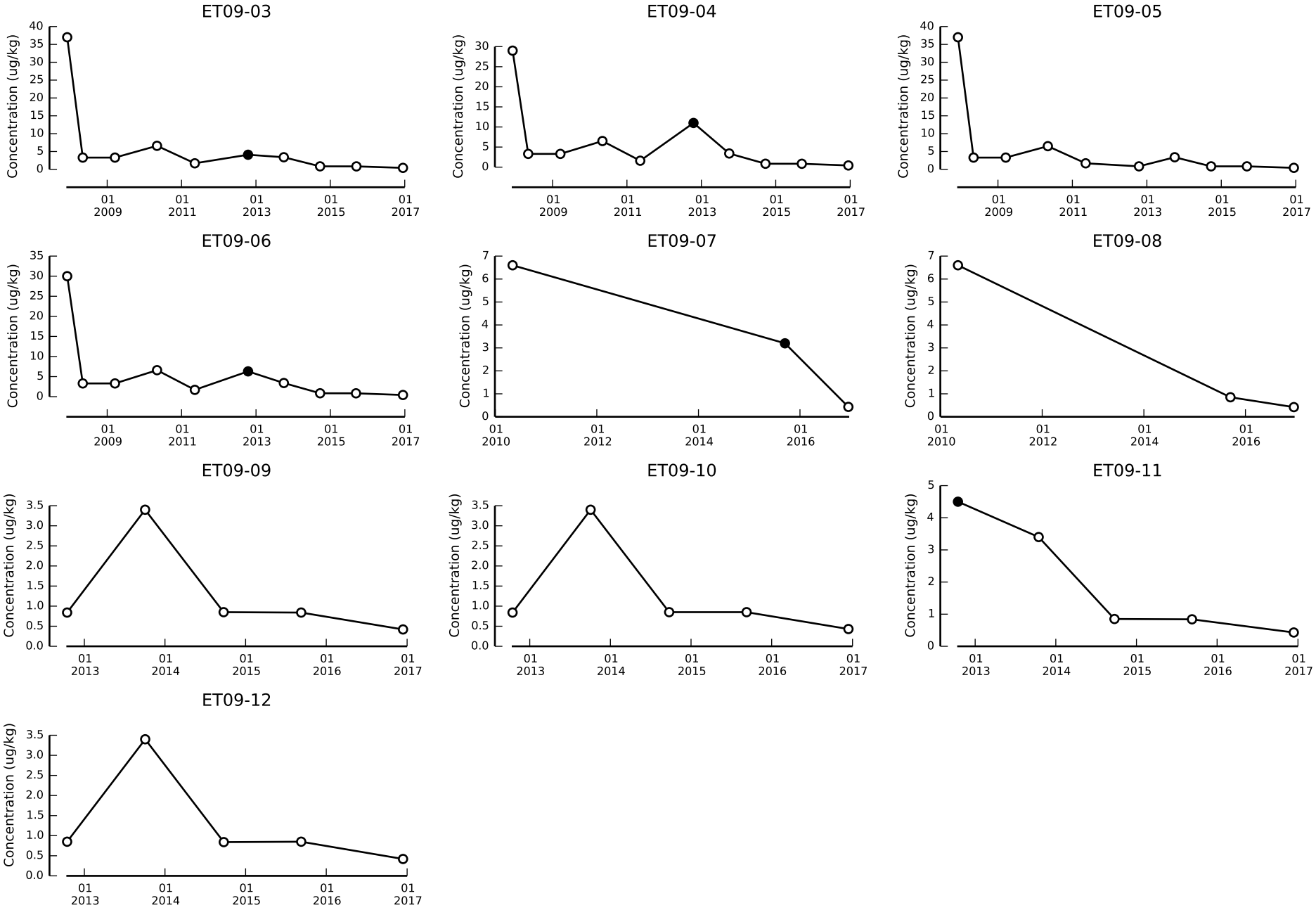
ENDOSULFAN II in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 69 of 105

● Detected
○ Not Detected, shown at detection limit



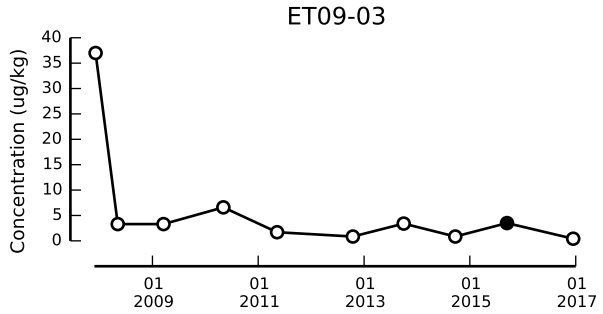
ENDOSULFAN SULFATE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 70 of 105

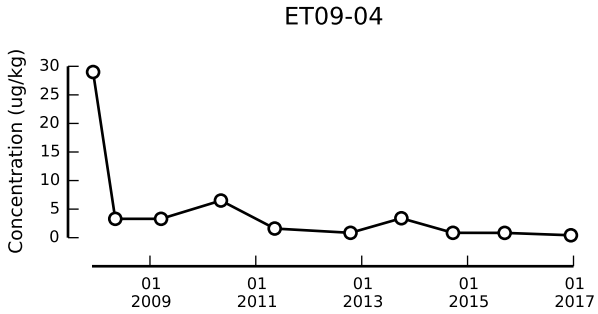
● Detected
○ Not Detected, shown at detection limit

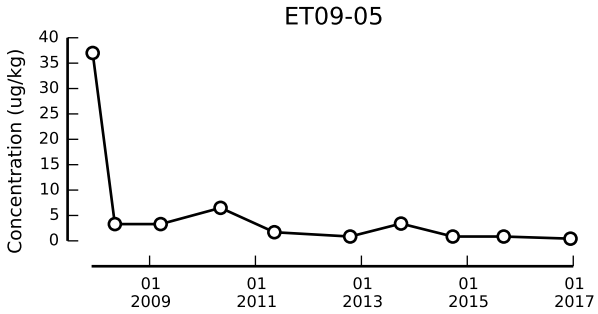


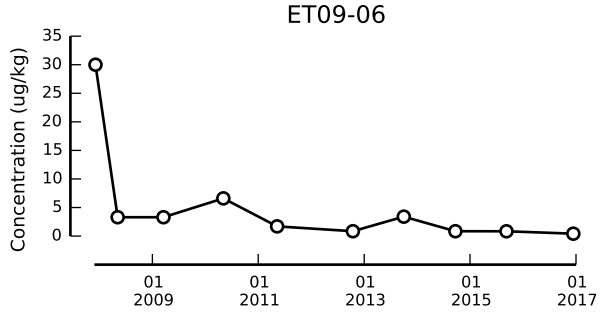
ENDRIN in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 71 of 105

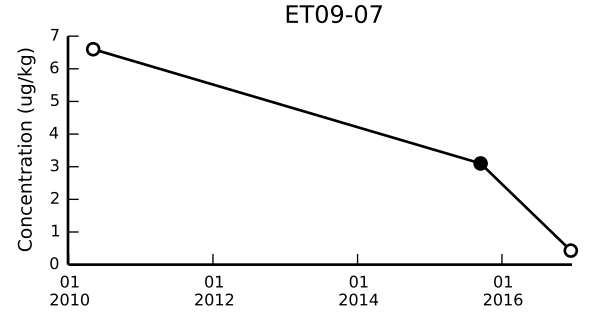
● Detected
○ Not Detected, shown at detection limit

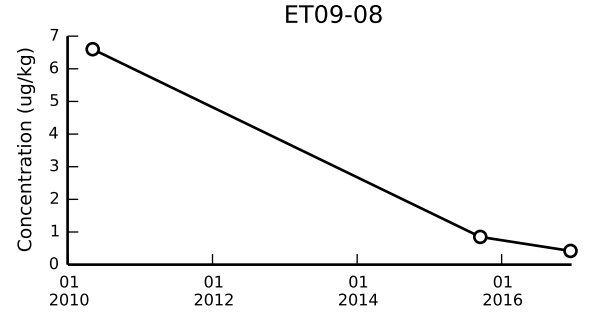


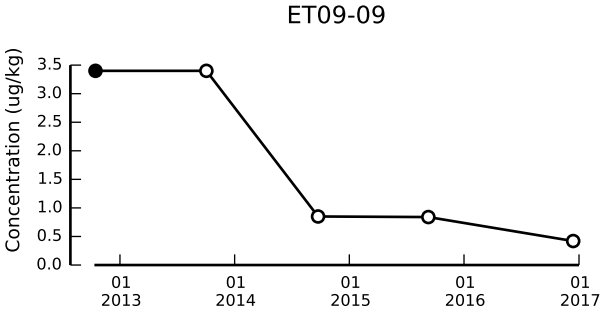


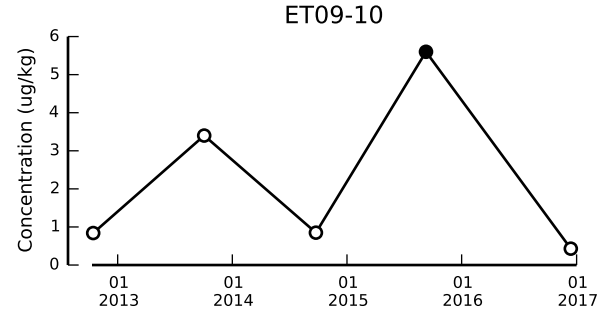


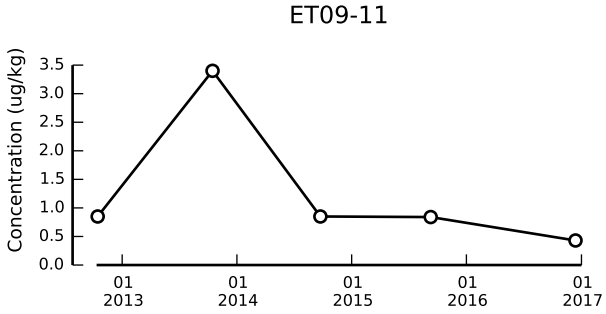


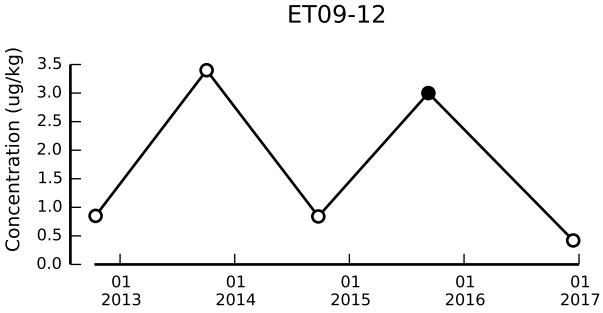






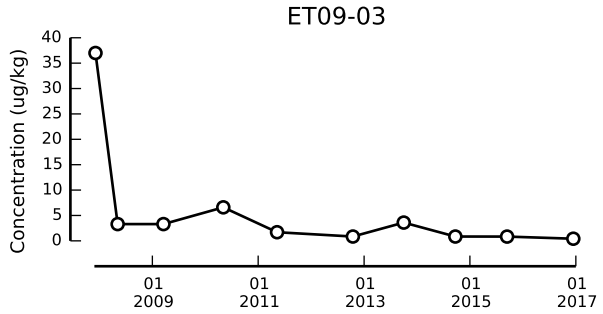


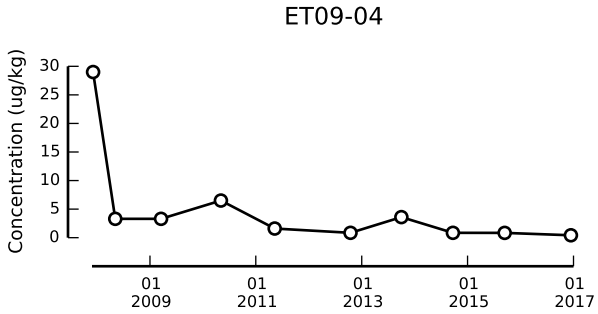


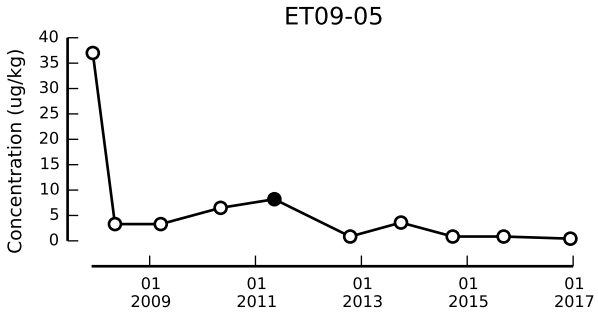


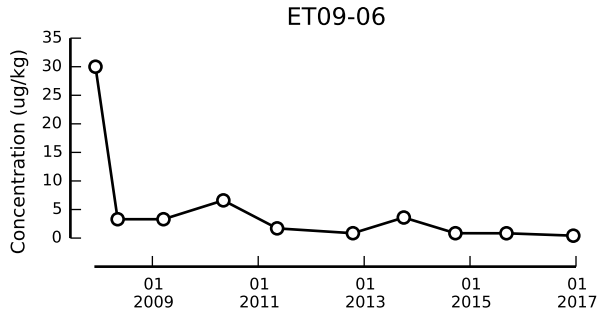
ENDRIN KETONE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 72 of 105

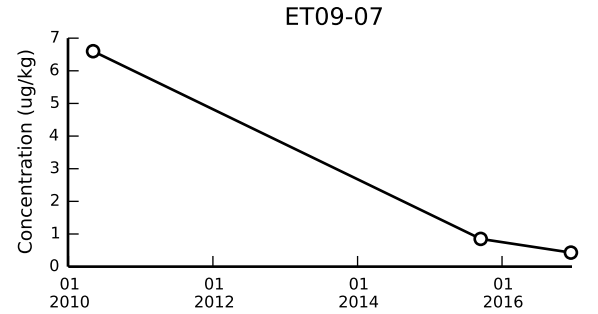
● Detected
○ Not Detected, shown at detection limit

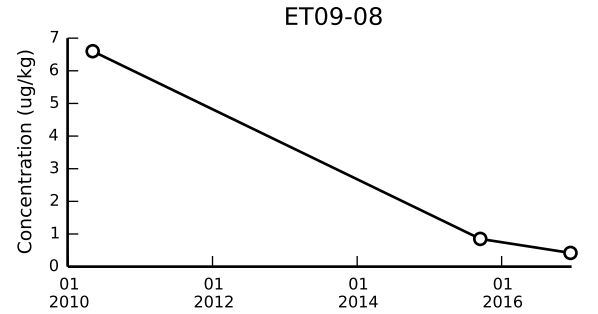


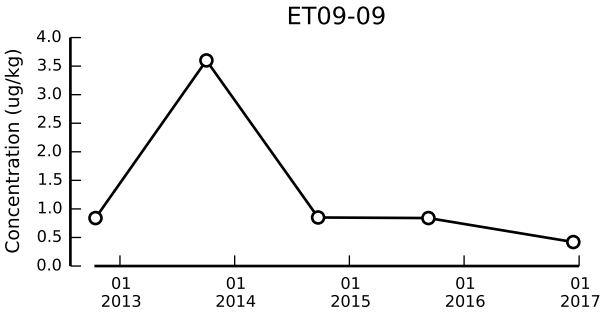


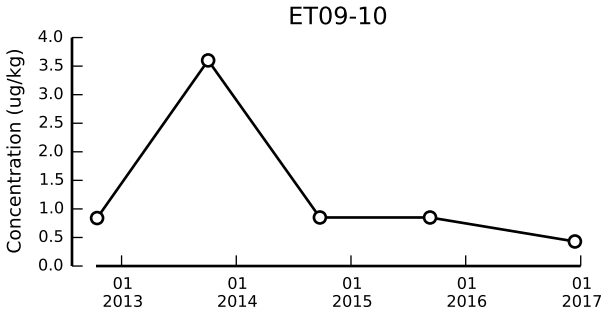


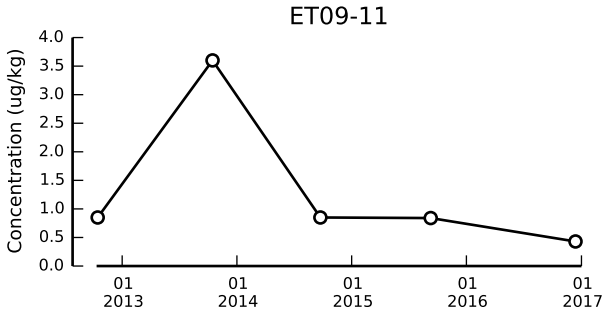


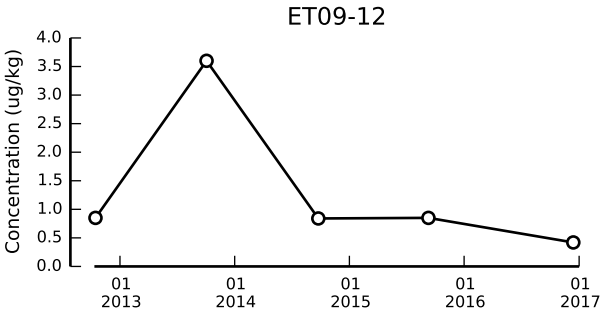






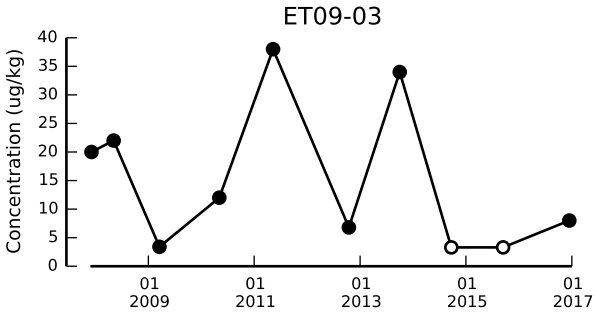


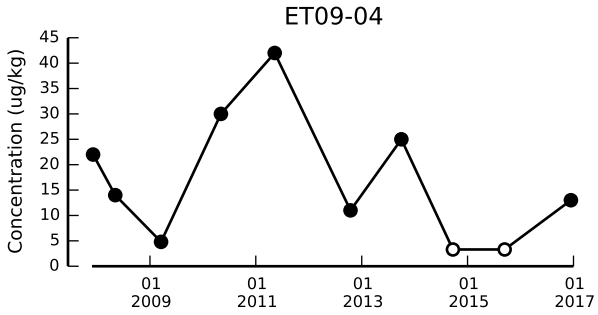


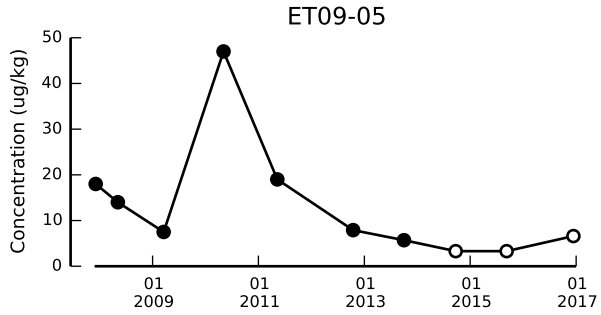


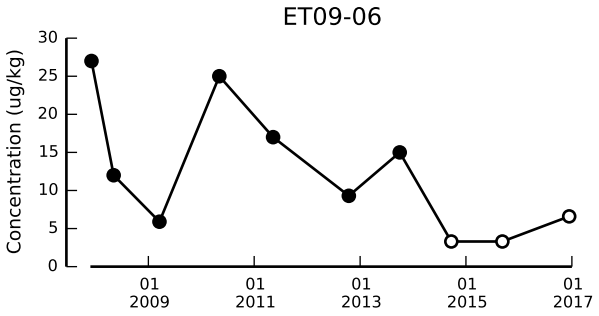
FLUORANTHENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 73 of 105

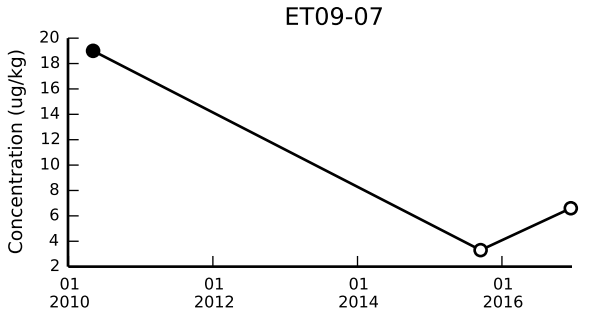
● Detected
○ Not Detected, shown at detection limit

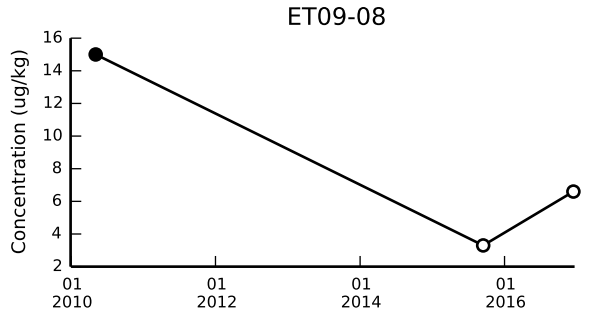


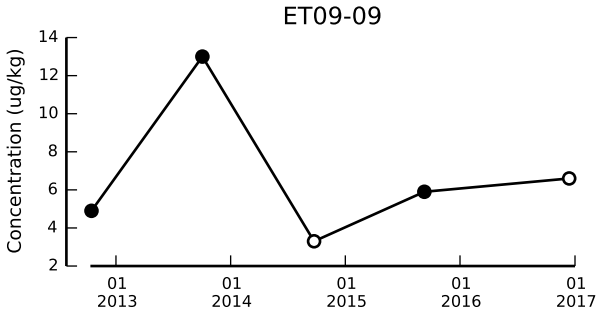


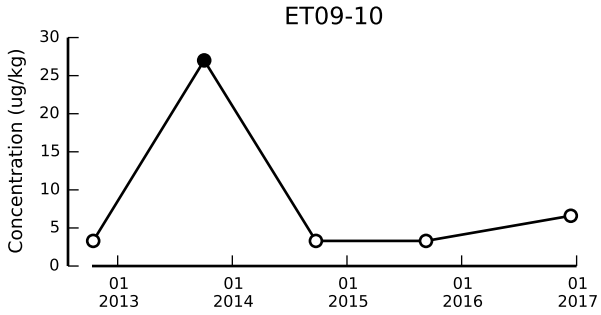


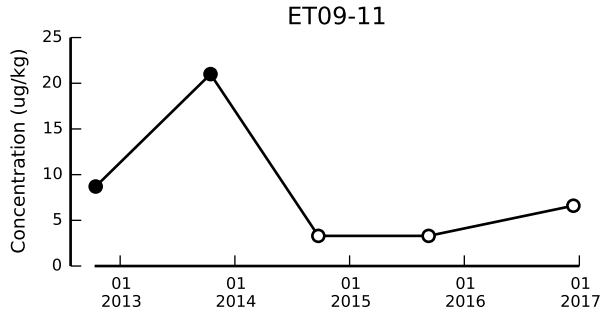


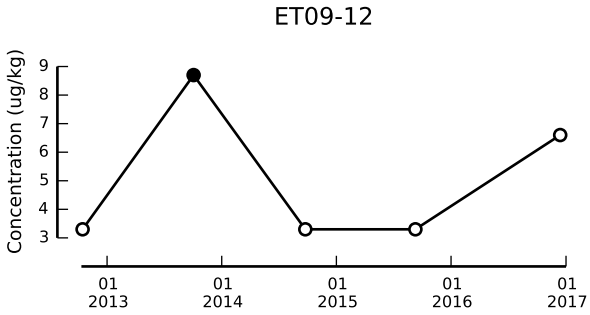






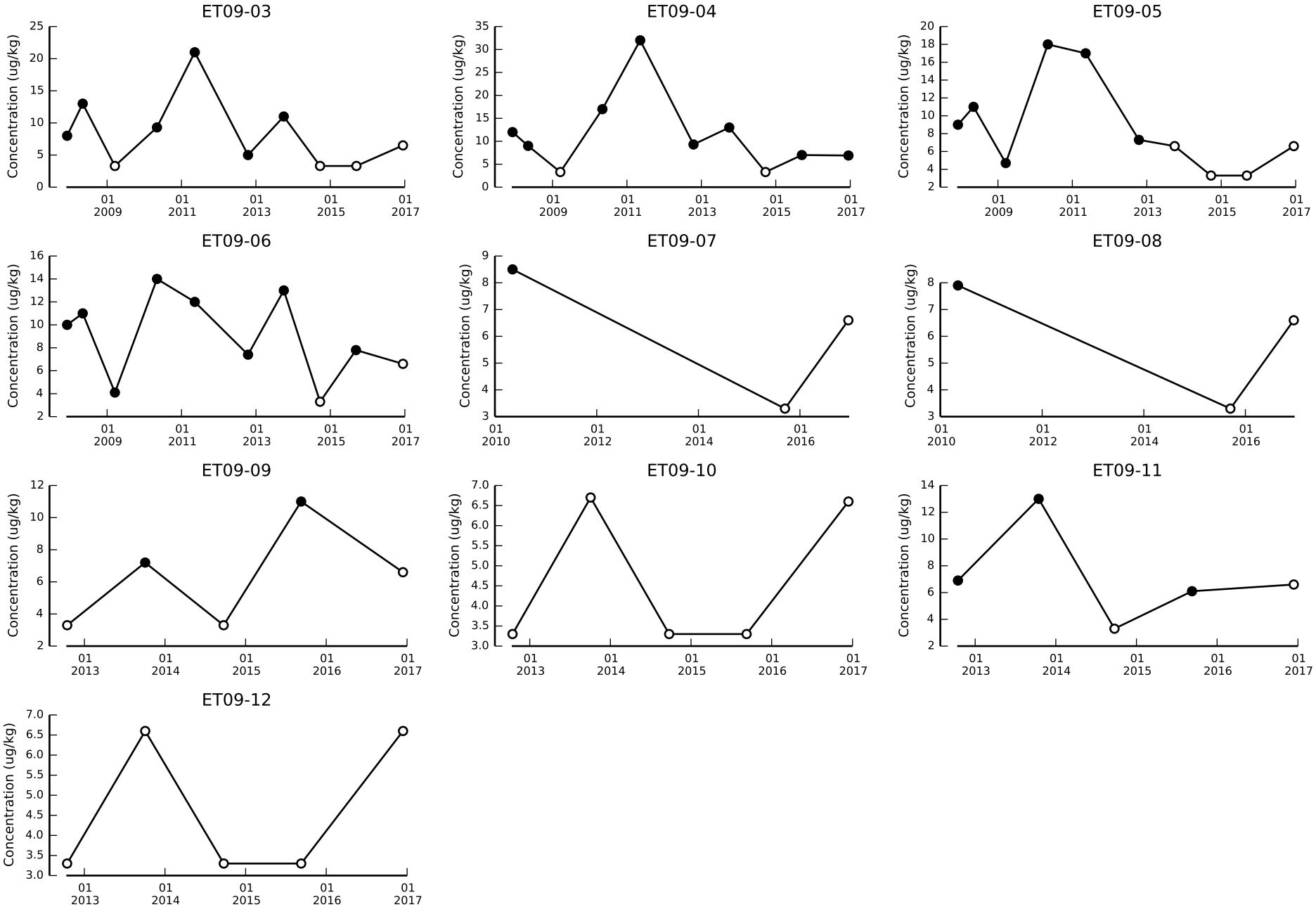






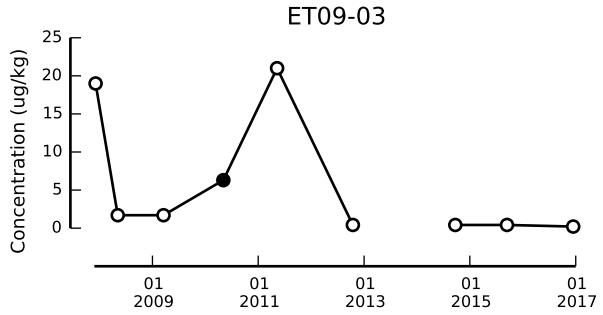
FLUORENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 74 of 105

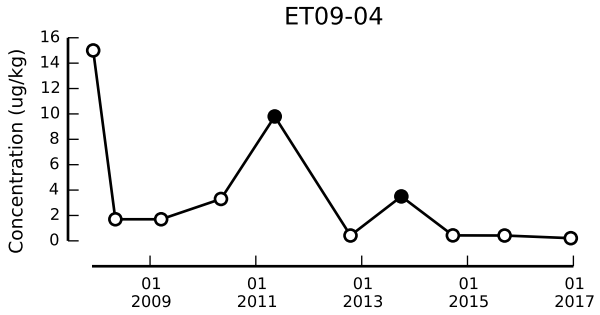
● Detected
○ Not Detected, shown at detection limit

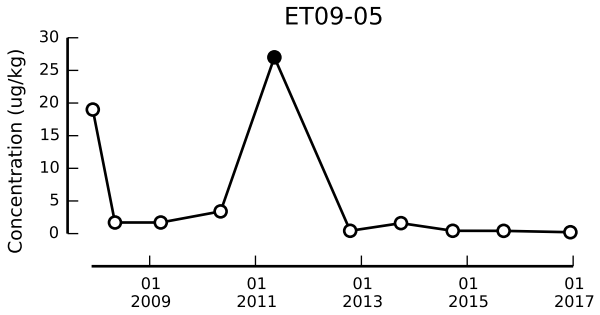


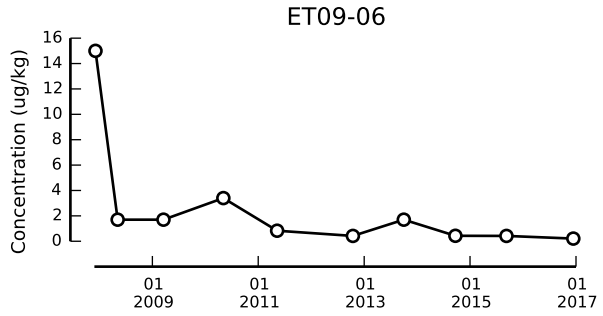
HEPTACHLOR in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 75 of 105

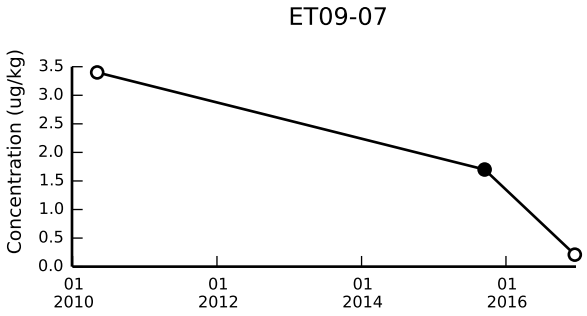
● Detected
○ Not Detected, shown at detection limit

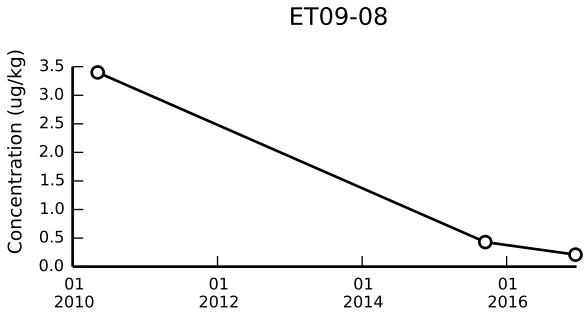


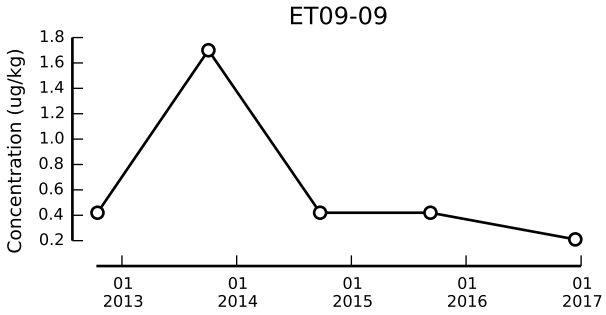


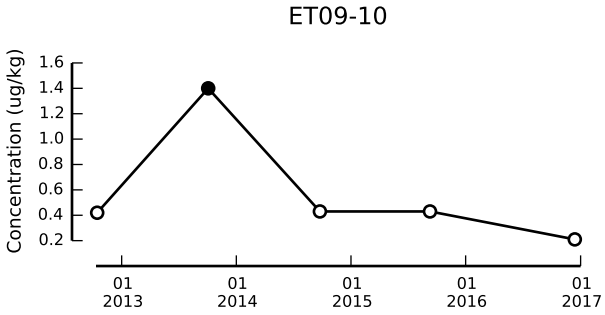


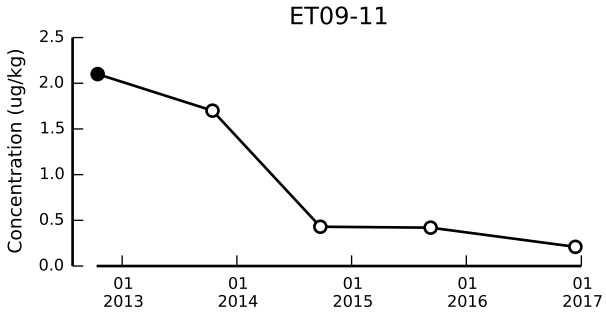


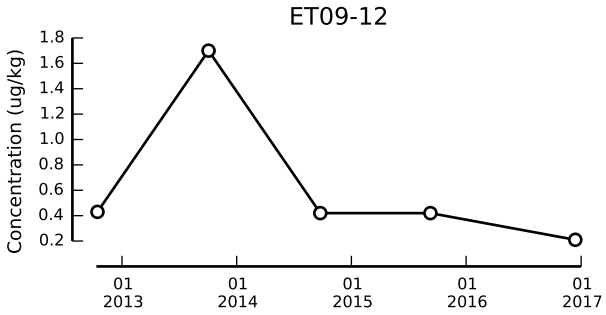








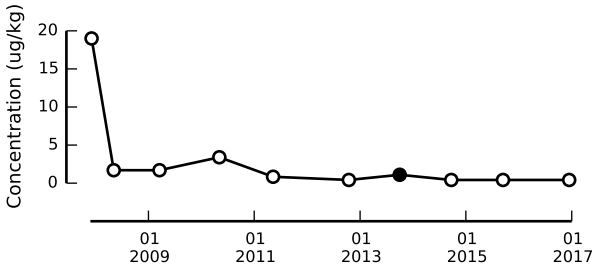




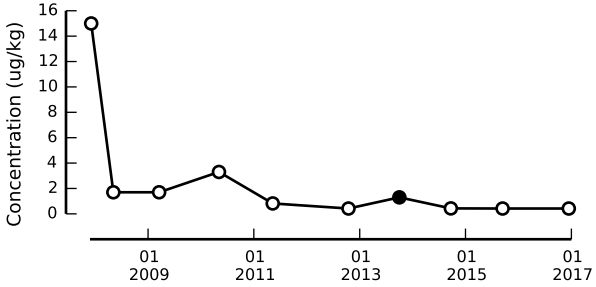
HEPTACHLOR EPOXIDE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 76 of 105

● Detected
○ Not Detected, shown at detection limit

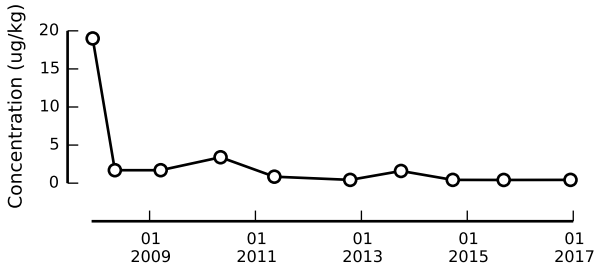
ET09-03



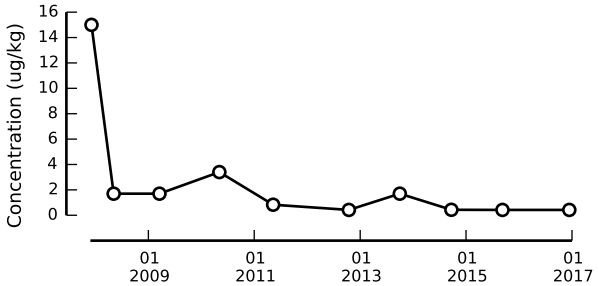
ET09-04



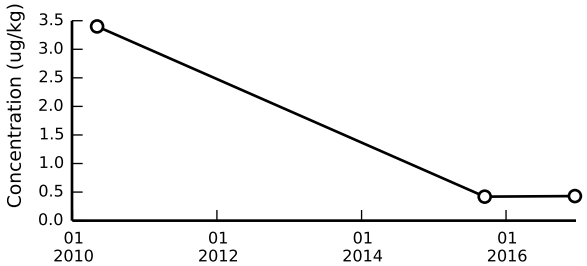
ET09-05



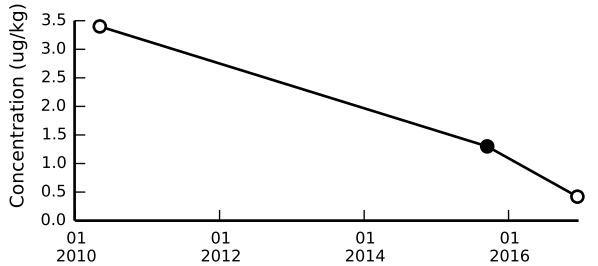
ET09-06



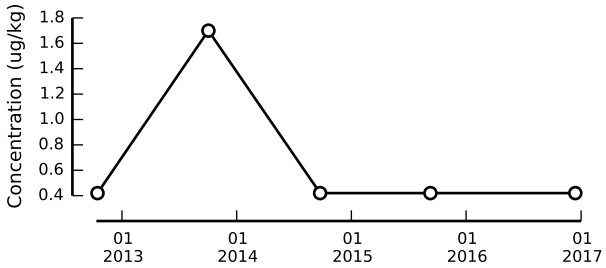
ET09-07



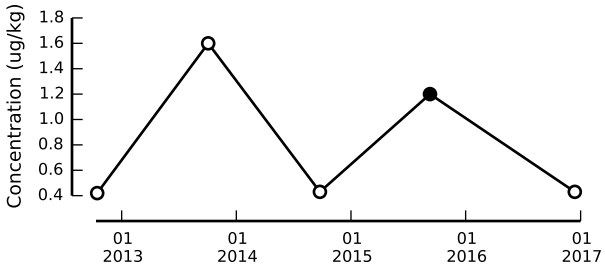
ET09-08



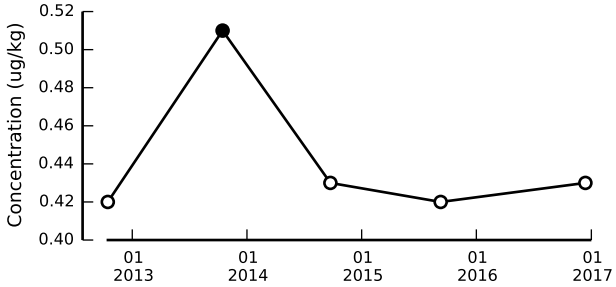
ET09-09



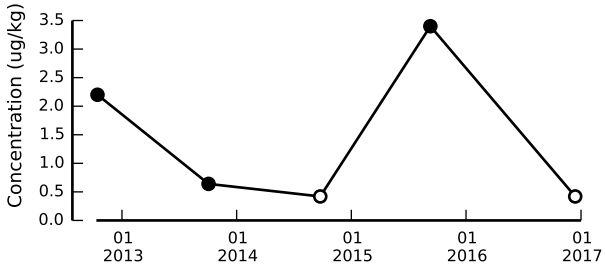
ET09-10



ET09-11

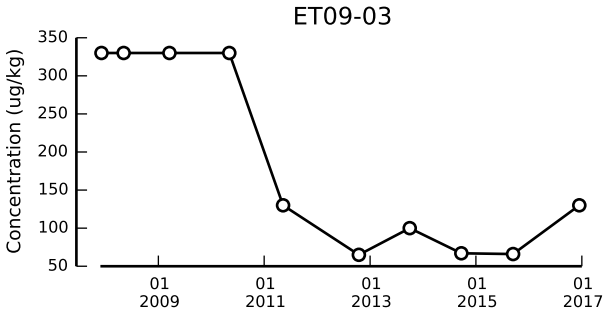


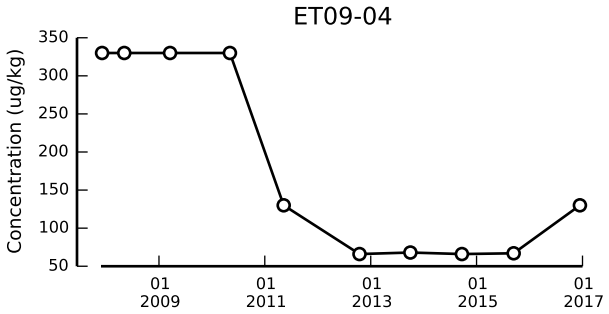
ET09-12

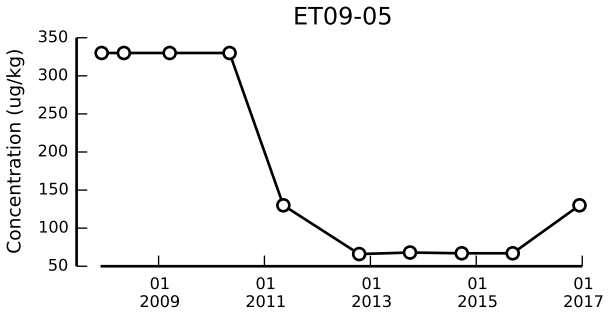


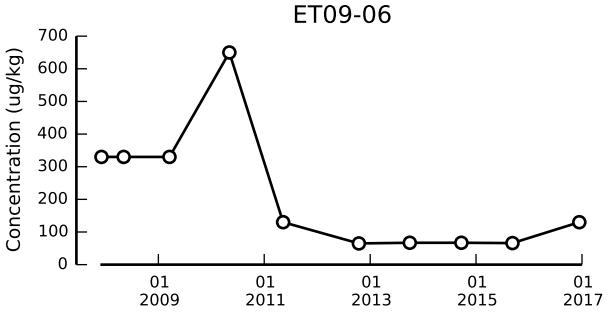
HEXACHLOROBENZENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 77 of 105

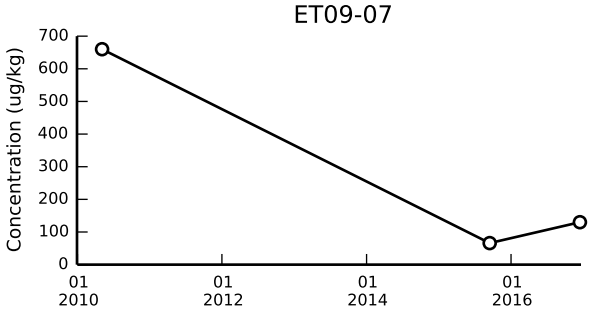
● Detected
○ Not Detected, shown at detection limit

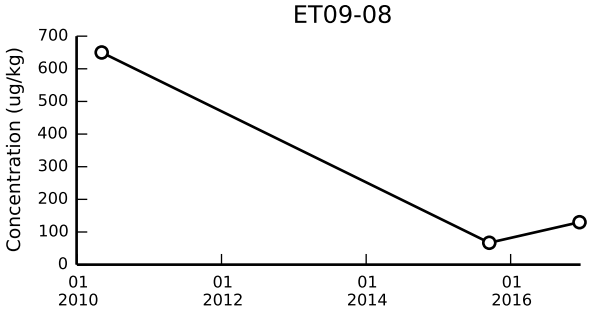


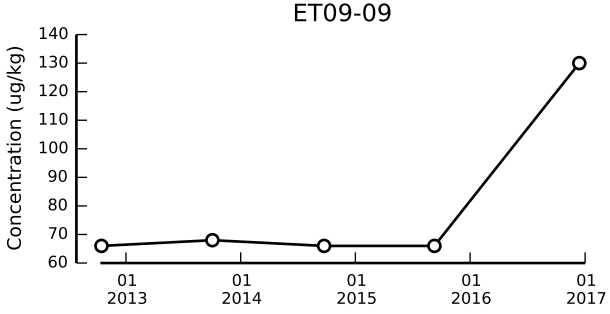


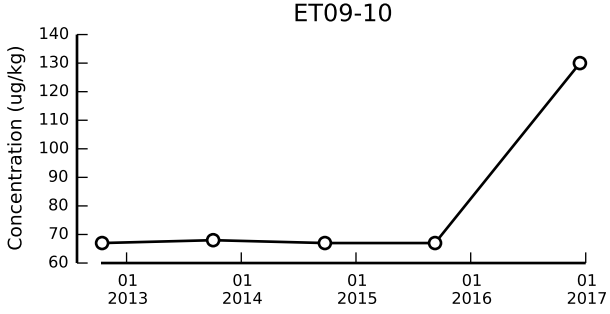


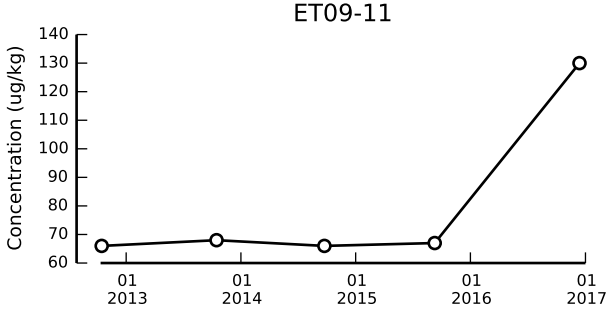


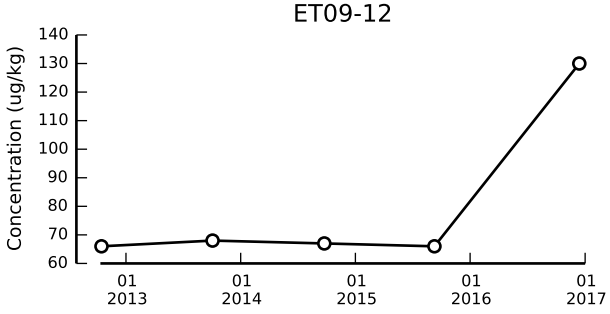






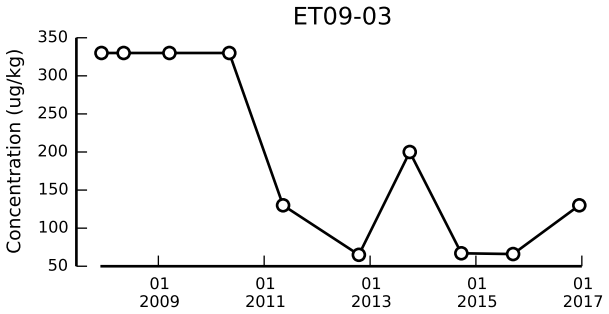


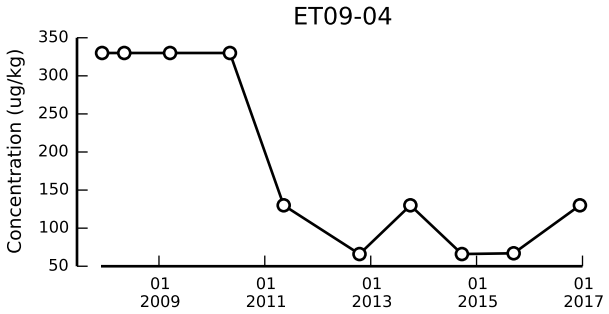


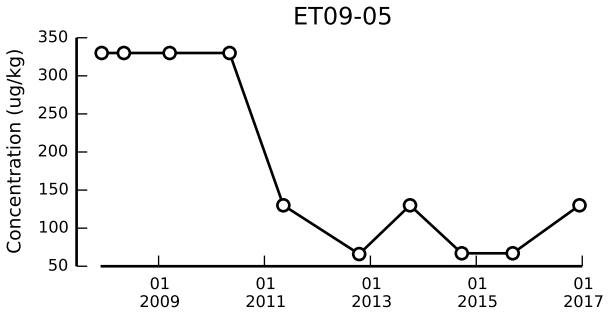


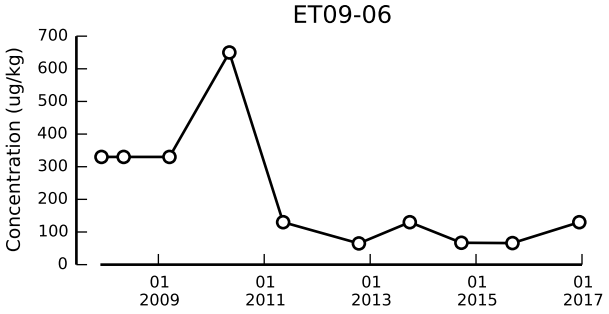
HEXACHLOROBUTADIENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 78 of 105

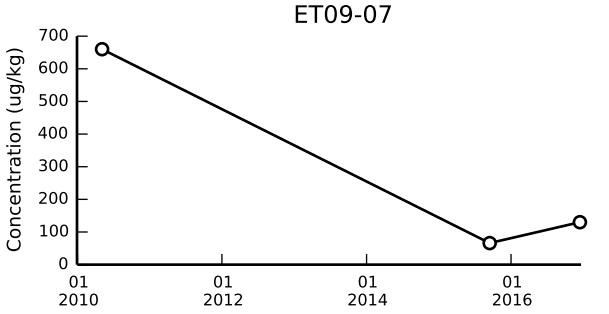
● Detected
○ Not Detected, shown at detection limit

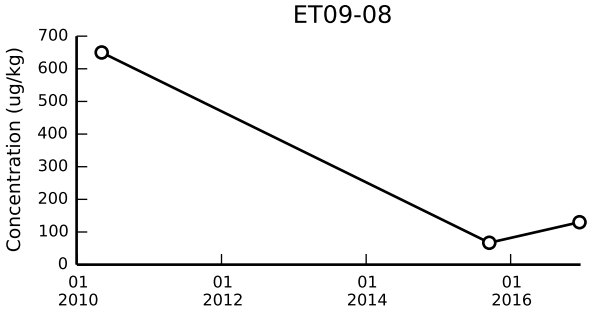


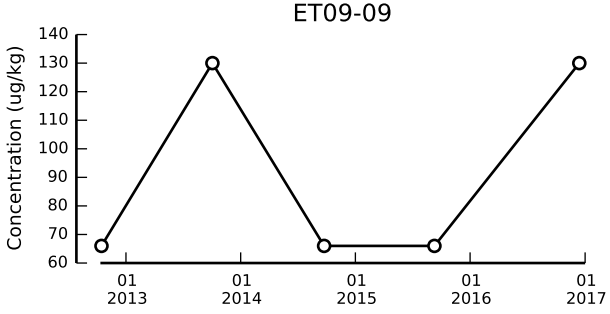


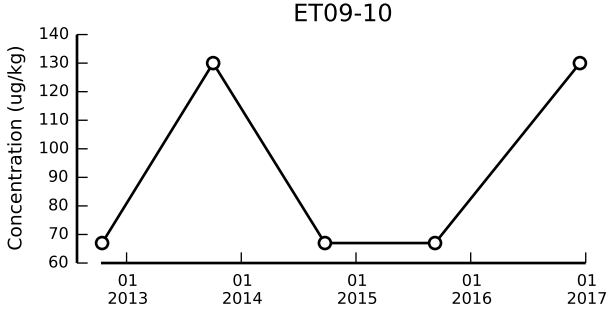


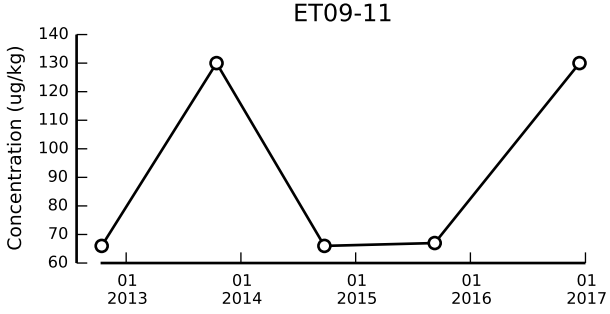


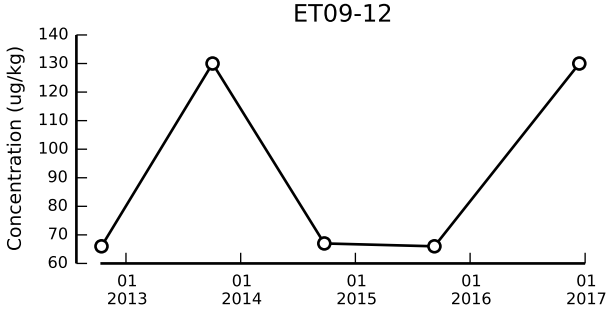






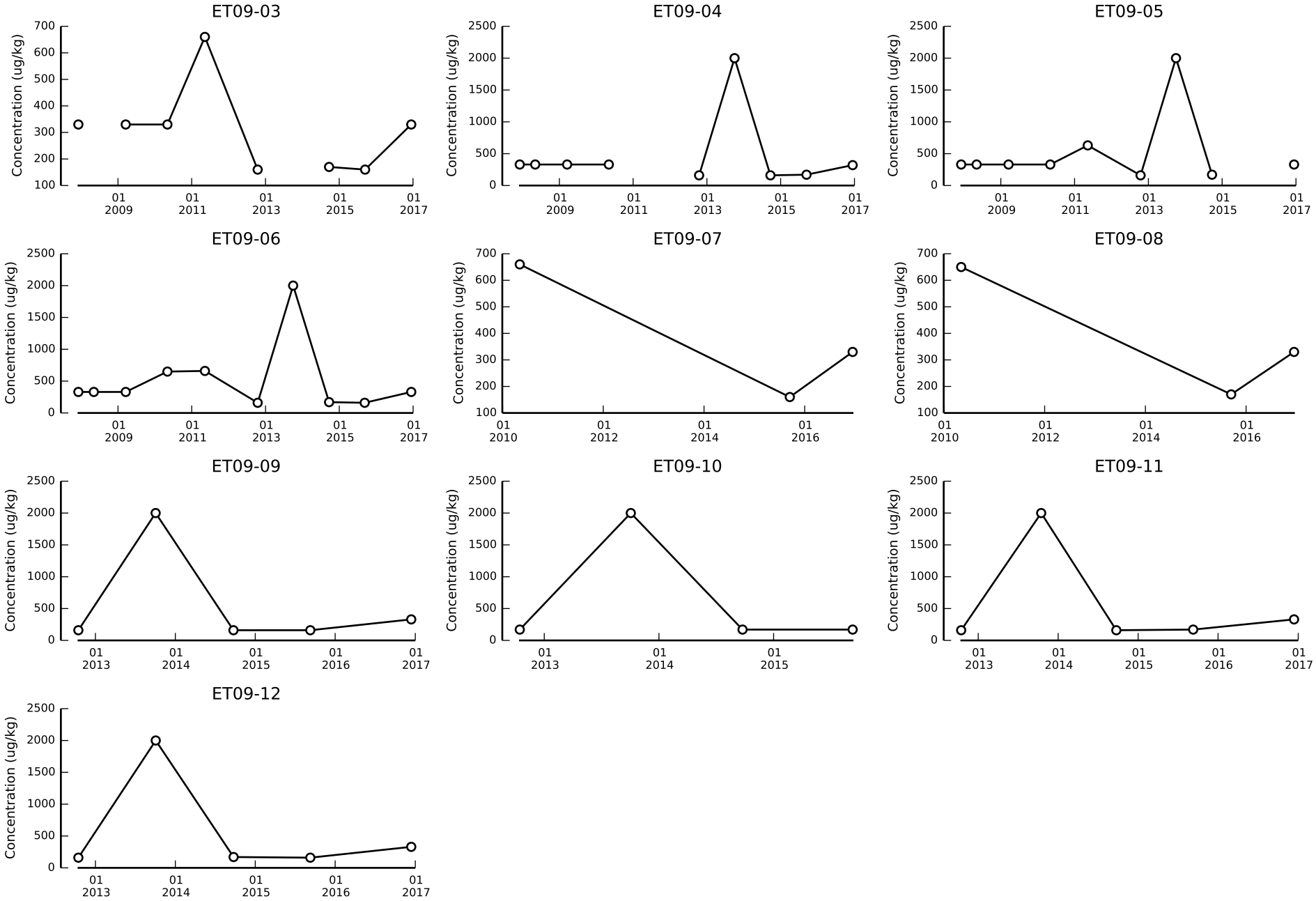






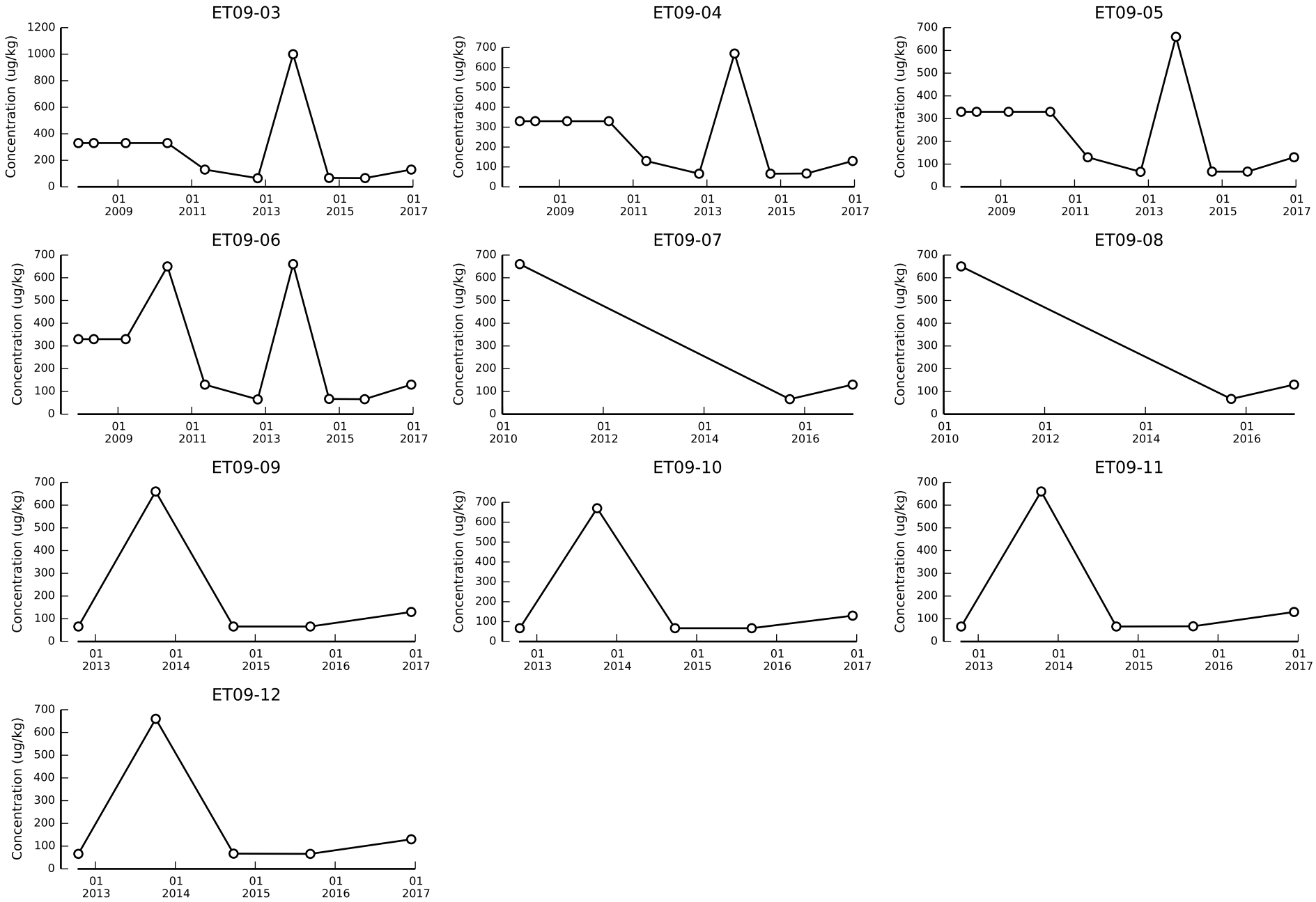
HEXACHLOROCYCLOPENTADIENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 79 of 105

● Detected
○ Not Detected, shown at detection limit



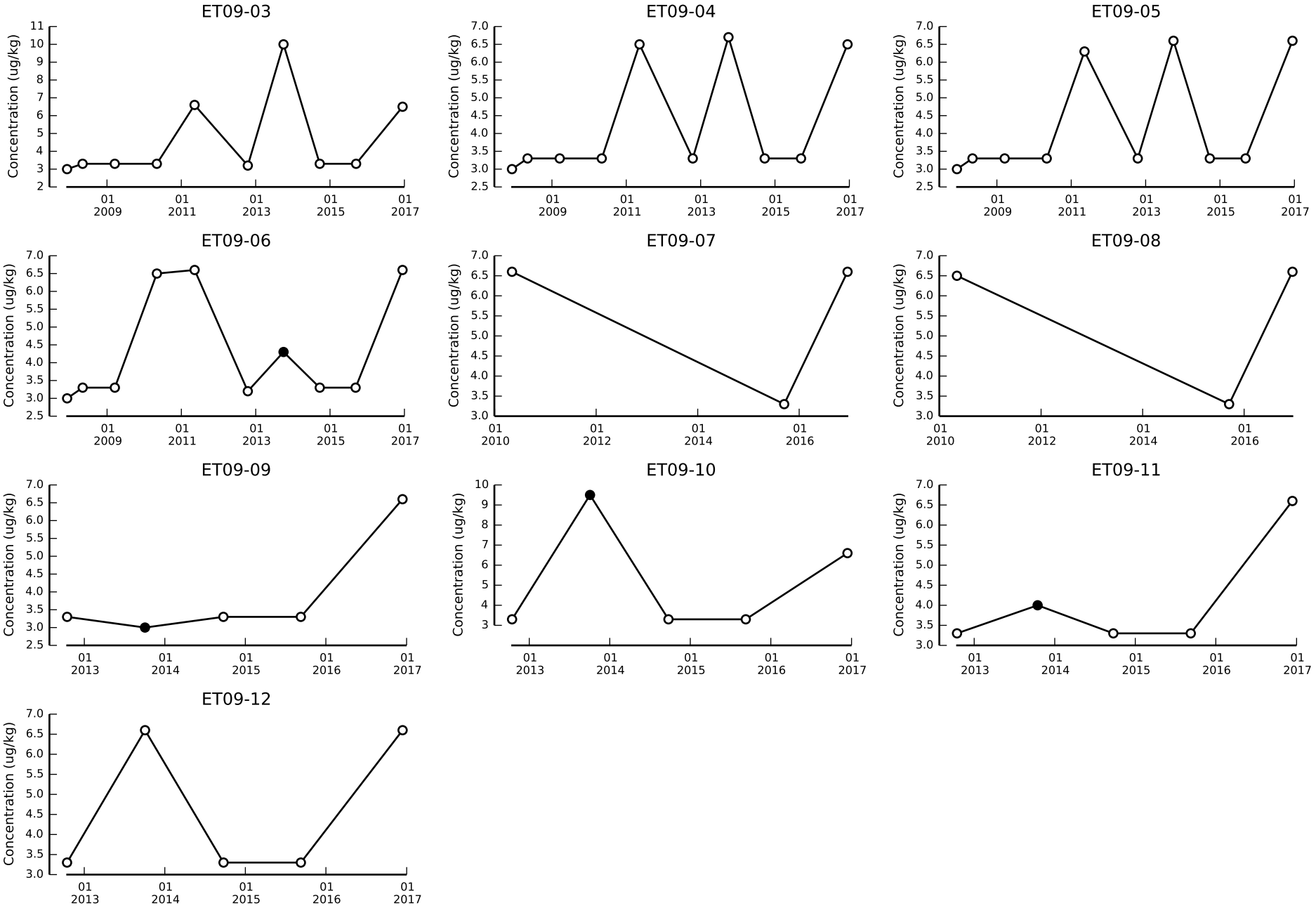
HEXACHLOROETHANE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 80 of 105

● Detected
○ Not Detected, shown at detection limit



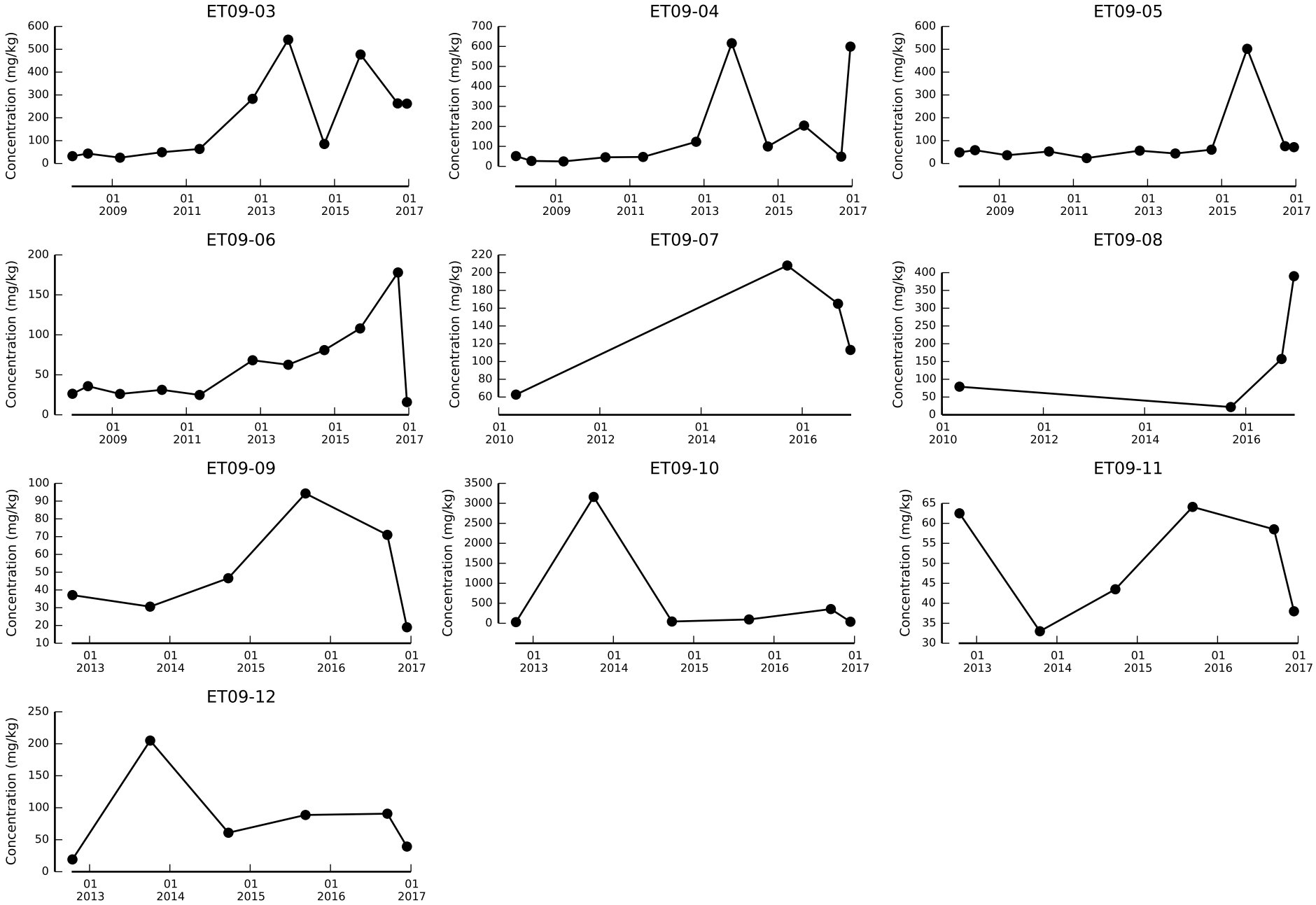
INDENO(1,2,3-CD)PYRENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 81 of 105

● Detected
○ Not Detected, shown at detection limit



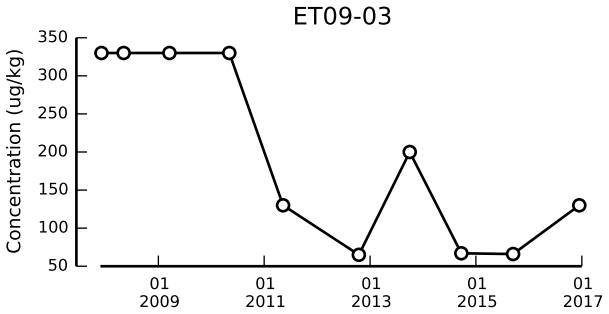
IRON in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 82 of 105

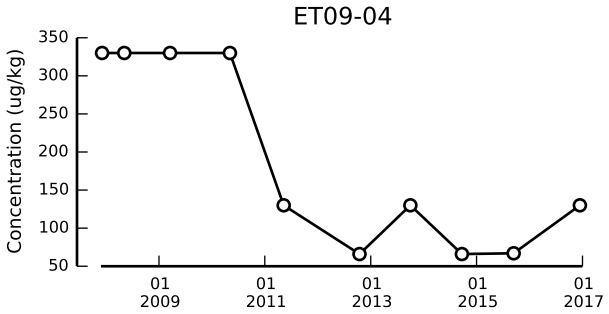
● Detected
○ Not Detected, shown at detection limit

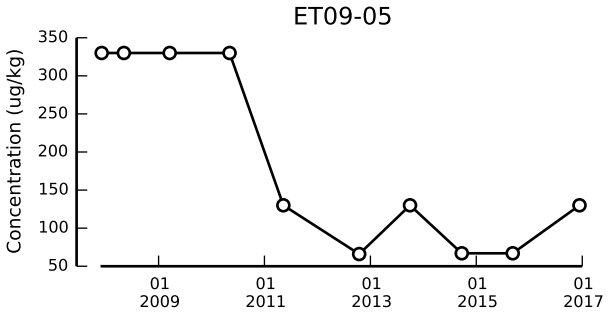


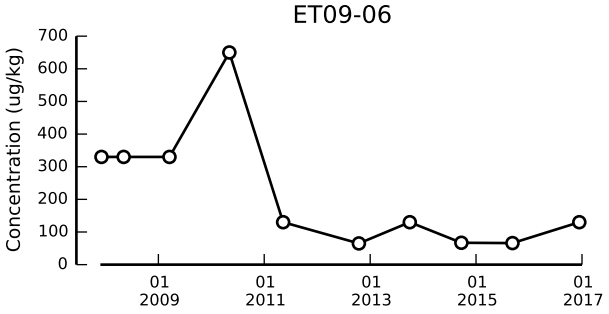
ISOPHORONE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 83 of 105

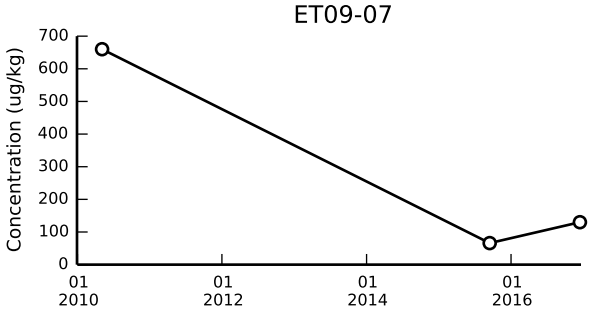
● Detected
○ Not Detected, shown at detection limit

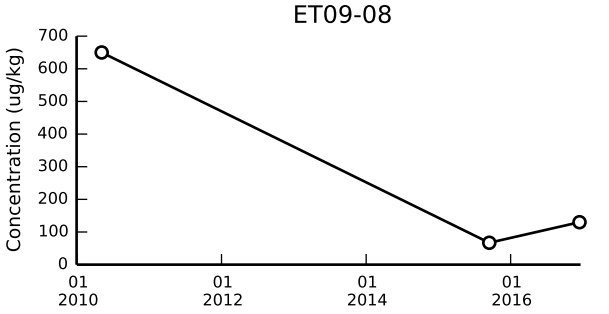


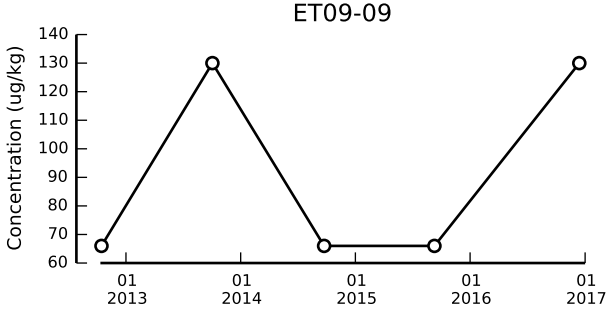


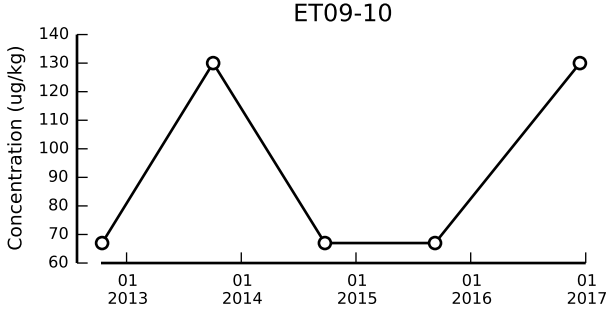


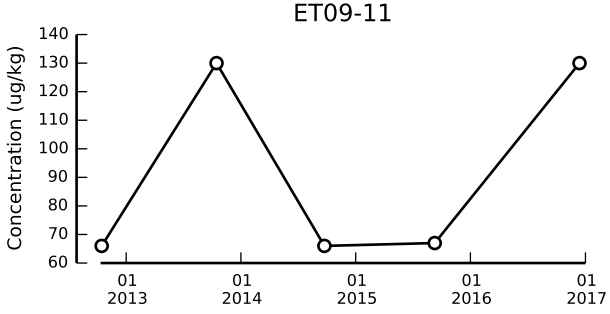


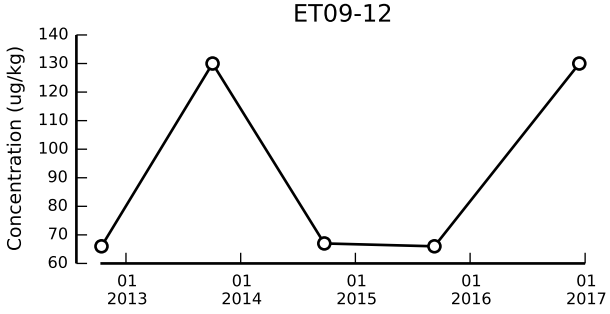






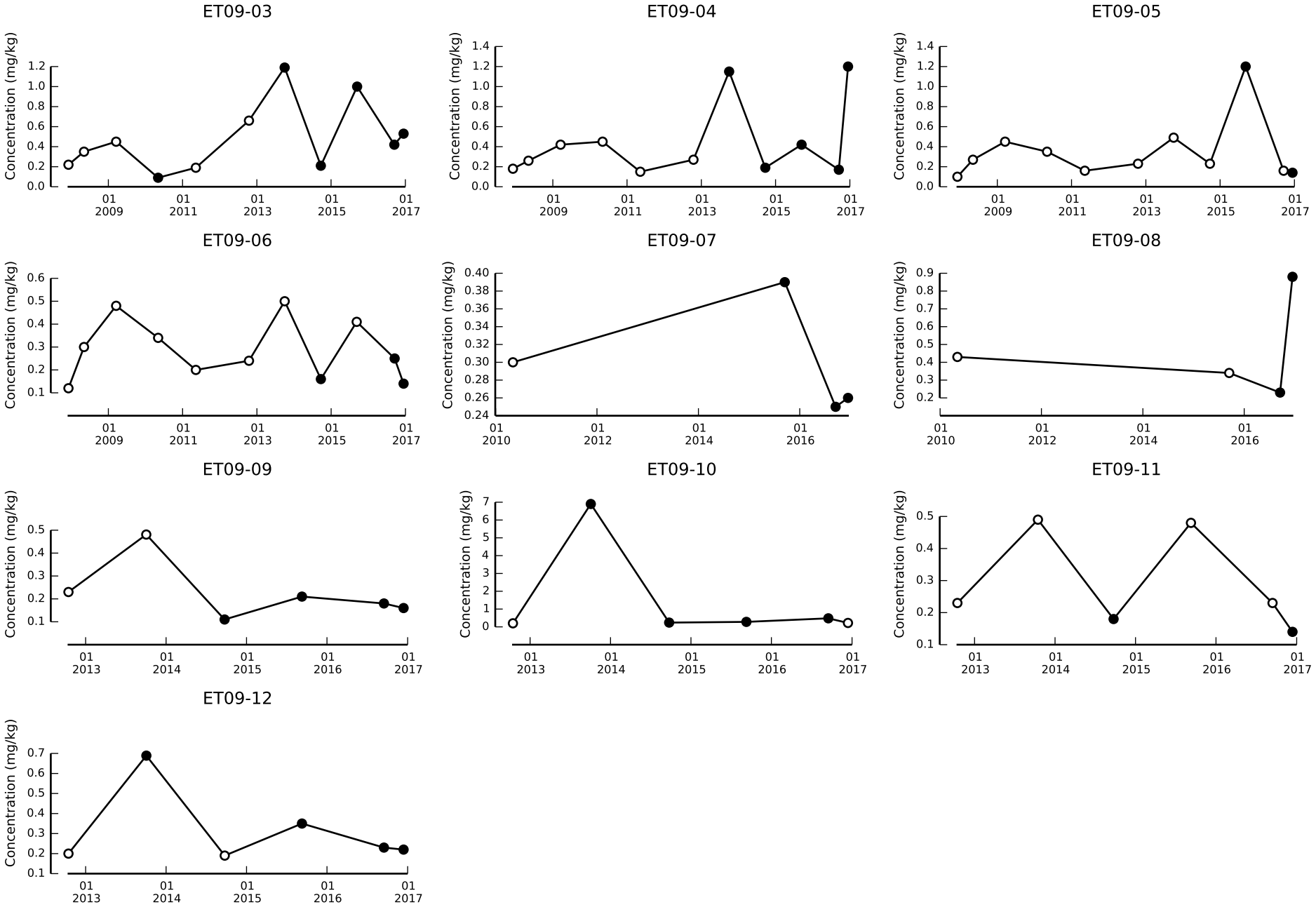






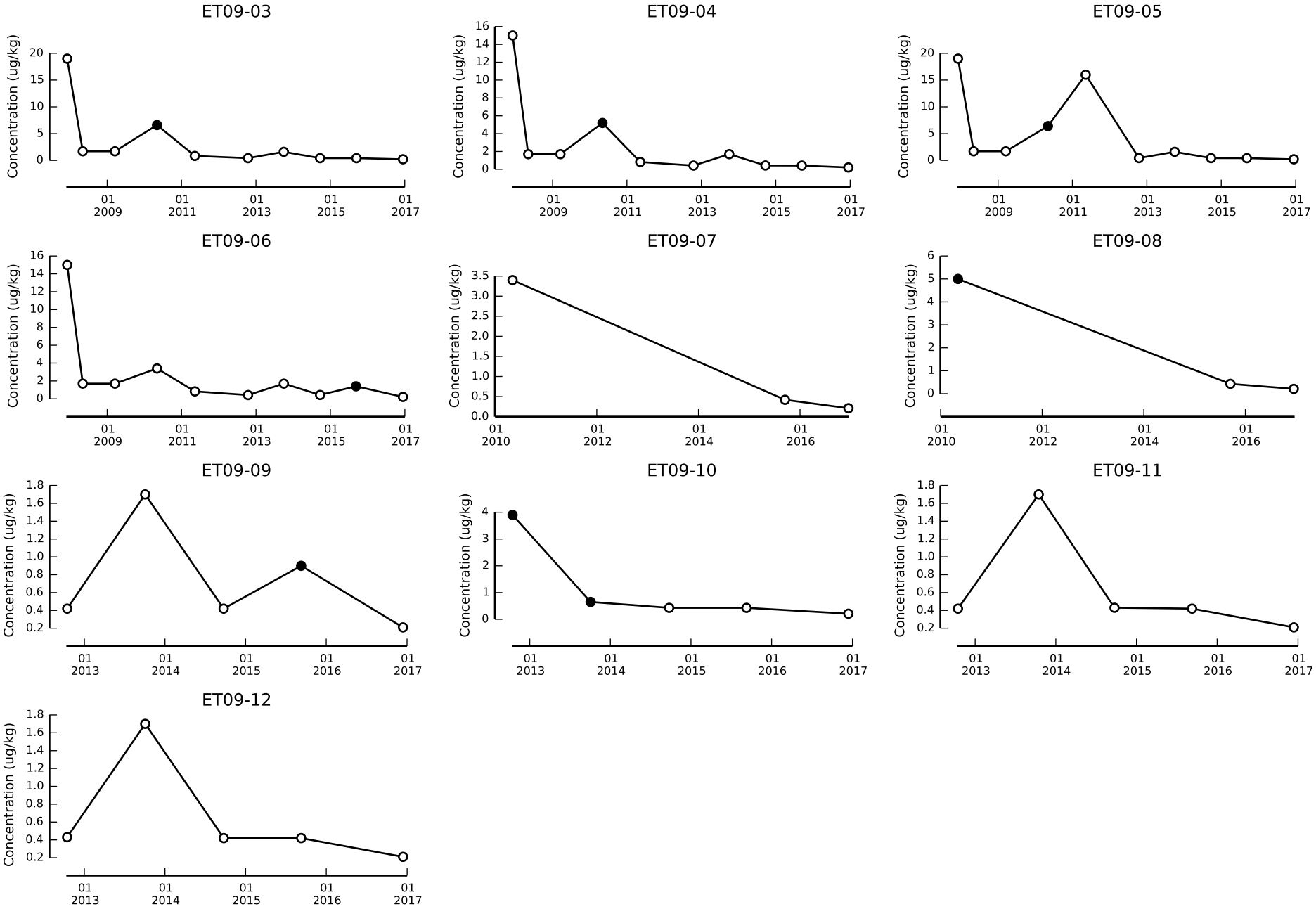
LEAD in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 84 of 105

● Detected
○ Not Detected, shown at detection limit



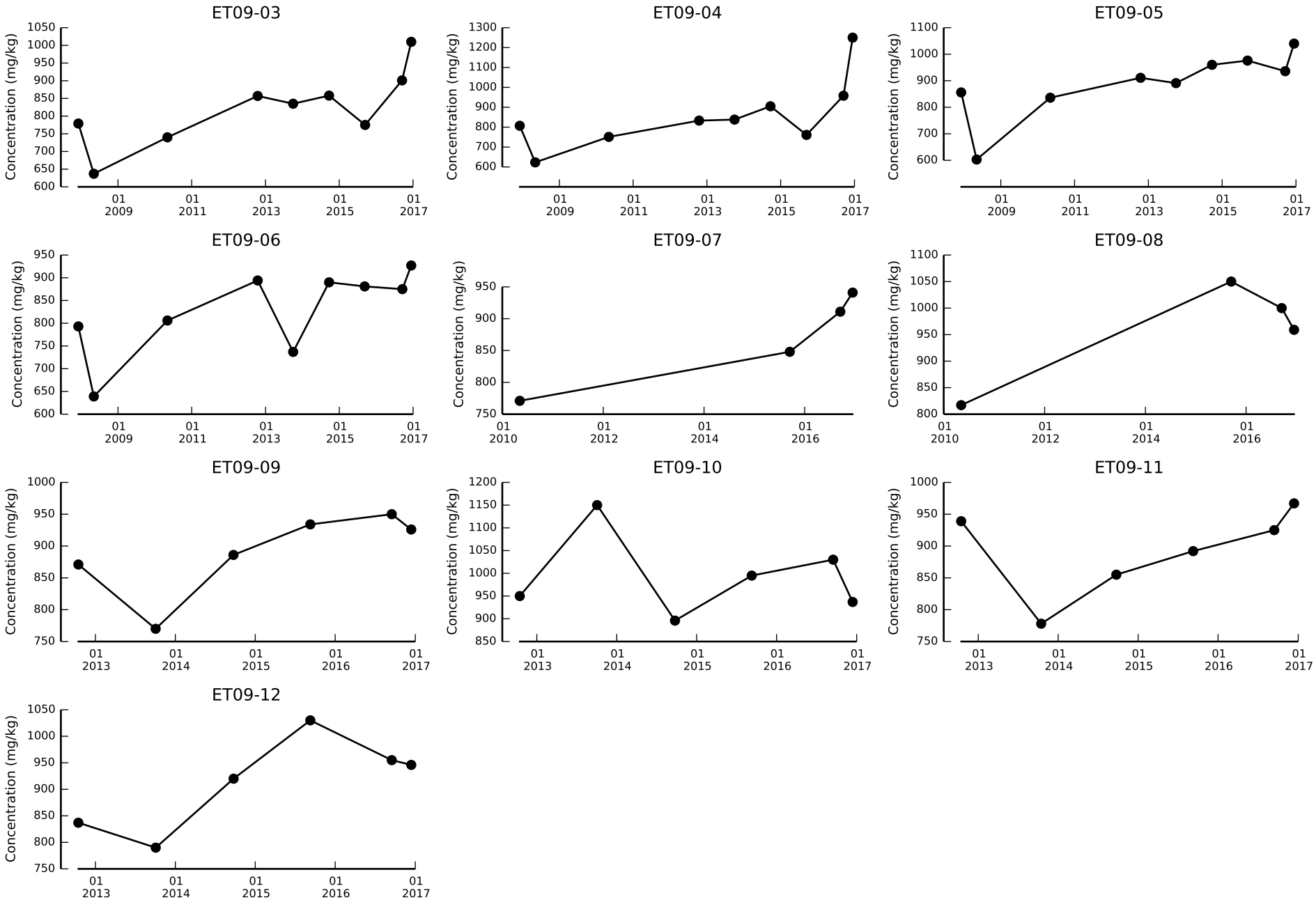
LINDANE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 85 of 105

● Detected
○ Not Detected, shown at detection limit



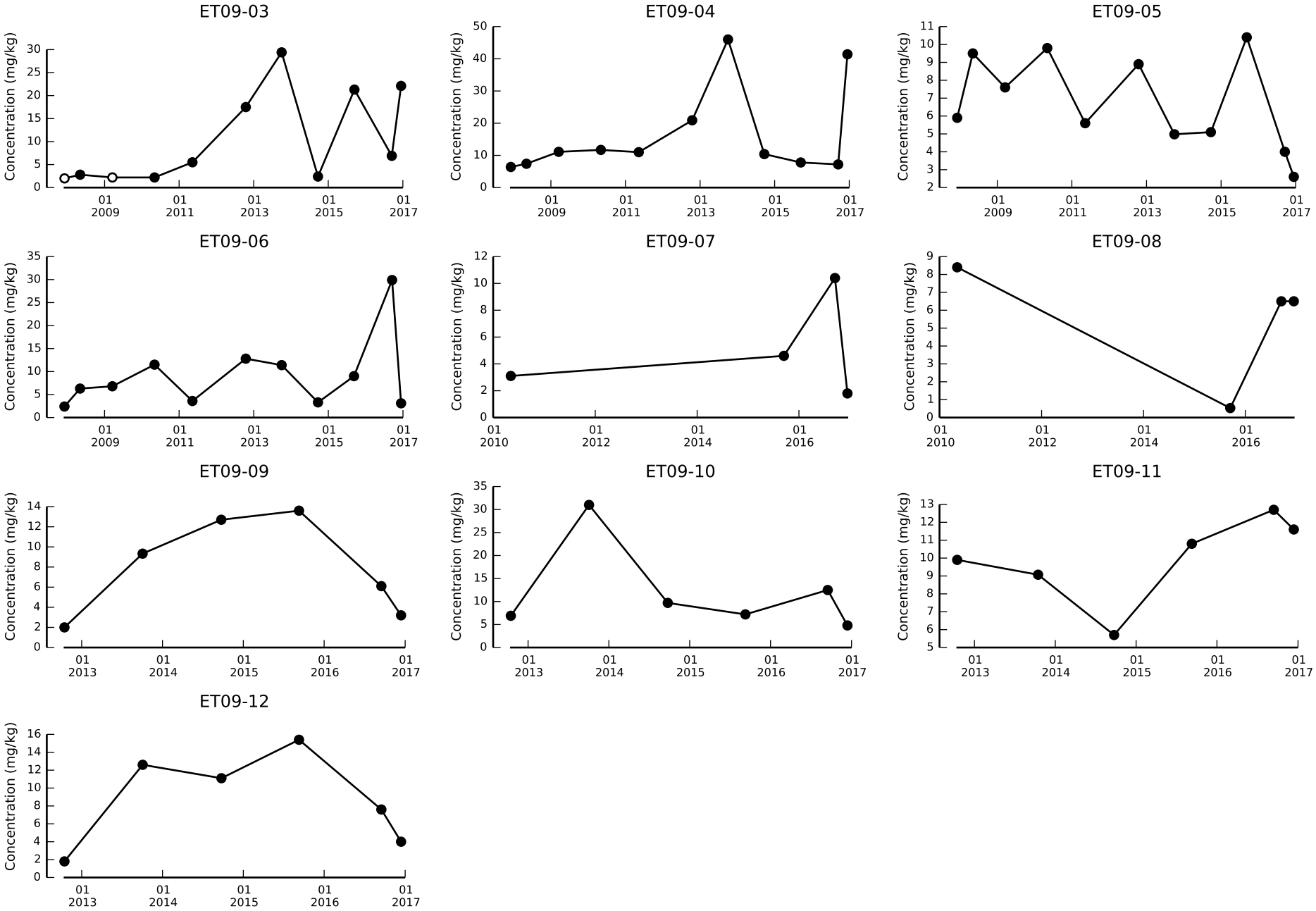
MAGNESIUM in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 86 of 105

● Detected
○ Not Detected, shown at detection limit



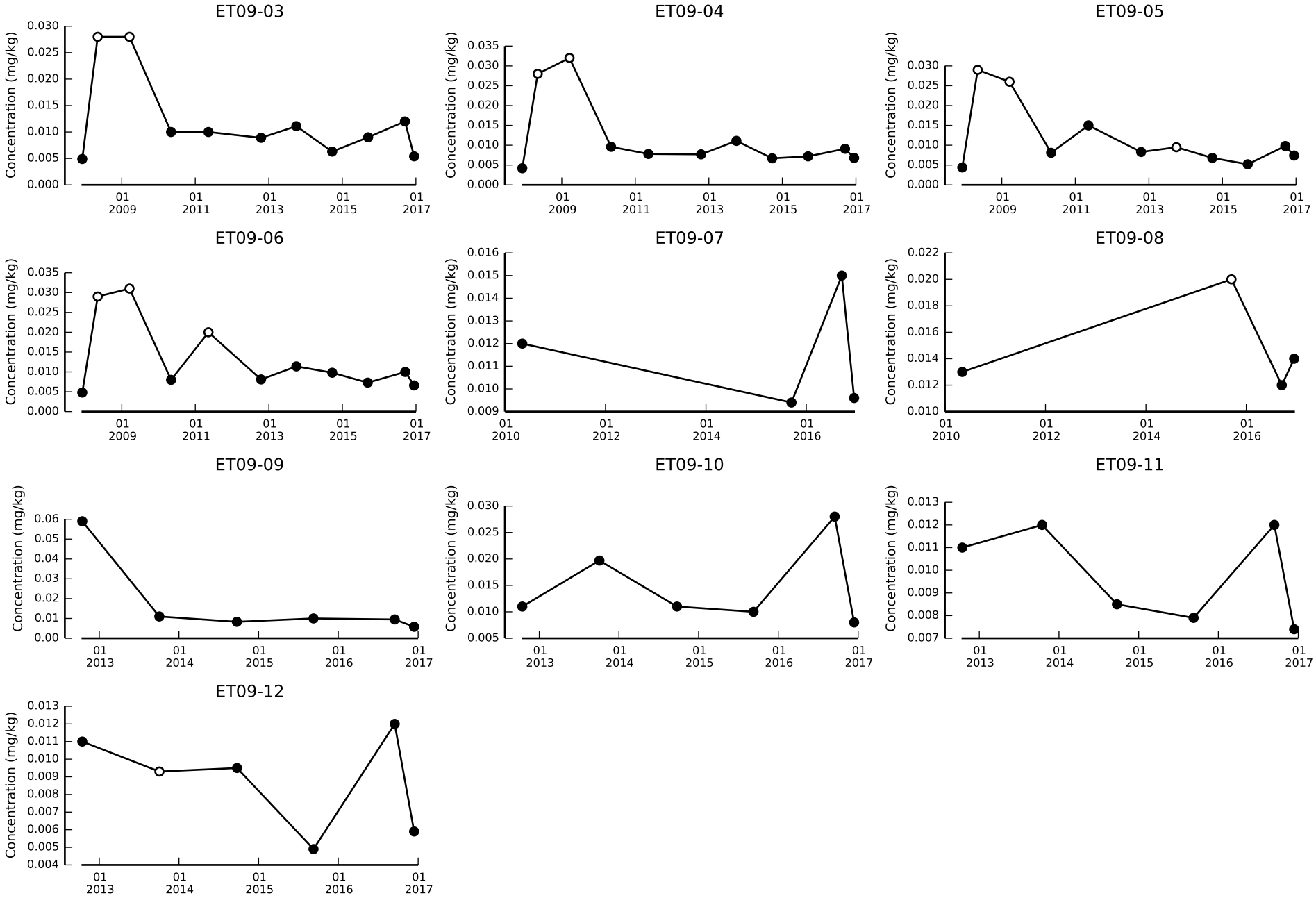
MANGANESE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 87 of 105

● Detected
○ Not Detected, shown at detection limit



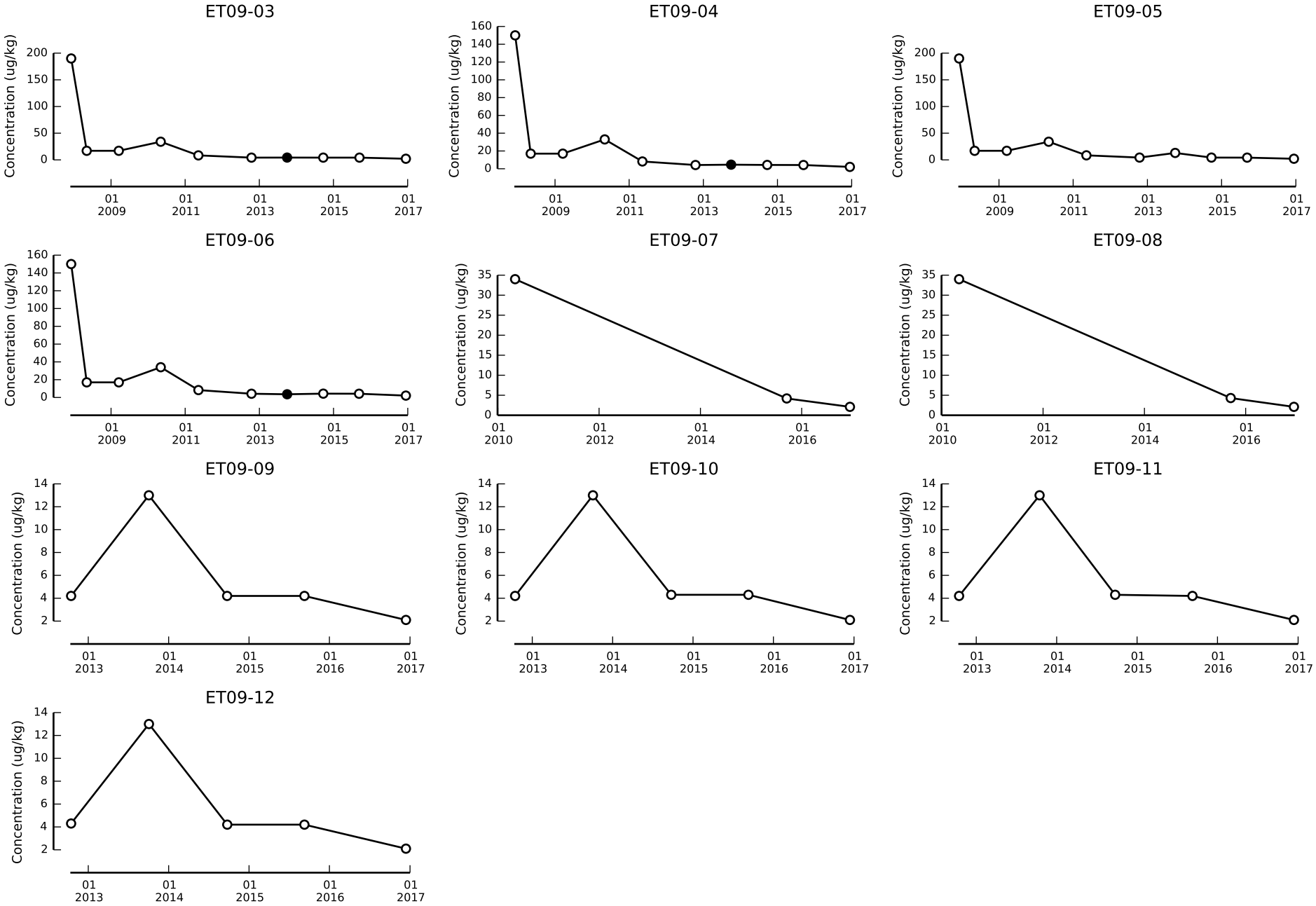
MERCURY in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 88 of 105

● Detected
○ Not Detected, shown at detection limit



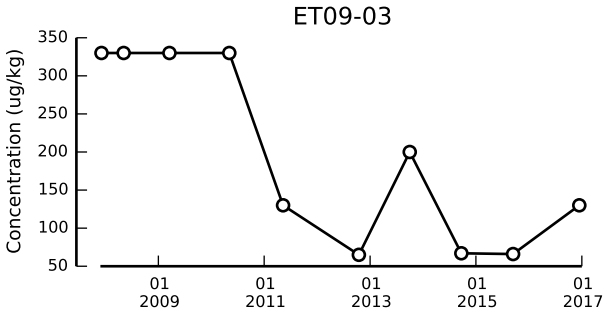
METHOXYCHLOR in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 89 of 105

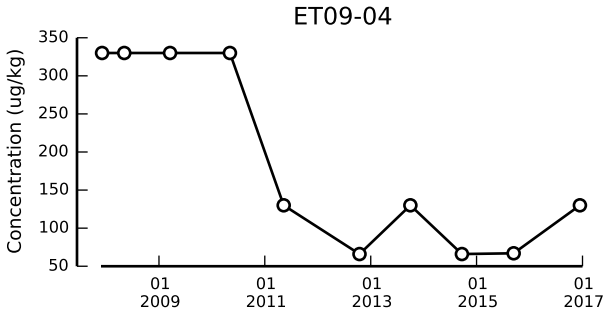
● Detected
○ Not Detected, shown at detection limit

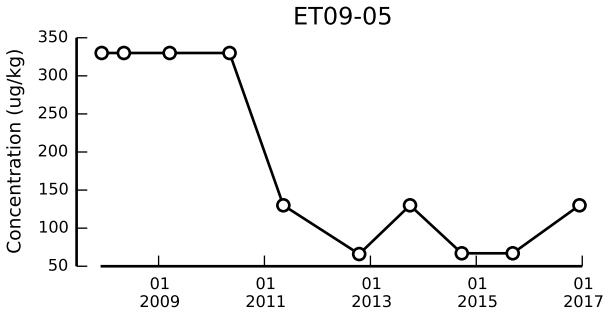


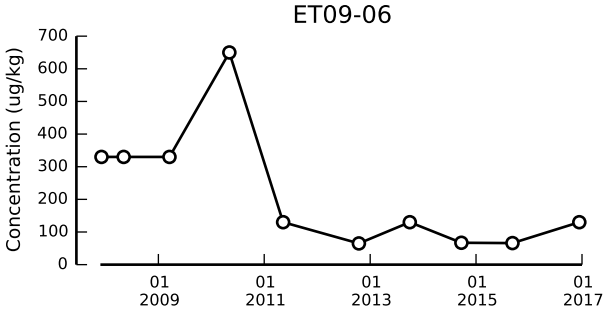
N-NITROSODINPROPYLAMINE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 90 of 105

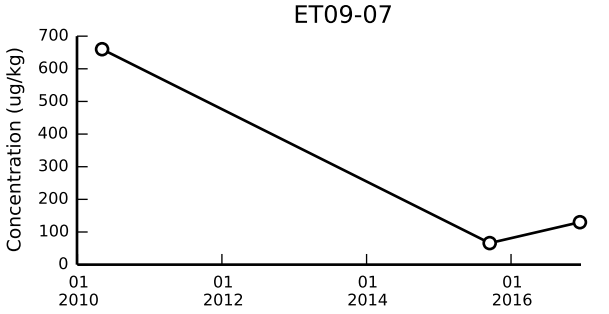
● Detected
○ Not Detected, shown at detection limit

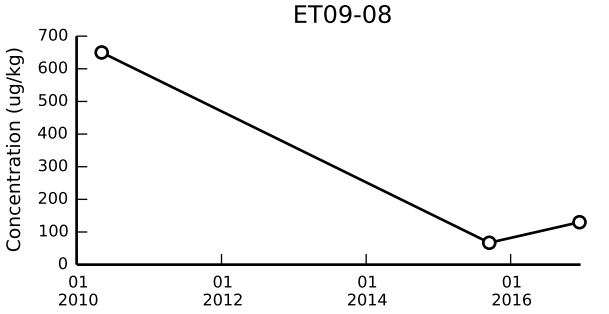


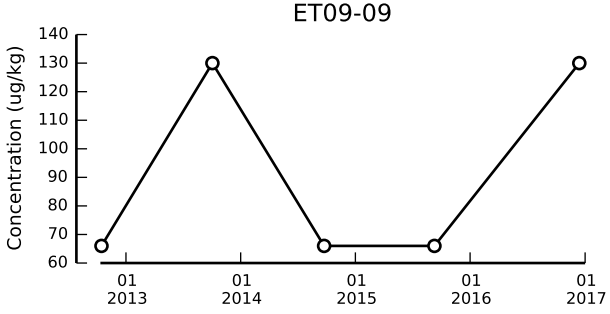


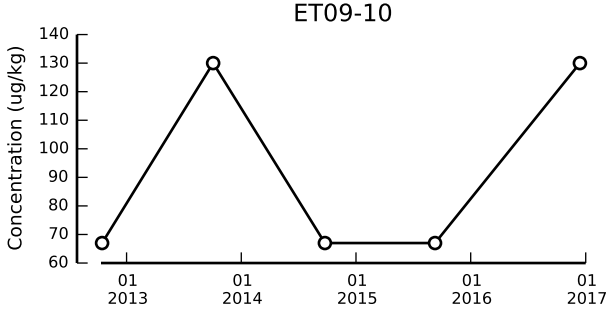


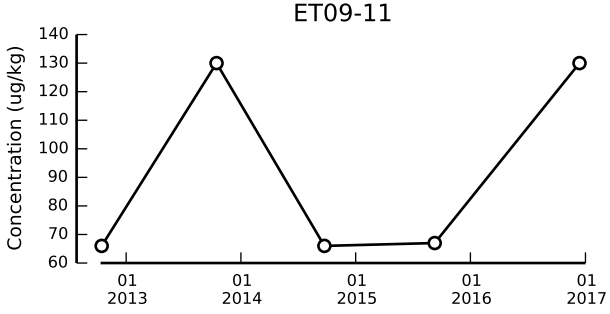


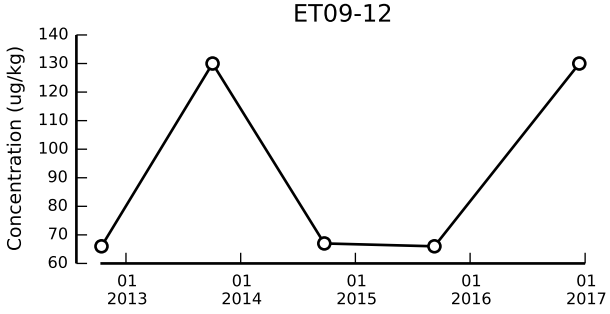






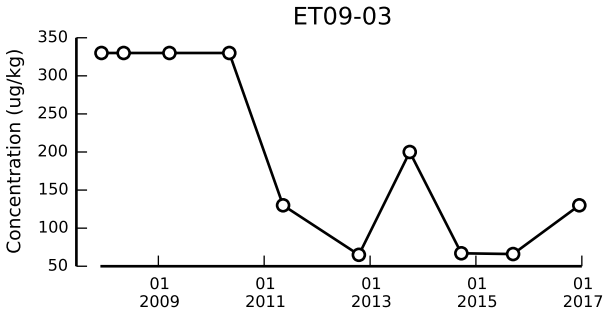


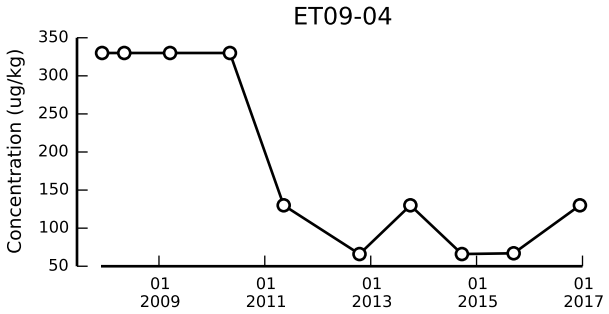


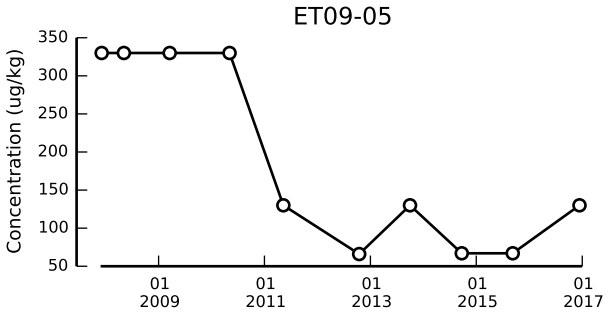


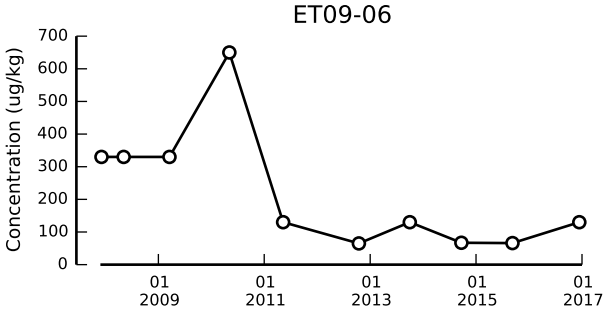
N-NITROSODIPHENYLAMINE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 91 of 105

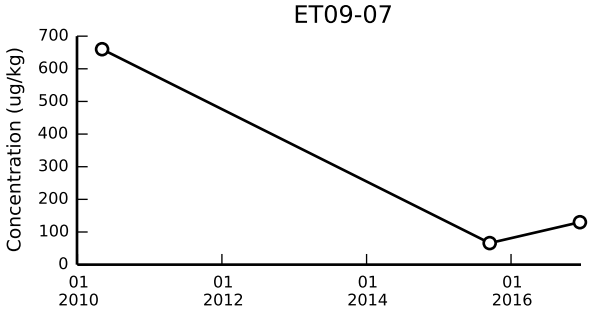
● Detected
○ Not Detected, shown at detection limit

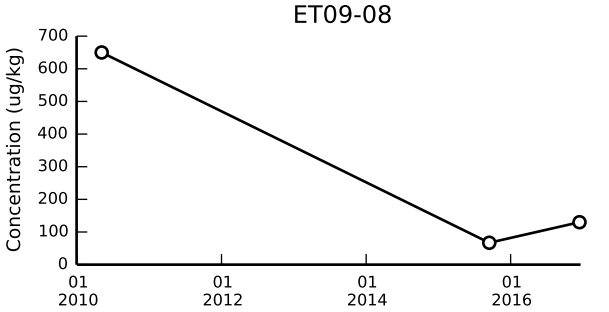


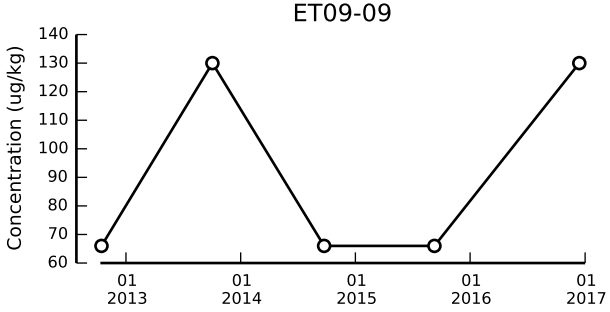


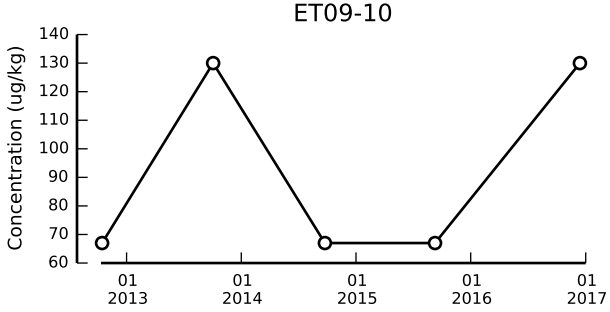


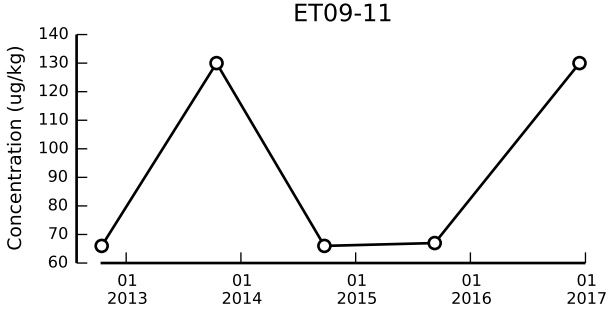


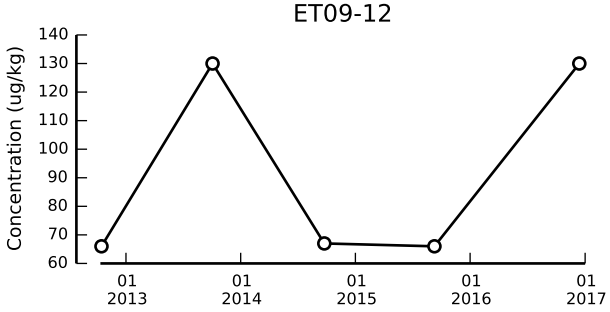












NAPHTHALENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 92 of 105

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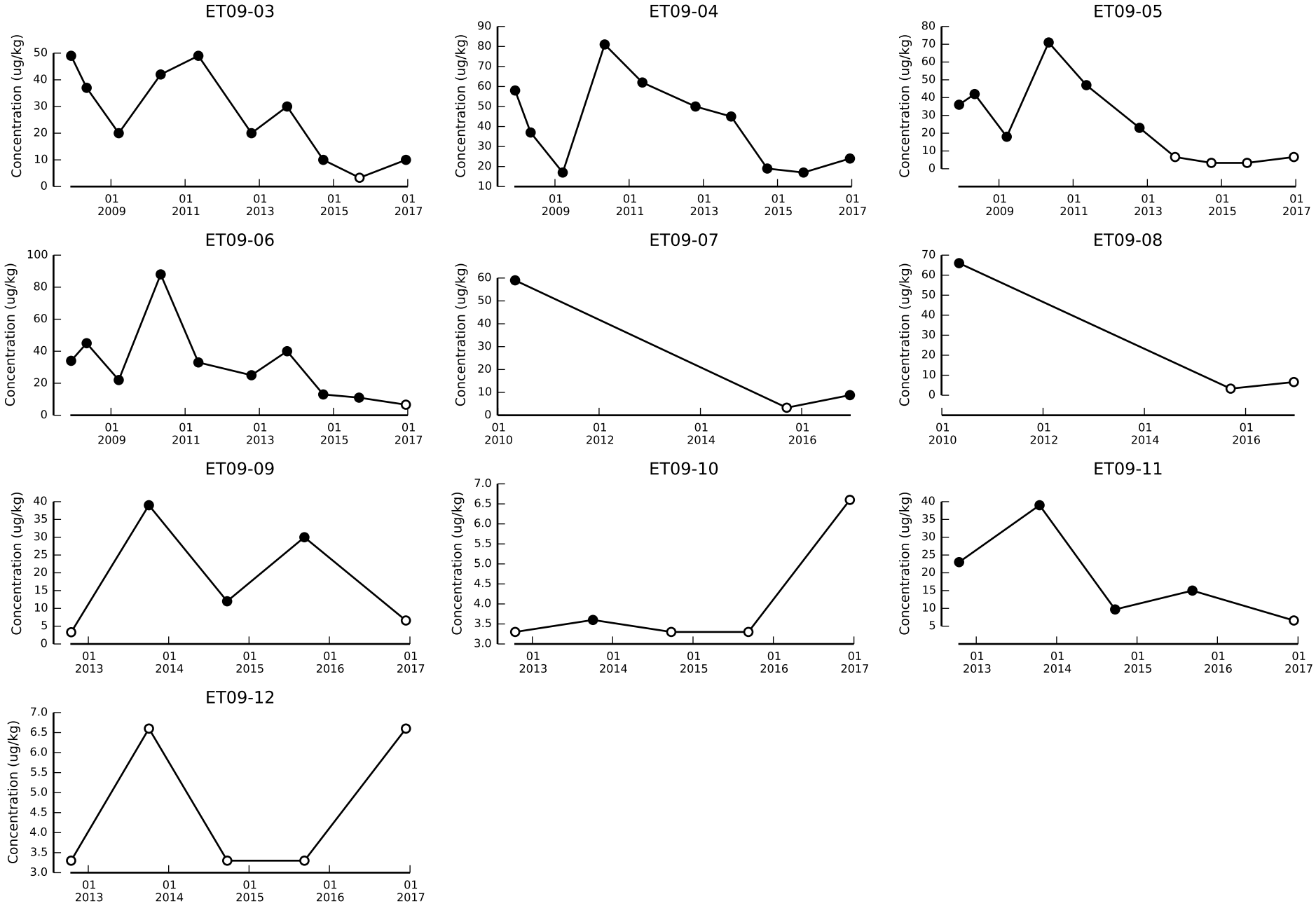

NICKEL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 93 of 105

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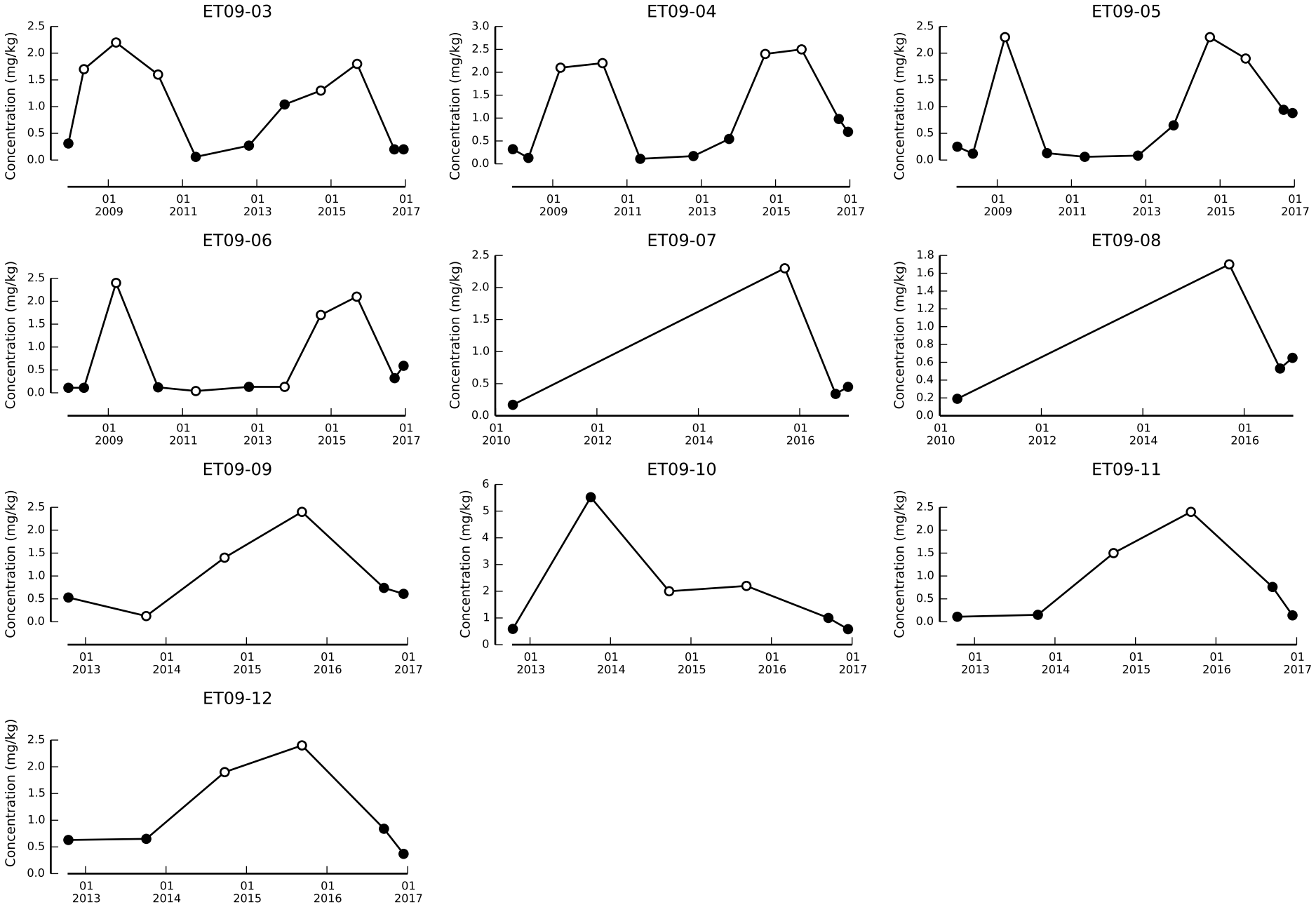

NITROBENZENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 94 of 105

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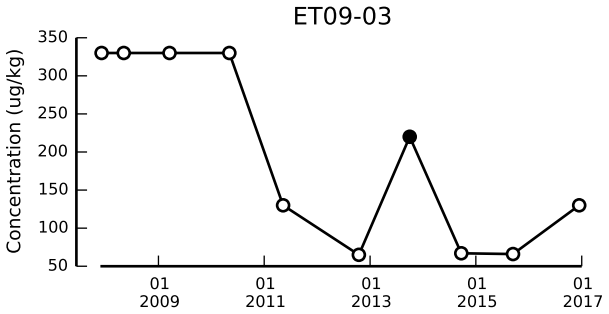
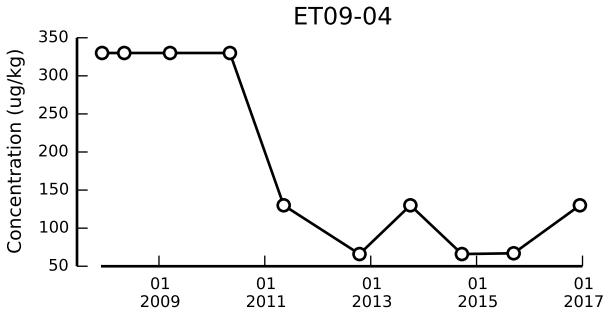
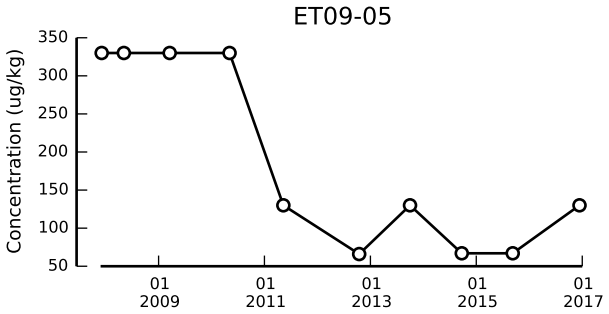
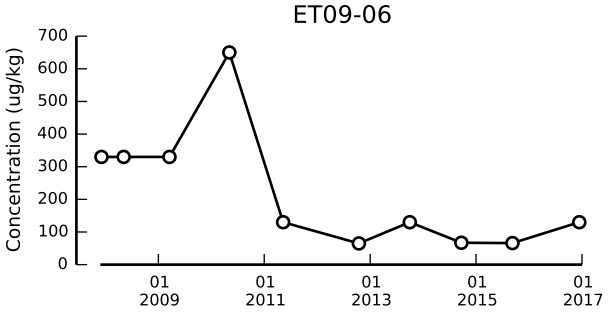
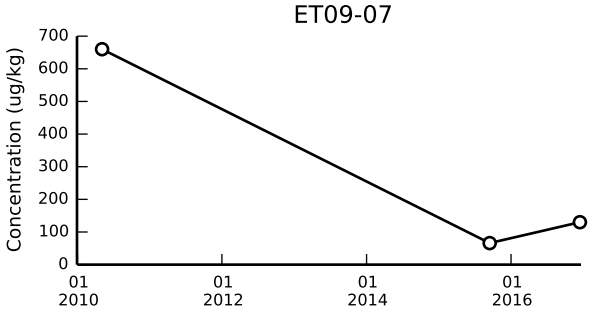
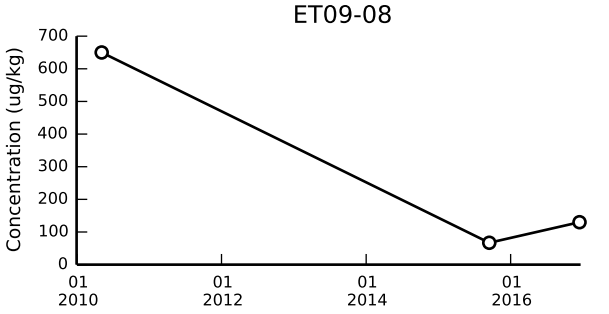


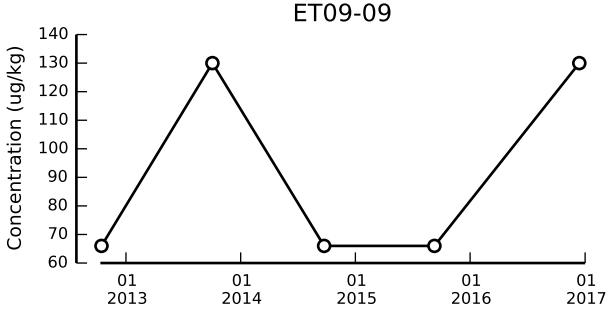


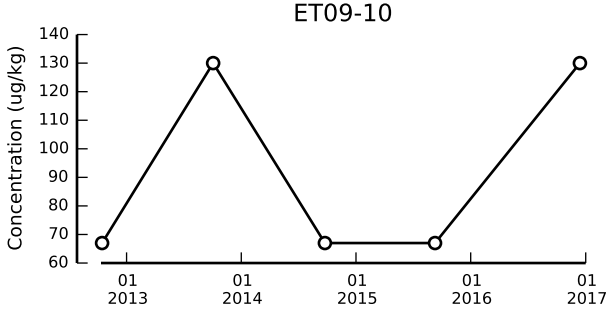


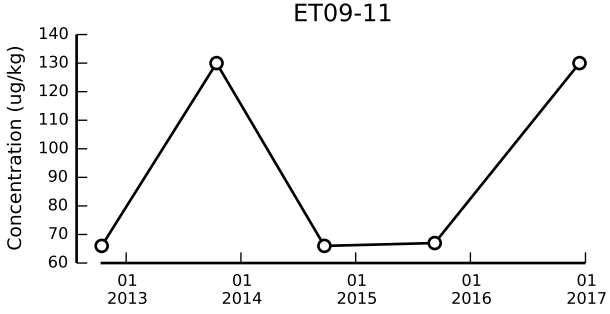


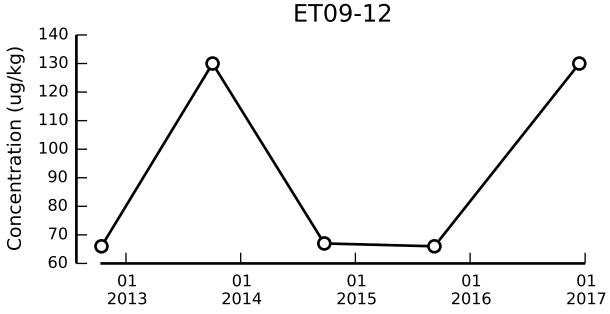






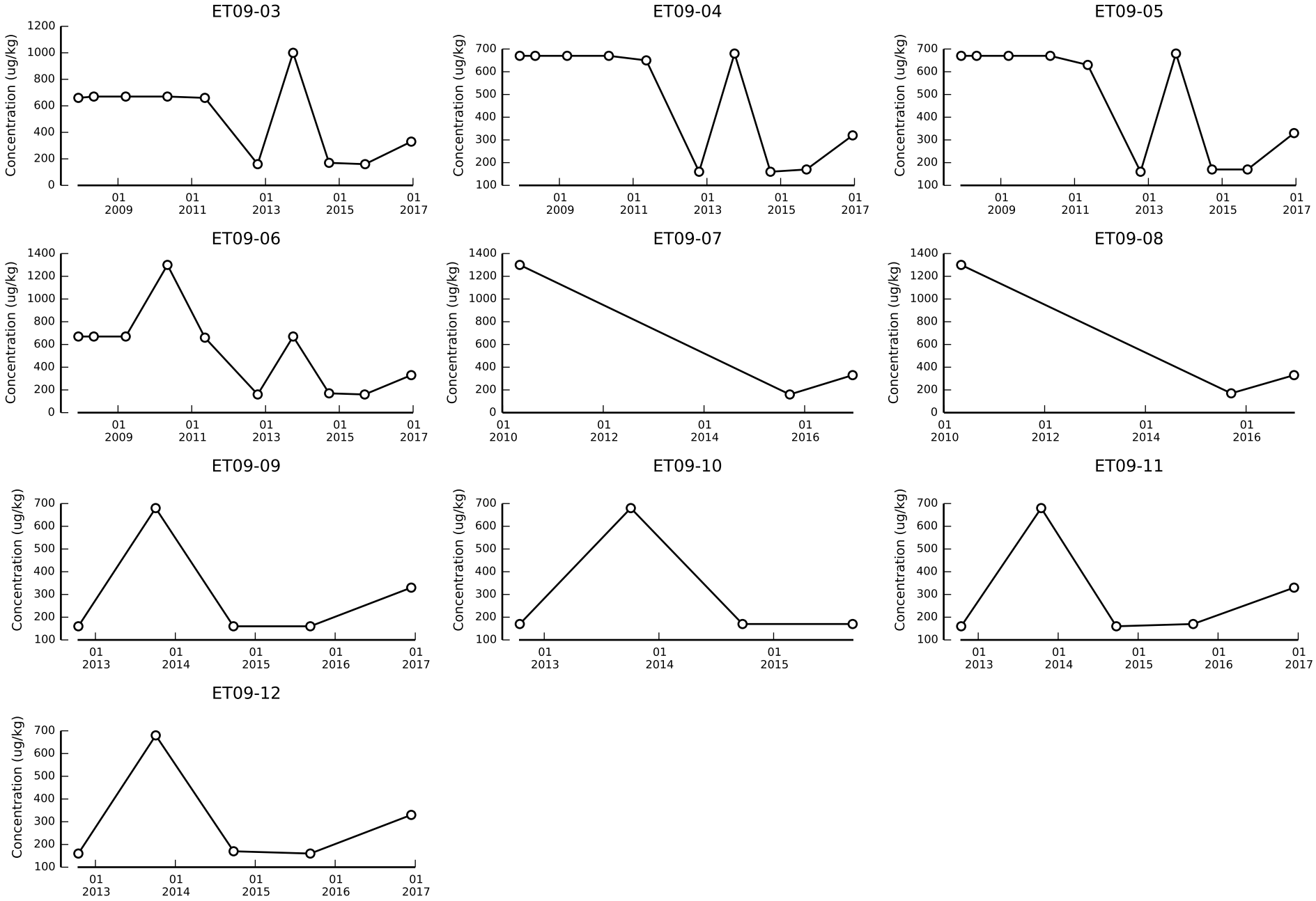






PENTACHLOROPHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 95 of 105

● Detected
○ Not Detected, shown at detection limit



PHENANTHRENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 96 of 105

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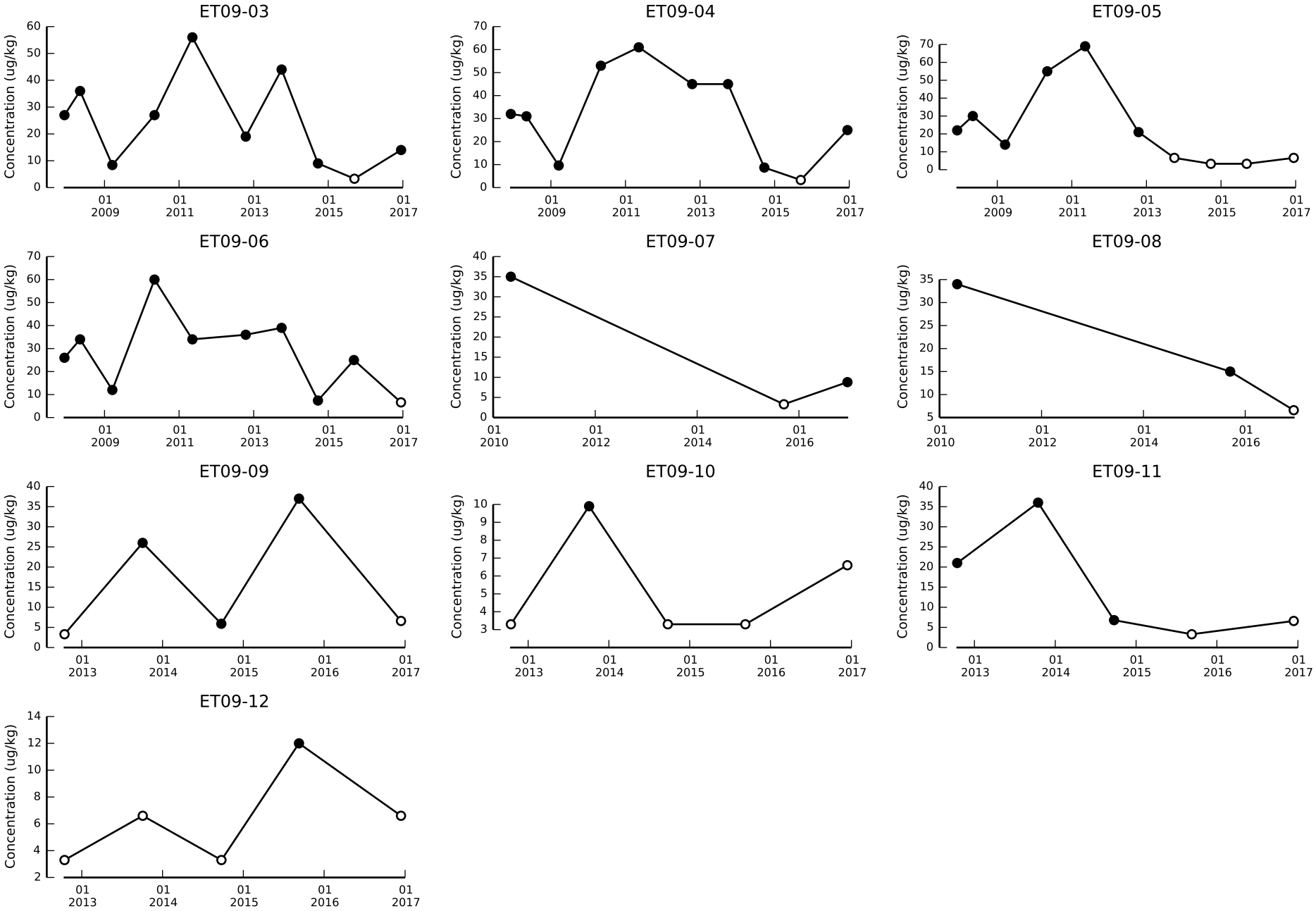

PHENOL in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 97 of 105

● Detected
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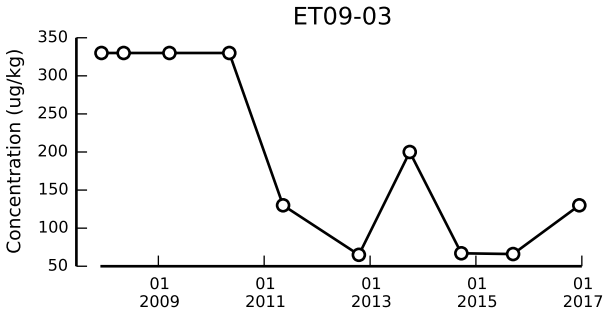
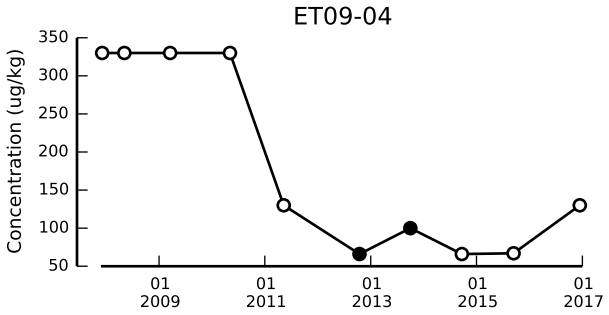
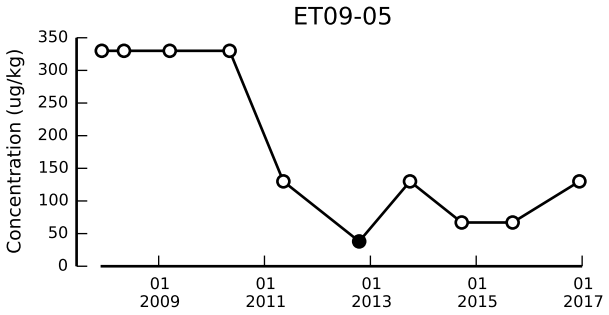
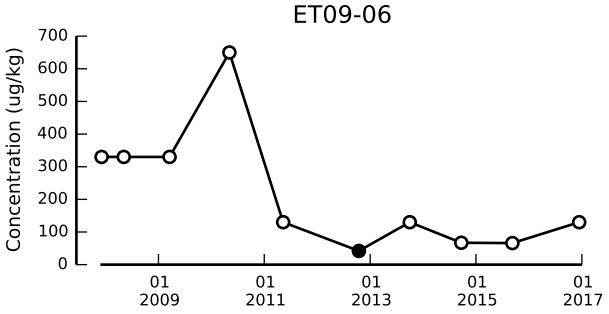
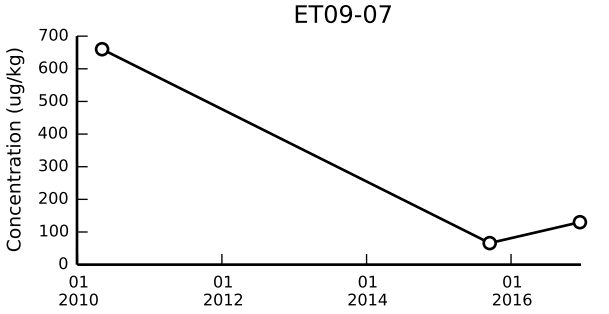
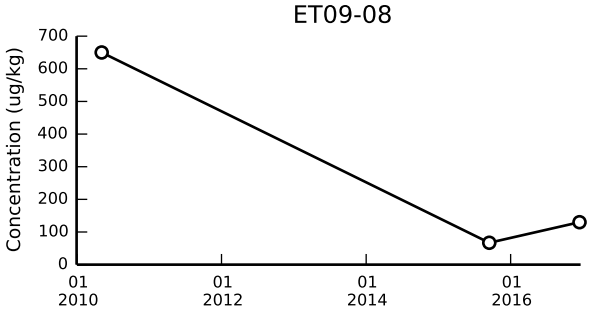


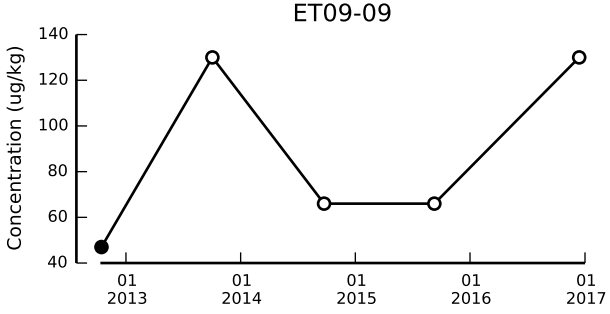


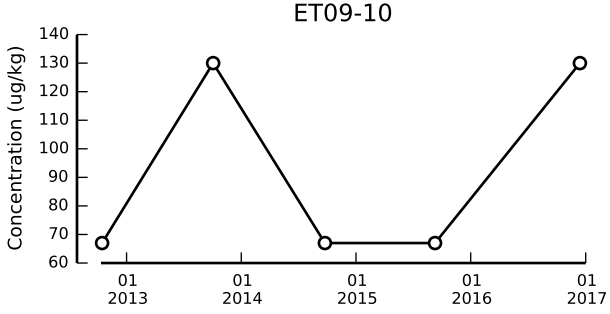


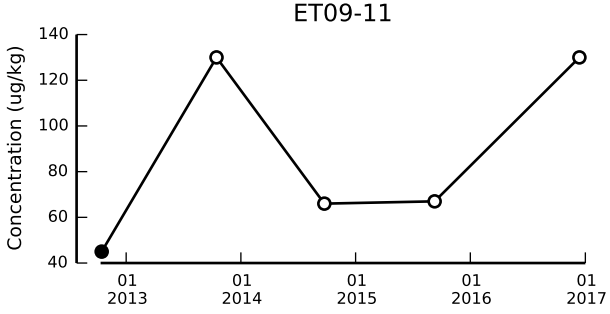


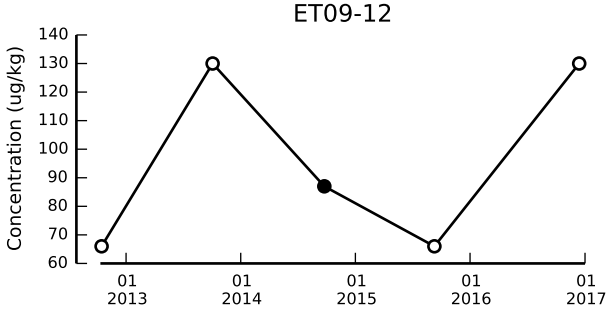






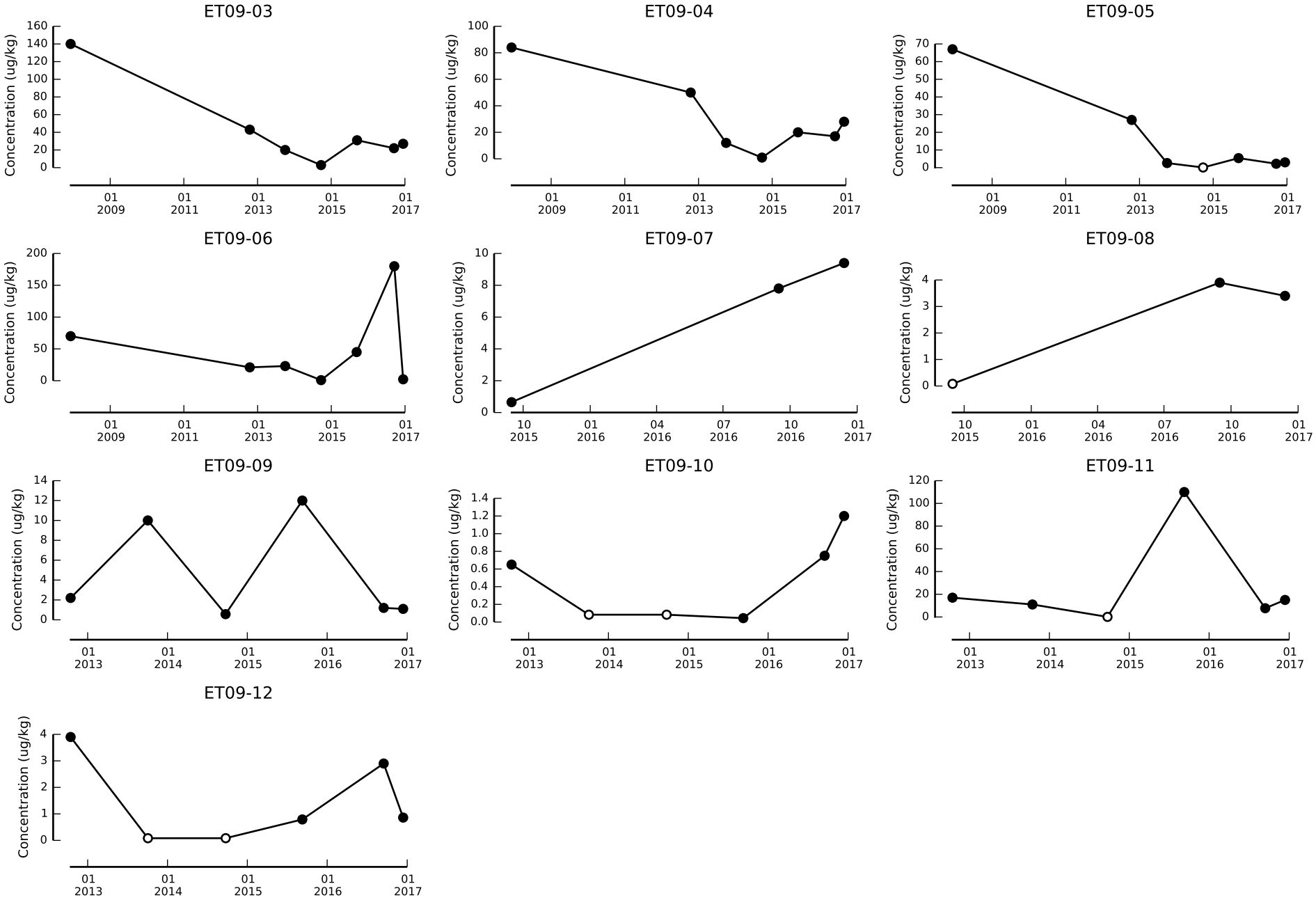






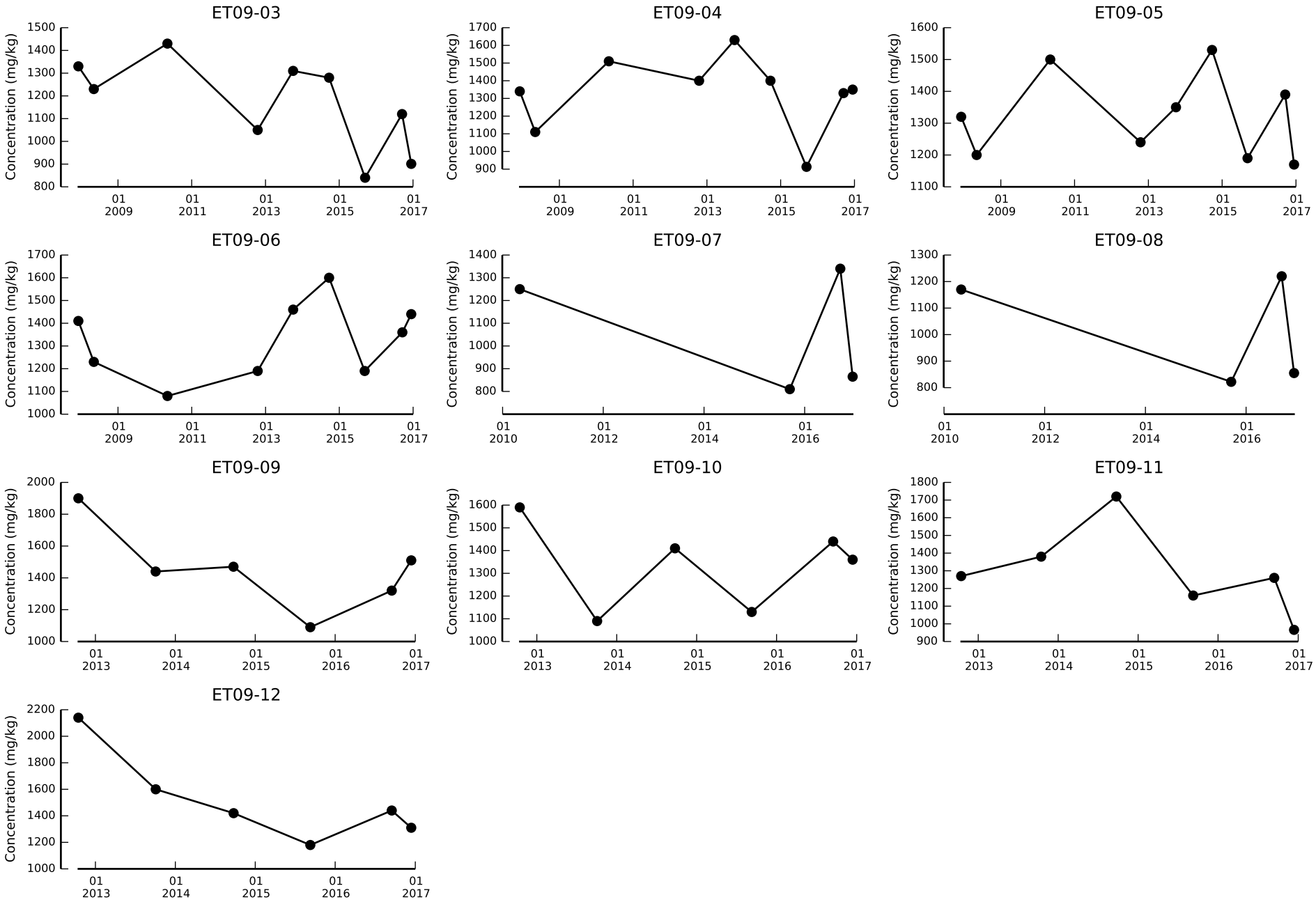
POLYCHLORINATED BIPHENYLS (PCBS) in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 98 of 105

● Detected
○ Not Detected, shown at detection limit



POTASSIUM in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 99 of 105

● Detected
○ Not Detected, shown at detection limit



PYRENE in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 100 of 105

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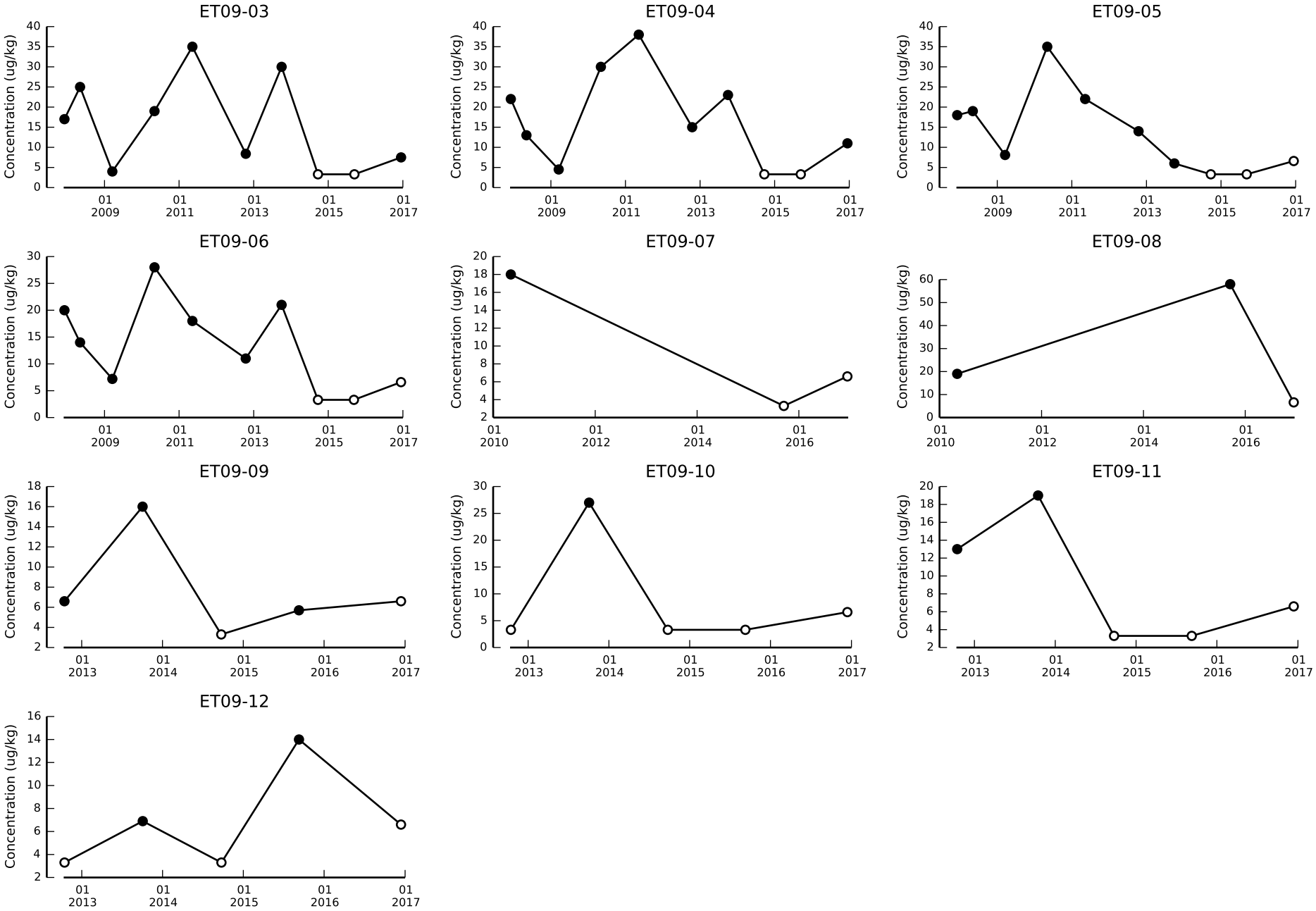

SELENIUM in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 101 of 105

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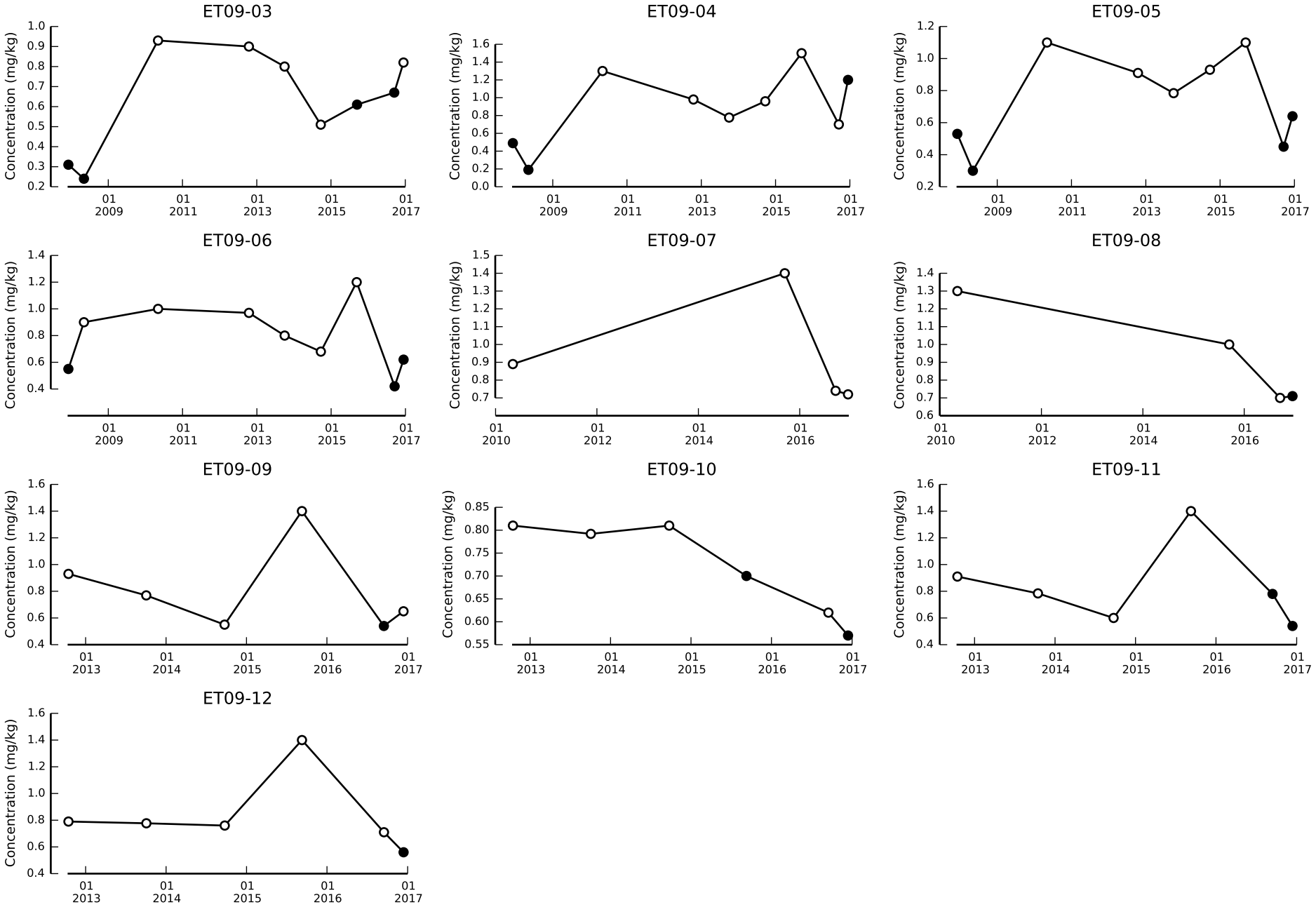
○ Not Detected, shown at detection limit



SILVER in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
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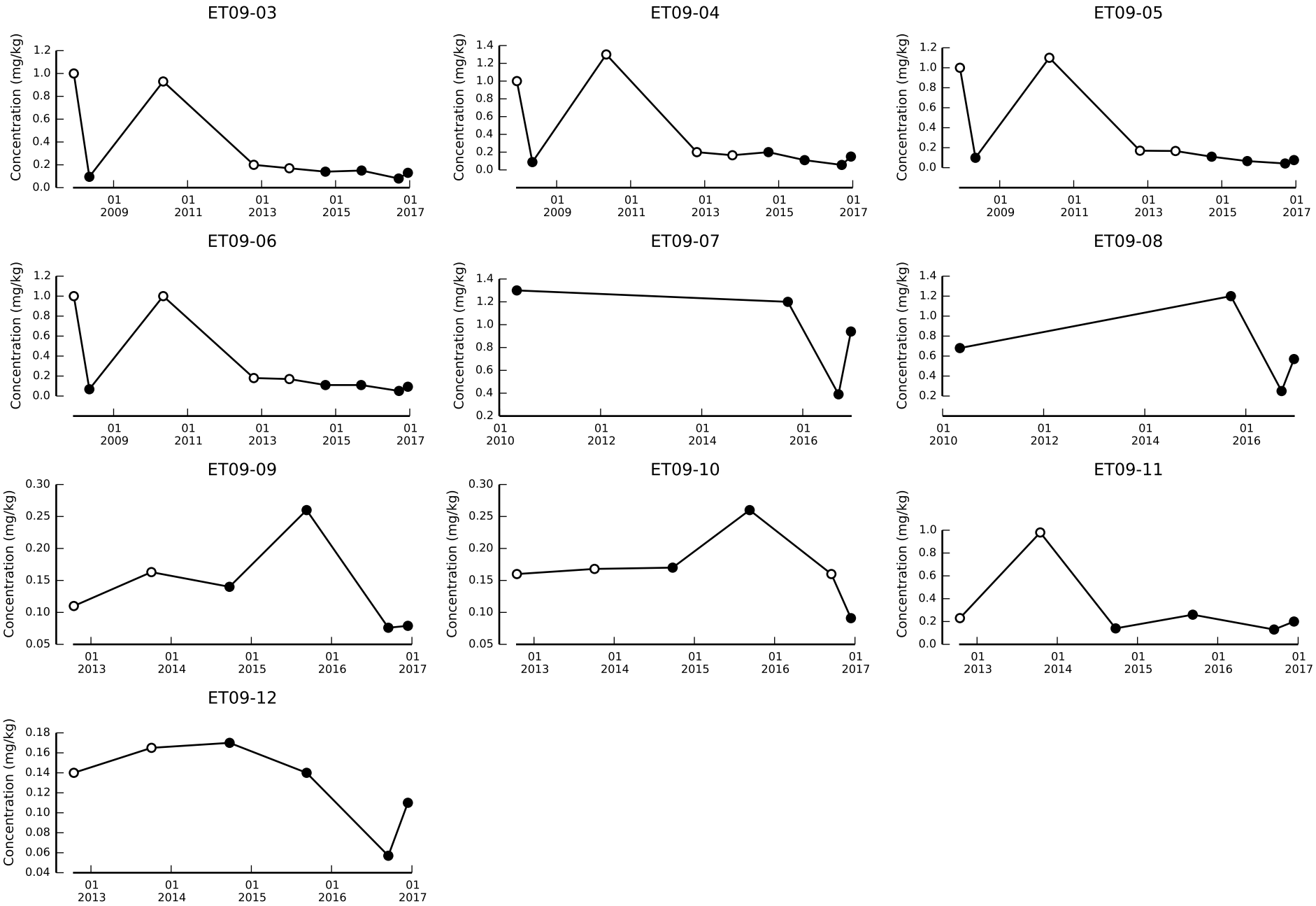
● Detected
○ Not Detected, shown at detection limit



SODIUM in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 103 of 105

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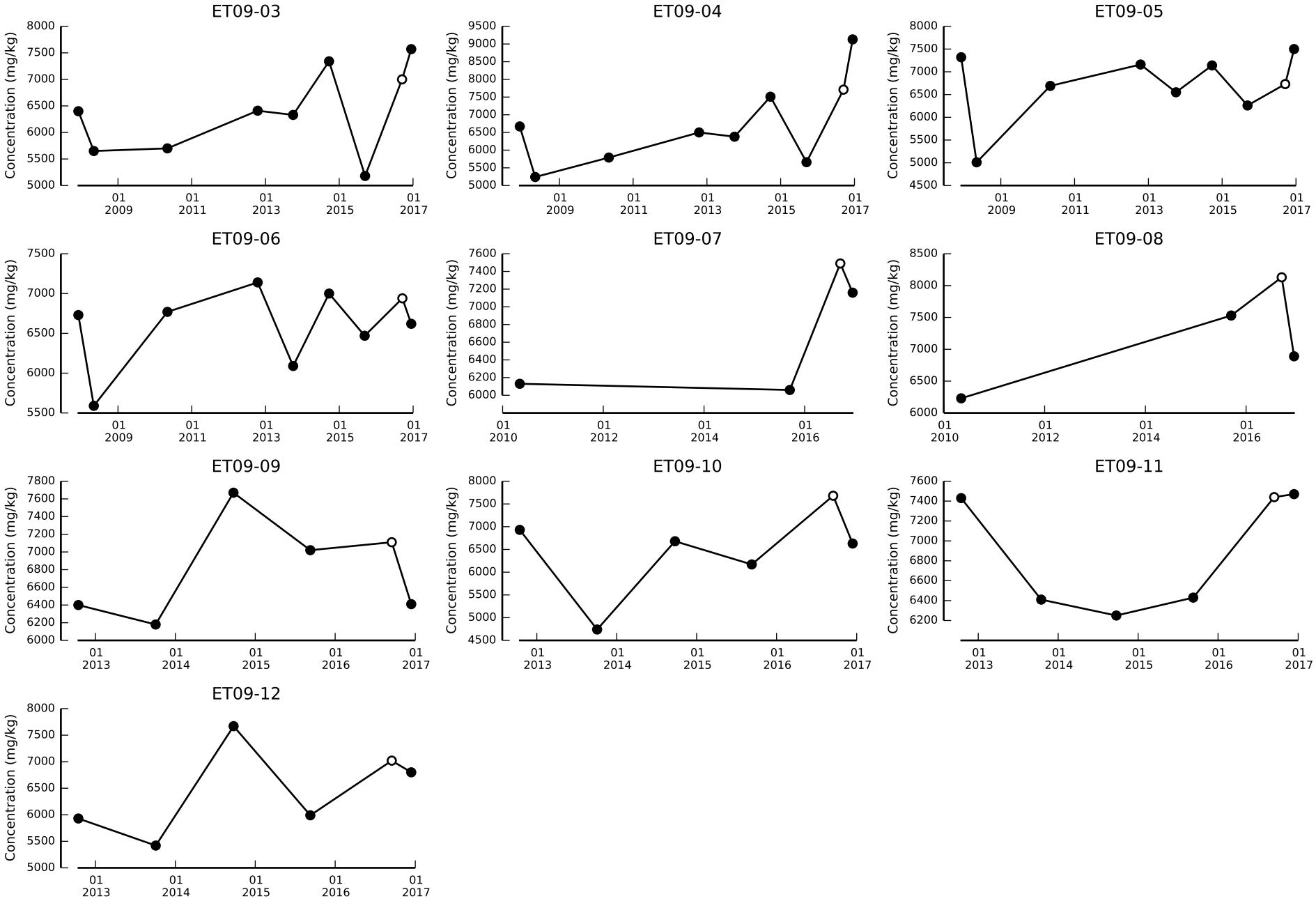
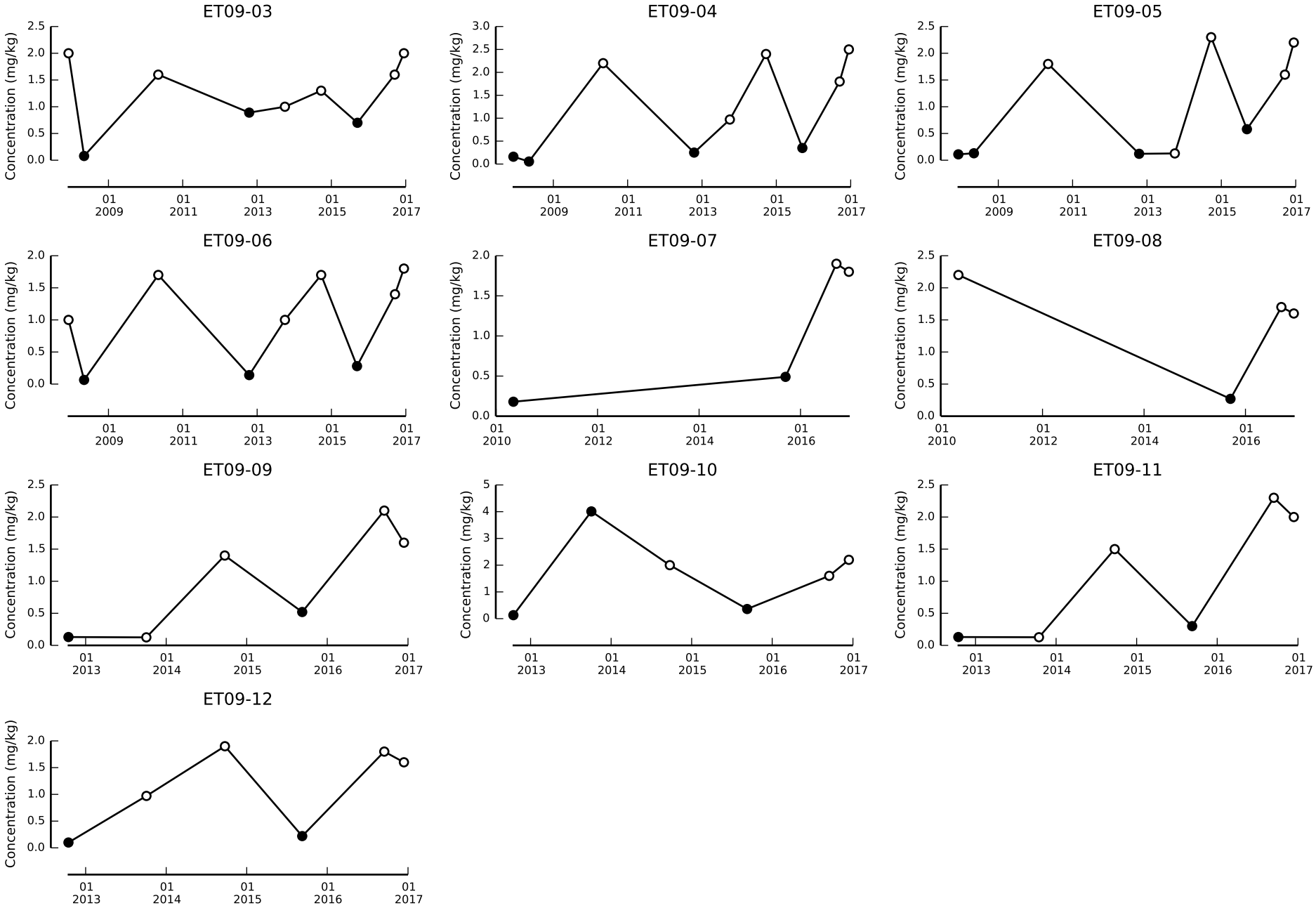


VANADIUM in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 104 of 105

● Detected
○ Not Detected, shown at detection limit



ZINC in Tissue
Site 9, Former NCBC Davisville, North Kingstown, RI
Figure 105 of 105

● Detected
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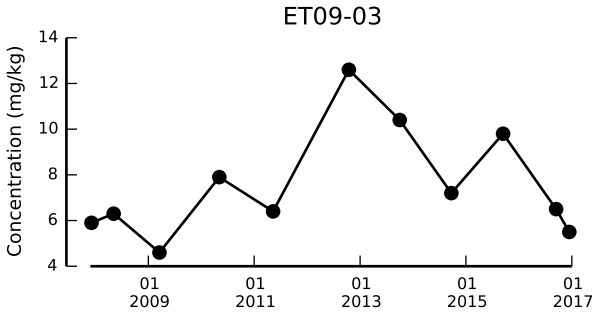

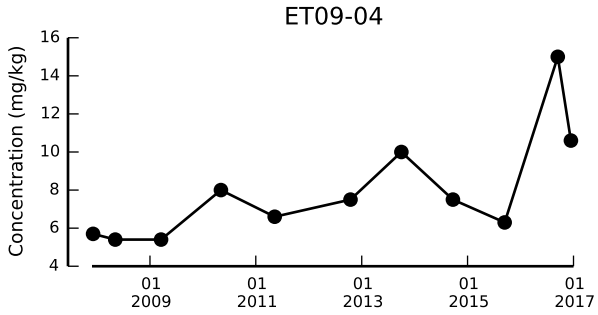

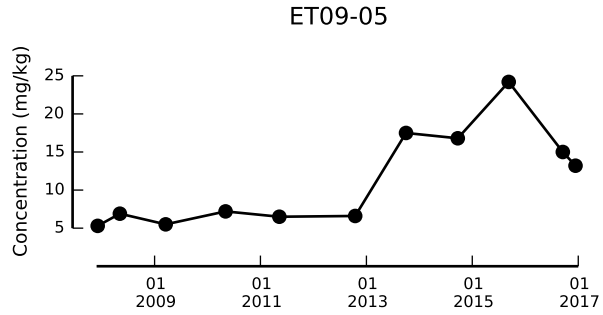

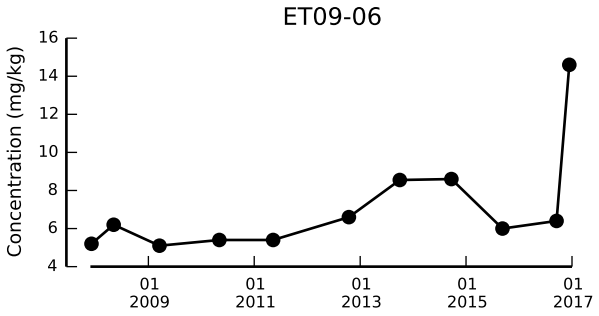

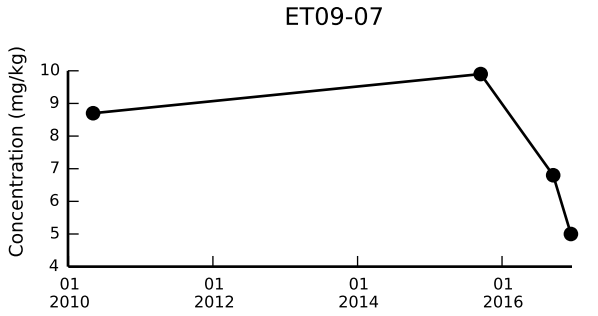

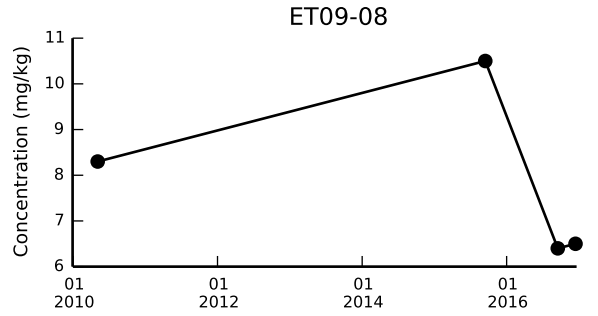

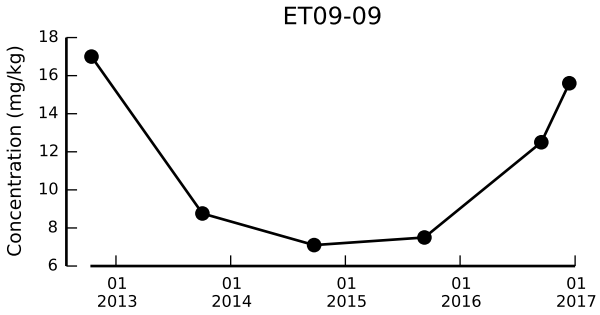

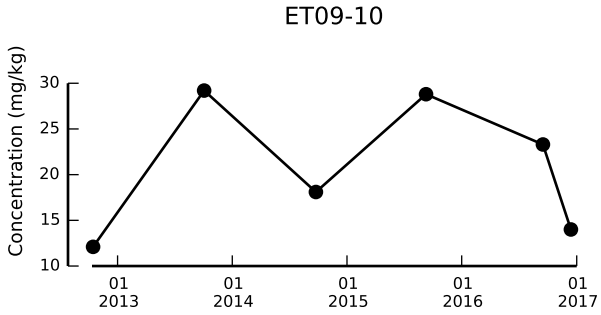

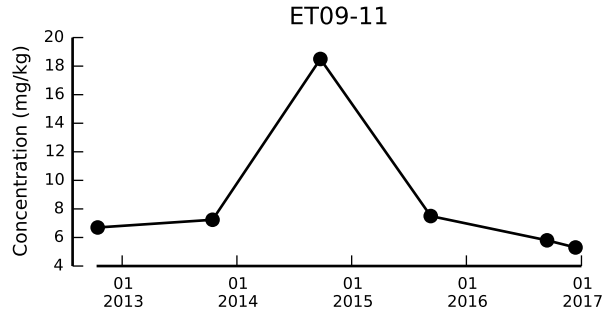

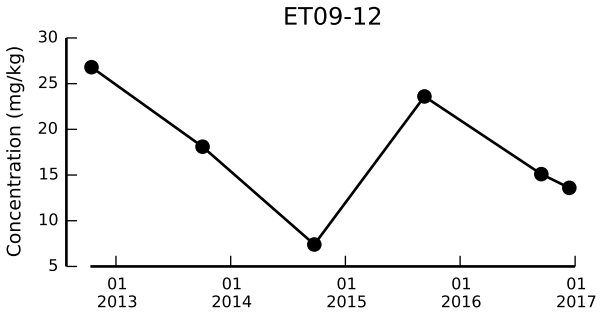

Attachment G

Updated Risk Assessments

Attachment G-1

Human Health Risk Assessment Update

HUMAN HEALTH RISK ASSESSMENT UPDATE
Site 09 Allen Harbor Landfill
Long Term Monitoring
Former Naval Construction Battalion Center
Davisville
North Kingstown, Rhode Island

DRAFT FINAL

Prepared for:

Department of the Navy
Naval Facilities Engineering Command
BRAC Program Management Office, East
4911 South Broad Street
Philadelphia, Pennsylvania 19112

Contract Number N62470-11-D-8013

CTO WE23

Prepared by:

Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, VA 23510

May 2017

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ACRONYMS AND ABBREVIATIONS

>	greater than
%	percent
ug/L	microgram per liter
ADAF	age-dependent adjustment factor
ADD	average daily dose
bgs	below ground surface
BCT	Base Realignment and Closure Cleanup Team
BRAC	Base Realignment and Closure
cm^2	square centimeter
COC	chemical of concern
COPC	chemical of potential concern
cPAH	carcinogenic polychlorinated aromatic hydrocarbons
CSF	cancer slope factor
CSM	conceptual site model
DA_{event}	dose absorbed per unit area per event
ELCR	excess lifetime cancer risk
EPC	exposure point concentration
EPD	Effective Prediction Domain
HHRA	human health risk assessment
HI	hazard index
HQ	hazard quotient
IRIS	Integrated Risk Information System
kg	kilogram
K_{ow}	octanol-water partition coefficient
K_p	dermal permeability constant
L	liter
LADD	lifetime average daily dose

LOD	limit of detection
LTM	long-term monitoring
MCL	maximum contaminant levels
mg	milligram
mg/day	milligrams per day
mg/kg	milligrams per kilogram
mg/kg-day	milligram of chemical per kilogram of body weight per day
NCBC	Naval Construction Battalion Center
NOAA	National Oceanic and Atmospheric Administration
PAH	polychlorinated aromatic hydrocarbons
PCBs	polychlorinated biphenyls
RAGS	Risk Assessment Guidance for Superfund
RAO	Remedial Action Objective
RBA	relative bioavailability
RfD	reference dose
RIDEM	Rhode Island Department of Environmental Management
RME	reasonable maximum exposure
ROD	Record of Decision
RSL	regional screening level
SVOC	semivolatile organic compound
ug	microgram
UCL	upper confidence limit
U.S.	United States
USEPA	United States Environmental Protection Agency
USFDA	United States Food and Drug Administration
VOC	volatile organic compound
Z	dermal factor

1.0 INTRODUCTION

This report presents a human health risk assessment (HHRA) update conducted for the shoreline sediment, groundwater in shallow piezometers, and shellfish tissue at Site 09 Allen Harbor Landfill (site), located at the Former Naval Construction Battalion Center (NCBC) Davisville, in North Kingstown, Rhode Island. This HHRA update was performed in support of the Site 09 Five Year Event Long-Term Monitoring (LTM) Report and will ultimately be used in the Fourth Five Year Review as part of the evaluation of compliance with the Remedial Action Objectives (RAOs) identified in the Record of Decision (ROD) (EA, 1997). The RAOs and selected remedial alternatives for Site 09 are described in the ROD. The selected remedial alternatives include:

- the construction of a multimedia cap (including a gas venting system), a stone shoreline revetment, an offshore breakwater, and the construction of inter-tidal wetlands;
- LTM of landfill gas, groundwater, sediment, and shellfish to evaluate the effectiveness of the remedy; and
- implementation of land-use controls, including a deed restriction on site use to maintain the integrity of the cap, a deed restriction on the installation or use of groundwater wells for drinking water or showering purposes, and warning signs to inform the public of the Rhode Island Department of Environmental Management (RIDEM) ban on shellfishing in the harbor.

A summary of the Site 09 history is provided in the Draft Tier II Sampling and Analysis Plan, Long Term Monitoring Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill (Resolution, 2016) and is, therefore, not included in this HHRA update. However, the previously conducted HHRAs are briefly summarized in the following section.

1.1 Previous HHRAs

As part of the March 2013 Third Five-Year Review Report (Tetra Tech, 2013), a limited screening-level human health risk evaluation was conducted for the primary chemicals detected in Site 09 sediment samples collected in 2005 to 2012 as part of the LTM program. The results of this limited evaluation concluded that the potential risks associated with potential exposure to sediment exceeded United States Environmental Protection Agency (USEPA) and RIDEM target levels based on a residential exposure scenario; and exceeded RIDEM target levels but were within USEPA target levels based on a recreational exposure scenario. Potentially carcinogenic polycyclic aromatic hydrocarbons (cPAHs) at location SED09-10 were the major contributors to the estimated potential cancer risks. The potential noncancer hazard index (HI) did not exceed USEPA/RIDEM's target level of 1 per target organ.

As part of the August 2015 Long-Term Monitoring Data Summary and Optimization Recommendations Report (Tetra Tech, 2015), an HHRA was conducted to evaluate potential risk/hazard to recreational users from ingestion of shellfish, direct contact exposure to sediment based on a swimming/wading and clamming scenario, and shallow groundwater (piezometer water) based on a clamming scenario. This HHRA considered data collected from 2007 to 2012. This HHRA is referred to as the "2013 HHRA" throughout this report given that this is the year in which the HHRA presented in the August 2015 LTM Report was conducted.

The 2013 HHRA conclusions indicated that the potential cancer risks associated with ingestion of shellfish tissue estimated for an adolescent, adult, and/or lifelong recreational user exceeded RIDEM's target cumulative cancer risk level of $1x10^{-5}$, but were within USEPA's target risk range of 10^{-6} to 10^{-4}. Risk drivers (i.e., chemicals that are the primary contributors to the exceedance of the target risk level) were arsenic, polychlorinated biphenyls (PCBs), and pesticides in shellfish tissue. The potential noncancer HIs for an adolescent and adult recreational user ingesting shellfish did not exceed USEPA/RIDEM's target HI of 1 per target organ.

The 2013 HHRA conducted as part of the 2015 LTM report also concluded that concentrations of primary contaminants in shellfish generally did not change during the 2007 to 2012 timeframe. The range of PCB concentrations detected in the Site 09 shellfish tissue samples collected in 2012 were within the range of concentrations detected in samples collected through the National Oceanic and Atmospheric Administration (NOAA) Mussel Watch Program. This suggests that it is possible that some of the PCB contamination noted in the Site 09 samples may reflect regional conditions.

Potential risks for adolescent, adult, and lifelong recreational users exceeded RIDEM's target cumulative cancer risk level of $1x10^{-5}$ in several cases evaluated in the 2013 HHRA due to exposure to shallow sediment (0 to 0.5 feet below ground surface [bgs]) and piezometer water. Primary risk drivers for exposure to shallow sediment were arsenic and cPAHs. Primary risk drivers for exposure to piezometer water (using maximum concentrations) were arsenic and vinyl chloride. However, using refined exposure assumptions to more accurately represent Site 09-specific exposure conditions, potential cancer risks were less than RIDEM's target risk level of $1x10^{-5}$ for exposure to shallow sediment. Potential cancer risks estimated using 95 percent (%) upper confidence limits on the arithmetic mean concentration (UCLs) as the exposure point concentrations (EPCs) instead of maximum concentrations for piezometer water were also less than RIDEM's target risk level of $1x10^{-5}$. The 95% UCLs are likely to be more representative of actual exposure conditions. The potential noncancer HIs for an adolescent and adult recreational user exposed to sediment and piezometer water did not exceed USEPA/RIDEM's target HI of 1 per target organ.

Comparison of regional cPAH sediment data to Site 09 shallow sediment data for several cPAHs suggests that concentrations of cPAHs detected in shallow sediment at location SED09-10 are

elevated compared to the regional dataset as well as when compared to the other Site 09 shallow sediment samples. Site 09 shallow sediment samples for the other sampling locations are within the range of or slightly exceed (i.e., are within one order of magnitude of) detected concentrations in the regional sediment dataset.

1.2 Objectives

The objective of this HHRA update (referred to herein as the 2017 HHRA update) is to determine whether there have been any changes and/or updates to USEPA HHRA guidance or site-specific conditions since the 2013 HHRA was conducted that would result in a change of the conclusions of the 2013 HHRA. The 2017 HHRA update includes the following:

- Calculation of summary statistics for analytical sediment, shallow groundwater (piezometer water), and shellfish tissue data collected along the Site 09 shoreline as part of the LTM, which are considered representative of current conditions (i.e., 2017 HHRA update dataset);
- Update of screening levels and chemical of potential concern (COPC) selection for shoreline sediment, shallow groundwater (piezometer water), and shellfish tissue;
- Update of human receptor exposure assumptions/parameters;
- Calculation of EPCs for COPCs within each medium based on the 2017 HHRA update dataset;
- Update of toxicity values for COPCs identified based on the 2017 HHRA update dataset.

In accordance with the approach discussed and agreed upon by the Davisville Base Realignment and Closure (BRAC) Cleanup Team (BCT) during the January 12, 2017 teleconference, a quantitative evaluation was performed to determine whether updates to the 2013 HHRA would result in changes to the overall conclusions of the 2013 HHRA, or whether the conclusions of the 2013 HHRA remain valid. Revised risk/hazard calculations were performed as part of this 2017 HHRA update to estimate the cumulative potential cancer risk and/or noncancer hazard associated with a recreational user exposure scenario, determine whether risk/hazard estimates exceed USEPA and/or RIDEM target risk/hazard levels, and identify whether the current institutional controls in place at Site 09 are still needed.

The following USEPA risk assessment guidance was utilized in this 2017 HHRA update. Guidance documentation includes, but is not limited to, the following:

- *Navy Policy for Conducting Human Health Risk Assessments Under the Environmental Restoration Program* (DON, 2001)
- *U.S. Navy Human Health Risk Assessment Guidance* (DON, 2008)

- *Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual* (Parts A, B, E) (USEPA, 1989a; 1991a; 1991b; 2004)
- *Human Health Toxicity Values in Superfund Risk Assessments* (USEPA, 2003)
- *Guidelines for Carcinogenic Risk Assessment* (USEPA, 2005a and b)
- *Exposure Factors Handbook* (USEPA, 2011)
- *Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors* (USEPA, 2014a)

The remainder of this report is organized into the following sections, consistent with USEPA's four-step paradigm for HHRA (USEPA, 1989a):

- Data Evaluation/Hazard Identification (Section 3.0)
- Exposure Assessment (Section 4.0)
- Toxicity Assessment (Section 5.0)
- Risk Characterization (Section 6.0)

Section 7.0 presents the summary and conclusions, and Section 8.0 presents the references cited in this report. Tables and figures, numbered sequentially as referenced in this report, are presented at the end of the text.

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2.0 CONCEPTUAL SITE MODEL

Site 09 is an approximate 15-acre, grassy, wooded area formerly used by the Navy as a landfill. The site is located within a 100-year floodplain and is bounded to the east by Allen Harbor, to the west by a bicycle path, and to the north and south by vegetated wetlands (Figure 1). Allen Harbor is used for recreational boating and is supported by two marinas. In 1984, RIDEM closed Allen Harbor to shellfishing due to suspected contamination by several sources, including Site 09.

As part of the selected remedy for Site 09 identified in the ROD (EA, 1997), the landfill has been capped and is currently covered with grass with small shrubs. A revetment wall and constructed wetland is located along the southern and eastern boundary of the landfill with a stone breakwater structure separating the wetland from the harbor.

Waste materials such as municipal-type waste, construction debris, rubble, preservatives, paint thinners, degreasers (e.g., solvents), PCBs, oil, asbestos, ash, sewage sludge, and waste fuel oil were disposed of in the landfill. Dredged sediment was used to construct the created wetland and contaminants potentially present within the dredged sediment may have entered media within the created wetland through leaching.

Constituents found in shoreline sediment immediately adjacent to Site 09 are most likely due to historical erosion of the landfill face and overland runoff prior to remedy implementation. This conclusion is supported by the historical presence of landfill debris along the Site 09 shoreline (e.g., asphalt, metal debris, glass fragments) prior to capping the landfill. Most of the constituents historically associated with quantifiable human health and ecological risk in near-shore sediment [polychlorinated aromatic hydrocarbons (PAHs), PCBs, and metals] are not detected, or are detected at low concentrations or frequency, in groundwater at the landfill.

Contaminants from the landfill and dredged sediment used to construct the created wetland may have entered sediment, sediment pore water, and surface water at Site 09 through leaching, and may have accumulated in shellfish living at the site.

Current Site Use

Site 09 was transferred as Parcel 10 from the Navy to the Town of North Kingstown via the U.S. Department of the Interior on May 10, 2004. The Town's current and future planned use of the property is as open space/conservation land. The property will not be used for residential purposes in the future due to environmental land use restrictions placed on the property as required by the ROD (EA, 1997). Groundwater at the site is classified by RIDEM as GB (i.e., not suitable for public or private drinking water use without treatment). However, Rhode Island does not have an USEPA-approved Comprehensive State Groundwater Protection Program; therefore, this classification is not recognized by USEPA. There are no groundwater production wells located on or downgradient of

Site 09. Institutional controls on the site include a restriction on the installation or use of groundwater wells for drinking water or showering purposes, and warning signs to inform the public of the RIDEM ban on shellfishing in the harbor.

This HHRA update evaluates potential exposure to shoreline sediment, piezometer water (which is assumed to be a mixture of shallow groundwater and surface water), and shellfish tissue based on recreational use of the Site 09 shoreline.

The potentially exposed receptors and exposure pathways for the Site 09 shoreline are summarized in Table 1.

3.0 DATA EVALUATION

This section summarizes the shoreline sediment, shallow groundwater (piezometer water), and shellfish tissue data evaluated in the HHRA update, and also provides a revised COPC selection to identify chemicals for further evaluation. A discussion of the sampling details associated with the data collection is provided in the LTM Report, and is not included in this HHRA update.

3.1 Summary of the Shoreline Dataset

The datasets for evaluation in the HHRA update are discussed by media in this section. Figure 2 identifies the shoreline sample locations.

3.1.1 Sediment

Shallow sediment samples were collected between 0 to 0.5 feet bgs from twelve locations along the Site 09 shoreline during three sampling events conducted in September 2014, September 2015, and September 2016. Due to a miscommunication, deep sediment samples were collected from 2 to 3 feet bgs instead of 0 to 0.5 feet bgs from the twelve locations in October 2013. Sediment samples were analyzed for metals, PCB Aroclors, pesticides, semivolatile organic compounds (SVOCs), and volatile organic compounds (VOCs). Appendix A presents a summary of sediment samples and individual analytical sediment sample results.

The 2013 sediment samples were collected from 2 to 3 feet bgs as specified in the Final Quality Assurance Project Plan for Long Term Monitoring of Site 09 (EA, 2001). However, it had been subsequently agreed to by the Davisville BCT to collect shallow sediment samples which are more representative for potential human contact. Contact with deeper sediment (2 to 3 ft bgs) is not considered a complete exposure pathway for recreational users. Rather than exclude the deep sediment from this HHRA update completely, shallow and deep sediment samples were summarized separately and included in a screening-level evaluation in this HHRA update for informational purposes. However, the deep sediment samples were not evaluated in the HHRA beyond the screening-level evaluation.

3.1.2 Shallow Groundwater (Piezometer Water)

Shallow groundwater samples were collected during four sampling events conducted in October 2013, September 2014, September 2015, and September 2016 from twelve piezometers located along the Site 09 shoreline. The piezometer water is assumed to be a mixture of groundwater and surface water, but is referred to in this HHRA update as shallow groundwater (piezometer water). The screened interval for the piezometers is approximately two to three feet bgs. Shallow groundwater samples were analyzed for total (unfiltered) metals, dissolved (filtered) metals, PCB Aroclors, pesticides, SVOCs, and VOCs. Appendix A presents a summary of shallow groundwater (piezometer water) samples and individual analytical sample results.

3.1.3 Shellfish Tissue

Shellfish tissue samples were collected during four sampling events conducted in October 2013, September 2014, September 2015, and December 2016 from ten locations along the Site 09 shoreline. Shellfish tissue samples were analyzed for metals, PCB homologs, pesticides, and SVOCs. Shellfish data from the initial 2016 sampling event (September 2016) were not included due to data quality issues, per agreement with the BCT. Shellfish analytical results were reported and evaluated on a wet weight basis. Appendix A presents a summary of shellfish tissue samples and individual analytical shellfish tissue sample results.

3.2 Data Treatment

Analytical data were evaluated, validated, and qualified prior to use in the HHRA update. Data evaluation and validation included a comparison of the site data to corresponding blank (laboratory, field, equipment, and trip) concentration data. Data validation reports are presented as Attachment B of the LTM report. Data rejected during data validation ("R" qualified) were not used in the HHRA. Estimated values ("J" qualified) were used in the HHRA without modification. If the value was flagged with "U" or "UJ," the result was considered a non-detect value.

For each medium, data were compiled into summary statistics. For each chemical detected at least once within a medium, the summary statistics include frequency of detection, range of detection limits, range of detected concentrations, and location of maximum detected result. Note that due to the exclusion of "R" qualified groundwater results for certain analytes, the frequency of detection may vary within a medium.

For sample locations in which a duplicate sample was also collected, the duplicate sample results for each chemical/medium combination were processed for use in the calculation of summary statistics. Duplicates were resolved as follows: (1) where both the sample and the duplicate results are not detected, the resulting value is the average of the limits of detection; (2) where both the sample and the duplicate results are detected, the resulting value is the average of the detected results; and (3) where one of the pair is reported as not detected and the other is detected, the detected concentration is used.

Appendix B presents comparisons of the summary statistics for chemicals detected in the 2017 HHRA update shallow sediment and groundwater (piezometer water) datasets to the summary statistics for COPCs identified in the 2013 HHRA. The summary statistics comparisons indicate that the maximum detected shallow sediment concentrations have increased for about half of the metals and decreased for the other half. The majority of the maximum detected shallow sediment concentrations for the pesticides, PAHs, and VOCs have decreased. The maximum detected shallow groundwater concentrations for the majority of the metals, pesticides, PAHs, and VOCs have decreased.

A trend analysis of shellfish tissue concentrations was performed as part of the LTM Report. This analysis indicates an upward concentration trend for several metals, specifically in sample locations at the north and south ends of the Site 09 shoreline. Downward concentration trends were identified for several PAHs and PCB homologs in these areas.

3.3 Identification of Sediment and Groundwater COPCs

The identification of sediment and shallow groundwater COPCs was performed per medium based on a comparison of the maximum detected concentrations of detected chemicals to the screening or regulatory values discussed below. Chemicals detected at concentrations above the screening or regulatory values were identified as COPCs for further evaluation in the HHRA update. Chemicals that were not detected in a particular medium or were detected at concentrations below the screening or regulatory values were eliminated from being COPCs and were not evaluated further.

The COPC selection for sediment and shallow groundwater (piezometer water) are presented in Tables 2.1 and 2.2, respectively. For analytes lacking a chemical-specific screening level, a conservative surrogate chemical was selected and its screening level was used for COPC screening. Specific instances where surrogate assignments were made are identified in footnotes in the COPC selection tables. Screening levels and regulatory criteria were used to select sediment and groundwater COPCs as discussed per media below.

3.3.1 Sediment

Published human health screening levels for sediment are not available. Therefore, sediment COPCs were conservatively selected using the USEPA residential soil Regional Screening Levels (RSLs) (USEPA, 2016a) based on a target excess lifetime cancer risk (ELCR) of 10^{-6} and a target hazard quotient (HQ) of 0.1 (to account for potential cumulative effects of multiple chemicals acting on the same target organ), and the RIDEM Method 1 Direct Contact Exposure Criteria for soil (RIDEM, 2011). The residential screening levels are overly conservative for a recreational sediment scenario as they are based on a 350 day per year exposure frequency, which is unlikely for sediment exposure. A chemical was selected as a sediment COPC if the maximum detected concentration exceeded either of the screening levels. The comparison to screening levels was performed separately for shallow and deep sediment.

RIDEM soil criteria have not changed since the 2013 HHRA was performed. However, the USEPA RSLs are typically updated twice per year. Changes to the RSLs associated with each update are documented on USEPA's RSL website (https://www.epa.gov/risk/regional-screening-levels-rsls-whats-new-may-2016).

In January 2017, USEPA released the final Integrated Risk Information System (IRIS) assessment of benzo(a)pyrene (USEPA, 2017a). This assessment includes revised cancer toxicity values as well

as new noncancer toxicity values for benzo(a)pyrene and also affects the cancer toxicity values for other cPAHs, which are derived by application of an equivalency factor to the cancer toxicity values for benzo(a)pyrene (USEPA, 1993). The most current version of the RSL table (May 2016) pre-dates the benzo(a)pyrene update. Therefore, USEPA RSLs for PAHs were calculated using the RSL calculator (USEPA, 2017b) to reflect the most current toxicity values.

Table 2.1 presents the COPC selection for sediment. Table 2.3 presents a comparison of the COPCs identified in the 2013 HHRA and those identified as a result of the updated COPC selection performed in this 2017 HHRA update. This comparison shows that the 2017 HHRA update did not identify any additional COPCs in shallow sediment. Three PAHs identified as COPCs in the 2013 HHRA are no longer identified as COPCs based on the updated dataset.

The list of COPCs identified in deep sediment is shorter than in shallow sediment. Three chemicals (aluminum, manganese, and Total PCBs), which were not previously identified as COPCs in deep sediment, were identified as COPCs based on the updated dataset. However, these chemicals were identified as COPCs in shallow sediment in both the 2013 HHRA and are also identified as COPCs in shallow sediment based on the updated dataset. One PAH identified as a COPC in the 2013 HHRA is no longer identified as a COPC based on the updated dataset.

3.3.2 Groundwater

Groundwater screening levels include the USEPA Maximum Contaminant Levels (MCLs) for drinking water (USEPA, 2017c), USEPA tapwater Regional Screening Levels (RSLs) (USEPA, 2016a) based on a target excess lifetime cancer risk (ELCR) of 10^{-6} and a target hazard quotient (HQ) of 0.1 (to account for potential cumulative effects of multiple chemicals acting on the same target organ), and RIDEM GA Groundwater Objectives (RIDEM, 2011). A chemical was selected as a groundwater COPC if the maximum detected concentration exceeded any of the groundwater screening levels.

USEPA MCLs and RIDEM GA Groundwater Objectives have not changed since the 2013 HHRA was performed. However, the USEPA RSLs are typically updated twice per year. Changes to the RSLs associated with each update are documented on USEPA's RSL website (https://www.epa.gov/risk/regional-screening-levels-rsls-whats-new-may-2016).

As discussed for sediment in Section 3.3.1, USEPA RSLs for PAHs were calculated using the RSL calculator (USEPA, 2017b) to reflect the most current toxicity values.

Table 2.2 presents the COPC selection for shallow groundwater. Table 2.3 presents a comparison of the COPCs identified in the 2013 HHRA and those identified as a result of the updated COPC selection performed in this 2017 HHRA update. This comparison shows that the list of total metals identified as shallow groundwater COPCs has not changed. Three dissolved metals, two PAHs, and four VOCs identified as COPCs in the 2013 HHRA are no longer identified as COPCs based on the

updated dataset. Two PAHs, which were not previously identified as COPCs in shallow groundwater, were identified as COPCs based on the updated dataset.

3.4 Development of Shellfish Tissue Screening Levels

The quantification of potential risk/hazard associated with exposure to shellfish tissue was performed for all chemicals detected in shellfish tissue; therefore, a COPC selection step was not performed for this medium. In accordance with the approach used in the 2013 HHRA, risk-based concentrations for shellfish tissue were derived for use in the estimation of potential risk/hazard using a "risk-ratio" approach, which is further discussed in Section 6.2. Risk-based concentrations for shellfish tissue were developed using the USEPA RSL Calculator (USEPA, 2017b). Default exposure inputs provided in the calculator for a residential exposure scenario [i.e., exposure frequency of 350 days per year, exposure duration of 26 years, and body weight of 80 kilogram (kg)], were used in conjunction with a shellfish ingestion rate of 12,800 milligrams per day (mg/day). The shellfish ingestion rate is equal to the 95th percentile uncooked weight per capita of shellfish consumption for the U.S. population (USEPA, 2011) and was recommended for use by USEPA Region 1 (Tetra Tech, 2013). The shellfish tissue RSLs were developed based on a target ELCR of 10^{-6} and a target HQ 1. (Note: Given that the risk-based concentrations are not used to exclude chemicals from further evaluation, use of a target HQ less than 1 is not necessary).

Shellfish tissue RSLs are not available for lead. Therefore, the screening level for lead in shellfish tissue is equal to the U.S. Food and Drug Administration (USFDA) action level for lead in crustaceans (USFDA, 2007).

4.0 EXPOSURE ASSESSMENT

The purpose of the exposure assessment is the quantification of the extent, frequency, and duration of actual or potential exposure to chemicals by pathways relevant to the site and activities of the potential receptors.

4.1 Determination of Exposure Point Concentrations

Exposure points are the locations where potential receptors may contact COPCs at or from a site. The exposure points (or exposure areas) were defined based on the anticipated receptor activity and the spatial distribution of COPC concentrations. EPCs are the concentrations of COPCs in the environmental medium that receptors may contact, which are estimated in order to determine the magnitude of potential exposure. EPCs for evaluation of the reasonable maximum exposure (RME) scenario were calculated as described below.

Sediment

Sediment EPCs were calculated based on shallow sediment samples collected between 0 and 0.5 feet bgs from all locations along the shoreline (SED09-01, SED09-02A, SED09-03A, SED09-04A, SED09-05A, SED09-06B, SED09-07B, SED09-08B, SED09-09, SED09-10, SED09-11B, and SED09-12B).

The 2013 HHRA developed sediment EPCs for multiple scenarios, as follows:

- 95% UCL for shallow sediment data collected from 2010 through 2012;
- 95% UCL for shallow sediment data collected from 2010 through 2012 assuming sample location SED09-10 (which had detections of PAHs at least an order of magnitude greater than those detected at other locations) represents 10% of the exposure unit and remaining locations represent 90% of the exposure unit for select PAHs (i.e., an “area weighted” UCL case);
- 95% UCL for shallow sediment data collected in 2012;
- 95% UCL for shallow sediment data collected in 2012 assuming SED09-10 represents 10% of the exposure unit and remaining locations represent 90% of the exposure unit for select PAHs (i.e., an “area weighted” UCL case); and
- Maximum concentration for deep sediment data collected in 2010.

In this 2017 HHRA update, EPCs were calculated based only on the shallow sediment dataset. Deep sediment data (collected from 2 to 3 feet bgs) are not considered to be available for direct contact by recreational users. The combined 2014 through 2016 shallow sediment dataset was evaluated because no discernable concentration pattern was identified within this timeframe. All sediment sampling locations were weighted equally.

Shallow Groundwater

Shallow groundwater EPCs were calculated based on piezometer water samples collected from all locations along the shoreline (P09-01, P09-02A, P09-03A, P09-04A, P09-05A, P09-06B, P09-07B, P09-08B, P09-09, P09-10, P09-11B, and P09-12B).

The 2013 HHRA developed shallow groundwater EPCs for multiple scenarios, as follows:

- Maximum concentration for piezometer water data collected from 2010 through 2012 using total metals results;
- 95% UCL for piezometer water data collected from 2010 through 2012 using total metals results;
- 95% UCL for piezometer water data collected from 2010 through 2012 using dissolved metals results.

In this 2017 HHRA update, the combined 2013 through 2016 dataset was evaluated because no discernable concentration pattern was identified within this timeframe. Shallow groundwater (piezometer water) EPCs are equal to the UCL or the maximum concentration, whichever is lower (USEPA, 2002). The 2017 HHRA update derived EPCs for metals based on the total (unfiltered) results. Dissolved (filtered) metals data were not evaluated beyond a comparison to screening levels because it is common HHRA practice to use total results to evaluate human exposure to chemicals in water as the total fraction represents the fraction available for ingestion. While dissolved concentrations are applicable to the dermal contact pathway, the dermal contact pathway is conservatively evaluated using totals data.

Shellfish Tissue

Shellfish tissue EPCs were calculated based on shellfish tissue samples collected from all locations along the shoreline (ET09-03, ET09-04, ET09-05, ET09-06, ET09-07, ET09-08, ET09-09, ET09-10, ET09-11, and ET09-12).

The 2013 HHRA developed shellfish tissue EPCs for multiple scenarios, as follows:

- Maximum detected concentration for 2012 dataset;
- 95% UCL concentration for 2012 dataset;
- Maximum detected concentration in the 2010 through 2012 datasets;
- 95% UCL for 2010 through 2012 datasets; and
- 95% UCL for 2007 through 2012 datasets.

In this 2017 HHRA update, shellfish tissue EPCs were calculated based on the combined 2013 through 2016 shellfish tissue dataset because no discernable concentration pattern was identified within this timeframe.

For all media evaluated in the 2017 HHRA update, EPCs are equal to the UCL or the maximum concentration, whichever is lower (USEPA, 2002). USEPA's ProUCL Version 5.1.002 software (USEPA, 2016b) was used to calculate the ProUCL recommended UCL. Based on information presented in the ProUCL guidance (USEPA, 2015) regarding minimum sample size and frequency detection, UCLs were calculated where at least 10 samples and at least 6 detects are available. Appendix C presents the ProUCL input and output sheets.

When the minimum sample size and number of detects were not met for a dataset, or if the UCL was greater than the maximum detected concentration, the maximum detected concentration was used as the EPC.

The EPCs for COPCs in shallow sediment, shallow groundwater (piezometer water), and shellfish tissue evaluated in the 2017 HHRA update are presented in Tables 3.1, 3.2, and 3.3, respectively. Tables 3.1 through 3.3 also show a comparison of the updated EPCs to those evaluated in the 2013 HHRA. The EPCs equal to the 95% UCL scenario from the 2013 HHRA were utilized in the comparison. The results of the comparison are discussed by media as follows.

The shallow sediment EPCs based on all sample locations (i.e., unweighted and weighted EPCs) developed in the 2013 HHRA have slightly increased (less than 2 times higher) for metals and PCBs. The shallow sediment EPCs for the cPAHs have decreased in comparison to the 2013 unweighted EPCs and have increased (with the exception of one cPAH) (less than 2 times higher) in comparison to the 2013 weighted EPCs.

The updated shallow groundwater EPCs for several COPCs have increased (between 1 to 23 times higher) in comparison to the EPCs calculated in the 2013 HHRA. However, the maximum detected shallow groundwater concentrations for the majority of the metals, pesticides, cPAHs, and VOCs have decreased. The increase in EPCs is likely due to a smaller sample size and higher reporting limits used for non-detect results utilized in the calculation of the UCL.

The majority of the updated shellfish tissue EPCs for PCBs, pesticides, and SVOCs have decreased in comparison to the EPCs calculated in the 2013 HHRA. The EPCs for several metals have increased.

4.2 Receptors and Exposure Pathways

The receptors and exposure pathways evaluated in the 2013 HHRA based on current and potential future land use remain appropriate for evaluation in the 2017 HHRA update and are summarized in Table 1 and as follows:

- Current/future recreational users (adolescent [age 7 through 16 years] and adult) may be exposed to shoreline shallow sediment via incidental ingestion and dermal contact while swimming, wading or harvesting shellfish (clamming); shallow groundwater (piezometer water) along the shoreline via direct contact while clamming; and to shellfish tissue via ingestion.

There are no formal recreational facilities (e.g., public swimming areas) currently located along the Site 09 shoreline and there are no known plans for development of formal recreational facilities in the future. Therefore, it is unlikely that a young child would be routinely exposed to the environmental media along the Site 09 shoreline. Therefore, exposure to Site 09 media by young children (birth through 6 years) was not evaluated in this 2017 HHRA update. The recreational user exposure scenarios evaluated in the HHRAs are also protective of occasional trespassers to the shoreline.

The quantitative exposure assumptions used for evaluation in the 2013 HHRA were updated based on current USEPA guidance (USEPA, 2004, 2011 and 2014) and an RME scenario, as appropriate. Table 4 presents a comparison of the exposure assumptions utilized in the 2013 HHRA in comparison to the updated exposure assumptions. Parameters that have changed based on the update are highlighted. Several exposure parameters were updated based on revisions to USEPA's recommended default exposure assumptions, including body weight, exposure duration, skin surface area, and sediment adherence factor. Site-specific assumptions used in the 2013 HHRA were not changed based on professional judgment, including the assumed exposure frequency of 80 days per year and event frequency of 1 event per day. The exposure frequency for recreational users is based on exposure to shoreline shallow sediment and groundwater for three days a week over the course of the warmer weather months (April through October). Assumptions based on the percentages of the total body surface area exposed to shallow groundwater used in the 2013 HHRA were also not changed. However, the total skin surface area values were revised based on application of the percentages to the revised total body surface areas identified based on USEPA guidance (2011 and 2014). The 2013 HHRA used a default soil ingestion rate of 100 mg/day. There is considerable debate in the scientific community regarding incidental soil ingestion, and research to better characterize soil ingestion rates continues. USEPA acknowledges in the *Exposure Factors Handbook* that studies of adult soil ingestion are extremely limited (USEPA, 2011). USEPA (2011) identifies a central tendency soil ingestion rate for adults of 50 milligrams per day (mg/day). The ingestion rate is based on the average soil ingestion rate identified by Davis and Mirick (2006) and

includes both soil and dust. USEPA (2014) recommends an upper-bound soil (RME) ingestion rate of 100 mg/day for adults. The source of the 100 mg/day recommendation dates back to 1989 and was the recommended value in 1991 (USEPA, 1989b, 1991a). The soil ingestion rate represents the total daily intake of soil integrated over a variety of activities and sources, both indoors and outdoors. The use of the upper-bound soil ingestion rate of 100 mg/day is not considered to be appropriate for the evaluation of sediment ingestion under a recreational scenario for the following reasons: (1) Other locations contribute to the total daily soil intake, particularly given the less than 24 hours of exposure anticipated for the recreational receptor; and (2) the 100 mg/day rate is based on outdated studies of soil ingestion (USEPA, 1989b). More recently published studies incorporate improvements in study design and analysis and address some of the issues and uncertainties associated with the earlier studies (Stanek et al., 1997; Stanek et al.; 1999, Stanek and Calabrese, 2000). These newer data suggest that the upper-bound estimate of long-term soil ingestion for adults is approximately half of the 100 mg/day older estimate, and the central tendency estimate is approximately one-fifth of the older mean value of 50 mg/day. Therefore, based on the newer data, an upper-bound estimate of adult soil ingestion is 50 mg/day, and a central tendency estimate of soil ingestion is 10 mg/day. The upper-bound value of 50 mg/day is therefore used in this 2017 HHRA update.

4.3 Calculation of Unit Intakes

In the 2013 HHRA, chronic daily intake values for the incidental ingestion and dermal contact pathways of exposure to sediment and groundwater were calculated in accordance with USEPA guidance (1989a and 2004). Equations in these documents are used for calculating a lifetime average daily dose (LADD) relevant to cancer risk (i.e., cancer intake) or for calculating an average daily dose (ADD) relevant to noncancer hazard (i.e., noncancer intake). The medium-specific equations used for the calculation of cancer and noncancer intakes of the COPCs (presented in the 2013 HHRA, Attachment 2) are still valid and appropriate for use, and are presented below.

Unit intake estimates were calculated based on the updated exposure assumptions discussed in Section 4.2, consistent with the equations utilized in the 2013 HHRA. The equations for calculation of unit intake are as follows:

<u>Sediment:</u>

- Incidental ingestion Intake [(mg/kg-day)(kg/mg)]= [Ingestion Rate (mg/day) x conversion factor (1E-6 kg/mg) x exposure frequency (days/year) x exposure duration (years) x fraction from contaminated source (unitless)] / [body weight (kg) x averaging time (days)]

- Dermal Intake [(mg/kg-day)/(kg/mg)]= [surface area (square centimeters [cm^2]) x adherence factor (mg/cm^2-event) x event frequency (events/day) x exposure frequency (days/year) x exposure duration (years) x conversion factor (1E-6 kg/mg)] / [body weight (kg) x averaging time (days)]

Groundwater:

- Dermal Intake [(cm^2-event)/(kg-day)]= [surface area (cm^2) x event frequency (events/day) x exposure frequency (days/year) x exposure duration (years)] / [body weight (kg) x averaging time (days)]

Chemical-specific parameters, including concentration, sediment absorption factors, and water dermal absorption parameters are not included in the unit intakes.

5.0 TOXICITY ASSESSMENT

The toxicity assessment was conducted in accordance with USEPA guidance and considers chronic (long-term) exposures for carcinogenic and noncarcinogenic COPCs. The USEPA's guidance regarding the hierarchy of sources of human health dose-response values in risk assessment was followed (USEPA, 2003) and is presented below:

- *Tier 1*: USEPA's IRIS (USEPA, 2017d)
- *Tier 2*: Provisional Peer-Reviewed Toxicity Values obtained from USEPA via the USEPA National Center for Environmental Assessment in Cincinnati, Ohio (USEPA, 2017e)
- *Tier 3*: Other sources of dose-response values including, but not limited to, California EPA's Office of Environmental Health and Hazard Assessment Toxicity Criteria Database (CalEPA, 2016), minimal risk levels published by the Agency for Toxic Substances and Disease Registry (ATSDR, 2016), and the Health Effects Assessment Summary Tables (USEPA, 1997)

Where published dose-response values were not available for a chemical, dose-response values based on surrogate chemicals (i.e., chemicals with structural similarities) were identified. The chosen surrogate is referenced in the summary table(s) of dose-response values.

No noncancer reference doses (RfDs) or cancer slope factors (CSFs) are available for evaluating dermal exposure. Therefore, cancer risks and noncancer hazards associated with dermal exposure may be evaluated using an oral CSF or RfD adjusted such that the toxicity value is appropriate for the dermal pathway. As detailed by USEPA (2004), for purposes of evaluating dermal exposure, it is generally necessary to adjust an oral toxicity factor (i.e., RfD or CSF) from an administered (i.e., applied) dose to an absorbed (i.e., internal) dose. Because the toxicity values for the COPCs at the site are expressed as orally administered doses (i.e., applied or intake-based), it is necessary to

adjust both the RfDs and CSFs for these substances in estimating exposure on an absorbed-dose basis when assessing dermal exposure.

Table 5 summarizes the oral and dermal noncancer toxicity values (i.e., RfDs) and the corresponding critical effects for Site 09 shallow sediment and groundwater COPCs. Table 6 summarizes the oral and dermal CSFs and the corresponding weight-of-evidence classifications for Site 09 shallow sediment and groundwater COPCs.

In the 2013 HHRA, the quantitative evaluation of potential risks for carcinogenic COPCs with a mutagenic mode of action followed the USEPA guidance titled *Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens* (USEPA, 2005a). Specifically, the quantification of cancer risks for child receptors involves the use of age-dependent adjustment factors (ADAFs), as follows:

- an ADAF of 10 was used for exposures occurring less than 2 years of age
- an ADAF of 3 was used for exposures occurring between 2 and less than 16 years of age
- an ADAF of 1 was used for exposures occurring after 16 years of age

The Site 09 COPCs considered to be mutagenic, for which application of ADAFs is necessary, are benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and dibenz(a,h)anthracene. Vinyl chloride is a mutagenic COPC. However, cancer toxicity values for vinyl chloride account for mutagenic action, such that ADAFs are not applied to the cancer risks for vinyl chloride.

6.0 RISK CHARACTERIZATION

Risk characterization combines estimates of exposure with toxicity data to develop estimates of the probability that an adverse effect will occur under the specified conditions of exposure. The risk characterization was divided into three phases: (1) risk estimation, (2) risk description, and (3) uncertainty analysis.

Risk estimation is undertaken by combining the toxicity factors and exposure assessment equations to calculate estimates of risks. Noncancer hazards are reported as pathway-specific HIs (hazard indices), which are the sum of individual COPC HQs for that pathway. A total HI is calculated, as well as HQs from COPCs that affect the same target organ. Estimates of cancer risks are reported as ELCRs. Current practice considers cancer risks to be additive when assessing exposure to a mixture of hazardous substances. The significance of the risk estimates are relative to risk management criteria set forth in USEPA policy. The uncertainty analysis describes the impact of data uncertainty and variability, exposure assumptions, and toxicity values on estimates of potential risk.

The potential cancer risk for each receptor is estimated for each medium by means of an ELCR. The ELCR represents the incremental upper-bound probability that an individual could develop cancer over his or her lifetime due to exposure to potential carcinogens under the conditions specified in the exposure scenario. For example, cancer risk levels of 10^{-6} and 10^{-4} represent an incremental chance of one-in-one-million and one-in-ten-thousand, respectively, that an individual could contract cancer over a lifetime.

USEPA (1991b) states that where the cumulative incremental current or future potential ELCR to an individual is less than 10^{-4}, action generally is not warranted unless there are adverse environmental impacts. RIDEM uses a target ELCR of 10^{-5} (RIDEM, 2011). The potential ELCR for each pathway (i.e.., the shallow sediment incidental ingestion pathway, the shallow groundwater pathway or the shellfish ingestion pathway) was calculated by summing the potential ELCRs from each COPC within the pathway, while receptor risks for each medium were calculated by summing ELCRs for each pathway within the medium (e.g., the shallow sediment incidental ingestion and dermal contact pathways).

The sum of the HQs for all chemicals within a pathway that have the same target organ or type of toxicity is termed the pathway HI. The HI is useful as a reference point for gauging potential effects of environmental exposures to complex mixtures. In general, HIs that are less than 1 are not of regulatory concern; however, an HI of greater than 1 does not automatically indicate that an adverse effect will occur and should not automatically be interpreted as posing an unacceptable risk to the exposed population. The magnitude of the HQ cannot be directly equated to a probability or effect level.

The total pathway HI for each exposure point was calculated by summing the HQs for all COPCs. Total HIs for each receptor by medium were calculated by summing the total HIs across pathways within the media (e.g., summing dermal and incidental ingestion shallow sediment risk estimates). As a first approximation, all COPCs are assumed to have additive effects. If the total HI for all COPCs does not exceed USEPA or RIDEM's target HI, then the total HI per target organ would also not exceed USEPA/RIDEM's target HI. Therefore, calculation of target HIs per target endpoint is not performed when the total HI is equal to or below 1. Both USEPA and RIDEM use a target HI per target organ of 1 (USEPA, 1991b; RIDEM, 2011).

For each associated exposure scenario with a potential cumulative ELCR/HI above USEPA or RIDEM target levels, risk drivers were identified as COPCs with an individual ELCR > 10^{-6} or target organ HI > 1, at one significant figure. Chemicals of concern (COCs) were identified as risk drivers that cause an exceedance of USEPA or RIDEM target ELCR or HI levels.

The following sections discuss the methods used for estimating the potential ELCR and HI.

6.1 Estimation of Potential ELCR and HI Associated with Exposure to Shallow Sediment and Groundwater (Piezometer Water)

In accordance with USEPA HHRA guidance (1989a, 2004, 2005a and b), potential ELCR and noncancer HQs associated with exposure to shallow sediment and groundwater (piezometer water) were estimated for the associated COPCs within each medium using the following equations. These equations include combination of the revised EPCs, pathway-specific unit intakes, chemical-specific toxicity values, and other chemical-specific factors (i.e., sediment ingestion and dermal-water absorption factors).

Sediment:

- Potential ELCR = EPC [milligram per kilogram mg/kg)] x unit intake [(mg/kg-day)(kg/mg)] x CSF $(mg/kg\text{-}day)^{-1}$ x sediment ABS (unitless) x ADAF (as applicable)
- Potential HQ = EPC (mg/kg) x unit intake [(mg/kg-day)(kg/mg)] x {1 / [RfD (mg/kg-day)]} x sediment ABS (unitless)

Groundwater:

- Potential ELCR = EPC (ug/L) x unit intake $[(cm^2\text{-event})/(kg\text{-day})]$ x CSF $(mg/kg\text{-}day)^{-1}$ x dermal factor ("Z") $(L/cm^2\text{-event})$ x 0.001 mg/ug) x ADAF (as applicable)
- Potential HQ = EPC (ug/L) x unit intake $[(cm^2\text{-event})/(kg\text{-day})]$ x {1 / [RfD (mg/kg-day)]} x dermal factor ("Z") $(L/cm^2\text{-event})$ x 0.001 mg/ug

Chemical-specific parameters including oral and dermal sediment absorption factors and dermal water parameters used in the calculation of oral and/or dermal dose in the 2013 HHRA were updated, as necessary, and are presented in Tables 7 and 8, respectively. These chemical-specific parameters are discussed further in Section 6.1.1 and 6.1.2.

Potential ELCR and HI estimates were estimated individually for adolescent and adult recreational users based on exposure to shallow sediment and groundwater (piezometer water). Since potentially carcinogenic effects are averaged over a receptor's lifetime, potential ELCR estimates were also estimated for a "Lifelong" scenario by summing the associated estimates for the adolescent and adult age groups. A lifelong scenario is not appropriate for evaluating noncancer HI because noncancer exposures are averaged over the period of exposure for each receptor. The estimation of potential ELCR/HI for a current/future recreational user exposed to shoreline shallow sediment and shallow groundwater (piezometer water) is presented on Table 9.1 (assuming exposure to sediment occurs while swimming/wading) and Table 9.2 (assuming exposure to sediment occurs while clamming). The potential ELCR and HI results are discussed in Section 6.3.

6.1.1 Sediment Absorption Factors

USEPA guidance (USEPA, 2012) recommends the use of site-specific bioavailability data to adjust exposure estimates in site-specific HHRAs when the medium of exposure in the exposure assessment differs from the medium of exposure associated with the toxicity value (i.e., CSF and RfD). In the absence of reliable site-specific data, the default assumption is that the bioavailability of a chemical is the same in an exposure medium at a site (e.g., sediment, water, etc.) as it is in the exposure medium used to derive the toxicity value. For arsenic, published toxicity values in USEPA's IRIS database are based upon exposure to arsenic in water (USEPA, 2017d). Therefore, use of these toxicity factors without adjustment assumes that the bioavailability of arsenic in soil or sediment is the same as the bioavailability of arsenic in water (relative bioavailability (RBA) of 100%). However, bioavailability studies conducted in animal models show that bioavailability of arsenic in soil is typically less than that of highly water soluble forms of arsenic (USEPA, 2012). Therefore, assuming an RBA of 100% for evaluation of arsenic in soil/sediment will result in an overestimation of risk. As a result of this recent research, USEPA released guidance recommending a default RBA for arsenic in soils of 60% be used where site-specific arsenic bioavailability assessment is not feasible (USEPA, 2012b). A RBA of 60% (0.6) was applied to arsenic in sediment in this HHRA in accordance with USEPA's guidance for soil by setting the oral absorption adjustment factor for arsenic in sediment to 0.6, as shown in Table 7.

Dermal absorption adjustment fractions for sediment COPCs were identified consistent with USEPA (2004) guidance.

6.1.2 Dermal Water Parameters

The dermal factor ("Z") represents the dose absorbed per unit area per event (DA_{event}) term (USEPA, 2004) with the water concentration (i.e., EPC) removed. The combination of the EPC (µg/L), "Z" (L/cm^2-event), and conversion factor of 0.001 mg/ug equal DA_{event} (mg/cm^2-event), making the groundwater equations for estimation of potential ELCR and HQ associated with dermal exposure presented in Section 6.1 consistent with those recommended in USEPA's dermal HHRA guidance (USEPA, 2004; Equations 3.2, 3.3, and 3.4). The parameters used in the calculation of the dermal factor ("Z") are presented in Table 8.

The quantification of potential noncancer hazards and cancer risks associated with the surface water pathway followed Exhibit 1-2 in the USEPA RAGS Part E guidance (2004). Specifically, if dermal assessment was not recommended in USEPA RAGS Part E (2004), no further evaluation of the dermal pathway was conducted for that COPC. Dermal assessment is not recommended for chemicals with a very large or very small octanol-water partition coefficient (K_{ow}) value, including benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene. These chemicals are considered to be outside of the "Effective Prediction Domain (EPD)", which means that an appropriate dermal permeability constant (K_p) value cannot be predicted by the statistical model (USEPA, 2004).

6.2 Estimation of Potential ELCR and HQ Associated with Shellfish Ingestion

Consistent with the approach used in the 2013 HHRA, in this 2017 HHRA update, risk-based shellfish tissue concentrations were derived for use in the estimation of potential ELCR and HI associated with the shellfish tissue ingestion pathway using a "risk-ratio" approach. This type of approach is presented in the USEPA RSL User's Guide (USEPA, 2016a). Risk-based concentrations (i.e., RSLs) for shellfish tissue were developed based on cancer effects using a target ELCR of 1E-6 and noncancer effects using a target HQ of 1, as described in Section 3.4. Potential ELCR and noncancer HQ estimates were developed for each chemical detected in shellfish tissue using the following equations:

Estimation of potential ELCR:

$$\frac{RSL_{cancer}\,(mg/kg)}{Target\ ELCR\ of\ 1E-6} = \frac{Tissue\ EPC\ (mg/kg)}{Potential\ ELCR}$$

$$Potential ELCR = \frac{Tissue\ EPC\ (mg/kg) \times 1E-6}{RSL_{cancer}\,(mg/kg)}$$

Estimation of potential HQ:

$$\frac{\text{RSL}_{\text{noncancer}}\,(\text{mg/kg})}{\text{Target HQ} = 1} = \frac{\text{Tissue EPC (mg/kg)}}{\text{Potential HQ}}$$

$$\text{Potential HQ} = \frac{\text{Tissue EPC (mg/kg)} \times 1}{\text{RSL}_{\text{noncancer}}\,(\text{mg/kg})}$$

The cumulative potential ELCR and total HI associated with the shellfish ingestion pathway was estimated by summing the potential ELCR and HQs for all of the detected chemicals. Because the comparison of site data to reference area data indicated that site arsenic concentrations may be consistent with reference area concentrations, the potential cumulative ELCR and total HI was also estimated excluding arsenic. This approach is consistent with the approach utilized in the 2013 HHRA. The estimation of potential ELCR/HI for a current/future recreational user exposed to shellfish tissue via ingestion is presented on Table 9.3.

6.3 Risk Characterization Results

The potential cancer risk and noncancer hazard results are discussed in this section. To evaluate the potential cumulative ELCR and HI for a recreational user who swims or wades, clams, and ingests shellfish from the Site 09 shoreline, the ELCR/HIs associated with sediment/groundwater exposure were added to those associated with shellfish tissue exposure. Exposure to shallow sediment was evaluated for both a swimming/wading and clamming exposure scenario. The potential ELCR/HI associated with exposure to shallow sediment via swimming/wading was included in the cumulative ELCR/HI estimate because the swimming/wading scenario represents a higher level of sediment exposure and higher level of risk/hazard than the clamming scenario. The potential cumulative ELCRs and HIs estimated based on exposure to all three media are presented in Table 10. Table 10 also summarizes the cumulative potential ELCRs and HIs associated with the scenarios considered to be the most representative of exposure estimated in the 2013 HHRA.

The cumulative potential ELCR associated with a lifetime recreational user exposure to shallow sediment (assuming a swimming/wading scenario), groundwater (piezometer water), and shellfish is 3×10^{-4}, which is greater than USEPA's target risk range of 10^{-6} to 10^{-4} and RIDEM's target risk level of 10^{-5}. Arsenic in shellfish tissue contributes the majority of the risk with an individual potential ELCR of 2.9×10^{-4}. The cumulative potential ELCR excluding arsenic is 2×10^{-5}, which is within USEPA's target risk range of 10^{-6} to 10^{-4} and greater than RIDEM's target risk level of 10^{-5}. PCBs and aldrin in shellfish tissue contribute the majority of the risk if arsenic is excluded, with a combined potential ELCR of 7.8×10^{-6}.

The total potential HI associated with an adolescent recreational user exposure to shallow sediment (assuming a swimming/wading scenario), groundwater (piezometer water), and shellfish is 2.7,

which is greater than USEPA and RIDEM's target HI of 1. Arsenic in shellfish tissue contributes the majority of the hazard with an individual potential HQ of 1.7. The total potential HI excluding arsenic is 1, which is equal to USEPA and RIDEM's target HI of 1. Given the total potential HI for all detected chemicals excluding arsenic is 1, the total potential HI per target organ would also not exceed the target HI of 1.

These results indicate that the overall conclusions of the 2013 HHRA, which are that ingestion of shellfish tissue obtained from the Site 09 shoreline by a current/future recreational user poses a potential cancer risk or noncancer hazard above RIDEM target levels due to arsenic, PCBs, and pesticides (specifically aldrin), remain valid. The 2017 HHRA update also concluded that the potential cancer risk due to ingestion of shellfish has increased to above USEPA's target risk range of 10^{-6} to 10^{-4} due to arsenic (which may be regionally influenced). Based on this conclusion, the current institutional control prohibiting ingestion of shellfish continues to be necessary to protect public health.

The potential ELCRs and HIs associated with exposure to shallow sediment and groundwater (piezometer water) estimated in the 2017 HHRA update are less than or approximately equal to the potential ELCRs and HIs estimated in the 2013 HHRA. Excluding arsenic concentrations, the potential ELCR and HI associated with shellfish ingestion estimated in the 2017 HHRA update is less than and equal to, respectively, the potential ELCR and HI estimated in the 2013 HHRA. However, the potential ELCR and HQ associated with arsenic concentrations in shellfish have increased based on the current shellfish tissue dataset. The shellfish tissue EPC for arsenic of 3.4 mg/kg (Table 3.3) is within the range of arsenic concentrations detected in reference tissue samples collected from the shoreline of Prudence Island (ET09-01) and from Fishing Cove in Wickford, Rhode Island (ET09-02) between 2007 and 2011. These results indicate that concentrations of arsenic in site shellfish tissue samples evaluated in the 2017 HHRA update may be due to background conditions, rather than Site 09.

The shellfish tissue EPC (i.e., maximum concentration) for aldrin of 0.0056 mg/kg is less than the range of aldrin concentrations detected in reference tissue samples from the shoreline of Prudence Island (ET09-01) and from Fishing Cove in Wickford, Rhode Island (ET09-02) between 2007 and 2011. These results indicate that concentrations of aldrin in site shellfish tissue samples evaluated in the 2017 HHRA update may be due to background conditions, rather than Site 09.

If both arsenic and aldrin concentrations in shellfish tissue are excluded from the 2017 HHRA update, the cumulative potential ELCR associated with a lifetime recreational user exposure to shallow sediment (assuming a swimming/wading scenario), groundwater (piezometer water), and shellfish is $1x10^{-5}$. This potential ELCR is within USEPA's target risk range of 10^{-6} to 10^{-4} and equal to RIDEM's target risk level of 10^{-5}.

In addition, the shellfish tissue EPC (i.e., 95% UCL) for PCBs of 0.0203 mg/kg is less than the range of PCB concentrations detected in samples collected in 2011 (the most currently available dataset) through the NOAA Mussel Watch Program (https://products.coastalscience.noaa.gov/nsandt_data/data.aspx) (i.e., 0.027 to 0.085 mg/kg). This suggests that it is possible that some of the PCB contamination noted in the Site 09 samples may reflect regional conditions.

6.4 Description of Uncertainties

Estimation of potential risks to human health that may result from exposure to chemicals in the environment is a complex process that often requires the combined efforts of multiple disciplines. Each assumption, whether regarding the toxicity value to use for a particular chemical or the value of a parameter in an exposure equation, has a degree of variability and uncertainty associated with it. In each step of the HHRA process, beginning with the data collection and analysis and continuing through the toxicity assessment, exposure assessment, and risk characterization, conservative assumptions are made that are intended to be protective of human health and to ensure that risks are not underestimated. There is a probability of overestimating health risks or hazards for a number of reasons. The following subsections provide a discussion of the key uncertainties that may affect the final estimates of human health risk in this HHRA. Uncertainties are arranged by topic.

6.4.1 Environmental Sampling and Analysis

The process of environmental sampling and analysis results in uncertainties from several sources, including errors inherent in sampling procedures or analytical methods. One area of uncertainty is sampling procedures. Since it is not possible to sample the entire area of interest at a given site, several samples are taken from each medium within a site, and the results are considered representative of the chemicals present throughout the site. This assumption may overestimate or underestimate risk.

Uncertainty is also associated with analytical methods. Due to uncertainty of quantification, individual chemicals were sometimes listed as detected but with the value qualified as estimated by laboratory qualification or validation procedures. The estimated value was used in the HHRA. This uncertainty may either overestimate or underestimate risk depending on how close the estimated value is to the true value.

Shallow groundwater (piezometer) data from all LTM sampling events conducted following the 2013 HHRA, occurring between October 2013 and September 2016, were included in the HHRA update. Given the lack any discernable concentration pattern indicating a consistent increase or decrease in concentration over time, inclusion of the data from all rounds provides for a robust dataset.

The HHRA utilizes the total (unfiltered) groundwater data for oral exposure pathways, consistent with the recommendation in USEPA (2004). However, as indicated in USEPA (2014):

> "….particulate-bound chemicals in an aqueous medium (e.g., suspended sediment particles) would be considered to be much less bioavailable for dermal absorption, due to inefficient adsorption of suspended particles onto the skin surface and a slower rate of absorption into the skin. The uncertainty in the estimation of the dermal dose from a water sample with high turbidity is directly proportional to the magnitude of the difference in the concentration between an unfiltered and filtered sample. The actual bioavailable concentration is likely to lie somewhere between the unfiltered and filtered sample concentrations."

Therefore, the use of the unfiltered groundwater data for quantitative evaluation of the dermal contact pathway is conservative.

6.4.2 COPC Selection

A comparison of maximum detected chemical concentrations to USEPA RSLs and RIDEM criteria was conducted as part of the COPC selection process for sediment and groundwater. RSLs are conservative risk-based values that are used when selecting COPCs so as not to omit a chemical that might contribute significantly to risk. Chemicals whose maximum concentrations were below their respective screening value were not identified as COPCs or further evaluated to quantify potential risk/hazard. It is unlikely that this risk-based screening excluded chemicals that would be of concern, based on the conservative exposure assumptions and conservatively derived toxicity criteria that are the basis of the screening level. Although following this methodology does not provide a quantitative risk estimate for all chemicals, it focuses the assessment on the chemicals accounting for the greatest risks (i.e., chemicals whose maximum concentrations exceeded their respective screening level). Although the overall potential risk estimates are uncertain, it is not expected that actual risks will be significantly greater than estimated risks given that a reasonable effort was made to characterize current and future potential health risks given current knowledge.

The sediment and shallow groundwater (piezometer water) datasets contains some non-detect results with levels of detection (LODs) greater than USEPA residential soil and tapwater RSLs (2016a), respectively, for several analytes. These elevated LODs introduce some level of uncertainty into the COPC selection and calculation of EPCs. The use of USEPA tapwater RSLs (which are protective of a drinking water ingestion scenario) to select COPCs for evaluation of incidental ingestion by recreational users for a clamming scenario is overly conservative. Similarly, the use of USEPA residential soil RSLs to select sediment COPCs for evaluation of incidental ingestion and dermal contact by recreational users for a swimming/wading/clamming scenario is overly conservative. For piezometer water, for a subset of analytes for which the LODs are greater than the tapwater RSLs, the LODs are less than the RIDEM GA groundwater objectives (RIDEM,

2011) and/or USEPA MCLs (USEPA, 2017c). Additionally, several of the analytes with elevated LODs were identified as shallow groundwater COPCs based on detected concentrations in other samples.

The presence of elevated LODs for chemicals selected as COPCs for further evaluation in the HHRA update may result in calculation of a higher EPC for that COPC, resulting in a higher estimated potential risk/hazard. Therefore, the presence of LODs above the tapwater and residential soil RSLs for a subset of sediment and piezometer water samples, respectively, is not considered to alter the conclusions of the HHRA update.

6.4.3 Toxicological Data

Uncertainty is associated with the toxicity values and toxicity information available to assess potential adverse effects.

One of the major contributors to uncertainty is the accuracy of the toxicity values used. A cancer potency value is a mathematical extrapolation of the slope of the dose-response curve from high doses administered to animals (or the exposures observed in epidemiological studies) to the low doses commonly experienced in the environment. The USEPA has developed potency values for chemicals classified as carcinogens, based on the premise that there is no threshold (i.e., there is no level of exposure below which there is no risk of a carcinogenic effect). USEPA's *Guidelines for Carcinogen Risk Assessment* (USEPA, 2005b) acknowledges that the mode of action of a carcinogen may involve both threshold and non-threshold mechanisms. To the extent that the approach used to develop the potency estimate is incorrect, the extrapolated risks may be overestimations or underestimations. However, in the derivation of toxicity values, conservative assumptions are employed. Therefore, toxicity values tend to be biased toward overestimating potential risk.

For dermal exposure pathways, the absence of dermal toxicity criteria necessitated the use of oral toxicity data. To calculate potential risk estimates for the dermal pathway, absolute oral bioavailability factors that reflect the toxicity study conditions were used to modify the oral toxicity criteria. For the chemicals with oral absorption exceeding 50%, a default oral absorption factor of 100% was used. The potential risk estimates for the dermal pathways may be overestimated or underestimated depending on how closely these values reflect the difference between the oral and dermal routes.

<u>Chromium</u>

Many metals can exist in different oxidation states; for some metals, the oxidation state can have different toxicities. This is the case for chromium. Chromium exists in two common oxidation states: trivalent chromium (chromium-3, Cr[III], or Cr+3) and hexavalent chromium (chromium-6, Cr[VI], or Cr+6). Trivalent chromium is essentially nontoxic as evidenced by its residential soil RSL of

120,000 mg/kg (USEPA, 2016a). It can be bought over-the-counter as a supplement and is included in most vitamins.

Chromium is most commonly present in the environment in the trivalent state because typical conditions in the environment favor the reduction of chromium from the hexavalent to the trivalent state. Hexavalent chromium in soil is expected to be reduced to trivalent chromium by organic matter, which is facilitated by low pH (ATSDR, 2012). In addition, if hexavalent chromium is ingested, it is rapidly converted to the trivalent form after entering the stomach, and is therefore not considered by USEPA to pose a cancer risk via the ingestion route of exposure (USEPA, 2013).

Total chromium results in Site 09 media were evaluated as trivalent chromium in the HHRA update, consistent with the approach in the 2013 HHRA. Chromium was not identified as a COPC in sediment based on evaluation as trivalent chromium, but was identified as a COPC based on evaluation as trivalent chromium in piezometer water.

The chromium species present in shellfish tissue is presumed to be trivalent due to the greater chemical stability of trivalent chromium as compared to hexavalent chromium, the general reducing conditions in foods, and the greater oxidizing potential of hexavalent chromium that causes its irreversible reduction to trivalent chromium in living organisms (USFDA, 1993; IOM, 2001). Hexavalent chromium is rapidly converted to the trivalent form after entering the stomach, and is therefore not considered by USEPA to pose a cancer risk via the ingestion route of exposure (USEPA, 2013). The USFDA Guidance for Chromium in Shellfish considers all chromium reported in shellfish as trivalent chromium and derives levels of concern for chromium in shellfish based on safe dietary intake levels rather than an adverse health effect endpoint (USFDA, 1993). Due to the likelihood that all chromium present in food and living organisms is present as trivalent chromium and the USFDA guidance assuming all chromium is trivalent chromium in shellfish, the HHRA evaluated total chromium concentrations in shellfish tissue as trivalent chromium.

6.4.4 Exposure Assessment

The primary areas of uncertainty affecting exposure parameter estimation involve the assumptions regarding exposure pathways, the estimation of EPCs, and the parameters used to estimate chemical doses. The uncertainties associated with these various sources are discussed below.

6.4.4.1 EPCs

With respect to determining EPCs for this evaluation, one assumption was that the concentrations of chemicals in the medium evaluated would remain constant over the exposure time. Depending on the properties of the chemical and the medium in which it was detected, this assumption may overestimate risks, depending on the degree of chemical degradation to less toxic species or transport to other media. Conversely, environmental bioactivation of chemicals to more toxic

chemicals was also not considered. Therefore, this assumption may underestimate risk if bioactivation mechanisms are significant.

The majority of the maximum detected piezometer water concentrations in the updated dataset are lower than those calculated in the 2013 HHRA. However, the updated shallow groundwater EPCs for several COPCs have increased (between 1 to 23 times higher) in comparison to the EPCs calculated in the 2013 HHRA. The increase in EPCs, despite the decrease in overall concentrations, is likely due in part to a smaller sample size and higher reporting limits used for non-detect results utilized in the calculation of the UCL selected as the EPC.

6.4.4.2 Exposure Assumptions

The parameter values used to describe the extent, frequency, and duration of exposure are associated with some uncertainty. Actual risks for some individuals within an exposed population may vary from those predicted depending on the actual exposure durations, intake rates (e.g., ingestion rates), or body weights.

There are no formal recreational facilities (e.g., public swimming areas) currently located along the Site 09 shoreline and there are no known plans for development of formal recreational facilities in the future. Therefore, it is unlikely that a young child would be routinely exposed to the environmental media along this shoreline. However, some uncertainty is introduced by the exclusion of a young child receptor. This uncertainty is not considered to change the conclusions of the 2017 HHRA update, which are generally consistent with those from the 2013 HHRA.

The exposure assumptions were generally selected to produce a reasonable upper-bound estimate of exposure in accordance with USEPA guidelines, although in some cases the combination of the various assumptions may lead to greater than an upper bound estimate. Therefore, exposures and estimated potential risks for the evaluated receptors are likely to be representative of reasonable upper-bound exposures, but in some cases may exceed reasonable upper-bound exposures.

7.0 SUMMARY AND CONCLUSIONS

This HHRA update was performed in support of the Site 09 Five Year Event LTM Report and will ultimately be used as part of the evaluation in the Fourth Five Year Review to confirm compliance with the RAOs identified in the ROD (EA, 1997). The objective of this HHRA update is to determine whether there have been any changes and/or updates to USEPA HHRA guidance or site-specific conditions since the 2013 HHRA was conducted that would result in a change of the conclusions of the 2013 HHRA or whether the conclusions of the 2013 HHRA remain valid. Revised risk/hazard calculations were performed as part of this 2017 HHRA update to estimate the cumulative potential cancer risk and/or noncancer hazard associated with a recreational user exposure scenario, determine whether risk/hazard estimates exceed USEPA and/or RIDEM target risk/hazard levels, and identify whether the current institutional controls in place at Site 09 are still needed. The receptors and exposure pathways evaluated in the HHRA update are consistent with those evaluated in the 2013 HHRA based on current and potential future land use, including recreational users exposed to shoreline media while swimming, wading, and clamming/harvesting shellfish.

The overall conclusion of this HHRA update is that the conclusions of the 2013 HHRA remain valid and ingestion of shellfish tissue obtained from the Site 09 shoreline by a current/future recreational user poses a potential cancer risk or noncancer hazard above RIDEM target levels due to arsenic, PCBs, and pesticides (specifically aldrin). Based on this conclusion, the current institutional control prohibiting ingestion of shellfish continues to be necessary to protect public health. The shellfish tissue EPCs for arsenic and aldrin are within the range of concentrations detected in reference tissue samples collected from the shoreline of Prudence Island and from Fishing Cove in Wickford, Rhode Island between 2007 and 2011. These results indicate that concentrations of arsenic and aldrin in site shellfish tissue samples evaluated in the 2017 HHRA update may be due to background conditions, rather than Site 09. In addition, the shellfish tissue EPC for PCBs is less than the range of PCB concentrations detected in samples collected in 2011 (the most currently available dataset) through the NOAA Mussel Watch Program. This suggests that some of the PCB contamination noted in the Site 09 samples may reflect regional conditions.

If both arsenic and aldrin concentrations in shellfish tissue are excluded from the 2017 HHRA update, the cumulative potential ELCR associated with a lifetime recreational user exposure to shallow sediment (assuming a swimming/wading scenario), groundwater (piezometer water), and shellfish is $1x10^{-5}$. This potential ELCR is within USEPA's target risk range of 10^{-6} to 10^{-4} and equal to RIDEM's target risk level of 10^{-5}. The associated total potential noncancer HI (conservatively based on all target endpoints combined) does not exceed USEPA or RIDEM's target level. Therefore, no site-related COCs are identified as a result of the 2017 HHRA update.

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TABLES

TABLE 1

SUMMARY OF RECEPTORS, EXPOSURE POINTS, MEDIA, AND EXPOSURE PATHWAYS FOR EVALUATION

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 09 - ALLEN HARBOR LANDFILL

FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE

NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current/ Future	Sediment	Shallow Sediment (0 to 0.5 ft bgs)	Site 9 - Shoreline	Recreational User	Adult	Incidental Ingestion	Quantitative	Recreational users may be exposed to shallow sediment while swimming/wading and/or clamming.
						Dermal	Quantitative	
					Adolescent	Incidental Ingestion	Quantitative	Recreational users may be exposed to shallow sediment while swimming/wading and/or clamming.
						Dermal	Quantitative	
		Deep Sediment (2 to 3 ft bgs)	Site 9 - Shoreline	Recreational User	Adult	Incidental Ingestion	Screening	Recreational users are not considered to be exposed to deep sediment at depths of 2 to 3 ft bgs.
						Dermal	Screening	
					Adolescent	Incidental Ingestion	Screening	
						Dermal	Screening	
	Groundwater (Piezometer Water)	Shallow Groundwater (a)	Site 9 - Shoreline	Recreational User	Adult	Dermal	Quantitative	Recreational users may have dermal contact with shallow groundwater while clamming.
					Adolescent	Dermal	Quantitative	Recreational users may have dermal contact with shallow groundwater while clamming.
	Shellfish tissue	Shellfish tissue	Site 9 - Shoreline	Recreational User	Adult	Ingestion	Quantitative	Recreational users may consume shellfish harvested from the site.
					Adolescent	Ingestion	Quantitative	Recreational users may consume shellfish harvested from the site.

Notes:

ft bgs - feet below ground surface.

(a) Piezometer water is assumed to be a mixture of shallow groundwater and surface water.

TABLE 2.1
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - SHORELINE SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (2)	Concentration Used for Screening (3)	Background Value (4)	Screening Toxicity Values (5)		Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (6)
											RSL (NC/C)	RIDEM Residential Direct Exposure Criteria				
Site 09 - Shoreline		**Metals**														
Shallow Sediment	7429-90-5	ALUMINUM	2.74E+03	9.13E+03	mg/kg	SED09-09 (2 - 6 in)	16 / 16	-	9.13E+03	N/A	7.70E+03 NC	N/A	N/A	N/A	Y	ASL
	7440-36-0	ANTIMONY	4.60E-01 J	1.70E+00 J-	mg/kg	SED09-09 (2 - 6 in)	3 / 16	0.63 - 2.7	1.70E+00	N/A	3.10E+00 NC	1.00E+01	N/A	N/A	N	BSL
	7440-38-2	ARSENIC	1.80E+00 J	1.16E+01 J	mg/kg	SED09-10 (0 - 0.5 ft)	16 / 16	-	1.16E+01	N/A	6.80E-01 C	7.00E+00	N/A	N/A	Y	ASL
	7440-41-7	BERYLLIUM	3.00E-01	1.40E+00	mg/kg	SED09-11B (0 - 0.5 ft)	15 / 16	0.049 - 0.049	1.40E+00	N/A	1.60E+01 NC	1.50E+00	N/A	N/A	N	BSL
	7440-47-3	CHROMIUM, TOTAL	8.40E+00 J-	3.24E+01 J	mg/kg	SED09-09 (0 - 0.5 ft)	16 / 16	-	3.24E+01	N/A	1.20E+04 NC	1.40E+03	N/A	N/A	N	BSL
	7440-50-8	COPPER	1.17E+01 J	9.10E+01	mg/kg	SED09-09 (2 - 6 in)	16 / 16	-	9.10E+01	N/A	3.10E+02 NC	3.10E+03	N/A	N/A	N	BSL
	7439-89-6	IRON	7.09E+03	2.75E+04	mg/kg	SED09-09 (2 - 6 in)	16 / 16	-	2.75E+04	N/A	5.50E+03 NC	N/A	N/A	N/A	Y	ASL
	7439-92-1	LEAD	7.90E+00 J	8.31E+01 J	mg/kg	SED09-09 (2 - 6 in)	16 / 16	-	8.31E+01	N/A	4.00E+02 L	1.50E+02	N/A	N/A	N	BSL
	7439-96-5	MANGANESE	5.49E+01 J+	2.50E+02 J+	mg/kg	SED09-09 (2 - 6 in)	16 / 16	-	2.50E+02	N/A	1.80E+02 NC	3.90E+02	N/A	N/A	Y	ASL
	7439-97-6	MERCURY	2.10E-02 J-	2.60E-01	mg/kg	SED09-09 (2 - 6 in)	16 / 16	-	2.60E-01	N/A	1.10E+00 NC	2.30E+01	N/A	N/A	N	BSL
	7440-02-0	NICKEL	4.60E+00	2.31E+01	mg/kg	SED09-09 (2 - 6 in)	16 / 16	-	2.31E+01	N/A	1.50E+02 NC	1.00E+03	N/A	N/A	N	BSL
	7440-66-6	ZINC	2.53E+01 J	2.63E+02 J,EB	mg/kg	SED09-09 (2 - 6 in)	16 / 16	-	2.63E+02	N/A	2.30E+03 NC	6.00E+03	N/A	N/A	N	BSL
		PCBs														
	RA-65	PCB, TOTAL	6.90E-04	1.80E-01	mg/kg	SED09-09 (2 - 6 in)	7 / 9	0.0093 - 0.011	1.80E-01	N/A	1.20E-01 NC	1.00E+01	N/A	N/A	Y	ASL
		Pesticides														
	72-55-9	4,4-DDE	2.70E-03 J	2.70E-03 J	mg/kg	SED09-09 (2 - 6 in)	1 / 9	0.00052 - 0.0012	2.70E-03	N/A	2.00E+00 C	N/A	N/A	N/A	N	BSL
	50-29-3	4,4-DDT	4.60E-03 J	9.30E-03 J	mg/kg	SED09-09 (2 - 6 in)	3 / 9	0.00052 - 0.0012	9.30E-03	N/A	1.90E+00 C	N/A	N/A	N/A	N	BSL
	319-85-7	BETA-BHC	7.00E-04 J	7.00E-04 J	mg/kg	SED09-02A (2 - 6 in)	1 / 9	0.00013 - 0.00039	7.00E-04	N/A	3.00E-01 C	N/A	N/A	N/A	N	BSL
	60-57-1	DIELDRIN	2.90E-03 J	2.90E-03 J	mg/kg	SED09-10 (2 - 6 in)	1 / 9	0.00027 - 0.00074	2.90E-03	N/A	3.40E-02 C	4.00E-02	N/A	N/A	N	BSL
	7421-93-4	ENDRIN ALDEHYDE	2.90E-03 J	3.50E-03 J	mg/kg	SED09-09 (2 - 6 in)	2 / 9	0.00052 - 0.0012	3.50E-03	N/A	1.90E+00 NC	N/A	N/A	N/A	N	BSL
	1024-57-3	HEPTACHLOR EPOXIDE	1.10E-03 J	1.10E-03 J	mg/kg	SED09-09 (2 - 6 in)	1 / 9	0.00026 - 0.00062	1.10E-03	N/A	7.00E-02 C	N/A	N/A	N/A	N	BSL
	58-89-9	LINDANE	2.10E-03 J	3.00E-03 J	mg/kg	SED09-10 (0 - 0.5 ft)	2 / 9	0.00013 - 0.00039	3.00E-03	N/A	5.70E-01 C	N/A	N/A	N/A	N	BSL
	72-43-5	METHOXYCHLOR	2.30E-03 J	2.30E-03 J	mg/kg	SED09-02A (0 - 0.5 ft)	1 / 9	0.0013 - 0.0039	2.30E-03	N/A	3.20E+01 NC	N/A	N/A	N/A	N	BSL
		SVOCs														
	91-57-6	2-METHYLNAPHTHALENE	8.20E-03	5.10E-02	mg/kg	SED09-10 (2 - 6 in)	3 / 19	0.004 - 0.0068	5.10E-02	N/A	2.40E+01 NC	1.23E+02	N/A	N/A	N	BSL
	83-32-9	ACENAPHTHENE	5.70E-03	3.70E-01	mg/kg	SED09-10 (2 - 6 in)	10 / 19	0.0041 - 0.0051	3.70E-01	N/A	3.60E+02 NC	4.30E+01	N/A	N/A	N	BSL
	208-96-8	ACENAPHTHYLENE	5.20E-03	1.90E-02	mg/kg	SED09-10 (2 - 6 in)	4 / 19	0.004 - 0.007	1.90E-02	N/A	3.60E+02 NC	2.30E+01	N/A	N/A	N	BSL
	120-12-7	ANTHRACENE	4.80E-03 J	8.40E-01	mg/kg	SED09-10 (2 - 6 in)	12 / 19	0.0041 - 0.007	8.40E-01	N/A	1.80E+03 NC	3.50E+01	N/A	N/A	N	BSL
	56-55-3	BENZO[A]ANTHRACENE	4.30E-03	1.40E+00	mg/kg	SED09-10 (2 - 6 in)	18 / 19	0.0041 - 0.0041	1.40E+00	N/A	1.13E+00 C	9.00E-01	N/A	N/A	Y	ASL
	50-32-8	BENZO[A]PYRENE	5.30E-03	1.10E+00	mg/kg	SED09-10 (2 - 6 in)	18 / 19	0.0041 - 0.0041	1.10E+00	N/A	1.15E-01 C	4.00E-01	N/A	N/A	Y	ASL
	205-99-2	BENZO[B]FLUORANTHENE	1.10E-02	1.30E+00	mg/kg	SED09-10 (2 - 6 in)	18 / 19	0.0041 - 0.0041	1.30E+00	N/A	1.15E+00 C	9.00E-01	N/A	N/A	Y	ASL
	191-24-2	BENZO[G,H,I]PERYLENE	5.20E-03	6.40E-01	mg/kg	SED09-10 (2 - 6 in)	18 / 19	0.0041 - 0.0041	6.40E-01	N/A	1.80E+02 NC	8.00E-01	N/A	N/A	N	BSL
	207-08-9	BENZO[K]FLUORANTHENE	4.60E-03	8.50E-01	mg/kg	SED09-10 (2 - 6 in)	18 / 19	0.0041 - 0.0041	8.50E-01	N/A	1.15E+01 C	9.00E-01	N/A	N/A	N	BSL
	218-01-9	CHRYSENE	6.60E-03	1.40E+00	mg/kg	SED09-10 (2 - 6 in)	18 / 19	0.0041 - 0.0041	1.40E+00	N/A	1.15E+02 C	4.00E-01	N/A	N/A	Y	ASL
	53-70-3	DIBENZ[A,H]ANTHRACENE	5.20E-03	1.40E-01	mg/kg	SED09-10 (2 - 6 in)	13 / 19	0.0041 - 0.0068	1.40E-01	N/A	1.15E-01 C	4.00E-01	N/A	N/A	Y	ASL
	206-44-0	FLUORANTHENE	5.70E-03	3.70E+00	mg/kg	SED09-10 (2 - 6 in)	19 / 19	-	3.70E+00	N/A	2.40E+02 NC	2.00E+01	N/A	N/A	N	BSL
	86-73-7	FLUORENE	5.50E-03	4.40E-01	mg/kg	SED09-10 (2 - 6 in)	9 / 19	0.0041 - 0.0055	4.40E-01	N/A	2.40E+02 NC	2.80E+01	N/A	N/A	N	BSL
	193-39-5	INDENO[1,2,3-CD]PYRENE	4.40E-03	5.60E-01	mg/kg	SED09-10 (2 - 6 in)	18 / 19	0.0041 - 0.0041	5.60E-01	N/A	1.15E+00 C	9.00E-01	N/A	N/A	N	BSL
	91-20-3	NAPHTHALENE	4.20E-03	1.60E-01	mg/kg	SED09-10 (2 - 6 in)	4 / 19	0.004 - 0.0068	1.60E-01	N/A	3.80E+00 C	5.40E+01	N/A	N/A	N	BSL
	85-01-8	PHENANTHRENE	4.60E-03	3.30E+00	mg/kg	SED09-10 (2 - 6 in)	17 / 19	0.0041 - 0.0042	3.30E+00	N/A	1.80E+03 NC	4.00E+01	N/A	N/A	N	BSL
	129-00-0	PYRENE	5.00E-03	2.70E+00	mg/kg	SED09-10 (2 - 6 in)	19 / 19	-	2.70E+00	N/A	1.80E+02 NC	1.30E+01	N/A	N/A	N	BSL

TABLE 2.1
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - SHORELINE SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (2)	Concentration Used for Screening (3)	Background Value (4)	Screening Toxicity Values (5)		Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (6)
											RSL (NC/C)	RIDEM Residential Direct Exposure Criteria				
		VOCs														
	78-93-3	2-BUTANONE	1.90E-02 J	1.90E-02 J	mg/kg	SED09-11B (2 - 6 in)	1 / 20	0.0018 - 0.012	1.90E-02	N/A	2.70E+03 NC	1.00E+04	N/A	N/A	N	BSL
	67-64-1	ACETONE	6.60E-03	6.20E-02	mg/kg	SED09-09 (2 - 6 in)	9 / 20	0.0018 - 0.012	6.20E-02	N/A	6.10E+03 NC	7.80E+03	N/A	N/A	N	BSL
	75-15-0	CARBON DISULFIDE	3.80E-03 J	3.60E-02	mg/kg	SED09-09 (2 - 6 in)	10 / 20	0.00088 - 0.0059	3.60E-02	N/A	7.70E+01 NC	N/A	N/A	N/A	N	BSL
	75-09-2	METHYLENE CHLORIDE	1.00E-01 J	1.00E-01 J	mg/kg	SED09-08B (2 - 6 in)	1 / 20	0.0024 - 0.021	1.00E-01	N/A	3.50E+01 NC	4.50E+01	N/A	N/A	N	BSL
	127-18-4	TETRACHLOROETHENE	2.50E-03 J	5.30E-03 J	mg/kg	SED09-06B (0 - 0.5 ft)	3 / 20	0.00088 - 0.0059	5.30E-03	N/A	8.10E+00 NC	1.20E+01	N/A	N/A	N	BSL
Site 09 - Shoreline		**Metals**														
Deep Sediment	7429-90-5	ALUMINUM	2.80E+03	1.17E+04	mg/kg	SED09-08B (24 - 36 in)	11 / 11	-	1.17E+04	N/A	7.70E+03 NC	N/A	N/A	N/A	Y	ASL
	7440-36-0	ANTIMONY	3.00E-02 J	1.80E-01 J	mg/kg	SED09-06B (24 - 36 in)	10 / 11	0.047 - 0.047	1.80E-01	N/A	3.10E+00 NC	1.00E+01	N/A	N/A	N	BSL
	7440-38-2	ARSENIC	7.10E-01	1.17E+01	mg/kg	SED09-09 (24 - 36 in)	11 / 11	-	1.17E+01	N/A	6.80E-01 C	7.00E+00	N/A	N/A	Y	ASL
	7440-41-7	BERYLLIUM	2.60E-01	9.40E-01	mg/kg	SED09-08B (24 - 36 in)	11 / 11	-	9.40E-01	N/A	1.60E+01 NC	1.50E+00	N/A	N/A	N	BSL
	7440-47-3	CHROMIUM, TOTAL	9.90E+00	3.00E+01	mg/kg	SED09-08B (24 - 36 in)	11 / 11	-	3.00E+01	N/A	1.20E+04 NC	1.40E+03	N/A	N/A	N	BSL
	7440-50-8	COPPER	8.70E+00	3.70E+01	mg/kg	SED09-06B (24 - 36 in)	11 / 11	-	3.70E+01	N/A	3.10E+02 NC	3.10E+03	N/A	N/A	N	BSL
	7439-89-6	IRON	7.13E+03	2.84E+04	mg/kg	SED09-09 (24 - 36 in)	11 / 11	-	2.84E+04	N/A	5.50E+03 NC	N/A	N/A	N/A	Y	ASL
	7439-92-1	LEAD	6.40E+00	1.91E+01	mg/kg	SED09-12B (24 - 36 in)	11 / 11	-	1.91E+01	N/A	4.00E+02 L	1.50E+02	N/A	N/A	N	BSL
	7439-96-5	MANGANESE	7.57E+01 J	2.35E+02 J	mg/kg	SED09-01 (24 - 36 in)	11 / 11	-	2.35E+02	N/A	1.80E+02 NC	3.90E+02	N/A	N/A	Y	ASL
	7439-97-6	MERCURY	2.00E-02 J	6.00E-02	mg/kg	SED09-07B (24 - 36 in) SED09-09 (24 - 36 in) SED09-12B (24 - 36 in)	7 / 11	0.014 - 0.054	6.00E-02	N/A	2.30E+00 NC	2.30E+01	N/A	N/A	N	BSL
	7440-02-0	NICKEL	7.20E+00	1.74E+01	mg/kg	SED09-01 (24 - 36 in)	11 / 11	-	1.74E+01	N/A	1.50E+02 NC	1.00E+03	N/A	N/A	N	BSL
	7440-66-6	ZINC	1.95E+01 J	6.23E+01 J	mg/kg	SED09-12B (24 - 36 in)	11 / 11	-	6.23E+01	N/A	2.30E+03 NC	6.00E+03	N/A	N/A	N	BSL
		PCBs														
	RA-65	PCB, TOTAL	1.10E-02	1.30E-01	mg/kg	SED09-11B (18 - 24 in)	5 / 10	0.01 - 0.017	1.30E-01	N/A	1.20E-01 NC	1.00E+01	N/A	N/A	Y	ASL
		Pesticides														
	72-54-8	4,4-DDD	5.50E-04 J	4.60E-03 J	mg/kg	SED09-12B (24 - 36 in)	5 / 9	0.0018 - 0.0029	4.60E-03	N/A	2.30E+00 C	N/A	N/A	N/A	N	BSL
	72-55-9	4,4-DDE	2.60E-04 J	4.20E-03 J	mg/kg	SED09-01 (24 - 36 in)	6 / 9	0.0019 - 0.0029	4.20E-03	N/A	2.00E+00 C	N/A	N/A	N/A	N	BSL
	50-29-3	4,4-DDT	4.80E-03 J	1.20E-02	mg/kg	SED09-01 (24 - 36 in)	4 / 9	0.0018 - 0.0029	1.20E-02	N/A	1.90E+00 C	N/A	N/A	N/A	N	BSL
		SVOCs														
	83-32-9	ACENAPHTHENE	2.60E-03 J	2.30E-02 J	mg/kg	SED09-06B (24 - 36 in)	4 / 9	0.01 - 0.018	2.30E-02	N/A	3.60E+02 NC	4.30E+01	N/A	N/A	N	BSL
	208-96-8	ACENAPHTHYLENE	6.10E-03 J	7.20E-03 J	mg/kg	SED09-06B (24 - 36 in)	3 / 9	0.01 - 0.018	7.20E-03	N/A	3.60E+02 NC	2.30E+01	N/A	N/A	N	BSL
	120-12-7	ANTHRACENE	2.20E-03 J	3.00E-02	mg/kg	SED09-06B (24 - 36 in)	8 / 9	0.018 - 0.018	3.00E-02	N/A	1.80E+03 NC	3.50E+01	N/A	N/A	N	BSL
	56-55-3	BENZO[A]ANTHRACENE	4.80E-03 J	8.30E-02	mg/kg	SED09-06B (24 - 36 in)	8 / 9	0.02 - 0.02	8.30E-02	N/A	1.13E+00 C	9.00E-01	N/A	N/A	N	BSL
	50-32-8	BENZO[A]PYRENE	4.60E-03 J	4.80E-02 J	mg/kg	SED09-09 (24 - 36 in)	9 / 9	-	4.80E-02	N/A	1.15E-01 C	4.00E-01	N/A	N/A	N	BSL
	205-99-2	BENZO[B]FLUORANTHENE	1.00E-02 J	1.30E-01 J	mg/kg	SED09-09 (24 - 36 in)	8 / 9	0.01 - 0.01	1.30E-01	N/A	1.15E+00 C	9.00E-01	N/A	N/A	N	BSL
	191-24-2	BENZO[G,H,I]PERYLENE	3.20E-03 J	2.40E-02 J	mg/kg	SED09-09 (24 - 36 in)	9 / 9	-	2.40E-02	N/A	1.80E+02 NC	8.00E-01	N/A	N/A	N	BSL
	207-08-9	BENZO[K]FLUORANTHENE	7.20E-03 J	2.50E-01 J	mg/kg	SED09-09 (24 - 36 in)	7 / 9	0.013 - 0.018	2.50E-01	N/A	1.15E+01 C	9.00E-01	N/A	N/A	N	BSL
	218-01-9	CHRYSENE	1.30E-02 J	8.00E-02	mg/kg	SED09-06B (24 - 36 in)	7 / 9	0.013 - 0.018	8.00E-02	N/A	1.15E+02 C	4.00E-01	N/A	N/A	N	BSL
	53-70-3	DIBENZ[A,H]ANTHRACENE	9.50E-03 J	1.90E-02 J	mg/kg	SED09-09 (24 - 36 in) SED09-10 (24 - 30 in) SED09-08B (24 - 36 in)	8 / 9	0.013 - 0.013	1.90E-02	N/A	1.15E-01 C	4.00E-01	N/A	N/A	N	BSL
	206-44-0	FLUORANTHENE	4.60E-03 J	3.20E-01	mg/kg	SED09-06B (24 - 36 in)	9 / 9	-	3.20E-01	N/A	2.40E+02 NC	2.00E+01	N/A	N/A	N	BSL
	86-73-7	FLUORENE	5.60E-03 J	7.20E-03 J	mg/kg	SED09-09 (24 - 36 in)	3 / 9	0.01 - 0.018	7.20E-03	N/A	2.40E+02 NC	2.80E+01	N/A	N/A	N	BSL
	193-39-5	INDENO[1,2,3-CD]PYRENE	1.20E-02 J	9.60E-02 J	mg/kg	SED09-10 (24 - 30 in)	7 / 9	0.02 - 0.026	9.60E-02	N/A	1.15E+00 C	9.00E-01	N/A	N/A	N	BSL
	91-20-3	NAPHTHALENE	6.50E-03 J	6.50E-03 J	mg/kg	SED09-10 (24 - 30 in)	1 / 9	0.01 - 0.018	6.50E-03	N/A	3.80E+00 C	5.40E+01	N/A	N/A	N	BSL

TABLE 2.1
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - SHORELINE SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Medium: Sediment
Exposure Medium: Sediment

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (2)	Concentration Used for Screening (3)	Background Value (4)	Screening Toxicity Values (5) RSL (NC/C)	Screening Toxicity Values (5) RIDEM Residential Direct Exposure Criteria	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (6)
	85-01-8	PHENANTHRENE	5.20E-03 J	9.80E-02	mg/kg	SED09-10 (24 - 30 in)	8 / 9	0.013 - 0.013	9.80E-02	N/A	1.80E+03 NC	4.00E+01	N/A	N/A	N	BSL
	129-00-0	PYRENE	4.20E-03 J	2.20E-01	mg/kg	SED09-06B (24 - 36 in)	9 / 9	-	2.20E-01	N/A	1.80E+02 NC	1.30E+01	N/A	N/A	N	BSL
		VOCs														
	67-64-1	ACETONE	2.10E-02 J	2.10E-02 J	mg/kg	SED09-03 (24 - 36 in)	1 / 8	0.011 - 0.021	2.10E-02	N/A	6.10E+03 NC	7.80E+03	N/A	N/A	N	BSL
	75-15-0	CARBON DISULFIDE	6.70E-03 J	1.10E-02 J	mg/kg	SED09-08B (24 - 36 in) SED09-12B (24 - 36 in)	7 / 8	0.0022 - 0.0022	1.10E-02	N/A	7.70E+01 NC	N/A	N/A	N/A	N	BSL

Notes:

Refer to Appendix A for samples included in data set.

Shallow sediment is defined as sediment samples collected from within the 0 to 0.5 ft bgs depth interval.

Deep sediment is defined as sediment samples collected from within the 1.5 to 3 ft bgs depth interval.

Totals for use in risk assessment are calculated as discussed in the report text and have a CAS number beginning with "RA-".

ARAR/TBC = Applicable or Relevant and Appropriate Requirements/To be Considered.

C = Cancer. Screening value is based on the screening level protective of carcinogenic effects.

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

ft = feet.

ft bgs = feet below ground surface.

in = Inches.

L = Lead screening level developed by USEPA using blood-lead modeling based on target blood lead concentrations (USEPA Regional Screening Level (RSL) Table User's Guide, May 2016).

mg/kg = milligrams per kilogram.

N/A = Not Applicable or Not Available.

NC = Noncancer. Screening value is based on the screening level protective of noncarcinogenic effects.

PCBs = Polychlorinated biphenyls.

SVOCs = Semivolatile organic compounds.

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

(1) Minimum/maximum detected concentration and associated data flags.
EB = Equipment blank contamination.
J = The chemical was positively identified; however, the associated numerical value is an estimated concentration.
J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

(2) Range of Laboratory Reporting Limits (RLs).

(3) Maximum detected concentration used for screening.

(4) Background values were not used for COPC screening purposes, although applicable background values may be considered in the risk characterization portion of the risk assessment update, if available.

(5) Sediment screening levels include the following:
- USEPA Regional Screening Level (RSL) for residential soil based on a target risk level of 1E-6 for carcinogens and a target hazard quotient of 0.1 for noncarcinogens (May 2016).
The screening value for trivalent chromium was used for total chromium.
The screening value for endrin was used for endrin aldehyde.
The screening value for manganese (non-diet) was used for manganese.
The screening value for acenaphthene was used for acenaphthylene.
The screening value for mercuric chloride was used for mercury.
The screening value for pyrene was used for benzo(g,h,i)perylene.
The screening value for Aroclor 1254 was used for total PCBs.
The screening value for anthracene was used for phenanthrene.
USEPA RSLs were updated for carcinogenic polycyclic aromatic hydrocarbons (PAHs) (i.e., benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene) to reflect USEPA's final Integrated Risk Information System (IRIS) assessment of benzo(a)pyrene (USEPA. IRIS Toxicological Review of Benzo[a]pyrene (Final Report). U.S. Environmental Protection Agency, Washington, DC, EPA/635/R-17/003F, 2017).
- RIDEM Residential Direct Exposure Criteria - RIDEM Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, DEM-DSR-01-93. November 2011.
The screening value for trivalent chromium was used for total chromium.

(6) Rationale Codes:
Selection Reason: Above Screening Level (ASL)
Deletion Reason: Below Screening Level (BSL)

TABLE 2.2
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - SHORELINE GROUNDWATER (PIEZOMETER WATER)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Shallow Groundwater (Piezometer Water)

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (2)	Concentration Used for Screening (3)	Background Value (4)	Screening Toxicity Values (5)			Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (6)
											MCL	RSL (NC/C)	RIDEM GA Groundwater Objectives				
Site 09 - Shoreline		**Total Metals**															
	7429-90-5	ALUMINUM	1.41E+02 J	6.22E+05	ug/L	P09-12B	32 / 34	300 - 500	6.22E+05	N/A	N/A	2.00E+03 NC	N/A	N/A	N/A	Y	ASL
	7440-36-0	ANTIMONY	2.20E-01 J	2.02E+01 J	ug/L	P09-11B	15 / 34	0.8 - 40	2.02E+01	N/A	6.00E+00	7.80E-01 NC	6.00E+00	N/A	N/A	Y	ASL
	7440-38-2	ARSENIC	3.50E-01 J-	5.92E+02 J-	ug/L	P09-05A	30 / 34	20 - 40	5.92E+02	N/A	1.00E+01	5.20E-02 C	1.00E+01	N/A	N/A	Y	ASL
	7440-41-7	BERYLLIUM	6.00E-02 J	5.64E+01	ug/L	P09-12B	16 / 34	0.2 - 15	5.64E+01	N/A	4.00E+00	2.50E+00 NC	4.00E+00	N/A	N/A	Y	ASL
	7440-47-3	CHROMIUM, TOTAL	8.50E+00	4.34E+04	ug/L	P09-01	29 / 34	5 - 100	4.34E+04	N/A	1.00E+02	2.20E+03 NC	1.00E+02	N/A	N/A	Y	ASL
	7440-50-8	COPPER	1.30E+00 J	2.15E+03	ug/L	P09-12B	26 / 34	3 - 100	2.15E+03	N/A	1.30E+03	8.00E+01 NC	N/A	N/A	N/A	Y	ASL
	7439-89-6	IRON	1.80E+03 J	2.20E+06	ug/L	P09-09	30 / 34	100 - 10000	2.20E+06	N/A	N/A	1.40E+03 NC	N/A	N/A	N/A	Y	ASL
	7439-92-1	LEAD	1.60E+00	2.28E+03	ug/L	P09-12B	22 / 34	1 - 50	2.28E+03	N/A	1.50E+01	1.50E+01 N/A	1.50E+01	N/A	N/A	Y	ASL
	7439-96-5	MANGANESE	4.50E+00	1.17E+04	ug/L	P09-09	33 / 34	2.7 - 2.7	1.17E+04	N/A	N/A	4.30E+01 NC	N/A	N/A	N/A	Y	ASL
	7439-97-6	MERCURY	4.00E-02 J	1.16E+01	ug/L	P09-12B	13 / 32	0.05 - 0.2	1.16E+01	N/A	2.00E+00	5.70E-01 NC	2.00E+00	N/A	N/A	Y	ASL
	7440-02-0	NICKEL	9.00E+00	5.25E+03	ug/L	P09-07B	34 / 34	-	5.25E+03	N/A	N/A	3.90E+01 NC	1.00E+02	N/A	N/A	Y	ASL
	7440-66-6	ZINC	9.90E+00 J	1.38E+05	ug/L	P09-06B	33 / 34	75 - 75	1.38E+05	N/A	N/A	6.00E+02 NC	N/A	N/A	N/A	Y	ASL
		Dissolved Metals															
	7429-90-5	ALUMINUM	4.35E+01	1.48E+04	ug/L	P09-02A	23 / 31	300 - 1000	1.48E+04	N/A	N/A	2.00E+03 NC	N/A	N/A	N/A	Y	ASL
	7440-36-0	ANTIMONY	1.20E-01 J	1.86E+01 J	ug/L	P09-02A	12 / 31	0.8 - 40	1.86E+01	N/A	6.00E+00	7.80E-01 NC	6.00E+00	N/A	N/A	Y	ASL
	7440-38-2	ARSENIC	2.00E-01 J-	6.66E+02 J-	ug/L	P09-05A	21 / 31	16 - 40	6.66E+02	N/A	1.00E+01	5.20E-02 C	1.00E+01	N/A	N/A	Y	ASL
	7440-41-7	BERYLLIUM	6.00E-02 J	6.00E-02 J	ug/L	P09-06B	1 / 31	0.2 - 15	6.00E-02	N/A	4.00E+00	2.50E+00 NC	4.00E+00	N/A	N/A	N	BSL
	7440-47-3	CHROMIUM, TOTAL	1.10E+00 J-	1.20E+03	ug/L	P09-01	16 / 31	5 - 100	1.20E+03	N/A	1.00E+02	2.20E+03 NC	1.00E+02	N/A	N/A	Y	ASL
	7440-50-8	COPPER	4.40E-01 J	1.92E+02	ug/L	P09-02A	9 / 31	3 - 100	1.92E+02	N/A	1.30E+03	8.00E+01 NC	N/A	N/A	N/A	Y	ASL
	7439-89-6	IRON	9.86E+02 J	7.51E+04	ug/L	P09-09	19 / 31	90 - 10000	7.51E+04	N/A	N/A	1.40E+03 NC	N/A	N/A	N/A	Y	ASL
	7439-92-1	LEAD	1.70E-01 J	1.04E+02	ug/L	P09-02A	8 / 31	1 - 50	1.04E+02	N/A	1.50E+01	1.50E+01 N/A	1.50E+01	N/A	N/A	Y	ASL
	7439-96-5	MANGANESE	3.80E+00	1.73E+04	ug/L	P09-12B	27 / 31	75 - 75	1.73E+04	N/A	N/A	4.30E+01 NC	N/A	N/A	N/A	Y	ASL
	7439-97-6	MERCURY	7.30E-02 J-	1.40E-01 J	ug/L	P09-02A	3 / 30	0.05 - 0.2	1.40E-01	N/A	2.00E+00	5.70E-01 NC	2.00E+00	N/A	N/A	N	BSL
	7440-02-0	NICKEL	1.40E+00	1.25E+04	ug/L	P09-12B	28 / 31	30 - 50	1.25E+04	N/A	N/A	3.90E+01 NC	1.00E+02	N/A	N/A	Y	ASL
	7440-66-6	ZINC	7.20E+00 J	4.89E+02	ug/L	P09-02A	23 / 31	10 - 75	4.89E+02	N/A	N/A	6.00E+02 NC	N/A	N/A	N/A	N	BSL
		SVOCs															
	95-95-4	2,4,5-TRICHLOROPHENOL	8.50E-02 J	8.50E-02 J	ug/L	P09-11B	1 / 8	0.1 - 0.1	8.50E-02	N/A	N/A	1.20E+02 NC	N/A	N/A	N/A	N	BSL
	56-55-3	BENZO[A]ANTHRACENE	3.00E-01	3.00E-01	ug/L	P09-10	1 / 8	0.094 - 0.1	3.00E-01	N/A	N/A	2.98E-02 C	N/A	N/A	N/A	Y	ASL
	50-32-8	BENZO[A]PYRENE	2.60E-01 J	2.60E-01 J	ug/L	P09-10	1 / 8	0.094 - 0.1	2.60E-01	N/A	2.00E-01	2.51E-02 C	2.00E-01	N/A	N/A	Y	ASL
	205-99-2	BENZO[B]FLUORANTHENE	4.10E-01	4.10E-01	ug/L	P09-10	1 / 8	0.094 - 0.1	4.10E-01	N/A	N/A	2.51E-01 C	N/A	N/A	N/A	Y	ASL
	191-24-2	BENZO[G,H,I]PERYLENE	2.30E-01	2.30E-01	ug/L	P09-10	1 / 8	0.094 - 0.1	2.30E-01	N/A	N/A	1.20E+01 NC	N/A	N/A	N/A	N	BSL
	207-08-9	BENZO[K]FLUORANTHENE	1.80E-01	1.80E-01	ug/L	P09-10	1 / 8	0.094 - 0.1	1.80E-01	N/A	N/A	2.51E+00 C	N/A	N/A	N/A	N	BSL
	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1.70E-01 J	5.10E-01 J	ug/L	P09-10	7 / 8	0.47 - 0.47	5.10E-01	N/A	6.00E+00	5.60E+00 C	6.00E+00	N/A	N/A	N	BSL
	85-68-7	BUTYLBENZYLPHTHALATE	1.20E+00 J	1.20E+00 J	ug/L	P09-10	1 / 8	2 - 7.1	1.20E+00	N/A	N/A	1.60E+01 C	N/A	N/A	N/A	N	BSL
	218-01-9	CHRYSENE	1.30E-01	3.00E-01	ug/L	P09-10	2 / 8	0.094 - 0.1	3.00E-01	N/A	N/A	2.51E+01 C	N/A	N/A	N/A	N	BSL
	206-44-0	FLUORANTHENE	6.40E-01	6.40E-01	ug/L	P09-10	1 / 8	0.094 - 0.1	6.40E-01	N/A	N/A	8.00E+01 NC	N/A	N/A	N/A	N	BSL
	86-73-7	FLUORENE	1.10E-01	1.10E-01	ug/L	P09-08B	1 / 8	0.094 - 0.1	1.10E-01	N/A	N/A	2.90E+01 NC	N/A	N/A	N/A	N	BSL
	193-39-5	INDENO[1,2,3-CD]PYRENE	2.00E-01 J	2.00E-01 J	ug/L	P09-10	1 / 8	0.094 - 0.1	2.00E-01	N/A	N/A	2.51E-01 C	N/A	N/A	N/A	N	BSL
	85-01-8	PHENANTHRENE	1.00E-01	3.10E-01	ug/L	P09-10	3 / 8	0.094 - 0.1	3.10E-01	N/A	N/A	1.80E+02 NC	N/A	N/A	N/A	N	BSL
	129-00-0	PYRENE	1.30E-01	5.10E-01	ug/L	P09-10	2 / 8	0.094 - 0.1	5.10E-01	N/A	N/A	1.20E+01 NC	N/A	N/A	N/A	N	BSL

TABLE 2.2
OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - SHORELINE GROUNDWATER (PIEZOMETER WATER)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Medium: Groundwater
Exposure Medium: Shallow Groundwater (Piezometer Water)

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (2)	Concentration Used for Screening (3)	Background Value (4)	Screening Toxicity Values (5)			Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (6)
											MCL	RSL (NC/C)	RIDEM GA Groundwater Objectives				
		VOCs															
	78-93-3	2-BUTANONE	5.70E+00	4.30E+01 J	ug/L	P09-08B	4 / 34	2.5 - 5	4.30E+01	N/A	N/A	5.60E+02 NC	N/A	N/A	N/A	N	BSL
	67-64-1	ACETONE	3.90E+00 J	3.70E+02	ug/L	P09-12B	10 / 34	2.5 - 5	3.70E+02	N/A	N/A	1.40E+03 NC	N/A	N/A	N/A	N	BSL
	71-43-2	BENZENE	1.30E+00	1.30E+00	ug/L	P09-10	1 / 34	0.5 - 1	1.30E+00	N/A	5.00E+00	4.60E-01 C	5.00E+00	N/A	N/A	Y	ASL
	75-15-0	CARBON DISULFIDE	4.00E-01 J	5.30E+00	ug/L	P09-01	7 / 34	0.5 - 1	5.30E+00	N/A	N/A	8.10E+01 NC	N/A	N/A	N/A	N	BSL
	108-88-3	TOLUENE	1.20E+00	2.20E+00	ug/L	P09-07B	2 / 34	0.5 - 1	2.20E+00	N/A	1.00E+03	1.10E+02 NC	1.00E+03	N/A	N/A	N	BSL
	75-01-4	VINYL CHLORIDE	1.10E+00 J	1.10E+00 J	ug/L	P09-10	1 / 34	0.5 - 1	1.10E+00	N/A	2.00E+00	1.90E-02 C	2.00E+00	N/A	N/A	Y	ASL
	1330-20-7	XYLENES, TOTAL	1.80E+00	1.80E+00	ug/L	P09-07B	1 / 34	1 - 1.5	1.80E+00	N/A	1.00E+04	1.90E+01 NC	1.00E+04	N/A	N/A	N	BSL

Notes:

Refer to Appendix A for samples included in the data set. The groundwater data evaluated in the HHRA Update includes piezometer water samples collected along the Site 09 shoreline, which represent both groundwater and surface water.

ARAR/TBC = Applicable or Relevant and Appropriate Requirements/To be Considered.

C = Cancer. Screening value is based on the screening level protective of carcinogenic effects.

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

MCL = Maximum Contaminant Level.

N/A = Not Applicable or Not Available.

NC = Noncancer. Screening value is based on the screening level protective of noncarcinogenic effects.

RIDEM = Rhode Island Department of Environmental Management.

SVOCs = Semivolatile organic compounds.

ug/L = micrograms per liter.

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

(1) Minimum/maximum detected concentration and associated data flags.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

(2) Range of Laboratory Reporting Limits (RLs).

(3) Maximum detected concentration used for screening.

(4) Background values were not used for COPC screening purposes, although applicable background values may be considered in the risk characterization portion of the risk assessment update, if available.

(5) Groundwater screening levels include the following:

- USEPA Maximum Contaminant Levels (MCLs) for drinking water. Accessed April 2017. https://www.epa.gov/ground-water-and-drinking-water/table-regulated-drinking-water-contaminants.

- USEPA Regional Screening Level (RSL) for tapwater based on a target risk level of 1E-6 for carcinogens and a target hazard quotient of 0.1 for noncarcinogens (May 2016).

The screening value for trivalent chromium was used for total chromium.

The screening value for manganese (non-diet) was used for manganese.

The screening value for mercuric chloride was used for mercury.

The screening value for pyrene was used for benzo(g,h,i)perylene.

The screening value for anthracene was used for phenanthrene.

USEPA RSLs were updated for carcinogenic polycyclic aromatic hydrocarbons (PAHs) (i.e., benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene) to reflect USEPA's final Integrated Risk Information System (IRIS) assessment of benzo(a)pyrene (USEPA. IRIS Toxicological Review of Benzo[a]pyrene (Final Report). U.S. Environmental Protection Agency, Washington, DC, EPA/635/R-17/003F, 2017).

- RIDEM GA Groundwater Objectives - RIDEM Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases, DEM-DSR-01-93. November 2011.

(6) Rationale Codes:

Selection Reason: Above Screening Level (ASL)

Deletion Reason: Below Screening Levels (BSL)

TABLE 2.3
COMPARISON OF CHEMICALS OF POTENTIAL CONCERN (COPCs) IN SEDIMENT AND GROUNDWATER (PIEZOMETER WATER)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Exposure Point	Media/Chemical	CAS Number	Identified as a COPC in the 2013 HHRA? (a)	Identified as a COPC in the current / 2017 HHRA Update? (b)
Site 09 - Shoreline	**Shallow Sediment**			
	Metals			
	ALUMINUM	7429-90-5	Y	Y
	ARSENIC	7440-38-2	Y	Y
	IRON	7439-89-6	Y	Y
	MANGANESE	7439-96-5	Y	Y
	PCBs			
	PCB, TOTAL	RA-65	Y	Y
	SVOCs			
	BENZO[A]ANTHRACENE	56-55-3	Y	Y
	BENZO[A]PYRENE	50-32-8	Y	Y
	BENZO[B]FLUORANTHENE	205-99-2	Y	Y
	BENZO[G,H,I]PERYLENE	191-24-2	Y	N
	BENZO[K]FLUORANTHENE	207-08-9	Y	N
	CHRYSENE	218-01-9	Y	Y
	DIBENZ[A,H]ANTHRACENE	53-70-3	Y	Y
	INDENO[1,2,3-CD]PYRENE	193-39-5	Y	N
	Deep Sediment			
	Metals			
	ALUMINUM	7429-90-5	N	Y
	ARSENIC	7440-38-2	Y	Y
	IRON	7439-89-6	Y	Y
	MANGANESE	7439-96-5	N	Y
	PCBs			
	PCB, TOTAL	RA-65	N	Y
	SVOCs			
	BENZO[A]PYRENE	50-32-8	Y	N
	Groundwater (Piezometer Water)			
	Total Metals			
	ALUMINUM	7429-90-5	Y	Y
	ANTIMONY	7440-36-0	Y	Y
	ARSENIC	7440-38-2	Y	Y
	BERYLLIUM	7440-41-7	Y	Y
	CHROMIUM, TOTAL	7440-47-3	Y	Y
	COPPER	7440-50-8	Y	Y
	IRON	7439-89-6	Y	Y
	LEAD	7439-92-1	Y	Y
	MANGANESE	7439-96-5	Y	Y
	MERCURY	7439-97-6	Y	Y
	NICKEL	7440-02-0	Y	Y
	ZINC	7440-66-6	Y	Y

TABLE 2.3
COMPARISON OF CHEMICALS OF POTENTIAL CONCERN (COPCs) IN SEDIMENT AND GROUNDWATER (PIEZOMETER WATER)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Exposure Point	Media/Chemical	CAS Number	Identified as a COPC in the 2013 HHRA? (a)	Identified as a COPC in the current / 2017 HHRA Update? (b)
Site 09 - Shoreline	**Dissolved Metals**			
	ALUMINUM	7429-90-5	Y	Y
	ANTIMONY	7440-36-0	Y	Y
	ARSENIC	7440-38-2	Y	Y
	BERYLLIUM	7440-41-7	Y	N
	CHROMIUM, TOTAL	7440-47-3	Y	Y
	COPPER	7440-50-8	Y	Y
	IRON	7439-89-6	Y	Y
	LEAD	7439-92-1	Y	Y
	MANGANESE	7439-96-5	Y	Y
	MERCURY	7439-97-6	Y	N
	NICKEL	7440-02-0	Y	Y
	ZINC	7440-66-6	Y	N
	PCBs			
	PCB, TOTAL	RA-65	Y	N
	SVOCs			
	BENZO[A]ANTHRACENE	56-55-3	Y	Y
	BENZO[A]PYRENE	50-32-8	N	Y
	BENZO[B]FLUORANTHENE	205-99-2	N	Y
	INDENO[1,2,3-CD]PYRENE	193-39-5	Y	N
	NAPHTHALENE	91-20-3	Y	N
	VOCs			
	BENZENE	71-43-2	Y	Y
	CIS-1,2-DICHLOROETHENE	156-59-2	Y	N
	1,2-DICHLOROETHENE (TOTAL)	540-59-0	Y	N
	TRANS-1,2-DICHLOROETHENE	156-60-5	Y	N
	TRICHLOROETHENE	79-01-6	Y	N
	VINYL CHLORIDE	75-01-4	Y	Y

Notes:

Shading indicates a difference between the COPC lists identified in the 2013 HHRA (a) and based on the current dataset (as defined in the text).

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

HHRA = Human Health Risk Assessment.

PCBs = Polychlorinated biphenyls.

SVOCs = Semivolatile organic compounds.

VOCs = Volatile organic compounds.

(a) 2013 HHRA presented in Appendix F of the Long-Term Monitoring Data Summary and Optimization Recommendations Report (Tetra Tech; August 2015).

(b) Selected in Tables 2.1 and 2.2 based on data set described in the text and as presented in Appendix A.

TABLE 3.1
EXPOSURE POINT CONCENTRATION SUMMARY AND COMPARISON
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe:	Current/Future
Medium:	Shallow Sediment
Exposure Medium:	Shallow Sediment

Exposure Point	Chemical of Potential Concern	CAS Number	Units	Mean (1)	UCL (Distribution) (2)	Maximum Concentration (Qualifier) (3)	Exposure Point Concentration - 2017 HHRA Update				Exposure Point Concentration - 2013 HHRA	
							Value	Units	Statistic (4)	Rationale (5)	Value	
											Unweighted (6)	Weighted (7)
Site 09 - Shoreline	**Metals**											
	ALUMINUM	7429-90-5	mg/kg	5.03E+03 (a)	6.09E+03 (G)	9.13E+03	6.09E+03	mg/kg	95% Adjusted Gamma UCL		5.00E+03	5.00E+03
	ARSENIC	7440-38-2	mg/kg	5.25E+00 (a)	6.49E+00 (N)	1.16E+01 J	6.49E+00	mg/kg	95% Student's-t UCL		4.60E+00	4.60E+00
	IRON	7439-89-6	mg/kg	1.32E+04 (a)	1.68E+04 (G)	2.75E+04	1.68E+04	mg/kg	95% Adjusted Gamma UCL		1.28E+04	1.28E+04
	MANGANESE	7439-96-5	mg/kg	1.06E+02 (a)	1.30E+02 (LN)	2.50E+02 J+	1.30E+02	mg/kg	95% Modified-t UCL	(b)	1.17E+02	1.17E+02
	PCBs											
	PCB, TOTAL	RA-65	mg/kg	6.93E-02	1.12E-01 (N)	1.80E-01	1.12E-01	mg/kg	95% KM (t) UCL		7.30E-02	7.30E-02
	SVOCs											
	BENZO[A]ANTHRACENE	56-55-3	mg/kg	1.39E-01	4.64E-01 (LN)	1.40E+00	4.64E-01	mg/kg	95% KM (Chebyshev) UCL		6.40E-01	2.70E-01
	BENZO[A]PYRENE	50-32-8	mg/kg	1.18E-01	3.76E-01 (LN)	1.10E+00	3.76E-01	mg/kg	95% KM (Chebyshev) UCL		7.40E-01	2.60E-01
	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	1.62E-01	4.78E-01 (LN)	1.30E+00	4.78E-01	mg/kg	95% KM (Chebyshev) UCL		1.10E+00	3.60E-01
	CHRYSENE	218-01-9	mg/kg	1.43E-01	4.66E-01 (LN)	1.40E+00	4.66E-01	mg/kg	95% KM (Chebyshev) UCL		2.00E+00	2.00E+00
	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	2.01E-02	5.59E-02 (NP)	1.40E-01	5.59E-02	mg/kg	95% KM (Chebyshev) UCL		2.00E-01	4.60E-02

Notes:

CAS = Chemical Abstracts Service.

EPC = Exposure point concentration.

HHRA = Human health risk assessment.

mg/kg = milligrams per kilogram.

PCBs = Polychlorinated biphenyls.

RME = Reasonable Maximum Exposure.

SVOCs = Semivolatile organic compounds.

UCL = Upper confidence limit.

USEPA = United States Environmental Protection Agency.

(1) Kaplan-Meier (KM) mean calculated using USEPA's ProUCL software version 5.1.002 (May 2016).

(a) KM method mean only calculated for datasets of sufficient sample size containing non-detects. Arithmetic means were used if KM method mean was not calculated.

(2) UCL calculations were performed using USEPA's ProUCL software version 5.1.002 (May 2016). For data sets with multiple detection limits for non-detects, the use of the Kaplan Meier non-parametric test procedure is recommended and used to calculate an appropriate UCL. For the Kaplan Meier test procedure, the type of data distribution was determined using a series of tests (Shapiro-Wilk, Kolmogorov-Smirnov, Anderson-Darling) for normal, lognormal, or gamma data distributions. The results of these distribution tests determined which UCL calculation was performed. The UCL suggested by ProUCL is used, unless otherwise noted. In cases where more than one UCL is suggested, the higher UCL is used, unless otherwise noted.
NP = Non-parametric; N = Normal; LN = Lognormal; G = Gamma; NC = Not calculated.

(3) Equal to the maximum detected concentration.
J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.
J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

(4) Indicates the statistic on which the exposure point concentration is based.

TABLE 3.1
EXPOSURE POINT CONCENTRATION SUMMARY AND COMPARISON
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe:	Current/Future
Medium:	Shallow Sediment
Exposure Medium:	Shallow Sediment

Exposure Point	Chemical of Potential Concern	CAS Number	Units	Mean (1)	UCL (Distribution) (2)	Maximum Concentration (Qualifier) (3)	Exposure Point Concentration - 2017 HHRA Update				Exposure Point Concentration - 2013 HHRA	
							Value	Units	Statistic (4)	Rationale (5)	Value	
											Unweighted (6)	Weighted (7)

95% Adjusted Gamma UCL = Calculated using Adjusted Gamma distribution procedure.

95% KM (Chebyshev) UCL = Calculated using 95% Kaplan Meier (Chebyshev inequality) non-parametric procedure.

95% KM (t) UCL = Calculated using 95% Kaplan Meier (Student's t approximation) non-parametric procedure.

95% Modified-t UCL = Calculated using a modified t approximation procedure.

95% Student's-t UCL = Calculated using a normal Student's t approximation procedure.

(5) The UCL recommended by ProUCL is used (where multiple values are recommended, the higher is used).

(b) ProUCL computes and outputs the H-statistic based UCLs for historic reasons only as it often results in unstable (both low and high) values (USEPA, 2010).

As such, the 95% Modified-t UCL UCL was used to estimate the 95% UCL for this data set.

(6) EPCs presented in Table F-2.3 of the 2013 HHRA. These EPCs were calculated as the 95% UCL (or maximum detected concentration if a sufficient number of samples were not available to calculate a UCL) based on 2012 sediment data.

(7) EPCs presented in Tables F-2.4 and F-2.5 of the 2013 HHRA. These EPCs were calculated as the 95% UCL (or maximum detected concentration if a sufficient number of samples were not available to calculate a UCL) based on 2012 sediment data, weighted to account for elevated carcinogenic polycyclic aromatic hydrocarbon concentrations at location SED09-10.

TABLE 3.2
EXPOSURE POINT CONCENTRATION SUMMARY AND COMPARISON
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Shallow Groundwater (Piezometer Water)

Exposure Point	Chemical of Potential Concern	CAS Number	Units	Mean (1)	UCL (Distribution) (2)	Maximum Concentration (Qualifier) (3)	Exposure Point Concentration - 2017 HHRA Update				Exposure Point Concentration - 2013 HHRA
							Value	Units	Statistic (4)	Rationale (5)	Value (6)
Site 09 - Shoreline	**Total Metals**										
	ALUMINUM	7429-90-5	ug/L	4.23E+04	1.07E+05 (G)	6.22E+05	1.07E+05	ug/L	95% Gamma Adjusted KM-UCL		1.30E+05
	ANTIMONY	7440-36-0	ug/L	6.13E+00	9.03E+00 (G)	2.02E+01 J	9.03E+00	ug/L	95% Gamma Adjusted KM-UCL		1.60E+00
	ARSENIC	7440-38-2	ug/L	7.54E+01	1.74E+02 (NP)	5.92E+02 J-	1.74E+02	ug/L	95% KM (Chebyshev) UCL		1.05E+02
	BERYLLIUM	7440-41-7	ug/L	6.75E+00	1.03E+01 (N)	5.64E+01	1.03E+01	ug/L	95% KM (t) UCL		1.15E+01
	CHROMIUM, TOTAL	7440-47-3	ug/L	3.32E+03	1.30E+04 (LN)	4.34E+04	1.30E+04	ug/L	97.5% KM (Chebyshev) UCL		6.75E+03
	COPPER	7440-50-8	ug/L	2.04E+02	4.08E+02 (G)	2.15E+03	4.08E+02	ug/L	95% Gamma Adjusted KM-UCL		7.73E+02
	IRON	7439-89-6	ug/L	2.60E+05	5.07E+05 (G)	2.20E+06	5.07E+05	ug/L	95% Gamma Adjusted KM-UCL		4.47E+05
	LEAD	7439-92-1	ug/L	1.78E+02	4.05E+02 (G)	2.28E+03	4.05E+02	ug/L	95% Gamma Adjusted KM-UCL		1.17E+02
	MANGANESE	7439-96-5	ug/L	2.05E+03	3.32E+03 (G)	1.17E+04	3.32E+03	ug/L	95% Gamma Adjusted KM-UCL		3.70E+03
	MERCURY	7439-97-6	ug/L	9.12E-01	3.02E+00 (LN)	1.16E+01	3.02E+00	ug/L	95% KM (Chebyshev) UCL		6.50E-01
	NICKEL	7440-02-0	ug/L	9.08E+02 (a)	1.97E+03 (LN)	5.25E+03	1.97E+03	ug/L	95% Chebyshev (Mean, Sd) UCL		1.24E+03
	ZINC	7440-66-6	ug/L	7.54E+03	3.43E+04 (LN)	1.38E+05	3.43E+04	ug/L	97.5% KM (Chebyshev) UCL		1.50E+03
	Dissolved Metals										
	ALUMINUM	7429-90-5	ug/L	1.82E+03	4.27E+03 (LN)	1.48E+04	4.27E+03	ug/L	95% KM (Chebyshev) UCL		2.21E+04
	ANTIMONY	7440-36-0	ug/L	5.38E+00	8.23E+00 (N)	1.86E+01 J	8.23E+00	ug/L	95% KM (t) UCL		5.70E-01
	ARSENIC	7440-38-2	ug/L	3.33E+01	1.26E+02 (NP)	6.66E+02 J-	1.26E+02	ug/L	95% KM (Chebyshev) UCL		1.76E+01
	CHROMIUM, TOTAL	7440-47-3	ug/L	1.08E+02	2.59E+02 (G)	1.20E+03	2.59E+02	ug/L	95% Gamma Adjusted KM-UCL		1.45E+02
	COPPER	7440-50-8	ug/L	1.69E+01	2.96E+01 (N)	1.92E+02	2.96E+01	ug/L	95% KM (t) UCL		2.41E+01
	IRON	7439-89-6	ug/L	1.50E+04	2.15E+04 (N)	7.51E+04	2.15E+04	ug/L	95% KM (t) UCL		6.96E+04
	LEAD	7439-92-1	ug/L	6.28E+00	2.05E+01 (G)	1.04E+02	2.05E+01	ug/L	95% Gamma Adjusted KM-UCL		6.40E+00
	MANGANESE	7439-96-5	ug/L	9.67E+02	3.38E+03 (LN)	1.73E+04	3.38E+03	ug/L	95% KM (Chebyshev) UCL		1.21E+03
	NICKEL	7440-02-0	ug/L	4.74E+02	2.23E+03 (NP)	1.25E+04	2.23E+03	ug/L	95% KM (Chebyshev) UCL		2.30E+02
	SVOCs										
	BENZO[A]ANTHRACENE	56-55-3	ug/L	1.20E-01	NC	3.00E-01	3.00E-01	ug/L	Maximum	(b)	1.10E-01
	BENZO[A]PYRENE	50-32-8	ug/L	1.15E-01	NC	2.60E-01 J	2.60E-01	ug/L	Maximum	(b)	N/A
	BENZO[B]FLUORANTHENE	205-99-2	ug/L	1.34E-01	NC	4.10E-01	4.10E-01	ug/L	Maximum	(b)	N/A
	VOCs										
	BENZENE	71-43-2	ug/L	5.24E-01	NC	1.30E+00	1.30E+00	ug/L	Maximum	(b)	7.40E-01
	VINYL CHLORIDE	75-01-4	ug/L	5.18E-01	NC	1.10E+00 J	1.10E+00	ug/L	Maximum	(b)	2.66E+01

Notes:
CAS = Chemical Abstracts Service.
EPC = Exposure point concentration.
HHRA = Human health risk assessment.
N/A = Not available.
RME = Reasonable Maximum Exposure.
SVOCs = Semivolatile organic compounds.
UCL = Upper confidence limit.
ug/L = micrograms per liter.

TABLE 3.2
EXPOSURE POINT CONCENTRATION SUMMARY AND COMPARISON
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Shallow Groundwater (Piezometer Water)

Exposure Point	Chemical of Potential Concern	CAS Number	Units	Mean (1)	UCL (Distribution) (2)	Maximum Concentration (Qualifier) (3)	Exposure Point Concentration - 2017 HHRA Update				Exposure Point Concentration - 2013 HHRA
							Value	Units	Statistic (4)	Rationale (5)	Value (6)

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

(1) Kaplan-Meier (KM) mean calculated using USEPA's ProUCL software version 5.1.002 (May 2016).

(a) KM method mean only calculated for datasets of sufficient sample size containing non-detects. Arithmetic means were used if KM method mean was not calculated.

(2) UCL calculations were performed using USEPA's ProUCL software version 5.1.002 (May 2016). For data sets with multiple detection limits for non-detects, the use of the Kaplan Meier non-parametric test procedure is recommended and used to calculate an appropriate UCL. For the Kaplan Meier test procedure, the type of data distribution was determined using a series of tests (Shapiro-Wilk, Kolmogorov-Smirnov, Anderson-Darling) for normal, lognormal, or gamma data distributions. The results of these distribution tests determined which UCL calculation was performed. The UCL suggested by ProUCL is used, unless otherwise noted. In cases where more than one UCL is suggested, the higher UCL is used, unless otherwise noted.
NP = Non-parametric; N = Normal; LN = Lognormal; G = Gamma; NC = Not calculated.

(3) Equal to the maximum detected concentration.
J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

(4) Indicates the statistic on which the exposure point concentration is based.
Maximum = Maximum detected concentration.
95% Chebyshev (Mean, Sd) UCL = Calculated using Chebyshev inequality non-parametric procedure.
95% Gamma Adjusted KM-UCL = Calculated using Kaplan Meier Adjusted Gamma distribution procedure.
95% KM (Chebyshev) UCL = Calculated using 95% Kaplan Meier (Chebyshev inequality) non-parametric procedure.
95% KM (t) UCL = Calculated using 95% Kaplan Meier (Student's t approximation) non-parametric procedure.
97.5% KM (Chebyshev) UCL = Calculated using 97.5% Kaplan Meier (Chebyshev inequality) non-parametric procedure.

(5) The UCL recommended by ProUCL is used (where multiple values are recommended, the higher is used).
(b) Maximum detected concentration used for EPC due to the low number of detections or small sample size.

(6) EPCs presented in Tables F-2.9 (includes total metals) and F-2.10 (includes dissolved metals) of the 2013 HHRA. These EPCs were calculated as the 95% UCL (or maximum detected concentration if a sufficient number of samples were not available to calculate a UCL) based on 2010 through 2012 piezometer water data.

TABLE 3.3
EXPOSURE POINT CONCENTRATION SUMMARY AND COMPARISON
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe:	Current/Future
Medium:	Shellfish tissue
Exposure Medium:	Shellfish tissue

Exposure Point	Chemical of Potential Concern (1)	CAS Number	Units	Mean (2)	UCL (Distribution) (3)	Maximum Concentration (Qualifier) (4)	Exposure Point Concentration - 2017 HHRA Update				Exposure Point Concentration - 2013 HHRA
							Value	Units	Statistic (5)	Rationale (6)	Value (7)
Site 09 - Shoreline	**Metals**										
	ALUMINUM	7429-90-5	mg/kg	7.68E+01 (a)	2.40E+02 (LN)	1.36E+03 J	2.40E+02	mg/kg	95% Chebyshev (Mean, Sd) UCL	(d)	2.00E+01
	ANTIMONY	7440-36-0	mg/kg	3.78E-01	4.27E-01 (N)	6.20E-01 J	4.27E-01	mg/kg	95% KM (t) UCL		N/A
	ARSENIC	7440-38-2	mg/kg	3.20E+00 (a)	3.41E+00 (N)	5.08E+00	3.41E+00	mg/kg	95% Student's-t UCL		1.00E-01
	BARIUM	7440-39-3	mg/kg	8.38E-01	1.14E+00 (LN)	6.05E+00	1.14E+00	mg/kg	95% KM H-UCL		4.50E-01
	BERYLLIUM	7440-41-7	mg/kg	1.32E-02	1.77E-02 (LN)	1.11E-01 J	1.77E-02	mg/kg	95% KM H-UCL		4.60E-03
	CADMIUM	7440-43-9	mg/kg	1.44E-01 (a)	1.71E-01 (G)	5.50E-01	1.71E-01	mg/kg	95% Adjusted Gamma UCL		4.30E-01
	CHROMIUM, TOTAL	7440-47-3	mg/kg	5.38E-01	NC	9.37E+00	9.37E+00	mg/kg	Maximum	(b)	1.70E-01
	COBALT	7440-48-4	mg/kg	1.69E-01	1.99E-01 (LN)	1.01E+00	1.99E-01	mg/kg	95% KM H-UCL		1.10E-01
	COPPER	7440-50-8	mg/kg	3.19E+00	4.03E+00 (G)	9.48E+00	4.03E+00	mg/kg	95% GROS Adjusted Gamma UCL		2.20E+00
	IRON	7439-89-6	mg/kg	2.35E+02 (a)	6.19E+02 (NP)	3.16E+03 J	6.19E+02	mg/kg	95% Chebyshev (Mean, Sd) UCL		8.45E+01
	LEAD	7439-92-1	mg/kg	5.62E-01	6.44E-01 (LN)	6.90E+00	6.44E-01	mg/kg	95% KM H-UCL		9.00E-02
	MANGANESE	7439-96-5	mg/kg	1.13E+01 (a)	1.45E+01 (G)	4.14E+01	1.45E+01	mg/kg	95% Adjusted Gamma UCL		1.04E+01
	MERCURY	7439-97-6	mg/kg	8.68E-03	9.53E-03 (N)	1.97E-02 J	9.53E-03	mg/kg	95% KM (t) UCL		2.50E-02
	NICKEL	7440-02-0	mg/kg	6.34E-01	8.14E-01 (LN)	5.52E+00	8.14E-01	mg/kg	95% KM H-UCL		2.70E-01
	SELENIUM	7782-49-2	mg/kg	6.06E-01	6.68E-01 (LN)	1.20E+00 J	6.68E-01	mg/kg	KM Student's t UCL		N/A
	SILVER	7440-22-4	mg/kg	2.32E-01	4.42E-01 (NP)	1.20E+00 J	4.42E-01	mg/kg	95% KM (Chebyshev) UCL		1.30E+00
	VANADIUM	7440-62-2	mg/kg	4.44E-01	5.20E-01 (LN)	4.01E+00	5.20E-01	mg/kg	95% KM H-UCL		3.40E-01
	ZINC	7440-66-6	mg/kg	1.21E+01 (a)	1.68E+01 (LN)	2.92E+01 J	1.68E+01	mg/kg	95% Chebyshev (Mean, Sd) UCL	(d)	1.15E+01
	PCBs										
	TOTAL PCB HOMOLOGS	TOTALPCBHOMO	mg/kg	1.10E-02	2.03E-02 (G)	1.10E-01	2.03E-02	mg/kg	95% Gamma Adjusted KM-UCL		4.40E-02
	Pesticides										
	4,4-DDD	72-54-8	mg/kg	1.76E-03	NC	1.70E-02 J	1.70E-02	mg/kg	Maximum	(b)	8.00E-03
	4,4-DDE	72-55-9	mg/kg	1.01E-03	1.22E-03 (N)	3.70E-03	1.22E-03	mg/kg	95% KM (t) UCL		N/A
	4,4-DDT	50-29-3	mg/kg	9.67E-04	NC	6.50E-03 J	6.50E-03	mg/kg	Maximum	(b)	4.70E-03
	ALDRIN	309-00-2	mg/kg	6.24E-04	1.01E-02 (G)	5.60E-03 J	5.60E-03	mg/kg	Maximum	(c)	7.10E-03
	ALPHA-BHC	319-84-6	mg/kg	3.23E-04	4.12E-04 (N)	1.40E-03 J	4.12E-04	mg/kg	95% KM (t) UCL		5.00E-03
	ALPHA-CHLORDANE	5103-71-9	mg/kg	6.01E-04	8.39E-04 (N)	3.90E-03 J	8.39E-04	mg/kg	95% KM (t) UCL		8.50E-03
	BETA-BHC	319-85-7	mg/kg	3.23E-04	NC	1.40E-03 J	1.40E-03	mg/kg	Maximum	(b)	3.90E-03
	DELTA-BHC	319-86-8	mg/kg	7.02E-04	8.89E-04 (N)	2.60E-03 J	8.89E-04	mg/kg	95% KM (t) UCL		9.30E-03
	DIELDRIN	60-57-1	mg/kg	4.40E-04	NC	1.00E-03 J	1.00E-03	mg/kg	Maximum	(b)	1.20E-02
	ENDOSULFAN I	959-98-8	mg/kg	3.33E-04	4.27E-04 (N)	1.40E-03 J	4.27E-04	mg/kg	95% KM (t) UCL		N/A
	ENDOSULFAN II	33213-65-9	mg/kg	4.42E-04	NC	6.60E-04 J	6.60E-04	mg/kg	Maximum	(b)	N/A
	ENDOSULFAN SULFATE	1031-07-8	mg/kg	5.19E-04	NC	3.20E-03 J	3.20E-03	mg/kg	Maximum	(b)	5.40E-03
	ENDRIN	72-20-8	mg/kg	8.41E-04	NC	5.60E-03 J	5.60E-03	mg/kg	Maximum	(b)	3.40E-03
	ENDRIN ALDEHYDE	7421-93-4	mg/kg	8.00E-04	NC	8.00E-04 J	8.00E-04	mg/kg	Maximum	(b)	4.00E-03

TABLE 3.3
EXPOSURE POINT CONCENTRATION SUMMARY AND COMPARISON
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe:	Current/Future
Medium:	Shellfish tissue
Exposure Medium:	Shellfish tissue

Exposure Point	Chemical of Potential Concern (1)	CAS Number	Units	Mean (2)	UCL (Distribution) (3)	Maximum Concentration (Qualifier) (4)	Exposure Point Concentration - 2017 HHRA Update				Exposure Point Concentration - 2013 HHRA
							Value	Units	Statistic (5)	Rationale (6)	Value (7)
Site 09 - Shoreline	HEPTACHLOR	76-44-8	mg/kg	3.87E-04	NC	3.50E-03	3.50E-03	mg/kg	Maximum	(b)	7.00E-03
	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	6.00E-04	7.46E-04 (N)	2.90E-03 J	7.46E-04	mg/kg	95% KM (t) UCL		2.20E-03
	LINDANE	58-89-9	mg/kg	2.90E-04	NC	1.40E-03 J	1.40E-03	mg/kg	Maximum	(b)	4.60E-03
	METHOXYCHLOR	72-43-5	mg/kg	2.38E-03	NC	4.60E-03 J	4.60E-03	mg/kg	Maximum	(b)	N/A
	TRANS-CHLORDANE	5103-74-2	mg/kg	1.28E-03	1.88E-03 (N)	7.30E-03	1.88E-03	mg/kg	95% KM (t) UCL		3.90E-03
	SVOCs										
	2-METHYLNAPHTHALENE	91-57-6	mg/kg	9.79E-03	1.56E-02 (G)	3.70E-02	1.56E-02	mg/kg	95% GROS Adjusted Gamma UCL		2.90E-02
	2-METHYLPHENOL	95-48-7	mg/kg	6.74E-02	NC	8.50E-02 J	8.50E-02	mg/kg	Maximum	(b)	N/A
	ACENAPHTHENE	83-32-9	mg/kg	8.01E-03	1.31E-02 (G)	3.20E-02	1.31E-02	mg/kg	95% GROS Adjusted Gamma UCL		2.30E-02
	ACENAPHTHYLENE	208-96-8	mg/kg	4.24E-03	9.89E-03 (G)	1.50E-02	9.89E-03	mg/kg	95% GROS Adjusted Gamma UCL		6.40E-03
	ANTHRACENE	120-12-7	mg/kg	3.99E-03	4.32E-03 (LN)	2.10E-02	4.32E-03	mg/kg	95% KM H-UCL		5.10E-03
	BENZO[A]ANTHRACENE	56-55-3	mg/kg	3.69E-03	NC	1.30E-02	1.30E-02	mg/kg	Maximum	(b)	N/A
	BENZO[A]PYRENE	50-32-8	mg/kg	3.27E-03	NC	1.40E-02	1.40E-02	mg/kg	Maximum	(b)	N/A
	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	3.95E-03	NC	2.70E-02	2.70E-02	mg/kg	Maximum	(b)	N/A
	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	3.41E-03	NC	5.40E-03 J	5.40E-03	mg/kg	Maximum	(b)	N/A
	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	3.38E-03	5.17E-03 (NP)	1.60E-02	5.17E-03	mg/kg	95% KM (Chebyshev) UCL		N/A
	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg	1.25E-01	1.75E-01 (G)	6.20E-01 J	1.75E-01	mg/kg	95% Gamma Adjusted KM-UCL		2.20E-01
	BUTYLBENZYLPHTHALATE	85-68-7	mg/kg	6.71E-02	NC	8.50E-02 J	8.50E-02	mg/kg	Maximum	(b)	N/A
	CHRYSENE	218-01-9	mg/kg	3.16E-03	1.01E-02 (G)	1.40E-02	1.01E-02	mg/kg	95% GROS Adjusted Gamma UCL		N/A
	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	2.80E-03	NC	2.80E-03 J	2.80E-03	mg/kg	Maximum	(b)	N/A
	DI-N-BUTYLPHTHALATE	84-74-2	mg/kg	4.80E-02	NC	4.80E-02 J	4.80E-02	mg/kg	Maximum	(b)	N/A
	FLUORANTHENE	206-44-0	mg/kg	7.19E-03	9.43E-03 (N)	3.40E-02	9.43E-03	mg/kg	95% KM (t) UCL		2.10E-02
	FLUORENE	86-73-7	mg/kg	5.08E-03	6.02E-03 (N)	1.30E-02	6.02E-03	mg/kg	95% KM (t) UCL		1.40E-02
	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	3.29E-03	NC	9.50E-03	9.50E-03	mg/kg	Maximum	(b)	N/A
	NAPHTHALENE	91-20-3	mg/kg	1.20E-02	1.56E-02 (N)	4.20E-02	1.56E-02	mg/kg	95% KM (t) UCL		5.20E-02
	NITROBENZENE	98-95-3	mg/kg	7.03E-02	NC	2.20E-01	2.20E-01	mg/kg	Maximum	(b)	N/A
	PHENANTHRENE	85-01-8	mg/kg	1.21E-02	1.85E-02 (G)	4.40E-02	1.85E-02	mg/kg	95% GROS Adjusted Gamma UCL		4.20E-02
	PHENOL	108-95-2	mg/kg	6.89E-02	NC	1.00E-01 J	1.00E-01	mg/kg	Maximum	(b)	5.40E-02
	PYRENE	129-00-0	mg/kg	8.98E-03	1.22E-02 (N)	5.80E-02 J	1.22E-02	mg/kg	95% KM (t) UCL		2.20E-02

Notes:
CAS = Chemical Abstracts Service.
EPC = Exposure point concentration.
HHRA = Human health risk assessment.
mg/kg = milligrams per kilogram.
N/A = Not applicable.
PCBs = Polychlorinated biphenyls.
RME = Reasonable Maximum Exposure.
SVOCs = Semivolatile organic compounds.
UCL = Upper confidence limit.

TABLE 3.3
EXPOSURE POINT CONCENTRATION SUMMARY AND COMPARISON
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe:	Current/Future
Medium:	Shellfish tissue
Exposure Medium:	Shellfish tissue

Exposure Point	Chemical of Potential Concern (1)	CAS Number	Units	Mean (2)	UCL (Distribution) (3)	Maximum Concentration (Qualifier) (4)	Exposure Point Concentration - 2017 HHRA Update				Exposure Point Concentration - 2013 HHRA
							Value	Units	Statistic (5)	Rationale (6)	Value (7)

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

(1) All compounds detected in fish tissue between 2013 - 2016 are included.

(2) Kaplan-Meier (KM) mean calculated using USEPA's ProUCL software version 5.1.002 (May 2016).

(a) KM method mean only calculated for datasets of sufficient sample size containing non-detects. Arithmetic means were used if KM method mean was not calculated.

(3) UCL calculations were performed using USEPA's ProUCL software version 5.1.002 (May 2016). For data sets with multiple detection limits for non-detects, the use of the Kaplan Meier non-parametric test procedure is recommended and used to calculate an appropriate UCL. For the Kaplan Meier test procedure, the type of data distribution was determined using a series of tests (Shapiro-Wilk, Kolmogorov-Smirnov, Anderson-Darling) for normal, lognormal, or gamma data distributions. The results of these distribution tests determined which UCL calculation was performed. The UCL suggested by ProUCL is used, unless otherwise noted. In cases where more than one UCL is suggested, the higher UCL is used, unless otherwise noted.
NP = Non-parametric; N = Normal; LN = Lognormal; G = Gamma; NC = Not calculated.

(4) Equal to the maximum detected concentration.
J = The chemical was positively identified; however, the associated numerical value is an estimated concentration only.

(5) Indicates the statistic on which the exposure point concentration is based.
Maximum = Maximum detected concentration.
95% Adjusted Gamma UCL = Calculated using Adjusted Gamma distribution procedure.
95% Chebyshev (Mean, Sd) UCL = Calculated using Chebyshev inequality non-parametric procedure.
95% Gamma Adjusted KM-UCL = Calculated using Kaplan Meier Adjusted Gamma distribution procedure.
95% GROS Adjusted Gamma UCL = Calculated using adjusted gamma regression on order statistics procedure.
95% KM (Chebyshev) UCL = Calculated using 95% Kaplan Meier (Chebyshev inequality) non-parametric procedure.
95% KM (t) UCL = Calculated using 95% Kaplan Meier (Student's t approximation) non-parametric procedure.
95% KM H-UCL = Calculated using 95% Kaplan Meier (Land's H-stat) lognormal procedure.
95% Student's-t UCL = Calculated using a normal Student's t approximation procedure.
KM Student's-t UCL = Calculated using a Kaplan Meier (Student's t approximation) lognormal procedure.

(6) The UCL recommended by ProUCL is used (where multiple values are recommended, the higher is used).
(b) Maximum detected concentration used for EPC due to the low number of detections or small sample size.
(c) 95% UCL exceeds maximum detected concentration. Therefore, maximum concentration used for EPC
(d) ProUCL computes and outputs the H-statistic based UCLs for historic reasons only as it often results in unstable (both low and high) values (USEPA, 2010).
As such, the 95% Chebyshev (Mean, Sd) UCL was used to estimate the 95% UCL for this data set.

(7) EPCs presented in Table F-1.7 of the 2013 HHRA. These EPCs were calculated as the 95% UCL (or maximum detected concentration if a sufficient number of samples were not available to calculate a UCL) based on May 2010 through 2012 shellfish data.

TABLE 4

COMPARISON OF EXPOSURE ASSUMPTIONS

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 09 - ALLEN HARBOR LANDFILL

FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE

NORTH KINGSTOWN, RHODE ISLAND

				Adolescent Recreator			Adult Recreator		
Exposure Media/ Scenario	Exposure Route(s)	Parameter	Units	2013 HHRA	Current Value	Current Source	2013 HHRA	Current Value	Current Source
Sediment and Groundwater	Incidental Ingestion/ Dermal	Body Weight	kg	45	44	USEPA, 2011 (1)	70	80	USEPA, 2014
		Averaging Time - Cancer	days	25,550	25,550	USEPA, 2014	25,550	25,550	USEPA, 2014
Sediment - Swimming/Wading	Incidental Ingestion	Ingestion Rate	mg/day	100	50	USEPA, 2011 (2)	50	50	USEPA, 2011 (2)
		Fraction from contaminated source	unitless	1	1	BPJ	1	1	BPJ
	Incidental Ingestion/ Dermal	Exposure Frequency	days/year	80	80	BPJ (3)	80	80	BPJ (3)
		Exposure Duration	years	10	10	(4)	16	16	USEPA, 2014 (5)
		Averaging Time - Noncancer	days	3,650	3,650	USEPA, 2014	5,840	5,840	USEPA, 2014
	Dermal	Skin Surface Area	cm^2/event	3,250	3,819	USEPA, 2011 (6)	4,500	4,780	USEPA, 2011 (7)
		Event Frequency	events/day	1	1	BPJ	1	1	BPJ
		Adherence Factor (16)	mg/cm^2-event	2	2	BPJ (8)	0.335	0.316	USEPA, 2011 (9)
	Unit Intakes (14):	Incidental Ingestion - Cancer	(mg/kg-day)(kg/mg)	6.96E-08	3.56E-08		3.58E-08	3.13E-08	
		Incidental Ingestion - Noncancer	(mg/kg-day)(kg/mg)	4.87E-07	2.49E-07		1.57E-07	1.37E-07	
		Dermal - Cancer	(mg/kg-day)/(kg/mg)	4.52E-06	5.44E-06		1.08E-06	9.46E-07	
		Dermal - Noncancer	(mg/kg-day)/(kg/mg)	3.17E-05	3.80E-05		4.72E-06	4.14E-06	
Sediment - Clamming	Incidental Ingestion	Ingestion Rate	mg/day	100	50	USEPA, 2011 (2)	50	50	USEPA, 2011 (2)
		Fraction from contaminated source	unitless	1	1	BPJ	1	1	BPJ
	Incidental Ingestion/ Dermal	Exposure Frequency	days/year	80	80	BPJ (3)	80	80	BPJ (3)
		Exposure Duration	years	10	10	(4)	16	16	USEPA, 2014 (5)
		Averaging Time - Noncancer	days	3,650	3,650	USEPA, 2014	5,840	5,840	USEPA, 2014
	Dermal	Skin Surface Area	cm^2/event	4,300	4,406	USEPA, 2011 (10)	6,073	6,077	USEPA, 2011 (11)
		Event Frequency	events/day	1	1	BPJ	1	1	BPJ
		Adherence Factor	mg/cm^2-event	0.335	0.316	USEPA, 2011 (9)	0.335	0.316	USEPA, 2011 (9)
	Unit Intakes (14):	Incidental Ingestion - Cancer	(mg/kg-day)(kg/mg)	6.96E-08	3.56E-08		3.58E-08	3.13E-08	
		Incidental Ingestion - Noncancer	(mg/kg-day)(kg/mg)	4.87E-07	2.49E-07		1.57E-07	1.37E-07	
		Dermal - Cancer	(mg/kg-day)/(kg/mg)	1.00E-06	9.91E-07		1.46E-06	1.20E-06	
		Dermal - Noncancer	(mg/kg-day)/(kg/mg)	7.02E-06	6.94E-06		6.37E-06	5.26E-06	
Groundwater - Clamming	Dermal	Skin Surface Area	cm^2/event	1,300	1,335	USEPA, 2011 (12)	1,800	1,965	USEPA, 2014 (13)
		Event Frequency	events/day	1	1	BPJ	1	1	BPJ
		Exposure Duration	years	10	10	(4)	16	16	USEPA, 2014 (5)
		Exposure Frequency	days/year	80	80	BPJ (3)	80	80	BPJ (3)
		Averaging Time - Noncancer	days	3,650	3,650	USEPA, 2014	5,840	5,840	USEPA, 2014
	Unit Intakes (15):	Dermal - Cancer	$(cm^2$-event)/(kg-day)	9.05E-01	9.50E-01		1.29E+00	1.23E+00	
		Dermal - Noncancer	$(cm^2$-event)/(kg-day)	6.33E+00	6.65E+00		5.64E+00	5.38E+00	

TABLE 4

COMPARISON OF EXPOSURE ASSUMPTIONS

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 09 - ALLEN HARBOR LANDFILL

FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE

NORTH KINGSTOWN, RHODE ISLAND

				Adolescent Recreator			Adult Recreator		
Exposure Media/ Scenario	Exposure Route(s)	Parameter	Units	2013 HHRA	Current Value	Current Source	2013 HHRA	Current Value	Current Source

Notes:

Shading indicates a difference between exposure assumptions/unit intakes utilized in the 2013 HHRA in comparison to current exposure assumptions/unit intakes.

BPJ = best professional judgement.

cm^2 = square centimeters.

HHRA = Human Health Risk Assessment.

kg = kilograms.

mg = milligrams.

USEPA = United States Environmental Protection Agency.

(1) Recommended mean body weight. Weighted average of recommended mean body weight for the associated age range (USEPA, 2011; Table 8-3).

(2) Equal to the central tendency ingestion rate for soil and dust by the general population (Table 5-1). Central tendency value used given the application of a default soil and dust ingestion rate to sediment is conservative.

(3) Assumes three days a week from April through October based on best professional judgement.

(4) The exposure duration for an adolescent reflects the 10 years from ages 7 to 16 years old.

(5) The exposure duration for the adult recreator was conservatively selected such that the combined exposure duration of the adolescent and adult recreator equals the default residential exposure duration (i.e., 26 years; USEPA, 2014), consistent with the approach used in the 2013 HHRA.

(6) Represents weighted mean surface area for males and females, including hands, forearms, lower legs, and feet, for ages 7 to 16 years old.

(7) Represents weighted mean surface area for adult males and females, including hands, lower legs and feet.

(8) BPJ; Represents a more conservative adherence factor than the recommended value for children playing in tidal flat sediment for all body areas except feet (USEPA, 2011; Table 7-4).

(9) Represents the weighted geometric mean adherence factor for adult reed gatherers (forearms, hands, lower legs, and feet) (USEPA, 2004; Exhibit C-2).

(10) Assumes 33 percent of total body skin surface area (i.e., 13,350 cm^2; weighted average of recommended mean surface area for the associated age [USEPA, 2011; Table 7-1]) is exposed.

(11) Represents weighted mean surface area for adult males and females, including hands, forearms, lower legs and feet.

(12) Assumes 10 percent of total body skin surface area (i.e., 13,350 cm^2; weighted average of recommended mean surface area for the associated age [USEPA, 2011; Table 7-1]) is exposed.

(13) Assumes 10 percent of total body skin surface area of an adult resident (i.e., 19,652 cm^2 [USEPA, 2014]).

(14) Unit Intakes for sediment exposure were calculated as follows, consistent with the equations utilized in the 2013 HHRA (Attachment 2) to calculate the Risk-Based Concentrations:

Incidental ingestion Intake [(mg/kg-day)(kg/mg)] =

[Ingestion Rate (mg/day) x conversion factor (1E-6 kg/mg) x exposure frequency (days/year) x exposure duration (years) x Fraction from contaminated source (unitless)] / [body weight (kg) x averaging time (days)]

Dermal Intake [(mg/kg-day)/(kg/mg)] =

[surface area (cm^2) x adherence factor (mg/cm^2-event) x event frequency (events/day) x exposure frequency (days/year) x exposure duration (years) x conversion factor (1E-6 kg/mg)] / [body weight (kg) x averaging time (days)]

(15) Unit Intakes for water exposure were calculated as follows, consistent with the equations utilized in the 2013 HHRA (Attachment 2) to calculate the Risk-Based Concentrations:

Dermal Intake [(cm^2-event)/(kg-day)] = [surface area (cm^2) x event frequency (events/day) x exposure frequency (days/year) x exposure duration (years)] / [body weight (kg) x averaging time (days)]

(16) Value for the "refined adherence factor" scenario used.

Sources:

USEPA, 2004. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual Part E, Supplemental Guidance for Dermal Assessment. Final. EPA/540/R/99/005. July.

USEPA, 2011. Exposure Factors Handbook: 2011 Edition. EPA/600/R-090/052F, September 2011.

USEPA, 2014. Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors. February 6, 2014. Corrected September 2015.

TABLE 5

COMPARISON OF NON-CANCER TOXICITY DATA -- ORAL/DERMAL

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 09 - ALLEN HARBOR LANDFILL

FORMER NCBC DAVISVILLE

NORTH KINGSTOWN, RHODE ISLAND

Chemical of Potential Concern (1)	CAS Number	Chronic/ Subchronic	Oral RfD			Oral Absorption Efficiency For Dermal (2)	Absorbed RfD for Dermal (3)			Primary Target Organ(s)		Combined Uncertainty/Modifying Factors (Current)	RfD:Target Organ(s) (4)			
			Value		Units		Value		Units				2013 HHRA		Current	
			2013 HHRA	Current			2013 HHRA	Current		2013 HHRA	Current		Source(s)	Date(s)	Source(s)	Date(s)
Metals																
ALUMINUM	7429-90-5	Chronic	1.0E+00	1.0E+00	mg/kg-day	(5)	1.0E+00	1.0E+00	mg/kg-day	Neurological	Neurological	100	P	3/2013	P	4/2017
ANTIMONY	7440-36-0	Chronic	4.0E-04	4.0E-04	mg/kg-day	0.15	6.0E-05 (6)	6.0E-05	mg/kg-day	Blood	Mortality, Blood	1000	I	3/2013	I	4/2017
ARSENIC	7440-38-2	Chronic	3.0E-04	3.0E-04	mg/kg-day	(5)	3.0E-04	3.0E-04	mg/kg-day	Skin, Cardiovascular	Skin, Cardiovascular	3	I	3/2013	I	4/2017
BERYLLIUM	7440-41-7	Chronic	2.0E-03	2.0E-03	mg/kg-day	0.007	1.4E-05	1.4E-05	mg/kg-day	Gastrointestinal	Gastrointestinal	300	I	3/2013	I	4/2017
CHROMIUM, TOTAL	7440-47-3	Chronic	1.5E+00	1.5E+00	mg/kg-day	0.013	2.0E-02	2.0E-02	mg/kg-day	N/A	N/A	100	I	3/2013	I	4/2017
COPPER	7440-50-8	Chronic	4.0E-02	4.0E-02	mg/kg-day	(5)	4.0E-02	4.0E-02	mg/kg-day	Gastrointestinal	Gastrointestinal	NA	H	3/2013	H	4/2017
IRON	7439-89-6	Chronic	7.0E-01	7.0E-01	mg/kg-day	(5)	7.0E-01	7.0E-01	mg/kg-day	Gastrointestinal	Gastrointestinal	1.5	P	3/2013	P	4/2017
LEAD	7439-92-1	Chronic	N/A	N/A			N/A	N/A								
MANGANESE	7439-96-5	Chronic	2.4E-02	2.4E-02	mg/kg-day	0.04	9.6E-04	9.6E-04	mg/kg-day	Neurological	Neurological	1	I	3/2013	I	4/2017
MERCURY	7439-97-6	Chronic	3.0E-04	3.0E-04	mg/kg-day	0.07	2.1E-05	2.1E-05	mg/kg-day	Neurological	Neurological	10	I	3/2013	I	4/2017
NICKEL	7440-02-0	Chronic	2.0E-02	2.0E-02	mg/kg-day	0.04	8.0E-04	8.0E-04	mg/kg-day	Body weight	Body weight	300	I	3/2013	I	4/2017
ZINC	7440-66-6	Chronic	3.0E-01	3.0E-01	mg/kg-day	(5)	3.0E-01	3.0E-01	mg/kg-day	Immune, Blood	Immune, Blood	3	I	3/2013	I	4/2017
PCBs																
PCB, TOTAL	RA-65	Chronic	2.0E-05	2.0E-05	mg/kg-day	(5)	2.0E-05	2.0E-05	mg/kg-day	Immune	Immune, Dermal, Ocular	300	I	3/2013	I	4/2017
SVOCs																
BENZO[A]ANTHRACENE	56-55-3	Chronic	N/A	N/A			N/A	N/A								
BENZO[A]PYRENE	50-32-8	Chronic	N/A	3.0E-04	mg/kg-day	(5)	N/A	3.0E-04	mg/kg-day	N/A	Developmental	300	I	3/2013	I	4/2017
BENZO[B]FLUORANTHENE	205-99-2	Chronic	N/A	N/A			N/A	N/A								
CHRYSENE	218-01-9	Chronic	N/A	N/A			N/A	N/A								
DIBENZ[A,H]ANTHRACENE	53-70-3	Chronic	N/A	N/A			N/A	N/A								
VOCs																
BENZENE	71-43-2	Chronic	4.0E-03	4.0E-03	mg/kg-day	(5)	4.0E-03	4.0E-03	mg/kg-day	Blood	Blood	300	I	3/2013	I	4/2017
VINYL CHLORIDE	75-01-4	Chronic	3.0E-03	3.0E-03	mg/kg-day	(5)	3.0E-03	3.0E-03	mg/kg-day	Liver	Liver	30	I	3/2013	I	4/2017

Notes:

CAS = Chemical Abstracts Service.

HHRA = Human Health Risk Assessment.

N/A = Not Applicable/Not Available.

mg/kg-day = milligrams per kilogram per day.

PCBs = Polychlorinated biphenyls.

RfD = Reference Dose.

SVOCs = Semivolatile organic compounds.

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

Shading indicates a difference between toxicity information utilized in the 2013 HHRA in comparison to current toxicity information obtained in accordance with USEPA's recommended hierarchy discussed in the report text.

(1) The following surrogates were used for chemicals without available toxicity values or with multiple forms:

Value for trivalent chromium was used for total chromium.

Value for manganese (non-diet) was used for manganese.

Value for mercuric chloride was used for mercury.

Value for Aroclor 1254 was used for total PCBs.

(2) Oral Absorption Efficiencies from Exhibit 4-1 (USEPA, 2004. Risk Assessment Guidance for Superfund, Part E).

(3) Calculated as: (oral RfD) x (oral to dermal adjustment factor).

(4) Toxicity data obtained from the following sources:

TABLE 5

COMPARISON OF NON-CANCER TOXICITY DATA -- ORAL/DERMAL

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 09 - ALLEN HARBOR LANDFILL

FORMER NCBC DAVISVILLE

NORTH KINGSTOWN, RHODE ISLAND

Chemical of Potential Concern (1)	CAS Number	Chronic/ Subchronic	Oral RfD			Oral Absorption Efficiency For Dermal (2)	Absorbed RfD for Dermal (3)			Primary Target Organ(s)		Combined Uncertainty/Modifying Factors (Current)	RfD:Target Organ(s) (4)			
			Value		Units		Value		Units				2013 HHRA		Current	
			2013 HHRA	Current			2013 HHRA	Current		2013 HHRA	Current		Source(s)	Date(s)	Source(s)	Date(s)

H - USEPA Health Effects Assessment Summary Table [https://epa-heast.ornl.gov/]

I - USEPA Integrated Risk Information System [https://www.epa.gov/iris].

P - USEPA Provisional Peer Reviewed Toxicity Values Appendix [https://hhpprtv.ornl.gov/].

(5) Oral absorption efficiency exceeds 50%. Therefore, no adjustment of the oral RfD is necessary (USEPA, 2004. Exhibit 4-1).

(6) An absorbed RfD of 4.0E-4 mg/kg-day was used in the 2013 HHRA for evaluation of the sediment - adolescent and adult recreational user - swimming/wading scenarios. The use of this alternate absorbed RfD, which is equaivalent to the oral RfD without adjusting per USEPA RAGS Part E, appears to have been used in error.

TABLE 6

COMPARISON OF CANCER TOXICITY DATA -- ORAL/DERMAL

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 09 - ALLEN HARBOR LANDFILL

FORMER NCBC DAVISVILLE

Chemical of Potential Concern (1)	CAS Number	Oral Cancer Slope Factor			Oral Absorption Efficiency for Dermal (2)	Absorbed Cancer Slope Factor for Dermal (3)			Weight of Evidence/ Cancer Guideline Description	Oral CSF (4)				Mutagen?
		Value		Units		Value		Units		Source(s)	Date(s)	Source(s)	Date(s)	
		2013 HHRA	Current			2013 HHRA	Current		(USEPA Group)	2013 HHRA	(MM/YYYY)	Current	(MM/YYYY)	
Metals														
ALUMINUM	7429-90-5	N/A	N/A			N/A	N/A		INADEQUATE					
ANTIMONY	7440-36-0	N/A	N/A			N/A	N/A		INADEQUATE					
ARSENIC	7440-38-2	1.50E+00	1.50E+00	$(mg/kg\text{-}day)^{-1}$	(5)	1.50E+00	1.5E+00	$(mg/kg\text{-}day)^{-1}$	A	I	3/2012	I	4/2017	No
BERYLLIUM	7440-41-7	N/A	N/A			N/A	N/A		B1; LIKELY					
CHROMIUM, TOTAL	7440-47-3	N/A	N/A			N/A	N/A		D					
COPPER	7440-50-8	N/A	N/A			N/A	N/A		D					
IRON	7439-89-6	N/A	N/A			N/A	N/A		INADEQUATE					
LEAD	7439-92-1	N/A	N/A			N/A	N/A		B2					
MANGANESE	7439-96-5	N/A	N/A			N/A	N/A		D					
MERCURY	7439-97-6	N/A	N/A			N/A	N/A		C					
NICKEL	7440-02-0	N/A	N/A			N/A	N/A		INADEQUATE					
ZINC	7440-66-6	N/A	N/A			N/A	N/A		D					
PCBs														
PCB, TOTAL	RA-65	2.00E+00	2.00E+00	$(mg/kg\text{-}day)^{-1}$	(5)	2.00E+00	2.0E+00	$(mg/kg\text{-}day)^{-1}$	B2	I	3/2012	S	4/2017	No
SVOCs														
BENZO[A]ANTHRACENE	56-55-3	7.30E-01	1.00E-01	$(mg/kg\text{-}day)^{-1}$	(5)	7.30E-01	1.0E-01	$(mg/kg\text{-}day)^{-1}$	B2	E	3/2012	(6)	4/2017	Yes
BENZO[A]PYRENE	50-32-8	7.30E+00	1.00E+00	$(mg/kg\text{-}day)^{-1}$	(5)	7.30E+00	1.0E+00	$(mg/kg\text{-}day)^{-1}$	A	I	3/2012	I	4/2017	Yes
BENZO[B]FLUORANTHENE	205-99-2	7.30E-01	1.00E-01	$(mg/kg\text{-}day)^{-1}$	(5)	7.30E-01	1.0E-01	$(mg/kg\text{-}day)^{-1}$	B2	E	3/2012	(6)	4/2017	Yes
CHRYSENE	218-01-9	7.30E-03	1.00E-03	$(mg/kg\text{-}day)^{-1}$	(5)	7.30E-03	1.0E-03	$(mg/kg\text{-}day)^{-1}$	B2	E	3/2012	(6)	4/2017	Yes
DIBENZ[A,H]ANTHRACENE	53-70-3	7.30E+00	1.00E+00	$(mg/kg\text{-}day)^{-1}$	(5)	7.30E+00	1.0E+00	$(mg/kg\text{-}day)^{-1}$	B2	E	3/2012	(6)	4/2017	Yes
VOCs														
BENZENE	71-43-2	5.50E-02	5.50E-02	$(mg/kg\text{-}day)^{-1}$	(5)	5.50E-02	5.5E-02	$(mg/kg\text{-}day)^{-1}$	A	I	3/2012	I	4/2017	No
VINYL CHLORIDE	75-01-4	7.20E-01	7.20E-01	$(mg/kg\text{-}day)^{-1}$	(5)	7.20E-01	7.2E-01	$(mg/kg\text{-}day)^{-1}$	A	I	3/2012	I	4/2017	Yes (7)

Notes:

CAS = Chemical Abstracts Service.

CSF = Cancer Slope Factor.

HHRA = Human Health Risk Assessment.

N/A = Not Applicable/Not Available.

mg/kg-day = Milligrams per kilogram per day.

PCBs = Polychlorinated biphenyls.

SVOCs = Semivolatile organic compounds.

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

Shading indicates a difference between toxicity information utilized in the 2013 HHRA in comparison to current toxicity information obtained in accordance with USEPA's recommended hierarchy discussed in the report text.

Weight of Evidence Characterization/USEPA Group:

A - Human carcinogen

B1 - Probable human carcinogen - indicates that limited human data are available

B2 - Probable human carcinogen - indicates sufficient evidence in animals and inadequate or no evidence in humans

C - Possible human carcinogen

D - Not classifiable as a human carcinogen (by the oral route)

LIKELY - Likely to be carcinogenic to humans.

INADEQUATE - Inadequate information to assess carcinogenic potential.

TABLE 6

COMPARISON OF CANCER TOXICITY DATA -- ORAL/DERMAL

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 09 - ALLEN HARBOR LANDFILL

FORMER NCBC DAVISVILLE

Chemical of Potential Concern (1)	CAS Number	Oral Cancer Slope Factor			Oral Absorption Efficiency for Dermal (2)	Absorbed Cancer Slope Factor for Dermal (3)			Weight of Evidence/ Cancer Guideline Description (USEPA Group)	Oral CSF (4)				Mutagen?
		Value		Units		Value		Units		Source(s) 2013 HHRA	Date(s) (MM/YYYY)	Source(s) Current	Date(s) (MM/YYYY)	
		2013 HHRA	Current			2013 HHRA	Current							

(1) The following surrogates were used for chemicals without available screening levels or with multiple forms:

Value for Aroclor 1254 was used for total PCBs.

(2) Oral Absorption Efficiencies from Exhibit 4-1 (USEPA, 2004. Risk Assessment Guidance for Superfund, Part E).

(3) Calculated as: (oral slope factor) / (oral to dermal adjustment factor)

(4) Toxicity data obtained from the following sources:

E - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites User's Guide Section 2.3.5

I - USEPA Integrated Risk Information System [https://www.epa.gov/iris].

S - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites User's Guide Section 5

(5) Oral absorption efficiency exceeds 50%. Therefore, no adjustment of the oral RfD is necessary (USEPA, 2004. Exhibit 4-1).

(6) Values for carcinogenic polycyclic aromatic hydrocarbons (cPAHs) calculated by application of the appropriate relative potency factor (USEPA, 1993) to the slope factor for benzo(a)pyrene.

(7) Cancer toxicity values for vinyl chloride account for mutagenic action, such that age-dependent adjustment factors (ADAFs) are not applied for vinyl chloride.

TABLE 7
DEFAULT ABSORPTION FACTORS FOR COPCS IN SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE

Chemicals of Potential Concern in Sediment	CAS Number	Oral - Absorption Adjustment Factor		Dermal - Absorption Adjustment Fraction	
		Default		Default	
Metals					
ALUMINUM	7429-90-5	1	(a)	N/A	(c)
ANTIMONY	7440-36-0	1	(a)	N/A	(c)
ARSENIC	7440-38-2	0.6	(b)	0.03	(c)
BERYLLIUM	7440-41-7	1	(a)	N/A	(c)
CHROMIUM, TOTAL	7440-47-3	1	(a)	N/A	(c)
COPPER	7440-50-8	1	(a)	N/A	(c)
IRON	7439-89-6	1	(a)	N/A	(c)
LEAD	7439-92-1	1	(a)	N/A	(c)
MANGANESE	7439-96-5	1	(a)	N/A	(c)
MERCURY	7439-97-6	1	(a)	N/A	(c)
NICKEL	7440-02-0	1	(a)	N/A	(c)
ZINC	7440-66-6	1	(a)	N/A	(c)
PCBs					
PCB, TOTAL	RA-65	1	(a)	0.14	(c)
SVOCs					
BENZO[A]ANTHRACENE	56-55-3	1	(a)	0.13	(c)
BENZO[A]PYRENE	50-32-8	1	(a)	0.13	(c)
BENZO[B]FLUORANTHENE	205-99-2	1	(a)	0.13	(c)
CHRYSENE	218-01-9	1	(a)	0.13	(c)
DIBENZ[A,H]ANTHRACENE	53-70-3	1	(a)	0.13	(c)
VOCs					
BENZENE	71-43-2	1	(a)	N/A	(c)
VINYL CHLORIDE	75-01-4	1	(a)	N/A	(c)

Notes:

CAS = Chemical Abstracts Service.

N/A = Not Applicable. Chemical is not assessed via this pathway.

PCBs = Polychlorinated biphenyls.

SVOCs = Semi-volatile organic compounds.

USEPA = United States Environmental Protection Agency.

VOCs = Volatile organic compounds.

(a) Absorption is assumed to be 100% (absorption factor = 1) (USEPA Risk Assessment Guidance for Superfund (RAGS), Part A, 1989.

(b) Recommendations for Default Value for Relative Bioavailability of Arsenic in Soil. OSWER Directive 9200.1-113. USEPA, December 2012. Consistent with the approach used by the USEPA Regional Screening Level (RSL) table (May 2016).

(c) USEPA, 2004. Risk Assessment Guidance for Superfund. Vol. 1, Part E. July, 2004. Exhibit 3-4.

TABLE 8

DERMAL WATER PARAMETERS FOR COPCS IN SHALLOW GROUNDWATER (PIEZOMETER WATER)

HUMAN HEALTH RISK ASSESSMENT UPDATE

SITE 09 - ALLEN HARBOR LANDFILL

FORMER NCBC DAVISVILLE

Chemical of Potential Concern in Groundwater (Piezometer Water)	CAS Number	Chemical Properties		Dermal Water Parameters												
		MW (f) g/mol	log Kow (f) unitless	tevent hr/event	Kp cm/hr	B unitless	Lag Time t hr/event	t* hr	FA unitless	lsc (e) cm	log (Dsc/lsc) unitless	Dsc/lsc unitless	Dsc unitless	b (a) unitless	c (a) unitless	Dermal Factor (Z) (d) L/cm^2-event
Metals																
ALUMINUM	7429-90-5	--	--	2.00E+00	1.00E-03 (b,c)	--	--	--	--	--	--	--	--	--	--	2.00E-06
ANTIMONY	7440-36-0	--	--	2.00E+00	1.00E-03 (b,c)	--	--	--	--	--	--	--	--	--	--	2.00E-06
ARSENIC	7440-38-2	--	--	2.00E+00	1.00E-03 (b,c)	--	--	--	--	--	--	--	--	--	--	2.00E-06
BERYLLIUM	7440-41-7	--	--	2.00E+00	1.00E-03 (b,c)	--	--	--	--	--	--	--	--	--	--	2.00E-06
CHROMIUM, TOTAL	7440-47-3	--	--	2.00E+00	1.00E-03 (b,c,g)	--	--	--	--	--	--	--	--	--	--	2.00E-06
COPPER	7440-50-8	--	--	2.00E+00	1.00E-03 (b,c)	--	--	--	--	--	--	--	--	--	--	2.00E-06
IRON	7439-89-6	--	--	2.00E+00	1.00E-03 (b,c)	--	--	--	--	--	--	--	--	--	--	2.00E-06
LEAD	7439-92-1	--	--	2.00E+00	1.00E-04 (b)	--	--	--	--	--	--	--	--	--	--	2.00E-07
MANGANESE	7439-96-5	--	--	2.00E+00	1.00E-03 (b,c)	--	--	--	--	--	--	--	--	--	--	2.00E-06
MERCURY	7439-97-6	--	--	2.00E+00	1.00E-03 (b)	--	--	--	--	--	--	--	--	--	--	2.00E-06
NICKEL	7440-02-0	--	--	2.00E+00	2.00E-04 (b)	--	--	--	--	--	--	--	--	--	--	4.00E-07
ZINC	7440-66-6	--	--	2.00E+00	6.00E-04 (b)	--	--	--	--	--	--	--	--	--	--	1.20E-06
SVOCs																
BENZO[A]ANTHRACENE	56-55-3	--	--	--	-- (h)	--	--	--	--	--	--	--	--	--	--	N/A
BENZO[A]PYRENE	50-32-8	--	--	--	-- (h)	--	--	--	--	--	--	--	--	--	--	N/A
BENZO[B]FLUORANTHENE	205-99-2	--	--	--	-- (h)	--	--	--	--	--	--	--	--	--	--	N/A
VOCs																
BENZENE	71-43-2	7.81E+01	2.13E+00	2.00E+00	1.49E-02 (a)	5.05E-02 (a)	2.90E-01 (a)	7.00E-01 (a)	1.00E+00 (a)	1.00E-03	-3.24E+00	5.71E-04	5.71E-07	3.35E-01	3.68E-01	3.74E-05
VINYL CHLORIDE	75-01-4	6.25E+01	1.36E+00	2.00E+00	5.60E-03 (a)	1.70E-02 (a)	2.40E-01 (a)	5.70E-01 (a)	1.00E+00 (a)	1.00E-03	-3.16E+00	6.99E-04	6.99E-07	3.14E-01	3.45E-01	1.37E-05

Notes:

CAS = Chemical Abstracts Service.

N/A = Not Applicable. Chemical is not assessed via this pathway.

SVOC = Semi-volatile organic compound.

VOC = Volatile organic compound.

USEPA, 2004. Risk Assessment Guidance for Superfund. Vol. 1, Part E. July, 2004.

(a) USEPA, 2004. Exhibit B-3 (Organics).

(b) USEPA, 2004. Exhibit 3-1. (Inorganics)

(c) Default for all other inorganics.

(d) Value is calculated as follows:

Z (inorganics) (L/cm^2-event) = Kp (cm/hr) x tevent (hr/event) x 0.001 L/cm^3

Z (organics) (L/cm^2-event): If tevent < t*, Then Z = 2 FA x Kp [square root (6 x t x tevent/p)] x 0.001 L/cm^3

Z (organics) (L/cm^2-event): If tevent > t*, Then Z = FA x Kp [(tevent/1 + B) + 2 t ((1 + 3 B + 3 B^2)/(1 + B)^2)] x 0.001 L/cm^3

Value is equal to Daevent (USEPA, 2004; Equations 3.2, 3.3, and 3.4) without the water concentration included.

(e) Equation A-4. Default value.

(f) Exhibit B-2.

(g) Value for trivalent chromium used.

(h) Dermal pathway is considered to be negligible, therefore, the dermal exposure pathway is not quantitatively evaluated, as discussed in the report text.

Definitions:

B - Relative Contribution of Permeability Coefficient.

DAevent - Absorbed dose per event.

Dsc - Effective diffusion coefficient through stratum corneum.

FA - Fraction Absorbed.

Kow - Octanol-Water Partition Coefficient.

Kp - Dermal Permeability Coefficient.

lsc - Apparent thickness of stratum corneum.

MW - Molecular Weight.

t - lag time (hr/event).

t* - Time to reach steady state.

TABLE 9.1
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - RECREATIONAL USER - SWIMMING/WADING
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Swimming/Wading
Exposure Point: Site 09 - Shoreline

Medium	Receptor Age	Exposure Route	COPC	CAS	EPC (a) Value	EPC (a) Units	Unit Intake - Cancer (b) Value	Unit Intake - Cancer (b) Units	Unit Intake - Noncancer (b) Value	Unit Intake - Noncancer (b) Units	Cancer Toxicity Value - Cancer Slope Factor (c) Value	Cancer Toxicity Value - Cancer Slope Factor (c) Units	Noncancer Toxicity Value - Reference Dose (c) Value	Noncancer Toxicity Value - Reference Dose (c) Units	ADAF	Sediment ABS (d)	Dermal Factor (Z) (L/cm^2-event) (d)	Potential Cancer Risk (e)	Potential Noncancer Hazard Quotient (e)
Shallow Sediment	Adolescent	Incidental Ingestion	**Metals**																
			ALUMINUM	7429-90-5	6.09E+03	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	N/A		1.0E+00	mg/kg-day	1	1	N/A	N/A	0.002
			ARSENIC	7440-38-2	6.49E+00	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	0.6	N/A	2E-07	0.003
			IRON	7439-89-6	1.68E+04	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	N/A		7.0E-01	mg/kg-day	1	1	N/A	N/A	0.006
			MANGANESE	7439-96-5	1.30E+02	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	N/A		2.4E-02	mg/kg-day	1	1	N/A	N/A	0.001
			PCBs																
			PCB, TOTAL	RA-65	1.12E-01	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	2.0E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-05	mg/kg-day	1	1	N/A	8E-09	0.001
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	4.64E-01	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	1	N/A	5E-09	N/A
			BENZO[A]PYRENE	50-32-8	3.76E-01	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	3	1	N/A	4E-08	0.0003
			BENZO[B]FLUORANTHENE	205-99-2	4.78E-01	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	1	N/A	5E-09	N/A
			CHRYSENE	218-01-9	4.66E-01	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.0E-03	$(mg/kg\text{-}day)^{-1}$	N/A		3	1	N/A	5E-11	N/A
			DIBENZ[A,H]ANTHRACENE	53-70-3	5.59E-02	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	N/A		3	1	N/A	6E-09	N/A
		Exposure Route Total																3E-07	0.01
		Dermal	**Metals**																
			ALUMINUM	7429-90-5	6.09E+03	mg/kg	5.44E-06	(mg/kg-day)(kg/mg)	3.80E-05	(mg/kg-day)(kg/mg)	N/A		1.0E+00	mg/kg-day	1	N/A	N/A	N/A	N/A
			ARSENIC	7440-38-2	6.49E+00	mg/kg	5.44E-06	(mg/kg-day)(kg/mg)	3.80E-05	(mg/kg-day)(kg/mg)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	0.03	N/A	2E-06	0.02
			IRON	7439-89-6	1.68E+04	mg/kg	5.44E-06	(mg/kg-day)(kg/mg)	3.80E-05	(mg/kg-day)(kg/mg)	N/A		7.0E-01	mg/kg-day	1	N/A	N/A	N/A	N/A
			MANGANESE	7439-96-5	1.30E+02	mg/kg	5.44E-06	(mg/kg-day)(kg/mg)	3.80E-05	(mg/kg-day)(kg/mg)	N/A		9.6E-04	mg/kg-day	1	N/A	N/A	N/A	N/A
			PCBs																
			PCB, TOTAL	RA-65	1.12E-01	mg/kg	5.44E-06	(mg/kg-day)(kg/mg)	3.80E-05	(mg/kg-day)(kg/mg)	2.0E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-05	mg/kg-day	1	0.14	N/A	2E-07	0.03
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	4.64E-01	mg/kg	5.44E-06	(mg/kg-day)(kg/mg)	3.80E-05	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	0.13	N/A	1E-07	N/A
			BENZO[A]PYRENE	50-32-8	3.76E-01	mg/kg	5.44E-06	(mg/kg-day)(kg/mg)	3.80E-05	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	3	0.13	N/A	8E-07	0.01
			BENZO[B]FLUORANTHENE	205-99-2	4.78E-01	mg/kg	5.44E-06	(mg/kg-day)(kg/mg)	3.80E-05	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	0.13	N/A	1E-07	N/A
			CHRYSENE	218-01-9	4.66E-01	mg/kg	5.44E-06	(mg/kg-day)(kg/mg)	3.80E-05	(mg/kg-day)(kg/mg)	1.0E-03	$(mg/kg\text{-}day)^{-1}$	N/A		3	0.13	N/A	1E-09	N/A
			DIBENZ[A,H]ANTHRACENE	53-70-3	5.59E-02	mg/kg	5.44E-06	(mg/kg-day)(kg/mg)	3.80E-05	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	N/A		3	0.13	N/A	1E-07	N/A
		Exposure Route Total																3E-06	0.06
	Adolescent Total																	3E-06	0.07
	Adult	Incidental Ingestion	**Metals**																
			ALUMINUM	7429-90-5	6.09E+03	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	N/A		1.0E+00	mg/kg-day	1	1	N/A	N/A	0.0008
			ARSENIC	7440-38-2	6.49E+00	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	0.6	N/A	2E-07	0.002
			IRON	7439-89-6	1.68E+04	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	N/A		7.0E-01	mg/kg-day	1	1	N/A	N/A	0.003
			MANGANESE	7439-96-5	1.30E+02	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	N/A		2.4E-02	mg/kg-day	1	1	N/A	N/A	0.0007
			PCBs																
			PCB, TOTAL	RA-65	1.12E-01	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	2.0E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-05	mg/kg-day	1	1	N/A	7E-09	0.0008
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	4.64E-01	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	1	N/A	1E-09	N/A
			BENZO[A]PYRENE	50-32-8	3.76E-01	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	1	N/A	1E-08	0.0002
			BENZO[B]FLUORANTHENE	205-99-2	4.78E-01	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	1	N/A	1E-09	N/A
			CHRYSENE	218-01-9	4.66E-01	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.0E-03	$(mg/kg\text{-}day)^{-1}$	N/A		1	1	N/A	1E-11	N/A
			DIBENZ[A,H]ANTHRACENE	53-70-3	5.59E-02	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	N/A		1	1	N/A	2E-09	N/A
		Exposure Route Total																2E-07	0.008
		Dermal	**Metals**																
			ALUMINUM	7429-90-5	6.09E+03	mg/kg	9.46E-07	(mg/kg-day)(kg/mg)	4.14E-06	(mg/kg-day)(kg/mg)	N/A		1.0E+00	mg/kg-day	1	N/A	N/A	N/A	N/A
			ARSENIC	7440-38-2	6.49E+00	mg/kg	9.46E-07	(mg/kg-day)(kg/mg)	4.14E-06	(mg/kg-day)(kg/mg)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	0.03	N/A	3E-07	0.003
			IRON	7439-89-6	1.68E+04	mg/kg	9.46E-07	(mg/kg-day)(kg/mg)	4.14E-06	(mg/kg-day)(kg/mg)	N/A		7.0E-01	mg/kg-day	1	N/A	N/A	N/A	N/A
			MANGANESE	7439-96-5	1.30E+02	mg/kg	9.46E-07	(mg/kg-day)(kg/mg)	4.14E-06	(mg/kg-day)(kg/mg)	N/A		9.6E-04	mg/kg-day	1	N/A	N/A	N/A	N/A
			PCBs																
			PCB, TOTAL	RA-65	1.12E-01	mg/kg	9.46E-07	(mg/kg-day)(kg/mg)	4.14E-06	(mg/kg-day)(kg/mg)	2.0E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-05	mg/kg-day	1	0.14	N/A	3E-08	0.003
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	4.64E-01	mg/kg	9.46E-07	(mg/kg-day)(kg/mg)	4.14E-06	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	0.13	N/A	6E-09	N/A
			BENZO[A]PYRENE	50-32-8	3.76E-01	mg/kg	9.46E-07	(mg/kg-day)(kg/mg)	4.14E-06	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	0.13	N/A	5E-08	0.001
			BENZO[B]FLUORANTHENE	205-99-2	4.78E-01	mg/kg	9.46E-07	(mg/kg-day)(kg/mg)	4.14E-06	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	0.13	N/A	6E-09	N/A
			CHRYSENE	218-01-9	4.66E-01	mg/kg	9.46E-07	(mg/kg-day)(kg/mg)	4.14E-06	(mg/kg-day)(kg/mg)	1.0E-03	$(mg/kg\text{-}day)^{-1}$	N/A		1	0.13	N/A	6E-11	N/A
			DIBENZ[A,H]ANTHRACENE	53-70-3	5.59E-02	mg/kg	9.46E-07	(mg/kg-day)(kg/mg)	4.14E-06	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	N/A		1	0.13	N/A	7E-09	N/A
		Exposure Route Total																4E-07	0.007
	Adult Total																	6E-07	0.01

TABLE 9.1
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - RECREATIONAL USER - SWIMMING/WADING
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Swimming/Wading
Exposure Point: Site 09 - Shoreline

Medium	Receptor Age	Exposure Route	COPC	CAS	EPC (a) Value	EPC (a) Units	Unit Intake - Cancer (b) Value	Unit Intake - Cancer (b) Units	Unit Intake - Noncancer (b) Value	Unit Intake - Noncancer (b) Units	Cancer Toxicity Value - Cancer Slope Factor (c) Value	Cancer Toxicity Value - Cancer Slope Factor (c) Units	Noncancer Toxicity Value - Reference Dose (c) Value	Noncancer Toxicity Value - Reference Dose (c) Units	ADAF	Sediment ABS (d)	Dermal Factor (Z) (L/cm^2-event) (d)	Potential Cancer Risk (e)	Potential Noncancer Hazard Quotient (e)
	Lifelong (f)	Ingestion	**Metals**																
			ALUMINUM	7429-90-5														N/A	
			ARSENIC	7440-38-2														4E-07	
			IRON	7439-89-6														N/A	
			MANGANESE	7439-96-5														N/A	
			PCBs																
			PCB, TOTAL	RA-65														1E-08	
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3														6E-09	
			BENZO[A]PYRENE	50-32-8														5E-08	
			BENZO[B]FLUORANTHENE	205-99-2														7E-09	
			CHRYSENE	218-01-9														6E-11	
			DIBENZ[A,H]ANTHRACENE	53-70-3														8E-09	
		Exposure Route Total																5E-07	
		Dermal	**Metals**																
			ALUMINUM	7429-90-5														N/A	
			ARSENIC	7440-38-2														2E-06	
			IRON	7439-89-6														N/A	
			MANGANESE	7439-96-5														N/A	
			PCBs																
			PCB, TOTAL	RA-65														2E-07	
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3														1E-07	
			BENZO[A]PYRENE	50-32-8														8E-07	
			BENZO[B]FLUORANTHENE	205-99-2														1E-07	
			CHRYSENE	218-01-9														1E-09	
			DIBENZ[A,H]ANTHRACENE	53-70-3														1E-07	
		Exposure Route Total																3E-06	
	Lifelong (Adolescent, Adult) Total																	4E-06	
Shallow Groundwater (Piezometer Water)	Adolescent	Dermal	**Total Metals**																
			ALUMINUM	7429-90-5	1.07E+05	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		1.0E+00	mg/kg-day	1	N/A	2.00E-06	N/A	0.001
			ANTIMONY	7440-36-0	9.03E+00	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		6.0E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.002
			ARSENIC	7440-38-2	1.74E+02	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	N/A	2.00E-06	5E-07	0.008
			BERYLLIUM	7440-41-7	1.03E+01	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		1.4E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.01
			CHROMIUM, TOTAL	7440-47-3	1.30E+04	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		2.0E-02	mg/kg-day	1	N/A	2.00E-06	N/A	0.009
			COPPER	7440-50-8	4.08E+02	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		4.0E-02	mg/kg-day	1	N/A	2.00E-06	N/A	0.0001
			IRON	7439-89-6	5.07E+05	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		7.0E-01	mg/kg-day	1	N/A	2.00E-06	N/A	0.01
			LEAD	7439-92-1	4.05E+02	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		N/A		1	N/A	2.00E-07	N/A	N/A
			MANGANESE	7439-96-5	3.32E+03	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		9.6E-04	mg/kg-day	1	N/A	2.00E-06	N/A	0.05
			MERCURY	7439-97-6	3.02E+00	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		2.1E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.002
			NICKEL	7440-02-0	1.97E+03	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		8.0E-04	mg/kg-day	1	N/A	4.00E-07	N/A	0.007
			ZINC	7440-66-6	3.43E+04	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		3.0E-01	mg/kg-day	1	N/A	1.20E-06	N/A	0.0009
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	3.00E-01	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	N/A	N/A	N/A	N/A
			BENZO[A]PYRENE	50-32-8	2.60E-01	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	3	N/A	N/A	N/A	N/A
			BENZO[B]FLUORANTHENE	205-99-2	4.10E-01	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	N/A	N/A	N/A	N/A
			VOCs																
			BENZENE	71-43-2	1.30E+00	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	5.5E-02	$(mg/kg\text{-}day)^{-1}$	4.0E-03	mg/kg-day	1	N/A	3.74E-05	3E-09	0.00008
			VINYL CHLORIDE	75-01-4	1.10E+00	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	7.2E-01	$(mg/kg\text{-}day)^{-1}$	3.0E-03	mg/kg-day	1	N/A	1.37E-05	1E-08	0.00003
		Exposure Route Total																5E-07	0.09
	Adolescent Total																	5E-07	0.09

TABLE 9.1
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - RECREATIONAL USER - SWIMMING/WADING
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Swimming/Wading
Exposure Point: Site 09 - Shoreline

Medium	Receptor Age	Exposure Route	COPC	CAS	EPC (a) Value	EPC (a) Units	Unit Intake - Cancer (b) Value	Unit Intake - Cancer (b) Units	Unit Intake - Noncancer (b) Value	Unit Intake - Noncancer (b) Units	Cancer Toxicity Value - Cancer Slope Factor (c) Value	Cancer Toxicity Value - Cancer Slope Factor (c) Units	Noncancer Toxicity Value - Reference Dose (c) Value	Noncancer Toxicity Value - Reference Dose (c) Units	ADAF	Sediment ABS (d)	Dermal Factor (Z) (L/cm^2-event) (d)	Potential Cancer Risk (e)	Potential Noncancer Hazard Quotient (e)
	Adult	Dermal	**Total Metals**																
			ALUMINUM	7429-90-5	1.07E+05	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		1.0E+00	mg/kg-day	1	N/A	2.00E-06	N/A	0.001
			ANTIMONY	7440-36-0	9.03E+00	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		6.0E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.002
			ARSENIC	7440-38-2	1.74E+02	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	N/A	2.00E-06	6E-07	0.006
			BERYLLIUM	7440-41-7	1.03E+01	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		1.4E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.008
			CHROMIUM, TOTAL	7440-47-3	1.30E+04	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		2.0E-02	mg/kg-day	1	N/A	2.00E-06	N/A	0.007
			COPPER	7440-50-8	4.08E+02	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		4.0E-02	mg/kg-day	1	N/A	2.00E-06	N/A	0.0001
			IRON	7439-89-6	5.07E+05	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		7.0E-01	mg/kg-day	1	N/A	2.00E-06	N/A	0.008
			LEAD	7439-92-1	4.05E+02	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		N/A		1	N/A	2.00E-07	N/A	N/A
			MANGANESE	7439-96-5	3.32E+03	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		9.6E-04	mg/kg-day	1	N/A	2.00E-06	N/A	0.04
			MERCURY	7439-97-6	3.02E+00	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		2.1E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.002
			NICKEL	7440-02-0	1.97E+03	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		8.0E-04	mg/kg-day	1	N/A	4.00E-07	N/A	0.005
			ZINC	7440-66-6	3.43E+04	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		3.0E-01	mg/kg-day	1	N/A	1.20E-06	N/A	0.0007
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	3.00E-01	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	N/A	N/A	N/A	N/A
			BENZO[A]PYRENE	50-32-8	2.60E-01	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	N/A	N/A	N/A	N/A
			BENZO[B]FLUORANTHENE	205-99-2	4.10E-01	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	N/A	N/A	N/A	N/A
			VOCs																
			BENZENE	71-43-2	1.30E+00	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	5.5E-02	$(mg/kg\text{-}day)^{-1}$	4.0E-03	mg/kg-day	1	N/A	3.74E-05	3E-09	0.00007
			VINYL CHLORIDE	75-01-4	1.10E+00	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	7.2E-01	$(mg/kg\text{-}day)^{-1}$	3.0E-03	mg/kg-day	1	N/A	1.37E-05	1E-08	0.00003
		Exposure Route Total																7E-07	0.08
	Adult Total																	7E-07	0.08
	Lifelong (f)	Dermal	**Total Metals**																
			ALUMINUM	7429-90-5														N/A	
			ANTIMONY	7440-36-0														N/A	
			ARSENIC	7440-38-2														1E-06	
			BERYLLIUM	7440-41-7														N/A	
			CHROMIUM, TOTAL	7440-47-3														N/A	
			COPPER	7440-50-8														N/A	
			IRON	7439-89-6														N/A	
			LEAD	7439-92-1														N/A	
			MANGANESE	7439-96-5														N/A	
			MERCURY	7439-97-6														N/A	
			NICKEL	7440-02-0														N/A	
			ZINC	7440-66-6														N/A	
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3														N/A	
			BENZO[A]PYRENE	50-32-8														N/A	
			BENZO[B]FLUORANTHENE	205-99-2														N/A	
			VOCs																
			BENZENE	71-43-2														6E-09	
			VINYL CHLORIDE	75-01-4														2E-08	
		Exposure Route Total																1E-06	
	Lifelong (Adolescent, Adult) Total - Groundwater																	1E-06	
Receptor Total - Adolescent - Shallow Sediment + Groundwater																		4E-06	0.2
Receptor Total - Adult - Shallow Sediment + Groundwater																		1E-06	0.09
Receptor Total - Lifelong (f) - Shallow Sediment + Groundwater																		5E-06	N/A (f)

TABLE 9.1
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - RECREATIONAL USER - SWIMMING/WADING
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Swimming/Wading
Exposure Point: Site 09 - Shoreline

Medium	Receptor Age	Exposure Route	COPC	CAS	EPC (a)		Unit Intake - Cancer (b)		Unit Intake - Noncancer (b)		Cancer Toxicity Value - Cancer Slope Factor (c)		Noncancer Toxicity Value - Reference Dose (c)		ADAF	Sediment ABS (d)	Dermal Factor (Z) (L/cm^2-event) (d)	Potential Cancer Risk (e)	Potential Noncancer Hazard Quotient (e)
					Value	Units	Value	Units	Value	Units	Value	Units	Value	Units					

Notes:
ABS = Absorption factor.
ADAF = Age-Adjusted Absorption fraction.
CAS = Chemical Abstracts Service.
COPC = Chemical of potential concern.
EPC = Exposure point concentration.
HHRA = Human Health Risk Assessment.
mg/kg = milligram per kilogram.
N/A = Not applicable/available.
PCB = Polychlorinated Biphenyl.
SVOC - Semivolatile organic compound.
VOC - Volatile organic compound.
(a) Presented on EPC comparison Table 3.2.
(b) Calculated on Table 4.
(c) Noncancer and cancer toxicity values are presented on Tables 5 and 6, respectively.
(d) Sediment oral and dermal absorption factors from Table 7. Dermal factor (Z) calculated in Table 8.
(e) Potential cancer risks and noncancer hazard quotients were calculated per exposure route using the following equations. Potential risks and hazard quotients were then summed for all exposure routes per receptor age group.
Potential cancer risk:
Sediment: EPC x Unit Intake x Cancer Toxicity Value x Sediment ABS x ADAF
Groundwater: EPC x Unit Intake x Cancer Toxicity Value x ADAF x Dermal Factor (Z) x 0.001 mg/ug
Potential hazard quotient [HQ] =
Sediment: EPC x Unit Intake x (1/Noncancer Toxicity Value) x Sediment ABS
Groundwater: EPC x Unit Intake x (1/Noncancer Toxicity Value) x Dermal Factor (Z) x 0.001 mg/ug
(f) Potential cancer risk estimates for the lifelong scenario were calculated by summing the associated estimates for the adolescent and adult. Potential noncancer hazard quotients for the lifelong scenario are the associated estimates for the adolescent.

TABLE 9.2
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - RECREATIONAL USER - CLAMMING
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Clamming
Exposure Point: Site 09 - Shoreline

Medium	Receptor Age	Exposure Route	COPC	CAS	EPC (a)		Unit Intake - Cancer (b)		Unit Intake - Noncancer (b)		Cancer Toxicity Value - Cancer Slope Factor (c)		Noncancer Toxicity Value - Reference Dose (c)		ADAF	Sediment ABS (d)	Dermal Factor (Z) (L/cm^2-event) (d)	Potential Cancer Risk (e)	Potential Noncancer Hazard Quotient (e)
					Value	Units	Value	Units	Value	Units	Value	Units	Value	Units					
Shallow Sediment	Adolescent	Incidental Ingestion	**Metals**																
			ALUMINUM	7429-90-5	6.09E+03	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	N/A		1.0E+00	mg/kg-day	1	1	N/A	N/A	0.002
			ARSENIC	7440-38-2	6.49E+00	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	0.6	N/A	2E-07	0.003
			IRON	7439-89-6	1.68E+04	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	N/A		7.0E-01	mg/kg-day	1	1	N/A	N/A	0.006
			MANGANESE	7439-96-5	1.30E+02	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	N/A		2.4E-02	mg/kg-day	1	1	N/A	N/A	0.001
			PCBs																
			PCB, TOTAL	RA-65	1.12E-01	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	2.0E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-05	mg/kg-day	1	1	N/A	8E-09	0.001
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	4.64E-01	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	1	N/A	5E-09	N/A
			BENZO[A]PYRENE	50-32-8	3.76E-01	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	3	1	N/A	4E-08	0.0003
			BENZO[B]FLUORANTHENE	205-99-2	4.78E-01	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	1	N/A	5E-09	N/A
			CHRYSENE	218-01-9	4.66E-01	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.0E-03	$(mg/kg\text{-}day)^{-1}$	N/A		3	1	N/A	5E-11	N/A
			DIBENZ[A,H]ANTHRACENE	53-70-3	5.59E-02	mg/kg	3.56E-08	(mg/kg-day)(kg/mg)	2.49E-07	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	N/A		3	1	N/A	6E-09	N/A
		Exposure Route Total																3E-07	0.01
		Dermal	**Metals**																
			ALUMINUM	7429-90-5	6.09E+03	mg/kg	9.91E-07	(mg/kg-day)(kg/mg)	6.94E-06	(mg/kg-day)(kg/mg)	N/A		1.0E+00	mg/kg-day	1	N/A	N/A	N/A	N/A
			ARSENIC	7440-38-2	6.49E+00	mg/kg	9.91E-07	(mg/kg-day)(kg/mg)	6.94E-06	(mg/kg-day)(kg/mg)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	0.03	N/A	3E-07	0.005
			IRON	7439-89-6	1.68E+04	mg/kg	9.91E-07	(mg/kg-day)(kg/mg)	6.94E-06	(mg/kg-day)(kg/mg)	N/A		7.0E-01	mg/kg-day	1	N/A	N/A	N/A	N/A
			MANGANESE	7439-96-5	1.30E+02	mg/kg	9.91E-07	(mg/kg-day)(kg/mg)	6.94E-06	(mg/kg-day)(kg/mg)	N/A		9.6E-04	mg/kg-day	1	N/A	N/A	N/A	N/A
			PCBs																
			PCB, TOTAL	RA-65	1.12E-01	mg/kg	9.91E-07	(mg/kg-day)(kg/mg)	6.94E-06	(mg/kg-day)(kg/mg)	2.0E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-05	mg/kg-day	1	0.14	N/A	3E-08	0.005
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	4.64E-01	mg/kg	9.91E-07	(mg/kg-day)(kg/mg)	6.94E-06	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	0.13	N/A	2E-08	N/A
			BENZO[A]PYRENE	50-32-8	3.76E-01	mg/kg	9.91E-07	(mg/kg-day)(kg/mg)	6.94E-06	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	3	0.13	N/A	1E-07	0.001
			BENZO[B]FLUORANTHENE	205-99-2	4.78E-01	mg/kg	9.91E-07	(mg/kg-day)(kg/mg)	6.94E-06	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	0.13	N/A	2E-08	N/A
			CHRYSENE	218-01-9	4.66E-01	mg/kg	9.91E-07	(mg/kg-day)(kg/mg)	6.94E-06	(mg/kg-day)(kg/mg)	1.0E-03	$(mg/kg\text{-}day)^{-1}$	N/A		3	0.13	N/A	2E-10	N/A
			DIBENZ[A,H]ANTHRACENE	53-70-3	5.59E-02	mg/kg	9.91E-07	(mg/kg-day)(kg/mg)	6.94E-06	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	N/A		3	0.13	N/A	2E-08	N/A
		Exposure Route Total																5E-07	0.01
	Adolescent Total																	8E-07	0.02
	Adult	Incidental Ingestion	**Metals**																
			ALUMINUM	7429-90-5	6.09E+03	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	N/A		1.0E+00	mg/kg-day	1	1	N/A	N/A	0.0008
			ARSENIC	7440-38-2	6.49E+00	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	0.6	N/A	2E-07	0.002
			IRON	7439-89-6	1.68E+04	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	N/A		7.0E-01	mg/kg-day	1	1	N/A	N/A	0.003
			MANGANESE	7439-96-5	1.30E+02	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	N/A		2.4E-02	mg/kg-day	1	1	N/A	N/A	0.0007
			PCBs																
			PCB, TOTAL	RA-65	1.12E-01	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	2.0E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-05	mg/kg-day	1	1	N/A	7E-09	0.0008
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	4.64E-01	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	1	N/A	1E-09	N/A
			BENZO[A]PYRENE	50-32-8	3.76E-01	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	1	N/A	1E-08	0.0002
			BENZO[B]FLUORANTHENE	205-99-2	4.78E-01	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	1	N/A	1E-09	N/A
			CHRYSENE	218-01-9	4.66E-01	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.0E-03	$(mg/kg\text{-}day)^{-1}$	N/A		1	1	N/A	1E-11	N/A
			DIBENZ[A,H]ANTHRACENE	53-70-3	5.59E-02	mg/kg	3.13E-08	(mg/kg-day)(kg/mg)	1.37E-07	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	N/A		1	1	N/A	2E-09	N/A
		Exposure Route Total																2E-07	0.008
		Dermal	**Metals**																
			ALUMINUM	7429-90-5	6.09E+03	mg/kg	1.20E-06	(mg/kg-day)(kg/mg)	5.26E-06	(mg/kg-day)(kg/mg)	N/A		1.0E+00	mg/kg-day	1	N/A	N/A	N/A	N/A
			ARSENIC	7440-38-2	6.49E+00	mg/kg	1.20E-06	(mg/kg-day)(kg/mg)	5.26E-06	(mg/kg-day)(kg/mg)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	0.03	N/A	4E-07	0.003
			IRON	7439-89-6	1.68E+04	mg/kg	1.20E-06	(mg/kg-day)(kg/mg)	5.26E-06	(mg/kg-day)(kg/mg)	N/A		7.0E-01	mg/kg-day	1	N/A	N/A	N/A	N/A
			MANGANESE	7439-96-5	1.30E+02	mg/kg	1.20E-06	(mg/kg-day)(kg/mg)	5.26E-06	(mg/kg-day)(kg/mg)	N/A		9.6E-04	mg/kg-day	1	N/A	N/A	N/A	N/A
			PCBs																
			PCB, TOTAL	RA-65	1.12E-01	mg/kg	1.20E-06	(mg/kg-day)(kg/mg)	5.26E-06	(mg/kg-day)(kg/mg)	2.0E+00	$(mg/kg\text{-}day)^{-1}$	2.0E-05	mg/kg-day	1	0.14	N/A	4E-08	0.004
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	4.64E-01	mg/kg	1.20E-06	(mg/kg-day)(kg/mg)	5.26E-06	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	0.13	N/A	7E-09	N/A
			BENZO[A]PYRENE	50-32-8	3.76E-01	mg/kg	1.20E-06	(mg/kg-day)(kg/mg)	5.26E-06	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	0.13	N/A	6E-08	0.001
			BENZO[B]FLUORANTHENE	205-99-2	4.78E-01	mg/kg	1.20E-06	(mg/kg-day)(kg/mg)	5.26E-06	(mg/kg-day)(kg/mg)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	0.13	N/A	7E-09	N/A
			CHRYSENE	218-01-9	4.66E-01	mg/kg	1.20E-06	(mg/kg-day)(kg/mg)	5.26E-06	(mg/kg-day)(kg/mg)	1.0E-03	$(mg/kg\text{-}day)^{-1}$	N/A		1	0.13	N/A	7E-11	N/A
			DIBENZ[A,H]ANTHRACENE	53-70-3	5.59E-02	mg/kg	1.20E-06	(mg/kg-day)(kg/mg)	5.26E-06	(mg/kg-day)(kg/mg)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	N/A		1	0.13	N/A	9E-09	N/A
		Exposure Route Total																5E-07	0.008
	Adult Total																	7E-07	0.02

TABLE 9.2
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - RECREATIONAL USER - CLAMMING
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Clamming
Exposure Point: Site 09 - Shoreline

Medium	Receptor Age	Exposure Route	COPC	CAS	EPC (a) Value	EPC (a) Units	Unit Intake - Cancer (b) Value	Unit Intake - Cancer (b) Units	Unit Intake - Noncancer (b) Value	Unit Intake - Noncancer (b) Units	Cancer Toxicity Value - Cancer Slope Factor (c) Value	Cancer Toxicity Value - Cancer Slope Factor (c) Units	Noncancer Toxicity Value - Reference Dose (c) Value	Noncancer Toxicity Value - Reference Dose (c) Units	ADAF	Sediment ABS (d)	Dermal Factor (Z) (L/cm^2-event) (d)	Potential Cancer Risk (e)	Potential Noncancer Hazard Quotient (e)
	Lifelong (f)	Ingestion	**Metals**																
			ALUMINUM	7429-90-5														N/A	
			ARSENIC	7440-38-2														4E-07	
			IRON	7439-89-6														N/A	
			MANGANESE	7439-96-5														N/A	
			PCBs																
			PCB, TOTAL	RA-65														1E-08	
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3														6E-09	
			BENZO[A]PYRENE	50-32-8														5E-08	
			BENZO[B]FLUORANTHENE	205-99-2														7E-09	
			CHRYSENE	218-01-9														6E-11	
			DIBENZ[A,H]ANTHRACENE	53-70-3														8E-09	
		Exposure Route Total																5E-07	
		Dermal	**Metals**																
			ALUMINUM	7429-90-5														N/A	
			ARSENIC	7440-38-2														6E-07	
			IRON	7439-89-6														N/A	
			MANGANESE	7439-96-5														N/A	
			PCBs																
			PCB, TOTAL	RA-65														7E-08	
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3														3E-08	
			BENZO[A]PYRENE	50-32-8														2E-07	
			BENZO[B]FLUORANTHENE	205-99-2														3E-08	
			CHRYSENE	218-01-9														3E-10	
			DIBENZ[A,H]ANTHRACENE	53-70-3														3E-08	
		Exposure Route Total																1E-06	
	Lifelong (Adolescent, Adult) Total																	1E-06	
Shallow Groundwater (Piezometer Water)	Adolescent	Dermal	**Total Metals**																
			ALUMINUM	7429-90-5	1.07E+05	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		1.0E+00	mg/kg-day	1	N/A	2.00E-06	N/A	0.001
			ANTIMONY	7440-36-0	9.03E+00	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		6.0E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.002
			ARSENIC	7440-38-2	1.74E+02	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	N/A	2.00E-06	5E-07	0.008
			BERYLLIUM	7440-41-7	1.03E+01	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		1.4E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.01
			CHROMIUM, TOTAL	7440-47-3	1.30E+04	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		2.0E-02	mg/kg-day	1	N/A	2.00E-06	N/A	0.009
			COPPER	7440-50-8	4.08E+02	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		4.0E-02	mg/kg-day	1	N/A	2.00E-06	N/A	0.0001
			IRON	7439-89-6	5.07E+05	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		7.0E-01	mg/kg-day	1	N/A	2.00E-06	N/A	0.01
			LEAD	7439-92-1	4.05E+02	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		N/A		1	N/A	2.00E-07	N/A	N/A
			MANGANESE	7439-96-5	3.32E+03	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		9.6E-04	mg/kg-day	1	N/A	2.00E-06	N/A	0.05
			MERCURY	7439-97-6	3.02E+00	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		2.1E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.002
			NICKEL	7440-02-0	1.97E+03	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		8.0E-04	mg/kg-day	1	N/A	4.00E-07	N/A	0.007
			ZINC	7440-66-6	3.43E+04	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	N/A		3.0E-01	mg/kg-day	1	N/A	1.20E-06	N/A	0.0009
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	3.00E-01	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	N/A	N/A	N/A	N/A
			BENZO[A]PYRENE	50-32-8	2.60E-01	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	3	N/A	N/A	N/A	N/A
			BENZO[B]FLUORANTHENE	205-99-2	4.10E-01	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		3	N/A	N/A	N/A	N/A
			VOCs																
			BENZENE	71-43-2	1.30E+00	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	5.5E-02	$(mg/kg\text{-}day)^{-1}$	4.0E-03	mg/kg-day	1	N/A	3.74E-05	3E-09	0.00008
			VINYL CHLORIDE	75-01-4	1.10E+00	ug/L	9.50E-01	(cm^2-event)/(kg-day)	6.65E+00	(cm^2-event)/(kg-day)	7.2E-01	$(mg/kg\text{-}day)^{-1}$	3.0E-03	mg/kg-day	1	N/A	1.37E-05	1E-08	0.00003
		Exposure Route Total																5E-07	0.09
	Adolescent Total																	5E-07	0.09

TABLE 9.2
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - RECREATIONAL USER - CLAMMING
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Clamming
Exposure Point: Site 09 - Shoreline

Medium	Receptor Age	Exposure Route	COPC	CAS	EPC (a) Value	EPC (a) Units	Unit Intake - Cancer (b) Value	Unit Intake - Cancer (b) Units	Unit Intake - Noncancer (b) Value	Unit Intake - Noncancer (b) Units	Cancer Toxicity Value - Cancer Slope Factor (c) Value	Cancer Toxicity Value - Cancer Slope Factor (c) Units	Noncancer Toxicity Value - Reference Dose (c) Value	Noncancer Toxicity Value - Reference Dose (c) Units	ADAF	Sediment ABS (d)	Dermal Factor (Z) (L/cm^2-event) (d)	Potential Cancer Risk (e)	Potential Noncancer Hazard Quotient (e)
	Adult	Dermal	**Total Metals**																
			ALUMINUM	7429-90-5	1.07E+05	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		1.0E+00	mg/kg-day	1	N/A	2.00E-06	N/A	0.001
			ANTIMONY	7440-36-0	9.03E+00	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		6.0E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.002
			ARSENIC	7440-38-2	1.74E+02	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	1.5E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	N/A	2.00E-06	6E-07	0.006
			BERYLLIUM	7440-41-7	1.03E+01	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		1.4E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.008
			CHROMIUM, TOTAL	7440-47-3	1.30E+04	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		2.0E-02	mg/kg-day	1	N/A	2.00E-06	N/A	0.007
			COPPER	7440-50-8	4.08E+02	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		4.0E-02	mg/kg-day	1	N/A	2.00E-06	N/A	0.0001
			IRON	7439-89-6	5.07E+05	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		7.0E-01	mg/kg-day	1	N/A	2.00E-06	N/A	0.008
			LEAD	7439-92-1	4.05E+02	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		N/A		1	N/A	2.00E-07	N/A	N/A
			MANGANESE	7439-96-5	3.32E+03	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		9.6E-04	mg/kg-day	1	N/A	2.00E-06	N/A	0.04
			MERCURY	7439-97-6	3.02E+00	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		2.1E-05	mg/kg-day	1	N/A	2.00E-06	N/A	0.002
			NICKEL	7440-02-0	1.97E+03	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		8.0E-04	mg/kg-day	1	N/A	4.00E-07	N/A	0.005
			ZINC	7440-66-6	3.43E+04	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	N/A		3.0E-01	mg/kg-day	1	N/A	1.20E-06	N/A	0.0007
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3	3.00E-01	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	N/A	N/A	N/A	N/A
			BENZO[A]PYRENE	50-32-8	2.60E-01	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	1.0E+00	$(mg/kg\text{-}day)^{-1}$	3.0E-04	mg/kg-day	1	N/A	N/A	N/A	N/A
			BENZO[B]FLUORANTHENE	205-99-2	4.10E-01	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	1.0E-01	$(mg/kg\text{-}day)^{-1}$	N/A		1	N/A	N/A	N/A	N/A
			VOCs																
			BENZENE	71-43-2	1.30E+00	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	5.5E-02	$(mg/kg\text{-}day)^{-1}$	4.0E-03	mg/kg-day	1	N/A	3.74E-05	3E-09	0.00007
			VINYL CHLORIDE	75-01-4	1.10E+00	ug/L	1.23E+00	(cm^2-event)/(kg-day)	5.38E+00	(cm^2-event)/(kg-day)	7.2E-01	$(mg/kg\text{-}day)^{-1}$	3.0E-03	mg/kg-day	1	N/A	1.37E-05	1E-08	0.00003
		Exposure Route Total																7E-07	0.08
	Adult Total																	7E-07	0.08
	Lifelong (f)	Dermal	**Total Metals**																
			ALUMINUM	7429-90-5														N/A	
			ANTIMONY	7440-36-0														N/A	
			ARSENIC	7440-38-2														1E-06	
			BERYLLIUM	7440-41-7														N/A	
			CHROMIUM, TOTAL	7440-47-3														N/A	
			COPPER	7440-50-8														N/A	
			IRON	7439-89-6														N/A	
			LEAD	7439-92-1														N/A	
			MANGANESE	7439-96-5														N/A	
			MERCURY	7439-97-6														N/A	
			NICKEL	7440-02-0														N/A	
			ZINC	7440-66-6														N/A	
			SVOCs																
			BENZO[A]ANTHRACENE	56-55-3														N/A	
			BENZO[A]PYRENE	50-32-8														N/A	
			BENZO[B]FLUORANTHENE	205-99-2														N/A	
			VOCs																
			BENZENE	71-43-2														6E-09	
			VINYL CHLORIDE	75-01-4														2E-08	
		Exposure Route Total																1E-06	
	Lifelong (Adolescent, Adult) Total - Groundwater																	1E-06	
Receptor Total - Adolescent - Shallow Sediment + Groundwater																		1E-06	0.1
Receptor Total - Adult - Shallow Sediment + Groundwater																		1E-06	0.09
Receptor Total - Lifelong (f) - Shallow Sediment + Groundwater																		3E-06	N/A (f)

TABLE 9.2
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - RECREATIONAL USER - CLAMMING
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Scenario Timeframe: Current/Future
Receptor Population: Recreational Users - Clamming
Exposure Point: Site 09 - Shoreline

Medium	Receptor Age	Exposure Route	COPC	CAS	EPC (a)		Unit Intake - Cancer (b)		Unit Intake - Noncancer (b)		Cancer Toxicity Value - Cancer Slope Factor (c)		Noncancer Toxicity Value - Reference Dose (c)		ADAF	Sediment ABS (d)	Dermal Factor (Z) (L/cm^2-event) (d)	Potential Cancer Risk (e)	Potential Noncancer Hazard Quotient (e)
					Value	Units	Value	Units	Value	Units	Value	Units	Value	Units					

Notes:
ABS = Absorption factor.
ADAF = Age-Adjusted Absorption fraction.
CAS = Chemical Abstracts Service.
COPC = Chemical of potential concern.
EPC = Exposure point concentration.
HHRA = Human Health Risk Assessment.
mg/kg = milligram per kilogram.
N/A = Not applicable/available.
PCB = Polychlorinated Biphenyl.
SVOC - Semivolatile organic compound.
VOC - Volatile organic compound.
(a) Presented on EPC comparison Table 3.2.
(b) Calculated on Table 4.
(c) Noncancer and cancer toxicity values are presented on Tables 5 and 6, respectively.
(d) Sediment oral and dermal absorption factors from Table 7. Dermal factor (Z) calculated in Table 8.
(e) Potential cancer risks and noncancer hazard quotients were calculated per exposure route using the following equations. Potential risks and hazard quotients were then summed for all exposure routes per receptor age group.
Potential cancer risk:
Sediment: EPC x Unit Intake x Cancer Toxicity Value x Sediment ADAF x ABS
Groundwater: EPC x Unit Intake x Cancer Toxicity Value x ADAF x Dermal Factor (Z) x 0.001 mg/ug
Potential hazard quotient [HQ] =
Sediment: EPC x Unit Intake x (1/Noncancer Toxicity Value) x Sediment ADAF x ABS
Groundwater: EPC x Unit Intake x (1/Noncancer Toxicity Value) x ADAF x Dermal Factor (Z) x 0.001 mg/ug
(f) Potential cancer risk estimates for the lifelong scenario were calculated by summing the associated estimates for the adolescent and adult. Potential noncancer hazard quotients for the lifelong scenario are the associated estimates for the adolescent.

TABLE 9.3
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - RECREATIONAL USER - SHELLFISH INGESTION
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical (r)	CAS	EPC (mg/kg)	Shellfish Screening Level (mg/kg) (a)		Potential Cancer Risk (b)	Potential Noncancer Hazard Quotient (c)
			Based on Cancer Endpoint	Based on Noncancer Endpoint		
Metals						
ALUMINUM	7429-90-5	2.40E+02	N/A	6.52E+03	NC	0.04
ANTIMONY	7440-36-0	4.27E-01	N/A	2.61E+00	NC	0.2
ARSENIC	7440-38-2	3.41E+00	1.17E-02	1.96E+00	**2.9E-04**	**1.7**
BARIUM	7440-39-3	1.14E+00	N/A	1.30E+03	NC	0.0009
BERYLLIUM	7440-41-7	1.77E-02	N/A	1.30E+01	NC	0.001
CADMIUM	7440-43-9	1.71E-01	N/A	6.52E+00 (d)	NC	0.03
CHROMIUM, TOTAL	7440-47-3	9.37E+00	N/A	9.78E+03 (e)	NC	0.001
COBALT	7440-48-4	1.99E-01	N/A	1.96E+00	NC	0.1
COPPER	7440-50-8	4.03E+00	N/A	2.61E+02	NC	0.02
IRON	7439-89-6	6.19E+02	N/A	4.56E+03	NC	0.1
LEAD	7439-92-1	6.44E-01	1.50E+00 (f)		NC (f)	NC (f)
MANGANESE	7439-96-5	1.45E+01	N/A	9.13E+02 (g)	NC	0.02
MERCURY	7439-97-6	9.53E-03	N/A	6.52E-01 (h)	NC	0.01
NICKEL	7440-02-0	8.14E-01	N/A	1.30E+02	NC	0.006
SELENIUM	7782-49-2	6.68E-01	N/A	3.26E+01	NC	0.02
SILVER	7440-22-4	4.42E-01	N/A	3.26E+01	NC	0.01
VANADIUM	7440-62-2	5.20E-01	N/A	3.29E+01	NC	0.02
ZINC	7440-66-6	1.68E+01	N/A	1.96E+03	NC	0.009
PCBs						
TOTAL PCB HOMOLOGS	TOTALPCBHOMO	2.03E-02	8.77E-03 (i)	1.30E-01 (i)	2.3E-06	0.2
Pesticides						
4,4-DDD	72-54-8	1.70E-02	7.31E-02	N/A	2.3E-07	NC
4,4-DDE	72-55-9	1.22E-03	5.16E-02	N/A	2.4E-08	NC
4,4-DDT	50-29-3	6.50E-03	5.16E-02	3.26E+00	1.3E-07	0.002
ALDRIN	309-00-2	5.60E-03	1.03E-03	1.96E-01	5.4E-06	0.03
ALPHA-BHC	319-84-6	4.12E-04	2.79E-03	5.21E+01	1.5E-07	0.00001
ALPHA-CHLORDANE	5103-71-9	8.39E-04	5.01E-02 (j)	3.26E+00 (j)	1.7E-08	0.0003
BETA-BHC	319-85-7	1.40E-03	9.75E-03	N/A	1.4E-07	NC
DELTA-BHC	319-86-8	8.89E-04	2.79E-03 (k)	5.21E+01 (k)	3.2E-07	0.00002
DIELDRIN	60-57-1	1.00E-03	1.10E-03	3.26E-01	9.1E-07	0.003
ENDOSULFAN I	959-98-8	4.27E-04	N/A	3.91E+01 (l)	NC	0.00001
ENDOSULFAN II	33213-65-9	6.60E-04	N/A	3.91E+01 (l)	NC	0.00002
ENDOSULFAN SULFATE	1031-07-8	3.20E-03	N/A	3.91E+01 (l)	NC	0.0001
ENDRIN	72-20-8	5.60E-03	N/A	1.96E+00	NC	0.003
ENDRIN ALDEHYDE	7421-93-4	8.00E-04	N/A	1.96E+00 (m)	NC	0.0004
HEPTACHLOR	76-44-8	3.50E-03	3.90E-03	3.26E+00	9.0E-07	0.001
HEPTACHLOR EPOXIDE	1024-57-3	7.46E-04	1.93E-03	8.47E-02	3.9E-07	0.009
LINDANE	58-89-9	1.40E-03	1.60E-02	1.96E+00	8.8E-08	0.0007
METHOXYCHLOR	72-43-5	4.60E-03	N/A	3.26E+01	NC	0.0001
TRANS-CHLORDANE	5103-74-2	1.88E-03	5.01E-02 (j)	3.26E+00 (j)	3.8E-08	0.0006
SVOCs						
2-METHYLNAPHTHALENE	91-57-6	1.56E-02	N/A	2.61E+01	NC	0.0006
2-METHYLPHENOL	95-48-7	8.50E-02	N/A	3.26E+02	NC	0.0003
ACENAPHTHENE	83-32-9	1.31E-02	N/A	3.91E+02	NC	0.00003
ACENAPHTHYLENE	208-96-8	9.89E-03	N/A	3.91E+02 (n)	NC	0.00003
ANTHRACENE	120-12-7	4.32E-03	N/A	1.96E+03	NC	0.000002
BENZO[A]ANTHRACENE	56-55-3	1.30E-02	1.75E-01	N/A	7.4E-08	NC
BENZO[A]PYRENE	50-32-8	1.40E-02	1.75E-02	1.96E+00	8.0E-07	0.007
BENZO[B]FLUORANTHENE	205-99-2	2.70E-02	1.75E-01	N/A	1.5E-07	NC
BENZO[G,H,I]PERYLENE	191-24-2	5.40E-03	N/A	1.96E+02 (o)	NC	0.00003
BENZO[K]FLUORANTHENE	207-08-9	5.17E-03	1.75E+00	N/A	3.0E-09	NC
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	1.75E-01	1.25E+00	1.30E+02	1.4E-07	0.001

TABLE 9.3
POTENTIAL CANCER RISKS AND NONCANCER HAZARD QUOTIENTS - RECREATIONAL USER - SHELLFISH INGESTION
REASONABLE MAXIMUM EXPOSURE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical (r)	CAS	EPC (mg/kg)	Shellfish Screening Level (mg/kg) (a)		Potential Cancer Risk (b)	Potential Noncancer Hazard Quotient (c)
			Based on Cancer Endpoint	Based on Noncancer Endpoint		
BUTYLBENZYLPHTHALATE	85-68-7	8.50E-02	9.24E+00	1.30E+03	9.2E-09	0.0001
CHRYSENE	218-01-9	1.01E-02	1.75E+01	N/A	5.8E-10	NC
DIBENZ[A,H]ANTHRACENE	53-70-3	2.80E-03	1.75E-02	N/A	1.6E-07	NC
DI-N-BUTYLPHTHALATE	84-74-2	4.80E-02	N/A	6.52E+02	NC	0.0001
FLUORANTHENE	206-44-0	9.43E-03	N/A	2.61E+02	NC	0.00004
FLUORENE	86-73-7	6.02E-03	N/A	2.61E+02	NC	0.00002
INDENO[1,2,3-CD]PYRENE	193-39-5	9.50E-03	1.75E-01	N/A	5.4E-08	NC
NAPHTHALENE	91-20-3	1.56E-02	N/A	1.30E+02	NC	0.0001
NITROBENZENE	98-95-3	2.20E-01	N/A	1.30E+01	NC	0.02
PHENANTHRENE	85-01-8	1.85E-02	N/A	1.96E+03 (p)	NC	0.00001
PHENOL	108-95-2	1.00E-01	N/A	1.96E+03	NC	0.0001
PYRENE	129-00-0	1.22E-02	N/A	1.96E+02	NC	0.0001
Potential Cumulative Cancer Risk / Total Hazard Index (q)					**3E-04**	**2.5**
Potential Cumulative Cancer Risk / Total Hazard Index - Calculated without Arsenic (r)					**1E-05**	**0.8**

Notes:
CAS = Chemical Abstracts Service.
EPC = Exposure point concentration.
mg/kg = milligram per kilogram.
N/A = Not applicable/available.
NC = Not calculated.
PCBs = Polychlorinated biphenyls.
SVOCs = Semivolatile organic compounds.
USEPA = United States Environmental Protection Agency.
(a) Calculated using the USEPA Regional Screening Level (RSL) calculator for fish consumption (accessed April 2017). Screening levels are based on a shellfish ingestion rate of 12.8 g/day (95th percentile per capita intake rate for freshwater/estuarine fish [USEPA, 2011]), and a target cancer risk level of 1E-6 and a target hazard quotient of 1.
(b) For potential carcinogens, the potential cancer risk is estimated as follows:

$$\frac{[EPC]}{\text{(fish screening level based on cancer endpoint)} \times 1E\text{-}6}$$

(c) For potential noncarcinogens, the hazard quotient (HQ) is estimated as follows:

$$\frac{[EPC]}{\text{(fish screening level based on noncancer endpoint)} \times 1}$$

(d) The screening value for cadmium (diet) was used.
(e) The screening value for trivalent chromium was used.
(f) The Food and Drug Administration (FDA) action level for lead in crustacea (FDA, 2007. National Shellfish Sanitation Program. Guide for the Control of Molluscan Shellfish. 2007) was used for lead (1.5 mg/kg). Cancer risk and noncancer hazard quotients were not calculated.
(g) The screening value for manganese (diet) was used.
(h) The screening value for methyl mercury was used.
(i) The screening value for Aroclor 1254 was used.
(j) The screening value for chlordane was used.
(k) The screening value for alpha-BHC was used.
(l) The screening value for endosulfan was used.
(m) The screening value for endrin was used.
(n) The screening value for acenaphthene was used.
(o) The screening value for pyrene was used.
(p) The screening value for anthracene was used.
(q) Potential cumulative cancer risk is estimated by summing the potential risk for the individual chemicals. Total potential hazard index (HI) is estimated by summing the potential hazard quotient for the individual chemicals. The total HIs presented are overly conservative because they are based on additivity of hazard quotients for all selected constituents regardless of the target endpoint.
(r) Potential cumulative cancer risk and total potential HI, as described in (q), for all chemicals, excluding arsenic.
(s) Includes all chemicals detected at least once in shellfish tissue.
Shading indicates an exceedance of Rhode Island Department of Environmental Management's (RIDEM) target cumulative cancer risk level of 1E-5 or a target hazard quotient of 1.

TABLE 10
CUMULATIVE CANCER RISK, NONCANCER HAZARD INDICES, AND RISK DRIVERS FOR RECREATIONAL USERS BASED ON INGESTION OF DIRECT CONTACT WITH SEDIMENT AND GROUNDWATER AND INGESTION OF SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Media	Exposure Route	2017 HHRA Update			2013 HHRA (a)		
		Potential Cancer Risk (b)	**Potential Noncancer Hazard Index (c)**	**Risk Drivers (d)**	**Potential Cancer Risk (b)**	**Potential Noncancer Hazard Index (c)**	**Risk Drivers (d)**
Sediment	Incidental Ingestion and Dermal Contact - Swimming/Wading	4E-06	0.07	--	8E-06	0.05	--
	Incidental Ingestion and Dermal Contact - Clamming	1E-06	0.02	--	8E-06	0.03	--
Groundwater (Piezometer Water)	Dermal Contact	1E-06	0.09	--	7E-07	0.02	--
Shellfish	Ingestion	**3E-04**	**2.5**	Arsenic, PCBs, Aldrin	**5E-05**	0.9	Arsenic, PCBs, pesticides
	(excluding Arsenic) (e)	1E-05	0.8	PCBs, Aldrin	**4E-05**	0.8	PCBs, pesticides
Cumulative Potential Risk/Hazard Index (f)		**3E-04**	**2.7**		**6E-05**	1.0	
(excluding Arsenic in shellfish) (e)		**2E-05**	1.0		**5E-05**	0.9	

Notes:
EPC = Exposure point concentration.
HHRA = Human health risk assessment.
PCBs = Polychlorinated biphenyls.
RIDEM = Rhode Island Department of Environmental Management.
UCL = Upper confidence limit on the arithmetic mean concentration.
USEPA = United States Environmental Protection Agency.
(a) The potential risk/hazard estimates from the 2013 HHRA are based on the following scenarios:
Incidental ingestion and dermal contact with shallow sediment while swimming/wading using the refined exposure assumptions and EPCs equal to the 95% UCL based on the 2012 dataset, including weighted EPCs for location SED09-10 for select carcinogenic polycyclic aromatic hydrocarbons (cPAHs) (Table F-2.5);
Incidental ingestion and dermal contact with shallow sediment while clamming using EPCs equal to the 95% UCL based on the 2012 dataset (Table F-2.6);
Dermal contact with piezometer water while clamming using EPCs equal to the 95% UCL based on the 2010 through 2012 dataset, including dissolved metals (Table F-2.10);
(Note: the potential cancer risk and noncancer hazard index estimates including the total metals (instead of the dissolved metals) dataset are 1E-6 and 0.09, respectively.)
Ingestion of shellfish using EPCs equal to the 95% UCL based on the 2010 through 2012 dataset (Table F-1.7).
(b) Potential cancer risk for lifetime recreational user (adolescent + adult).
(c) Potential noncancer hazard associated with sediment and groundwater presented for the adolescent recreational user.
(d) Risk drivers were identified as chemicals with an individual potential cancer risk greater than 1E-6, when the medium-specific total potential cancer risk for the receptor exceeds RIDEM's target cumulative risk level of 1E-5, and chemicals causing an exceedance of RIDEM's total noncancer hazard index of 1 per target endpoint.
(e) For informational purposes, and consistent with the 2013 HHRA, risk/hazard estimates are also provided excluding arsenic.
(f) The cumulative potential risk/hazard index estimates were calculated by summing the potential risk/hazard estimates for all exposure media. Potential risk/hazard estimates for shallow sediment for the swimming/wading scenario (instead of the clamming scenario) were utilized in the calculation of the cumulative risk/hazard estimates because it is the activity with the higher sediment exposure.
Green shading indicates an exceedance of RIDEM's cumulative target cancer risk level of 1E-5.
Yellow shading indicates an exceedance of RIDEM's cumulative target cancer risk level of 1E-5 and USEPA's cumulative target cancer risk range of 1E-6 to 1E-4, or an exceedance of RIDEM and USEPA's target hazard index of 1 per target endpoint.

FIGURES

RESOLUTION CONSULTANTS

Drawn:	RM	02/26/2016
Approved:	BS	02/26/2016
Project #:	60273164	

Legend

Parcel 10 Property Boundary

N

0 180 360

Scale in Feet

FIGURE 1
SITE 09 SITE LAYOUT

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN,
RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\Site 7_9 SAP\MXD\Fig_10_5_Site_Layout.mxd

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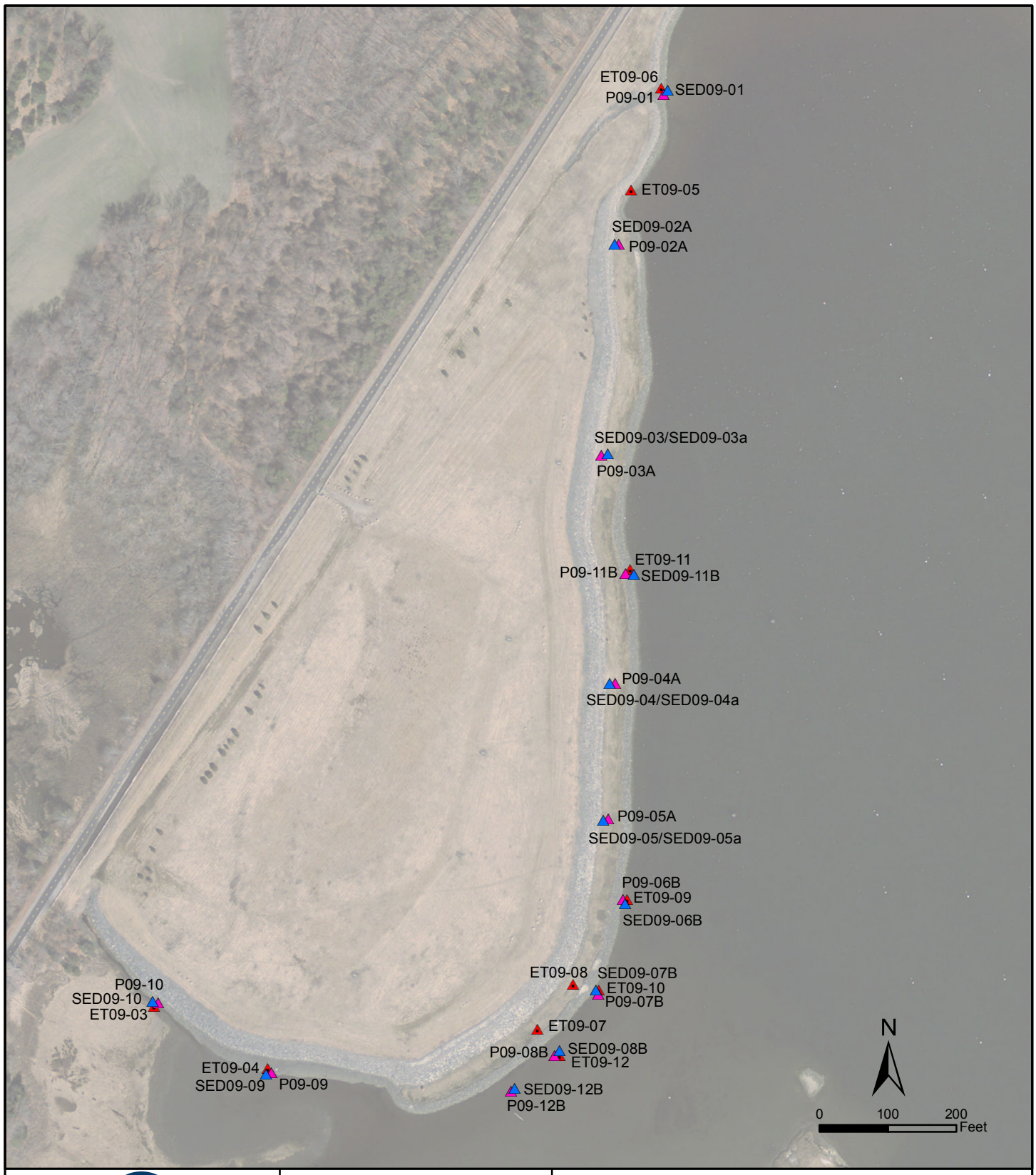

RESOLUTION CONSULTANTS

Drawn:	CP	05/01/2017
Approved:	AC	05/01/2017
Project #:	60273164	

Legend

- Piezometer
- Shellfish
- Sediment

FIGURE 2
SHORELINE SAMPLE LOCATIONS

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN,
RHODE ISLAND

\\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Site 9\MXD\HHRA_Figure2_ShorelineSampleLocations_04242017.mxd

APPENDIX A

SAMPLE LISTS AND ANALYTICAL DATA SUMMARY TABLES

APPENDIX A TABLE 1
SAMPLE SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
DAVISVILLE, RHODE ISLAND

Location ID	Sample Date	Sample ID	Sample Type Code	Parent Sample ID	Depth Interval
SED09-01	10/11/2013	SED09-01-101113	N		24 - 36 in
SED09-01	9/22/2014	SED09-01-092214-1	N		0 - 0.5 ft
SED09-01	9/23/2014	SED09-01-092214-2	FD	SED09-01-092214-1	0 - 0.5 ft
SED09-01	9/10/2015	SED09-01-091015-1	N		2 - 6 in
SED09-01	9/13/2016	SED09-01-ME45-1	N		0 - 0.5 ft
SED09-02A	10/4/2013	SED09-02A-100413	N		24 - 35 in
SED09-02A	9/8/2015	SED09-02A-090815-1	N		2 - 6 in
SED09-02A	9/8/2015	SED09-02A-090815-2	FD	SED09-02A-090815-1	2 - 6 in
SED09-02A	9/12/2016	SED09-02A-ME45-1	N		0 - 0.5 ft
SED09-02A	9/12/2016	SD09-ME45-FD01	FD	SED09-02A-ME45-1	0 - 0.5 ft
SED09-03	10/9/2013	SED09-03A-100913	N		24 - 36 in
SED09-03A	9/12/2016	SED09-03A-ME45-1	N		0 - 0.5 ft
SED09-04	10/9/2013	SED09-04A-100913	N		24 - 36 in
SED09-04A	9/9/2015	SED09-04A-090915-1	N		2 - 6 in
SED09-04A	9/12/2016	SED09-04A-ME45-1	N		0 - 0.5 ft
SED09-05	10/9/2013	SED09-05A-100913	N		24 - 36 in
SED09-05A	9/9/2015	SED09-05A-090915-1	N		2 - 6 in
SED09-05A	9/13/2016	SED09-05A-ME45-1	N		0 - 0.5 ft
SED09-06B	10/15/2013	SED09-06B-101513	N		24 - 36 in
SED09-06B	9/8/2015	SED09-06B-090815-1	N		2 - 6 in
SED09-06B	9/26/2016	SED09-06B-ME45-1	N		0 - 0.5 ft
SED09-07B	10/3/2013	SED09-07B-100313	N		24 - 36 in
SED09-07B	10/14/2013	SED09-07B-101413	N		24 - 36 in
SED09-07B	9/8/2015	SED09-07B-090815-1	N		2 - 6 in
SED09-07B	9/26/2016	SED09-07B-ME45-1	N		0 - 0.5 ft
SED09-08B	10/3/2013	SED09-08B-100313	N		24 - 36 in
SED09-08B	10/14/2013	SED09-08B-101413	N		24 - 36 in
SED09-08B	9/8/2015	SED09-08B-090815-1	N		2 - 6 in
SED09-08B	9/8/2015	SED09-08B-090815-2	FD	SED09-08B-090815-1	2 - 6 in
SED09-08B	9/26/2016	SED09-08B-ME45-1	N		0 - 0.5 ft
SED09-08B	9/26/2016	SED09-ME45-FD02	FD	SED09-08B-ME45-1	0 - 0.5 ft
SED09-09	10/2/2013	SED09-09-100213	N		24 - 36 in
SED09-09	9/22/2014	SED09-09-092214-1	N		0 - 0.5 ft
SED09-09	9/22/2014	SED09-09-092214-2	FD	SED09-09-092214-1	0 - 0.5 ft
SED09-09	9/8/2015	SED09-09-090815-1	N		2 - 6 in
SED09-09	9/12/2016	SED09-09-ME45-1	N		0 - 0.5 ft
SED09-10	10/2/2013	SED09-10-100213	N		24 - 30 in
SED09-10	9/22/2014	SED09-10-092214-1	N		0 - 0.5 ft
SED09-10	9/22/2014	SED09-10-092214-2	FD	SED09-10-092214-1	0 - 0.5 ft
SED09-10	9/8/2015	SED09-10-090815-1	N		2 - 6 in
SED09-10	9/12/2016	SED09-10-ME45-1	N		0 - 0.5 ft
SED09-11B	10/15/2013	SED09-011B-101513	N		18 - 24 in
SED09-11B	9/9/2015	SED09-11B-090915-1	N		2 - 6 in
SED09-11B	9/13/2016	SED09-11B-ME45-1	N		0 - 0.5 ft
SED09-12B	10/14/2013	SED09-12B-101413	N		24 - 36 in
SED09-12B	10/14/2013	SED09-12B-101413-2	FD	SED09-12B-101413	24 - 36 in
SED09-12B	9/8/2015	SED09-12B-090815-1	N		2 - 6 in
SED09-12B	9/26/2016	SED09-12B-ME45-1	N		0 - 0.5 ft

Notes:

FD = Field duplicate.

ft = feet.

in = inches.

N = Normal sample.

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	SED09-01	SED09-01	SED09-01	SED09-01	SED09-01	SED09-02A	SED09-02A	SED09-02A
				Sample Date	10/11/2013	9/22/2014	9/23/2014	9/10/2015	9/13/2016	10/4/2013	9/8/2015	9/8/2015
				Sample Type Code	N	N	FD	N	N	N	N	FD
				Sample ID	SED09-01-101113	SED09-01-092214-1	SED09-01-092214-2	SED09-01-091015-1	SED09-01-ME45-1	SED09-02A-100413	SED09-02A-090815-1	SED09-02A-090815-2
				Depth Interval	24 - 36 in	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	24 - 35 in	2 - 6 in	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**									
Metals	ALUMINUM	7429-90-5	mg/kg	8910				2740				
Metals	ANTIMONY	7440-36-0	mg/kg	< 0.047 UJ				< 0.95 UJ				
Metals	ARSENIC	7440-38-2	mg/kg	7.1				3.0 J				
Metals	BERYLLIUM	7440-41-7	mg/kg	0.51				0.31				
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	20.3				9.0 J				
Metals	COPPER	7440-50-8	mg/kg	12.0				14.7 J				
Metals	IRON	7439-89-6	mg/kg	16600				7290 J				
Metals	LEAD	7439-92-1	mg/kg	6.4				9.7 J				
Metals	MANGANESE	7439-96-5	mg/kg	235 J				75.3				
Metals	MERCURY	7439-97-6	mg/kg	< 0.017 U				0.021 J-				
Metals	NICKEL	7440-02-0	mg/kg	17.4				6.5				
Metals	ZINC	7440-66-6	mg/kg	45.6 J				49.7 J				
PCBs	AROCLOR-1016	12674-11-2	mg/kg	< 0.011 U	< 0.0055 U	< 0.0054 U	< 0.0050 U	< 0.0042 U	< 0.0092 U	< 0.0057 U	< 0.0056 U	
PCBs	AROCLOR-1221	11104-28-2	mg/kg	< 0.011 U	< 0.011 U	< 0.011 U	< 0.01 U	< 0.0084 U	< 0.0092 U	< 0.011 U	< 0.011 U	
PCBs	AROCLOR-1232	11141-16-5	mg/kg	< 0.013 U	< 0.0055 U	< 0.0054 U	< 0.0050 U	< 0.0042 U	< 0.011 U	< 0.0057 U	< 0.0056 U	
PCBs	AROCLOR-1242	53469-21-9	mg/kg	< 0.011 U	< 0.0055 U	< 0.0054 U	< 0.0050 U	< 0.0042 U	< 0.0092 U	< 0.0057 U	< 0.0056 U	
PCBs	AROCLOR-1248	12672-29-6	mg/kg	< 0.011 U	< 0.0055 U	< 0.0054 U	< 0.0050 U	< 0.0042 U	< 0.0092 U	< 0.0057 U	< 0.0056 U	
PCBs	AROCLOR-1254	11097-69-1	mg/kg	< 0.011 U	< 0.0055 U	< 0.0054 U	< 0.0050 U	< 0.0084 U	< 0.0092 U	< 0.0057 U	< 0.0056 U	
PCBs	AROCLOR-1260	11096-82-5	mg/kg	< 0.011 U	0.076 J	0.072 J	0.049	0.075	< 0.0092 U	< 0.0057 U	< 0.0056 U	
PCBs	PCB, TOTAL (a)	RA-65	mg/kg	< 0.013 U	0.076	0.072	0.049	0.075	< 0.011 U	< 0.011 U	< 0.011 U	
Pesticides	4,4-DDD	72-54-8	mg/kg	0.0031 J	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00054 U		< 0.00059 UJ	< 0.00057 UJ	
Pesticides	4,4-DDE	72-55-9	mg/kg	0.0042 J	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00054 UJ		< 0.00059 UJ	< 0.00057 UJ	
Pesticides	4,4-DDT	50-29-3	mg/kg	0.012	0.0080 J	0.0078 J	< 0.00052 UJ	0.0046 J		< 0.00059 UJ	< 0.00057 UJ	
Pesticides	ALDRIN	309-00-2	mg/kg	< 0.0011 U	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00027 U		< 0.00029 UJ	< 0.00029 UJ	
Pesticides	ALPHA-BHC	319-84-6	mg/kg	< 0.0011 U	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 U		< 0.00029 UJ	< 0.00029 UJ	
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg	< 0.0011 U	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 UJ		< 0.00029 UJ	< 0.00029 UJ	
Pesticides	BETA-BHC	319-85-7	mg/kg	< 0.0011 U	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 U		< 0.00029 UJ	0.00070 J	
Pesticides	DELTA-BHC	319-86-8	mg/kg	< 0.0011 U	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00027 U		< 0.00029 UJ	< 0.00029 UJ	
Pesticides	DIELDRIN	60-57-1	mg/kg	< 0.0022 U	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00027 U		< 0.00059 UJ	< 0.00057 UJ	
Pesticides	ENDOSULFAN I	959-98-8	mg/kg	< 0.0011 U	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 UJ		< 0.00029 UJ	< 0.00029 UJ	
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg	< 0.0022 U	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00027 U		< 0.00059 UJ	< 0.00057 UJ	
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg	< 0.0022 U	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00027 UJ		< 0.00059 UJ	< 0.00057 UJ	
Pesticides	ENDRIN	72-20-8	mg/kg	< 0.0022 UJ	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00027 U		< 0.00059 UJ	< 0.00057 UJ	
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg	< 0.0022 U	0.0028 J	0.0029 J	< 0.00052 UJ	< 0.00054 U		< 0.00059 UJ	< 0.00057 UJ	
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg	< 0.0022 U	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00027 UJ		< 0.00059 UJ	< 0.00057 UJ	
Pesticides	GAMMA-CHLORDANE	5566-34-7	mg/kg	< 0.0011 U								
Pesticides	HEPTACHLOR	76-44-8	mg/kg	< 0.0011 U	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 U		< 0.00029 UJ	< 0.00029 UJ	
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	< 0.0011 U	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00027 U		< 0.00029 UJ	< 0.00029 UJ	
Pesticides	LINDANE	58-89-9	mg/kg	< 0.0011 U	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 U		< 0.00029 UJ	< 0.00029 UJ	
Pesticides	METHOXYCHLOR	72-43-5	mg/kg	< 0.011 U	< 0.0028 UJ	< 0.0028 UJ	< 0.0026 UJ	< 0.0013 UJ		< 0.0029 UJ	< 0.0029 UJ	
Pesticides	TOXAPHENE	8001-35-2	mg/kg	< 0.022 U	< 0.011 UJ	< 0.011 UJ	< 0.01 UJ	< 0.011 U		< 0.012 UJ	< 0.011 UJ	
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg		< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00027 UJ		< 0.00029 UJ	< 0.00029 UJ	
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	< 0.013 U			< 0.0040 U	< 0.0042 U		< 0.0045 U	< 0.0045 U	
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	< 0.013 U			0.0094	< 0.0042 U		< 0.0045 U	< 0.0045 U	
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	< 0.013 U			< 0.0040 U	< 0.0042 U		< 0.0045 U	< 0.0045 U	
SVOCs	ANTHRACENE	120-12-7	mg/kg	0.0024 J			0.022	0.0048 J		< 0.0045 U	< 0.0045 U	
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	0.0048 J			0.057	0.018 J		0.0092	0.013	
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	0.0046 J			0.052	0.022 J		0.0082	0.012	
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	0.01 J			0.075	0.035 J		0.012	0.019	
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	0.0032 J			0.032	0.021 J+		0.0079	0.01	

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	SED09-01	SED09-01	SED09-01	SED09-01	SED09-01	SED09-02A	SED09-02A	SED09-02A
				Sample Date	10/11/2013	9/22/2014	9/23/2014	9/10/2015	9/13/2016	10/4/2013	9/8/2015	9/8/2015
				Sample Type Code	N	N	FD	N	N	N	N	FD
				Sample ID	SED09-01-101113	SED09-01-092214-1	SED09-01-092214-2	SED09-01-091015-1	SED09-01-ME45-1	SED09-02A-100413	SED09-02A-090815-1	SED09-02A-090815-2
				Depth Interval	24 - 36 in	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	24 - 35 in	2 - 6 in	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**									
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	< 0.013 U			0.036	0.011 J		0.0080	0.0086
SVOCs	CHRYSENE	218-01-9	mg/kg	< 0.013 U			0.068	0.02 J		0.011	0.017
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	< 0.013 UJ			0.0082	0.0057		< 0.0045 U	< 0.0045 U
SVOCs	FLUORANTHENE	206-44-0	mg/kg	0.0046 J			0.13	0.035 J		0.018	0.027
SVOCs	FLUORENE	86-73-7	mg/kg	< 0.013 U			0.012	< 0.0042 U		< 0.0045 U	< 0.0045 U
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	0.019 J			0.034 J	0.016 J+		0.0060	0.0083
SVOCs	NAPHTHALENE	91-20-3	mg/kg	< 0.013 U			0.0042	< 0.0042 U		< 0.0045 U	< 0.0045 U
SVOCs	PHENANTHRENE	85-01-8	mg/kg	< 0.013 U			0.1	0.017 J		0.0075	0.011
SVOCs	PYRENE	129-00-0	mg/kg	0.0042 J			0.1	0.03 J		0.016	0.023
VOCs	1,1,1-TRICHLOROETHANE	71-55-6	mg/kg					< 0.0026 U			
VOCs	1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg					< 0.0026 U			
VOCs	1,1,2-TRICHLOROETHANE	79-00-5	mg/kg					< 0.0026 U			
VOCs	1,1-DICHLOROETHANE	75-34-3	mg/kg					< 0.0026 U			
VOCs	1,1-DICHLOROETHENE	75-35-4	mg/kg					< 0.0026 U			
VOCs	1,2-DICHLOROETHANE	107-06-2	mg/kg					< 0.0026 U			
VOCs	1,2-DICHLOROPROPANE	78-87-5	mg/kg					< 0.0026 U			
VOCs	2-BUTANONE	78-93-3	mg/kg					< 0.0051 UJ			
VOCs	2-HEXANONE	591-78-6	mg/kg					< 0.0051 UJ			
VOCs	4-METHYL-2-PENTANONE	108-10-1	mg/kg					< 0.0051 U			
VOCs	ACETONE	67-64-1	mg/kg					< 0.0051 UJ			
VOCs	BENZENE	71-43-2	mg/kg					< 0.0026 U			
VOCs	BROMODICHLOROMETHANE	75-27-4	mg/kg					< 0.0026 U			
VOCs	BROMOFORM	75-25-2	mg/kg					< 0.0051 U			
VOCs	BROMOMETHANE	74-83-9	mg/kg					< 0.0051 U			
VOCs	CARBON DISULFIDE	75-15-0	mg/kg					< 0.0026 U			
VOCs	CARBON TETRACHLORIDE	56-23-5	mg/kg					< 0.0026 U			
VOCs	CHLOROBENZENE	108-90-7	mg/kg					< 0.0026 U			
VOCs	CHLOROETHANE	75-00-3	mg/kg					< 0.0026 U			
VOCs	CHLOROFORM	67-66-3	mg/kg					< 0.0026 U			
VOCs	CHLOROMETHANE	74-87-3	mg/kg					< 0.0026 U			
VOCs	CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg					< 0.0026 U			
VOCs	CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg					< 0.0026 U			
VOCs	DIBROMOCHLOROMETHANE	124-48-1	mg/kg					< 0.0026 U			
VOCs	ETHYLBENZENE	100-41-4	mg/kg					< 0.0026 U			
VOCs	M- AND P-XYLENE	108-38-3/106-42-3	mg/kg								
VOCs	METHYLENE CHLORIDE	75-09-2	mg/kg					< 0.0051 U			
VOCs	O-XYLENE	95-47-6	mg/kg								
VOCs	STYRENE	100-42-5	mg/kg					< 0.0026 UJ			
VOCs	TETRACHLOROETHENE	127-18-4	mg/kg					< 0.0026 U			
VOCs	TOLUENE	108-88-3	mg/kg					< 0.0026 U			
VOCs	TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg					< 0.0026 U			
VOCs	TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg					< 0.0026 U			
VOCs	TRICHLOROETHENE	79-01-6	mg/kg					< 0.0026 U			
VOCs	VINYL CHLORIDE	75-01-4	mg/kg					< 0.0026 U			
VOCs	XYLENES, TOTAL	1330-20-7	mg/kg					< 0.0026 U			

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-01	SED09-01	SED09-01	SED09-01	SED09-01	SED09-02A	SED09-02A	SED09-02A
			Sample Date	10/11/2013	9/22/2014	9/23/2014	9/10/2015	9/13/2016	10/4/2013	9/8/2015	9/8/2015
			Sample Type Code	N	N	FD	N	N	N	N	FD
			Sample ID	SED09-01-101113	SED09-01-092214-1	SED09-01-092214-2	SED09-01-091015-1	SED09-01-ME45-1	SED09-02A-100413	SED09-02A-090815-1	SED09-02A-090815-2
			Depth Interval	24 - 36 in	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	24 - 35 in	2 - 6 in	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**								

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

EB = Equipment blank contamination.

FD = Field duplicate.

ft = feet.

in = inches.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-02A	SED09-02A	SED09-03	SED09-03A	SED09-04	SED09-04A	SED09-04A	SED09-05
			Sample Date	9/12/2016	9/12/2016	10/9/2013	9/12/2016	10/9/2013	9/9/2015	9/12/2016	10/9/2013
			Sample Type Code	N	FD	N	N	N	N	N	N
			Sample ID	SED09-02A-ME45-1	SD09-ME45-FD01	SED09-03A-100913	SED09-03A-ME45-1	SED09-04A-100913	SED09-04A-090915-1	SED09-04A-ME45-1	SED09-05A-100913
			Depth Interval	0 - 0.5 ft	0 - 0.5 ft	24 - 36 in	0 - 0.5 ft	24 - 36 in	2 - 6 in	0 - 0.5 ft	24 - 36 in
Analyte Group	**Compound**	**CAS**	**Units**								
Metals	ALUMINUM	7429-90-5	mg/kg	4370	5200	4010	3830	6160	3060	3690	4750
Metals	ANTIMONY	7440-36-0	mg/kg	< 0.65 UJ	< 0.86 UJ	0.04 J	< 1.2 UJ	0.04 J	< 0.73 UJ	< 0.66 UJ	0.03 J
Metals	ARSENIC	7440-38-2	mg/kg	3.2 J	4.2 J	2.2	2.9 J	4.8	2.7	2.3 J	2.4
Metals	BERYLLIUM	7440-41-7	mg/kg	0.39	0.45	0.34	0.34	0.70	< 0.049 U	0.30	0.37
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	14.8 J	18.1 J	15.4	12.9 J	11.2	8.4 J-	10.0 J	15.2
Metals	COPPER	7440-50-8	mg/kg	21.2 J	30.2 J	20.4	16.9 J	14.6	13.8	11.7 J	21.4
Metals	IRON	7439-89-6	mg/kg	8040 J	9360 J	8870	8250 J	21600	7090	7260 J	10000
Metals	LEAD	7439-92-1	mg/kg	12.5 J	15.8 J	12.4	11.3 J	8.8	8.2 J	7.9 J	11.8
Metals	MANGANESE	7439-96-5	mg/kg	71.4	83.5	78.4 J	65.4	108 J	54.9 J+	70.3	89.9 J
Metals	MERCURY	7439-97-6	mg/kg	0.050 J-	0.072 J-	0.04	0.047 J-	< 0.037 U	0.030	0.031 J-	0.05
Metals	NICKEL	7440-02-0	mg/kg	6.7	9.1	8.0	6.1	17.1	4.6	5.7	8.5
Metals	ZINC	7440-66-6	mg/kg	33.0 J	60.2 J	46.1 J	33.3 J	47.7 J	29.3 J,EB	25.3 J	44.6 J
PCBs	AROCLOR-1016	12674-11-2	mg/kg	< 0.0044 UJ	< 0.0049 U						< 0.0089 U
PCBs	AROCLOR-1221	11104-28-2	mg/kg	< 0.0089 UJ	< 0.0097 U						< 0.0089 U
PCBs	AROCLOR-1232	11141-16-5	mg/kg	< 0.0044 UJ	< 0.0049 U						< 0.01 U
PCBs	AROCLOR-1242	53469-21-9	mg/kg	< 0.0044 UJ	< 0.0049 U						< 0.0089 U
PCBs	AROCLOR-1248	12672-29-6	mg/kg	< 0.0044 UJ	< 0.0049 U						< 0.0089 U
PCBs	AROCLOR-1254	11097-69-1	mg/kg	< 0.0089 UJ	< 0.0097 U						< 0.0089 U
PCBs	AROCLOR-1260	11096-82-5	mg/kg	< 0.0044 UJ	< 0.0049 U						< 0.0089 U
PCBs	PCB, TOTAL (a)	RA-65	mg/kg	< 0.0089 U	< 0.0097 U						< 0.01 U
Pesticides	4,4-DDD	72-54-8	mg/kg	< 0.00057 U	< 0.00063 U						0.00055 J
Pesticides	4,4-DDE	72-55-9	mg/kg	< 0.00057 U	< 0.00063 U						0.00026 J
Pesticides	4,4-DDT	50-29-3	mg/kg	< 0.00057 UJ	< 0.00063 UJ						0.0048 J
Pesticides	ALDRIN	309-00-2	mg/kg	< 0.00029 U	< 0.00031 U						< 0.00089 UJ
Pesticides	ALPHA-BHC	319-84-6	mg/kg	< 0.00014 U	< 0.00016 U						< 0.00089 UJ
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg	< 0.00014 U	< 0.00016 U						< 0.00089 UJ
Pesticides	BETA-BHC	319-85-7	mg/kg	< 0.00014 U	< 0.00016 U						< 0.00089 UJ
Pesticides	DELTA-BHC	319-86-8	mg/kg	< 0.00029 U	< 0.00031 U						< 0.00089 UJ
Pesticides	DIELDRIN	60-57-1	mg/kg	< 0.00029 U	< 0.00031 U						< 0.0017 UJ
Pesticides	ENDOSULFAN I	959-98-8	mg/kg	< 0.00014 U	< 0.00016 U						< 0.00089 UJ
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg	< 0.00029 U	< 0.00031 U						< 0.0017 UJ
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg	< 0.00029 U	< 0.00031 U						< 0.0017 UJ
Pesticides	ENDRIN	72-20-8	mg/kg	< 0.00029 U	< 0.00031 U						< 0.0017 UJ
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg	< 0.00057 U	< 0.00063 U						< 0.0017 UJ
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg	< 0.00029 U	< 0.00031 U						< 0.0017 UJ
Pesticides	GAMMA-CHLORDANE	5566-34-7	mg/kg								< 0.00089 UJ
Pesticides	HEPTACHLOR	76-44-8	mg/kg	< 0.00014 U	< 0.00016 U						< 0.00089 UJ
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	< 0.00029 U	< 0.00031 U						< 0.00089 UJ
Pesticides	LINDANE	58-89-9	mg/kg	< 0.00014 U	< 0.00016 U						< 0.00089 UJ
Pesticides	METHOXYCHLOR	72-43-5	mg/kg	0.0023 J	< 0.0016 U						< 0.0089 UJ
Pesticides	TOXAPHENE	8001-35-2	mg/kg	< 0.011 U	< 0.013 U						< 0.017 UJ
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg	< 0.00029 U	< 0.00031 U						
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	< 0.0044 U	< 0.0049 U		< 0.0041 U			< 0.0042 U	< 0.012 U
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	< 0.0044 U	< 0.0049 U		< 0.0041 U			< 0.0042 U	< 0.012 U
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	< 0.0044 U	< 0.0049 U		< 0.0041 U			< 0.0042 U	0.0061 J
SVOCs	ANTHRACENE	120-12-7	mg/kg	< 0.0044 U	< 0.0049 U		< 0.0041 U			< 0.0042 U	0.0022 J
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	0.012	0.014		0.0063			0.0043	0.01 J
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	0.011	0.014		0.0072			0.0053	0.01 J
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	0.025	0.027		0.015			0.011	0.015 J
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	0.01	0.012		0.0063			0.0052	0.0033 J

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	SED09-02A	SED09-02A	SED09-03	SED09-03A	SED09-04	SED09-04A	SED09-04A	SED09-05
				Sample Date	9/12/2016	9/12/2016	10/9/2013	9/12/2016	10/9/2013	9/9/2015	9/12/2016	10/9/2013
				Sample Type Code	N	FD	N	N	N	N	N	N
				Sample ID	SED09-02A-ME45-1	SD09-ME45-FD01	SED09-03A-100913	SED09-03A-ME45-1	SED09-04A-100913	SED09-04A-090915-1	SED09-04A-ME45-1	SED09-05A-100913
				Depth Interval	0 - 0.5 ft	0 - 0.5 ft	24 - 36 in	0 - 0.5 ft	24 - 36 in	2 - 6 in	0 - 0.5 ft	24 - 36 in
Analyte Group	**Compound**	**CAS**	**Units**									
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	0.0098	0.011		0.0057			0.0046	0.0081 J
SVOCs	CHRYSENE	218-01-9	mg/kg	0.022	0.018		0.0082			0.0066	0.017 J
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	< 0.0044 U	< 0.0049 U		< 0.0041 U			< 0.0042 U	0.0095 J
SVOCs	FLUORANTHENE	206-44-0	mg/kg	0.029	0.028		0.014			0.0098	0.02 J
SVOCs	FLUORENE	86-73-7	mg/kg	< 0.0044 U	< 0.0049 U		< 0.0041 U			< 0.0042 U	< 0.012 U
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	0.0089	0.011		0.0055			0.0044	0.012 J
SVOCs	NAPHTHALENE	91-20-3	mg/kg	< 0.0044 U	< 0.0049 U		< 0.0041 U			< 0.0042 U	< 0.012 U
SVOCs	PHENANTHRENE	85-01-8	mg/kg	0.0083	0.0085		0.0046			< 0.0042 U	0.0070 J
SVOCs	PYRENE	129-00-0	mg/kg	0.025	0.024		0.013			0.0079	0.02 J
VOCs	1,1,1-TRICHLOROETHANE	71-55-6	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	1,1,2-TRICHLOROETHANE	79-00-5	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	1,1-DICHLOROETHANE	75-34-3	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	1,1-DICHLOROETHENE	75-35-4	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	1,2-DICHLOROETHANE	107-06-2	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	1,2-DICHLOROPROPANE	78-87-5	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	2-BUTANONE	78-93-3	mg/kg	< 0.0054 UJ	< 0.0059 UJ	< 0.018 UJ	< 0.0050 UJ	< 0.014 UJ		< 0.0051 UJ	< 0.015 UJ
VOCs	2-HEXANONE	591-78-6	mg/kg	< 0.0054 UJ	< 0.0059 UJ	< 0.018 UJ	< 0.0050 UJ	< 0.014 UJ		< 0.0051 UJ	< 0.015 UJ
VOCs	4-METHYL-2-PENTANONE	108-10-1	mg/kg	< 0.0054 U	< 0.0059 U	< 0.018 UJ	< 0.0050 U	< 0.014 UJ		< 0.0051 U	< 0.015 UJ
VOCs	ACETONE	67-64-1	mg/kg	< 0.0054 UJ	< 0.0059 UJ	0.021 J	< 0.0050 UJ	< 0.014 UJ		< 0.0051 UJ	< 0.015 UJ
VOCs	BENZENE	71-43-2	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	BROMODICHLOROMETHANE	75-27-4	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	BROMOFORM	75-25-2	mg/kg	< 0.0054 U	< 0.0059 U	< 0.0035 UJ	< 0.0050 U	< 0.0028 UJ		< 0.0051 U	< 0.0030 UJ
VOCs	BROMOMETHANE	74-83-9	mg/kg	< 0.0054 UJ	< 0.0059 UJ	< 0.0070 UJ	< 0.0050 UJ	< 0.0055 UJ		< 0.0051 UJ	< 0.0060 UJ
VOCs	CARBON DISULFIDE	75-15-0	mg/kg	< 0.0027 U	< 0.0030 U	0.0096 J	< 0.0025 U	0.0072 J		< 0.0026 U	0.0099 J
VOCs	CARBON TETRACHLORIDE	56-23-5	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	CHLOROBENZENE	108-90-7	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	CHLOROETHANE	75-00-3	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0070 UJ	< 0.0025 U	< 0.0055 UJ		< 0.0026 U	< 0.0060 UJ
VOCs	CHLOROFORM	67-66-3	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	CHLOROMETHANE	74-87-3	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0070 UJ	< 0.0025 U	< 0.0055 UJ		< 0.0026 U	< 0.0060 UJ
VOCs	CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	DIBROMOCHLOROMETHANE	124-48-1	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	ETHYLBENZENE	100-41-4	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	M- AND P-XYLENE	108-38-3/106-42-3	mg/kg			< 0.0070 UJ		< 0.0055 UJ			< 0.0060 UJ
VOCs	METHYLENE CHLORIDE	75-09-2	mg/kg	< 0.0054 U	< 0.0059 U	< 0.018 UJ	< 0.0050 U	< 0.014 UJ		< 0.0051 U	< 0.015 UJ
VOCs	O-XYLENE	95-47-6	mg/kg			< 0.0035 UJ		< 0.0028 UJ			< 0.0030 UJ
VOCs	STYRENE	100-42-5	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	TETRACHLOROETHENE	127-18-4	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	TOLUENE	108-88-3	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	TRICHLOROETHENE	79-01-6	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0035 UJ	< 0.0025 U	< 0.0028 UJ		< 0.0026 U	< 0.0030 UJ
VOCs	VINYL CHLORIDE	75-01-4	mg/kg	< 0.0027 U	< 0.0030 U	< 0.0070 UJ	< 0.0025 U	< 0.0055 UJ		< 0.0026 U	< 0.0060 UJ
VOCs	XYLENES, TOTAL	1330-20-7	mg/kg	< 0.0027 U	< 0.0030 U	< 0.01 UJ	< 0.0025 U	< 0.0082 UJ		< 0.0026 U	< 0.0090 UJ

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-02A	SED09-02A	SED09-03	SED09-03A	SED09-04	SED09-04A	SED09-04A	SED09-05
			Sample Date	9/12/2016	9/12/2016	10/9/2013	9/12/2016	10/9/2013	9/9/2015	9/12/2016	10/9/2013
			Sample Type Code	N	FD	N	N	N	N	N	N
			Sample ID	SED09-02A-ME45-1	SD09-ME45-FD01	SED09-03A-100913	SED09-03A-ME45-1	SED09-04A-100913	SED09-04A-090915-1	SED09-04A-ME45-1	SED09-05A-100913
			Depth Interval	0 - 0.5 ft	0 - 0.5 ft	24 - 36 in	0 - 0.5 ft	24 - 36 in	2 - 6 in	0 - 0.5 ft	24 - 36 in
Analyte Group	**Compound**	**CAS**	**Units**								

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

EB = Equipment blank contamination.

FD = Field duplicate.

ft = feet.

in = inches.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	SED09-05A	SED09-05A	SED09-06B	SED09-06B	SED09-06B	SED09-07B	SED09-07B	SED09-07B
				Sample Date	9/9/2015	9/13/2016	10/15/2013	9/8/2015	9/26/2016	10/3/2013	10/14/2013	9/8/2015
				Sample Type Code	N	N	N	N	N	N	N	N
				Sample ID	SED09-05A-090915-1	SED09-05A-ME45-1	SED09-06B-101513	SED09-06B-090815-1	SED09-06B-ME45-1	SED09-07B-100313	SED09-07B-101413	SED09-07B-090815-1
				Depth Interval	2 - 6 in	0 - 0.5 ft	24 - 36 in	2 - 6 in	0 - 0.5 ft	24 - 36 in	24 - 36 in	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**									
Metals	ALUMINUM	7429-90-5	mg/kg		4590	3080		5080		4130		
Metals	ANTIMONY	7440-36-0	mg/kg		< 0.80 UJ	0.18 J		< 1.0 UJ		0.14 J		
Metals	ARSENIC	7440-38-2	mg/kg		3.2 J	2.5		7.7		2.6		
Metals	BERYLLIUM	7440-41-7	mg/kg		0.39	0.36		0.56 J		0.34		
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg		15.3 J	9.9		19.1 J		13.3		
Metals	COPPER	7440-50-8	mg/kg		23.7 J	37.0		77.0 J		19.7		
Metals	IRON	7439-89-6	mg/kg		9040 J	9260		16500 J		9920		
Metals	LEAD	7439-92-1	mg/kg		13.3 J	18.3		33.2 J		17.9		
Metals	MANGANESE	7439-96-5	mg/kg		78.0	123 J		136		75.7 J		
Metals	MERCURY	7439-97-6	mg/kg		0.049 J-	0.04		0.10		0.06		
Metals	NICKEL	7440-02-0	mg/kg		8.0	7.2		13.2 J		8.3		
Metals	ZINC	7440-66-6	mg/kg		47.3 J	58.9 J		120 J		57.4 J		
PCBs	AROCLOR-1016	12674-11-2	mg/kg			< 0.011 U				< 0.0098 U		
PCBs	AROCLOR-1221	11104-28-2	mg/kg			< 0.011 U				< 0.0098 U		
PCBs	AROCLOR-1232	11141-16-5	mg/kg			< 0.013 U				< 0.012 U		
PCBs	AROCLOR-1242	53469-21-9	mg/kg			< 0.011 U				< 0.0098 U		
PCBs	AROCLOR-1248	12672-29-6	mg/kg			< 0.011 U				< 0.0098 U		
PCBs	AROCLOR-1254	11097-69-1	mg/kg			< 0.011 U				< 0.0098 U		
PCBs	AROCLOR-1260	11096-82-5	mg/kg			0.028 J				0.024		
PCBs	PCB, TOTAL (a)	RA-65	mg/kg			0.028				0.024		
Pesticides	4,4-DDD	72-54-8	mg/kg			0.0036 J				0.0041 J		
Pesticides	4,4-DDE	72-55-9	mg/kg			0.0014 J				< 0.0019 U		
Pesticides	4,4-DDT	50-29-3	mg/kg			< 0.0022 U				0.0082 J		
Pesticides	ALDRIN	309-00-2	mg/kg			< 0.0011 U				< 0.00098 U		
Pesticides	ALPHA-BHC	319-84-6	mg/kg			< 0.0011 U				< 0.00098 U		
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg			< 0.0011 U				< 0.00098 U		
Pesticides	BETA-BHC	319-85-7	mg/kg			< 0.0011 U				< 0.00098 U		
Pesticides	DELTA-BHC	319-86-8	mg/kg			< 0.0011 U				< 0.00098 U		
Pesticides	DIELDRIN	60-57-1	mg/kg			< 0.0022 U				< 0.0019 U		
Pesticides	ENDOSULFAN I	959-98-8	mg/kg			< 0.0011 U				< 0.00098 U		
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg			< 0.0022 U				< 0.0019 U		
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg			< 0.0022 U				< 0.0019 UJ		
Pesticides	ENDRIN	72-20-8	mg/kg			< 0.0022 U				< 0.0019 U		
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg			< 0.0022 U				< 0.0019 U		
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg			< 0.0022 U				< 0.0019 U		
Pesticides	GAMMA-CHLORDANE	5566-34-7	mg/kg			< 0.0011 U				< 0.00098 U		
Pesticides	HEPTACHLOR	76-44-8	mg/kg			< 0.0011 U				< 0.00098 U		
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg			< 0.0011 U				< 0.00098 U		
Pesticides	LINDANE	58-89-9	mg/kg			< 0.0011 U				< 0.00098 U		
Pesticides	METHOXYCHLOR	72-43-5	mg/kg			< 0.011 U				< 0.0098 UJ		
Pesticides	TOXAPHENE	8001-35-2	mg/kg			< 0.022 U				< 0.019 UJ		
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg									
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg		< 0.0048 U	< 0.013 U	< 0.0041 U	< 0.0055 UJ		< 0.013 U		
SVOCs	ACENAPHTHENE	83-32-9	mg/kg		< 0.0048 U	0.023 J	< 0.0041 U	0.0057		< 0.013 U		
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg		< 0.0048 U	0.0072 J	< 0.0041 U	< 0.0055 U		< 0.013 U		
SVOCs	ANTHRACENE	120-12-7	mg/kg		< 0.0048 U	0.03	< 0.0041 U	0.011 J-		0.0047 J		
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg		0.0095	0.083	< 0.0041 U	0.062 J-		0.029		
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg		0.01	0.047 J	< 0.0041 U	0.072		0.032		
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg		0.017	0.11 J	< 0.0041 U	0.11		0.083 J		
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg		0.01	0.012 J	< 0.0041 U	0.058		0.018 J		

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-05A	SED09-05A	SED09-06B	SED09-06B	SED09-06B	SED09-07B	SED09-07B	SED09-07B
			Sample Date	9/9/2015	9/13/2016	10/15/2013	9/8/2015	9/26/2016	10/3/2013	10/14/2013	9/8/2015
			Sample Type Code	N	N	N	N	N	N	N	N
			Sample ID	SED09-05A-090915-1	SED09-05A-ME45-1	SED09-06B-101513	SED09-06B-090815-1	SED09-06B-ME45-1	SED09-07B-100313	SED09-07B-101413	SED09-07B-090815-1
			Depth Interval	2 - 6 in	0 - 0.5 ft	24 - 36 in	2 - 6 in	0 - 0.5 ft	24 - 36 in	24 - 36 in	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**								
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg		0.0084	0.017 J	< 0.0041 U	0.038 J	0.014 J		
SVOCs	CHRYSENE	218-01-9	mg/kg		0.011	0.08	< 0.0041 U	0.08 J-	0.034		
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg		0.0052	0.018 J	< 0.0041 U	0.013	0.017 J		
SVOCs	FLUORANTHENE	206-44-0	mg/kg		0.014	0.32	0.0057	0.12 J-	0.06		
SVOCs	FLUORENE	86-73-7	mg/kg		< 0.0048 U	0.0068 J	< 0.0041 U	< 0.0055 U	< 0.013 U		
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg		0.0089	< 0.026 UJ	< 0.0041 U	0.067	0.026 J		
SVOCs	NAPHTHALENE	91-20-3	mg/kg		< 0.0048 U	< 0.013 U	< 0.0041 U	< 0.0055 UJ	< 0.013 U		
SVOCs	PHENANTHRENE	85-01-8	mg/kg		0.0059	0.031	< 0.0041 U	0.055	0.026 J		
SVOCs	PYRENE	129-00-0	mg/kg		0.013	0.22	0.0050	0.13 J-	0.063		
VOCs	1,1,1-TRICHLOROETHANE	71-55-6	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	1,1,2-TRICHLOROETHANE	79-00-5	mg/kg	< 0.0038 U	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	1,1-DICHLOROETHANE	75-34-3	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	1,1-DICHLOROETHENE	75-35-4	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	1,2-DICHLOROETHANE	107-06-2	mg/kg	< 0.0038 U	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	1,2-DICHLOROPROPANE	78-87-5	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	2-BUTANONE	78-93-3	mg/kg	< 0.0076 UJ	< 0.0059 UJ	< 0.015 UJ	< 0.0018 UJ	< 0.0089 UJ		< 0.02 UJ	< 0.0053 UJ
VOCs	2-HEXANONE	591-78-6	mg/kg	< 0.0076 U	< 0.0059 UJ	< 0.015 UJ	< 0.0018 U	< 0.0089 UJ		< 0.02 UJ	< 0.0053 U
VOCs	4-METHYL-2-PENTANONE	108-10-1	mg/kg	< 0.0076 U	< 0.0059 U	< 0.015 UJ	< 0.0018 U	< 0.0089 U		< 0.02 UJ	< 0.0053 U
VOCs	ACETONE	67-64-1	mg/kg	< 0.0076 U	< 0.0059 UJ	< 0.015 UJ	< 0.0018 U	< 0.0089 UJ		< 0.02 UJ	0.018
VOCs	BENZENE	71-43-2	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	BROMODICHLOROMETHANE	75-27-4	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	BROMOFORM	75-25-2	mg/kg	< 0.0038 UJ	< 0.0059 U	< 0.0030 UJ	< 0.00088 U	< 0.0089 U		< 0.0040 UJ	< 0.0026 U
VOCs	BROMOMETHANE	74-83-9	mg/kg	< 0.0038 UJ	< 0.0059 U	< 0.0060 UJ	< 0.00088 UJ	< 0.0089 UJ		< 0.0080 UJ	< 0.0026 UJ
VOCs	CARBON DISULFIDE	75-15-0	mg/kg	< 0.0038 UJ	< 0.0029 U	0.0071 J	< 0.00088 U	0.016		0.0067 J	0.014
VOCs	CARBON TETRACHLORIDE	56-23-5	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	CHLOROBENZENE	108-90-7	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	CHLOROETHANE	75-00-3	mg/kg	< 0.0038 U	< 0.0029 U	< 0.0060 UJ	< 0.00088 U	< 0.0045 U		< 0.0080 UJ	< 0.0026 U
VOCs	CHLOROFORM	67-66-3	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	CHLOROMETHANE	74-87-3	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0060 UJ	< 0.00088 UJ	< 0.0045 U		< 0.0080 UJ	< 0.0026 UJ
VOCs	CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg	< 0.0038 U	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	DIBROMOCHLOROMETHANE	124-48-1	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	ETHYLBENZENE	100-41-4	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	M- AND P-XYLENE	108-38-3/106-42-3	mg/kg			< 0.0060 UJ				< 0.0080 UJ	
VOCs	METHYLENE CHLORIDE	75-09-2	mg/kg	< 0.0038 U	< 0.0059 U	< 0.015 UJ	< 0.0059 U	< 0.0089 U		< 0.02 UJ	< 0.021 U
VOCs	O-XYLENE	95-47-6	mg/kg			< 0.0030 UJ				< 0.0040 UJ	
VOCs	STYRENE	100-42-5	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	TETRACHLOROETHENE	127-18-4	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	0.0053 J		< 0.0040 UJ	< 0.0026 U
VOCs	TOLUENE	108-88-3	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg	< 0.0038 U	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	TRICHLOROETHENE	79-01-6	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0030 UJ	< 0.00088 U	< 0.0045 U		< 0.0040 UJ	< 0.0026 U
VOCs	VINYL CHLORIDE	75-01-4	mg/kg	< 0.0038 U	< 0.0029 U	< 0.0060 UJ	< 0.00088 U	< 0.0045 U		< 0.0080 UJ	< 0.0026 U
VOCs	XYLENES, TOTAL	1330-20-7	mg/kg	< 0.0038 UJ	< 0.0029 U	< 0.0090 UJ	< 0.00088 U	< 0.0045 U		< 0.012 UJ	< 0.0026 U

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-05A	SED09-05A	SED09-06B	SED09-06B	SED09-06B	SED09-07B	SED09-07B	SED09-07B
			Sample Date	9/9/2015	9/13/2016	10/15/2013	9/8/2015	9/26/2016	10/3/2013	10/14/2013	9/8/2015
			Sample Type Code	N	N	N	N	N	N	N	N
			Sample ID	SED09-05A-090915-1	SED09-05A-ME45-1	SED09-06B-101513	SED09-06B-090815-1	SED09-06B-ME45-1	SED09-07B-100313	SED09-07B-101413	SED09-07B-090815-1
			Depth Interval	2 - 6 in	0 - 0.5 ft	24 - 36 in	2 - 6 in	0 - 0.5 ft	24 - 36 in	24 - 36 in	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**								

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

EB = Equipment blank contamination.

FD = Field duplicate.

ft = feet.

in = inches.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	SED09-07B	SED09-08B	SED09-08B	SED09-08B	SED09-08B	SED09-08B	SED09-08B	SED09-09
				Sample Date	9/26/2016	10/3/2013	10/14/2013	9/8/2015	9/8/2015	9/26/2016	9/26/2016	10/2/2013
				Sample Type Code	N	N	N	N	FD	N	FD	N
				Sample ID	SED09-07B-ME45-1	SED09-08B-100313	SED09-08B-101413	SED09-08B-090815-1	SED09-08B-090815-2	SED09-08B-ME45-1	SED09-ME45-FD02	SED09-09-100213
				Depth Interval	0 - 0.5 ft	24 - 36 in	24 - 36 in	2 - 6 in	2 - 6 in	0 - 0.5 ft	0 - 0.5 ft	24 - 36 in
Analyte Group	**Compound**	**CAS**	**Units**									
Metals	ALUMINUM	7429-90-5	mg/kg	3810	11700		7120	7360	2980	4810	10800
Metals	ANTIMONY	7440-36-0	mg/kg	< 0.63 UJ	0.05 J		< 0.97 UJ	0.64 J-	< 0.86 UJ	< 0.81 UJ	0.14 J
Metals	ARSENIC	7440-38-2	mg/kg	4.7	7.7		6.4	6.4	4.6	6.3	11.7
Metals	BERYLLIUM	7440-41-7	mg/kg	0.34 J	0.94		0.58	0.59	0.39 J	0.46 J	0.54
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	11.6 J	30.0		16.8 J-	17.6 J-	11.1 J	14.6 J	19.0
Metals	COPPER	7440-50-8	mg/kg	33.4 J	14.1		21.5	23.6	62.5 J	42.1 J	14.1
Metals	IRON	7439-89-6	mg/kg	9740 J	23200		19000	18900	9660 J	13100 J	28400
Metals	LEAD	7439-92-1	mg/kg	17.7 J	14.5		20.3 J	17.5 J	43.0 J	23.9 J	16.6
Metals	MANGANESE	7439-96-5	mg/kg	73.0	180 J		128 J+	136 J+	61.6	94.1	185 J
Metals	MERCURY	7439-97-6	mg/kg	0.064	< 0.054 U		0.058	0.045	0.063	0.077	0.06
Metals	NICKEL	7440-02-0	mg/kg	7.7 J	15.9		11.9	12.6	25.4 J	10.7 J	10.8
Metals	ZINC	7440-66-6	mg/kg	60.6 J	56.4 J		78.1 J,EB	81.0 J,EB	192 J	115 J	44.1 J
PCBs	AROCLOR-1016	12674-11-2	mg/kg		< 0.015 U						< 0.014 U
PCBs	AROCLOR-1221	11104-28-2	mg/kg		< 0.015 U						< 0.014 U
PCBs	AROCLOR-1232	11141-16-5	mg/kg		< 0.017 U						< 0.016 U
PCBs	AROCLOR-1242	53469-21-9	mg/kg		< 0.015 U						< 0.014 U
PCBs	AROCLOR-1248	12672-29-6	mg/kg		< 0.015 U						< 0.014 U
PCBs	AROCLOR-1254	11097-69-1	mg/kg		< 0.015 U						< 0.014 U
PCBs	AROCLOR-1260	11096-82-5	mg/kg		< 0.015 U						0.053 J
PCBs	PCB, TOTAL (a)	RA-65	mg/kg		< 0.017 U						0.053
Pesticides	4,4-DDD	72-54-8	mg/kg		< 0.0029 U						< 0.0027 U
Pesticides	4,4-DDE	72-55-9	mg/kg		< 0.0029 U						0.0018 J
Pesticides	4,4-DDT	50-29-3	mg/kg		< 0.0029 UJ						< 0.0027 UJ
Pesticides	ALDRIN	309-00-2	mg/kg		< 0.0015 U						< 0.0014 U
Pesticides	ALPHA-BHC	319-84-6	mg/kg		< 0.0015 U						< 0.0014 U
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg		< 0.0015 U						< 0.0014 UJ
Pesticides	BETA-BHC	319-85-7	mg/kg		< 0.0015 U						< 0.0014 U
Pesticides	DELTA-BHC	319-86-8	mg/kg		< 0.0015 U						< 0.0014 U
Pesticides	DIELDRIN	60-57-1	mg/kg		< 0.0029 U						< 0.0027 UJ
Pesticides	ENDOSULFAN I	959-98-8	mg/kg		< 0.0015 U						< 0.0014 U
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg		< 0.0029 U						< 0.0027 U
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg		< 0.0029 UJ						< 0.0027 UJ
Pesticides	ENDRIN	72-20-8	mg/kg		< 0.0029 U						< 0.0027 UJ
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg		< 0.0029 U						< 0.0027 U
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg		< 0.0029 U						< 0.0027 U
Pesticides	GAMMA-CHLORDANE	5566-34-7	mg/kg		< 0.0015 U						< 0.0014 UJ
Pesticides	HEPTACHLOR	76-44-8	mg/kg		< 0.0015 U						< 0.0014 U
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg		< 0.0015 U						< 0.0014 UJ
Pesticides	LINDANE	58-89-9	mg/kg		< 0.0015 U						< 0.0014 U
Pesticides	METHOXYCHLOR	72-43-5	mg/kg		< 0.015 UJ						< 0.014 UJ
Pesticides	TOXAPHENE	8001-35-2	mg/kg		< 0.029 UJ						< 0.027 UJ
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg								
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	< 0.0049 UJ	< 0.018 U		< 0.0054 U	< 0.0054 U	< 0.0052 UJ	< 0.0049 UJ	< 0.014 U
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	< 0.0049 U	< 0.018 U		0.0068	< 0.0054 U	< 0.0052 U	< 0.0049 U	0.0059 J
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	< 0.0049 U	< 0.018 U		< 0.0054 U	< 0.0054 U	< 0.0052 U	0.0052	< 0.014 U
SVOCs	ANTHRACENE	120-12-7	mg/kg	0.0082 J-	< 0.018 U		0.014 J	< 0.0054 UJ	0.0054 J	0.014 J	0.012 J
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	0.034 J-	0.0057 J		0.045 J	0.023 J	0.021 J	0.056 J	0.056 J
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	0.037	0.0096 J		0.038 J	0.02 J	0.022 J	0.05 J	0.048 J
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	0.06	0.021 J		0.061 J	0.033 J	0.035 J	0.087 J	0.13 J
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	0.032	0.0039 J		0.029 J	0.016 J	0.018 J	0.04 J	0.024 J

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	SED09-07B	SED09-08B	SED09-08B	SED09-08B	SED09-08B	SED09-08B	SED09-08B	SED09-09
				Sample Date	9/26/2016	10/3/2013	10/14/2013	9/8/2015	9/8/2015	9/26/2016	9/26/2016	10/2/2013
				Sample Type Code	N	N	N	N	FD	N	FD	N
				Sample ID	SED09-07B-ME45-1	SED09-08B-100313	SED09-08B-101413	SED09-08B-090815-1	SED09-08B-090815-2	SED09-08B-ME45-1	SED09-ME45-FD02	SED09-09-100213
				Depth Interval	0 - 0.5 ft	24 - 36 in	24 - 36 in	2 - 6 in	2 - 6 in	0 - 0.5 ft	0 - 0.5 ft	24 - 36 in
Analyte Group	**Compound**	**CAS**	**Units**									
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	0.021 J	< 0.018 U		0.024 J	0.012 J	0.013 J	0.03 J	0.25 J
SVOCs	CHRYSENE	218-01-9	mg/kg	0.045 J-	< 0.018 U		0.049 J	0.025 J	0.027 J	0.077 J	0.056 J
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	0.0073	0.019 J		0.0078	< 0.0054 U	< 0.0052 U	0.0096	0.019 J
SVOCs	FLUORANTHENE	206-44-0	mg/kg	0.066 J-	0.014 J		0.095 J	0.045 J	0.044 J	0.11 J	0.12 J
SVOCs	FLUORENE	86-73-7	mg/kg	< 0.0049 U	< 0.018 U		0.0069	< 0.0054 U	< 0.0052 U	< 0.0049 U	0.0072 J
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	0.037	0.026 J		0.024 J	0.013 J	0.022 J	0.05 J	0.031 J
SVOCs	NAPHTHALENE	91-20-3	mg/kg	< 0.0049 UJ	< 0.018 U		< 0.0054 U	< 0.0054 U	< 0.0052 UJ	< 0.0049 UJ	< 0.014 U
SVOCs	PHENANTHRENE	85-01-8	mg/kg	0.039	0.0052 J		0.06 J	0.019 J	0.024 J	0.043 J	0.064 J
SVOCs	PYRENE	129-00-0	mg/kg	0.075 J-	0.0096 J		0.082 J	0.042 J	0.042 J	0.11 J	0.11 J
VOCs	1,1,1-TRICHLOROETHANE	71-55-6	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	1,1,2-TRICHLOROETHANE	79-00-5	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	1,1-DICHLOROETHANE	75-34-3	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	1,1-DICHLOROETHENE	75-35-4	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	1,2-DICHLOROETHANE	107-06-2	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	1,2-DICHLOROPROPANE	78-87-5	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	2-BUTANONE	78-93-3	mg/kg	< 0.0082 UJ		< 0.021 UJ	R	< 0.0080 UJ	< 0.0073 UJ	< 0.0066 UJ	
VOCs	2-HEXANONE	591-78-6	mg/kg	< 0.0082 UJ		< 0.021 UJ	R	< 0.0080 U	< 0.0073 UJ	< 0.0066 UJ	
VOCs	4-METHYL-2-PENTANONE	108-10-1	mg/kg	< 0.0082 U		< 0.021 UJ	R	< 0.0080 U	< 0.0073 U	< 0.0066 U	
VOCs	ACETONE	67-64-1	mg/kg	< 0.0082 UJ		< 0.021 UJ	0.059 J	0.028 J	< 0.0073 UJ	0.0099 J	
VOCs	BENZENE	71-43-2	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	BROMODICHLOROMETHANE	75-27-4	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	BROMOFORM	75-25-2	mg/kg	< 0.0082 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0073 U	< 0.0066 U	
VOCs	BROMOMETHANE	74-83-9	mg/kg	< 0.0082 UJ		< 0.0085 UJ	R	< 0.0040 UJ	< 0.0073 UJ	< 0.0066 UJ	
VOCs	CARBON DISULFIDE	75-15-0	mg/kg	0.0087 J		0.011 J	R	0.02 J	< 0.0037 U	0.014	
VOCs	CARBON TETRACHLORIDE	56-23-5	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	CHLOROBENZENE	108-90-7	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	CHLOROETHANE	75-00-3	mg/kg	< 0.0041 U		< 0.0085 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	CHLOROFORM	67-66-3	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	CHLOROMETHANE	74-87-3	mg/kg	< 0.0041 U		< 0.0085 UJ	R	< 0.0040 UJ	< 0.0037 U	< 0.0033 U	
VOCs	CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	DIBROMOCHLOROMETHANE	124-48-1	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	ETHYLBENZENE	100-41-4	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	M- AND P-XYLENE	108-38-3/106-42-3	mg/kg			< 0.0085 UJ					
VOCs	METHYLENE CHLORIDE	75-09-2	mg/kg	< 0.0082 U		< 0.021 UJ	0.1 J	< 0.0040 UJ	< 0.0073 U	< 0.0066 U	
VOCs	O-XYLENE	95-47-6	mg/kg			< 0.0042 UJ					
VOCs	STYRENE	100-42-5	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	TETRACHLOROETHENE	127-18-4	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	0.0033 J	
VOCs	TOLUENE	108-88-3	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	TRICHLOROETHENE	79-01-6	mg/kg	< 0.0041 U		< 0.0042 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	VINYL CHLORIDE	75-01-4	mg/kg	< 0.0041 U		< 0.0085 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	
VOCs	XYLENES, TOTAL	1330-20-7	mg/kg	< 0.0041 U		< 0.013 UJ	R	< 0.0040 U	< 0.0037 U	< 0.0033 U	

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-07B	SED09-08B	SED09-08B	SED09-08B	SED09-08B	SED09-08B	SED09-08B	SED09-09
			Sample Date	9/26/2016	10/3/2013	10/14/2013	9/8/2015	9/8/2015	9/26/2016	9/26/2016	10/2/2013
			Sample Type Code	N	N	N	N	FD	N	FD	N
			Sample ID	SED09-07B-ME45-1	SED09-08B-100313	SED09-08B-101413	SED09-08B-090815-1	SED09-08B-090815-2	SED09-08B-ME45-1	SED09-ME45-FD02	SED09-09-100213
			Depth Interval	0 - 0.5 ft	24 - 36 in	24 - 36 in	2 - 6 in	2 - 6 in	0 - 0.5 ft	0 - 0.5 ft	24 - 36 in
Analyte Group	**Compound**	**CAS**	**Units**								

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

EB = Equipment blank contamination.

FD = Field duplicate.

ft = feet.

in = inches.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-09	SED09-09	SED09-09	SED09-09	SED09-10	SED09-10	SED09-10	SED09-10
			Sample Date	9/22/2014	9/22/2014	9/8/2015	9/12/2016	10/2/2013	9/22/2014	9/22/2014	9/8/2015
			Sample Type Code	N	FD	N	N	N	N	FD	N
			Sample ID	SED09-09-092214-1	SED09-09-092214-2	SED09-09-090815-1	SED09-09-ME45-1	SED09-10-100213	SED09-10-092214-1	SED09-10-092214-2	SED09-10-090815-1
			Depth Interval	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	24 - 30 in	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**								
Metals	ALUMINUM	7429-90-5	mg/kg	4400	4840	9130	8420	8310			
Metals	ANTIMONY	7440-36-0	mg/kg	0.46 J	< 1.0 UJ	1.7 J-	< 1.3 UJ	0.03 J			
Metals	ARSENIC	7440-38-2	mg/kg	6.2 J-	5.6 J-	9.6	8.2 J	2.9			
Metals	BERYLLIUM	7440-41-7	mg/kg	0.42	0.40	0.70	0.84	0.26			
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	13.5 J+	12.2 J+	30.2 J-	32.4 J	11.7			
Metals	COPPER	7440-50-8	mg/kg	40.3 J	34.6 J	91.0	80.5 J	8.7			
Metals	IRON	7439-89-6	mg/kg	11900	12400	27500	24100 J	11400			
Metals	LEAD	7439-92-1	mg/kg	39.8 J	32.0 J	83.1 J	53.0 J	7.9			
Metals	MANGANESE	7439-96-5	mg/kg	102 J	93.1 J	250 J+	186	82.4 J			
Metals	MERCURY	7439-97-6	mg/kg	0.067	0.075	0.26	0.20 J-	0.02 J			
Metals	NICKEL	7440-02-0	mg/kg	15.5 J	11.2 J	23.1	19.0	7.7			
Metals	ZINC	7440-66-6	mg/kg	167 J	135 J	263 J,EB	172 J	19.5 J			
PCBs	AROCLOR-1016	12674-11-2	mg/kg			< 0.0072 U	< 0.000070 UJ	< 0.011 U			< 0.0077 U
PCBs	AROCLOR-1221	11104-28-2	mg/kg			< 0.014 U	< 0.00014 UJ	< 0.011 U			< 0.015 U
PCBs	AROCLOR-1232	11141-16-5	mg/kg			< 0.0072 U	< 0.000070 UJ	< 0.013 U			< 0.0077 U
PCBs	AROCLOR-1242	53469-21-9	mg/kg			< 0.0072 U	< 0.000070 UJ	< 0.011 U			< 0.0077 U
PCBs	AROCLOR-1248	12672-29-6	mg/kg			< 0.0072 U	< 0.000070 UJ	< 0.011 U			< 0.0077 U
PCBs	AROCLOR-1254	11097-69-1	mg/kg			0.097 J	< 0.00014 UJ	< 0.011 U			0.079 J
PCBs	AROCLOR-1260	11096-82-5	mg/kg			0.083 J	0.00069 J-	0.011 J			0.089 J
PCBs	PCB, TOTAL (a)	RA-65	mg/kg			0.18	0.00069	0.011			0.17
Pesticides	4,4-DDD	72-54-8	mg/kg			< 0.00074 UJ	< 0.00090 U	< 0.0022 U			< 0.00079 UJ
Pesticides	4,4-DDE	72-55-9	mg/kg			0.0027 J	< 0.00090 U	< 0.0022 U			< 0.00079 UJ
Pesticides	4,4-DDT	50-29-3	mg/kg			0.0093 J	< 0.00090 UJ	< 0.0022 UJ			< 0.00079 UJ
Pesticides	ALDRIN	309-00-2	mg/kg			< 0.00037 UJ	< 0.00045 U	< 0.0011 U			< 0.00039 UJ
Pesticides	ALPHA-BHC	319-84-6	mg/kg			< 0.00037 UJ	< 0.00022 U	< 0.0011 U			< 0.00039 UJ
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg			< 0.00037 UJ	< 0.00022 U	< 0.0011 U			< 0.00039 UJ
Pesticides	BETA-BHC	319-85-7	mg/kg			< 0.00037 UJ	< 0.00022 U	< 0.0011 U			< 0.00039 UJ
Pesticides	DELTA-BHC	319-86-8	mg/kg			< 0.00037 UJ	< 0.00045 U	< 0.0011 U			< 0.00039 UJ
Pesticides	DIELDRIN	60-57-1	mg/kg			< 0.00074 UJ	< 0.00045 U	< 0.0022 U			0.0029 J
Pesticides	ENDOSULFAN I	959-98-8	mg/kg			< 0.00037 UJ	< 0.00022 U	< 0.0011 U			< 0.00039 UJ
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg			< 0.00074 UJ	< 0.00045 U	< 0.0022 U			< 0.00079 UJ
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg			< 0.00074 UJ	< 0.00045 U	< 0.0022 UJ			< 0.00079 UJ
Pesticides	ENDRIN	72-20-8	mg/kg			< 0.00074 UJ	< 0.00045 U	< 0.0022 U			< 0.00079 UJ
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg			0.0035 J	< 0.00090 U	< 0.0022 U			< 0.00079 UJ
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg			< 0.00074 UJ	< 0.00045 U	< 0.0022 U			< 0.00079 UJ
Pesticides	GAMMA-CHLORDANE	5566-34-7	mg/kg					< 0.0011 U			
Pesticides	HEPTACHLOR	76-44-8	mg/kg			< 0.00037 UJ	< 0.00022 U	< 0.0011 U			< 0.00039 UJ
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg			0.0011 J	< 0.00045 U	< 0.0011 U			< 0.00039 UJ
Pesticides	LINDANE	58-89-9	mg/kg			< 0.00037 UJ	0.0021 J	< 0.0011 U			< 0.00039 UJ
Pesticides	METHOXYCHLOR	72-43-5	mg/kg			< 0.0037 UJ	< 0.0022 U	< 0.011 UJ			< 0.0039 UJ
Pesticides	TOXAPHENE	8001-35-2	mg/kg			< 0.015 UJ	< 0.018 U	< 0.022 UJ			< 0.016 UJ
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg			< 0.00037 UJ	< 0.00045 U				< 0.00039 UJ
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg			< 0.0058 U	0.0082	< 0.014 U	< 0.0067 U	< 0.0069 U	0.051
SVOCs	ACENAPHTHENE	83-32-9	mg/kg			0.01	0.028	0.0051 J	< 0.0067 UJ	0.023 J	0.37
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg			0.0060	< 0.0070 U	< 0.014 U	< 0.0067 U	< 0.0069 U	0.019
SVOCs	ANTHRACENE	120-12-7	mg/kg			0.027	< 0.0070 U	0.0074 J	0.031 J	0.053 J	0.84
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg			0.1	0.18	0.028	0.09	0.15	1.4
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg			0.078	0.17	0.045	0.074 J	0.13 J	1.1
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg			0.1	0.24	0.073 J	0.12 J	0.19 J	1.3
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg			0.067	0.13	0.022 J	0.042 J	0.082 J	0.64

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	SED09-09	SED09-09	SED09-09	SED09-09	SED09-10	SED09-10	SED09-10	SED09-10
				Sample Date	9/22/2014	9/22/2014	9/8/2015	9/12/2016	10/2/2013	9/22/2014	9/22/2014	9/8/2015
				Sample Type Code	N	FD	N	N	N	N	FD	N
				Sample ID	SED09-09-092214-1	SED09-09-092214-2	SED09-09-090815-1	SED09-09-ME45-1	SED09-10-100213	SED09-10-092214-1	SED09-10-092214-2	SED09-10-090815-1
				Depth Interval	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	24 - 30 in	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**									
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg			0.072	0.11	0.03	0.039 J	0.079 J	0.85
SVOCs	CHRYSENE	218-01-9	mg/kg			0.092	0.17	0.064	0.089 J	0.15 J	1.4
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg			0.018	0.036	0.019 J	< 0.0067 U	< 0.0069 U	0.14
SVOCs	FLUORANTHENE	206-44-0	mg/kg			0.19	0.4	0.18	0.22 J	0.37 J	3.7
SVOCs	FLUORENE	86-73-7	mg/kg			0.012	0.038	0.0056 J	0.017 J	0.038 J	0.44
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg			0.055	0.11	0.096 J	0.069 J	0.11 J	0.56
SVOCs	NAPHTHALENE	91-20-3	mg/kg			< 0.0058 U	0.018	0.0065 J	< 0.0067 U	< 0.0069 U	0.16
SVOCs	PHENANTHRENE	85-01-8	mg/kg			0.11	0.28	0.098	0.13 J	0.27 J	3.3
SVOCs	PYRENE	129-00-0	mg/kg			0.16	0.31	0.13	0.18 J	0.31 J	2.7
VOCs	1,1,1-TRICHLOROETHANE	71-55-6	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	1,1,2-TRICHLOROETHANE	79-00-5	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	1,1-DICHLOROETHANE	75-34-3	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	1,1-DICHLOROETHENE	75-35-4	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	1,2-DICHLOROETHANE	107-06-2	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	1,2-DICHLOROPROPANE	78-87-5	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	2-BUTANONE	78-93-3	mg/kg			< 0.0081 UJ	< 0.0085 UJ				< 0.0069 UJ
VOCs	2-HEXANONE	591-78-6	mg/kg			< 0.0081 U	< 0.0085 UJ				< 0.0069 U
VOCs	4-METHYL-2-PENTANONE	108-10-1	mg/kg			< 0.0081 U	< 0.0085 U				< 0.0069 U
VOCs	ACETONE	67-64-1	mg/kg			0.062	< 0.0085 UJ				0.022
VOCs	BENZENE	71-43-2	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	BROMODICHLOROMETHANE	75-27-4	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	BROMOFORM	75-25-2	mg/kg			< 0.0041 U	< 0.0085 U				< 0.0035 U
VOCs	BROMOMETHANE	74-83-9	mg/kg			< 0.0041 UJ	< 0.0085 UJ				< 0.0035 UJ
VOCs	CARBON DISULFIDE	75-15-0	mg/kg			0.036	< 0.0043 U				0.011
VOCs	CARBON TETRACHLORIDE	56-23-5	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	CHLOROBENZENE	108-90-7	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	CHLOROETHANE	75-00-3	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	CHLOROFORM	67-66-3	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	CHLOROMETHANE	74-87-3	mg/kg			< 0.0041 UJ	< 0.0043 U				< 0.0035 UJ
VOCs	CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	DIBROMOCHLOROMETHANE	124-48-1	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	ETHYLBENZENE	100-41-4	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	M- AND P-XYLENE	108-38-3/106-42-3	mg/kg								
VOCs	METHYLENE CHLORIDE	75-09-2	mg/kg			< 0.01 U	< 0.0085 U				< 0.0035 U
VOCs	O-XYLENE	95-47-6	mg/kg								
VOCs	STYRENE	100-42-5	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	TETRACHLOROETHENE	127-18-4	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	TOLUENE	108-88-3	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	TRICHLOROETHENE	79-01-6	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	VINYL CHLORIDE	75-01-4	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U
VOCs	XYLENES, TOTAL	1330-20-7	mg/kg			< 0.0041 U	< 0.0043 U				< 0.0035 U

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-09	SED09-09	SED09-09	SED09-09	SED09-10	SED09-10	SED09-10	SED09-10
			Sample Date	9/22/2014	9/22/2014	9/8/2015	9/12/2016	10/2/2013	9/22/2014	9/22/2014	9/8/2015
			Sample Type Code	N	FD	N	N	N	N	FD	N
			Sample ID	SED09-09-092214-1	SED09-09-092214-2	SED09-09-090815-1	SED09-09-ME45-1	SED09-10-100213	SED09-10-092214-1	SED09-10-092214-2	SED09-10-090815-1
			Depth Interval	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	24 - 30 in	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**								

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

EB = Equipment blank contamination.

FD = Field duplicate.

ft = feet.

in = inches.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-10	SED09-11B	SED09-11B	SED09-11B	SED09-12B	SED09-12B	SED09-12B	SED09-12B
			Sample Date	9/12/2016	10/15/2013	9/9/2015	9/13/2016	10/14/2013	10/14/2013	9/8/2015	9/26/2016
			Sample Type Code	N	N	N	N	N	FD	N	N
			Sample ID	SED09-10-ME45-1	SED09-011B-101513	SED09-11B-090915-1	SED09-11B-ME45-1	SED09-12B-101413	SED09-12B-101413-2	SED09-12B-090815-1	SED09-12B-ME45-1
			Depth Interval	0 - 0.5 ft	18 - 24 in	2 - 6 in	0 - 0.5 ft	24 - 36 in	24 - 36 in	2 - 6 in	0 - 0.5 ft
Analyte Group	**Compound**	**CAS**	**Units**								
Metals	ALUMINUM	7429-90-5	mg/kg	7950	2800		3770	7480	5080		3890
Metals	ANTIMONY	7440-36-0	mg/kg	< 2.7 UJ	0.07 J		< 0.83 UJ	0.09 J	0.17 J		< 0.70 UJ
Metals	ARSENIC	7440-38-2	mg/kg	11.6 J	0.71		1.8 J	4.0	3.7		4.9
Metals	BERYLLIUM	7440-41-7	mg/kg	0.85	0.26		1.4	0.58	0.42		0.36 J
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	23.7 J	19.7		12.8 J	16.6	12.5		11.3 J
Metals	COPPER	7440-50-8	mg/kg	65.5 J	12.2		19.3 J	19.7	20.1		27.8 J
Metals	IRON	7439-89-6	mg/kg	22900 J	7130		8850 J	16400	12400		10600 J
Metals	LEAD	7439-92-1	mg/kg	50.0 J	8.2		13.7 J	14.6	23.5		16.0 J
Metals	MANGANESE	7439-96-5	mg/kg	136	114 J		109	140 J	94.2 J		74.2
Metals	MERCURY	7439-97-6	mg/kg	0.15 J-	< 0.014 U		0.021 J-	0.05	0.07		0.066
Metals	NICKEL	7440-02-0	mg/kg	15.5	12.6		10	13.4	10.0		8.1 J
Metals	ZINC	7440-66-6	mg/kg	158 J	41.8 J		76.1 J	61.8 J	62.7 J		60.6 J
PCBs	AROCLOR-1016	12674-11-2	mg/kg	< 0.0097 UJ	< 0.0092 U			< 0.011 U	< 0.011 U		
PCBs	AROCLOR-1221	11104-28-2	mg/kg	< 0.019 UJ	< 0.0092 U			< 0.011 U	< 0.011 U		
PCBs	AROCLOR-1232	11141-16-5	mg/kg	< 0.0097 UJ	< 0.011 U			< 0.012 U	< 0.013 U		
PCBs	AROCLOR-1242	53469-21-9	mg/kg	< 0.0097 UJ	< 0.0092 U			< 0.011 U	< 0.011 U		
PCBs	AROCLOR-1248	12672-29-6	mg/kg	< 0.0097 UJ	< 0.0092 U			< 0.011 U	< 0.011 U		
PCBs	AROCLOR-1254	11097-69-1	mg/kg	< 0.019 UJ	< 0.0092 U			< 0.011 U	< 0.011 U		
PCBs	AROCLOR-1260	11096-82-5	mg/kg	0.074 J-	0.13 J			< 0.011 U	< 0.011 U		
PCBs	PCB, TOTAL (a)	RA-65	mg/kg	0.074	0.13			< 0.012 U	< 0.013 U		
Pesticides	4,4-DDD	72-54-8	mg/kg	< 0.0012 U	< 0.0018 U			0.0047 J	0.0044 J		
Pesticides	4,4-DDE	72-55-9	mg/kg	< 0.0012 U	0.0011 J			0.0016 J	0.0021 J		
Pesticides	4,4-DDT	50-29-3	mg/kg	< 0.0012 UJ	< 0.0018 U			< 0.0021 U	0.0086		
Pesticides	ALDRIN	309-00-2	mg/kg	< 0.00062 U	< 0.00092 U			< 0.0011 U	< 0.0011 U		
Pesticides	ALPHA-BHC	319-84-6	mg/kg	< 0.00031 U	< 0.00092 U			< 0.0011 U	< 0.0011 U		
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg	< 0.00031 U	< 0.00092 U			< 0.0011 U	< 0.0011 U		
Pesticides	BETA-BHC	319-85-7	mg/kg	< 0.00031 U	< 0.00092 U			< 0.0011 U	< 0.0011 U		
Pesticides	DELTA-BHC	319-86-8	mg/kg	< 0.00062 U	< 0.00092 U			< 0.0011 U	< 0.0011 U		
Pesticides	DIELDRIN	60-57-1	mg/kg	< 0.00062 U	< 0.0018 U			< 0.0021 U	< 0.0021 U		
Pesticides	ENDOSULFAN I	959-98-8	mg/kg	< 0.00031 U	< 0.00092 U			< 0.0011 U	< 0.0011 U		
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg	< 0.00062 U	< 0.0018 U			< 0.0021 U	< 0.0021 U		
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg	< 0.00062 U	< 0.0018 U			< 0.0021 U	< 0.0021 U		
Pesticides	ENDRIN	72-20-8	mg/kg	< 0.00062 U	< 0.0018 U			< 0.0021 UJ	< 0.0021 UJ		
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg	< 0.0012 U	< 0.0018 U			< 0.0021 U	< 0.0021 U		
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg	< 0.00062 U	< 0.0018 UJ			< 0.0021 U	< 0.0021 U		
Pesticides	GAMMA-CHLORDANE	5566-34-7	mg/kg		< 0.00092 U			< 0.0011 U	< 0.0011 U		
Pesticides	HEPTACHLOR	76-44-8	mg/kg	< 0.00031 U	< 0.00092 U			< 0.0011 U	< 0.0011 U		
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	< 0.00062 U	< 0.00092 U			< 0.0011 U	< 0.0011 U		
Pesticides	LINDANE	58-89-9	mg/kg	0.0030 J	< 0.00092 U			< 0.0011 U	< 0.0011 U		
Pesticides	METHOXYCHLOR	72-43-5	mg/kg	< 0.0031 U	< 0.0092 U			< 0.011 U	< 0.011 U		
Pesticides	TOXAPHENE	8001-35-2	mg/kg	< 0.025 U	< 0.018 U			< 0.021 U	< 0.021 U		
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg	< 0.00062 U							
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	0.034	< 0.01 U		< 0.0040 U	< 0.014 U	< 0.013 U		< 0.0049 UJ
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	0.092	< 0.01 U		0.0068	0.0026 J	< 0.013 U		0.0059
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	0.011	< 0.01 U		< 0.0040 U	0.0068 J	0.0065 J		< 0.0049 U
SVOCs	ANTHRACENE	120-12-7	mg/kg	0.2	0.0036 J		0.013	0.0057 J	0.0059 J		0.012 J-
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	0.48	< 0.02 U		0.032	0.032 J	0.028 J		0.045 J
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	0.43	0.015 J		0.033	0.031 J	0.026 J		0.04 J
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	0.69	< 0.01 UJ		0.048	0.042 J	0.034 J		0.062 J
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	0.29	0.0053 J		0.029	0.0093 J	0.012 J		0.03 J

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-10	SED09-11B	SED09-11B	SED09-11B	SED09-12B	SED09-12B	SED09-12B	SED09-12B
			Sample Date	9/12/2016	10/15/2013	9/9/2015	9/13/2016	10/14/2013	10/14/2013	9/8/2015	9/26/2016
			Sample Type Code	N	N	N	N	N	FD	N	N
			Sample ID	SED09-10-ME45-1	SED09-011B-101513	SED09-11B-090915-1	SED09-11B-ME45-1	SED09-12B-101413	SED09-12B-101413-2	SED09-12B-090815-1	SED09-12B-ME45-1
			Depth Interval	0 - 0.5 ft	18 - 24 in	2 - 6 in	0 - 0.5 ft	24 - 36 in	24 - 36 in	2 - 6 in	0 - 0.5 ft
Analyte Group	**Compound**	**CAS**	**Units**								
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	0.22	0.0072 J		0.021	0.024 J	0.018 J		0.025 J
SVOCs	CHRYSENE	218-01-9	mg/kg	0.48	0.013 J		0.033	0.033	0.028		0.051 J
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	0.091	0.014 J		0.0074	< 0.014 UJ	0.012 J		0.0074
SVOCs	FLUORANTHENE	206-44-0	mg/kg	1.3	0.03		0.072	0.064	0.062		0.088 J
SVOCs	FLUORENE	86-73-7	mg/kg	0.13	< 0.01 U		0.0055	< 0.014 U	< 0.013 U		0.0057
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	0.27	< 0.02 UJ		0.024	0.044 J	0.037 J		0.037 J
SVOCs	NAPHTHALENE	91-20-3	mg/kg	0.085	< 0.01 U		< 0.0040 U	< 0.014 U	< 0.013 U		< 0.0049 UJ
SVOCs	PHENANTHRENE	85-01-8	mg/kg	0.96	0.017 J		0.045	0.034	0.028		0.057 J
SVOCs	PYRENE	129-00-0	mg/kg	0.89	0.025		0.055	0.062 J	0.051 J		0.073 J
VOCs	1,1,1-TRICHLOROETHANE	71-55-6	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	1,1,2-TRICHLOROETHANE	79-00-5	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	1,1-DICHLOROETHANE	75-34-3	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	1,1-DICHLOROETHENE	75-35-4	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	1,2-DICHLOROETHANE	107-06-2	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	1,2-DICHLOROPROPANE	78-87-5	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	2-BUTANONE	78-93-3	mg/kg	< 0.012 UJ	< 0.011 UJ	0.019 J	< 0.0048 UJ	< 0.02 UJ	< 0.018 UJ	< 0.0039 UJ	< 0.0039 UJ
VOCs	2-HEXANONE	591-78-6	mg/kg	< 0.012 UJ	< 0.011 UJ	< 0.0048 U	< 0.0048 UJ	< 0.02 UJ	< 0.018 UJ	< 0.0039 U	< 0.0039 UJ
VOCs	4-METHYL-2-PENTANONE	108-10-1	mg/kg	< 0.012 U	< 0.011 UJ	< 0.0048 U	< 0.0048 U	< 0.02 UJ	< 0.018 UJ	< 0.0039 U	< 0.0039 U
VOCs	ACETONE	67-64-1	mg/kg	< 0.012 UJ	< 0.011 UJ	0.054	0.016 J	< 0.02 UJ	< 0.018 UJ	0.0066	0.02 J
VOCs	BENZENE	71-43-2	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	BROMODICHLOROMETHANE	75-27-4	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	BROMOFORM	75-25-2	mg/kg	< 0.012 U	< 0.0022 UJ	< 0.0024 U	< 0.0048 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0039 U
VOCs	BROMOMETHANE	74-83-9	mg/kg	< 0.012 UJ	< 0.0045 UJ	< 0.0024 UJ	< 0.0048 UJ	< 0.0080 UJ	< 0.0070 UJ	< 0.0019 UJ	< 0.0039 UJ
VOCs	CARBON DISULFIDE	75-15-0	mg/kg	< 0.0059 U	< 0.0022 UJ	0.0038 J	< 0.0024 U	0.014 J	0.0080 J	0.0052	0.011
VOCs	CARBON TETRACHLORIDE	56-23-5	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	CHLOROBENZENE	108-90-7	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	CHLOROETHANE	75-00-3	mg/kg	< 0.0059 U	< 0.0045 UJ	< 0.0024 U	< 0.0024 U	< 0.0080 UJ	< 0.0070 UJ	< 0.0019 U	< 0.0019 U
VOCs	CHLOROFORM	67-66-3	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	CHLOROMETHANE	74-87-3	mg/kg	< 0.0059 U	< 0.0045 UJ	< 0.0024 UJ	< 0.0024 U	< 0.0080 UJ	< 0.0070 UJ	< 0.0019 UJ	< 0.0019 U
VOCs	CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	DIBROMOCHLOROMETHANE	124-48-1	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	ETHYLBENZENE	100-41-4	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	M- AND P-XYLENE	108-38-3/106-42-3	mg/kg		< 0.0045 UJ			< 0.0080 UJ	< 0.0070 UJ		
VOCs	METHYLENE CHLORIDE	75-09-2	mg/kg	< 0.012 U	< 0.011 UJ	< 0.0024 U	< 0.0048 U	< 0.02 UJ	< 0.018 UJ	< 0.0049 U	< 0.0039 U
VOCs	O-XYLENE	95-47-6	mg/kg		< 0.0022 UJ			< 0.0040 UJ	< 0.0035 UJ		
VOCs	STYRENE	100-42-5	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	TETRACHLOROETHENE	127-18-4	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	0.0025 J
VOCs	TOLUENE	108-88-3	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	TRICHLOROETHENE	79-01-6	mg/kg	< 0.0059 U	< 0.0022 UJ	< 0.0024 U	< 0.0024 U	< 0.0040 UJ	< 0.0035 UJ	< 0.0019 U	< 0.0019 U
VOCs	VINYL CHLORIDE	75-01-4	mg/kg	< 0.0059 U	< 0.0045 UJ	< 0.0024 U	< 0.0024 U	< 0.0080 UJ	< 0.0070 UJ	< 0.0019 U	< 0.0019 U
VOCs	XYLENES, TOTAL	1330-20-7	mg/kg	< 0.0059 U	< 0.0068 UJ	< 0.0024 U	< 0.0024 U	< 0.012 UJ	< 0.01 UJ	< 0.0019 U	< 0.0019 U

APPENIDX A TABLE 2
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-10	SED09-11B	SED09-11B	SED09-11B	SED09-12B	SED09-12B	SED09-12B	SED09-12B
			Sample Date	9/12/2016	10/15/2013	9/9/2015	9/13/2016	10/14/2013	10/14/2013	9/8/2015	9/26/2016
			Sample Type Code	N	N	N	N	N	FD	N	N
			Sample ID	SED09-10-ME45-1	SED09-011B-101513	SED09-11B-090915-1	SED09-11B-ME45-1	SED09-12B-101413	SED09-12B-101413-2	SED09-12B-090815-1	SED09-12B-ME45-1
			Depth Interval	0 - 0.5 ft	18 - 24 in	2 - 6 in	0 - 0.5 ft	24 - 36 in	24 - 36 in	2 - 6 in	0 - 0.5 ft
Analyte Group	**Compound**	**CAS**	**Units**								

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

EB = Equipment blank contamination.

FD = Field duplicate.

ft = feet.

in = inches.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENDIX A TABLE 3
SAMPLE SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
DAVISVILLE, RHODE ISLAND

Location ID	Sample Date	Sample ID	Sample Type Code	Parent Sample ID
P09-01	10/1/2013	P09-01-100113	N	
P09-01	9/9/2015	P09-01-090915-1	N	
P09-01	9/9/2015	P09-01-090915-1-F	N	
P09-01	9/13/2016	P09-01-ME45-1	N	
P09-01	9/14/2016	P09-01-ME45-1-F	N	
P09-01	9/27/2016	P09-01-ME45R-1	N	
P09-02A	10/2/2013	P09-02A-100213	N	
P09-02A	9/9/2015	P09-02A-090915-1	N	
P09-02A	9/15/2015	P09-02A-091515-1	N	
P09-02A	9/15/2015	P09-02A-091515-1-F	N	
P09-02A	9/14/2016	P09-02A-ME45-1	N	
P09-02A	9/15/2016	P09-02A-ME45-1-F	N	
P09-03A	10/15/2013	P09-03A-101513	N	
P09-03A	9/16/2015	P09-03A-091515-1	N	
P09-03A	9/16/2015	P09-03A-091515-1-F	N	
P09-03A	9/16/2015	P09-03A-091615-1	N	
P09-03A	9/14/2016	P09-03A-ME45-1	N	
P09-04A	10/15/2013	P09-04A-101513	N	
P09-04A	9/16/2015	P09-04A-091515-1	N	
P09-04A	9/16/2015	P09-04A-091515-1-F	N	
P09-04A	9/16/2015	P09-04A-091615-1	N	
P09-04A	9/12/2016	P09-04A-ME45-1	N	
P09-04A	9/15/2016	P09-04A-ME45-1-F	N	
P09-05A	10/2/2013	P09-05A-100213	N	
P09-05A	10/2/2013	P09-05A-100213-2	FD	P09-05A-100213
P09-05A	9/14/2015	P09-05A-091415-1	N	
P09-05A	9/14/2015	P09-05A-091415-1-F	N	
P09-06B	10/3/2013	P09-06B-100313	N	
P09-06B	9/22/2014	P09-06B-092214-1	N	
P09-06B	9/9/2015	P09-06B-090915-1	N	
P09-06B	9/9/2015	P09-06B-090915-1-F	N	
P09-06B	9/13/2016	P09-06B-ME45-1	N	
P09-06B	9/13/2016	P09-06B-ME45-1-F	N	
P09-07B	10/3/2013	P09-07B-100313	N	
P09-07B	9/22/2014	P09-07B-092214-1	N	
P09-07B	9/9/2015	P09-07B-090915-1	N	
P09-07B	9/9/2015	P09-07B-090915-1-F	N	
P09-07B	9/13/2016	P09-07B-ME45-1	N	
P09-08B	10/3/2013	P09-08B-100313	N	
P09-08B	10/15/2013	P09-08B-101513	N	
P09-08B	9/22/2014	P09-08B-092214-1	N	
P09-08B	9/8/2015	P09-08B-090815-1	N	
P09-08B	9/8/2015	P09-08B-090815-1-F	N	
P09-08B	9/13/2016	P09-08B-ME45-1	N	
P09-08B	9/15/2016	P09-08B-ME45-1-F	N	
P09-09	10/1/2013	P09-09-100113	N	
P09-09	10/1/2013	P09-09-100213	N	
P09-09	9/9/2015	P09-09-090915-1	N	
P09-09	9/9/2015	P09-09-090915-1-F	N	
P09-09	9/12/2016	P09-09-ME45-1	N	
P09-09	9/12/2016	P09-09-ME45-1-F	N	
P09-10	10/1/2013	P09-10-100113	N	
P09-10	9/8/2015	P09-10-090815-1	N	
P09-10	9/8/2015	P09-10-090815-1-F	N	
P09-10	9/12/2016	P09-10-ME45-1	N	
P09-10	9/12/2016	P09-10-ME45-1-F	N	
P09-11B	10/15/2013	P09-11B-101513	N	
P09-11B	9/24/2014	P09-11B-092414-1	N	
P09-11B	9/9/2015	P09-11B-090915-1	N	
P09-11B	9/9/2015	P09-11B-090915-1-F	N	
P09-11B	9/16/2016	P09-11B-ME45-1	N	
P09-11B	9/16/2016	P09-11B-ME45-1-F	N	
P09-12B	10/14/2013	P09-12B-101413	N	
P09-12B	9/22/2014	P09-12B-092214-1	N	
P09-12B	9/8/2015	P09-12B-090815-1	N	
P09-12B	9/8/2015	P09-12B-090815-1-F	N	
P09-12B	9/13/2016	P09-12B-ME45-1	N	
P09-12B	9/13/2016	P09-12B-ME45-1-F	N	

Notes:

FD = Field duplicate.

N = Normal sample.

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-01	P09-01	P09-01	P09-01	P09-01	P09-01	P09-02A
				Sample Date	10/1/2013	9/9/2015	9/9/2015	9/13/2016	9/14/2016	9/27/2016	10/2/2013
				Sample Type Code	N	N	N	N	N	N	N
				Sample ID	P09-01-100113	P09-01-090915-1	P09-01-090915-1-F	P09-01-ME45-1	P09-01-ME45-1-F	P09-01-ME45R-1	P09-02A-100213
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**							
Metals	F	ALUMINUM	7429-90-5	ug/L					4050		
Metals	F	ANTIMONY	7440-36-0	ug/L					10.7 J		
Metals	F	ARSENIC	7440-38-2	ug/L					5.4 J		
Metals	F	BERYLLIUM	7440-41-7	ug/L					< 7.5 U		
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L					1200		
Metals	F	COPPER	7440-50-8	ug/L					64.8		
Metals	F	IRON	7439-89-6	ug/L					41000		
Metals	F	LEAD	7439-92-1	ug/L					16.1 J		
Metals	F	MANGANESE	7439-96-5	ug/L					1210		
Metals	F	MERCURY	7439-97-6	ug/L					< 0.10 U		
Metals	F	NICKEL	7440-02-0	ug/L					251		
Metals	F	ZINC	7440-66-6	ug/L					173		
Metals	FF	ALUMINUM	7429-90-5	ug/L	307		873 J				362
Metals	FF	ANTIMONY	7440-36-0	ug/L	0.23 J		< 40.0 U				0.32 J
Metals	FF	ARSENIC	7440-38-2	ug/L	11.5		< 40.0 U				12.6
Metals	FF	BERYLLIUM	7440-41-7	ug/L	< 0.20 U		< 15.0 U				< 0.20 U
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L	7.7		97.4 J				< 5.0 U
Metals	FF	COPPER	7440-50-8	ug/L	< 3.6 U		< 50.0 U				< 4.5 U
Metals	FF	IRON	7439-89-6	ug/L	< 100 U		< 10000 U				6140
Metals	FF	LEAD	7439-92-1	ug/L	< 1.0 U		4.5 J				< 1.0 U
Metals	FF	MANGANESE	7439-96-5	ug/L	47.3		262				93.3
Metals	FF	MERCURY	7439-97-6	ug/L	< 0.10 U		< 0.050 UJ				< 0.10 U
Metals	FF	NICKEL	7440-02-0	ug/L	28.9		31.5 J				18.0
Metals	FF	ZINC	7440-66-6	ug/L	10 J		< 75.0 U				23.1
Metals	N	ALUMINUM	7429-90-5	ug/L	4000	10600		37300			141 J
Metals	N	ANTIMONY	7440-36-0	ug/L	0.33 J	< 40.0 U		10.4 J			0.33 J
Metals	N	ARSENIC	7440-38-2	ug/L	15.6	131		62.0			10.7
Metals	N	BERYLLIUM	7440-41-7	ug/L	0.24 J	< 15.0 U		11.5 J			< 0.20 U
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L	81.0	1380		43400			< 5.0 U
Metals	N	COPPER	7440-50-8	ug/L	12.6	248		405			6.2
Metals	N	IRON	7439-89-6	ug/L	31200	85900		482000			6150
Metals	N	LEAD	7439-92-1	ug/L	4.3	< 50.0 U		389			< 1.0 U
Metals	N	MANGANESE	7439-96-5	ug/L	843	5480		3110			92.4
Metals	N	MERCURY	7439-97-6	ug/L	< 0.10 U	0.11 J-		< 0.10 U			< 0.10 U
Metals	N	NICKEL	7440-02-0	ug/L	256	486		3550			19.4
Metals	N	ZINC	7440-66-6	ug/L	37.8	277		2970			26.5
PCBs	N	AROCLOR-1016	12674-11-2	ug/L	< 0.24 U					< 0.20 UJ	< 0.24 U
PCBs	N	AROCLOR-1221	11104-28-2	ug/L	< 0.24 U					< 0.10 UJ	< 0.24 U
PCBs	N	AROCLOR-1232	11141-16-5	ug/L	< 0.24 U					< 0.20 UJ	< 0.24 U
PCBs	N	AROCLOR-1242	53469-21-9	ug/L	< 0.24 U					< 0.10 UJ	< 0.24 U
PCBs	N	AROCLOR-1248	12672-29-6	ug/L	< 0.24 U					< 0.10 UJ	< 0.24 U
PCBs	N	AROCLOR-1254	11097-69-1	ug/L	< 0.24 U					< 0.20 UJ	< 0.24 U
PCBs	N	AROCLOR-1260	11096-82-5	ug/L	< 0.24 UJ					< 0.20 UJ	< 0.24 UJ
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L	< 0.24 U					< 0.2 U	< 0.24 U
Pesticides	N	4,4-DDD	72-54-8	ug/L						< 0.0063 U	
Pesticides	N	4,4-DDE	72-55-9	ug/L						< 0.0063 U	
Pesticides	N	4,4-DDT	50-29-3	ug/L						< 0.0063 UJ	
Pesticides	N	ALDRIN	309-00-2	ug/L						< 0.0031 U	
Pesticides	N	ALPHA-BHC	319-84-6	ug/L						< 0.0031 U	
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L						< 0.0031 U	

APPENDIX A TABLE 4
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FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-01	P09-01	P09-01	P09-01	P09-01	P09-01	P09-02A
					Sample Date	10/1/2013	9/9/2015	9/9/2015	9/13/2016	9/14/2016	9/27/2016	10/2/2013
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-01-100113	P09-01-090915-1	P09-01-090915-1-F	P09-01-ME45-1	P09-01-ME45-1-F	P09-01-ME45R-1	P09-02A-100213
Pesticides	N	BETA-BHC	319-85-7	ug/L							< 0.0031 U	
Pesticides	N	DELTA-BHC	319-86-8	ug/L							< 0.0031 U	
Pesticides	N	DIELDRIN	60-57-1	ug/L							< 0.0063 U	
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L							< 0.0031 U	
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L							< 0.0063 U	
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L							< 0.0063 U	
Pesticides	N	ENDRIN	72-20-8	ug/L							< 0.0063 U	
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L							< 0.031 U	
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L							< 0.0063 U	
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L								
Pesticides	N	HEPTACHLOR	76-44-8	ug/L							< 0.0031 U	
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L							< 0.0031 U	
Pesticides	N	LINDANE	58-89-9	ug/L							< 0.0031 U	
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L							< 0.063 U	
Pesticides	N	TOXAPHENE	8001-35-2	ug/L							< 0.25 U	
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L							< 0.0031 U	
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L								
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L								
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L								
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L								
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L								
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L								
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L								
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L								
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L								
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L								
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L								
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L								
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L								
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L								
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L								
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L								
SVOCs	N	2-NITROANILINE	88-74-4	ug/L								
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L								
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L								
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L								
SVOCs	N	3-NITROANILINE	99-09-2	ug/L								
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L								
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L								
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L								
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L								
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L								
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L								
SVOCs	N	4-NITROANILINE	100-01-6	ug/L								
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L								
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L								
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L								
SVOCs	N	ANTHRACENE	120-12-7	ug/L								
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L								
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L								
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L								
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L								

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-01	P09-01	P09-01	P09-01	P09-01	P09-01	P09-02A
					Sample Date	10/1/2013	9/9/2015	9/9/2015	9/13/2016	9/14/2016	9/27/2016	10/2/2013
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-01-100113	P09-01-090915-1	P09-01-090915-1-F	P09-01-ME45-1	P09-01-ME45-1-F	P09-01-ME45R-1	P09-02A-100213
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L								
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L								
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L								
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L								
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L								
SVOCs	N	CARBAZOLE	86-74-8	ug/L								
SVOCs	N	CHRYSENE	218-01-9	ug/L								
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L								
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L								
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L								
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L								
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L								
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L								
SVOCs	N	FLUORANTHENE	206-44-0	ug/L								
SVOCs	N	FLUORENE	86-73-7	ug/L								
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L								
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L								
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L								
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L								
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L								
SVOCs	N	ISOPHORONE	78-59-1	ug/L								
SVOCs	N	NAPHTHALENE	91-20-3	ug/L								
SVOCs	N	NITROBENZENE	98-95-3	ug/L								
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L								
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L								
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L								
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L								
SVOCs	N	PHENANTHRENE	85-01-8	ug/L								
SVOCs	N	PHENOL	108-95-2	ug/L								
SVOCs	N	PYRENE	129-00-0	ug/L								
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L	< 0.50 U			< 1.0 UJ			< 0.50 U
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L	< 0.50 U			< 2.0 U			< 0.50 U
VOCs	N	2-BUTANONE	78-93-3	ug/L	< 2.5 UJ			< 5.0 UJ			< 2.5 UJ
VOCs	N	2-HEXANONE	591-78-6	ug/L	< 2.5 U			< 5.0 UJ			< 2.5 U
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L	< 2.5 U			< 2.0 U			< 2.5 U
VOCs	N	ACETONE	67-64-1	ug/L	< 2.5 U			< 5.0 UJ			< 2.5 UJ
VOCs	N	BENZENE	71-43-2	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	BROMOFORM	75-25-2	ug/L	< 0.50 U			< 2.0 U			< 0.50 U
VOCs	N	BROMOMETHANE	74-83-9	ug/L	< 1.0 U			< 2.0 UJ			< 1.0 U
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L	5.3			< 1.0 U			< 0.50 U
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L	< 0.50 U			< 2.0 UJ			< 0.50 U
VOCs	N	CHLOROBENZENE	108-90-7	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	CHLOROETHANE	75-00-3	ug/L	< 1.0 UJ			< 1.0 U			< 1.0 U
VOCs	N	CHLOROFORM	67-66-3	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	CHLOROMETHANE	74-87-3	ug/L	< 1.0 U			< 1.0 U			< 1.0 U
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 0.50 U			< 1.0 U			< 0.50 U

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HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-01	P09-01	P09-01	P09-01	P09-01	P09-01	P09-02A
					Sample Date	10/1/2013	9/9/2015	9/9/2015	9/13/2016	9/14/2016	9/27/2016	10/2/2013
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-01-100113	P09-01-090915-1	P09-01-090915-1-F	P09-01-ME45-1	P09-01-ME45-1-F	P09-01-ME45R-1	P09-02A-100213
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L	< 0.50 U			< 2.0 U			< 0.50 U
VOCs	N	ETHYLBENZENE	100-41-4	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L	< 1.0 U						< 1.0 U
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L	< 2.5 U			< 1.0 U			< 2.5 U
VOCs	N	O-XYLENE	95-47-6	ug/L	< 0.50 U						< 0.50 U
VOCs	N	STYRENE	100-42-5	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L	< 0.50 U			< 2.0 U			< 0.50 U
VOCs	N	TOLUENE	108-88-3	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 0.50 U			< 2.0 U			< 0.50 U
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L	< 0.50 U			< 1.0 U			< 0.50 U
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U			< 1.0 U			< 1.0 U
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L	< 1.5 U			< 1.0 U			< 1.5 U

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

F = Filtered sample.

FD = Field duplicate.

FF = Field filtered sample.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A	P09-03A	P09-03A
				Sample Date	9/9/2015	9/15/2015	9/15/2015	9/14/2016	9/15/2016	10/15/2013	9/16/2015
				Sample Type Code	N	N	N	N	N	N	N
				Sample ID	P09-02A-090915-1	P09-02A-091515-1	P09-02A-091515-1-F	P09-02A-ME45-1	P09-02A-ME45-1-F	P09-03A-101513	P09-03A-091515-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**							
Metals	F	ALUMINUM	7429-90-5	ug/L					14800		
Metals	F	ANTIMONY	7440-36-0	ug/L					18.6 J		
Metals	F	ARSENIC	7440-38-2	ug/L					11.8 J		
Metals	F	BERYLLIUM	7440-41-7	ug/L					< 15.0 U		
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L					607		
Metals	F	COPPER	7440-50-8	ug/L					192		
Metals	F	IRON	7439-89-6	ug/L					65000		
Metals	F	LEAD	7439-92-1	ug/L					104		
Metals	F	MANGANESE	7439-96-5	ug/L					625		
Metals	F	MERCURY	7439-97-6	ug/L					0.14 J		
Metals	F	NICKEL	7440-02-0	ug/L					203		
Metals	F	ZINC	7440-66-6	ug/L					489		
Metals	FF	ALUMINUM	7429-90-5	ug/L			< 500 U			195 J	
Metals	FF	ANTIMONY	7440-36-0	ug/L			< 40.0 U			< 1.0 U	
Metals	FF	ARSENIC	7440-38-2	ug/L			21.5 J-			8.0	
Metals	FF	BERYLLIUM	7440-41-7	ug/L			< 15.0 U			< 0.20 U	
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L			< 30.0 UJ			< 5.0 U	
Metals	FF	COPPER	7440-50-8	ug/L			< 50.0 U			< 3.0 U	
Metals	FF	IRON	7439-89-6	ug/L			< 2500 U			< 500 U	
Metals	FF	LEAD	7439-92-1	ug/L			< 15.0 U			< 1.0 U	
Metals	FF	MANGANESE	7439-96-5	ug/L			120			31.8	
Metals	FF	MERCURY	7439-97-6	ug/L			< 0.050 U			< 0.20 U	
Metals	FF	NICKEL	7440-02-0	ug/L			< 30.0 U			33.5	
Metals	FF	ZINC	7440-66-6	ug/L			< 75.0 UJ			81.3	
Metals	N	ALUMINUM	7429-90-5	ug/L		1800 J		99500		1630 J	5690 J
Metals	N	ANTIMONY	7440-36-0	ug/L		< 40.0 U		16.6 J		< 1.2 U	< 40.0 U
Metals	N	ARSENIC	7440-38-2	ug/L		20.1 J-		24.3 J		15.3	16.8 J-
Metals	N	BERYLLIUM	7440-41-7	ug/L		< 15.0 U		20.5 J		0.13 J	< 15.0 U
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L		207		4040		53.4	473
Metals	N	COPPER	7440-50-8	ug/L		32.6 J		918		7.8	63.4 J
Metals	N	IRON	7439-89-6	ug/L		79100		672000		3490	91200
Metals	N	LEAD	7439-92-1	ug/L		< 50 U		712		4.8	< 50 U
Metals	N	MANGANESE	7439-96-5	ug/L		412		4120		74.8	451
Metals	N	MERCURY	7439-97-6	ug/L		< 0.050 U		< 0.10 U		< 0.20 U	0.074 J
Metals	N	NICKEL	7440-02-0	ug/L		114 J		1130		64.2	264 J
Metals	N	ZINC	7440-66-6	ug/L		59.9 J		3550		721	3520 J
PCBs	N	AROCLOR-1016	12674-11-2	ug/L							
PCBs	N	AROCLOR-1221	11104-28-2	ug/L							
PCBs	N	AROCLOR-1232	11141-16-5	ug/L							
PCBs	N	AROCLOR-1242	53469-21-9	ug/L							
PCBs	N	AROCLOR-1248	12672-29-6	ug/L							
PCBs	N	AROCLOR-1254	11097-69-1	ug/L							
PCBs	N	AROCLOR-1260	11096-82-5	ug/L							
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L							
Pesticides	N	4,4-DDD	72-54-8	ug/L							
Pesticides	N	4,4-DDE	72-55-9	ug/L							
Pesticides	N	4,4-DDT	50-29-3	ug/L							
Pesticides	N	ALDRIN	309-00-2	ug/L							
Pesticides	N	ALPHA-BHC	319-84-6	ug/L							
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L							

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A	P09-03A	P09-03A
					Sample Date	9/9/2015	9/15/2015	9/15/2015	9/14/2016	9/15/2016	10/15/2013	9/16/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-02A-090915-1	P09-02A-091515-1	P09-02A-091515-1-F	P09-02A-ME45-1	P09-02A-ME45-1-F	P09-03A-101513	P09-03A-091515-1
Pesticides	N	BETA-BHC	319-85-7	ug/L								
Pesticides	N	DELTA-BHC	319-86-8	ug/L								
Pesticides	N	DIELDRIN	60-57-1	ug/L								
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L								
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L								
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L								
Pesticides	N	ENDRIN	72-20-8	ug/L								
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L								
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L								
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L								
Pesticides	N	HEPTACHLOR	76-44-8	ug/L								
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L								
Pesticides	N	LINDANE	58-89-9	ug/L								
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L								
Pesticides	N	TOXAPHENE	8001-35-2	ug/L								
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L								
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L								
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L								
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L								
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L								
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L								
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L								
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L								
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L								
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L								
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L								
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L								
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L								
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L								
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L								
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L								
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L								
SVOCs	N	2-NITROANILINE	88-74-4	ug/L								
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L								
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L								
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L								
SVOCs	N	3-NITROANILINE	99-09-2	ug/L								
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L								
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L								
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L								
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L								
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L								
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L								
SVOCs	N	4-NITROANILINE	100-01-6	ug/L								
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L								
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L								
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L								
SVOCs	N	ANTHRACENE	120-12-7	ug/L								
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L								
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L								
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L								
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L								

APPENDIX A TABLE 4
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SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A	P09-03A	P09-03A
					Sample Date	9/9/2015	9/15/2015	9/15/2015	9/14/2016	9/15/2016	10/15/2013	9/16/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-02A-090915-1	P09-02A-091515-1	P09-02A-091515-1-F	P09-02A-ME45-1	P09-02A-ME45-1-F	P09-03A-101513	P09-03A-091515-1
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L								
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L								
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L								
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L								
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L								
SVOCs	N	CARBAZOLE	86-74-8	ug/L								
SVOCs	N	CHRYSENE	218-01-9	ug/L								
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L								
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L								
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L								
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L								
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L								
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L								
SVOCs	N	FLUORANTHENE	206-44-0	ug/L								
SVOCs	N	FLUORENE	86-73-7	ug/L								
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L								
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L								
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L								
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L								
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L								
SVOCs	N	ISOPHORONE	78-59-1	ug/L								
SVOCs	N	NAPHTHALENE	91-20-3	ug/L								
SVOCs	N	NITROBENZENE	98-95-3	ug/L								
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L								
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L								
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L								
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L								
SVOCs	N	PHENANTHRENE	85-01-8	ug/L								
SVOCs	N	PHENOL	108-95-2	ug/L								
SVOCs	N	PYRENE	129-00-0	ug/L								
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L					< 1.0 UJ		< 0.50 U	
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L					< 1.0 U		< 0.50 U	
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L					< 1.0 U		< 0.50 U	
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L					< 1.0 U		< 0.50 U	
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L					< 1.0 U		< 0.50 U	
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L					< 1.0 U		< 0.50 U	
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L					< 2.0 U		< 0.50 U	
VOCs	N	2-BUTANONE	78-93-3	ug/L					< 5.0 UJ		< 2.5 U	
VOCs	N	2-HEXANONE	591-78-6	ug/L					< 5.0 UJ		< 2.5 U	
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L					< 2.0 U		< 2.5 UJ	
VOCs	N	ACETONE	67-64-1	ug/L					< 5.0 UJ		9.1 J	
VOCs	N	BENZENE	71-43-2	ug/L					< 1.0 U		< 0.50 U	
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L					< 1.0 U		< 0.50 U	
VOCs	N	BROMOFORM	75-25-2	ug/L					< 2.0 U		< 0.50 U	
VOCs	N	BROMOMETHANE	74-83-9	ug/L					< 2.0 UJ		< 1.0 U	
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L					< 1.0 U		< 0.50 U	
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L					< 2.0 UJ		< 0.50 U	
VOCs	N	CHLOROBENZENE	108-90-7	ug/L					< 1.0 U		< 0.50 U	
VOCs	N	CHLOROETHANE	75-00-3	ug/L					< 1.0 U		< 1.0 U	
VOCs	N	CHLOROFORM	67-66-3	ug/L					< 1.0 U		< 0.50 U	
VOCs	N	CHLOROMETHANE	74-87-3	ug/L					< 1.0 U		< 1.0 U	
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L					< 1.0 U		< 0.50 U	

APPENDIX A TABLE 4
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HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A	P09-03A	P09-03A
					Sample Date	9/9/2015	9/15/2015	9/15/2015	9/14/2016	9/15/2016	10/15/2013	9/16/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-02A-090915-1	P09-02A-091515-1	P09-02A-091515-1-F	P09-02A-ME45-1	P09-02A-ME45-1-F	P09-03A-101513	P09-03A-091515-1
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L				< 1.0 U		< 0.50 U	
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L				< 2.0 U		< 0.50 U	
VOCs	N	ETHYLBENZENE	100-41-4	ug/L				< 1.0 U		< 0.50 U	
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L						< 1.0 U	
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L				< 1.0 U		< 2.5 U	
VOCs	N	O-XYLENE	95-47-6	ug/L						< 0.50 U	
VOCs	N	STYRENE	100-42-5	ug/L				< 1.0 U		< 0.50 U	
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L				< 2.0 U		< 0.50 U	
VOCs	N	TOLUENE	108-88-3	ug/L				< 1.0 U		< 0.50 U	
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L				< 2.0 U		< 0.50 U	
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L				< 1.0 U		< 0.50 U	
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L				< 1.0 U		< 0.50 U	
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L				< 1.0 U		< 1.0 U	
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L				< 1.0 U		< 1.5 U	

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

F = Filtered sample.

FD = Field duplicate.

FF = Field filtered sample.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-03A	P09-03A	P09-03A	P09-04A	P09-04A	P09-04A	P09-04A
				Sample Date	9/16/2015	9/16/2015	9/14/2016	10/15/2013	9/16/2015	9/16/2015	9/16/2015
				Sample Type Code	N	N	N	N	N	N	N
				Sample ID	P09-03A-091515-1-F	P09-03A-091615-1	P09-03A-ME45-1	P09-04A-101513	P09-04A-091515-1	P09-04A-091515-1-F	P09-04A-091615-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**							
Metals	F	ALUMINUM	7429-90-5	ug/L							
Metals	F	ANTIMONY	7440-36-0	ug/L							
Metals	F	ARSENIC	7440-38-2	ug/L							
Metals	F	BERYLLIUM	7440-41-7	ug/L							
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L							
Metals	F	COPPER	7440-50-8	ug/L							
Metals	F	IRON	7439-89-6	ug/L							
Metals	F	LEAD	7439-92-1	ug/L							
Metals	F	MANGANESE	7439-96-5	ug/L							
Metals	F	MERCURY	7439-97-6	ug/L							
Metals	F	NICKEL	7440-02-0	ug/L							
Metals	F	ZINC	7440-66-6	ug/L							
Metals	FF	ALUMINUM	7429-90-5	ug/L	< 500 U			174 J		< 500 U	
Metals	FF	ANTIMONY	7440-36-0	ug/L	< 40.0 U			< 1.0 U		< 40.0 U	
Metals	FF	ARSENIC	7440-38-2	ug/L	15.0 J-			12.6		< 40.0 U	
Metals	FF	BERYLLIUM	7440-41-7	ug/L	< 15.0 U			< 0.20 U		< 15.0 U	
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L	< 30.0 UJ			< 5.0 U		< 30.0 U	
Metals	FF	COPPER	7440-50-8	ug/L	24.5 J			6.5		< 50.0 U	
Metals	FF	IRON	7439-89-6	ug/L	1190 J+			< 500 U		< 2500 U	
Metals	FF	LEAD	7439-92-1	ug/L	< 15.0 U			< 1.0 U		< 15.0 U	
Metals	FF	MANGANESE	7439-96-5	ug/L	509			4.2		< 75.0 U	
Metals	FF	MERCURY	7439-97-6	ug/L	< 0.050 U			< 0.20 U		< 0.050 U	
Metals	FF	NICKEL	7440-02-0	ug/L	29.2 J			36.4		13.0 J	
Metals	FF	ZINC	7440-66-6	ug/L	119 J			32.0		< 75.0 UJ	
Metals	N	ALUMINUM	7429-90-5	ug/L				261 J	2640 J		
Metals	N	ANTIMONY	7440-36-0	ug/L				< 1.0 U	< 40.0 U		
Metals	N	ARSENIC	7440-38-2	ug/L				14.7	16.5 J-		
Metals	N	BERYLLIUM	7440-41-7	ug/L				< 0.20 U	< 15.0 U		
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L				< 5.0 U	208		
Metals	N	COPPER	7440-50-8	ug/L				< 3.0 U	51.2 J		
Metals	N	IRON	7439-89-6	ug/L				< 500 U	8940 J		
Metals	N	LEAD	7439-92-1	ug/L				< 1.0 U	< 50 U		
Metals	N	MANGANESE	7439-96-5	ug/L				4.5	67.7 J		
Metals	N	MERCURY	7439-97-6	ug/L				< 0.20 U	0.063 J		
Metals	N	NICKEL	7440-02-0	ug/L				34.2	111 J		
Metals	N	ZINC	7440-66-6	ug/L				28.8	208 J		
PCBs	N	AROCLOR-1016	12674-11-2	ug/L							
PCBs	N	AROCLOR-1221	11104-28-2	ug/L							
PCBs	N	AROCLOR-1232	11141-16-5	ug/L							
PCBs	N	AROCLOR-1242	53469-21-9	ug/L							
PCBs	N	AROCLOR-1248	12672-29-6	ug/L							
PCBs	N	AROCLOR-1254	11097-69-1	ug/L							
PCBs	N	AROCLOR-1260	11096-82-5	ug/L							
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L							
Pesticides	N	4,4-DDD	72-54-8	ug/L							
Pesticides	N	4,4-DDE	72-55-9	ug/L							
Pesticides	N	4,4-DDT	50-29-3	ug/L							
Pesticides	N	ALDRIN	309-00-2	ug/L							
Pesticides	N	ALPHA-BHC	319-84-6	ug/L							
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L							

APPENDIX A TABLE 4
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HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-03A	P09-03A	P09-03A	P09-04A	P09-04A	P09-04A	P09-04A
					Sample Date	9/16/2015	9/16/2015	9/14/2016	10/15/2013	9/16/2015	9/16/2015	9/16/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-03A-091515-1-F	P09-03A-091615-1	P09-03A-ME45-1	P09-04A-101513	P09-04A-091515-1	P09-04A-091515-1-F	P09-04A-091615-1
Pesticides	N	BETA-BHC	319-85-7	ug/L								
Pesticides	N	DELTA-BHC	319-86-8	ug/L								
Pesticides	N	DIELDRIN	60-57-1	ug/L								
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L								
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L								
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L								
Pesticides	N	ENDRIN	72-20-8	ug/L								
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L								
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L								
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L								
Pesticides	N	HEPTACHLOR	76-44-8	ug/L								
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L								
Pesticides	N	LINDANE	58-89-9	ug/L								
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L								
Pesticides	N	TOXAPHENE	8001-35-2	ug/L								
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L								
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L								
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L								
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L								
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L								
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L								
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L								
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L								
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L								
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L								
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L								
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L								
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L								
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L								
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L								
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L								
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L								
SVOCs	N	2-NITROANILINE	88-74-4	ug/L								
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L								
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L								
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L								
SVOCs	N	3-NITROANILINE	99-09-2	ug/L								
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L								
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L								
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L								
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L								
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L								
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L								
SVOCs	N	4-NITROANILINE	100-01-6	ug/L								
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L								
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L								
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L								
SVOCs	N	ANTHRACENE	120-12-7	ug/L								
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L								
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L								
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L								
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L								

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NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-03A	P09-03A	P09-03A	P09-04A	P09-04A	P09-04A	P09-04A
					Sample Date	9/16/2015	9/16/2015	9/14/2016	10/15/2013	9/16/2015	9/16/2015	9/16/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-03A-091515-1-F	P09-03A-091615-1	P09-03A-ME45-1	P09-04A-101513	P09-04A-091515-1	P09-04A-091515-1-F	P09-04A-091615-1
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L								
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L								
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L								
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L								
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L								
SVOCs	N	CARBAZOLE	86-74-8	ug/L								
SVOCs	N	CHRYSENE	218-01-9	ug/L								
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L								
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L								
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L								
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L								
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L								
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L								
SVOCs	N	FLUORANTHENE	206-44-0	ug/L								
SVOCs	N	FLUORENE	86-73-7	ug/L								
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L								
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L								
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L								
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L								
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L								
SVOCs	N	ISOPHORONE	78-59-1	ug/L								
SVOCs	N	NAPHTHALENE	91-20-3	ug/L								
SVOCs	N	NITROBENZENE	98-95-3	ug/L								
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L								
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L								
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L								
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L								
SVOCs	N	PHENANTHRENE	85-01-8	ug/L								
SVOCs	N	PHENOL	108-95-2	ug/L								
SVOCs	N	PYRENE	129-00-0	ug/L								
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L				< 1.0 UJ	< 0.50 U			
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L				< 1.0 U	< 0.50 U			
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L				< 1.0 U	< 0.50 U			
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L				< 1.0 U	< 0.50 U			
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L				< 1.0 U	< 0.50 U			
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L				< 1.0 U	< 0.50 U			
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L				< 2.0 U	< 0.50 U			
VOCs	N	2-BUTANONE	78-93-3	ug/L				< 5.0 UJ	< 2.5 U			
VOCs	N	2-HEXANONE	591-78-6	ug/L				< 5.0 UJ	< 2.5 U			
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L				< 2.0 U	< 2.5 UJ			
VOCs	N	ACETONE	67-64-1	ug/L				< 5.0 UJ	< 2.5 U			
VOCs	N	BENZENE	71-43-2	ug/L				< 1.0 U	< 0.50 U			
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L				< 1.0 U	< 0.50 U			
VOCs	N	BROMOFORM	75-25-2	ug/L				< 2.0 U	< 0.50 U			
VOCs	N	BROMOMETHANE	74-83-9	ug/L				< 2.0 UJ	< 1.0 U			
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L				< 1.0 U	< 0.50 U			
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L				< 2.0 UJ	< 0.50 U			
VOCs	N	CHLOROBENZENE	108-90-7	ug/L				< 1.0 U	< 0.50 U			
VOCs	N	CHLOROETHANE	75-00-3	ug/L				< 1.0 U	< 1.0 U			
VOCs	N	CHLOROFORM	67-66-3	ug/L				< 1.0 U	< 0.50 U			
VOCs	N	CHLOROMETHANE	74-87-3	ug/L				< 1.0 U	< 1.0 U			
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L				< 1.0 U	< 0.50 U			

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HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-03A	P09-03A	P09-03A	P09-04A	P09-04A	P09-04A	P09-04A
					Sample Date	9/16/2015	9/16/2015	9/14/2016	10/15/2013	9/16/2015	9/16/2015	9/16/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-03A-091515-1-F	P09-03A-091615-1	P09-03A-ME45-1	P09-04A-101513	P09-04A-091515-1	P09-04A-091515-1-F	P09-04A-091615-1
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L			< 1.0 U	< 0.50 U			
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L			< 2.0 U	< 0.50 U			
VOCs	N	ETHYLBENZENE	100-41-4	ug/L			< 1.0 U	< 0.50 U			
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L				< 1.0 U			
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L			< 1.0 U	< 2.5 U			
VOCs	N	O-XYLENE	95-47-6	ug/L				< 0.50 U			
VOCs	N	STYRENE	100-42-5	ug/L			< 1.0 U	< 0.50 U			
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L			< 2.0 U	< 0.50 U			
VOCs	N	TOLUENE	108-88-3	ug/L			< 1.0 U	< 0.50 U			
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L			< 2.0 U	< 0.50 U			
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L			< 1.0 U	< 0.50 U			
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L			< 1.0 U	< 0.50 U			
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L			< 1.0 U	< 1.0 U			
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L			< 1.0 U	< 1.5 U			

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

F = Filtered sample.

FD = Field duplicate.

FF = Field filtered sample.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

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ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
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SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-04A	P09-04A	P09-05A	P09-05A	P09-05A	P09-05A	P09-06B
				Sample Date	9/12/2016	9/15/2016	10/2/2013	10/2/2013	9/14/2015	9/14/2015	10/3/2013
				Sample Type Code	N	N	N	FD	N	N	N
				Sample ID	P09-04A-ME45-1	P09-04A-ME45-1-F	P09-05A-100213	P09-05A-100213-2	P09-05A-091415-1	P09-05A-091415-1-F	P09-06B-100313
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**							
Metals	F	ALUMINUM	7429-90-5	ug/L		< 500 U					
Metals	F	ANTIMONY	7440-36-0	ug/L		< 40.0 U					
Metals	F	ARSENIC	7440-38-2	ug/L		< 40.0 U					
Metals	F	BERYLLIUM	7440-41-7	ug/L		< 15.0 U					
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L		< 30.0 UJ					
Metals	F	COPPER	7440-50-8	ug/L		< 50.0 U					
Metals	F	IRON	7439-89-6	ug/L		< 2500 U					
Metals	F	LEAD	7439-92-1	ug/L		< 15.0 U					
Metals	F	MANGANESE	7439-96-5	ug/L		< 75.0 U					
Metals	F	MERCURY	7439-97-6	ug/L		< 0.10 U					
Metals	F	NICKEL	7440-02-0	ug/L		24.7 J					
Metals	F	ZINC	7440-66-6	ug/L		240					
Metals	FF	ALUMINUM	7429-90-5	ug/L			< 300 U	< 300 U		357 J	367 J
Metals	FF	ANTIMONY	7440-36-0	ug/L			1.5	1.7		< 40.0 U	< 1.0 U
Metals	FF	ARSENIC	7440-38-2	ug/L			8.4	8.8		666 J-	9.7
Metals	FF	BERYLLIUM	7440-41-7	ug/L			< 0.20 U	< 0.20 U		< 15.0 U	0.06 J
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L			< 5.0 U	< 5.0 U		< 30.0 U	403
Metals	FF	COPPER	7440-50-8	ug/L			< 3.0 U	< 3.0 U		< 50.0 U	13.3
Metals	FF	IRON	7439-89-6	ug/L			< 100 U	< 80 U		< 2500 U	57000
Metals	FF	LEAD	7439-92-1	ug/L			< 1.0 U	< 1.0 U		< 15.0 U	2.7
Metals	FF	MANGANESE	7439-96-5	ug/L			3.8	< 2.2 U		< 75.0 U	503
Metals	FF	MERCURY	7439-97-6	ug/L			< 0.10 UJ	< 0.10 UJ		< 0.050 U	< 0.10 U
Metals	FF	NICKEL	7440-02-0	ug/L			33.5	30.3		15.5 J	132
Metals	FF	ZINC	7440-66-6	ug/L			38.6	39.9		372 J	13.0
Metals	N	ALUMINUM	7429-90-5	ug/L	2030		< 300 U	< 300 U	18600 J		5560
Metals	N	ANTIMONY	7440-36-0	ug/L	< 40.0 U		1.7	1.5	< 40.0 U		2.7
Metals	N	ARSENIC	7440-38-2	ug/L	< 40.0 U		10.0	17.6	592 J-		19.2
Metals	N	BERYLLIUM	7440-41-7	ug/L	< 15.0 U		< 0.20 U	< 0.20 U	< 15.0 U		0.53 J
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L	67.6 J		< 5.0 U	< 5.0 U	86.4 J		6270
Metals	N	COPPER	7440-50-8	ug/L	17.4 J		< 3.0 U	< 3.0 U	100 J		183
Metals	N	IRON	7439-89-6	ug/L	4870 J		< 100 U	< 100 U	40700		118000
Metals	N	LEAD	7439-92-1	ug/L	9.5 J		< 1.0 U	< 1.0 U	64.4		56.8
Metals	N	MANGANESE	7439-96-5	ug/L	65.9 J		< 2.7 U	< 2.6 U	517		818
Metals	N	MERCURY	7439-97-6	ug/L	< 0.10 U		< 0.10 UJ	< 0.10 UJ	0.19 J		< 0.20 U
Metals	N	NICKEL	7440-02-0	ug/L	80.6		31.0	26.3	75.0 J		1410
Metals	N	ZINC	7440-66-6	ug/L	3080		39.4	38.0	4930 J		152
PCBs	N	AROCLOR-1016	12674-11-2	ug/L							
PCBs	N	AROCLOR-1221	11104-28-2	ug/L							
PCBs	N	AROCLOR-1232	11141-16-5	ug/L							
PCBs	N	AROCLOR-1242	53469-21-9	ug/L							
PCBs	N	AROCLOR-1248	12672-29-6	ug/L							
PCBs	N	AROCLOR-1254	11097-69-1	ug/L							
PCBs	N	AROCLOR-1260	11096-82-5	ug/L							
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L							
Pesticides	N	4,4-DDD	72-54-8	ug/L							
Pesticides	N	4,4-DDE	72-55-9	ug/L							
Pesticides	N	4,4-DDT	50-29-3	ug/L							
Pesticides	N	ALDRIN	309-00-2	ug/L							
Pesticides	N	ALPHA-BHC	319-84-6	ug/L							
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L							

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-04A	P09-04A	P09-05A	P09-05A	P09-05A	P09-05A	P09-06B
					Sample Date	9/12/2016	9/15/2016	10/2/2013	10/2/2013	9/14/2015	9/14/2015	10/3/2013
					Sample Type Code	N	N	N	FD	N	N	N
					Sample ID	P09-04A-ME45-1	P09-04A-ME45-1-F	P09-05A-100213	P09-05A-100213-2	P09-05A-091415-1	P09-05A-091415-1-F	P09-06B-100313
Pesticides	N	BETA-BHC	319-85-7	ug/L								
Pesticides	N	DELTA-BHC	319-86-8	ug/L								
Pesticides	N	DIELDRIN	60-57-1	ug/L								
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L								
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L								
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L								
Pesticides	N	ENDRIN	72-20-8	ug/L								
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L								
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L								
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L								
Pesticides	N	HEPTACHLOR	76-44-8	ug/L								
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L								
Pesticides	N	LINDANE	58-89-9	ug/L								
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L								
Pesticides	N	TOXAPHENE	8001-35-2	ug/L								
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L								
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L	< 2.0 U							
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L	< 2.0 U							
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L	< 2.0 U							
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L	< 5.0 U							
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L	< 2.0 UJ							
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L	< 0.10 UJ							
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L	< 2.0 U							
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L	< 2.0 U							
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L	< 5.0 U							
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L	< 10 UJ							
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L	< 2.0 U							
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L	< 2.0 U							
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L	< 2.0 U							
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L	< 2.0 U							
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L	< 0.10 U							
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L	< 2.0 U							
SVOCs	N	2-NITROANILINE	88-74-4	ug/L	< 2.0 U							
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L	< 2.0 U							
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L								
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L	< 5.0 U							
SVOCs	N	3-NITROANILINE	99-09-2	ug/L	< 2.0 U							
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L	< 2.0 UJ							
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L	< 2.0 U							
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L	< 2.0 U							
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L	< 5.0 U							
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L	< 2.0 U							
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L	< 5.0 UJ							
SVOCs	N	4-NITROANILINE	100-01-6	ug/L	< 2.0 U							
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L	< 2.0 U							
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L	< 0.10 U							
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L	< 0.10 U							
SVOCs	N	ANTHRACENE	120-12-7	ug/L	< 0.10 U							
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L	< 0.10 U							
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L	< 0.10 UJ							
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L	< 0.10 U							
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L	< 0.10 U							

APPENDIX A TABLE 4
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HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-04A	P09-04A	P09-05A	P09-05A	P09-05A	P09-05A	P09-06B
					Sample Date	9/12/2016	9/15/2016	10/2/2013	10/2/2013	9/14/2015	9/14/2015	10/3/2013
					Sample Type Code	N	N	N	FD	N	N	N
					Sample ID	P09-04A-ME45-1	P09-04A-ME45-1-F	P09-05A-100213	P09-05A-100213-2	P09-05A-091415-1	P09-05A-091415-1-F	P09-06B-100313
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L		< 0.10 U						
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L		< 5.0 U						
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L		< 2.0 U						
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L		0.40 J						
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L		< 2.0 U						
SVOCs	N	CARBAZOLE	86-74-8	ug/L		< 2.0 U						
SVOCs	N	CHRYSENE	218-01-9	ug/L		< 0.10 U						
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L		< 0.10 U						
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L		< 2.0 U						
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L		< 2.0 U						
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L		< 2.0 U						
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L		< 2.0 U						
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L		< 2.0 UJ						
SVOCs	N	FLUORANTHENE	206-44-0	ug/L		< 0.10 U						
SVOCs	N	FLUORENE	86-73-7	ug/L		< 0.10 U						
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L		< 0.10 U						
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L		< 2.0 UJ						
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L		< 2.0 U						
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L		< 2.0 U						
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L		< 0.10 UJ						
SVOCs	N	ISOPHORONE	78-59-1	ug/L		< 2.0 U						
SVOCs	N	NAPHTHALENE	91-20-3	ug/L		< 0.10 U						
SVOCs	N	NITROBENZENE	98-95-3	ug/L		< 5.0 U						
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L								
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L		< 2.0 U						
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L		< 5.0 U						
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L		< 1.0 UJ						
SVOCs	N	PHENANTHRENE	85-01-8	ug/L		< 0.10 U						
SVOCs	N	PHENOL	108-95-2	ug/L		< 2.0 U						
SVOCs	N	PYRENE	129-00-0	ug/L		< 0.10 U						
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L		< 1.0 UJ		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L		< 1.0 U		< 0.50 U	< 0.50 U	< 1.0 UJ		< 0.50 U
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L		< 2.0 U		< 0.50 U	< 0.50 U	< 1.0 U		< 0.50 U
VOCs	N	2-BUTANONE	78-93-3	ug/L		< 5.0 UJ		< 2.5 UJ	< 2.5 UJ	5.7		< 2.5 UJ
VOCs	N	2-HEXANONE	591-78-6	ug/L		< 5.0 UJ		< 2.5 U	< 2.5 U	< 2.5 U		< 2.5 UJ
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L		< 2.0 U		< 2.5 U	< 2.5 U	< 2.5 U		< 2.5 U
VOCs	N	ACETONE	67-64-1	ug/L		< 5.0 UJ		< 2.5 UJ	< 2.5 UJ	< 2.5 U		< 2.5 UJ
VOCs	N	BENZENE	71-43-2	ug/L		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	BROMOFORM	75-25-2	ug/L		< 2.0 U		< 0.50 U	< 0.50 U	< 1.0 U		< 0.50 U
VOCs	N	BROMOMETHANE	74-83-9	ug/L		< 2.0 UJ		< 1.0 U	< 1.0 U	< 1.0 U		< 1.0 U
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		0.62 J
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L		< 2.0 UJ		< 0.50 U	< 0.50 U	< 1.0 U		< 0.50 U
VOCs	N	CHLOROBENZENE	108-90-7	ug/L		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	CHLOROETHANE	75-00-3	ug/L		< 1.0 U		< 1.0 U	< 1.0 U	< 0.50 U		< 1.0 U
VOCs	N	CHLOROFORM	67-66-3	ug/L		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	CHLOROMETHANE	74-87-3	ug/L		< 1.0 U		< 1.0 U	< 1.0 U	< 0.50 UJ		< 1.0 U
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-04A	P09-04A	P09-05A	P09-05A	P09-05A	P09-05A	P09-06B
					Sample Date	9/12/2016	9/15/2016	10/2/2013	10/2/2013	9/14/2015	9/14/2015	10/3/2013
					Sample Type Code	N	N	N	FD	N	N	N
					Sample ID	P09-04A-ME45-1	P09-04A-ME45-1-F	P09-05A-100213	P09-05A-100213-2	P09-05A-091415-1	P09-05A-091415-1-F	P09-06B-100313
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L	< 2.0 U		< 0.50 U	< 0.50 U	< 1.0 U		< 0.50 U
VOCs	N	ETHYLBENZENE	100-41-4	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L			< 1.0 U	< 1.0 U			< 1.0 U
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L	< 1.0 U		< 2.5 U	< 2.5 U	< 0.50 U		< 2.5 U
VOCs	N	O-XYLENE	95-47-6	ug/L			< 0.50 U	< 0.50 U			< 0.50 U
VOCs	N	STYRENE	100-42-5	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L	< 2.0 U		< 0.50 U	< 0.50 U	< 1.0 U		< 0.50 U
VOCs	N	TOLUENE	108-88-3	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 2.0 U		< 0.50 U	< 0.50 U	< 1.0 U		< 0.50 U
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 0.50 U
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U		< 1.0 U	< 1.0 U	< 0.50 U		< 1.0 U
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L	< 1.0 U		< 1.5 U	< 1.5 U	< 1.0 U		< 1.5 U

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

F = Filtered sample.

FD = Field duplicate.

FF = Field filtered sample.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-07B	P09-07B
				Sample Date	9/22/2014	9/9/2015	9/9/2015	9/13/2016	9/13/2016	10/3/2013	9/22/2014
				Sample Type Code	N	N	N	N	N	N	N
				Sample ID	P09-06B-092214-1	P09-06B-090915-1	P09-06B-090915-1-F	P09-06B-ME45-1	P09-06B-ME45-1-F	P09-07B-100313	P09-07B-092214-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**							
Metals	F	ALUMINUM	7429-90-5	ug/L					3960		
Metals	F	ANTIMONY	7440-36-0	ug/L					18.3 J		
Metals	F	ARSENIC	7440-38-2	ug/L					22.2 J		
Metals	F	BERYLLIUM	7440-41-7	ug/L					< 15.0 U		
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L					40.6 J		
Metals	F	COPPER	7440-50-8	ug/L					< 50.0 U		
Metals	F	IRON	7439-89-6	ug/L					986 J		
Metals	F	LEAD	7439-92-1	ug/L					< 15.0 U		
Metals	F	MANGANESE	7439-96-5	ug/L					83.6 J		
Metals	F	MERCURY	7439-97-6	ug/L					< 0.10 U		
Metals	F	NICKEL	7440-02-0	ug/L					39.2 J		
Metals	F	ZINC	7440-66-6	ug/L					405		
Metals	FF	ALUMINUM	7429-90-5	ug/L			3220			252 J	
Metals	FF	ANTIMONY	7440-36-0	ug/L			< 40.0 U			< 1.0 U	
Metals	FF	ARSENIC	7440-38-2	ug/L			< 40.0 U			13.0	
Metals	FF	BERYLLIUM	7440-41-7	ug/L			< 15.0 U			< 0.20 U	
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L			24.9 J			52.3	
Metals	FF	COPPER	7440-50-8	ug/L			33.3 J			< 3.0 U	
Metals	FF	IRON	7439-89-6	ug/L			< 10000 U			44900	
Metals	FF	LEAD	7439-92-1	ug/L			14.0 J			< 1.0 U	
Metals	FF	MANGANESE	7439-96-5	ug/L			232			728	
Metals	FF	MERCURY	7439-97-6	ug/L			< 0.20 UJ			< 0.20 U	
Metals	FF	NICKEL	7440-02-0	ug/L			23.5 J			150	
Metals	FF	ZINC	7440-66-6	ug/L			< 75.0 U			< 10 U	
Metals	N	ALUMINUM	7429-90-5	ug/L		14800		25800		106000	
Metals	N	ANTIMONY	7440-36-0	ug/L		< 40.0 U		20.1 J		2.7	
Metals	N	ARSENIC	7440-38-2	ug/L		14.5 J		12.4 J		56.1	
Metals	N	BERYLLIUM	7440-41-7	ug/L		< 15.0 U		6.6 J		9.7	
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L		179		287		31600	
Metals	N	COPPER	7440-50-8	ug/L		134		109		399	
Metals	N	IRON	7439-89-6	ug/L		27500		42800		460000	
Metals	N	LEAD	7439-92-1	ug/L		56.4		394		202	
Metals	N	MANGANESE	7439-96-5	ug/L		549		614		2910	
Metals	N	MERCURY	7439-97-6	ug/L		< 0.20 UJ		< 0.10 U		0.41	
Metals	N	NICKEL	7440-02-0	ug/L		125		322		5250	
Metals	N	ZINC	7440-66-6	ug/L		179		138000		821	
PCBs	N	AROCLOR-1016	12674-11-2	ug/L							
PCBs	N	AROCLOR-1221	11104-28-2	ug/L							
PCBs	N	AROCLOR-1232	11141-16-5	ug/L							
PCBs	N	AROCLOR-1242	53469-21-9	ug/L							
PCBs	N	AROCLOR-1248	12672-29-6	ug/L							
PCBs	N	AROCLOR-1254	11097-69-1	ug/L							
PCBs	N	AROCLOR-1260	11096-82-5	ug/L							
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L							
Pesticides	N	4,4-DDD	72-54-8	ug/L							
Pesticides	N	4,4-DDE	72-55-9	ug/L							
Pesticides	N	4,4-DDT	50-29-3	ug/L							
Pesticides	N	ALDRIN	309-00-2	ug/L							
Pesticides	N	ALPHA-BHC	319-84-6	ug/L							
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L							

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-07B	P09-07B
					Sample Date	9/22/2014	9/9/2015	9/9/2015	9/13/2016	9/13/2016	10/3/2013	9/22/2014
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-06B-092214-1	P09-06B-090915-1	P09-06B-090915-1-F	P09-06B-ME45-1	P09-06B-ME45-1-F	P09-07B-100313	P09-07B-092214-1
Pesticides	N	BETA-BHC	319-85-7	ug/L								
Pesticides	N	DELTA-BHC	319-86-8	ug/L								
Pesticides	N	DIELDRIN	60-57-1	ug/L								
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L								
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L								
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L								
Pesticides	N	ENDRIN	72-20-8	ug/L								
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L								
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L								
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L								
Pesticides	N	HEPTACHLOR	76-44-8	ug/L								
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L								
Pesticides	N	LINDANE	58-89-9	ug/L								
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L								
Pesticides	N	TOXAPHENE	8001-35-2	ug/L								
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L								
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L					< 2.0 U			
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L					< 2.0 U			
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L					< 2.0 U			
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L					< 5.0 U			
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L					< 2.0 UJ			
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L					< 0.10 UJ			
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L					< 2.0 U			
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L					< 2.0 U			
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L					< 5.0 U			
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L					< 10 UJ			
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L					< 2.0 U			
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L					< 2.0 U			
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L					< 2.0 U			
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L					< 2.0 U			
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L					< 0.10 U			
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L					< 2.0 U			
SVOCs	N	2-NITROANILINE	88-74-4	ug/L					< 2.0 U			
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L					< 2.0 U			
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L								
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L					< 5.0 U			
SVOCs	N	3-NITROANILINE	99-09-2	ug/L					< 2.0 U			
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L					< 2.0 UJ			
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L					< 2.0 U			
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L					< 2.0 U			
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L					< 5.0 U			
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L					< 2.0 U			
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L					< 5.0 UJ			
SVOCs	N	4-NITROANILINE	100-01-6	ug/L					< 2.0 U			
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L					< 2.0 U			
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L					< 0.10 U			
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L					< 0.10 U			
SVOCs	N	ANTHRACENE	120-12-7	ug/L					< 0.10 U			
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L					< 0.10 U			
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L					< 0.10 UJ			
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L					< 0.10 U			
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L					< 0.10 U			

APPENDIX A TABLE 4
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SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-07B	P09-07B
					Sample Date	9/22/2014	9/9/2015	9/9/2015	9/13/2016	9/13/2016	10/3/2013	9/22/2014
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-06B-092214-1	P09-06B-090915-1	P09-06B-090915-1-F	P09-06B-ME45-1	P09-06B-ME45-1-F	P09-07B-100313	P09-07B-092214-1
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L				< 0.10 U			
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L				< 5.0 U			
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L				< 2.0 U			
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L				0.44 J			
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L				< 2.0 U			
SVOCs	N	CARBAZOLE	86-74-8	ug/L				< 2.0 U			
SVOCs	N	CHRYSENE	218-01-9	ug/L				< 0.10 U			
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L				< 0.10 U			
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L				< 2.0 U			
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L				< 2.0 U			
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L				< 2.0 U			
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L				< 2.0 U			
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L				< 2.0 UJ			
SVOCs	N	FLUORANTHENE	206-44-0	ug/L				< 0.10 U			
SVOCs	N	FLUORENE	86-73-7	ug/L				< 0.10 U			
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L				< 0.10 U			
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L				< 2.0 UJ			
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L				< 2.0 U			
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L				< 2.0 U			
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L				< 0.10 UJ			
SVOCs	N	ISOPHORONE	78-59-1	ug/L				< 2.0 U			
SVOCs	N	NAPHTHALENE	91-20-3	ug/L				< 0.10 U			
SVOCs	N	NITROBENZENE	98-95-3	ug/L				< 5.0 U			
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L							
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L				< 2.0 U			
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L				< 5.0 U			
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L				< 1.0 UJ			
SVOCs	N	PHENANTHRENE	85-01-8	ug/L				0.12			
SVOCs	N	PHENOL	108-95-2	ug/L				< 2.0 U			
SVOCs	N	PYRENE	129-00-0	ug/L				0.13			
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L	< 0.50 U	< 0.50 U		< 1.0 UJ		< 0.50 U	< 0.50 U
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 1.0 U	< 1.0 U		< 1.0 U		< 0.50 U	< 1.0 U
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U
VOCs	N	2-BUTANONE	78-93-3	ug/L	< 2.5 U	< 2.5 UJ		< 5.0 UJ		15 J	< 2.5 U
VOCs	N	2-HEXANONE	591-78-6	ug/L	< 2.5 U	< 2.5 U		< 5.0 UJ		< 2.5 UJ	< 2.5 U
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L	< 1.0 U	< 2.5 U		< 2.0 U		< 2.5 U	< 1.0 U
VOCs	N	ACETONE	67-64-1	ug/L	23	< 2.5 UJ		< 5.0 UJ		35 J	< 2.5 U
VOCs	N	BENZENE	71-43-2	ug/L	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	BROMOFORM	75-25-2	ug/L	< 1.0 U	< 1.0 UJ		< 2.0 U		< 0.50 U	< 1.0 U
VOCs	N	BROMOMETHANE	74-83-9	ug/L	< 1.0 U	< 1.0 UJ		< 2.0 UJ		< 1.0 U	< 1.0 U
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L	< 0.50 U	< 0.50 U		< 1.0 U		1.4	< 0.50 U
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L	< 1.0 U	< 1.0 U		< 2.0 UJ		< 0.50 U	< 1.0 U
VOCs	N	CHLOROBENZENE	108-90-7	ug/L	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	CHLOROETHANE	75-00-3	ug/L	< 0.50 U	< 0.50 UJ		< 1.0 U		< 1.0 U	< 0.50 U
VOCs	N	CHLOROFORM	67-66-3	ug/L	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	CHLOROMETHANE	74-87-3	ug/L	< 0.50 U	< 0.50 UJ		< 1.0 U		< 1.0 U	< 0.50 U
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U

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SITE 09 - ALLEN HARBOR LANDFILL
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NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-07B	P09-07B
					Sample Date	9/22/2014	9/9/2015	9/9/2015	9/13/2016	9/13/2016	10/3/2013	9/22/2014
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-06B-092214-1	P09-06B-090915-1	P09-06B-090915-1-F	P09-06B-ME45-1	P09-06B-ME45-1-F	P09-07B-100313	P09-07B-092214-1
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L		< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L		< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U
VOCs	N	ETHYLBENZENE	100-41-4	ug/L		< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L							< 1.0 U	
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L		< 0.50 U	< 0.50 U		< 1.0 U		< 2.5 U	< 0.50 U
VOCs	N	O-XYLENE	95-47-6	ug/L							< 0.50 U	
VOCs	N	STYRENE	100-42-5	ug/L		< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L		< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U
VOCs	N	TOLUENE	108-88-3	ug/L		1.2	< 0.50 U		< 1.0 U		< 0.50 U	2.2
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L		< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L		< 0.50 U	< 0.50 UJ		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L		< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L		< 0.50 U	< 0.50 U		< 1.0 U		< 1.0 U	< 0.50 U
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L		< 1.0 U	< 1.0 U		< 1.0 U		< 1.5 U	1.8

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

F = Filtered sample.

FD = Field duplicate.

FF = Field filtered sample.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

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SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-07B	P09-07B	P09-07B	P09-08B	P09-08B	P09-08B	P09-08B
				Sample Date	9/9/2015	9/9/2015	9/13/2016	10/3/2013	10/15/2013	9/22/2014	9/8/2015
				Sample Type Code	N	N	N	N	N	N	N
				Sample ID	P09-07B-090915-1	P09-07B-090915-1-F	P09-07B-ME45-1	P09-08B-100313	P09-08B-101513	P09-08B-092214-1	P09-08B-090815-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**							
Metals	F	ALUMINUM	7429-90-5	ug/L							
Metals	F	ANTIMONY	7440-36-0	ug/L							
Metals	F	ARSENIC	7440-38-2	ug/L							
Metals	F	BERYLLIUM	7440-41-7	ug/L							
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L							
Metals	F	COPPER	7440-50-8	ug/L							
Metals	F	IRON	7439-89-6	ug/L							
Metals	F	LEAD	7439-92-1	ug/L							
Metals	F	MANGANESE	7439-96-5	ug/L							
Metals	F	MERCURY	7439-97-6	ug/L							
Metals	F	NICKEL	7440-02-0	ug/L							
Metals	F	ZINC	7440-66-6	ug/L							
Metals	FF	ALUMINUM	7429-90-5	ug/L		< 1000 U					
Metals	FF	ANTIMONY	7440-36-0	ug/L		< 40.0 U					
Metals	FF	ARSENIC	7440-38-2	ug/L		37.6 J					
Metals	FF	BERYLLIUM	7440-41-7	ug/L		< 15.0 U					
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L		< 30.0 U					
Metals	FF	COPPER	7440-50-8	ug/L		< 50.0 U					
Metals	FF	IRON	7439-89-6	ug/L		< 2500 U					
Metals	FF	LEAD	7439-92-1	ug/L		< 15.0 U					
Metals	FF	MANGANESE	7439-96-5	ug/L		70.9 J					
Metals	FF	MERCURY	7439-97-6	ug/L		< 0.050 UJ					
Metals	FF	NICKEL	7440-02-0	ug/L		< 30.0 U					
Metals	FF	ZINC	7440-66-6	ug/L		< 75.0 U					
Metals	N	ALUMINUM	7429-90-5	ug/L	3460		130000		2750 J		7460
Metals	N	ANTIMONY	7440-36-0	ug/L	< 40.0 U		10.7 J		< 1.0 U		< 40.0 U
Metals	N	ARSENIC	7440-38-2	ug/L	78.9 J		113		13.6		81.1 J
Metals	N	BERYLLIUM	7440-41-7	ug/L	< 15.0 U		20.3 J		0.26 J		< 15.0 U
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L	< 100 U		5570		2370		571
Metals	N	COPPER	7440-50-8	ug/L	< 100 U		566		25.3		< 100 U
Metals	N	IRON	7439-89-6	ug/L	< 10000 U		271000		349000		20700
Metals	N	LEAD	7439-92-1	ug/L	< 50.0 U		441		7.1		< 50.0 U
Metals	N	MANGANESE	7439-96-5	ug/L	136		4700		2720		2130
Metals	N	MERCURY	7439-97-6	ug/L	< 0.20 UJ		0.57		0.04 J		0.062 J-
Metals	N	NICKEL	7440-02-0	ug/L	92.2		3410		2740		490
Metals	N	ZINC	7440-66-6	ug/L	90.5 J		42700		42.1		179
PCBs	N	AROCLOR-1016	12674-11-2	ug/L							
PCBs	N	AROCLOR-1221	11104-28-2	ug/L							
PCBs	N	AROCLOR-1232	11141-16-5	ug/L							
PCBs	N	AROCLOR-1242	53469-21-9	ug/L							
PCBs	N	AROCLOR-1248	12672-29-6	ug/L							
PCBs	N	AROCLOR-1254	11097-69-1	ug/L							
PCBs	N	AROCLOR-1260	11096-82-5	ug/L							
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L							
Pesticides	N	4,4-DDD	72-54-8	ug/L							
Pesticides	N	4,4-DDE	72-55-9	ug/L							
Pesticides	N	4,4-DDT	50-29-3	ug/L							
Pesticides	N	ALDRIN	309-00-2	ug/L							
Pesticides	N	ALPHA-BHC	319-84-6	ug/L							
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L							

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-07B	P09-07B	P09-07B	P09-08B	P09-08B	P09-08B	P09-08B
					Sample Date	9/9/2015	9/9/2015	9/13/2016	10/3/2013	10/15/2013	9/22/2014	9/8/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-07B-090915-1	P09-07B-090915-1-F	P09-07B-ME45-1	P09-08B-100313	P09-08B-101513	P09-08B-092214-1	P09-08B-090815-1
Pesticides	N	BETA-BHC	319-85-7	ug/L								
Pesticides	N	DELTA-BHC	319-86-8	ug/L								
Pesticides	N	DIELDRIN	60-57-1	ug/L								
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L								
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L								
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L								
Pesticides	N	ENDRIN	72-20-8	ug/L								
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L								
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L								
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L								
Pesticides	N	HEPTACHLOR	76-44-8	ug/L								
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L								
Pesticides	N	LINDANE	58-89-9	ug/L								
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L								
Pesticides	N	TOXAPHENE	8001-35-2	ug/L								
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L								
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L								
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L								
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L								
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L								
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L								
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L								
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L								
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L								
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L								
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L								
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L								
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L								
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L								
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L								
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L								
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L								
SVOCs	N	2-NITROANILINE	88-74-4	ug/L								
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L								
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L								
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L								
SVOCs	N	3-NITROANILINE	99-09-2	ug/L								
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L								
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L								
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L								
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L								
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L								
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L								
SVOCs	N	4-NITROANILINE	100-01-6	ug/L								
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L								
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L								
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L								
SVOCs	N	ANTHRACENE	120-12-7	ug/L								
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L								
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L								
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L								
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L								

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FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-07B	P09-07B	P09-07B	P09-08B	P09-08B	P09-08B	P09-08B
					Sample Date	9/9/2015	9/9/2015	9/13/2016	10/3/2013	10/15/2013	9/22/2014	9/8/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-07B-090915-1	P09-07B-090915-1-F	P09-07B-ME45-1	P09-08B-100313	P09-08B-101513	P09-08B-092214-1	P09-08B-090815-1
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L								
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L								
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L								
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L								
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L								
SVOCs	N	CARBAZOLE	86-74-8	ug/L								
SVOCs	N	CHRYSENE	218-01-9	ug/L								
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L								
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L								
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L								
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L								
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L								
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L								
SVOCs	N	FLUORANTHENE	206-44-0	ug/L								
SVOCs	N	FLUORENE	86-73-7	ug/L								
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L								
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L								
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L								
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L								
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L								
SVOCs	N	ISOPHORONE	78-59-1	ug/L								
SVOCs	N	NAPHTHALENE	91-20-3	ug/L								
SVOCs	N	NITROBENZENE	98-95-3	ug/L								
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L								
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L								
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L								
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L								
SVOCs	N	PHENANTHRENE	85-01-8	ug/L								
SVOCs	N	PHENOL	108-95-2	ug/L								
SVOCs	N	PYRENE	129-00-0	ug/L								
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L	< 0.50 U		< 1.0 UJ	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 1.0 U		< 1.0 U	< 0.50 U		< 1.0 U	< 1.0 U
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L	< 1.0 U		< 2.0 U	< 0.50 U		< 1.0 U	< 1.0 U
VOCs	N	2-BUTANONE	78-93-3	ug/L	< 2.5 UJ		< 5.0 UJ	43 J		< 2.5 U	< 2.5 UJ
VOCs	N	2-HEXANONE	591-78-6	ug/L	< 2.5 U		< 5.0 UJ	< 2.5 UJ		< 2.5 U	< 2.5 U
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L	< 2.5 U		< 2.0 U	< 2.5 U		< 1.0 U	< 2.5 U
VOCs	N	ACETONE	67-64-1	ug/L	< 2.5 UJ		< 5.0 UJ	200 J		50	< 2.5 UJ
VOCs	N	BENZENE	71-43-2	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	BROMOFORM	75-25-2	ug/L	< 1.0 UJ		< 2.0 U	< 0.50 U		< 1.0 U	< 1.0 UJ
VOCs	N	BROMOMETHANE	74-83-9	ug/L	< 1.0 UJ		< 2.0 UJ	< 1.0 U		< 1.0 U	< 1.0 UJ
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		1.0	< 0.50 U
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L	< 1.0 U		< 2.0 UJ	< 0.50 U		< 1.0 U	< 1.0 U
VOCs	N	CHLOROBENZENE	108-90-7	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	CHLOROETHANE	75-00-3	ug/L	< 0.50 UJ		< 1.0 U	< 1.0 U		< 0.50 U	< 0.50 UJ
VOCs	N	CHLOROFORM	67-66-3	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	CHLOROMETHANE	74-87-3	ug/L	< 0.50 UJ		< 1.0 U	< 1.0 U		< 0.50 U	< 0.50 UJ
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U

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NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-07B	P09-07B	P09-07B	P09-08B	P09-08B	P09-08B	P09-08B
					Sample Date	9/9/2015	9/9/2015	9/13/2016	10/3/2013	10/15/2013	9/22/2014	9/8/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-07B-090915-1	P09-07B-090915-1-F	P09-07B-ME45-1	P09-08B-100313	P09-08B-101513	P09-08B-092214-1	P09-08B-090815-1
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L	< 1.0 U		< 2.0 U	< 0.50 U		< 1.0 U	< 1.0 U
VOCs	N	ETHYLBENZENE	100-41-4	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L				< 1.0 U			
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L	< 0.50 U		< 1.0 U	< 2.5 U		< 0.50 U	< 0.50 U
VOCs	N	O-XYLENE	95-47-6	ug/L				< 0.50 U			
VOCs	N	STYRENE	100-42-5	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L	< 1.0 U		< 2.0 U	< 0.50 U		< 1.0 U	< 1.0 U
VOCs	N	TOLUENE	108-88-3	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 1.0 U		< 2.0 U	< 0.50 U		< 1.0 U	< 1.0 U
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L	< 0.50 UJ		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 UJ
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L	< 0.50 U		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L	< 0.50 U		< 1.0 U	< 1.0 U		< 0.50 U	< 0.50 U
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L	< 1.0 U		< 1.0 U	< 1.5 U		< 1.0 U	< 1.0 U

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

F = Filtered sample.

FD = Field duplicate.

FF = Field filtered sample.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

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SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-08B	P09-08B	P09-08B	P09-09	P09-09	P09-09	P09-09
				Sample Date	9/8/2015	9/13/2016	9/15/2016	10/1/2013	10/1/2013	9/9/2015	9/9/2015
				Sample Type Code	N	N	N	N	N	N	N
				Sample ID	P09-08B-090815-1-F	P09-08B-ME45-1	P09-08B-ME45-1-F	P09-09-100113	P09-09-100213	P09-09-090915-1	P09-09-090915-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**							
Metals	F	ALUMINUM	7429-90-5	ug/L			5270				
Metals	F	ANTIMONY	7440-36-0	ug/L			9.4 J				
Metals	F	ARSENIC	7440-38-2	ug/L			8.6 J				
Metals	F	BERYLLIUM	7440-41-7	ug/L			< 7.5 U				
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L			305				
Metals	F	COPPER	7440-50-8	ug/L			< 50.0 U				
Metals	F	IRON	7439-89-6	ug/L			30300				
Metals	F	LEAD	7439-92-1	ug/L			27.3				
Metals	F	MANGANESE	7439-96-5	ug/L			1130				
Metals	F	MERCURY	7439-97-6	ug/L			< 0.10 U				
Metals	F	NICKEL	7440-02-0	ug/L			342				
Metals	F	ZINC	7440-66-6	ug/L			429				
Metals	FF	ALUMINUM	7429-90-5	ug/L	8180				168 J		1840
Metals	FF	ANTIMONY	7440-36-0	ug/L	< 40.0 U				0.42 J		< 40.0 U
Metals	FF	ARSENIC	7440-38-2	ug/L	< 40.0 U				7.1		23.9 J
Metals	FF	BERYLLIUM	7440-41-7	ug/L	< 15.0 U				< 0.20 U		< 15.0 U
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L	400				12.0		< 100 U
Metals	FF	COPPER	7440-50-8	ug/L	< 100 U				< 3.0 U		< 100 U
Metals	FF	IRON	7439-89-6	ug/L	21400				19400		75100
Metals	FF	LEAD	7439-92-1	ug/L	< 50.0 U				< 1.0 U		< 50.0 U
Metals	FF	MANGANESE	7439-96-5	ug/L	2060				241		1390
Metals	FF	MERCURY	7439-97-6	ug/L	0.079 J-				< 0.10 U		< 0.050 UJ
Metals	FF	NICKEL	7440-02-0	ug/L	436				75.9		< 50 U
Metals	FF	ZINC	7440-66-6	ug/L	147				7.6 J		< 75.0 U
Metals	N	ALUMINUM	7429-90-5	ug/L		129000			18400	45600	
Metals	N	ANTIMONY	7440-36-0	ug/L		< 20.0 U			3.2	< 40.0 U	
Metals	N	ARSENIC	7440-38-2	ug/L		10.0 J			45.6	318	
Metals	N	BERYLLIUM	7440-41-7	ug/L		28.9			1.6	11.3 J	
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L		2490			4970	526	
Metals	N	COPPER	7440-50-8	ug/L		25.1 J			558	216	
Metals	N	IRON	7439-89-6	ug/L		243000			197000	2200000	
Metals	N	LEAD	7439-92-1	ug/L		321			91.0	273	
Metals	N	MANGANESE	7439-96-5	ug/L		3060			646	11700	
Metals	N	MERCURY	7439-97-6	ug/L		< 0.10 U			0.24	5.0 J-	
Metals	N	NICKEL	7440-02-0	ug/L		1830			400	448	
Metals	N	ZINC	7440-66-6	ug/L		39800			265	2250	
PCBs	N	AROCLOR-1016	12674-11-2	ug/L				< 0.27 U			
PCBs	N	AROCLOR-1221	11104-28-2	ug/L				< 0.27 U			
PCBs	N	AROCLOR-1232	11141-16-5	ug/L				< 0.27 U			
PCBs	N	AROCLOR-1242	53469-21-9	ug/L				< 0.27 U			
PCBs	N	AROCLOR-1248	12672-29-6	ug/L				< 0.27 U			
PCBs	N	AROCLOR-1254	11097-69-1	ug/L				< 0.27 U			
PCBs	N	AROCLOR-1260	11096-82-5	ug/L				< 0.27 UJ			
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L				< 0.27 U			
Pesticides	N	4,4-DDD	72-54-8	ug/L							
Pesticides	N	4,4-DDE	72-55-9	ug/L							
Pesticides	N	4,4-DDT	50-29-3	ug/L							
Pesticides	N	ALDRIN	309-00-2	ug/L							
Pesticides	N	ALPHA-BHC	319-84-6	ug/L							
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L							

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-08B	P09-08B	P09-08B	P09-09	P09-09	P09-09	P09-09
					Sample Date	9/8/2015	9/13/2016	9/15/2016	10/1/2013	10/1/2013	9/9/2015	9/9/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-08B-090815-1-F	P09-08B-ME45-1	P09-08B-ME45-1-F	P09-09-100113	P09-09-100213	P09-09-090915-1	P09-09-090915-1-F
Pesticides	N	BETA-BHC	319-85-7	ug/L								
Pesticides	N	DELTA-BHC	319-86-8	ug/L								
Pesticides	N	DIELDRIN	60-57-1	ug/L								
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L								
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L								
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L								
Pesticides	N	ENDRIN	72-20-8	ug/L								
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L								
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L								
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L								
Pesticides	N	HEPTACHLOR	76-44-8	ug/L								
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L								
Pesticides	N	LINDANE	58-89-9	ug/L								
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L								
Pesticides	N	TOXAPHENE	8001-35-2	ug/L								
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L								
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L		< 2.0 U						
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L		< 2.0 U						
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L		< 2.0 U						
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L		< 5.0 U						
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L		< 2.0 UJ						
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L		< 0.10 UJ						
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L		< 2.0 U						
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L		< 2.0 U						
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L		< 5.0 U						
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L		< 10 UJ						
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L		< 2.0 U						
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L		< 2.0 U						
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L		< 2.0 U						
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L		< 2.0 U						
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L		< 0.10 U						
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L		< 2.0 U						
SVOCs	N	2-NITROANILINE	88-74-4	ug/L		< 2.0 U						
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L		< 2.0 U						
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L								
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L		< 5.0 U						
SVOCs	N	3-NITROANILINE	99-09-2	ug/L		< 2.0 U						
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L		< 2.0 UJ						
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L		< 2.0 U						
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L		< 2.0 U						
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L		< 5.0 U						
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L		< 2.0 U						
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L		< 5.0 UJ						
SVOCs	N	4-NITROANILINE	100-01-6	ug/L		< 2.0 U						
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L		< 2.0 U						
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L		< 0.10 U						
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L		< 0.10 U						
SVOCs	N	ANTHRACENE	120-12-7	ug/L		< 0.10 U						
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L		< 0.10 U						
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L		< 0.10 UJ						
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L		< 0.10 U						
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L		< 0.10 U						

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NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-08B	P09-08B	P09-08B	P09-09	P09-09	P09-09	P09-09
					Sample Date	9/8/2015	9/13/2016	9/15/2016	10/1/2013	10/1/2013	9/9/2015	9/9/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-08B-090815-1-F	P09-08B-ME45-1	P09-08B-ME45-1-F	P09-09-100113	P09-09-100213	P09-09-090915-1	P09-09-090915-1-F
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L		< 0.10 U					
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L		< 5.0 U					
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L		< 2.0 U					
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L		0.45 J					
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L		< 2.0 U					
SVOCs	N	CARBAZOLE	86-74-8	ug/L		< 2.0 U					
SVOCs	N	CHRYSENE	218-01-9	ug/L		< 0.10 U					
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L		< 0.10 U					
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L		< 2.0 U					
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L		< 2.0 U					
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L		< 2.0 U					
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L		< 2.0 U					
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L		< 2.0 UJ					
SVOCs	N	FLUORANTHENE	206-44-0	ug/L		< 0.10 U					
SVOCs	N	FLUORENE	86-73-7	ug/L		0.11					
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L		< 0.10 U					
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L		< 2.0 UJ					
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L		< 2.0 UJ					
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L		< 2.0 U					
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L		< 0.10 UJ					
SVOCs	N	ISOPHORONE	78-59-1	ug/L		< 2.0 U					
SVOCs	N	NAPHTHALENE	91-20-3	ug/L		< 0.10 U					
SVOCs	N	NITROBENZENE	98-95-3	ug/L		< 5.0 U					
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L							
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L		< 2.0 U					
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L		< 5.0 U					
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L		< 1.0 UJ					
SVOCs	N	PHENANTHRENE	85-01-8	ug/L		0.10					
SVOCs	N	PHENOL	108-95-2	ug/L		< 2.0 U					
SVOCs	N	PYRENE	129-00-0	ug/L		< 0.10 U					
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L		< 1.0 UJ				< 0.50 U		
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L		< 1.0 U				< 0.50 U		
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L		< 1.0 U				< 0.50 U		
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L		< 1.0 U				< 0.50 U		
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L		< 1.0 U				< 0.50 U		
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L		< 1.0 U				< 0.50 U		
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L		< 2.0 U				< 0.50 U		
VOCs	N	2-BUTANONE	78-93-3	ug/L		< 5.0 UJ				< 2.5 UJ		
VOCs	N	2-HEXANONE	591-78-6	ug/L		< 5.0 UJ				< 2.5 U		
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L		< 2.0 U				< 2.5 U		
VOCs	N	ACETONE	67-64-1	ug/L		< 5.0 UJ				14		
VOCs	N	BENZENE	71-43-2	ug/L		< 1.0 U				< 0.50 U		
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L		< 1.0 U				< 0.50 U		
VOCs	N	BROMOFORM	75-25-2	ug/L		< 2.0 U				< 0.50 U		
VOCs	N	BROMOMETHANE	74-83-9	ug/L		< 2.0 UJ				< 1.0 U		
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L		< 1.0 U				0.92 J		
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L		< 2.0 UJ				< 0.50 U		
VOCs	N	CHLOROBENZENE	108-90-7	ug/L		< 1.0 U				< 0.50 U		
VOCs	N	CHLOROETHANE	75-00-3	ug/L		< 1.0 U				< 1.0 UJ		
VOCs	N	CHLOROFORM	67-66-3	ug/L		< 1.0 U				< 0.50 U		
VOCs	N	CHLOROMETHANE	74-87-3	ug/L		< 1.0 U				< 1.0 U		
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L		< 1.0 U				< 0.50 U		

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SITE 09 - ALLEN HARBOR LANDFILL
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NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-08B	P09-08B	P09-08B	P09-09	P09-09	P09-09	P09-09
					Sample Date	9/8/2015	9/13/2016	9/15/2016	10/1/2013	10/1/2013	9/9/2015	9/9/2015
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-08B-090815-1-F	P09-08B-ME45-1	P09-08B-ME45-1-F	P09-09-100113	P09-09-100213	P09-09-090915-1	P09-09-090915-1-F
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L		< 1.0 U			< 0.50 U		
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L		< 2.0 U			< 0.50 U		
VOCs	N	ETHYLBENZENE	100-41-4	ug/L		< 1.0 U			< 0.50 U		
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L					< 1.0 U		
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L		< 1.0 U			< 2.5 U		
VOCs	N	O-XYLENE	95-47-6	ug/L					< 0.50 U		
VOCs	N	STYRENE	100-42-5	ug/L		< 1.0 U			< 0.50 U		
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L		< 2.0 U			< 0.50 U		
VOCs	N	TOLUENE	108-88-3	ug/L		< 1.0 U			< 0.50 U		
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L		< 2.0 U			< 0.50 U		
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L		< 1.0 U			< 0.50 U		
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L		< 1.0 U			< 0.50 U		
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L		< 1.0 U			< 1.0 U		
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L		< 1.0 U			< 1.5 U		

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

F = Filtered sample.

FD = Field duplicate.

FF = Field filtered sample.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

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HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
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NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-09	P09-09	P09-10	P09-10	P09-10	P09-10	P09-10
				Sample Date	9/12/2016	9/12/2016	10/1/2013	9/8/2015	9/8/2015	9/12/2016	9/12/2016
				Sample Type Code	N	N	N	N	N	N	N
				Sample ID	P09-09-ME45-1	P09-09-ME45-1-F	P09-10-100113	P09-10-090815-1	P09-10-090815-1-F	P09-10-ME45-1	P09-10-ME45-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**							
Metals	F	ALUMINUM	7429-90-5	ug/L		3690					1800
Metals	F	ANTIMONY	7440-36-0	ug/L		16.4 J					9.0 J
Metals	F	ARSENIC	7440-38-2	ug/L		< 40.0 U					< 20.0 U
Metals	F	BERYLLIUM	7440-41-7	ug/L		< 15.0 U					< 7.5 U
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L		19.9 J					19.8 J
Metals	F	COPPER	7440-50-8	ug/L		< 50.0 U					< 25.0 U
Metals	F	IRON	7439-89-6	ug/L		2800 J					13400
Metals	F	LEAD	7439-92-1	ug/L		< 15.0 U					< 7.5 U
Metals	F	MANGANESE	7439-96-5	ug/L		130					554
Metals	F	MERCURY	7439-97-6	ug/L		< 0.10 U					R
Metals	F	NICKEL	7440-02-0	ug/L		26.5 J					28.0
Metals	F	ZINC	7440-66-6	ug/L		154					77.1
Metals	FF	ALUMINUM	7429-90-5	ug/L			219 J		144		
Metals	FF	ANTIMONY	7440-36-0	ug/L			0.12 J		< 0.80 U		
Metals	FF	ARSENIC	7440-38-2	ug/L			7.8		3.1		
Metals	FF	BERYLLIUM	7440-41-7	ug/L			< 0.20 U		< 0.30 U		
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L			< 5.0 U		9.4		
Metals	FF	COPPER	7440-50-8	ug/L			< 3.0 U		2.0		
Metals	FF	IRON	7439-89-6	ug/L			19000		23500		
Metals	FF	LEAD	7439-92-1	ug/L			< 1.0 U		1.0		
Metals	FF	MANGANESE	7439-96-5	ug/L			144		200		
Metals	FF	MERCURY	7439-97-6	ug/L			< 0.10 U		< 0.050 UJ		
Metals	FF	NICKEL	7440-02-0	ug/L			27.6		6.5		
Metals	FF	ZINC	7440-66-6	ug/L			7.2 J		8.3		
Metals	N	ALUMINUM	7429-90-5	ug/L	23300		805	98300		2070	
Metals	N	ANTIMONY	7440-36-0	ug/L	18.1 J		0.22 J	< 20.0 U		8.7 J	
Metals	N	ARSENIC	7440-38-2	ug/L	19.4 J		5.2	226		< 20.0 U	
Metals	N	BERYLLIUM	7440-41-7	ug/L	4.7 J		0.06 J	23.8 J		< 7.5 U	
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L	175		136	3040		51.3	
Metals	N	COPPER	7440-50-8	ug/L	393		< 5.3 U	175		6.1 J	
Metals	N	IRON	7439-89-6	ug/L	321000		26500	1550000		22300	
Metals	N	LEAD	7439-92-1	ug/L	441		2.7	188		3.7 J	
Metals	N	MANGANESE	7439-96-5	ug/L	885		144	2970		607	
Metals	N	MERCURY	7439-97-6	ug/L	R		< 0.10 U	9.3 J-		R	
Metals	N	NICKEL	7440-02-0	ug/L	104		33.8	525		28.6	
Metals	N	ZINC	7440-66-6	ug/L	1550		9.9 J	2820		94.0	
PCBs	N	AROCLOR-1016	12674-11-2	ug/L	< 0.20 U		< 0.24 U			< 0.20 U	
PCBs	N	AROCLOR-1221	11104-28-2	ug/L	< 0.10 U		< 0.24 U			< 0.10 U	
PCBs	N	AROCLOR-1232	11141-16-5	ug/L	< 0.20 U		< 0.24 U			< 0.20 U	
PCBs	N	AROCLOR-1242	53469-21-9	ug/L	< 0.10 U		< 0.24 U			< 0.10 U	
PCBs	N	AROCLOR-1248	12672-29-6	ug/L	< 0.10 U		< 0.24 U			< 0.10 U	
PCBs	N	AROCLOR-1254	11097-69-1	ug/L	< 0.20 U		< 0.24 U			< 0.20 U	
PCBs	N	AROCLOR-1260	11096-82-5	ug/L	< 0.20 U		< 0.24 UJ			< 0.20 U	
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L	< 0.2 U		< 0.24 U			< 0.2 U	
Pesticides	N	4,4-DDD	72-54-8	ug/L	< 0.0063 U					< 0.0063 U	
Pesticides	N	4,4-DDE	72-55-9	ug/L	< 0.0063 U					< 0.0063 U	
Pesticides	N	4,4-DDT	50-29-3	ug/L	< 0.0063 U					< 0.0063 U	
Pesticides	N	ALDRIN	309-00-2	ug/L	< 0.0031 U					< 0.0031 U	
Pesticides	N	ALPHA-BHC	319-84-6	ug/L	< 0.0031 U					< 0.0031 U	
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L	< 0.0031 U					< 0.0031 U	

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-09	P09-09	P09-10	P09-10	P09-10	P09-10	P09-10
					Sample Date	9/12/2016	9/12/2016	10/1/2013	9/8/2015	9/8/2015	9/12/2016	9/12/2016
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-09-ME45-1	P09-09-ME45-1-F	P09-10-100113	P09-10-090815-1	P09-10-090815-1-F	P09-10-ME45-1	P09-10-ME45-1-F
Pesticides	N	BETA-BHC	319-85-7	ug/L		< 0.0031 U					< 0.0031 U	
Pesticides	N	DELTA-BHC	319-86-8	ug/L		< 0.0031 U					< 0.0031 U	
Pesticides	N	DIELDRIN	60-57-1	ug/L		< 0.0063 U					< 0.0063 U	
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L		< 0.0031 U					< 0.0031 U	
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L		< 0.0063 U					< 0.0063 U	
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L		< 0.0063 U					< 0.0063 U	
Pesticides	N	ENDRIN	72-20-8	ug/L		< 0.0063 U					< 0.0063 U	
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L		< 0.031 U					< 0.031 U	
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L		< 0.0063 U					< 0.0063 U	
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L								
Pesticides	N	HEPTACHLOR	76-44-8	ug/L		< 0.0031 U					< 0.0031 U	
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L		< 0.0031 U					< 0.0031 U	
Pesticides	N	LINDANE	58-89-9	ug/L		< 0.0031 U					< 0.0031 U	
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L		< 0.063 U					< 0.063 U	
Pesticides	N	TOXAPHENE	8001-35-2	ug/L		< 0.25 U					< 0.25 U	
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L		< 0.0031 U					< 0.0031 U	
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L		< 5.0 U					< 5.0 U	
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L		< 2.0 UJ					< 2.0 UJ	
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L		< 0.10 UJ					< 0.10 UJ	
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L		< 5.0 U					< 5.0 U	
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L		< 10 UJ					< 10 UJ	
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L		< 0.10 U					< 0.10 U	
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	2-NITROANILINE	88-74-4	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L								
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L		< 5.0 U					< 5.0 U	
SVOCs	N	3-NITROANILINE	99-09-2	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L		< 2.0 UJ					< 2.0 UJ	
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L		< 5.0 U					< 5.0 U	
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L		< 5.0 UJ					< 5.0 UJ	
SVOCs	N	4-NITROANILINE	100-01-6	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L		< 0.10 U					< 0.10 U	
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L		< 0.10 U					< 0.10 U	
SVOCs	N	ANTHRACENE	120-12-7	ug/L		< 0.10 U					< 0.10 U	
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L		< 0.10 U					0.30	
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L		< 0.10 UJ					0.26 J	
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L		< 0.10 U					0.41	
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L		< 0.10 U					0.23	

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NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-09	P09-09	P09-10	P09-10	P09-10	P09-10	P09-10
					Sample Date	9/12/2016	9/12/2016	10/1/2013	9/8/2015	9/8/2015	9/12/2016	9/12/2016
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-09-ME45-1	P09-09-ME45-1-F	P09-10-100113	P09-10-090815-1	P09-10-090815-1-F	P09-10-ME45-1	P09-10-ME45-1-F
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L		< 0.10 U					0.18	
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L		< 5.0 U					< 5.0 U	
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L		0.34 J					0.51 J	
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L		< 2.0 U					1.2 J	
SVOCs	N	CARBAZOLE	86-74-8	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	CHRYSENE	218-01-9	ug/L		< 0.10 U					0.30	
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L		< 0.10 U					< 0.10 U	
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L		< 2.0 UJ					< 2.0 UJ	
SVOCs	N	FLUORANTHENE	206-44-0	ug/L		< 0.10 U					0.64	
SVOCs	N	FLUORENE	86-73-7	ug/L		< 0.10 U					< 0.10 U	
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L		< 0.10 U					< 0.10 U	
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L		< 2.0 UJ					< 2.0 UJ	
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L		< 2.0 U					< 2.0 UJ	
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L		< 0.10 UJ					0.20 J	
SVOCs	N	ISOPHORONE	78-59-1	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	NAPHTHALENE	91-20-3	ug/L		< 0.10 U					< 0.10 U	
SVOCs	N	NITROBENZENE	98-95-3	ug/L		< 5.0 U					< 5.0 U	
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L								
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L		< 5.0 U					< 5.0 U	
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L		< 1.0 UJ					< 1.0 UJ	
SVOCs	N	PHENANTHRENE	85-01-8	ug/L		< 0.10 U					0.31	
SVOCs	N	PHENOL	108-95-2	ug/L		< 2.0 U					< 2.0 U	
SVOCs	N	PYRENE	129-00-0	ug/L		< 0.10 U					0.51	
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L		< 1.0 UJ		< 0.50 U			< 1.0 UJ	
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L		< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L		< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L		< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L		< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L		< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L		< 2.0 U		< 0.50 U			< 2.0 U	
VOCs	N	2-BUTANONE	78-93-3	ug/L		< 5.0 UJ		< 2.5 UJ			< 5.0 UJ	
VOCs	N	2-HEXANONE	591-78-6	ug/L		< 5.0 UJ		< 2.5 U			< 5.0 UJ	
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L		< 2.0 U		< 2.5 U			< 2.0 U	
VOCs	N	ACETONE	67-64-1	ug/L		< 5.0 UJ		3.9 J			< 5.0 UJ	
VOCs	N	BENZENE	71-43-2	ug/L		< 1.0 U		1.3			< 1.0 U	
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L		< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	BROMOFORM	75-25-2	ug/L		< 2.0 U		< 0.50 U			< 2.0 U	
VOCs	N	BROMOMETHANE	74-83-9	ug/L		< 2.0 UJ		< 1.0 U			< 2.0 UJ	
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L		2.5 J		0.40 J			< 1.0 U	
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L		< 2.0 UJ		< 0.50 U			< 2.0 UJ	
VOCs	N	CHLOROBENZENE	108-90-7	ug/L		< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	CHLOROETHANE	75-00-3	ug/L		< 1.0 U		< 1.0 UJ			< 1.0 U	
VOCs	N	CHLOROFORM	67-66-3	ug/L		< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	CHLOROMETHANE	74-87-3	ug/L		< 1.0 U		< 1.0 U			< 1.0 U	
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L		< 1.0 U		< 0.50 U			< 1.0 U	

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					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-09	P09-09	P09-10	P09-10	P09-10	P09-10	P09-10
					Sample Date	9/12/2016	9/12/2016	10/1/2013	9/8/2015	9/8/2015	9/12/2016	9/12/2016
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-09-ME45-1	P09-09-ME45-1-F	P09-10-100113	P09-10-090815-1	P09-10-090815-1-F	P09-10-ME45-1	P09-10-ME45-1-F
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L	< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L	< 2.0 U		< 0.50 U			< 2.0 U	
VOCs	N	ETHYLBENZENE	100-41-4	ug/L	< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L			< 1.0 U				
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L	< 1.0 U		< 2.5 U			< 1.0 U	
VOCs	N	O-XYLENE	95-47-6	ug/L			< 0.50 U				
VOCs	N	STYRENE	100-42-5	ug/L	< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L	< 2.0 U		< 0.50 U			< 2.0 U	
VOCs	N	TOLUENE	108-88-3	ug/L	< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 2.0 U		< 0.50 U			< 2.0 U	
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L	< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U		< 0.50 U			< 1.0 U	
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U		1.1 J			< 1.0 U	
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L	< 1.0 U		< 1.5 U			< 1.0 U	

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

F = Filtered sample.

FD = Field duplicate.

FF = Field filtered sample.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

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				Location ID	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-12B
				Sample Date	10/15/2013	9/24/2014	9/9/2015	9/9/2015	9/16/2016	9/16/2016	10/14/2013
				Sample Type Code	N	N	N	N	N	N	N
				Sample ID	P09-11B-101513	P09-11B-092414-1	P09-11B-090915-1	P09-11B-090915-1-F	P09-11B-ME45-1	P09-11B-ME45-1-F	P09-12B-101413
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**							
Metals	F	ALUMINUM	7429-90-5	ug/L						3680	
Metals	F	ANTIMONY	7440-36-0	ug/L						18.4 J	
Metals	F	ARSENIC	7440-38-2	ug/L						< 40.0 U	
Metals	F	BERYLLIUM	7440-41-7	ug/L						< 15.0 U	
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L						52.8 J	
Metals	F	COPPER	7440-50-8	ug/L						< 50.0 U	
Metals	F	IRON	7439-89-6	ug/L						1730 J	
Metals	F	LEAD	7439-92-1	ug/L						< 15.0 U	
Metals	F	MANGANESE	7439-96-5	ug/L						752	
Metals	F	MERCURY	7439-97-6	ug/L						< 0.10 U	
Metals	F	NICKEL	7440-02-0	ug/L						55.8	
Metals	F	ZINC	7440-66-6	ug/L						156	
Metals	FF	ALUMINUM	7429-90-5	ug/L	< 1000 U			< 500 U			
Metals	FF	ANTIMONY	7440-36-0	ug/L	< 1.0 U			< 40.0 U			
Metals	FF	ARSENIC	7440-38-2	ug/L	10.2			< 40.0 U			
Metals	FF	BERYLLIUM	7440-41-7	ug/L	< 0.20 U			< 15.0 U			
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L	< 5.0 U			< 30.0 U			
Metals	FF	COPPER	7440-50-8	ug/L	< 3.0 U			88.6 J			
Metals	FF	IRON	7439-89-6	ug/L	1940			< 2500 U			
Metals	FF	LEAD	7439-92-1	ug/L	< 1.0 U			< 15.0 U			
Metals	FF	MANGANESE	7439-96-5	ug/L	184			< 75.0 U			
Metals	FF	MERCURY	7439-97-6	ug/L	< 0.10 U			< 0.050 UJ			
Metals	FF	NICKEL	7440-02-0	ug/L	18.4			41.9 J			
Metals	FF	ZINC	7440-66-6	ug/L	14.1			< 75.0 U			
Metals	N	ALUMINUM	7429-90-5	ug/L	196 J		< 500 U		3630		622000
Metals	N	ANTIMONY	7440-36-0	ug/L	< 1.0 U		< 40.0 U		20.2 J		9.2
Metals	N	ARSENIC	7440-38-2	ug/L	15.0		< 40.0 U		< 40.0 U		432
Metals	N	BERYLLIUM	7440-41-7	ug/L	< 0.20 U		< 15.0 U		< 15.0 U		56.4
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L	< 5.0 U		378		36.2 J		3810
Metals	N	COPPER	7440-50-8	ug/L	< 3.0 U		< 50.0 U		< 50.0 U		2150
Metals	N	IRON	7439-89-6	ug/L	1970		< 10000 U		1800 J		1380000
Metals	N	LEAD	7439-92-1	ug/L	< 1.0 U		< 15.0 U		< 15.0 U		2280
Metals	N	MANGANESE	7439-96-5	ug/L	169		88.2 J		859		10700
Metals	N	MERCURY	7439-97-6	ug/L	< 0.10 U		< 0.050 UJ		< 0.10 U		11.6
Metals	N	NICKEL	7440-02-0	ug/L	16.3		66.7		65.8		3080
Metals	N	ZINC	7440-66-6	ug/L	21.8		< 75.0 U		160		7260
PCBs	N	AROCLOR-1016	12674-11-2	ug/L	< 0.24 U						
PCBs	N	AROCLOR-1221	11104-28-2	ug/L	< 0.24 U						
PCBs	N	AROCLOR-1232	11141-16-5	ug/L	< 0.24 U						
PCBs	N	AROCLOR-1242	53469-21-9	ug/L	< 0.24 U						
PCBs	N	AROCLOR-1248	12672-29-6	ug/L	< 0.24 U						
PCBs	N	AROCLOR-1254	11097-69-1	ug/L	< 0.24 U						
PCBs	N	AROCLOR-1260	11096-82-5	ug/L	< 0.24 U						
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L	< 0.24 U						
Pesticides	N	4,4-DDD	72-54-8	ug/L	< 0.047 U						
Pesticides	N	4,4-DDE	72-55-9	ug/L	< 0.047 U						
Pesticides	N	4,4-DDT	50-29-3	ug/L	< 0.047 UJ						
Pesticides	N	ALDRIN	309-00-2	ug/L	< 0.024 U						
Pesticides	N	ALPHA-BHC	319-84-6	ug/L	< 0.024 UJ						
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L	< 0.024 UJ						

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-12B
					Sample Date	10/15/2013	9/24/2014	9/9/2015	9/9/2015	9/16/2016	9/16/2016	10/14/2013
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-11B-101513	P09-11B-092414-1	P09-11B-090915-1	P09-11B-090915-1-F	P09-11B-ME45-1	P09-11B-ME45-1-F	P09-12B-101413
Pesticides	N	BETA-BHC	319-85-7	ug/L		< 0.024 UJ						
Pesticides	N	DELTA-BHC	319-86-8	ug/L		< 0.024 UJ						
Pesticides	N	DIELDRIN	60-57-1	ug/L		< 0.047 UJ						
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L		< 0.024 UJ						
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L		< 0.047 U						
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L		< 0.047 UJ						
Pesticides	N	ENDRIN	72-20-8	ug/L		< 0.047 UJ						
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L		< 0.047 UJ						
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L		< 0.047 UJ						
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L		< 0.024 UJ						
Pesticides	N	HEPTACHLOR	76-44-8	ug/L		< 0.024 UJ						
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L		< 0.024 UJ						
Pesticides	N	LINDANE	58-89-9	ug/L		< 0.024 U						
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L		< 0.24 UJ						
Pesticides	N	TOXAPHENE	8001-35-2	ug/L		< 0.47 U						
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L								
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L		< 7.1 U				< 5.0 U		
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L						< 2.0 UJ		
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L		0.085 J				< 0.10 UJ		
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L		< 7.1 U				< 5.0 U		
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L		< 18 U				< 10 UJ		
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L		< 7.1 U				< 2.0 UJ		
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L		< 7.1 UJ				< 2.0 U		
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L		< 0.094 U				< 0.10 U		
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	2-NITROANILINE	88-74-4	ug/L		< 18 U				< 2.0 U		
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L		< 7.1 UJ						
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L		< 7.1 U				< 5.0 U		
SVOCs	N	3-NITROANILINE	99-09-2	ug/L		< 18 U				< 2.0 U		
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L		< 18 U				< 2.0 UJ		
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L		< 7.1 UJ				< 2.0 U		
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L		< 7.1 U				< 5.0 U		
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L						< 5.0 UJ		
SVOCs	N	4-NITROANILINE	100-01-6	ug/L		< 18 U				< 2.0 U		
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L		< 18 U				< 2.0 U		
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L		< 0.094 U				< 0.10 U		
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L		< 0.094 UJ				< 0.10 U		
SVOCs	N	ANTHRACENE	120-12-7	ug/L		< 0.094 UJ				< 0.10 U		
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L		< 0.094 UJ				< 0.10 U		
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L		< 0.094 U				< 0.10 UJ		
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L		< 0.094 UJ				< 0.10 U		
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L		< 0.094 U				< 0.10 U		

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HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-12B
					Sample Date	10/15/2013	9/24/2014	9/9/2015	9/9/2015	9/16/2016	9/16/2016	10/14/2013
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-11B-101513	P09-11B-092414-1	P09-11B-090915-1	P09-11B-090915-1-F	P09-11B-ME45-1	P09-11B-ME45-1-F	P09-12B-101413
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L		< 0.094 U				< 0.10 U		
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L		< 7.1 U				< 5.0 U		
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L		< 0.47 UJ				0.17 J		
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	CARBAZOLE	86-74-8	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	CHRYSENE	218-01-9	ug/L		< 0.094 U				< 0.10 U		
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L		< 0.094 UJ				< 0.10 U		
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L		< 7.1 U				< 2.0 UJ		
SVOCs	N	FLUORANTHENE	206-44-0	ug/L		< 0.094 UJ				< 0.10 U		
SVOCs	N	FLUORENE	86-73-7	ug/L		< 0.094 U				< 0.10 U		
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L		< 0.094 UJ				< 0.10 U		
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L		< 7.1 U				< 2.0 UJ		
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L		< 0.094 UJ				< 0.10 UJ		
SVOCs	N	ISOPHORONE	78-59-1	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	NAPHTHALENE	91-20-3	ug/L		< 0.094 U				< 0.10 U		
SVOCs	N	NITROBENZENE	98-95-3	ug/L		< 7.1 U				< 5.0 U		
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L		< 7.1 U						
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L		< 7.1 U				< 5.0 U		
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L		< 0.47 U				< 1.0 UJ		
SVOCs	N	PHENANTHRENE	85-01-8	ug/L		< 0.094 UJ				< 0.10 U		
SVOCs	N	PHENOL	108-95-2	ug/L		< 7.1 U				< 2.0 U		
SVOCs	N	PYRENE	129-00-0	ug/L		< 0.094 UJ				< 0.10 U		
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L		< 0.50 U	< 1.0 U	< 1.0 U		< 1.0 U		< 0.50 U
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U
VOCs	N	2-BUTANONE	78-93-3	ug/L		< 2.5 U	< 2.5 U	< 2.5 UJ		< 5.0 UJ		16
VOCs	N	2-HEXANONE	591-78-6	ug/L		< 2.5 U	< 2.5 U	< 2.5 U		< 5.0 UJ		< 2.5 U
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L		< 2.5 UJ	< 1.0 U	< 2.5 U		< 2.0 UJ		< 2.5 UJ
VOCs	N	ACETONE	67-64-1	ug/L		< 2.5 U	< 2.5 U	< 2.5 UJ		< 5.0 UJ		370
VOCs	N	BENZENE	71-43-2	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	BROMOFORM	75-25-2	ug/L		< 0.50 U	< 1.0 U	< 1.0 UJ		< 2.0 U		< 0.50 U
VOCs	N	BROMOMETHANE	74-83-9	ug/L		< 1.0 U	< 1.0 U	< 1.0 UJ		< 2.0 UJ		< 1.0 U
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U
VOCs	N	CHLOROBENZENE	108-90-7	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	CHLOROETHANE	75-00-3	ug/L		< 1.0 U	< 0.50 U	< 0.50 UJ		< 1.0 U		< 1.0 U
VOCs	N	CHLOROFORM	67-66-3	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	CHLOROMETHANE	74-87-3	ug/L		< 1.0 U	< 0.50 U	< 0.50 UJ		< 1.0 U		< 1.0 U
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U

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NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-12B
					Sample Date	10/15/2013	9/24/2014	9/9/2015	9/9/2015	9/16/2016	9/16/2016	10/14/2013
					Sample Type Code	N	N	N	N	N	N	N
					Sample ID	P09-11B-101513	P09-11B-092414-1	P09-11B-090915-1	P09-11B-090915-1-F	P09-11B-ME45-1	P09-11B-ME45-1-F	P09-12B-101413
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 UJ		< 0.50 U
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U
VOCs	N	ETHYLBENZENE	100-41-4	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L		< 1.0 U						< 1.0 U
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L		< 2.5 U	< 0.50 U	< 0.50 U		< 1.0 U		< 2.5 UJ
VOCs	N	O-XYLENE	95-47-6	ug/L		< 0.50 U						< 0.50 U
VOCs	N	STYRENE	100-42-5	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 UJ		< 0.50 U
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U
VOCs	N	TOLUENE	108-88-3	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L		< 0.50 U	< 0.50 U	< 0.50 UJ		< 1.0 UJ		< 0.50 U
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L		< 1.0 U	< 0.50 U	< 0.50 U		< 1.0 U		< 1.0 U
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L		< 1.5 U	< 1.0 U	< 1.0 U		< 1.0 UJ		< 1.5 U

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

F = Filtered sample.

FD = Field duplicate.

FF = Field filtered sample.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

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SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-12B	P09-12B	P09-12B	P09-12B	P09-12B
					Sample Date	9/22/2014	9/8/2015	9/8/2015	9/13/2016	9/13/2016
					Sample Type Code	N	N	N	N	N
					Sample ID	P09-12B-092214-1	P09-12B-090815-1	P09-12B-090815-1-F	P09-12B-ME45-1	P09-12B-ME45-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**						
Metals	F	ALUMINUM	7429-90-5	ug/L						43.5
Metals	F	ANTIMONY	7440-36-0	ug/L						< 0.80 U
Metals	F	ARSENIC	7440-38-2	ug/L						0.20 J-
Metals	F	BERYLLIUM	7440-41-7	ug/L						< 0.30 U
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L						1.1 J-
Metals	F	COPPER	7440-50-8	ug/L						0.44 J
Metals	F	IRON	7439-89-6	ug/L						18600
Metals	F	LEAD	7439-92-1	ug/L						0.17 J
Metals	F	MANGANESE	7439-96-5	ug/L						1250
Metals	F	MERCURY	7439-97-6	ug/L						< 0.10 U
Metals	F	NICKEL	7440-02-0	ug/L						1.4
Metals	F	ZINC	7440-66-6	ug/L						16.9
Metals	FF	ALUMINUM	7429-90-5	ug/L				516		
Metals	FF	ANTIMONY	7440-36-0	ug/L				< 16.0 U		
Metals	FF	ARSENIC	7440-38-2	ug/L				< 16.0 U		
Metals	FF	BERYLLIUM	7440-41-7	ug/L				< 6.0 U		
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L				< 40.0 U		
Metals	FF	COPPER	7440-50-8	ug/L				< 20.0 U		
Metals	FF	IRON	7439-89-6	ug/L				15400		
Metals	FF	LEAD	7439-92-1	ug/L				< 6.0 U		
Metals	FF	MANGANESE	7439-96-5	ug/L				17300		
Metals	FF	MERCURY	7439-97-6	ug/L				0.073 J-		
Metals	FF	NICKEL	7440-02-0	ug/L				12500		
Metals	FF	ZINC	7440-66-6	ug/L				33.9 J		
Metals	N	ALUMINUM	7429-90-5	ug/L		13500			332	
Metals	N	ANTIMONY	7440-36-0	ug/L		< 20.0 U			< 0.80 U	
Metals	N	ARSENIC	7440-38-2	ug/L		115			0.35 J-	
Metals	N	BERYLLIUM	7440-41-7	ug/L		< 7.5 U			< 0.30 U	
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L		208			8.5	
Metals	N	COPPER	7440-50-8	ug/L		59.4			1.3 J	
Metals	N	IRON	7439-89-6	ug/L		36300			43300	
Metals	N	LEAD	7439-92-1	ug/L		46.2			1.6	
Metals	N	MANGANESE	7439-96-5	ug/L		6830			1150	
Metals	N	MERCURY	7439-97-6	ug/L		0.50 J-			< 0.10 U	
Metals	N	NICKEL	7440-02-0	ug/L		4220			9.0	
Metals	N	ZINC	7440-66-6	ug/L		397			128	
PCBs	N	AROCLOR-1016	12674-11-2	ug/L						
PCBs	N	AROCLOR-1221	11104-28-2	ug/L						
PCBs	N	AROCLOR-1232	11141-16-5	ug/L						
PCBs	N	AROCLOR-1242	53469-21-9	ug/L						
PCBs	N	AROCLOR-1248	12672-29-6	ug/L						
PCBs	N	AROCLOR-1254	11097-69-1	ug/L						
PCBs	N	AROCLOR-1260	11096-82-5	ug/L						
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L						
Pesticides	N	4,4-DDD	72-54-8	ug/L						
Pesticides	N	4,4-DDE	72-55-9	ug/L						
Pesticides	N	4,4-DDT	50-29-3	ug/L						
Pesticides	N	ALDRIN	309-00-2	ug/L						
Pesticides	N	ALPHA-BHC	319-84-6	ug/L						
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L						

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-12B	P09-12B	P09-12B	P09-12B	P09-12B
					Sample Date	9/22/2014	9/8/2015	9/8/2015	9/13/2016	9/13/2016
					Sample Type Code	N	N	N	N	N
					Sample ID	P09-12B-092214-1	P09-12B-090815-1	P09-12B-090815-1-F	P09-12B-ME45-1	P09-12B-ME45-1-F
Pesticides	N	BETA-BHC	319-85-7	ug/L						
Pesticides	N	DELTA-BHC	319-86-8	ug/L						
Pesticides	N	DIELDRIN	60-57-1	ug/L						
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L						
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L						
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L						
Pesticides	N	ENDRIN	72-20-8	ug/L						
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L						
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L						
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L						
Pesticides	N	HEPTACHLOR	76-44-8	ug/L						
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L						
Pesticides	N	LINDANE	58-89-9	ug/L						
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L						
Pesticides	N	TOXAPHENE	8001-35-2	ug/L						
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L						
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L					< 2.0 U	
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L					< 2.0 U	
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L					< 2.0 U	
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L					< 5.0 U	
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L					< 2.0 UJ	
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L					< 0.10 UJ	
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L					< 2.0 U	
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L					< 2.0 U	
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L					< 5.0 U	
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L					< 10 UJ	
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L					< 2.0 U	
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L					< 2.0 U	
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L					< 2.0 U	
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L					< 2.0 U	
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L					< 0.10 U	
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L					< 2.0 U	
SVOCs	N	2-NITROANILINE	88-74-4	ug/L					< 2.0 U	
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L					< 2.0 U	
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L						
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L					< 5.0 U	
SVOCs	N	3-NITROANILINE	99-09-2	ug/L					< 2.0 U	
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L					< 2.0 UJ	
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L					< 2.0 U	
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L					< 2.0 U	
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L					< 5.0 U	
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L					< 2.0 U	
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L					< 5.0 UJ	
SVOCs	N	4-NITROANILINE	100-01-6	ug/L					< 2.0 U	
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L					< 2.0 U	
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L					< 0.10 U	
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L					< 0.10 U	
SVOCs	N	ANTHRACENE	120-12-7	ug/L					< 0.10 U	
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L					< 0.10 U	
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L					< 0.10 UJ	
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L					< 0.10 U	
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L					< 0.10 U	

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-12B	P09-12B	P09-12B	P09-12B	P09-12B
					Sample Date	9/22/2014	9/8/2015	9/8/2015	9/13/2016	9/13/2016
					Sample Type Code	N	N	N	N	N
					Sample ID	P09-12B-092214-1	P09-12B-090815-1	P09-12B-090815-1-F	P09-12B-ME45-1	P09-12B-ME45-1-F
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L				< 0.10 U	
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L				< 5.0 U	
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L				< 2.0 U	
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L				0.43 J	
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L				< 2.0 U	
SVOCs	N	CARBAZOLE	86-74-8	ug/L				< 2.0 U	
SVOCs	N	CHRYSENE	218-01-9	ug/L				0.13	
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L				< 0.10 U	
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L				< 2.0 U	
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L				< 2.0 U	
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L				< 2.0 U	
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L				< 2.0 U	
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L				< 2.0 UJ	
SVOCs	N	FLUORANTHENE	206-44-0	ug/L				< 0.10 U	
SVOCs	N	FLUORENE	86-73-7	ug/L				< 0.10 U	
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L				< 0.10 U	
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L				< 2.0 UJ	
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L				< 2.0 U	
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L				< 2.0 U	
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L				< 0.10 UJ	
SVOCs	N	ISOPHORONE	78-59-1	ug/L				< 2.0 U	
SVOCs	N	NAPHTHALENE	91-20-3	ug/L				< 0.10 U	
SVOCs	N	NITROBENZENE	98-95-3	ug/L				< 5.0 U	
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L					
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L				< 2.0 U	
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L				< 5.0 U	
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L				< 1.0 UJ	
SVOCs	N	PHENANTHRENE	85-01-8	ug/L				< 0.10 U	
SVOCs	N	PHENOL	108-95-2	ug/L				< 2.0 U	
SVOCs	N	PYRENE	129-00-0	ug/L				< 0.10 U	
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L	< 0.50 U	< 0.50 U		< 1.0 UJ	
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 1.0 U	< 1.0 U		< 1.0 U	
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L	< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L	< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L	< 1.0 U	< 1.0 U		< 2.0 U	
VOCs	N	2-BUTANONE	78-93-3	ug/L	< 2.5 U	< 2.5 UJ		< 5.0 UJ	
VOCs	N	2-HEXANONE	591-78-6	ug/L	< 2.5 U	< 2.5 U		< 5.0 UJ	
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L	< 1.0 U	< 2.5 U		< 2.0 U	
VOCs	N	ACETONE	67-64-1	ug/L	15	9.2 J		< 5.0 UJ	
VOCs	N	BENZENE	71-43-2	ug/L	< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L	< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	BROMOFORM	75-25-2	ug/L	< 1.0 U	< 1.0 UJ		< 2.0 U	
VOCs	N	BROMOMETHANE	74-83-9	ug/L	< 1.0 U	< 1.0 UJ		< 2.0 UJ	
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L	< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L	< 1.0 U	< 1.0 U		< 2.0 UJ	
VOCs	N	CHLOROBENZENE	108-90-7	ug/L	< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	CHLOROETHANE	75-00-3	ug/L	< 0.50 U	< 0.50 UJ		< 1.0 U	
VOCs	N	CHLOROFORM	67-66-3	ug/L	< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	CHLOROMETHANE	74-87-3	ug/L	< 0.50 U	< 0.50 UJ		< 1.0 U	
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 0.50 U	< 0.50 U		< 1.0 U	

APPENDIX A TABLE 4
ANALYTICAL DATA SUMMARY TABLE- SHALLOW GROUNDWATER (PIEZOMETERS)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-12B	P09-12B	P09-12B	P09-12B	P09-12B
					Sample Date	9/22/2014	9/8/2015	9/8/2015	9/13/2016	9/13/2016
					Sample Type Code	N	N	N	N	N
					Sample ID	P09-12B-092214-1	P09-12B-090815-1	P09-12B-090815-1-F	P09-12B-ME45-1	P09-12B-ME45-1-F
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L		< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L		< 1.0 U	< 1.0 U		< 2.0 U	
VOCs	N	ETHYLBENZENE	100-41-4	ug/L		< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L						
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L		< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	O-XYLENE	95-47-6	ug/L						
VOCs	N	STYRENE	100-42-5	ug/L		< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L		< 1.0 U	< 1.0 U		< 2.0 U	
VOCs	N	TOLUENE	108-88-3	ug/L		< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L		< 1.0 U	< 1.0 U		< 2.0 U	
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L		< 0.50 U	< 0.50 UJ		< 1.0 U	
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L		< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L		< 0.50 U	< 0.50 U		< 1.0 U	
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L		< 1.0 U	< 1.0 U		< 1.0 U	

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

F = Filtered sample.

FD = Field duplicate.

FF = Field filtered sample.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENDIX A TABLE 5
SAMPLE SUMMARY TABLE - SHELLFISH TISSUE
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
DAVISVILLE, RHODE ISLAND

Location ID	Sample Date	Sample ID	Sample Type Code	Parent Sample ID
ET09-03	10/1/2013	ET09-03-100113	N	
ET09-03	9/22/2014	ET09-03-092214-1	N	
ET09-03	9/14/2015	ET09-03-091415-1	N	
ET09-03	12/14/2016	ET09-03-ME45R-1	N	
ET09-04	10/1/2013	ET09-04-100113-2	FD	ET09-04-100113
ET09-04	10/1/2013	ET09-04-100113	N	
ET09-04	10/1/2013	ET09-04-100113-2FD	FD	ET09-04-100113
ET09-04	9/22/2014	ET09-04-092214-1	N	
ET09-04	9/14/2015	ET09-04-091415-1	N	
ET09-04	12/14/2016	ET09-04-ME45R-1	N	
ET09-05	10/1/2013	ET09-05-100113	N	
ET09-05	9/23/2014	ET09-05-092314-1	N	
ET09-05	9/23/2014	ET09-05-092314-2	FD	ET09-05-092314-1
ET09-05	9/9/2015	ET09-05-090915-1	N	
ET09-05	12/13/2016	ET09-05-ME45R-1	N	
ET09-05	12/13/2016	ET09-ME45R-FD01	FD	ET09-05-ME45R-1
ET09-06	10/1/2013	ET09-06-100113	N	
ET09-06	9/22/2014	ET09-06-092214-1	N	
ET09-06	9/9/2015	ET09-06-090915-1	N	
ET09-06	12/13/2016	ET09-06-ME45R-1	N	
ET09-07	9/15/2015	ET09-07-091515-1	N	
ET09-07	12/14/2016	ET09-07-ME45R-1	N	
ET09-08	9/15/2015	ET09-08-091515-1	N	
ET09-08	12/14/2016	ET09-08-ME45R-1	N	
ET09-09	10/3/2013	ET09-09-100313	N	
ET09-09	9/23/2014	ET09-09-092314-1	N	
ET09-09	9/9/2015	ET09-09-090915-1	N	
ET09-09	12/13/2016	ET09-09-ME45R-1	N	
ET09-10	10/3/2013	ET09-10-100313	N	
ET09-10	9/24/2014	ET09-10-092414-1	N	
ET09-10	9/9/2015	ET09-10-090915-1	N	
ET09-10	12/13/2016	ET09-10-ME45R-1	N	
ET09-11	10/15/2013	ET09-11-101513	N	
ET09-11	9/23/2014	ET09-11-092314-1	N	
ET09-11	9/9/2015	ET09-11-090915-1	N	
ET09-11	12/13/2016	ET09-11-ME45R-1	N	
ET09-12	10/3/2013	ET09-12-100313	N	
ET09-12	9/24/2014	ET09-12-092414-1	N	
ET09-12	9/9/2015	ET09-12-090915-1	N	
ET09-12	9/9/2015	ET09-12-090915-2	FD	ET09-12-090915-1
ET09-12	12/13/2016	ET09-12-ME45R-1	N	

Notes:

FD = Field duplicate.

N = Normal sample.

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-03	ET09-03	ET09-03	ET09-03	ET09-04	ET09-04	ET09-04	ET09-04
			Sample Date	10/1/2013	9/22/2014	9/14/2015	12/14/2016	10/1/2013	10/1/2013	10/1/2013	9/22/2014
			Sample Type Code	N	N	N	N	FD	N	FD	N
			Sample ID	ET09-03-100113	ET09-03-092214-1	ET09-03-091415-1	ET09-03-ME45R-1	ET09-04-100113-2	ET09-04-100113	ET09-04-100113-2FD	ET09-04-092214-1
Analyte Group	**Compound**	**CAS**	**Units**								
Metals	ALUMINUM	7429-90-5	mg/kg	166 J	19.2	107	52.3		133 J	72.3 J	16.3
Metals	ANTIMONY	7440-36-0	mg/kg	< 0.740 U	0.24 J	< 0.53 U	< 0.82 U		< 0.718 U	< 0.718 U	0.62 J
Metals	ARSENIC	7440-38-2	mg/kg	3.52 J	3.4	2.7	2.4		5.17	4.98	4.1
Metals	BARIUM	7440-39-3	mg/kg	0.608 J	< 5.1 U	< 7.1 U	< 8.2 U		0.737 J	0.486 J	< 9.6 U
Metals	BERYLLIUM	7440-41-7	mg/kg	< 0.0670 U	0.0026 J	0.014 J	< 0.20 U		< 0.0650 U	< 0.0650 U	0.0074 J
Metals	CADMIUM	7440-43-9	mg/kg	0.213 J	0.23	0.17 J	0.12 J		0.148 J	0.202 J	0.19 J
Metals	CALCIUM	7440-70-2	mg/kg	685 J	418	559	662		2670 J	1910 J	395
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	< 3 U	< 0.51 U	< 0.71 U	< 0.82 U		< 2.91 U	< 2.91 U	< 0.96 U
Metals	COBALT	7440-48-4	mg/kg	< 1 U	< 1.3 U	< 1.8 U	0.12 J		< 0.971 U	< 0.971 U	< 2.4 U
Metals	COPPER	7440-50-8	mg/kg	3.58	1.9	3.0	< 1.4 U		2.77	2.50	1.9
Metals	IRON	7439-89-6	mg/kg	542 J	85.4	477	262		616 J	261 J	99.4
Metals	LEAD	7439-92-1	mg/kg	1.19 J	0.21 J	1.0	0.53		1.15 J	0.711 J	0.19 J
Metals	MAGNESIUM	7439-95-4	mg/kg	835	858	775	1010		838	777	905
Metals	MANGANESE	7439-96-5	mg/kg	29.4 J	2.4	21.3	22.1		46.0 J	27.5 J	10.4
Metals	MERCURY	7439-97-6	mg/kg	0.0111 J	0.0063 J	0.0090 J	0.0054 J		< 0.0093 U	0.0111 J	0.0067 J
Metals	NICKEL	7440-02-0	mg/kg	1.04 J	< 1.3 U	< 1.8 U	0.20 J		0.433 J	0.544 J	< 2.4 U
Metals	POTASSIUM	7440-09-7	mg/kg	1310	1280	840	901		1540	1630	1400
Metals	SELENIUM	7782-49-2	mg/kg	< 0.800 U	< 0.51 U	0.61 J	< 0.82 U		< 0.777 U	< 0.777 U	< 0.96 U
Metals	SILVER	7440-22-4	mg/kg	< 0.170 U	0.14 J	0.15 J	0.13 J		< 0.165 U	< 0.165 U	0.20 J
Metals	SODIUM	7440-23-5	mg/kg	6330	7340	5180	7570		6380	5800	7510
Metals	THALLIUM	7440-28-0	mg/kg	< 0.520 U	< 0.26 U	< 0.35 U	< 0.41 UJ		< 0.505 U	< 0.505 U	< 0.48 U
Metals	VANADIUM	7440-62-2	mg/kg	< 1 U	< 1.3 U	0.70 J	< 2.0 U		< 0.971 U	< 0.971 U	< 2.4 U
Metals	ZINC	7440-66-6	mg/kg	10.4 J	7.2	9.8	5.5		9.72 J	10.0 J	7.5
PCBs	DECACHLOROBIPHENYL	2051-24-3	mg/kg	< 0.00042 U	< 0.00041 U	< 0.00042 U	0.00026 J	< 0.00041 U	< 0.00042 U		< 0.00042 U
PCBs	DICHLOROBIPHENYL	25512-42-9	mg/kg	< 0.000083 U	< 0.000082 U	< 0.000083 U	< 0.000082 U	< 0.000082 U	< 0.000083 U		< 0.000083 U
PCBs	HEPTACHLOROBIPHENYL	28655-71-2	mg/kg	0.0080	< 0.00025 U	0.0065	0.0053	0.00050 J	0.0017 J		< 0.00025 U
PCBs	HEXACHLOROBIPHENYL	26601-64-9	mg/kg	0.0081 J	0.0029	0.018	0.016	0.0033 J	0.0071 J		0.00092
PCBs	MONOCHLOROBIPHENYL	27323-18-8	mg/kg	< 0.000083 U	< 0.000082 U	< 0.00017 U	< 0.00017 U	< 0.000082 U	< 0.000083 U		< 0.000083 U
PCBs	NONACHLOROBIPHENYL	53742-07-7	mg/kg	< 0.00042 U	< 0.00041 U	< 0.00042 U	< 0.00041 U	< 0.00041 U	< 0.00042 U		< 0.00042 U
PCBs	OCTACHLOROBIPHENYL	55722-26-4	mg/kg	0.0026	< 0.00025 U	< 0.00050 U	< 0.00050 U	< 0.00025 U	< 0.00025 U		< 0.00025 U
PCBs	PENTACHLOROBIPHENYL	25429-29-2	mg/kg	0.0011	< 0.00017 U	0.0058	0.0051	0.0014 J	0.0030 J		< 0.00017 U
PCBs	POLYCHLORINATED BIPHENYLS (PCBS) (b)	1336-36-3	mg/kg	0.02	0.0029	0.031	0.027	0.0051 J	0.012 J		0.00092
PCBs	TETRACHLOROBIPHENYL	26914-33-0	mg/kg	< 0.00017 U	< 0.00017 U	< 0.00017 U	0.00074	< 0.00017 U	0.00037 J		< 0.00017 U
PCBs	TOTAL PCB HOMOLOGS (a)	TOTALPCBHOMO	mg/kg	0.02	0.0029	0.03	0.027	0.0052	0.012		0.00092
PCBs	TRICHLOROBIPHENYL	25323-68-6	mg/kg	< 0.000083 U	< 0.000082 U	< 0.000083 U	< 0.000082 U	< 0.000082 U	< 0.000083 U		< 0.000083 U
Pesticides	4,4-DDD	72-54-8	mg/kg	R	< 0.00085 U	0.012 J	< 0.00085 U		< 0.015 U	< 0.0034 U	< 0.00085 U
Pesticides	4,4-DDE	72-55-9	mg/kg	0.0037	< 0.00085 U	0.0027 J	< 0.00085 U		0.0027 J	0.0027 J	< 0.00085 U
Pesticides	4,4-DDT	50-29-3	mg/kg	< 0.0073 U	< 0.00085 U	0.0055 J	< 0.00085 U		< 0.0034 U	< 0.0036 U	< 0.00085 U
Pesticides	ALDRIN	309-00-2	mg/kg	0.00060 J	< 0.00042 U	0.0019 J	< 0.00042 U		0.0012 J	0.00074 J	< 0.00043 U
Pesticides	ALPHA-BHC	319-84-6	mg/kg	0.0014 J	< 0.00042 U	< 0.00042 UJ	< 0.00021 U		< 0.0017 U	< 0.0016 U	< 0.00043 U
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg	< 0.0016 U	< 0.00042 U	0.0010 J	< 0.00021 U		< 0.0017 U	< 0.0016 U	< 0.00043 U
Pesticides	BETA-BHC	319-85-7	mg/kg	< 0.0038 U	< 0.00042 U	0.00099 J	< 0.00021 U		< 0.0038 U	< 0.0038 U	< 0.00043 U
Pesticides	DELTA-BHC	319-86-8	mg/kg	R	< 0.00042 U	< 0.00042 UJ	< 0.00042 U		< 0.0027 U	< 0.0016 U	< 0.00043 U
Pesticides	DIELDRIN	60-57-1	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U		< 0.0034 U	0.0010 J	< 0.00085 U
Pesticides	ENDOSULFAN I	959-98-8	mg/kg	< 0.0016 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U		0.00084 J	< 0.0016 U	< 0.00043 U
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U		< 0.0034 U	< 0.0034 U	< 0.00085 U
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U		< 0.0034 U	< 0.0034 U	< 0.00085 U
Pesticides	ENDRIN	72-20-8	mg/kg	< 0.0034 U	< 0.00085 U	0.0035 J	< 0.00042 U		< 0.0034 U	< 0.0034 U	< 0.00085 U
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00085 U		0.00080 J	< 0.0034 U	< 0.00085 U
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg	< 0.0036 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U		< 0.0036 U	< 0.0036 U	< 0.00085 U
Pesticides	HEPTACHLOR	76-44-8	mg/kg	R	< 0.00042 U	< 0.00042 UJ	< 0.00021 U		0.0035	< 0.0016 U	< 0.00043 U

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-03	ET09-03	ET09-03	ET09-03	ET09-04	ET09-04	ET09-04	ET09-04
			Sample Date	10/1/2013	9/22/2014	9/14/2015	12/14/2016	10/1/2013	10/1/2013	10/1/2013	9/22/2014
			Sample Type Code	N	N	N	N	FD	N	FD	N
			Sample ID	ET09-03-100113	ET09-03-092214-1	ET09-03-091415-1	ET09-03-ME45R-1	ET09-04-100113-2	ET09-04-100113	ET09-04-100113-2FD	ET09-04-092214-1
Analyte Group	**Compound**	**CAS**	**Units**								
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	0.0011 J	< 0.00042 U	< 0.00042 UJ	< 0.00042 U		0.0013 J	< 0.0016 U	< 0.00043 U
Pesticides	LINDANE	58-89-9	mg/kg	< 0.0016 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U		< 0.0017 U	< 0.0016 U	< 0.00043 U
Pesticides	METHOXYCHLOR	72-43-5	mg/kg	0.0043 J	< 0.0042 U	< 0.0042 UJ	< 0.0021 U		0.0046 J	< 0.013 U	< 0.0043 U
Pesticides	TOXAPHENE	8001-35-2	mg/kg	< 0.066 U	< 0.017 U	< 0.017 UJ	< 0.017 U		< 0.066 U	< 0.066 U	< 0.017 U
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg	0.0066 J	< 0.00042 U	0.00087 J	< 0.00042 U		0.0045	0.0059	< 0.00043 U
SVOCs	1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	1,2-DICHLOROBENZENE	95-50-1	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	1,3-DICHLOROBENZENE	541-73-1	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	1,4-DICHLOROBENZENE	106-46-7	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	mg/kg		< 0.067 U	< 0.066 U	< 0.13 UJ				< 0.066 U
SVOCs	2,4,5-TRICHLOROPHENOL	95-95-4	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	2,4,6-TRICHLOROPHENOL	88-06-2	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	2,4-DICHLOROPHENOL	120-83-2	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	2,4-DIMETHYLPHENOL	105-67-9	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	2,4-DINITROPHENOL	51-28-5	mg/kg	< 6 U	< 0.17 U	< 0.16 UJ	< 0.33 UJ		< 4 U	< 3.9 U	< 0.16 U
SVOCs	2,4-DINITROTOLUENE	121-14-2	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U
SVOCs	2,6-DINITROTOLUENE	606-20-2	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	2-CHLORONAPHTHALENE	91-58-7	mg/kg	< 0.2 UJ	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 UJ	< 0.13 UJ	< 0.066 U
SVOCs	2-CHLOROPHENOL	95-57-8	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	0.037	0.0044 J	< 0.0033 U	< 0.0065 U		0.039	0.035	0.0074 J
SVOCs	2-METHYLPHENOL	95-48-7	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		0.085 J	< 0.13 U	< 0.066 U
SVOCs	2-NITROANILINE	88-74-4	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	2-NITROPHENOL	88-75-5	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	3,3-DICHLOROBENZIDINE	91-94-1	mg/kg	< 2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 1.3 U	< 1.3 U	< 0.066 U
SVOCs	3-NITROANILINE	99-09-2	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U
SVOCs	4,6-DINITRO-2-METHYLPHENOL	534-52-1	mg/kg	< 3 U	< 0.067 U	< 0.066 UJ	< 0.13 UJ		< 2 U	< 2 U	< 0.066 U
SVOCs	4-BROMOPHENYL-PHENYLETHER	101-55-3	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	4-CHLORO-3-METHYLPHENOL	59-50-7	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	4-CHLOROANILINE	106-47-8	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	4-METHYLPHENOL	106-44-5	mg/kg	< 0.2 UJ	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 UJ	< 0.13 UJ	< 0.066 U
SVOCs	4-NITROANILINE	100-01-6	mg/kg	< 1 U	< 0.067 UJ	< 0.066 UJ	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 UJ
SVOCs	4-NITROPHENOL	100-02-7	mg/kg	< 3 U	< 0.067 UJ	< 0.066 U	< 0.13 U		< 2 U	< 2 U	< 0.066 UJ
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	0.025 J	0.0060	< 0.0033 U	< 0.0065 U		0.028	0.024	0.0066
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	0.0056 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0050 J	0.0062 J	< 0.0033 U
SVOCs	ANTHRACENE	120-12-7	mg/kg	0.0057 J	< 0.0033 U	< 0.0033 U	< 0.0065 UJ		0.0053 J	0.0077	< 0.0033 U
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	0.0070 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0039 J	0.0032 J	< 0.0033 U
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	0.0061 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0028 J	< 0.0066 U	< 0.0033 U
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	0.0077 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0041 J	0.0048 J	< 0.0033 U
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	< 0.01 UJ	< 0.0033 U	< 0.0033 U	< 0.0065 U		< 0.0067 UJ	< 0.0066 UJ	< 0.0033 U
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	0.0043 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0027 J	< 0.0066 U	< 0.0033 U
SVOCs	BIS(2-CHLOROETHOXY)METHANE	111-91-1	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	BIS(2-CHLOROETHYL)ETHER	111-44-4	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg	0.62 J	< 0.17 U	0.11 J	0.17 J-		0.39 J	0.3 J	< 0.066 U
SVOCs	BUTYLBENZYLPHTHALATE	85-68-7	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U
SVOCs	CARBAZOLE	86-74-8	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	CHRYSENE	218-01-9	mg/kg	0.0081 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0047 J	0.0050 J	< 0.0033 U
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	< 0.01 U	< 0.0033 U	< 0.0033 U	< 0.0065 UJ		< 0.0067 U	< 0.0066 U	< 0.0033 U
SVOCs	DIBENZOFURAN	132-64-9	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	DIETHYLPHTHALATE	84-66-2	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U
SVOCs	DIMETHYL PHTHALATE	131-11-3	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-03	ET09-03	ET09-03	ET09-03	ET09-04	ET09-04	ET09-04	ET09-04
			Sample Date	10/1/2013	9/22/2014	9/14/2015	12/14/2016	10/1/2013	10/1/2013	10/1/2013	9/22/2014
			Sample Type Code	N	N	N	N	FD	N	FD	N
			Sample ID	ET09-03-100113	ET09-03-092214-1	ET09-03-091415-1	ET09-03-ME45R-1	ET09-04-100113-2	ET09-04-100113	ET09-04-100113-2FD	ET09-04-092214-1
Analyte Group	**Compound**	**CAS**	**Units**								
SVOCs	DI-N-BUTYLPHTHALATE	84-74-2	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U
SVOCs	DI-N-OCTYLPHTHALATE	117-84-0	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U
SVOCs	FLUORANTHENE	206-44-0	mg/kg	0.034	< 0.0033 U	< 0.0033 U	0.0080		0.025	0.021	< 0.0033 U
SVOCs	FLUORENE	86-73-7	mg/kg	0.011	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.013	0.01	< 0.0033 U
SVOCs	HEXACHLOROBENZENE	118-74-1	mg/kg	< 0.1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.068 U	< 0.067 U	< 0.066 U
SVOCs	HEXACHLOROBUTADIENE	87-68-3	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	HEXACHLOROCYCLOPENTADIENE	77-47-4	mg/kg	R	< 0.17 U	< 0.16 U	< 0.33 UJ		< 2 U	< 2 U	< 0.16 U
SVOCs	HEXACHLOROETHANE	67-72-1	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	< 0.01 U	< 0.0033 UJ	< 0.0033 U	< 0.0065 U		< 0.0067 U	< 0.0066 U	< 0.0033 UJ
SVOCs	ISOPHORONE	78-59-1	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	NAPHTHALENE	91-20-3	mg/kg	0.03	0.01	< 0.0033 U	0.01		0.045	0.038	0.019
SVOCs	NITROBENZENE	98-95-3	mg/kg	0.22	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	N-NITROSODIMETHYLAMINE	62-75-9	mg/kg	< 1 U	< 0.067 U	< 0.066 U			< 0.67 U	< 0.66 U	< 0.066 U
SVOCs	N-NITROSODINPROPYLAMINE	621-64-7	mg/kg	< 0.2 U	< 0.067 U	< 0.066 UJ	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	N-NITROSODIPHENYLAMINE	86-30-6	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U
SVOCs	PENTACHLOROPHENOL	87-86-5	mg/kg	< 1 U	< 0.17 U	< 0.16 U	< 0.33 UJ		< 0.68 U	< 0.67 U	< 0.16 U
SVOCs	PHENANTHRENE	85-01-8	mg/kg	0.044	0.0090	< 0.0033 U	0.014		0.045	0.042	0.0087
SVOCs	PHENOL	108-95-2	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	0.1 J	< 0.066 U
SVOCs	PYRENE	129-00-0	mg/kg	0.03	< 0.0033 U	< 0.0033 U	0.0075		0.023	0.022	< 0.0033 U

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

FD = Field duplicate.

J = Estimated value.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

R = Rejected.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., homolog) concentrations. For samples without any detections of individual compounds (i.e., homolog) the maximum reporting detection limit within the sample is presented as a non-detect value.

(b) Lab calculated value; Not used. Totals for use in risk assessment are calculated as discussed in the report text.

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-04	ET09-04	ET09-05	ET09-05	ET09-05	ET09-05	ET09-05	ET09-05
			Sample Date	9/14/2015	12/14/2016	10/1/2013	9/23/2014	9/23/2014	9/9/2015	12/13/2016	12/13/2016
			Sample Type Code	N	N	N	N	FD	N	N	FD
			Sample ID	ET09-04-091415-1	ET09-04-ME45R-1	ET09-05-100113	ET09-05-092314-1	ET09-05-092314-2	ET09-05-090915-1	ET09-05-ME45R-1	ET09-ME45R-FD01
Analyte Group	**Compound**	**CAS**	**Units**								
Metals	ALUMINUM	7429-90-5	mg/kg	51.6	128	15.1 J	16.8	19.9	146	21.5 J	6.8 J
Metals	ANTIMONY	7440-36-0	mg/kg	< 0.74 U	< 0.80 U	< 0.725 U	< 0.69 U	< 0.64 U	0.36 J	< 0.55 U	< 0.70 U
Metals	ARSENIC	7440-38-2	mg/kg	2.1	3.4	3.15 J	1.9	3.2	3.3	2.9	2.9
Metals	BARIUM	7440-39-3	mg/kg	< 9.8 U	< 10.0 U	0.222 J	< 9.3 U	< 8.5 U	< 7.5 U	< 6.9 U	< 8.7 U
Metals	BERYLLIUM	7440-41-7	mg/kg	0.0061 J	< 0.25 U	< 0.0657 U	0.0046 J	0.0052 J	0.018 J	< 0.17 U	< 0.22 U
Metals	CADMIUM	7440-43-9	mg/kg	0.10 J	0.17 J	0.0873 J	0.063 J	0.085 J	0.076 J	0.069 J	0.063 J
Metals	CALCIUM	7440-70-2	mg/kg	343	2430	631 J	332	448	810	1060	1300
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	< 0.98 U	1.1	< 0.157 U	< 0.93 U	< 0.85 U	1.1	< 0.69 U	< 0.87 U
Metals	COBALT	7440-48-4	mg/kg	< 2.5 U	0.26 J	< 0.98 U	< 2.3 U	< 2.1 U	< 1.9 U	0.17 J	0.18 J
Metals	COPPER	7440-50-8	mg/kg	2.4	6.4	1.39 J	1.1 J	1.7	2.8	< 1.1 U	< 1.3 U
Metals	IRON	7439-89-6	mg/kg	204	599	43.8 J	50.8	60.4	502	71.5 J	32.8 J
Metals	LEAD	7439-92-1	mg/kg	0.42 J	1.2	< 0.490 U	< 0.23 U	< 0.21 U	1.2	0.14 J	< 0.22 U
Metals	MAGNESIUM	7439-95-4	mg/kg	761	1250	891	640	960	976	1000	1040
Metals	MANGANESE	7439-96-5	mg/kg	7.8	41.4	4.98 J	4.1	5.1	10.4	2.6	< 2.2 U
Metals	MERCURY	7439-97-6	mg/kg	0.0072 J	0.0068 J	< 0.0095 U	0.0068 J	0.0059 J	0.0052 J	0.0072 J	0.0074 J
Metals	NICKEL	7440-02-0	mg/kg	< 2.5 U	0.70 J	0.649 J	< 2.3 U	< 2.1 U	< 1.9 U	0.87 J	0.88 J
Metals	POTASSIUM	7440-09-7	mg/kg	913	1350	1350	931	1530	1190	1120	1170
Metals	SELENIUM	7782-49-2	mg/kg	< 1.5 U	1.2 J	< 0.784 U	< 0.93 U	< 0.85 U	< 1.1 U	0.64 J	0.57 J
Metals	SILVER	7440-22-4	mg/kg	0.11 J	0.15 J	< 0.167 U	0.11 J	0.11 J	0.066 J	0.076 J	0.075 J
Metals	SODIUM	7440-23-5	mg/kg	5660	9130	6550	4650	7140	6260	7500	7420
Metals	THALLIUM	7440-28-0	mg/kg	< 0.49 U	< 0.50 UJ	< 0.510 U	< 0.46 U	< 0.42 U	< 0.37 U	< 0.34 UJ	< 0.43 UJ
Metals	VANADIUM	7440-62-2	mg/kg	0.35 J	< 2.5 U	< 0.127 U	< 2.3 U	< 2.1 U	0.58 J	< 1.7 U	< 2.2 U
Metals	ZINC	7440-66-6	mg/kg	6.3	10.6	17.5 J	12.5	16.8	24.2	12.5	13.2
PCBs	DECACHLOROBIPHENYL	2051-24-3	mg/kg	< 0.00042 U	< 0.00042 U	< 0.00041 U	< 0.00042 U	< 0.00042 U	< 0.00041 U	0.00038 J	0.00023 J
PCBs	DICHLOROBIPHENYL	25512-42-9	mg/kg	0.00039 J	0.00042	< 0.000082 U	< 0.000083 U	< 0.000083 U	< 0.000082 U	< 0.000083 U	< 0.000082 U
PCBs	HEPTACHLOROBIPHENYL	28655-71-2	mg/kg	0.0031	0.0037	0.00075 J	< 0.00025 U	< 0.00025 U	0.0018	0.00071 J	0.00021 J
PCBs	HEXACHLOROBIPHENYL	26601-64-9	mg/kg	0.012	0.015	0.0018	< 0.00017 U	< 0.00017 U	0.0032	0.0015	0.00096
PCBs	MONOCHLOROBIPHENYL	27323-18-8	mg/kg	< 0.00017 U	< 0.00017 U	< 0.000082 U	< 0.000083 U	< 0.000083 U	< 0.00017 U	< 0.00017 U	< 0.00016 U
PCBs	NONACHLOROBIPHENYL	53742-07-7	mg/kg	< 0.00042 U	< 0.00042 U	< 0.00041 U	< 0.00042 U	< 0.00042 U	< 0.00041 U	< 0.00042 U	< 0.00041 U
PCBs	OCTACHLOROBIPHENYL	55722-26-4	mg/kg	< 0.00050 U	< 0.00050 U	< 0.00025 U	< 0.00025 U	< 0.00025 U	< 0.00050 U	< 0.00050 U	< 0.00049 U
PCBs	PENTACHLOROBIPHENYL	25429-29-2	mg/kg	0.0048	0.0066	< 0.00016 U	< 0.00017 U	< 0.00017 U	0.00041 J	0.00019 J	0.00015 J
PCBs	POLYCHLORINATED BIPHENYLS (PCBS) (b)	1336-36-3	mg/kg	0.02	0.028	0.0026	< 0.000083 U	< 0.000083 U	0.0054	0.0030 J	0.0015 J
PCBs	TETRACHLOROBIPHENYL	26914-33-0	mg/kg	0.00028 J	0.0012	< 0.00016 U	< 0.00017 U	< 0.00017 U	< 0.00017 U	< 0.00017 U	< 0.00016 U
PCBs	TOTAL PCB HOMOLOGS (a)	TOTALPCBHOMO	mg/kg	0.021	0.027	0.0026	< 0.00042 U	< 0.00042 U	0.0054	0.0030	0.0016
PCBs	TRICHLOROBIPHENYL	25323-68-6	mg/kg	0.00015 J	0.000088 J	< 0.000082 U	< 0.000083 U	< 0.000083 U	< 0.000082 U	0.00019 J	< 0.000082 U
Pesticides	4,4-DDD	72-54-8	mg/kg	< 0.00084 UJ	< 0.00084 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	< 0.00084 U
Pesticides	4,4-DDE	72-55-9	mg/kg	< 0.00084 UJ	< 0.00084 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	< 0.00084 U
Pesticides	4,4-DDT	50-29-3	mg/kg	< 0.00084 UJ	< 0.00084 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	< 0.00084 U
Pesticides	ALDRIN	309-00-2	mg/kg	< 0.00042 UJ	< 0.00042 U	< 0.0016 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00043 U	< 0.00042 U
Pesticides	ALPHA-BHC	319-84-6	mg/kg	< 0.00042 UJ	< 0.00021 U	0.00076 J	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U	< 0.00021 U
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg	< 0.00042 UJ	< 0.00021 U	0.0011 J	< 0.00043 U	< 0.00042 U	0.0015 J	< 0.00021 U	< 0.00021 U
Pesticides	BETA-BHC	319-85-7	mg/kg	< 0.00042 UJ	< 0.00021 U	< 0.0038 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U	< 0.00021 U
Pesticides	DELTA-BHC	319-86-8	mg/kg	< 0.00042 UJ	< 0.00042 U	0.0010 J	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00043 U	< 0.00042 U
Pesticides	DIELDRIN	60-57-1	mg/kg	< 0.00084 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 U	< 0.00042 U
Pesticides	ENDOSULFAN I	959-98-8	mg/kg	< 0.00042 UJ	< 0.00021 U	< 0.0016 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U	< 0.00021 U
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg	< 0.00084 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 U	< 0.00042 U
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg	< 0.00084 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 U	< 0.00042 U
Pesticides	ENDRIN	72-20-8	mg/kg	< 0.00084 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 U	< 0.00042 U
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg	< 0.00084 UJ	< 0.00084 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	< 0.00084 U
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg	< 0.00084 UJ	< 0.00042 U	< 0.0036 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 U	< 0.00042 U
Pesticides	HEPTACHLOR	76-44-8	mg/kg	< 0.00042 UJ	< 0.00021 U	< 0.0016 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U	< 0.00021 U

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-04	ET09-04	ET09-05	ET09-05	ET09-05	ET09-05	ET09-05	ET09-05
			Sample Date	9/14/2015	12/14/2016	10/1/2013	9/23/2014	9/23/2014	9/9/2015	12/13/2016	12/13/2016
			Sample Type Code	N	N	N	N	FD	N	N	FD
			Sample ID	ET09-04-091415-1	ET09-04-ME45R-1	ET09-05-100113	ET09-05-092314-1	ET09-05-092314-2	ET09-05-090915-1	ET09-05-ME45R-1	ET09-ME45R-FD01
Analyte Group	**Compound**	**CAS**	**Units**								
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	< 0.00042 UJ	< 0.00042 U	< 0.0016 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00043 U	< 0.00042 U
Pesticides	LINDANE	58-89-9	mg/kg	< 0.00042 UJ	< 0.00021 U	< 0.0016 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U	< 0.00021 U
Pesticides	METHOXYCHLOR	72-43-5	mg/kg	< 0.0042 UJ	< 0.0021 U	< 0.013 U	< 0.0043 U	< 0.0042 U	< 0.0042 UJ	< 0.0021 U	< 0.0021 U
Pesticides	TOXAPHENE	8001-35-2	mg/kg	< 0.017 UJ	< 0.017 U	< 0.065 U	< 0.017 U	< 0.017 U	< 0.017 UJ	< 0.017 U	< 0.017 U
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg	< 0.00042 UJ	< 0.00042 U	0.00085 J	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00043 U	< 0.00042 U
SVOCs	1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	1,2-DICHLOROBENZENE	95-50-1	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	1,3-DICHLOROBENZENE	541-73-1	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	1,4-DICHLOROBENZENE	106-46-7	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	mg/kg	< 0.067 U	< 0.13 U		< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	2,4,5-TRICHLOROPHENOL	95-95-4	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 UJ	< 0.13 U	< 0.13 U
SVOCs	2,4,6-TRICHLOROPHENOL	88-06-2	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U	< 0.13 U
SVOCs	2,4-DICHLOROPHENOL	120-83-2	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U	< 0.13 U
SVOCs	2,4-DIMETHYLPHENOL	105-67-9	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	2,4-DINITROPHENOL	51-28-5	mg/kg	< 0.17 UJ	< 0.32 UJ	< 4 U	< 0.17 U	< 0.17 U	< 0.17 UJ	< 0.33 UJ	< 0.33 UJ
SVOCs	2,4-DINITROTOLUENE	121-14-2	mg/kg	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	2,6-DINITROTOLUENE	606-20-2	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	2-CHLORONAPHTHALENE	91-58-7	mg/kg	< 0.067 U	< 0.13 U	< 0.13 UJ	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	2-CHLOROPHENOL	95-57-8	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U	< 0.13 U
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	0.0082	0.012	0.0090	< 0.0033 UJ	< 0.0033 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0066 UJ
SVOCs	2-METHYLPHENOL	95-48-7	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U	< 0.13 U
SVOCs	2-NITROANILINE	88-74-4	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	2-NITROPHENOL	88-75-5	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U	< 0.13 U
SVOCs	3,3-DICHLOROBENZIDINE	91-94-1	mg/kg	< 0.067 U	< 0.13 U	< 1.3 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	3-NITROANILINE	99-09-2	mg/kg	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	R	< 0.13 UJ	< 0.13 UJ
SVOCs	4,6-DINITRO-2-METHYLPHENOL	534-52-1	mg/kg	< 0.067 UJ	< 0.13 UJ	< 2 U	< 0.067 U	< 0.067 U	R	< 0.13 UJ	< 0.13 UJ
SVOCs	4-BROMOPHENYL-PHENYLETHER	101-55-3	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	4-CHLORO-3-METHYLPHENOL	59-50-7	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	4-CHLOROANILINE	106-47-8	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	4-METHYLPHENOL	106-44-5	mg/kg	< 0.067 U	< 0.13 U	< 0.13 UJ	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	4-NITROANILINE	100-01-6	mg/kg	< 0.067 UJ	< 0.13 U	< 0.66 U	< 0.067 UJ	< 0.067 UJ	< 0.067 UJ	< 0.13 UJ	< 0.13 UJ
SVOCs	4-NITROPHENOL	100-02-7	mg/kg	< 0.067 U	< 0.13 U	< 2 U	< 0.067 UJ	< 0.067 UJ	< 0.067 U	< 0.13 U	< 0.13 U
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	0.013	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	< 0.0066 UJ
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	0.0043	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	< 0.0066 UJ
SVOCs	ANTHRACENE	120-12-7	mg/kg	0.021	< 0.0065 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	< 0.0066 UJ
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	< 0.0033 U	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 UJ
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	< 0.0033 U	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	< 0.0066 UJ
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	< 0.0033 U	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 UJ
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	< 0.0033 U	< 0.0065 U	< 0.0066 UJ	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	< 0.0066 UJ
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	< 0.0033 U	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 UJ
SVOCs	BIS(2-CHLOROETHOXY)METHANE	111-91-1	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	BIS(2-CHLOROETHYL)ETHER	111-44-4	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg	0.16 J	< 0.13 UJ	< 0.68 U	< 0.17 U	< 0.17 U	0.12 J	< 0.13 UJ	< 0.13 UJ
SVOCs	BUTYLBENZYLPHTHALATE	85-68-7	mg/kg	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	CARBAZOLE	86-74-8	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	CHRYSENE	218-01-9	mg/kg	< 0.0033 U	< 0.0065 U	0.0016 J	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 UJ
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	< 0.0033 U	< 0.0065 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	< 0.0066 UJ
SVOCs	DIBENZOFURAN	132-64-9	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	DIETHYLPHTHALATE	84-66-2	mg/kg	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	DIMETHYL PHTHALATE	131-11-3	mg/kg	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-04	ET09-04	ET09-05	ET09-05	ET09-05	ET09-05	ET09-05	ET09-05
			Sample Date	9/14/2015	12/14/2016	10/1/2013	9/23/2014	9/23/2014	9/9/2015	12/13/2016	12/13/2016
			Sample Type Code	N	N	N	N	FD	N	N	FD
			Sample ID	ET09-04-091415-1	ET09-04-ME45R-1	ET09-05-100113	ET09-05-092314-1	ET09-05-092314-2	ET09-05-090915-1	ET09-05-ME45R-1	ET09-ME45R-FD01
Analyte Group	**Compound**	**CAS**	**Units**								
SVOCs	DI-N-BUTYLPHTHALATE	84-74-2	mg/kg	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	DI-N-OCTYLPHTHALATE	117-84-0	mg/kg	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	FLUORANTHENE	206-44-0	mg/kg	< 0.0033 U	0.013	0.0057 J	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	< 0.0066 UJ
SVOCs	FLUORENE	86-73-7	mg/kg	0.0070	0.0069	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	< 0.0066 UJ
SVOCs	HEXACHLOROBENZENE	118-74-1	mg/kg	< 0.067 U	< 0.13 U	< 0.068 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	HEXACHLOROBUTADIENE	87-68-3	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	HEXACHLOROCYCLOPENTADIENE	77-47-4	mg/kg	< 0.17 U	< 0.32 UJ	< 2 U	< 0.17 U	< 0.17 U	R	< 0.33 UJ	< 0.33 UJ
SVOCs	HEXACHLOROETHANE	67-72-1	mg/kg	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 UJ	< 0.13 UJ	< 0.13 UJ
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	< 0.0033 U	< 0.0065 U	< 0.0066 U	< 0.0033 UJ	< 0.0033 UJ	< 0.0033 UJ	< 0.0066 UJ	< 0.0066 UJ
SVOCs	ISOPHORONE	78-59-1	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	NAPHTHALENE	91-20-3	mg/kg	0.017	0.024	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 UJ
SVOCs	NITROBENZENE	98-95-3	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	N-NITROSODIMETHYLAMINE	62-75-9	mg/kg	< 0.067 U		< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U		
SVOCs	N-NITROSODINPROPYLAMINE	621-64-7	mg/kg	< 0.067 UJ	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 UJ	< 0.13 UJ	< 0.13 UJ
SVOCs	N-NITROSODIPHENYLAMINE	86-30-6	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 UJ
SVOCs	PENTACHLOROPHENOL	87-86-5	mg/kg	< 0.17 U	< 0.32 U	< 0.68 U	< 0.17 U	< 0.17 U	< 0.17 UJ	< 0.33 UJ	< 0.33 UJ
SVOCs	PHENANTHRENE	85-01-8	mg/kg	< 0.0033 U	0.025	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	< 0.0066 UJ
SVOCs	PHENOL	108-95-2	mg/kg	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U	< 0.13 U
SVOCs	PYRENE	129-00-0	mg/kg	< 0.0033 U	0.011	0.0060 J	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	< 0.0066 UJ

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

FD = Field duplicate.

J = Estimated value.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

R = Rejected.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., homolog) concentrations. For samples without any detections of individual compounds (i.e., homolog) the maximum reporting detection limit within the sample is presented as a non-detect value.

(b) Lab calculated value; Not used. Totals for use in risk assessment are calculated as discussed in the report text.

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-06	ET09-06	ET09-06	ET09-06	ET09-07	ET09-07	ET09-08	ET09-08
			Sample Date	10/1/2013	9/22/2014	9/9/2015	12/13/2016	9/15/2015	12/14/2016	9/15/2015	12/14/2016
			Sample Type Code	N	N	N	N	N	N	N	N
			Sample ID	ET09-06-100113	ET09-06-092214-1	ET09-06-090915-1	ET09-06-ME45R-1	ET09-07-091515-1	ET09-07-ME45R-1	ET09-08-091515-1	ET09-08-ME45R-1
Analyte Group	**Compound**	**CAS**	**Units**								
Metals	ALUMINUM	7429-90-5	mg/kg	16.9 J	21.3	21.0	2.1 J	54.2	38.3	6.1 J	144
Metals	ANTIMONY	7440-36-0	mg/kg	< 0.740 U	0.37 J	0.45 J	< 0.59 U	< 0.68 U	< 0.72 U	< 0.50 U	< 0.52 U
Metals	ARSENIC	7440-38-2	mg/kg	4.73	4.2	3.0	2.6	3.1	2.0	4.1	2.5
Metals	BARIUM	7440-39-3	mg/kg	0.131 J	< 6.8 U	< 8.3 U	< 7.4 U	< 9.0 U	< 7.2 U	< 6.7 U	< 6.5 U
Metals	BERYLLIUM	7440-41-7	mg/kg	< 0.0670 U	0.0057 J	0.0066 J	< 0.18 U	0.0072 J	< 0.18 U	0.0023 J	< 0.16 U
Metals	CADMIUM	7440-43-9	mg/kg	0.145 J	0.12 J	0.089 J	0.064 J	0.55	0.46	0.21	0.15 J
Metals	CALCIUM	7440-70-2	mg/kg	427 J	419	403	606	663	700	930	635
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	< 3 U	< 0.68 U	< 0.83 U	< 0.74 U	< 0.90 U	1.1	< 0.67 U	1.4
Metals	COBALT	7440-48-4	mg/kg	< 0.0990 U	< 1.7 U	< 2.1 U	0.13 J	< 2.3 U	0.057 J	< 1.7 U	0.14 J
Metals	COPPER	7440-50-8	mg/kg	1.68 J	2.4	4.2	< 1.8 U	6.3	< 1.9 U	6.9	3.0
Metals	IRON	7439-89-6	mg/kg	62.6 J	80.9	108	15.9	208	113	21.8	390
Metals	LEAD	7439-92-1	mg/kg	< 0.500 U	0.16 J	< 0.41 U	0.14 J	0.39 J	0.26 J	< 0.34 U	0.88
Metals	MAGNESIUM	7439-95-4	mg/kg	737	890	881	927	848	941	1050	959
Metals	MANGANESE	7439-96-5	mg/kg	11.4 J	3.3	9.0	3.1	4.6	1.8	0.53 J	6.5
Metals	MERCURY	7439-97-6	mg/kg	0.0114 J	0.0098 J	0.0073 J	0.0066 J	0.0094 J	0.0096 J	< 0.020 U	0.014 J
Metals	NICKEL	7440-02-0	mg/kg	< 0.130 U	< 1.7 U	< 2.1 U	0.59 J	< 2.3 U	0.45 J	< 1.7 U	0.65 J
Metals	POTASSIUM	7440-09-7	mg/kg	1460	1600	1190	1440	810	865	822	855
Metals	SELENIUM	7782-49-2	mg/kg	< 0.800 U	< 0.68 U	< 1.2 U	0.62 J	< 1.4 U	< 0.72 U	< 1.0 U	0.71 J
Metals	SILVER	7440-22-4	mg/kg	< 0.170 U	0.11 J	0.11 J	0.093 J	1.2 J	0.94 J	1.2	0.57 J
Metals	SODIUM	7440-23-5	mg/kg	6090	7000	6470	6620	6060	7160	7530	6890
Metals	THALLIUM	7440-28-0	mg/kg	< 0.520 U	< 0.34 U	< 0.41 U	< 0.37 UJ	< 0.45 U	< 0.36 UJ	< 0.34 U	< 0.33 UJ
Metals	VANADIUM	7440-62-2	mg/kg	< 1 U	< 1.7 U	0.28 J	< 1.8 U	0.49 J	< 1.8 U	0.27 J	< 1.6 U
Metals	ZINC	7440-66-6	mg/kg	8.55 J	8.6	6.0	14.6	9.9	5.0	10.5	6.5
PCBs	DECACHLOROBIPHENYL	2051-24-3	mg/kg	< 0.00042 U	< 0.00042 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 U	< 0.00041 U	< 0.00041 U	< 0.00041 U
PCBs	DICHLOROBIPHENYL	25512-42-9	mg/kg	< 0.000083 U	< 0.000083 U	0.00090	< 0.000083 UJ	< 0.000083 U	< 0.000082 U	< 0.000082 U	0.00021 J
PCBs	HEPTACHLOROBIPHENYL	28655-71-2	mg/kg	0.0043	< 0.00025 U	0.0078	0.00076 J-	0.00024 J	0.0011	< 0.00025 U	0.00037 J
PCBs	HEXACHLOROBIPHENYL	26601-64-9	mg/kg	0.012	0.00088	0.027	0.0013 J-	0.00041 J	0.0055	< 0.00017 U	0.0017
PCBs	MONOCHLOROBIPHENYL	27323-18-8	mg/kg	< 0.000083 U	< 0.000083 U	< 0.00017 U	< 0.00017 UJ	< 0.00017 U	< 0.00016 U	< 0.00017 U	< 0.00016 U
PCBs	NONACHLOROBIPHENYL	53742-07-7	mg/kg	< 0.00042 U	< 0.00042 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 U	< 0.00041 U	< 0.00041 U	< 0.00041 U
PCBs	OCTACHLOROBIPHENYL	55722-26-4	mg/kg	< 0.00025 U	< 0.00025 U	< 0.00050 U	< 0.00050 UJ	< 0.00050 U	< 0.00049 U	< 0.00050 U	< 0.00049 U
PCBs	PENTACHLOROBIPHENYL	25429-29-2	mg/kg	0.0051	< 0.00017 U	0.0085	0.00021 J-	< 0.00017 U	0.0027	< 0.00017 U	0.00099
PCBs	POLYCHLORINATED BIPHENYLS (PCBS) (b)	1336-36-3	mg/kg	0.023	0.00088	0.045	0.0022 J-	0.00065	0.0094	< 0.000082 U	0.0034
PCBs	TETRACHLOROBIPHENYL	26914-33-0	mg/kg	0.00070	< 0.00017 U	0.00087	< 0.00017 UJ	< 0.00017 U	0.00017 J	< 0.00017 U	0.000087 J
PCBs	TOTAL PCB HOMOLOGS (a)	TOTALPCBHOMO	mg/kg	0.022	0.00088	0.045	0.0023	0.00065	0.0095	< 0.0005 U	0.0034
PCBs	TRICHLOROBIPHENYL	25323-68-6	mg/kg	0.00016 J	< 0.000083 U	< 0.000083 U	< 0.000083 UJ	< 0.000083 U	< 0.000082 U	< 0.000082 U	0.000055 J
Pesticides	4,4-DDD	72-54-8	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	0.017 J	< 0.00085 U	< 0.00085 UJ	< 0.00085 U
Pesticides	4,4-DDE	72-55-9	mg/kg	0.0019 J	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	< 0.00085 UJ	< 0.00085 U
Pesticides	4,4-DDT	50-29-3	mg/kg	< 0.0035 U	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	0.0065 J	< 0.00085 U	< 0.00085 UJ	< 0.00085 U
Pesticides	ALDRIN	309-00-2	mg/kg	0.00071 J	< 0.00043 U	0.0056 J	< 0.00042 U	< 0.00042 UJ	< 0.00043 U	< 0.00043 UJ	< 0.00042 U
Pesticides	ALPHA-BHC	319-84-6	mg/kg	0.00058 J	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.0011 J	< 0.00021 U	< 0.00043 UJ	< 0.00021 U
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg	< 0.0017 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.0039 J	< 0.00021 U	< 0.00043 UJ	< 0.00021 U
Pesticides	BETA-BHC	319-85-7	mg/kg	< 0.0038 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.00042 UJ	< 0.00021 U	0.0014 J	< 0.00021 U
Pesticides	DELTA-BHC	319-86-8	mg/kg	< 0.0017 U	< 0.00043 U	0.0018 J	< 0.00042 U	0.0013 J	< 0.00043 U	0.0021 J	< 0.00042 U
Pesticides	DIELDRIN	60-57-1	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	< 0.00085 UJ	< 0.00043 U	< 0.00085 UJ	< 0.00042 U
Pesticides	ENDOSULFAN I	959-98-8	mg/kg	0.0011 J	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.00090 J	< 0.00021 U	< 0.00043 UJ	< 0.00021 U
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	< 0.00085 UJ	< 0.00043 U	< 0.00085 UJ	< 0.00042 U
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	0.0032 J	< 0.00043 U	< 0.00085 UJ	< 0.00042 U
Pesticides	ENDRIN	72-20-8	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	0.0031 J	< 0.00043 U	< 0.00085 UJ	< 0.00042 U
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	< 0.00085 UJ	< 0.00085 U
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg	< 0.0036 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	< 0.00085 UJ	< 0.00043 U	< 0.00085 UJ	< 0.00042 U
Pesticides	HEPTACHLOR	76-44-8	mg/kg	< 0.0017 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.0017 J	< 0.00021 U	< 0.00043 UJ	< 0.00021 U

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-06	ET09-06	ET09-06	ET09-06	ET09-07	ET09-07	ET09-08	ET09-08
			Sample Date	10/1/2013	9/22/2014	9/9/2015	12/13/2016	9/15/2015	12/14/2016	9/15/2015	12/14/2016
			Sample Type Code	N	N	N	N	N	N	N	N
			Sample ID	ET09-06-100113	ET09-06-092214-1	ET09-06-090915-1	ET09-06-ME45R-1	ET09-07-091515-1	ET09-07-ME45R-1	ET09-08-091515-1	ET09-08-ME45R-1
Analyte Group	**Compound**	**CAS**	**Units**								
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	< 0.0017 U	< 0.00043 U	< 0.00042 UJ	< 0.00042 U	< 0.00042 UJ	< 0.00043 U	0.0013 J	< 0.00042 U
Pesticides	LINDANE	58-89-9	mg/kg	< 0.0017 U	< 0.00043 U	0.0014 J	< 0.00021 U	< 0.00042 UJ	< 0.00021 U	< 0.00043 UJ	< 0.00021 U
Pesticides	METHOXYCHLOR	72-43-5	mg/kg	0.0036 J	< 0.0043 U	< 0.0042 UJ	< 0.0021 U	< 0.0042 UJ	< 0.0021 U	< 0.0043 UJ	< 0.0021 U
Pesticides	TOXAPHENE	8001-35-2	mg/kg	< 0.066 U	< 0.017 U	< 0.017 UJ	< 0.017 U	< 0.017 UJ	< 0.017 U	< 0.017 UJ	< 0.017 U
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg	0.0071	< 0.00043 U	< 0.00042 UJ	< 0.00042 U	0.0011 J	< 0.00043 U	< 0.00043 UJ	< 0.00042 U
SVOCs	1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	1,2-DICHLOROBENZENE	95-50-1	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	1,3-DICHLOROBENZENE	541-73-1	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	1,4-DICHLOROBENZENE	106-46-7	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	mg/kg		< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	2,4,5-TRICHLOROPHENOL	95-95-4	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U
SVOCs	2,4,6-TRICHLOROPHENOL	88-06-2	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U
SVOCs	2,4-DICHLOROPHENOL	120-83-2	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U
SVOCs	2,4-DIMETHYLPHENOL	105-67-9	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 UJ	< 0.13 UJ
SVOCs	2,4-DINITROPHENOL	51-28-5	mg/kg	< 3.9 U	< 0.17 U	< 0.16 UJ	< 0.33 UJ	< 0.16 UJ	< 0.33 UJ	< 0.17 UJ	< 0.33 UJ
SVOCs	2,4-DINITROTOLUENE	121-14-2	mg/kg	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	2,6-DINITROTOLUENE	606-20-2	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	2-CHLORONAPHTHALENE	91-58-7	mg/kg	< 0.13 UJ	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	2-CHLOROPHENOL	95-57-8	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	0.032	0.0045 J	0.0068	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	2-METHYLPHENOL	95-48-7	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U
SVOCs	2-NITROANILINE	88-74-4	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	2-NITROPHENOL	88-75-5	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U
SVOCs	3,3-DICHLOROBENZIDINE	91-94-1	mg/kg	< 1.3 U	< 0.067 UJ	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	3-NITROANILINE	99-09-2	mg/kg	< 0.66 U	< 0.067 UJ	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	4,6-DINITRO-2-METHYLPHENOL	534-52-1	mg/kg	< 2 U	< 0.067 U	< 0.066 U	< 0.13 UJ	< 0.066 U	< 0.13 UJ	< 0.067 UJ	< 0.13 UJ
SVOCs	4-BROMOPHENYL-PHENYLETHER	101-55-3	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	4-CHLORO-3-METHYLPHENOL	59-50-7	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 UJ	< 0.13 UJ
SVOCs	4-CHLOROANILINE	106-47-8	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	4-METHYLPHENOL	106-44-5	mg/kg	< 0.13 UJ	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 UJ	< 0.13 UJ
SVOCs	4-NITROANILINE	100-01-6	mg/kg	< 0.66 U	< 0.067 UJ	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	4-NITROPHENOL	100-02-7	mg/kg	< 2 U	< 0.067 UJ	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	0.032	0.0061	0.014	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	0.0050	< 0.0066 UJ
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	0.0052 J	0.015	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	ANTHRACENE	120-12-7	mg/kg	0.0050 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0033 UJ	< 0.0066 UJ
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	< 0.0066 UJ	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	0.0035 J	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	BIS(2-CHLOROETHOXY)METHANE	111-91-1	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	BIS(2-CHLOROETHYL)ETHER	111-44-4	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg	0.45 J	< 0.067 U	0.17	< 0.13 UJ	< 0.066 U	< 0.13 UJ	0.13 J	< 0.13 UJ
SVOCs	BUTYLBENZYLPHTHALATE	85-68-7	mg/kg	< 0.66 U	< 0.067 U	0.085 J	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	CARBAZOLE	86-74-8	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	CHRYSENE	218-01-9	mg/kg	0.0038 J	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	DIBENZOFURAN	132-64-9	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	DIETHYLPHTHALATE	84-66-2	mg/kg	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	DIMETHYL PHTHALATE	131-11-3	mg/kg	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-06	ET09-06	ET09-06	ET09-06	ET09-07	ET09-07	ET09-08	ET09-08
			Sample Date	10/1/2013	9/22/2014	9/9/2015	12/13/2016	9/15/2015	12/14/2016	9/15/2015	12/14/2016
			Sample Type Code	N	N	N	N	N	N	N	N
			Sample ID	ET09-06-100113	ET09-06-092214-1	ET09-06-090915-1	ET09-06-ME45R-1	ET09-07-091515-1	ET09-07-ME45R-1	ET09-08-091515-1	ET09-08-ME45R-1
Analyte Group	**Compound**	**CAS**	**Units**								
SVOCs	DI-N-BUTYLPHTHALATE	84-74-2	mg/kg	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	DI-N-OCTYLPHTHALATE	117-84-0	mg/kg	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 UJ	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	FLUORANTHENE	206-44-0	mg/kg	0.015	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 UJ	< 0.0066 UJ
SVOCs	FLUORENE	86-73-7	mg/kg	0.013	< 0.0033 U	0.0078	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	HEXACHLOROBENZENE	118-74-1	mg/kg	< 0.067 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	HEXACHLOROBUTADIENE	87-68-3	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	HEXACHLOROCYCLOPENTADIENE	77-47-4	mg/kg	< 2 U	< 0.17 UJ	< 0.16 U	< 0.33 UJ	< 0.16 U	< 0.33 UJ	< 0.17 U	< 0.33 UJ
SVOCs	HEXACHLOROETHANE	67-72-1	mg/kg	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	0.0043 J	< 0.0033 UJ	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	ISOPHORONE	78-59-1	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	NAPHTHALENE	91-20-3	mg/kg	0.04	0.013	0.011	< 0.0066 U	< 0.0033 U	0.0088 J-	< 0.0033 U	< 0.0066 UJ
SVOCs	NITROBENZENE	98-95-3	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	N-NITROSODIMETHYLAMINE	62-75-9	mg/kg	< 0.66 U	< 0.067 U	< 0.066 U		< 0.066 U		< 0.067 U	
SVOCs	N-NITROSODINPROPYLAMINE	621-64-7	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	N-NITROSODIPHENYLAMINE	86-30-6	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ
SVOCs	PENTACHLOROPHENOL	87-86-5	mg/kg	< 0.67 U	< 0.17 U	< 0.16 U	< 0.33 U	< 0.16 U	< 0.33 UJ	< 0.17 UJ	< 0.33 UJ
SVOCs	PHENANTHRENE	85-01-8	mg/kg	0.039	0.0074	0.025	< 0.0066 U	< 0.0033 U	0.0088 J-	0.015 J	< 0.0066 UJ
SVOCs	PHENOL	108-95-2	mg/kg	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U
SVOCs	PYRENE	129-00-0	mg/kg	0.021	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	0.058 J	< 0.0066 UJ

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

FD = Field duplicate.

J = Estimated value.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

R = Rejected.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., homolog) concentrations. For samples without any detections of individual compounds (i.e., homolog) the maximum reporting detection limit within the sample is presented as a non-detect value.

(b) Lab calculated value; Not used. Totals for use in risk assessment are calculated as discussed in the report text.

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-09	ET09-09	ET09-09	ET09-09	ET09-10	ET09-10	ET09-10	ET09-10	ET09-11
			Sample Date	10/3/2013	9/23/2014	9/9/2015	12/13/2016	10/3/2013	9/24/2014	9/9/2015	12/13/2016	10/15/2013
			Sample Type Code	N	N	N	N	N	N	N	N	N
			Sample ID	ET09-09-100313	ET09-09-092314-1	ET09-09-090915-1	ET09-09-ME45R-1	ET09-10-100313	ET09-10-092414-1	ET09-10-090915-1	ET09-10-ME45R-1	ET09-11-101513
Analyte Group	**Compound**	**CAS**	**Units**									
Metals	ALUMINUM	7429-90-5	mg/kg	7.30 J	14.6	27.2	2.6 J	1360 J	9.9	26.2	7.3 J	9.72 J
Metals	ANTIMONY	7440-36-0	mg/kg	< 0.712 U	0.23 J	0.48 J	< 0.65 U	< 0.733 U	0.36 J	0.44 J	< 0.87 U	< 0.725 U
Metals	ARSENIC	7440-38-2	mg/kg	4.56	3.6	2.9	2.9	2.71 J	3.0	3.9	2.8	3.61 J
Metals	BARIUM	7440-39-3	mg/kg	0.0856 J	< 5.5 U	< 9.4 U	< 6.5 U	6.05	< 8.1 U	< 8.7 U	< 8.7 U	0.0863 J
Metals	BERYLLIUM	7440-41-7	mg/kg	< 0.0644 U	0.0011 J	0.030 J	< 0.16 U	0.111 J	0.0077 J	0.028 J	< 0.22 U	< 0.0657 U
Metals	CADMIUM	7440-43-9	mg/kg	0.142 J	0.10 J	0.13 J	0.066 J	0.206 J	0.093 J	0.18 J	0.059 J	0.120 J
Metals	CALCIUM	7440-70-2	mg/kg	490 J	465	431	494	968 J	511	904	926	512 J
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	< 0.154 U	< 0.55 U	< 0.94 U	< 0.65 U	9.37	< 0.81 U	< 0.87 U	< 0.87 U	< 0.157 U
Metals	COBALT	7440-48-4	mg/kg	< 0.0952 U	< 1.4 U	< 2.4 U	0.14 J	1.01	< 2.0 U	< 2.2 U	0.15 J	< 0.0971 U
Metals	COPPER	7440-50-8	mg/kg	1.83 J	1.9	2.3	2.8	9.48	4.1	9.1	< 2.2 U	1.60 J
Metals	IRON	7439-89-6	mg/kg	30.6 J	46.6	94.3	19.0	3160 J	43.6	95.3	38	33.0 J
Metals	LEAD	7439-92-1	mg/kg	< 0.481 U	0.11 J	0.21 J	0.16 J	6.90	0.24 J	0.28 J	< 0.22 U	< 0.490 U
Metals	MAGNESIUM	7439-95-4	mg/kg	770	886	934	926	1150	896	995	937	778
Metals	MANGANESE	7439-96-5	mg/kg	9.33 J	12.7	13.6	3.2	31.0 J	9.7	7.2	4.8	9.07 J
Metals	MERCURY	7439-97-6	mg/kg	0.0110 J	0.0083 J	0.010 J	0.0058 J	0.0197 J	0.011 J	0.010 J	0.0080 J	0.0120 J
Metals	NICKEL	7440-02-0	mg/kg	< 0.125 U	< 1.4 U	< 2.4 U	0.61 J	5.52	< 2.0 U	< 2.2 U	0.58 J	0.152 J
Metals	POTASSIUM	7440-09-7	mg/kg	1440	1470	1090	1510	1090	1410	1130	1360	1380
Metals	SELENIUM	7782-49-2	mg/kg	< 0.769 U	< 0.55 U	< 1.4 U	< 0.65 U	< 0.792 U	< 0.81 U	0.70 J	0.57 J	< 0.784 U
Metals	SILVER	7440-22-4	mg/kg	< 0.163 U	0.14 J	0.26 J	0.079 J	< 0.168 U	0.17 J	0.26 J	0.091 J	< 0.98 U
Metals	SODIUM	7440-23-5	mg/kg	6180	7670	7020	6410	4740	6680	6170	6630	6410
Metals	THALLIUM	7440-28-0	mg/kg	< 0.500 U	< 0.27 U	< 0.47 U	< 0.32 UJ	< 0.515 U	< 0.41 U	< 0.43 U	< 0.43 UJ	< 0.510 U
Metals	VANADIUM	7440-62-2	mg/kg	< 0.125 U	< 1.4 U	0.52 J	< 1.6 U	4.01	< 2.0 U	0.36 J	< 2.2 U	< 0.127 U
Metals	ZINC	7440-66-6	mg/kg	8.76 J	7.1	7.5	15.6	29.2 J	18.1	28.8	14	7.24 J
PCBs	DECACHLOROBIPHENYL	2051-24-3	mg/kg	< 0.00042 U	< 0.00042 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 U	< 0.00042 U	< 0.00042 U	0.00020 J	< 0.00041 U
PCBs	DICHLOROBIPHENYL	25512-42-9	mg/kg	< 0.000083 U	< 0.000083 U	< 0.000083 U	< 0.000083 UJ	< 0.000083 U	< 0.000083 U	< 0.000083 U	< 0.000083 U	< 0.000081 U
PCBs	HEPTACHLOROBIPHENYL	28655-71-2	mg/kg	0.0015	< 0.00025 U	0.0013	0.00020 J-	< 0.00025 U	< 0.00025 U	< 0.00025 U	0.00021 J-	0.0012
PCBs	HEXACHLOROBIPHENYL	26601-64-9	mg/kg	0.0055	0.00057 J	0.0062	0.00086 J-	< 0.00017 U	< 0.00017 U	< 0.00017 U	0.00063 J-	0.0059
PCBs	MONOCHLOROBIPHENYL	27323-18-8	mg/kg	< 0.000083 U	< 0.000083 U	< 0.00017 U	< 0.00017 UJ	< 0.000083 U	< 0.000083 U	< 0.00017 U	< 0.00017 U	< 0.000081 U
PCBs	NONACHLOROBIPHENYL	53742-07-7	mg/kg	< 0.00042 U	< 0.00042 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 U	< 0.00042 U	< 0.00042 U	< 0.00042 UJ	< 0.00041 U
PCBs	OCTACHLOROBIPHENYL	55722-26-4	mg/kg	< 0.00025 U	< 0.00025 U	< 0.00050 U	< 0.00050 UJ	< 0.00025 U	< 0.00025 U	< 0.00050 U	< 0.00050 UJ	< 0.00024 U
PCBs	PENTACHLOROBIPHENYL	25429-29-2	mg/kg	0.0027	< 0.00017 U	0.0039	< 0.00017 UJ	< 0.00017 U	< 0.00017 U	< 0.00017 U	0.00018 J-	0.0033
PCBs	POLYCHLORINATED BIPHENYLS (PCBS) (b)	1336-36-3	mg/kg	0.01	0.00057	0.012	0.0011 J-	< 0.000083 U	< 0.000083 U	0.000044 J	0.0012 J-	0.011
PCBs	TETRACHLOROBIPHENYL	26914-33-0	mg/kg	0.00058 J	< 0.00017 U	0.00038 J	< 0.00017 UJ	< 0.00017 U	< 0.00017 U	< 0.00017 U	< 0.00017 UJ	0.00067
PCBs	TOTAL PCB HOMOLOGS (a)	TOTALPCBHOMO	mg/kg	0.01	0.00057	0.012	0.0011	< 0.00042 U	< 0.00042 U	< 0.0005 U	0.0012	0.011
PCBs	TRICHLOROBIPHENYL	25323-68-6	mg/kg	< 0.000083 U	< 0.000083 U	0.00026 J	< 0.000083 UJ	< 0.000083 U	< 0.000083 U	< 0.000083 U	< 0.000083 UJ	0.000097 J
Pesticides	4,4-DDD	72-54-8	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00084 UJ	< 0.0034 U	< 0.00085 U	< 0.00085 UJ	< 0.00085 UJ	< 0.0034 U
Pesticides	4,4-DDE	72-55-9	mg/kg	0.0017 J	< 0.00085 U	< 0.00084 UJ	< 0.00084 UJ	0.00087 J	< 0.00085 U	< 0.00085 UJ	< 0.00085 UJ	0.0016 J
Pesticides	4,4-DDT	50-29-3	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00084 UJ	0.0015 J	< 0.00085 U	< 0.00085 UJ	< 0.00085 UJ	< 0.0034 U
Pesticides	ALDRIN	309-00-2	mg/kg	0.00070 J	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	0.00064 J	< 0.00043 U	< 0.00043 UJ	< 0.00043 UJ	0.00036 J
Pesticides	ALPHA-BHC	319-84-6	mg/kg	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 UJ	< 0.0016 U	< 0.00043 U	< 0.00043 UJ	< 0.00021 UJ	0.00069 J
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg	< 0.0017 U	< 0.00042 U	0.00088 J	< 0.00021 UJ	0.0010 J	< 0.00043 U	0.0023 J	< 0.00021 UJ	< 0.0017 U
Pesticides	BETA-BHC	319-85-7	mg/kg	< 0.0038 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 UJ	< 0.0038 U	< 0.00043 U	0.0014 J	< 0.00021 UJ	< 0.0038 U
Pesticides	DELTA-BHC	319-86-8	mg/kg	< 0.0017 U	< 0.00042 U	0.0011 J	< 0.00042 UJ	< 0.0016 U	< 0.00043 U	0.0026 J	< 0.00043 UJ	< 0.0017 U
Pesticides	DIELDRIN	60-57-1	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 UJ	< 0.0034 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 UJ	< 0.0034 U
Pesticides	ENDOSULFAN I	959-98-8	mg/kg	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 UJ	0.0014 J	< 0.00043 U	< 0.00043 UJ	< 0.00021 UJ	0.00051 J
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 UJ	0.00066 J	< 0.00085 U	< 0.00085 UJ	< 0.00043 UJ	< 0.0034 U
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 UJ	< 0.0034 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 UJ	< 0.0034 U
Pesticides	ENDRIN	72-20-8	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 UJ	< 0.0034 U	< 0.00085 U	0.0056 J	< 0.00043 UJ	< 0.0034 U
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00084 UJ	< 0.0034 U	< 0.00085 U	< 0.00085 UJ	< 0.00085 UJ	< 0.0034 U
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg	< 0.0036 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 UJ	< 0.0036 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 UJ	< 0.0036 U
Pesticides	HEPTACHLOR	76-44-8	mg/kg	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 UJ	0.0014 J	< 0.00043 U	< 0.00043 UJ	< 0.00021 UJ	< 0.0017 U

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-09	ET09-09	ET09-09	ET09-09	ET09-10	ET09-10	ET09-10	ET09-10	ET09-11
			Sample Date	10/3/2013	9/23/2014	9/9/2015	12/13/2016	10/3/2013	9/24/2014	9/9/2015	12/13/2016	10/15/2013
			Sample Type Code	N	N	N	N	N	N	N	N	N
			Sample ID	ET09-09-100313	ET09-09-092314-1	ET09-09-090915-1	ET09-09-ME45R-1	ET09-10-100313	ET09-10-092414-1	ET09-10-090915-1	ET09-10-ME45R-1	ET09-11-101513
Analyte Group	**Compound**	**CAS**	**Units**									
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.0016 U	< 0.00043 U	0.0012 J	< 0.00043 UJ	0.00051 J
Pesticides	LINDANE	58-89-9	mg/kg	< 0.0017 U	< 0.00042 U	0.00090 J	< 0.00021 UJ	0.00065 J	< 0.00043 U	< 0.00043 UJ	< 0.00021 UJ	< 0.0017 U
Pesticides	METHOXYCHLOR	72-43-5	mg/kg	< 0.013 U	< 0.0042 U	< 0.0042 UJ	< 0.0021 UJ	< 0.013 U	< 0.0043 U	< 0.0043 UJ	< 0.0021 UJ	< 0.013 U
Pesticides	TOXAPHENE	8001-35-2	mg/kg	< 0.066 U	< 0.017 U	< 0.017 UJ	< 0.017 UJ	< 0.066 U	< 0.017 U	< 0.017 UJ	< 0.017 UJ	< 0.066 U
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg	0.0047	< 0.00042 U	0.00083 J	< 0.00042 UJ	< 0.0016 U	< 0.00043 U	< 0.00043 UJ	< 0.00043 UJ	0.0073
SVOCs	1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	1,2-DICHLOROBENZENE	95-50-1	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	1,3-DICHLOROBENZENE	541-73-1	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	1,4-DICHLOROBENZENE	106-46-7	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	mg/kg		< 0.066 U	< 0.066 U	< 0.13 U		< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	2,4,5-TRICHLOROPHENOL	95-95-4	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	2,4,6-TRICHLOROPHENOL	88-06-2	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	2,4-DICHLOROPHENOL	120-83-2	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	2,4-DIMETHYLPHENOL	105-67-9	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	2,4-DINITROPHENOL	51-28-5	mg/kg	< 4 U	< 0.16 U	< 0.16 UJ	< 0.33 UJ	< 4 U	< 0.17 U	< 0.17 UJ	< 0.33 UJ	< 4 U
SVOCs	2,4-DINITROTOLUENE	121-14-2	mg/kg	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.66 U
SVOCs	2,6-DINITROTOLUENE	606-20-2	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	2-CHLORONAPHTHALENE	91-58-7	mg/kg	< 0.13 UJ	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	2-CHLOROPHENOL	95-57-8	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	0.029	0.0052 J	0.019	< 0.0066 U	0.011	< 0.0033 UJ	< 0.0033 U	< 0.0066 UJ	0.035
SVOCs	2-METHYLPHENOL	95-48-7	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	0.074 J
SVOCs	2-NITROANILINE	88-74-4	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	2-NITROPHENOL	88-75-5	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	3,3-DICHLOROBENZIDINE	91-94-1	mg/kg	< 1.3 U	< 0.066 U	< 0.066 U	< 0.13 U	< 1.3 U	< 0.067 U	< 0.067 U	R	< 1.3 U
SVOCs	3-NITROANILINE	99-09-2	mg/kg	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U	< 0.067 U	R	< 0.66 U
SVOCs	4,6-DINITRO-2-METHYLPHENOL	534-52-1	mg/kg	< 2 U	< 0.066 U	< 0.066 UJ	< 0.13 UJ	< 2 U	< 0.067 U	< 0.067 UJ	< 0.13 UJ	< 2 U
SVOCs	4-BROMOPHENYL-PHENYLETHER	101-55-3	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	4-CHLORO-3-METHYLPHENOL	59-50-7	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	4-CHLOROANILINE	106-47-8	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	R	< 0.13 U
SVOCs	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	4-METHYLPHENOL	106-44-5	mg/kg	< 0.13 UJ	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	4-NITROANILINE	100-01-6	mg/kg	< 0.66 U	< 0.066 UJ	< 0.066 UJ	< 0.13 U	< 0.67 U	< 0.067 UJ	< 0.067 UJ	R	< 0.66 U
SVOCs	4-NITROPHENOL	100-02-7	mg/kg	< 2 U	< 0.066 UJ	< 0.066 U	< 0.13 U	< 2 U	< 0.067 UJ	< 0.067 U	< 0.13 UJ	< 2 U
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	0.02	0.0042	0.018	< 0.0066 U	0.0051 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.016
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	0.0040 J	< 0.0033 U	0.0060	< 0.0066 U	< 0.0067 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0070
SVOCs	ANTHRACENE	120-12-7	mg/kg	0.0030 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0036 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0060 J
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.013	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.014	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.027	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0031 J
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	< 0.0066 UJ	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.0054 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 UJ
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	0.0029 J	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.016	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0032 J
SVOCs	BIS(2-CHLOROETHOXY)METHANE	111-91-1	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	BIS(2-CHLOROETHYL)ETHER	111-44-4	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg	< 0.68 U	< 0.16 U	< 0.066 U	< 0.13 UJ	< 0.68 U	< 0.17 U	0.057 J	R	< 0.68 U
SVOCs	BUTYLBENZYLPHTHALATE	85-68-7	mg/kg	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.66 U
SVOCs	CARBAZOLE	86-74-8	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	CHRYSENE	218-01-9	mg/kg	0.0030 J	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.014	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0036 J
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0028 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U
SVOCs	DIBENZOFURAN	132-64-9	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	DIETHYLPHTHALATE	84-66-2	mg/kg	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.66 U
SVOCs	DIMETHYL PHTHALATE	131-11-3	mg/kg	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.66 U

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-09	ET09-09	ET09-09	ET09-09	ET09-10	ET09-10	ET09-10	ET09-10	ET09-11
			Sample Date	10/3/2013	9/23/2014	9/9/2015	12/13/2016	10/3/2013	9/24/2014	9/9/2015	12/13/2016	10/15/2013
			Sample Type Code	N	N	N	N	N	N	N	N	N
			Sample ID	ET09-09-100313	ET09-09-092314-1	ET09-09-090915-1	ET09-09-ME45R-1	ET09-10-100313	ET09-10-092414-1	ET09-10-090915-1	ET09-10-ME45R-1	ET09-11-101513
Analyte Group	**Compound**	**CAS**	**Units**									
SVOCs	DI-N-BUTYLPHTHALATE	84-74-2	mg/kg	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.66 U
SVOCs	DI-N-OCTYLPHTHALATE	117-84-0	mg/kg	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 UJ	< 0.67 UJ	< 0.067 U	< 0.067 U	R	< 0.66 UJ
SVOCs	FLUORANTHENE	206-44-0	mg/kg	0.013	< 0.0033 U	0.0059	< 0.0066 U	0.027	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.021
SVOCs	FLUORENE	86-73-7	mg/kg	0.0072	< 0.0033 U	0.011	< 0.0066 U	< 0.0067 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.013
SVOCs	HEXACHLOROBENZENE	118-74-1	mg/kg	< 0.068 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.068 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.068 U
SVOCs	HEXACHLOROBUTADIENE	87-68-3	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	HEXACHLOROCYCLOPENTADIENE	77-47-4	mg/kg	< 2 U	< 0.16 U	< 0.16 U	< 0.33 UJ	< 2 UJ	< 0.17 U	< 0.17 U	R	< 2 UJ
SVOCs	HEXACHLOROETHANE	67-72-1	mg/kg	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.66 U
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	0.0030 J	< 0.0033 UJ	< 0.0033 U	< 0.0066 U	0.0095	< 0.0033 UJ	< 0.0033 U	< 0.0066 UJ	0.0040 J
SVOCs	ISOPHORONE	78-59-1	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	NAPHTHALENE	91-20-3	mg/kg	0.039	0.012	0.03	< 0.0066 U	0.0036 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.039
SVOCs	NITROBENZENE	98-95-3	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	N-NITROSODIMETHYLAMINE	62-75-9	mg/kg	< 0.66 U	< 0.066 U	< 0.066 U		< 0.67 U	< 0.067 U	< 0.067 U		< 0.66 U
SVOCs	N-NITROSODINPROPYLAMINE	621-64-7	mg/kg	< 0.13 U	< 0.066 U	< 0.066 UJ	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 UJ	< 0.13 UJ	< 0.13 U
SVOCs	N-NITROSODIPHENYLAMINE	86-30-6	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	PENTACHLOROPHENOL	87-86-5	mg/kg	< 0.68 U	< 0.16 U	< 0.16 U	< 0.33 U	< 0.68 U	< 0.17 U	< 0.17 U	R	< 0.68 U
SVOCs	PHENANTHRENE	85-01-8	mg/kg	0.026	0.0059	0.037	< 0.0066 U	0.0099	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.036
SVOCs	PHENOL	108-95-2	mg/kg	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.13 UJ	< 0.13 U
SVOCs	PYRENE	129-00-0	mg/kg	0.016	< 0.0033 U	0.0057	< 0.0066 U	0.027	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.019

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

FD = Field duplicate.

J = Estimated value.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

R = Rejected.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., homolog) concentrations. For samples without any detections of individual compounds (i.e., homolog) the maximum reporting detection limit within the sample is presented as a non-detect value.

(b) Lab calculated value; Not used. Totals for use in risk assessment are calculated as discussed in the report text.

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-11	ET09-11	ET09-11	ET09-12	ET09-12	ET09-12	ET09-12	ET09-12
			Sample Date	9/23/2014	9/9/2015	12/13/2016	10/3/2013	9/24/2014	9/9/2015	9/9/2015	12/13/2016
			Sample Type Code	N	N	N	N	N	N	FD	N
			Sample ID	ET09-11-092314-1	ET09-11-090915-1	ET09-11-ME45R-1	ET09-12-100313	ET09-12-092414-1	ET09-12-090915-1	ET09-12-090915-2	ET09-12-ME45R-1
Analyte Group	**Compound**	**CAS**	**Units**								
Metals	ALUMINUM	7429-90-5	mg/kg	10.4	16.5	9.3	77.5 J	19.9	19.1	16.5	6.2 J
Metals	ANTIMONY	7440-36-0	mg/kg	< 0.45 U	0.42 J	< 0.82 U	< 0.718 U	< 0.57 U	0.31 J	< 0.71 U	< 0.51 U
Metals	ARSENIC	7440-38-2	mg/kg	3.5	3.0	2.0	2.56 J	3.4	2.7	3.0	3.1
Metals	BARIUM	7440-39-3	mg/kg	< 6.0 U	< 9.6 U	< 8.2 U	0.476 J	< 7.6 U	< 6.8 U	< 9.4 U	< 6.4 U
Metals	BERYLLIUM	7440-41-7	mg/kg	0.0065 J	0.0049 J	< 0.20 U	< 0.0650 U	0.0024 J	0.0093 J	0.013 J	< 0.16 U
Metals	CADMIUM	7440-43-9	mg/kg	0.084 J	0.11 J	0.073 J	0.0845 J	0.10 J	0.14 J	0.10 J	0.055 J
Metals	CALCIUM	7440-70-2	mg/kg	501	501	988	726 J	441	794	784	879
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	< 0.60 U	< 0.96 U	< 0.82 U	< 2.91 U	< 0.76 U	< 0.68 U	< 0.94 U	< 0.64 U
Metals	COBALT	7440-48-4	mg/kg	< 1.5 U	< 2.4 U	0.059 J	< 0.971 U	< 1.9 U	< 1.7 U	< 2.4 U	0.15 J
Metals	COPPER	7440-50-8	mg/kg	4.2	3.1	< 1.6 U	3.28	2.0	5.5	7.2	2.7
Metals	IRON	7439-89-6	mg/kg	43.5	64.1	38.0	205 J	60.9	88.7	72.1	39.3
Metals	LEAD	7439-92-1	mg/kg	0.18 J	< 0.48 U	0.14 J	0.689 J	< 0.19 U	0.35	0.35 J	0.22 J
Metals	MAGNESIUM	7439-95-4	mg/kg	855	892	967	790	920	1030	904	946
Metals	MANGANESE	7439-96-5	mg/kg	5.7	10.8	11.6	12.6 J	11.1	15.4	13.1	4.0
Metals	MERCURY	7439-97-6	mg/kg	0.0085 J	0.0079 J	0.0074 J	< 0.0093 U	0.0095 J	0.0049 J	0.0040 J	0.0059 J
Metals	NICKEL	7440-02-0	mg/kg	< 1.5 U	< 2.4 U	0.14 J	0.651 J	< 1.9 U	< 1.7 U	< 2.4 U	0.37 J
Metals	POTASSIUM	7440-09-7	mg/kg	1720	1160	966	1600	1420	1180	1090	1310
Metals	SELENIUM	7782-49-2	mg/kg	< 0.60 U	< 1.4 U	0.54 J	< 0.777 U	< 0.76 U	< 1.0 U	< 1.4 U	0.56 J
Metals	SILVER	7440-22-4	mg/kg	0.14 J	0.26 J	0.20 J	< 0.165 U	0.17 J	0.12 J	0.14 J	0.11 J
Metals	SODIUM	7440-23-5	mg/kg	6250	6430	7470	5420	7670	5990	5590	6800
Metals	THALLIUM	7440-28-0	mg/kg	< 0.30 U	< 0.48 U	< 0.41 UJ	< 0.505 U	< 0.38 U	< 0.34 U	< 0.47 U	< 0.32 UJ
Metals	VANADIUM	7440-62-2	mg/kg	< 1.5 U	0.30 J	< 2.0 U	< 0.971 U	< 1.9 U	0.22 J	0.21 J	< 1.6 U
Metals	ZINC	7440-66-6	mg/kg	18.5	7.5	5.3	18.1 J	7.4	23.6	21.5	13.6
PCBs	DECACHLOROBIPHENYL	2051-24-3	mg/kg	< 0.00041 U	< 0.00042 U	< 0.00041 U	< 0.00041 U	< 0.00042 U	< 0.00042 U	< 0.00041 U	< 0.00041 UJ
PCBs	DICHLOROBIPHENYL	25512-42-9	mg/kg	< 0.000082 U	< 0.000083 U	< 0.000082 U	< 0.000082 U	< 0.000083 U	< 0.000083 U	< 0.000082 U	< 0.000082 UJ
PCBs	HEPTACHLOROBIPHENYL	28655-71-2	mg/kg	< 0.00025 U	0.044	0.0017	< 0.00025 U	< 0.00025 U	< 0.00025 U	0.00026 J	0.00035 J-
PCBs	HEXACHLOROBIPHENYL	26601-64-9	mg/kg	< 0.00017 U	0.046	0.0083	< 0.00016 U	< 0.00017 U	< 0.00017 U	0.00043 J	0.00051 J-
PCBs	MONOCHLOROBIPHENYL	27323-18-8	mg/kg	< 0.000082 U	< 0.00017 U	< 0.00016 U	< 0.000082 U	< 0.000083 U	< 0.00017 U	< 0.00016 U	< 0.00017 UJ
PCBs	NONACHLOROBIPHENYL	53742-07-7	mg/kg	< 0.00041 U	< 0.00042 U	< 0.00041 U	< 0.00041 U	< 0.00042 U	< 0.00042 U	< 0.00041 U	< 0.00041 UJ
PCBs	OCTACHLOROBIPHENYL	55722-26-4	mg/kg	< 0.00025 U	0.0075	< 0.00049 U	< 0.00025 U	< 0.00025 U	< 0.00050 U	< 0.00049 U	< 0.00050 UJ
PCBs	PENTACHLOROBIPHENYL	25429-29-2	mg/kg	< 0.00017 U	0.012	0.0044	< 0.00016 U	< 0.00017 U	< 0.00017 U	< 0.00016 U	< 0.00017 UJ
PCBs	POLYCHLORINATED BIPHENYLS (PCBS) (b)	1336-36-3	mg/kg	< 0.000082 U	0.11	0.015	< 0.000082 U	< 0.000083 U	0.000050 J	0.00079 J	0.00086 J-
PCBs	TETRACHLOROBIPHENYL	26914-33-0	mg/kg	< 0.00017 U	0.0013	0.00066	< 0.00016 U	< 0.00017 U	< 0.00017 U	< 0.00016 U	< 0.00017 UJ
PCBs	TOTAL PCB HOMOLOGS (a)	TOTALPCBHOMO	mg/kg	< 0.00041 U	0.11	0.015	< 0.00041 U	< 0.00042 U	< 0.0005 U	0.00069	0.00086
PCBs	TRICHLOROBIPHENYL	25323-68-6	mg/kg	< 0.000082 U	0.00050	< 0.000082 U	< 0.000082 U	< 0.000083 U	< 0.000083 U	< 0.000082 U	< 0.000082 UJ
Pesticides	4,4-DDD	72-54-8	mg/kg	< 0.00085 U	0.0057 J	< 0.00085 U	< 0.0034 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00085 U
Pesticides	4,4-DDE	72-55-9	mg/kg	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	0.00072 J	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00085 U
Pesticides	4,4-DDT	50-29-3	mg/kg	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	< 0.0034 U	< 0.00084 U	0.00063 J	< 0.00085 UJ	< 0.00085 U
Pesticides	ALDRIN	309-00-2	mg/kg	< 0.00043 U	0.0011 J	< 0.00043 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00042 U
Pesticides	ALPHA-BHC	319-84-6	mg/kg	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.00046 J	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00021 U
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.0012 J	< 0.00042 U	0.0021 J	< 0.00042 UJ	< 0.00021 U
Pesticides	BETA-BHC	319-85-7	mg/kg	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.0038 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00021 U
Pesticides	DELTA-BHC	319-86-8	mg/kg	< 0.00043 U	< 0.00042 UJ	< 0.00043 U	< 0.0017 U	< 0.00042 U	0.0023 J	< 0.00042 UJ	< 0.00042 U
Pesticides	DIELDRIN	60-57-1	mg/kg	< 0.00085 U	< 0.00084 UJ	< 0.00043 U	< 0.0034 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00042 U
Pesticides	ENDOSULFAN I	959-98-8	mg/kg	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.00058 J	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00021 U
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg	< 0.00085 U	< 0.00084 UJ	< 0.00043 U	< 0.0034 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00042 U
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg	< 0.00085 U	< 0.00084 UJ	< 0.00043 U	< 0.0034 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00042 U
Pesticides	ENDRIN	72-20-8	mg/kg	< 0.00085 U	< 0.00084 UJ	< 0.00043 U	< 0.0034 U	< 0.00084 U	0.0029 J	0.0030 J	< 0.00042 U
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	< 0.0034 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00085 U
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg	< 0.00085 U	< 0.00084 UJ	< 0.00043 U	< 0.0036 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00042 U
Pesticides	HEPTACHLOR	76-44-8	mg/kg	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00021 U

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-11	ET09-11	ET09-11	ET09-12	ET09-12	ET09-12	ET09-12	ET09-12
			Sample Date	9/23/2014	9/9/2015	12/13/2016	10/3/2013	9/24/2014	9/9/2015	9/9/2015	12/13/2016
			Sample Type Code	N	N	N	N	N	N	FD	N
			Sample ID	ET09-11-092314-1	ET09-11-090915-1	ET09-11-ME45R-1	ET09-12-100313	ET09-12-092414-1	ET09-12-090915-1	ET09-12-090915-2	ET09-12-ME45R-1
Analyte Group	**Compound**	**CAS**	**Units**								
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	< 0.00043 U	< 0.00042 UJ	< 0.00043 U	0.00064 J	< 0.00042 U	0.0034 J	0.0023 J	< 0.00042 U
Pesticides	LINDANE	58-89-9	mg/kg	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00021 U
Pesticides	METHOXYCHLOR	72-43-5	mg/kg	< 0.0043 U	< 0.0042 UJ	< 0.0021 U	< 0.013 U	< 0.0042 U	< 0.0042 UJ	< 0.0042 UJ	< 0.0021 U
Pesticides	TOXAPHENE	8001-35-2	mg/kg	< 0.017 U	< 0.017 UJ	< 0.017 U	< 0.066 U	< 0.017 U	< 0.017 UJ	< 0.017 UJ	< 0.017 U
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg	< 0.00043 U	< 0.00042 UJ	< 0.00043 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00042 U
SVOCs	1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	1,2-DICHLOROBENZENE	95-50-1	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	1,3-DICHLOROBENZENE	541-73-1	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	1,4-DICHLOROBENZENE	106-46-7	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ		< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2,4,5-TRICHLOROPHENOL	95-95-4	mg/kg	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2,4,6-TRICHLOROPHENOL	88-06-2	mg/kg	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2,4-DICHLOROPHENOL	120-83-2	mg/kg	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2,4-DIMETHYLPHENOL	105-67-9	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2,4-DINITROPHENOL	51-28-5	mg/kg	< 0.16 U	< 0.17 UJ	< 0.33 UJ	< 4 U	< 0.17 U	< 0.16 UJ	< 0.16 UJ	< 0.33 UJ
SVOCs	2,4-DINITROTOLUENE	121-14-2	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2,6-DINITROTOLUENE	606-20-2	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2-CHLORONAPHTHALENE	91-58-7	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2-CHLOROPHENOL	95-57-8	mg/kg	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	0.0041 J	0.011	< 0.0066 UJ	0.017	< 0.0033 UJ	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	2-METHYLPHENOL	95-48-7	mg/kg	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2-NITROANILINE	88-74-4	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2-NITROPHENOL	88-75-5	mg/kg	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	3,3-DICHLOROBENZIDINE	91-94-1	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 1.3 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	3-NITROANILINE	99-09-2	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	4,6-DINITRO-2-METHYLPHENOL	534-52-1	mg/kg	< 0.066 U	< 0.067 UJ	< 0.13 UJ	< 2 U	< 0.067 U	< 0.066 UJ	< 0.066 UJ	< 0.13 UJ
SVOCs	4-BROMOPHENYL-PHENYLETHER	101-55-3	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	4-CHLORO-3-METHYLPHENOL	59-50-7	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	4-CHLOROANILINE	106-47-8	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	4-METHYLPHENOL	106-44-5	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	4-NITROANILINE	100-01-6	mg/kg	< 0.066 UJ	< 0.067 UJ	< 0.13 UJ	< 0.66 U	< 0.067 UJ	< 0.066 UJ	< 0.066 UJ	< 0.13 UJ
SVOCs	4-NITROPHENOL	100-02-7	mg/kg	< 0.066 UJ	< 0.067 U	< 0.13 U	< 2 U	< 0.067 UJ	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	0.0036	0.011	< 0.0066 UJ	0.0052 J	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0044 J	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	ANTHRACENE	120-12-7	mg/kg	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 UJ	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	BIS(2-CHLOROETHOXY)METHANE	111-91-1	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	BIS(2-CHLOROETHYL)ETHER	111-44-4	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg	< 0.16 U	< 0.067 U	< 0.13 UJ	< 0.68 U	< 0.067 U	< 0.066 U	0.1 J	< 0.13 UJ
SVOCs	BUTYLBENZYLPHTHALATE	85-68-7	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	CARBAZOLE	86-74-8	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	CHRYSENE	218-01-9	mg/kg	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0029 J	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ
SVOCs	DIBENZOFURAN	132-64-9	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	DIETHYLPHTHALATE	84-66-2	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	DIMETHYL PHTHALATE	131-11-3	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-11	ET09-11	ET09-11	ET09-12	ET09-12	ET09-12	ET09-12	ET09-12
			Sample Date	9/23/2014	9/9/2015	12/13/2016	10/3/2013	9/24/2014	9/9/2015	9/9/2015	12/13/2016
			Sample Type Code	N	N	N	N	N	N	FD	N
			Sample ID	ET09-11-092314-1	ET09-11-090915-1	ET09-11-ME45R-1	ET09-12-100313	ET09-12-092414-1	ET09-12-090915-1	ET09-12-090915-2	ET09-12-ME45R-1
Analyte Group	**Compound**	**CAS**	**Units**								
SVOCs	DI-N-BUTYLPHTHALATE	84-74-2	mg/kg	0.048 J	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	DI-N-OCTYLPHTHALATE	117-84-0	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 UJ	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	FLUORANTHENE	206-44-0	mg/kg	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0087	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	FLUORENE	86-73-7	mg/kg	< 0.0033 U	0.0061	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	HEXACHLOROBENZENE	118-74-1	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.068 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	HEXACHLOROBUTADIENE	87-68-3	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	HEXACHLOROCYCLOPENTADIENE	77-47-4	mg/kg	< 0.16 U	< 0.17 U	< 0.33 UJ	< 2 UJ	< 0.17 U	< 0.16 U	< 0.16 U	< 0.33 UJ
SVOCs	HEXACHLOROETHANE	67-72-1	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	< 0.0033 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 UJ	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	ISOPHORONE	78-59-1	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	NAPHTHALENE	91-20-3	mg/kg	0.0097	0.015	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	NITROBENZENE	98-95-3	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	N-NITROSODIMETHYLAMINE	62-75-9	mg/kg	< 0.066 U	< 0.067 U		< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	
SVOCs	N-NITROSODINPROPYLAMINE	621-64-7	mg/kg	< 0.066 U	< 0.067 UJ	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 UJ	< 0.066 UJ	< 0.13 UJ
SVOCs	N-NITROSODIPHENYLAMINE	86-30-6	mg/kg	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	PENTACHLOROPHENOL	87-86-5	mg/kg	< 0.16 U	< 0.17 U	< 0.33 UJ	< 0.68 U	< 0.17 U	< 0.16 U	< 0.16 U	< 0.33 U
SVOCs	PHENANTHRENE	85-01-8	mg/kg	0.0068	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	0.012 J	< 0.0033 UJ	< 0.0066 U
SVOCs	PHENOL	108-95-2	mg/kg	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	0.087 J	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	PYRENE	129-00-0	mg/kg	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0069	< 0.0033 U	0.014 J	< 0.0033 UJ	< 0.0066 U

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

FD = Field duplicate.

J = Estimated value.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

R = Rejected.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., homolog) concentrations. For samples without any detections of individual compounds (i.e., homolog) the maximum reporting detection limit within the sample is presented as a non-detect value.

(b) Lab calculated value; Not used. Totals for use in risk assessment are calculated as discussed in the report text.

APPENDIX B

SUMMARY STATISTICS COMPARISON TABLES

APPENDIX B, TABLE 1
SUMMARY STATISTICS COMPARISON - SHORELINE SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Exposure Point	CAS Number	Chemical (3)	Units	2013 HHRA							2017 HHRA						
				Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	COPC Flag (Y/N) (4)	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	COPC Flag (Y/N) (4)
Site 09 - Shoreline		**Metals**															
Shallow Sediment	7429-90-5	ALUMINUM	mg/kg	2.18E+03	1.06E+04	SED09-09	48 / 48	100	--	Y	2.74E+03	9.13E+03	SED09-09 (2 - 6 in)	16 / 16	100	-	Y
	7440-36-0	ANTIMONY	mg/kg	8.00E-02	7.40E-01 J	SED09-09	9 / 48	19	0.1 - 1.6	N	4.60E-01 J	1.70E+00 J-	SED09-09 (2 - 6 in)	3 / 16	19	0.63 - 2.7	N
	7440-38-2	ARSENIC	mg/kg	1.40E+00	1.61E+01	SED09-10	48 / 48	100	--	Y	1.80E+00 J	1.16E+01 J	SED09-10 (0 - 0.5 ft)	16 / 16	100	-	Y
	7440-41-7	BERYLLIUM	mg/kg	1.50E-01 J	7.40E-01	SED09-09	48 / 48	100	--	N	3.00E-01	1.40E+00	SED09-11B (0 - 0.5 ft)	15 / 16	94	0.049 - 0.049	N
	7440-47-3	CHROMIUM, TOTAL	mg/kg	8.30E+00	4.23E+01	SED09-09	48 / 48	100	--	N	8.40E+00 J-	3.24E+01 J	SED09-09 (0 - 0.5 ft)	16 / 16	100	-	N
	7440-50-8	COPPER	mg/kg	9.90E+00 J	7.68E+01 J	SED09-01	48 / 48	100	--	N	1.17E+01 J	9.10E+01	SED09-09 (2 - 6 in)	16 / 16	100	-	N
	7439-89-6	IRON	mg/kg	5.69E+03	2.66E+04	SED09-09	48 / 48	100	--	Y	7.09E+03	2.75E+04	SED09-09 (2 - 6 in)	16 / 16	100	-	Y
	7439-92-1	LEAD	mg/kg	5.40E+00 J	5.80E+01	SED09-09	48 / 48	100	--	N	7.90E+00 J	8.31E+01 J	SED09-09 (2 - 6 in)	16 / 16	100	-	N
	7439-96-5	MANGANESE	mg/kg	6.38E+01	3.08E+02 J	SED09-01	48 / 48	100	--	Y	5.49E+01 J+	2.50E+02 J+	SED09-09 (2 - 6 in)	16 / 16	100	-	Y
	7439-97-6	MERCURY	mg/kg	9.60E-03 J	2.10E-01	SED09-06B, SED09-09	48 / 48	100	--	N	2.10E-02 J-	2.60E-01	SED09-09 (2 - 6 in)	16 / 16	100	-	N
	7440-02-0	NICKEL	mg/kg	4.60E+00	2.36E+01	SED09-01	48 / 48	100	--	N	4.60E+00	2.31E+01	SED09-09 (2 - 6 in)	16 / 16	100	-	N
	7440-66-6	ZINC	mg/kg	2.26E+01 J	3.05E+02	SED09-01	48 / 48	100	--	N	2.53E+01 J	2.63E+02 J,EB	SED09-09 (2 - 6 in)	16 / 16	100	-	N
		PCBs															
	RA-65	PCB, TOTAL	mg/kg	9.30E-03 J	4.30E-01	SED09-10	20 / 53	38	0.00184 - 0.0111	Y	6.90E-04	1.80E-01	SED09-09 (2 - 6 in)	7 / 9	78	0.0093 - 0.011	Y
		Pesticides															
	72-55-9	4,4-DDE	mg/kg	2.00E-04	5.60E-03	SED09-10	28 / 48	58	0.00011 - 0.0076	N	2.70E-03 J	2.70E-03 J	SED09-09 (2 - 6 in)	1 / 9	11	0.00052 - 0.0012	N
	50-29-3	4,4-DDT	mg/kg	1.00E-03 J	1.50E-02 J	SED09-10	6 / 48	13	0.00019 - 0.032	N	4.60E-03 J	9.30E-03 J	SED09-09 (2 - 6 in)	3 / 9	33	0.00052 - 0.0012	N
	319-85-7	BETA-BHC	mg/kg	1.20E-03 J	1.50E-03 J	SED09-10	2 / 48	4	0.00017 - 0.0039	N	7.00E-04 J	7.00E-04 J	SED09-02A (2 - 6 in)	1 / 9	11	0.00013 - 0.00039	N
	60-57-1	DIELDRIN	mg/kg	7.10E-04	1.10E-03 J	SED09-6A	5 / 48	10	0.00012 - 0.0091	N	2.90E-03 J	2.90E-03 J	SED09-10 (2 - 6 in)	1 / 9	11	0.00027 - 0.00074	N
	7421-93-4	ENDRIN ALDEHYDE	mg/kg	6.00E-03	6.00E-03 J	SED09-10	1 / 48	2	0.00026 - 0.0076	N	2.90E-03 J	3.50E-03 J	SED09-09 (2 - 6 in)	2 / 9	22	0.00052 - 0.0012	N
	1024-57-3	HEPTACHLOR EPOXIDE	mg/kg	2.10E-03	2.80E-03 J	SED09-09	3 / 48	6	0.00012 - 0.0039	N	1.10E-03 J	1.10E-03 J	SED09-09 (2 - 6 in)	1 / 9	11	0.00026 - 0.00062	N
	58-89-9	LINDANE	mg/kg	2.30E-04 J	4.80E-02	SED09-10	4 / 48	8	0.00014 - 0.0039	N	2.10E-03 J	3.00E-03 J	SED09-10 (0 - 0.5 ft)	2 / 9	22	0.00013 - 0.00039	N
	72-43-5	METHOXYCHLOR	mg/kg	3.90E-04	7.80E-02 J	SED09-10	3 / 48	6	0.00026 - 0.039	N	2.30E-03 J	2.30E-03 J	SED09-02A (0 - 0.5 ft)	1 / 9	11	0.0013 - 0.0039	N
		SVOCs															
	91-57-6	2-METHYLNAPHTHALENE	mg/kg	3.00E-03 J	3.50E-01 J	SED09-10	8 / 48	17	0.002 - 0.04	N	8.20E-03	5.10E-02	SED09-10 (2 - 6 in)	3 / 19	16	0.004 - 0.0068	N
	83-32-9	ACENAPHTHENE	mg/kg	2.20E-03 J	1.50E+00 J	SED09-10	21 / 48	44	0.002 - 0.027	N	5.70E-03	3.70E-01	SED09-10 (2 - 6 in)	10 / 19	53	0.0041 - 0.0051	N
	208-96-8	ACENAPHTHYLENE	mg/kg	1.40E-03 J	3.60E-02	SED09-10	18 / 48	38	0.001 - 0.04	N	5.20E-03	1.90E-02	SED09-10 (2 - 6 in)	4 / 19	21	0.004 - 0.007	N
	120-12-7	ANTHRACENE	mg/kg	1.30E-03 J	3.50E+00	SED09-10	35 / 48	73	0.001 - 0.027	N	4.80E-03 J	8.40E-01	SED09-10 (2 - 6 in)	12 / 19	63	0.0041 - 0.007	N
	56-55-3	BENZO[A]ANTHRACENE	mg/kg	4.00E-03 J	6.80E+00	SED09-10	43 / 48	90	0.011 - 0.012	Y	4.30E-03	1.40E+00	SED09-10 (2 - 6 in)	18 / 19	95	0.0041 - 0.0041	Y
	50-32-8	BENZO[A]PYRENE	mg/kg	5.80E-03 J	4.70E+00	SED09-10	43 / 48	90	0.011 - 0.012	Y	5.30E-03	1.10E+00	SED09-10 (2 - 6 in)	18 / 19	95	0.0041 - 0.0041	Y
	205-99-2	BENZO[B]FLUORANTHENE	mg/kg	1.00E-02 J	6.40E+00	SED09-10	46 / 48	96	0.011 - 0.012	Y	1.10E-02	1.30E+00	SED09-10 (2 - 6 in)	18 / 19	95	0.0041 - 0.0041	Y
	191-24-2	BENZO[G,H,I]PERYLENE	mg/kg	2.70E-03 J	2.70E+00	SED09-10	43 / 48	90	0.011 - 0.024	Y	5.20E-03	6.40E-01	SED09-10 (2 - 6 in)	18 / 19	95	0.0041 - 0.0041	N
	207-08-9	BENZO[K]FLUORANTHENE	mg/kg	4.20E-04 J	2.00E+00	SED09-10	39 / 48	81	0.003 - 0.024	Y	4.60E-03	8.50E-01	SED09-10 (2 - 6 in)	18 / 19	95	0.0041 - 0.0041	N
	218-01-9	CHRYSENE	mg/kg	3.20E-03 J	5.40E+00	SED09-10	47 / 48	98	0.0019 - 0.0019	Y	6.60E-03	1.40E+00	SED09-10 (2 - 6 in)	18 / 19	95	0.0041 - 0.0041	Y
	53-70-3	DIBENZ[A,H]ANTHRACENE	mg/kg	2.50E-03 J	9.00E-01 J	SED09-10	30 / 48	63	0.002 - 0.027	Y	5.20E-03	1.40E-01	SED09-10 (2 - 6 in)	13 / 19	68	0.0041 - 0.0068	Y
	206-44-0	FLUORANTHENE	mg/kg	5.70E-03 J	1.60E+01	SED09-10	46 / 48	96	0.011 - 0.012	N	5.70E-03	3.70E+00	SED09-10 (2 - 6 in)	19 / 19	100	-	N
	86-73-7	FLUORENE	mg/kg	7.20E-03 J	2.10E+00	SED09-10	19 / 48	40	0.003 - 0.027	N	5.50E-03	4.40E-01	SED09-10 (2 - 6 in)	9 / 19	47	0.0041 - 0.0055	N
	193-39-5	INDENO[1,2,3-CD]PYRENE	mg/kg	3.90E-03 J	2.00E+00	SED09-10	39 / 48	81	0.011 - 0.027	Y	4.40E-03	5.60E-01	SED09-10 (2 - 6 in)	18 / 19	95	0.0041 - 0.0041	N
	91-20-3	NAPHTHALENE	mg/kg	4.30E-03 J	1.10E+00 J	SED09-10	12 / 48	25	0.003 - 0.04	N	4.20E-03	1.60E-01	SED09-10 (2 - 6 in)	4 / 19	21	0.004 - 0.0068	N
	85-01-8	PHENANTHRENE	mg/kg	3.00E-03 J	1.40E+01	SED09-10	47 / 48	98	4.3 - 4.3	N	4.60E-03	3.30E+00	SED09-10 (2 - 6 in)	17 / 19	89	0.0041 - 0.0042	N
	129-00-0	PYRENE	mg/kg	7.50E-03 J	1.20E+01	SED09-10	45 / 48	94	0.011 - 0.017	N	5.00E-03	2.70E+00	SED09-10 (2 - 6 in)	19 / 19	100	-	N

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SUMMARY STATISTICS COMPARISON - SHORELINE SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Exposure Point	CAS Number	Chemical (3)	Units	2013 HHRA							2017 HHRA						
				Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	COPC Flag (Y/N) (4)	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	COPC Flag (Y/N) (4)
		VOCs															
	78-93-3	2-BUTANONE	mg/kg	N/A						N	1.90E-02 J	1.90E-02 J	SED09-11B (2 - 6 in)	1 / 20	5	0.0018 - 0.012	N
	67-64-1	ACETONE	mg/kg	N/A						N	6.60E-03	6.20E-02	SED09-09 (2 - 6 in)	9 / 20	45	0.0018 - 0.012	N
	75-15-0	CARBON DISULFIDE	mg/kg	4.60E-02 J	5.40E-02 J	SED09-07B	2 / 25	8	0.042 - 0.58	N	3.80E-03 J	3.60E-02	SED09-09 (2 - 6 in)	10 / 20	50	0.00088 - 0.0059	N
	75-09-2	METHYLENE CHLORIDE	mg/kg	1.70E-01	1.70E-01	SED09-12A	1 / 25	4	0.13 - 2.9	N	1.00E-01 J	1.00E-01 J	SED09-08B (2 - 6 in)	1 / 20	5	0.0024 - 0.021	N
	127-18-4	TETRACHLOROETHENE	mg/kg	N/A						N	2.50E-03 J	5.30E-03 J	SED09-06B (0 - 0.5 ft)	3 / 20	15	0.00088 - 0.0059	N
Site 09 - Shoreline		**Metals**															
Deep Sediment	7429-90-5	ALUMINUM	mg/kg	4.57E+03	4.97E+03	SED09-12	2/2	100	--	N	2.80E+03	1.17E+04	SED09-08B (24 - 36 in)	11 / 11	100	-	Y
	7440-36-0	ANTIMONY	mg/kg	1.90E-01 J	2.70E-01 J	SED09-11	2/2	100	--	N	3.00E-02 J	1.80E-01 J	SED09-06B (24 - 36 in)	10 / 11	91	0.047 - 0.047	N
	7440-38-2	ARSENIC	mg/kg	3.00E+00	3.40E+00	SED09-12	2/2	100	--	Y	7.10E-01	1.17E+01	SED09-09 (24 - 36 in)	11 / 11	100	-	Y
	7440-41-7	BERYLLIUM	mg/kg	2.80E-01 J	3.10E-01 J	SED09-12	2/2	100	--	N	2.60E-01	9.40E-01	SED09-08B (24 - 36 in)	11 / 11	100	-	N
	7440-47-3	CHROMIUM, TOTAL	mg/kg	1.36E+01	1.48E+01	SED09-12	2/2	100	--	N	9.90E+00	3.00E+01	SED09-08B (24 - 36 in)	11 / 11	100	-	N
	7440-50-8	COPPER	mg/kg	1.32E+01	2.15E+01	SED09-12	2/2	100	--	N	8.70E+00	3.70E+01	SED09-06B (24 - 36 in)	11 / 11	100	-	N
	7439-89-6	IRON	mg/kg	8.76E+03	9.80E+03	SED09-11	2/2	100	--	Y	7.13E+03	2.84E+04	SED09-09 (24 - 36 in)	11 / 11	100	-	Y
	7439-92-1	LEAD	mg/kg	9.50E+00	1.36E+01	SED09-12	2/2	100	--	N	6.40E+00	1.91E+01	SED09-12B (24 - 36 in)	11 / 11	100	-	N
	7439-96-5	MANGANESE	mg/kg	9.06E+01 J	9.96E+01 J	SED09-12	2/2	100	--	N	7.57E+01 J	2.35E+02 J	SED09-01 (24 - 36 in)	11 / 11	100	-	Y
	7439-97-6	MERCURY	mg/kg	3.00E-02	8.00E-02	SED09-12	2/2	100	--	N	2.00E-02 J	6.00E-02	SED09-07B (24 - 36 in) SED09-09 (24 - 36 in) SED09-12B (24 - 36 in)	7 / 11	64	0.014 - 0.054	N
	7440-02-0	NICKEL	mg/kg	7.00E+00	8.00E+00	SED09-12	2/2	100	--	N	7.20E+00	1.74E+01	SED09-01 (24 - 36 in)	11 / 11	100	-	N
	7440-66-6	ZINC	mg/kg	4.08E+01 J	1.93E+02 J	SED09-12	2/2	100	--	N	1.95E+01 J	6.23E+01 J	SED09-12B (24 - 36 in)	11 / 11	100	-	N
		PCBs															
	RA-65	PCB, TOTAL	mg/kg	N/A						N	1.10E-02	1.30E-01	SED09-11B (18 - 24 in)	5 / 10	50	0.01 - 0.017	Y
		Pesticides															
	72-54-8	4,4-DDD	mg/kg	1.50E-03 J	1.50E-03 J	SED09-12	1 / 2	50	0.00023 - 0.00023	N	5.50E-04 J	4.60E-03 J	SED09-12B (24 - 36 in)	5 / 9	56	0.0018 - 0.0029	N
	72-55-9	4,4-DDE	mg/kg	7.90E-04 J	1.10E-03 J	SED09-12	2 / 2	100	--	N	2.60E-04 J	4.20E-03 J	SED09-01 (24 - 36 in)	6 / 9	67	0.0019 - 0.0029	N
	50-29-3	4,4-DDT	mg/kg	N/A						N	4.80E-03 J	1.20E-02	SED09-01 (24 - 36 in)	4 / 9	44	0.0018 - 0.0029	N
		SVOCs															
	83-32-9	ACENAPHTHENE	mg/kg	2.00E-03 J	2.00E-03 J	SED09-12	1 / 2	50	0.002 - 0.002	N	2.60E-03 J	2.30E-02 J	SED09-06B (24 - 36 in)	4 / 9	44	0.01 - 0.018	N
	208-96-8	ACENAPHTHYLENE	mg/kg	N/A						N	6.10E-03 J	7.20E-03 J	SED09-06B (24 - 36 in)	3 / 9	33	0.01 - 0.018	N
	120-12-7	ANTHRACENE	mg/kg	2.00E-03 J	7.00E-03 J	SED09-12	2 / 2	100	--	N	2.20E-03 J	3.00E-02	SED09-06B (24 - 36 in)	8 / 9	89	0.018 - 0.018	N
	56-55-3	BENZO[A]ANTHRACENE	mg/kg	9.00E-03 J	2.20E-02 J	SED09-12	2 / 2	100	--	N	4.80E-03 J	8.30E-02	SED09-06B (24 - 36 in)	8 / 9	89	0.02 - 0.02	N
	50-32-8	BENZO[A]PYRENE	mg/kg	9.00E-03 J	2.20E-02 J	SED09-12	2 / 2	100	--	Y	4.60E-03 J	4.80E-02 J	SED09-09 (24 - 36 in)	9 / 9	100	-	N
	205-99-2	BENZO[B]FLUORANTHENE	mg/kg	1.60E-02 J	3.30E-02	SED09-12	2 / 2	100	--	N	1.00E-02 J	1.30E-01 J	SED09-09 (24 - 36 in)	8 / 9	89	0.01 - 0.01	N
	191-24-2	BENZO[G,H,I]PERYLENE	mg/kg	8.00E-03 J	1.40E-02 J	SED09-12	2 / 2	100	--	N	3.20E-03 J	2.40E-02 J	SED09-09 (24 - 36 in)	9 / 9	100	-	N
	207-08-9	BENZO[K]FLUORANTHENE	mg/kg	6.00E-03 J	1.60E-02 J	SED09-12	2 / 2	100	--	N	7.20E-03 J	2.50E-01 J	SED09-09 (24 - 36 in)	7 / 9	78	0.013 - 0.018	N
	218-01-9	CHRYSENE	mg/kg	7.00E-03 J	2.50E-02	SED09-12	2 / 2	100	--	N	1.30E-02 J	8.00E-02	SED09-06B (24 - 36 in)	7 / 9	78	0.013 - 0.018	N
	53-70-3	DIBENZ[A,H]ANTHRACENE	mg/kg	3.00E-03 J	5.00E-03 J	SED09-12	1 / 2	50	0.002 - 0.002	N	9.50E-03 J	1.90E-02 J	SED09-09 (24 - 36 in) SED09-10 (24 - 30 in) SED09-08B (24 - 36 in)	8 / 9	89	0.013 - 0.013	N
	206-44-0	FLUORANTHENE	mg/kg	1.20E-02 J	4.20E-02	SED09-12	2 / 2	100	--	N	4.60E-03 J	3.20E-01	SED09-06B (24 - 36 in)	9 / 9	100	-	N
	86-73-7	FLUORENE	mg/kg	4.00E-03 J	4.00E-03 J	SED09-12	1 / 2	50	0.004 - 0.004	N	5.60E-03 J	7.20E-03 J	SED09-09 (24 - 36 in)	3 / 9	33	0.01 - 0.018	N
	193-39-5	INDENO[1,2,3-CD]PYRENE	mg/kg	1.00E-02 J	2.20E-02 J	SED09-12	2 / 2	100	--	N	1.20E-02 J	9.60E-02 J	SED09-10 (24 - 30 in)	7 / 9	78	0.02 - 0.026	N
	91-20-3	NAPHTHALENE	mg/kg	N/A						N	6.50E-03 J	6.50E-03 J	SED09-10 (24 - 30 in)	1 / 9	11	0.01 - 0.018	N
	85-01-8	PHENANTHRENE	mg/kg	5.00E-03 J	2.60E-02 J	SED09-12	2 / 2	100	--	N	5.20E-03 J	9.80E-02	SED09-10 (24 - 30 in)	8 / 9	89	0.013 - 0.013	N
	129-00-0	PYRENE	mg/kg	1.90E-02 J	6.50E-02	SED09-12	2 / 2	100	--	N	4.20E-03 J	2.20E-01	SED09-06B (24 - 36 in)	9 / 9	100	-	N

APPENDIX B, TABLE 1
SUMMARY STATISTICS COMPARISON - SHORELINE SEDIMENT
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Exposure Point	CAS Number	Chemical (3)	Units	2013 HHRA							2017 HHRA						
				Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	COPC Flag (Y/N) (4)	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	COPC Flag (Y/N) (4)
		VOCs															
	67-64-1	ACETONE	mg/kg	N/A						N	2.10E-02 J	2.10E-02 J	SED09-03 (24 - 36 in)	1 / 8	13	0.011 - 0.021	N
	75-15-0	CARBON DISULFIDE	mg/kg	N/A						N	6.70E-03 J	1.10E-02 J	SED09-08B (24 - 36 in) SED09-12B (24 - 36 in)	7 / 8	88	0.0022 - 0.0022	N

Notes:

Refer to the 2013 HHRA presented as Appendix F of the Long-Term Monitoring Data Summary and Optimization Recommendations Report for samples (Tetra Tech; August 2015) included in 2013 HHRA data set. Refer to Appendix A for samples included in the 2017 HHRA Update data set.

Shallow sediment is defined as sediment samples collected from within the 0 to 0.5 ft bgs depth interval.

Deep sediment is defined as sediment samples collected from within the 1.5 to 3 ft bgs depth interval.

Totals for use in risk assessment are calculated as discussed in the report text and have a CAS number beginning with "RA-".

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

HHRA = Human Health Risk Assessment.

ft = feet.

ft bgs = feet below ground surface.

in = Inches.

mg/kg = milligrams per kilogram.

N/A = Not Applicable or Not Available.

PCBs = Polychlorinated biphenyls.

SVOCs = Semivolatile organic compounds.

VOCs = Volatile organic compounds.

(1) Minimum/maximum detected concentration and associated data flags.

EB = Equipment blank contamination.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

(2) Range of Reporting Detection Limits (RDLs).

(3) Chemicals presented on this table include the shoreline sediment COPCs identified in the 2013 HHRA and chemicals detected in the 2017 HHRA shoreline sediment dataset (as defined in the text and Appendix A). Chemicals not identified as COPCs in the 2013 HHRA that were also not detected in the 2017 HHRA dataset are not included.

(4) An indicator of whether the associated chemical was identified as a COPC in the 2013 HHRA or 2017 HHRA update is provided for informational purposes.

APPENDIX B, TABLE 2
SUMMARY STATISTICS COMPARISON - SHORELINE GROUNDWATER (PIEZOMETER WATER)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Exposure Point	CAS Number	Chemical (3)	Units	2013 HHRA							2017 HHRA						
				Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	COPC Flag (Y/N) (4)	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	COPC Flag (Y/N) (4)
Site 09 - Shoreline		**Total Metals**															
	7429-90-5	ALUMINUM	ug/L	3.56E+01 J	7.79E+05	P09-06	47 / 67	70	15.2 - 340	Y	1.41E+02 J	6.22E+05	P09-12B	32 / 34	94	300 - 500	Y
	7440-36-0	ANTIMONY	ug/L	2.00E-01 J	1.40E+01	P09-06	28 / 67	42	0.24 - 56.5	Y	2.20E-01 J	2.02E+01 J	P09-11B	15 / 34	44	0.8 - 40	Y
	7440-38-2	ARSENIC	ug/L	5.40E+00 J	6.42E+02	P09-06	56 / 67	84	5.6 - 21.6	Y	3.50E-01 J-	5.92E+02 J-	P09-05A	30 / 34	88	20 - 40	Y
	7440-41-7	BERYLLIUM	ug/L	5.00E-02 J	7.02E+01	P09-06	31 / 67	46	0.05 - 11.3	Y	6.00E-02 J	5.64E+01	P09-12B	16 / 34	47	0.2 - 15	Y
	7440-47-3	CHROMIUM, TOTAL	ug/L	3.20E+00 J	5.68E+04	P09-01	42 / 67	63	0.78 - 33.9	Y	8.50E+00	4.34E+04	P09-01	29 / 34	85	5 - 100	Y
	7440-50-8	COPPER	ug/L	1.40E+00 J	3.20E+03	P09-06	44 / 67	66	3.5 - 25.4	Y	1.30E+00 J	2.15E+03	P09-12B	26 / 34	76	3 - 100	Y
	7439-89-6	IRON	ug/L	5.42E+02 J	1.88E+06	P09-06	64 / 67	96	488 - 714	Y	1.80E+03 J	2.20E+06	P09-09	30 / 34	88	100 - 10000	Y
	7439-92-1	LEAD	ug/L	5.00E-02 J	2.57E+03	P09-12B	44 / 67	66	0.5 - 7.5	Y	1.60E+00	2.28E+03	P09-12B	22 / 34	65	1 - 50	Y
	7439-96-5	MANGANESE	ug/L	3.30E+00 J	1.78E+04	P09-06	59 / 67	88	5 - 50	Y	4.50E+00	1.17E+04	P09-09	33 / 34	97	2.7 - 2.7	Y
	7439-97-6	MERCURY	ug/L	1.00E-02 J	5.00E+00	P09-12B	26 / 67	39	0.01 - 0.17	Y	4.00E-02 J	1.16E+01	P09-12B	13 / 32	38	0.05 - 0.2	Y
	7440-02-0	NICKEL	ug/L	6.90E+00 J	8.32E+03	P09-01	61 / 67	91	2.2 - 17.4	Y	9.00E+00	5.25E+03	P09-07B	34 / 34	100	-	Y
	7440-66-6	ZINC	ug/L	9.20E+00 J	9.16E+03	P09-12B	45 / 67	67	2.4 - 74.1	Y	9.90E+00 J	1.38E+05	P09-06B	33 / 34	97	75 - 75	Y
		Dissolved Metals															
	7429-90-5	ALUMINUM	ug/L	3.99E+01 J	1.88E+05	P09-08B	11 / 64	17	15.2 - 340	Y	4.35E+01	1.48E+04	P09-02A	23 / 31	74	300 - 1000	Y
	7440-36-0	ANTIMONY	ug/L	1.70E-01 J	2.90E+00	P09-06	17 / 64	27	0.15 - 10	Y	1.20E-01 J	1.86E+01 J	P09-02A	12 / 31	39	0.8 - 40	Y
	7440-38-2	ARSENIC	ug/L	4.90E+00 J	1.76E+02	P09-08B	47 / 64	73	1.5 - 33	Y	2.00E-01 J-	6.66E+02 J-	P09-05A	21 / 31	68	16 - 40	Y
	7440-41-7	BERYLLIUM	ug/L	4.00E-02 J	1.60E+01 J	P09-08B	8 / 64	13	0.05 - 7.5	Y	6.00E-02 J	6.00E-02 J	P09-06B	1 / 31	3	0.2 - 15	N
	7440-47-3	CHROMIUM, TOTAL	ug/L	1.20E+00 J	1.58E+03	P09-08B	17 / 64	27	0.52 - 16	Y	1.10E+00 J-	1.20E+03	P09-01	16 / 31	52	5 - 100	Y
	7440-50-8	COPPER	ug/L	1.20E+00 J	4.36E+02	P09-08B	21 / 64	33	0.7 - 19	Y	4.40E-01 J	1.92E+02	P09-02A	9 / 31	29	3 - 100	Y
	7439-89-6	IRON	ug/L	1.07E+02	4.88E+05	P09-08B	54 / 64	84	12.1 - 4440	Y	9.86E+02 J	7.51E+04	P09-09	19 / 31	61	90 - 10000	Y
	7439-92-1	LEAD	ug/L	8.00E-02 J	3.31E+02	P09-08B	12 / 64	19	0.5 - 7.5	Y	1.70E-01 J	1.04E+02	P09-02A	8 / 31	26	1 - 50	Y
	7439-96-5	MANGANESE	ug/L	2.20E+00 J	4.21E+03	P09-08B	54 / 64	84	2.3 - 50	Y	3.80E+00	1.73E+04	P09-12B	27 / 31	87	75 - 75	Y
	7439-97-6	MERCURY	ug/L	1.00E-02 J	6.00E-01	P09-08B	9 / 64	14	0.01 - 0.1	Y	7.30E-02 J-	1.40E-01 J	P09-02A	3 / 30	10	0.05 - 0.2	N
	7440-02-0	NICKEL	ug/L	1.30E+00 J	1.91E+03	P09-08B	42 / 64	66	2 - 25.5	Y	1.40E+00	1.25E+04	P09-12B	28 / 31	90	30 - 50	Y
	7440-66-6	ZINC	ug/L	1.50E+00 J	1.41E+03	P09-08B	22 / 64	34	1.7 - 50	Y	7.20E+00 J	4.89E+02	P09-02A	23 / 31	74	10 - 75	N
		PCBs															
	RA-65	PCB, TOTAL	ug/L	4.80E-01 J	4.80E-01 J	P09-09	1 / 39	3	0.048 - 0.5	Y	ND						N
		SVOCs															
	95-95-4	2,4,5-TRICHLOROPHENOL	ug/L	N/A						N	8.50E-02 J	8.50E-02 J	P09-11B	1 / 8	13	0.1 - 0.1	N
	56-55-3	BENZO[A]ANTHRACENE	ug/L	1.10E-01 J	1.10E-01 J	P09-11A, P09-12A	2 / 19	11	0.04 - 7.9	Y	3.00E-01	3.00E-01	P09-10	1 / 8	13	0.094 - 0.1	Y
	50-32-8	BENZO[A]PYRENE	ug/L	N/A						N	2.60E-01 J	2.60E-01 J	P09-10	1 / 8	13	0.094 - 0.1	Y
	205-99-2	BENZO[B]FLUORANTHENE	ug/L	N/A						N	4.10E-01	4.10E-01	P09-10	1 / 8	13	0.094 - 0.1	Y
	191-24-2	BENZO[G,H,I]PERYLENE	ug/L	N/A						N	2.30E-01	2.30E-01	P09-10	1 / 8	13	0.094 - 0.1	N
	207-08-9	BENZO[K]FLUORANTHENE	ug/L	N/A						N	1.80E-01	1.80E-01	P09-10	1 / 8	13	0.094 - 0.1	N
	117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	ug/L	2.30E+00 J	2.30E+00 J	P09-11B	1 / 19	5	2 - 16	N	1.70E-01 J	5.10E-01 J	P09-10	7 / 8	88	0.47 - 0.47	N
	85-68-7	BUTYLBENZYLPHTHALATE	ug/L	N/A						N	1.20E+00 J	1.20E+00 J	P09-10	1 / 8	13	2 - 7.1	N
	218-01-9	CHRYSENE	ug/L	N/A						N	1.30E-01	3.00E-01	P09-10	2 / 8	25	0.094 - 0.1	N
	206-44-0	FLUORANTHENE	ug/L	N/A						N	6.40E-01	6.40E-01	P09-10	1 / 8	13	0.094 - 0.1	N
	86-73-7	FLUORENE	ug/L	N/A						N	1.10E-01	1.10E-01	P09-08B	1 / 8	13	0.094 - 0.1	N
	193-39-5	INDENO[1,2,3-CD]PYRENE	ug/L	1.30E-01 J	1.30E-01 J	P09-11A	1 / 19	5	0.05 - 7.9	Y	2.00E-01 J	2.00E-01 J	P09-10	1 / 8	13	0.094 - 0.1	N
	91-20-3	NAPHTHALENE	ug/L	8.00E-02 J	3.00E-01 J	P09-11	2 / 19	11	0.06 - 7.9	Y	ND						N
	85-01-8	PHENANTHRENE	ug/L	N/A						N	1.00E-01	3.10E-01	P09-10	3 / 8	38	0.094 - 0.1	N
	129-00-0	PYRENE	ug/L	N/A						N	1.30E-01	5.10E-01	P09-10	2 / 8	25	0.094 - 0.1	N

APPENDIX B, TABLE 2
SUMMARY STATISTICS COMPARISON - SHORELINE GROUNDWATER (PIEZOMETER WATER)
HUMAN HEALTH RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Exposure Point	CAS Number	Chemical (3)	Units	2013 HHRA							2017 HHRA						
				Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	COPC Flag (Y/N) (4)	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Location of Maximum Concentration	Detection Frequency	Detection Frequency (%)	Range of Detection Limits (2)	COPC Flag (Y/N) (4)
		VOCs															
	78-93-3	2-BUTANONE	ug/L	2.40E+00 J	5.00E+00	P09-01	5 / 60	8	1 - 2.5	N	5.70E+00	4.30E+01 J	P09-08B	4 / 34	12	2.5 - 5	N
	67-64-1	ACETONE	ug/L	2.40E+00 J	2.30E+01	P09-09	27 / 61	44	2 - 2.5	N	3.90E+00 J	3.70E+02	P09-12B	10 / 34	29	2.5 - 5	N
	71-43-2	BENZENE	ug/L	5.20E-01 J	4.00E+00	P09-10	6 / 67	9	0.3 - 0.5	Y	1.30E+00	1.30E+00	P09-10	1 / 34	3	0.5 - 1	Y
	75-15-0	CARBON DISULFIDE	ug/L	3.00E-01 J	6.00E+00	P09-01	11 / 67	16	0.2 - 0.69	N	4.00E-01 J	5.30E+00	P09-01	7 / 34	21	0.5 - 1	N
	156-59-2	CIS-1,2-DICHLOROETHENE	ug/L	3.80E-01 J	2.40E+02 J	P09-08A	11 / 67	16	0.2 - 0.5	Y	ND						N
	108-88-3	TOLUENE	ug/L	3.00E-01 J	3.90E-01 J	P09-08A	2 / 67	3	0.3 - 0.5	N	1.20E+00	2.20E+00	P09-07B	2 / 34	6	0.5 - 1	N
	540-59-0	1,2-DICHLOROETHENE (TOTAL)	ug/L	3.80E-01 J	2.70E+02 J	P09-08A	11 / 67	16	0.2 - 0.75	Y	ND						N
	156-60-5	TRANS-1,2-DICHLOROETHENE	ug/L	3.50E-01 J	3.00E+01	P09-08A	8 / 67	12	0.2 - 1	Y	ND						N
	79-01-6	TRICHLOROETHENE	ug/L	3.00E-01 J	2.80E+00	P09-06A	7 / 67	10	0.3 - 0.5	Y	ND						N
	75-01-4	VINYL CHLORIDE	ug/L	1.40E+00 J	5.90E+02 J	P09-08A	7 / 67	10	0.2 - 1	Y	1.10E+00 J	1.10E+00 J	P09-10	1 / 34	3	0.5 - 1	Y
	1330-20-7	XYLENES, TOTAL	ug/L	N/A						N	1.80E+00	1.80E+00	P09-07B	1 / 34	3	1 - 1.5	N

Notes:

Refer to the 2013 HHRA presented as Appendix F of the Long-Term Monitoring Data Summary and Optimization Recommendations Report for samples (Tetra Tech; August 2015) included in 2013 HHRA data set. Refer to Appendix A for samples included in the 2017 HHRA Update data set.

CAS = Chemical Abstracts Service.

COPC = Chemical of Potential Concern.

HHRA = Human Health Risk Assessment.

N/A = Not Applicable or Not Available.

ND = Not detected.

PCBs = Polychlorinated biphenyls.

ug/L = micrograms per liter.

SVOCs = Semivolatile organic compounds.

VOCs = Volatile organic compounds.

(1) Minimum/maximum detected concentration and associated data flags.

J = The chemical was positively identified; however, the associated numerical value is an estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

(2) Range of Reporting Detection Limits (RDLs).

(3) Chemicals presented on this table include the shoreline groundwater COPCs identified in the 2013 HHRA and chemicals detected in the 2017 HHRA shoreline groundwater dataset (as defined in the text and Appendix A). Chemicals not identified as COPCs in the 2013 HHRA that were also not detected in the 2017 HHRA dataset are not included.

(4) An indicator of whether the associated chemical was identified as a COPC in the 2013 HHRA or 2017 HHRA update is provided for informational purposes.

APPENDIX C

PROUCL INPUT AND OUTPUT

SHALLOW SEDIMENT

Matrix	Fraction	Units	Location	Collected	Depth	ALUMINUM	D_ALUMINUM	ARSENIC	D_ARSENIC	BENZO[A]ANTHRACENE	D_BENZO[A]ANTHRACENE	BENZO[A]PYRENE	D_BENZO[A]PYRENE
SE	T	MG_KG	SED09-01	9/22/2014	0 - 0.5 ft								
SE	T	MG_KG	SED09-01	9/10/2015	2 - 6 in					0.057	1	0.052	1
SE	T	MG_KG	SED09-01	9/13/2016	0 - 0.5 ft	2740	1	3	1	0.018	1	0.022	1
SE	T	MG_KG	SED09-02A	9/8/2015	2 - 6 in					0.011	1	0.01	1
SE	T	MG_KG	SED09-02A	9/12/2016	0 - 0.5 ft	4790	1	3.7	1	0.013	1	0.013	1
SE	T	MG_KG	SED09-03A	9/12/2016	0 - 0.5 ft	3830	1	2.9	1	0.0063	1	0.0072	1
SE	T	MG_KG	SED09-04A	9/9/2015	2 - 6 in	3060	1	2.7	1				
SE	T	MG_KG	SED09-04A	9/12/2016	0 - 0.5 ft	3690	1	2.3	1	0.0043	1	0.0053	1
SE	T	MG_KG	SED09-05A	9/9/2015	2 - 6 in								
SE	T	MG_KG	SED09-05A	9/13/2016	0 - 0.5 ft	4590	1	3.2	1	0.0095	1	0.01	1
SE	T	MG_KG	SED09-06B	9/8/2015	2 - 6 in					0.0041	0	0.0041	0
SE	T	MG_KG	SED09-06B	9/26/2016	0 - 0.5 ft	5080	1	7.7	1	0.062	1	0.072	1
SE	T	MG_KG	SED09-07B	9/8/2015	2 - 6 in								
SE	T	MG_KG	SED09-07B	9/26/2016	0 - 0.5 ft	3810	1	4.7	1	0.034	1	0.037	1
SE	T	MG_KG	SED09-08B	9/8/2015	2 - 6 in	7240	1	6.4	1	0.034	1	0.029	1
SE	T	MG_KG	SED09-08B	9/26/2016	0 - 0.5 ft	3900	1	5.4	1	0.039	1	0.036	1
SE	T	MG_KG	SED09-09	9/22/2014	0 - 0.5 ft	4620	1	5.9	1				
SE	T	MG_KG	SED09-09	9/8/2015	2 - 6 in	9130	1	9.6	1	0.1	1	0.078	1
SE	T	MG_KG	SED09-09	9/12/2016	0 - 0.5 ft	8420	1	8.2	1	0.18	1	0.17	1
SE	T	MG_KG	SED09-10	9/22/2014	0 - 0.5 ft					0.12	1	0.1	1
SE	T	MG_KG	SED09-10	9/8/2015	2 - 6 in					1.4	1	1.1	1
SE	T	MG_KG	SED09-10	9/12/2016	0 - 0.5 ft	7950	1	11.6	1	0.48	1	0.43	1
SE	T	MG_KG	SED09-11B	9/9/2015	2 - 6 in								
SE	T	MG_KG	SED09-11B	9/13/2016	0 - 0.5 ft	3770	1	1.8	1	0.032	1	0.033	1
SE	T	MG_KG	SED09-12B	9/8/2015	2 - 6 in								
SE	T	MG_KG	SED09-12B	9/26/2016	0 - 0.5 ft	3890	1	4.9	1	0.045	1	0.04	1

Matrix	Fraction	Units	Location	Collected	Depth	BENZO[B]FLUORANTHENE	D_BENZO[B]FLUORANTHENE	CHRYSENE	D_CHRYSENE	DIBENZ[A,H]ANTHRACENE	D_DIBENZ[A,H]ANTHRACENE
SE	T	MG_KG	SED09-01	9/22/2014	0 - 0.5 ft						
SE	T	MG_KG	SED09-01	9/10/2015	2 - 6 in	0.075	1	0.068	1	0.0082	1
SE	T	MG_KG	SED09-01	9/13/2016	0 - 0.5 ft	0.035	1	0.02	1	0.0057	1
SE	T	MG_KG	SED09-02A	9/8/2015	2 - 6 in	0.016	1	0.014	1	0.0045	0
SE	T	MG_KG	SED09-02A	9/12/2016	0 - 0.5 ft	0.026	1	0.02	1	0.0047	0
SE	T	MG_KG	SED09-03A	9/12/2016	0 - 0.5 ft	0.015	1	0.0082	1	0.0041	0
SE	T	MG_KG	SED09-04A	9/9/2015	2 - 6 in						
SE	T	MG_KG	SED09-04A	9/12/2016	0 - 0.5 ft	0.011	1	0.0066	1	0.0042	0
SE	T	MG_KG	SED09-05A	9/9/2015	2 - 6 in						
SE	T	MG_KG	SED09-05A	9/13/2016	0 - 0.5 ft	0.017	1	0.011	1	0.0052	1
SE	T	MG_KG	SED09-06B	9/8/2015	2 - 6 in	0.0041	0	0.0041	0	0.0041	0
SE	T	MG_KG	SED09-06B	9/26/2016	0 - 0.5 ft	0.11	1	0.08	1	0.013	1
SE	T	MG_KG	SED09-07B	9/8/2015	2 - 6 in						
SE	T	MG_KG	SED09-07B	9/26/2016	0 - 0.5 ft	0.06	1	0.045	1	0.0073	1
SE	T	MG_KG	SED09-08B	9/8/2015	2 - 6 in	0.047	1	0.037	1	0.0078	1
SE	T	MG_KG	SED09-08B	9/26/2016	0 - 0.5 ft	0.061	1	0.052	1	0.0096	1
SE	T	MG_KG	SED09-09	9/22/2014	0 - 0.5 ft						
SE	T	MG_KG	SED09-09	9/8/2015	2 - 6 in	0.1	1	0.092	1	0.018	1
SE	T	MG_KG	SED09-09	9/12/2016	0 - 0.5 ft	0.24	1	0.17	1	0.036	1
SE	T	MG_KG	SED09-10	9/22/2014	0 - 0.5 ft	0.16	1	0.12	1	0.0068	0
SE	T	MG_KG	SED09-10	9/8/2015	2 - 6 in	1.3	1	1.4	1	0.14	1
SE	T	MG_KG	SED09-10	9/12/2016	0 - 0.5 ft	0.69	1	0.48	1	0.091	1
SE	T	MG_KG	SED09-11B	9/9/2015	2 - 6 in						
SE	T	MG_KG	SED09-11B	9/13/2016	0 - 0.5 ft	0.048	1	0.033	1	0.0074	1
SE	T	MG_KG	SED09-12B	9/8/2015	2 - 6 in						
SE	T	MG_KG	SED09-12B	9/26/2016	0 - 0.5 ft	0.062	1	0.051	1	0.0074	1

Matrix	Fraction	Units	Location	Collected	Depth	INDENO[1,2,3-CD]PYRENE	D_INDENO[1,2,3-CD]PYRENE	IRON	D_IRON	MANGANESE	D_MANGANESE	PCB, TOTAL	D_PCB, TOTAL
SE	T	MG_KG	SED09-01	9/22/2014	0 - 0.5 ft							0.074	1
SE	T	MG_KG	SED09-01	9/10/2015	2 - 6 in	0.034	1					0.049	1
SE	T	MG_KG	SED09-01	9/13/2016	0 - 0.5 ft	0.016	1	7290	1	75.3	1	0.075	1
SE	T	MG_KG	SED09-02A	9/8/2015	2 - 6 in	0.0072	1					0.011	0
SE	T	MG_KG	SED09-02A	9/12/2016	0 - 0.5 ft	0.01	1	8700	1	77.5	1	0.0093	0
SE	T	MG_KG	SED09-03A	9/12/2016	0 - 0.5 ft	0.0055	1	8250	1	65.4	1		
SE	T	MG_KG	SED09-04A	9/9/2015	2 - 6 in			7090	1	54.9	1		
SE	T	MG_KG	SED09-04A	9/12/2016	0 - 0.5 ft	0.0044	1	7260	1	70.3	1		
SE	T	MG_KG	SED09-05A	9/9/2015	2 - 6 in								
SE	T	MG_KG	SED09-05A	9/13/2016	0 - 0.5 ft	0.0089	1	9040	1	78	1		
SE	T	MG_KG	SED09-06B	9/8/2015	2 - 6 in	0.0041	0						
SE	T	MG_KG	SED09-06B	9/26/2016	0 - 0.5 ft	0.067	1	16500	1	136	1		
SE	T	MG_KG	SED09-07B	9/8/2015	2 - 6 in								
SE	T	MG_KG	SED09-07B	9/26/2016	0 - 0.5 ft	0.037	1	9740	1	73	1		
SE	T	MG_KG	SED09-08B	9/8/2015	2 - 6 in	0.019	1	19000	1	132	1		
SE	T	MG_KG	SED09-08B	9/26/2016	0 - 0.5 ft	0.036	1	11400	1	77.8	1		
SE	T	MG_KG	SED09-09	9/22/2014	0 - 0.5 ft			12200	1	97.6	1		
SE	T	MG_KG	SED09-09	9/8/2015	2 - 6 in	0.055	1	27500	1	250	1	0.18	1
SE	T	MG_KG	SED09-09	9/12/2016	0 - 0.5 ft	0.11	1	24100	1	186	1	0.00069	1
SE	T	MG_KG	SED09-10	9/22/2014	0 - 0.5 ft	0.09	1						
SE	T	MG_KG	SED09-10	9/8/2015	2 - 6 in	0.56	1					0.17	1
SE	T	MG_KG	SED09-10	9/12/2016	0 - 0.5 ft	0.27	1	22900	1	136	1	0.074	1
SE	T	MG_KG	SED09-11B	9/9/2015	2 - 6 in								
SE	T	MG_KG	SED09-11B	9/13/2016	0 - 0.5 ft	0.024	1	8850	1	109	1		
SE	T	MG_KG	SED09-12B	9/8/2015	2 - 6 in								
SE	T	MG_KG	SED09-12B	9/26/2016	0 - 0.5 ft	0.037	1	10600	1	74.2	1		

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.14/11/2017 2:28:12 PM
From File	SE_Shallow_ProUCL_Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

PCB, TOTAL

General Statistics

Total Number of Observations	9	Number of Distinct Observations	8
		Number of Missing Observations	13
Number of Detects	7	Number of Non-Detects	2
Number of Distinct Detects	6	Number of Distinct Non-Detects	2
Minimum Detect	6.9000E-4	Minimum Non-Detect	0.0093
Maximum Detect	0.18	Maximum Non-Detect	0.011
Variance Detects	0.00415	Percent Non-Detects	22.22%
Mean Detects	0.089	SD Detects	0.0644
Median Detects	0.074	CV Detects	0.724
Skewness Detects	0.46	Kurtosis Detects	-0.647
Mean of Logged Detects	-3.083	SD of Logged Detects	1.911

Note: Sample size is small (e.g., <10), if data are collected using ISM approach, you should use guidance provided in ITRC Tech Reg Guide on ISM (ITRC, 2012) to compute statistics of interest. For example, you may want to use Chebyshev UCL to estimate EPC (ITRC, 2012). Chebyshev UCL can be computed using the Nonparametric and All UCL Options of ProUCL 5.1

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.887	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.3	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.304	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.0693	KM Standard Error of Mean	0.0231
KM SD	0.0641	95% KM (BCA) UCL	0.105
95% KM (t) UCL	0.112	95% KM (Percentile Bootstrap) UCL	0.104
95% KM (z) UCL	0.107	95% KM Bootstrap t UCL	0.126
90% KM Chebyshev UCL	0.139	95% KM Chebyshev UCL	0.17
97.5% KM Chebyshev UCL	0.214	99% KM Chebyshev UCL	0.299

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.773	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.732	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.302	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.321	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.884	k star (bias corrected MLE)	0.6
Theta hat (MLE)	0.101	Theta star (bias corrected MLE)	0.148
nu hat (MLE)	12.37	nu star (bias corrected)	8.402
Mean (detects)	0.089		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	6.9000E-4	Mean	0.0723
Maximum	0.18	Median	0.074
SD	0.0649	CV	0.897
k hat (MLE)	0.821	k star (bias corrected MLE)	0.621
Theta hat (MLE)	0.0881	Theta star (bias corrected MLE)	0.116
nu hat (MLE)	14.77	nu star (bias corrected)	11.18
Adjusted Level of Significance (β)	0.0231		
Approximate Chi Square Value (11.18, α)	4.692	Adjusted Chi Square Value (11.18, β)	3.845
95% Gamma Approximate UCL (use when n>=50)	0.172	95% Gamma Adjusted UCL (use when n<50)	0.21

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.0693	SD (KM)	0.0641
Variance (KM)	0.00411	SE of Mean (KM)	0.0231
k hat (KM)	1.169	k star (KM)	0.854
nu hat (KM)	21.05	nu star (KM)	15.37
theta hat (KM)	0.0593	theta star (KM)	0.0812
80% gamma percentile (KM)	0.113	90% gamma percentile (KM)	0.166
95% gamma percentile (KM)	0.22	99% gamma percentile (KM)	0.346

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (15.37, α)	7.517	Adjusted Chi Square Value (15.37, β)	6.394
95% Gamma Approximate KM-UCL (use when n>=50)	0.142	95% Gamma Adjusted KM-UCL (use when n<50)	0.167

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.676	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.803	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.371	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.304	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.0698	Mean in Log Scale	-3.706
SD in Original Scale	0.0675	SD in Log Scale	2.065
95% t UCL (assumes normality of ROS data)	0.112	95% Percentile Bootstrap UCL	0.107
95% BCA Bootstrap UCL	0.108	95% Bootstrap t UCL	0.126
95% H-UCL (Log ROS)	15.19		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-4.015	KM Geo Mean	0.018
KM SD (logged)	2.34	95% Critical H Value (KM-Log)	6.599
KM Standard Error of Mean (logged)	0.843	95% H-UCL (KM -Log)	65.59
KM SD (logged)	2.34	95% Critical H Value (KM-Log)	6.599
KM Standard Error of Mean (logged)	0.843		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.0703	Mean in Log Scale	-3.573
SD in Original Scale	0.0669	SD in Log Scale	1.919
95% t UCL (Assumes normality)	0.112	95% H-Stat UCL	7.402

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL	0.112

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

BENZO[A]ANTHRACENE

General Statistics

Total Number of Observations	19	Number of Distinct Observations	18
		Number of Missing Observations	7
Number of Detects	18	Number of Non-Detects	1
Number of Distinct Detects	17	Number of Distinct Non-Detects	1
Minimum Detect	0.0043	Minimum Non-Detect	0.0041
Maximum Detect	1.4	Maximum Non-Detect	0.0041
Variance Detects	0.11	Percent Non-Detects	5.263%
Mean Detects	0.147	SD Detects	0.332
Median Detects	0.0365	CV Detects	2.259
Skewness Detects	3.584	Kurtosis Detects	13.51
Mean of Logged Detects	-3.154	SD of Logged Detects	1.485

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.455	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.897	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.366	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.202	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.139	KM Standard Error of Mean	0.0745
KM SD	0.316	95% KM (BCA) UCL	0.273
95% KM (t) UCL	0.269	95% KM (Percentile Bootstrap) UCL	0.276
95% KM (z) UCL	0.262	95% KM Bootstrap t UCL	0.893
90% KM Chebyshev UCL	0.363	95% KM Chebyshev UCL	0.464
97.5% KM Chebyshev UCL	0.605	99% KM Chebyshev UCL	0.881

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.295	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.799	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.243	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.215	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.512	k star (bias corrected MLE)	0.464
Theta hat (MLE)	0.287	Theta star (bias corrected MLE)	0.317
nu hat (MLE)	18.43	nu star (bias corrected)	16.69
Mean (detects)	0.147		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0043	Mean	0.14
Maximum	1.4	Median	0.034
SD	0.324	CV	2.319
k hat (MLE)	0.503	k star (bias corrected MLE)	0.458
Theta hat (MLE)	0.278	Theta star (bias corrected MLE)	0.305
nu hat (MLE)	19.1	nu star (bias corrected)	17.42
Adjusted Level of Significance (β)	0.0369		
Approximate Chi Square Value (17.42, α)	8.973	Adjusted Chi Square Value (17.42, β)	8.446
95% Gamma Approximate UCL (use when n>=50)	0.271	95% Gamma Adjusted UCL (use when n<50)	0.288

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.139	SD (KM)	0.316
Variance (KM)	0.0996	SE of Mean (KM)	0.0745
k hat (KM)	0.195	k star (KM)	0.199
nu hat (KM)	7.417	nu star (KM)	7.579
theta hat (KM)	0.714	theta star (KM)	0.699
80% gamma percentile (KM)	0.183	90% gamma percentile (KM)	0.422
95% gamma percentile (KM)	0.719	99% gamma percentile (KM)	1.538

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (7.58, α)	2.494	Adjusted Chi Square Value (7.58, β)	2.246
95% Gamma Approximate KM-UCL (use when n>=50)	0.424	95% Gamma Adjusted KM-UCL (use when n<50)	0.471

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.962	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.897	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.123	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.202	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.139	Mean in Log Scale	-3.346
SD in Original Scale	0.324	SD in Log Scale	1.669
95% t UCL (assumes normality of ROS data)	0.268	95% Percentile Bootstrap UCL	0.279
95% BCA Bootstrap UCL	0.348	95% Bootstrap t UCL	0.868
95% H-UCL (Log ROS)	0.601		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-3.277	KM Geo Mean	0.0377
KM SD (logged)	1.499	95% Critical H Value (KM-Log)	3.387
KM Standard Error of Mean (logged)	0.354	95% H-UCL (KM -Log)	0.384
KM SD (logged)	1.499	95% Critical H Value (KM-Log)	3.387
KM Standard Error of Mean (logged)	0.354		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.139	Mean in Log Scale	-3.314
SD in Original Scale	0.324	SD in Log Scale	1.603
95% t UCL (Assumes normality)	0.268	95% H-Stat UCL	0.504

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	0.464

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

BENZO[A]PYRENE

General Statistics

Total Number of Observations	19	Number of Distinct Observations	18
		Number of Missing Observations	7
Number of Detects	18	Number of Non-Detects	1
Number of Distinct Detects	17	Number of Distinct Non-Detects	1
Minimum Detect	0.0053	Minimum Non-Detect	0.0041
Maximum Detect	1.1	Maximum Non-Detect	0.0041
Variance Detects	0.0691	Percent Non-Detects	5.263%
Mean Detects	0.125	SD Detects	0.263
Median Detects	0.0365	CV Detects	2.108
Skewness Detects	3.435	Kurtosis Detects	12.44
Mean of Logged Detects	-3.183	SD of Logged Detects	1.394

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.479	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.897	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.371	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.202	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.118	KM Standard Error of Mean	0.059
KM SD	0.25	95% KM (BCA) UCL	0.228
95% KM (t) UCL	0.221	95% KM (Percentile Bootstrap) UCL	0.225
95% KM (z) UCL	0.215	95% KM Bootstrap t UCL	0.639
90% KM Chebyshev UCL	0.295	95% KM Chebyshev UCL	0.376
97.5% KM Chebyshev UCL	0.487	99% KM Chebyshev UCL	0.706

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.286	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.794	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.226	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.214	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.566	k star (bias corrected MLE)	0.509
Theta hat (MLE)	0.22	Theta star (bias corrected MLE)	0.245
nu hat (MLE)	20.37	nu star (bias corrected)	18.31
Mean (detects)	0.125		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0053	Mean	0.119
Maximum	1.1	Median	0.036
SD	0.257	CV	2.165
k hat (MLE)	0.555	k star (bias corrected MLE)	0.502
Theta hat (MLE)	0.214	Theta star (bias corrected MLE)	0.236
nu hat (MLE)	21.09	nu star (bias corrected)	19.09
Adjusted Level of Significance (β)	0.0369		
Approximate Chi Square Value (19.09, α)	10.18	Adjusted Chi Square Value (19.09, β)	9.618
95% Gamma Approximate UCL (use when n>=50)	0.222	95% Gamma Adjusted UCL (use when n<50)	0.236

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.118	SD (KM)	0.25
Variance (KM)	0.0626	SE of Mean (KM)	0.059
k hat (KM)	0.224	k star (KM)	0.224
nu hat (KM)	8.506	nu star (KM)	8.497
theta hat (KM)	0.529	theta star (KM)	0.529
80% gamma percentile (KM)	0.164	90% gamma percentile (KM)	0.357
95% gamma percentile (KM)	0.592	99% gamma percentile (KM)	1.226

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (8.50, α)	3.026	Adjusted Chi Square Value (8.50, β)	2.747
95% Gamma Approximate KM-UCL (use when n>=50)	0.332	95% Gamma Adjusted KM-UCL (use when n<50)	0.366

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.953	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.897	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.121	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.202	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.118	Mean in Log Scale	-3.363
SD in Original Scale	0.257	SD in Log Scale	1.565
95% t UCL (assumes normality of ROS data)	0.22	95% Percentile Bootstrap UCL	0.218
95% BCA Bootstrap UCL	0.293	95% Bootstrap t UCL	0.64
95% H-UCL (Log ROS)	0.428		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-3.305	KM Geo Mean	0.0367
KM SD (logged)	1.416	95% Critical H Value (KM-Log)	3.249
KM Standard Error of Mean (logged)	0.334	95% H-UCL (KM -Log)	0.296
KM SD (logged)	1.416	95% Critical H Value (KM-Log)	3.249
KM Standard Error of Mean (logged)	0.334		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.118	Mean in Log Scale	-3.341
SD in Original Scale	0.257	SD in Log Scale	1.52
95% t UCL (Assumes normality)	0.22	95% H-Stat UCL	0.383

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	0.376

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

BENZO[B]FLUORANTHENE

General Statistics

Total Number of Observations	19	Number of Distinct Observations	19
		Number of Missing Observations	7
Number of Detects	18	Number of Non-Detects	1
Number of Distinct Detects	18	Number of Distinct Non-Detects	1
Minimum Detect	0.011	Minimum Non-Detect	0.0041
Maximum Detect	1.3	Maximum Non-Detect	0.0041
Variance Detects	0.104	Percent Non-Detects	5.263%
Mean Detects	0.171	SD Detects	0.323
Median Detects	0.0605	CV Detects	1.891
Skewness Detects	3.052	Kurtosis Detects	9.545
Mean of Logged Detects	-2.715	SD of Logged Detects	1.285

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.52	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.897	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.352	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.202	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.162	KM Standard Error of Mean	0.0726
KM SD	0.308	95% KM (BCA) UCL	0.306
95% KM (t) UCL	0.288	95% KM (Percentile Bootstrap) UCL	0.285
95% KM (z) UCL	0.281	95% KM Bootstrap t UCL	0.755
90% KM Chebyshev UCL	0.38	95% KM Chebyshev UCL	0.478
97.5% KM Chebyshev UCL	0.615	99% KM Chebyshev UCL	0.884

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.334	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.787	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.238	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.213	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.645	k star (bias corrected MLE)	0.575
Theta hat (MLE)	0.265	Theta star (bias corrected MLE)	0.297
nu hat (MLE)	23.23	nu star (bias corrected)	20.69
Mean (detects)	0.171		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.162
Maximum	1.3	Median	0.06
SD	0.316	CV	1.946
k hat (MLE)	0.618	k star (bias corrected MLE)	0.555
Theta hat (MLE)	0.263	Theta star (bias corrected MLE)	0.292
nu hat (MLE)	23.47	nu star (bias corrected)	21.1
Adjusted Level of Significance (β)	0.0369		
Approximate Chi Square Value (21.10, α)	11.66	Adjusted Chi Square Value (21.10, β)	11.05
95% Gamma Approximate UCL (use when n>=50)	0.293	95% Gamma Adjusted UCL (use when n<50)	0.31

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.162	SD (KM)	0.308
Variance (KM)	0.0946	SE of Mean (KM)	0.0726
k hat (KM)	0.277	k star (KM)	0.269
nu hat (KM)	10.54	nu star (KM)	10.21
theta hat (KM)	0.584	theta star (KM)	0.603
80% gamma percentile (KM)	0.241	90% gamma percentile (KM)	0.483
95% gamma percentile (KM)	0.767	99% gamma percentile (KM)	1.515

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (10.21, α)	4.071	Adjusted Chi Square Value (10.21, β)	3.738
95% Gamma Approximate KM-UCL (use when n>=50)	0.406	95% Gamma Adjusted KM-UCL (use when n<50)	0.442

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.938	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.897	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.131	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.202	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.162	Mean in Log Scale	-2.88
SD in Original Scale	0.316	SD in Log Scale	1.44
95% t UCL (assumes normality of ROS data)	0.288	95% Percentile Bootstrap UCL	0.289
95% BCA Bootstrap UCL	0.357	95% Bootstrap t UCL	0.733
95% H-UCL (Log ROS)	0.484		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-2.862	KM Geo Mean	0.0572
KM SD (logged)	1.365	95% Critical H Value (KM-Log)	3.165
KM Standard Error of Mean (logged)	0.322	95% H-UCL (KM -Log)	0.402
KM SD (logged)	1.365	95% Critical H Value (KM-Log)	3.165
KM Standard Error of Mean (logged)	0.322		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.162	Mean in Log Scale	-2.898
SD in Original Scale	0.316	SD in Log Scale	1.481
95% t UCL (Assumes normality)	0.288	95% H-Stat UCL	0.533

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	0.478

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

CHRYSENE

General Statistics

Total Number of Observations	19	Number of Distinct Observations	18
		Number of Missing Observations	7
Number of Detects	18	Number of Non-Detects	1
Number of Distinct Detects	17	Number of Distinct Non-Detects	1
Minimum Detect	0.0066	Minimum Non-Detect	0.0041
Maximum Detect	1.4	Maximum Non-Detect	0.0041
Variance Detects	0.109	Percent Non-Detects	5.263%
Mean Detects	0.15	SD Detects	0.33
Median Detects	0.048	CV Detects	2.197
Skewness Detects	3.6	Kurtosis Detects	13.62
Mean of Logged Detects	-3.003	SD of Logged Detects	1.381

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.455	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.897	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.37	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.202	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.143	KM Standard Error of Mean	0.0742
KM SD	0.314	95% KM (BCA) UCL	0.272
95% KM (t) UCL	0.271	95% KM (Percentile Bootstrap) UCL	0.277
95% KM (z) UCL	0.265	95% KM Bootstrap t UCL	0.934
90% KM Chebyshev UCL	0.365	95% KM Chebyshev UCL	0.466
97.5% KM Chebyshev UCL	0.606	99% KM Chebyshev UCL	0.881

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.32	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.795	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.23	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.214	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.563	k star (bias corrected MLE)	0.506
Theta hat (MLE)	0.267	Theta star (bias corrected MLE)	0.297
nu hat (MLE)	20.25	nu star (bias corrected)	18.21
Mean (detects)	0.15		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0066	Mean	0.143
Maximum	1.4	Median	0.045
SD	0.323	CV	2.257
k hat (MLE)	0.548	k star (bias corrected MLE)	0.497
Theta hat (MLE)	0.261	Theta star (bias corrected MLE)	0.288
nu hat (MLE)	20.82	nu star (bias corrected)	18.87
Adjusted Level of Significance (β)	0.0369		
Approximate Chi Square Value (18.87, α)	10.02	Adjusted Chi Square Value (18.87, β)	9.461
95% Gamma Approximate UCL (use when n>=50)	0.269	95% Gamma Adjusted UCL (use when n<50)	0.285

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.143	SD (KM)	0.314
Variance (KM)	0.0988	SE of Mean (KM)	0.0742
k hat (KM)	0.206	k star (KM)	0.209
nu hat (KM)	7.836	nu star (KM)	7.932
theta hat (KM)	0.692	theta star (KM)	0.684
80% gamma percentile (KM)	0.192	90% gamma percentile (KM)	0.432
95% gamma percentile (KM)	0.727	99% gamma percentile (KM)	1.535

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (7.93, α)	2.696	Adjusted Chi Square Value (7.93, β)	2.436
95% Gamma Approximate KM-UCL (use when n>=50)	0.42	95% Gamma Adjusted KM-UCL (use when n<50)	0.465

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.955	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.897	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.105	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.202	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.143	Mean in Log Scale	-3.181
SD in Original Scale	0.323	SD in Log Scale	1.55
95% t UCL (assumes normality of ROS data)	0.271	95% Percentile Bootstrap UCL	0.278
95% BCA Bootstrap UCL	0.373	95% Bootstrap t UCL	0.888
95% H-UCL (Log ROS)	0.491		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-3.134	KM Geo Mean	0.0435
KM SD (logged)	1.42	95% Critical H Value (KM-Log)	3.255
KM Standard Error of Mean (logged)	0.335	95% H-UCL (KM -Log)	0.354
KM SD (logged)	1.42	95% Critical H Value (KM-Log)	3.255
KM Standard Error of Mean (logged)	0.335		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.143	Mean in Log Scale	-3.171
SD in Original Scale	0.323	SD in Log Scale	1.528
95% t UCL (Assumes normality)	0.271	95% H-Stat UCL	0.465

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	0.466

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

DIBENZ[A,H]ANTHRACENE

General Statistics

Total Number of Observations	19	Number of Distinct Observations	17
		Number of Missing Observations	7
Number of Detects	13	Number of Non-Detects	6
Number of Distinct Detects	12	Number of Distinct Non-Detects	5
Minimum Detect	0.0052	Minimum Non-Detect	0.0041
Maximum Detect	0.14	Maximum Non-Detect	0.0068
Variance Detects	0.00169	Percent Non-Detects	31.58%
Mean Detects	0.0274	SD Detects	0.0412
Median Detects	0.0082	CV Detects	1.501
Skewness Detects	2.28	Kurtosis Detects	4.637
Mean of Logged Detects	-4.27	SD of Logged Detects	1.063

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.596	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.866	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.36	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.234	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.0201	KM Standard Error of Mean	0.00823
KM SD	0.0345	95% KM (BCA) UCL	0.0337
95% KM (t) UCL	0.0343	95% KM (Percentile Bootstrap) UCL	0.0344
95% KM (z) UCL	0.0336	95% KM Bootstrap t UCL	0.0763
90% KM Chebyshev UCL	0.0448	95% KM Chebyshev UCL	0.0559
97.5% KM Chebyshev UCL	0.0715	99% KM Chebyshev UCL	0.102

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.633	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.764	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.29	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.244	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.871	k star (bias corrected MLE)	0.721
Theta hat (MLE)	0.0315	Theta star (bias corrected MLE)	0.038
nu hat (MLE)	22.65	nu star (bias corrected)	18.76
Mean (detects)	0.0274		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0052	Mean	0.0219
Maximum	0.14	Median	0.01
SD	0.0346	CV	1.579
k hat (MLE)	1.035	k star (bias corrected MLE)	0.906
Theta hat (MLE)	0.0212	Theta star (bias corrected MLE)	0.0242
nu hat (MLE)	39.31	nu star (bias corrected)	34.44
Adjusted Level of Significance (β)	0.0369		
Approximate Chi Square Value (34.44, α)	22.02	Adjusted Chi Square Value (34.44, β)	21.15
95% Gamma Approximate UCL (use when n>=50)	0.0343	95% Gamma Adjusted UCL (use when n<50)	0.0357

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.0201	SD (KM)	0.0345
Variance (KM)	0.00119	SE of Mean (KM)	0.00823
k hat (KM)	0.34	k star (KM)	0.321
nu hat (KM)	12.91	nu star (KM)	12.21
theta hat (KM)	0.0591	theta star (KM)	0.0625
80% gamma percentile (KM)	0.0313	90% gamma percentile (KM)	0.0587
95% gamma percentile (KM)	0.0899	99% gamma percentile (KM)	0.17

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (12.21, α)	5.363	Adjusted Chi Square Value (12.21, β)	4.971
95% Gamma Approximate KM-UCL (use when n>=50)	0.0457	95% Gamma Adjusted KM-UCL (use when n<50)	0.0493

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.801	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.254	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.0192	Mean in Log Scale	-5.019
SD in Original Scale	0.0358	SD in Log Scale	1.435
95% t UCL (assumes normality of ROS data)	0.0335	95% Percentile Bootstrap UCL	0.0324
95% BCA Bootstrap UCL	0.0393	95% Bootstrap t UCL	0.0717
95% H-UCL (Log ROS)	0.0561		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-4.653	KM Geo Mean	0.00953
KM SD (logged)	1.016	95% Critical H Value (KM-Log)	2.634
KM Standard Error of Mean (logged)	0.243	95% H-UCL (KM -Log)	0.03
KM SD (logged)	1.016	95% Critical H Value (KM-Log)	2.634
KM Standard Error of Mean (logged)	0.243		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.0195	Mean in Log Scale	-4.836
SD in Original Scale	0.0357	SD in Log Scale	1.224
95% t UCL (Assumes normality)	0.0337	95% H-Stat UCL	0.0392

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	0.0559

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	ProUCL 5.14/11/2017 2:29:10 PM
From File	SE_Shallow_ProUCL_Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

ALUMINUM

General Statistics

Total Number of Observations	16	Number of Distinct Observations	16
		Number of Missing Observations	10
Minimum	2740	Mean	5032
Maximum	9130	Median	4245
SD	2002	Std. Error of Mean	500.6
Coefficient of Variation	0.398	Skewness	1.068

Normal GOF Test

Shapiro Wilk Test Statistic	0.833	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.887	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.24	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.213	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	5909	95% Adjusted-CLT UCL (Chen-1995)	5998
		95% Modified-t UCL (Johnson-1978)	5932

Gamma GOF Test

A-D Test Statistic	0.933	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.74	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.212	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.215	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics

k hat (MLE)	7.763	k star (bias corrected MLE)	6.349
Theta hat (MLE)	648.2	Theta star (bias corrected MLE)	792.6
nu hat (MLE)	248.4	nu star (bias corrected)	203.2
MLE Mean (bias corrected)	5032	MLE Sd (bias corrected)	1997
		Approximate Chi Square Value (0.05)	171.2
Adjusted Level of Significance	0.0335	Adjusted Chi Square Value	167.8

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50)	5972	95% Adjusted Gamma UCL (use when n<50)	6091

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.901	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.887	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.198	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.213	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	7.916	Mean of logged Data	8.458
Maximum of Logged Data	9.119	SD of logged Data	0.364

Assuming Lognormal Distribution

95% H-UCL	6033	90% Chebyshev (MVUE) UCL	6406
95% Chebyshev (MVUE) UCL	7037	97.5% Chebyshev (MVUE) UCL	7913
99% Chebyshev (MVUE) UCL	9633		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	5855	95% Jackknife UCL	5909
95% Standard Bootstrap UCL	5821	95% Bootstrap-t UCL	6194
95% Hall's Bootstrap UCL	5840	95% Percentile Bootstrap UCL	5876
95% BCA Bootstrap UCL	5987		
90% Chebyshev(Mean, Sd) UCL	6534	95% Chebyshev(Mean, Sd) UCL	7214
97.5% Chebyshev(Mean, Sd) UCL	8158	99% Chebyshev(Mean, Sd) UCL	10013

Suggested UCL to Use

95% Adjusted Gamma UCL	6091

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ARSENIC

General Statistics

Total Number of Observations	16	Number of Distinct Observations	16
		Number of Missing Observations	10
Minimum	1.8	Mean	5.25
Maximum	11.6	Median	4.8
SD	2.834	Std. Error of Mean	0.708
Coefficient of Variation	0.54	Skewness	0.872

Normal GOF Test

Shapiro Wilk Test Statistic	0.923	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.887	Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.145	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.213	Data appear Normal at 5% Significance Level	

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	6.492	95% Adjusted-CLT UCL (Chen-1995)	6.58
		95% Modified-t UCL (Johnson-1978)	6.518

Gamma GOF Test

A-D Test Statistic	0.233	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.742	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.139	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.216	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	3.845	k star (bias corrected MLE)	3.166
Theta hat (MLE)	1.365	Theta star (bias corrected MLE)	1.658
nu hat (MLE)	123	nu star (bias corrected)	101.3
MLE Mean (bias corrected)	5.25	MLE Sd (bias corrected)	2.951
		Approximate Chi Square Value (0.05)	79.08
Adjusted Level of Significance	0.0335	Adjusted Chi Square Value	76.84

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	6.725	95% Adjusted Gamma UCL (use when n<50)	6.921

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.976	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.887	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.121	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.213	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	0.588	Mean of logged Data	1.523
Maximum of Logged Data	2.451	SD of logged Data	0.543

Assuming Lognormal Distribution

95% H-UCL	7.123	90% Chebyshev (MVUE) UCL	7.474
95% Chebyshev (MVUE) UCL	8.479	97.5% Chebyshev (MVUE) UCL	9.873
99% Chebyshev (MVUE) UCL	12.61		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	6.415	95% Jackknife UCL	6.492
95% Standard Bootstrap UCL	6.366	95% Bootstrap-t UCL	6.755
95% Hall's Bootstrap UCL	6.682	95% Percentile Bootstrap UCL	6.406
95% BCA Bootstrap UCL	6.475		
90% Chebyshev(Mean, Sd) UCL	7.375	95% Chebyshev(Mean, Sd) UCL	8.338
97.5% Chebyshev(Mean, Sd) UCL	9.674	99% Chebyshev(Mean, Sd) UCL	12.3

Suggested UCL to Use

95% Student's-t UCL	6.492

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

IRON

General Statistics

Total Number of Observations	16	Number of Distinct Observations	16
		Number of Missing Observations	10
Minimum	7090	Mean	13151
Maximum	27500	Median	10170
SD	6700	Std. Error of Mean	1675
Coefficient of Variation	0.509	Skewness	1.111

Normal GOF Test

Shapiro Wilk Test Statistic	0.82	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.887	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.244	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.213	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	16088	95% Adjusted-CLT UCL (Chen-1995)	16403
		95% Modified-t UCL (Johnson-1978)	16165

Gamma GOF Test

A-D Test Statistic	0.914	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.741	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.192	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.216	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics

k hat (MLE)	4.884	k star (bias corrected MLE)	4.01
Theta hat (MLE)	2693	Theta star (bias corrected MLE)	3280
nu hat (MLE)	156.3	nu star (bias corrected)	128.3
MLE Mean (bias corrected)	13151	MLE Sd (bias corrected)	6567
		Approximate Chi Square Value (0.05)	103.2
Adjusted Level of Significance	0.0335	Adjusted Chi Square Value	100.6

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50)	16360	95% Adjusted Gamma UCL (use when n<50)	16777

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.884	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.887	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.164	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.213	Data appear Lognormal at 5% Significance Level

Data appear Approximate Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	8.866	Mean of logged Data	9.378
Maximum of Logged Data	10.22	SD of logged Data	0.459

Assuming Lognormal Distribution

95% H-UCL	16674	90% Chebyshev (MVUE) UCL	17661
95% Chebyshev (MVUE) UCL	19750	97.5% Chebyshev (MVUE) UCL	22649
99% Chebyshev (MVUE) UCL	28344		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	15906	95% Jackknife UCL	16088
95% Standard Bootstrap UCL	15894	95% Bootstrap-t UCL	17142
95% Hall's Bootstrap UCL	15953	95% Percentile Bootstrap UCL	15897
95% BCA Bootstrap UCL	16104		
90% Chebyshev(Mean, Sd) UCL	18176	95% Chebyshev(Mean, Sd) UCL	20453
97.5% Chebyshev(Mean, Sd) UCL	23612	99% Chebyshev(Mean, Sd) UCL	29818

Suggested UCL to Use

95% Adjusted Gamma UCL 16777

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

MANGANESE

General Statistics

Total Number of Observations	16	Number of Distinct Observations	15
		Number of Missing Observations	10
Minimum	54.9	Mean	105.8
Maximum	250	Median	77.9
SD	52.06	Std. Error of Mean	13.02
Coefficient of Variation	0.492	Skewness	1.718

Normal GOF Test

Shapiro Wilk Test Statistic	0.797	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.887	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.266	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.213	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	128.6	95% Adjusted-CLT UCL (Chen-1995)	133.2
		95% Modified-t UCL (Johnson-1978)	129.6

Gamma GOF Test

A-D Test Statistic	0.899	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.741	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.272	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.216	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	5.715	k star (bias corrected MLE)	4.685
Theta hat (MLE)	18.51	Theta star (bias corrected MLE)	22.58
nu hat (MLE)	182.9	nu star (bias corrected)	149.9
MLE Mean (bias corrected)	105.8	MLE Sd (bias corrected)	48.89
		Approximate Chi Square Value (0.05)	122.6
Adjusted Level of Significance	0.0335	Adjusted Chi Square Value	119.8

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	129.4	95% Adjusted Gamma UCL (use when n<50)	132.4

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.901	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.887	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.26	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.213	Data Not Lognormal at 5% Significance Level

Data appear Approximate Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	4.006	Mean of logged Data	4.572
Maximum of Logged Data	5.521	SD of logged Data	0.417

Assuming Lognormal Distribution

95% H-UCL	130.3	90% Chebyshev (MVUE) UCL	138.4
95% Chebyshev (MVUE) UCL	153.5	97.5% Chebyshev (MVUE) UCL	174.6
99% Chebyshev (MVUE) UCL	216		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	127.2	95% Jackknife UCL	128.6
95% Standard Bootstrap UCL	126.4	95% Bootstrap-t UCL	142.8
95% Hall's Bootstrap UCL	148	95% Percentile Bootstrap UCL	128.4
95% BCA Bootstrap UCL	133		
90% Chebyshev(Mean, Sd) UCL	144.9	95% Chebyshev(Mean, Sd) UCL	162.5
97.5% Chebyshev(Mean, Sd) UCL	187.1	99% Chebyshev(Mean, Sd) UCL	235.3

Suggested UCL to Use

95% Student's-t UCL	128.6	or 95% Modified-t UCL	129.6
or 95% H-UCL	130.3		

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ProUCL computes and outputs H-statistic based UCLs for historical reasons only.
H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.
It is therefore recommended to avoid the use of H-statistic based 95% UCLs.
Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.

SHALLOW GROUNDWATER
(PIEZOMETER WATER)

Unfiltered Groundwater

Matrix	Fraction	Units	Location	Collected	ALUMINUM	D_ALUMINUM	ANTIMONY	D_ANTIMONY	ARSENIC	D_ARSENIC	BERYLLIUM	D_BERYLLIUM
WG	T	UG_L	P09-01	10/1/2013	4000	1	0.33	1	15.6	1	0.24	1
WG	T	UG_L	P09-01	9/9/2015	10600	1	40	0	131	1	15	0
WG	T	UG_L	P09-01	9/13/2016	37300	1	10.4	1	62	1	11.5	1
WG	T	UG_L	P09-01	9/27/2016								
WG	T	UG_L	P09-02A	10/2/2013	141	1	0.33	1	10.7	1	0.2	0
WG	T	UG_L	P09-02A	9/15/2015	1800	1	40	0	20.1	1	15	0
WG	T	UG_L	P09-02A	9/14/2016	99500	1	16.6	1	24.3	1	20.5	1
WG	T	UG_L	P09-03A	10/15/2013	1630	1	1.2	0	15.3	1	0.13	1
WG	T	UG_L	P09-03A	9/16/2015	5690	1	40	0	16.8	1	15	0
WG	T	UG_L	P09-03A	9/14/2016								
WG	T	UG_L	P09-04A	10/15/2013	261	1	1	0	14.7	1	0.2	0
WG	T	UG_L	P09-04A	9/16/2015	2640	1	40	0	16.5	1	15	0
WG	T	UG_L	P09-04A	9/12/2016	2030	1	40	0	40	0	15	0
WG	T	UG_L	P09-05A	10/2/2013	300	0	1.6	1	13.8	1	0.2	0
WG	T	UG_L	P09-05A	9/14/2015	18600	1	40	0	592	1	15	0
WG	T	UG_L	P09-06B	10/3/2013	5560	1	2.7	1	19.2	1	0.53	1
WG	T	UG_L	P09-06B	9/22/2014								
WG	T	UG_L	P09-06B	9/9/2015	14800	1	40	0	14.5	1	15	0
WG	T	UG_L	P09-06B	9/13/2016	25800	1	20.1	1	12.4	1	6.6	1
WG	T	UG_L	P09-07B	10/3/2013	106000	1	2.7	1	56.1	1	9.7	1
WG	T	UG_L	P09-07B	9/22/2014								
WG	T	UG_L	P09-07B	9/9/2015	3460	1	40	0	78.9	1	15	0
WG	T	UG_L	P09-07B	9/13/2016	130000	1	10.7	1	113	1	20.3	1
WG	T	UG_L	P09-08B	10/3/2013								
WG	T	UG_L	P09-08B	10/15/2013	2750	1	1	0	13.6	1	0.26	1
WG	T	UG_L	P09-08B	9/22/2014								
WG	T	UG_L	P09-08B	9/8/2015	7460	1	40	0	81.1	1	15	0
WG	T	UG_L	P09-08B	9/13/2016	129000	1	20	0	10	1	28.9	1
WG	T	UG_L	P09-09	10/1/2013								
WG	T	UG_L	P09-09	10/1/2013	18400	1	3.2	1	45.6	1	1.6	1
WG	T	UG_L	P09-09	9/9/2015	45600	1	40	0	318	1	11.3	1
WG	T	UG_L	P09-09	9/12/2016	23300	1	18.1	1	19.4	1	4.7	1
WG	T	UG_L	P09-10	10/1/2013	805	1	0.22	1	5.2	1	0.06	1
WG	T	UG_L	P09-10	9/8/2015	98300	1	20	0	226	1	23.8	1
WG	T	UG_L	P09-10	9/12/2016	2070	1	8.7	1	20	0	7.5	0
WG	T	UG_L	P09-11B	10/15/2013	196	1	1	0	15	1	0.2	0
WG	T	UG_L	P09-11B	9/24/2014								
WG	T	UG_L	P09-11B	9/9/2015	500	0	40	0	40	0	15	0
WG	T	UG_L	P09-11B	9/16/2016	3630	1	20.2	1	40	0	15	0
WG	T	UG_L	P09-12B	10/14/2013	622000	1	9.2	1	432	1	56.4	1
WG	T	UG_L	P09-12B	9/22/2014								
WG	T	UG_L	P09-12B	9/8/2015	13500	1	20	0	115	1	7.5	0
WG	T	UG_L	P09-12B	9/13/2016	332	1	0.8	0	0.35	1	0.3	0

Unfiltered Groundwater

Matrix	Fraction	Units	Location	Collected	CHROMIUM, TOTAL	D_CHROMIUM, TOTAL	COPPER	D_COPPER	IRON	D_IRON	LEAD	D_LEAD	MANGANESE	D_MANGANESE
WG	T	UG_L	P09-01	10/1/2013	81	1	12.6	1	31200	1	4.3	1	843	1
WG	T	UG_L	P09-01	9/9/2015	1380	1	248	1	85900	1	50	0	5480	1
WG	T	UG_L	P09-01	9/13/2016	43400	1	405	1	482000	1	389	1	3110	1
WG	T	UG_L	P09-01	9/27/2016										
WG	T	UG_L	P09-02A	10/2/2013	5	0	6.2	1	6150	1	1	0	92.4	1
WG	T	UG_L	P09-02A	9/15/2015	207	1	32.6	1	79100	1	50	0	412	1
WG	T	UG_L	P09-02A	9/14/2016	4040	1	918	1	672000	1	712	1	4120	1
WG	T	UG_L	P09-03A	10/15/2013	53.4	1	7.8	1	3490	1	4.8	1	74.8	1
WG	T	UG_L	P09-03A	9/16/2015	473	1	63.4	1	91200	1	50	0	451	1
WG	T	UG_L	P09-03A	9/14/2016										
WG	T	UG_L	P09-04A	10/15/2013	5	0	3	0	500	0	1	0	4.5	1
WG	T	UG_L	P09-04A	9/16/2015	208	1	51.2	1	8940	1	50	0	67.7	1
WG	T	UG_L	P09-04A	9/12/2016	67.6	1	17.4	1	4870	1	9.5	1	65.9	1
WG	T	UG_L	P09-05A	10/2/2013	5	0	3	0	100	0	1	0	2.7	0
WG	T	UG_L	P09-05A	9/14/2015	86.4	1	100	1	40700	1	64.4	1	517	1
WG	T	UG_L	P09-06B	10/3/2013	6270	1	183	1	118000	1	56.8	1	818	1
WG	T	UG_L	P09-06B	9/22/2014										
WG	T	UG_L	P09-06B	9/9/2015	179	1	134	1	27500	1	56.4	1	549	1
WG	T	UG_L	P09-06B	9/13/2016	287	1	109	1	42800	1	394	1	614	1
WG	T	UG_L	P09-07B	10/3/2013	31600	1	399	1	460000	1	202	1	2910	1
WG	T	UG_L	P09-07B	9/22/2014										
WG	T	UG_L	P09-07B	9/9/2015	100	0	100	0	10000	0	50	0	136	1
WG	T	UG_L	P09-07B	9/13/2016	5570	1	566	1	271000	1	441	1	4700	1
WG	T	UG_L	P09-08B	10/3/2013										
WG	T	UG_L	P09-08B	10/15/2013	2370	1	25.3	1	349000	1	7.1	1	2720	1
WG	T	UG_L	P09-08B	9/22/2014										
WG	T	UG_L	P09-08B	9/8/2015	571	1	100	0	20700	1	50	0	2130	1
WG	T	UG_L	P09-08B	9/13/2016	2490	1	25.1	1	243000	1	321	1	3060	1
WG	T	UG_L	P09-09	10/1/2013										
WG	T	UG_L	P09-09	10/1/2013	4970	1	558	1	197000	1	91	1	646	1
WG	T	UG_L	P09-09	9/9/2015	526	1	216	1	2200000	1	273	1	11700	1
WG	T	UG_L	P09-09	9/12/2016	175	1	393	1	321000	1	441	1	885	1
WG	T	UG_L	P09-10	10/1/2013	136	1	5.3	0	26500	1	2.7	1	144	1
WG	T	UG_L	P09-10	9/8/2015	3040	1	175	1	1550000	1	188	1	2970	1
WG	T	UG_L	P09-10	9/12/2016	51.3	1	6.1	1	22300	1	3.7	1	607	1
WG	T	UG_L	P09-11B	10/15/2013	5	0	3	0	1970	1	1	0	169	1
WG	T	UG_L	P09-11B	9/24/2014										
WG	T	UG_L	P09-11B	9/9/2015	378	1	50	0	10000	0	15	0	88.2	1
WG	T	UG_L	P09-11B	9/16/2016	36.2	1	50	0	1800	1	15	0	859	1
WG	T	UG_L	P09-12B	10/14/2013	3810	1	2150	1	1380000	1	2280	1	10700	1
WG	T	UG_L	P09-12B	9/22/2014										
WG	T	UG_L	P09-12B	9/8/2015	208	1	59.4	1	36300	1	46.2	1	6830	1
WG	T	UG_L	P09-12B	9/13/2016	8.5	1	1.3	1	43300	1	1.6	1	1150	1

Unfiltered Groundwater

Matrix	Fraction	Units	Location	Collected	MERCURY	D_MERCURY	NICKEL	D_NICKEL	ZINC	D_ZINC
WG	T	UG_L	P09-01	10/1/2013	0.1	0	256	1	37.8	1
WG	T	UG_L	P09-01	9/9/2015	0.11	1	486	1	277	1
WG	T	UG_L	P09-01	9/13/2016	0.1	0	3550	1	2970	1
WG	T	UG_L	P09-01	9/27/2016						
WG	T	UG_L	P09-02A	10/2/2013	0.1	0	19.4	1	26.5	1
WG	T	UG_L	P09-02A	9/15/2015	0.05	0	114	1	59.9	1
WG	T	UG_L	P09-02A	9/14/2016	0.1	0	1130	1	3550	1
WG	T	UG_L	P09-03A	10/15/2013	0.2	0	64.2	1	721	1
WG	T	UG_L	P09-03A	9/16/2015	0.074	1	264	1	3520	1
WG	T	UG_L	P09-03A	9/14/2016						
WG	T	UG_L	P09-04A	10/15/2013	0.2	0	34.2	1	28.8	1
WG	T	UG_L	P09-04A	9/16/2015	0.063	1	111	1	208	1
WG	T	UG_L	P09-04A	9/12/2016	0.1	0	80.6	1	3080	1
WG	T	UG_L	P09-05A	10/2/2013	0.1	0	28.7	1	38.7	1
WG	T	UG_L	P09-05A	9/14/2015	0.19	1	75	1	4930	1
WG	T	UG_L	P09-06B	10/3/2013	0.2	0	1410	1	152	1
WG	T	UG_L	P09-06B	9/22/2014						
WG	T	UG_L	P09-06B	9/9/2015	0.2	0	125	1	179	1
WG	T	UG_L	P09-06B	9/13/2016	0.1	0	322	1	138000	1
WG	T	UG_L	P09-07B	10/3/2013	0.41	1	5250	1	821	1
WG	T	UG_L	P09-07B	9/22/2014						
WG	T	UG_L	P09-07B	9/9/2015	0.2	0	92.2	1	90.5	1
WG	T	UG_L	P09-07B	9/13/2016	0.57	1	3410	1	42700	1
WG	T	UG_L	P09-08B	10/3/2013						
WG	T	UG_L	P09-08B	10/15/2013	0.04	1	2740	1	42.1	1
WG	T	UG_L	P09-08B	9/22/2014						
WG	T	UG_L	P09-08B	9/8/2015	0.062	1	490	1	179	1
WG	T	UG_L	P09-08B	9/13/2016	0.1	0	1830	1	39800	1
WG	T	UG_L	P09-09	10/1/2013						
WG	T	UG_L	P09-09	10/1/2013	0.24	1	400	1	265	1
WG	T	UG_L	P09-09	9/9/2015	5	1	448	1	2250	1
WG	T	UG_L	P09-09	9/12/2016			104	1	1550	1
WG	T	UG_L	P09-10	10/1/2013	0.1	0	33.8	1	9.9	1
WG	T	UG_L	P09-10	9/8/2015	9.3	1	525	1	2820	1
WG	T	UG_L	P09-10	9/12/2016			28.6	1	94	1
WG	T	UG_L	P09-11B	10/15/2013	0.1	0	16.3	1	21.8	1
WG	T	UG_L	P09-11B	9/24/2014						
WG	T	UG_L	P09-11B	9/9/2015	0.05	0	66.7	1	75	0
WG	T	UG_L	P09-11B	9/16/2016	0.1	0	65.8	1	160	1
WG	T	UG_L	P09-12B	10/14/2013	11.6	1	3080	1	7260	1
WG	T	UG_L	P09-12B	9/22/2014						
WG	T	UG_L	P09-12B	9/8/2015	0.5	1	4220	1	397	1
WG	T	UG_L	P09-12B	9/13/2016	0.1	0	9	1	128	1

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.14/11/2017 1:37:45 PM
From File	GW_Filtered_ProUCL_Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

ALUMINUM

General Statistics

Total Number of Observations	31	Number of Distinct Observations	26
Number of Detects	23	Number of Non-Detects	8
Number of Distinct Detects	23	Number of Distinct Non-Detects	3
Minimum Detect	43.5	Minimum Non-Detect	300
Maximum Detect	14800	Maximum Non-Detect	1000
Variance Detects	11941864	Percent Non-Detects	25.81%
Mean Detects	2368	SD Detects	3456
Median Detects	516	CV Detects	1.459
Skewness Detects	2.459	Kurtosis Detects	7.169
Mean of Logged Detects	6.736	SD of Logged Detects	1.578

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.684	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.914	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.251	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.18	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	1818	KM Standard Error of Mean	561.7
KM SD	3058	95% KM (BCA) UCL	2752
95% KM (t) UCL	2771	95% KM (Percentile Bootstrap) UCL	2769
95% KM (z) UCL	2742	95% KM Bootstrap t UCL	3373
90% KM Chebyshev UCL	3503	95% KM Chebyshev UCL	4266
97.5% KM Chebyshev UCL	5325	99% KM Chebyshev UCL	7407

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.935	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.796	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.217	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.191	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.598	k star (bias corrected MLE)	0.549
Theta hat (MLE)	3961	Theta star (bias corrected MLE)	4315
nu hat (MLE)	27.5	nu star (bias corrected)	25.25
Mean (detects)	2368		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	1786
Maximum	14800	Median	357
SD	3127	CV	1.751
k hat (MLE)	0.259	k star (bias corrected MLE)	0.255

Theta hat (MLE)	6895	Theta star (bias corrected MLE)	6991
nu hat (MLE)	16.06	nu star (bias corrected)	15.84
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (15.84, α)	7.847	Adjusted Chi Square Value (15.84, β)	7.535
95% Gamma Approximate UCL (use when n>=50)	3604	95% Gamma Adjusted UCL (use when n<50)	3753

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	1818	SD (KM)	3058
Variance (KM)	9350336	SE of Mean (KM)	561.7
k hat (KM)	0.353	k star (KM)	0.341
nu hat (KM)	21.91	nu star (KM)	21.12
theta hat (KM)	5144	theta star (KM)	5336
80% gamma percentile (KM)	2864	90% gamma percentile (KM)	5270
95% gamma percentile (KM)	7976	99% gamma percentile (KM)	14902

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (21.12, α)	11.68	Adjusted Chi Square Value (21.12, β)	11.29
95% Gamma Approximate KM-UCL (use when n>=50)	3286	95% Gamma Adjusted KM-UCL (use when n<50)	3400

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.94	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.914	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.179	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.18	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	1830	Mean in Log Scale	6.4
SD in Original Scale	3103	SD in Log Scale	1.509
95% t UCL (assumes normality of ROS data)	2776	95% Percentile Bootstrap UCL	2754
95% BCA Bootstrap UCL	3068	95% Bootstrap t UCL	3375
95% H-UCL (Log ROS)	4403		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	6.366	KM Geo Mean	581.6
KM SD (logged)	1.503	95% Critical H Value (KM-Log)	3.081
KM Standard Error of Mean (logged)	0.285	95% H-UCL (KM -Log)	4187
KM SD (logged)	1.503	95% Critical H Value (KM-Log)	3.081
KM Standard Error of Mean (logged)	0.285		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	1834	Mean in Log Scale	6.451
SD in Original Scale	3100	SD in Log Scale	1.451
95% t UCL (Assumes normality)	2779	95% H-Stat UCL	4021

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	4266

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ANTIMONY

General Statistics

Total Number of Observations	31	Number of Distinct Observations	16
Number of Detects	12	Number of Non-Detects	19
Number of Distinct Detects	12	Number of Distinct Non-Detects	4
Minimum Detect	0.12	Minimum Non-Detect	0.8
Maximum Detect	18.6	Maximum Non-Detect	40
Variance Detects	62.06	Percent Non-Detects	61.29%
Mean Detects	8.624	SD Detects	7.878
Median Detects	9.2	CV Detects	0.913
Skewness Detects	0.142	Kurtosis Detects	-1.849
Mean of Logged Detects	1.102	SD of Logged Detects	1.98

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.827	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.859	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.23	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.243	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	5.382	KM Standard Error of Mean	1.677
KM SD	7.126	95% KM (BCA) UCL	8.099
95% KM (t) UCL	8.228	95% KM (Percentile Bootstrap) UCL	8.183
95% KM (z) UCL	8.14	95% KM Bootstrap t UCL	8.846
90% KM Chebyshev UCL	10.41	95% KM Chebyshev UCL	12.69
97.5% KM Chebyshev UCL	15.85	99% KM Chebyshev UCL	22.07

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.941	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.778	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.264	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.257	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.589	k star (bias corrected MLE)	0.497
Theta hat (MLE)	14.65	Theta star (bias corrected MLE)	17.35
nu hat (MLE)	14.13	nu star (bias corrected)	11.93
Mean (detects)	8.624		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.12	Mean	5.716
Maximum	18.6	Median	2.399
SD	6.322	CV	1.106
k hat (MLE)	0.764	k star (bias corrected MLE)	0.712
Theta hat (MLE)	7.479	Theta star (bias corrected MLE)	8.03
nu hat (MLE)	47.38	nu star (bias corrected)	44.13
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (44.13, α)	29.9	Adjusted Chi Square Value (44.13, β)	29.24
95% Gamma Approximate UCL (use when n>=50)	8.438	95% Gamma Adjusted UCL (use when n<50)	8.626

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	5.382	SD (KM)	7.126
Variance (KM)	50.78	SE of Mean (KM)	1.677
k hat (KM)	0.571	k star (KM)	0.537
nu hat (KM)	35.37	nu star (KM)	33.28
theta hat (KM)	9.434	theta star (KM)	10.03
80% gamma percentile (KM)	8.861	90% gamma percentile (KM)	14.35
95% gamma percentile (KM)	20.16	99% gamma percentile (KM)	34.36

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (33.28, α)	21.09	Adjusted Chi Square Value (33.28, β)	20.55
95% Gamma Approximate KM-UCL (use when n>=50)	8.493	95% Gamma Adjusted KM-UCL (use when n<50)	8.716

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.814	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.293	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.243	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	4.964	Mean in Log Scale	0.263
SD in Original Scale	7.05	SD in Log Scale	1.829
95% t UCL (assumes normality of ROS data)	7.113	95% Percentile Bootstrap UCL	7.128
95% BCA Bootstrap UCL	7.316	95% Bootstrap t UCL	7.526
95% H-UCL (Log ROS)	22.7		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	0.144	KM Geo Mean	1.155
KM SD (logged)	1.939	95% Critical H Value (KM-Log)	3.718
KM Standard Error of Mean (logged)	0.474	95% H-UCL (KM -Log)	28.2
KM SD (logged)	1.939	95% Critical H Value (KM-Log)	3.718
KM Standard Error of Mean (logged)	0.474		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	10.8	Mean in Log Scale	1.386
SD in Original Scale	8.991	SD in Log Scale	1.873
95% t UCL (Assumes normality)	13.54	95% H-Stat UCL	79.76

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL	8.228

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ARSENIC

General Statistics

Total Number of Observations	31	Number of Distinct Observations	22
Number of Detects	21	Number of Non-Detects	10
Number of Distinct Detects	19	Number of Distinct Non-Detects	3
Minimum Detect	0.2	Minimum Non-Detect	16
Maximum Detect	666	Maximum Non-Detect	40
Variance Detects	20402	Percent Non-Detects	32.26%
Mean Detects	43.64	SD Detects	142.8
Median Detects	11.5	CV Detects	3.273
Skewness Detects	4.558	Kurtosis Detects	20.84
Mean of Logged Detects	2.425	SD of Logged Detects	1.392

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.271	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.908	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.469	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.188	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	33.3	KM Standard Error of Mean	21.33
KM SD	115.8	95% KM (BCA) UCL	76.45
95% KM (t) UCL	69.5	95% KM (Percentile Bootstrap) UCL	74.77
95% KM (z) UCL	68.38	95% KM Bootstrap t UCL	428.6
90% KM Chebyshev UCL	97.28	95% KM Chebyshev UCL	126.3
97.5% KM Chebyshev UCL	166.5	99% KM Chebyshev UCL	245.5

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	3.568	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.811	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.355	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.201	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.474	k star (bias corrected MLE)	0.438
Theta hat (MLE)	92.05	Theta star (bias corrected MLE)	99.61
nu hat (MLE)	19.91	nu star (bias corrected)	18.4
Mean (detects)	43.64		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	36.72
Maximum	666	Median	9.7
SD	119.4	CV	3.253
k hat (MLE)	0.285	k star (bias corrected MLE)	0.279
Theta hat (MLE)	128.7	Theta star (bias corrected MLE)	131.6
nu hat (MLE)	17.68	nu star (bias corrected)	17.3
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (17.30, α)	8.89	Adjusted Chi Square Value (17.30, β)	8.554
95% Gamma Approximate UCL (use when n>=50)	71.47	95% Gamma Adjusted UCL (use when n<50)	74.27

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	33.3	SD (KM)	115.8
Variance (KM)	13405	SE of Mean (KM)	21.33
k hat (KM)	0.0827	k star (KM)	0.0962
nu hat (KM)	5.128	nu star (KM)	5.965
theta hat (KM)	402.6	theta star (KM)	346.1
80% gamma percentile (KM)	21.81	90% gamma percentile (KM)	87.15
95% gamma percentile (KM)	193.6	99% gamma percentile (KM)	539.2

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (5.96, α)	1.622	Adjusted Chi Square Value (5.96, β)	1.5
95% Gamma Approximate KM-UCL (use when n>=50)	122.5	95% Gamma Adjusted KM-UCL (use when n<50)	132.4

95% Gamma Adjusted KM-UCL (use when k<=1 and 15 < n < 50)

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.793	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.908	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.226	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.188	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	33.62	Mean in Log Scale	2.356
SD in Original Scale	117.7	SD in Log Scale	1.232
95% t UCL (assumes normality of ROS data)	69.51	95% Percentile Bootstrap UCL	74.86
95% BCA Bootstrap UCL	116.8	95% Bootstrap t UCL	392.3
95% H-UCL (Log ROS)	41.48		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	2.337	KM Geo Mean	10.35
KM SD (logged)	1.268	95% Critical H Value (KM-Log)	2.761
KM Standard Error of Mean (logged)	0.268	95% H-UCL (KM -Log)	43.83
KM SD (logged)	1.268	95% Critical H Value (KM-Log)	2.761
KM Standard Error of Mean (logged)	0.268		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	35.3	Mean in Log Scale	2.557
SD in Original Scale	117.3	SD in Log Scale	1.169
95% t UCL (Assumes normality)	71.06	95% H-Stat UCL	44.74

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	126.3

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

CHROMIUM, TOTAL

General Statistics

Total Number of Observations	31	Number of Distinct Observations	20
Number of Detects	16	Number of Non-Detects	15
Number of Distinct Detects	16	Number of Distinct Non-Detects	4
Minimum Detect	1.1	Minimum Non-Detect	5
Maximum Detect	1200	Maximum Non-Detect	100
Variance Detects	105394	Percent Non-Detects	48.39%
Mean Detects	203.3	SD Detects	324.6
Median Detects	46.45	CV Detects	1.597
Skewness Detects	2.254	Kurtosis Detects	5.509
Mean of Logged Detects	3.967	SD of Logged Detects	1.894

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.669	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.887	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.315	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.213	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	107.7	KM Standard Error of Mean	45.76
KM SD	246.6	95% KM (BCA) UCL	199
95% KM (t) UCL	185.3	95% KM (Percentile Bootstrap) UCL	186.3
95% KM (z) UCL	182.9	95% KM Bootstrap t UCL	268.6
90% KM Chebyshev UCL	244.9	95% KM Chebyshev UCL	307.1
97.5% KM Chebyshev UCL	393.4	99% KM Chebyshev UCL	562.9

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.631	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.802	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.223	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.228	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.475	k star (bias corrected MLE)	0.428
Theta hat (MLE)	428	Theta star (bias corrected MLE)	475.4
nu hat (MLE)	15.2	nu star (bias corrected)	13.68
Mean (detects)	203.3		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	105.3
Maximum	1200	Median	7.7
SD	251.6	CV	2.39
k hat (MLE)	0.164	k star (bias corrected MLE)	0.17
Theta hat (MLE)	640.5	Theta star (bias corrected MLE)	619.4
nu hat (MLE)	10.19	nu star (bias corrected)	10.54
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (10.54, α)	4.28	Adjusted Chi Square Value (10.54, β)	4.059
95% Gamma Approximate UCL (use when n>=50)	259.1	95% Gamma Adjusted UCL (use when n<50)	273.2

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	107.7	SD (KM)	246.6
Variance (KM)	60794	SE of Mean (KM)	45.76
k hat (KM)	0.191	k star (KM)	0.194
nu hat (KM)	11.83	nu star (KM)	12.01
theta hat (KM)	564.6	theta star (KM)	555.7
80% gamma percentile (KM)	139.5	90% gamma percentile (KM)	325.6
95% gamma percentile (KM)	559.4	99% gamma percentile (KM)	1206

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (12.01, α)	5.237	Adjusted Chi Square Value (12.01, β)	4.989
95% Gamma Approximate KM-UCL (use when n>=50)	247.1	95% Gamma Adjusted KM-UCL (use when n<50)	259.3

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.965	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.887	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.135	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.213	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	107.2	Mean in Log Scale	2.421
SD in Original Scale	250.8	SD in Log Scale	2.302
95% t UCL (assumes normality of ROS data)	183.6	95% Percentile Bootstrap UCL	186.6
95% BCA Bootstrap UCL	215.8	95% Bootstrap t UCL	279.1
95% H-UCL (Log ROS)	959.8		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	2.451	KM Geo Mean	11.6
KM SD (logged)	2.212	95% Critical H Value (KM-Log)	4.136
KM Standard Error of Mean (logged)	0.445	95% H-UCL (KM -Log)	711.8
KM SD (logged)	2.212	95% Critical H Value (KM-Log)	4.136
KM Standard Error of Mean (logged)	0.445		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	111.1	Mean in Log Scale	3.059
SD in Original Scale	249.3	SD in Log Scale	1.79
95% t UCL (Assumes normality)	187.1	95% H-Stat UCL	331.7

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

a Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1)	259.3

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

COPPER

General Statistics

Total Number of Observations	31	Number of Distinct Observations	16
Number of Detects	9	Number of Non-Detects	22
Number of Distinct Detects	9	Number of Distinct Non-Detects	7
Minimum Detect	0.44	Minimum Non-Detect	3
Maximum Detect	192	Maximum Non-Detect	100
Variance Detects	3842	Percent Non-Detects	70.97%
Mean Detects	47.27	SD Detects	61.98
Median Detects	24.5	CV Detects	1.311
Skewness Detects	1.883	Kurtosis Detects	3.689
Mean of Logged Detects	2.772	SD of Logged Detects	1.932

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.775	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.829	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.256	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.274	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	16.93	KM Standard Error of Mean	7.442
KM SD	37.86	95% KM (BCA) UCL	29.76
95% KM (t) UCL	29.56	95% KM (Percentile Bootstrap) UCL	29.61
95% KM (z) UCL	29.17	95% KM Bootstrap t UCL	40.9
90% KM Chebyshev UCL	39.25	95% KM Chebyshev UCL	49.37
97.5% KM Chebyshev UCL	63.4	99% KM Chebyshev UCL	90.98

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.114	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.765	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.0905	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.293	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.574	k star (bias corrected MLE)	0.457
Theta hat (MLE)	82.37	Theta star (bias corrected MLE)	103.5
nu hat (MLE)	10.33	nu star (bias corrected)	8.22
Mean (detects)	47.27		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	15.87
Maximum	192	Median	0.01
SD	38.62	CV	2.434
k hat (MLE)	0.174	k star (bias corrected MLE)	0.179
Theta hat (MLE)	90.99	Theta star (bias corrected MLE)	88.64
nu hat (MLE)	10.81	nu star (bias corrected)	11.1
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (11.10, α)	4.64	Adjusted Chi Square Value (11.10, β)	4.409
95% Gamma Approximate UCL (use when n>=50)	37.96	95% Gamma Adjusted UCL (use when n<50)	39.94

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	16.93	SD (KM)	37.86
Variance (KM)	1433	SE of Mean (KM)	7.442
k hat (KM)	0.2	k star (KM)	0.202
nu hat (KM)	12.39	nu star (KM)	12.53
theta hat (KM)	84.67	theta star (KM)	83.77
80% gamma percentile (KM)	22.42	90% gamma percentile (KM)	51.19
95% gamma percentile (KM)	86.98	99% gamma percentile (KM)	185.3

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (12.53, α)	5.577	Adjusted Chi Square Value (12.53, β)	5.32
95% Gamma Approximate KM-UCL (use when n>=50)	38.02	95% Gamma Adjusted KM-UCL (use when n<50)	39.86

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.959	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.143	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	15.93	Mean in Log Scale	1.103
SD in Original Scale	38.12	SD in Log Scale	1.807
95% t UCL (assumes normality of ROS data)	27.55	95% Percentile Bootstrap UCL	27.53
95% BCA Bootstrap UCL	35.59	95% Bootstrap t UCL	49.68
95% H-UCL (Log ROS)	49.35		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	1.107	KM Geo Mean	3.026
KM SD (logged)	1.819	95% Critical H Value (KM-Log)	3.539
KM Standard Error of Mean (logged)	0.543	95% H-UCL (KM -Log)	51.28
KM SD (logged)	1.819	95% Critical H Value (KM-Log)	3.539
KM Standard Error of Mean (logged)	0.543		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	26.16	Mean in Log Scale	2.375
SD in Original Scale	37.04	SD in Log Scale	1.55
95% t UCL (Assumes normality)	37.45	95% H-Stat UCL	87.07

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL	29.56

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

IRON

General Statistics

Total Number of Observations	31	Number of Distinct Observations	24
Number of Detects	19	Number of Non-Detects	12
Number of Distinct Detects	19	Number of Distinct Non-Detects	5
Minimum Detect	986	Minimum Non-Detect	90
Maximum Detect	75100	Maximum Non-Detect	10000
Variance Detects	5.120E+8	Percent Non-Detects	38.71%
Mean Detects	24147	SD Detects	22627
Median Detects	19000	CV Detects	0.937
Skewness Detects	0.993	Kurtosis Detects	0.0843
Mean of Logged Detects	9.437	SD of Logged Detects	1.403

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.878	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.901	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.196	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.197	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	15041	KM Standard Error of Mean	3823
KM SD	20709	95% KM (BCA) UCL	21939
95% KM (t) UCL	21530	95% KM (Percentile Bootstrap) UCL	21543
95% KM (z) UCL	21330	95% KM Bootstrap t UCL	22755
90% KM Chebyshev UCL	26511	95% KM Chebyshev UCL	31706
97.5% KM Chebyshev UCL	38917	99% KM Chebyshev UCL	53082

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.438	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.773	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.132	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.205	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.894	k star (bias corrected MLE)	0.788
Theta hat (MLE)	27010	Theta star (bias corrected MLE)	30646
nu hat (MLE)	33.97	nu star (bias corrected)	29.94
Mean (detects)	24147		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	14899
Maximum	75100	Median	2569
SD	21150	CV	1.42
k hat (MLE)	0.157	k star (bias corrected MLE)	0.163
Theta hat (MLE)	94778	Theta star (bias corrected MLE)	91130
nu hat (MLE)	9.746	nu star (bias corrected)	10.14
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (10.14, α)	4.027	Adjusted Chi Square Value (10.14, β)	3.815
95% Gamma Approximate UCL (use when n>=50)	37500	95% Gamma Adjusted UCL (use when n<50)	39590

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	15041	SD (KM)	20709
Variance (KM)	4.289E+8	SE of Mean (KM)	3823
k hat (KM)	0.528	k star (KM)	0.498
nu hat (KM)	32.71	nu star (KM)	30.87
theta hat (KM)	28514	theta star (KM)	30206
80% gamma percentile (KM)	24699	90% gamma percentile (KM)	40729
95% gamma percentile (KM)	57864	99% gamma percentile (KM)	100019

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (30.87, α)	19.18	Adjusted Chi Square Value (30.87, β)	18.67
95% Gamma Approximate KM-UCL (use when n>=50)	24210	95% Gamma Adjusted KM-UCL (use when n<50)	24876

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.896	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.901	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.203	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.197	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	15199	Mean in Log Scale	8.34
SD in Original Scale	20940	SD in Log Scale	1.85
95% t UCL (assumes normality of ROS data)	21583	95% Percentile Bootstrap UCL	21459
95% BCA Bootstrap UCL	22221	95% Bootstrap t UCL	23042
95% H-UCL (Log ROS)	77828		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	7.901	KM Geo Mean	2699
KM SD (logged)	2.365	95% Critical H Value (KM-Log)	4.375
KM Standard Error of Mean (logged)	0.474	95% H-UCL (KM -Log)	292658
KM SD (logged)	2.365	95% Critical H Value (KM-Log)	4.375
KM Standard Error of Mean (logged)	0.474		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	15383	Mean in Log Scale	8.319
SD in Original Scale	20831	SD in Log Scale	2.026
95% t UCL (Assumes normality)	21733	95% H-Stat UCL	132889

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL	21530

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

LEAD

General Statistics

Total Number of Observations	31	Number of Distinct Observations	12
Number of Detects	8	Number of Non-Detects	23
Number of Distinct Detects	8	Number of Distinct Non-Detects	5
Minimum Detect	0.17	Minimum Non-Detect	1
Maximum Detect	104	Maximum Non-Detect	50
Variance Detects	1206	Percent Non-Detects	74.19%
Mean Detects	21.22	SD Detects	34.73
Median Detects	9.25	CV Detects	1.636
Skewness Detects	2.448	Kurtosis Detects	6.301
Mean of Logged Detects	1.762	SD of Logged Detects	2.027

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.649	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.309	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	6.283	KM Standard Error of Mean	3.68
KM SD	18.9	95% KM (BCA) UCL	14.31
95% KM (t) UCL	12.53	95% KM (Percentile Bootstrap) UCL	12.94
95% KM (z) UCL	12.34	95% KM Bootstrap t UCL	22.23
90% KM Chebyshev UCL	17.32	95% KM Chebyshev UCL	22.32
97.5% KM Chebyshev UCL	29.26	99% KM Chebyshev UCL	42.89

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.208	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.764	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.141	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.309	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.492	k star (bias corrected MLE)	0.391
Theta hat (MLE)	43.1	Theta star (bias corrected MLE)	54.27
nu hat (MLE)	7.878	nu star (bias corrected)	6.257
Mean (detects)	21.22		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	5.86
Maximum	104	Median	0.01
SD	19.23	CV	3.281
k hat (MLE)	0.173	k star (bias corrected MLE)	0.178
Theta hat (MLE)	33.89	Theta star (bias corrected MLE)	32.98
nu hat (MLE)	10.72	nu star (bias corrected)	11.02
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (11.02, α)	4.587	Adjusted Chi Square Value (11.02, β)	4.357
95% Gamma Approximate UCL (use when n>=50)	14.08	95% Gamma Adjusted UCL (use when n<50)	14.82

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	6.283	SD (KM)	18.9
Variance (KM)	357	SE of Mean (KM)	3.68
k hat (KM)	0.111	k star (KM)	0.121
nu hat (KM)	6.855	nu star (KM)	7.525
theta hat (KM)	56.83	theta star (KM)	51.77
80% gamma percentile (KM)	5.58	90% gamma percentile (KM)	17.86
95% gamma percentile (KM)	35.8	99% gamma percentile (KM)	90.41

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (7.52, α)	2.463	Adjusted Chi Square Value (7.52, β)	2.305
95% Gamma Approximate KM-UCL (use when n>=50)	19.19	95% Gamma Adjusted KM-UCL (use when n<50)	20.51

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.979	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.167	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	5.948	Mean in Log Scale	-0.648
SD in Original Scale	19.13	SD in Log Scale	2.207
95% t UCL (assumes normality of ROS data)	11.78	95% Percentile Bootstrap UCL	12.29
95% BCA Bootstrap UCL	15.96	95% Bootstrap t UCL	28.84
95% H-UCL (Log ROS)	31.58		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-0.478	KM Geo Mean	0.62
KM SD (logged)	1.936	95% Critical H Value (KM-Log)	3.715
KM Standard Error of Mean (logged)	0.45	95% H-UCL (KM -Log)	15.02
KM SD (logged)	1.936	95% Critical H Value (KM-Log)	3.715
KM Standard Error of Mean (logged)	0.45		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	9.872	Mean in Log Scale	1.189
SD in Original Scale	19.03	SD in Log Scale	1.616
95% t UCL (Assumes normality)	15.67	95% H-Stat UCL	31.54

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

a Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1)	20.51

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

MANGANESE

General Statistics

Total Number of Observations	31	Number of Distinct Observations	28
Number of Detects	27	Number of Non-Detects	4
Number of Distinct Detects	27	Number of Distinct Non-Detects	1
Minimum Detect	3.8	Minimum Non-Detect	75
Maximum Detect	17300	Maximum Non-Detect	75
Variance Detects	10745548	Percent Non-Detects	12.9%
Mean Detects	1106	SD Detects	3278
Median Detects	241	CV Detects	2.964
Skewness Detects	4.991	Kurtosis Detects	25.49
Mean of Logged Detects	5.528	SD of Logged Detects	1.797

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.317	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.923	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.391	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.167	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	967.3	KM Standard Error of Mean	553.4
KM SD	3024	95% KM (BCA) UCL	2135
95% KM (t) UCL	1907	95% KM (Percentile Bootstrap) UCL	2023
95% KM (z) UCL	1878	95% KM Bootstrap t UCL	5845
90% KM Chebyshev UCL	2627	95% KM Chebyshev UCL	3380
97.5% KM Chebyshev UCL	4423	99% KM Chebyshev UCL	6474

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.372	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.822	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.182	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.179	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.438	k star (bias corrected MLE)	0.414
Theta hat (MLE)	2525	Theta star (bias corrected MLE)	2671
nu hat (MLE)	23.65	nu star (bias corrected)	22.36
Mean (detects)	1106		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	963.2
Maximum	17300	Median	200
SD	3075	CV	3.192
k hat (MLE)	0.265	k star (bias corrected MLE)	0.261
Theta hat (MLE)	3628	Theta star (bias corrected MLE)	3686
nu hat (MLE)	16.46	nu star (bias corrected)	16.2
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (16.20, α)	8.103	Adjusted Chi Square Value (16.20, β)	7.785
95% Gamma Approximate UCL (use when n>=50)	1926	95% Gamma Adjusted UCL (use when n<50)	2004

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	967.3	SD (KM)	3024
Variance (KM)	9142180	SE of Mean (KM)	553.4
k hat (KM)	0.102	k star (KM)	0.114
nu hat (KM)	6.345	nu star (KM)	7.064
theta hat (KM)	9452	theta star (KM)	8489
80% gamma percentile (KM)	798.4	90% gamma percentile (KM)	2699
95% gamma percentile (KM)	5553	99% gamma percentile (KM)	14381

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (7.06, α)	2.206	Adjusted Chi Square Value (7.06, β)	2.058
95% Gamma Approximate KM-UCL (use when n>=50)	3098	95% Gamma Adjusted KM-UCL (use when n<50)	3320

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.956	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.923	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.0967	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.167	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	966.1	Mean in Log Scale	5.194
SD in Original Scale	3074	SD in Log Scale	1.905
95% t UCL (assumes normality of ROS data)	1903	95% Percentile Bootstrap UCL	2049
95% BCA Bootstrap UCL	2679	95% Bootstrap t UCL	5550
95% H-UCL (Log ROS)	3958		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	5.185	KM Geo Mean	178.6
KM SD (logged)	1.924	95% Critical H Value (KM-Log)	3.696
KM Standard Error of Mean (logged)	0.369	95% H-UCL (KM -Log)	4159
KM SD (logged)	1.924	95% Critical H Value (KM-Log)	3.696
KM Standard Error of Mean (logged)	0.369		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	968	Mean in Log Scale	5.282
SD in Original Scale	3073	SD in Log Scale	1.794
95% t UCL (Assumes normality)	1905	95% H-Stat UCL	3100

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	3380

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

NICKEL

General Statistics

Total Number of Observations	31	Number of Distinct Observations	30
Number of Detects	28	Number of Non-Detects	3
Number of Distinct Detects	28	Number of Distinct Non-Detects	2
Minimum Detect	1.4	Minimum Non-Detect	30
Maximum Detect	12500	Maximum Non-Detect	50
Variance Detects	5521813	Percent Non-Detects	9.677%
Mean Detects	522.2	SD Detects	2350
Median Detects	31.7	CV Detects	4.5
Skewness Detects	5.274	Kurtosis Detects	27.87
Mean of Logged Detects	3.864	SD of Logged Detects	1.626

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.222	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.924	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.479	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.164	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	473.7	KM Standard Error of Mean	402
KM SD	2198	95% KM (BCA) UCL	1281
95% KM (t) UCL	1156	95% KM (Percentile Bootstrap) UCL	1267
95% KM (z) UCL	1135	95% KM Bootstrap t UCL	12968
90% KM Chebyshev UCL	1680	95% KM Chebyshev UCL	2226
97.5% KM Chebyshev UCL	2984	99% KM Chebyshev UCL	4474

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	5.132	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.859	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.311	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.18	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.29	k star (bias corrected MLE)	0.282
Theta hat (MLE)	1802	Theta star (bias corrected MLE)	1849
nu hat (MLE)	16.22	nu star (bias corrected)	15.82
Mean (detects)	522.2		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	471.7
Maximum	12500	Median	29.2
SD	2235	CV	4.738
k hat (MLE)	0.231	k star (bias corrected MLE)	0.23
Theta hat (MLE)	2040	Theta star (bias corrected MLE)	2048
nu hat (MLE)	14.33	nu star (bias corrected)	14.28
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (14.28, α)	6.762	Adjusted Chi Square Value (14.28, β)	6.475
95% Gamma Approximate UCL (use when n>=50)	995.9	95% Gamma Adjusted UCL (use when n<50)	1040

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	473.7	SD (KM)	2198
Variance (KM)	4831235	SE of Mean (KM)	402
k hat (KM)	0.0465	k star (KM)	0.0635
nu hat (KM)	2.88	nu star (KM)	3.935
theta hat (KM)	10198	theta star (KM)	7465
80% gamma percentile (KM)	133.2	90% gamma percentile (KM)	940.5
95% gamma percentile (KM)	2685	99% gamma percentile (KM)	9327

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (3.93, α)	0.696	Adjusted Chi Square Value (3.93, β)	0.627
95% Gamma Approximate KM-UCL (use when n>=50)	2678	95% Gamma Adjusted KM-UCL (use when n<50)	2971

95% Gamma Adjusted KM-UCL (use when k<=1 and 15 < n < 50)

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.875	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.924	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.21	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.164	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	473.4	Mean in Log Scale	3.765
SD in Original Scale	2234	SD in Log Scale	1.579
95% t UCL (assumes normality of ROS data)	1155	95% Percentile Bootstrap UCL	1277
95% BCA Bootstrap UCL	1693	95% Bootstrap t UCL	13327
95% H-UCL (Log ROS)	376.2		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	3.768	KM Geo Mean	43.29
KM SD (logged)	1.566	95% Critical H Value (KM-Log)	3.171
KM Standard Error of Mean (logged)	0.291	95% H-UCL (KM -Log)	365.6
KM SD (logged)	1.566	95% Critical H Value (KM-Log)	3.171
KM Standard Error of Mean (logged)	0.291		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	473.4	Mean in Log Scale	3.769
SD in Original Scale	2234	SD in Log Scale	1.573
95% t UCL (Assumes normality)	1155	95% H-Stat UCL	371.9

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	2226

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

UCL Statistics for Uncensored Full Data Sets

User Selected Options	
Date/Time of Computation	ProUCL 5.14/11/2017 1:14:07 PM
From File	GW_Total_ProUCL_Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

NICKEL

General Statistics

Total Number of Observations	34	Number of Distinct Observations	34
		Number of Missing Observations	9
Minimum	9	Mean	908.2
Maximum	5250	Median	190.5
SD	1421	Std. Error of Mean	243.6
Coefficient of Variation	1.564	Skewness	1.775

Normal GOF Test

Shapiro Wilk Test Statistic	0.671	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.933	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.342	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.15	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	1321	95% Adjusted-CLT UCL (Chen-1995)	1388
		95% Modified-t UCL (Johnson-1978)	1333

Gamma GOF Test

A-D Test Statistic	1.434	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.819	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.194	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.16	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.468	k star (bias corrected MLE)	0.447
Theta hat (MLE)	1939	Theta star (bias corrected MLE)	2033
nu hat (MLE)	31.85	nu star (bias corrected)	30.38
MLE Mean (bias corrected)	908.2	MLE Sd (bias corrected)	1359
		Approximate Chi Square Value (0.05)	18.79
Adjusted Level of Significance	0.0422	Adjusted Chi Square Value	18.34

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	1468	95% Adjusted Gamma UCL (use when n<50)	1504

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.946	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.933	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.133	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.15	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	2.197	Mean of logged Data	5.442
Maximum of Logged Data	8.566	SD of logged Data	1.811

Assuming Lognormal Distribution

95% H-UCL	3679	90% Chebyshev (MVUE) UCL	2393
95% Chebyshev (MVUE) UCL	2996	97.5% Chebyshev (MVUE) UCL	3833
99% Chebyshev (MVUE) UCL	5476		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	1309	95% Jackknife UCL	1321
95% Standard Bootstrap UCL	1312	95% Bootstrap-t UCL	1444
95% Hall's Bootstrap UCL	1341	95% Percentile Bootstrap UCL	1353
95% BCA Bootstrap UCL	1395		
90% Chebyshev(Mean, Sd) UCL	1639	95% Chebyshev(Mean, Sd) UCL	1970
97.5% Chebyshev(Mean, Sd) UCL	2430	99% Chebyshev(Mean, Sd) UCL	3332

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL	1970

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Filtered Groundwater

Matrix	Units	Location	Collected	ALUMINUM	D_ALUMINUM	ANTIMONY	D_ANTIMONY	ARSENIC	D_ARSENIC	CHROMIUM, TOTAL	D_CHROMIUM, TOTAL	COPPER	D_COPPER	IRON	D_IRON
WG	UG_L	P09-01	10/1/2013	307	1	0.23	1	11.5	1	7.7	1	3.6	0	100	0
WG	UG_L	P09-01	9/9/2015	873	1	40	0	40	0	97.4	1	50	0	10000	0
WG	UG_L	P09-01	9/14/2016	4050	1	10.7	1	5.4	1	1200	1	64.8	1	41000	1
WG	UG_L	P09-02A	10/2/2013	362	1	0.32	1	12.6	1	5	0	4.5	0	6140	1
WG	UG_L	P09-02A	9/15/2015	500	0	40	0	21.5	1	30	0	50	0	2500	0
WG	UG_L	P09-02A	9/15/2016	14800	1	18.6	1	11.8	1	607	1	192	1	65000	1
WG	UG_L	P09-03A	10/15/2013	195	1	1	0	8	1	5	0	3	0	500	0
WG	UG_L	P09-03A	9/16/2015	500	0	40	0	15	1	30	0	24.5	1	1190	1
WG	UG_L	P09-04A	10/15/2013	174	1	1	0	12.6	1	5	0	6.5	1	500	0
WG	UG_L	P09-04A	9/16/2015	500	0	40	0	40	0	30	0	50	0	2500	0
WG	UG_L	P09-04A	9/15/2016	500	0	40	0	40	0	30	0	50	0	2500	0
WG	UG_L	P09-05A	10/2/2013	300	0	1.6	1	8.6	1	5	0	3	0	90	0
WG	UG_L	P09-05A	9/14/2015	357	1	40	0	666	1	30	0	50	0	2500	0
WG	UG_L	P09-06B	10/3/2013	367	1	1	0	9.7	1	403	1	13.3	1	57000	1
WG	UG_L	P09-06B	9/9/2015	3220	1	40	0	40	0	24.9	1	33.3	1	10000	0
WG	UG_L	P09-06B	9/13/2016	3960	1	18.3	1	22.2	1	40.6	1	50	0	986	1
WG	UG_L	P09-07B	10/3/2013	252	1	1	0	13	1	52.3	1	3	0	44900	1
WG	UG_L	P09-07B	9/9/2015	1000	0	40	0	37.6	1	30	0	50	0	2500	0
WG	UG_L	P09-08B	9/8/2015	8180	1	40	0	40	0	400	1	100	0	21400	1
WG	UG_L	P09-08B	9/15/2016	5270	1	9.4	1	8.6	1	305	1	50	0	30300	1
WG	UG_L	P09-09	10/1/2013	168	1	0.42	1	7.1	1	12	1	3	0	19400	1
WG	UG_L	P09-09	9/9/2015	1840	1	40	0	23.9	1	100	0	100	0	75100	1
WG	UG_L	P09-09	9/12/2016	3690	1	16.4	1	40	0	19.9	1	50	0	2800	1
WG	UG_L	P09-10	10/1/2013	219	1	0.12	1	7.8	1	5	0	3	0	19000	1
WG	UG_L	P09-10	9/8/2015	144	1	0.8	0	3.1	1	9.4	1	2	1	23500	1
WG	UG_L	P09-10	9/12/2016	1800	1	9	1	20	0	19.8	1	25	0	13400	1
WG	UG_L	P09-11B	10/15/2013	1000	0	1	0	10.2	1	5	0	3	0	1940	1
WG	UG_L	P09-11B	9/9/2015	500	0	40	0	40	0	30	0	88.6	1	2500	0
WG	UG_L	P09-11B	9/16/2016	3680	1	18.4	1	40	0	52.8	1	50	0	1730	1
WG	UG_L	P09-12B	9/8/2015	516	1	16	0	16	0	40	0	20	0	15400	1
WG	UG_L	P09-12B	9/13/2016	43.5	1	0.8	0	0.2	1	1.1	1	0.44	1	18600	1

Filtered Groundwater

Matrix	Units	Location	Collected	LEAD	D_LEAD	MANGANESE	D_MANGANESE	NICKEL	D_NICKEL
WG	UG_L	P09-01	10/1/2013	1	0	47.3	1	28.9	1
WG	UG_L	P09-01	9/9/2015	4.5	1	262	1	31.5	1
WG	UG_L	P09-01	9/14/2016	16.1	1	1210	1	251	1
WG	UG_L	P09-02A	10/2/2013	1	0	93.3	1	18	1
WG	UG_L	P09-02A	9/15/2015	15	0	120	1	30	0
WG	UG_L	P09-02A	9/15/2016	104	1	625	1	203	1
WG	UG_L	P09-03A	10/15/2013	1	0	31.8	1	33.5	1
WG	UG_L	P09-03A	9/16/2015	15	0	509	1	29.2	1
WG	UG_L	P09-04A	10/15/2013	1	0	4.2	1	36.4	1
WG	UG_L	P09-04A	9/16/2015	15	0	75	0	13	1
WG	UG_L	P09-04A	9/15/2016	15	0	75	0	24.7	1
WG	UG_L	P09-05A	10/2/2013	1	0	3.8	1	31.9	1
WG	UG_L	P09-05A	9/14/2015	15	0	75	0	15.5	1
WG	UG_L	P09-06B	10/3/2013	2.7	1	503	1	132	1
WG	UG_L	P09-06B	9/9/2015	14	1	232	1	23.5	1
WG	UG_L	P09-06B	9/13/2016	15	0	83.6	1	39.2	1
WG	UG_L	P09-07B	10/3/2013	1	0	728	1	150	1
WG	UG_L	P09-07B	9/9/2015	15	0	70.9	1	30	0
WG	UG_L	P09-08B	9/8/2015	50	0	2060	1	436	1
WG	UG_L	P09-08B	9/15/2016	27.3	1	1130	1	342	1
WG	UG_L	P09-09	10/1/2013	1	0	241	1	75.9	1
WG	UG_L	P09-09	9/9/2015	50	0	1390	1	50	0
WG	UG_L	P09-09	9/12/2016	15	0	130	1	26.5	1
WG	UG_L	P09-10	10/1/2013	1	0	144	1	27.6	1
WG	UG_L	P09-10	9/8/2015	1	1	200	1	6.5	1
WG	UG_L	P09-10	9/12/2016	7.5	0	554	1	28	1
WG	UG_L	P09-11B	10/15/2013	1	0	184	1	18.4	1
WG	UG_L	P09-11B	9/9/2015	15	0	75	0	41.9	1
WG	UG_L	P09-11B	9/16/2016	15	0	752	1	55.8	1
WG	UG_L	P09-12B	9/8/2015	6	0	17300	1	12500	1
WG	UG_L	P09-12B	9/13/2016	0.17	1	1250	1	1.4	1

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.14/11/2017 1:37:45 PM
From File	GW_Filtered_ProUCL_Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

ALUMINUM

General Statistics

Total Number of Observations	31	Number of Distinct Observations	26
Number of Detects	23	Number of Non-Detects	8
Number of Distinct Detects	23	Number of Distinct Non-Detects	3
Minimum Detect	43.5	Minimum Non-Detect	300
Maximum Detect	14800	Maximum Non-Detect	1000
Variance Detects	11941864	Percent Non-Detects	25.81%
Mean Detects	2368	SD Detects	3456
Median Detects	516	CV Detects	1.459
Skewness Detects	2.459	Kurtosis Detects	7.169
Mean of Logged Detects	6.736	SD of Logged Detects	1.578

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.684	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.914	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.251	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.18	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	1818	KM Standard Error of Mean	561.7
KM SD	3058	95% KM (BCA) UCL	2752
95% KM (t) UCL	2771	95% KM (Percentile Bootstrap) UCL	2769
95% KM (z) UCL	2742	95% KM Bootstrap t UCL	3373
90% KM Chebyshev UCL	3503	95% KM Chebyshev UCL	4266
97.5% KM Chebyshev UCL	5325	99% KM Chebyshev UCL	7407

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.935	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.796	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.217	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.191	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.598	k star (bias corrected MLE)	0.549
Theta hat (MLE)	3961	Theta star (bias corrected MLE)	4315
nu hat (MLE)	27.5	nu star (bias corrected)	25.25
Mean (detects)	2368		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	1786
Maximum	14800	Median	357
SD	3127	CV	1.751
k hat (MLE)	0.259	k star (bias corrected MLE)	0.255

Theta hat (MLE)	6895	Theta star (bias corrected MLE)	6991
nu hat (MLE)	16.06	nu star (bias corrected)	15.84
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (15.84, α)	7.847	Adjusted Chi Square Value (15.84, β)	7.535
95% Gamma Approximate UCL (use when n>=50)	3604	95% Gamma Adjusted UCL (use when n<50)	3753

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	1818	SD (KM)	3058
Variance (KM)	9350336	SE of Mean (KM)	561.7
k hat (KM)	0.353	k star (KM)	0.341
nu hat (KM)	21.91	nu star (KM)	21.12
theta hat (KM)	5144	theta star (KM)	5336
80% gamma percentile (KM)	2864	90% gamma percentile (KM)	5270
95% gamma percentile (KM)	7976	99% gamma percentile (KM)	14902

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (21.12, α)	11.68	Adjusted Chi Square Value (21.12, β)	11.29
95% Gamma Approximate KM-UCL (use when n>=50)	3286	95% Gamma Adjusted KM-UCL (use when n<50)	3400

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.94	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.914	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.179	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.18	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	1830	Mean in Log Scale	6.4
SD in Original Scale	3103	SD in Log Scale	1.509
95% t UCL (assumes normality of ROS data)	2776	95% Percentile Bootstrap UCL	2754
95% BCA Bootstrap UCL	3068	95% Bootstrap t UCL	3375
95% H-UCL (Log ROS)	4403		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	6.366	KM Geo Mean	581.6
KM SD (logged)	1.503	95% Critical H Value (KM-Log)	3.081
KM Standard Error of Mean (logged)	0.285	95% H-UCL (KM -Log)	4187
KM SD (logged)	1.503	95% Critical H Value (KM-Log)	3.081
KM Standard Error of Mean (logged)	0.285		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	1834	Mean in Log Scale	6.451
SD in Original Scale	3100	SD in Log Scale	1.451
95% t UCL (Assumes normality)	2779	95% H-Stat UCL	4021

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	4266

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ANTIMONY

General Statistics

Total Number of Observations	31	Number of Distinct Observations	16
Number of Detects	12	Number of Non-Detects	19
Number of Distinct Detects	12	Number of Distinct Non-Detects	4
Minimum Detect	0.12	Minimum Non-Detect	0.8
Maximum Detect	18.6	Maximum Non-Detect	40
Variance Detects	62.06	Percent Non-Detects	61.29%
Mean Detects	8.624	SD Detects	7.878
Median Detects	9.2	CV Detects	0.913
Skewness Detects	0.142	Kurtosis Detects	-1.849
Mean of Logged Detects	1.102	SD of Logged Detects	1.98

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.827	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.859	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.23	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.243	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	5.382	KM Standard Error of Mean	1.677
KM SD	7.126	95% KM (BCA) UCL	8.099
95% KM (t) UCL	8.228	95% KM (Percentile Bootstrap) UCL	8.183
95% KM (z) UCL	8.14	95% KM Bootstrap t UCL	8.846
90% KM Chebyshev UCL	10.41	95% KM Chebyshev UCL	12.69
97.5% KM Chebyshev UCL	15.85	99% KM Chebyshev UCL	22.07

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.941	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.778	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.264	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.257	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.589	k star (bias corrected MLE)	0.497
Theta hat (MLE)	14.65	Theta star (bias corrected MLE)	17.35
nu hat (MLE)	14.13	nu star (bias corrected)	11.93
Mean (detects)	8.624		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.12	Mean	5.716
Maximum	18.6	Median	2.399
SD	6.322	CV	1.106
k hat (MLE)	0.764	k star (bias corrected MLE)	0.712
Theta hat (MLE)	7.479	Theta star (bias corrected MLE)	8.03
nu hat (MLE)	47.38	nu star (bias corrected)	44.13
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (44.13, α)	29.9	Adjusted Chi Square Value (44.13, β)	29.24
95% Gamma Approximate UCL (use when n>=50)	8.438	95% Gamma Adjusted UCL (use when n<50)	8.626

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	5.382	SD (KM)	7.126
Variance (KM)	50.78	SE of Mean (KM)	1.677
k hat (KM)	0.571	k star (KM)	0.537
nu hat (KM)	35.37	nu star (KM)	33.28
theta hat (KM)	9.434	theta star (KM)	10.03
80% gamma percentile (KM)	8.861	90% gamma percentile (KM)	14.35
95% gamma percentile (KM)	20.16	99% gamma percentile (KM)	34.36

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (33.28, α)	21.09	Adjusted Chi Square Value (33.28, β)	20.55
95% Gamma Approximate KM-UCL (use when n>=50)	8.493	95% Gamma Adjusted KM-UCL (use when n<50)	8.716

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.814	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.859	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.293	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.243	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	4.964	Mean in Log Scale	0.263
SD in Original Scale	7.05	SD in Log Scale	1.829
95% t UCL (assumes normality of ROS data)	7.113	95% Percentile Bootstrap UCL	7.128
95% BCA Bootstrap UCL	7.316	95% Bootstrap t UCL	7.526
95% H-UCL (Log ROS)	22.7		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	0.144	KM Geo Mean	1.155
KM SD (logged)	1.939	95% Critical H Value (KM-Log)	3.718
KM Standard Error of Mean (logged)	0.474	95% H-UCL (KM -Log)	28.2
KM SD (logged)	1.939	95% Critical H Value (KM-Log)	3.718
KM Standard Error of Mean (logged)	0.474		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	10.8	Mean in Log Scale	1.386
SD in Original Scale	8.991	SD in Log Scale	1.873
95% t UCL (Assumes normality)	13.54	95% H-Stat UCL	79.76

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL	8.228

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ARSENIC

General Statistics

Total Number of Observations	31	Number of Distinct Observations	22
Number of Detects	21	Number of Non-Detects	10
Number of Distinct Detects	19	Number of Distinct Non-Detects	3
Minimum Detect	0.2	Minimum Non-Detect	16
Maximum Detect	666	Maximum Non-Detect	40
Variance Detects	20402	Percent Non-Detects	32.26%
Mean Detects	43.64	SD Detects	142.8
Median Detects	11.5	CV Detects	3.273
Skewness Detects	4.558	Kurtosis Detects	20.84
Mean of Logged Detects	2.425	SD of Logged Detects	1.392

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.271	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.908	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.469	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.188	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	33.3	KM Standard Error of Mean	21.33
KM SD	115.8	95% KM (BCA) UCL	76.45
95% KM (t) UCL	69.5	95% KM (Percentile Bootstrap) UCL	74.77
95% KM (z) UCL	68.38	95% KM Bootstrap t UCL	428.6
90% KM Chebyshev UCL	97.28	95% KM Chebyshev UCL	126.3
97.5% KM Chebyshev UCL	166.5	99% KM Chebyshev UCL	245.5

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	3.568	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.811	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.355	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.201	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.474	k star (bias corrected MLE)	0.438
Theta hat (MLE)	92.05	Theta star (bias corrected MLE)	99.61
nu hat (MLE)	19.91	nu star (bias corrected)	18.4
Mean (detects)	43.64		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	36.72
Maximum	666	Median	9.7
SD	119.4	CV	3.253
k hat (MLE)	0.285	k star (bias corrected MLE)	0.279
Theta hat (MLE)	128.7	Theta star (bias corrected MLE)	131.6
nu hat (MLE)	17.68	nu star (bias corrected)	17.3
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (17.30, α)	8.89	Adjusted Chi Square Value (17.30, β)	8.554
95% Gamma Approximate UCL (use when n>=50)	71.47	95% Gamma Adjusted UCL (use when n<50)	74.27

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	33.3	SD (KM)	115.8
Variance (KM)	13405	SE of Mean (KM)	21.33
k hat (KM)	0.0827	k star (KM)	0.0962
nu hat (KM)	5.128	nu star (KM)	5.965
theta hat (KM)	402.6	theta star (KM)	346.1
80% gamma percentile (KM)	21.81	90% gamma percentile (KM)	87.15
95% gamma percentile (KM)	193.6	99% gamma percentile (KM)	539.2

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (5.96, α)	1.622	Adjusted Chi Square Value (5.96, β)	1.5
95% Gamma Approximate KM-UCL (use when n>=50)	122.5	95% Gamma Adjusted KM-UCL (use when n<50)	132.4

95% Gamma Adjusted KM-UCL (use when k<=1 and 15 < n < 50)

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.793	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.908	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.226	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.188	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	33.62	Mean in Log Scale	2.356
SD in Original Scale	117.7	SD in Log Scale	1.232
95% t UCL (assumes normality of ROS data)	69.51	95% Percentile Bootstrap UCL	74.86
95% BCA Bootstrap UCL	116.8	95% Bootstrap t UCL	392.3
95% H-UCL (Log ROS)	41.48		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	2.337	KM Geo Mean	10.35
KM SD (logged)	1.268	95% Critical H Value (KM-Log)	2.761
KM Standard Error of Mean (logged)	0.268	95% H-UCL (KM -Log)	43.83
KM SD (logged)	1.268	95% Critical H Value (KM-Log)	2.761
KM Standard Error of Mean (logged)	0.268		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	35.3	Mean in Log Scale	2.557
SD in Original Scale	117.3	SD in Log Scale	1.169
95% t UCL (Assumes normality)	71.06	95% H-Stat UCL	44.74

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	126.3

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

CHROMIUM, TOTAL

General Statistics

Total Number of Observations	31	Number of Distinct Observations	20
Number of Detects	16	Number of Non-Detects	15
Number of Distinct Detects	16	Number of Distinct Non-Detects	4
Minimum Detect	1.1	Minimum Non-Detect	5
Maximum Detect	1200	Maximum Non-Detect	100
Variance Detects	105394	Percent Non-Detects	48.39%
Mean Detects	203.3	SD Detects	324.6
Median Detects	46.45	CV Detects	1.597
Skewness Detects	2.254	Kurtosis Detects	5.509
Mean of Logged Detects	3.967	SD of Logged Detects	1.894

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.669	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.887	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.315	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.213	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	107.7	KM Standard Error of Mean	45.76
KM SD	246.6	95% KM (BCA) UCL	199
95% KM (t) UCL	185.3	95% KM (Percentile Bootstrap) UCL	186.3
95% KM (z) UCL	182.9	95% KM Bootstrap t UCL	268.6
90% KM Chebyshev UCL	244.9	95% KM Chebyshev UCL	307.1
97.5% KM Chebyshev UCL	393.4	99% KM Chebyshev UCL	562.9

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.631	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.802	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.223	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.228	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.475	k star (bias corrected MLE)	0.428
Theta hat (MLE)	428	Theta star (bias corrected MLE)	475.4
nu hat (MLE)	15.2	nu star (bias corrected)	13.68
Mean (detects)	203.3		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	105.3
Maximum	1200	Median	7.7
SD	251.6	CV	2.39
k hat (MLE)	0.164	k star (bias corrected MLE)	0.17
Theta hat (MLE)	640.5	Theta star (bias corrected MLE)	619.4
nu hat (MLE)	10.19	nu star (bias corrected)	10.54
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (10.54, α)	4.28	Adjusted Chi Square Value (10.54, β)	4.059
95% Gamma Approximate UCL (use when n>=50)	259.1	95% Gamma Adjusted UCL (use when n<50)	273.2

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	107.7	SD (KM)	246.6
Variance (KM)	60794	SE of Mean (KM)	45.76
k hat (KM)	0.191	k star (KM)	0.194
nu hat (KM)	11.83	nu star (KM)	12.01
theta hat (KM)	564.6	theta star (KM)	555.7
80% gamma percentile (KM)	139.5	90% gamma percentile (KM)	325.6
95% gamma percentile (KM)	559.4	99% gamma percentile (KM)	1206

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (12.01, α)	5.237	Adjusted Chi Square Value (12.01, β)	4.989
95% Gamma Approximate KM-UCL (use when n>=50)	247.1	95% Gamma Adjusted KM-UCL (use when n<50)	259.3

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.965	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.887	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.135	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.213	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	107.2	Mean in Log Scale	2.421
SD in Original Scale	250.8	SD in Log Scale	2.302
95% t UCL (assumes normality of ROS data)	183.6	95% Percentile Bootstrap UCL	186.6
95% BCA Bootstrap UCL	215.8	95% Bootstrap t UCL	279.1
95% H-UCL (Log ROS)	959.8		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	2.451	KM Geo Mean	11.6
KM SD (logged)	2.212	95% Critical H Value (KM-Log)	4.136
KM Standard Error of Mean (logged)	0.445	95% H-UCL (KM -Log)	711.8
KM SD (logged)	2.212	95% Critical H Value (KM-Log)	4.136
KM Standard Error of Mean (logged)	0.445		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	111.1	Mean in Log Scale	3.059
SD in Original Scale	249.3	SD in Log Scale	1.79
95% t UCL (Assumes normality)	187.1	95% H-Stat UCL	331.7

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

a Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1)	259.3

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

COPPER

General Statistics

Total Number of Observations	31	Number of Distinct Observations	16
Number of Detects	9	Number of Non-Detects	22
Number of Distinct Detects	9	Number of Distinct Non-Detects	7
Minimum Detect	0.44	Minimum Non-Detect	3
Maximum Detect	192	Maximum Non-Detect	100
Variance Detects	3842	Percent Non-Detects	70.97%
Mean Detects	47.27	SD Detects	61.98
Median Detects	24.5	CV Detects	1.311
Skewness Detects	1.883	Kurtosis Detects	3.689
Mean of Logged Detects	2.772	SD of Logged Detects	1.932

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.775	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.829	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.256	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.274	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	16.93	KM Standard Error of Mean	7.442
KM SD	37.86	95% KM (BCA) UCL	29.76
95% KM (t) UCL	29.56	95% KM (Percentile Bootstrap) UCL	29.61
95% KM (z) UCL	29.17	95% KM Bootstrap t UCL	40.9
90% KM Chebyshev UCL	39.25	95% KM Chebyshev UCL	49.37
97.5% KM Chebyshev UCL	63.4	99% KM Chebyshev UCL	90.98

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.114	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.765	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.0905	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.293	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.574	k star (bias corrected MLE)	0.457
Theta hat (MLE)	82.37	Theta star (bias corrected MLE)	103.5
nu hat (MLE)	10.33	nu star (bias corrected)	8.22
Mean (detects)	47.27		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	15.87
Maximum	192	Median	0.01
SD	38.62	CV	2.434
k hat (MLE)	0.174	k star (bias corrected MLE)	0.179
Theta hat (MLE)	90.99	Theta star (bias corrected MLE)	88.64
nu hat (MLE)	10.81	nu star (bias corrected)	11.1
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (11.10, α)	4.64	Adjusted Chi Square Value (11.10, β)	4.409
95% Gamma Approximate UCL (use when n>=50)	37.96	95% Gamma Adjusted UCL (use when n<50)	39.94

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	16.93	SD (KM)	37.86
Variance (KM)	1433	SE of Mean (KM)	7.442
k hat (KM)	0.2	k star (KM)	0.202
nu hat (KM)	12.39	nu star (KM)	12.53
theta hat (KM)	84.67	theta star (KM)	83.77
80% gamma percentile (KM)	22.42	90% gamma percentile (KM)	51.19
95% gamma percentile (KM)	86.98	99% gamma percentile (KM)	185.3

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (12.53, α)	5.577	Adjusted Chi Square Value (12.53, β)	5.32
95% Gamma Approximate KM-UCL (use when n>=50)	38.02	95% Gamma Adjusted KM-UCL (use when n<50)	39.86

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.959	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.143	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	15.93	Mean in Log Scale	1.103
SD in Original Scale	38.12	SD in Log Scale	1.807
95% t UCL (assumes normality of ROS data)	27.55	95% Percentile Bootstrap UCL	27.53
95% BCA Bootstrap UCL	35.59	95% Bootstrap t UCL	49.68
95% H-UCL (Log ROS)	49.35		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	1.107	KM Geo Mean	3.026
KM SD (logged)	1.819	95% Critical H Value (KM-Log)	3.539
KM Standard Error of Mean (logged)	0.543	95% H-UCL (KM -Log)	51.28
KM SD (logged)	1.819	95% Critical H Value (KM-Log)	3.539
KM Standard Error of Mean (logged)	0.543		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	26.16	Mean in Log Scale	2.375
SD in Original Scale	37.04	SD in Log Scale	1.55
95% t UCL (Assumes normality)	37.45	95% H-Stat UCL	87.07

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL	29.56

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

IRON

General Statistics

Total Number of Observations	31	Number of Distinct Observations	24
Number of Detects	19	Number of Non-Detects	12
Number of Distinct Detects	19	Number of Distinct Non-Detects	5
Minimum Detect	986	Minimum Non-Detect	90
Maximum Detect	75100	Maximum Non-Detect	10000
Variance Detects	5.120E+8	Percent Non-Detects	38.71%
Mean Detects	24147	SD Detects	22627
Median Detects	19000	CV Detects	0.937
Skewness Detects	0.993	Kurtosis Detects	0.0843
Mean of Logged Detects	9.437	SD of Logged Detects	1.403

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.878	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.901	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.196	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.197	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	15041	KM Standard Error of Mean	3823
KM SD	20709	95% KM (BCA) UCL	21939
95% KM (t) UCL	21530	95% KM (Percentile Bootstrap) UCL	21543
95% KM (z) UCL	21330	95% KM Bootstrap t UCL	22755
90% KM Chebyshev UCL	26511	95% KM Chebyshev UCL	31706
97.5% KM Chebyshev UCL	38917	99% KM Chebyshev UCL	53082

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.438	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.773	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.132	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.205	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.894	k star (bias corrected MLE)	0.788
Theta hat (MLE)	27010	Theta star (bias corrected MLE)	30646
nu hat (MLE)	33.97	nu star (bias corrected)	29.94
Mean (detects)	24147		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	14899
Maximum	75100	Median	2569
SD	21150	CV	1.42
k hat (MLE)	0.157	k star (bias corrected MLE)	0.163
Theta hat (MLE)	94778	Theta star (bias corrected MLE)	91130
nu hat (MLE)	9.746	nu star (bias corrected)	10.14
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (10.14, α)	4.027	Adjusted Chi Square Value (10.14, β)	3.815
95% Gamma Approximate UCL (use when n>=50)	37500	95% Gamma Adjusted UCL (use when n<50)	39590

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	15041	SD (KM)	20709
Variance (KM)	4.289E+8	SE of Mean (KM)	3823
k hat (KM)	0.528	k star (KM)	0.498
nu hat (KM)	32.71	nu star (KM)	30.87
theta hat (KM)	28514	theta star (KM)	30206
80% gamma percentile (KM)	24699	90% gamma percentile (KM)	40729
95% gamma percentile (KM)	57864	99% gamma percentile (KM)	100019

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (30.87, α)	19.18	Adjusted Chi Square Value (30.87, β)	18.67
95% Gamma Approximate KM-UCL (use when n>=50)	24210	95% Gamma Adjusted KM-UCL (use when n<50)	24876

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.896	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.901	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.203	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.197	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	15199	Mean in Log Scale	8.34
SD in Original Scale	20940	SD in Log Scale	1.85
95% t UCL (assumes normality of ROS data)	21583	95% Percentile Bootstrap UCL	21459
95% BCA Bootstrap UCL	22221	95% Bootstrap t UCL	23042
95% H-UCL (Log ROS)	77828		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	7.901	KM Geo Mean	2699
KM SD (logged)	2.365	95% Critical H Value (KM-Log)	4.375
KM Standard Error of Mean (logged)	0.474	95% H-UCL (KM -Log)	292658
KM SD (logged)	2.365	95% Critical H Value (KM-Log)	4.375
KM Standard Error of Mean (logged)	0.474		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	15383	Mean in Log Scale	8.319
SD in Original Scale	20831	SD in Log Scale	2.026
95% t UCL (Assumes normality)	21733	95% H-Stat UCL	132889

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL	21530

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

LEAD

General Statistics

Total Number of Observations	31	Number of Distinct Observations	12
Number of Detects	8	Number of Non-Detects	23
Number of Distinct Detects	8	Number of Distinct Non-Detects	5
Minimum Detect	0.17	Minimum Non-Detect	1
Maximum Detect	104	Maximum Non-Detect	50
Variance Detects	1206	Percent Non-Detects	74.19%
Mean Detects	21.22	SD Detects	34.73
Median Detects	9.25	CV Detects	1.636
Skewness Detects	2.448	Kurtosis Detects	6.301
Mean of Logged Detects	1.762	SD of Logged Detects	2.027

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.649	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.309	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	6.283	KM Standard Error of Mean	3.68
KM SD	18.9	95% KM (BCA) UCL	14.31
95% KM (t) UCL	12.53	95% KM (Percentile Bootstrap) UCL	12.94
95% KM (z) UCL	12.34	95% KM Bootstrap t UCL	22.23
90% KM Chebyshev UCL	17.32	95% KM Chebyshev UCL	22.32
97.5% KM Chebyshev UCL	29.26	99% KM Chebyshev UCL	42.89

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.208	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.764	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.141	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.309	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.492	k star (bias corrected MLE)	0.391
Theta hat (MLE)	43.1	Theta star (bias corrected MLE)	54.27
nu hat (MLE)	7.878	nu star (bias corrected)	6.257
Mean (detects)	21.22		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	5.86
Maximum	104	Median	0.01
SD	19.23	CV	3.281
k hat (MLE)	0.173	k star (bias corrected MLE)	0.178
Theta hat (MLE)	33.89	Theta star (bias corrected MLE)	32.98
nu hat (MLE)	10.72	nu star (bias corrected)	11.02
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (11.02, α)	4.587	Adjusted Chi Square Value (11.02, β)	4.357
95% Gamma Approximate UCL (use when n>=50)	14.08	95% Gamma Adjusted UCL (use when n<50)	14.82

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	6.283	SD (KM)	18.9
Variance (KM)	357	SE of Mean (KM)	3.68
k hat (KM)	0.111	k star (KM)	0.121
nu hat (KM)	6.855	nu star (KM)	7.525
theta hat (KM)	56.83	theta star (KM)	51.77
80% gamma percentile (KM)	5.58	90% gamma percentile (KM)	17.86
95% gamma percentile (KM)	35.8	99% gamma percentile (KM)	90.41

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (7.52, α)	2.463	Adjusted Chi Square Value (7.52, β)	2.305
95% Gamma Approximate KM-UCL (use when n>=50)	19.19	95% Gamma Adjusted KM-UCL (use when n<50)	20.51

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.979	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.167	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	5.948	Mean in Log Scale	-0.648
SD in Original Scale	19.13	SD in Log Scale	2.207
95% t UCL (assumes normality of ROS data)	11.78	95% Percentile Bootstrap UCL	12.29
95% BCA Bootstrap UCL	15.96	95% Bootstrap t UCL	28.84
95% H-UCL (Log ROS)	31.58		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-0.478	KM Geo Mean	0.62
KM SD (logged)	1.936	95% Critical H Value (KM-Log)	3.715
KM Standard Error of Mean (logged)	0.45	95% H-UCL (KM -Log)	15.02
KM SD (logged)	1.936	95% Critical H Value (KM-Log)	3.715
KM Standard Error of Mean (logged)	0.45		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	9.872	Mean in Log Scale	1.189
SD in Original Scale	19.03	SD in Log Scale	1.616
95% t UCL (Assumes normality)	15.67	95% H-Stat UCL	31.54

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

a Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1)	20.51

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

MANGANESE

General Statistics

Total Number of Observations	31	Number of Distinct Observations	28
Number of Detects	27	Number of Non-Detects	4
Number of Distinct Detects	27	Number of Distinct Non-Detects	1
Minimum Detect	3.8	Minimum Non-Detect	75
Maximum Detect	17300	Maximum Non-Detect	75
Variance Detects	10745548	Percent Non-Detects	12.9%
Mean Detects	1106	SD Detects	3278
Median Detects	241	CV Detects	2.964
Skewness Detects	4.991	Kurtosis Detects	25.49
Mean of Logged Detects	5.528	SD of Logged Detects	1.797

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.317	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.923	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.391	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.167	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	967.3	KM Standard Error of Mean	553.4
KM SD	3024	95% KM (BCA) UCL	2135
95% KM (t) UCL	1907	95% KM (Percentile Bootstrap) UCL	2023
95% KM (z) UCL	1878	95% KM Bootstrap t UCL	5845
90% KM Chebyshev UCL	2627	95% KM Chebyshev UCL	3380
97.5% KM Chebyshev UCL	4423	99% KM Chebyshev UCL	6474

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.372	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.822	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.182	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.179	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.438	k star (bias corrected MLE)	0.414
Theta hat (MLE)	2525	Theta star (bias corrected MLE)	2671
nu hat (MLE)	23.65	nu star (bias corrected)	22.36
Mean (detects)	1106		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	963.2
Maximum	17300	Median	200
SD	3075	CV	3.192
k hat (MLE)	0.265	k star (bias corrected MLE)	0.261
Theta hat (MLE)	3628	Theta star (bias corrected MLE)	3686
nu hat (MLE)	16.46	nu star (bias corrected)	16.2
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (16.20, α)	8.103	Adjusted Chi Square Value (16.20, β)	7.785
95% Gamma Approximate UCL (use when n>=50)	1926	95% Gamma Adjusted UCL (use when n<50)	2004

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	967.3	SD (KM)	3024
Variance (KM)	9142180	SE of Mean (KM)	553.4
k hat (KM)	0.102	k star (KM)	0.114
nu hat (KM)	6.345	nu star (KM)	7.064
theta hat (KM)	9452	theta star (KM)	8489
80% gamma percentile (KM)	798.4	90% gamma percentile (KM)	2699
95% gamma percentile (KM)	5553	99% gamma percentile (KM)	14381

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (7.06, α)	2.206	Adjusted Chi Square Value (7.06, β)	2.058
95% Gamma Approximate KM-UCL (use when n>=50)	3098	95% Gamma Adjusted KM-UCL (use when n<50)	3320

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.956	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.923	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.0967	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.167	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	966.1	Mean in Log Scale	5.194
SD in Original Scale	3074	SD in Log Scale	1.905
95% t UCL (assumes normality of ROS data)	1903	95% Percentile Bootstrap UCL	2049
95% BCA Bootstrap UCL	2679	95% Bootstrap t UCL	5550
95% H-UCL (Log ROS)	3958		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	5.185	KM Geo Mean	178.6
KM SD (logged)	1.924	95% Critical H Value (KM-Log)	3.696
KM Standard Error of Mean (logged)	0.369	95% H-UCL (KM -Log)	4159
KM SD (logged)	1.924	95% Critical H Value (KM-Log)	3.696
KM Standard Error of Mean (logged)	0.369		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	968	Mean in Log Scale	5.282
SD in Original Scale	3073	SD in Log Scale	1.794
95% t UCL (Assumes normality)	1905	95% H-Stat UCL	3100

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	3380

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

NICKEL

General Statistics

Total Number of Observations	31	Number of Distinct Observations	30
Number of Detects	28	Number of Non-Detects	3
Number of Distinct Detects	28	Number of Distinct Non-Detects	2
Minimum Detect	1.4	Minimum Non-Detect	30
Maximum Detect	12500	Maximum Non-Detect	50
Variance Detects	5521813	Percent Non-Detects	9.677%
Mean Detects	522.2	SD Detects	2350
Median Detects	31.7	CV Detects	4.5
Skewness Detects	5.274	Kurtosis Detects	27.87
Mean of Logged Detects	3.864	SD of Logged Detects	1.626

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.222	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.924	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.479	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.164	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	473.7	KM Standard Error of Mean	402
KM SD	2198	95% KM (BCA) UCL	1281
95% KM (t) UCL	1156	95% KM (Percentile Bootstrap) UCL	1267
95% KM (z) UCL	1135	95% KM Bootstrap t UCL	12968
90% KM Chebyshev UCL	1680	95% KM Chebyshev UCL	2226
97.5% KM Chebyshev UCL	2984	99% KM Chebyshev UCL	4474

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	5.132	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.859	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.311	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.18	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.29	k star (bias corrected MLE)	0.282
Theta hat (MLE)	1802	Theta star (bias corrected MLE)	1849
nu hat (MLE)	16.22	nu star (bias corrected)	15.82
Mean (detects)	522.2		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	471.7
Maximum	12500	Median	29.2
SD	2235	CV	4.738
k hat (MLE)	0.231	k star (bias corrected MLE)	0.23
Theta hat (MLE)	2040	Theta star (bias corrected MLE)	2048
nu hat (MLE)	14.33	nu star (bias corrected)	14.28
Adjusted Level of Significance (β)	0.0413		
Approximate Chi Square Value (14.28, α)	6.762	Adjusted Chi Square Value (14.28, β)	6.475
95% Gamma Approximate UCL (use when n>=50)	995.9	95% Gamma Adjusted UCL (use when n<50)	1040

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	473.7	SD (KM)	2198
Variance (KM)	4831235	SE of Mean (KM)	402
k hat (KM)	0.0465	k star (KM)	0.0635
nu hat (KM)	2.88	nu star (KM)	3.935
theta hat (KM)	10198	theta star (KM)	7465
80% gamma percentile (KM)	133.2	90% gamma percentile (KM)	940.5
95% gamma percentile (KM)	2685	99% gamma percentile (KM)	9327

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (3.93, α)	0.696	Adjusted Chi Square Value (3.93, β)	0.627
95% Gamma Approximate KM-UCL (use when n>=50)	2678	95% Gamma Adjusted KM-UCL (use when n<50)	2971

95% Gamma Adjusted KM-UCL (use when k<=1 and 15 < n < 50)

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.875	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.924	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.21	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.164	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	473.4	Mean in Log Scale	3.765
SD in Original Scale	2234	SD in Log Scale	1.579
95% t UCL (assumes normality of ROS data)	1155	95% Percentile Bootstrap UCL	1277
95% BCA Bootstrap UCL	1693	95% Bootstrap t UCL	13327
95% H-UCL (Log ROS)	376.2		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	3.768	KM Geo Mean	43.29
KM SD (logged)	1.566	95% Critical H Value (KM-Log)	3.171
KM Standard Error of Mean (logged)	0.291	95% H-UCL (KM -Log)	365.6
KM SD (logged)	1.566	95% Critical H Value (KM-Log)	3.171
KM Standard Error of Mean (logged)	0.291		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	473.4	Mean in Log Scale	3.769
SD in Original Scale	2234	SD in Log Scale	1.573
95% t UCL (Assumes normality)	1155	95% H-Stat UCL	371.9

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL	2226

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

Matrix	Fraction	Units	Location	Collected	BENZENE	D_BENZENE	BENZO[A]ANTHRACENE	D_BENZO[A]ANTHRACENE	BENZO[A]PYRENE	D_BENZO[A]PYRENE
WG	T	UG_L	P09-01	10/1/2013	0.5	0				
WG	T	UG_L	P09-01	9/9/2015						
WG	T	UG_L	P09-01	9/13/2016	1	0				
WG	T	UG_L	P09-01	9/27/2016						
WG	T	UG_L	P09-02A	10/2/2013	0.5	0				
WG	T	UG_L	P09-02A	9/15/2015						
WG	T	UG_L	P09-02A	9/14/2016	1	0				
WG	T	UG_L	P09-03A	10/15/2013	0.5	0				
WG	T	UG_L	P09-03A	9/16/2015						
WG	T	UG_L	P09-03A	9/14/2016	1	0				
WG	T	UG_L	P09-04A	10/15/2013	0.5	0				
WG	T	UG_L	P09-04A	9/16/2015						
WG	T	UG_L	P09-04A	9/12/2016	1	0	0.1	0	0.1	0
WG	T	UG_L	P09-05A	10/2/2013	0.5	0				
WG	T	UG_L	P09-05A	9/14/2015	0.5	0				
WG	T	UG_L	P09-06B	10/3/2013	0.5	0				
WG	T	UG_L	P09-06B	9/22/2014	0.5	0				
WG	T	UG_L	P09-06B	9/9/2015	0.5	0				
WG	T	UG_L	P09-06B	9/13/2016	1	0	0.1	0	0.1	0
WG	T	UG_L	P09-07B	10/3/2013	0.5	0				
WG	T	UG_L	P09-07B	9/22/2014	0.5	0				
WG	T	UG_L	P09-07B	9/9/2015	0.5	0				
WG	T	UG_L	P09-07B	9/13/2016	1	0				
WG	T	UG_L	P09-08B	10/3/2013	0.5	0				
WG	T	UG_L	P09-08B	10/15/2013						
WG	T	UG_L	P09-08B	9/22/2014	0.5	0				
WG	T	UG_L	P09-08B	9/8/2015	0.5	0				
WG	T	UG_L	P09-08B	9/13/2016	1	0	0.1	0	0.1	0
WG	T	UG_L	P09-09	10/1/2013						
WG	T	UG_L	P09-09	10/1/2013	0.5	0				
WG	T	UG_L	P09-09	9/9/2015						
WG	T	UG_L	P09-09	9/12/2016	1	0	0.1	0	0.1	0
WG	T	UG_L	P09-10	10/1/2013	1.3	1				
WG	T	UG_L	P09-10	9/8/2015						
WG	T	UG_L	P09-10	9/12/2016	1	0	0.3	1	0.26	1
WG	T	UG_L	P09-11B	10/15/2013	0.5	0	0.094	0	0.094	0
WG	T	UG_L	P09-11B	9/24/2014	0.5	0				
WG	T	UG_L	P09-11B	9/9/2015	0.5	0				
WG	T	UG_L	P09-11B	9/16/2016	1	0	0.1	0	0.1	0
WG	T	UG_L	P09-12B	10/14/2013	0.5	0				
WG	T	UG_L	P09-12B	9/22/2014	0.5	0				
WG	T	UG_L	P09-12B	9/8/2015	0.5	0				
WG	T	UG_L	P09-12B	9/13/2016	1	0	0.1	0	0.1	0

Matrix	Fraction	Units	Location	Collected	BENZO[B]FLUORANTHENE	D_BENZO[B]FLUORANTHENE	VINYL CHLORIDE	D_VINYL CHLORIDE
WG	T	UG_L	P09-01	10/1/2013			1	0
WG	T	UG_L	P09-01	9/9/2015				
WG	T	UG_L	P09-01	9/13/2016			1	0
WG	T	UG_L	P09-01	9/27/2016				
WG	T	UG_L	P09-02A	10/2/2013			1	0
WG	T	UG_L	P09-02A	9/15/2015				
WG	T	UG_L	P09-02A	9/14/2016			1	0
WG	T	UG_L	P09-03A	10/15/2013			1	0
WG	T	UG_L	P09-03A	9/16/2015				
WG	T	UG_L	P09-03A	9/14/2016			1	0
WG	T	UG_L	P09-04A	10/15/2013			1	0
WG	T	UG_L	P09-04A	9/16/2015				
WG	T	UG_L	P09-04A	9/12/2016	0.1	0	1	0
WG	T	UG_L	P09-05A	10/2/2013			1	0
WG	T	UG_L	P09-05A	9/14/2015			0.5	0
WG	T	UG_L	P09-06B	10/3/2013			1	0
WG	T	UG_L	P09-06B	9/22/2014			0.5	0
WG	T	UG_L	P09-06B	9/9/2015			0.5	0
WG	T	UG_L	P09-06B	9/13/2016	0.1	0	1	0
WG	T	UG_L	P09-07B	10/3/2013			1	0
WG	T	UG_L	P09-07B	9/22/2014			0.5	0
WG	T	UG_L	P09-07B	9/9/2015			0.5	0
WG	T	UG_L	P09-07B	9/13/2016			1	0
WG	T	UG_L	P09-08B	10/3/2013			1	0
WG	T	UG_L	P09-08B	10/15/2013				
WG	T	UG_L	P09-08B	9/22/2014			0.5	0
WG	T	UG_L	P09-08B	9/8/2015			0.5	0
WG	T	UG_L	P09-08B	9/13/2016	0.1	0	1	0
WG	T	UG_L	P09-09	10/1/2013				
WG	T	UG_L	P09-09	10/1/2013			1	0
WG	T	UG_L	P09-09	9/9/2015				
WG	T	UG_L	P09-09	9/12/2016	0.1	0	1	0
WG	T	UG_L	P09-10	10/1/2013			1.1	1
WG	T	UG_L	P09-10	9/8/2015				
WG	T	UG_L	P09-10	9/12/2016	0.41	1	1	0
WG	T	UG_L	P09-11B	10/15/2013	0.094	0	1	0
WG	T	UG_L	P09-11B	9/24/2014			0.5	0
WG	T	UG_L	P09-11B	9/9/2015			0.5	0
WG	T	UG_L	P09-11B	9/16/2016	0.1	0	1	0
WG	T	UG_L	P09-12B	10/14/2013			1	0
WG	T	UG_L	P09-12B	9/22/2014			0.5	0
WG	T	UG_L	P09-12B	9/8/2015			0.5	0
WG	T	UG_L	P09-12B	9/13/2016	0.1	0	1	0

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.15/1/2017 2:17:13 PM

User Selected Options

From File GW_Total_ProUCL_Input_KM.xls

Full Precision OFF

From File: GW_Total_ProUCL_Input_KM.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
BENZENE	34	425	1	33	97.06%	0.5	1	0.524	0.0183	0.135	0.258
ENZO[A]ANTHRACENE	8	451	1	7	87.50%	0.094	0.1	0.12	0.00464	0.0681	0.569
BENZO[A]PYRENE	8	451	1	7	87.50%	0.094	0.1	0.115	0.00301	0.0549	0.478
ZO[B]FLUORANTHENE	8	451	1	7	87.50%	0.094	0.1	0.134	0.0109	0.105	0.783
VINYL CHLORIDE	34	425	1	33	97.06%	0.5	1	0.518	0.0103	0.101	0.196

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
BENZENE	1	425	1.3	1.3	1.3	1.3	N/A	N/A	0	N/A	N/A
ENZO[A]ANTHRACENE	1	451	0.3	0.3	0.3	0.3	N/A	N/A	0	N/A	N/A
BENZO[A]PYRENE	1	451	0.26	0.26	0.26	0.26	N/A	N/A	0	N/A	N/A
ZO[B]FLUORANTHENE	1	451	0.41	0.41	0.41	0.41	N/A	N/A	0	N/A	N/A
VINYL CHLORIDE	1	425	1.1	1.1	1.1	1.1	N/A	N/A	0	N/A	N/A

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
BENZENE	34	425	0.5	0.5	0.5	0.5	1	1	1	1	1.201
ENZO[A]ANTHRACENE	8	451	0.0982	0.1	0.1	0.1	0.1	0.1	0.16	0.23	0.286
BENZO[A]PYRENE	8	451	0.0982	0.1	0.1	0.1	0.1	0.1	0.148	0.204	0.249
ZO[B]FLUORANTHENE	8	451	0.0982	0.1	0.1	0.1	0.1	0.1	0.193	0.302	0.388
VINYL CHLORIDE	34	425	0.5	0.5	0.5	1	1	1	1	1	1.067

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Matrix	Fraction	Units	Location	Collected	1,2,4-TRICHLOROBENZENE	D_1,2,4-TRICHLOROBENZENE	1,2-DICHLOROBENZENE	D_1,2-DICHLOROBENZENE	1,3-DICHLOROBENZENE	D_1,3-DICHLOROBENZENE
TX	T	MG_KG	ET09-03	10/1/2013	0.2	0	0.2	0	0.2	0
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015						
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	9/23/2014						
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015						
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015						
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.13	0	0.13	0

Matrix	Fraction	Units	Location	Collected	1,4-DICHLOROBENZENE	D_1,4-DICHLOROBENZENE	2,2'-OXYBIS(1-CHLOROPROPANE)	D_2,2'-OXYBIS(1-CHLOROPROPANE)	2,4,5-TRICHLOROPHENOL	D_2,4,5-TRICHLOROPHENOL
TX	T	MG_KG	ET09-03	10/1/2013	0.2	0			0.2	0
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015						
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	0.13	0			0.13	0
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	0.13	0			0.13	0
TX	T	MG_KG	ET09-05	9/23/2014						
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	0.13	0			0.13	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015						
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015						
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	0.13	0			0.13	0
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	0.13	0			0.13	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	0.13	0			0.13	0
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	0.13	0			0.13	0
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.13	0	0.13	0

Matrix	Fraction	Units	Location	Collected	2,4,6-TRICHLOROPHENOL	D_2,4,6-TRICHLOROPHENOL	2,4-DICHLOROPHENOL	D_2,4-DICHLOROPHENOL	2,4-DIMETHYLPHENOL	D_2,4-DIMETHYLPHENOL
TX	T	MG_KG	ET09-03	10/1/2013	0.2	0	0.2	0	0.2	0
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015						
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	9/23/2014						
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015						
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015						
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.13	0	0.13	0

Matrix	Fraction	Units	Location	Collected	2,4-DINITROPHENOL	D_2,4-DINITROPHENOL	2,4-DINITROTOLUENE	D_2,4-DINITROTOLUENE	2,6-DINITROTOLUENE	D_2,6-DINITROTOLUENE
TX	T	MG_KG	ET09-03	10/1/2013	6	0	1	0	0.2	0
TX	T	MG_KG	ET09-03	9/22/2014	0.17	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015						
TX	T	MG_KG	ET09-03	9/14/2015	0.16	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.33	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	4	0	0.67	0	0.13	0
TX	T	MG_KG	ET09-04	9/22/2014	0.16	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.17	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.32	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	4	0	0.66	0	0.13	0
TX	T	MG_KG	ET09-05	9/23/2014						
TX	T	MG_KG	ET09-05	9/23/2014	0.17	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.17	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.33	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	3.9	0	0.66	0	0.13	0
TX	T	MG_KG	ET09-06	9/22/2014	0.17	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.16	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015						
TX	T	MG_KG	ET09-06	12/13/2016	0.33	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0.16	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015						
TX	T	MG_KG	ET09-07	12/14/2016	0.33	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0.17	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.33	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	4	0	0.66	0	0.13	0
TX	T	MG_KG	ET09-09	9/23/2014	0.16	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.16	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.33	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	4	0	0.67	0	0.13	0
TX	T	MG_KG	ET09-10	9/24/2014	0.17	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.17	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0.33	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	4	0	0.66	0	0.13	0
TX	T	MG_KG	ET09-11	9/23/2014	0.16	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.17	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.33	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	4	0	0.66	0	0.13	0
TX	T	MG_KG	ET09-12	9/24/2014	0.17	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.16	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.33	0	0.13	0	0.13	0

Matrix	Fraction	Units	Location	Collected	2-CHLORONAPHTHALENE	D_2-CHLORONAPHTHALENE	2-CHLOROPHENOL	D_2-CHLOROPHENOL	2-METHYLNAPHTHALENE	D_2-METHYLNAPHTHALENE	2-METHYLPHENOL	D_2-METHYLPHENOL
TX	T	MG_KG	ET09-03	10/1/2013	0.2	0	0.2	0	0.037	1	0.2	0
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.067	0	0.0044	1	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015								
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.066	0	0.0033	0	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.13	0	0.0065	0	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	0.13	0	0.13	0	0.037	1	0.085	1
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.066	0	0.0074	1	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.067	0	0.0082	1	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.13	0	0.012	1	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	0.13	0	0.13	0	0.009	1	0.13	0
TX	T	MG_KG	ET09-05	9/23/2014								
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.067	0	0.0033	0	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.067	0	0.0033	0	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.13	0	0.0066	0	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	0.13	0	0.13	0	0.032	1	0.13	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.067	0	0.0045	1	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.066	0	0.0068	1	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015								
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.13	0	0.0066	0	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.066	0	0.0033	0	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015								
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.13	0	0.0066	0	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.067	0	0.0033	0	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.13	0	0.0066	0	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	0.13	0	0.13	0	0.029	1	0.13	0
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.066	0	0.0052	1	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.066	0	0.019	1	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.13	0	0.0066	0	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	0.13	0	0.13	0	0.011	1	0.13	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.067	0	0.0033	0	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.067	0	0.0033	0	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0.13	0	0.13	0	0.0066	0	0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	0.13	0	0.13	0	0.035	1	0.074	1
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.066	0	0.0041	1	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.067	0	0.011	1	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.13	0	0.0066	0	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	0.13	0	0.13	0	0.017	1	0.13	0
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.067	0	0.0033	0	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.066	0	0.0033	0	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.13	0	0.0066	0	0.13	0

Matrix	Fraction	Units	Location	Collected	2-NITROANILINE	D_2-NITROANILINE	2-NITROPHENOL	D_2-NITROPHENOL	3,3-DICHLOROBENZIDINE	D_3,3-DICHLOROBENZIDINE	3-NITROANILINE	D_3-NITROANILINE	4,4-DDD	D_4,4-DDD
TX	T	MG_KG	ET09-03	10/1/2013	0.2	0	0.2	0	2	0	1	0		
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.067	0	0.067	0	0.067	0	0.00085	0
TX	T	MG_KG	ET09-03	9/9/2015										
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.066	0	0.066	0	0.066	0	0.012	1
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.13	0	0.13	0	0.13	0	0.00085	0
TX	T	MG_KG	ET09-04	10/1/2013	0.13	0	0.13	0	1.3	0	0.67	0	0.0092	0
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.066	0	0.066	0	0.066	0	0.00085	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.067	0	0.067	0	0.067	0	0.00084	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.13	0	0.13	0	0.13	0	0.00084	0
TX	T	MG_KG	ET09-05	10/1/2013	0.13	0	0.13	0	1.3	0	0.66	0	0.0034	0
TX	T	MG_KG	ET09-05	9/23/2014										
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.067	0	0.067	0	0.067	0	0.00085	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.067	0	0.067	0			0.00085	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.13	0	0.13	0	0.13	0	0.00085	0
TX	T	MG_KG	ET09-06	10/1/2013	0.13	0	0.13	0	1.3	0	0.66	0	0.0034	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.067	0	0.067	0	0.067	0	0.00085	0
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.066	0	0.066	0	0.066	0	0.00084	0
TX	T	MG_KG	ET09-06	9/14/2015										
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.13	0	0.13	0	0.13	0	0.00085	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.066	0	0.066	0	0.066	0	0.017	1
TX	T	MG_KG	ET09-07	9/15/2015										
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.13	0	0.13	0	0.13	0	0.00085	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.067	0	0.067	0	0.067	0	0.00085	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.13	0	0.13	0	0.13	0	0.00085	0
TX	T	MG_KG	ET09-09	10/3/2013	0.13	0	0.13	0	1.3	0	0.66	0	0.0034	0
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.066	0	0.066	0	0.066	0	0.00085	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.066	0	0.066	0	0.066	0	0.00084	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.13	0	0.13	0	0.13	0	0.00084	0
TX	T	MG_KG	ET09-10	10/3/2013	0.13	0	0.13	0	1.3	0	0.67	0	0.0034	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.067	0	0.067	0	0.067	0	0.00085	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.067	0	0.067	0	0.067	0	0.00085	0
TX	T	MG_KG	ET09-10	12/13/2016	0.13	0	0.13	0					0.00085	0
TX	T	MG_KG	ET09-11	10/15/2013	0.13	0	0.13	0	1.3	0	0.66	0	0.0034	0
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.066	0	0.066	0	0.066	0	0.00085	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.067	0	0.067	0	0.067	0	0.0057	1
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.13	0	0.13	0	0.13	0	0.00085	0
TX	T	MG_KG	ET09-12	10/3/2013	0.13	0	0.13	0	1.3	0	0.66	0	0.0034	0
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.067	0	0.067	0	0.067	0	0.00084	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.066	0	0.066	0	0.066	0	0.00085	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.13	0	0.13	0	0.13	0	0.00085	0

Matrix	Fraction	Units	Location	Collected	4,4-DDE	D_4,4-DDE	4,4-DDT	D_4,4-DDT	4,6-DINITRO-2-METHYLPHENOL	D_4,6-DINITRO-2-METHYLPHENOL	4-BROMOPHENYL-PHENYLETHER	D_4-BROMOPHENYL-PHENYLETHER
TX	T	MG_KG	ET09-03	10/1/2013	0.0037	1	0.0073	0	3	0	0.2	0
TX	T	MG_KG	ET09-03	9/22/2014	0.00085	0	0.00085	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015								
TX	T	MG_KG	ET09-03	9/14/2015	0.0027	1	0.0055	1	0.066	0	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.00085	0	0.00085	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	0.0027	1	0.0035	0	2	0	0.13	0
TX	T	MG_KG	ET09-04	9/22/2014	0.00085	0	0.00085	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.00084	0	0.00084	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.00084	0	0.00084	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	0.0034	0	0.0034	0	2	0	0.13	0
TX	T	MG_KG	ET09-05	9/23/2014								
TX	T	MG_KG	ET09-05	9/23/2014	0.00085	0	0.00085	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.00085	0	0.00085	0			0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.00085	0	0.00085	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	0.0019	1	0.0035	0	2	0	0.13	0
TX	T	MG_KG	ET09-06	9/22/2014	0.00085	0	0.00085	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.00084	0	0.00084	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015								
TX	T	MG_KG	ET09-06	12/13/2016	0.00085	0	0.00085	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0.00085	0	0.0065	1	0.066	0	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015								
TX	T	MG_KG	ET09-07	12/14/2016	0.00085	0	0.00085	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0.00085	0	0.00085	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.00085	0	0.00085	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	0.0017	1	0.0034	0	2	0	0.13	0
TX	T	MG_KG	ET09-09	9/23/2014	0.00085	0	0.00085	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.00084	0	0.00084	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.00084	0	0.00084	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	0.00087	1	0.0015	1	2	0	0.13	0
TX	T	MG_KG	ET09-10	9/24/2014	0.00085	0	0.00085	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.00085	0	0.00085	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0.00085	0	0.00085	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	0.0016	1	0.0034	0	2	0	0.13	0
TX	T	MG_KG	ET09-11	9/23/2014	0.00085	0	0.00085	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.00084	0	0.00084	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.00085	0	0.00085	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	0.00072	1	0.0034	0	2	0	0.13	0
TX	T	MG_KG	ET09-12	9/24/2014	0.00084	0	0.00084	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.00085	0	0.00063	1	0.066	0	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.00085	0	0.00085	0	0.13	0	0.13	0

Matrix	Fraction	Units	Location	Collected	4-CHLORO-3-METHYLPHENOL	D_4-CHLORO-3-METHYLPHENOL	4-CHLOROANILINE	D_4-CHLOROANILINE	4-CHLOROPHENYL-PHENYLETHER	D_4-CHLOROPHENYL-PHENYLETHER
TX	T	MG_KG	ET09-03	10/1/2013	0.2	0	0.2	0	0.2	0
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015						
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	9/23/2014						
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015						
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015						
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0.13	0			0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	0.13	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.13	0	0.13	0

Matrix	Fraction	Units	Location	Collected	4-METHYLPHENOL	D_4-METHYLPHENOL	4-NITROANILINE	D_4-NITROANILINE	4-NITROPHENOL	D_4-NITROPHENOL	ACENAPHTHENE	D_ACENAPHTHENE	ACENAPHTHYLENE	D_ACENAPHTHYLENE
TX	T	MG_KG	ET09-03	10/1/2013	0.2	0	1	0	3	0	0.025	1	0.0056	1
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.067	0	0.067	0	0.006	1	0.0033	0
TX	T	MG_KG	ET09-03	9/9/2015										
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.066	0	0.066	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.13	0	0.13	0	0.0065	0	0.0065	0
TX	T	MG_KG	ET09-04	10/1/2013	0.13	0	0.67	0	2	0	0.026	1	0.0056	1
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.066	0	0.066	0	0.0066	1	0.0033	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.067	0	0.067	0	0.013	1	0.0043	1
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.13	0	0.13	0	0.0065	0	0.0065	0
TX	T	MG_KG	ET09-05	10/1/2013	0.13	0	0.66	0	2	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-05	9/23/2014										
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.067	0	0.067	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.067	0	0.067	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.13	0	0.13	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-06	10/1/2013	0.13	0	0.66	0	2	0	0.032	1	0.0052	1
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.067	0	0.067	0	0.0061	1	0.015	1
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.066	0	0.066	0	0.014	1	0.0033	0
TX	T	MG_KG	ET09-06	9/14/2015										
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.13	0	0.13	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.066	0	0.066	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-07	9/15/2015										
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.13	0	0.13	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.067	0	0.067	0	0.005	1	0.0033	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.13	0	0.13	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-09	10/3/2013	0.13	0	0.66	0	2	0	0.02	1	0.004	1
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.066	0	0.066	0	0.0042	1	0.0033	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.066	0	0.066	0	0.018	1	0.006	1
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.13	0	0.13	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-10	10/3/2013	0.13	0	0.67	0	2	0	0.0051	1	0.0067	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.067	0	0.067	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.067	0	0.067	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-10	12/13/2016	0.13	0			0.13	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-11	10/15/2013	0.13	0	0.66	0	2	0	0.016	1	0.007	1
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.066	0	0.066	0	0.0036	1	0.0033	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.067	0	0.067	0	0.011	1	0.0033	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.13	0	0.13	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-12	10/3/2013	0.13	0	0.66	0	2	0	0.0052	1	0.0044	1
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.067	0	0.067	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.066	0	0.066	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.13	0	0.13	0	0.0066	0	0.0066	0

Matrix	Fraction	Units	Location	Collected	ALDRIN	D_ALDRIN	ALPHA-BHC	D_ALPHA-BHC	ALPHA-CHLORDANE	D_ALPHA-CHLORDANE	ALUMINUM	D_ALUMINUM	ANTHRACENE	D_ANTHRACENE	ANTIMONY	D_ANTIMONY
TX	T	MG_KG	ET09-03	10/1/2013	0.0006	1	0.0014	1	0.0016	0	166	1	0.0057	1	0.74	0
TX	T	MG_KG	ET09-03	9/22/2014	0.00042	0	0.00042	0	0.00042	0	19.2	1	0.0033	0	0.24	1
TX	T	MG_KG	ET09-03	9/9/2015												
TX	T	MG_KG	ET09-03	9/14/2015	0.0019	1	0.00042	0	0.001	1	107	1	0.0033	0	0.53	0
TX	T	MG_KG	ET09-03	12/14/2016	0.00042	0	0.00021	0	0.00021	0	52.3	1	0.0065	0	0.82	0
TX	T	MG_KG	ET09-04	10/1/2013	0.00097	1	0.0017	0	0.0017	0	103	1	0.0065	1	0.718	0
TX	T	MG_KG	ET09-04	9/22/2014	0.00043	0	0.00043	0	0.00043	0	16.3	1	0.0033	0	0.62	1
TX	T	MG_KG	ET09-04	9/14/2015	0.00042	0	0.00042	0	0.00042	0	51.6	1	0.021	1	0.74	0
TX	T	MG_KG	ET09-04	12/14/2016	0.00042	0	0.00021	0	0.00021	0	128	1	0.0065	0	0.8	0
TX	T	MG_KG	ET09-05	10/1/2013	0.0016	0	0.00076	1	0.0011	1	15.1	1	0.0066	0	0.725	0
TX	T	MG_KG	ET09-05	9/23/2014												
TX	T	MG_KG	ET09-05	9/23/2014	0.00043	0	0.00043	0	0.00043	0	18.4	1	0.0033	0	0.67	0
TX	T	MG_KG	ET09-05	9/9/2015	0.00042	0	0.00042	0	0.0015	1	146	1	0.0033	0	0.36	1
TX	T	MG_KG	ET09-05	12/13/2016	0.00043	0	0.00021	0	0.00021	0	14.2	1	0.0066	0	0.63	0
TX	T	MG_KG	ET09-06	10/1/2013	0.00071	1	0.00058	1	0.0017	0	16.9	1	0.005	1	0.74	0
TX	T	MG_KG	ET09-06	9/22/2014	0.00043	0	0.00043	0	0.00043	0	21.3	1	0.0033	0	0.37	1
TX	T	MG_KG	ET09-06	9/9/2015	0.0056	1	0.00042	0	0.00042	0	21	1	0.0033	0	0.45	1
TX	T	MG_KG	ET09-06	9/14/2015												
TX	T	MG_KG	ET09-06	12/13/2016	0.00042	0	0.00021	0	0.00021	0	2.1	1	0.0066	0	0.59	0
TX	T	MG_KG	ET09-07	9/15/2015	0.00042	0	0.0011	1	0.0039	1	54.2	1	0.0033	0	0.68	0
TX	T	MG_KG	ET09-07	9/15/2015												
TX	T	MG_KG	ET09-07	12/14/2016	0.00043	0	0.00021	0	0.00021	0	38.3	1	0.0066	0	0.72	0
TX	T	MG_KG	ET09-08	9/15/2015	0.00043	0	0.00043	0	0.00043	0	6.1	1	0.0033	0	0.5	0
TX	T	MG_KG	ET09-08	12/14/2016	0.00042	0	0.00021	0	0.00021	0	144	1	0.0066	0	0.52	0
TX	T	MG_KG	ET09-09	10/3/2013	0.0007	1	0.0017	0	0.0017	0	7.3	1	0.003	1	0.712	0
TX	T	MG_KG	ET09-09	9/23/2014	0.00042	0	0.00042	0	0.00042	0	14.6	1	0.0033	0	0.23	1
TX	T	MG_KG	ET09-09	9/9/2015	0.00042	0	0.00042	0	0.00088	1	27.2	1	0.0033	0	0.48	1
TX	T	MG_KG	ET09-09	12/13/2016	0.00042	0	0.00021	0	0.00021	0	2.6	1	0.0066	0	0.65	0
TX	T	MG_KG	ET09-10	10/3/2013	0.00064	1	0.0016	0	0.001	1	1360	1	0.0036	1	0.733	0
TX	T	MG_KG	ET09-10	9/24/2014	0.00043	0	0.00043	0	0.00043	0	9.9	1	0.0033	0	0.36	1
TX	T	MG_KG	ET09-10	9/9/2015	0.00043	0	0.00043	0	0.0023	1	26.2	1	0.0033	0	0.44	1
TX	T	MG_KG	ET09-10	12/13/2016	0.00043	0	0.00021	0	0.00021	0	7.3	1	0.0066	0	0.87	0
TX	T	MG_KG	ET09-11	10/15/2013	0.00036	1	0.00069	1	0.0017	0	9.72	1	0.006	1	0.725	0
TX	T	MG_KG	ET09-11	9/23/2014	0.00043	0	0.00043	0	0.00043	0	10.4	1	0.0033	0	0.45	0
TX	T	MG_KG	ET09-11	9/9/2015	0.0011	1	0.00042	0	0.00042	0	16.5	1	0.0033	0	0.42	1
TX	T	MG_KG	ET09-11	12/13/2016	0.00043	0	0.00021	0	0.00021	0	9.3	1	0.0066	0	0.82	0
TX	T	MG_KG	ET09-12	10/3/2013	0.0017	0	0.00046	1	0.0012	1	77.5	1	0.0066	0	0.718	0
TX	T	MG_KG	ET09-12	9/24/2014	0.00042	0	0.00042	0	0.00042	0	19.9	1	0.0033	0	0.57	0
TX	T	MG_KG	ET09-12	9/9/2015	0.00042	0	0.00042	0	0.0021	1	17.8	1	0.0033	0	0.31	1
TX	T	MG_KG	ET09-12	12/13/2016	0.00042	0	0.00021	0	0.00021	0	6.2	1	0.0066	0	0.51	0

Matrix	Fraction	Units	Location	Collected	ARSENIC	D_ARSENIC	BARIUM	D_BARIUM	BENZO[A]ANTHRACENE	D_BENZO[A]ANTHRACENE	BENZO[A]PYRENE	D_BENZO[A]PYRENE	BENZO[B]FLUORANTHENE	D_BENZO[B]FLUORANTHENE
TX	T	MG_KG	ET09-03	10/1/2013	3.52	1	0.608	1	0.007	1	0.0061	1	0.0077	1
TX	T	MG_KG	ET09-03	9/22/2014	3.4	1	5.1	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-03	9/9/2015										
TX	T	MG_KG	ET09-03	9/14/2015	2.7	1	7.1	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-03	12/14/2016	2.4	1	8.2	0	0.0065	0	0.0065	0	0.0065	0
TX	T	MG_KG	ET09-04	10/1/2013	5.08	1	0.611	1	0.0036	1	0.0028	1	0.0044	1
TX	T	MG_KG	ET09-04	9/22/2014	4.1	1	9.6	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-04	9/14/2015	2.1	1	9.8	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-04	12/14/2016	3.4	1	10	0	0.0065	0	0.0065	0	0.0065	0
TX	T	MG_KG	ET09-05	10/1/2013	3.15	1	0.222	1	0.0066	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-05	9/23/2014										
TX	T	MG_KG	ET09-05	9/23/2014	2.6	1	8.9	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-05	9/9/2015	3.3	1	7.5	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-05	12/13/2016	2.9	1	7.8	0	0.0066	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-06	10/1/2013	4.73	1	0.131	1	0.0066	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-06	9/22/2014	4.2	1	6.8	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-06	9/9/2015	3	1	8.3	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-06	9/14/2015										
TX	T	MG_KG	ET09-06	12/13/2016	2.6	1	7.4	0	0.0066	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-07	9/15/2015	3.1	1	9	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-07	9/15/2015										
TX	T	MG_KG	ET09-07	12/14/2016	2	1	7.2	0	0.0066	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-08	9/15/2015	4.1	1	6.7	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-08	12/14/2016	2.5	1	6.5	0	0.0066	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-09	10/3/2013	4.56	1	0.0856	1	0.0066	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-09	9/23/2014	3.6	1	5.5	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-09	9/9/2015	2.9	1	9.4	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-09	12/13/2016	2.9	1	6.5	0	0.0066	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-10	10/3/2013	2.71	1	6.05	1	0.013	1	0.014	1	0.027	1
TX	T	MG_KG	ET09-10	9/24/2014	3	1	8.1	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-10	9/9/2015	3.9	1	8.7	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-10	12/13/2016	2.8	1	8.7	0	0.0066	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-11	10/15/2013	3.61	1	0.0863	1	0.0066	0	0.0066	0	0.0031	1
TX	T	MG_KG	ET09-11	9/23/2014	3.5	1	6	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-11	9/9/2015	3	1	9.6	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-11	12/13/2016	2	1	8.2	0	0.0066	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-12	10/3/2013	2.56	1	0.476	1	0.0066	0	0.0066	0	0.0066	0
TX	T	MG_KG	ET09-12	9/24/2014	3.4	1	7.6	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-12	9/9/2015	2.9	1	8.1	0	0.0033	0	0.0033	0	0.0033	0
TX	T	MG_KG	ET09-12	12/13/2016	3.1	1	6.4	0	0.0066	0	0.0066	0	0.0066	0

Matrix	Fraction	Units	Location	Collected	BENZO[G,H,I]PERYLENE	D_BENZO[G,H,I]PERYLENE	BENZO[K]FLUORANTHENE	D_BENZO[K]FLUORANTHENE	BERYLLIUM	D_BERYLLIUM	BETA-BHC	D_BETA-BHC
TX	T	MG_KG	ET09-03	10/1/2013	0.01	0	0.0043	1	0.067	0	0.0038	0
TX	T	MG_KG	ET09-03	9/22/2014	0.0033	0	0.0033	0	0.0026	1	0.00042	0
TX	T	MG_KG	ET09-03	9/9/2015								
TX	T	MG_KG	ET09-03	9/14/2015	0.0033	0	0.0033	0	0.014	1	0.00099	1
TX	T	MG_KG	ET09-03	12/14/2016	0.0065	0	0.0065	0	0.2	0	0.00021	0
TX	T	MG_KG	ET09-04	10/1/2013	0.0067	0	0.0027	1	0.065	0	0.0038	0
TX	T	MG_KG	ET09-04	9/22/2014	0.0033	0	0.0033	0	0.0074	1	0.00043	0
TX	T	MG_KG	ET09-04	9/14/2015	0.0033	0	0.0033	0	0.0061	1	0.00042	0
TX	T	MG_KG	ET09-04	12/14/2016	0.0065	0	0.0065	0	0.25	0	0.00021	0
TX	T	MG_KG	ET09-05	10/1/2013	0.0066	0	0.0066	0	0.0657	0	0.0038	0
TX	T	MG_KG	ET09-05	9/23/2014								
TX	T	MG_KG	ET09-05	9/23/2014	0.0033	0	0.0033	0	0.0049	1	0.00043	0
TX	T	MG_KG	ET09-05	9/9/2015	0.0033	0	0.0033	0	0.018	1	0.00042	0
TX	T	MG_KG	ET09-05	12/13/2016	0.0066	0	0.0066	0	0.2	0	0.00021	0
TX	T	MG_KG	ET09-06	10/1/2013	0.0066	0	0.0035	1	0.067	0	0.0038	0
TX	T	MG_KG	ET09-06	9/22/2014	0.0033	0	0.0033	0	0.0057	1	0.00043	0
TX	T	MG_KG	ET09-06	9/9/2015	0.0033	0	0.0033	0	0.0066	1	0.00042	0
TX	T	MG_KG	ET09-06	9/14/2015								
TX	T	MG_KG	ET09-06	12/13/2016	0.0066	0	0.0066	0	0.18	0	0.00021	0
TX	T	MG_KG	ET09-07	9/15/2015	0.0033	0	0.0033	0	0.0072	1	0.00042	0
TX	T	MG_KG	ET09-07	9/15/2015								
TX	T	MG_KG	ET09-07	12/14/2016	0.0066	0	0.0066	0	0.18	0	0.00021	0
TX	T	MG_KG	ET09-08	9/15/2015	0.0033	0	0.0033	0	0.0023	1	0.0014	1
TX	T	MG_KG	ET09-08	12/14/2016	0.0066	0	0.0066	0	0.16	0	0.00021	0
TX	T	MG_KG	ET09-09	10/3/2013	0.0066	0	0.0029	1	0.0644	0	0.0038	0
TX	T	MG_KG	ET09-09	9/23/2014	0.0033	0	0.0033	0	0.0011	1	0.00042	0
TX	T	MG_KG	ET09-09	9/9/2015	0.0033	0	0.0033	0	0.03	1	0.00042	0
TX	T	MG_KG	ET09-09	12/13/2016	0.0066	0	0.0066	0	0.16	0	0.00021	0
TX	T	MG_KG	ET09-10	10/3/2013	0.0054	1	0.016	1	0.111	1	0.0038	0
TX	T	MG_KG	ET09-10	9/24/2014	0.0033	0	0.0033	0	0.0077	1	0.00043	0
TX	T	MG_KG	ET09-10	9/9/2015	0.0033	0	0.0033	0	0.028	1	0.0014	1
TX	T	MG_KG	ET09-10	12/13/2016	0.0066	0	0.0066	0	0.22	0	0.00021	0
TX	T	MG_KG	ET09-11	10/15/2013	0.0066	0	0.0032	1	0.0657	0	0.0038	0
TX	T	MG_KG	ET09-11	9/23/2014	0.0033	0	0.0033	0	0.0065	1	0.00043	0
TX	T	MG_KG	ET09-11	9/9/2015	0.0033	0	0.0033	0	0.0049	1	0.00042	0
TX	T	MG_KG	ET09-11	12/13/2016	0.0066	0	0.0066	0	0.2	0	0.00021	0
TX	T	MG_KG	ET09-12	10/3/2013	0.0066	0	0.0066	0	0.065	0	0.0038	0
TX	T	MG_KG	ET09-12	9/24/2014	0.0033	0	0.0033	0	0.0024	1	0.00042	0
TX	T	MG_KG	ET09-12	9/9/2015	0.0033	0	0.0033	0	0.011	1	0.00042	0
TX	T	MG_KG	ET09-12	12/13/2016	0.0066	0	0.0066	0	0.16	0	0.00021	0

Matrix	Fraction	Units	Location	Collected	BIS(2-CHLOROETHOXY)METHANE	D_BIS(2-CHLOROETHOXY)METHANE	BIS(2-CHLOROETHYL)ETHER	D_BIS(2-CHLOROETHYL)ETHER
TX	T	MG_KG	ET09-03	10/1/2013	0.2	0	0.2	0
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015				
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	9/23/2014				
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015				
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015				
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0.13	0	0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	0.13	0	0.13	0
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.13	0

Matrix	Fraction	Units	Location	Collected	BIS(2-ETHYLHEXYL)PHTHALATE	D_BIS(2-ETHYLHEXYL)PHTHALATE	BUTYLBENZYLPHTHALATE	D_BUTYLBENZYLPHTHALATE	CADMIUM	D_CADMIUM	CARBAZOLE	D_CARBAZOLE
TX	T	MG_KG	ET09-03	10/1/2013	0.62	1	1	0	0.213	1	0.2	0
TX	T	MG_KG	ET09-03	9/22/2014	0.17	0	0.067	0	0.23	1	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015								
TX	T	MG_KG	ET09-03	9/14/2015	0.11	1	0.066	0	0.17	1	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.17	1	0.13	0	0.12	1	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	0.35	1	0.67	0	0.175	1	0.13	0
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.066	0	0.19	1	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.16	1	0.067	0	0.1	1	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.13	0	0.17	1	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	0.68	0	0.66	0	0.0873	1	0.13	0
TX	T	MG_KG	ET09-05	9/23/2014								
TX	T	MG_KG	ET09-05	9/23/2014	0.17	0	0.067	0	0.074	1	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.12	1	0.067	0	0.076	1	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.13	0	0.066	1	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	0.45	1	0.66	0	0.145	1	0.13	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.067	0	0.12	1	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.17	1	0.085	1	0.089	1	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015								
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.13	0	0.064	1	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.066	0	0.55	1	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015								
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.13	0	0.46	1	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0.13	1	0.067	0	0.21	1	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.13	0	0.15	1	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	0.68	0	0.66	0	0.142	1	0.13	0
TX	T	MG_KG	ET09-09	9/23/2014	0.16	0	0.066	0	0.1	1	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.066	0	0.13	1	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.13	0	0.066	1	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	0.68	0	0.67	0	0.206	1	0.13	0
TX	T	MG_KG	ET09-10	9/24/2014	0.17	0	0.067	0	0.093	1	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.057	1	0.067	0	0.18	1	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016			0.13	0	0.059	1	0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	0.68	0	0.66	0	0.12	1	0.13	0
TX	T	MG_KG	ET09-11	9/23/2014	0.16	0	0.066	0	0.084	1	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.067	0	0.11	1	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.13	0	0.073	1	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	0.68	0	0.66	0	0.0845	1	0.13	0
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.067	0	0.1	1	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.1	1	0.066	0	0.12	1	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.13	0	0.055	1	0.13	0

Matrix	Fraction	Units	Location	Collected	CHROMIUM, TOTAL	D_CHROMIUM, TOTAL	CHRYSENE	D_CHRYSENE	COBALT	D_COBALT	COPPER	D_COPPER	DECACHLOROBIPHENYL	D_DECACHLOROBIPHENYL	DELTA-BHC	D_DELTA-BHC
TX	T	MG_KG	ET09-03	10/1/2013	3	0	0.0081	1	1	0	3.58	1	0.00042	0		
TX	T	MG_KG	ET09-03	9/22/2014	0.51	0	0.0033	0	1.3	0	1.9	1	0.00041	0	0.00042	0
TX	T	MG_KG	ET09-03	9/9/2015												
TX	T	MG_KG	ET09-03	9/14/2015	0.71	0	0.0033	0	1.8	0	3	1	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-03	12/14/2016	0.82	0	0.0065	0	0.12	1	1.4	0	0.00026	1	0.00042	0
TX	T	MG_KG	ET09-04	10/1/2013	2.91	0	0.0049	1	0.971	0	2.64	1	0.00042	0	0.0022	0
TX	T	MG_KG	ET09-04	9/22/2014	0.96	0	0.0033	0	2.4	0	1.9	1	0.00042	0	0.00043	0
TX	T	MG_KG	ET09-04	9/14/2015	0.98	0	0.0033	0	2.5	0	2.4	1	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-04	12/14/2016	1.1	1	0.0065	0	0.26	1	6.4	1	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-05	10/1/2013	0.157	0	0.0016	1	0.98	0	1.39	1	0.00041	0	0.001	1
TX	T	MG_KG	ET09-05	9/23/2014												
TX	T	MG_KG	ET09-05	9/23/2014	0.89	0	0.0033	0	2.2	0	1.4	1	0.00042	0	0.00043	0
TX	T	MG_KG	ET09-05	9/9/2015	1.1	1	0.0033	0	1.9	0	2.8	1	0.00041	0	0.00042	0
TX	T	MG_KG	ET09-05	12/13/2016	0.78	0	0.0066	0	0.18	1	1.2	0	0.00031	1	0.00043	0
TX	T	MG_KG	ET09-06	10/1/2013	3	0	0.0038	1	0.099	0	1.68	1	0.00042	0	0.0017	0
TX	T	MG_KG	ET09-06	9/22/2014	0.68	0	0.0033	0	1.7	0	2.4	1	0.00042	0	0.00043	0
TX	T	MG_KG	ET09-06	9/9/2015	0.83	0	0.0033	0	2.1	0	4.2	1	0.00042	0	0.0018	1
TX	T	MG_KG	ET09-06	9/14/2015												
TX	T	MG_KG	ET09-06	12/13/2016	0.74	0	0.0066	0	0.13	1	1.8	0	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-07	9/15/2015	0.9	0	0.0033	0	2.3	0	6.3	1	0.00042	0	0.0013	1
TX	T	MG_KG	ET09-07	9/15/2015												
TX	T	MG_KG	ET09-07	12/14/2016	1.1	1	0.0066	0	0.057	1	1.9	0	0.00041	0	0.00043	0
TX	T	MG_KG	ET09-08	9/15/2015	0.67	0	0.0033	0	1.7	0	6.9	1	0.00041	0	0.0021	1
TX	T	MG_KG	ET09-08	12/14/2016	1.4	1	0.0066	0	0.14	1	3	1	0.00041	0	0.00042	0
TX	T	MG_KG	ET09-09	10/3/2013	0.154	0	0.003	1	0.0952	0	1.83	1	0.00042	0	0.0017	0
TX	T	MG_KG	ET09-09	9/23/2014	0.55	0	0.0033	0	1.4	0	1.9	1	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-09	9/9/2015	0.94	0	0.0033	0	2.4	0	2.3	1	0.00042	0	0.0011	1
TX	T	MG_KG	ET09-09	12/13/2016	0.65	0	0.0066	0	0.14	1	2.8	1	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-10	10/3/2013	9.37	1	0.014	1	1.01	1	9.48	1	0.00042	0	0.0016	0
TX	T	MG_KG	ET09-10	9/24/2014	0.81	0	0.0033	0	2	0	4.1	1	0.00042	0	0.00043	0
TX	T	MG_KG	ET09-10	9/9/2015	0.87	0	0.0033	0	2.2	0	9.1	1	0.00042	0	0.0026	1
TX	T	MG_KG	ET09-10	12/13/2016	0.87	0	0.0066	0	0.15	1	2.2	0	0.0002	1	0.00043	0
TX	T	MG_KG	ET09-11	10/15/2013	0.157	0	0.0036	1	0.0971	0	1.6	1	0.00041	0	0.0017	0
TX	T	MG_KG	ET09-11	9/23/2014	0.6	0	0.0033	0	1.5	0	4.2	1	0.00041	0	0.00043	0
TX	T	MG_KG	ET09-11	9/9/2015	0.96	0	0.0033	0	2.4	0	3.1	1	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-11	12/13/2016	0.82	0	0.0066	0	0.059	1	1.6	0	0.00041	0	0.00043	0
TX	T	MG_KG	ET09-12	10/3/2013	2.91	0	0.0029	1	0.971	0	3.28	1	0.00041	0	0.0017	0
TX	T	MG_KG	ET09-12	9/24/2014	0.76	0	0.0033	0	1.9	0	2	1	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-12	9/9/2015	0.81	0	0.0033	0	2.1	0	6.4	1	0.00042	0	0.0023	1
TX	T	MG_KG	ET09-12	12/13/2016	0.64	0	0.0066	0	0.15	1	2.7	1	0.00041	0	0.00042	0

Matrix	Fraction	Units	Location	Collected	DIBENZ[A,H]ANTHRACENE	D_DIBENZ[A,H]ANTHRACENE	DIBENZOFURAN	D_DIBENZOFURAN	DICHLOROBIPHENYL	D_DICHLOROBIPHENYL	DIELDRIN	D_DIELDRIN	DIETHYLPHTHALATE
TX	T	MG_KG	ET09-03	10/1/2013	0.01	0	0.2	0	0.000083	0	0.0034	0	1
TX	T	MG_KG	ET09-03	9/22/2014	0.0033	0	0.067	0	0.000082	0	0.00085	0	0.067
TX	T	MG_KG	ET09-03	9/9/2015									
TX	T	MG_KG	ET09-03	9/14/2015	0.0033	0	0.066	0	0.000083	0	0.00084	0	0.066
TX	T	MG_KG	ET09-03	12/14/2016	0.0065	0	0.13	0	0.000082	0	0.00042	0	0.13
TX	T	MG_KG	ET09-04	10/1/2013	0.0067	0	0.13	0	0.000083	0	0.001	1	0.67
TX	T	MG_KG	ET09-04	9/22/2014	0.0033	0	0.066	0	0.000083	0	0.00085	0	0.066
TX	T	MG_KG	ET09-04	9/14/2015	0.0033	0	0.067	0	0.00039	1	0.00084	0	0.067
TX	T	MG_KG	ET09-04	12/14/2016	0.0065	0	0.13	0	0.00042	1	0.00042	0	0.13
TX	T	MG_KG	ET09-05	10/1/2013	0.0066	0	0.13	0	0.000082	0	0.0034	0	0.66
TX	T	MG_KG	ET09-05	9/23/2014									
TX	T	MG_KG	ET09-05	9/23/2014	0.0033	0	0.067	0	0.000083	0	0.00085	0	0.067
TX	T	MG_KG	ET09-05	9/9/2015	0.0033	0	0.067	0	0.000082	0	0.00085	0	0.067
TX	T	MG_KG	ET09-05	12/13/2016	0.0066	0	0.13	0	0.000083	0	0.00043	0	0.13
TX	T	MG_KG	ET09-06	10/1/2013	0.0066	0	0.13	0	0.000083	0	0.0034	0	0.66
TX	T	MG_KG	ET09-06	9/22/2014	0.0033	0	0.067	0	0.000083	0	0.00085	0	0.067
TX	T	MG_KG	ET09-06	9/9/2015	0.0033	0	0.066	0	0.0009	1	0.00084	0	0.066
TX	T	MG_KG	ET09-06	9/14/2015									
TX	T	MG_KG	ET09-06	12/13/2016	0.0066	0	0.13	0	0.000083	0	0.00042	0	0.13
TX	T	MG_KG	ET09-07	9/15/2015	0.0033	0	0.066	0	0.000083	0	0.00085	0	0.066
TX	T	MG_KG	ET09-07	9/15/2015									
TX	T	MG_KG	ET09-07	12/14/2016	0.0066	0	0.13	0	0.000082	0	0.00043	0	0.13
TX	T	MG_KG	ET09-08	9/15/2015	0.0033	0	0.067	0	0.000082	0	0.00085	0	0.067
TX	T	MG_KG	ET09-08	12/14/2016	0.0066	0	0.13	0	0.00021	1	0.00042	0	0.13
TX	T	MG_KG	ET09-09	10/3/2013	0.0066	0	0.13	0	0.000083	0	0.0034	0	0.66
TX	T	MG_KG	ET09-09	9/23/2014	0.0033	0	0.066	0	0.000083	0	0.00085	0	0.066
TX	T	MG_KG	ET09-09	9/9/2015	0.0033	0	0.066	0	0.000083	0	0.00084	0	0.066
TX	T	MG_KG	ET09-09	12/13/2016	0.0066	0	0.13	0	0.000083	0	0.00042	0	0.13
TX	T	MG_KG	ET09-10	10/3/2013	0.0028	1	0.13	0	0.000083	0	0.0034	0	0.67
TX	T	MG_KG	ET09-10	9/24/2014	0.0033	0	0.067	0	0.000083	0	0.00085	0	0.067
TX	T	MG_KG	ET09-10	9/9/2015	0.0033	0	0.067	0	0.000083	0	0.00085	0	0.067
TX	T	MG_KG	ET09-10	12/13/2016	0.0066	0	0.13	0	0.000083	0	0.00043	0	0.13
TX	T	MG_KG	ET09-11	10/15/2013	0.0066	0	0.13	0	0.000081	0	0.0034	0	0.66
TX	T	MG_KG	ET09-11	9/23/2014	0.0033	0	0.066	0	0.000082	0	0.00085	0	0.066
TX	T	MG_KG	ET09-11	9/9/2015	0.0033	0	0.067	0	0.000083	0	0.00084	0	0.067
TX	T	MG_KG	ET09-11	12/13/2016	0.0066	0	0.13	0	0.000082	0	0.00043	0	0.13
TX	T	MG_KG	ET09-12	10/3/2013	0.0066	0	0.13	0	0.000082	0	0.0034	0	0.66
TX	T	MG_KG	ET09-12	9/24/2014	0.0033	0	0.067	0	0.000083	0	0.00084	0	0.067
TX	T	MG_KG	ET09-12	9/9/2015	0.0033	0	0.066	0	0.000083	0	0.00085	0	0.066
TX	T	MG_KG	ET09-12	12/13/2016	0.0066	0	0.13	0	0.000082	0	0.00042	0	0.13

Matrix	Fraction	Units	Location	Collected	D_DIETHYLPHTHALATE	DIMETHYL PHTHALATE	D_DIMETHYL PHTHALATE	DI-N-BUTYLPHTHALATE	D_DI-N-BUTYLPHTHALATE
TX	T	MG_KG	ET09-03	10/1/2013	0	1	0	1	0
TX	T	MG_KG	ET09-03	9/22/2014	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015					
TX	T	MG_KG	ET09-03	9/14/2015	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	0	0.67	0	0.67	0
TX	T	MG_KG	ET09-04	9/22/2014	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	0	0.66	0	0.66	0
TX	T	MG_KG	ET09-05	9/23/2014					
TX	T	MG_KG	ET09-05	9/23/2014	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	0	0.66	0	0.66	0
TX	T	MG_KG	ET09-06	9/22/2014	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015					
TX	T	MG_KG	ET09-06	12/13/2016	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015					
TX	T	MG_KG	ET09-07	12/14/2016	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	0	0.66	0	0.66	0
TX	T	MG_KG	ET09-09	9/23/2014	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	0	0.67	0	0.67	0
TX	T	MG_KG	ET09-10	9/24/2014	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	0	0.66	0	0.66	0
TX	T	MG_KG	ET09-11	9/23/2014	0	0.066	0	0.048	1
TX	T	MG_KG	ET09-11	9/9/2015	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0	0.13	0	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	0	0.66	0	0.66	0
TX	T	MG_KG	ET09-12	9/24/2014	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0	0.13	0	0.13	0

Matrix	Fraction	Units	Location	Collected	DI-N-OCTYLPHTHALATE	D_DI-N-OCTYLPHTHALATE	ENDOSULFAN I	D_ENDOSULFAN I	ENDOSULFAN II	D_ENDOSULFAN II	ENDOSULFAN SULFATE	D_ENDOSULFAN SULFATE	ENDRIN	D_ENDRIN
TX	T	MG_KG	ET09-03	10/1/2013	1	0	0.0016	0	0.0034	0	0.0034	0	0.0034	0
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.00042	0	0.00085	0	0.00085	0	0.00085	0
TX	T	MG_KG	ET09-03	9/9/2015										
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.00042	0	0.00084	0	0.00084	0	0.0035	1
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.00021	0	0.00042	0	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-04	10/1/2013	0.67	0	0.00084	1	0.0034	0	0.0034	0	0.0034	0
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.00043	0	0.00085	0	0.00085	0	0.00085	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.00042	0	0.00084	0	0.00084	0	0.00084	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.00021	0	0.00042	0	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-05	10/1/2013	0.66	0	0.0016	0	0.0034	0	0.0034	0	0.0034	0
TX	T	MG_KG	ET09-05	9/23/2014										
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.00043	0	0.00085	0	0.00085	0	0.00085	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.00042	0	0.00085	0	0.00085	0	0.00085	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.00021	0	0.00043	0	0.00043	0	0.00043	0
TX	T	MG_KG	ET09-06	10/1/2013	0.66	0	0.0011	1	0.0034	0	0.0034	0	0.0034	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.00043	0	0.00085	0	0.00085	0	0.00085	0
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.00042	0	0.00084	0	0.00084	0	0.00084	0
TX	T	MG_KG	ET09-06	9/14/2015										
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.00021	0	0.00042	0	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.0009	1	0.00085	0	0.0032	1	0.0031	1
TX	T	MG_KG	ET09-07	9/15/2015										
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.00021	0	0.00043	0	0.00043	0	0.00043	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.00043	0	0.00085	0	0.00085	0	0.00085	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.00021	0	0.00042	0	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-09	10/3/2013	0.66	0	0.0017	0	0.0034	0	0.0034	0	0.0034	0
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.00042	0	0.00085	0	0.00085	0	0.00085	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.00042	0	0.00084	0	0.00084	0	0.00084	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.00021	0	0.00042	0	0.00042	0	0.00042	0
TX	T	MG_KG	ET09-10	10/3/2013	0.67	0	0.0014	1	0.00066	1	0.0034	0	0.0034	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.00043	0	0.00085	0	0.00085	0	0.00085	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.00043	0	0.00085	0	0.00085	0	0.0056	1
TX	T	MG_KG	ET09-10	12/13/2016			0.00021	0	0.00043	0	0.00043	0	0.00043	0
TX	T	MG_KG	ET09-11	10/15/2013	0.66	0	0.00051	1	0.0034	0	0.0034	0	0.0034	0
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.00043	0	0.00085	0	0.00085	0	0.00085	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.00042	0	0.00084	0	0.00084	0	0.00084	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.00021	0	0.00043	0	0.00043	0	0.00043	0
TX	T	MG_KG	ET09-12	10/3/2013	0.66	0	0.00058	1	0.0034	0	0.0034	0	0.0034	0
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.00042	0	0.00084	0	0.00084	0	0.00084	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.00042	0	0.00085	0	0.00085	0	0.003	1
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.00021	0	0.00042	0	0.00042	0	0.00042	0

Matrix	Fraction	Units	Location	Collected	ENDRIN ALDEHYDE	D_ENDRIN ALDEHYDE	ENDRIN KETONE	D_ENDRIN KETONE	FLUORANTHENE	D_FLUORANTHENE	FLUORENE	D_FLUORENE	Girth	D_Girth	HEPTACHLOR	D_HEPTACHLOR
TX	T	MG_KG	ET09-03	10/1/2013	0.0034	0	0.0036	0	0.034	1	0.011	1	99999999	1		
TX	T	MG_KG	ET09-03	9/22/2014	0.00085	0	0.00085	0	0.0033	0	0.0033	0	99999999	1	0.00042	0
TX	T	MG_KG	ET09-03	9/9/2015									99999999	1		
TX	T	MG_KG	ET09-03	9/14/2015	0.00084	0	0.00084	0	0.0033	0	0.0033	0			0.00042	0
TX	T	MG_KG	ET09-03	12/14/2016	0.00085	0	0.00042	0	0.008	1	0.0065	0			0.00021	0
TX	T	MG_KG	ET09-04	10/1/2013	0.0008	1	0.0036	0	0.023	1	0.012	1	99999999	1	0.0035	1
TX	T	MG_KG	ET09-04	9/22/2014	0.00085	0	0.00085	0	0.0033	0	0.0033	0	99999999	1	0.00043	0
TX	T	MG_KG	ET09-04	9/14/2015	0.00084	0	0.00084	0	0.0033	0	0.007	1	99999999	1	0.00042	0
TX	T	MG_KG	ET09-04	12/14/2016	0.00084	0	0.00042	0	0.013	1	0.0069	1			0.00021	0
TX	T	MG_KG	ET09-05	10/1/2013	0.0034	0	0.0036	0	0.0057	1	0.0066	0	99999999	1	0.0016	0
TX	T	MG_KG	ET09-05	9/23/2014									100000000	1		
TX	T	MG_KG	ET09-05	9/23/2014	0.00085	0	0.00085	0	0.0033	0	0.0033	0			0.00043	0
TX	T	MG_KG	ET09-05	9/9/2015	0.00085	0	0.00085	0	0.0033	0	0.0033	0	99999999	1	0.00042	0
TX	T	MG_KG	ET09-05	12/13/2016	0.00085	0	0.00043	0	0.0066	0	0.0066	0			0.00021	0
TX	T	MG_KG	ET09-06	10/1/2013	0.0034	0	0.0036	0	0.015	1	0.013	1	99999999	1	0.0017	0
TX	T	MG_KG	ET09-06	9/22/2014	0.00085	0	0.00085	0	0.0033	0	0.0033	0	99999999	1	0.00043	0
TX	T	MG_KG	ET09-06	9/9/2015	0.00084	0	0.00084	0	0.0033	0	0.0078	1			0.00042	0
TX	T	MG_KG	ET09-06	9/14/2015									99999999	1		
TX	T	MG_KG	ET09-06	12/13/2016	0.00085	0	0.00042	0	0.0066	0	0.0066	0			0.00021	0
TX	T	MG_KG	ET09-07	9/15/2015	0.00085	0	0.00085	0	0.0033	0	0.0033	0			0.0017	1
TX	T	MG_KG	ET09-07	9/15/2015									99999999	1		
TX	T	MG_KG	ET09-07	12/14/2016	0.00085	0	0.00043	0	0.0066	0	0.0066	0			0.00021	0
TX	T	MG_KG	ET09-08	9/15/2015	0.00085	0	0.00085	0	0.0033	0	0.0033	0	99999999	1	0.00043	0
TX	T	MG_KG	ET09-08	12/14/2016	0.00085	0	0.00042	0	0.0066	0	0.0066	0			0.00021	0
TX	T	MG_KG	ET09-09	10/3/2013	0.0034	0	0.0036	0	0.013	1	0.0072	1	99999999	1	0.0017	0
TX	T	MG_KG	ET09-09	9/23/2014	0.00085	0	0.00085	0	0.0033	0	0.0033	0	99999999	1	0.00042	0
TX	T	MG_KG	ET09-09	9/9/2015	0.00084	0	0.00084	0	0.0059	1	0.011	1	99999999	1	0.00042	0
TX	T	MG_KG	ET09-09	12/13/2016	0.00084	0	0.00042	0	0.0066	0	0.0066	0			0.00021	0
TX	T	MG_KG	ET09-10	10/3/2013	0.0034	0	0.0036	0	0.027	1	0.0067	0	99999999	1	0.0014	1
TX	T	MG_KG	ET09-10	9/24/2014	0.00085	0	0.00085	0	0.0033	0	0.0033	0	99999999	1	0.00043	0
TX	T	MG_KG	ET09-10	9/9/2015	0.00085	0	0.00085	0	0.0033	0	0.0033	0	99999999	1	0.00043	0
TX	T	MG_KG	ET09-10	12/13/2016	0.00085	0	0.00043	0	0.0066	0	0.0066	0			0.00021	0
TX	T	MG_KG	ET09-11	10/15/2013	0.0034	0	0.0036	0	0.021	1	0.013	1	99999999	1	0.0017	0
TX	T	MG_KG	ET09-11	9/23/2014	0.00085	0	0.00085	0	0.0033	0	0.0033	0	99999999	1	0.00043	0
TX	T	MG_KG	ET09-11	9/9/2015	0.00084	0	0.00084	0	0.0033	0	0.0061	1	99999999	1	0.00042	0
TX	T	MG_KG	ET09-11	12/13/2016	0.00085	0	0.00043	0	0.0066	0	0.0066	0			0.00021	0
TX	T	MG_KG	ET09-12	10/3/2013	0.0034	0	0.0036	0	0.0087	1	0.0066	0	99999999	1	0.0017	0
TX	T	MG_KG	ET09-12	9/24/2014	0.00084	0	0.00084	0	0.0033	0	0.0033	0	99999999	1	0.00042	0
TX	T	MG_KG	ET09-12	9/9/2015	0.00085	0	0.00085	0	0.0033	0	0.0033	0	99999999	1	0.00042	0
TX	T	MG_KG	ET09-12	12/13/2016	0.00085	0	0.00042	0	0.0066	0	0.0066	0			0.00021	0

Matrix	Fraction	Units	Location	Collected	HEPTACHLOR EPOXIDE	D_HEPTACHLOR EPOXIDE	HEPTACHLOROBIPHENYL	D_HEPTACHLOROBIPHENYL	HEXACHLOROBENZENE	D_HEXACHLOROBENZENE
TX	T	MG_KG	ET09-03	10/1/2013	0.0011	1	0.008	1	0.1	0
TX	T	MG_KG	ET09-03	9/22/2014	0.00042	0	0.00025	0	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015						
TX	T	MG_KG	ET09-03	9/14/2015	0.00042	0	0.0065	1	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.00042	0	0.0053	1	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	0.0013	1	0.0011	1	0.068	0
TX	T	MG_KG	ET09-04	9/22/2014	0.00043	0	0.00025	0	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.00042	0	0.0031	1	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.00042	0	0.0037	1	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	0.0016	0	0.00075	1	0.068	0
TX	T	MG_KG	ET09-05	9/23/2014						
TX	T	MG_KG	ET09-05	9/23/2014	0.00043	0	0.00025	0	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.00042	0	0.0018	1	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.00043	0	0.00046	1	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	0.0017	0	0.0043	1	0.067	0
TX	T	MG_KG	ET09-06	9/22/2014	0.00043	0	0.00025	0	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.00042	0	0.0078	1	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015						
TX	T	MG_KG	ET09-06	12/13/2016	0.00042	0	0.00076	1	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0.00042	0	0.00024	1	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015						
TX	T	MG_KG	ET09-07	12/14/2016	0.00043	0	0.0011	1	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0.0013	1	0.00025	0	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.00042	0	0.00037	1	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	0.0017	0	0.0015	1	0.068	0
TX	T	MG_KG	ET09-09	9/23/2014	0.00042	0	0.00025	0	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.00042	0	0.0013	1	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.00042	0	0.0002	1	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	0.0016	0	0.00025	0	0.068	0
TX	T	MG_KG	ET09-10	9/24/2014	0.00043	0	0.00025	0	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.0012	1	0.00025	0	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0.00043	0	0.00021	1	0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	0.00051	1	0.0012	1	0.068	0
TX	T	MG_KG	ET09-11	9/23/2014	0.00043	0	0.00025	0	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.00042	0	0.044	1	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.00043	0	0.0017	1	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	0.00064	1	0.00025	0	0.068	0
TX	T	MG_KG	ET09-12	9/24/2014	0.00042	0	0.00025	0	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.0029	1	0.00026	1	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.00042	0	0.00035	1	0.13	0

Matrix	Fraction	Units	Location	Collected	HEXACHLOROBIPHENYL	D_HEXACHLOROBIPHENYL	HEXACHLOROBUTADIENE	D_HEXACHLOROBUTADIENE	HEXACHLOROCYCLOPENTADIENE	D_HEXACHLOROCYCLOPENTADIENE
TX	T	MG_KG	ET09-03	10/1/2013	0.0081	1	0.2	0		
TX	T	MG_KG	ET09-03	9/22/2014	0.0029	1	0.067	0	0.17	0
TX	T	MG_KG	ET09-03	9/9/2015						
TX	T	MG_KG	ET09-03	9/14/2015	0.018	1	0.066	0	0.16	0
TX	T	MG_KG	ET09-03	12/14/2016	0.016	1	0.13	0	0.33	0
TX	T	MG_KG	ET09-04	10/1/2013	0.0052	1	0.13	0	2	0
TX	T	MG_KG	ET09-04	9/22/2014	0.00092	1	0.066	0	0.16	0
TX	T	MG_KG	ET09-04	9/14/2015	0.012	1	0.067	0	0.17	0
TX	T	MG_KG	ET09-04	12/14/2016	0.015	1	0.13	0	0.32	0
TX	T	MG_KG	ET09-05	10/1/2013	0.0018	1	0.13	0	2	0
TX	T	MG_KG	ET09-05	9/23/2014						
TX	T	MG_KG	ET09-05	9/23/2014	0.00017	0	0.067	0	0.17	0
TX	T	MG_KG	ET09-05	9/9/2015	0.0032	1	0.067	0		
TX	T	MG_KG	ET09-05	12/13/2016	0.0012	1	0.13	0	0.33	0
TX	T	MG_KG	ET09-06	10/1/2013	0.012	1	0.13	0	2	0
TX	T	MG_KG	ET09-06	9/22/2014	0.00088	1	0.067	0	0.17	0
TX	T	MG_KG	ET09-06	9/9/2015	0.027	1	0.066	0	0.16	0
TX	T	MG_KG	ET09-06	9/14/2015						
TX	T	MG_KG	ET09-06	12/13/2016	0.0013	1	0.13	0	0.33	0
TX	T	MG_KG	ET09-07	9/15/2015	0.00041	1	0.066	0	0.16	0
TX	T	MG_KG	ET09-07	9/15/2015						
TX	T	MG_KG	ET09-07	12/14/2016	0.0055	1	0.13	0	0.33	0
TX	T	MG_KG	ET09-08	9/15/2015	0.00017	0	0.067	0	0.17	0
TX	T	MG_KG	ET09-08	12/14/2016	0.0017	1	0.13	0	0.33	0
TX	T	MG_KG	ET09-09	10/3/2013	0.0055	1	0.13	0	2	0
TX	T	MG_KG	ET09-09	9/23/2014	0.00057	1	0.066	0	0.16	0
TX	T	MG_KG	ET09-09	9/9/2015	0.0062	1	0.066	0	0.16	0
TX	T	MG_KG	ET09-09	12/13/2016	0.00086	1	0.13	0	0.33	0
TX	T	MG_KG	ET09-10	10/3/2013	0.00017	0	0.13	0	2	0
TX	T	MG_KG	ET09-10	9/24/2014	0.00017	0	0.067	0	0.17	0
TX	T	MG_KG	ET09-10	9/9/2015	0.00017	0	0.067	0	0.17	0
TX	T	MG_KG	ET09-10	12/13/2016	0.00063	1	0.13	0		
TX	T	MG_KG	ET09-11	10/15/2013	0.0059	1	0.13	0	2	0
TX	T	MG_KG	ET09-11	9/23/2014	0.00017	0	0.066	0	0.16	0
TX	T	MG_KG	ET09-11	9/9/2015	0.046	1	0.067	0	0.17	0
TX	T	MG_KG	ET09-11	12/13/2016	0.0083	1	0.13	0	0.33	0
TX	T	MG_KG	ET09-12	10/3/2013	0.00016	0	0.13	0	2	0
TX	T	MG_KG	ET09-12	9/24/2014	0.00017	0	0.067	0	0.17	0
TX	T	MG_KG	ET09-12	9/9/2015	0.00043	1	0.066	0	0.16	0
TX	T	MG_KG	ET09-12	12/13/2016	0.00051	1	0.13	0	0.33	0

Matrix	Fraction	Units	Location	Collected	HEXACHLOROETHANE	D_HEXACHLOROETHANE	INDENO[1,2,3-CD]PYRENE	D_INDENO[1,2,3-CD]PYRENE	IRON	D_IRON	ISOPHORONE	D_ISOPHORONE
TX	T	MG_KG	ET09-03	10/1/2013	1	0	0.01	0	542	1	0.2	0
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.0033	0	85.4	1	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015								
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.0033	0	477	1	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.0065	0	262	1	0.13	0
TX	T	MG_KG	ET09-04	10/1/2013	0.67	0	0.0067	0	439	1	0.13	0
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.0033	0	99.4	1	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.0033	0	204	1	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.0065	0	599	1	0.13	0
TX	T	MG_KG	ET09-05	10/1/2013	0.66	0	0.0066	0	43.8	1	0.13	0
TX	T	MG_KG	ET09-05	9/23/2014								
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.0033	0	55.6	1	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.0033	0	502	1	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.0066	0	52.2	1	0.13	0
TX	T	MG_KG	ET09-06	10/1/2013	0.66	0	0.0043	1	62.6	1	0.13	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.0033	0	80.9	1	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.0033	0	108	1	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015								
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.0066	0	15.9	1	0.13	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.0033	0	208	1	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015								
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.0066	0	113	1	0.13	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.0033	0	21.8	1	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.0066	0	390	1	0.13	0
TX	T	MG_KG	ET09-09	10/3/2013	0.66	0	0.003	1	30.6	1	0.13	0
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.0033	0	46.6	1	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.0033	0	94.3	1	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.0066	0	19	1	0.13	0
TX	T	MG_KG	ET09-10	10/3/2013	0.67	0	0.0095	1	3160	1	0.13	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.0033	0	43.6	1	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.0033	0	95.3	1	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0.13	0	0.0066	0	38	1	0.13	0
TX	T	MG_KG	ET09-11	10/15/2013	0.66	0	0.004	1	33	1	0.13	0
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.0033	0	43.5	1	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.0033	0	64.1	1	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.0066	0	38	1	0.13	0
TX	T	MG_KG	ET09-12	10/3/2013	0.66	0	0.0066	0	205	1	0.13	0
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.0033	0	60.9	1	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.0033	0	80.4	1	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.0066	0	39.3	1	0.13	0

Matrix	Fraction	Units	Location	Collected	LEAD	D_LEAD	LINDANE	D_LINDANE	MANGANESE	D_MANGANESE	MERCURY	D_MERCURY	METHOXYCHLOR	D_METHOXYCHLOR	MONOCHLOROBIPHENYL	D_MONOCHLOROBIPHENYL
TX	T	MG_KG	ET09-03	10/1/2013	1.19	1	0.0016	0	29.4	1	0.0111	1	0.0043	1	0.000083	0
TX	T	MG_KG	ET09-03	9/22/2014	0.21	1	0.00042	0	2.4	1	0.0063	1	0.0042	0	0.000082	0
TX	T	MG_KG	ET09-03	9/9/2015												
TX	T	MG_KG	ET09-03	9/14/2015	1	1	0.00042	0	21.3	1	0.009	1	0.0042	0	0.00017	0
TX	T	MG_KG	ET09-03	12/14/2016	0.53	1	0.00021	0	22.1	1	0.0054	1	0.0021	0	0.00017	0
TX	T	MG_KG	ET09-04	10/1/2013	0.93	1	0.0017	0	36.8	1	0.0111	1	0.0046	1	0.000083	0
TX	T	MG_KG	ET09-04	9/22/2014	0.19	1	0.00043	0	10.4	1	0.0067	1	0.0043	0	0.000083	0
TX	T	MG_KG	ET09-04	9/14/2015	0.42	1	0.00042	0	7.8	1	0.0072	1	0.0042	0	0.00017	0
TX	T	MG_KG	ET09-04	12/14/2016	1.2	1	0.00021	0	41.4	1	0.0068	1	0.0021	0	0.00017	0
TX	T	MG_KG	ET09-05	10/1/2013	0.49	0	0.0016	0	4.98	1	0.0095	0	0.013	0	0.000082	0
TX	T	MG_KG	ET09-05	9/23/2014												
TX	T	MG_KG	ET09-05	9/23/2014	0.22	0	0.00043	0	4.6	1	0.0064	1	0.0043	0	0.000083	0
TX	T	MG_KG	ET09-05	9/9/2015	1.2	1	0.00042	0	10.4	1	0.0052	1	0.0042	0	0.00017	0
TX	T	MG_KG	ET09-05	12/13/2016	0.14	1	0.00021	0	2.6	1	0.0073	1	0.0021	0	0.00017	0
TX	T	MG_KG	ET09-06	10/1/2013	0.5	0	0.0017	0	11.4	1	0.0114	1	0.0036	1	0.000083	0
TX	T	MG_KG	ET09-06	9/22/2014	0.16	1	0.00043	0	3.3	1	0.0098	1	0.0043	0	0.000083	0
TX	T	MG_KG	ET09-06	9/9/2015	0.41	0	0.0014	1	9	1	0.0073	1	0.0042	0	0.00017	0
TX	T	MG_KG	ET09-06	9/14/2015												
TX	T	MG_KG	ET09-06	12/13/2016	0.14	1	0.00021	0	3.1	1	0.0066	1	0.0021	0	0.00017	0
TX	T	MG_KG	ET09-07	9/15/2015	0.39	1	0.00042	0	4.6	1	0.0094	1	0.0042	0	0.00017	0
TX	T	MG_KG	ET09-07	9/15/2015												
TX	T	MG_KG	ET09-07	12/14/2016	0.26	1	0.00021	0	1.8	1	0.0096	1	0.0021	0	0.00016	0
TX	T	MG_KG	ET09-08	9/15/2015	0.34	0	0.00043	0	0.53	1	0.02	0	0.0043	0	0.00017	0
TX	T	MG_KG	ET09-08	12/14/2016	0.88	1	0.00021	0	6.5	1	0.014	1	0.0021	0	0.00016	0
TX	T	MG_KG	ET09-09	10/3/2013	0.481	0	0.0017	0	9.33	1	0.011	1	0.013	0	0.000083	0
TX	T	MG_KG	ET09-09	9/23/2014	0.11	1	0.00042	0	12.7	1	0.0083	1	0.0042	0	0.000083	0
TX	T	MG_KG	ET09-09	9/9/2015	0.21	1	0.0009	1	13.6	1	0.01	1	0.0042	0	0.00017	0
TX	T	MG_KG	ET09-09	12/13/2016	0.16	1	0.00021	0	3.2	1	0.0058	1	0.0021	0	0.00017	0
TX	T	MG_KG	ET09-10	10/3/2013	6.9	1	0.00065	1	31	1	0.0197	1	0.013	0	0.000083	0
TX	T	MG_KG	ET09-10	9/24/2014	0.24	1	0.00043	0	9.7	1	0.011	1	0.0043	0	0.000083	0
TX	T	MG_KG	ET09-10	9/9/2015	0.28	1	0.00043	0	7.2	1	0.01	1	0.0043	0	0.00017	0
TX	T	MG_KG	ET09-10	12/13/2016	0.22	0	0.00021	0	4.8	1	0.008	1	0.0021	0	0.00017	0
TX	T	MG_KG	ET09-11	10/15/2013	0.49	0	0.0017	0	9.07	1	0.012	1	0.013	0	0.000081	0
TX	T	MG_KG	ET09-11	9/23/2014	0.18	1	0.00043	0	5.7	1	0.0085	1	0.0043	0	0.000082	0
TX	T	MG_KG	ET09-11	9/9/2015	0.48	0	0.00042	0	10.8	1	0.0079	1	0.0042	0	0.00017	0
TX	T	MG_KG	ET09-11	12/13/2016	0.14	1	0.00021	0	11.6	1	0.0074	1	0.0021	0	0.00016	0
TX	T	MG_KG	ET09-12	10/3/2013	0.689	1	0.0017	0	12.6	1	0.0093	0	0.013	0	0.000082	0
TX	T	MG_KG	ET09-12	9/24/2014	0.19	0	0.00042	0	11.1	1	0.0095	1	0.0042	0	0.000083	0
TX	T	MG_KG	ET09-12	9/9/2015	0.35	1	0.00042	0	14.3	1	0.0045	1	0.0042	0	0.00017	0
TX	T	MG_KG	ET09-12	12/13/2016	0.22	1	0.00021	0	4	1	0.0059	1	0.0021	0	0.00017	0

Matrix	Fraction	Units	Location	Collected	NAPHTHALENE	D_NAPHTHALENE	NICKEL	D_NICKEL	NITROBENZENE	D_NITROBENZENE	N-NITROSODIMETHYLAMINE	D_N-NITROSODIMETHYLAMINE
TX	T	MG_KG	ET09-03	10/1/2013	0.03	1	1.04	1	0.22	1	1	0
TX	T	MG_KG	ET09-03	9/22/2014	0.01	1	1.3	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-03	9/9/2015								
TX	T	MG_KG	ET09-03	9/14/2015	0.0033	0	1.8	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-03	12/14/2016	0.01	1	0.2	1	0.13	0		
TX	T	MG_KG	ET09-04	10/1/2013	0.042	1	0.489	1	0.13	0	0.67	0
TX	T	MG_KG	ET09-04	9/22/2014	0.019	1	2.4	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-04	9/14/2015	0.017	1	2.5	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-04	12/14/2016	0.024	1	0.7	1	0.13	0		
TX	T	MG_KG	ET09-05	10/1/2013	0.0066	0	0.649	1	0.13	0	0.66	0
TX	T	MG_KG	ET09-05	9/23/2014								
TX	T	MG_KG	ET09-05	9/23/2014	0.0033	0	2.2	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	9/9/2015	0.0033	0	1.9	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-05	12/13/2016	0.0066	0	0.88	1	0.13	0		
TX	T	MG_KG	ET09-06	10/1/2013	0.04	1	0.13	0	0.13	0	0.66	0
TX	T	MG_KG	ET09-06	9/22/2014	0.013	1	1.7	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-06	9/9/2015	0.011	1	2.1	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-06	9/14/2015								
TX	T	MG_KG	ET09-06	12/13/2016	0.0066	0	0.59	1	0.13	0		
TX	T	MG_KG	ET09-07	9/15/2015	0.0033	0	2.3	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-07	9/15/2015								
TX	T	MG_KG	ET09-07	12/14/2016	0.0088	1	0.45	1	0.13	0		
TX	T	MG_KG	ET09-08	9/15/2015	0.0033	0	1.7	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-08	12/14/2016	0.0066	0	0.65	1	0.13	0		
TX	T	MG_KG	ET09-09	10/3/2013	0.039	1	0.125	0	0.13	0	0.66	0
TX	T	MG_KG	ET09-09	9/23/2014	0.012	1	1.4	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	9/9/2015	0.03	1	2.4	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-09	12/13/2016	0.0066	0	0.61	1	0.13	0		
TX	T	MG_KG	ET09-10	10/3/2013	0.0036	1	5.52	1	0.13	0	0.67	0
TX	T	MG_KG	ET09-10	9/24/2014	0.0033	0	2	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	9/9/2015	0.0033	0	2.2	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-10	12/13/2016	0.0066	0	0.58	1	0.13	0		
TX	T	MG_KG	ET09-11	10/15/2013	0.039	1	0.152	1	0.13	0	0.66	0
TX	T	MG_KG	ET09-11	9/23/2014	0.0097	1	1.5	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-11	9/9/2015	0.015	1	2.4	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-11	12/13/2016	0.0066	0	0.14	1	0.13	0		
TX	T	MG_KG	ET09-12	10/3/2013	0.0066	0	0.651	1	0.13	0	0.66	0
TX	T	MG_KG	ET09-12	9/24/2014	0.0033	0	1.9	0	0.067	0	0.067	0
TX	T	MG_KG	ET09-12	9/9/2015	0.0033	0	2.1	0	0.066	0	0.066	0
TX	T	MG_KG	ET09-12	12/13/2016	0.0066	0	0.37	1	0.13	0		

Matrix	Fraction	Units	Location	Collected	N-NITROSODINPROPYLAMINE	D_N-NITROSODINPROPYLAMINE	N-NITROSODIPHENYLAMINE	D_N-NITROSODIPHENYLAMINE	NONACHLOROBIPHENYL	D_NONACHLOROBIPHENYL
TX	T	MG_KG	ET09-03	10/1/2013	0.2	0	0.2	0	0.00042	0
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.067	0	0.00041	0
TX	T	MG_KG	ET09-03	9/9/2015						
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.066	0	0.00042	0
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.13	0	0.00041	0
TX	T	MG_KG	ET09-04	10/1/2013	0.13	0	0.13	0	0.00042	0
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.066	0	0.00042	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.067	0	0.00042	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.13	0	0.00042	0
TX	T	MG_KG	ET09-05	10/1/2013	0.13	0	0.13	0	0.00041	0
TX	T	MG_KG	ET09-05	9/23/2014						
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.067	0	0.00042	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.067	0	0.00041	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.13	0	0.00042	0
TX	T	MG_KG	ET09-06	10/1/2013	0.13	0	0.13	0	0.00042	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.067	0	0.00042	0
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.066	0	0.00042	0
TX	T	MG_KG	ET09-06	9/14/2015						
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.13	0	0.00042	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.066	0	0.00042	0
TX	T	MG_KG	ET09-07	9/15/2015						
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.13	0	0.00041	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.067	0	0.00041	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.13	0	0.00041	0
TX	T	MG_KG	ET09-09	10/3/2013	0.13	0	0.13	0	0.00042	0
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.066	0	0.00042	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.066	0	0.00042	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.13	0	0.00042	0
TX	T	MG_KG	ET09-10	10/3/2013	0.13	0	0.13	0	0.00042	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.067	0	0.00042	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.067	0	0.00042	0
TX	T	MG_KG	ET09-10	12/13/2016	0.13	0	0.13	0	0.00042	0
TX	T	MG_KG	ET09-11	10/15/2013	0.13	0	0.13	0	0.00041	0
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.066	0	0.00041	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.067	0	0.00042	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.13	0	0.00041	0
TX	T	MG_KG	ET09-12	10/3/2013	0.13	0	0.13	0	0.00041	0
TX	T	MG_KG	ET09-12	9/24/2014	0.067	0	0.067	0	0.00042	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.066	0	0.00042	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.13	0	0.00041	0

Matrix	Fraction	Units	Location	Collected	OCTACHLOROBIPHENYL	D_OCTACHLOROBIPHENYL	PENTACHLOROBIPHENYL	D_PENTACHLOROBIPHENYL	PENTACHLOROPHENOL	D_PENTACHLOROPHENOL	PHENANTHRENE	D_PHENANTHRENE
TX	T	MG_KG	ET09-03	10/1/2013	0.0026	1	0.0011	1	1	0	0.044	1
TX	T	MG_KG	ET09-03	9/22/2014	0.00025	0	0.00017	0	0.17	0	0.009	1
TX	T	MG_KG	ET09-03	9/9/2015								
TX	T	MG_KG	ET09-03	9/14/2015	0.0005	0	0.0058	1	0.16	0	0.0033	0
TX	T	MG_KG	ET09-03	12/14/2016	0.0005	0	0.0051	1	0.33	0	0.014	1
TX	T	MG_KG	ET09-04	10/1/2013	0.00025	0	0.0022	1	0.68	0	0.044	1
TX	T	MG_KG	ET09-04	9/22/2014	0.00025	0	0.00017	0	0.16	0	0.0087	1
TX	T	MG_KG	ET09-04	9/14/2015	0.0005	0	0.0048	1	0.17	0	0.0033	0
TX	T	MG_KG	ET09-04	12/14/2016	0.0005	0	0.0066	1	0.32	0	0.025	1
TX	T	MG_KG	ET09-05	10/1/2013	0.00025	0	0.00016	0	0.68	0	0.0066	0
TX	T	MG_KG	ET09-05	9/23/2014								
TX	T	MG_KG	ET09-05	9/23/2014	0.00025	0	0.00017	0	0.17	0	0.0033	0
TX	T	MG_KG	ET09-05	9/9/2015	0.0005	0	0.00041	1	0.17	0	0.0033	0
TX	T	MG_KG	ET09-05	12/13/2016	0.0005	0	0.00017	1	0.33	0	0.0066	0
TX	T	MG_KG	ET09-06	10/1/2013	0.00025	0	0.0051	1	0.67	0	0.039	1
TX	T	MG_KG	ET09-06	9/22/2014	0.00025	0	0.00017	0	0.17	0	0.0074	1
TX	T	MG_KG	ET09-06	9/9/2015	0.0005	0	0.0085	1	0.16	0	0.025	1
TX	T	MG_KG	ET09-06	9/14/2015								
TX	T	MG_KG	ET09-06	12/13/2016	0.0005	0	0.00021	1	0.33	0	0.0066	0
TX	T	MG_KG	ET09-07	9/15/2015	0.0005	0	0.00017	0	0.16	0	0.0033	0
TX	T	MG_KG	ET09-07	9/15/2015								
TX	T	MG_KG	ET09-07	12/14/2016	0.00049	0	0.0027	1	0.33	0	0.0088	1
TX	T	MG_KG	ET09-08	9/15/2015	0.0005	0	0.00017	0	0.17	0	0.015	1
TX	T	MG_KG	ET09-08	12/14/2016	0.00049	0	0.00099	1	0.33	0	0.0066	0
TX	T	MG_KG	ET09-09	10/3/2013	0.00025	0	0.0027	1	0.68	0	0.026	1
TX	T	MG_KG	ET09-09	9/23/2014	0.00025	0	0.00017	0	0.16	0	0.0059	1
TX	T	MG_KG	ET09-09	9/9/2015	0.0005	0	0.0039	1	0.16	0	0.037	1
TX	T	MG_KG	ET09-09	12/13/2016	0.0005	0	0.00017	0	0.33	0	0.0066	0
TX	T	MG_KG	ET09-10	10/3/2013	0.00025	0	0.00017	0	0.68	0	0.0099	1
TX	T	MG_KG	ET09-10	9/24/2014	0.00025	0	0.00017	0	0.17	0	0.0033	0
TX	T	MG_KG	ET09-10	9/9/2015	0.0005	0	0.00017	0	0.17	0	0.0033	0
TX	T	MG_KG	ET09-10	12/13/2016	0.0005	0	0.00018	1			0.0066	0
TX	T	MG_KG	ET09-11	10/15/2013	0.00024	0	0.0033	1	0.68	0	0.036	1
TX	T	MG_KG	ET09-11	9/23/2014	0.00025	0	0.00017	0	0.16	0	0.0068	1
TX	T	MG_KG	ET09-11	9/9/2015	0.0075	1	0.012	1	0.17	0	0.0033	0
TX	T	MG_KG	ET09-11	12/13/2016	0.00049	0	0.0044	1	0.33	0	0.0066	0
TX	T	MG_KG	ET09-12	10/3/2013	0.00025	0	0.00016	0	0.68	0	0.0066	0
TX	T	MG_KG	ET09-12	9/24/2014	0.00025	0	0.00017	0	0.17	0	0.0033	0
TX	T	MG_KG	ET09-12	9/9/2015	0.0005	0	0.00017	0	0.16	0	0.012	1
TX	T	MG_KG	ET09-12	12/13/2016	0.0005	0	0.00017	0	0.33	0	0.0066	0

Matrix	Fraction	Units	Location	Collected	PHENOL	D_PHENOL	PYRENE	D_PYRENE	SELENIUM	D_SELENIUM	SILVER	D_SILVER	TETRACHLOROBIPHENYL	D_TETRACHLOROBIPHENYL	THALLIUM	D_THALLIUM
TX	T	MG_KG	ET09-03	10/1/2013	0.2	0	0.03	1	0.8	0	0.17	0	0.00017	0	0.52	0
TX	T	MG_KG	ET09-03	9/22/2014	0.067	0	0.0033	0	0.51	0	0.14	1	0.00017	0	0.26	0
TX	T	MG_KG	ET09-03	9/9/2015												
TX	T	MG_KG	ET09-03	9/14/2015	0.066	0	0.0033	0	0.61	1	0.15	1	0.00017	0	0.35	0
TX	T	MG_KG	ET09-03	12/14/2016	0.13	0	0.0075	1	0.82	0	0.13	1	0.00074	1	0.41	0
TX	T	MG_KG	ET09-04	10/1/2013	0.1	1	0.023	1	0.777	0	0.165	0	0.00037	1	0.505	0
TX	T	MG_KG	ET09-04	9/22/2014	0.066	0	0.0033	0	0.96	0	0.2	1	0.00017	0	0.48	0
TX	T	MG_KG	ET09-04	9/14/2015	0.067	0	0.0033	0	1.5	0	0.11	1	0.00028	1	0.49	0
TX	T	MG_KG	ET09-04	12/14/2016	0.13	0	0.011	1	1.2	1	0.15	1	0.0012	1	0.5	0
TX	T	MG_KG	ET09-05	10/1/2013	0.13	0	0.006	1	0.784	0	0.167	0	0.00016	0	0.51	0
TX	T	MG_KG	ET09-05	9/23/2014												
TX	T	MG_KG	ET09-05	9/23/2014	0.067	0	0.0033	0	0.89	0	0.11	1	0.00017	0	0.44	0
TX	T	MG_KG	ET09-05	9/9/2015	0.067	0	0.0033	0	1.1	0	0.066	1	0.00017	0	0.37	0
TX	T	MG_KG	ET09-05	12/13/2016	0.13	0	0.0066	0	0.61	1	0.076	1	0.00017	0	0.39	0
TX	T	MG_KG	ET09-06	10/1/2013	0.13	0	0.021	1	0.8	0	0.17	0	0.0007	1	0.52	0
TX	T	MG_KG	ET09-06	9/22/2014	0.067	0	0.0033	0	0.68	0	0.11	1	0.00017	0	0.34	0
TX	T	MG_KG	ET09-06	9/9/2015	0.066	0	0.0033	0	1.2	0	0.11	1	0.00087	1	0.41	0
TX	T	MG_KG	ET09-06	9/14/2015												
TX	T	MG_KG	ET09-06	12/13/2016	0.13	0	0.0066	0	0.62	1	0.093	1	0.00017	0	0.37	0
TX	T	MG_KG	ET09-07	9/15/2015	0.066	0	0.0033	0	1.4	0	1.2	1	0.00017	0	0.45	0
TX	T	MG_KG	ET09-07	9/15/2015												
TX	T	MG_KG	ET09-07	12/14/2016	0.13	0	0.0066	0	0.72	0	0.94	1	0.00017	1	0.36	0
TX	T	MG_KG	ET09-08	9/15/2015	0.067	0	0.058	1	1	0	1.2	1	0.00017	0	0.34	0
TX	T	MG_KG	ET09-08	12/14/2016	0.13	0	0.0066	0	0.71	1	0.57	1	0.000087	1	0.33	0
TX	T	MG_KG	ET09-09	10/3/2013	0.13	0	0.016	1	0.769	0	0.163	0	0.00058	1	0.5	0
TX	T	MG_KG	ET09-09	9/23/2014	0.066	0	0.0033	0	0.55	0	0.14	1	0.00017	0	0.27	0
TX	T	MG_KG	ET09-09	9/9/2015	0.066	0	0.0057	1	1.4	0	0.26	1	0.00038	1	0.47	0
TX	T	MG_KG	ET09-09	12/13/2016	0.13	0	0.0066	0	0.65	0	0.079	1	0.00017	0	0.32	0
TX	T	MG_KG	ET09-10	10/3/2013	0.13	0	0.027	1	0.792	0	0.168	0	0.00017	0	0.515	0
TX	T	MG_KG	ET09-10	9/24/2014	0.067	0	0.0033	0	0.81	0	0.17	1	0.00017	0	0.41	0
TX	T	MG_KG	ET09-10	9/9/2015	0.067	0	0.0033	0	0.7	1	0.26	1	0.00017	0	0.43	0
TX	T	MG_KG	ET09-10	12/13/2016	0.13	0	0.0066	0	0.57	1	0.091	1	0.00017	0	0.43	0
TX	T	MG_KG	ET09-11	10/15/2013	0.13	0	0.019	1	0.784	0	0.98	0	0.00067	1	0.51	0
TX	T	MG_KG	ET09-11	9/23/2014	0.066	0	0.0033	0	0.6	0	0.14	1	0.00017	0	0.3	0
TX	T	MG_KG	ET09-11	9/9/2015	0.067	0	0.0033	0	1.4	0	0.26	1	0.0013	1	0.48	0
TX	T	MG_KG	ET09-11	12/13/2016	0.13	0	0.0066	0	0.54	1	0.2	1	0.00066	1	0.41	0
TX	T	MG_KG	ET09-12	10/3/2013	0.13	0	0.0069	1	0.777	0	0.165	0	0.00016	0	0.505	0
TX	T	MG_KG	ET09-12	9/24/2014	0.087	1	0.0033	0	0.76	0	0.17	1	0.00017	0	0.38	0
TX	T	MG_KG	ET09-12	9/9/2015	0.066	0	0.014	1	1.2	0	0.13	1	0.00017	0	0.41	0
TX	T	MG_KG	ET09-12	12/13/2016	0.13	0	0.0066	0	0.56	1	0.11	1	0.00017	0	0.32	0

Matrix	Fraction	Units	Location	Collected	Total PCB Homologs	D_Total PCB Homologs	TOXAPHENE	D_TOXAPHENE	TRANS-CHLORDANE	D_TRANS-CHLORDANE	TRICHLOROBIPHENYL	D_TRICHLOROBIPHENYL	VANADIUM	D_VANADIUM
TX	T	MG_KG	ET09-03	10/1/2013	0.02	1	0.066	0	0.0066	1	0.000083	0	1	0
TX	T	MG_KG	ET09-03	9/22/2014	0.0029	1	0.017	0	0.00042	0	0.000082	0	1.3	0
TX	T	MG_KG	ET09-03	9/9/2015										
TX	T	MG_KG	ET09-03	9/14/2015	0.03	1	0.017	0	0.00087	1	0.000083	0	0.7	1
TX	T	MG_KG	ET09-03	12/14/2016	0.027	1	0.017	0	0.00042	0	0.000082	0	2	0
TX	T	MG_KG	ET09-04	10/1/2013	0.0086	1	0.066	0	0.0052	1	0.000083	0	0.971	0
TX	T	MG_KG	ET09-04	9/22/2014	0.00092	1	0.017	0	0.00043	0	0.000083	0	2.4	0
TX	T	MG_KG	ET09-04	9/14/2015	0.021	1	0.017	0	0.00042	0	0.00015	1	0.35	1
TX	T	MG_KG	ET09-04	12/14/2016	0.027	1	0.017	0	0.00042	0	0.000088	1	2.5	0
TX	T	MG_KG	ET09-05	10/1/2013	0.0026	1	0.065	0	0.00085	1	0.000082	0	0.127	0
TX	T	MG_KG	ET09-05	9/23/2014										
TX	T	MG_KG	ET09-05	9/23/2014	0.00042	0	0.017	0	0.00043	0	0.000083	0	2.2	0
TX	T	MG_KG	ET09-05	9/9/2015	0.0054	1	0.017	0	0.00042	0	0.000082	0	0.58	1
TX	T	MG_KG	ET09-05	12/13/2016	0.0023	1	0.017	0	0.00043	0	0.00019	1	2	0
TX	T	MG_KG	ET09-06	10/1/2013	0.022	1	0.066	0	0.0071	1	0.00016	1	1	0
TX	T	MG_KG	ET09-06	9/22/2014	0.00088	1	0.017	0	0.00043	0	0.000083	0	1.7	0
TX	T	MG_KG	ET09-06	9/9/2015	0.045	1	0.017	0	0.00042	0	0.000083	0	0.28	1
TX	T	MG_KG	ET09-06	9/14/2015										
TX	T	MG_KG	ET09-06	12/13/2016	0.0023	1	0.017	0	0.00042	0	0.000083	0	1.8	0
TX	T	MG_KG	ET09-07	9/15/2015	0.00065	1	0.017	0	0.0011	1	0.000083	0	0.49	1
TX	T	MG_KG	ET09-07	9/15/2015										
TX	T	MG_KG	ET09-07	12/14/2016	0.0095	1	0.017	0	0.00043	0	0.000082	0	1.8	0
TX	T	MG_KG	ET09-08	9/15/2015	0.0005	0	0.017	0	0.00043	0	0.000082	0	0.27	1
TX	T	MG_KG	ET09-08	12/14/2016	0.0034	1	0.017	0	0.00042	0	0.000055	1	1.6	0
TX	T	MG_KG	ET09-09	10/3/2013	0.01	1	0.066	0	0.0047	1	0.000083	0	0.125	0
TX	T	MG_KG	ET09-09	9/23/2014	0.00057	1	0.017	0	0.00042	0	0.000083	0	1.4	0
TX	T	MG_KG	ET09-09	9/9/2015	0.012	1	0.017	0	0.00083	1	0.00026	1	0.52	1
TX	T	MG_KG	ET09-09	12/13/2016	0.0011	1	0.017	0	0.00042	0	0.000083	0	1.6	0
TX	T	MG_KG	ET09-10	10/3/2013	0.00042	0	0.066	0	0.0016	0	0.000083	0	4.01	1
TX	T	MG_KG	ET09-10	9/24/2014	0.00042	0	0.017	0	0.00043	0	0.000083	0	2	0
TX	T	MG_KG	ET09-10	9/9/2015	0.0005	0	0.017	0	0.00043	0	0.000083	0	0.36	1
TX	T	MG_KG	ET09-10	12/13/2016	0.0012	1	0.017	0	0.00043	0	0.000083	0	2.2	0
TX	T	MG_KG	ET09-11	10/15/2013	0.011	1	0.066	0	0.0073	1	0.000097	1	0.127	0
TX	T	MG_KG	ET09-11	9/23/2014	0.00041	0	0.017	0	0.00043	0	0.000082	0	1.5	0
TX	T	MG_KG	ET09-11	9/9/2015	0.11	1	0.017	0	0.00042	0	0.0005	1	0.3	1
TX	T	MG_KG	ET09-11	12/13/2016	0.015	1	0.017	0	0.00043	0	0.000082	0	2	0
TX	T	MG_KG	ET09-12	10/3/2013	0.00041	0	0.066	0	0.0017	0	0.000082	0	0.971	0
TX	T	MG_KG	ET09-12	9/24/2014	0.00042	0	0.017	0	0.00042	0	0.000083	0	1.9	0
TX	T	MG_KG	ET09-12	9/9/2015	0.00069	1	0.017	0	0.00042	0	0.000083	0	0.22	1
TX	T	MG_KG	ET09-12	12/13/2016	0.00086	1	0.017	0	0.00042	0	0.000082	0	1.6	0

Matrix	Fraction	Units	Location	Collected	ZINC	D_ZINC
TX	T	MG_KG	ET09-03	10/1/2013	10.4	1
TX	T	MG_KG	ET09-03	9/22/2014	7.2	1
TX	T	MG_KG	ET09-03	9/9/2015		
TX	T	MG_KG	ET09-03	9/14/2015	9.8	1
TX	T	MG_KG	ET09-03	12/14/2016	5.5	1
TX	T	MG_KG	ET09-04	10/1/2013	9.86	1
TX	T	MG_KG	ET09-04	9/22/2014	7.5	1
TX	T	MG_KG	ET09-04	9/14/2015	6.3	1
TX	T	MG_KG	ET09-04	12/14/2016	10.6	1
TX	T	MG_KG	ET09-05	10/1/2013	17.5	1
TX	T	MG_KG	ET09-05	9/23/2014		
TX	T	MG_KG	ET09-05	9/23/2014	14.7	1
TX	T	MG_KG	ET09-05	9/9/2015	24.2	1
TX	T	MG_KG	ET09-05	12/13/2016	12.9	1
TX	T	MG_KG	ET09-06	10/1/2013	8.55	1
TX	T	MG_KG	ET09-06	9/22/2014	8.6	1
TX	T	MG_KG	ET09-06	9/9/2015	6	1
TX	T	MG_KG	ET09-06	9/14/2015		
TX	T	MG_KG	ET09-06	12/13/2016	14.6	1
TX	T	MG_KG	ET09-07	9/15/2015	9.9	1
TX	T	MG_KG	ET09-07	9/15/2015		
TX	T	MG_KG	ET09-07	12/14/2016	5	1
TX	T	MG_KG	ET09-08	9/15/2015	10.5	1
TX	T	MG_KG	ET09-08	12/14/2016	6.5	1
TX	T	MG_KG	ET09-09	10/3/2013	8.76	1
TX	T	MG_KG	ET09-09	9/23/2014	7.1	1
TX	T	MG_KG	ET09-09	9/9/2015	7.5	1
TX	T	MG_KG	ET09-09	12/13/2016	15.6	1
TX	T	MG_KG	ET09-10	10/3/2013	29.2	1
TX	T	MG_KG	ET09-10	9/24/2014	18.1	1
TX	T	MG_KG	ET09-10	9/9/2015	28.8	1
TX	T	MG_KG	ET09-10	12/13/2016	14	1
TX	T	MG_KG	ET09-11	10/15/2013	7.24	1
TX	T	MG_KG	ET09-11	9/23/2014	18.5	1
TX	T	MG_KG	ET09-11	9/9/2015	7.5	1
TX	T	MG_KG	ET09-11	12/13/2016	5.3	1
TX	T	MG_KG	ET09-12	10/3/2013	18.1	1
TX	T	MG_KG	ET09-12	9/24/2014	7.4	1
TX	T	MG_KG	ET09-12	9/9/2015	22.6	1
TX	T	MG_KG	ET09-12	12/13/2016	13.6	1

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.14/6/2017 9:28:12 AM
From File	Shellfish_Input.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

ALUMINUM

General Statistics

Total Number of Observations	36	Number of Distinct Observations	35
		Number of Missing Observations	4
Minimum	2.1	Mean	76.76
Maximum	1360	Median	18.8
SD	224.7	Std. Error of Mean	37.45
Coefficient of Variation	2.927	Skewness	5.622

Normal GOF Test

Shapiro Wilk Test Statistic	0.31	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.37	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.145	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	140	95% Adjusted-CLT UCL (Chen-1995)	175.9
		95% Modified-t UCL (Johnson-1978)	145.9

Gamma GOF Test

A-D Test Statistic	2.78	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.807	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.241	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.155	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.554	k star (bias corrected MLE)	0.527
Theta hat (MLE)	138.5	Theta star (bias corrected MLE)	145.8
nu hat (MLE)	39.91	nu star (bias corrected)	37.91
MLE Mean (bias corrected)	76.76	MLE Sd (bias corrected)	105.8
		Approximate Chi Square Value (0.05)	24.81
Adjusted Level of Significance	0.0428	Adjusted Chi Square Value	24.33

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	117.3	95% Adjusted Gamma UCL (use when n<50)	119.6

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.952	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.158	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.145	Data Not Lognormal at 5% Significance Level

Data appear Approximate Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	0.742	Mean of logged Data	3.213
Maximum of Logged Data	7.215	SD of logged Data	1.3

Assuming Lognormal Distribution

95% H-UCL	105.7	90% Chebyshev (MVUE) UCL	100.2
95% Chebyshev (MVUE) UCL	120.4	97.5% Chebyshev (MVUE) UCL	148.5
99% Chebyshev (MVUE) UCL	203.7		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	138.4	95% Jackknife UCL	140
95% Standard Bootstrap UCL	135.6	95% Bootstrap-t UCL	341.8
95% Hall's Bootstrap UCL	351.1	95% Percentile Bootstrap UCL	148.9
95% BCA Bootstrap UCL	210.5		
90% Chebyshev(Mean, Sd) UCL	189.1	95% Chebyshev(Mean, Sd) UCL	240
97.5% Chebyshev(Mean, Sd) UCL	310.6	99% Chebyshev(Mean, Sd) UCL	449.4

Suggested UCL to Use

95% H-UCL	105.7

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ProUCL computes and outputs H-statistic based UCLs for historical reasons only.

H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.

It is therefore recommended to avoid the use of H-statistic based 95% UCLs.

Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.

ANTIMONY

General Statistics

Total Number of Observations	36	Number of Distinct Observations	29
		Number of Missing Observations	4
Number of Detects	11	Number of Non-Detects	25
Number of Distinct Detects	10	Number of Distinct Non-Detects	20
Minimum Detect	0.23	Minimum Non-Detect	0.45
Maximum Detect	0.62	Maximum Non-Detect	0.87
Variance Detects	0.0125	Percent Non-Detects	69.44%
Mean Detects	0.389	SD Detects	0.112
Median Detects	0.37	CV Detects	0.287
Skewness Detects	0.488	Kurtosis Detects	0.677
Mean of Logged Detects	-0.982	SD of Logged Detects	0.294

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.956	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.85	Detected Data appear Normal at 5% Significance Level	
Lilliefors Test Statistic	0.125	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.251	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.378	KM Standard Error of Mean	0.029
KM SD	0.098	95% KM (BCA) UCL	0.423
95% KM (t) UCL	0.427	95% KM (Percentile Bootstrap) UCL	0.425
95% KM (z) UCL	0.426	95% KM Bootstrap t UCL	0.429
90% KM Chebyshev UCL	0.465	95% KM Chebyshev UCL	0.504
97.5% KM Chebyshev UCL	0.559	99% KM Chebyshev UCL	0.666

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.251	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.729	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.153	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.255	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	13.22	k star (bias corrected MLE)	9.678
Theta hat (MLE)	0.0294	Theta star (bias corrected MLE)	0.0402
nu hat (MLE)	290.9	nu star (bias corrected)	212.9
Mean (detects)	0.389		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.23	Mean	0.373
Maximum	0.62	Median	0.368
SD	0.066	CV	0.177
k hat (MLE)	34.52	k star (bias corrected MLE)	31.66
Theta hat (MLE)	0.0108	Theta star (bias corrected MLE)	0.0118
nu hat (MLE)	2486	nu star (bias corrected)	2280
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (N/A, α)	2170	Adjusted Chi Square Value (N/A, β)	2165
95% Gamma Approximate UCL (use when n>=50)	0.392	95% Gamma Adjusted UCL (use when n<50)	0.392

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.378	SD (KM)	0.098
Variance (KM)	0.0096	SE of Mean (KM)	0.029
k hat (KM)	14.88	k star (KM)	13.65
nu hat (KM)	1071	nu star (KM)	983.2
theta hat (KM)	0.0254	theta star (KM)	0.0277
80% gamma percentile (KM)	0.46	90% gamma percentile (KM)	0.514
95% gamma percentile (KM)	0.56	99% gamma percentile (KM)	0.656

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (983.16, α)	911.4	Adjusted Chi Square Value (983.16, β)	908.2
95% Gamma Approximate KM-UCL (use when n>=50)	0.408	95% Gamma Adjusted KM-UCL (use when n<50)	0.409

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.957	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.85	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.174	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.251	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.369	Mean in Log Scale	-1.012
SD in Original Scale	0.0665	SD in Log Scale	0.174
95% t UCL (assumes normality of ROS data)	0.388	95% Percentile Bootstrap UCL	0.388
95% BCA Bootstrap UCL	0.391	95% Bootstrap t UCL	0.391
95% H-UCL (Log ROS)	0.388		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-1.008	KM Geo Mean	0.365
KM SD (logged)	0.267	95% Critical H Value (KM-Log)	1.766
KM Standard Error of Mean (logged)	0.0815	95% H-UCL (KM -Log)	0.41
KM SD (logged)	0.267	95% Critical H Value (KM-Log)	1.766

KM Standard Error of Mean (logged)	0.0815

DL/2 Statistics

DL/2 Normal		DL/2 Log-Transformed	
Mean in Original Scale	0.353	Mean in Log Scale	-1.064
SD in Original Scale	0.0792	SD in Log Scale	0.221
95% t UCL (Assumes normality)	0.376	95% H-Stat UCL	0.377

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.427

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ARSENIC

General Statistics

Total Number of Observations	36	Number of Distinct Observations	25
		Number of Missing Observations	4
Minimum	2	Mean	3.203
Maximum	5.08	Median	3.05
SD	0.737	Std. Error of Mean	0.123
Coefficient of Variation	0.23	Skewness	0.666

Normal GOF Test

Shapiro Wilk Test Statistic	0.955	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.112	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.145	Data appear Normal at 5% Significance Level

Data appear Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	3.411	95% Adjusted-CLT UCL (Chen-1995)	3.42
		95% Modified-t UCL (Johnson-1978)	3.413

Gamma GOF Test

A-D Test Statistic	0.278	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.747	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.0858	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.147	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	20.18	k star (bias corrected MLE)	18.51
Theta hat (MLE)	0.159	Theta star (bias corrected MLE)	0.173
nu hat (MLE)	1453	nu star (bias corrected)	1333
MLE Mean (bias corrected)	3.203	MLE Sd (bias corrected)	0.744
		Approximate Chi Square Value (0.05)	1249
Adjusted Level of Significance	0.0428	Adjusted Chi Square Value	1246

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	3.418	95% Adjusted Gamma UCL (use when n<50)	3.428

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.977	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.935	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.0712	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.145	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	0.693	Mean of logged Data	1.139
Maximum of Logged Data	1.625	SD of logged Data	0.226

Assuming Lognormal Distribution

95% H-UCL	3.427	90% Chebyshev (MVUE) UCL	3.569
95% Chebyshev (MVUE) UCL	3.735	97.5% Chebyshev (MVUE) UCL	3.965
99% Chebyshev (MVUE) UCL	4.417		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	3.405	95% Jackknife UCL	3.411
95% Standard Bootstrap UCL	3.398	95% Bootstrap-t UCL	3.432
95% Hall's Bootstrap UCL	3.434	95% Percentile Bootstrap UCL	3.412
95% BCA Bootstrap UCL	3.414		
90% Chebyshev(Mean, Sd) UCL	3.572	95% Chebyshev(Mean, Sd) UCL	3.738
97.5% Chebyshev(Mean, Sd) UCL	3.97	99% Chebyshev(Mean, Sd) UCL	4.425

Suggested UCL to Use

95% Student's-t UCL 3.411

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

BARIUM

General Statistics

Total Number of Observations	36	Number of Distinct Observations	31
		Number of Missing Observations	4
Number of Detects	8	Number of Non-Detects	28
Number of Distinct Detects	8	Number of Distinct Non-Detects	23
Minimum Detect	0.0856	Minimum Non-Detect	5.1
Maximum Detect	6.05	Maximum Non-Detect	10
Variance Detects	4.158	Percent Non-Detects	77.78%
Mean Detects	1.034	SD Detects	2.039
Median Detects	0.349	CV Detects	1.973
Skewness Detects	2.762	Kurtosis Detects	7.715
Mean of Logged Detects	-1.047	SD of Logged Detects	1.412

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.515	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.457	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.838	KM Standard Error of Mean	0.537
KM SD	1.662	95% KM (BCA) UCL	1.871
95% KM (t) UCL	1.746	95% KM (Percentile Bootstrap) UCL	1.824
95% KM (z) UCL	1.722	95% KM Bootstrap t UCL	5.52
90% KM Chebyshev UCL	2.451	95% KM Chebyshev UCL	3.181
97.5% KM Chebyshev UCL	4.195	99% KM Chebyshev UCL	6.186

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.883	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.757	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.339	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.308	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.575	k star (bias corrected MLE)	0.443
Theta hat (MLE)	1.796	Theta star (bias corrected MLE)	2.334
nu hat (MLE)	9.207	nu star (bias corrected)	7.088
Mean (detects)	1.034		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.508
Maximum	6.05	Median	0.293
SD	0.999	CV	1.968
k hat (MLE)	0.703	k star (bias corrected MLE)	0.663
Theta hat (MLE)	0.722	Theta star (bias corrected MLE)	0.766
nu hat (MLE)	50.62	nu star (bias corrected)	47.74
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (47.74, α)	32.88	Adjusted Chi Square Value (47.74, β)	32.32
95% Gamma Approximate UCL (use when n>=50)	0.737	95% Gamma Adjusted UCL (use when n<50)	0.75

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.838	SD (KM)	1.662
Variance (KM)	2.761	SE of Mean (KM)	0.537
k hat (KM)	0.255	k star (KM)	0.252
nu hat (KM)	18.32	nu star (KM)	18.13
theta hat (KM)	3.294	theta star (KM)	3.329
80% gamma percentile (KM)	1.221	90% gamma percentile (KM)	2.515
95% gamma percentile (KM)	4.049	99% gamma percentile (KM)	8.129

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (18.13, α)	9.485	Adjusted Chi Square Value (18.13, β)	9.201
95% Gamma Approximate KM-UCL (use when n>=50)	1.602	95% Gamma Adjusted KM-UCL (use when n<50)	1.652

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.882	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.222	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.484	Mean in Log Scale	-1.16
SD in Original Scale	0.967	SD in Log Scale	0.722
95% t UCL (assumes normality of ROS data)	0.757	95% Percentile Bootstrap UCL	0.786
95% BCA Bootstrap UCL	0.981	95% Bootstrap t UCL	1.757
95% H-UCL (Log ROS)	0.525		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-1.158	KM Geo Mean	0.314
KM SD (logged)	1.218	95% Critical H Value (KM-Log)	2.642
KM Standard Error of Mean (logged)	0.426	95% H-UCL (KM -Log)	1.136
KM SD (logged)	1.218	95% Critical H Value (KM-Log)	2.642
KM Standard Error of Mean (logged)	0.426		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	3.267	Mean in Log Scale	0.816
SD in Original Scale	1.624	SD in Log Scale	1.201
95% t UCL (Assumes normality)	3.724	95% H-Stat UCL	7.914

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 1.136

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

BERYLLIUM

General Statistics

Total Number of Observations	36	Number of Distinct Observations	27
		Number of Missing Observations	4
Number of Detects	19	Number of Non-Detects	17
Number of Distinct Detects	18	Number of Distinct Non-Detects	9
Minimum Detect	0.0011	Minimum Non-Detect	0.0644
Maximum Detect	0.111	Maximum Non-Detect	0.25
Variance Detects	6.1024E-4	Percent Non-Detects	47.22%
Mean Detects	0.0146	SD Detects	0.0247
Median Detects	0.0066	CV Detects	1.692
Skewness Detects	3.661	Kurtosis Detects	14.47
Mean of Logged Detects	-4.874	SD of Logged Detects	1.06

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.5	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.901	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.299	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.197	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.0132	KM Standard Error of Mean	0.00437
KM SD	0.0211	95% KM (BCA) UCL	0.0221
95% KM (t) UCL	0.0205	95% KM (Percentile Bootstrap) UCL	0.0206
95% KM (z) UCL	0.0203	95% KM Bootstrap t UCL	0.031
90% KM Chebyshev UCL	0.0263	95% KM Chebyshev UCL	0.0322
97.5% KM Chebyshev UCL	0.0404	99% KM Chebyshev UCL	0.0566

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.169	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.773	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.256	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.205	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.902	k star (bias corrected MLE)	0.795
Theta hat (MLE)	0.0162	Theta star (bias corrected MLE)	0.0184
nu hat (MLE)	34.29	nu star (bias corrected)	30.21
Mean (detects)	0.0146		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0011	Mean	0.0137
Maximum	0.111	Median	0.01
SD	0.018	CV	1.31
k hat (MLE)	1.509	k star (bias corrected MLE)	1.401
Theta hat (MLE)	0.00911	Theta star (bias corrected MLE)	0.00981
nu hat (MLE)	108.6	nu star (bias corrected)	100.9
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (100.90, α)	78.72	Adjusted Chi Square Value (100.90, β)	77.83
95% Gamma Approximate UCL (use when n>=50)	0.0176	95% Gamma Adjusted UCL (use when n<50)	0.0178

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.0132	SD (KM)	0.0211
Variance (KM)	4.4570E-4	SE of Mean (KM)	0.00437
k hat (KM)	0.388	k star (KM)	0.375
nu hat (KM)	27.97	nu star (KM)	26.97
theta hat (KM)	0.0339	theta star (KM)	0.0351
80% gamma percentile (KM)	0.0211	90% gamma percentile (KM)	0.0376
95% gamma percentile (KM)	0.0559	99% gamma percentile (KM)	0.102

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (26.97, α)	16.13	Adjusted Chi Square Value (26.97, β)	15.75
95% Gamma Approximate KM-UCL (use when n>=50)	0.022	95% Gamma Adjusted KM-UCL (use when n<50)	0.0225

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.954	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.901	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.181	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.197	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.0115	Mean in Log Scale	-4.907
SD in Original Scale	0.0182	SD in Log Scale	0.831
95% t UCL (assumes normality of ROS data)	0.0166	95% Percentile Bootstrap UCL	0.0174
95% BCA Bootstrap UCL	0.0201	95% Bootstrap t UCL	0.0255
95% H-UCL (Log ROS)	0.0142		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-4.915	KM Geo Mean	0.00734
KM SD (logged)	0.986	95% Critical H Value (KM-Log)	2.367
KM Standard Error of Mean (logged)	0.224	95% H-UCL (KM -Log)	0.0177
KM SD (logged)	0.986	95% Critical H Value (KM-Log)	2.367
KM Standard Error of Mean (logged)	0.224		

DL/2 Statistics

DL/2 Normal		DL/2 Log-Transformed	
Mean in Original Scale	0.0406	Mean in Log Scale	-3.892
SD in Original Scale	0.0401	SD in Log Scale	1.351
95% t UCL (Assumes normality)	0.0519	95% H-Stat UCL	0.0965

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 0.0177

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

CADMIUM

General Statistics

Total Number of Observations	36	Number of Distinct Observations	29
		Number of Missing Observations	4
Minimum	0.055	Mean	0.144
Maximum	0.55	Median	0.12
SD	0.102	Std. Error of Mean	0.017
Coefficient of Variation	0.709	Skewness	2.709

Normal GOF Test

Shapiro Wilk Test Statistic	0.7	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.192	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.145	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.173	95% Adjusted-CLT UCL (Chen-1995)	0.18
		95% Modified-t UCL (Johnson-1978)	0.174

Gamma GOF Test

A-D Test Statistic	1.04	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.753	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.137	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.148	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics

k hat (MLE)	3.303	k star (bias corrected MLE)	3.046
Theta hat (MLE)	0.0436	Theta star (bias corrected MLE)	0.0473
nu hat (MLE)	237.8	nu star (bias corrected)	219.3
MLE Mean (bias corrected)	0.144	MLE Sd (bias corrected)	0.0825
		Approximate Chi Square Value (0.05)	186
Adjusted Level of Significance	0.0428	Adjusted Chi Square Value	184.6

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50)	0.17	95% Adjusted Gamma UCL (use when n<50)	0.171

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.938	**Shapiro Wilk Lognormal GOF Test**	
5% Shapiro Wilk Critical Value	0.935	Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.101	**Lilliefors Lognormal GOF Test**	
5% Lilliefors Critical Value	0.145	Data appear Lognormal at 5% Significance Level	

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-2.9	Mean of logged Data	-2.097
Maximum of Logged Data	-0.598	SD of logged Data	0.531

Assuming Lognormal Distribution

95% H-UCL	0.168	90% Chebyshev (MVUE) UCL	0.18
95% Chebyshev (MVUE) UCL	0.198	97.5% Chebyshev (MVUE) UCL	0.223
99% Chebyshev (MVUE) UCL	0.271		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.172	95% Jackknife UCL	0.173
95% Standard Bootstrap UCL	0.172	95% Bootstrap-t UCL	0.196
95% Hall's Bootstrap UCL	0.328	95% Percentile Bootstrap UCL	0.175
95% BCA Bootstrap UCL	0.182		
90% Chebyshev(Mean, Sd) UCL	0.195	95% Chebyshev(Mean, Sd) UCL	0.218
97.5% Chebyshev(Mean, Sd) UCL	0.25	99% Chebyshev(Mean, Sd) UCL	0.313

Suggested UCL to Use

95% Adjusted Gamma UCL 0.171

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

COBALT

General Statistics

Total Number of Observations	36	Number of Distinct Observations	27
		Number of Missing Observations	4
Number of Detects	11	Number of Non-Detects	25
Number of Distinct Detects	9	Number of Distinct Non-Detects	18
Minimum Detect	0.057	Minimum Non-Detect	0.0952
Maximum Detect	1.01	Maximum Non-Detect	2.5
Variance Detects	0.072	Percent Non-Detects	69.44%
Mean Detects	0.218	SD Detects	0.268
Median Detects	0.14	CV Detects	1.232
Skewness Detects	3.071	Kurtosis Detects	9.8
Mean of Logged Detects	-1.876	SD of Logged Detects	0.765

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.529	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.85	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.374	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.251	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.169	KM Standard Error of Mean	0.0529
KM SD	0.212	95% KM (BCA) UCL	0.295
95% KM (t) UCL	0.259	95% KM (Percentile Bootstrap) UCL	0.268
95% KM (z) UCL	0.257	95% KM Bootstrap t UCL	0.434
90% KM Chebyshev UCL	0.328	95% KM Chebyshev UCL	0.4
97.5% KM Chebyshev UCL	0.5	99% KM Chebyshev UCL	0.696

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.249	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.742	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.302	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.26	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.568	k star (bias corrected MLE)	1.201
Theta hat (MLE)	0.139	Theta star (bias corrected MLE)	0.181
nu hat (MLE)	34.49	nu star (bias corrected)	26.41
Mean (detects)	0.218		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.131
Maximum	1.01	Median	0.0985
SD	0.167	CV	1.274
k hat (MLE)	1.067	k star (bias corrected MLE)	0.996
Theta hat (MLE)	0.123	Theta star (bias corrected MLE)	0.132
nu hat (MLE)	76.8	nu star (bias corrected)	71.73
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (71.73, α)	53.23	Adjusted Chi Square Value (71.73, β)	52.51
95% Gamma Approximate UCL (use when n>=50)	0.177	95% Gamma Adjusted UCL (use when n<50)	0.18

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.169	SD (KM)	0.212
Variance (KM)	0.0448	SE of Mean (KM)	0.0529
k hat (KM)	0.64	k star (KM)	0.605
nu hat (KM)	46.1	nu star (KM)	43.59
theta hat (KM)	0.265	theta star (KM)	0.28
80% gamma percentile (KM)	0.279	90% gamma percentile (KM)	0.44
95% gamma percentile (KM)	0.608	99% gamma percentile (KM)	1.014

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (43.59, α)	29.45	Adjusted Chi Square Value (43.59, β)	28.92
95% Gamma Approximate KM-UCL (use when n>=50)	0.251	95% Gamma Adjusted KM-UCL (use when n<50)	0.255

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.841	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.85	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.238	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.251	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.145	Mean in Log Scale	-2.131
SD in Original Scale	0.155	SD in Log Scale	0.542
95% t UCL (assumes normality of ROS data)	0.189	95% Percentile Bootstrap UCL	0.193
95% BCA Bootstrap UCL	0.221	95% Bootstrap t UCL	0.271
95% H-UCL (Log ROS)	0.164		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-2.12	KM Geo Mean	0.12
KM SD (logged)	0.715	95% Critical H Value (KM-Log)	2.089
KM Standard Error of Mean (logged)	0.189	95% H-UCL (KM -Log)	0.199
KM SD (logged)	0.715	95% Critical H Value (KM-Log)	2.089
KM Standard Error of Mean (logged)	0.189		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.622	Mean in Log Scale	-0.916
SD in Original Scale	0.435	SD in Log Scale	1.128
95% t UCL (Assumes normality)	0.745	95% H-Stat UCL	1.224

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 0.199

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

COPPER

General Statistics

Total Number of Observations	36	Number of Distinct Observations	26
		Number of Missing Observations	4
Number of Detects	30	Number of Non-Detects	6
Number of Distinct Detects	23	Number of Distinct Non-Detects	6
Minimum Detect	1.39	Minimum Non-Detect	1.2
Maximum Detect	9.48	Maximum Non-Detect	2.2
Variance Detects	4.828	Percent Non-Detects	16.67%
Mean Detects	3.556	SD Detects	2.197
Median Detects	2.8	CV Detects	0.618
Skewness Detects	1.457	Kurtosis Detects	1.403
Mean of Logged Detects	1.117	SD of Logged Detects	0.54

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.812	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.927	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.217	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.159	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	3.193	KM Standard Error of Mean	0.362
KM SD	2.134	95% KM (BCA) UCL	3.763
95% KM (t) UCL	3.805	95% KM (Percentile Bootstrap) UCL	3.815
95% KM (z) UCL	3.789	95% KM Bootstrap t UCL	3.991
90% KM Chebyshev UCL	4.279	95% KM Chebyshev UCL	4.771
97.5% KM Chebyshev UCL	5.454	99% KM Chebyshev UCL	6.795

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.003	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.751	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.16	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.161	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	3.448	k star (bias corrected MLE)	3.125
Theta hat (MLE)	1.031	Theta star (bias corrected MLE)	1.138
nu hat (MLE)	206.9	nu star (bias corrected)	187.5
Mean (detects)	3.556		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	3.036
Maximum	9.48	Median	2.52
SD	2.327	CV	0.766
k hat (MLE)	1.279	k star (bias corrected MLE)	1.191
Theta hat (MLE)	2.373	Theta star (bias corrected MLE)	2.549
nu hat (MLE)	92.1	nu star (bias corrected)	85.76
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (85.76, α)	65.41	Adjusted Chi Square Value (85.76, β)	64.61
95% Gamma Approximate UCL (use when n>=50)	3.98	95% Gamma Adjusted UCL (use when n<50)	4.03

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	3.193	SD (KM)	2.134
Variance (KM)	4.554	SE of Mean (KM)	0.362
k hat (KM)	2.239	k star (KM)	2.071
nu hat (KM)	161.2	nu star (KM)	149.1
theta hat (KM)	1.426	theta star (KM)	1.542
80% gamma percentile (KM)	4.761	90% gamma percentile (KM)	6.16
95% gamma percentile (KM)	7.492	99% gamma percentile (KM)	10.44

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (149.11, α)	121.9	Adjusted Chi Square Value (149.11, β)	120.8
95% Gamma Approximate KM-UCL (use when n>=50)	3.907	95% Gamma Adjusted KM-UCL (use when n<50)	3.943

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.936	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.927	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.122	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.159	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	3.15	Mean in Log Scale	0.946
SD in Original Scale	2.204	SD in Log Scale	0.632
95% t UCL (assumes normality of ROS data)	3.771	95% Percentile Bootstrap UCL	3.759
95% BCA Bootstrap UCL	3.809	95% Bootstrap t UCL	3.92
95% H-UCL (Log ROS)	3.899		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	0.983	KM Geo Mean	2.671
KM SD (logged)	0.573	95% Critical H Value (KM-Log)	1.966
KM Standard Error of Mean (logged)	0.0975	95% H-UCL (KM -Log)	3.807
KM SD (logged)	0.573	95% Critical H Value (KM-Log)	1.966
KM Standard Error of Mean (logged)	0.0975		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	3.104	Mean in Log Scale	0.899
SD in Original Scale	2.249	SD in Log Scale	0.702
95% t UCL (Assumes normality)	3.737	95% H-Stat UCL	4.021

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Adjusted Gamma UCL	3.943	95% GROS Adjusted Gamma UCL	4.03

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

IRON

General Statistics

Total Number of Observations	36	Number of Distinct Observations	35
		Number of Missing Observations	4
Minimum	15.9	Mean	234.8
Maximum	3160	Median	80.65
SD	528.6	Std. Error of Mean	88.1
Coefficient of Variation	2.251	Skewness	5.122

Normal GOF Test

Shapiro Wilk Test Statistic	0.395	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.339	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.145	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	383.7	95% Adjusted-CLT UCL (Chen-1995)	460.1
		95% Modified-t UCL (Johnson-1978)	396.2

Gamma GOF Test

A-D Test Statistic	2.383	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.793	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.244	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.153	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.697	k star (bias corrected MLE)	0.657
Theta hat (MLE)	336.9	Theta star (bias corrected MLE)	357.2
nu hat (MLE)	50.18	nu star (bias corrected)	47.33
MLE Mean (bias corrected)	234.8	MLE Sd (bias corrected)	289.6
		Approximate Chi Square Value (0.05)	32.54
Adjusted Level of Significance	0.0428	Adjusted Chi Square Value	31.98

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	341.5	95% Adjusted Gamma UCL (use when n<50)	347.5

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.935	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.148	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.145	Data Not Lognormal at 5% Significance Level

Data Not Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	2.766	Mean of logged Data	4.591
Maximum of Logged Data	8.058	SD of logged Data	1.166

Assuming Lognormal Distribution

95% H-UCL	323.6	90% Chebyshev (MVUE) UCL	321.4
95% Chebyshev (MVUE) UCL	381.4	97.5% Chebyshev (MVUE) UCL	464.7
99% Chebyshev (MVUE) UCL	628.3		

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	379.7	95% Jackknife UCL	383.7
95% Standard Bootstrap UCL	378.9	95% Bootstrap-t UCL	668.1
95% Hall's Bootstrap UCL	887.6	95% Percentile Bootstrap UCL	391.3
95% BCA Bootstrap UCL	490.8		
90% Chebyshev(Mean, Sd) UCL	499.1	95% Chebyshev(Mean, Sd) UCL	618.8
97.5% Chebyshev(Mean, Sd) UCL	785	99% Chebyshev(Mean, Sd) UCL	1111

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL 618.8

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

LEAD

General Statistics

Total Number of Observations	36	Number of Distinct Observations	27
		Number of Missing Observations	4
Number of Detects	26	Number of Non-Detects	10
Number of Distinct Detects	21	Number of Distinct Non-Detects	8
Minimum Detect	0.11	Minimum Non-Detect	0.19
Maximum Detect	6.9	Maximum Non-Detect	0.5
Variance Detects	1.735	Percent Non-Detects	27.78%
Mean Detects	0.705	SD Detects	1.317
Median Detects	0.27	CV Detects	1.869
Skewness Detects	4.477	Kurtosis Detects	21.52
Mean of Logged Detects	-0.978	SD of Logged Detects	0.975

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.423	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.92	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.326	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.17	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.562	KM Standard Error of Mean	0.191
KM SD	1.122	95% KM (BCA) UCL	0.955
95% KM (t) UCL	0.885	95% KM (Percentile Bootstrap) UCL	0.921
95% KM (z) UCL	0.876	95% KM Bootstrap t UCL	1.52
90% KM Chebyshev UCL	1.135	95% KM Chebyshev UCL	1.394
97.5% KM Chebyshev UCL	1.754	99% KM Chebyshev UCL	2.461

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.833	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.777	Detected Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.195	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.177	Detected Data Not Gamma Distributed at 5% Significance Level	

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.928	k star (bias corrected MLE)	0.846
Theta hat (MLE)	0.759	Theta star (bias corrected MLE)	0.832
nu hat (MLE)	48.25	nu star (bias corrected)	44.01
Mean (detects)	0.705		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.517
Maximum	6.9	Median	0.209
SD	1.155	CV	2.234
k hat (MLE)	0.51	k star (bias corrected MLE)	0.486
Theta hat (MLE)	1.014	Theta star (bias corrected MLE)	1.064
nu hat (MLE)	36.72	nu star (bias corrected)	34.99
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (34.99, α)	22.46	Adjusted Chi Square Value (34.99, β)	22
95% Gamma Approximate UCL (use when n>=50)	0.806	95% Gamma Adjusted UCL (use when n<50)	0.822

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.562	SD (KM)	1.122
Variance (KM)	1.259	SE of Mean (KM)	0.191
k hat (KM)	0.251	k star (KM)	0.249
nu hat (KM)	18.07	nu star (KM)	17.89
theta hat (KM)	2.24	theta star (KM)	2.262
80% gamma percentile (KM)	0.815	90% gamma percentile (KM)	1.688
95% gamma percentile (KM)	2.725	99% gamma percentile (KM)	5.49

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (17.89, α)	9.314	Adjusted Chi Square Value (17.89, β)	9.032
95% Gamma Approximate KM-UCL (use when n>=50)	1.08	95% Gamma Adjusted KM-UCL (use when n<50)	1.113

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.893	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.92	Detected Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.157	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.17	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.564	Mean in Log Scale	-1.164
SD in Original Scale	1.137	SD in Log Scale	0.89
95% t UCL (assumes normality of ROS data)	0.884	95% Percentile Bootstrap UCL	0.911
95% BCA Bootstrap UCL	1.142	95% Bootstrap t UCL	1.527
95% H-UCL (Log ROS)	0.653		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-1.181	KM Geo Mean	0.307
KM SD (logged)	0.893	95% Critical H Value (KM-Log)	2.266
KM Standard Error of Mean (logged)	0.155	95% H-UCL (KM -Log)	0.644
KM SD (logged)	0.893	95% Critical H Value (KM-Log)	2.266
KM Standard Error of Mean (logged)	0.155		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.562	Mean in Log Scale	-1.183
SD in Original Scale	1.138	SD in Log Scale	0.912
95% t UCL (Assumes normality)	0.882	95% H-Stat UCL	0.66

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 0.644

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

MANGANESE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	34
		Number of Missing Observations	4
Minimum	0.53	Mean	11.25
Maximum	41.4	Median	9.2
SD	9.844	Std. Error of Mean	1.641
Coefficient of Variation	0.875	Skewness	1.687

Normal GOF Test

Shapiro Wilk Test Statistic	0.806	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.219	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.145	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	14.03	95% Adjusted-CLT UCL (Chen-1995)	14.44
		95% Modified-t UCL (Johnson-1978)	14.1

Gamma GOF Test

A-D Test Statistic	0.453	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.766	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.116	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.149	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	1.562	k star (bias corrected MLE)	1.45
Theta hat (MLE)	7.205	Theta star (bias corrected MLE)	7.76
nu hat (MLE)	112.5	nu star (bias corrected)	104.4
MLE Mean (bias corrected)	11.25	MLE Sd (bias corrected)	9.345
		Approximate Chi Square Value (0.05)	81.83
Adjusted Level of Significance	0.0428	Adjusted Chi Square Value	80.93

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50)	14.36	95% Adjusted Gamma UCL (use when n<50)	14.52

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.968	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.112	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.145	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-0.635	Mean of logged Data	2.068
Maximum of Logged Data	3.723	SD of logged Data	0.908

Assuming Lognormal Distribution

95% H-UCL	16.94	90% Chebyshev (MVUE) UCL	17.81
95% Chebyshev (MVUE) UCL	20.56	97.5% Chebyshev (MVUE) UCL	24.37
99% Chebyshev (MVUE) UCL	31.86		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	13.95	95% Jackknife UCL	14.03
95% Standard Bootstrap UCL	13.86	95% Bootstrap-t UCL	14.83
95% Hall's Bootstrap UCL	14.45	95% Percentile Bootstrap UCL	13.99
95% BCA Bootstrap UCL	14.28		
90% Chebyshev(Mean, Sd) UCL	16.18	95% Chebyshev(Mean, Sd) UCL	18.4
97.5% Chebyshev(Mean, Sd) UCL	21.5	99% Chebyshev(Mean, Sd) UCL	27.58

Suggested UCL to Use

95% Adjusted Gamma UCL 14.52

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

MERCURY

General Statistics

Total Number of Observations	36	Number of Distinct Observations	31
		Number of Missing Observations	4
Number of Detects	33	Number of Non-Detects	3
Number of Distinct Detects	29	Number of Distinct Non-Detects	3
Minimum Detect	0.0045	Minimum Non-Detect	0.0093
Maximum Detect	0.0197	Maximum Non-Detect	0.02
Variance Detects	8.9065E-6	Percent Non-Detects	8.333%
Mean Detects	0.00879	SD Detects	0.00298
Median Detects	0.0083	CV Detects	0.339
Skewness Detects	1.572	Kurtosis Detects	4.349
Mean of Logged Detects	-4.783	SD of Logged Detects	0.312

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.892	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.931	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.104	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.152	Detected Data appear Normal at 5% Significance Level	

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00868	KM Standard Error of Mean	5.0061E-4
KM SD	0.0029	95% KM (BCA) UCL	0.00953
95% KM (t) UCL	0.00953	95% KM (Percentile Bootstrap) UCL	0.00952
95% KM (z) UCL	0.00951	95% KM Bootstrap t UCL	0.00971
90% KM Chebyshev UCL	0.0102	95% KM Chebyshev UCL	0.0109
97.5% KM Chebyshev UCL	0.0118	99% KM Chebyshev UCL	0.0137

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.297	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.747	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.092	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.153	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	10.37	k star (bias corrected MLE)	9.443
Theta hat (MLE)	8.4812E-4	Theta star (bias corrected MLE)	9.3094E-4
nu hat (MLE)	684.1	nu star (bias corrected)	623.2
Mean (detects)	0.00879		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0045	Mean	0.00889
Maximum	0.0197	Median	0.00875
SD	0.00287	CV	0.323
k hat (MLE)	11.13	k star (bias corrected MLE)	10.22
Theta hat (MLE)	7.9873E-4	Theta star (bias corrected MLE)	8.6977E-4
nu hat (MLE)	801.5	nu star (bias corrected)	736.1
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (736.06, α)	674.1	Adjusted Chi Square Value (736.06, β)	671.4
95% Gamma Approximate UCL (use when n>=50)	0.00971	95% Gamma Adjusted UCL (use when n<50)	0.00975

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00868	SD (KM)	0.0029
Variance (KM)	8.4137E-6	SE of Mean (KM)	5.0061E-4
k hat (KM)	8.964	k star (KM)	8.236
nu hat (KM)	645.4	nu star (KM)	593
theta hat (KM)	9.6882E-4	theta star (KM)	0.00105
80% gamma percentile (KM)	0.0111	90% gamma percentile (KM)	0.0127
95% gamma percentile (KM)	0.0142	99% gamma percentile (KM)	0.0172

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (592.96, α)	537.5	Adjusted Chi Square Value (592.96, β)	535.1
95% Gamma Approximate KM-UCL (use when n>=50)	0.00958	95% Gamma Adjusted KM-UCL (use when n<50)	0.00962

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.982	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.931	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.0778	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.152	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00868	Mean in Log Scale	-4.793
SD in Original Scale	0.00288	SD in Log Scale	0.301
95% t UCL (assumes normality of ROS data)	0.00949	95% Percentile Bootstrap UCL	0.00948
95% BCA Bootstrap UCL	0.00957	95% Bootstrap t UCL	0.00966
95% H-UCL (Log ROS)	0.00949		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-4.795	KM Geo Mean	0.00827
KM SD (logged)	0.305	95% Critical H Value (KM-Log)	1.786
KM Standard Error of Mean (logged)	0.053	95% H-UCL (KM -Log)	0.0095
KM SD (logged)	0.305	95% Critical H Value (KM-Log)	1.786
KM Standard Error of Mean (logged)	0.053		

DL/2 Statistics

DL/2 Normal		DL/2 Log-Transformed	
Mean in Original Scale	0.0086	Mean in Log Scale	-4.81
SD in Original Scale	0.00302	SD in Log Scale	0.329
95% t UCL (Assumes normality)	0.00945	95% H-Stat UCL	0.0095

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.00953

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test
When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

NICKEL

General Statistics

Total Number of Observations	36	Number of Distinct Observations	30
		Number of Missing Observations	4
Number of Detects	16	Number of Non-Detects	20
Number of Distinct Detects	16	Number of Distinct Non-Detects	14
Minimum Detect	0.14	Minimum Non-Detect	0.125
Maximum Detect	5.52	Maximum Non-Detect	2.5
Variance Detects	1.608	Percent Non-Detects	55.56%
Mean Detects	0.854	SD Detects	1.268
Median Detects	0.6	CV Detects	1.484
Skewness Detects	3.746	Kurtosis Detects	14.58
Mean of Logged Detects	-0.598	SD of Logged Detects	0.851

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.451	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.887	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.379	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.213	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.634	KM Standard Error of Mean	0.156
KM SD	0.867	95% KM (BCA) UCL	0.935
95% KM (t) UCL	0.898	95% KM (Percentile Bootstrap) UCL	0.915
95% KM (z) UCL	0.891	95% KM Bootstrap t UCL	1.188
90% KM Chebyshev UCL	1.103	95% KM Chebyshev UCL	1.315
97.5% KM Chebyshev UCL	1.61	99% KM Chebyshev UCL	2.189

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.488	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.759	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.279	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.22	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.276	k star (bias corrected MLE)	1.079
Theta hat (MLE)	0.67	Theta star (bias corrected MLE)	0.792
nu hat (MLE)	40.84	nu star (bias corrected)	34.52
Mean (detects)	0.854		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.572
Maximum	5.52	Median	0.356
SD	0.899	CV	1.571
k hat (MLE)	0.787	k star (bias corrected MLE)	0.739
Theta hat (MLE)	0.727	Theta star (bias corrected MLE)	0.774
nu hat (MLE)	56.63	nu star (bias corrected)	53.24
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (53.24, α)	37.48	Adjusted Chi Square Value (53.24, β)	36.88
95% Gamma Approximate UCL (use when n>=50)	0.813	95% Gamma Adjusted UCL (use when n<50)	0.826

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.634	SD (KM)	0.867
Variance (KM)	0.751	SE of Mean (KM)	0.156
k hat (KM)	0.535	k star (KM)	0.509
nu hat (KM)	38.49	nu star (KM)	36.62
theta hat (KM)	1.186	theta star (KM)	1.246
80% gamma percentile (KM)	1.042	90% gamma percentile (KM)	1.709
95% gamma percentile (KM)	2.42	99% gamma percentile (KM)	4.166

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (36.62, α)	23.76	Adjusted Chi Square Value (36.62, β)	23.29
95% Gamma Approximate KM-UCL (use when n>=50)	0.977	95% Gamma Adjusted KM-UCL (use when n<50)	0.996

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.871	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.887	Detected Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.201	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.213	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.603	Mean in Log Scale	-0.838
SD in Original Scale	0.871	SD in Log Scale	0.723
95% t UCL (assumes normality of ROS data)	0.848	95% Percentile Bootstrap UCL	0.871
95% BCA Bootstrap UCL	1.055	95% Bootstrap t UCL	1.387
95% H-UCL (Log ROS)	0.726		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-0.835	KM Geo Mean	0.434
KM SD (logged)	0.812	95% Critical H Value (KM-Log)	2.183
KM Standard Error of Mean (logged)	0.186	95% H-UCL (KM -Log)	0.814
KM SD (logged)	0.812	95% Critical H Value (KM-Log)	2.183
KM Standard Error of Mean (logged)	0.186		

DL/2 Statistics

DL/2 Normal		DL/2 Log-Transformed	
Mean in Original Scale	0.881	Mean in Log Scale	-0.43
SD in Original Scale	0.866	SD in Log Scale	0.858
95% t UCL (Assumes normality)	1.124	95% H-Stat UCL	1.298

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 0.814

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

SELENIUM

General Statistics

Total Number of Observations	36	Number of Distinct Observations	28
		Number of Missing Observations	4
Number of Detects	9	Number of Non-Detects	27
Number of Distinct Detects	8	Number of Distinct Non-Detects	21
Minimum Detect	0.54	Minimum Non-Detect	0.51
Maximum Detect	1.2	Maximum Non-Detect	1.5
Variance Detects	0.0414	Percent Non-Detects	75%
Mean Detects	0.68	SD Detects	0.203
Median Detects	0.61	CV Detects	0.299
Skewness Detects	2.555	Kurtosis Detects	6.98
Mean of Logged Detects	-0.416	SD of Logged Detects	0.243

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.65	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.829	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.33	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.274	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.606	KM Standard Error of Mean	0.0273
KM SD	0.123	95% KM (BCA) UCL	0.655
95% KM (t) UCL	0.652	95% KM (Percentile Bootstrap) UCL	0.654
95% KM (z) UCL	0.651	95% KM Bootstrap t UCL	0.67
90% KM Chebyshev UCL	0.688	95% KM Chebyshev UCL	0.725
97.5% KM Chebyshev UCL	0.776	99% KM Chebyshev UCL	0.878

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.119	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.721	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.287	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.279	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	16.79	k star (bias corrected MLE)	11.27
Theta hat (MLE)	0.0405	Theta star (bias corrected MLE)	0.0603
nu hat (MLE)	302.3	nu star (bias corrected)	202.8
Mean (detects)	0.68		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.34	Mean	0.573
Maximum	1.2	Median	0.555
SD	0.133	CV	0.231
k hat (MLE)	24.45	k star (bias corrected MLE)	22.43
Theta hat (MLE)	0.0234	Theta star (bias corrected MLE)	0.0256
nu hat (MLE)	1760	nu star (bias corrected)	1615
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (N/A, α)	1523	Adjusted Chi Square Value (N/A, β)	1519
95% Gamma Approximate UCL (use when n>=50)	0.608	95% Gamma Adjusted UCL (use when n<50)	0.61

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.606	SD (KM)	0.123
Variance (KM)	0.0151	SE of Mean (KM)	0.0273
k hat (KM)	24.29	k star (KM)	22.28
nu hat (KM)	1749	nu star (KM)	1604
theta hat (KM)	0.0249	theta star (KM)	0.0272
80% gamma percentile (KM)	0.71	90% gamma percentile (KM)	0.775
95% gamma percentile (KM)	0.831	99% gamma percentile (KM)	0.944

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (N/A, α)	1512	Adjusted Chi Square Value (N/A, β)	1508
95% Gamma Approximate KM-UCL (use when n>=50)	0.643	95% Gamma Adjusted KM-UCL (use when n<50)	0.644

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.737	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.27	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.586	Mean in Log Scale	-0.549
SD in Original Scale	0.122	SD in Log Scale	0.168
95% t UCL (assumes normality of ROS data)	0.621	95% Percentile Bootstrap UCL	0.624
95% BCA Bootstrap UCL	0.639	95% Bootstrap t UCL	0.645
95% H-UCL (Log ROS)	0.615		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-0.516	KM Geo Mean	0.597
KM SD (logged)	0.161	95% Critical H Value (KM-Log)	1.718
KM Standard Error of Mean (logged)	0.039	95% H-UCL (KM -Log)	0.634
KM SD (logged)	0.161	95% Critical H Value (KM-Log)	1.718
KM Standard Error of Mean (logged)	0.039		

DL/2 Statistics

DL/2 Normal		DL/2 Log-Transformed	
Mean in Original Scale	0.509	Mean in Log Scale	-0.73
SD in Original Scale	0.183	SD in Log Scale	0.332
95% t UCL (Assumes normality)	0.561	95% H-Stat UCL	0.563

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM Student's t	0.668	KM H-UCL	0.634

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

SILVER

General Statistics

Total Number of Observations	36	Number of Distinct Observations	20
		Number of Missing Observations	4
Number of Detects	28	Number of Non-Detects	8
Number of Distinct Detects	15	Number of Distinct Non-Detects	6
Minimum Detect	0.066	Minimum Non-Detect	0.163
Maximum Detect	1.2	Maximum Non-Detect	0.98
Variance Detects	0.101	Percent Non-Detects	22.22%
Mean Detects	0.263	SD Detects	0.318
Median Detects	0.14	CV Detects	1.207
Skewness Detects	2.392	Kurtosis Detects	4.688
Mean of Logged Detects	-1.731	SD of Logged Detects	0.786

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.573	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.924	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.361	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.164	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.232	KM Standard Error of Mean	0.0483
KM SD	0.283	95% KM (BCA) UCL	0.323
95% KM (t) UCL	0.313	95% KM (Percentile Bootstrap) UCL	0.318
95% KM (z) UCL	0.311	95% KM Bootstrap t UCL	0.383
90% KM Chebyshev UCL	0.376	95% KM Chebyshev UCL	0.442
97.5% KM Chebyshev UCL	0.533	99% KM Chebyshev UCL	0.712

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	2.933	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.765	Detected Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.258	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.169	Detected Data Not Gamma Distributed at 5% Significance Level	

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.406	k star (bias corrected MLE)	1.279
Theta hat (MLE)	0.187	Theta star (bias corrected MLE)	0.206
nu hat (MLE)	78.75	nu star (bias corrected)	71.65
Mean (detects)	0.263		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0184	Mean	0.223
Maximum	1.2	Median	0.132
SD	0.29	CV	1.301
k hat (MLE)	1.244	k star (bias corrected MLE)	1.158
Theta hat (MLE)	0.179	Theta star (bias corrected MLE)	0.192
nu hat (MLE)	89.54	nu star (bias corrected)	83.41
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (83.41, α)	63.36	Adjusted Chi Square Value (83.41, β)	62.57
95% Gamma Approximate UCL (use when n>=50)	0.293	95% Gamma Adjusted UCL (use when n<50)	0.297

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.232	SD (KM)	0.283
Variance (KM)	0.0801	SE of Mean (KM)	0.0483
k hat (KM)	0.67	k star (KM)	0.632
nu hat (KM)	48.22	nu star (KM)	45.54
theta hat (KM)	0.346	theta star (KM)	0.366
80% gamma percentile (KM)	0.382	90% gamma percentile (KM)	0.595
95% gamma percentile (KM)	0.818	99% gamma percentile (KM)	1.353

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (45.54, α)	31.06	Adjusted Chi Square Value (45.54, β)	30.51
95% Gamma Approximate KM-UCL (use when n>=50)	0.34	95% Gamma Adjusted KM-UCL (use when n<50)	0.346

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.833	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.924	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.199	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.164	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.232	Mean in Log Scale	-1.815
SD in Original Scale	0.285	SD in Log Scale	0.714
95% t UCL (assumes normality of ROS data)	0.312	95% Percentile Bootstrap UCL	0.314
95% BCA Bootstrap UCL	0.341	95% Bootstrap t UCL	0.362
95% H-UCL (Log ROS)	0.27		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-1.829	KM Geo Mean	0.161
KM SD (logged)	0.72	95% Critical H Value (KM-Log)	2.093
KM Standard Error of Mean (logged)	0.125	95% H-UCL (KM -Log)	0.268
KM SD (logged)	0.72	95% Critical H Value (KM-Log)	2.093
KM Standard Error of Mean (logged)	0.125		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.234	Mean in Log Scale	-1.849
SD in Original Scale	0.291	SD in Log Scale	0.778
95% t UCL (Assumes normality)	0.316	95% H-Stat UCL	0.283

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 0.442

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

VANADIUM

General Statistics

Total Number of Observations	36	Number of Distinct Observations	26
		Number of Missing Observations	4
Number of Detects	11	Number of Non-Detects	25
Number of Distinct Detects	11	Number of Distinct Non-Detects	15
Minimum Detect	0.22	Minimum Non-Detect	0.125
Maximum Detect	4.01	Maximum Non-Detect	2.5
Variance Detects	1.202	Percent Non-Detects	69.44%
Mean Detects	0.735	SD Detects	1.097
Median Detects	0.36	CV Detects	1.493
Skewness Detects	3.207	Kurtosis Detects	10.46
Mean of Logged Detects	-0.75	SD of Logged Detects	0.795

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.469	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.85	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.422	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.251	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.444	KM Standard Error of Mean	0.117
KM SD	0.627	95% KM (BCA) UCL	0.654
95% KM (t) UCL	0.641	95% KM (Percentile Bootstrap) UCL	0.64
95% KM (z) UCL	0.636	95% KM Bootstrap t UCL	0.892
90% KM Chebyshev UCL	0.794	95% KM Chebyshev UCL	0.952
97.5% KM Chebyshev UCL	1.172	99% KM Chebyshev UCL	1.604

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.592	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.746	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.312	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.261	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.273	k star (bias corrected MLE)	0.986
Theta hat (MLE)	0.577	Theta star (bias corrected MLE)	0.745
nu hat (MLE)	28	nu star (bias corrected)	21.7
Mean (detects)	0.735		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.363
Maximum	4.01	Median	0.175
SD	0.669	CV	1.846
k hat (MLE)	0.579	k star (bias corrected MLE)	0.549

Theta hat (MLE)	0.626	Theta star (bias corrected MLE)	0.66
nu hat (MLE)	41.69	nu star (bias corrected)	39.55
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (39.55, α)	26.14	Adjusted Chi Square Value (39.55, β)	25.64
95% Gamma Approximate UCL (use when n>=50)	0.548	95% Gamma Adjusted UCL (use when n<50)	0.559

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.444	SD (KM)	0.627
Variance (KM)	0.394	SE of Mean (KM)	0.117
k hat (KM)	0.5	k star (KM)	0.477
nu hat (KM)	36.02	nu star (KM)	34.35
theta hat (KM)	0.887	theta star (KM)	0.93
80% gamma percentile (KM)	0.727	90% gamma percentile (KM)	1.212
95% gamma percentile (KM)	1.734	99% gamma percentile (KM)	3.021

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (34.35, α)	21.95	Adjusted Chi Square Value (34.35, β)	21.5
95% Gamma Approximate KM-UCL (use when n>=50)	0.695	95% Gamma Adjusted KM-UCL (use when n<50)	0.709

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.771	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.85	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.219	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.251	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.426	Mean in Log Scale	-1.172
SD in Original Scale	0.632	SD in Log Scale	0.671
95% t UCL (assumes normality of ROS data)	0.604	95% Percentile Bootstrap UCL	0.621
95% BCA Bootstrap UCL	0.754	95% Bootstrap t UCL	1.04
95% H-UCL (Log ROS)	0.489		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-1.149	KM Geo Mean	0.317
KM SD (logged)	0.704	95% Critical H Value (KM-Log)	2.078
KM Standard Error of Mean (logged)	0.177	95% H-UCL (KM -Log)	0.52
KM SD (logged)	0.704	95% Critical H Value (KM-Log)	2.078
KM Standard Error of Mean (logged)	0.177		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.75	Mean in Log Scale	-0.582
SD in Original Scale	0.65	SD in Log Scale	0.861
95% t UCL (Assumes normality)	0.933	95% H-Stat UCL	1.12

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 0.52

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ZINC

General Statistics

Total Number of Observations	36	Number of Distinct Observations	33
		Number of Missing Observations	4
Minimum	5	Mean	12.09
Maximum	29.2	Median	9.88
SD	6.462	Std. Error of Mean	1.077
Coefficient of Variation	0.534	Skewness	1.241

Normal GOF Test

Shapiro Wilk Test Statistic	0.857	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.203	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.145	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	13.91	95% Adjusted-CLT UCL (Chen-1995)	14.1
		95% Modified-t UCL (Johnson-1978)	13.95

Gamma GOF Test

A-D Test Statistic	0.827	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.752	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.152	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.147	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	4.274	k star (bias corrected MLE)	3.936
Theta hat (MLE)	2.83	Theta star (bias corrected MLE)	3.073
nu hat (MLE)	307.7	nu star (bias corrected)	283.4
MLE Mean (bias corrected)	12.09	MLE Sd (bias corrected)	6.096
		Approximate Chi Square Value (0.05)	245.4
Adjusted Level of Significance	0.0428	Adjusted Chi Square Value	243.8

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	13.97	95% Adjusted Gamma UCL (use when n<50)	14.06

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.947	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.128	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.145	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	1.609	Mean of logged Data	2.371
Maximum of Logged Data	3.374	SD of logged Data	0.488

Assuming Lognormal Distribution

95% H-UCL	14.12	90% Chebyshev (MVUE) UCL	15.09
95% Chebyshev (MVUE) UCL	16.48	97.5% Chebyshev (MVUE) UCL	18.4
99% Chebyshev (MVUE) UCL	22.19		

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	13.87	95% Jackknife UCL	13.91
95% Standard Bootstrap UCL	13.83	95% Bootstrap-t UCL	14.38
95% Hall's Bootstrap UCL	14.16	95% Percentile Bootstrap UCL	13.97
95% BCA Bootstrap UCL	14.13		
90% Chebyshev(Mean, Sd) UCL	15.33	95% Chebyshev(Mean, Sd) UCL	16.79
97.5% Chebyshev(Mean, Sd) UCL	18.82	99% Chebyshev(Mean, Sd) UCL	22.81

Suggested UCL to Use

95% Student's-t UCL	13.91	or 95% Modified-t UCL	13.95
or 95% H-UCL	14.12		

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ProUCL computes and outputs H-statistic based UCLs for historical reasons only.

H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.

It is therefore recommended to avoid the use of H-statistic based 95% UCLs.

Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.

Total PCB Homologs

General Statistics

Total Number of Observations	36	Number of Distinct Observations	29
		Number of Missing Observations	4
Number of Detects	28	Number of Non-Detects	8
Number of Distinct Detects	26	Number of Distinct Non-Detects	3
Minimum Detect	5.7000E-4	Minimum Non-Detect	4.1000E-4
Maximum Detect	0.11	Maximum Non-Detect	5.0000E-4
Variance Detects	4.8498E-4	Percent Non-Detects	22.22%
Mean Detects	0.0141	SD Detects	0.022
Median Detects	0.007	CV Detects	1.566
Skewness Detects	3.343	Kurtosis Detects	13.57
Mean of Logged Detects	-5.226	SD of Logged Detects	1.507

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.615	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.924	Detected Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.27	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.164	Detected Data Not Normal at 5% Significance Level	

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.011	KM Standard Error of Mean	0.00338
KM SD	0.0199	95% KM (BCA) UCL	0.018
95% KM (t) UCL	0.0167	95% KM (Percentile Bootstrap) UCL	0.0171
95% KM (z) UCL	0.0166	95% KM Bootstrap t UCL	0.0217
90% KM Chebyshev UCL	0.0212	95% KM Chebyshev UCL	0.0258
97.5% KM Chebyshev UCL	0.0321	99% KM Chebyshev UCL	0.0446

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.68	**Anderson-Darling GOF Test**	
5% A-D Critical Value	0.796	Detected data appear Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.145	**Kolmogorov-Smirnov GOF**	
5% K-S Critical Value	0.173	Detected data appear Gamma Distributed at 5% Significance Level	

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.636	k star (bias corrected MLE)	0.592

Theta hat (MLE)	0.0221	Theta star (bias corrected MLE)	0.0238
nu hat (MLE)	35.64	nu star (bias corrected)	33.15
Mean (detects)	0.0141		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	5.7000E-4	Mean	0.0132
Maximum	0.11	Median	0.01
SD	0.0194	CV	1.475
k hat (MLE)	0.785	k star (bias corrected MLE)	0.738
Theta hat (MLE)	0.0168	Theta star (bias corrected MLE)	0.0178
nu hat (MLE)	56.51	nu star (bias corrected)	53.14
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (53.14, α)	37.39	Adjusted Chi Square Value (53.14, β)	36.79
95% Gamma Approximate UCL (use when n>=50)	0.0187	95% Gamma Adjusted UCL (use when n<50)	0.019

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.011	SD (KM)	0.0199
Variance (KM)	3.9597E-4	SE of Mean (KM)	0.00338
k hat (KM)	0.307	k star (KM)	0.3
nu hat (KM)	22.13	nu star (KM)	21.62
theta hat (KM)	0.0359	theta star (KM)	0.0367
80% gamma percentile (KM)	0.0169	90% gamma percentile (KM)	0.0325
95% gamma percentile (KM)	0.0505	99% gamma percentile (KM)	0.097

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (21.62, α)	12.05	Adjusted Chi Square Value (21.62, β)	11.73
95% Gamma Approximate KM-UCL (use when n>=50)	0.0198	95% Gamma Adjusted KM-UCL (use when n<50)	0.0203

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.939	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.924	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.126	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.164	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.011	Mean in Log Scale	-5.99
SD in Original Scale	0.0202	SD in Log Scale	1.979
95% t UCL (assumes normality of ROS data)	0.0167	95% Percentile Bootstrap UCL	0.0173
95% BCA Bootstrap UCL	0.0197	95% Bootstrap t UCL	0.0219
95% H-UCL (Log ROS)	0.0608		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.798	KM Geo Mean	0.00303
KM SD (logged)	1.687	95% Critical H Value (KM-Log)	3.266
KM Standard Error of Mean (logged)	0.286	95% H-UCL (KM -Log)	0.032
KM SD (logged)	1.687	95% Critical H Value (KM-Log)	3.266
KM Standard Error of Mean (logged)	0.286		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.011	Mean in Log Scale	-5.939
SD in Original Scale	0.0202	SD in Log Scale	1.892
95% t UCL (Assumes normality)	0.0167	95% H-Stat UCL	0.0492

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

Adjusted KM-UCL (use when k<=1 and 15 < n < 50 but k<=1)	0.0203

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

4,4-DDE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	10
		Number of Missing Observations	4
Number of Detects	8	Number of Non-Detects	28
Number of Distinct Detects	7	Number of Distinct Non-Detects	3
Minimum Detect	7.2000E-4	Minimum Non-Detect	8.4000E-4
Maximum Detect	0.0037	Maximum Non-Detect	0.0034
Variance Detects	1.0063E-6	Percent Non-Detects	77.78%
Mean Detects	0.00199	SD Detects	0.001
Median Detects	0.0018	CV Detects	0.505
Skewness Detects	0.426	Kurtosis Detects	-0.397
Mean of Logged Detects	-6.349	SD of Logged Detects	0.564

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.949	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.159	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00101	KM Standard Error of Mean	1.2427E-4
KM SD	6.9170E-4	95% KM (BCA) UCL	0.00132
95% KM (t) UCL	0.00122	95% KM (Percentile Bootstrap) UCL	0.00126
95% KM (z) UCL	0.00121	95% KM Bootstrap t UCL	0.00124
90% KM Chebyshev UCL	0.00138	95% KM Chebyshev UCL	0.00155
97.5% KM Chebyshev UCL	0.00178	99% KM Chebyshev UCL	0.00224

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.265	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.719	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.167	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.295	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	4.079	k star (bias corrected MLE)	2.633
Theta hat (MLE)	4.8693E-4	Theta star (bias corrected MLE)	7.5443E-4
nu hat (MLE)	65.27	nu star (bias corrected)	42.12
Mean (detects)	0.00199		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs
GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)
For such situations, GROS method may yield incorrect values of UCLs and BTVs
This is especially true when the sample size is small.
For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	7.2000E-4	Mean	0.00822

Maximum	0.01	Median	0.01
SD	0.00341	CV	0.415
k hat (MLE)	2.767	k star (bias corrected MLE)	2.555
Theta hat (MLE)	0.00297	Theta star (bias corrected MLE)	0.00322
nu hat (MLE)	199.3	nu star (bias corrected)	184
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (183.99, α)	153.6	Adjusted Chi Square Value (183.99, β)	152.4
95% Gamma Approximate UCL (use when n>=50)	0.00984	95% Gamma Adjusted UCL (use when n<50)	0.00993

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00101	SD (KM)	6.9170E-4
Variance (KM)	4.7845E-7	SE of Mean (KM)	1.2427E-4
k hat (KM)	2.12	k star (KM)	1.962
nu hat (KM)	152.7	nu star (KM)	141.3
theta hat (KM)	4.7501E-4	theta star (KM)	5.1331E-4
80% gamma percentile (KM)	0.00151	90% gamma percentile (KM)	0.00197
95% gamma percentile (KM)	0.0024	99% gamma percentile (KM)	0.00337

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (141.28, α)	114.8	Adjusted Chi Square Value (141.28, β)	113.7
95% Gamma Approximate KM-UCL (use when n>=50)	0.00124	95% Gamma Adjusted KM-UCL (use when n<50)	0.00125

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.938	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.188	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Detected Data appear Lognormal at 5% Significance Level

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	9.4934E-4	Mean in Log Scale	-7.196
SD in Original Scale	7.6220E-4	SD in Log Scale	0.674
95% t UCL (assumes normality of ROS data)	0.00116	95% Percentile Bootstrap UCL	0.00117
95% BCA Bootstrap UCL	0.00122	95% Bootstrap t UCL	0.00125
95% H-UCL (Log ROS)	0.00119		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-7.035	KM Geo Mean	8.8083E-4
KM SD (logged)	0.448	95% Critical H Value (KM-Log)	1.873
KM Standard Error of Mean (logged)	0.0807	95% H-UCL (KM -Log)	0.00112
KM SD (logged)	0.448	95% Critical H Value (KM-Log)	1.873
KM Standard Error of Mean (logged)	0.0807		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	8.0639E-4	Mean in Log Scale	-7.413
SD in Original Scale	8.0946E-4	SD in Log Scale	0.67
95% t UCL (Assumes normality)	0.00103	95% H-Stat UCL	9.5288E-4

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.00122

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ALDRIN

General Statistics

Total Number of Observations	36	Number of Distinct Observations	13
		Number of Missing Observations	4
Number of Detects	9	Number of Non-Detects	27
Number of Distinct Detects	9	Number of Distinct Non-Detects	4
Minimum Detect	3.6000E-4	Minimum Non-Detect	4.2000E-4
Maximum Detect	0.0056	Maximum Non-Detect	0.0017
Variance Detects	2.6788E-6	Percent Non-Detects	75%
Mean Detects	0.0014	SD Detects	0.00164
Median Detects	7.1000E-4	CV Detects	1.171
Skewness Detects	2.621	Kurtosis Detects	7.16
Mean of Logged Detects	-6.935	SD of Logged Detects	0.801

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.613	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.829	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.35	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.274	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	6.2389E-4	KM Standard Error of Mean	1.5803E-4
KM SD	8.9283E-4	95% KM (BCA) UCL	9.9881E-4
95% KM (t) UCL	8.9089E-4	95% KM (Percentile Bootstrap) UCL	9.1600E-4
95% KM (z) UCL	8.8382E-4	95% KM Bootstrap t UCL	0.0015
90% KM Chebyshev UCL	0.0011	95% KM Chebyshev UCL	0.00131
97.5% KM Chebyshev UCL	0.00161	99% KM Chebyshev UCL	0.0022

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.879	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.734	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.281	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.284	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.525	k star (bias corrected MLE)	1.09
Theta hat (MLE)	9.1681E-4	Theta star (bias corrected MLE)	0.00128
nu hat (MLE)	27.44	nu star (bias corrected)	19.63
Mean (detects)	0.0014		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	3.6000E-4	Mean	0.00785
Maximum	0.01	Median	0.01
SD	0.00386	CV	0.491
k hat (MLE)	1.615	k star (bias corrected MLE)	1.499
Theta hat (MLE)	0.00486	Theta star (bias corrected MLE)	0.00524
nu hat (MLE)	116.3	nu star (bias corrected)	107.9
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (107.95, α)	84.97	Adjusted Chi Square Value (107.95, β)	84.04
95% Gamma Approximate UCL (use when n>=50)	0.00997	95% Gamma Adjusted UCL (use when n<50)	0.0101

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	6.2389E-4	SD (KM)	8.9283E-4
Variance (KM)	7.9714E-7	SE of Mean (KM)	1.5803E-4
k hat (KM)	0.488	k star (KM)	0.466
nu hat (KM)	35.16	nu star (KM)	33.56
theta hat (KM)	0.00128	theta star (KM)	0.00134
80% gamma percentile (KM)	0.00102	90% gamma percentile (KM)	0.00171
95% gamma percentile (KM)	0.00246	99% gamma percentile (KM)	0.0043

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (33.56, α)	21.31	Adjusted Chi Square Value (33.56, β)	20.87
95% Gamma Approximate KM-UCL (use when n>=50)	9.8239E-4	95% Gamma Adjusted KM-UCL (use when n<50)	0.001

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.882	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.217	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	5.3509E-4	Mean in Log Scale	-8.1
SD in Original Scale	9.3928E-4	SD in Log Scale	0.965
95% t UCL (assumes normality of ROS data)	7.9959E-4	95% Percentile Bootstrap UCL	8.2856E-4
95% BCA Bootstrap UCL	0.00101	95% Bootstrap t UCL	0.00132
95% H-UCL (Log ROS)	7.0894E-4		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-7.673	KM Geo Mean	4.6521E-4
KM SD (logged)	0.575	95% Critical H Value (KM-Log)	1.967
KM Standard Error of Mean (logged)	0.102	95% H-UCL (KM -Log)	6.6433E-4
KM SD (logged)	0.575	95% Critical H Value (KM-Log)	1.967
KM Standard Error of Mean (logged)	0.102		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	5.4264E-4	Mean in Log Scale	-8.002
SD in Original Scale	9.3964E-4	SD in Log Scale	0.796
95% t UCL (Assumes normality)	8.0724E-4	95% H-Stat UCL	6.1553E-4

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Adjusted Gamma UCL	0.001	95% GROS Adjusted Gamma UCL	0.0101

Warning: Recommended UCL exceeds the maximum observation

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ALPHA-BHC

General Statistics

Total Number of Observations	36	Number of Distinct Observations	11
		Number of Missing Observations	4
Number of Detects	6	Number of Non-Detects	30
Number of Distinct Detects	6	Number of Distinct Non-Detects	5
Minimum Detect	4.6000E-4	Minimum Non-Detect	2.1000E-4
Maximum Detect	0.0014	Maximum Non-Detect	0.0017
Variance Detects	1.2434E-7	Percent Non-Detects	83.33%
Mean Detects	8.3167E-4	SD Detects	3.5261E-4
Median Detects	7.2500E-4	CV Detects	0.424
Skewness Detects	0.906	Kurtosis Detects	-0.226
Mean of Logged Detects	-7.164	SD of Logged Detects	0.41

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.921	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.247	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.325	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	3.2303E-4	KM Standard Error of Mean	5.2684E-5
KM SD	2.7628E-4	95% KM (BCA) UCL	4.0194E-4
95% KM (t) UCL	4.1204E-4	95% KM (Percentile Bootstrap) UCL	4.1118E-4
95% KM (z) UCL	4.0969E-4	95% KM Bootstrap t UCL	4.1076E-4
90% KM Chebyshev UCL	4.8108E-4	95% KM Chebyshev UCL	5.5268E-4
97.5% KM Chebyshev UCL	6.5204E-4	99% KM Chebyshev UCL	8.4723E-4

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.248	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.698	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.211	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.333	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	7.155	k star (bias corrected MLE)	3.689
Theta hat (MLE)	1.1624E-4	Theta star (bias corrected MLE)	2.2547E-4
nu hat (MLE)	85.86	nu star (bias corrected)	44.26
Mean (detects)	8.3167E-4		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	4.6000E-4	Mean	0.00847
Maximum	0.01	Median	0.01
SD	0.00347	CV	0.409
k hat (MLE)	2.07	k star (bias corrected MLE)	1.916
Theta hat (MLE)	0.00409	Theta star (bias corrected MLE)	0.00442
nu hat (MLE)	149	nu star (bias corrected)	138
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (137.96, α)	111.8	Adjusted Chi Square Value (137.96, β)	110.7
95% Gamma Approximate UCL (use when n>=50)	0.0105	95% Gamma Adjusted UCL (use when n<50)	0.0106

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	3.2303E-4	SD (KM)	2.7628E-4
Variance (KM)	7.6330E-8	SE of Mean (KM)	5.2684E-5
k hat (KM)	1.367	k star (KM)	1.272
nu hat (KM)	98.43	nu star (KM)	91.56
theta hat (KM)	2.3629E-4	theta star (KM)	2.5402E-4
80% gamma percentile (KM)	5.0857E-4	90% gamma percentile (KM)	7.0096E-4
95% gamma percentile (KM)	8.8992E-4	99% gamma percentile (KM)	0.00132

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (91.56, α)	70.49	Adjusted Chi Square Value (91.56, β)	69.66
95% Gamma Approximate KM-UCL (use when n>=50)	4.1956E-4	95% Gamma Adjusted KM-UCL (use when n<50)	4.2461E-4

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.97	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.185	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	2.5417E-4	Mean in Log Scale	-8.788
SD in Original Scale	3.0485E-4	SD in Log Scale	1.004
95% t UCL (assumes normality of ROS data)	3.4002E-4	95% Percentile Bootstrap UCL	3.4324E-4
95% BCA Bootstrap UCL	3.7762E-4	95% Bootstrap t UCL	3.7814E-4
95% H-UCL (Log ROS)	3.7876E-4		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-8.231	KM Geo Mean	2.6623E-4
KM SD (logged)	0.528	95% Critical H Value (KM-Log)	1.931
KM Standard Error of Mean (logged)	0.101	95% H-UCL (KM -Log)	3.6361E-4
KM SD (logged)	0.528	95% Critical H Value (KM-Log)	1.931
KM Standard Error of Mean (logged)	0.101		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	3.3736E-4	Mean in Log Scale	-8.324
SD in Original Scale	3.2224E-4	SD in Log Scale	0.771
95% t UCL (Assumes normality)	4.2810E-4	95% H-Stat UCL	4.3184E-4

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 4.12E-04

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ALPHA-CHLORDANE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	13
		Number of Missing Observations	4
Number of Detects	9	Number of Non-Detects	27
Number of Distinct Detects	8	Number of Distinct Non-Detects	5
Minimum Detect	8.8000E-4	Minimum Non-Detect	2.1000E-4
Maximum Detect	0.0039	Maximum Non-Detect	0.0017
Variance Detects	9.5638E-7	Percent Non-Detects	75%
Mean Detects	0.00166	SD Detects	9.7795E-4
Median Detects	0.0012	CV Detects	0.588
Skewness Detects	1.746	Kurtosis Detects	3.07
Mean of Logged Detects	-6.52	SD of Logged Detects	0.496

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.788	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.829	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.238	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.274	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	6.0050E-4	KM Standard Error of Mean	1.4123E-4
KM SD	7.8381E-4	95% KM (BCA) UCL	8.5077E-4
95% KM (t) UCL	8.3911E-4	95% KM (Percentile Bootstrap) UCL	8.3394E-4
95% KM (z) UCL	8.3279E-4	95% KM Bootstrap t UCL	8.9549E-4
90% KM Chebyshev UCL	0.00102	95% KM Chebyshev UCL	0.00122
97.5% KM Chebyshev UCL	0.00148	99% KM Chebyshev UCL	0.00201

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.581	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.724	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.238	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.28	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	4.272	k star (bias corrected MLE)	2.922
Theta hat (MLE)	3.8965E-4	Theta star (bias corrected MLE)	5.6965E-4
nu hat (MLE)	76.89	nu star (bias corrected)	52.59
Mean (detects)	0.00166		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	8.8000E-4	Mean	0.00792
Maximum	0.01	Median	0.01
SD	0.00369	CV	0.466
k hat (MLE)	2.193	k star (bias corrected MLE)	2.029
Theta hat (MLE)	0.00361	Theta star (bias corrected MLE)	0.0039
nu hat (MLE)	157.9	nu star (bias corrected)	146.1
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (146.08, α)	119.1	Adjusted Chi Square Value (146.08, β)	118
95% Gamma Approximate UCL (use when n>=50)	0.00971	95% Gamma Adjusted UCL (use when n<50)	0.0098

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	6.0050E-4	SD (KM)	7.8381E-4
Variance (KM)	6.1436E-7	SE of Mean (KM)	1.4123E-4
k hat (KM)	0.587	k star (KM)	0.557
nu hat (KM)	42.26	nu star (KM)	40.07
theta hat (KM)	0.00102	theta star (KM)	0.00108
80% gamma percentile (KM)	9.8932E-4	90% gamma percentile (KM)	0.00159
95% gamma percentile (KM)	0.00222	99% gamma percentile (KM)	0.00376

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (40.07, α)	26.57	Adjusted Chi Square Value (40.07, β)	26.07
95% Gamma Approximate KM-UCL (use when n>=50)	9.0571E-4	95% Gamma Adjusted KM-UCL (use when n<50)	9.2309E-4

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.89	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.216	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	6.6569E-4	Mean in Log Scale	-7.753
SD in Original Scale	7.6490E-4	SD in Log Scale	0.915
95% t UCL (assumes normality of ROS data)	8.8109E-4	95% Percentile Bootstrap UCL	8.7677E-4
95% BCA Bootstrap UCL	9.5307E-4	95% Bootstrap t UCL	0.00101
95% H-UCL (Log ROS)	9.2996E-4		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-7.932	KM Geo Mean	3.5904E-4
KM SD (logged)	0.893	95% Critical H Value (KM-Log)	2.266
KM Standard Error of Mean (logged)	0.165	95% H-UCL (KM -Log)	7.5361E-4
KM SD (logged)	0.893	95% Critical H Value (KM-Log)	2.266
KM Standard Error of Mean (logged)	0.165		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	6.3278E-4	Mean in Log Scale	-7.977
SD in Original Scale	7.9914E-4	SD in Log Scale	1.094
95% t UCL (Assumes normality)	8.5781E-4	95% H-Stat UCL	9.8919E-4

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 8.39E-04

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

DELTA-BHC

General Statistics

Total Number of Observations	35	Number of Distinct Observations	12
		Number of Missing Observations	5
Number of Detects	7	Number of Non-Detects	28
Number of Distinct Detects	7	Number of Distinct Non-Detects	5
Minimum Detect	0.001	Minimum Non-Detect	4.2000E-4
Maximum Detect	0.0026	Maximum Non-Detect	0.0022
Variance Detects	3.8952E-7	Percent Non-Detects	80%
Mean Detects	0.00174	SD Detects	6.2412E-4
Median Detects	0.0018	CV Detects	0.358
Skewness Detects	0.0825	Kurtosis Detects	-1.813
Mean of Logged Detects	-6.411	SD of Logged Detects	0.377

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.928	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.19	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.304	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	7.0183E-4	KM Standard Error of Mean	1.1069E-4
KM SD	5.9349E-4	95% KM (BCA) UCL	8.8416E-4
95% KM (t) UCL	8.8899E-4	95% KM (Percentile Bootstrap) UCL	8.8581E-4
95% KM (z) UCL	8.8389E-4	95% KM Bootstrap t UCL	8.6340E-4
90% KM Chebyshev UCL	0.00103	95% KM Chebyshev UCL	0.00118
97.5% KM Chebyshev UCL	0.00139	99% KM Chebyshev UCL	0.0018

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.333	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.709	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.188	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.312	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	8.641	k star (bias corrected MLE)	5.033
Theta hat (MLE)	2.0170E-4	Theta star (bias corrected MLE)	3.4630E-4
nu hat (MLE)	121	nu star (bias corrected)	70.46
Mean (detects)	0.00174		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.001	Mean	0.00835
Maximum	0.01	Median	0.01
SD	0.00336	CV	0.403
k hat (MLE)	2.923	k star (bias corrected MLE)	2.691
Theta hat (MLE)	0.00286	Theta star (bias corrected MLE)	0.0031
nu hat (MLE)	204.6	nu star (bias corrected)	188.4
Adjusted Level of Significance (β)	0.0425		
Approximate Chi Square Value (188.39, α)	157.6	Adjusted Chi Square Value (188.39, β)	156.3
95% Gamma Approximate UCL (use when n>=50)	0.00998	95% Gamma Adjusted UCL (use when n<50)	0.0101

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	7.0183E-4	SD (KM)	5.9349E-4
Variance (KM)	3.5224E-7	SE of Mean (KM)	1.1069E-4
k hat (KM)	1.398	k star (KM)	1.298
nu hat (KM)	97.89	nu star (KM)	90.83
theta hat (KM)	5.0189E-4	theta star (KM)	5.4088E-4
80% gamma percentile (KM)	0.0011	90% gamma percentile (KM)	0.00152
95% gamma percentile (KM)	0.00192	99% gamma percentile (KM)	0.00284

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (90.83, α)	69.85	Adjusted Chi Square Value (90.83, β)	68.98
95% Gamma Approximate KM-UCL (use when n>=50)	9.1257E-4	95% Gamma Adjusted KM-UCL (use when n<50)	9.2411E-4

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.919	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.171	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.304	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	7.3309E-4	Mean in Log Scale	-7.479
SD in Original Scale	6.0597E-4	SD in Log Scale	0.712
95% t UCL (assumes normality of ROS data)	9.0628E-4	95% Percentile Bootstrap UCL	9.0948E-4
95% BCA Bootstrap UCL	9.2809E-4	95% Bootstrap t UCL	9.6628E-4
95% H-UCL (Log ROS)	9.4438E-4		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-7.48	KM Geo Mean	5.6447E-4
KM SD (logged)	0.577	95% Critical H Value (KM-Log)	2.007
KM Standard Error of Mean (logged)	0.109	95% H-UCL (KM -Log)	8.1353E-4
KM SD (logged)	0.577	95% Critical H Value (KM-Log)	2.007
KM Standard Error of Mean (logged)	0.109		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	6.3329E-4	Mean in Log Scale	-7.806
SD in Original Scale	6.7066E-4	SD in Log Scale	0.899
95% t UCL (Assumes normality)	8.2497E-4	95% H-Stat UCL	8.7485E-4

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 8.89E-04

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ENDOSULFAN I

General Statistics

Total Number of Observations	36	Number of Distinct Observations	11
		Number of Missing Observations	4
Number of Detects	6	Number of Non-Detects	30
Number of Distinct Detects	6	Number of Distinct Non-Detects	5
Minimum Detect	5.1000E-4	Minimum Non-Detect	2.1000E-4
Maximum Detect	0.0014	Maximum Non-Detect	0.0017
Variance Detects	1.0946E-7	Percent Non-Detects	83.33%
Mean Detects	8.8833E-4	SD Detects	3.3084E-4
Median Detects	8.7000E-4	CV Detects	0.372
Skewness Detects	0.496	Kurtosis Detects	-0.403
Mean of Logged Detects	-7.085	SD of Logged Detects	0.381

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.957	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.158	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.325	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	3.3333E-4	KM Standard Error of Mean	5.5607E-5
KM SD	2.9161E-4	95% KM (BCA) UCL	4.2200E-4
95% KM (t) UCL	4.2729E-4	95% KM (Percentile Bootstrap) UCL	4.2176E-4
95% KM (z) UCL	4.2480E-4	95% KM Bootstrap t UCL	4.0936E-4
90% KM Chebyshev UCL	5.0015E-4	95% KM Chebyshev UCL	5.7572E-4
97.5% KM Chebyshev UCL	6.8060E-4	99% KM Chebyshev UCL	8.8662E-4

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.217	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.698	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.186	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.333	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	8.601	k star (bias corrected MLE)	4.412
Theta hat (MLE)	1.0328E-4	Theta star (bias corrected MLE)	2.0137E-4
nu hat (MLE)	103.2	nu star (bias corrected)	52.94
Mean (detects)	8.8833E-4		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	5.1000E-4	Mean	0.00848
Maximum	0.01	Median	0.01
SD	0.00345	CV	0.406
k hat (MLE)	2.163	k star (bias corrected MLE)	2.001
Theta hat (MLE)	0.00392	Theta star (bias corrected MLE)	0.00424
nu hat (MLE)	155.7	nu star (bias corrected)	144.1
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (144.07, α)	117.3	Adjusted Chi Square Value (144.07, β)	116.2
95% Gamma Approximate UCL (use when n>=50)	0.0104	95% Gamma Adjusted UCL (use when n<50)	0.0105

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	3.3333E-4	SD (KM)	2.9161E-4
Variance (KM)	8.5034E-8	SE of Mean (KM)	5.5607E-5
k hat (KM)	1.307	k star (KM)	1.216
nu hat (KM)	94.08	nu star (KM)	87.57
theta hat (KM)	2.5510E-4	theta star (KM)	2.7406E-4
80% gamma percentile (KM)	5.2711E-4	90% gamma percentile (KM)	7.3130E-4
95% gamma percentile (KM)	9.3249E-4	99% gamma percentile (KM)	0.00139

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (87.57, α)	67	Adjusted Chi Square Value (87.57, β)	66.18
95% Gamma Approximate KM-UCL (use when n>=50)	4.3569E-4	95% Gamma Adjusted KM-UCL (use when n<50)	4.4107E-4

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.962	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.17	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	2.9174E-4	Mean in Log Scale	-8.563
SD in Original Scale	3.1216E-4	SD in Log Scale	0.914
95% t UCL (assumes normality of ROS data)	3.7964E-4	95% Percentile Bootstrap UCL	3.8034E-4
95% BCA Bootstrap UCL	3.9472E-4	95% Bootstrap t UCL	4.1630E-4
95% H-UCL (Log ROS)	4.1299E-4		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-8.217	KM Geo Mean	2.7004E-4
KM SD (logged)	0.554	95% Critical H Value (KM-Log)	1.951
KM Standard Error of Mean (logged)	0.106	95% H-UCL (KM -Log)	3.7779E-4
KM SD (logged)	0.554	95% Critical H Value (KM-Log)	1.951
KM Standard Error of Mean (logged)	0.106		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	3.4542E-4	Mean in Log Scale	-8.313
SD in Original Scale	3.3227E-4	SD in Log Scale	0.787
95% t UCL (Assumes normality)	4.3898E-4	95% H-Stat UCL	4.4556E-4

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 4.27E-04

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

HEPTACHLOR EPOXIDE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	10
		Number of Missing Observations	4
Number of Detects	7	Number of Non-Detects	29
Number of Distinct Detects	6	Number of Distinct Non-Detects	4
Minimum Detect	5.1000E-4	Minimum Non-Detect	4.2000E-4
Maximum Detect	0.0029	Maximum Non-Detect	0.0017
Variance Detects	6.1108E-7	Percent Non-Detects	80.56%
Mean Detects	0.00128	SD Detects	7.8172E-4
Median Detects	0.0012	CV Detects	0.611
Skewness Detects	1.73	Kurtosis Detects	3.883
Mean of Logged Detects	-6.801	SD of Logged Detects	0.561

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.805	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.346	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.304	Detected Data Not Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	5.9960E-4	KM Standard Error of Mean	8.6657E-5
KM SD	4.7172E-4	95% KM (BCA) UCL	7.5493E-4
95% KM (t) UCL	7.4601E-4	95% KM (Percentile Bootstrap) UCL	7.4190E-4
95% KM (z) UCL	7.4213E-4	95% KM Bootstrap t UCL	8.0240E-4
90% KM Chebyshev UCL	8.5957E-4	95% KM Chebyshev UCL	9.7733E-4
97.5% KM Chebyshev UCL	0.00114	99% KM Chebyshev UCL	0.00146

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.442	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.71	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.276	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.313	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	3.757	k star (bias corrected MLE)	2.242
Theta hat (MLE)	3.4036E-4	Theta star (bias corrected MLE)	5.7033E-4
nu hat (MLE)	52.59	nu star (bias corrected)	31.39
Mean (detects)	0.00128		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	5.1000E-4	Mean	0.0083
Maximum	0.01	Median	0.01
SD	0.00352	CV	0.423
k hat (MLE)	2.226	k star (bias corrected MLE)	2.059
Theta hat (MLE)	0.00373	Theta star (bias corrected MLE)	0.00403
nu hat (MLE)	160.3	nu star (bias corrected)	148.2
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (148.24, α)	121.1	Adjusted Chi Square Value (148.24, β)	120
95% Gamma Approximate UCL (use when n>=50)	0.0102	95% Gamma Adjusted UCL (use when n<50)	0.0103

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	5.9960E-4	SD (KM)	4.7172E-4
Variance (KM)	2.2252E-7	SE of Mean (KM)	8.6657E-5
k hat (KM)	1.616	k star (KM)	1.5
nu hat (KM)	116.3	nu star (KM)	108
theta hat (KM)	3.7111E-4	theta star (KM)	3.9985E-4
80% gamma percentile (KM)	9.2773E-4	90% gamma percentile (KM)	0.00125
95% gamma percentile (KM)	0.00156	99% gamma percentile (KM)	0.00227

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (107.97, α)	84.99	Adjusted Chi Square Value (107.97, β)	84.06
95% Gamma Approximate KM-UCL (use when n>=50)	7.6174E-4	95% Gamma Adjusted KM-UCL (use when n<50)	7.7012E-4

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.926	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.248	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.304	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	4.1400E-4	Mean in Log Scale	-8.348
SD in Original Scale	5.5128E-4	SD in Log Scale	1.041
95% t UCL (assumes normality of ROS data)	5.6924E-4	95% Percentile Bootstrap UCL	5.7561E-4
95% BCA Bootstrap UCL	6.1691E-4	95% Bootstrap t UCL	6.8920E-4
95% H-UCL (Log ROS)	6.2427E-4		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-7.568	KM Geo Mean	5.1657E-4
KM SD (logged)	0.46	95% Critical H Value (KM-Log)	1.881
KM Standard Error of Mean (logged)	0.0859	95% H-UCL (KM -Log)	6.6450E-4
KM SD (logged)	0.46	95% Critical H Value (KM-Log)	1.881
KM Standard Error of Mean (logged)	0.0859		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	4.8736E-4	Mean in Log Scale	-7.986
SD in Original Scale	5.4525E-4	SD in Log Scale	0.765
95% t UCL (Assumes normality)	6.4090E-4	95% H-Stat UCL	6.0056E-4

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 7.46E-04

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

TRANS-CHLORDANE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	13
		Number of Missing Observations	4
Number of Detects	9	Number of Non-Detects	27
Number of Distinct Detects	9	Number of Distinct Non-Detects	4
Minimum Detect	8.3000E-4	Minimum Non-Detect	4.2000E-4
Maximum Detect	0.0073	Maximum Non-Detect	0.0017
Variance Detects	8.3918E-6	Percent Non-Detects	75%
Mean Detects	0.00384	SD Detects	0.0029
Median Detects	0.0047	CV Detects	0.755
Skewness Detects	-0.002	Kurtosis Detects	-2.234
Mean of Logged Detects	-5.948	SD of Logged Detects	1.016

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.806	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.829	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.272	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.274	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00128	KM Standard Error of Mean	3.5592E-4
KM SD	0.00201	95% KM (BCA) UCL	0.00189
95% KM (t) UCL	0.00188	95% KM (Percentile Bootstrap) UCL	0.00187
95% KM (z) UCL	0.00186	95% KM Bootstrap t UCL	0.00199
90% KM Chebyshev UCL	0.00235	95% KM Chebyshev UCL	0.00283
97.5% KM Chebyshev UCL	0.0035	99% KM Chebyshev UCL	0.00482

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.976	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.735	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.272	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.284	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.441	k star (bias corrected MLE)	1.035
Theta hat (MLE)	0.00266	Theta star (bias corrected MLE)	0.00371
nu hat (MLE)	25.95	nu star (bias corrected)	18.63
Mean (detects)	0.00384		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	8.3000E-4	Mean	0.00846
Maximum	0.01	Median	0.01
SD	0.00304	CV	0.359
k hat (MLE)	3.126	k star (bias corrected MLE)	2.884
Theta hat (MLE)	0.00271	Theta star (bias corrected MLE)	0.00293
nu hat (MLE)	225	nu star (bias corrected)	207.6
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (207.62, α)	175.3	Adjusted Chi Square Value (207.62, β)	173.9
95% Gamma Approximate UCL (use when n>=50)	0.01	95% Gamma Adjusted UCL (use when n<50)	0.0101

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00128	SD (KM)	0.00201
Variance (KM)	4.0520E-6	SE of Mean (KM)	3.5592E-4
k hat (KM)	0.403	k star (KM)	0.388
nu hat (KM)	29.04	nu star (KM)	27.96
theta hat (KM)	0.00317	theta star (KM)	0.00329
80% gamma percentile (KM)	0.00206	90% gamma percentile (KM)	0.00363
95% gamma percentile (KM)	0.00537	99% gamma percentile (KM)	0.00975

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (27.96, α)	16.89	Adjusted Chi Square Value (27.96, β)	16.5
95% Gamma Approximate KM-UCL (use when n>=50)	0.00212	95% Gamma Adjusted KM-UCL (use when n<50)	0.00217

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.766	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.274	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00107	Mean in Log Scale	-8.549
SD in Original Scale	0.00213	SD in Log Scale	1.949
95% t UCL (assumes normality of ROS data)	0.00167	95% Percentile Bootstrap UCL	0.0017
95% BCA Bootstrap UCL	0.00176	95% Bootstrap t UCL	0.00192
95% H-UCL (Log ROS)	0.00429		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-7.313	KM Geo Mean	6.6713E-4
KM SD (logged)	0.925	95% Critical H Value (KM-Log)	2.299
KM Standard Error of Mean (logged)	0.164	95% H-UCL (KM -Log)	0.00147
KM SD (logged)	0.925	95% Critical H Value (KM-Log)	2.299
KM Standard Error of Mean (logged)	0.164		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.00115	Mean in Log Scale	-7.755
SD in Original Scale	0.0021	SD in Log Scale	1.206
95% t UCL (Assumes normality)	0.00174	95% H-Stat UCL	0.00151

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.00188

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

2-METHYLNAPHTHALENE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	19
		Number of Missing Observations	4
Number of Detects	18	Number of Non-Detects	18
Number of Distinct Detects	16	Number of Distinct Non-Detects	3
Minimum Detect	0.0041	Minimum Non-Detect	0.0033
Maximum Detect	0.037	Maximum Non-Detect	0.0066
Variance Detects	1.4926E-4	Percent Non-Detects	50%
Mean Detects	0.0161	SD Detects	0.0122
Median Detects	0.011	CV Detects	0.759
Skewness Detects	0.815	Kurtosis Detects	-0.998
Mean of Logged Detects	-4.411	SD of Logged Detects	0.781

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.823	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.897	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.242	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.202	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00979	KM Standard Error of Mean	0.0018
KM SD	0.0105	95% KM (BCA) UCL	0.0125
95% KM (t) UCL	0.0128	95% KM (Percentile Bootstrap) UCL	0.0127
95% KM (z) UCL	0.0128	95% KM Bootstrap t UCL	0.0135
90% KM Chebyshev UCL	0.0152	95% KM Chebyshev UCL	0.0176
97.5% KM Chebyshev UCL	0.021	99% KM Chebyshev UCL	0.0277

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.71	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.753	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.167	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.206	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	1.924	k star (bias corrected MLE)	1.641
Theta hat (MLE)	0.00836	Theta star (bias corrected MLE)	0.00981
nu hat (MLE)	69.27	nu star (bias corrected)	59.06
Mean (detects)	0.0161		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0041	Mean	0.013
Maximum	0.037	Median	0.01
SD	0.00906	CV	0.694
k hat (MLE)	3.117	k star (bias corrected MLE)	2.876
Theta hat (MLE)	0.00419	Theta star (bias corrected MLE)	0.00454
nu hat (MLE)	224.4	nu star (bias corrected)	207
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (207.04, α)	174.7	Adjusted Chi Square Value (207.04, β)	173.4
95% Gamma Approximate UCL (use when n>=50)	0.0155	95% Gamma Adjusted UCL (use when n<50)	0.0156

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00979	SD (KM)	0.0105
Variance (KM)	1.1026E-4	SE of Mean (KM)	0.0018
k hat (KM)	0.869	k star (KM)	0.815
nu hat (KM)	62.59	nu star (KM)	58.71
theta hat (KM)	0.0113	theta star (KM)	0.012
80% gamma percentile (KM)	0.016	90% gamma percentile (KM)	0.0237
95% gamma percentile (KM)	0.0315	99% gamma percentile (KM)	0.05

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (58.71, α)	42.09	Adjusted Chi Square Value (58.71, β)	41.45
95% Gamma Approximate KM-UCL (use when n>=50)	0.0137	95% Gamma Adjusted KM-UCL (use when n<50)	0.0139

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.913	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.897	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.145	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.202	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00908	Mean in Log Scale	-5.391
SD in Original Scale	0.0111	SD in Log Scale	1.223
95% t UCL (assumes normality of ROS data)	0.0122	95% Percentile Bootstrap UCL	0.0123
95% BCA Bootstrap UCL	0.0128	95% Bootstrap t UCL	0.013
95% H-UCL (Log ROS)	0.0167		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.038	KM Geo Mean	0.00649
KM SD (logged)	0.83	95% Critical H Value (KM-Log)	2.2
KM Standard Error of Mean (logged)	0.143	95% H-UCL (KM -Log)	0.0125
KM SD (logged)	0.83	95% Critical H Value (KM-Log)	2.2
KM Standard Error of Mean (logged)	0.143		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.00928	Mean in Log Scale	-5.236
SD in Original Scale	0.011	SD in Log Scale	1.028
95% t UCL (Assumes normality)	0.0124	95% H-Stat UCL	0.0137

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Adjusted Gamma UCL	0.0139	95% GROS Adjusted Gamma UCL	0.0156

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ACENAPHTHENE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	19
		Number of Missing Observations	4
Number of Detects	17	Number of Non-Detects	19
Number of Distinct Detects	17	Number of Distinct Non-Detects	3
Minimum Detect	0.0036	Minimum Non-Detect	0.0033
Maximum Detect	0.032	Maximum Non-Detect	0.0066
Variance Detects	7.8224E-5	Percent Non-Detects	52.78%
Mean Detects	0.0128	SD Detects	0.00884
Median Detects	0.011	CV Detects	0.694
Skewness Detects	0.847	Kurtosis Detects	-0.349
Mean of Logged Detects	-4.596	SD of Logged Detects	0.715

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.878	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.892	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.227	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.207	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00801	KM Standard Error of Mean	0.00128
KM SD	0.00744	95% KM (BCA) UCL	0.0102
95% KM (t) UCL	0.0102	95% KM (Percentile Bootstrap) UCL	0.0101
95% KM (z) UCL	0.0101	95% KM Bootstrap t UCL	0.0108
90% KM Chebyshev UCL	0.0119	95% KM Chebyshev UCL	0.0136
97.5% KM Chebyshev UCL	0.016	99% KM Chebyshev UCL	0.0208

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.613	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.748	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.218	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.211	Detected Data Not Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.286	k star (bias corrected MLE)	1.922
Theta hat (MLE)	0.00558	Theta star (bias corrected MLE)	0.00664
nu hat (MLE)	77.73	nu star (bias corrected)	65.35
Mean (detects)	0.0128		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0036	Mean	0.0113
Maximum	0.032	Median	0.01
SD	0.00614	CV	0.543
k hat (MLE)	4.395	k star (bias corrected MLE)	4.047
Theta hat (MLE)	0.00257	Theta star (bias corrected MLE)	0.00279
nu hat (MLE)	316.4	nu star (bias corrected)	291.4
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (291.41, α)	252.9	Adjusted Chi Square Value (291.41, β)	251.2
95% Gamma Approximate UCL (use when n>=50)	0.013	95% Gamma Adjusted UCL (use when n<50)	0.0131

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00801	SD (KM)	0.00744
Variance (KM)	5.5300E-5	SE of Mean (KM)	0.00128
k hat (KM)	1.16	k star (KM)	1.082
nu hat (KM)	83.54	nu star (KM)	77.91
theta hat (KM)	0.0069	theta star (KM)	0.0074
80% gamma percentile (KM)	0.0128	90% gamma percentile (KM)	0.0181
95% gamma percentile (KM)	0.0233	99% gamma percentile (KM)	0.0355

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (77.91, α)	58.58	Adjusted Chi Square Value (77.91, β)	57.82
95% Gamma Approximate KM-UCL (use when n>=50)	0.0107	95% Gamma Adjusted KM-UCL (use when n<50)	0.0108

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.921	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.892	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.194	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.207	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00739	Mean in Log Scale	-5.414
SD in Original Scale	0.00798	SD in Log Scale	1.029
95% t UCL (assumes normality of ROS data)	0.00963	95% Percentile Bootstrap UCL	0.00967
95% BCA Bootstrap UCL	0.0101	95% Bootstrap t UCL	0.0103
95% H-UCL (Log ROS)	0.0115		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.128	KM Geo Mean	0.00593
KM SD (logged)	0.708	95% Critical H Value (KM-Log)	2.083
KM Standard Error of Mean (logged)	0.125	95% H-UCL (KM -Log)	0.00977
KM SD (logged)	0.708	95% Critical H Value (KM-Log)	2.083
KM Standard Error of Mean (logged)	0.125		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.00739	Mean in Log Scale	-5.341
SD in Original Scale	0.00791	SD in Log Scale	0.898
95% t UCL (Assumes normality)	0.00962	95% H-Stat UCL	0.0101

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Adjusted Gamma UCL	0.0108	95% GROS Adjusted Gamma UCL	0.0131

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ACENAPHTHYLENE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	12
		Number of Missing Observations	4
Number of Detects	9	Number of Non-Detects	27
Number of Distinct Detects	8	Number of Distinct Non-Detects	4
Minimum Detect	0.004	Minimum Non-Detect	0.0033
Maximum Detect	0.015	Maximum Non-Detect	0.0067
Variance Detects	1.1418E-5	Percent Non-Detects	75%
Mean Detects	0.00634	SD Detects	0.00338
Median Detects	0.0056	CV Detects	0.533
Skewness Detects	2.573	Kurtosis Detects	7.094
Mean of Logged Detects	-5.145	SD of Logged Detects	0.396

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.65	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.829	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.318	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.274	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00424	KM Standard Error of Mean	3.8506E-4
KM SD	0.00208	95% KM (BCA) UCL	0.00493
95% KM (t) UCL	0.00489	95% KM (Percentile Bootstrap) UCL	0.00488
95% KM (z) UCL	0.00488	95% KM Bootstrap t UCL	0.00541
90% KM Chebyshev UCL	0.0054	95% KM Chebyshev UCL	0.00592
97.5% KM Chebyshev UCL	0.00665	99% KM Chebyshev UCL	0.00807

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.941	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.723	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.278	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.28	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	6.069	k star (bias corrected MLE)	4.12
Theta hat (MLE)	0.00105	Theta star (bias corrected MLE)	0.00154
nu hat (MLE)	109.2	nu star (bias corrected)	74.16
Mean (detects)	0.00634		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.004	Mean	0.00909
Maximum	0.015	Median	0.01
SD	0.00228	CV	0.251
k hat (MLE)	12.96	k star (bias corrected MLE)	11.9
Theta hat (MLE)	7.0105E-4	Theta star (bias corrected MLE)	7.6360E-4
nu hat (MLE)	933.2	nu star (bias corrected)	856.7
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (856.74, α)	789.8	Adjusted Chi Square Value (856.74, β)	786.9
95% Gamma Approximate UCL (use when n>=50)	0.00986	95% Gamma Adjusted UCL (use when n<50)	0.00989

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00424	SD (KM)	0.00208
Variance (KM)	4.3317E-6	SE of Mean (KM)	3.8506E-4
k hat (KM)	4.156	k star (KM)	3.828
nu hat (KM)	299.2	nu star (KM)	275.6
theta hat (KM)	0.00102	theta star (KM)	0.00111
80% gamma percentile (KM)	0.00588	90% gamma percentile (KM)	0.00715
95% gamma percentile (KM)	0.00832	99% gamma percentile (KM)	0.0108

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (275.63, α)	238.2	Adjusted Chi Square Value (275.63, β)	236.6
95% Gamma Approximate KM-UCL (use when n>=50)	0.00491	95% Gamma Adjusted KM-UCL (use when n<50)	0.00494

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.803	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.829	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.249	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.274	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Approximate Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00343	Mean in Log Scale	-5.862
SD in Original Scale	0.00253	SD in Log Scale	0.596
95% t UCL (assumes normality of ROS data)	0.00414	95% Percentile Bootstrap UCL	0.00416
95% BCA Bootstrap UCL	0.00437	95% Bootstrap t UCL	0.00447
95% H-UCL (Log ROS)	0.00415		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.528	KM Geo Mean	0.00397
KM SD (logged)	0.318	95% Critical H Value (KM-Log)	1.793
KM Standard Error of Mean (logged)	0.0621	95% H-UCL (KM -Log)	0.0046
KM SD (logged)	0.318	95% Critical H Value (KM-Log)	1.793
KM Standard Error of Mean (logged)	0.0621		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.00337	Mean in Log Scale	-5.861
SD in Original Scale	0.00248	SD in Log Scale	0.55
95% t UCL (Assumes normality)	0.00407	95% H-Stat UCL	0.00397

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Adjusted Gamma UCL	0.00494	95% GROS Adjusted Gamma UCL	0.00989

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ANTHRACENE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	9
		Number of Missing Observations	4
Number of Detects	7	Number of Non-Detects	29
Number of Distinct Detects	7	Number of Distinct Non-Detects	3
Minimum Detect	0.003	Minimum Non-Detect	0.0033
Maximum Detect	0.021	Maximum Non-Detect	0.0066
Variance Detects	3.8340E-5	Percent Non-Detects	80.56%
Mean Detects	0.00726	SD Detects	0.00619
Median Detects	0.0057	CV Detects	0.853
Skewness Detects	2.41	Kurtosis Detects	6.097
Mean of Logged Detects	-5.131	SD of Logged Detects	0.626

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.651	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.803	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.406	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.304	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00399	KM Standard Error of Mean	5.6680E-4
KM SD	0.00306	95% KM (BCA) UCL	0.00534
95% KM (t) UCL	0.00495	95% KM (Percentile Bootstrap) UCL	0.00501
95% KM (z) UCL	0.00492	95% KM Bootstrap t UCL	0.00585
90% KM Chebyshev UCL	0.00569	95% KM Chebyshev UCL	0.00646
97.5% KM Chebyshev UCL	0.00753	99% KM Chebyshev UCL	0.00963

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.763	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.713	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.343	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.314	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.591	k star (bias corrected MLE)	1.576
Theta hat (MLE)	0.0028	Theta star (bias corrected MLE)	0.0046
nu hat (MLE)	36.28	nu star (bias corrected)	22.06
Mean (detects)	0.00726		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.003	Mean	0.00947
Maximum	0.021	Median	0.01
SD	0.00279	CV	0.295
k hat (MLE)	10.71	k star (bias corrected MLE)	9.832
Theta hat (MLE)	8.8425E-4	Theta star (bias corrected MLE)	9.6282E-4
nu hat (MLE)	770.8	nu star (bias corrected)	707.9
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (707.92, α)	647.2	Adjusted Chi Square Value (707.92, β)	644.6
95% Gamma Approximate UCL (use when n>=50)	0.0104	95% Gamma Adjusted UCL (use when n<50)	0.0104

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00399	SD (KM)	0.00306
Variance (KM)	9.3758E-6	SE of Mean (KM)	5.6680E-4
k hat (KM)	1.696	k star (KM)	1.574
nu hat (KM)	122.1	nu star (KM)	113.3
theta hat (KM)	0.00235	theta star (KM)	0.00253
80% gamma percentile (KM)	0.00614	90% gamma percentile (KM)	0.00821
95% gamma percentile (KM)	0.0102	99% gamma percentile (KM)	0.0147

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (113.30, α)	89.73	Adjusted Chi Square Value (113.30, β)	88.78
95% Gamma Approximate KM-UCL (use when n>=50)	0.00504	95% Gamma Adjusted KM-UCL (use when n<50)	0.00509

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.854	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.803	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.297	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.304	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00347	Mean in Log Scale	-5.899
SD in Original Scale	0.00338	SD in Log Scale	0.641
95% t UCL (assumes normality of ROS data)	0.00442	95% Percentile Bootstrap UCL	0.00445
95% BCA Bootstrap UCL	0.00484	95% Bootstrap t UCL	0.00532
95% H-UCL (Log ROS)	0.00419		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.639	KM Geo Mean	0.00356
KM SD (logged)	0.387	95% Critical H Value (KM-Log)	1.833
KM Standard Error of Mean (logged)	0.0762	95% H-UCL (KM -Log)	0.00432
KM SD (logged)	0.387	95% Critical H Value (KM-Log)	1.833
KM Standard Error of Mean (logged)	0.0762		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.00329	Mean in Log Scale	-5.929
SD in Original Scale	0.00332	SD in Log Scale	0.567
95% t UCL (Assumes normality)	0.00422	95% H-Stat UCL	0.00377

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Lognormal Distributed at 5% Significance Level

Suggested UCL to Use

KM H-UCL 0.00432

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

BENZO[K]FLUORANTHENE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	9
		Number of Missing Observations	4
Number of Detects	6	Number of Non-Detects	30
Number of Distinct Detects	6	Number of Distinct Non-Detects	3
Minimum Detect	0.0027	Minimum Non-Detect	0.0033
Maximum Detect	0.016	Maximum Non-Detect	0.0066
Variance Detects	2.7111E-5	Percent Non-Detects	83.33%
Mean Detects	0.00543	SD Detects	0.00521
Median Detects	0.00335	CV Detects	0.958
Skewness Detects	2.387	Kurtosis Detects	5.754
Mean of Logged Detects	-5.457	SD of Logged Detects	0.667

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.594	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.788	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.419	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.325	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00338	KM Standard Error of Mean	4.1156E-4
KM SD	0.00216	95% KM (BCA) UCL	0.00419
95% KM (t) UCL	0.00407	95% KM (Percentile Bootstrap) UCL	0.00412
95% KM (z) UCL	0.00405	95% KM Bootstrap t UCL	0.00539
90% KM Chebyshev UCL	0.00461	95% KM Chebyshev UCL	0.00517
97.5% KM Chebyshev UCL	0.00595	99% KM Chebyshev UCL	0.00747

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.061	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.704	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.376	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.336	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.221	k star (bias corrected MLE)	1.222
Theta hat (MLE)	0.00245	Theta star (bias corrected MLE)	0.00445
nu hat (MLE)	26.65	nu star (bias corrected)	14.66
Mean (detects)	0.00543		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0027	Mean	0.00924
Maximum	0.016	Median	0.01
SD	0.00262	CV	0.283
k hat (MLE)	8.126	k star (bias corrected MLE)	7.467
Theta hat (MLE)	0.00114	Theta star (bias corrected MLE)	0.00124
nu hat (MLE)	585.1	nu star (bias corrected)	537.6
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (537.63, α)	484.9	Adjusted Chi Square Value (537.63, β)	482.6
95% Gamma Approximate UCL (use when n>=50)	0.0102	95% Gamma Adjusted UCL (use when n<50)	0.0103

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00338	SD (KM)	0.00216
Variance (KM)	4.6750E-6	SE of Mean (KM)	4.1156E-4
k hat (KM)	2.441	k star (KM)	2.256
nu hat (KM)	175.7	nu star (KM)	162.4
theta hat (KM)	0.00138	theta star (KM)	0.0015
80% gamma percentile (KM)	0.00499	90% gamma percentile (KM)	0.00639
95% gamma percentile (KM)	0.00772	99% gamma percentile (KM)	0.0106

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (162.43, α)	134	Adjusted Chi Square Value (162.43, β)	132.8
95% Gamma Approximate KM-UCL (use when n>=50)	0.0041	95% Gamma Adjusted KM-UCL (use when n<50)	0.00413

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.716	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.788	Detected Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.329	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.325	Detected Data Not Lognormal at 5% Significance Level	

Detected Data Not Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00337	Mean in Log Scale	-5.807
SD in Original Scale	0.00235	SD in Log Scale	0.429
95% t UCL (assumes normality of ROS data)	0.00404	95% Percentile Bootstrap UCL	0.00405
95% BCA Bootstrap UCL	0.00445	95% Bootstrap t UCL	0.00481
95% H-UCL (Log ROS)	0.00378		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.763	KM Geo Mean	0.00314
KM SD (logged)	0.295	95% Critical H Value (KM-Log)	1.78
KM Standard Error of Mean (logged)	0.0664	95% H-UCL (KM -Log)	0.00359
KM SD (logged)	0.295	95% Critical H Value (KM-Log)	1.78
KM Standard Error of Mean (logged)	0.0664		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.00283	Mean in Log Scale	-6.018
SD in Original Scale	0.00241	SD in Log Scale	0.476
95% t UCL (Assumes normality)	0.00351	95% H-Stat UCL	0.00317

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution at 5% Significance Level

Suggested UCL to Use

95% KM (Chebyshev) UCL 0.00517

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

BIS(2-ETHYLHEXYL)PHTHALATE

General Statistics

Total Number of Observations	35	Number of Distinct Observations	13
		Number of Missing Observations	5
Number of Detects	11	Number of Non-Detects	24
Number of Distinct Detects	10	Number of Distinct Non-Detects	6
Minimum Detect	0.057	Minimum Non-Detect	0.066
Maximum Detect	0.62	Maximum Non-Detect	0.68
Variance Detects	0.031	Percent Non-Detects	68.57%
Mean Detects	0.222	SD Detects	0.176
Median Detects	0.16	CV Detects	0.794
Skewness Detects	1.511	Kurtosis Detects	1.48
Mean of Logged Detects	-1.749	SD of Logged Detects	0.707

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.793	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.85	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.343	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.251	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.125	KM Standard Error of Mean	0.0248
KM SD	0.127	95% KM (BCA) UCL	0.166
95% KM (t) UCL	0.167	95% KM (Percentile Bootstrap) UCL	0.171
95% KM (z) UCL	0.166	95% KM Bootstrap t UCL	0.192
90% KM Chebyshev UCL	0.199	95% KM Chebyshev UCL	0.233
97.5% KM Chebyshev UCL	0.28	99% KM Chebyshev UCL	0.371

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.62	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.738	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.286	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.258	Detected Data Not Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.22	k star (bias corrected MLE)	1.675
Theta hat (MLE)	0.0998	Theta star (bias corrected MLE)	0.132
nu hat (MLE)	48.85	nu star (bias corrected)	36.86
Mean (detects)	0.222		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.01	Mean	0.0955
Maximum	0.62	Median	0.0373
SD	0.136	CV	1.425
k hat (MLE)	0.681	k star (bias corrected MLE)	0.642
Theta hat (MLE)	0.14	Theta star (bias corrected MLE)	0.149
nu hat (MLE)	47.7	nu star (bias corrected)	44.95
Adjusted Level of Significance (β)	0.0425		
Approximate Chi Square Value (44.95, α)	30.57	Adjusted Chi Square Value (44.95, β)	30
95% Gamma Approximate UCL (use when n>=50)	0.14	95% Gamma Adjusted UCL (use when n<50)	0.143

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.125	SD (KM)	0.127
Variance (KM)	0.0161	SE of Mean (KM)	0.0248
k hat (KM)	0.974	k star (KM)	0.91
nu hat (KM)	68.21	nu star (KM)	63.69
theta hat (KM)	0.128	theta star (KM)	0.137
80% gamma percentile (KM)	0.203	90% gamma percentile (KM)	0.295
95% gamma percentile (KM)	0.388	99% gamma percentile (KM)	0.604

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (63.69, α)	46.33	Adjusted Chi Square Value (63.69, β)	45.63
95% Gamma Approximate KM-UCL (use when n>=50)	0.172	95% Gamma Adjusted KM-UCL (use when n<50)	0.175

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.938	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.85	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.24	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.251	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.115	Mean in Log Scale	-2.512
SD in Original Scale	0.125	SD in Log Scale	0.789
95% t UCL (assumes normality of ROS data)	0.151	95% Percentile Bootstrap UCL	0.151
95% BCA Bootstrap UCL	0.163	95% Bootstrap t UCL	0.176
95% H-UCL (Log ROS)	0.149		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-2.361	KM Geo Mean	0.0943
KM SD (logged)	0.66	95% Critical H Value (KM-Log)	2.084
KM Standard Error of Mean (logged)	0.139	95% H-UCL (KM -Log)	0.148
KM SD (logged)	0.66	95% Critical H Value (KM-Log)	2.084
KM Standard Error of Mean (logged)	0.139		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.151	Mean in Log Scale	-2.268
SD in Original Scale	0.144	SD in Log Scale	0.853
95% t UCL (Assumes normality)	0.192	95% H-Stat UCL	0.208

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Adjusted Gamma UCL	0.175	95% GROS Adjusted Gamma UCL	0.143

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

CHRYSENE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	11
		Number of Missing Observations	4
Number of Detects	8	Number of Non-Detects	28
Number of Distinct Detects	8	Number of Distinct Non-Detects	3
Minimum Detect	0.0016	Minimum Non-Detect	0.0033
Maximum Detect	0.014	Maximum Non-Detect	0.0066
Variance Detects	1.6220E-5	Percent Non-Detects	77.78%
Mean Detects	0.00524	SD Detects	0.00403
Median Detects	0.0037	CV Detects	0.769
Skewness Detects	1.798	Kurtosis Detects	3.185
Mean of Logged Detects	-5.462	SD of Logged Detects	0.668

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.794	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.818	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.283	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.283	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00316	KM Standard Error of Mean	5.0091E-4
KM SD	0.00219	95% KM (BCA) UCL	0.00413
95% KM (t) UCL	0.00401	95% KM (Percentile Bootstrap) UCL	0.00398
95% KM (z) UCL	0.00399	95% KM Bootstrap t UCL	0.00425
90% KM Chebyshev UCL	0.00467	95% KM Chebyshev UCL	0.00535
97.5% KM Chebyshev UCL	0.00629	99% KM Chebyshev UCL	0.00815

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.426	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.723	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.231	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.297	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.539	k star (bias corrected MLE)	1.67
Theta hat (MLE)	0.00206	Theta star (bias corrected MLE)	0.00314
nu hat (MLE)	40.62	nu star (bias corrected)	26.72
Mean (detects)	0.00524		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0016	Mean	0.00894
Maximum	0.014	Median	0.01
SD	0.0027	CV	0.302
k hat (MLE)	6.536	k star (bias corrected MLE)	6.01
Theta hat (MLE)	0.00137	Theta star (bias corrected MLE)	0.00149
nu hat (MLE)	470.6	nu star (bias corrected)	432.7
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (432.69, α)	385.5	Adjusted Chi Square Value (432.69, β)	383.4
95% Gamma Approximate UCL (use when n>=50)	0.01	95% Gamma Adjusted UCL (use when n<50)	0.0101

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00316	SD (KM)	0.00219
Variance (KM)	4.7808E-6	SE of Mean (KM)	5.0091E-4
k hat (KM)	2.094	k star (KM)	1.938
nu hat (KM)	150.8	nu star (KM)	139.5
theta hat (KM)	0.00151	theta star (KM)	0.00163
80% gamma percentile (KM)	0.00475	90% gamma percentile (KM)	0.0062
95% gamma percentile (KM)	0.00758	99% gamma percentile (KM)	0.0106

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (139.53, α)	113.2	Adjusted Chi Square Value (139.53, β)	112.2
95% Gamma Approximate KM-UCL (use when n>=50)	0.0039	95% Gamma Adjusted KM-UCL (use when n<50)	0.00394

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.955	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.818	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.191	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.283	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00304	Mean in Log Scale	-5.964
SD in Original Scale	0.00232	SD in Log Scale	0.549
95% t UCL (assumes normality of ROS data)	0.0037	95% Percentile Bootstrap UCL	0.00369
95% BCA Bootstrap UCL	0.00393	95% Bootstrap t UCL	0.00422
95% H-UCL (Log ROS)	0.00358		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.885	KM Geo Mean	0.00278
KM SD (logged)	0.458	95% Critical H Value (KM-Log)	1.88
KM Standard Error of Mean (logged)	0.163	95% H-UCL (KM -Log)	0.00357
KM SD (logged)	0.458	95% Critical H Value (KM-Log)	1.88
KM Standard Error of Mean (logged)	0.163		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.0029	Mean in Log Scale	-6.005
SD in Original Scale	0.00231	SD in Log Scale	0.513
95% t UCL (Assumes normality)	0.00355	95% H-Stat UCL	0.00332

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Adjusted Gamma UCL	0.00394	95% GROS Adjusted Gamma UCL	0.0101

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
Recommendations are based upon data size, data distribution, and skewness.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

FLUORANTHENE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	12
		Number of Missing Observations	4
Number of Detects	11	Number of Non-Detects	25
Number of Distinct Detects	10	Number of Distinct Non-Detects	2
Minimum Detect	0.0057	Minimum Non-Detect	0.0033
Maximum Detect	0.034	Maximum Non-Detect	0.0066
Variance Detects	8.6313E-5	Percent Non-Detects	69.44%
Mean Detects	0.0158	SD Detects	0.00929
Median Detects	0.013	CV Detects	0.586
Skewness Detects	0.755	Kurtosis Detects	-0.369
Mean of Logged Detects	-4.308	SD of Logged Detects	0.61

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.917	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.85	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.173	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.251	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00719	KM Standard Error of Mean	0.00132
KM SD	0.00755	95% KM (BCA) UCL	0.00962
95% KM (t) UCL	0.00943	95% KM (Percentile Bootstrap) UCL	0.00945
95% KM (z) UCL	0.00937	95% KM Bootstrap t UCL	0.0102
90% KM Chebyshev UCL	0.0112	95% KM Chebyshev UCL	0.013
97.5% KM Chebyshev UCL	0.0155	99% KM Chebyshev UCL	0.0204

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.266	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.733	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.147	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.257	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	3.224	k star (bias corrected MLE)	2.405
Theta hat (MLE)	0.00491	Theta star (bias corrected MLE)	0.00659
nu hat (MLE)	70.93	nu star (bias corrected)	52.92
Mean (detects)	0.0158		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0057	Mean	0.0118
Maximum	0.034	Median	0.01
SD	0.00567	CV	0.481
k hat (MLE)	6.965	k star (bias corrected MLE)	6.403
Theta hat (MLE)	0.00169	Theta star (bias corrected MLE)	0.00184
nu hat (MLE)	501.5	nu star (bias corrected)	461
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (461.00, α)	412.2	Adjusted Chi Square Value (461.00, β)	410.1
95% Gamma Approximate UCL (use when n>=50)	0.0132	95% Gamma Adjusted UCL (use when n<50)	0.0132

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00719	SD (KM)	0.00755
Variance (KM)	5.7067E-5	SE of Mean (KM)	0.00132
k hat (KM)	0.906	k star (KM)	0.849
nu hat (KM)	65.26	nu star (KM)	61.15
theta hat (KM)	0.00793	theta star (KM)	0.00847
80% gamma percentile (KM)	0.0117	90% gamma percentile (KM)	0.0172
95% gamma percentile (KM)	0.0228	99% gamma percentile (KM)	0.036

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (61.15, α)	44.17	Adjusted Chi Square Value (61.15, β)	43.51
95% Gamma Approximate KM-UCL (use when n>=50)	0.00996	95% Gamma Adjusted KM-UCL (use when n<50)	0.0101

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.949	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.85	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.131	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.251	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00635	Mean in Log Scale	-5.762
SD in Original Scale	0.00818	SD in Log Scale	1.227
95% t UCL (assumes normality of ROS data)	0.00865	95% Percentile Bootstrap UCL	0.00865
95% BCA Bootstrap UCL	0.00903	95% Bootstrap t UCL	0.00941
95% H-UCL (Log ROS)	0.0116		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.271	KM Geo Mean	0.00514
KM SD (logged)	0.72	95% Critical H Value (KM-Log)	2.094
KM Standard Error of Mean (logged)	0.127	95% H-UCL (KM -Log)	0.00859
KM SD (logged)	0.72	95% Critical H Value (KM-Log)	2.094
KM Standard Error of Mean (logged)	0.127		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.00635	Mean in Log Scale	-5.612
SD in Original Scale	0.00812	SD in Log Scale	0.975
95% t UCL (Assumes normality)	0.00864	95% H-Stat UCL	0.00866

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.00943

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

FLUORENE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	12
		Number of Missing Observations	4
Number of Detects	10	Number of Non-Detects	26
Number of Distinct Detects	8	Number of Distinct Non-Detects	4
Minimum Detect	0.0061	Minimum Non-Detect	0.0033
Maximum Detect	0.013	Maximum Non-Detect	0.0067
Variance Detects	7.5556E-6	Percent Non-Detects	72.22%
Mean Detects	0.0095	SD Detects	0.00275
Median Detects	0.0094	CV Detects	0.289
Skewness Detects	0.124	Kurtosis Detects	-2.03
Mean of Logged Detects	-4.695	SD of Logged Detects	0.296

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.856	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.842	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.232	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.262	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00508	KM Standard Error of Mean	5.5135E-4
KM SD	0.00309	95% KM (BCA) UCL	0.006
95% KM (t) UCL	0.00602	95% KM (Percentile Bootstrap) UCL	0.00592
95% KM (z) UCL	0.00599	95% KM Bootstrap t UCL	0.00618
90% KM Chebyshev UCL	0.00674	95% KM Chebyshev UCL	0.00749
97.5% KM Chebyshev UCL	0.00853	99% KM Chebyshev UCL	0.0106

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.705	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.725	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.237	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.266	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	13.04	k star (bias corrected MLE)	9.193
Theta hat (MLE)	7.2865E-4	Theta star (bias corrected MLE)	0.00103
nu hat (MLE)	260.8	nu star (bias corrected)	183.9
Mean (detects)	0.0095		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0061	Mean	0.00986
Maximum	0.013	Median	0.01
SD	0.00141	CV	0.143
k hat (MLE)	45.41	k star (bias corrected MLE)	41.65
Theta hat (MLE)	2.1715E-4	Theta star (bias corrected MLE)	2.3678E-4
nu hat (MLE)	3270	nu star (bias corrected)	2999
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (N/A, α)	2872	Adjusted Chi Square Value (N/A, β)	2867
95% Gamma Approximate UCL (use when n>=50)	0.0103	95% Gamma Adjusted UCL (use when n<50)	0.0103

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00508	SD (KM)	0.00309
Variance (KM)	9.5566E-6	SE of Mean (KM)	5.5135E-4
k hat (KM)	2.705	k star (KM)	2.498
nu hat (KM)	194.8	nu star (KM)	179.9
theta hat (KM)	0.00188	theta star (KM)	0.00204
80% gamma percentile (KM)	0.00741	90% gamma percentile (KM)	0.00939
95% gamma percentile (KM)	0.0113	99% gamma percentile (KM)	0.0153

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (179.87, α)	149.8	Adjusted Chi Square Value (179.87, β)	148.6
95% Gamma Approximate KM-UCL (use when n>=50)	0.0061	95% Gamma Adjusted KM-UCL (use when n<50)	0.00615

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.862	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.842	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.235	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.262	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00515	Mean in Log Scale	-5.439
SD in Original Scale	0.00324	SD in Log Scale	0.587
95% t UCL (assumes normality of ROS data)	0.00607	95% Percentile Bootstrap UCL	0.00605
95% BCA Bootstrap UCL	0.00615	95% Bootstrap t UCL	0.00619
95% H-UCL (Log ROS)	0.00628		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.417	KM Geo Mean	0.00444
KM SD (logged)	0.48	95% Critical H Value (KM-Log)	1.895
KM Standard Error of Mean (logged)	0.0869	95% H-UCL (KM -Log)	0.00581
KM SD (logged)	0.48	95% Critical H Value (KM-Log)	1.895
KM Standard Error of Mean (logged)	0.0869		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.00438	Mean in Log Scale	-5.7
SD in Original Scale	0.00358	SD in Log Scale	0.715
95% t UCL (Assumes normality)	0.00539	95% H-Stat UCL	0.00556

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.00602

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

NAPHTHALENE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	17
		Number of Missing Observations	4
Number of Detects	18	Number of Non-Detects	18
Number of Distinct Detects	15	Number of Distinct Non-Detects	2
Minimum Detect	0.0036	Minimum Non-Detect	0.0033
Maximum Detect	0.042	Maximum Non-Detect	0.0066
Variance Detects	1.6129E-4	Percent Non-Detects	50%
Mean Detects	0.0207	SD Detects	0.0127
Median Detects	0.016	CV Detects	0.613
Skewness Detects	0.575	Kurtosis Detects	-1.203
Mean of Logged Detects	-4.074	SD of Logged Detects	0.678

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.878	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.897	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.174	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.202	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.012	KM Standard Error of Mean	0.00211
KM SD	0.0123	95% KM (BCA) UCL	0.0156
95% KM (t) UCL	0.0156	95% KM (Percentile Bootstrap) UCL	0.0155
95% KM (z) UCL	0.0155	95% KM Bootstrap t UCL	0.0163
90% KM Chebyshev UCL	0.0184	95% KM Chebyshev UCL	0.0212
97.5% KM Chebyshev UCL	0.0252	99% KM Chebyshev UCL	0.0331

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.556	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.748	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.135	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.205	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.679	k star (bias corrected MLE)	2.269
Theta hat (MLE)	0.00774	Theta star (bias corrected MLE)	0.00913
nu hat (MLE)	96.44	nu star (bias corrected)	81.7
Mean (detects)	0.0207		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0036	Mean	0.0154
Maximum	0.042	Median	0.01
SD	0.0104	CV	0.676
k hat (MLE)	3.205	k star (bias corrected MLE)	2.956
Theta hat (MLE)	0.00479	Theta star (bias corrected MLE)	0.0052
nu hat (MLE)	230.8	nu star (bias corrected)	212.9
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (212.86, α)	180.1	Adjusted Chi Square Value (212.86, β)	178.7
95% Gamma Approximate UCL (use when n>=50)	0.0182	95% Gamma Adjusted UCL (use when n<50)	0.0183

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.012	SD (KM)	0.0123
Variance (KM)	1.5197E-4	SE of Mean (KM)	0.00211
k hat (KM)	0.951	k star (KM)	0.89
nu hat (KM)	68.47	nu star (KM)	64.1
theta hat (KM)	0.0126	theta star (KM)	0.0135
80% gamma percentile (KM)	0.0195	90% gamma percentile (KM)	0.0285
95% gamma percentile (KM)	0.0375	99% gamma percentile (KM)	0.0587

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (64.10, α)	46.68	Adjusted Chi Square Value (64.10, β)	46
95% Gamma Approximate KM-UCL (use when n>=50)	0.0165	95% Gamma Adjusted KM-UCL (use when n<50)	0.0168

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.93	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.897	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.132	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.202	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.012	Mean in Log Scale	-4.97
SD in Original Scale	0.0126	SD in Log Scale	1.1
95% t UCL (assumes normality of ROS data)	0.0155	95% Percentile Bootstrap UCL	0.0156
95% BCA Bootstrap UCL	0.0157	95% Bootstrap t UCL	0.0162
95% H-UCL (Log ROS)	0.0202		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-4.892	KM Geo Mean	0.00751
KM SD (logged)	0.941	95% Critical H Value (KM-Log)	2.317
KM Standard Error of Mean (logged)	0.161	95% H-UCL (KM -Log)	0.0169
KM SD (logged)	0.941	95% Critical H Value (KM-Log)	2.317
KM Standard Error of Mean (logged)	0.161		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.0116	Mean in Log Scale	-5.067
SD in Original Scale	0.0128	SD in Log Scale	1.14
95% t UCL (Assumes normality)	0.0152	95% H-Stat UCL	0.0197

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.0156

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

PHENANTHRENE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	18
		Number of Missing Observations	4
Number of Detects	18	Number of Non-Detects	18
Number of Distinct Detects	16	Number of Distinct Non-Detects	2
Minimum Detect	0.0059	Minimum Non-Detect	0.0033
Maximum Detect	0.044	Maximum Non-Detect	0.0066
Variance Detects	1.9217E-4	Percent Non-Detects	50%
Mean Detects	0.0208	SD Detects	0.0139
Median Detects	0.0145	CV Detects	0.668
Skewness Detects	0.583	Kurtosis Detects	-1.292
Mean of Logged Detects	-4.104	SD of Logged Detects	0.709

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.853	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.897	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.216	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.202	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.0121	KM Standard Error of Mean	0.00221
KM SD	0.0129	95% KM (BCA) UCL	0.0159
95% KM (t) UCL	0.0158	95% KM (Percentile Bootstrap) UCL	0.0156
95% KM (z) UCL	0.0157	95% KM Bootstrap t UCL	0.0169
90% KM Chebyshev UCL	0.0187	95% KM Chebyshev UCL	0.0217
97.5% KM Chebyshev UCL	0.0259	99% KM Chebyshev UCL	0.0341

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.796	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.75	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.171	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.206	Detected data appear Gamma Distributed at 5% Significance Level

Detected data follow Appr. Gamma Distribution at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.343	k star (bias corrected MLE)	1.989
Theta hat (MLE)	0.00886	Theta star (bias corrected MLE)	0.0104
nu hat (MLE)	84.34	nu star (bias corrected)	71.61
Mean (detects)	0.0208		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0059	Mean	0.0154
Maximum	0.044	Median	0.01
SD	0.0111	CV	0.721
k hat (MLE)	2.944	k star (bias corrected MLE)	2.717
Theta hat (MLE)	0.00522	Theta star (bias corrected MLE)	0.00566
nu hat (MLE)	212	nu star (bias corrected)	195.6
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (195.63, α)	164.3	Adjusted Chi Square Value (195.63, β)	163
95% Gamma Approximate UCL (use when n>=50)	0.0183	95% Gamma Adjusted UCL (use when n<50)	0.0185

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.0121	SD (KM)	0.0129
Variance (KM)	1.6590E-4	SE of Mean (KM)	0.00221
k hat (KM)	0.881	k star (KM)	0.826
nu hat (KM)	63.44	nu star (KM)	59.48
theta hat (KM)	0.0137	theta star (KM)	0.0146
80% gamma percentile (KM)	0.0197	90% gamma percentile (KM)	0.0292
95% gamma percentile (KM)	0.0388	99% gamma percentile (KM)	0.0614

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (59.48, α)	42.75	Adjusted Chi Square Value (59.48, β)	42.1
95% Gamma Approximate KM-UCL (use when n>=50)	0.0168	95% Gamma Adjusted KM-UCL (use when n<50)	0.0171

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.901	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.897	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.165	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.202	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.0118	Mean in Log Scale	-5.057
SD in Original Scale	0.0133	SD in Log Scale	1.166
95% t UCL (assumes normality of ROS data)	0.0156	95% Percentile Bootstrap UCL	0.0156
95% BCA Bootstrap UCL	0.0162	95% Bootstrap t UCL	0.0164
95% H-UCL (Log ROS)	0.0209		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-4.894	KM Geo Mean	0.00749
KM SD (logged)	0.933	95% Critical H Value (KM-Log)	2.308
KM Standard Error of Mean (logged)	0.161	95% H-UCL (KM -Log)	0.0167
KM SD (logged)	0.933	95% Critical H Value (KM-Log)	2.308
KM Standard Error of Mean (logged)	0.161		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.0116	Mean in Log Scale	-5.082
SD in Original Scale	0.0134	SD in Log Scale	1.136
95% t UCL (Assumes normality)	0.0154	95% H-Stat UCL	0.0193

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Gamma Distributed at 5% Significance Level

Suggested UCL to Use

95% KM Adjusted Gamma UCL	0.0171	95% GROS Adjusted Gamma UCL	0.0185

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

PYRENE

General Statistics

Total Number of Observations	36	Number of Distinct Observations	15
		Number of Missing Observations	4
Number of Detects	13	Number of Non-Detects	23
Number of Distinct Detects	13	Number of Distinct Non-Detects	2
Minimum Detect	0.0057	Minimum Non-Detect	0.0033
Maximum Detect	0.058	Maximum Non-Detect	0.0066
Variance Detects	2.0402E-4	Percent Non-Detects	63.89%
Mean Detects	0.0189	SD Detects	0.0143
Median Detects	0.016	CV Detects	0.758
Skewness Detects	1.818	Kurtosis Detects	4.245
Mean of Logged Detects	-4.202	SD of Logged Detects	0.705

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.822	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.866	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.179	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.234	Detected Data appear Normal at 5% Significance Level

Detected Data appear Approximate Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.00898	KM Standard Error of Mean	0.00193
KM SD	0.0111	95% KM (BCA) UCL	0.0126
95% KM (t) UCL	0.0122	95% KM (Percentile Bootstrap) UCL	0.0124
95% KM (z) UCL	0.0122	95% KM Bootstrap t UCL	0.0142
90% KM Chebyshev UCL	0.0148	95% KM Chebyshev UCL	0.0174
97.5% KM Chebyshev UCL	0.021	99% KM Chebyshev UCL	0.0282

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.288	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.742	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.145	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.239	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.314	k star (bias corrected MLE)	1.832
Theta hat (MLE)	0.00815	Theta star (bias corrected MLE)	0.0103
nu hat (MLE)	60.18	nu star (bias corrected)	47.62
Mean (detects)	0.0189		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)

For such situations, GROS method may yield incorrect values of UCLs and BTVs

This is especially true when the sample size is small.

For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates

Minimum	0.0057	Mean	0.0132
Maximum	0.058	Median	0.01
SD	0.00941	CV	0.713
k hat (MLE)	3.948	k star (bias corrected MLE)	3.637
Theta hat (MLE)	0.00334	Theta star (bias corrected MLE)	0.00363
nu hat (MLE)	284.2	nu star (bias corrected)	261.9
Adjusted Level of Significance (β)	0.0428		
Approximate Chi Square Value (261.90, α)	225.4	Adjusted Chi Square Value (261.90, β)	223.9
95% Gamma Approximate UCL (use when n>=50)	0.0153	95% Gamma Adjusted UCL (use when n<50)	0.0154

Estimates of Gamma Parameters using KM Estimates

Mean (KM)	0.00898	SD (KM)	0.0111
Variance (KM)	1.2324E-4	SE of Mean (KM)	0.00193
k hat (KM)	0.655	k star (KM)	0.619
nu hat (KM)	47.15	nu star (KM)	44.55
theta hat (KM)	0.0137	theta star (KM)	0.0145
80% gamma percentile (KM)	0.0148	90% gamma percentile (KM)	0.0232
95% gamma percentile (KM)	0.032	99% gamma percentile (KM)	0.0531

Gamma Kaplan-Meier (KM) Statistics

Approximate Chi Square Value (44.55, α)	30.24	Adjusted Chi Square Value (44.55, β)	29.71
95% Gamma Approximate KM-UCL (use when n>=50)	0.0132	95% Gamma Adjusted KM-UCL (use when n<50)	0.0135

Lognormal GOF Test on Detected Observations Only

Shapiro Wilk Test Statistic	0.954	**Shapiro Wilk GOF Test**	
5% Shapiro Wilk Critical Value	0.866	Detected Data appear Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.144	**Lilliefors GOF Test**	
5% Lilliefors Critical Value	0.234	Detected Data appear Lognormal at 5% Significance Level	

Detected Data appear Lognormal at 5% Significance Level

Lognormal ROS Statistics Using Imputed Non-Detects

Mean in Original Scale	0.00816	Mean in Log Scale	-5.633
SD in Original Scale	0.0117	SD in Log Scale	1.338
95% t UCL (assumes normality of ROS data)	0.0115	95% Percentile Bootstrap UCL	0.0113
95% BCA Bootstrap UCL	0.0125	95% Bootstrap t UCL	0.0134
95% H-UCL (Log ROS)	0.0165		

Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution

KM Mean (logged)	-5.153	KM Geo Mean	0.00578
KM SD (logged)	0.828	95% Critical H Value (KM-Log)	2.199
KM Standard Error of Mean (logged)	0.145	95% H-UCL (KM -Log)	0.0111
KM SD (logged)	0.828	95% Critical H Value (KM-Log)	2.199
KM Standard Error of Mean (logged)	0.145		

DL/2 Statistics

DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.00823	Mean in Log Scale	-5.457
SD in Original Scale	0.0117	SD in Log Scale	1.076
95% t UCL (Assumes normality)	0.0115	95% H-Stat UCL	0.0119

DL/2 is not a recommended method, provided for comparisons and historical reasons

Nonparametric Distribution Free UCL Statistics

Detected Data appear Approximate Normal Distributed at 5% Significance Level

Suggested UCL to Use

95% KM (t) UCL 0.0122

When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test

When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

General Statistics on Uncensored Data

Date/Time of Computation ProUCL 5.15/1/2017 1:34:29 PM

User Selected Options

From File RiskStatsReport_DAVISVILLE_Site9_Shellfish 4-5-17_c.xls

Full Precision OFF

From File: RiskStatsReport_DAVISVILLE_Site9_Shellfish 4-5-17_c.xls

General Statistics for Censored Data Set (with NDs) using Kaplan Meier Method

Variable	NumObs	# Missing	Num Ds	NumNDs	% NDs	Min ND	Max ND	KM Mean	KM Var	KM SD	KM CV
CHROMIUM, TOTAL	36	4	5	31	86.11%	0.154	3	0.538	2.345	1.531	2.846
4,4-DDD	35	5	3	32	91.43%	8.4000E-4	0.0092	0.00176	1.0862E-5	0.0033	1.869
4,4-DDT	36	4	4	32	88.89%	8.4000E-4	0.0073	9.6724E-4	1.5748E-6	0.00125	1.297
BETA-BHC	36	4	3	33	91.67%	2.1000E-4	0.0038	3.2286E-4	1.1014E-7	3.3188E-4	1.028
DIELDRIN	36	4	1	35	97.22%	4.2000E-4	0.0034	4.4000E-4	1.1200E-8	1.0583E-4	0.241
ENDOSULFAN II	36	4	1	35	97.22%	4.2000E-4	0.0034	4.4182E-4	4.7603E-9	6.8995E-5	0.156
NDOSULFAN SULFATE	36	4	1	35	97.22%	4.2000E-4	0.0034	5.1929E-4	2.6616E-7	5.1590E-4	0.993
ENDRIN	36	4	4	32	88.89%	4.2000E-4	0.0034	8.4051E-4	1.3347E-6	0.00116	1.375
ENDRIN ALDEHYDE	36	4	1	35	97.22%	8.4000E-4	0.0034	8.0000E-4	0	0	N/A
HEPTACHLOR	35	5	3	32	91.43%	2.1000E-4	0.0017	3.8664E-4	3.8917E-7	6.2384E-4	1.613
LINDANE	36	4	3	33	91.67%	2.1000E-4	0.0017	2.9000E-4	6.5524E-8	2.5598E-4	0.883
METHOXYCHLOR	36	4	3	33	91.67%	0.0021	0.013	0.00238	4.7115E-7	6.8640E-4	0.289
2-METHYLPHENOL	36	4	2	34	94.44%	0.066	0.2	0.0674	1.9428E-5	0.00441	0.0654
ENZO[A]ANTHRACENE	36	4	3	33	91.67%	0.0033	0.0066	0.00369	2.8485E-6	0.00169	0.458
BENZO[A]PYRENE	36	4	3	33	91.67%	0.0033	0.0066	0.00327	3.7915E-6	0.00195	0.595
ZO[B]FLUORANTHENE	36	4	4	32	88.89%	0.0033	0.0066	0.00395	1.5807E-5	0.00398	1.006
ENZO[G,H,I]PERYLENE	36	4	1	35	97.22%	0.0033	0.01	0.00341	2.1989E-7	4.6892E-4	0.137
YLBENZYLPHTHALATE	36	4	1	35	97.22%	0.066	1	0.0671	1.8941E-5	0.00435	0.0649
ENZ[A,H]ANTHRACENE	36	4	1	35	97.22%	0.0033	0.01	0.0028	0	0	N/A
I-N-BUTYLPHTHALATE	36	4	1	35	97.22%	0.066	1	0.048	0	0	N/A
ENO[1,2,3-CD]PYRENE	36	4	4	32	88.89%	0.0033	0.01	0.00329	1.2463E-6	0.00112	0.339
NITROBENZENE	36	4	1	35	97.22%	0.066	0.13	0.0703	6.4048E-4	0.0253	0.36
PHENOL	36	4	2	34	94.44%	0.066	0.2	0.0689	7.5673E-5	0.0087	0.126

General Statistics for Raw Data Sets using Detected Data Only

Variable	NumObs	# Missing	Minimum	Maximum	Mean	Median	Var	SD	MAD/0.675	Skewness	CV
CHROMIUM, TOTAL	5	4	1.1	9.37	2.814	1.1	13.45	3.667	0	2.229	1.303
4,4-DDD	3	5	0.0057	0.017	0.0116	0.012	3.2063E-5	0.00566	0.00741	-0.342	0.49
4,4-DDT	4	4	6.3000E-4	0.0065	0.00353	0.0035	8.4109E-6	0.0029	0.00361	0.0246	0.821
BETA-BHC	3	4	9.9000E-4	0.0014	0.00126	0.0014	5.6033E-8	2.3671E-4	0	-1.732	0.187
DIELDRIN	1	4	0.001	0.001	0.001	0.001	N/A	N/A	0	N/A	N/A
ENDOSULFAN II	1	4	6.6000E-4	6.6000E-4	6.6000E-4	6.6000E-4	N/A	N/A	0	N/A	N/A
NDOSULFAN SULFATE	1	4	0.0032	0.0032	0.0032	0.0032	N/A	N/A	0	N/A	N/A
ENDRIN	4	4	0.003	0.0056	0.0038	0.0033	1.4867E-6	0.00122	3.7064E-4	1.821	0.321
ENDRIN ALDEHYDE	1	4	8.0000E-4	8.0000E-4	8.0000E-4	8.0000E-4	N/A	N/A	0	N/A	N/A
HEPTACHLOR	3	5	0.0014	0.0035	0.0022	0.0017	1.2900E-6	0.00114	4.4477E-4	1.597	0.516
LINDANE	3	4	6.5000E-4	0.0014	9.8333E-4	9.0000E-4	1.4583E-7	3.8188E-4	3.7064E-4	0.935	0.388
METHOXYCHLOR	3	4	0.0036	0.0046	0.00417	0.0043	2.6333E-7	5.1316E-4	4.4477E-4	-1.09	0.123
2-METHYLPHENOL	2	4	0.074	0.085	0.0795	0.0795	6.0500E-5	0.00778	0.00815	N/A	0.0978
ENZO[A]ANTHRACENE	3	4	0.0036	0.013	0.00787	0.007	2.2653E-5	0.00476	0.00504	0.792	0.605
BENZO[A]PYRENE	3	4	0.0028	0.014	0.00763	0.0061	3.3123E-5	0.00576	0.00489	1.114	0.754
ZO[B]FLUORANTHENE	4	4	0.0031	0.027	0.0106	0.00605	1.2402E-4	0.0111	0.00341	1.826	1.056
ENZO[G,H,I]PERYLENE	1	4	0.0054	0.0054	0.0054	0.0054	N/A	N/A	0	N/A	N/A
YLBENZYLPHTHALATE	1	4	0.085	0.085	0.085	0.085	N/A	N/A	0	N/A	N/A
ENZ[A,H]ANTHRACENE	1	4	0.0028	0.0028	0.0028	0.0028	N/A	N/A	0	N/A	N/A
I-N-BUTYLPHTHALATE	1	4	0.048	0.048	0.048	0.048	N/A	N/A	0	N/A	N/A
ENO[1,2,3-CD]PYRENE	4	4	0.003	0.0095	0.0052	0.00415	8.5267E-6	0.00292	9.6368E-4	1.778	0.562
NITROBENZENE	1	4	0.22	0.22	0.22	0.22	N/A	N/A	0	N/A	N/A
PHENOL	2	4	0.087	0.1	0.0935	0.0935	8.4500E-5	0.00919	0.00964	N/A	0.0983

Percentiles using all Detects (Ds) and Non-Detects (NDs)

Variable	NumObs	# Missing	10%ile	20%ile	25%ile(Q1)	50%ile(Q2)	75%ile(Q3)	80%ile	90%ile	95%ile	99%ile
CHROMIUM, TOTAL	36	4	0.53	0.65	0.678	0.825	1.01	1.1	2.91	3	7.14
4,4-DDD	35	5	8.4000E-4	8.5000E-4	8.5000E-4	8.5000E-4	0.0034	0.0034	0.00478	0.01	0.0153
4,4-DDT	36	4	8.4000E-4	8.4000E-4	8.5000E-4	8.5000E-4	0.00198	0.0034	0.0035	0.00575	0.00702
BETA-BHC	36	4	2.1000E-4	2.1000E-4	2.1000E-4	4.2000E-4	0.0014	0.0038	0.0038	0.0038	0.0038
DIELDRIN	36	4	4.2000E-4	4.3000E-4	4.3000E-4	8.5000E-4	8.5000E-4	0.001	0.0034	0.0034	0.0034
ENDOSULFAN II	36	4	4.2000E-4	4.3000E-4	4.3000E-4	8.5000E-4	8.5000E-4	8.5000E-4	0.0034	0.0034	0.0034
NDOSULFAN SULFATE	36	4	4.2000E-4	4.3000E-4	4.3000E-4	8.5000E-4	0.00144	0.0034	0.0034	0.0034	0.0034
ENDRIN	36	4	4.2000E-4	4.3000E-4	4.3000E-4	8.5000E-4	0.0034	0.0034	0.0034	0.00343	0.00487
ENDRIN ALDEHYDE	36	4	8.4000E-4	8.4000E-4	8.4750E-4	8.5000E-4	8.5000E-4	8.5000E-4	0.0034	0.0034	0.0034
HEPTACHLOR	35	5	2.1000E-4	2.1000E-4	2.1000E-4	4.2000E-4	4.3000E-4	0.00144	0.0017	0.0017	0.00289
LINDANE	36	4	2.1000E-4	2.1000E-4	2.1000E-4	4.2000E-4	7.1250E-4	0.0014	0.0017	0.0017	0.0017
METHOXYCHLOR	36	4	0.0021	0.0021	0.0021	0.0042	0.0043	0.0043	0.013	0.013	0.013
2-METHYLPHENOL	36	4	0.066	0.066	0.067	0.0705	0.13	0.13	0.13	0.13	0.176
ENZO[A]ANTHRACENE	36	4	0.0033	0.0033	0.0033	0.00345	0.0066	0.0066	0.0066	0.0067	0.0109
BENZO[A]PYRENE	36	4	0.0033	0.0033	0.0033	0.0033	0.0066	0.0066	0.0066	0.0066	0.0114
ZO[B]FLUORANTHENE	36	4	0.0033	0.0033	0.0033	0.0033	0.0066	0.0066	0.0066	0.00688	0.0202
ENZO[G,H,I]PERYLENE	36	4	0.0033	0.0033	0.0033	0.00435	0.0066	0.0066	0.0066	0.00663	0.00885
YLBENZYLPHTHALATE	36	4	0.066	0.067	0.067	0.108	0.13	0.66	0.66	0.67	0.885
ENZ[A,H]ANTHRACENE	36	4	0.0033	0.0033	0.0033	0.0033	0.0066	0.0066	0.0066	0.00663	0.00885
I-N-BUTYLPHTHALATE	36	4	0.066	0.066	0.067	0.0985	0.13	0.66	0.66	0.67	0.885
ENO[1,2,3-CD]PYRENE	36	4	0.0033	0.0033	0.0033	0.0033	0.0066	0.0066	0.0066	0.0074	0.00983
NITROBENZENE	36	4	0.066	0.066	0.067	0.0985	0.13	0.13	0.13	0.13	0.189
PHENOL	36	4	0.066	0.066	0.067	0.0935	0.13	0.13	0.13	0.13	0.176

Attachment G-2

Ecological Risk Assessment Update

ECOLOGICAL RISK ASSESSMENT UPDATE
Long Term Monitoring
Site 09 Allen Harbor Landfill
Former Naval Construction Battalion Center
Davisville
North Kingstown, Rhode Island

DRAFT **FINAL**

Prepared for:

Department of the Navy
Naval Facilities Engineering Command
BRAC Program Management Office, East
4911 South Broad Street
Philadelphia, Pennsylvania 19112

Contract Number N62470-11-D-8013

CTO WE23

Prepared by:

Resolution Consultants
A Joint Venture of AECOM & EnSafe
1500 Wells Fargo Building
440 Monticello Avenue
Norfolk, VA 23510

September 2017

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ACRONYMS AND ABBREVIATIONS

>	greater than
%	percent
ug/L	microgram per liter
bgs	below ground surface
BCT	Base Realignment and Closure Cleanup Team
BRAC	Base Realignment and Closure
BTAG	Biological Technical Assistance Group
COPC	chemical of potential concern
EPC	exposure point concentration
ERA	Ecological Risk Assessment
ER-L	Effects Range - Low
FOD	frequency of detection
HMW	high molecular weight
HQ	hazard quotient
kg	kilogram
KM	kilometers
L	liter
LMW	low molecular weight
LOAEL	Lowest Observed Adverse Effects Levels
LTM	long-term monitoring
mg	milligram
mg/kg-day	milligram of chemical per kilogram of body weight per day
NCBC	Naval Construction Battalion Center
NRWQC	National Recommended Water Quality Criteria
NOAA	National Oceanic and Atmospheric Administration
NOAEL	No Observed Adverse Effects Levels

ORNL	Oak Ridge National Laboratory
PAH	polycyclic aromatic hydrocarbons
PCBs	polychlorinated biphenyls
RAO	Remedial Action Objective
RIDEM	Rhode Island Department of Environmental Management
ROD	Record of Decision
SAP	Sampling and Analysis Plan
SEV	screening ecotoxicity values
SMDP	Scientific/Management Decision Point
SRA	Screening Risk Assessment
SVOCs	semi-volatile organic compounds
TDD	total daily dose
TRV	toxicity reference values
ug	microgram
UCL	upper confidence limit
U.S.	United States
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

1.0 INTRODUCTION

This report presents an ecological risk assessment (ERA) update conducted for shoreline exposures to sediment, sediment porewater, surface water, and shellfish at Site 09 (Allen Harbor Landfill) (site), located at the Former Naval Construction Battalion Center (NCBC) Davisville, in North Kingstown, Rhode Island (Figure 1). This ERA update was performed in support of the Site 09 Five Year Event Long-Term Monitoring (LTM) Report and will ultimately be used as part of the evaluation of compliance with the Remedial Action Objectives (RAOs) identified in the Record of Decision (ROD) (EA, 1997) in the Fourth Five Year Review Report. The RAOs and selected remedial alternatives for Site 09 are described in the LTM Report.

A summary of the Site 09 history is provided in the Draft Tier II Sampling and Analysis Plan, Long Term Monitoring Site 07 Calf Pasture Point and Site 09 Allen Harbor Landfill (Resolution, 2016) and is, therefore, not included in this ERA update. However, the previously conducted ERAs are briefly summarized in the following section.

1.1 Previous ERAs

As summarized in the Third Five-Year Review Report (Tetra Tech, 2015), the Marine Ecological Risk Assessment (EA, 1996) indicated that ecological risks to marine organisms in Allen Harbor were reported to be "moderate'' to "slight." Moderate risk to marine organisms was reported to be limited to the narrow inter-tidal zone to the north and south of the site. Risks to terrestrial ecological receptors were reported to be moderate to high within the Allen Harbor Watershed (an area in which the Allen Harbor Landfill was one of the contributors to elevated risk). The ERA identified elevated risks to several terrestrial receptors, resulting from exposure to contaminants. Elevated concentrations of polycyclic aromatic hydrocarbons (PAHs), pesticides, polychlorinated biphenyls (PCBs), and metals in surface soil and sediment were the primary sources of ecological risk to terrestrial receptors. Sediment samples collected from Allen Harbor had concentrations of PAHs, pesticides, PCBs, and metals in excess of benchmark screening values. A benthic community structure analysis showed no obvious toxicological effects relative to reference stations; however, the elevated concentrations of contaminants were identified in the risk assessment as "flags" of potential ecological risk (EA, 1996).

An ERA was conducted in 2015 in support of the Third Five-Year Review Report for Site 09 (Tetra Tech, 2015) using recently collected (e.g., 2010 to 2012) sediment, shallow piezometer water (representing brackish sediment porewater; assumed to be mixture of groundwater and surface water), seep water (representing surface water), and shellfish data. The 2015 ERA identified no unacceptable risks to ecological receptors exposed to sediment, sediment pore water or surface water.

1.2 Objectives

The objective of this ERA update (referred to herein as the 2017 ERA update) is to determine whether there have been any changes and/or updates to USEPA ERA guidance or site-specific conditions since the 2015 ERA was conducted that would result in a change of the conclusions of the 2015 ERA. The 2017 ERA update includes the following:

- Calculation of summary statistics for analytical shallow sediment, piezometer water, seep water, and shellfish data collected along the Site 09 shoreline as part of the LTM, which are considered representative of current conditions (i.e., 2017 ERA update data set);
- Review and update of screening levels and chemical of potential concern (COPC) selection for shoreline shallow sediment, piezometer water (representing sediment porewater), seep water (representing surface water);
- Review and update of food web modeling evaluating birds and mammals exposed to shoreline sediment and shellfish.

Revised quantitative risk calculations were not required to be conducted for this update per the Davisville Base Realignment and Closure (BRAC) Cleanup Team (BCT) January 12, 2017 teleconference. However, given the relatively simple nature of the 2015 ERA and the addition of some new detected chemicals, the 2015 ERA risk screenings and food web calculations were updated to reflect the current data set. These updated evaluations and a comparison of exposure point concentrations (EPCs) between the 2015 ERA and this 2017 ERA update are used to assess whether the conclusions of the 2015 ERA remain valid.

1.3 Approach for the ERA Update

The approach for this ERA update is consistent with the approach used in the 2015 ERA. The following risk assessment guidance was utilized in this 2017 ERA update. Guidance documentation includes, but is not limited to, the following:

- *Navy Policy for Conducting Ecological Risk Assessments (DON, 1999a)*
- *Navy Guidance for Conducting Ecological Risk Assessments (DON, 1999b)*
- *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments, Interim Final (USEPA, 1997).*
- *Guidelines for Ecological Risk Assessment (USEPA, 1998)*
- *The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments (USEPA, 2001)*

Consistent with the 2015 ERA, this ERA update consisted of Steps 1, 2, and 3a of the eight-step ecological risk evaluation process discussed in USEPA guidance (USEPA, 1997) and the Navy Policy

for Conducting ERAs (1999). Steps 1 and 2 comprise the screening-level ERA and corresponds with Tier 1 of the Navy Policy to include comparisons of conservative exposure estimates to screening-level and threshold toxicity values. Step 3a is the first step of a baseline ERA and consists of refining the Tier 1 assumptions to further focus the ERA process on the chemicals of greatest concern at the site. Step 3a corresponds with the first part of Tier 2 of the Navy Policy.

2.0 DATA USED IN THE ECOLOGICAL RISK ASSESSMENT UPDATE

This section summarizes the shoreline shallow sediment, shallow piezometer water (representing sediment porewater), seep water (representing surface water), and shellfish data evaluated in this ERA update. A discussion of the sampling details associated with collection of the shoreline data is provided in the LTM Report, and is not included in this ERA update.

2.1 Summary of the Shoreline Data Set

The data sets for evaluation in the 2017 ERA update are discussed by media in this section. Figure 2 identifies the shoreline sample locations. Analytical results for samples used in the ERA are presented in Appendix A.

2.1.1 Shallow Sediment

Shallow sediment samples were collected from within the top 6 inches below ground surface (bgs) during sampling events in September of 2014, 2015, and 2016. A total of 33 shallow sediment samples (including 7 field duplicates) were collected as part of the three sampling events. Samples were collected from 12 locations in 2016, from 11 locations in 2015, and from the 3 locations in 2014. Samples were analyzed for metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, and PCBs as Aroclors.

Sediment samples were also collected in 2013. However, these samples were collected from 2 to 3 feet bgs as specified in the Final Quality Assurance Project Plan for Long Term Monitoring of Site 09 (EA, 2001) and not as shallow sediment samples as had subsequently been agreed to by the Davisville BCT. These samples were not included in this ERA update since the sample depth is not representative of ecologically active zone for marine sediment.

Shallow sediment data for detected chemicals are summarized in Table 1. The summary table provides the frequency of detection (FOD), range of detected concentrations, mean of detected concentrations and location of maximum detected result for each detected chemical.

2.1.2 Shallow Piezometer Water

Shallow piezometer water samples were collected during sampling events in 2013, 2014, 2015, and 2016. The piezometers were grouped into two areas: adjacent to the stone revetment (P09-01, P09-02A, P09-3A, P09-4A, P09-05A, P09-09, P09-10) and beyond the breakwater structure (P09-06B, P09-07B, P09-08B, P09-11B, P09-12B). Samples were collected from all 12 locations in 2013 and 2015, from 11 locations in 2016 (P09-05A was not sampled due to lack of water), and from the 5 beyond the breakwater locations in 2014. Samples were analyzed for metals (total and dissolved), VOCs, SVOCs, pesticides, and PCBs as Aroclors. In addition, field water quality parameters were

collect during each sampling event. Measurements of salinity averaged approximately 20 parts per thousand indicating brackish water.

Shallow piezometer data for detected chemicals from adjacent to the stone revetment and beyond the breakwater structure are summarized in Tables 2 and 3, respectively. The summary table provides the FOD, range of detected concentrations, mean of detected concentrations and location of maximum detected result for each detected chemical. PCBs and pesticides were not detected in any of the collected piezometer samples.

2.1.3 Seep Water

Seep water samples were collected during sampling events in 2013, 2014, 2015, and 2016. Samples were collected from two locations in 2013 and from three locations in 2014, 2015, and 2016 and were analyzed for VOCs. In addition to the VOC samples, field water quality parameters were collect during each sampling event. Measurements of salinity averaged approximately 27 parts per thousand indicating brackish water that was more saline than the piezometer water.

Seep water data for detected chemicals are summarized in Table 4. The summary table provides the FOD, range of detected concentrations, mean of detected concentrations and location of maximum detected result for each detected chemical.

2.1.4 Shellfish

Shellfish tissue samples were collected during sampling events in 2014, 2015, and 2016. In 2016, shellfish were collected in September and December. The initial September 2016 sampling results were not included in the ERA update due to data quality issues, per agreement with the BCT; instead, the data from the December 2016 re-sampling were used.

A total of 46 shellfish tissue samples (including six field duplicates) were collected from ten locations. Shellfish samples were analyzed for metals, SVOCs, pesticides, PCBs as homologs, and lipids. In addition, shellfish measurements (e.g., shell length, weight) were made during each sampling event.

Shellfish data are presented in Appendix A and the maximum and average concentrations considered in the food web model update are provided in Table 5.

2.2 Data Treatment

Analytical data were evaluated, validated, and qualified prior to use in the 2017 ERA update. Data evaluation and validation included a comparison of the site data to corresponding blank (laboratory, field, equipment, and trip) concentration data. Data validation reports are presented as Appendix B of the LTM report. Data rejected by the evaluation ("R" qualified) were not used in the ERA.

Estimated values ("J" qualified) were used in the ERA without modification. If the value was flagged with "U" or "UJ," the result was considered a non-detect value.

For each medium, data were compiled into summary statistics. For each chemical detected at least once within a medium, the summary statistics include frequency of detection, range of detection limits, range of detected concentrations, and location of maximum detected result.

For sample locations in which a duplicate sample was also collected, the duplicate sample results for each chemical/medium combination were processed for use in the calculation of summary statistics. Duplicates were resolved as follows: (1) where both the sample and the duplicate results are not detected, the resulting value is the average of the limits of detection; (2) where both the sample and the duplicate results are detected, the resulting value is the average of the detected results; and (3) where one of the pair is reported as not detected and the other is detected, the detected concentration is used.

2.3 Data Evaluation Approach for 2017 ERA Update

Summary statistics for the recent shoreline data sets are provided in Tables 1, 2, 3, 4 and 5 and the maximum detected concentrations were used to update the screening-level evaluations presented in the 2015 ERA. As needed, the average concentrations (conservatively represented by the average of the detected concentrations) were used to refine the screening level results. In addition, the maximum and average concentrations for all media types considered in the 2015 ERA are provided in the tables to support a qualitative discussion of the recently collected data relative to the findings of the 2015 ERA.

3.0 TIER 1 ECOLOGICAL SCREENING RISK ASSESSMENT

The primary objective for a Tier 1 screening risk assessment (SRA) is to determine which, if any, exposure pathways and COPCs warrant further evaluation in a more refined ERA. The Navy Tier 1 ecological SRA process can be described in two steps. Step 1 is equivalent to Step 1 of the USEPA (1997) ERA process and includes a site description, pathway identification/problem formulation, and toxicity evaluation. The goals of this step are to describe the ecological setting of the site and determine whether ecological exposure pathways are potentially complete. Step 2 of the Navy Tier 1 ecological SRA process is equivalent to Step 2 of the USEPA (1997) ERA process. First, potential exposure is evaluated based on conservative assumptions. Then, risk is estimated by comparing the chemical concentrations detected in each medium of concern to conservative, screening-level, medium-specific benchmark criteria.

After Step 2 in the risk assessment process, a Scientific/Management Decision Point (SMDP) is normally reached to determine whether exit criteria for Tier 1, Step 2 have been met. The approach used in this 2017 ERA update is consistent with the 2015 ERA.

3.1 Ecological Setting

The ecological setting for Site 09 is consistent with that described in the 2015 ERA. Site 09 is located within the former NCBC Davisville facility and encompasses approximately 15 acres. It is located along Allen Harbor with a shoreline approximately 2000 feet in length above the 100-year flood plain elevation. The site was used as a landfill but is currently capped with an impermeable geosynthetic liner and is currently covered with grass with small shrubs. The terrain is gently sloping, with a topographic high in the center of the landfill. The Site is bounded to the east by Allen Harbor, to the west by a bicycle path, and to the north and south by vegetated wetlands (Figure 1).

A revetment wall and constructed wetland are located along the southern and eastern boundary of the landfill with a stone breakwater structure separating the wetland from the harbor.

Fiddler crabs, snails, quahogs, and ribbed mussels have been observed within in the wetlands. Vegetation within the created wetland includes smooth cordgrass (*Spartina alterniflora*) and sea lavender (*Limonium carolinianum*). The surrounding shoreline area also includes the invasive common reed (*Phragmites*).

3.2 Potential Exposure Pathways and Receptors

Ecological receptors within the wetland may be exposed to contaminants in sediment, sediment pore water, surface water, and prey tissue (i.e., shellfish) at the Site. The potentially exposed receptors and exposure pathways for the Site 09 shoreline evaluated in the 2015 ERA remain appropriate and are summarized as follows:

- Benthic invertebrates exposed to shallow sediment;
- Aquatic organisms exposed to sediment pore water (represented by piezometer water) and surface water (represented by seep water);
- Terrestrial plants exposed to surface water (represented by seep water); and
- Birds and mammals exposed to shallow sediment and shellfish via ingestion pathways.

3.3 Assessment and Measurement Endpoints

Assessment endpoints describe the characteristics of an ecosystem that have an intrinsic environmental value that is to be protected (e.g., protection of warm-water fish community). Typically, assessment endpoints and receptors are selected for their potential exposure, ecological significance, economic importance, and/or societal relevance. Because assessment endpoints often cannot be measured directly, measurement endpoints are a set of surrogate endpoints used to provide a quantitative metric for evaluating potential effects of chemicals on the ecosystem components potentially at risk. Measurement endpoints provide the actual measurements used to evaluate ecological risk and are selected to represent mechanisms of toxicity and exposure pathways.

The assessment endpoints and measurement endpoints for the Site 09 shoreline evaluated in the 2015 ERA remain appropriate and are summarized as follows:

- Benthic invertebrate assessment endpoint- Adverse effects on the survival, reproduction, and/or growth of sediment invertebrates
    - Measurement endpoint – Comparison of measured concentrations of chemicals in shallow sediment to sediment screening levels protective of benthic invertebrates.
- Aquatic organism assessment endpoint- Adverse effects on the survival, reproduction, and/or growth of aquatic organisms
    - Measurement endpoint – Comparison of measured concentrations of chemicals in sediment pore water to surface water screening levels protective of aquatic organisms.
    - Measurement endpoint – Comparison of measured concentrations of chemicals in surface water to surface water screening levels protective of aquatic organisms.
- Terrestrial plant assessment endpoint- Adverse effects on the survival, reproduction, and/or growth of terrestrial plants
    - Measurement endpoint – Comparison of measured concentrations of chemicals in surface water to plant-based surface water screening levels.

- Bird and mammal assessment endpoint- Adverse effects on the survival, reproduction, and/or growth of birds and mammals
    - Measurement endpoint – Comparison of estimated ingested dose of chemicals in the sediment and shellfish to No Observed Adverse Effects Levels (NOAELs) and Lowest Observed Adverse Effects Levels (LOAELs) for surrogate wildlife species. Raccoon and green heron were selected as the surrogate species (consistent with the 2015 ERA).

3.4 Conceptual Site Model

Contamination may be present at Site 09 from use of the Site as a landfill. Waste materials such as municipal-type waste, construction debris, rubble, preservatives, paint thinners, degreasers (e.g., solvents), PCBs, oil, asbestos, ash, sewage sludge, and waste fuel oil were disposed of in the landfill. Dredged sediment was used to construct the created wetland and contaminants potentially present within the dredged sediment may have entered media within the created wetland through leaching.

Constituents found in shoreline sediment immediately adjacent to Site 09 are most likely due to historical erosion of the landfill face and overland runoff prior to remedy implementation. This conclusion is supported by the historical presence of landfill debris along the Site 09 shoreline (e.g., asphalt, metal debris, glass fragments) prior to capping the landfill. Most of the constituents historically associated with quantifiable human health and ecological risk in near-shore sediment (PAH, PCB, and metals) are not detected, or are detected at low concentrations or frequency, in groundwater at the landfill.

Contaminants from the landfill and from the dredged sediment used to construct the created wetland may have entered sediment, sediment pore water, and surface water at Site 09 through leaching, and may have accumulated in shellfish living along the shoreline at Site 09. Ecological receptors within the wetland may be exposed to contaminants in sediment, sediment pore water, and surface water.

3.5 Ecological Effects Evaluation

The ecological effects evaluation consists of identification of screening ecotoxicity values (SEVs) for sediment and surface water, and toxicity reference values (TRVs) for the food web pathways. These values are expressed as concentrations (in milligram/kilogram [mg/kg] on a dry weight basis for sediment or in micrograms per liter [ug/L] for water) or dosage (in mg/kg of body weight per day [mg/kg-day] for wildlife) of a chemical believed to have little or no effect on the long-term health of the representative species of concern.

The SEVs and TRVs used in the 2015 ERA remain appropriate and sources are summarized as follows:

- Sediment
    - Effects Range - Low (ER-L) values (Long, et al., 1995; Long and Morgan, 1991);
    - USEPA Region 3 Biological Technical Assistance Group (BTAG) sediment screening levels (USEPA, 2006a, 2006b); and
    - National Oceanic and Atmospheric Administration (NOAA) Screening Quick Reference Table (SQuiRT) sediment benchmarks (Buchman, 2008).
- Surface water and sediment pore water (aquatic organisms)
    - National Recommended Water Quality Criteria (NRWQC) (USEPA, 2013)
    - Rhode Island Department of Environmental Management (RIDEM) Ambient Water Quality Criteria (RIDEM, 2009)
    - USEPA Region 3 BTAG screening levels (USEPA, 2006c, 2006d),
    - NOAA SQuiRT surface water benchmarks (Buchman, 2008).
- Surface water (plants)
    - Oak Ridge National Laboratory (ORNL) toxicological benchmarks for plants (Efroymson, et al., 1997).

For both sediment and surface water, marine values were preferentially selected, but freshwater values were used if marine values were not available.

Risks to mammals and birds from exposure to chemicals in sediment were determined using food web models to estimate the total daily dose (TDD) which was compared to chemical-specific TRVs representing acceptable daily doses in mg/kg-day. The TRVs were developed from NOAELs and LOAELs obtained from wildlife studies. The majority of the TRVs were obtained from the ORNL Toxicological Benchmarks for Wildlife (Sample et al., 1996) and USEPA Eco-SSL documents and were supplemented with other toxicity information when necessary. Refer to Attachment 1 of the 2015 ERA report for a detailed presentation of the TRVs and sources.

3.6 Exposure Estimation

Mechanisms for exposure of a representative species to chemicals depend on the physical and behavioral characteristics of the organism. Most exposure for sediment invertebrates, aquatic invertebrates, and plants can be loosely termed “direct contact.” Sediment and aquatic invertebrates have in common the ability to absorb chemicals from sediment or water through

external body surfaces or by intake of food, sediment, or water. Plants may absorb chemical in sediment or water through the roots. Wildlife species may be exposed to chemicals in sediment through direct incidental ingestion of sediment or indirectly by ingestion of contaminated food items.

Consistent with the 2015 ERA, it is anticipated that ecological receptors may come in contact with surface sediment, sediment pore water (piezometer water), and surface water through direct contact or incidentally during ingestion of prey items. Information used to estimate the exposure includes EPCs (i.e., maximum and average detected concentrations), species-specific exposure factors, chemical-specific exposure factors, and exposure equations. The approaches used to estimate exposures in this 2017 ERA update are consistent with the approaches used in the 2015 ERA.

Exposure Point Concentrations

Exposure was estimated using analytical data for shallow sediment, piezometer water, seep water, and shellfish presented in Attachment A. Maximum values were used as the EPCs in the screening to select COPCs in Tables 1 through 4 and in food web modeling presented in Tables 6 and 7.

Species-Specific Exposure Factors

Attachment 1 of the 2015 ERA presented the exposure factors for the mammalian (raccoon) and avian (green heron) receptors evaluated in the food web model. These assumptions are still valid and were used in this ERA update.

Chemical concentrations of shellfish tissue collected in 2014, 2015, and 2016 from Site 09 were used in the food chain model to estimate the dose incurred from ingestion of food items. Recent shellfish analytical results were reported on a wet weight basis (Appendix A); however, the ingestion rates used in the 2015 ERA were expressed on a dry weight basis. Percent moisture data were not reported in the current tissue data set, so the percent moisture results for the 2009 to 2012 shellfish data (average of 86.6% moisture; 13.4% solids)[1] were used to complete the wet weight to dry weight conversion of the shellfish data to be consistent with the food web modeling approach used in the 2015 ERA.

Conservative food chain model inputs were used to evaluate the COPCs. These included the following:

- Assumed sediment and shellfish COPC concentrations are represented by the maximum concentrations in the sediment and shellfish data sets.

[1] dry weight tissue = (wet weight tissue / fraction solids)

- Assumed representative species weight is the low-end of the range and food intake is estimated at the high-end of the range.
- Assumed 100 percent bioavailability of COPCs.
- Assumed species is present year-round.
- Assumed that receptors obtain all of their daily dietary requirements from within the site.

Exposure Equations

To estimate potential dietary exposure, a TDD was estimated for the raccoon and green heron. The TDD calculation considers concentrations of the COPCs in the food items (i.e., shellfish), estimated amounts of abiotic media (i.e., sediment) that it would incidentally ingest, the relative amount of different food items in its diet, body weight, species-specific home range factor, and food ingestion rates.

A home range factor accounts for how much of the receptor's diet comes from the site based on the ratio of the area of receptor's home range to the available habitat area on-site. In the screening level evaluation it was conservatively assumed that 100% of the receptor's diet comes from the given exposure area and there is no seasonal migration out of the exposure area. These assumptions are conservative for receptors that may migrate off-site during parts of the year.

The following generalized equation was used to evaluate the TDD from all sources (i.e., food or prey item, drinking water, incidental ingestion) for each COPC:

$$TDD = \frac{\Sigma([IR_f \times C_f] + [IR_s \times C_s] + [IR_w \times C_w]) \times H}{\text{Body Weight}}$$

Where:

IR_f = Ingestion rate of food (kg/day)

IR_s = Incidental ingestion rate of sediment (kg/day)

IR_w = Ingestion rate of water (L/day)

C_f = Concentration of COPC in food (mg/kg)

C_s= Concentration of COPC in sediment (mg/kg)

C_w = Concentration of COPC in water (mg/kg)

H = Home range factor (ratio of the receptor's home range to the size of exposure area)

The sum of the doses from the various sources represents the full TDD from each COPC that a receptor may be exposed through as a result of foraging within an exposure area. This generalized equation was modified for each representative species. The surface water in Allen Harbor is saline, so is not used as a drinking water source for birds or mammals in the food chain model (C_w is assumed to be zero in the TDD calculations).

3.7 Risk Calculations

The integration of toxicity and exposure information is used to predict possible adverse effects to ecological receptors. The hazard quotient (HQ) method is used to screen sites when potential adverse effects to ecological receptors occur.

To estimate risks to benthic invertebrates, aquatic organisms, and plants, screening level HQs were calculated by comparing the maximum detected concentration for each chemical in each medium (i.e., an estimate of exposure) to the appropriate SEV (i.e., an estimate of effects) using the following formula:

$$HQ = \text{Maximum detected concentration}/SEV$$

For higher trophic level wildlife receptors, the risk estimate is also based on the HQ, defined as the ingested dose divided by the species-specific TRV:

$$HQ = TDD/TRV$$

Due to the consistently applied conservative assumptions implicit in a Tier 1 SRA the presence of HQs above 1 does not necessarily constitute ecological risk; only that additional consideration is warranted.

Analytes which exceed their respective screening benchmarks (i.e., HQs > 1) and analytes without screening benchmarks were retained as COPCs.

3.8 Risk Characterization

The COPCs and receptors with HQs greater than 1 in the updated Tier 1 ecological SRA risk assessment are summarized below.

Risk to Benthic Invertebrates Exposed to Shallow Sediment

The maximum detected concentrations for shallow sediment were compared against direct contact sediment SEVs identified for marine benthic invertebrates. The resulting HQs are presented in Table 1.

Twenty nine COPCs (representing analytes and analyte groups) had HQs above 1 when maximum detected sediment concentrations were compared against the benthic invertebrate SEVs. These HQs ranged from 1.1 for nickel to 145 for dieldrin (detected once above the SEV). Four COPCs lacked benthic invertebrate SEVs (beryllium, 2-butanone, acetone, and methylene chloride). Consistent with the 2015 ERA, total chlorinated VOCs were determined, but are not retained as a COPC; instead, the VOCs are evaluated individually.

In comparison to the 2015 ERA, eight chemicals that had been considered COPCs previously did not have HQs above 1 based on the current data set. Five chemicals that were not detected in the 2015 ERA data set were detected in the current data set and two (gamma-BHC and Aroclor-1254) were identified as COPCs.

Risk to Aquatic Organisms Exposed to Sediment Porewater – Piezometers Adjacent to Revetment Wall

The maximum detected concentrations for piezometer water collected from adjacent to the revetment wall were compared to surface water SEVs designed to be protective of aquatic life. The resulting HQs are presented in Table 2.

Thirteen COPCs (representing analytes and analyte groups) had HQs above 1 when maximum detected sediment concentrations were compared against the surface water SEVs (nine COPCs were identified in both dissolved and total phases). These HQs ranged from 1.1 for total PAHs to 2,200 for iron. Two compounds (BTEX and total chlorinated VOCs) were presented in the screen, but not selected as COPCs because risks were considered by evaluating individual VOCs. Eleven metals were identified as COPCs in the total recoverable phase and nine were retained in the dissolved phase.

In comparison to the 2015 ERA, two new COPCs were selected (total PAHs and total mercury) and the dissolved phases of four metals (arsenic, chromium, lead, zinc) were also identified as COPCs in the current data set, but not the 2015 ERA. There were no pesticides or PCBs detected in the current data set. Several PAHs and two phthalates were detected in the current data set but were not previously detected in the 2015 ERA. These chemicals were not identified as COPCs.

Risk to Aquatic Organisms Exposed to Sediment Porewater – Piezometers Beyond Breakwater Structure

The maximum detected concentrations for piezometer water collected from beyond the breakwater structure were compared to surface water SEVs designed to be protective of aquatic life. The resulting HQs are presented in Table 3.

Thirteen COPCs (representing analytes and analyte groups) had HQs above 1 when maximum detected sediment concentrations were compared against the surface water SEVs (eight COPCs were identified in both dissolved and total phases). These HQs ranged from 1.5 for total carbon disulfide to 7,149 for total recoverable aluminum. Eleven metals were identified as COPCs in the total recoverable phase and eight were retained in the dissolved phase.

In comparison to the 2015 ERA, two new COPCs were selected (2-butanone and carbon disulfide) and the dissolved phases of four metals (chromium, copper, lead, and zinc) were also identified as COPCs in the current data set, but not the 2015 ERA. There were no pesticides or PCBs detected in the current data set. Several PAHs, 2,4,5-trichlorophenol, 2-butanone, toluene, total xylenes, and several metals (predominantly in the dissolved phase) were detected in the current data set but were not previously detected in the 2015 ERA. Of these chemicals, 2-butanone, and dissolved phase copper, lead, and zinc were identified as COPCs.

Risk to Aquatic Organisms and Plants Exposed to Surface Water

The maximum detected concentrations for seep water were compared to surface water SEVs designed to be protective of aquatic life and to SEVs designed to be protective of plants. The resulting HQs are presented in Table 4.

Seep samples were only analyzed for VOCs. Four VOCs were detected and there were no HQs above 1. However, two VOCs (cis-1,2-dichloroethene and trans-1,2-dichloroethene) were selected as COPCs because plant SEVs were not available. Total chlorinated VOCs was presented in the screen, but not selected as a COPC because risks were considered by evaluating individual VOCs.

In comparison to the 2015 ERA, COPC selection was similar with both cis-1,2-dichloroethene and trans-1,2-dichloroethene retained based on a lack of plant SEVs. In the 2015 ERA, total 1,2-dichloroethene and vinyl chloride were also retained as COPCs based on a lack of plant SEVs.

Risk to Birds and Mammals

Risks to mammals and birds were assessed using conservative food web models and assumptions presented previously in the 2015 ERA. Table 5 presents the sediment and shellfish data considered in the 2017 ERA update of the models and Tables 6 and 7 present the conservative exposure food web models and HQs for the raccoon and green heron, respectively.

NOAEL-based HQs for the raccoon were above 1 for aluminum, antimony, arsenic, chromium, iron, and nickel (Table 6) and NOAEL-based HQs for the green heron were above 1 for aluminum, arsenic, chromium, copper, iron, lead, and mercury (Table 7). Therefore, these chemicals were identified as COPCs for wildlife. Aluminum, iron, and mercury were previously identified as COPCs for wildlife in the screening-level food web evaluation in the 2015 ERA, but antimony, arsenic, chromium, copper, lead, and nickel were not. However, it appears that food web risks were underestimated in the 2015 ERA because wet weight shellfish data were not converted to dry weight before inclusion in the food web model.

3.9 Tier 1 Conclusions

In this update of the Tier 1 portion of the ERA, it was determined that complete exposure pathways exist from the shallow sediment, groundwater (piezometer water), and surface water (seep water) at Site 09 to benthic invertebrates, aquatic organisms, plants and wildlife receptors. This evaluation indicated that certain COPCs warrant additional evaluation to assess the potential for risks to ecological receptors exposed to these media.

4.0 TIER 2, STEP 3A COPC REFINEMENT

The purpose of Tier 2, Step 3a is to reevaluate COPCs that were retained in Tier 1 for further evaluation in a Tier 2 BERA, and to identify and eliminate from further consideration those COPCs that were retained because of the use of very conservative exposure scenarios. Using less conservative, more realistic, Tier 2, Step 3a assumptions, the Tier 1 ecological SRA risk estimates were recalculated for the pathways and COPCs retained at the end of the Tier 1 SRA. These recalculated risk estimates were used to refine the list of COPCs identified in the Tier 1 ecological SRA.

Consistent with the 2015 ERA, the following factors were evaluated, as appropriate, to determine if the risks are great enough to warrant additional evaluations:

- Magnitude of criterion exceedance
- Frequency of chemical detection and spatial distribution
- Alternate benchmarks
- Food chain modeling assumptions

4.1 COPC Refinement – Benthic Invertebrates Exposed to Shallow Sediment

As indicated in Table 1, six metals slightly exceeded an HQ of 1, with HQs ranging from 1.1 (nickel) to 2.7 (copper) using the screening-level SEVs. However, when compared to the higher effect benchmarks there were no exceedances. When average concentrations were compared to the screening-level SEVs only copper slightly exceeded the SEV (34 mg/kg) with a concentration of 38 mg/kg. Beryllium was selected as a COPC because a screening value was not available. Beryllium was detected in 15 of 16 samples and concentrations ranged from 0.15 to 1.4 mg/kg. Based on the relatively low concentrations of beryllium no impacts are expected. Because the metals concentrations only slightly exceed the screening-level SEVs and no higher effects benchmarks are exceeded, it is it expected that metals risks to benthic invertebrates is minimal. This finding is consistent with the 2015 ERA.

Ten individual PAHs had HQs above 1 using the screening-level SEVs, with HQs ranging from 2 to 23. The toxicity of PAHs is assumed to be additive, so evaluating combined PAHs is useful in examining the potential risks. When evaluated as total PAHs the maximum HQ based on the screening-level SEV was 4.7, for high molecular weight (HMW) PAHs the maximum HQ was 8.2, and for low molecular weight (LMW) PAHs it was 9.4. The concentrations of total PAHs ranged from 0.011 to 19 mg/kg, and only two samples exceeded the screening-level SEV of 4.02 mg/kg. When

total PAH concentrations were compared to the higher effects benchmark there were no exceedances.

The concentrations of HMW PAHs ranged from 0.011 to 14 mg/kg, and three of the 19 samples exceeded the screening-level SEV of 1.7 mg/kg. When concentrations of HMW PAHs were compared to the higher effects benchmark, only one sample that exceeded the benchmark. The concentrations of LMW PAHs ranged from 0.005 to 5.2 mg/kg, and two samples exceeded the screening-level SEV of 0.55 mg/kg. When concentrations of LMW PAHs were compared to the higher effects benchmark there was only one sample that exceeded the benchmark. In general, only a few of the 19 samples exceeded the screening-level SEV, and fewer exceeded the higher effects benchmark. In addition, when the average concentrations were compared to screening values there were no exceedances of the screening-level SEV. Therefore, PAHs are not considered a risk to benthic invertebrates. This finding is consistent with the 2015 ERA.

Carbon disulfide was the only VOC retained as a COPC for benthic invertebrates due to exceedance of the screening level-SEV. No higher effects benchmark was identified for carbon disulfide. As indicated in the 2015 ERA, VOCs are typically not very toxic to invertebrates. Although carbon disulfide was detected more frequently in the current data set than in the 2015 ERA, the maximum and average detected concentrations were lower in the current data set. Therefore, consistent with the 2015 ERA, carbon disulfide is not considered a risk to benthic invertebrates.

Six pesticides had HQs above 1 using the screening-level SEVs, with HQs ranging from 1.2 to 145. All of the pesticides had a low frequency of detection with one to three detected concentrations out of nine samples. 4,4-DDE, endrin aldehyde, and heptachlor epoxide had HQs below 2, only slightly exceeding the screening-level SEVs with no exceedances of the higher effects benchmarks. 4,4-DDT was detected in three samples with concentrations ranging from 0.0046 to 0.0093 mg/kg, all samples exceed the screening-level SEV of 0.00158 mg/kg, but none exceeded the higher effects benchmark. Dieldrin was only detected in one sample at 0.0029 mg/kg which exceeded the screening-level SEV of 0.00002 mg/kg, but not the higher effects benchmark. Gamma-BHC (lindane) was detected in two samples at concentrations of 0.003 and 0.0021 mg/kg, which exceeded the screening-level SEV of 0.00032 mg/kg and the higher effects benchmark of 0.00099 mg/kg. All of the pesticides were detected infrequently and a relatively low concentrations that are not indicative of disposal activities. Therefore, risks to benthic invertebrates due to pesticides are expected to be minimal and not related to site activities. This finding is consistent with the 2015 ERA.

Aroclor-1254, Aroclor-1260, and total PCBs were also retained as COPCs with screening-level HQs ranging from 3.9 to 7.9 based on comparisons to the total PCB screening-level SEV. SEVs are not available for the individual Aroclors, so evaluating total PCBs is most appropriate in this refinement

step. Total PCBs exceeded the screening-level SEV of 0.0227 mg/kg in six of the seven detected samples with a range of concentrations of 0.049 to 0.18 mg/kg. When the PCBs were compared to the higher effects benchmarks, there were no exceedances. Because the concentrations of PCBs were relatively low, and there were no exceedances when compared to the higher effects benchmarks, potential risks from PCBs are expected to be minimal. This finding is consistent with the 2015 ERA, which showed slightly higher levels of Aroclor-1260 but reached the same conclusion.

A review of the average detected concentrations in the current data set and the average EPCs considered in the 2015 ERA indicates that, in general the average concentrations were similar. Some chemicals were higher in the current data set (most metals, some HMW PAHs, most pesticides, and total PCBs) and others were lower (aluminum, manganese, most PAHs, VOCs). The increases or decreases were relatively small with the largest differences found for pesticides where dieldrin and endrin aldehyde averages were approximately four times higher in the current data set than the 2015 ERA data set. However, given the infrequent detection of these COPCs, this does not necessarily indicate a trend and all detected concentrations considered in the 2017 ERA update were below the higher effects benchmarks.

Although there are several exceedances of the screening-level SEVs, the exceedances of the higher effects benchmarks are infrequent and relatively low (maximum HQ of 3). As indicated in Section 3.4, dredged material was used to construct the created wetland and likely serves as a potential source of COPCs. COPCs concentrations in surface sediment may reflect contributions from both the dredged materials and the landfill. Therefore, consistent with the 2015 ERA, no chemicals in sediment are retained as COPCs for benthic invertebrates.

4.2 COPC Refinement – Aquatic Organisms Exposed to Sediment Pore Water

Piezometers Adjacent to Revetment Wall

As indicated in Table 2, total PAHs slightly exceeded the screening-level SEV with an HQ of 1.1 based on a detected concentration in one of three samples. One VOC, carbon disulfide, exceeded the screening-level SEV of 0.92 ug/L in two samples with a range of detected concentrations of 0.4 to 5.3 ug/L. Carbon disulfide had a low frequency of detection and was only detected in 4 of the 12 samples. Based on the infrequent detections and exceedances of the screening-level SEVs, concentrations of total PAHs and carbon disulfide are not expected to adversely impact aquatic organisms at the Site and both chemicals are eliminated as COPCs for aquatic organisms.

Eleven metals had HQs above 1 based on comparisons to screening-level SEVs; however, beryllium and mercury were only COPCs in the total recoverable, not dissolved phase. The bioavailable fraction of metals is more closely represented by dissolved metals in the water column. Therefore,

only COPCs selected in dissolved metals are further evaluated. Concentrations of aluminum, arsenic, chromium, copper, iron, lead, manganese, nickel, and zinc exceeded screening-level SEVs in the dissolved phase.

Piezometer water is being used to represent exposure to sediment porewater that might occur for aquatic organisms. Aquatic receptors within the sediment are typically exposed to pore water in the upper 0 to 6 inches of sediment within the biologically active zone. However, the piezometer water was collected at a depth of 2 to 3 feet bgs which is likely deeper than most aquatic organisms would be found. Groundwater at this depth will be diluted as it moves upward towards the biologically active zone. Therefore, the actual concentrations of pore water in the biologically active zone would likely be lower than what is present in groundwater or piezometer water, and exceedances of piezometer water do not necessarily indicate unacceptable risk to the aquatic community.

A dilution factor has not been determined at this site, but if a dilution factor of 10 was used all concentrations of zinc would be below the screening-level SEV. Average concentrations of arsenic, chromium, lead, manganese and nickel would also be below the screening-level SEVs with a 10-fold dilution. Average concentrations of aluminum, copper, and iron exceeded the screening-level SEVs with a 10-fold dilution applied.

When considered on a sample-by-sample basis, the following COPCs exceed the screening-level SEVs with the 10-fold dilution applied –one sample each for arsenic and lead, two samples each for chromium, copper, manganese, and nickel, six samples for aluminum, and seven samples for iron. In general, these exceedances are limited to the northern (P09-01, P09-02A) and southern (P09-09, P09-10) portions of the site.

A review of dissolved and total recoverable phase metals data from nearby shallow (or intermediate depth if nearby shallow groundwater was not available) groundwater monitoring wells was conducted to qualitatively assess whether the monitoring well data corresponded with elevated concentrations in nearby piezometer water.

Monitoring wells MW09-25S and MW09-11S are located within the northern portion of the site in the vicinity of piezometers P09-01 and P09-02A which had exceedances of the screening level SEVs for aluminum, chromium, copper, iron, lead, manganese, and nickel with the 10-fold dilution applied. Concentrations of these COPCs in the groundwater data are much lower than the piezometer water concentrations indicating that groundwater is not likely the source of the COPCs in piezometer water.

Monitoring well MW09-21S is located within the southern portion of the site in the vicinity of piezometers P09-09 and P09-10 which had exceedances of the screening level SEVs for aluminum,

iron, and manganese with the 10-fold dilution applied. As noted for the northern wells, concentrations of these COPCs in the groundwater data are much lower than the piezometer water concentrations indicating that groundwater is not likely the source of the COPCs in piezometer water.

Arsenic in piezometer water from one location (P09-05A) was elevated above the screening level SEV with the 10-fold dilution factor applied, so data from groundwater well MW09-17I were reviewed. While arsenic in the piezometer was detected at 666 ug/L, the highest concentration in the groundwater was 0.58 ug/L. Therefore, groundwater is not expected to be the source of the elevated arsenic at P09-05A.

Based on this review of the groundwater data, it does not appear that the piezometer water concentrations of metals above the screening-level SEVs are related to groundwater discharge from the site. Therefore, metals are eliminated as COPCs for aquatic organisms.

These findings are consistent with the 2015 ERA. Concentrations of metals in the piezometer water are higher than observed in the 2015 ERA data set; however, consistent with the 2015 ERA, the review of the groundwater data indicates that groundwater from the site does not appear to be the source of COPC in piezometer water.

Piezometers Beyond Breakwater Structure

As indicated in Table 3, only two VOCs were selected as COPCs and each was detected only three times in 20 samples. As indicated in the 2015 ERA, VOCs are typically not very toxic to invertebrates. Carbon disulfide had a maximum concentration of 1.4 ug/L which only slightly exceeded the screening value of 0.92 ug/L and the maximum concentration of 2-butanone (43 ug/L) resulted in a maximum HQ of 14. Based on the relatively low levels of these VOCs and the infrequent detections, concentrations of carbon disulfide and 2-butanone are not expected to adversely impact aquatic organisms at the Site and both chemicals are eliminated as COPCs for aquatic organisms.

Eleven metals had HQs above 1 based on comparisons to screening-level SEVs; however, arsenic, beryllium, and mercury were only COPCs in the total recoverable, not dissolved phase. As stated previously, the dissolved metals in the water column represent the bioavailable fraction, so only COPCs selected in dissolved metals are further evaluated. Concentrations of aluminum, chromium, copper, iron, lead, manganese, nickel, and zinc in the dissolved phase exceeded screening-level SEVs.

As indicated previously, concentrations of pore water in the biologically active zone would likely be lower than what is present in groundwater or piezometer water, and exceedances of piezometer

water do not necessarily indicate unacceptable risk to the aquatic community. Therefore, a 10-fold dilution factor was applied to further evaluate COPCs in piezometer water.

With a dilution factor of 10 considered, concentrations of chromium, lead, and zinc would all be below the screening-level SEVs. Average concentrations of chromium, lead, and zinc would also be below the screening-level SEVs with a 10-fold dilution. Average concentrations of aluminum, copper, iron, manganese, and nickel exceeded the screening-level SEVs with a 10-fold dilution applied.

When considered on a sample-by-sample basis, the following COPCs exceed the screening-level SEVs with the 10-fold dilution applied – two samples for copper, three samples for manganese, five samples each for aluminum and nickel, and six samples for iron. These exceedances occur in all five of the outside the breakwater piezometer locations with P09-08B and P09-012B, located in the southeastern potion of the site, showing the most frequent exceedances.

As described above, shallow (or intermediate depth) groundwater data for dissolved and total recoverable phase metals from nearby monitoring wells were reviewed to qualitatively assess whether the monitoring well data corresponded with elevated concentrations in nearby piezometer water.

Monitoring wells MW09-08S, MW-09-20I, and MW09-09S are located within the southeastern portion of the site in the vicinity of piezometers P09-06B, P09-07B, P09-08B, and P09-12B which had exceedances of the screening level SEVs for aluminum, copper, iron, manganese, and nickel with the 10-fold dilution applied. Similar to the observations noted for the piezometers adjacent to the revetment wall, the concentrations of these COPCs in the groundwater data are much lower than the piezometer water concentrations indicating that groundwater is not likely the source of the COPCs in piezometer water.

Monitoring wells MW-09-10S and MW09-23S are located in the vicinity of piezometers P09-11B which had exceedances of the screening level SEVs for aluminum and copper with the 10-fold dilution applied. Aluminum and copper were detected infrequently in the groundwater from MW-09-10S and MW09-23S and the detected concentrations are well below the maximum aluminum and copper concentrations in P09-11B (3,680 and 88.6 ug/L, respectively).

Based on this review of the groundwater data, it does not appear that the piezometer water concentrations of metals above the screening-level SEVs are related to groundwater discharge from the site. Therefore, metals are eliminated as COPCs for aquatic organisms.

These findings are consistent with the 2015 ERA. Some dissolved phase metals that were not previously detected in the 2015 ERA data set are detected in the current data set (copper, lead,

zinc) and dissolved phase concentrations are generally higher in the current data set. However, consistent with the 2015 ERA, the review of the groundwater data indicates that groundwater from the site does not appear to be the source of COPC in piezometer water.

4.3 COPC Refinement – Aquatic Organisms Exposed to Surface Water

Two VOCs were selected as COPCs due to a lack of available plant screening values (cis-1,2-dichloroethene, and trans-1,2-dichloroethene). These VOC were both detected at low frequencies (two detects out of 11 samples) and concentrations were well below plant-based screening values for other VOCs identified by Efroymson, et al. (1997; values for VOCs range from 1,000 to 100,000 ug/L). No impacts to plants are expected from exposure to VOCs in surface water.

The VOC concentrations detected in seep water in the current data set are lower than the concentrations evaluated in the 2015 ERA and the findings of this update are consistent with the 2015 ERA.

4.4 COPC Refinement – Birds and Mammals

A refined food web model was used to assess the potential for risks to mammals and birds. Alternative average exposure factors and average detected concentrations were used to refine the conservative evaluation presented in the screening-level food webs presented in Tables 6 and 7. The alternative exposure factors used were consistent with those used in the 2015 ERA.

Although the screening-level food webs assumed that the receptors obtained all of their diet from the shoreline area surrounding the site (i.e., where shallow sediment and shellfish were collected), it is more likely that they also forage elsewhere. The home range of the raccoon was reported as 386 acres (USEPA, 1993 as cited in Tetra Tech, 2015), which is larger than the shoreline area surrounding the site (0.9 acres). Therefore, a home range factor of 0.00233 was calculated by dividing the approximate shoreline area (0.9 acres) by the home range (386 acres). The home range for the green heron was reported as 0.355 kilometers (km) of shoreline, which is smaller than the shoreline of the site (approximately 0.6 km). Because the home range was smaller than the site shoreline, the home range factor for the green heron remained the same (H=1) as in the conservative food web model.

In addition, the average sediment and shellfish concentrations were used in the refined food web model calculations. The resulting TDD was divided by the NOAEL- and LOAEL-based TRVs to estimate the potential for adverse effects to ecological receptors over the range of toxicity levels.

Table 8 presents the refined food web model calculations for the raccoon for the six COPCs with NOAEL-based HQs above 1 in the conservative food web model. The results of the refined evaluation indicate that no chemicals exceeded a HQ of 1 for the raccoon.

Table 9 presents the refined food web model calculations for the green heron for the seven COPCs with NOAEL-based HQs above 1 in the conservative food web model. The results of the refined evaluation indicate that five COPCs had HQs above 1 (HQs ranging from 1.1 to 3.4) using the NOAEL-based TRV. However, none of the HQs were above 1 when the LOAEL-based TRV was used.

While all of the TDDs are dominated by the shellfish contribution, the aluminum and iron TDDs for the green heron also contain a significant contribution (27% to 30%) from the incidental ingestion of sediment during foraging. The sediment ingestion rate of 5% was selected based on best professional judgement due to a lack of data for the green heron and is likely to be an overestimate. Even a slight reduction in the sediment ingestion rate would bring the NOAEL-based HQ for aluminum below 1 and would reduce the iron HQ. The heron food web model also assumes that the heron obtains all of their diet from the shoreline of the Site. This is likely an overestimate and a reduction of the home range factor from 1 to 0.75 would bring the NOAEL-based HQs for aluminum and chromium below 1 and would reduce the NOAEL-based HQs for arsenic, iron, and mercury to 1.1, 2.6, and1.2, respectively.

Based on the low NOAEL-based HQs, the lack of LOAEL-based HQs above 1, and the conservative nature of the sediment ingestion rate and the home range factor, risks to the green heron due to exposure to sediment and shellfish are expected to be minimal.

As described in Section 4.1, average sediment concentrations varied, but not substantially or consistently up or down, between the current data set and the data set considered in the 2015 ERA. For the shellfish, most metals and approximately half of the organic constituents had higher average concentrations in the current data set than in the previous dataset. The greatest difference in shellfish concentration was for chromium with an average concentration of 2.8 mg/kg_{ww} in the current data set and 0.18 mg/kg_{ww} in the previous data set. Although many of the shellfish concentrations were higher in the current data set than in the 2015 ERA, the overall findings of minimal risks to wildlife are consistent with the previous ERA.

5.0 ECOLOGICAL RISK UNCERTAINTY ANALYSIS

ERA results depend primarily on the use of multiple lines of evidence supporting particular conclusions, and each line of evidence is subject to varying degrees of uncertainty. Because of the complexity of ecosystems and the associated mechanisms that cause ecological stress, uncertainty in environmental risk characterization is inevitable. Uncertainty could be attributable to a number of sources, including but not limited to the following:

- Sampling and statistical variability
- Difficulty of extrapolating from laboratory data to field data
- Problems in evaluating environmental responses to mixtures of contaminants
- Range of conditions for which models or HQs are applicable

Additional sources of uncertainty associated with this evaluation are described below. In general, the assumptions made in multiple points in the ERA tend to err on the side of over-estimating risks. The cumulative impact of multiple conservative assumptions is more likely to over-estimate, than under-estimate, potential risks to ecological receptors.

Uncertainty in Ecological Effects Data

Sediment SEVs were not available for a beryllium, 2-butanone, acetone, and methylene chloride which were detected in sediment. Mammalian TRVs were not available for 2-butanone or tetrachloroethene and avian TRVs were not available for antimony beryllium, four VOCs, and heptachlor epoxide so these chemicals could not be evaluated in the food web models. These chemicals were selected as COPCs because, with no SEV or TRV, it cannot be stated with certainty that those COPCs do not pose an ecological risk. However, VOCs are typically not toxic to invertebrates and they do not tend to bioaccumulate in the food chain.

Several of the screening-level SEVs are very conservative, and are based on laboratory studies using chemical forms that are more bioavailable than chemicals found in the environment.

The community-level screening benchmarks and wildlife TRVs used do not generally account for possible synergistic, antagonistic, or additive effects of COPC mixtures in environmental media. These factors may result in an under-estimate or over-estimate of potential risk. Assessing potential risks due to exposures to chemical mixtures is challenging since chemicals within the mixture may not be equally bioavailable and may not act on the receptor with the same toxic mechanism.

The TRVs used in the food web model are based on species other than the endpoint species (e.g., rats, mice). Uncertainty exists in the application of toxicity data across species because the

contaminant may be more or less toxic to the endpoint species than it was to the test study species.

Uncertainties in Ecological Exposure Estimation

In general, the sampling activities targeted areas with the potential to have been impacted by historic site activities. However, these areas may not represent ecological habitats or areas likely to be frequented by ecological receptors. Therefore, ecological exposures represented by some samples may be limited or receptors may forage in other portions of the Site. This type of sampling is expected to bias results high.

Shellfish data used in the 2017 ERA update were reported on a wet weight basis and percent moisture data were not reported. Therefore, the percent moisture results for the 2009 to 2012 shellfish data were used to convert the wet weight data to dry weight to be consistent with the food web modeling approach used in the 2015 ERA. The lack of sample specific percent moisture results represents a source of uncertainty in the food web evaluation where the shellfish represent the prey item for the raccoon and the shrew. The average percent moisture of 86.6% from the 2009 to 2012 shellfish data is slightly higher than the average for bivalves listed in USEPA guidance (82% moisture; USEPA, 1993). However, even a slight decrease in the percent moisture would lower the dry weight tissue concentrations and the associated wildlife HQs.

As stated previously, the piezometer water was collected at a depth of 2 to 3 ft bgs, which is deeper than the biologically active zone (typically 0 to 6 inches). Therefore, the comparison of those data to surface water SEVs is very conservative and likely to over-estimate risks to aquatic receptors.

The average concentrations evaluated in the 2017 ERA update are based on the detected concentrations. An average concentration that included non-detect values would be lower; therefore, the evaluation of the average of the detected concentrations in the COPC refinement may over-estimate risks throughout the exposure area and for mobile receptors.

The TDD in the food web model is based on an equation that incorporates ingestion rates, body weights, and other exposure factors. These exposure factors were obtained from literature studies or predicted using various equations. Ingestion rates and body weights vary among species, especially among species inhabiting different habitats and species present on-site could be somewhat different from those models in the food web model.

6.0 ECOLOGICAL RISK SUMMARY AND CONCLUSIONS

This 2017 ERA update was performed in support of the Site 09 Five Year Event LTM Report and will ultimately be used as part of the evaluation to confirm compliance with the RAOs identified in the ROD. The objective of this ERA update is to determine whether there have been any changes and/or updates to ERA guidance or site-specific conditions since the 2015 ERA was conducted that would result in a change of the conclusions of the 2015 ERA or whether the conclusions of the 2015 ERA remain valid.

The receptors and exposure pathways evaluated in the ERA update are consistent with those evaluated in the 2015 ERA. These included the following:

- Benthic invertebrates exposed to shallow sediment;
- Aquatic organisms exposed to sediment pore water (represented by piezometer water) and surface water (represented by seep water);
- Terrestrial plants exposed to surface water (represented by seep water); and
- Birds and mammals exposed to shallow sediment and shellfish via ingestion pathways

Toxicity values and exposure assumptions used in the 2017 ERA update are consistent with those used in the 2015 ERA. Updated analytical data from all media were used to update the benchmark screens and food web models and to qualitatively identify differences between the current data set and the data set evaluated in the 2015 ERA.

The overall conclusion of this 2017 ERA update is that the conclusions of the 2015 ERA remain valid and exposure to shallow sediment, pore water, surface water, and shellfish along the Site 09 shoreline does not pose a site-related risk to ecological receptors. Concentrations of several metals were elevated in piezometer water, but it does not appear that these concentrations are related to groundwater at the site.

7.0 REFERENCES

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TABLES

TABLE 1
SELECTION OF SHALLOW SEDIMENT COPCs
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Frequency of Detection	Minimum Detected Concentration	Maximum Detected Concentration	Location of Maximum Detection	Average of Detected Concentrations	SEVs for Sediment		HQ	COPC Determination and Rationale		Comparison to Higher Effects Benchmark			Detected Concentrations Evaluated in Previous ERA [1]		COPC in Previous ERA?
						Value	Source				Value	Source	HQ	Maximum	Average	
Metals (mg/kg)																
ALUMINUM	16 / 16	2740	9130	SED09-09 (2 - 6 in)	5030	18000	NOAA	0.51	NO	Max Detect < SEV	NA		NA	10600	5431	NO
ANTIMONY	3 / 16	0.46 J	1.7 J-	SED09-09 (2 - 6 in)	0.93	2	ER-L 1991	0.85	NO	Max Detect < SEV	25	ER-M 1991	0.068	0.74	0.27	NO
ARSENIC	16 / 16	1.8 J	11.6 J	SED09-10 (0 - 0.5 ft)	5.3	8.2	ER-L 1995	1.4	YES	Max Detect > SEV	70	ER-M 1995	0.17	16	4.2	YES
BERYLLIUM	15 / 16	0.3	1.4	SED09-11B (0 - 0.5 ft)	0.55	NA		NA	YES	No SEV	NA		NA	0.74	0.40	YES
CHROMIUM	16 / 16	8.4 J-	32.4 J	SED09-09 (0 - 0.5 ft)	16	81	ER-L 1995	0.40	NO	Max Detect < SEV	370	ER-M 1995	0.088	42	16	NO
COPPER	16 / 16	11.7 J	91	SED09-09 (2 - 6 in)	38	34	ER-L 1995	2.7	YES	Max Detect > SEV	270	ER-M 1995	0.34	77	28	YES
IRON	16 / 16	7090	27500	SED09-09 (2 - 6 in)	13200	220000	NOAA	0.13	NO	Max Detect < SEV	NA		NA	26600	11591	NO
LEAD	16 / 16	7.9 J	83.1 J	SED09-09 (2 - 6 in)	26	46.7	ER-L 1995	1.8	YES	Max Detect > SEV	218	ER-M 1995	0.38	58	18	YES
MANGANESE	16 / 16	54.9 J+	250 J+	SED09-09 (2 - 6 in)	106	260	NOAA	0.96	NO	Max Detect < SEV	1100	NOAA FW	0.23	308	119	YES
MERCURY	16 / 16	0.021 J-	0.26	SED09-09 (2 - 6 in)	0.081	0.15	ER-L 1995	1.7	YES	Max Detect > SEV	0.71	ER-M 1995	0.37	0.21	0.069	YES
NICKEL	16 / 16	4.6	23.1	SED09-09 (2 - 6 in)	11	20.9	ER-L 1995	1.1	YES	Max Detect > SEV	51.6	ER-M 1995	0.45	24	9.9	YES
ZINC	16 / 16	25.3 J	263 J	SED09-09 (2 - 6 in)	95	150	ER-L 1995	1.8	YES	Max Detect > SEV	410	ER-M 1995	0.64	305	72	YES
Semivolatile Organic Compounds (mg/kg)																
2-METHYLNAPHTHALENE	3 / 19	0.0082	0.051	SED09-10 (2 - 6 in)	0.031	0.070	ER-L 1995	0.73	NO	Max Detect < SEV	0.67	ER-M 1995	0.076	0.35	0.024	YES
ACENAPHTHENE	10 / 19	0.0057	0.37	SED09-10 (2 - 6 in)	0.056	0.016	ER-L 1995	23	YES	Max Detect > SEV	0.5	ER-M 1995	0.74	1.5	0.095	YES
ACENAPHTHYLENE	4 / 19	0.0052	0.019	SED09-10 (2 - 6 in)	0.010	0.044	ER-L 1995	0.43	NO	Max Detect < SEV	0.64	ER-M 1995	0.030	0.036	0.0061	NO
ANTHRACENE	12 / 19	0.0048 J	0.84	SED09-10 (2 - 6 in)	0.10	0.0853	ER-L 1995	9.8	YES	Max Detect > SEV	1.1	ER-M 1995	0.76	3.5	0.19	YES
BENZO(A)ANTHRACENE	18 / 19	0.0043	1.4	SED09-10 (2 - 6 in)	0.15	0.261	ER-L 1995	5.4	YES	Max Detect > SEV	1.6	ER-M 1995	0.88	6.8	0.43	YES
BENZO(A)PYRENE	18 / 19	0.0053	1.1	SED09-10 (2 - 6 in)	0.12	0.43	ER-L 1995	2.6	YES	Max Detect > SEV	1.6	ER-M 1995	0.69	4.7	0.31	YES
BENZO(B)FLUORANTHENE	18 / 19	0.011	1.3	SED09-10 (2 - 6 in)	0.17	1.8	NOAA	0.72	NO	Max Detect < SEV	NA		NA	6.4	0.46	YES
BENZO(G,H,I)PERYLENE	18 / 19	0.0052	0.64	SED09-10 (2 - 6 in)	0.082	0.67	NOAA	0.96	NO	Max Detect < SEV	NA		NA	2.7	0.18	YES
BENZO(K)FLUORANTHENE	18 / 19	0.0046	0.85	SED09-10 (2 - 6 in)	0.086	1.8	NOAA	0.47	NO	Max Detect < SEV	NA		NA	2.00	0.15	YES
CHRYSENE	18 / 19	0.0066	1.4	SED09-10 (2 - 6 in)	0.15	0.384	ER-L 1995	3.6	YES	Max Detect > SEV	2.8	ER-M 1995	0.50	5.4	0.39	YES
DIBENZO(A,H)ANTHRACENE	13 / 19	0.0052	0.14	SED09-10 (2 - 6 in)	0.027	0.0634	ER-L 1995	2.2	YES	Max Detect > SEV	0.26	ER-M 1995	0.54	0.90	0.060	YES
FLUORANTHENE	19 / 19	0.0057	3.7	SED09-10 (2 - 6 in)	0.35	0.6	ER-L 1995	6.2	YES	Max Detect > SEV	5.1	ER-M 1995	0.73	16	1.08	YES
FLUORENE	9 / 19	0.0055	0.44	SED09-10 (2 - 6 in)	0.075	0.019	ER-L 1995	23	YES	Max Detect > SEV	0.54	ER-M 1995	0.81	2.1	0.12	YES
INDENO(1,2,3-CD)PYRENE	18 / 19	0.0044	0.56	SED09-10 (2 - 6 in)	0.077	0.6	NOAA	0.93	NO	Max Detect < SEV	NA		NA	2.0	0.16	YES
NAPHTHALENE	4 / 19	0.0042	0.16	SED09-10 (2 - 6 in)	0.067	0.16	ER-L 1995	1.0	NO	Max Detect < SEV	2.1	ER-M 1995	0.076	1.1	0.055	YES
PHENANTHRENE	17 / 19	0.0046	3.3	SED09-10 (2 - 6 in)	0.31	0.24	ER-L 1995	14	YES	Max Detect > SEV	1.5	ER-M 1995	2.2	14	0.84	YES
PYRENE	19 / 19	0.005	2.7	SED09-10 (2 - 6 in)	0.26	0.665	ER-L 1995	4.1	YES	Max Detect > SEV	2.6	ER-M 1995	1.0	12	0.74	YES
HIGH MOLECULAR WEIGHT PAHS	19 / 19	0.011	14	SED09-10 (2 - 6 in)	1.4	1.7	ER-L 1995	8.2	YES	Max Detect > SEV	9.6	ER-M 1995	1.5	58	3.97	YES
LOW MOLECULAR WEIGHT PAHS	17 / 19	0.0046	5.2	SED09-10 (2 - 6 in)	0.48	0.552	ER-L 1995	9.4	YES	Max Detect > SEV	3.16	ER-M 1995	1.6	22	1.3	YES
TOTAL PAHS	19 / 19	0.011	19	SED09-10 (2 - 6 in)	1.9	4.022	ER-L 1995	4.7	YES	Max Detect > SEV	44.792	ER-M 1995	0.42	81	5.3	YES
Volatile Organic Compounds (mg/kg)																
2-BUTANONE	1 / 20	0.019 J	0.019 J	SED09-11B (2 - 6 in)	0.019	NA		NA	YES	No SEV	NA		NA	ND	ND	NO
ACETONE	9 / 20	0.0066	0.062	SED09-09 (2 - 6 in)	0.028	NA		NA	YES	No SEV	NA		NA	ND	ND	NO
CARBON DISULFIDE	10 / 20	0.0038 J	0.036	SED09-09 (2 - 6 in)	0.014	0.000851	Region 3 FW	42	YES	Max Detect > SEV	NA		NA	0.054	0.079	YES
METHYLENE CHLORIDE	1 / 20	0.1 J	0.1 J	SED09-08B (2 - 6 in)	0.10	NA		NA	YES	No SEV	NA		NA	0.17	0.32	YES
TETRACHLOROETHENE	3 / 20	0.0025 J	0.0053 J	SED09-06B (0 - 0.5 ft)	0.0037	0.19	Region 3	0.028	NO	Max Detect < SEV	0.057	NOAA	0.093	ND	ND	NO
TOTAL CHLORINATED VOCS	4 / 20	0.0025	0.1	SED09-08B (2 - 6 in)	0.028	NA		NA	NO	[3]	NA		NA	0.17	0.10	[3]

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FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Frequency of Detection	Minimum Detected Concentration	Maximum Detected Concentration	Location of Maximum Detection	Average of Detected Concentrations	SEVs for Sediment		HQ	COPC Determination and Rationale		Comparison to Higher Effects Benchmark			Detected Concentrations Evaluated in Previous ERA [1]		COPC in Previous ERA?
						Value	Source				Value	Source	HQ	Maximum	Average	
Pesticides/PCBs (mg/kg)																
4,4'-DDE	1 / 9	0.0027 J	0.0027 J	SED09-09 (2 - 6 in)	0.0027	0.0022	ER-L 1995	**1.2**	**YES**	Max Detect > SEV	0.027	ER-M 1995	0.10	11	0.0011	YES
4,4'-DDT	3 / 9	0.0046 J	0.0093 J	SED09-09 (2 - 6 in)	0.0073	0.00158	ER-L 1995	**5.9**	**YES**	Max Detect > SEV	0.0461	ER-M 1995	0.20	0.00074	0.0020	YES
BETA-BHC	1 / 9	0.0007 J	0.0007 J	SED09-02A (2 - 6 in)	0.0007	0.005	Region 3 FW	0.14	NO	Max Detect < SEV	0.21	NOAA FW	0.0033	0.0015	0.00037	NO
DIELDRIN	1 / 9	0.0029 J	0.0029 J	SED09-10 (2 - 6 in)	0.0029	0.00002	ER-L 1991	**145**	**YES**	Max Detect > SEV	0.008	ER-M 1991	0.36	0.0011	0.00070	YES
ENDRIN ALDEHYDE	2 / 9	0.0029 J	0.0035 J	SED09-09 (2 - 6 in)	0.0032	0.00267	Region 3[(2)]	**1.3**	**YES**	Max Detect > SEV	0.0624	NOAA FW(4)	0.056	0.0060	0.00073	YES
HEPTACHLOR EPOXIDE	1 / 9	0.0011 J	0.0011 J	SED09-09 (2 - 6 in)	0.0011	0.0006	Region 3	**1.8**	**YES**	Max Detect > SEV	0.00274	NOAA	0.40	0.0028	0.00045	YES
GAMMA-BHC (LINDANE)	2 / 9	0.0021 J	0.003 J	SED09-10 (0 - 0.5 ft)	0.0026	0.00032	Region 3	**9.4**	**YES**	Max Detect > SEV	0.00099	NOAA	**3.0**	ND	ND	NO
METHOXYCHLOR	1 / 9	0.0023 J	0.0023 J	SED09-02A (0 - 0.5 ft)	0.0023	0.0296	Region 3	0.078	NO	Max Detect < SEV	NA		NA	0.078	0.0049	YES
AROCLOR-1254	2 / 9	0.079	0.097	SED09-09 (2 - 6 in)	0.088	0.0227	ER-L 1995	**4.3**	**YES**	Max Detect > SEV	0.18	ER-M 1995	0.54	ND	ND	NO
AROCLOR-1260	7 / 9	0.00069	0.089	SED09-10 (2 - 6 in)	0.064	0.0227	ER-L 1995	**3.9**	**YES**	Max Detect > SEV	0.18	ER-M 1995	0.49	0.43	0.066	YES
TOTAL PCBs	7 / 9	0.00069	0.18	SED09-09 (2 - 6 in)	0.089	0.0227	ER-L 1995	**7.9**	**YES**	Max Detect > SEV	0.18	ER-M 1995	1.0	0.43	0.066	YES

Notes:
Only detected chemicals are presented. See Appendix A for all analytical results.
All concentrations reported in micrograms per kilograms (mg/kg).
COPC - Chemical of Potential Concern.
HQ - Hazard Quotient (Maximum detected concentration/SEV).
J+ - The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
J - Estimated concentration.
J- -The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
NA - Not available or Not applicable.
ND - Not detected.
No SEV - Analyte was detected but SEV was not identified (analyte is retained as a COPC).
SEV - Screening Ecotoxicity Value.

1 - Concentrations presented in Table F-3.2 in the Long-Term Monitoring Data Summary and Optimization Recommendations Report for Site 09 (Tetra Tech, 2015).
2 - Value for endrin.
3 - Risks considered by evaluating individual volatile organic compounds (VOCs).

Screening Level Sources (in Order of Preference):
ER-L 1995 - Effects Range - Low (ER-L) values (Long, et al., 1995)
ER-L 1991 - ER-L values (Long and Morgan, 1991)
Region 3 - USEPA Region 3 Biological Technical Assistance Group (BTAG) sediment screening benchmarks (USEPA, 2006, 2006)
NOAA - NOAA SQuiRT sediment benchmarks (Buchman, 2008)
Freshwater values (FW) were only selected if no marine values were available.

Higher Effect Benchmark Sources (in Order of Preference):
ER-M 1995 - Effects Range - Median (ER-M) values (Long, et al., 1995)
ER-M 1991 - ER-M values (Long and Morgan, 1991)
NOAA - NOAA SQuiRT sediment benchmarks (Buchman, 2008)

TABLE 2
SELECTION OF COPCs FOR PIEZOMETERS ADJACENT TO STONE REVETMENT WALL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Frequency of Detection	Minimum Detected Concentration	Maximum Detected Concentration	Location of Maximum Detection	Average of Detected Concentrations	SEV for Surface Water		HQ	COPC Determination and Rationale		Detected Concentrations Evaluated in Previous ERA [1]		COPC in Previous ERA?
						Value	Source				Maximum	Average	
Semivolatile Organic Compounds (µg/L)													
BENZO(A)ANTHRACENE	1 / 3	0.30	0.30	P09-10	0.30	3	NOAA [2]	0.10	NO	Max Detect < SEV	0.11	0.84	NO
BENZO[A]PYRENE	1 / 3	0.26 J	0.26 J	P09-10	0.26	3	NOAA [2]	0.087	NO	Max Detect < SEV	ND	ND	NO
BENZO[B]FLUORANTHENE	1 / 3	0.41	0.41	P09-10	0.41	3	NOAA [2]	0.14	NO	Max Detect < SEV	ND	ND	NO
BENZO[G,H,I]PERYLENE	1 / 3	0.23	0.23	P09-10	0.23	3	NOAA [2]	0.077	NO	Max Detect < SEV	ND	ND	NO
BENZO[K]FLUORANTHENE	1 / 3	0.18	0.18	P09-10	0.18	3	NOAA [2]	0.060	NO	Max Detect < SEV	ND	ND	NO
BIS(2-ETHYLHEXYL)PHTHALATE	3 / 3	0.34 J	0.51 J	P09-10	0.42	360	NOAA [2]	0.0014	NO	Max Detect < SEV	ND	ND	NO
BUTYLBENZYLPHTHALATE	1 / 3	1.2 J	1.2 J	P09-10	1.2	29.4	Region 3	0.041	NO	Max Detect < SEV	ND	ND	NO
CHRYSENE	1 / 3	0.30	0.30	P09-10	0.30	3	NOAA [2]	0.10	NO	Max Detect < SEV	ND	ND	NO
FLUORANTHENE	1 / 3	0.64	0.64	P09-10	0.64	11	NOAA	0.058	NO	Max Detect < SEV	ND	ND	NO
INDENO(1,2,3-CD)PYRENE	1 / 3	0.20 J	0.20 J	P09-10	0.20	3	NOAA [2]	0.067	NO	Max Detect < SEV	0.13	0.84	NO
PHENANTHRENE	1 / 3	0.31	0.31	P09-10	0.31	1.5	Region 3	0.21	NO	Max Detect < SEV	ND	ND	NO
PYRENE	1 / 3	0.51	0.51	P09-10	0.51	3	NOAA [2]	0.17	NO	Max Detect < SEV	ND	ND	NO
HIGH MOLECULAR WEIGHT PAHS	1 / 3	3.0	3.0	P09-10	3.0	3	NOAA [2]	1.0	NO	Max Detect < SEV	0.24	0.85	NO
LOW MOLECULAR WEIGHT PAHS	1 / 3	0.31	0.31	P09-10	0.31	3	NOAA [2]	0.10	NO	Max Detect < SEV	ND	ND	NO
TOTAL PAHS	1 / 3	3.3	3.3	P09-10	3.3	3	NOAA [2]	**1.1**	**YES**	Max Detect > SEV	0.24	0.85	NO
Volatile Organic Compounds (µg/L)													
2-BUTANONE	1 / 14	5.7	5.7	P09-05A	5.7	14000	Region 3 FW	0.00041	NO	Max Detect < SEV	4.3	1.4	NO
ACETONE	3 / 14	3.9 J	14	P09-09	9.0	564000	Region 3	0.000025	NO	Max Detect < SEV	21.0	3.5	NO
BENZENE	1 / 14	1.3	1.3	P09-10	1.3	110	Region 3	0.012	NO	Max Detect < SEV	2.1	0.37	NO
BTEX	1 / 7	1.3	1.3	P09-10	1.3	NA		NA	NO	[3]	2.1	0.48	[3]
CARBON DISULFIDE	4 / 14	0.4 J	5.3	P09-01	2.3	0.92	Region 3 FW	**5.8**	**YES**	Max Detect > SEV	3.2	0.33	YES
TOTAL CHLORINATED VOCS	1 / 14	1.1	1.1	P09-10	1.1	NA		NA	NO	[3]	860	26.6	[3]
VINYL CHLORIDE	1 / 14	1.1 J	1.1 J	P09-10	1.1	930	Region 3 FW	0.0012	NO	Max Detect < SEV	590	14.1	NO
Total Recoverable Metals (µg/L)													
ALUMINUM	18 / 19	141 J	99500	P09-02A	20700	87	RIDEM FW	**1144**	**YES**	Max Detect > SEV	232000	13697	YES
ANTIMONY	9 / 19	0.22 J	18.1 J	P09-09	6.61	500	Region 3	0.036	NO	Max Detect < SEV	6.8	1.6	NO
ARSENIC	17 / 19	5.2	592 J-	P09-05A	91	36	NRWQC	**16**	**YES**	Max Detect > SEV	163	22.5	YES
BERYLLIUM	9 / 19	0.060 J	23.8 J	P09-10	8.2	0.17	RIDEM FW	**140**	**YES**	Max Detect > SEV	18.1	1.8	YES
CHROMIUM	16 / 19	51	43400	P09-01	3680	50	NRWQC	**868**	**YES**	Max Detect > SEV	6700	348	YES
COPPER	16 / 19	6.1 J	918	P09-02A	201	3.1	NRWQC	**296**	**YES**	Max Detect > SEV	2860	123	YES
IRON	17 / 19	3490	2200000	P09-09	342000	1000	RIDEM FW	**2200**	**YES**	Max Detect > SEV	1110000	88232	YES
LEAD	12 / 19	2.7	712	P09-02A	182	8.1	NRWQC	**88**	**YES**	Max Detect > SEV	555	33.9	YES
MANGANESE	18 / 19	4.5	11700	P09-09	1790	120	Region 3 FW	**98**	**YES**	Max Detect > SEV	7220	786	YES
MERCURY	7 / 17	0.063 J	9.3 J-	P09-10	2.1	0.94	NRWQC	**9.9**	**YES**	Max Detect > SEV	0.41	0.074	NO
NICKEL	19 / 19	19.4	3550	P09-01	408	8.2	NRWQC	**433**	**YES**	Max Detect > SEV	954	97.0	YES
ZINC	19 / 19	9.9 J	4930 J	P09-05A	1390	81	NRWQC	**61**	**YES**	Max Detect > SEV	1960	177	YES

TABLE 2
SELECTION OF COPCs FOR PIEZOMETERS ADJACENT TO STONE REVETMENT WALL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Frequency of Detection	Minimum Detected Concentration	Maximum Detected Concentration	Location of Maximum Detection	Average of Detected Concentrations	SEV for Surface Water		HQ	COPC Determination and Rationale		Detected Concentrations Evaluated in Previous ERA [1]		COPC in Previous ERA?
						Value	Source				Maximum	Average	
Dissolved Metals (µg/L)													
ALUMINUM	14 / 19	144	14800	P09-02A	2070	87	RIDEM FW	**170**	**YES**	Max Detect > SEV	1100	118	YES
ANTIMONY	9 / 19	0.12 J	18.6 J	P09-02A	6.4	500	Region 3	0.037	NO	Max Detect < SEV	1.9	1.3	NO
ARSENIC	14 / 19	3.1	666	P09-05A	58	36	NRWQC	**19**	**YES**	Max Detect > SEV	18.7	8.7	NO
CHROMIUM	8 / 19	7.7	1200	P09-01	247	50	NRWQC	**24**	**YES**	Max Detect > SEV	35.7	5.2	NO
COPPER	5 / 19	2	192	P09-02A	58	3.1	NRWQC	**62**	**YES**	Max Detect > SEV	19.0	5.0	YES
IRON	10 / 19	1190 J+	75100 J+	P09-09	26700	1000	RIDEM FW	**75**	**YES**	Max Detect > SEV	140000	11423	YES
LEAD	4 / 19	1	104	P09-02A	31	8.1	NRWQC	**13**	**YES**	Max Detect > SEV	3.8	1.2	NO
MANGANESE	16 / 19	3.8	1390	P09-09	348	120	Region 3 FW	**12**	**YES**	Max Detect > SEV	4030	424	YES
MERCURY	1 / 18	0.14 J	0.14 J	P09-02A	0.14	0.94	NRWQC	0.15	NO	Max Detect < SEV	0.020	0.038	NO
NICKEL	17 / 19	6.5	251	P09-01	52	8.2	NRWQC	**31**	**YES**	Max Detect > SEV	278	29.5	YES
ZINC	15 / 19	7.2 J	489 J	P09-02A	122	81	NRWQC	**6.0**	**YES**	Max Detect > SEV	65.2	20.2	NO

Notes:
Only detected chemicals are presented. See Appendix A for all analytical results.
All concentrations reported in micrograms per liter (ug/L).
COPC - Chemical of Potential Concern.
HQ - Hazard Quotient (Maximum detected concentration/SEV).
J+ - The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
J - Estimated concentration.
J- -The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
NA - Not available or Not applicable.
ND - Not detected in dataset evaluated in the 2015 ecological risk assessment [ERA]).
SEV - Screening Ecotoxicity Value.
1 - Concentrations presented in Table F-3.3 in the Long-Term Monitoring Data Summary and Optimization Recommendations Report for Site 09 (Tetra Tech, 2015).
2 - Chronic value not available. Value calculated by multiplying acute LOAEL value by 0.01 to estimate chronic NOAEL.
3 - Risks considered by evaluating individual volatile organic compounds (VOCs).
SEV Sources (in Order of Preference):
NRWQC - National Recommended Water Quality Criteria (USEPA, 2013).
RIDEM - RIDEM Saltwater Ambient Water Quality Criteria (AWQC) (RIDEM, 2009).
Region 3 - USEPA Region 3 marine screening benchmarks (USEPA, 2006c).
NOAA - National Oceanic and Atmospheric Adminstration chronic marine surface water values (Buchman, 2008).
RIDEM FW - RIDEM Freshwater AWQC (RIDEM, 2009).
Region 3 FW - USEPA Region 3 freshwater screening benchmarks (USEPA, 2006d).

TABLE 3
SELECTION OF COPCs FOR PIEZOMETERS BEYOND THE BREAKWATER STRUCTURE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Frequency of Detection	Minimum Detected Concentration	Maximum Detected Concentration	Location of Maximum Detection	Average of Detected Concentrations	SEV for Surface Water		HQ	COPC Determination and Rationale		Detected Concentrations Evaluated in Previous ERA [1]		COPC in Previous ERA?
						Value	Source				Maximum	Average	
Semivolatile Organic Compounds (µg/L)													
2,4,5-TRICHLOROPHENOL	1 / 5	0.085 J	0.085 J	P09-11B	0.085	12	Region 3	0.0071	NO	Max Detect < SEV	ND	ND	NO
BIS(2-ETHYLHEXYL)PHTHALATE	4 / 5	0.17 J	0.45 J	P09-08B	0.37	360	NOAA	0.0013	NO	Max Detect < SEV	2.3	NA	NO
CHRYSENE	1 / 5	0.13	0.13	P09-12B	0.13	3	NOAA [2]	0.043	NO	Max Detect < SEV	ND	ND	NO
FLUORENE	1 / 5	0.11	0.11	P09-08B	0.11	3	NOAA [2]	0.037	NO	Max Detect < SEV	ND	ND	NO
PHENANTHRENE	2 / 5	0.1	0.12	P09-06B	0.11	1.5	Region 3	0.080	NO	Max Detect < SEV	ND	ND	NO
PYRENE	1 / 5	0.13	0.13	P09-06B	0.13	3	NOAA [2]	0.043	NO	Max Detect < SEV	ND	ND	NO
HIGH MOLECULAR WEIGHT PAHS	2 / 5	0.13	0.13	P09-06B, P09-12B	0.13	3	NOAA [2]	0.043	NO	Max Detect < SEV	ND	ND	NO
LOW MOLECULAR WEIGHT PAHS	2 / 5	0.12	0.21	P09-08B	0.17	3	NOAA [2]	0.070	NO	Max Detect < SEV	ND	ND	NO
TOTAL PAHS	3 / 5	0.13	0.25	P09-06B	0.2	3	NOAA [2]	0.083	NO	Max Detect < SEV	ND	ND	NO
Volatile Organic Compounds (µg/L)													
2-BUTANONE	3 / 20	15 J	43 J	P09-08B	25	3	NOAA [2]	**14**	**YES**	Max Detect > SEV	ND	ND	NO
ACETONE	7 / 20	9.2 J	370	P09-12B	100	564000	Region 3	0.00066	NO	Max Detect < SEV	7.5	NA	NO
CARBON DISULFIDE	3 / 20	0.62 J	1.4	P09-07B	1	0.92	Region 3 FW	**1.5**	**YES**	Max Detect > SEV	0.58	0.52	NO
TOLUENE	2 / 20	1.2	2.2	P09-07B	1.7	215	Region 3	0.010	NO	Max Detect < SEV	ND	ND	NO
XYLENES, TOTAL	1 / 20	1.8	1.8	P09-07B	1.8	19	Region 3	0.095	NO	Max Detect < SEV	ND	ND	NO
Total Recoverable Metals (µg/L)													
ALUMINUM	14 / 15	196 J	622000	P09-12B	76000	87	RIDEM FW	**7149**	**YES**	Max Detect > SEV	622000	197516	YES
ANTIMONY	6 / 15	2.7	20.2 J	P09-11B	10.9	500	Region 3	0.040	NO	Max Detect < SEV	ND	ND	NO
ARSENIC	13 / 15	0.35 J-	432	P09-12B	73.9	36	NRWQC	**12**	**YES**	Max Detect > SEV	633	210	YES
BERYLLIUM	7 / 15	0.26 J	56.4	P09-12B	17.5	0.17	RIDEM FW	**332**	**YES**	Max Detect > SEV	53	16	YES
CHROMIUM	13 / 15	8.5	31600	P09-07B	4140	50	NRWQC	**632**	**YES**	Max Detect > SEV	4430	2259	YES
COPPER	10 / 15	1.3 J	2150	P09-12B	365	3.1	NRWQC	**694**	**YES**	Max Detect > SEV	3170	1020	YES
IRON	13 / 15	1800 J	1380000	P09-12B	230000	1000	RIDEM FW	**1380**	**YES**	Max Detect > SEV	1770000	558790	YES
LEAD	10 / 15	1.6	2280	P09-12B	381	8.1	NRWQC	**281**	**YES**	Max Detect > SEV	2570	790	YES
MANGANESE	15 / 15	88.2 J	10700	P09-12B	2500	120	Region 3 FW	**89**	**YES**	Max Detect > SEV	13900	4593	YES
MERCURY	6 / 15	0.04 J	11.6	P09-12B	2.2	0.94	NRWQC	**12**	**YES**	Max Detect > SEV	5.00	1.4	YES
NICKEL	15 / 15	9	5250	P09-07B	1540	8.2	NRWQC	**640**	**YES**	Max Detect > SEV	2650	1641	YES
ZINC	14 / 15	21.8	138000	P09-06B	16400	81	NRWQC	**1704**	**YES**	Max Detect > SEV	9160	2815	YES
Dissolved Metals (µg/L)													
ALUMINUM	9 / 12	43.5	8180	P09-08B	2830	87	RIDEM FW	**94**	**YES**	Max Detect > SEV	2360	1405	YES
ANTIMONY	3 / 12	9.4 J	18.4 J	P09-11B	15	500	Region 3	0.037	NO	Max Detect < SEV	ND	ND	NO
ARSENIC	7 / 12	0.2 J-	37.6 J	P09-07B	15	36	NRWQC	1.0	NO	Max Detect < SEV	32.7	28.9	NO
BERYLLIUM	1 / 12	0.06 J	0.06 J	P09-06B	0.060	0.17	RIDEM FW	0.35	NO	Max Detect < SEV	ND	ND	NO
CHROMIUM	8 / 12	1.1 J-	403	P09-06B	160	50	NRWQC	**8.1**	**YES**	Max Detect > SEV	18	12	NO
COPPER	4 / 12	0.44 J	88.6 J	P09-11B	33.9	3.1	NRWQC	**29**	**YES**	Max Detect > SEV	ND	ND	NO
IRON	9 / 12	986 J	57000	P09-06B	21400	1000	RIDEM FW	**57**	**YES**	Max Detect > SEV	5930	3885	YES
LEAD	4 / 12	0.17 J	27.3	P09-08B	11	8.1	NRWQC	**3.4**	**YES**	Max Detect > SEV	ND	ND	NO
MANGANESE	11 / 12	70.9 J	17300	P09-12B	2210	120	Region 3 FW	**144**	**YES**	Max Detect > SEV	245	135	YES
MERCURY	2 / 12	0.073 J-	0.079 J-	P09-08B	0.076	0.94	NRWQC	0.084	NO	Max Detect < SEV	ND	ND	NO
NICKEL	11 / 12	1.4	12500	P09-12B	1250	8.2	NRWQC	**1524**	**YES**	Max Detect > SEV	153	85	YES
ZINC	8 / 12	13	429	P09-08B	152	81	NRWQC	**5.3**	**YES**	Max Detect > SEV	ND	ND	NO

Notes:
Only detected chemicals are presented. See Appendix A for all analytical results.
All concentrations reported in micrograms per liter (ug/L).
COPC - Chemical of Potential Concern.
HQ - Hazard Quotient (Maximum detected concentration/SEV).
J - Estimated concentration.
J- -The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
ND - Not detected in dataset evaluated in the 2015 ecological risk assessment [ERA]).
SEV - Screening Ecotoxicity Value.
1 - Concentrations presented in Table F-3.4 in the Long-Term Monitoring Data Summary and Optimization Recommendations Report for Site 09 (Tetra Tech, 2015).
2 - Chronic value not available. Value calculated by multiplying acute LOAEL value by 0.01 to estimate chronic NOAEL.
SEV Sources (in Order of Preference):
NRWQC - National Recommended Water Quality Criteria (USEPA, 2013).
RIDEM - RIDEM Saltwater Ambient Water Quality Criteria (AWQC) (RIDEM, 2009).
Region 3 - USEPA Region 3 marine screening benchmarks (USEPA, 2006c).
NOAA - National Oceanic and Atmospheric Adminstration chronic marine surface water values (Buchman, 2008)
RIDEM FW - RIDEM Freshwater AWQC (RIDEM, 2009).
Region 3 FW - USEPA Region 3 freshwater screening benchmarks (USEPA, 2006d).

TABLE 4
SELECTION OF SURFACE WATER COPCs
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Frequency of Detection	Minimum Detected Concentration	Maximum Detected Concentration	Location of Maximum Detection	Average of Detected Concentrations	SEV for Aquatic Organisms		SEV for Plants		HQ		COPC Determination and Rationale		Detected Concentrations Evaluated in Previous ERA [2]		COPC in Previous ERA?
						Value	Source	Value	Source	Aquatic Organisms	Plants			Maximum	Average	
Volatile Organic Compounds (µg/L)																
CIS-1,2-DICHLOROETHENE	2 / 11	16	19	SP09-01	18	680	Region 3	NA		0.028	NA	**YES**	No SEV (plants)	62	23.5	YES
TOTAL CHLORINATED VOCS	2 / 8	17	20	SP09-01	19	NA		NA		NA	NA	NO	[1]	72	27.2	[1]
TRANS-1,2-DICHLOROETHENE	2 / 11	1	1.2	SP09-02	1.1	680	Region 3	NA		0.0018	NA	**YES**	No SEV (plants)	5.0	2.0	YES
TRICHLOROETHENE	1 / 11	0.73 J	0.73 J	SP09-03	0.73	1940	Region 3	100,000	ORNL	0.00038	0.000007	NO	Max Detect < Both SEVs	3.0	1.3	NO

Notes:

Only detected chemicals are presented. See Appendix A for all analytical results.
All concentrations reported in micrograms per liter (ug/L).
1 - Risks considered by evaluating individual volatile organic compounds (VOCs).
2 - Concentrations presented in Table F-3.5 in the Long-Term Monitoring Data Summary and Optimization Recommendations Report for Site 09 (Tetra Tech, 2015).
COPC - Chemical of Potential Concern.
HQ - Hazard Quotient (Maximum detected concentration/SEV).
J - Estimated concentration.
NA - Not available or Not applicable.
No SEV - Analyte was detected but SEV was not identified (analyte is retained as a COPC).
SEV - Screening Ecotoxicity Value.
SEV Sources:
ORNL - Oak Ridge National Laboratory (Efroymson, et al., 1997).
Region 3 - USEPA Region 3 marine screening benchmarks (USEPA, 2006c).

TABLE 5
MEDIA CONCENTRATIONS IN SEDIMENT AND TISSUE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Sediment Concentration (mg/kg)		Shellfish Tissue Concentrations				Detected Shellfish Tissue Concentrations Evaluated in Previous ERA[4]	
	Maximum Detected Concentration	Average of Detected Concentrations	Maximum Detected Concentration		Average of Detected Concentrations		Maximum Detected Concentration (mg/kg ww)	Average of Detected Concentrations (mg/kg ww)
			(mg/kg ww)	(mg/kg dw)[3]	(mg/kg ww)	(mg/kg dw)[3]		
Metals								
ALUMINUM	9130	5030	1360	10149	76.8	573	68.8	9.9
ANTIMONY	1.7	0.93	0.62	4.6	0.39	2.9	0.75	0.19
ARSENIC	11.6	5.3	5.1	37.9	3.2	23.9	3.9	1.6
BERYLLIUM	1.4	0.55	0.11	0.8	0.015	0.11	0.0088	0.0030
CHROMIUM	32.4	16	9.4	69.9	2.8	21.0	0.59	0.18
COPPER	91	38.3	9.5	70.7	3.6	26.6	3.1	1.6
IRON	27500	13200	3160	23582	235	1754	283	51.9
LEAD	83.1	26.2	6.9	51.5	0.71	5.3	0.090	0.085
MANGANESE	250	106	41.4	309	11.3	84.3	20.9	7.1
MERCURY	0.26	0.081	0.020	0.15	0.0088	0.066	0.059	0.0099
NICKEL	23.1	11.2	5.5	41.2	0.85	6.4	0.63	0.17
ZINC	263	95.4	29.2	218	12.1	90.3	26.8	7.8
Semivolatile Organic Compounds								
2-METHYLNAPHTHALENE	0.051	0.031	0.037	0.28	0.016	0.119	0.055	0.020
ACENAPHTHENE	0.37	0.056	0.032	0.24	0.013	0.097	0.05	0.016
ACENAPHTHYLENE	0.019	0.010	0.015	0.11	0.0063	0.047	0.015	0.0042
ANTHRACENE	0.84	0.1000	0.021	0.16	0.0073	0.054	0.0051	0.0023
BENZO(A)ANTHRACENE	1.4	0.15	0.013	0.097	0.0079	0.059	0.0066	0.0025
BENZO(A)PYRENE	1.1	0.12	0.014	0.10	0.0076	0.057	ND	ND
BENZO(B)FLUORANTHENE	1.3	0.17	0.027	0.20	0.011	0.082	ND	ND
BENZO(G,H,I)PERYLENE	0.64	0.082	0.0054	0.04	0.0054	0.040	ND	ND
BENZO(K)FLUORANTHENE	0.85	0.086	0.016	0.12	0.0054	0.040	ND	ND
CHRYSENE	1.4	0.15	0.014	0.10	0.0052	0.039	ND	ND
DIBENZO(A,H)ANTHRACENE	0.14	0.027	0.0028	0.021	0.0028	0.02	ND	ND
FLUORANTHENE	3.7	0.35	0.034	0.254	0.016	0.12	0.047	0.015
FLUORENE	0.44	0.075	0.013	0.097	0.0095	0.071	0.032	0.0094
HIGH MOLECULAR WEIGHT PAHS	14	1.4	0.16	1.2	0.047	0.35	0.082	0.082
INDENO(1,2,3-CD)PYRENE	0.56	0.077	0.0095	0.071	0.0052	0.039	ND	ND
LOW MOLECULAR WEIGHT PAHS	5.2	0.48	0.17	1.3	0.066	0.49	0.26	0.26
NAPHTHALENE	0.16	0.067	0.042	0.31	0.021	0.16	0.088	0.037
PHENANTHRENE	3.3	0.31	0.044	0.33	0.021	0.16	0.069	0.029
PYRENE	2.7	0.26	0.058	0.43	0.019	0.14	0.038	0.016
Volatile Organic Compounds [1]								
2-BUTANONE	0.019	0.019	NV	NV	NV	NV	ND	ND
ACETONE	0.062	0.028	NV	NV	NV	NV	ND	ND
CARBON DISULFIDE	0.036	0.014	NV	NV	NV	NV	ND	ND
METHYLENE CHLORIDE	0.10	0.10	NV	NV	NV	NV	ND	ND
TETRACHLOROETHENE	0.0053	0.0037	NV	NV	NV	NV	ND	ND
TOTAL CHLORINATED VOCS	0.10	0.028	NV	NV	NV	NV	ND	ND
Pesticides/PCBs								
4,4'-DDE	0.0027	0.0027	0.0037	0.0276	0.0020	0.0149	0.0047	0.0016
4,4'-DDT	0.0093	0.0073	0.0065	0.0485	0.0035	0.0261	0.011	0.0025
AROCLOR-1254 [2]	0.097	0.088	0.11	0.82	0.014	0.104	ND	ND
AROCLOR-1260 [2]	0.089	0.064	0.11	0.82	0.014	0.104	0.14	0.038
BETA-BHC	0.0007	0.0007	0.0014	0.0104	0.0013	0.0097	0.011	0.0029
DIELDRIN	0.0029	0.0029	0.0010	0.0075	0.0010	0.0075	0.012	0.0022
ENDRIN ALDEHYDE	0.0035	0.0032	0.00080	0.00597	0.00080	0.00597	0.0040	0.0017
GAMMA-BHC (LINDANE)	0.0030	0.0026	0.0014	0.0104	0.00098	0.0073	0.0066	0.0017
HEPTACHLOR EPOXIDE	0.0011	0.0011	0.0029	0.0216	0.0013	0.0097	0.0022	0.00086
METHOXYCHLOR	0.0023	0.0023	0.0046	0.0343	0.0042	0.0313	ND	ND
TOTAL PCBs [2]	0.18	0.089	0.11	0.82	0.014	0.104	ND	ND

Notes
All concentrations reported in micrograms per kilograms (mg/kg).
ND - Not detected.
NV - No value available.
dw - Dry Weight.
ww - Wet Weight.
1 - VOCs were not analyzed for in shellfish samples; only incidental ingestion of soil sediment was evaluated for VOCs.
2 - PCBs in sediment are reported on an Aroclor basis. PCBs in shellfish tissue are reported as total PCB homologs.
3 - Shellfish data converted from wet weight to dry weight assuming 13.4% solids (dry weight tissue = [wet weight tissue / fraction solids]). This solids value is based on the average percent moisture obtained from Site 09 shellfish tissue data from 2009 through 2012.
4 - Concentrations presented in Appendix F-3, Attachment 1, Table 6 in the Long-Term Monitoring Data Summary and Optimization Recommendations Report for Site 09 (Tetra Tech, 2015).

TABLE 6
RACCOON - CONSERVATIVE EXPOSURE FOOD WEB MODEL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Maximum Sediment Concentration (mg/kg)	Maximum Shelfish Concentration (mg/kg)	Dose (mg/kg/d) from:		Total Daily Dose (mg/kg/d)	NOAEL[3] (mg/kg/d)	LOAEL[3] (mg/kg/d)	Hazard Quotients	
			Sediment	Shellfish				NOAEL	LOAEL
Metals									
ALUMINUM	9130	10149	55.4	655	711	1.93	19.3	**368**	**36.8**
ANTIMONY	1.7	4.63	0.010	0.299	0.309	0.059	2.76	**5.2**	0.11
ARSENIC	11.6	37.9	0.070	2.45	2.52	1.04	4.55	**2.4**	0.55
BERYLLIUM	1.4	0.83	0.0085	0.0535	0.062	0.53	0.67	0.12	0.092
CHROMIUM	32.4	69.9	0.20	4.52	4.71	2.4	58.2	**2.0**	0.081
COPPER	91	70.7	0.55	4.57	5.1	5.6	82.7	0.91	0.062
IRON	27500	23582	167	1523	1690	50	500	**33.8**	**3.4**
LEAD	83.1	51.5	0.50	3.33	3.8	4.7	186.4	0.81	0.021
MANGANESE	250	309.0	1.5	20.0	21.5	51.5	145.7	0.42	0.15
MERCURY	0.26	0.147	0.0016	0.0095	0.0111	0.032	0.16	0.35	0.069
NICKEL	23.1	41.2	0.14	2.66	2.80	1.7	14.8	**1.6**	0.19
ZINC	263	217.9	1.6	14.1	15.7	75.4	298	0.21	0.053
Semivolatile Organic Compounds									
2-METHYLNAPHTHALENE	0.051	0.276	0.00031	0.0178	0.0181	65.6	356	0.00028	0.000051
ACENAPHTHENE	0.37	0.239	0.0022	0.0154	0.0177	65.6	356	0.00027	0.000050
ACENAPHTHYLENE	0.019	0.112	0.00012	0.0072	0.0073	65.6	356	0.00011	0.000021
ANTHRACENE	0.84	0.157	0.0051	0.0101	0.0152	65.6	356	0.00023	0.000043
BENZO(A)ANTHRACENE	1.4	0.097	0.0085	0.00626	0.0148	0.615	38.4	0.024	0.00038
BENZO(A)PYRENE	1.1	0.104	0.0067	0.0067	0.0134	0.615	38.4	0.022	0.00035
BENZO(B)FLUORANTHENE	1.3	0.201	0.0079	0.0130	0.0209	0.615	38.4	0.034	0.00054
BENZO(G,H,I)PERYLENE	0.64	0.0403	0.0039	0.00260	0.0065	0.615	38.4	0.011	0.00017
BENZO(K)FLUORANTHENE	0.85	0.119	0.0052	0.0077	0.0129	0.615	38.4	0.021	0.00034
CHRYSENE	1.4	0.104	0.0085	0.0067	0.0152	0.615	38.4	0.025	0.00040
DIBENZO(A,H)ANTHRACENE	0.14	0.0209	0.00085	0.00135	0.0022	0.615	38.4	0.0036	0.000057
FLUORANTHENE	3.7	0.254	0.022	0.0164	0.039	65.6	356	0.00059	0.00011
FLUORENE	0.44	0.097	0.0027	0.00626	0.0089	65.6	356	0.00014	0.000025
INDENO(1,2,3-CD)PYRENE	0.56	0.071	0.0034	0.00458	0.0080	0.615	38.4	0.013	0.00021
NAPHTHALENE	0.16	0.313	0.00097	0.0202	0.0212	65.6	356	0.00032	0.000060
PHENANTHRENE	3.3	0.328	0.020	0.0212	0.041	65.6	356	0.00063	0.00012
PYRENE	2.7	0.433	0.016	0.0280	0.044	0.615	38.4	0.072	0.0012
HIGH MOLECULAR WEIGHT PAHS	14.0	1.19	0.085	0.077	0.162	65.6	356	0.0025	0.00046
LOW MOLECULAR WEIGHT PAHS	5.2	1.27	0.032	0.082	0.113	0.615	38.4	0.185	0.0030
Volatile Organic Compounds [1]									
2-BUTANONE	0.019	NV	0.00012	0	0.00012	NV	NV	NV	NV
ACETONE	0.062	NV	0.00038	0	0.00038	10	50	0.000038	0.0000075
CARBON DISULFIDE	0.036	NV	0.00022	0	0.00022	12.6	25.6	0.000017	0.0000085
METHYLENE CHLORIDE	0.10	NV	0.00061	0	0.00061	5.85	50	0.00010	0.000012
TETRACHLOROETHENE	0.0053	NV	0.000032	0	0.000032	NV	NV	NV	NV
TOTAL CHLORINATED VOCS	0.10	NV	0.00061	0	0.00061	0.7	7	0.00087	0.000087

TABLE 6
RACCOON - CONSERVATIVE EXPOSURE FOOD WEB MODEL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Maximum Sediment Concentration (mg/kg)	Maximum Shelfish Concentration (mg/kg)	Dose (mg/kg/d) from:		Total Daily Dose (mg/kg/d)	NOAEL[3] (mg/kg/d)	LOAEL[3] (mg/kg/d)	Hazard Quotients	
			Sediment	Shellfish				NOAEL	LOAEL
Pesticides/PCBs									
4,4'-DDE	0.0027	0.0276	0.000016	0.00178	0.00180	0.147	5.56	0.012	0.00032
4,4'-DDT	0.0093	0.0485	0.000056	0.00313	0.00319	0.147	5.56	0.022	0.00057
AROCLOR-1254 [2]	0.097	0.82	0.00059	0.0530	0.0536	0.068	0.68	0.79	0.079
AROCLOR-1260 [2]	0.089	0.82	0.00054	0.0530	0.0536	0.068	0.68	0.79	0.079
BETA-BHC	0.00070	0.0104	0.0000042	0.00067	0.00068	0.4	2	0.0017	0.00034
DIELDRIN	0.0029	0.0075	0.000018	0.000482	0.000500	0.015	1.27	0.033	0.00039
ENDRIN ALDEHYDE	0.0035	0.00597	0.000021	0.000386	0.000407	0.092	0.92	0.0044	0.00044
GAMMA-BHC (LINDANE)	0.0030	0.0104	0.000018	0.00067	0.00069	8	80	0.000087	0.0000087
HEPTACHLOR EPOXIDE	0.0011	0.0216	0.0000067	0.00140	0.00140	0.1	1	0.014	0.0014
METHOXYCHLOR	0.0023	0.0343	0.000014	0.00222	0.00223	4	8	0.00056	0.00028
TOTAL PCBs [2]	0.18	0.82	0.0011	0.0530	0.0541	0.068	0.68	0.80	0.080

Exposure Parameters: [4]

Body Weight = (BW)	3.67	kg	Dose (sediment) = (Cs * Is)(H)/BW	LOAEL = Lowest Observed Adverse Effects Level
Shellfish Ingestion Rate = (Ii)	0.237	kg/day	Dose (Shellfish) = (Ci * Ii)(H)/BW	NOAEL = No Observed Adverse Effects Level
Sediment Ingestion Rate = (Is)	0.022278	kg/day	Ci = Contaminant concentration in Shellfish	NV = No value available
Home Range = (HR)	Assume 100% on site		Cs = Contaminant concentration in sediment	
Contaminated Area = (CA)	Assume equal to home range		Total Dose = Dose (sediment) + Dose (Shellfish)	
Home Range Factor = (H)	1	unitless	H=CA/HR (Assume = to 1)	

1 - VOCs were not analyzed for in shellfish samples; only incidental ingestion of soil sediment was evaluated for VOCs.
2 - PCBs in sediment are reported on an Aroclor basis. PCBs in shellfish tissue are reported as total PCB homologs.
3 - Toxicity reference values presented in Appendix F-3, Attachment 1, Table 3, in the Long-Term Monitoring Data Summary and Optimization Recommendations Report for Site 09 (Tetra Tech, 2015).
Acetone values are from Sample et.al., 1996.
4 - Exposure parameters presented in Appendix F-3, Attachment 1, Tables 1 and 2 (Tetra Tech, 2015).

TABLE 7
GREEN HERON - CONSERVATIVE EXPOSURE FOOD WEB MODEL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Maximum Sediment Concentration (mg/kg)	Maximum Shelfish Concentration (mg/kg)	Dose (mg/kg/d) from:		Total Daily Dose (mg/kg/d)	NOAEL[3] (mg/kg/d)	LOAEL[3] (mg/kg/d)	Hazard Quotients	
			Sediment	Shellfish				NOAEL	LOAEL
Metals									
ALUMINUM	9130	10149	73.0	1573	1646	109.7	1097	**15.0**	**1.50**
ANTIMONY	1.7	4.63	0.014	0.72	0.73	NV	NV	NV	NV
ARSENIC	11.6	37.9	0.093	5.876	6.0	2.24	4.51	**2.7**	**1.3**
BERYLLIUM	1.4	0.83	0.011	0.128	0.140	NV	NV	NV	NV
CHROMIUM	32.4	69.9	0.26	10.8	11.1	2.7	15.6	**4.2**	0.71
COPPER	91	70.7	0.73	11.0	11.7	4.05	34.9	**2.9**	0.34
IRON	27500	23582	220	3655	3875	100	1000	**38.8**	**3.9**
LEAD	83.1	51.5	0.66	8.0	8.6	1.63	44.6	**5.3**	0.19
MANGANESE	250	309.0	2.0	47.9	49.9	179	376.6	0.28	0.13
MERCURY	0.26	0.147	0.0021	0.0228	0.0249	0.0064	0.064	**3.9**	0.39
NICKEL	23.1	41.2	0.18	6.39	6.6	6.7	18.6	0.98	0.35
ZINC	263	217.9	2.1	33.8	35.9	66.1	171.4	0.54	0.21
Semivolatile Organic Compounds									
2-METHYLNAPHTHALENE	0.051	0.276	0.000408	0.0428	0.0432	2	20	0.022	0.0022
ACENAPHTHENE	0.37	0.239	0.00296	0.0370	0.0400	2	20	0.020	0.0020
ACENAPHTHYLENE	0.019	0.112	0.000152	0.0174	0.0175	2	20	0.0088	0.00088
ANTHRACENE	0.84	0.157	0.00672	0.0243	0.031	2	20	0.016	0.0016
BENZO(A)ANTHRACENE	1.4	0.097	0.0112	0.0150	0.026	2	20	0.013	0.0013
BENZO(A)PYRENE	1.1	0.104	0.0088	0.0162	0.025	2	20	0.012	0.0012
BENZO(B)FLUORANTHENE	1.3	0.201	0.0104	0.0312	0.042	2	20	0.021	0.0021
BENZO(G,H,I)PERYLENE	0.64	0.0403	0.00512	0.0062	0.0114	2	20	0.0057	0.00057
BENZO(K)FLUORANTHENE	0.85	0.119	0.0068	0.0185	0.025	2	20	0.013	0.0013
CHRYSENE	1.4	0.104	0.0112	0.0162	0.027	2	20	0.014	0.0014
DIBENZO(A,H)ANTHRACENE	0.14	0.0209	0.00112	0.0032	0.0044	2	20	0.0022	0.00022
FLUORANTHENE	3.7	0.254	0.030	0.0393	0.069	2	20	0.034	0.0034
FLUORENE	0.44	0.097	0.0035	0.0150	0.0186	2	20	0.0093	0.00093
INDENO(1,2,3-CD)PYRENE	0.56	0.071	0.0045	0.0110	0.0155	2	20	0.0077	0.00077
NAPHTHALENE	0.16	0.313	0.0013	0.0486	0.0499	2	20	0.025	0.0025
PHENANTHRENE	3.3	0.328	0.026	0.0509	0.077	2	20	0.039	0.0039
PYRENE	2.7	0.433	0.022	0.067	0.089	2	20	0.044	0.0044
HIGH MOLECULAR WEIGHT PAHS	14.0	1.19	0.11	0.185	0.30	2	20	0.15	0.015
LOW MOLECULAR WEIGHT PAHS	5.2	1.27	0.042	0.197	0.238	2	20	0.12	0.012
Volatile Organic Compounds[1]									
2-BUTANONE	0.019	NV	0.000152	0	0.00015	NV	NV	NV	NV
ACETONE	0.062	NV	0.000496	0	0.00050	NV	NV	NV	NV
CARBON DISULFIDE	0.036	NV	0.000288	0	0.00029	NV	NV	NV	NV
METHYLENE CHLORIDE	0.1	NV	0.0008	0	0.00080	NV	NV	NV	NV
TETRACHLOROETHENE	0.0053	NV	0.0000424	0	0.000042	NV	NV	NV	NV
TOTAL CHLORINATED VOCS	0.1	NV	0.0008	0	0.00080	NV	NV	NV	NV

TABLE 7
GREEN HERON - CONSERVATIVE EXPOSURE FOOD WEB MODEL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Maximum Sediment Concentration (mg/kg)	Maximum Shelfish Concentration (mg/kg)	Dose (mg/kg/d) from:		Total Daily Dose (mg/kg/d)	NOAEL[3] (mg/kg/d)	LOAEL[3] (mg/kg/d)	Hazard Quotients	
			Sediment	Shellfish				NOAEL	LOAEL
Pesticides/PCBs									
4,4'-DDE	0.0027	0.0276	0.00002	0.00428	0.00430	0.227	2.7	0.019	0.0016
4,4'-DDT	0.0093	0.0485	0.000074	0.0075	0.0076	0.227	2.7	0.033	0.0028
AROCLOR-1254 [2]	0.097	0.82	0.00078	0.127	0.128	0.18	1.8	0.71	0.071
AROCLOR-1260 [2]	0.089	0.82	0.00071	0.127	0.128	0.18	1.8	0.71	0.071
BETA-BHC	0.0007	0.0104	0.00001	0.00162	0.00163	0.56	2.25	0.0029	0.00072
DIELDRIN	0.0029	0.0075	0.00002	0.00116	0.00118	0.0709	0.8	0.017	0.0015
ENDRIN ALDEHYDE	0.0035	0.00597	0.000028	0.00093	0.00095	0.01	0.1	0.095	0.0095
GAMMA-BHC (LINDANE)	0.00300	0.0104	0.00002	0.00162	0.00164	2	20	0.00082	0.000082
HEPTACHLOR EPOXIDE	0.0011	0.0216	0.00001	0.00335	0.00336	NV	NV	NV	NV
METHOXYCHLOR	0.0023	0.0343	0.00002	0.00532	0.00534	25.8	258	0.00021	0.000021
TOTAL PCBs [2]	0.18	0.82	0.0014	0.127	0.129	0.18	1.8	0.71	0.071

Exposure Parameters: [4]

Body Weight = (BW)	0.2	kg
Shellfish Ingestion Rate = (Ii)	0.031	kg/day
Sediment Ingestion Rate = (Is)	0.0016	kg/day
Home Range = (HR)	Assume 100% on site	
Contaminated Area = (CA)	Assume equal to home range	
Home Range Factor = (H)	1	unitless

Dose (sediment) = (Cs * Is)(H)/BW
Dose (Shellfish) = (Ci * Ii)(H)/BW
Ci = Contaminant concentration in Shellfish
Cs = Contaminant concentration in sediment
Total Dose = Dose (sediment) + Dose (Shellfish)
H=CA/HR (Assume = to 1)

LOAEL = Lowest Observed Adverse Effects Level
NOAEL = No Observed Adverse Effects Level
NV = No value available

Cells are shaded if the hazard quotient is greater than 1.0

1 - VOCs were not analyzed for in shellfish samples; only incidental ingestion of soil sediment was evaluated for VOCs.
2 - PCBs in sediment are reported on an Aroclor basis. PCBs in shellfish tissue are reported as total PCB homologs.
3 - Toxicity reference values presented in Appendix F-3, Attachment 1, Table 3, in the Long-Term Monitoring Data Summary and Optimization Recommendations Report for Site 09 (Tetra Tech, 2015).
Acetone values are from Sample et.al., 1996.
4 - Exposure parameters presented in Appendix F-3, Attachment 1, Tables 1 and 2 (Tetra Tech, 2015).

TABLE 8
RACCOON - AVERAGE EXPOSURE FOOD WEB MODEL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Average Sediment Concentration (mg/kg)	Average Shelfish Concentration (mg/kg)	Dose (mg/kg/d) from:		Total Daily Dose (mg/kg/d)	NOAEL[1] (mg/kg/d)	LOAEL[1] (mg/kg/d)	Hazard Quotients	
			Sediment	Shellfish				NOAEL	LOAEL
Metals									
ALUMINUM	5030	573	0.036	0.044	0.080	1.93	19.3	0.041	0.0041
ANTIMONY	0.93	2.91	0.0000067	0.00022	0.00023	0.059	2.8	0.0039	0.000083
ARSENIC	5.25	23.88	0.000038	0.0018	0.0019	1.04	4.6	0.0018	0.00041
CHROMIUM	16.00	20.97	0.00011	0.0016	0.0017	2.4	58.2	0.00071	0.000029
IRON	13200	1754	0.095	0.13	0.23	50	500	0.0046	0.00046
NICKEL	11.20	6.37	0.000080	0.00049	0.00057	1.7	14.8	0.00033	0.000038

Exposure Parameters: [2]

Body Weight = (BW)	5.636	kg
Shellfish Ingestion Rate = (Ii)	0.184	kg/day
Sediment Ingestion Rate = (Is)	0.017296	kg/day
Home Range = (HR)	385.5	acres
Contaminated Area = (CA)	0.9	acres
Home Range Factor (H) = CA/HR	0.0023	unitless

Dose (soil) = (Cs * Is)(H)/BW
Dose (Shellfish) = (Ci * Ii)(H)/BW
Ci = Contaminant concentration in Shellfish
Cs = Contaminant concentration in sediment
Total Dose = Dose (sediment) + Dose (Shellfish)

LOAEL = Lowest Observed Adverse Effects Level
NOAEL = No Observed Adverse Effects Level
NV = No value available

1 - Toxicity reference values presented in Appendix F-3, Attachment 1, Table 3, in the Long-Term Monitoring Data Summary and Optimization Recommendations Report for Site 09 (Tetra Tech, 2015).
2 - Exposure parameters presented in Appendix F-3, Attachment 1, Tables 1 and 2 (Tetra Tech, 2015).

TABLE 9
GREEN HERON - AVERAGE EXPOSURE FOOD WEB MODEL
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

Chemical	Average Sediment Concentration (mg/kg)	Average Shelfish Concentration (mg/kg)	Dose (mg/kg/d) from:		Total Daily Dose (mg/kg/d)	NOAEL[1] (mg/kg/d)	LOAEL[1] (mg/kg/d)	Hazard Quotients	
			Sediment	Shellfish				NOAEL	LOAEL
Metals									
ALUMINUM	5030	573.1	35.6	81.1	116.7	109.7	1097	**1.1**	0.11
ARSENIC	5.3	23.9	0.037	3.4	3.4	2.2	4.5	**1.5**	0.76
CHROMIUM	16.0	21.0	0.11	3.0	3.1	2.7	15.6	**1.2**	0.20
COPPER	38.3	26.6	0.27	3.8	4.0	4.1	34.9	1.0	0.12
IRON	13200	1754	93.4	248	341.6	100	1000	**3.4**	0.34
LEAD	26.2	5.3	0.19	0.74	0.93	1.63	44.6	0.57	0.021
MERCURY	0.081	0.066	0.0006	0.0093	0.010	0.006	0.064	**1.5**	0.15

Exposure Parameters: [2]

Body Weight = (BW)	0.212	kg	Dose (sediment) = (Cs * Is)(H)/BW	LOAEL = Lowest Observed Adverse Effects Level
Shellfish Ingestion Rate = (Ii)	0.03	kg/day	Dose (Shellfish) = (Ci * Ii)(H)/BW	NOAEL = No Observed Adverse Effects Level
Sediment Ingestion Rate = (Is)	0.0015	kg/day	Ci = Contaminant concentration in Shellfish	NV = No value available
Home Range = (HR)	0.355	km	Cs = Contaminant concentration in sediment	
Contaminated Area = (CA)	0.6	km	Total Dose = Dose (sediment) + Dose (Shellfish)	
Home Range Factor = (H)	1	unitless; Value of 1 used if CA is greater than HR.		

Cells are shaded if the hazard quotient is greater than 1.0

1 - Toxicity reference values presented in Appendix F-3, Attachment 1, Table 3, in the Long-Term Monitoring Data Summary and Optimization Recommendations Report for Site 09 (Tetra Tech, 2015).
2 - Exposure parameters presented in Appendix F-3, Attachment 1, Tables 1 and 2 (Tetra Tech, 2015).

FIGURES

RESOLUTION CONSULTANTS

Drawn:	RM	02/26/2016
Approved:	BS	02/26/2016
Project #:	60273164	

Legend

Parcel 10 Property Boundary

N

0 180 360

Scale in Feet

FIGURE 1
SITE 09 SITE LAYOUT

RP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN,
RHODE ISLAND

Path: P:\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Projects\Site 7_9 SAP\MXD\Fig_10_5_Site_Layout.mxd

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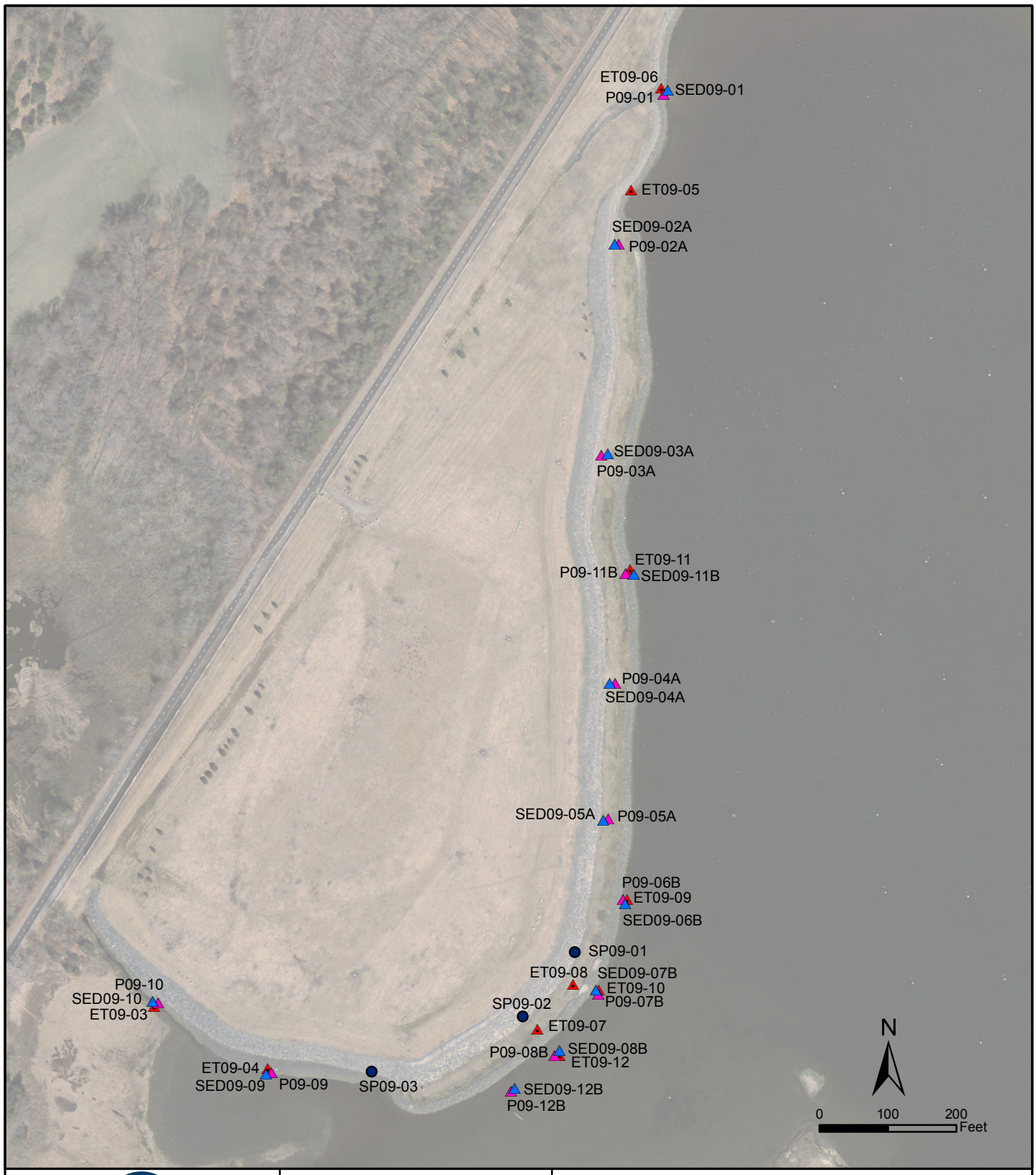

RESOLUTION CONSULTANTS

Drawn:	CP	04/19/2017
Approved:	CA	04/19/2017
Project #:	60273164	

Legend

- Piezometer
- Shellfish
- Sediment
- Seep

FIGURE 2
SHORELINE SAMPLE LOCATIONS

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN,
RHODE ISLAND

\\uschl1fp001\data\Projects\Govt\Projects\NavyCLEAN AECOM-EnSafe JV\Davisville\GIS\Site 9\MXD\ERA_Figure2_ShorelineSampleLocations_04192017.mxd

APPENDIX A

SAMPLE LISTS AND ANALYTICAL DATA SUMMARY TABLES

APPENDIX A TABLE 1
SAMPLE SUMMARY TABLE - SHELLFISH
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
DAVISVILLE, RHODE ISLAND

Location ID	Sample Date	Sample ID	Sample Type Code	Parent Sample ID
ET09-03	10/1/2013	ET09-03-100113	N	
ET09-03	9/22/2014	ET09-03-092214-1	N	
ET09-03	9/14/2015	ET09-03-091415-1	N	
ET09-03	12/14/2016	ET09-03-ME45R-1	N	
ET09-04	10/1/2013	ET09-04-100113-2	FD	ET09-04-100113
ET09-04	10/1/2013	ET09-04-100113	N	
ET09-04	10/1/2013	ET09-04-100113-2FD	FD	ET09-04-100113
ET09-04	9/22/2014	ET09-04-092214-1	N	
ET09-04	9/14/2015	ET09-04-091415-1	N	
ET09-04	12/14/2016	ET09-04-ME45R-1	N	
ET09-05	10/1/2013	ET09-05-100113	N	
ET09-05	9/23/2014	ET09-05-092314-1	N	
ET09-05	9/23/2014	ET09-05-092314-2	FD	ET09-05-092314-1
ET09-05	9/9/2015	ET09-05-090915-1	N	
ET09-05	12/13/2016	ET09-05-ME45R-1	N	
ET09-05	12/13/2016	ET09-ME45R-FD01	FD	ET09-05-ME45R-1
ET09-06	10/1/2013	ET09-06-100113	N	
ET09-06	9/22/2014	ET09-06-092214-1	N	
ET09-06	9/9/2015	ET09-06-090915-1	N	
ET09-06	12/13/2016	ET09-06-ME45R-1	N	
ET09-07	9/15/2015	ET09-07-091515-1	N	
ET09-07	12/14/2016	ET09-07-ME45R-1	N	
ET09-08	9/15/2015	ET09-08-091515-1	N	
ET09-08	12/14/2016	ET09-08-ME45R-1	N	
ET09-09	10/3/2013	ET09-09-100313	N	
ET09-09	9/23/2014	ET09-09-092314-1	N	
ET09-09	9/9/2015	ET09-09-090915-1	N	
ET09-09	12/13/2016	ET09-09-ME45R-1	N	
ET09-10	10/3/2013	ET09-10-100313	N	
ET09-10	9/24/2014	ET09-10-092414-1	N	
ET09-10	9/9/2015	ET09-10-090915-1	N	
ET09-10	12/13/2016	ET09-10-ME45R-1	N	
ET09-11	10/15/2013	ET09-11-101513	N	
ET09-11	9/23/2014	ET09-11-092314-1	N	
ET09-11	9/9/2015	ET09-11-090915-1	N	
ET09-11	12/13/2016	ET09-11-ME45R-1	N	
ET09-12	10/3/2013	ET09-12-100313	N	
ET09-12	9/24/2014	ET09-12-092414-1	N	
ET09-12	9/9/2015	ET09-12-090915-1	N	
ET09-12	9/9/2015	ET09-12-090915-2	FD	ET09-12-090915-1
ET09-12	12/13/2016	ET09-12-ME45R-1	N	

Notes:

FD = Field duplicate.

N = Normal sample.

APPENDIX A TABLE 2
SAMPLE SUMMARY TABLE - SEDIMENT
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
DAVISVILLE, RHODE ISLAND

Location ID	Sample Date	Sample ID	Sample Type Code	Parent Sample ID	Depth Interval
SED09-01	9/22/2014	SED09-01-092214-1	N		0 - 0.5 ft
SED09-01	9/23/2014	SED09-01-092214-2	FD	SED09-01-092214-1	0 - 0.5 ft
SED09-01	9/10/2015	SED09-01-091015-1	N		2 - 6 in
SED09-01	9/13/2016	SED09-01-ME45-1	N		0 - 0.5 ft
SED09-02A	9/8/2015	SED09-02A-090815-1	N		2 - 6 in
SED09-02A	9/8/2015	SED09-02A-090815-2	FD	SED09-02A-090815-1	2 - 6 in
SED09-02A	9/12/2016	SED09-02A-ME45-1	N		0 - 0.5 ft
SED09-02A	9/12/2016	SD09-ME45-FD01	FD	SED09-02A-ME45-1	0 - 0.5 ft
SED09-03A	9/12/2016	SED09-03A-ME45-1	N		0 - 0.5 ft
SED09-04A	9/9/2015	SED09-04A-090915-1	N		2 - 6 in
SED09-04A	9/12/2016	SED09-04A-ME45-1	N		0 - 0.5 ft
SED09-05A	9/9/2015	SED09-05A-090915-1	N		2 - 6 in
SED09-05A	9/13/2016	SED09-05A-ME45-1	N		0 - 0.5 ft
SED09-06B	9/8/2015	SED09-06B-090815-1	N		2 - 6 in
SED09-06B	9/26/2016	SED09-06B-ME45-1	N		0 - 0.5 ft
SED09-07B	9/8/2015	SED09-07B-090815-1	N		2 - 6 in
SED09-07B	9/26/2016	SED09-07B-ME45-1	N		0 - 0.5 ft
SED09-08B	9/8/2015	SED09-08B-090815-1	N		2 - 6 in
SED09-08B	9/8/2015	SED09-08B-090815-2	FD	SED09-08B-090815-1	2 - 6 in
SED09-08B	9/26/2016	SED09-08B-ME45-1	N		0 - 0.5 ft
SED09-08B	9/26/2016	SED09-ME45-FD02	FD	SED09-08B-ME45-1	0 - 0.5 ft
SED09-09	9/22/2014	SED09-09-092214-1	N		0 - 0.5 ft
SED09-09	9/22/2014	SED09-09-092214-2	FD	SED09-09-092214-1	0 - 0.5 ft
SED09-09	9/8/2015	SED09-09-090815-1	N		2 - 6 in
SED09-09	9/12/2016	SED09-09-ME45-1	N		0 - 0.5 ft
SED09-10	9/22/2014	SED09-10-092214-1	N		0 - 0.5 ft
SED09-10	9/22/2014	SED09-10-092214-2	FD	SED09-10-092214-1	0 - 0.5 ft
SED09-10	9/8/2015	SED09-10-090815-1	N		2 - 6 in
SED09-10	9/12/2016	SED09-10-ME45-1	N		0 - 0.5 ft
SED09-11B	9/9/2015	SED09-11B-090915-1	N		2 - 6 in
SED09-11B	9/13/2016	SED09-11B-ME45-1	N		0 - 0.5 ft
SED09-12B	9/8/2015	SED09-12B-090815-1	N		2 - 6 in
SED09-12B	9/26/2016	SED09-12B-ME45-1	N		0 - 0.5 ft

Notes:

FD = Field duplicate.

ft = feet.

in = inches.

N = Normal sample.

APPENDIX A TABLE 3
SAMPLE SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
DAVISVILLE, RHODE ISLAND

Location ID	Sample Date	Sample ID	Sample Type Code	Parent Sample ID
Samples Adjacent to the Stone Revetment				
P09-01	10/1/2013	P09-01-100113	N	
P09-01	9/9/2015	P09-01-090915-1	N	
P09-01	9/9/2015	P09-01-090915-1-F	N	
P09-01	9/13/2016	P09-01-ME45-1	N	
P09-01	9/14/2016	P09-01-ME45-1-F	N	
P09-01	9/27/2016	P09-01-ME45R-1	N	
P09-02A	10/2/2013	P09-02A-100213	N	
P09-02A	9/9/2015	P09-02A-090915-1	N	
P09-02A	9/15/2015	P09-02A-091515-1	N	
P09-02A	9/15/2015	P09-02A-091515-1-F	N	
P09-02A	9/14/2016	P09-02A-ME45-1	N	
P09-02A	9/15/2016	P09-02A-ME45-1-F	N	
P09-03A	10/15/2013	P09-03A-101513	N	
P09-03A	9/16/2015	P09-03A-091515-1	N	
P09-03A	9/16/2015	P09-03A-091515-1-F	N	
P09-03A	9/16/2015	P09-03A-091615-1	N	
P09-03A	9/14/2016	P09-03A-ME45-1	N	
P09-04A	10/15/2013	P09-04A-101513	N	
P09-04A	9/16/2015	P09-04A-091515-1	N	
P09-04A	9/16/2015	P09-04A-091515-1-F	N	
P09-04A	9/16/2015	P09-04A-091615-1	N	
P09-04A	9/12/2016	P09-04A-ME45-1	N	
P09-04A	9/15/2016	P09-04A-ME45-1-F	N	
P09-05A	10/2/2013	P09-05A-100213	N	
P09-05A	10/2/2013	P09-05A-100213-2	FD	P09-05A-100213
P09-05A	9/14/2015	P09-05A-091415-1	N	
P09-05A	9/14/2015	P09-05A-091415-1-F	N	
P09-09	10/1/2013	P09-09-100113	N	
P09-09	10/1/2013	P09-09-100213	N	
P09-09	9/9/2015	P09-09-090915-1	N	
P09-09	9/9/2015	P09-09-090915-1-F	N	
P09-09	9/12/2016	P09-09-ME45-1	N	
P09-09	9/12/2016	P09-09-ME45-1-F	N	
P09-10	10/1/2013	P09-10-100113	N	
P09-10	9/8/2015	P09-10-090815-1	N	
P09-10	9/8/2015	P09-10-090815-1-F	N	
P09-10	9/12/2016	P09-10-ME45-1	N	
P09-10	9/12/2016	P09-10-ME45-1-F	N	
Samples Beyond the Breakwater Structure				
P09-06B	10/3/2013	P09-06B-100313	N	
P09-06B	9/22/2014	P09-06B-092214-1	N	
P09-06B	9/9/2015	P09-06B-090915-1	N	
P09-06B	9/9/2015	P09-06B-090915-1-F	N	
P09-06B	9/13/2016	P09-06B-ME45-1	N	
P09-06B	9/13/2016	P09-06B-ME45-1-F	N	
P09-07B	10/3/2013	P09-07B-100313	N	
P09-07B	9/22/2014	P09-07B-092214-1	N	
P09-07B	9/9/2015	P09-07B-090915-1	N	
P09-07B	9/9/2015	P09-07B-090915-1-F	N	
P09-07B	9/13/2016	P09-07B-ME45-1	N	
P09-08B	10/3/2013	P09-08B-100313	N	
P09-08B	10/15/2013	P09-08B-101513	N	
P09-08B	9/22/2014	P09-08B-092214-1	N	
P09-08B	9/8/2015	P09-08B-090815-1	N	
P09-08B	9/8/2015	P09-08B-090815-1-F	N	
P09-08B	9/13/2016	P09-08B-ME45-1	N	
P09-08B	9/15/2016	P09-08B-ME45-1-F	N	
P09-11B	10/15/2013	P09-11B-101513	N	
P09-11B	9/24/2014	P09-11B-092414-1	N	
P09-11B	9/9/2015	P09-11B-090915-1	N	
P09-11B	9/9/2015	P09-11B-090915-1-F	N	
P09-11B	9/16/2016	P09-11B-ME45-1	N	
P09-11B	9/16/2016	P09-11B-ME45-1-F	N	
P09-12B	10/14/2013	P09-12B-101413	N	
P09-12B	9/22/2014	P09-12B-092214-1	N	
P09-12B	9/8/2015	P09-12B-090815-1	N	
P09-12B	9/8/2015	P09-12B-090815-1-F	N	
P09-12B	9/13/2016	P09-12B-ME45-1	N	
P09-12B	9/13/2016	P09-12B-ME45-1-F	N	

Notes:

FD = Field duplicate.

N = Normal sample.

APPENDIX A TABLE 4
SAMPLE SUMMARY TABLE - SEEP WATER
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
DAVISVILLE, RHODE ISLAND

Location ID	Sample Date	Sample ID	Sample Type Code	Parent Sample ID
SP09-01	3/28/2013	SEEP-01-032813-1	N	
SP09-01	10/7/2014	SEEP09-01-100714-1	N	
SP09-01	9/17/2015	SEEP1-091715-1	N	
SP09-01	9/14/2016	SP09-01-ME45-1	N	
SP09-01	9/14/2016	SEEP09-01-ME45-1	N	
SP09-01	9/14/2016	MW09-ME45-FD04	FD	SP09-01-ME45-1
SP09-02	3/28/2013	SEEP-02-032813-1	N	
SP09-02	3/28/2013	SEEP-02-032813-2	FD	SEEP-02-032813-1
SP09-02	10/7/2014	SEEP09-02-100714-1	N	
SP09-02	10/7/2014	SEEP09-02-100714-2	FD	SEEP09-02-100714-1
SP09-02	9/16/2015	SEEP2-091615-1	N	
SP09-02	9/14/2016	SEEP09-02-ME45-1	N	
SP09-02	9/14/2016	SP09-02-ME45-1	N	
SP09-03	10/6/2014	SEEP 09-03-100614-1	N	
SP09-03	9/14/2015	SEEP3-091415-1	N	
SP09-03	9/14/2015	SEEP3-091415-2	FD	SEEP3-091415-1
SP09-03	9/14/2016	SEEP09-03-ME45-1	N	
SP09-03	9/14/2016	SP09-03-ME45-1	N	

Notes:

FD = Field duplicate.

N = Normal sample.

APPENIDX A TABLE 5
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	ET09-03	ET09-03	ET09-03	ET09-03	ET09-04	ET09-04	ET09-04	ET09-04	ET09-04	ET09-04	ET09-05	ET09-05	ET09-05	ET09-05	ET09-05
				Sample Date	10/1/2013	9/22/2014	9/14/2015	12/14/2016	10/1/2013	10/1/2013	10/1/2013	9/22/2014	9/14/2015	12/14/2016	10/1/2013	9/23/2014	9/23/2014	9/9/2015	12/13/2016
				Sample Type Code	N	N	N	N	FD	N	FD	N	N	N	N	N	FD	N	N
				Sample ID	ET09-03-100113	ET09-03-092214-1	ET09-03-091415-1	ET09-03-ME45R-1	ET09-04-100113-2	ET09-04-100113	ET09-04-100113-2FD	ET09-04-092214-1	ET09-04-091415-1	ET09-04-ME45R-1	ET09-05-100113	ET09-05-092314-1	ET09-05-092314-2	ET09-05-090915-1	ET09-05-ME45R-1
Analyte Group	**Compound**	**CAS**	**Units**																
Metals	ALUMINUM	7429-90-5	mg/kg	166 J	19.2	107	52.3		133 J	72.3 J	16.3	51.6	128	15.1 J	16.8	19.9	146	21.5 J
Metals	ANTIMONY	7440-36-0	mg/kg	< 0.740 U	0.24 J	< 0.53 U	< 0.82 U		< 0.718 U	< 0.718 U	0.62 J	< 0.74 U	< 0.80 U	< 0.725 U	< 0.69 U	< 0.64 U	0.36 J	< 0.55 U
Metals	ARSENIC	7440-38-2	mg/kg	3.52 J	3.4	2.7	2.4		5.17	4.98	4.1	2.1	3.4	3.15 J	1.9	3.2	3.3	2.9
Metals	BARIUM	7440-39-3	mg/kg	0.608 J	< 5.1 U	< 7.1 U	< 8.2 U		0.737 J	0.486 J	< 9.6 U	< 9.8 U	< 10.0 U	0.222 J	< 9.3 U	< 8.5 U	< 7.5 U	< 6.9 U
Metals	BERYLLIUM	7440-41-7	mg/kg	< 0.0670 U	0.0026 J	0.014 J	< 0.20 U		< 0.0650 U	< 0.0650 U	0.0074 J	0.0061 J	< 0.25 U	< 0.0657 U	0.0046 J	0.0052 J	0.018 J	< 0.17 U
Metals	CADMIUM	7440-43-9	mg/kg	0.213 J	0.23	0.17 J	0.12 J		0.148 J	0.202 J	0.19 J	0.10 J	0.17 J	0.0873 J	0.063 J	0.085 J	0.076 J	0.069 J
Metals	CALCIUM	7440-70-2	mg/kg	685 J	418	559	662		2670 J	1910 J	395	343	2430	631 J	332	448	810	1060
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	< 3 U	< 0.51 U	< 0.71 U	< 0.82 U		< 2.91 U	< 2.91 U	< 0.96 U	< 0.98 U	1.1	< 0.157 U	< 0.93 U	< 0.85 U	1.1	< 0.69 U
Metals	COBALT	7440-48-4	mg/kg	< 1 U	< 1.3 U	< 1.8 U	0.12 J		< 0.971 U	< 0.971 U	< 2.4 U	< 2.5 U	0.26 J	< 0.98 U	< 2.3 U	< 2.1 U	< 1.9 U	0.17 J
Metals	COPPER	7440-50-8	mg/kg	3.58	1.9	3.0	< 1.4 U		2.77	2.50	1.9	2.4	6.4	1.39 J	1.1 J	1.7	2.8	< 1.1 U
Metals	IRON	7439-89-6	mg/kg	542 J	85.4	477	262		616 J	261 J	99.4	204	599	43.8 J	50.8	60.4	502	71.5 J
Metals	LEAD	7439-92-1	mg/kg	1.19 J	0.21 J	1.0	0.53		1.15 J	0.711 J	0.19 J	0.42 J	1.2	< 0.490 U	< 0.23 U	< 0.21 U	1.2	0.14 J
Metals	MAGNESIUM	7439-95-4	mg/kg	835	858	775	1010		838	777	905	761	1250	891	640	960	976	1000
Metals	MANGANESE	7439-96-5	mg/kg	29.4 J	2.4	21.3	22.1		46.0 J	27.5 J	10.4	7.8	41.4	4.98 J	4.1	5.1	10.4	2.6
Metals	MERCURY	7439-97-6	mg/kg	0.0111 J	0.0063 J	0.0090 J	0.0054 J		< 0.0093 U	0.0111 J	0.0067 J	0.0072 J	0.0068 J	< 0.0095 U	0.0068 J	0.0059 J	0.0052 J	0.0072 J
Metals	NICKEL	7440-02-0	mg/kg	1.04 J	< 1.3 U	< 1.8 U	0.20 J		0.433 J	0.544 J	< 2.4 U	< 2.5 U	0.70 J	0.649 J	< 2.3 U	< 2.1 U	< 1.9 U	0.87 J
Metals	POTASSIUM	7440-09-7	mg/kg	1310	1280	840	901		1540	1630	1400	913	1350	1350	931	1530	1190	1120
Metals	SELENIUM	7782-49-2	mg/kg	< 0.800 U	< 0.51 U	0.61 J	< 0.82 U		< 0.777 U	< 0.777 U	< 0.96 U	< 1.5 U	1.2 J	< 0.784 U	< 0.93 U	< 0.85 U	< 1.1 U	0.64 J
Metals	SILVER	7440-22-4	mg/kg	< 0.170 U	0.14 J	0.15 J	0.13 J		< 0.165 U	< 0.165 U	0.20 J	0.11 J	0.15 J	< 0.167 U	0.11 J	0.11 J	0.066 J	0.076 J
Metals	SODIUM	7440-23-5	mg/kg	6330	7340	5180	7570		6380	5800	7510	5660	9130	6550	4650	7140	6260	7500
Metals	THALLIUM	7440-28-0	mg/kg	< 0.520 U	< 0.26 U	< 0.35 U	< 0.41 UJ		< 0.505 U	< 0.505 U	< 0.48 U	< 0.49 U	< 0.50 UJ	< 0.510 U	< 0.46 U	< 0.42 U	< 0.37 U	< 0.34 UJ
Metals	VANADIUM	7440-62-2	mg/kg	< 1 U	< 1.3 U	0.70 J	< 2.0 U		< 0.971 U	< 0.971 U	< 2.4 U	0.35 J	< 2.5 U	< 0.127 U	< 2.3 U	< 2.1 U	0.58 J	< 1.7 U
Metals	ZINC	7440-66-6	mg/kg	10.4 J	7.2	9.8	5.5		9.72 J	10.0 J	7.5	6.3	10.6	17.5 J	12.5	16.8	24.2	12.5
PCBs	DECACHLOROBIPHENYL	2051-24-3	mg/kg	< 0.00042 U	< 0.00041 U	< 0.00042 U	0.00026 J	< 0.00041 U	< 0.00042 U		< 0.00042 U	< 0.00042 U	< 0.00042 U	< 0.00041 U	< 0.00042 U	< 0.00042 U	< 0.00041 U	0.00038 J
PCBs	DICHLOROBIPHENYL	25512-42-9	mg/kg	< 0.000083 U	< 0.000082 U	< 0.000083 U	< 0.000082 U	< 0.000082 U	< 0.000083 U		< 0.000083 U	0.00039 J	0.00042	< 0.000082 U	< 0.000083 U	< 0.000083 U	< 0.000082 U	< 0.000083 U
PCBs	HEPTACHLOROBIPHENYL	28655-71-2	mg/kg	0.0080	< 0.00025 U	0.0065	0.0053	0.00050 J	0.0017 J		< 0.00025 U	0.0031	0.0037	0.00075 J	< 0.00025 U	< 0.00025 U	0.0018	0.00071 J
PCBs	HEXACHLOROBIPHENYL	26601-64-9	mg/kg	0.0081 J	0.0029	0.018	0.016	0.0033 J	0.0071 J		0.00092	0.012	0.015	0.0018	< 0.00017 U	< 0.00017 U	0.0032	0.0015
PCBs	MONOCHLOROBIPHENYL	27323-18-8	mg/kg	< 0.000083 U	< 0.000082 U	< 0.00017 U	< 0.00017 U	< 0.000082 U	< 0.000083 U		< 0.000083 U	< 0.00017 U	< 0.00017 U	< 0.000082 U	< 0.000083 U	< 0.000083 U	< 0.00017 U	< 0.00017 U
PCBs	NONACHLOROBIPHENYL	53742-07-7	mg/kg	< 0.00042 U	< 0.00041 U	< 0.00042 U	< 0.00041 U	< 0.00041 U	< 0.00042 U		< 0.00042 U	< 0.00042 U	< 0.00042 U	< 0.00041 U	< 0.00042 U	< 0.00042 U	< 0.00041 U	< 0.00042 U
PCBs	OCTACHLOROBIPHENYL	55722-26-4	mg/kg	0.0026	< 0.00025 U	< 0.00050 U	< 0.00050 U	< 0.00025 U	< 0.00025 U		< 0.00025 U	< 0.00050 U	< 0.00050 U	< 0.00025 U	< 0.00050 U	< 0.00025 U	< 0.00050 U	< 0.00050 U
PCBs	PENTACHLOROBIPHENYL	25429-29-2	mg/kg	0.0011	< 0.00017 U	0.0058	0.0051	0.0014 J	0.0030 J		< 0.00017 U	0.0048	0.0066	< 0.00016 U	< 0.00017 U	< 0.00017 U	0.00041 J	0.00019 J
PCBs	POLYCHLORINATED BIPHENYLS (PCBS) (b	1336-36-3	mg/kg	0.02	0.0029	0.031	0.027	0.0051 J	0.012 J		0.00092	0.02	0.028	0.0026	< 0.000083 U	< 0.000083 U	0.0054	0.0030 J
PCBs	TETRACHLOROBIPHENYL	26914-33-0	mg/kg	< 0.00017 U	< 0.00017 U	< 0.00017 U	0.00074	< 0.00017 U	0.00037 J		< 0.00017 U	0.00028 J	0.0012	< 0.00016 U	< 0.00017 U	< 0.00017 U	< 0.00017 U	< 0.00017 U
PCBs	TOTAL PCB HOMOLOGS (a)	TOTALPCBHOMO	mg/kg	0.02	0.0029	0.03	0.027	0.0052	0.012		0.00092	0.021	0.027	0.0026	< 0.00042 U	< 0.00042 U	0.0054	0.0030
PCBs	TRICHLOROBIPHENYL	25323-68-6	mg/kg	< 0.000083 U	< 0.000082 U	< 0.000083 U	< 0.000082 U	< 0.000082 U	< 0.000083 U		< 0.000083 U	0.00015 J	0.000088 J	< 0.000082 U	< 0.000083 U	< 0.000083 U	< 0.000082 U	0.00019 J
Pesticides	4,4-DDD	72-54-8	mg/kg	R	< 0.00085 U	0.012 J	< 0.00085 U		< 0.015 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00084 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00085 U
Pesticides	4,4-DDE	72-55-9	mg/kg	0.0037	< 0.00085 U	0.0027 J	< 0.00085 U		0.0027 J	0.0027 J	< 0.00085 U	< 0.00084 UJ	< 0.00084 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00085 U
Pesticides	4,4-DDT	50-29-3	mg/kg	< 0.0073 U	< 0.00085 U	0.0055 J	< 0.00085 U		< 0.0034 U	< 0.0036 U	< 0.00085 U	< 0.00084 UJ	< 0.00084 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00085 U
Pesticides	ALDRIN	309-00-2	mg/kg	0.00060 J	< 0.00042 U	0.0019 J	< 0.00042 U		0.0012 J	0.00074 J	< 0.00043 U	< 0.00042 UJ	< 0.00042 U	< 0.0016 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00043 U
Pesticides	ALPHA-BHC	319-84-6	mg/kg	0.0014 J	< 0.00042 U	< 0.00042 UJ	< 0.00021 U		< 0.0017 U	< 0.0016 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.00076 J	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg	< 0.0016 U	< 0.00042 U	0.0010 J	< 0.00021 U		< 0.0017 U	< 0.0016 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.0011 J	< 0.00043 U	< 0.00042 U	0.0015 J	< 0.00021 U
Pesticides	BETA-BHC	319-85-7	mg/kg	< 0.0038 U	< 0.00042 U	0.00099 J	< 0.00021 U		< 0.0038 U	< 0.0038 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.0038 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U
Pesticides	DELTA-BHC	319-86-8	mg/kg	R	< 0.00042 U	< 0.00042 UJ	< 0.00042 U		< 0.0027 U	< 0.0016 U	< 0.00043 U	< 0.00042 UJ	< 0.00042 U	0.0010 J	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00043 U
Pesticides	DIELDRIN	60-57-1	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U		< 0.0034 U	0.0010 J	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 U
Pesticides	ENDOSULFAN I	959-98-8	mg/kg	< 0.0016 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U		0.00084 J	< 0.0016 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.0016 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U		< 0.0034 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 U
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U		< 0.0034 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 U
Pesticides	ENDRIN	72-20-8	mg/kg	< 0.0034 U	< 0.00085 U	0.0035 J	< 0.00042 U		< 0.0034 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 U
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00085 U		0.00080 J	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00084 U	< 0.0034 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00085 U
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg	< 0.0036 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U		< 0.0036 U	< 0.0036 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	< 0.0036 U	< 0.00085 U	< 0.00085 U	< 0.00085 UJ	< 0.00043 U
Pesticides	HEPTACHLOR	76-44-8	mg/kg	R	< 0.00042 U	< 0.00042 UJ	< 0.00021 U		0.0035	< 0.0016 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.0016 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	0.0011 J	< 0.00042 U	< 0.00042 UJ	< 0.00042 U		0.0013 J	< 0.0016 U	< 0.00043 U	< 0.00042 UJ	< 0.00042 U	< 0.0016 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00043 U
Pesticides	LINDANE	58-89-9	mg/kg	< 0.0016 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U		< 0.0017 U	< 0.0016 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.0016 U	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 U
Pesticides	METHOXYCHLOR	72-43-5	mg/kg	0.0043 J	< 0.0042 U	< 0.0042 UJ	< 0.0021 U		0.0046 J	< 0.013 U	< 0.0043 U	< 0.0042 UJ	< 0.0021 U	< 0.013 U	< 0.0043 U	< 0.0042 U	< 0.0042 UJ	< 0.0021 U
Pesticides	TOXAPHENE	8001-35-2	mg/kg	< 0.066 U	< 0.017 U	< 0.017 UJ	< 0.017 U		< 0.066 U	< 0.066 U	< 0.017 U	< 0.017 UJ	< 0.017 U	< 0.065 U	< 0.017 U	< 0.017 U	< 0.017 UJ	< 0.017 U
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg	0.0066 J	< 0.00042 U	0.00087 J	< 0.00042 U		0.0045	0.0059	< 0.00043 U	< 0.00042 UJ	< 0.00042 U	0.00085 J	< 0.00043 U	< 0.00042 U	< 0.00042 UJ	< 0.00043 U
SVOCs	1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	1,2-DICHLOROBENZENE	95-50-1	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	1,3-DICHLOROBENZENE	541-73-1	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	1,4-DICHLOROBENZENE	106-46-7	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	mg/kg		< 0.067 U	< 0.066 U	< 0.13 UJ				< 0.066 U	< 0.067 U	< 0.13 U		< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	2,4,5-TRICHLOROPHENOL	95-95-4	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 UJ	< 0.13 U
SVOCs	2,4,6-TRICHLOROPHENOL	88-06-2	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U
SVOCs	2,4-DICHLOROPHENOL	120-83-2	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U
SVOCs	2,4-DIMETHYLPHENOL	105-67-9	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	2,4-DINITROPHENOL	51-28-5	mg/kg	< 6 U	< 0.17 U	< 0.16 UJ	< 0.33 UJ		< 4 U	< 3.9 U	< 0.16 U	< 0.17 UJ	< 0.32 UJ	< 4 U	< 0.17 U	< 0.17 U	< 0.17 UJ	< 0.33 UJ
SVOCs	2,4-DINITROTOLUENE	121-14-2	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	2,6-DINITROTOLUENE	606-20-2	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	2-CHLORONAPHTHALENE	91-58-7	mg/kg	< 0.2 UJ	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 UJ	< 0.13 UJ	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 UJ	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	2-CHLOROPHENOL	95-57-8	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	0.037	0.0044 J	< 0.0033 U	< 0.0065 U		0.039	0.035	0.0074 J	0.0082	0.012	0.0090	< 0.0033 UJ	< 0.0033 UJ	< 0.0033 U	< 0.0066 UJ
SVOCs	2-METHYLPHENOL	95-48-7	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		0.085 J	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U
SVOCs	2-NITROANILINE	88-74-4	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	2-NITROPHENOL	88-75-5	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U
SVOCs	3,3-DICHLOROBENZIDINE	91-94-1	mg/kg	< 2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 1.3 U	< 1.3 U	< 0.066 U	< 0.067 U	< 0.13 U	< 1.3 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	3-NITROANILINE	99-09-2	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	R	< 0.13 UJ

APPENIDX A TABLE 5
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	ET09-03	ET09-03	ET09-03	ET09-03	ET09-04	ET09-04	ET09-04	ET09-04	ET09-04	ET09-04	ET09-05	ET09-05	ET09-05	ET09-05	ET09-05
				Sample Date	10/1/2013	9/22/2014	9/14/2015	12/14/2016	10/1/2013	10/1/2013	10/1/2013	9/22/2014	9/14/2015	12/14/2016	10/1/2013	9/23/2014	9/23/2014	9/9/2015	12/13/2016
				Sample Type Code	N	N	N	N	FD	N	FD	N	N	N	N	N	FD	N	N
				Sample ID	ET09-03-100113	ET09-03-092214-1	ET09-03-091415-1	ET09-03-ME45R-1	ET09-04-100113-2	ET09-04-100113	ET09-04-100113-2FD	ET09-04-092214-1	ET09-04-091415-1	ET09-04-ME45R-1	ET09-05-100113	ET09-05-092314-1	ET09-05-092314-2	ET09-05-090915-1	ET09-05-ME45R-1
Analyte Group	**Compound**	**CAS**	**Units**																
SVOCs	4,6-DINITRO-2-METHYLPHENOL	534-52-1	mg/kg	< 3 U	< 0.067 U	< 0.066 UJ	< 0.13 UJ		< 2 U	< 2 U	< 0.066 U	< 0.067 UJ	< 0.13 UJ	< 2 U	< 0.067 U	< 0.067 U	R	< 0.13 UJ
SVOCs	4-BROMOPHENYL-PHENYLETHER	101-55-3	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	4-CHLORO-3-METHYLPHENOL	59-50-7	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	4-CHLOROANILINE	106-47-8	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	4-METHYLPHENOL	106-44-5	mg/kg	< 0.2 UJ	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 UJ	< 0.13 UJ	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 UJ	< 0.067 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ
SVOCs	4-NITROANILINE	100-01-6	mg/kg	< 1 U	< 0.067 UJ	< 0.066 UJ	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 UJ	< 0.067 UJ	< 0.13 U	< 0.66 U	< 0.067 UJ	< 0.067 UJ	< 0.067 UJ	< 0.067 UJ	< 0.13 UJ
SVOCs	4-NITROPHENOL	100-02-7	mg/kg	< 3 U	< 0.067 UJ	< 0.066 U	< 0.13 U		< 2 U	< 2 U	< 0.066 UJ	< 0.067 U	< 0.13 U	< 2 U	< 0.067 UJ	< 0.067 UJ	< 0.067 U	< 0.067 U	< 0.13 U
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	0.025 J	0.0060	< 0.0033 U	< 0.0065 U		0.028	0.024	0.0066	0.013	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	0.0056 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0050 J	0.0062 J	< 0.0033 U	0.0043	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	
SVOCs	ANTHRACENE	120-12-7	mg/kg	0.0057 J	< 0.0033 U	< 0.0033 U	< 0.0065 UJ		0.0053 J	0.0077	< 0.0033 U	0.021	< 0.0065 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	0.0070 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0039 J	0.0032 J	< 0.0033 U	< 0.0033 U	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	0.0061 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0028 J	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	0.0077 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0041 J	0.0048 J	< 0.0033 U	< 0.0033 U	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	< 0.01 UJ	< 0.0033 U	< 0.0033 U	< 0.0065 U		< 0.0067 UJ	< 0.0066 UJ	< 0.0033 U	< 0.0033 U	< 0.0065 U	< 0.0066 UJ	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	0.0043 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0027 J	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0065 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	
SVOCs	BIS(2-CHLOROETHOXY)METHANE	111-91-1	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	BIS(2-CHLOROETHYL)ETHER	111-44-4	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg	0.62 J	< 0.17 U	0.11 J	0.17 J-		0.39 J	0.3 J	< 0.066 U	0.16 J	< 0.13 UJ	< 0.68 U	< 0.17 U	< 0.17 U	0.12 J	< 0.13 UJ	
SVOCs	BUTYLBENZYLPHTHALATE	85-68-7	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	CARBAZOLE	86-74-8	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	CHRYSENE	218-01-9	mg/kg	0.0081 J	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.0047 J	0.0050 J	< 0.0033 U	< 0.0033 U	< 0.0065 U	0.0016 J	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	< 0.01 U	< 0.0033 U	< 0.0033 U	< 0.0065 UJ		< 0.0067 U	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0065 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	
SVOCs	DIBENZOFURAN	132-64-9	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	DIETHYLPHTHALATE	84-66-2	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	DIMETHYL PHTHALATE	131-11-3	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	DI-N-BUTYLPHTHALATE	84-74-2	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	DI-N-OCTYLPHTHALATE	117-84-0	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	FLUORANTHENE	206-44-0	mg/kg	0.034	< 0.0033 U	< 0.0033 U	0.0080		0.025	0.021	< 0.0033 U	< 0.0033 U	0.013	0.0057 J	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	
SVOCs	FLUORENE	86-73-7	mg/kg	0.011	< 0.0033 U	< 0.0033 U	< 0.0065 U		0.013	0.01	< 0.0033 U	0.0070	0.0069	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	
SVOCs	HEXACHLOROBENZENE	118-74-1	mg/kg	< 0.1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.068 U	< 0.067 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.068 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	HEXACHLOROBUTADIENE	87-68-3	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	HEXACHLOROCYCLOPENTADIENE	77-47-4	mg/kg	R	< 0.17 U	< 0.16 U	< 0.33 UJ		< 2 U	< 2 U	< 0.16 U	< 0.17 U	< 0.32 UJ	< 2 U	< 0.17 U	< 0.17 U	R	< 0.33 UJ	
SVOCs	HEXACHLOROETHANE	67-72-1	mg/kg	< 1 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.67 U	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 UJ	< 0.13 UJ	
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	< 0.01 U	< 0.0033 UJ	< 0.0033 U	< 0.0065 U		< 0.0067 U	< 0.0066 U	< 0.0033 UJ	< 0.0033 U	< 0.0065 U	< 0.0066 U	< 0.0033 UJ	< 0.0033 UJ	< 0.0033 UJ	< 0.0066 UJ	
SVOCs	ISOPHORONE	78-59-1	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	NAPHTHALENE	91-20-3	mg/kg	0.03	0.01	< 0.0033 U	0.01		0.045	0.038	0.019	0.017	0.024	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	
SVOCs	NITROBENZENE	98-95-3	mg/kg	0.22	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	N-NITROSODIMETHYLAMINE	62-75-9	mg/kg	< 1 U	< 0.067 U	< 0.066 U			< 0.67 U	< 0.66 U	< 0.066 U	< 0.067 U		< 0.66 U	< 0.067 U	< 0.067 U	< 0.067 U		
SVOCs	N-NITROSODINPROPYLAMINE	621-64-7	mg/kg	< 0.2 U	< 0.067 U	< 0.066 UJ	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 UJ	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 UJ	< 0.13 UJ	
SVOCs	N-NITROSODIPHENYLAMINE	86-30-6	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 UJ		< 0.13 U	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 UJ	
SVOCs	PENTACHLOROPHENOL	87-86-5	mg/kg	< 1 U	< 0.17 U	< 0.16 U	< 0.33 UJ		< 0.68 U	< 0.67 U	< 0.16 U	< 0.17 U	< 0.32 U	< 0.68 U	< 0.17 U	< 0.17 U	< 0.17 UJ	< 0.33 UJ	
SVOCs	PHENANTHRENE	85-01-8	mg/kg	0.044	0.0090	< 0.0033 U	0.014		0.045	0.042	0.0087	< 0.0033 U	0.025	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	
SVOCs	PHENOL	108-95-2	mg/kg	< 0.2 U	< 0.067 U	< 0.066 U	< 0.13 U		< 0.13 U	0.1 J	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.067 U	< 0.067 U	< 0.13 U	
SVOCs	PYRENE	129-00-0	mg/kg	0.03	< 0.0033 U	< 0.0033 U	0.0075		0.023	0.022	< 0.0033 U	< 0.0033 U	0.011	0.0060 J	< 0.0033 U	< 0.0033 U	< 0.0033 UJ	< 0.0066 UJ	

Notes:
Results reported on a wet weight basis.
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
FD = Field duplicate.
J = Estimated value.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
mg/kg = milligram per kilogram.
N = Normal sample.
PCBs = Polychlorinated biphenyls.
R = Rejected.
SVOC = Semivolatile organic compound.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.
(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., homolog) concentrations. For samples without any detections of individual compounds (i.e., homolog) the maximum reporting detection limit within the sample is presented as a non-detect value.
(b) Lab calculated value; Not used. Totals for use in risk assessment are calculated as discussed in the report text.

APPENIDX A TABLE 5
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	ET09-05	ET09-06	ET09-06	ET09-06	ET09-06	ET09-07	ET09-07	ET09-08	ET09-08	ET09-09	ET09-09	ET09-09	ET09-09	ET09-09	ET09-10
			Sample Date	12/13/2016	10/1/2013	9/22/2014	9/9/2015	12/13/2016	9/15/2015	12/14/2016	9/15/2015	12/14/2016	10/3/2013	9/23/2014	9/9/2015	12/13/2016	10/3/2013	9/24/2014
			Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N
			Sample ID	ET09-ME45R-FD01	ET09-06-100113	ET09-06-092214-1	ET09-06-090915-1	ET09-06-ME45R-1	ET09-07-091515-1	ET09-07-ME45R-1	ET09-08-091515-1	ET09-08-ME45R-1	ET09-09-100313	ET09-09-092314-1	ET09-09-090915-1	ET09-09-ME45R-1	ET09-10-100313	ET09-10-092414-1
Analyte Group	**Compound**	**CAS**	**Units**															
Metals	ALUMINUM	7429-90-5	mg/kg	6.8 J	16.9 J	21.3	21.0	2.1 J	54.2	38.3	6.1 J	144	7.30 J	14.6	27.2	2.6 J	1360 J	9.9
Metals	ANTIMONY	7440-36-0	mg/kg	< 0.70 U	< 0.740 U	0.37 J	0.45 J	< 0.59 U	< 0.68 U	< 0.72 U	< 0.50 U	< 0.52 U	< 0.712 U	0.23 J	0.48 J	< 0.65 U	< 0.733 U	0.36 J
Metals	ARSENIC	7440-38-2	mg/kg	2.9	4.73	4.2	3.0	2.6	3.1	2.0	4.1	2.5	4.56	3.6	2.9	2.9	2.71 J	3.0
Metals	BARIUM	7440-39-3	mg/kg	< 8.7 U	0.131 J	< 6.8 U	< 8.3 U	< 7.4 U	< 9.0 U	< 7.2 U	< 6.7 U	< 6.5 U	0.0856 J	< 5.5 U	< 9.4 U	< 6.5 U	6.05	< 8.1 U
Metals	BERYLLIUM	7440-41-7	mg/kg	< 0.22 U	< 0.0670 U	0.0057 J	0.0066 J	< 0.18 U	0.0072 J	< 0.18 U	0.0023 J	< 0.16 U	< 0.0644 U	0.0011 J	0.030 J	< 0.16 U	0.111 J	0.0077 J
Metals	CADMIUM	7440-43-9	mg/kg	0.063 J	0.145 J	0.12 J	0.089 J	0.064 J	0.55	0.46	0.21	0.15 J	0.142 J	0.10 J	0.13 J	0.066 J	0.206 J	0.093 J
Metals	CALCIUM	7440-70-2	mg/kg	1300	427 J	419	403	606	663	700	930	635	490 J	465	431	494	968 J	511
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	< 0.87 U	< 3 U	< 0.68 U	< 0.83 U	< 0.74 U	< 0.90 U	1.1	< 0.67 U	1.4	< 0.154 U	< 0.55 U	< 0.94 U	< 0.65 U	9.37	< 0.81 U
Metals	COBALT	7440-48-4	mg/kg	0.18 J	< 0.0990 U	< 1.7 U	< 2.1 U	0.13 J	< 2.3 U	0.057 J	< 1.7 U	0.14 J	< 0.0952 U	< 1.4 U	< 2.4 U	0.14 J	1.01	< 2.0 U
Metals	COPPER	7440-50-8	mg/kg	< 1.3 U	1.68 J	2.4	4.2	< 1.8 U	6.3	< 1.9 U	6.9	3.0	1.83 J	1.9	2.3	2.8	9.48	4.1
Metals	IRON	7439-89-6	mg/kg	32.8 J	62.6 J	80.9	108	15.9	208	113	21.8	390	30.6 J	46.6	94.3	19.0	3160 J	43.6
Metals	LEAD	7439-92-1	mg/kg	< 0.22 U	< 0.500 U	0.16 J	< 0.41 U	0.14 J	0.39 J	0.26 J	< 0.34 U	0.88	< 0.481 U	0.11 J	0.21 J	0.16 J	6.90	0.24 J
Metals	MAGNESIUM	7439-95-4	mg/kg	1040	737	890	881	927	848	941	1050	959	770	886	934	926	1150	896
Metals	MANGANESE	7439-96-5	mg/kg	< 2.2 U	11.4 J	3.3	9.0	3.1	4.6	1.8	0.53 J	6.5	9.33 J	12.7	13.6	3.2	31.0 J	9.7
Metals	MERCURY	7439-97-6	mg/kg	0.0074 J	0.0114 J	0.0098 J	0.0073 J	0.0066 J	0.0094 J	0.0096 J	< 0.020 U	0.014 J	0.0110 J	0.0083 J	0.010 J	0.0058 J	0.0197 J	0.011 J
Metals	NICKEL	7440-02-0	mg/kg	0.88 J	< 0.130 U	< 1.7 U	< 2.1 U	0.59 J	< 2.3 U	0.45 J	< 1.7 U	0.65 J	< 0.125 U	< 1.4 U	< 2.4 U	0.61 J	5.52	< 2.0 U
Metals	POTASSIUM	7440-09-7	mg/kg	1170	1460	1600	1190	1440	810	865	822	855	1440	1470	1090	1510	1090	1410
Metals	SELENIUM	7782-49-2	mg/kg	0.57 J	< 0.800 U	< 0.68 U	< 1.2 U	0.62 J	< 1.4 U	< 0.72 U	< 1.0 U	0.71 J	< 0.769 U	< 0.55 U	< 1.4 U	< 0.65 U	< 0.792 U	< 0.81 U
Metals	SILVER	7440-22-4	mg/kg	0.075 J	< 0.170 U	0.11 J	0.11 J	0.093 J	1.2 J	0.94 J	1.2	0.57 J	< 0.163 U	0.14 J	0.26 J	0.079 J	< 0.168 U	0.17 J
Metals	SODIUM	7440-23-5	mg/kg	7420	6090	7000	6470	6620	6060	7160	7530	6890	6180	7670	7020	6410	4740	6680
Metals	THALLIUM	7440-28-0	mg/kg	< 0.43 UJ	< 0.520 U	< 0.34 U	< 0.41 U	< 0.37 UJ	< 0.45 U	< 0.36 UJ	< 0.34 U	< 0.33 UJ	< 0.500 U	< 0.27 U	< 0.47 U	< 0.32 UJ	< 0.515 U	< 0.41 U
Metals	VANADIUM	7440-62-2	mg/kg	< 2.2 U	< 1 U	< 1.7 U	0.28 J	< 1.8 U	0.49 J	< 1.8 U	0.27 J	< 1.6 U	< 0.125 U	< 1.4 U	0.52 J	< 1.6 U	4.01	< 2.0 U
Metals	ZINC	7440-66-6	mg/kg	13.2	8.55 J	8.6	6.0	14.6	9.9	5.0	10.5	6.5	8.76 J	7.1	7.5	15.6	29.2 J	18.1
PCBs	DECACHLOROBIPHENYL	2051-24-3	mg/kg	0.00023 J	< 0.00042 U	< 0.00042 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 U	< 0.00041 U	< 0.00041 U	< 0.00041 U	< 0.00042 U	< 0.00042 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 U	< 0.00042 U
PCBs	DICHLOROBIPHENYL	25512-42-9	mg/kg	< 0.000082 U	< 0.000083 U	< 0.000083 U	0.00090	< 0.000083 UJ	< 0.000083 U	< 0.000082 U	< 0.000082 U	0.00021 J	< 0.000083 U	< 0.000083 U	< 0.000083 U	< 0.000083 UJ	< 0.000083 U	< 0.000083 U
PCBs	HEPTACHLOROBIPHENYL	28655-71-2	mg/kg	0.00021 J	0.0043	< 0.00025 U	0.0078	0.00076 J-	0.00024 J	0.0011	< 0.00025 U	0.00037 J	0.0015	< 0.00025 U	0.0013	0.00020 J-	< 0.00025 U	< 0.00025 U
PCBs	HEXACHLOROBIPHENYL	26601-64-9	mg/kg	0.00096	0.012	0.00088	0.027	0.0013 J-	0.00041 J	0.0055	< 0.00017 U	0.0017	0.0055	0.00057 J	0.0062	0.00086 J-	< 0.00017 U	< 0.00017 U
PCBs	MONOCHLOROBIPHENYL	27323-18-8	mg/kg	< 0.00016 U	< 0.000083 U	< 0.000083 U	< 0.00017 U	< 0.00017 UJ	< 0.00017 U	< 0.00016 U	< 0.00017 U	< 0.00016 U	< 0.000083 U	< 0.000083 U	< 0.00017 U	< 0.00017 UJ	< 0.000083 U	< 0.000083 U
PCBs	NONACHLOROBIPHENYL	53742-07-7	mg/kg	< 0.00041 U	< 0.00042 U	< 0.00042 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 U	< 0.00041 U	< 0.00041 U	< 0.00041 U	< 0.00042 U	< 0.00042 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 U	< 0.00042 U
PCBs	OCTACHLOROBIPHENYL	55722-26-4	mg/kg	< 0.00049 U	< 0.00025 U	< 0.00025 U	< 0.00050 U	< 0.00050 UJ	< 0.00050 U	< 0.00049 U	< 0.00050 U	< 0.00049 U	< 0.00025 U	< 0.00025 U	< 0.00050 U	< 0.00050 UJ	< 0.00025 U	< 0.00025 U
PCBs	PENTACHLOROBIPHENYL	25429-29-2	mg/kg	0.00015 J	0.0051	< 0.00017 U	0.0085	0.00021 J-	< 0.00017 U	0.0027	< 0.00017 U	0.00099	0.0027	< 0.00017 U	0.0039	< 0.00017 UJ	< 0.00017 U	< 0.00017 U
PCBs	POLYCHLORINATED BIPHENYLS (PCBS) (t	1336-36-3	mg/kg	0.0015 J	0.023	0.00088	0.045	0.0022 J-	0.00065	0.0094	< 0.000082 U	0.0034	0.01	0.00057	0.012	0.0011 J-	< 0.000083 U	< 0.000083 U
PCBs	TETRACHLOROBIPHENYL	26914-33-0	mg/kg	< 0.00016 U	0.00070	< 0.00017 U	0.00087	< 0.00017 UJ	< 0.00017 U	0.00017 J	< 0.00017 U	0.000087 J	0.00058 J	< 0.00017 U	0.00038 J	< 0.00017 UJ	< 0.00017 U	< 0.00017 U
PCBs	TOTAL PCB HOMOLOGS (a)	TOTALPCBHOMO	mg/kg	0.0016	0.022	0.00088	0.045	0.0023	0.00065	0.0095	< 0.0005 U	0.0034	0.01	0.00057	0.012	0.0011	< 0.00042 U	< 0.00042 U
PCBs	TRICHLOROBIPHENYL	25323-68-6	mg/kg	< 0.000082 U	0.00016 J	< 0.000083 U	< 0.000083 U	< 0.000083 UJ	< 0.000083 U	< 0.000082 U	< 0.000082 U	0.000055 J	< 0.000083 U	< 0.000083 U	0.00026 J	< 0.000083 UJ	< 0.000083 U	< 0.000083 U
Pesticides	4,4-DDD	72-54-8	mg/kg	< 0.00084 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	0.017 J	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00084 UJ	< 0.0034 U	< 0.00085 U
Pesticides	4,4-DDE	72-55-9	mg/kg	< 0.00084 U	0.0019 J	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	0.0017 J	< 0.00085 U	< 0.00084 UJ	< 0.00084 UJ	0.00087 J	< 0.00085 U
Pesticides	4,4-DDT	50-29-3	mg/kg	< 0.00084 U	< 0.0035 U	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	0.0065 J	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00084 UJ	0.0015 J	< 0.00085 U
Pesticides	ALDRIN	309-00-2	mg/kg	< 0.00042 U	0.00071 J	< 0.00043 U	0.0056 J	< 0.00042 U	< 0.00042 UJ	< 0.00043 U	< 0.00043 UJ	< 0.00042 U	0.00070 J	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	0.00064 J	< 0.00043 U
Pesticides	ALPHA-BHC	319-84-6	mg/kg	< 0.00021 U	0.00058 J	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.0011 J	< 0.00021 U	< 0.00043 UJ	< 0.00021 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 UJ	< 0.0016 U	< 0.00043 U
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg	< 0.00021 U	< 0.0017 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.0039 J	< 0.00021 U	< 0.00043 UJ	< 0.00021 U	< 0.0017 U	< 0.00042 U	0.00088 J	< 0.00021 UJ	0.0010 J	< 0.00043 U
Pesticides	BETA-BHC	319-85-7	mg/kg	< 0.00021 U	< 0.0038 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.00042 UJ	< 0.00021 U	0.0014 J	< 0.00021 U	< 0.0038 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 UJ	< 0.0038 U	< 0.00043 U
Pesticides	DELTA-BHC	319-86-8	mg/kg	< 0.00042 U	< 0.0017 U	< 0.00043 U	0.0018 J	< 0.00042 U	0.0013 J	< 0.00043 U	0.0021 J	< 0.00042 U	< 0.0017 U	< 0.00042 U	0.0011 J	< 0.00042 UJ	< 0.0016 U	< 0.00043 U
Pesticides	DIELDRIN	60-57-1	mg/kg	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	< 0.00085 UJ	< 0.00043 U	< 0.00085 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 UJ	< 0.0034 U	< 0.00085 U
Pesticides	ENDOSULFAN I	959-98-8	mg/kg	< 0.00021 U	0.0011 J	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.00090 J	< 0.00021 U	< 0.00043 UJ	< 0.00021 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 UJ	0.0014 J	< 0.00043 U
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	< 0.00085 UJ	< 0.00043 U	< 0.00085 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 UJ	0.00066 J	< 0.00085 U
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	0.0032 J	< 0.00043 U	< 0.00085 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 UJ	< 0.0034 U	< 0.00085 U
Pesticides	ENDRIN	72-20-8	mg/kg	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	0.0031 J	< 0.00043 U	< 0.00085 UJ	< 0.00042 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 UJ	< 0.0034 U	< 0.00085 U
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg	< 0.00084 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	< 0.00085 UJ	< 0.00085 U	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00084 UJ	< 0.0034 U	< 0.00085 U
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg	< 0.00042 U	< 0.0036 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 U	< 0.00085 UJ	< 0.00043 U	< 0.00085 UJ	< 0.00042 U	< 0.0036 U	< 0.00085 U	< 0.00084 UJ	< 0.00042 UJ	< 0.0036 U	< 0.00085 U
Pesticides	HEPTACHLOR	76-44-8	mg/kg	< 0.00021 U	< 0.0017 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.0017 J	< 0.00021 U	< 0.00043 UJ	< 0.00021 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00021 UJ	0.0014 J	< 0.00043 U
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	< 0.00042 U	< 0.0017 U	< 0.00043 U	< 0.00042 UJ	< 0.00042 U	< 0.00042 UJ	< 0.00043 U	0.0013 J	< 0.00042 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.0016 U	< 0.00043 U
Pesticides	LINDANE	58-89-9	mg/kg	< 0.00021 U	< 0.0017 U	< 0.00043 U	0.0014 J	< 0.00021 U	< 0.00042 UJ	< 0.00021 U	< 0.00043 UJ	< 0.00021 U	< 0.0017 U	< 0.00042 U	0.00090 J	< 0.00021 UJ	0.00065 J	< 0.00043 U
Pesticides	METHOXYCHLOR	72-43-5	mg/kg	< 0.0021 U	0.0036 J	< 0.0043 U	< 0.0042 UJ	< 0.0021 U	< 0.0042 UJ	< 0.0021 U	< 0.0043 UJ	< 0.0021 U	< 0.013 U	< 0.0042 U	< 0.0042 UJ	< 0.0021 UJ	< 0.013 U	< 0.0043 U
Pesticides	TOXAPHENE	8001-35-2	mg/kg	< 0.017 U	< 0.066 U	< 0.017 U	< 0.017 UJ	< 0.017 U	< 0.017 UJ	< 0.017 U	< 0.017 UJ	< 0.017 U	< 0.066 U	< 0.017 U	< 0.017 UJ	< 0.017 UJ	< 0.066 U	< 0.017 U
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg	< 0.00042 U	0.0071	< 0.00043 U	< 0.00042 UJ	< 0.00042 U	0.0011 J	< 0.00043 U	< 0.00043 UJ	< 0.00042 U	0.0047	< 0.00042 U	0.00083 J	< 0.00042 UJ	< 0.0016 U	< 0.00043 U
SVOCs	1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	1,2-DICHLOROBENZENE	95-50-1	mg/kg	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	1,3-DICHLOROBENZENE	541-73-1	mg/kg	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	1,4-DICHLOROBENZENE	106-46-7	mg/kg	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	mg/kg	< 0.13 UJ		< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ		< 0.066 U	< 0.066 U	< 0.13 U		< 0.067 U
SVOCs	2,4,5-TRICHLOROPHENOL	95-95-4	mg/kg	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	2,4,6-TRICHLOROPHENOL	88-06-2	mg/kg	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	2,4-DICHLOROPHENOL	120-83-2	mg/kg	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	2,4-DIMETHYLPHENOL	105-67-9	mg/kg	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 UJ	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	2,4-DINITROPHENOL	51-28-5	mg/kg	< 0.33 UJ	< 3.9 U	< 0.17 U	< 0.16 UJ	< 0.33 UJ	< 0.16 UJ	< 0.33 UJ	< 0.17 UJ	< 0.33 UJ	< 4 U	< 0.16 U	< 0.16 UJ	< 0.33 UJ	< 4 U	< 0.17 U
SVOCs	2,4-DINITROTOLUENE	121-14-2	mg/kg	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U
SVOCs	2,6-DINITROTOLUENE	606-20-2	mg/kg	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	2-CHLORONAPHTHALENE	91-58-7	mg/kg	< 0.13 UJ	< 0.13 UJ	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 UJ	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	2-CHLOROPHENOL	95-57-8	mg/kg	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	< 0.0066 UJ	0.032	0.0045 J	0.0068	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	0.029	0.0052 J	0.019	< 0.0066 U	0.011	< 0.0033 UJ
SVOCs	2-METHYLPHENOL	95-48-7	mg/kg	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	2-NITROANILINE	88-74-4	mg/kg	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	2-NITROPHENOL	88-75-5	mg/kg	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	3,3-DICHLOROBENZIDINE	91-94-1	mg/kg	< 0.13 UJ	< 1.3 U	< 0.067 UJ	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 1.3 U	< 0.066 U	< 0.066 U	< 0.13 U	< 1.3 U	< 0.067 U
SVOCs	3-NITROANILINE	99-09-2	mg/kg	< 0.13 UJ	< 0.66 U	< 0.067 UJ	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U

APPENIDX A TABLE 5
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	ET09-05	ET09-06	ET09-06	ET09-06	ET09-06	ET09-07	ET09-07	ET09-08	ET09-08	ET09-09	ET09-09	ET09-09	ET09-09	ET09-10	ET09-10
				Sample Date	12/13/2016	10/1/2013	9/22/2014	9/9/2015	12/13/2016	9/15/2015	12/14/2016	9/15/2015	12/14/2016	10/3/2013	9/23/2014	9/9/2015	12/13/2016	10/3/2013	9/24/2014
				Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N	N	N	N
				Sample ID	ET09-ME45R-FD01	ET09-06-100113	ET09-06-092214-1	ET09-06-090915-1	ET09-06-ME45R-1	ET09-07-091515-1	ET09-07-ME45R-1	ET09-08-091515-1	ET09-08-ME45R-1	ET09-09-100313	ET09-09-092314-1	ET09-09-090915-1	ET09-09-ME45R-1	ET09-10-100313	ET09-10-092414-1
Analyte Group	**Compound**	**CAS**	**Units**																
SVOCs	4,6-DINITRO-2-METHYLPHENOL	534-52-1	mg/kg		< 0.13 UJ	< 2 U	< 0.067 U	< 0.066 U	< 0.13 UJ	< 0.066 U	< 0.13 UJ	< 0.067 UJ	< 0.13 UJ	< 2 U	< 0.066 U	< 0.066 UJ	< 0.13 UJ	< 2 U	< 0.067 U
SVOCs	4-BROMOPHENYL-PHENYLETHER	101-55-3	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	4-CHLORO-3-METHYLPHENOL	59-50-7	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 UJ	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	4-CHLOROANILINE	106-47-8	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	4-METHYLPHENOL	106-44-5	mg/kg		< 0.13 UJ	< 0.13 UJ	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 UJ	< 0.13 UJ	< 0.13 UJ	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	4-NITROANILINE	100-01-6	mg/kg		< 0.13 UJ	< 0.66 U	< 0.067 UJ	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 UJ	< 0.066 UJ	< 0.13 U	< 0.67 U	< 0.067 UJ
SVOCs	4-NITROPHENOL	100-02-7	mg/kg		< 0.13 U	< 2 U	< 0.067 UJ	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U	< 2 U	< 0.066 UJ	< 0.066 UJ	< 0.13 U	< 2 U	< 0.067 UJ
SVOCs	ACENAPHTHENE	83-32-9	mg/kg		< 0.0066 UJ	0.032	0.0061	0.014	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	0.0050	< 0.0066 UJ	0.02	0.0042	0.018	< 0.0066 U	0.0051 J	< 0.0033 U
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg		< 0.0066 UJ	0.0052 J	0.015	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	0.0040 J	< 0.0033 U	0.0060	< 0.0066 U	< 0.0067 U	< 0.0033 U
SVOCs	ANTHRACENE	120-12-7	mg/kg		< 0.0066 UJ	0.0050 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0033 UJ	< 0.0066 UJ	0.0030 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0036 J	< 0.0033 U
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg		< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.013	< 0.0033 U
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg		< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.014	< 0.0033 U
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg		< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.027	< 0.0033 U
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg		< 0.0066 UJ	< 0.0066 UJ	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0066 UJ	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.0054 J	< 0.0033 U
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg		< 0.0066 UJ	0.0035 J	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	0.0029 J	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.016	< 0.0033 U
SVOCs	BIS(2-CHLOROETHOXY)METHANE	111-91-1	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	BIS(2-CHLOROETHYL)ETHER	111-44-4	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg		< 0.13 UJ	0.45 J	< 0.067 U	0.17	< 0.13 UJ	< 0.066 U	< 0.13 UJ	0.13 J	< 0.13 UJ	< 0.68 U	< 0.16 U	< 0.066 U	< 0.13 UJ	< 0.68 U	< 0.17 U
SVOCs	BUTYLBENZYLPHTHALATE	85-68-7	mg/kg		< 0.13 UJ	< 0.66 U	< 0.067 U	0.085 J	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U
SVOCs	CARBAZOLE	86-74-8	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	CHRYSENE	218-01-9	mg/kg		< 0.0066 UJ	0.0038 J	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	0.0030 J	< 0.0033 U	< 0.0033 U	< 0.0066 U	0.014	< 0.0033 U
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg		< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0028 J	< 0.0033 U
SVOCs	DIBENZOFURAN	132-64-9	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	DIETHYLPHTHALATE	84-66-2	mg/kg		< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U
SVOCs	DIMETHYL PHTHALATE	131-11-3	mg/kg		< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U
SVOCs	DI-N-BUTYLPHTHALATE	84-74-2	mg/kg		< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U
SVOCs	DI-N-OCTYLPHTHALATE	117-84-0	mg/kg		< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 UJ	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 UJ	< 0.67 UJ	< 0.067 U
SVOCs	FLUORANTHENE	206-44-0	mg/kg		< 0.0066 UJ	0.015	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 UJ	< 0.0066 UJ	0.013	< 0.0033 U	0.0059	< 0.0066 U	0.027	< 0.0033 U
SVOCs	FLUORENE	86-73-7	mg/kg		< 0.0066 UJ	0.013	< 0.0033 U	0.0078	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	0.0072	< 0.0033 U	0.011	< 0.0066 U	< 0.0067 U	< 0.0033 U
SVOCs	HEXACHLOROBENZENE	118-74-1	mg/kg		< 0.13 UJ	< 0.067 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.068 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.068 U	< 0.067 U
SVOCs	HEXACHLOROBUTADIENE	87-68-3	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	HEXACHLOROCYCLOPENTADIENE	77-47-4	mg/kg		< 0.33 UJ	< 2 U	< 0.17 UJ	< 0.16 U	< 0.33 UJ	< 0.16 U	< 0.33 UJ	< 0.17 U	< 0.33 UJ	< 2 U	< 0.16 U	< 0.16 U	< 0.33 UJ	< 2 UJ	< 0.17 U
SVOCs	HEXACHLOROETHANE	67-72-1	mg/kg		< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.67 U	< 0.067 U
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg		< 0.0066 UJ	0.0043 J	< 0.0033 UJ	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	< 0.0033 U	< 0.0066 UJ	0.0030 J	< 0.0033 UJ	< 0.0033 U	< 0.0066 U	0.0095	< 0.0033 UJ
SVOCs	ISOPHORONE	78-59-1	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	NAPHTHALENE	91-20-3	mg/kg		< 0.0066 UJ	0.04	0.013	0.011	< 0.0066 U	< 0.0033 U	0.0088 J-	< 0.0033 U	< 0.0066 UJ	0.039	0.012	0.03	< 0.0066 U	0.0036 J	< 0.0033 U
SVOCs	NITROBENZENE	98-95-3	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	N-NITROSODIMETHYLAMINE	62-75-9	mg/kg			< 0.66 U	< 0.067 U	< 0.066 U		< 0.066 U		< 0.067 U		< 0.66 U	< 0.066 U	< 0.066 U		< 0.67 U	< 0.067 U
SVOCs	N-NITROSODINPROPYLAMINE	621-64-7	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 UJ	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	N-NITROSODIPHENYLAMINE	86-30-6	mg/kg		< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 UJ	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	PENTACHLOROPHENOL	87-86-5	mg/kg		< 0.33 UJ	< 0.67 U	< 0.17 U	< 0.16 U	< 0.33 U	< 0.16 U	< 0.33 UJ	< 0.17 UJ	< 0.33 UJ	< 0.68 U	< 0.16 U	< 0.16 U	< 0.33 U	< 0.68 U	< 0.17 U
SVOCs	PHENANTHRENE	85-01-8	mg/kg		< 0.0066 UJ	0.039	0.0074	0.025	< 0.0066 U	< 0.0033 U	0.0088 J-	0.015 J	< 0.0066 UJ	0.026	0.0059	0.037	< 0.0066 U	0.0099	< 0.0033 U
SVOCs	PHENOL	108-95-2	mg/kg		< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.13 U	< 0.066 U	< 0.13 U	< 0.067 UJ	< 0.13 U	< 0.13 U	< 0.066 U	< 0.066 U	< 0.13 U	< 0.13 U	< 0.067 U
SVOCs	PYRENE	129-00-0	mg/kg		< 0.0066 UJ	0.021	< 0.0033 U	< 0.0033 U	< 0.0066 U	< 0.0033 U	< 0.0066 UJ	0.058 J	< 0.0066 UJ	0.016	< 0.0033 U	0.0057	< 0.0066 U	0.027	< 0.0033 U

Notes:
Results reported on a wet weight basis.
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
FD = Field duplicate.
J = Estimated value.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
mg/kg = milligram per kilogram.
N = Normal sample.
PCBs = Polychlorinated biphenyls.
R = Rejected.
SVOC = Semivolatile organic compound.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.
(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., homolog) concentrations. For samples without any detections of individual compounds (i.e., homolog) the maximum reporting detection limit within the sample is presented as a non-detect value.
(b) Lab calculated value; Not used. Totals for use in risk assessment are calculated as discussed in the report text.

APPENIDX A TABLE 5
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	ET09-10	ET09-10	ET09-11	ET09-11	ET09-11	ET09-11	ET09-12	ET09-12	ET09-12	ET09-12	ET09-12
				Sample Date	9/9/2015	12/13/2016	10/15/2013	9/23/2014	9/9/2015	12/13/2016	10/3/2013	9/24/2014	9/9/2015	9/9/2015	12/13/2016
				Sample Type Code	N	N	N	N	N	N	N	N	N	FD	N
				Sample ID	ET09-10-090915-1	ET09-10-ME45R-1	ET09-11-101513	ET09-11-092314-1	ET09-11-090915-1	ET09-11-ME45R-1	ET09-12-100313	ET09-12-092414-1	ET09-12-090915-1	ET09-12-090915-2	ET09-12-ME45R-1
Analyte Group	**Compound**	**CAS**	**Units**												
Metals	ALUMINUM	7429-90-5	mg/kg		26.2	7.3 J	9.72 J	10.4	16.5	9.3	77.5 J	19.9	19.1	16.5	6.2 J
Metals	ANTIMONY	7440-36-0	mg/kg		0.44 J	< 0.87 U	< 0.725 U	< 0.45 U	0.42 J	< 0.82 U	< 0.718 U	< 0.57 U	0.31 J	< 0.71 U	< 0.51 U
Metals	ARSENIC	7440-38-2	mg/kg		3.9	2.8	3.61 J	3.5	3.0	2.0	2.56 J	3.4	2.7	3.0	3.1
Metals	BARIUM	7440-39-3	mg/kg		< 8.7 U	< 8.7 U	0.0863 J	< 6.0 U	< 9.6 U	< 8.2 U	0.476 J	< 7.6 U	< 6.8 U	< 9.4 U	< 6.4 U
Metals	BERYLLIUM	7440-41-7	mg/kg		0.028 J	< 0.22 U	< 0.0657 U	0.0065 J	0.0049 J	< 0.20 U	< 0.0650 U	0.0024 J	0.0093 J	0.013 J	< 0.16 U
Metals	CADMIUM	7440-43-9	mg/kg		0.18 J	0.059 J	0.120 J	0.084 J	0.11 J	0.073 J	0.0845 J	0.10 J	0.14 J	0.10 J	0.055 J
Metals	CALCIUM	7440-70-2	mg/kg		904	926	512 J	501	501	988	726 J	441	794	784	879
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg		< 0.87 U	< 0.87 U	< 0.157 U	< 0.60 U	< 0.96 U	< 0.82 U	< 2.91 U	< 0.76 U	< 0.68 U	< 0.94 U	< 0.64 U
Metals	COBALT	7440-48-4	mg/kg		< 2.2 U	0.15 J	< 0.0971 U	< 1.5 U	< 2.4 U	0.059 J	< 0.971 U	< 1.9 U	< 1.7 U	< 2.4 U	0.15 J
Metals	COPPER	7440-50-8	mg/kg		9.1	< 2.2 U	1.60 J	4.2	3.1	< 1.6 U	3.28	2.0	5.5	7.2	2.7
Metals	IRON	7439-89-6	mg/kg		95.3	38	33.0 J	43.5	64.1	38.0	205 J	60.9	88.7	72.1	39.3
Metals	LEAD	7439-92-1	mg/kg		0.28 J	< 0.22 U	< 0.490 U	0.18 J	< 0.48 U	0.14 J	0.689 J	< 0.19 U	0.35	0.35 J	0.22 J
Metals	MAGNESIUM	7439-95-4	mg/kg		995	937	778	855	892	967	790	920	1030	904	946
Metals	MANGANESE	7439-96-5	mg/kg		7.2	4.8	9.07 J	5.7	10.8	11.6	12.6 J	11.1	15.4	13.1	4.0
Metals	MERCURY	7439-97-6	mg/kg		0.010 J	0.0080 J	0.0120 J	0.0085 J	0.0079 J	0.0074 J	< 0.0093 U	0.0095 J	0.0049 J	0.0040 J	0.0059 J
Metals	NICKEL	7440-02-0	mg/kg		< 2.2 U	0.58 J	0.152 J	< 1.5 U	< 2.4 U	0.14 J	0.651 J	< 1.9 U	< 1.7 U	< 2.4 U	0.37 J
Metals	POTASSIUM	7440-09-7	mg/kg		1130	1360	1380	1720	1160	966	1600	1420	1180	1090	1310
Metals	SELENIUM	7782-49-2	mg/kg		0.70 J	0.57 J	< 0.784 U	< 0.60 U	< 1.4 U	0.54 J	< 0.777 U	< 0.76 U	< 1.0 U	< 1.4 U	0.56 J
Metals	SILVER	7440-22-4	mg/kg		0.26 J	0.091 J	< 0.98 U	0.14 J	0.26 J	0.20 J	< 0.165 U	0.17 J	0.12 J	0.14 J	0.11 J
Metals	SODIUM	7440-23-5	mg/kg		6170	6630	6410	6250	6430	7470	5420	7670	5990	5590	6800
Metals	THALLIUM	7440-28-0	mg/kg		< 0.43 U	< 0.43 UJ	< 0.510 U	< 0.30 U	< 0.48 U	< 0.41 UJ	< 0.505 U	< 0.38 U	< 0.34 U	< 0.47 U	< 0.32 UJ
Metals	VANADIUM	7440-62-2	mg/kg		0.36 J	< 2.2 U	< 0.127 U	< 1.5 U	0.30 J	< 2.0 U	< 0.971 U	< 1.9 U	0.22 J	0.21 J	< 1.6 U
Metals	ZINC	7440-66-6	mg/kg		28.8	14	7.24 J	18.5	7.5	5.3	18.1 J	7.4	23.6	21.5	13.6
PCBs	DECACHLOROBIPHENYL	2051-24-3	mg/kg		< 0.00042 U	0.00020 J	< 0.00041 U	< 0.00041 U	< 0.00042 U	< 0.00041 U	< 0.00041 U	< 0.00042 U	< 0.00042 U	< 0.00041 U	< 0.00041 UJ
PCBs	DICHLOROBIPHENYL	25512-42-9	mg/kg		< 0.000083 U	< 0.000083 U	< 0.000081 U	< 0.000082 U	< 0.000083 U	< 0.000082 U	< 0.000082 U	< 0.000083 U	< 0.000083 U	< 0.000082 U	< 0.000082 UJ
PCBs	HEPTACHLOROBIPHENYL	28655-71-2	mg/kg		< 0.00025 U	0.00021 J-	0.0012	< 0.00025 U	0.044	0.0017	< 0.00025 U	< 0.00025 U	< 0.00025 U	0.00026 J	0.00035 J-
PCBs	HEXACHLOROBIPHENYL	26601-64-9	mg/kg		< 0.00017 U	0.00063 J-	0.0059	< 0.00017 U	0.046	0.0083	< 0.00016 U	< 0.00017 U	< 0.00017 U	0.00043 J	0.00051 J-
PCBs	MONOCHLOROBIPHENYL	27323-18-8	mg/kg		< 0.00017 U	< 0.00017 U	< 0.000081 U	< 0.000082 U	< 0.00017 U	< 0.00016 U	< 0.000082 U	< 0.000083 U	< 0.00017 U	< 0.00016 U	< 0.00017 UJ
PCBs	NONACHLOROBIPHENYL	53742-07-7	mg/kg		< 0.00042 U	< 0.00042 UJ	< 0.00041 U	< 0.00041 U	< 0.00042 U	< 0.00041 U	< 0.00041 U	< 0.00042 U	< 0.00042 U	< 0.00041 U	< 0.00041 UJ
PCBs	OCTACHLOROBIPHENYL	55722-26-4	mg/kg		< 0.00050 U	< 0.00050 UJ	< 0.00024 U	< 0.00025 U	0.0075	< 0.00049 U	< 0.00025 U	< 0.00025 U	< 0.00050 U	< 0.00049 U	< 0.00050 UJ
PCBs	PENTACHLOROBIPHENYL	25429-29-2	mg/kg		< 0.00017 U	0.00018 J-	0.0033	< 0.00017 U	0.012	0.0044	< 0.00016 U	< 0.00017 U	< 0.00017 U	< 0.00016 U	< 0.00017 UJ
PCBs	POLYCHLORINATED BIPHENYLS (PCBS) (t	1336-36-3	mg/kg		0.000044 J	0.0012 J-	0.011	< 0.000082 U	0.11	0.015	< 0.000082 U	< 0.000083 U	0.000050 J	0.00079 J	0.00086 J-
PCBs	TETRACHLOROBIPHENYL	26914-33-0	mg/kg		< 0.00017 U	< 0.00017 UJ	0.00067	< 0.00017 U	0.0013	0.00066	< 0.00016 U	< 0.00017 U	< 0.00017 U	< 0.00016 U	< 0.00017 UJ
PCBs	TOTAL PCB HOMOLOGS (a)	TOTALPCBHOMO	mg/kg		< 0.0005 U	0.0012	0.011	< 0.00041 U	0.11	0.015	< 0.00041 U	< 0.00042 U	< 0.0005 U	0.00069	0.00086
PCBs	TRICHLOROBIPHENYL	25323-68-6	mg/kg		< 0.000083 U	< 0.000083 UJ	0.000097 J	< 0.000082 U	0.00050	< 0.000082 U	< 0.000082 U	< 0.000083 U	< 0.000083 U	< 0.000082 U	< 0.000082 UJ
Pesticides	4,4-DDD	72-54-8	mg/kg		< 0.00085 UJ	< 0.00085 UJ	< 0.0034 U	< 0.00085 U	0.0057 J	< 0.00085 U	< 0.0034 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00085 U
Pesticides	4,4-DDE	72-55-9	mg/kg		< 0.00085 UJ	< 0.00085 UJ	0.0016 J	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	0.00072 J	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00085 U
Pesticides	4,4-DDT	50-29-3	mg/kg		< 0.00085 UJ	< 0.00085 UJ	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	< 0.0034 U	< 0.00084 U	0.00063 J	< 0.00085 UJ	< 0.00085 U
Pesticides	ALDRIN	309-00-2	mg/kg		< 0.00043 UJ	< 0.00043 UJ	0.00036 J	< 0.00043 U	0.0011 J	< 0.00043 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00042 U
Pesticides	ALPHA-BHC	319-84-6	mg/kg		< 0.00043 UJ	< 0.00021 UJ	0.00069 J	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.00046 J	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00021 U
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg		0.0023 J	< 0.00021 UJ	< 0.0017 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.0012 J	< 0.00042 U	0.0021 J	< 0.00042 UJ	< 0.00021 U
Pesticides	BETA-BHC	319-85-7	mg/kg		0.0014 J	< 0.00021 UJ	< 0.0038 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.0038 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00021 U
Pesticides	DELTA-BHC	319-86-8	mg/kg		0.0026 J	< 0.00043 UJ	< 0.0017 U	< 0.00043 U	< 0.00042 UJ	< 0.00043 U	< 0.0017 U	< 0.00042 U	0.0023 J	< 0.00042 UJ	< 0.00042 U
Pesticides	DIELDRIN	60-57-1	mg/kg		< 0.00085 UJ	< 0.00043 UJ	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00043 U	< 0.0034 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00042 U
Pesticides	ENDOSULFAN I	959-98-8	mg/kg		< 0.00043 UJ	< 0.00021 UJ	0.00051 J	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	0.00058 J	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00021 U
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg		< 0.00085 UJ	< 0.00043 UJ	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00043 U	< 0.0034 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00042 U
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg		< 0.00085 UJ	< 0.00043 UJ	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00043 U	< 0.0034 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00042 U
Pesticides	ENDRIN	72-20-8	mg/kg		0.0056 J	< 0.00043 UJ	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00043 U	< 0.0034 U	< 0.00084 U	0.0029 J	0.0030 J	< 0.00042 U
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg		< 0.00085 UJ	< 0.00085 UJ	< 0.0034 U	< 0.00085 U	< 0.00084 UJ	< 0.00085 U	< 0.0034 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00085 U
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg		< 0.00085 UJ	< 0.00043 UJ	< 0.0036 U	< 0.00085 U	< 0.00084 UJ	< 0.00043 U	< 0.0036 U	< 0.00084 U	< 0.00084 UJ	< 0.00085 UJ	< 0.00042 U
Pesticides	HEPTACHLOR	76-44-8	mg/kg		< 0.00043 UJ	< 0.00021 UJ	< 0.0017 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00021 U
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg		0.0012 J	< 0.00043 UJ	0.00051 J	< 0.00043 U	< 0.00042 UJ	< 0.00043 U	0.00064 J	< 0.00042 U	0.0034 J	0.0023 J	< 0.00042 U
Pesticides	LINDANE	58-89-9	mg/kg		< 0.00043 UJ	< 0.00021 UJ	< 0.0017 U	< 0.00043 U	< 0.00042 UJ	< 0.00021 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00021 U
Pesticides	METHOXYCHLOR	72-43-5	mg/kg		< 0.0043 UJ	< 0.0021 UJ	< 0.013 U	< 0.0043 U	< 0.0042 UJ	< 0.0021 U	< 0.013 U	< 0.0042 U	< 0.0042 UJ	< 0.0042 UJ	< 0.0021 U
Pesticides	TOXAPHENE	8001-35-2	mg/kg		< 0.017 UJ	< 0.017 UJ	< 0.066 U	< 0.017 U	< 0.017 UJ	< 0.017 U	< 0.066 U	< 0.017 U	< 0.017 UJ	< 0.017 UJ	< 0.017 U
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg		< 0.00043 UJ	< 0.00043 UJ	0.0073	< 0.00043 U	< 0.00042 UJ	< 0.00043 U	< 0.0017 U	< 0.00042 U	< 0.00042 UJ	< 0.00042 UJ	< 0.00042 U
SVOCs	1,2,4-TRICHLOROBENZENE	120-82-1	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	1,2-DICHLOROBENZENE	95-50-1	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	1,3-DICHLOROBENZENE	541-73-1	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	1,4-DICHLOROBENZENE	106-46-7	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	mg/kg		< 0.067 U	< 0.13 UJ		< 0.066 U	< 0.067 U	< 0.13 UJ		< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2,4,5-TRICHLOROPHENOL	95-95-4	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2,4,6-TRICHLOROPHENOL	88-06-2	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2,4-DICHLOROPHENOL	120-83-2	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2,4-DIMETHYLPHENOL	105-67-9	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2,4-DINITROPHENOL	51-28-5	mg/kg		< 0.17 UJ	< 0.33 UJ	< 4 U	< 0.16 U	< 0.17 UJ	< 0.33 UJ	< 4 U	< 0.17 U	< 0.16 UJ	< 0.16 UJ	< 0.33 UJ
SVOCs	2,4-DINITROTOLUENE	121-14-2	mg/kg		< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2,6-DINITROTOLUENE	606-20-2	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2-CHLORONAPHTHALENE	91-58-7	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2-CHLOROPHENOL	95-57-8	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg		< 0.0033 U	< 0.0066 UJ	0.035	0.0041 J	0.011	< 0.0066 UJ	0.017	< 0.0033 UJ	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	2-METHYLPHENOL	95-48-7	mg/kg		< 0.067 U	< 0.13 UJ	0.074 J	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	2-NITROANILINE	88-74-4	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	2-NITROPHENOL	88-75-5	mg/kg		< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	3,3-DICHLOROBENZIDINE	91-94-1	mg/kg		< 0.067 U	R	< 1.3 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 1.3 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	3-NITROANILINE	99-09-2	mg/kg		< 0.067 U	R	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ

APPENIDX A TABLE 5
ANALYTICAL DATA SUMMARY TABLE - SHELLFISH
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	ET09-10	ET09-10	ET09-11	ET09-11	ET09-11	ET09-11	ET09-12	ET09-12	ET09-12	ET09-12	ET09-12
				Sample Date	9/9/2015	12/13/2016	10/15/2013	9/23/2014	9/9/2015	12/13/2016	10/3/2013	9/24/2014	9/9/2015	9/9/2015	12/13/2016
				Sample Type Code	N	N	N	N	N	N	N	N	N	FD	N
				Sample ID	ET09-10-090915-1	ET09-10-ME45R-1	ET09-11-101513	ET09-11-092314-1	ET09-11-090915-1	ET09-11-ME45R-1	ET09-12-100313	ET09-12-092414-1	ET09-12-090915-1	ET09-12-090915-2	ET09-12-ME45R-1
Analyte Group	**Compound**	**CAS**	**Units**												
SVOCs	4,6-DINITRO-2-METHYLPHENOL	534-52-1	mg/kg	< 0.067 UJ	< 0.13 UJ	< 2 U	< 0.066 U	< 0.067 UJ	< 0.13 UJ	< 2 U	< 0.067 U	< 0.066 UJ	< 0.066 UJ	< 0.13 UJ
SVOCs	4-BROMOPHENYL-PHENYLETHER	101-55-3	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	4-CHLORO-3-METHYLPHENOL	59-50-7	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	4-CHLOROANILINE	106-47-8	mg/kg	< 0.067 U	R	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	4-METHYLPHENOL	106-44-5	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	4-NITROANILINE	100-01-6	mg/kg	< 0.067 UJ	R	< 0.66 U	< 0.066 UJ	< 0.067 UJ	< 0.13 UJ	< 0.66 U	< 0.067 UJ	< 0.066 UJ	< 0.066 UJ	< 0.13 UJ
SVOCs	4-NITROPHENOL	100-02-7	mg/kg	< 0.067 U	< 0.13 UJ	< 2 U	< 0.066 UJ	< 0.067 U	< 0.13 U	< 2 U	< 0.067 UJ	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	< 0.0033 U	< 0.0066 UJ	0.016	0.0036	0.011	< 0.0066 UJ	0.0052 J	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	< 0.0033 U	< 0.0066 UJ	0.0070	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0044 J	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	ANTHRACENE	120-12-7	mg/kg	< 0.0033 U	< 0.0066 UJ	0.0060 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	< 0.0033 U	< 0.0066 UJ	0.0031 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	< 0.0033 U	< 0.0066 UJ	< 0.0066 UJ	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 UJ	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	< 0.0033 U	< 0.0066 UJ	0.0032 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	BIS(2-CHLOROETHOXY)METHANE	111-91-1	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	BIS(2-CHLOROETHYL)ETHER	111-44-4	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	mg/kg	0.057 J	R	< 0.68 U	< 0.16 U	< 0.067 U	< 0.13 UJ	< 0.68 U	< 0.067 U	< 0.066 U	0.1 J	< 0.13 UJ
SVOCs	BUTYLBENZYLPHTHALATE	85-68-7	mg/kg	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	CARBAZOLE	86-74-8	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	CHRYSENE	218-01-9	mg/kg	< 0.0033 U	< 0.0066 UJ	0.0036 J	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0029 J	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 UJ
SVOCs	DIBENZOFURAN	132-64-9	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	DIETHYLPHTHALATE	84-66-2	mg/kg	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	DIMETHYL PHTHALATE	131-11-3	mg/kg	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	DI-N-BUTYLPHTHALATE	84-74-2	mg/kg	< 0.067 U	< 0.13 UJ	< 0.66 U	0.048 J	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	DI-N-OCTYLPHTHALATE	117-84-0	mg/kg	< 0.067 U	R	< 0.66 UJ	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 UJ	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	FLUORANTHENE	206-44-0	mg/kg	< 0.0033 U	< 0.0066 UJ	0.021	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0087	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	FLUORENE	86-73-7	mg/kg	< 0.0033 U	< 0.0066 UJ	0.013	< 0.0033 U	0.0061	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	HEXACHLOROBENZENE	118-74-1	mg/kg	< 0.067 U	< 0.13 UJ	< 0.068 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.068 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	HEXACHLOROBUTADIENE	87-68-3	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	HEXACHLOROCYCLOPENTADIENE	77-47-4	mg/kg	< 0.17 U	R	< 2 UJ	< 0.16 U	< 0.17 U	< 0.33 UJ	< 2 UJ	< 0.17 U	< 0.16 U	< 0.16 U	< 0.33 UJ
SVOCs	HEXACHLOROETHANE	67-72-1	mg/kg	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	< 0.0033 U	< 0.0066 UJ	0.0040 J	< 0.0033 UJ	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 UJ	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	ISOPHORONE	78-59-1	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	NAPHTHALENE	91-20-3	mg/kg	< 0.0033 U	< 0.0066 UJ	0.039	0.0097	0.015	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	< 0.0033 U	< 0.0033 U	< 0.0066 U
SVOCs	NITROBENZENE	98-95-3	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	N-NITROSODIMETHYLAMINE	62-75-9	mg/kg	< 0.067 U		< 0.66 U	< 0.066 U	< 0.067 U		< 0.66 U	< 0.067 U	< 0.066 U	< 0.066 U	
SVOCs	N-NITROSODINPROPYLAMINE	621-64-7	mg/kg	< 0.067 UJ	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 UJ	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 UJ	< 0.066 UJ	< 0.13 UJ
SVOCs	N-NITROSODIPHENYLAMINE	86-30-6	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.067 U	< 0.066 U	< 0.066 U	< 0.13 UJ
SVOCs	PENTACHLOROPHENOL	87-86-5	mg/kg	< 0.17 U	R	< 0.68 U	< 0.16 U	< 0.17 U	< 0.33 UJ	< 0.68 U	< 0.17 U	< 0.16 U	< 0.16 U	< 0.33 U
SVOCs	PHENANTHRENE	85-01-8	mg/kg	< 0.0033 U	< 0.0066 UJ	0.036	0.0068	< 0.0033 U	< 0.0066 UJ	< 0.0066 U	< 0.0033 U	0.012 J	< 0.0033 UJ	< 0.0066 U
SVOCs	PHENOL	108-95-2	mg/kg	< 0.067 U	< 0.13 UJ	< 0.13 U	< 0.066 U	< 0.067 U	< 0.13 U	< 0.13 U	0.087 J	< 0.066 U	< 0.066 U	< 0.13 U
SVOCs	PYRENE	129-00-0	mg/kg	< 0.0033 U	< 0.0066 UJ	0.019	< 0.0033 U	< 0.0033 U	< 0.0066 UJ	0.0069	< 0.0033 U	0.014 J	< 0.0033 UJ	< 0.0066 U

Notes:
Results reported on a wet weight basis.
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
FD = Field duplicate.
J = Estimated value.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
mg/kg = milligram per kilogram.
N = Normal sample.
PCBs = Polychlorinated biphenyls.
R = Rejected.
SVOC = Semivolatile organic compound.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.
(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., homolog) concentrations. For samples without any detections of individual compounds (i.e., homolog) the maximum reporting detection limit within the sample is presented as a non-detect value.
(b) Lab calculated value; Not used. Totals for use in risk assessment are calculated as discussed in the report text.

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	SED09-01	SED09-01	SED09-01	SED09-01	SED09-02A	SED09-02A	SED09-02A	SED09-02A	SED09-03A	SED09-04A	SED09-04A	SED09-05A	SED09-05A	SED09-06B
				Sample Date	9/22/2014	9/23/2014	9/10/2015	9/13/2016	9/8/2015	9/8/2015	9/12/2016	9/12/2016	9/12/2016	9/9/2015	9/12/2016	9/9/2015	9/13/2016	9/8/2015
				Sample Type Code	N	FD	N	N	N	FD	N	FD	N	N	N	N	N	N
				Sample ID	SED09-01-092214-1	SED09-01-092214-2	SED09-01-091015-1	SED09-01-ME45-1	SED09-02A-090815-1	SED09-02A-090815-2	SED09-02A-ME45-1	SD09-ME45-FD01	SED09-03A-ME45-1	SED09-04A-090915-1	SED09-04A-ME45-1	SED09-05A-090915-1	SED09-05A-ME45-1	SED09-06B-090815-1
				Depth Interval	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	2 - 6 in	2 - 6 in	0 - 0.5 ft	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**															
Metals	ALUMINUM	7429-90-5	mg/kg					2740			4370	5200	3830	3060	3690		4590	
Metals	ANTIMONY	7440-36-0	mg/kg					< 0.95 UJ			< 0.65 UJ	< 0.86 UJ	< 1.2 UJ	< 0.73 UJ	< 0.66 UJ		< 0.80 UJ	
Metals	ARSENIC	7440-38-2	mg/kg					3.0 J			3.2 J	4.2 J	2.9 J	2.7	2.3 J		3.2 J	
Metals	BERYLLIUM	7440-41-7	mg/kg					0.31			0.39	0.45	0.34	< 0.049 U	0.30		0.39	
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg					9.0 J			14.8 J	18.1 J	12.9 J	8.4 J-	10.0 J		15.3 J	
Metals	COPPER	7440-50-8	mg/kg					14.7 J			21.2 J	30.2 J	16.9 J	13.8	11.7 J		23.7 J	
Metals	IRON	7439-89-6	mg/kg					7290 J			8040 J	9360 J	8250 J	7090	7260 J		9040 J	
Metals	LEAD	7439-92-1	mg/kg					9.7 J			12.5 J	15.8 J	11.3 J	8.2 J	7.9 J		13.3 J	
Metals	MANGANESE	7439-96-5	mg/kg					75.3			71.4	83.5	65.4	54.9 J+	70.3		78.0	
Metals	MERCURY	7439-97-6	mg/kg					0.021 J-			0.050 J-	0.072 J-	0.047 J-	0.030	0.031 J-		0.049 J-	
Metals	NICKEL	7440-02-0	mg/kg					6.5			6.7	9.1	6.1	4.6	5.7		8.0	
Metals	ZINC	7440-66-6	mg/kg					49.7 J			33.0 J	60.2 J	33.3 J	29.3 J,EB	25.3 J		47.3 J	
PCBs	AROCLOR-1016	12674-11-2	mg/kg	< 0.0055 U	< 0.0054 U	< 0.0050 U	< 0.0042 U	< 0.0057 U	< 0.0056 U	< 0.0044 UJ	< 0.0049 U							
PCBs	AROCLOR-1221	11104-28-2	mg/kg	< 0.011 U	< 0.011 U	< 0.01 U	< 0.0084 U	< 0.011 U	< 0.011 U	< 0.0089 UJ	< 0.0097 U							
PCBs	AROCLOR-1232	11141-16-5	mg/kg	< 0.0055 U	< 0.0054 U	< 0.0050 U	< 0.0042 U	< 0.0057 U	< 0.0056 U	< 0.0044 UJ	< 0.0049 U							
PCBs	AROCLOR-1242	53469-21-9	mg/kg	< 0.0055 U	< 0.0054 U	< 0.0050 U	< 0.0042 U	< 0.0057 U	< 0.0056 U	< 0.0044 UJ	< 0.0049 U							
PCBs	AROCLOR-1248	12672-29-6	mg/kg	< 0.0055 U	< 0.0054 U	< 0.0050 U	< 0.0042 U	< 0.0057 U	< 0.0056 U	< 0.0044 UJ	< 0.0049 U							
PCBs	AROCLOR-1254	11097-69-1	mg/kg	< 0.0055 U	< 0.0054 U	< 0.0050 U	< 0.0084 U	< 0.0057 U	< 0.0056 U	< 0.0089 UJ	< 0.0097 U							
PCBs	AROCLOR-1260	11096-82-5	mg/kg	0.076 J	0.072 J	0.049	0.075	< 0.0057 U	< 0.0056 U	< 0.0044 UJ	< 0.0049 U							
PCBs	PCB, TOTAL (a)	RA-65	mg/kg	0.076	0.072	0.049	0.075	< 0.011 U	< 0.011 U	< 0.0089 U	< 0.0097 U							
Pesticides	4,4-DDD	72-54-8	mg/kg	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00054 U	< 0.00059 UJ	< 0.00057 UJ	< 0.00057 U	< 0.00063 U							
Pesticides	4,4-DDE	72-55-9	mg/kg	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00054 UJ	< 0.00059 UJ	< 0.00057 UJ	< 0.00057 U	< 0.00063 U							
Pesticides	4,4-DDT	50-29-3	mg/kg	0.0080 J	0.0078 J	< 0.00052 UJ	0.0046 J	< 0.00059 UJ	< 0.00057 UJ	< 0.00057 UJ	< 0.00063 UJ							
Pesticides	ALDRIN	309-00-2	mg/kg	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00027 U	< 0.00029 UJ	< 0.00029 UJ	< 0.00029 U	< 0.00031 U							
Pesticides	ALPHA-BHC	319-84-6	mg/kg	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 U	< 0.00029 UJ	< 0.00029 UJ	< 0.00014 U	< 0.00016 U							
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 UJ	< 0.00029 UJ	< 0.00029 UJ	< 0.00014 U	< 0.00016 U							
Pesticides	BETA-BHC	319-85-7	mg/kg	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 U	< 0.00029 UJ	0.00070 J	< 0.00014 U	< 0.00016 U							
Pesticides	DELTA-BHC	319-86-8	mg/kg	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00027 U	< 0.00029 UJ	< 0.00029 UJ	< 0.00029 U	< 0.00031 U							
Pesticides	DIELDRIN	60-57-1	mg/kg	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00027 U	< 0.00059 UJ	< 0.00057 UJ	< 0.00029 U	< 0.00031 U							
Pesticides	ENDOSULFAN I	959-98-8	mg/kg	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 UJ	< 0.00029 UJ	< 0.00029 UJ	< 0.00014 U	< 0.00016 U							
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00027 U	< 0.00059 UJ	< 0.00057 UJ	< 0.00029 U	< 0.00031 U							
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00027 UJ	< 0.00059 UJ	< 0.00057 UJ	< 0.00029 U	< 0.00031 U							
Pesticides	ENDRIN	72-20-8	mg/kg	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00027 U	< 0.00059 UJ	< 0.00057 UJ	< 0.00029 U	< 0.00031 U							
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg	0.0028 J	0.0029 J	< 0.00052 UJ	< 0.00054 U	< 0.00059 UJ	< 0.00057 UJ	< 0.00057 U	< 0.00063 U							
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg	< 0.00055 UJ	< 0.00055 UJ	< 0.00052 UJ	< 0.00027 UJ	< 0.00059 UJ	< 0.00057 UJ	< 0.00029 U	< 0.00031 U							
Pesticides	GAMMA-CHLORDANE	5566-34-7	mg/kg															
Pesticides	HEPTACHLOR	76-44-8	mg/kg	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 U	< 0.00029 UJ	< 0.00029 UJ	< 0.00014 U	< 0.00016 U							
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00027 U	< 0.00029 UJ	< 0.00029 UJ	< 0.00029 U	< 0.00031 U							
Pesticides	LINDANE	58-89-9	mg/kg	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00013 U	< 0.00029 UJ	< 0.00029 UJ	< 0.00014 U	< 0.00016 U							
Pesticides	METHOXYCHLOR	72-43-5	mg/kg	< 0.0028 UJ	< 0.0028 UJ	< 0.0026 UJ	< 0.0013 UJ	< 0.0029 UJ	< 0.0029 UJ	0.0023 J	< 0.0016 U							
Pesticides	TOXAPHENE	8001-35-2	mg/kg	< 0.011 UJ	< 0.011 UJ	< 0.01 UJ	< 0.011 U	< 0.012 UJ	< 0.011 UJ	< 0.011 U	< 0.013 U							
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg	< 0.00028 UJ	< 0.00028 UJ	< 0.00026 UJ	< 0.00027 UJ	< 0.00029 UJ	< 0.00029 UJ	< 0.00029 U	< 0.00031 U							
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg			< 0.0040 U	< 0.0042 U	< 0.0045 U	< 0.0045 U	< 0.0044 U	< 0.0049 U	< 0.0041 U		< 0.0042 U		< 0.0048 U	< 0.0041 U	
SVOCs	ACENAPHTHENE	83-32-9	mg/kg			0.0094	< 0.0042 U	< 0.0045 U	< 0.0045 U	< 0.0044 U	< 0.0049 U	< 0.0041 U		< 0.0042 U		< 0.0048 U	< 0.0041 U	
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg			< 0.0040 U	< 0.0042 U	< 0.0045 U	< 0.0045 U	< 0.0044 U	< 0.0049 U	< 0.0041 U		< 0.0042 U		< 0.0048 U	< 0.0041 U	
SVOCs	ANTHRACENE	120-12-7	mg/kg			0.022	0.0048 J	< 0.0045 U	< 0.0045 U	< 0.0044 U	< 0.0049 U	< 0.0041 U		< 0.0042 U		< 0.0048 U	< 0.0041 U	
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg			0.057	0.018 J	0.0092	0.013	0.012	0.014	0.0063		0.0043		0.0095	< 0.0041 U	
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg			0.052	0.022 J	0.0082	0.012	0.011	0.014	0.0072		0.0053		0.01	< 0.0041 U	
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg			0.075	0.035 J	0.012	0.019	0.025	0.027	0.015		0.011		0.017	< 0.0041 U	
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg			0.032	0.021 J+	0.0079	0.01	0.01	0.012	0.0063		0.0052		0.01	< 0.0041 U	
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg			0.036	0.011 J	0.0080	0.0086	0.0098	0.011	0.0057		0.0046		0.0084	< 0.0041 U	
SVOCs	CHRYSENE	218-01-9	mg/kg			0.068	0.02 J	0.011	0.017	0.022	0.018	0.0082		0.0066		0.011	< 0.0041 U	
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg			0.0082	0.0057	< 0.0045 U	< 0.0045 U	< 0.0044 U	< 0.0049 U	< 0.0041 U		< 0.0042 U		0.0052	< 0.0041 U	
SVOCs	FLUORANTHENE	206-44-0	mg/kg			0.13	0.035 J	0.018	0.027	0.029	0.028	0.014		0.0098		0.014	0.0057	
SVOCs	FLUORENE	86-73-7	mg/kg			0.012	< 0.0042 U	< 0.0045 U	< 0.0045 U	< 0.0044 U	< 0.0049 U	< 0.0041 U		< 0.0042 U		< 0.0048 U	< 0.0041 U	
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg			0.034 J	0.016 J+	0.0060	0.0083	0.0089	0.011	0.0055		0.0044		0.0089	< 0.0041 U	
SVOCs	NAPHTHALENE	91-20-3	mg/kg			0.0042	< 0.0042 U	< 0.0045 U	< 0.0045 U	< 0.0044 U	< 0.0049 U	< 0.0041 U		< 0.0042 U		< 0.0048 U	< 0.0041 U	
SVOCs	PHENANTHRENE	85-01-8	mg/kg			0.1	0.017 J	0.0075	0.011	0.0083	0.0085	0.0046		< 0.0042 U		0.0059	< 0.0041 U	
SVOCs	PYRENE	129-00-0	mg/kg			0.1	0.03 J	0.016	0.023	0.025	0.024	0.013		0.0079		0.013	0.0050	
VOCs	1,1,1-TRICHLOROETHANE	71-55-6	mg/kg				< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U	
VOCs	1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg				< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U	
VOCs	1,1,2-TRICHLOROETHANE	79-00-5	mg/kg				< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 U	< 0.0029 U	< 0.00088 U	
VOCs	1,1-DICHLOROETHANE	75-34-3	mg/kg				< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U	
VOCs	1,1-DICHLOROETHENE	75-35-4	mg/kg				< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U	
VOCs	1,2-DICHLOROETHANE	107-06-2	mg/kg				< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 U	< 0.0029 U	< 0.00088 U	
VOCs	1,2-DICHLOROPROPANE	78-87-5	mg/kg				< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U	
VOCs	2-BUTANONE	78-93-3	mg/kg				< 0.0051 UJ			< 0.0054 UJ	< 0.0059 UJ	< 0.0050 UJ		< 0.0051 UJ	< 0.0076 UJ	< 0.0059 UJ	< 0.0018 UJ	
VOCs	2-HEXANONE	591-78-6	mg/kg				< 0.0051 UJ			< 0.0054 UJ	< 0.0059 UJ	< 0.0050 UJ		< 0.0051 UJ	< 0.0076 U	< 0.0059 UJ	< 0.0018 U	
VOCs	4-METHYL-2-PENTANONE	108-10-1	mg/kg				< 0.0051 U			< 0.0054 U	< 0.0059 U	< 0.0050 U		< 0.0051 U	< 0.0076 U	< 0.0059 U	< 0.0018 U	
VOCs	ACETONE	67-64-1	mg/kg				< 0.0051 UJ			< 0.0054 UJ	< 0.0059 UJ	< 0.0050 UJ		< 0.0051 UJ	< 0.0076 U	< 0.0059 UJ	< 0.0018 U	
VOCs	BENZENE	71-43-2	mg/kg				< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U	
VOCs	BROMODICHLOROMETHANE	75-27-4	mg/kg				< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U	
VOCs	BROMOFORM	75-25-2	mg/kg				< 0.0051 U			< 0.0054 U	< 0.0059 U	< 0.0050 U		< 0.0051 U	< 0.0038 UJ	< 0.0059 U	< 0.00088 U	
VOCs	BROMOMETHANE	74-83-9	mg/kg				< 0.0051 U			< 0.0054 UJ	< 0.0059 UJ	< 0.0050 UJ		< 0.0051 UJ	< 0.0038 UJ	< 0.0059 U	< 0.00088 UJ	
VOCs	CARBON DISULFIDE	75-15-0	mg/kg				< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U	

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	SED09-01	SED09-01	SED09-01	SED09-01	SED09-02A	SED09-02A	SED09-02A	SED09-02A	SED09-03A	SED09-04A	SED09-04A	SED09-05A	SED09-05A	SED09-06B
				Sample Date	9/22/2014	9/23/2014	9/10/2015	9/13/2016	9/8/2015	9/8/2015	9/12/2016	9/12/2016	9/12/2016	9/9/2015	9/12/2016	9/9/2015	9/13/2016	9/8/2015
				Sample Type Code	N	FD	N	N	N	FD	N	FD	N	N	N	N	N	N
				Sample ID	SED09-01-092214-1	SED09-01-092214-2	SED09-01-091015-1	SED09-01-ME45-1	SED09-02A-090815-1	SED09-02A-090815-2	SED09-02A-ME45-1	SD09-ME45-FD01	SED09-03A-ME45-1	SED09-04A-090915-1	SED09-04A-ME45-1	SED09-05A-090915-1	SED09-05A-ME45-1	SED09-06B-090815-1
				Depth Interval	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	2 - 6 in	2 - 6 in	0 - 0.5 ft	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**															
VOCs	CARBON TETRACHLORIDE	56-23-5	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U
VOCs	CHLOROBENZENE	108-90-7	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U
VOCs	CHLOROETHANE	75-00-3	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 U	< 0.0029 U	< 0.00088 U
VOCs	CHLOROFORM	67-66-3	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U
VOCs	CHLOROMETHANE	74-87-3	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 UJ
VOCs	CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 U	< 0.0029 U	< 0.00088 U
VOCs	CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U
VOCs	DIBROMOCHLOROMETHANE	124-48-1	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U
VOCs	ETHYLBENZENE	100-41-4	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U
VOCs	M- AND P-XYLENE	108-38-3/106-42-3	mg/kg															
VOCs	METHYLENE CHLORIDE	75-09-2	mg/kg					< 0.0051 U			< 0.0054 U	< 0.0059 U	< 0.0050 U		< 0.0051 U	< 0.0038 U	< 0.0059 U	< 0.0059 U
VOCs	O-XYLENE	95-47-6	mg/kg															
VOCs	STYRENE	100-42-5	mg/kg					< 0.0026 UJ			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U
VOCs	TETRACHLOROETHENE	127-18-4	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U
VOCs	TOLUENE	108-88-3	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U
VOCs	TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 U	< 0.0029 U	< 0.00088 U
VOCs	TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U
VOCs	TRICHLOROETHENE	79-01-6	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U
VOCs	VINYL CHLORIDE	75-01-4	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 U	< 0.0029 U	< 0.00088 U
VOCs	XYLENES, TOTAL	1330-20-7	mg/kg					< 0.0026 U			< 0.0027 U	< 0.0030 U	< 0.0025 U		< 0.0026 U	< 0.0038 UJ	< 0.0029 U	< 0.00088 U

Notes:
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
EB = Equipment blank contamination.
FD = Field duplicate.
J = Estimated value.
J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
mg/kg = milligram per kilogram.
N = Normal sample.
PCBs = Polychlorinated biphenyls.
SVOC = Semivolatile organic compound.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.
(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	SED09-06B	SED09-07B	SED09-07B	SED09-08B	SED09-08B	SED09-08B	SED09-08B	SED09-09	SED09-09	SED09-09	SED09-09	SED09-10	SED09-10	SED09-10
				Sample Date	9/26/2016	9/8/2015	9/26/2016	9/8/2015	9/8/2015	9/26/2016	9/26/2016	9/22/2014	9/22/2014	9/8/2015	9/12/2016	9/22/2014	9/22/2014	9/8/2015
				Sample Type Code	N	N	N	N	FD	N	FD	N	FD	N	N	N	FD	N
				Sample ID	SED09-06B-ME45-1	SED09-07B-090815-1	SED09-07B-ME45-1	SED09-08B-090815-1	SED09-08B-090815-2	SED09-08B-ME45-1	SED09-ME45-FD02	SED09-09-092214-1	SED09-09-092214-2	SED09-09-090815-1	SED09-09-ME45-1	SED09-10-092214-1	SED09-10-092214-2	SED09-10-090815-1
				Depth Interval	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	2 - 6 in	2 - 6 in	0 - 0.5 ft	0 - 0.5 ft	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**															
Metals	ALUMINUM	7429-90-5	mg/kg	5080		3810	7120	7360	2980	4810	4400	4840	9130	8420			
Metals	ANTIMONY	7440-36-0	mg/kg	< 1.0 UJ		< 0.63 UJ	< 0.97 UJ	0.64 J-	< 0.86 UJ	< 0.81 UJ	0.46 J	< 1.0 UJ	1.7 J-	< 1.3 UJ			
Metals	ARSENIC	7440-38-2	mg/kg	7.7		4.7	6.4	6.4	4.6	6.3	6.2 J-	5.6 J-	9.6	8.2 J			
Metals	BERYLLIUM	7440-41-7	mg/kg	0.56 J		0.34 J	0.58	0.59	0.39 J	0.46 J	0.42	0.40	0.70	0.84			
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg	19.1 J		11.6 J	16.8 J-	17.6 J-	11.1 J	14.6 J	13.5 J+	12.2 J+	30.2 J-	32.4 J			
Metals	COPPER	7440-50-8	mg/kg	77.0 J		33.4 J	21.5	23.6	62.5 J	42.1 J	40.3 J	34.6 J	91.0	80.5 J			
Metals	IRON	7439-89-6	mg/kg	16500 J		9740 J	19000	18900	9660 J	13100 J	11900	12400	27500	24100 J			
Metals	LEAD	7439-92-1	mg/kg	33.2 J		17.7 J	20.3 J	17.5 J	43.0 J	23.9 J	39.8 J	32.0 J	83.1 J	53.0 J			
Metals	MANGANESE	7439-96-5	mg/kg	136		73.0	128 J+	136 J+	61.6	94.1	102 J	93.1 J	250 J+	186			
Metals	MERCURY	7439-97-6	mg/kg	0.10		0.064	0.058	0.045	0.063	0.077	0.067	0.075	0.26	0.20 J-			
Metals	NICKEL	7440-02-0	mg/kg	13.2 J		7.7 J	11.9	12.6	25.4 J	10.7 J	15.5 J	11.2 J	23.1	19.0			
Metals	ZINC	7440-66-6	mg/kg	120 J		60.6 J	78.1 J,EB	81.0 J,EB	192 J	115 J	167 J	135 J	263 J,EB	172 J			
PCBs	AROCLOR-1016	12674-11-2	mg/kg										< 0.0072 U	< 0.000070 UJ			< 0.0077 U
PCBs	AROCLOR-1221	11104-28-2	mg/kg										< 0.014 U	< 0.00014 UJ			< 0.015 U
PCBs	AROCLOR-1232	11141-16-5	mg/kg										< 0.0072 U	< 0.000070 UJ			< 0.0077 U
PCBs	AROCLOR-1242	53469-21-9	mg/kg										< 0.0072 U	< 0.000070 UJ			< 0.0077 U
PCBs	AROCLOR-1248	12672-29-6	mg/kg										< 0.0072 U	< 0.000070 UJ			< 0.0077 U
PCBs	AROCLOR-1254	11097-69-1	mg/kg										0.097 J	< 0.00014 UJ			0.079 J
PCBs	AROCLOR-1260	11096-82-5	mg/kg										0.083 J	0.00069 J-			0.089 J
PCBs	PCB, TOTAL (a)	RA-65	mg/kg										0.18	0.00069			0.17
Pesticides	4,4-DDD	72-54-8	mg/kg										< 0.00074 UJ	< 0.00090 U			< 0.00079 UJ
Pesticides	4,4-DDE	72-55-9	mg/kg										0.0027 J	< 0.00090 U			< 0.00079 UJ
Pesticides	4,4-DDT	50-29-3	mg/kg										0.0093 J	< 0.00090 UJ			< 0.00079 UJ
Pesticides	ALDRIN	309-00-2	mg/kg										< 0.00037 UJ	< 0.00045 U			< 0.00039 UJ
Pesticides	ALPHA-BHC	319-84-6	mg/kg										< 0.00037 UJ	< 0.00022 U			< 0.00039 UJ
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg										< 0.00037 UJ	< 0.00022 U			< 0.00039 UJ
Pesticides	BETA-BHC	319-85-7	mg/kg										< 0.00037 UJ	< 0.00022 U			< 0.00039 UJ
Pesticides	DELTA-BHC	319-86-8	mg/kg										< 0.00037 UJ	< 0.00045 U			< 0.00039 UJ
Pesticides	DIELDRIN	60-57-1	mg/kg										< 0.00074 UJ	< 0.00045 U			0.0029 J
Pesticides	ENDOSULFAN I	959-98-8	mg/kg										< 0.00037 UJ	< 0.00022 U			< 0.00039 UJ
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg										< 0.00074 UJ	< 0.00045 U			< 0.00079 UJ
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg										< 0.00074 UJ	< 0.00045 U			< 0.00079 UJ
Pesticides	ENDRIN	72-20-8	mg/kg										< 0.00074 UJ	< 0.00045 U			< 0.00079 UJ
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg										0.0035 J	< 0.00090 U			< 0.00079 UJ
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg										< 0.00074 UJ	< 0.00045 U			< 0.00079 UJ
Pesticides	GAMMA-CHLORDANE	5566-34-7	mg/kg														
Pesticides	HEPTACHLOR	76-44-8	mg/kg										< 0.00037 UJ	< 0.00022 U			< 0.00039 UJ
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg										0.0011 J	< 0.00045 U			< 0.00039 UJ
Pesticides	LINDANE	58-89-9	mg/kg										< 0.00037 UJ	0.0021 J			< 0.00039 UJ
Pesticides	METHOXYCHLOR	72-43-5	mg/kg										< 0.0037 UJ	< 0.0022 U			< 0.0039 UJ
Pesticides	TOXAPHENE	8001-35-2	mg/kg										< 0.015 UJ	< 0.018 U			< 0.016 UJ
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg										< 0.00037 UJ	< 0.00045 U			< 0.00039 UJ
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg	< 0.0055 UJ		< 0.0049 UJ	< 0.0054 U	< 0.0054 U	< 0.0052 UJ	< 0.0049 UJ			< 0.0058 U	0.0082	< 0.0067 U	< 0.0069 U	0.051
SVOCs	ACENAPHTHENE	83-32-9	mg/kg	0.0057		< 0.0049 U	0.0068	< 0.0054 U	< 0.0052 U	< 0.0049 U			0.01	0.028	< 0.0067 UJ	0.023 J	0.37
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg	< 0.0055 U		< 0.0049 U	< 0.0054 U	< 0.0054 U	< 0.0052 U	0.0052			0.0060	< 0.0070 U	< 0.0067 U	< 0.0069 U	0.019
SVOCs	ANTHRACENE	120-12-7	mg/kg	0.011 J-		0.0082 J-	0.014 J	< 0.0054 UJ	0.0054 J	0.014 J			0.027	< 0.0070 U	0.031 J	0.053 J	0.84
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg	0.062 J-		0.034 J-	0.045 J	0.023 J	0.021 J	0.056 J			0.1	0.18	0.09	0.15	1.4
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg	0.072		0.037	0.038 J	0.02 J	0.022 J	0.05 J			0.078	0.17	0.074 J	0.13 J	1.1
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg	0.11		0.06	0.061 J	0.033 J	0.035 J	0.087 J			0.1	0.24	0.12 J	0.19 J	1.3
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg	0.058		0.032	0.029 J	0.016 J	0.018 J	0.04 J			0.067	0.13	0.042 J	0.082 J	0.64
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg	0.038 J		0.021 J	0.024 J	0.012 J	0.013 J	0.03 J			0.072	0.11	0.039 J	0.079 J	0.85
SVOCs	CHRYSENE	218-01-9	mg/kg	0.08 J-		0.045 J-	0.049 J	0.025 J	0.027 J	0.077 J			0.092	0.17	0.089 J	0.15 J	1.4
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg	0.013		0.0073	0.0078	< 0.0054 U	< 0.0052 U	0.0096			0.018	0.036	< 0.0067 U	< 0.0069 U	0.14
SVOCs	FLUORANTHENE	206-44-0	mg/kg	0.12 J-		0.066 J-	0.095 J	0.045 J	0.044 J	0.11 J			0.19	0.4	0.22 J	0.37 J	3.7
SVOCs	FLUORENE	86-73-7	mg/kg	< 0.0055 U		< 0.0049 U	0.0069	< 0.0054 U	< 0.0052 U	< 0.0049 U			0.012	0.038	0.017 J	0.038 J	0.44
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg	0.067		0.037	0.024 J	0.013 J	0.022 J	0.05 J			0.055	0.11	0.069 J	0.11 J	0.56
SVOCs	NAPHTHALENE	91-20-3	mg/kg	< 0.0055 UJ		< 0.0049 UJ	< 0.0054 U	< 0.0054 U	< 0.0052 UJ	< 0.0049 UJ			< 0.0058 U	0.018	< 0.0067 U	< 0.0069 U	0.16
SVOCs	PHENANTHRENE	85-01-8	mg/kg	0.055		0.039	0.06 J	0.019 J	0.024 J	0.043 J			0.11	0.28	0.13 J	0.27 J	3.3
SVOCs	PYRENE	129-00-0	mg/kg	0.13 J-		0.075 J-	0.082 J	0.042 J	0.042 J	0.11 J			0.16	0.31	0.18 J	0.31 J	2.7
VOCs	1,1,1-TRICHLOROETHANE	71-55-6	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	1,1,2-TRICHLOROETHANE	79-00-5	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	1,1-DICHLOROETHANE	75-34-3	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	1,1-DICHLOROETHENE	75-35-4	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	1,2-DICHLOROETHANE	107-06-2	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	1,2-DICHLOROPROPANE	78-87-5	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	2-BUTANONE	78-93-3	mg/kg	< 0.0089 UJ	< 0.0053 UJ	< 0.0082 UJ	R	< 0.0080 UJ	< 0.0073 UJ	< 0.0066 UJ			< 0.0081 UJ	< 0.0085 UJ			< 0.0069 UJ
VOCs	2-HEXANONE	591-78-6	mg/kg	< 0.0089 UJ	< 0.0053 U	< 0.0082 UJ	R	< 0.0080 U	< 0.0073 UJ	< 0.0066 UJ			< 0.0081 U	< 0.0085 UJ			< 0.0069 U
VOCs	4-METHYL-2-PENTANONE	108-10-1	mg/kg	< 0.0089 U	< 0.0053 U	< 0.0082 U	R	< 0.0080 U	< 0.0073 U	< 0.0066 U			< 0.0081 U	< 0.0085 U			< 0.0069 U
VOCs	ACETONE	67-64-1	mg/kg	< 0.0089 UJ	0.018	< 0.0082 UJ	0.059 J	0.028 J	< 0.0073 UJ	0.0099 J			0.062	< 0.0085 UJ			0.022
VOCs	BENZENE	71-43-2	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	BROMODICHLOROMETHANE	75-27-4	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	BROMOFORM	75-25-2	mg/kg	< 0.0089 U	< 0.0026 U	< 0.0082 U	R	< 0.0040 U	< 0.0073 U	< 0.0066 U			< 0.0041 U	< 0.0085 U			< 0.0035 U
VOCs	BROMOMETHANE	74-83-9	mg/kg	< 0.0089 UJ	< 0.0026 UJ	< 0.0082 UJ	R	< 0.0040 UJ	< 0.0073 UJ	< 0.0066 UJ			< 0.0041 UJ	< 0.0085 UJ			< 0.0035 UJ
VOCs	CARBON DISULFIDE	75-15-0	mg/kg	0.016	0.014	0.0087 J	R	0.02 J	< 0.0037 U	0.014			0.036	< 0.0043 U			0.011

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-06B	SED09-07B	SED09-07B	SED09-08B	SED09-08B	SED09-08B	SED09-08B	SED09-09	SED09-09	SED09-09	SED09-09	SED09-10	SED09-10	SED09-10
			Sample Date	9/26/2016	9/8/2015	9/26/2016	9/8/2015	9/8/2015	9/26/2016	9/26/2016	9/22/2014	9/22/2014	9/8/2015	9/12/2016	9/22/2014	9/22/2014	9/8/2015
			Sample Type Code	N	N	N	N	FD	N	FD	N	FD	N	N	N	FD	N
			Sample ID	SED09-06B-ME45-1	SED09-07B-090815-1	SED09-07B-ME45-1	SED09-08B-090815-1	SED09-08B-090815-2	SED09-08B-ME45-1	SED09-ME45-FD02	SED09-09-092214-1	SED09-09-092214-2	SED09-09-090815-1	SED09-09-ME45-1	SED09-10-092214-1	SED09-10-092214-2	SED09-10-090815-1
			Depth Interval	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	2 - 6 in	2 - 6 in	0 - 0.5 ft	0 - 0.5 ft	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	0 - 0.5 ft	0 - 0.5 ft	2 - 6 in
Analyte Group	**Compound**	**CAS**	**Units**														
VOCs	CARBON TETRACHLORIDE	56-23-5	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	CHLOROBENZENE	108-90-7	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	CHLOROETHANE	75-00-3	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	CHLOROFORM	67-66-3	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	CHLOROMETHANE	74-87-3	mg/kg	< 0.0045 U	< 0.0026 UJ	< 0.0041 U	R	< 0.0040 UJ	< 0.0037 U	< 0.0033 U			< 0.0041 UJ	< 0.0043 U			< 0.0035 UJ
VOCs	CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	DIBROMOCHLOROMETHANE	124-48-1	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	ETHYLBENZENE	100-41-4	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	M- AND P-XYLENE	108-38-3/106-42-3	mg/kg														
VOCs	METHYLENE CHLORIDE	75-09-2	mg/kg	< 0.0089 U	< 0.021 U	< 0.0082 U	0.1 J	< 0.0040 UJ	< 0.0073 U	< 0.0066 U			< 0.01 U	< 0.0085 U			< 0.0035 U
VOCs	O-XYLENE	95-47-6	mg/kg														
VOCs	STYRENE	100-42-5	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	TETRACHLOROETHENE	127-18-4	mg/kg	0.0053 J	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	0.0033 J			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	TOLUENE	108-88-3	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	TRICHLOROETHENE	79-01-6	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	VINYL CHLORIDE	75-01-4	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U
VOCs	XYLENES, TOTAL	1330-20-7	mg/kg	< 0.0045 U	< 0.0026 U	< 0.0041 U	R	< 0.0040 U	< 0.0037 U	< 0.0033 U			< 0.0041 U	< 0.0043 U			< 0.0035 U

Notes:
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
EB = Equipment blank contamination.
FD = Field duplicate.
J = Estimated value.
J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
mg/kg = milligram per kilogram.
N = Normal sample.
PCBs = Polychlorinated biphenyls.
SVOC = Semivolatile organic compound.
U = Not detected.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.
(a) Total concentrations were calculated per sample by summing only the detected individual compou (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Ar the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
				Location ID	SED09-10	SED09-11B	SED09-11B	SED09-12B	SED09-12B
				Sample Date	9/12/2016	9/9/2015	9/13/2016	9/8/2015	9/26/2016
				Sample Type Code	N	N	N	N	N
				Sample ID	SED09-10-ME45-1	SED09-11B-090915-1	SED09-11B-ME45-1	SED09-12B-090815-1	SED09-12B-ME45-1
				Depth Interval	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft
Analyte Group	**Compound**	**CAS**	**Units**						
Metals	ALUMINUM	7429-90-5	mg/kg		7950		3770		3890
Metals	ANTIMONY	7440-36-0	mg/kg		< 2.7 UJ		< 0.83 UJ		< 0.70 UJ
Metals	ARSENIC	7440-38-2	mg/kg		11.6 J		1.8 J		4.9
Metals	BERYLLIUM	7440-41-7	mg/kg		0.85		1.4		0.36 J
Metals	CHROMIUM, TOTAL	7440-47-3	mg/kg		23.7 J		12.8 J		11.3 J
Metals	COPPER	7440-50-8	mg/kg		65.5 J		19.3 J		27.8 J
Metals	IRON	7439-89-6	mg/kg		22900 J		8850 J		10600 J
Metals	LEAD	7439-92-1	mg/kg		50.0 J		13.7 J		16.0 J
Metals	MANGANESE	7439-96-5	mg/kg		136		109		74.2
Metals	MERCURY	7439-97-6	mg/kg		0.15 J-		0.021 J-		0.066
Metals	NICKEL	7440-02-0	mg/kg		15.5		10		8.1 J
Metals	ZINC	7440-66-6	mg/kg		158 J		76.1 J		60.6 J
PCBs	AROCLOR-1016	12674-11-2	mg/kg		< 0.0097 UJ				
PCBs	AROCLOR-1221	11104-28-2	mg/kg		< 0.019 UJ				
PCBs	AROCLOR-1232	11141-16-5	mg/kg		< 0.0097 UJ				
PCBs	AROCLOR-1242	53469-21-9	mg/kg		< 0.0097 UJ				
PCBs	AROCLOR-1248	12672-29-6	mg/kg		< 0.0097 UJ				
PCBs	AROCLOR-1254	11097-69-1	mg/kg		< 0.019 UJ				
PCBs	AROCLOR-1260	11096-82-5	mg/kg		0.074 J-				
PCBs	PCB, TOTAL (a)	RA-65	mg/kg		0.074				
Pesticides	4,4-DDD	72-54-8	mg/kg		< 0.0012 U				
Pesticides	4,4-DDE	72-55-9	mg/kg		< 0.0012 U				
Pesticides	4,4-DDT	50-29-3	mg/kg		< 0.0012 UJ				
Pesticides	ALDRIN	309-00-2	mg/kg		< 0.00062 U				
Pesticides	ALPHA-BHC	319-84-6	mg/kg		< 0.00031 U				
Pesticides	ALPHA-CHLORDANE	5103-71-9	mg/kg		< 0.00031 U				
Pesticides	BETA-BHC	319-85-7	mg/kg		< 0.00031 U				
Pesticides	DELTA-BHC	319-86-8	mg/kg		< 0.00062 U				
Pesticides	DIELDRIN	60-57-1	mg/kg		< 0.00062 U				
Pesticides	ENDOSULFAN I	959-98-8	mg/kg		< 0.00031 U				
Pesticides	ENDOSULFAN II	33213-65-9	mg/kg		< 0.00062 U				
Pesticides	ENDOSULFAN SULFATE	1031-07-8	mg/kg		< 0.00062 U				
Pesticides	ENDRIN	72-20-8	mg/kg		< 0.00062 U				
Pesticides	ENDRIN ALDEHYDE	7421-93-4	mg/kg		< 0.0012 U				
Pesticides	ENDRIN KETONE	53494-70-5	mg/kg		< 0.00062 U				
Pesticides	GAMMA-CHLORDANE	5566-34-7	mg/kg						
Pesticides	HEPTACHLOR	76-44-8	mg/kg		< 0.00031 U				
Pesticides	HEPTACHLOR EPOXIDE	1024-57-3	mg/kg		< 0.00062 U				
Pesticides	LINDANE	58-89-9	mg/kg		0.0030 J				
Pesticides	METHOXYCHLOR	72-43-5	mg/kg		< 0.0031 U				
Pesticides	TOXAPHENE	8001-35-2	mg/kg		< 0.025 U				
Pesticides	TRANS-CHLORDANE	5103-74-2	mg/kg		< 0.00062 U				
SVOCs	2-METHYLNAPHTHALENE	91-57-6	mg/kg		0.034		< 0.0040 U		< 0.0049 UJ
SVOCs	ACENAPHTHENE	83-32-9	mg/kg		0.092		0.0068		0.0059
SVOCs	ACENAPHTHYLENE	208-96-8	mg/kg		0.011		< 0.0040 U		< 0.0049 U
SVOCs	ANTHRACENE	120-12-7	mg/kg		0.2		0.013		0.012 J-
SVOCs	BENZO[A]ANTHRACENE	56-55-3	mg/kg		0.48		0.032		0.045 J
SVOCs	BENZO[A]PYRENE	50-32-8	mg/kg		0.43		0.033		0.04 J
SVOCs	BENZO[B]FLUORANTHENE	205-99-2	mg/kg		0.69		0.048		0.062 J
SVOCs	BENZO[G,H,I]PERYLENE	191-24-2	mg/kg		0.29		0.029		0.03 J
SVOCs	BENZO[K]FLUORANTHENE	207-08-9	mg/kg		0.22		0.021		0.025 J
SVOCs	CHRYSENE	218-01-9	mg/kg		0.48		0.033		0.051 J
SVOCs	DIBENZ[A,H]ANTHRACENE	53-70-3	mg/kg		0.091		0.0074		0.0074
SVOCs	FLUORANTHENE	206-44-0	mg/kg		1.3		0.072		0.088 J
SVOCs	FLUORENE	86-73-7	mg/kg		0.13		0.0055		0.0057
SVOCs	INDENO[1,2,3-CD]PYRENE	193-39-5	mg/kg		0.27		0.024		0.037 J
SVOCs	NAPHTHALENE	91-20-3	mg/kg		0.085		< 0.0040 U		< 0.0049 UJ
SVOCs	PHENANTHRENE	85-01-8	mg/kg		0.96		0.045		0.057 J
SVOCs	PYRENE	129-00-0	mg/kg		0.89		0.055		0.073 J
VOCs	1,1,1-TRICHLOROETHANE	71-55-6	mg/kg		< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	1,1,2,2-TETRACHLOROETHANE	79-34-5	mg/kg		< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	1,1,2-TRICHLOROETHANE	79-00-5	mg/kg		< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	1,1-DICHLOROETHANE	75-34-3	mg/kg		< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	1,1-DICHLOROETHENE	75-35-4	mg/kg		< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	1,2-DICHLOROETHANE	107-06-2	mg/kg		< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	1,2-DICHLOROPROPANE	78-87-5	mg/kg		< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	2-BUTANONE	78-93-3	mg/kg		< 0.012 UJ	0.019 J	< 0.0048 UJ	< 0.0039 UJ	< 0.0039 UJ
VOCs	2-HEXANONE	591-78-6	mg/kg		< 0.012 UJ	< 0.0048 U	< 0.0048 UJ	< 0.0039 U	< 0.0039 UJ
VOCs	4-METHYL-2-PENTANONE	108-10-1	mg/kg		< 0.012 U	< 0.0048 U	< 0.0048 U	< 0.0039 U	< 0.0039 U
VOCs	ACETONE	67-64-1	mg/kg		< 0.012 UJ	0.054	0.016 J	0.0066	0.02 J
VOCs	BENZENE	71-43-2	mg/kg		< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	BROMODICHLOROMETHANE	75-27-4	mg/kg		< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	BROMOFORM	75-25-2	mg/kg		< 0.012 U	< 0.0024 U	< 0.0048 U	< 0.0019 U	< 0.0039 U
VOCs	BROMOMETHANE	74-83-9	mg/kg		< 0.012 UJ	< 0.0024 UJ	< 0.0048 UJ	< 0.0019 UJ	< 0.0039 UJ
VOCs	CARBON DISULFIDE	75-15-0	mg/kg		< 0.0059 U	0.0038 J	< 0.0024 U	0.0052	0.011

APPENIDX A TABLE 6
ANALYTICAL DATA SUMMARY TABLE - SEDIMENT
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

			Location Group	SITE 00009	SITE 00009	SITE 00009	SITE 00009	SITE 00009
			Location ID	SED09-10	SED09-11B	SED09-11B	SED09-12B	SED09-12B
			Sample Date	9/12/2016	9/9/2015	9/13/2016	9/8/2015	9/26/2016
			Sample Type Code	N	N	N	N	N
			Sample ID	SED09-10-ME45-1	SED09-11B-090915-1	SED09-11B-ME45-1	SED09-12B-090815-1	SED09-12B-ME45-1
			Depth Interval	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft	2 - 6 in	0 - 0.5 ft
Analyte Group	**Compound**	**CAS**	**Units**					
VOCs	CARBON TETRACHLORIDE	56-23-5	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	CHLOROBENZENE	108-90-7	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	CHLOROETHANE	75-00-3	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	CHLOROFORM	67-66-3	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	CHLOROMETHANE	74-87-3	mg/kg	< 0.0059 U	< 0.0024 UJ	< 0.0024 U	< 0.0019 UJ	< 0.0019 U
VOCs	CIS-1,2-DICHLOROETHENE	156-59-2	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	CIS-1,3-DICHLOROPROPENE	10061-01-5	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	DIBROMOCHLOROMETHANE	124-48-1	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	ETHYLBENZENE	100-41-4	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	M- AND P-XYLENE	108-38-3/106-42-3	mg/kg					
VOCs	METHYLENE CHLORIDE	75-09-2	mg/kg	< 0.012 U	< 0.0024 U	< 0.0048 U	< 0.0049 U	< 0.0039 U
VOCs	O-XYLENE	95-47-6	mg/kg					
VOCs	STYRENE	100-42-5	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	TETRACHLOROETHENE	127-18-4	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	0.0025 J
VOCs	TOLUENE	108-88-3	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	TRANS-1,2-DICHLOROETHENE	156-60-5	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	TRANS-1,3-DICHLOROPROPENE	10061-02-6	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	TRICHLOROETHENE	79-01-6	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	VINYL CHLORIDE	75-01-4	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U
VOCs	XYLENES, TOTAL	1330-20-7	mg/kg	< 0.0059 U	< 0.0024 U	< 0.0024 U	< 0.0019 U	< 0.0019 U

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

EB = Equipment blank contamination.

FD = Field duplicate.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

mg/kg = milligram per kilogram.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compou
(i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Ar
the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-01	P09-01	P09-01	P09-01	P09-01	P09-01	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A
					Sample Date	10/1/2013	9/9/2015	9/9/2015	9/13/2016	9/14/2016	9/27/2016	10/2/2013	9/9/2015	9/15/2015	9/15/2015	9/14/2016	9/15/2016
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-01-100113	P09-01-090915-1	P09-01-090915-1-F	P09-01-ME45-1	P09-01-ME45-1-F	P09-01-ME45R-1	P09-02A-100213	P09-02A-090915-1	P09-02A-091515-1	P09-02A-091515-1-F	P09-02A-ME45-1	P09-02A-ME45-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
Metals	F	ALUMINUM	7429-90-5	ug/L					4050							14800
Metals	F	ANTIMONY	7440-36-0	ug/L					10.7 J							18.6 J
Metals	F	ARSENIC	7440-38-2	ug/L					5.4 J							11.8 J
Metals	F	BERYLLIUM	7440-41-7	ug/L					< 7.5 U							< 15.0 U
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L					1200							607
Metals	F	COPPER	7440-50-8	ug/L					64.8							192
Metals	F	IRON	7439-89-6	ug/L					41000							65000
Metals	F	LEAD	7439-92-1	ug/L					16.1 J							104
Metals	F	MANGANESE	7439-96-5	ug/L					1210							625
Metals	F	MERCURY	7439-97-6	ug/L					< 0.10 U							0.14 J
Metals	F	NICKEL	7440-02-0	ug/L					251							203
Metals	F	ZINC	7440-66-6	ug/L					173							489
Metals	FF	ALUMINUM	7429-90-5	ug/L	307		873 J				362			< 500 U		
Metals	FF	ANTIMONY	7440-36-0	ug/L	0.23 J		< 40.0 U				0.32 J			< 40.0 U		
Metals	FF	ARSENIC	7440-38-2	ug/L	11.5		< 40.0 U				12.6			21.5 J-		
Metals	FF	BERYLLIUM	7440-41-7	ug/L	< 0.20 U		< 15.0 U				< 0.20 U			< 15.0 U		
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L	7.7		97.4 J				< 5.0 U			< 30.0 UJ		
Metals	FF	COPPER	7440-50-8	ug/L	< 3.6 U		< 50.0 U				< 4.5 U			< 50.0 U		
Metals	FF	IRON	7439-89-6	ug/L	< 100 U		< 10000 U				6140			< 2500 U		
Metals	FF	LEAD	7439-92-1	ug/L	< 1.0 U		4.5 J				< 1.0 U			< 15.0 U		
Metals	FF	MANGANESE	7439-96-5	ug/L	47.3		262				93.3			120		
Metals	FF	MERCURY	7439-97-6	ug/L	< 0.10 U		< 0.050 UJ				< 0.10 U			< 0.050 U		
Metals	FF	NICKEL	7440-02-0	ug/L	28.9		31.5 J				18.0			< 30.0 U		
Metals	FF	ZINC	7440-66-6	ug/L	10 J		< 75.0 U				23.1			< 75.0 UJ		
Metals	N	ALUMINUM	7429-90-5	ug/L	4000	10600		37300			141 J		1800 J		99500	
Metals	N	ANTIMONY	7440-36-0	ug/L	0.33 J	< 40.0 U		10.4 J			0.33 J		< 40.0 U		16.6 J	
Metals	N	ARSENIC	7440-38-2	ug/L	15.6	131		62.0			10.7		20.1 J-		24.3 J	
Metals	N	BERYLLIUM	7440-41-7	ug/L	0.24 J	< 15.0 U		11.5 J			< 0.20 U		< 15.0 U		20.5 J	
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L	81.0	1380		43400			< 5.0 U		207		4040	
Metals	N	COPPER	7440-50-8	ug/L	12.6	248		405			6.2		32.6 J		918	
Metals	N	IRON	7439-89-6	ug/L	31200	85900		482000			6150		79100		672000	
Metals	N	LEAD	7439-92-1	ug/L	4.3	< 50.0 U		389			< 1.0 U		< 50 U		712	
Metals	N	MANGANESE	7439-96-5	ug/L	843	5480		3110			92.4		412		4120	
Metals	N	MERCURY	7439-97-6	ug/L	< 0.10 U	0.11 J-		< 0.10 U			< 0.10 U		< 0.050 U		< 0.10 U	
Metals	N	NICKEL	7440-02-0	ug/L	256	486		3550			19.4		114 J		1130	
Metals	N	ZINC	7440-66-6	ug/L	37.8	277		2970			26.5		59.9 J		3550	
PCBs	N	AROCLOR-1016	12674-11-2	ug/L	< 0.24 U					< 0.20 UJ	< 0.24 U					
PCBs	N	AROCLOR-1221	11104-28-2	ug/L	< 0.24 U					< 0.10 UJ	< 0.24 U					
PCBs	N	AROCLOR-1232	11141-16-5	ug/L	< 0.24 U					< 0.20 UJ	< 0.24 U					
PCBs	N	AROCLOR-1242	53469-21-9	ug/L	< 0.24 U					< 0.10 UJ	< 0.24 U					
PCBs	N	AROCLOR-1248	12672-29-6	ug/L	< 0.24 U					< 0.10 UJ	< 0.24 U					
PCBs	N	AROCLOR-1254	11097-69-1	ug/L	< 0.24 U					< 0.20 UJ	< 0.24 U					
PCBs	N	AROCLOR-1260	11096-82-5	ug/L	< 0.24 UJ					< 0.20 UJ	< 0.24 UJ					
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L	< 0.24 U					< 0.2 U	< 0.24 U					
Pesticides	N	4,4-DDD	72-54-8	ug/L						< 0.0063 U						
Pesticides	N	4,4-DDE	72-55-9	ug/L						< 0.0063 U						
Pesticides	N	4,4-DDT	50-29-3	ug/L						< 0.0063 UJ						
Pesticides	N	ALDRIN	309-00-2	ug/L						< 0.0031 U						
Pesticides	N	ALPHA-BHC	319-84-6	ug/L						< 0.0031 U						
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L						< 0.0031 U						
Pesticides	N	BETA-BHC	319-85-7	ug/L						< 0.0031 U						

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-01	P09-01	P09-01	P09-01	P09-01	P09-01	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A
					Sample Date	10/1/2013	9/9/2015	9/9/2015	9/13/2016	9/14/2016	9/27/2016	10/2/2013	9/9/2015	9/15/2015	9/15/2015	9/14/2016	9/15/2016
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-01-100113	P09-01-090915-1	P09-01-090915-1-F	P09-01-ME45-1	P09-01-ME45-1-F	P09-01-ME45R-1	P09-02A-100213	P09-02A-090915-1	P09-02A-091515-1	P09-02A-091515-1-F	P09-02A-ME45-1	P09-02A-ME45-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
Pesticides	N	DELTA-BHC	319-86-8	ug/L						< 0.0031 U							
Pesticides	N	DIELDRIN	60-57-1	ug/L						< 0.0063 U							
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L						< 0.0031 U							
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L						< 0.0063 U							
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L						< 0.0063 U							
Pesticides	N	ENDRIN	72-20-8	ug/L						< 0.0063 U							
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L						< 0.031 U							
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L						< 0.0063 U							
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L													
Pesticides	N	HEPTACHLOR	76-44-8	ug/L						< 0.0031 U							
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L						< 0.0031 U							
Pesticides	N	LINDANE	58-89-9	ug/L						< 0.0031 U							
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L						< 0.063 U							
Pesticides	N	TOXAPHENE	8001-35-2	ug/L						< 0.25 U							
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L						< 0.0031 U							
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L													
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L													
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L													
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L													
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L													
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L													
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L													
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L													
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L													
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L													
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L													
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L													
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L													
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L													
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L													
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L													
SVOCs	N	2-NITROANILINE	88-74-4	ug/L													
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L													
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L													
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L													
SVOCs	N	3-NITROANILINE	99-09-2	ug/L													
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L													
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L													
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L													
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L													
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L													
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L													
SVOCs	N	4-NITROANILINE	100-01-6	ug/L													
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L													
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L													
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L													
SVOCs	N	ANTHRACENE	120-12-7	ug/L													
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L													
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L													
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L													
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L													
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L													
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L													
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L													

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-01	P09-01	P09-01	P09-01	P09-01	P09-01	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A
					Sample Date	10/1/2013	9/9/2015	9/9/2015	9/13/2016	9/14/2016	9/27/2016	10/2/2013	9/9/2015	9/15/2015	9/15/2015	9/14/2016	9/15/2016
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-01-100113	P09-01-090915-1	P09-01-090915-1-F	P09-01-ME45-1	P09-01-ME45-1-F	P09-01-ME45R-1	P09-02A-100213	P09-02A-090915-1	P09-02A-091515-1	P09-02A-091515-1-F	P09-02A-ME45-1	P09-02A-ME45-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L													
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L													
SVOCs	N	CARBAZOLE	86-74-8	ug/L													
SVOCs	N	CHRYSENE	218-01-9	ug/L													
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L													
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L													
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L													
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L													
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L													
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L													
SVOCs	N	FLUORANTHENE	206-44-0	ug/L													
SVOCs	N	FLUORENE	86-73-7	ug/L													
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L													
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L													
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L													
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L													
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L													
SVOCs	N	ISOPHORONE	78-59-1	ug/L													
SVOCs	N	NAPHTHALENE	91-20-3	ug/L													
SVOCs	N	NITROBENZENE	98-95-3	ug/L													
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L													
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L													
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L													
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L													
SVOCs	N	PHENANTHRENE	85-01-8	ug/L													
SVOCs	N	PHENOL	108-95-2	ug/L													
SVOCs	N	PYRENE	129-00-0	ug/L													
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L	< 0.50 U			< 1.0 UJ			< 0.50 U				< 1.0 UJ	
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L	< 0.50 U			< 2.0 U			< 0.50 U				< 2.0 U	
VOCs	N	2-BUTANONE	78-93-3	ug/L	< 2.5 UJ			< 5.0 UJ			< 2.5 UJ				< 5.0 UJ	
VOCs	N	2-HEXANONE	591-78-6	ug/L	< 2.5 U			< 5.0 UJ			< 2.5 U				< 5.0 UJ	
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L	< 2.5 U			< 2.0 U			< 2.5 U				< 2.0 U	
VOCs	N	ACETONE	67-64-1	ug/L	< 2.5 U			< 5.0 UJ			< 2.5 UJ				< 5.0 UJ	
VOCs	N	BENZENE	71-43-2	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	BROMOFORM	75-25-2	ug/L	< 0.50 U			< 2.0 U			< 0.50 U				< 2.0 U	
VOCs	N	BROMOMETHANE	74-83-9	ug/L	< 1.0 U			< 2.0 UJ			< 1.0 U				< 2.0 UJ	
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L	5.3			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L	< 0.50 U			< 2.0 UJ			< 0.50 U				< 2.0 UJ	
VOCs	N	CHLOROBENZENE	108-90-7	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	CHLOROETHANE	75-00-3	ug/L	< 1.0 UJ			< 1.0 U			< 1.0 U				< 1.0 U	
VOCs	N	CHLOROFORM	67-66-3	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	CHLOROMETHANE	74-87-3	ug/L	< 1.0 U			< 1.0 U			< 1.0 U				< 1.0 U	
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L	< 0.50 U			< 2.0 U			< 0.50 U				< 2.0 U	
VOCs	N	ETHYLBENZENE	100-41-4	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L	< 1.0 U						< 1.0 U					
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L	< 2.5 U			< 1.0 U			< 2.5 U				< 1.0 U	

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ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-01	P09-01	P09-01	P09-01	P09-01	P09-01	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A	P09-02A
					Sample Date	10/1/2013	9/9/2015	9/9/2015	9/13/2016	9/14/2016	9/27/2016	10/2/2013	9/9/2015	9/15/2015	9/15/2015	9/14/2016	9/15/2016
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-01-100113	P09-01-090915-1	P09-01-090915-1-F	P09-01-ME45-1	P09-01-ME45-1-F	P09-01-ME45R-1	P09-02A-100213	P09-02A-090915-1	P09-02A-091515-1	P09-02A-091515-1-F	P09-02A-ME45-1	P09-02A-ME45-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
VOCs	N	O-XYLENE	95-47-6	ug/L	< 0.50 U						< 0.50 U					
VOCs	N	STYRENE	100-42-5	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L	< 0.50 U			< 2.0 U			< 0.50 U				< 2.0 U	
VOCs	N	TOLUENE	108-88-3	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 0.50 U			< 2.0 U			< 0.50 U				< 2.0 U	
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L	< 0.50 U			< 1.0 U			< 0.50 U				< 1.0 U	
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U			< 1.0 U			< 1.0 U				< 1.0 U	
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L	< 1.5 U			< 1.0 U			< 1.5 U				< 1.0 U	

Notes:
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
F = Filtered sample.
FD = Field duplicate.
FF = Field filtered sample.
J = Estimated value.
J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
N = Normal sample.
PCBs = Polychlorinated biphenyls.
SVOC = Semivolatile organic compound.
U = Not detected.
ug/L - microgram per liter.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.
(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

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ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-03A	P09-03A	P09-03A	P09-03A	P09-03A	P09-04A	P09-04A	P09-04A	P09-04A	P09-04A	P09-04A	P09-05A
					Sample Date	10/15/2013	9/16/2015	9/16/2015	9/16/2015	9/14/2016	10/15/2013	9/16/2015	9/16/2015	9/16/2015	9/12/2016	9/15/2016	10/2/2013
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-03A-101513	P09-03A-091515-1	P09-03A-091515-1-F	P09-03A-091615-1	P09-03A-ME45-1	P09-04A-101513	P09-04A-091515-1	P09-04A-091515-1-F	P09-04A-091615-1	P09-04A-ME45-1	P09-04A-ME45-1-F	P09-05A-100213
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
Metals	F	ALUMINUM	7429-90-5	ug/L											< 500 U	
Metals	F	ANTIMONY	7440-36-0	ug/L											< 40.0 U	
Metals	F	ARSENIC	7440-38-2	ug/L											< 40.0 U	
Metals	F	BERYLLIUM	7440-41-7	ug/L											< 15.0 U	
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L											< 30.0 UJ	
Metals	F	COPPER	7440-50-8	ug/L											< 50.0 U	
Metals	F	IRON	7439-89-6	ug/L											< 2500 U	
Metals	F	LEAD	7439-92-1	ug/L											< 15.0 U	
Metals	F	MANGANESE	7439-96-5	ug/L											< 75.0 U	
Metals	F	MERCURY	7439-97-6	ug/L											< 0.10 U	
Metals	F	NICKEL	7440-02-0	ug/L											24.7 J	
Metals	F	ZINC	7440-66-6	ug/L											240	
Metals	FF	ALUMINUM	7429-90-5	ug/L	195 J		< 500 U			174 J		< 500 U				< 300 U
Metals	FF	ANTIMONY	7440-36-0	ug/L	< 1.0 U		< 40.0 U			< 1.0 U		< 40.0 U				1.5
Metals	FF	ARSENIC	7440-38-2	ug/L	8.0		15.0 J-			12.6		< 40.0 U				8.4
Metals	FF	BERYLLIUM	7440-41-7	ug/L	< 0.20 U		< 15.0 U			< 0.20 U		< 15.0 U				< 0.20 U
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L	< 5.0 U		< 30.0 UJ			< 5.0 U		< 30.0 U				< 5.0 U
Metals	FF	COPPER	7440-50-8	ug/L	< 3.0 U		24.5 J			6.5		< 50.0 U				< 3.0 U
Metals	FF	IRON	7439-89-6	ug/L	< 500 U		1190 J+			< 500 U		< 2500 U				< 100 U
Metals	FF	LEAD	7439-92-1	ug/L	< 1.0 U		< 15.0 U			< 1.0 U		< 15.0 U				< 1.0 U
Metals	FF	MANGANESE	7439-96-5	ug/L	31.8		509			4.2		< 75.0 U				3.8
Metals	FF	MERCURY	7439-97-6	ug/L	< 0.20 U		< 0.050 U			< 0.20 U		< 0.050 U				< 0.10 UJ
Metals	FF	NICKEL	7440-02-0	ug/L	33.5		29.2 J			36.4		13.0 J				33.5
Metals	FF	ZINC	7440-66-6	ug/L	81.3		119 J			32.0		< 75.0 UJ				38.6
Metals	N	ALUMINUM	7429-90-5	ug/L	1630 J	5690 J				261 J	2640 J			2030		< 300 U
Metals	N	ANTIMONY	7440-36-0	ug/L	< 1.2 U	< 40.0 U				< 1.0 U	< 40.0 U			< 40.0 U		1.7
Metals	N	ARSENIC	7440-38-2	ug/L	15.3	16.8 J-				14.7	16.5 J-			< 40.0 U		10.0
Metals	N	BERYLLIUM	7440-41-7	ug/L	0.13 J	< 15.0 U				< 0.20 U	< 15.0 U			< 15.0 U		< 0.20 U
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L	53.4	473				< 5.0 U	208			67.6 J		< 5.0 U
Metals	N	COPPER	7440-50-8	ug/L	7.8	63.4 J				< 3.0 U	51.2 J			17.4 J		< 3.0 U
Metals	N	IRON	7439-89-6	ug/L	3490	91200				< 500 U	8940 J			4870 J		< 100 U
Metals	N	LEAD	7439-92-1	ug/L	4.8	< 50 U				< 1.0 U	< 50 U			9.5 J		< 1.0 U
Metals	N	MANGANESE	7439-96-5	ug/L	74.8	451				4.5	67.7 J			65.9 J		< 2.7 U
Metals	N	MERCURY	7439-97-6	ug/L	< 0.20 U	0.074 J				< 0.20 U	0.063 J			< 0.10 U		< 0.10 UJ
Metals	N	NICKEL	7440-02-0	ug/L	64.2	264 J				34.2	111 J			80.6		31.0
Metals	N	ZINC	7440-66-6	ug/L	721	3520 J				28.8	208 J			3080		39.4
PCBs	N	AROCLOR-1016	12674-11-2	ug/L												
PCBs	N	AROCLOR-1221	11104-28-2	ug/L												
PCBs	N	AROCLOR-1232	11141-16-5	ug/L												
PCBs	N	AROCLOR-1242	53469-21-9	ug/L												
PCBs	N	AROCLOR-1248	12672-29-6	ug/L												
PCBs	N	AROCLOR-1254	11097-69-1	ug/L												
PCBs	N	AROCLOR-1260	11096-82-5	ug/L												
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L												
Pesticides	N	4,4-DDD	72-54-8	ug/L												
Pesticides	N	4,4-DDE	72-55-9	ug/L												
Pesticides	N	4,4-DDT	50-29-3	ug/L												
Pesticides	N	ALDRIN	309-00-2	ug/L												
Pesticides	N	ALPHA-BHC	319-84-6	ug/L												
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L												
Pesticides	N	BETA-BHC	319-85-7	ug/L												

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-03A	P09-03A	P09-03A	P09-03A	P09-03A	P09-04A	P09-04A	P09-04A	P09-04A	P09-04A	P09-04A	P09-05A
					Sample Date	10/15/2013	9/16/2015	9/16/2015	9/16/2015	9/14/2016	10/15/2013	9/16/2015	9/16/2015	9/16/2015	9/12/2016	9/15/2016	10/2/2013
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-03A-101513	P09-03A-091515-1	P09-03A-091515-1-F	P09-03A-091615-1	P09-03A-ME45-1	P09-04A-101513	P09-04A-091515-1	P09-04A-091515-1-F	P09-04A-091615-1	P09-04A-ME45-1	P09-04A-ME45-1-F	P09-05A-100213
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
Pesticides	N	DELTA-BHC	319-86-8	ug/L													
Pesticides	N	DIELDRIN	60-57-1	ug/L													
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L													
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L													
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L													
Pesticides	N	ENDRIN	72-20-8	ug/L													
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L													
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L													
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L													
Pesticides	N	HEPTACHLOR	76-44-8	ug/L													
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L													
Pesticides	N	LINDANE	58-89-9	ug/L													
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L													
Pesticides	N	TOXAPHENE	8001-35-2	ug/L													
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L													
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L											< 2.0 U		
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L											< 2.0 U		
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L											< 2.0 U		
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L											< 5.0 U		
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L											< 2.0 UJ		
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L											< 0.10 UJ		
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L											< 2.0 U		
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L											< 2.0 U		
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L											< 5.0 U		
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L											< 10 UJ		
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L											< 2.0 U		
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L											< 2.0 U		
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L											< 2.0 U		
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L											< 2.0 U		
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L											< 0.10 U		
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L											< 2.0 U		
SVOCs	N	2-NITROANILINE	88-74-4	ug/L											< 2.0 U		
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L											< 2.0 U		
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L													
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L											< 5.0 U		
SVOCs	N	3-NITROANILINE	99-09-2	ug/L											< 2.0 U		
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L											< 2.0 UJ		
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L											< 2.0 U		
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L											< 2.0 U		
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L											< 5.0 U		
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L											< 2.0 U		
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L											< 5.0 UJ		
SVOCs	N	4-NITROANILINE	100-01-6	ug/L											< 2.0 U		
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L											< 2.0 U		
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L											< 0.10 U		
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L											< 0.10 U		
SVOCs	N	ANTHRACENE	120-12-7	ug/L											< 0.10 U		
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L											< 0.10 U		
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L											< 0.10 UJ		
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L											< 0.10 U		
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L											< 0.10 U		
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L											< 0.10 U		
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L											< 5.0 U		
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L											< 2.0 U		

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ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-03A	P09-03A	P09-03A	P09-03A	P09-03A	P09-04A	P09-04A	P09-04A	P09-04A	P09-04A	P09-04A	P09-05A
					Sample Date	10/15/2013	9/16/2015	9/16/2015	9/16/2015	9/14/2016	10/15/2013	9/16/2015	9/16/2015	9/16/2015	9/12/2016	9/15/2016	10/2/2013
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-03A-101513	P09-03A-091515-1	P09-03A-091515-1-F	P09-03A-091615-1	P09-03A-ME45-1	P09-04A-101513	P09-04A-091515-1	P09-04A-091515-1-F	P09-04A-091615-1	P09-04A-ME45-1	P09-04A-ME45-1-F	P09-05A-100213
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L										0.40 J		
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L										< 2.0 U		
SVOCs	N	CARBAZOLE	86-74-8	ug/L										< 2.0 U		
SVOCs	N	CHRYSENE	218-01-9	ug/L										< 0.10 U		
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L										< 0.10 U		
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L										< 2.0 U		
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L										< 2.0 U		
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L										< 2.0 U		
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L										< 2.0 U		
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L										< 2.0 UJ		
SVOCs	N	FLUORANTHENE	206-44-0	ug/L										< 0.10 U		
SVOCs	N	FLUORENE	86-73-7	ug/L										< 0.10 U		
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L										< 0.10 U		
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L										< 2.0 UJ		
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L										< 2.0 U		
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L										< 2.0 U		
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L										< 0.10 UJ		
SVOCs	N	ISOPHORONE	78-59-1	ug/L										< 2.0 U		
SVOCs	N	NAPHTHALENE	91-20-3	ug/L										< 0.10 U		
SVOCs	N	NITROBENZENE	98-95-3	ug/L										< 5.0 U		
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L												
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L										< 2.0 U		
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L										< 5.0 U		
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L										< 1.0 UJ		
SVOCs	N	PHENANTHRENE	85-01-8	ug/L										< 0.10 U		
SVOCs	N	PHENOL	108-95-2	ug/L										< 2.0 U		
SVOCs	N	PYRENE	129-00-0	ug/L										< 0.10 U		
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L	< 0.50 U				< 1.0 UJ	< 0.50 U				< 1.0 UJ		< 0.50 U
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L	< 0.50 U				< 2.0 U	< 0.50 U				< 2.0 U		< 0.50 U
VOCs	N	2-BUTANONE	78-93-3	ug/L	< 2.5 U				< 5.0 UJ	< 2.5 U				< 5.0 UJ		< 2.5 UJ
VOCs	N	2-HEXANONE	591-78-6	ug/L	< 2.5 U				< 5.0 UJ	< 2.5 U				< 5.0 UJ		< 2.5 U
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L	< 2.5 UJ				< 2.0 U	< 2.5 UJ				< 2.0 U		< 2.5 U
VOCs	N	ACETONE	67-64-1	ug/L	9.1 J				< 5.0 UJ	< 2.5 U				< 5.0 UJ		< 2.5 UJ
VOCs	N	BENZENE	71-43-2	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	BROMOFORM	75-25-2	ug/L	< 0.50 U				< 2.0 U	< 0.50 U				< 2.0 U		< 0.50 U
VOCs	N	BROMOMETHANE	74-83-9	ug/L	< 1.0 U				< 2.0 UJ	< 1.0 U				< 2.0 UJ		< 1.0 U
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L	< 0.50 U				< 2.0 UJ	< 0.50 U				< 2.0 UJ		< 0.50 U
VOCs	N	CHLOROBENZENE	108-90-7	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	CHLOROETHANE	75-00-3	ug/L	< 1.0 U				< 1.0 U	< 1.0 U				< 1.0 U		< 1.0 U
VOCs	N	CHLOROFORM	67-66-3	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	CHLOROMETHANE	74-87-3	ug/L	< 1.0 U				< 1.0 U	< 1.0 U				< 1.0 U		< 1.0 U
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L	< 0.50 U				< 2.0 U	< 0.50 U				< 2.0 U		< 0.50 U
VOCs	N	ETHYLBENZENE	100-41-4	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L	< 1.0 U					< 1.0 U						< 1.0 U
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L	< 2.5 U				< 1.0 U	< 2.5 U				< 1.0 U		< 2.5 U
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U

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ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-03A	P09-03A	P09-03A	P09-03A	P09-03A	P09-04A	P09-04A	P09-04A	P09-04A	P09-04A	P09-04A	P09-05A
					Sample Date	10/15/2013	9/16/2015	9/16/2015	9/16/2015	9/14/2016	10/15/2013	9/16/2015	9/16/2015	9/16/2015	9/12/2016	9/15/2016	10/2/2013
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-03A-101513	P09-03A-091515-1	P09-03A-091515-1-F	P09-03A-091615-1	P09-03A-ME45-1	P09-04A-101513	P09-04A-091515-1	P09-04A-091515-1-F	P09-04A-091615-1	P09-04A-ME45-1	P09-04A-ME45-1-F	P09-05A-100213
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
VOCs	N	O-XYLENE	95-47-6	ug/L	< 0.50 U					< 0.50 U							< 0.50 U
VOCs	N	STYRENE	100-42-5	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L	< 0.50 U				< 2.0 U	< 0.50 U				< 2.0 U		< 0.50 U
VOCs	N	TOLUENE	108-88-3	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 0.50 U				< 2.0 U	< 0.50 U				< 2.0 U		< 0.50 U
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L	< 0.50 U				< 1.0 U	< 0.50 U				< 1.0 U		< 0.50 U
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U				< 1.0 U	< 1.0 U				< 1.0 U		< 1.0 U
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L	< 1.5 U				< 1.0 U	< 1.5 U				< 1.0 U		< 1.5 U

Notes:
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
F = Filtered sample.
FD = Field duplicate.
FF = Field filtered sample.
J = Estimated value.
J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
N = Normal sample.
PCBs = Polychlorinated biphenyls.
SVOC = Semivolatile organic compound.
U = Not detected.
ug/L - microgram per liter.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.
(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-05A	P09-05A	P09-05A	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-07B	P09-07B	P09-07B
					Sample Date	10/2/2013	9/14/2015	9/14/2015	10/3/2013	9/22/2014	9/9/2015	9/9/2015	9/13/2016	9/13/2016	10/3/2013	9/22/2014	9/9/2015
					Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-05A-100213-2	P09-05A-091415-1	P09-05A-091415-1-F	P09-06B-100313	P09-06B-092214-1	P09-06B-090915-1	P09-06B-090915-1-F	P09-06B-ME45-1	P09-06B-ME45-1-F	P09-07B-100313	P09-07B-092214-1	P09-07B-090915-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
Metals	F	ALUMINUM	7429-90-5	ug/L										3960			
Metals	F	ANTIMONY	7440-36-0	ug/L										18.3 J			
Metals	F	ARSENIC	7440-38-2	ug/L										22.2 J			
Metals	F	BERYLLIUM	7440-41-7	ug/L										< 15.0 U			
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L										40.6 J			
Metals	F	COPPER	7440-50-8	ug/L										< 50.0 U			
Metals	F	IRON	7439-89-6	ug/L										986 J			
Metals	F	LEAD	7439-92-1	ug/L										< 15.0 U			
Metals	F	MANGANESE	7439-96-5	ug/L										83.6 J			
Metals	F	MERCURY	7439-97-6	ug/L										< 0.10 U			
Metals	F	NICKEL	7440-02-0	ug/L										39.2 J			
Metals	F	ZINC	7440-66-6	ug/L										405			
Metals	FF	ALUMINUM	7429-90-5	ug/L	< 300 U		357 J	367 J			3220			252 J			
Metals	FF	ANTIMONY	7440-36-0	ug/L	1.7		< 40.0 U	< 1.0 U			< 40.0 U			< 1.0 U			
Metals	FF	ARSENIC	7440-38-2	ug/L	8.8		666 J-	9.7			< 40.0 U			13.0			
Metals	FF	BERYLLIUM	7440-41-7	ug/L	< 0.20 U		< 15.0 U	0.06 J			< 15.0 U			< 0.20 U			
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L	< 5.0 U		< 30.0 U	403			24.9 J			52.3			
Metals	FF	COPPER	7440-50-8	ug/L	< 3.0 U		< 50.0 U	13.3			33.3 J			< 3.0 U			
Metals	FF	IRON	7439-89-6	ug/L	< 80 U		< 2500 U	57000			< 10000 U			44900			
Metals	FF	LEAD	7439-92-1	ug/L	< 1.0 U		< 15.0 U	2.7			14.0 J			< 1.0 U			
Metals	FF	MANGANESE	7439-96-5	ug/L	< 2.2 U		< 75.0 U	503			232			728			
Metals	FF	MERCURY	7439-97-6	ug/L	< 0.10 UJ		< 0.050 U	< 0.10 U			< 0.20 UJ			< 0.20 U			
Metals	FF	NICKEL	7440-02-0	ug/L	30.3		15.5 J	132			23.5 J			150			
Metals	FF	ZINC	7440-66-6	ug/L	39.9		372 J	13.0			< 75.0 U			< 10 U			
Metals	N	ALUMINUM	7429-90-5	ug/L	< 300 U	18600 J		5560		14800		25800		106000		3460	
Metals	N	ANTIMONY	7440-36-0	ug/L	1.5	< 40.0 U		2.7		< 40.0 U		20.1 J		2.7		< 40.0 U	
Metals	N	ARSENIC	7440-38-2	ug/L	17.6	592 J-		19.2		14.5 J		12.4 J		56.1		78.9 J	
Metals	N	BERYLLIUM	7440-41-7	ug/L	< 0.20 U	< 15.0 U		0.53 J		< 15.0 U		6.6 J		9.7		< 15.0 U	
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L	< 5.0 U	86.4 J		6270		179		287		31600		< 100 U	
Metals	N	COPPER	7440-50-8	ug/L	< 3.0 U	100 J		183		134		109		399		< 100 U	
Metals	N	IRON	7439-89-6	ug/L	< 100 U	40700		118000		27500		42800		460000		< 10000 U	
Metals	N	LEAD	7439-92-1	ug/L	< 1.0 U	64.4		56.8		56.4		394		202		< 50.0 U	
Metals	N	MANGANESE	7439-96-5	ug/L	< 2.6 U	517		818		549		614		2910		136	
Metals	N	MERCURY	7439-97-6	ug/L	< 0.10 UJ	0.19 J		< 0.20 U		< 0.20 UJ		< 0.10 U		0.41		< 0.20 UJ	
Metals	N	NICKEL	7440-02-0	ug/L	26.3	75.0 J		1410		125		322		5250		92.2	
Metals	N	ZINC	7440-66-6	ug/L	38.0	4930 J		152		179		138000		821		90.5 J	
PCBs	N	AROCLOR-1016	12674-11-2	ug/L													
PCBs	N	AROCLOR-1221	11104-28-2	ug/L													
PCBs	N	AROCLOR-1232	11141-16-5	ug/L													
PCBs	N	AROCLOR-1242	53469-21-9	ug/L													
PCBs	N	AROCLOR-1248	12672-29-6	ug/L													
PCBs	N	AROCLOR-1254	11097-69-1	ug/L													
PCBs	N	AROCLOR-1260	11096-82-5	ug/L													
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L													
Pesticides	N	4,4-DDD	72-54-8	ug/L													
Pesticides	N	4,4-DDE	72-55-9	ug/L													
Pesticides	N	4,4-DDT	50-29-3	ug/L													
Pesticides	N	ALDRIN	309-00-2	ug/L													
Pesticides	N	ALPHA-BHC	319-84-6	ug/L													
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L													
Pesticides	N	BETA-BHC	319-85-7	ug/L													

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-05A	P09-05A	P09-05A	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-07B	P09-07B	P09-07B
					Sample Date	10/2/2013	9/14/2015	9/14/2015	10/3/2013	9/22/2014	9/9/2015	9/9/2015	9/13/2016	9/13/2016	10/3/2013	9/22/2014	9/9/2015
					Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-05A-100213-2	P09-05A-091415-1	P09-05A-091415-1-F	P09-06B-100313	P09-06B-092214-1	P09-06B-090915-1	P09-06B-090915-1-F	P09-06B-ME45-1	P09-06B-ME45-1-F	P09-07B-100313	P09-07B-092214-1	P09-07B-090915-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
Pesticides	N	DELTA-BHC	319-86-8	ug/L													
Pesticides	N	DIELDRIN	60-57-1	ug/L													
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L													
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L													
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L													
Pesticides	N	ENDRIN	72-20-8	ug/L													
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L													
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L													
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L													
Pesticides	N	HEPTACHLOR	76-44-8	ug/L													
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L													
Pesticides	N	LINDANE	58-89-9	ug/L													
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L													
Pesticides	N	TOXAPHENE	8001-35-2	ug/L													
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L													
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L									< 2.0 U				
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L									< 2.0 U				
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L									< 2.0 U				
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L									< 5.0 U				
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L									< 2.0 UJ				
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L									< 0.10 UJ				
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L									< 2.0 U				
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L									< 2.0 U				
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L									< 5.0 U				
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L									< 10 UJ				
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L									< 2.0 U				
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L									< 2.0 U				
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L									< 2.0 U				
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L									< 2.0 U				
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L									< 0.10 U				
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L									< 2.0 U				
SVOCs	N	2-NITROANILINE	88-74-4	ug/L									< 2.0 U				
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L									< 2.0 U				
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L													
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L									< 5.0 U				
SVOCs	N	3-NITROANILINE	99-09-2	ug/L									< 2.0 U				
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L									< 2.0 UJ				
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L									< 2.0 U				
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L									< 2.0 U				
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L									< 5.0 U				
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L									< 2.0 U				
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L									< 5.0 UJ				
SVOCs	N	4-NITROANILINE	100-01-6	ug/L									< 2.0 U				
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L									< 2.0 U				
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L									< 0.10 U				
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L									< 0.10 U				
SVOCs	N	ANTHRACENE	120-12-7	ug/L									< 0.10 U				
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L									< 0.10 U				
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L									< 0.10 UJ				
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L									< 0.10 U				
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L									< 0.10 U				
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L									< 0.10 U				
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L									< 5.0 U				
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L									< 2.0 U				

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SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-05A	P09-05A	P09-05A	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-07B	P09-07B	P09-07B
					Sample Date	10/2/2013	9/14/2015	9/14/2015	10/3/2013	9/22/2014	9/9/2015	9/9/2015	9/13/2016	9/13/2016	10/3/2013	9/22/2014	9/9/2015
					Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-05A-100213-2	P09-05A-091415-1	P09-05A-091415-1-F	P09-06B-100313	P09-06B-092214-1	P09-06B-090915-1	P09-06B-090915-1-F	P09-06B-ME45-1	P09-06B-ME45-1-F	P09-07B-100313	P09-07B-092214-1	P09-07B-090915-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L								0.44 J				
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L								< 2.0 U				
SVOCs	N	CARBAZOLE	86-74-8	ug/L								< 2.0 U				
SVOCs	N	CHRYSENE	218-01-9	ug/L								< 0.10 U				
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L								< 0.10 U				
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L								< 2.0 U				
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L								< 2.0 U				
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L								< 2.0 U				
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L								< 2.0 U				
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L								< 2.0 UJ				
SVOCs	N	FLUORANTHENE	206-44-0	ug/L								< 0.10 U				
SVOCs	N	FLUORENE	86-73-7	ug/L								< 0.10 U				
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L								< 0.10 U				
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L								< 2.0 UJ				
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L								< 2.0 U				
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L								< 2.0 U				
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L								< 0.10 UJ				
SVOCs	N	ISOPHORONE	78-59-1	ug/L								< 2.0 U				
SVOCs	N	NAPHTHALENE	91-20-3	ug/L								< 0.10 U				
SVOCs	N	NITROBENZENE	98-95-3	ug/L								< 5.0 U				
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L												
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L								< 2.0 U				
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L								< 5.0 U				
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L								< 1.0 UJ				
SVOCs	N	PHENANTHRENE	85-01-8	ug/L								0.12				
SVOCs	N	PHENOL	108-95-2	ug/L								< 2.0 U				
SVOCs	N	PYRENE	129-00-0	ug/L								0.13				
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 UJ		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 0.50 U	< 1.0 UJ		< 0.50 U	< 1.0 U	< 1.0 U		< 1.0 U		< 0.50 U	< 1.0 U	< 1.0 U
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L	< 0.50 U	< 1.0 U		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U
VOCs	N	2-BUTANONE	78-93-3	ug/L	< 2.5 UJ	5.7		< 2.5 UJ	< 2.5 U	< 2.5 UJ		< 5.0 UJ		15 J	< 2.5 U	< 2.5 UJ
VOCs	N	2-HEXANONE	591-78-6	ug/L	< 2.5 U	< 2.5 U		< 2.5 UJ	< 2.5 U	< 2.5 U		< 5.0 UJ		< 2.5 UJ	< 2.5 U	< 2.5 U
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L	< 2.5 U	< 2.5 U		< 2.5 U	< 1.0 U	< 2.5 U		< 2.0 U		< 2.5 U	< 1.0 U	< 2.5 U
VOCs	N	ACETONE	67-64-1	ug/L	< 2.5 UJ	< 2.5 U		< 2.5 UJ	23	< 2.5 UJ		< 5.0 UJ		35 J	< 2.5 U	< 2.5 UJ
VOCs	N	BENZENE	71-43-2	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	BROMOFORM	75-25-2	ug/L	< 0.50 U	< 1.0 U		< 0.50 U	< 1.0 U	< 1.0 UJ		< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 UJ
VOCs	N	BROMOMETHANE	74-83-9	ug/L	< 1.0 U	< 1.0 U		< 1.0 U	< 1.0 U	< 1.0 UJ		< 2.0 UJ		< 1.0 U	< 1.0 U	< 1.0 UJ
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L	< 0.50 U	< 0.50 U		0.62 J	< 0.50 U	< 0.50 U		< 1.0 U		1.4	< 0.50 U	< 0.50 U
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L	< 0.50 U	< 1.0 U		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 UJ		< 0.50 U	< 1.0 U	< 1.0 U
VOCs	N	CHLOROBENZENE	108-90-7	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	CHLOROETHANE	75-00-3	ug/L	< 1.0 U	< 0.50 U		< 1.0 U	< 0.50 U	< 0.50 UJ		< 1.0 U		< 1.0 U	< 0.50 U	< 0.50 UJ
VOCs	N	CHLOROFORM	67-66-3	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	CHLOROMETHANE	74-87-3	ug/L	< 1.0 U	< 0.50 UJ		< 1.0 U	< 0.50 U	< 0.50 UJ		< 1.0 U		< 1.0 U	< 0.50 U	< 0.50 UJ
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L	< 0.50 U	< 1.0 U		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U
VOCs	N	ETHYLBENZENE	100-41-4	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L	< 1.0 U			< 1.0 U						< 1.0 U		
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L	< 2.5 U	< 0.50 U		< 2.5 U	< 0.50 U	< 0.50 U		< 1.0 U		< 2.5 U	< 0.50 U	< 0.50 U

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-05A	P09-05A	P09-05A	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-06B	P09-07B	P09-07B	P09-07B
				Sample Date	10/2/2013	9/14/2015	9/14/2015	10/3/2013	9/22/2014	9/9/2015	9/9/2015	9/13/2016	9/13/2016	10/3/2013	9/22/2014	9/9/2015
				Sample Type Code	FD	N	N	N	N	N	N	N	N	N	N	N
				Sample ID	P09-05A-100213-2	P09-05A-091415-1	P09-05A-091415-1-F	P09-06B-100313	P09-06B-092214-1	P09-06B-090915-1	P09-06B-090915-1-F	P09-06B-ME45-1	P09-06B-ME45-1-F	P09-07B-100313	P09-07B-092214-1	P09-07B-090915-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**												
VOCs	N	O-XYLENE	95-47-6	ug/L	< 0.50 U			< 0.50 U						< 0.50 U		
VOCs	N	STYRENE	100-42-5	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L	< 0.50 U	< 1.0 U		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U
VOCs	N	TOLUENE	108-88-3	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	1.2	< 0.50 U		< 1.0 U		< 0.50 U	2.2	< 0.50 U
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 0.50 U	< 1.0 U		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 UJ		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 UJ
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L	< 0.50 U	< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U	< 0.50 U		< 1.0 U	< 0.50 U	< 0.50 U		< 1.0 U		< 1.0 U	< 0.50 U	< 0.50 U
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L	< 1.5 U	< 1.0 U		< 1.5 U	< 1.0 U	< 1.0 U		< 1.0 U		< 1.5 U	1.8	< 1.0 U

Notes:
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
F = Filtered sample.
FD = Field duplicate.
FF = Field filtered sample.
J = Estimated value.
J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
N = Normal sample.
PCBs = Polychlorinated biphenyls.
SVOC = Semivolatile organic compound.
U = Not detected.
ug/L - microgram per liter.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.
(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-07B	P09-07B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-09	P09-09	P09-09
					Sample Date	9/9/2015	9/13/2016	10/3/2013	10/15/2013	9/22/2014	9/8/2015	9/8/2015	9/13/2016	9/15/2016	10/1/2013	10/1/2013	9/9/2015
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-07B-090915-1-F	P09-07B-ME45-1	P09-08B-100313	P09-08B-101513	P09-08B-092214-1	P09-08B-090815-1	P09-08B-090815-1-F	P09-08B-ME45-1	P09-08B-ME45-1-F	P09-09-100113	P09-09-100213	P09-09-090915-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
Metals	F	ALUMINUM	7429-90-5	ug/L										5270			
Metals	F	ANTIMONY	7440-36-0	ug/L										9.4 J			
Metals	F	ARSENIC	7440-38-2	ug/L										8.6 J			
Metals	F	BERYLLIUM	7440-41-7	ug/L										< 7.5 U			
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L										305			
Metals	F	COPPER	7440-50-8	ug/L										< 50.0 U			
Metals	F	IRON	7439-89-6	ug/L										30300			
Metals	F	LEAD	7439-92-1	ug/L										27.3			
Metals	F	MANGANESE	7439-96-5	ug/L										1130			
Metals	F	MERCURY	7439-97-6	ug/L										< 0.10 U			
Metals	F	NICKEL	7440-02-0	ug/L										342			
Metals	F	ZINC	7440-66-6	ug/L										429			
Metals	FF	ALUMINUM	7429-90-5	ug/L	< 1000 U							8180				168 J	
Metals	FF	ANTIMONY	7440-36-0	ug/L	< 40.0 U							< 40.0 U				0.42 J	
Metals	FF	ARSENIC	7440-38-2	ug/L	37.6 J							< 40.0 U				7.1	
Metals	FF	BERYLLIUM	7440-41-7	ug/L	< 15.0 U							< 15.0 U				< 0.20 U	
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L	< 30.0 U							400				12.0	
Metals	FF	COPPER	7440-50-8	ug/L	< 50.0 U							< 100 U				< 3.0 U	
Metals	FF	IRON	7439-89-6	ug/L	< 2500 U							21400				19400	
Metals	FF	LEAD	7439-92-1	ug/L	< 15.0 U							< 50.0 U				< 1.0 U	
Metals	FF	MANGANESE	7439-96-5	ug/L	70.9 J							2060				241	
Metals	FF	MERCURY	7439-97-6	ug/L	< 0.050 UJ							0.079 J-				< 0.10 U	
Metals	FF	NICKEL	7440-02-0	ug/L	< 30.0 U							436				75.9	
Metals	FF	ZINC	7440-66-6	ug/L	< 75.0 U							147				7.6 J	
Metals	N	ALUMINUM	7429-90-5	ug/L		130000		2750 J		7460		129000				18400	45600
Metals	N	ANTIMONY	7440-36-0	ug/L		10.7 J		< 1.0 U		< 40.0 U		< 20.0 U				3.2	< 40.0 U
Metals	N	ARSENIC	7440-38-2	ug/L		113		13.6		81.1 J		10.0 J				45.6	318
Metals	N	BERYLLIUM	7440-41-7	ug/L		20.3 J		0.26 J		< 15.0 U		28.9				1.6	11.3 J
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L		5570		2370		571		2490				4970	526
Metals	N	COPPER	7440-50-8	ug/L		566		25.3		< 100 U		25.1 J				558	216
Metals	N	IRON	7439-89-6	ug/L		271000		349000		20700		243000				197000	2200000
Metals	N	LEAD	7439-92-1	ug/L		441		7.1		< 50.0 U		321				91.0	273
Metals	N	MANGANESE	7439-96-5	ug/L		4700		2720		2130		3060				646	11700
Metals	N	MERCURY	7439-97-6	ug/L		0.57		0.04 J		0.062 J-		< 0.10 U				0.24	5.0 J-
Metals	N	NICKEL	7440-02-0	ug/L		3410		2740		490		1830				400	448
Metals	N	ZINC	7440-66-6	ug/L		42700		42.1		179		39800				265	2250
PCBs	N	AROCLOR-1016	12674-11-2	ug/L											< 0.27 U		
PCBs	N	AROCLOR-1221	11104-28-2	ug/L											< 0.27 U		
PCBs	N	AROCLOR-1232	11141-16-5	ug/L											< 0.27 U		
PCBs	N	AROCLOR-1242	53469-21-9	ug/L											< 0.27 U		
PCBs	N	AROCLOR-1248	12672-29-6	ug/L											< 0.27 U		
PCBs	N	AROCLOR-1254	11097-69-1	ug/L											< 0.27 U		
PCBs	N	AROCLOR-1260	11096-82-5	ug/L											< 0.27 UJ		
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L											< 0.27 U		
Pesticides	N	4,4-DDD	72-54-8	ug/L													
Pesticides	N	4,4-DDE	72-55-9	ug/L													
Pesticides	N	4,4-DDT	50-29-3	ug/L													
Pesticides	N	ALDRIN	309-00-2	ug/L													
Pesticides	N	ALPHA-BHC	319-84-6	ug/L													
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L													
Pesticides	N	BETA-BHC	319-85-7	ug/L													

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-07B	P09-07B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-09	P09-09	P09-09
					Sample Date	9/9/2015	9/13/2016	10/3/2013	10/15/2013	9/22/2014	9/8/2015	9/8/2015	9/13/2016	9/15/2016	10/1/2013	10/1/2013	9/9/2015
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-07B-090915-1-F	P09-07B-ME45-1	P09-08B-100313	P09-08B-101513	P09-08B-092214-1	P09-08B-090815-1	P09-08B-090815-1-F	P09-08B-ME45-1	P09-08B-ME45-1-F	P09-09-100113	P09-09-100213	P09-09-090915-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
Pesticides	N	DELTA-BHC	319-86-8	ug/L													
Pesticides	N	DIELDRIN	60-57-1	ug/L													
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L													
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L													
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L													
Pesticides	N	ENDRIN	72-20-8	ug/L													
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L													
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L													
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L													
Pesticides	N	HEPTACHLOR	76-44-8	ug/L													
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L													
Pesticides	N	LINDANE	58-89-9	ug/L													
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L													
Pesticides	N	TOXAPHENE	8001-35-2	ug/L													
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L													
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L									< 2.0 U				
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L									< 2.0 U				
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L									< 2.0 U				
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L									< 5.0 U				
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L									< 2.0 UJ				
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L									< 0.10 UJ				
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L									< 2.0 U				
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L									< 2.0 U				
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L									< 5.0 U				
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L									< 10 UJ				
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L									< 2.0 U				
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L									< 2.0 U				
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L									< 2.0 U				
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L									< 2.0 U				
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L									< 0.10 U				
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L									< 2.0 U				
SVOCs	N	2-NITROANILINE	88-74-4	ug/L									< 2.0 U				
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L									< 2.0 U				
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L													
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L									< 5.0 U				
SVOCs	N	3-NITROANILINE	99-09-2	ug/L									< 2.0 U				
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L									< 2.0 UJ				
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L									< 2.0 U				
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L									< 2.0 U				
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L									< 5.0 U				
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L									< 2.0 U				
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L									< 5.0 UJ				
SVOCs	N	4-NITROANILINE	100-01-6	ug/L									< 2.0 U				
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L									< 2.0 U				
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L									< 0.10 U				
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L									< 0.10 U				
SVOCs	N	ANTHRACENE	120-12-7	ug/L									< 0.10 U				
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L									< 0.10 U				
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L									< 0.10 UJ				
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L									< 0.10 U				
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L									< 0.10 U				
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L									< 0.10 U				
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L									< 5.0 U				
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L									< 2.0 U				

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-07B	P09-07B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-09	P09-09	P09-09
					Sample Date	9/9/2015	9/13/2016	10/3/2013	10/15/2013	9/22/2014	9/8/2015	9/8/2015	9/13/2016	9/15/2016	10/1/2013	10/1/2013	9/9/2015
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-07B-090915-1-F	P09-07B-ME45-1	P09-08B-100313	P09-08B-101513	P09-08B-092214-1	P09-08B-090815-1	P09-08B-090815-1-F	P09-08B-ME45-1	P09-08B-ME45-1-F	P09-09-100113	P09-09-100213	P09-09-090915-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L								0.45 J				
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L								< 2.0 U				
SVOCs	N	CARBAZOLE	86-74-8	ug/L								< 2.0 U				
SVOCs	N	CHRYSENE	218-01-9	ug/L								< 0.10 U				
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L								< 0.10 U				
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L								< 2.0 U				
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L								< 2.0 U				
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L								< 2.0 U				
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L								< 2.0 U				
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L								< 2.0 UJ				
SVOCs	N	FLUORANTHENE	206-44-0	ug/L								< 0.10 U				
SVOCs	N	FLUORENE	86-73-7	ug/L								0.11				
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L								< 0.10 U				
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L								< 2.0 UJ				
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L								< 2.0 UJ				
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L								< 2.0 U				
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L								< 0.10 UJ				
SVOCs	N	ISOPHORONE	78-59-1	ug/L								< 2.0 U				
SVOCs	N	NAPHTHALENE	91-20-3	ug/L								< 0.10 U				
SVOCs	N	NITROBENZENE	98-95-3	ug/L								< 5.0 U				
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L												
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L								< 2.0 U				
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L								< 5.0 U				
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L								< 1.0 UJ				
SVOCs	N	PHENANTHRENE	85-01-8	ug/L								0.10				
SVOCs	N	PHENOL	108-95-2	ug/L								< 2.0 U				
SVOCs	N	PYRENE	129-00-0	ug/L								< 0.10 U				
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L		< 1.0 UJ	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 UJ			< 0.50 U	
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L		< 1.0 U	< 0.50 U		< 1.0 U	< 1.0 U		< 1.0 U			< 0.50 U	
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L		< 2.0 U	< 0.50 U		< 1.0 U	< 1.0 U		< 2.0 U			< 0.50 U	
VOCs	N	2-BUTANONE	78-93-3	ug/L		< 5.0 UJ	43 J		< 2.5 U	< 2.5 UJ		< 5.0 UJ			< 2.5 UJ	
VOCs	N	2-HEXANONE	591-78-6	ug/L		< 5.0 UJ	< 2.5 UJ		< 2.5 U	< 2.5 U		< 5.0 UJ			< 2.5 U	
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L		< 2.0 U	< 2.5 U		< 1.0 U	< 2.5 U		< 2.0 U			< 2.5 U	
VOCs	N	ACETONE	67-64-1	ug/L		< 5.0 UJ	200 J		50	< 2.5 UJ		< 5.0 UJ			14	
VOCs	N	BENZENE	71-43-2	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	BROMOFORM	75-25-2	ug/L		< 2.0 U	< 0.50 U		< 1.0 U	< 1.0 UJ		< 2.0 U			< 0.50 U	
VOCs	N	BROMOMETHANE	74-83-9	ug/L		< 2.0 UJ	< 1.0 U		< 1.0 U	< 1.0 UJ		< 2.0 UJ			< 1.0 U	
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L		< 1.0 U	< 0.50 U		1.0	< 0.50 U		< 1.0 U			0.92 J	
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L		< 2.0 UJ	< 0.50 U		< 1.0 U	< 1.0 U		< 2.0 UJ			< 0.50 U	
VOCs	N	CHLOROBENZENE	108-90-7	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	CHLOROETHANE	75-00-3	ug/L		< 1.0 U	< 1.0 U		< 0.50 U	< 0.50 UJ		< 1.0 U			< 1.0 UJ	
VOCs	N	CHLOROFORM	67-66-3	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	CHLOROMETHANE	74-87-3	ug/L		< 1.0 U	< 1.0 U		< 0.50 U	< 0.50 UJ		< 1.0 U			< 1.0 U	
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L		< 2.0 U	< 0.50 U		< 1.0 U	< 1.0 U		< 2.0 U			< 0.50 U	
VOCs	N	ETHYLBENZENE	100-41-4	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L			< 1.0 U								< 1.0 U	
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L		< 1.0 U	< 2.5 U		< 0.50 U	< 0.50 U		< 1.0 U			< 2.5 U	

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-07B	P09-07B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-08B	P09-09	P09-09	P09-09
					Sample Date	9/9/2015	9/13/2016	10/3/2013	10/15/2013	9/22/2014	9/8/2015	9/8/2015	9/13/2016	9/15/2016	10/1/2013	10/1/2013	9/9/2015
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-07B-090915-1-F	P09-07B-ME45-1	P09-08B-100313	P09-08B-101513	P09-08B-092214-1	P09-08B-090815-1	P09-08B-090815-1-F	P09-08B-ME45-1	P09-08B-ME45-1-F	P09-09-100113	P09-09-100213	P09-09-090915-1
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
VOCs	N	O-XYLENE	95-47-6	ug/L			< 0.50 U								< 0.50 U	
VOCs	N	STYRENE	100-42-5	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L		< 2.0 U	< 0.50 U		< 1.0 U	< 1.0 U		< 2.0 U			< 0.50 U	
VOCs	N	TOLUENE	108-88-3	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L		< 2.0 U	< 0.50 U		< 1.0 U	< 1.0 U		< 2.0 U			< 0.50 U	
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 UJ		< 1.0 U			< 0.50 U	
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L		< 1.0 U	< 0.50 U		< 0.50 U	< 0.50 U		< 1.0 U			< 0.50 U	
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L		< 1.0 U	< 1.0 U		< 0.50 U	< 0.50 U		< 1.0 U			< 1.0 U	
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L		< 1.0 U	< 1.5 U		< 1.0 U	< 1.0 U		< 1.0 U			< 1.5 U	

Notes:
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
F = Filtered sample.
FD = Field duplicate.
FF = Field filtered sample.
J = Estimated value.
J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
N = Normal sample.
PCBs = Polychlorinated biphenyls.
SVOC = Semivolatile organic compound.
U = Not detected.
ug/L - microgram per liter.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.
(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-09	P09-09	P09-09	P09-10	P09-10	P09-10
				Sample Date	9/9/2015	9/12/2016	9/12/2016	10/1/2013	9/8/2015	9/8/2015
				Sample Type Code	N	N	N	N	N	N
				Sample ID	P09-09-090915-1-F	P09-09-ME45-1	P09-09-ME45-1-F	P09-10-100113	P09-10-090815-1	P09-10-090815-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**						
Metals	F	ALUMINUM	7429-90-5	ug/L			3690			
Metals	F	ANTIMONY	7440-36-0	ug/L			16.4 J			
Metals	F	ARSENIC	7440-38-2	ug/L			< 40.0 U			
Metals	F	BERYLLIUM	7440-41-7	ug/L			< 15.0 U			
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L			19.9 J			
Metals	F	COPPER	7440-50-8	ug/L			< 50.0 U			
Metals	F	IRON	7439-89-6	ug/L			2800 J			
Metals	F	LEAD	7439-92-1	ug/L			< 15.0 U			
Metals	F	MANGANESE	7439-96-5	ug/L			130			
Metals	F	MERCURY	7439-97-6	ug/L			< 0.10 U			
Metals	F	NICKEL	7440-02-0	ug/L			26.5 J			
Metals	F	ZINC	7440-66-6	ug/L			154			
Metals	FF	ALUMINUM	7429-90-5	ug/L	1840			219 J		144
Metals	FF	ANTIMONY	7440-36-0	ug/L	< 40.0 U			0.12 J		< 0.80 U
Metals	FF	ARSENIC	7440-38-2	ug/L	23.9 J			7.8		3.1
Metals	FF	BERYLLIUM	7440-41-7	ug/L	< 15.0 U			< 0.20 U		< 0.30 U
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L	< 100 U			< 5.0 U		9.4
Metals	FF	COPPER	7440-50-8	ug/L	< 100 U			< 3.0 U		2.0
Metals	FF	IRON	7439-89-6	ug/L	75100			19000		23500
Metals	FF	LEAD	7439-92-1	ug/L	< 50.0 U			< 1.0 U		1.0
Metals	FF	MANGANESE	7439-96-5	ug/L	1390			144		200
Metals	FF	MERCURY	7439-97-6	ug/L	< 0.050 UJ			< 0.10 U		< 0.050 UJ
Metals	FF	NICKEL	7440-02-0	ug/L	< 50 U			27.6		6.5
Metals	FF	ZINC	7440-66-6	ug/L	< 75.0 U			7.2 J		8.3
Metals	N	ALUMINUM	7429-90-5	ug/L		23300		805	98300	
Metals	N	ANTIMONY	7440-36-0	ug/L		18.1 J		0.22 J	< 20.0 U	
Metals	N	ARSENIC	7440-38-2	ug/L		19.4 J		5.2	226	
Metals	N	BERYLLIUM	7440-41-7	ug/L		4.7 J		0.06 J	23.8 J	
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L		175		136	3040	
Metals	N	COPPER	7440-50-8	ug/L		393		< 5.3 U	175	
Metals	N	IRON	7439-89-6	ug/L		321000		26500	1550000	
Metals	N	LEAD	7439-92-1	ug/L		441		2.7	188	
Metals	N	MANGANESE	7439-96-5	ug/L		885		144	2970	
Metals	N	MERCURY	7439-97-6	ug/L		R		< 0.10 U	9.3 J-	
Metals	N	NICKEL	7440-02-0	ug/L		104		33.8	525	
Metals	N	ZINC	7440-66-6	ug/L		1550		9.9 J	2820	
PCBs	N	AROCLOR-1016	12674-11-2	ug/L		< 0.20 U		< 0.24 U		
PCBs	N	AROCLOR-1221	11104-28-2	ug/L		< 0.10 U		< 0.24 U		
PCBs	N	AROCLOR-1232	11141-16-5	ug/L		< 0.20 U		< 0.24 U		
PCBs	N	AROCLOR-1242	53469-21-9	ug/L		< 0.10 U		< 0.24 U		
PCBs	N	AROCLOR-1248	12672-29-6	ug/L		< 0.10 U		< 0.24 U		
PCBs	N	AROCLOR-1254	11097-69-1	ug/L		< 0.20 U		< 0.24 U		
PCBs	N	AROCLOR-1260	11096-82-5	ug/L		< 0.20 U		< 0.24 UJ		
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L		< 0.2 U		< 0.24 U		
Pesticides	N	4,4-DDD	72-54-8	ug/L		< 0.0063 U				
Pesticides	N	4,4-DDE	72-55-9	ug/L		< 0.0063 U				
Pesticides	N	4,4-DDT	50-29-3	ug/L		< 0.0063 U				
Pesticides	N	ALDRIN	309-00-2	ug/L		< 0.0031 U				
Pesticides	N	ALPHA-BHC	319-84-6	ug/L		< 0.0031 U				
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L		< 0.0031 U				
Pesticides	N	BETA-BHC	319-85-7	ug/L		< 0.0031 U				

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ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-09	P09-09	P09-09	P09-10	P09-10	P09-10
					Sample Date	9/9/2015	9/12/2016	9/12/2016	10/1/2013	9/8/2015	9/8/2015
					Sample Type Code	N	N	N	N	N	N
					Sample ID	P09-09-090915-1-F	P09-09-ME45-1	P09-09-ME45-1-F	P09-10-100113	P09-10-090815-1	P09-10-090815-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**							
Pesticides	N	DELTA-BHC	319-86-8	ug/L		< 0.0031 U					
Pesticides	N	DIELDRIN	60-57-1	ug/L		< 0.0063 U					
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L		< 0.0031 U					
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L		< 0.0063 U					
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L		< 0.0063 U					
Pesticides	N	ENDRIN	72-20-8	ug/L		< 0.0063 U					
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L		< 0.031 U					
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L		< 0.0063 U					
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L							
Pesticides	N	HEPTACHLOR	76-44-8	ug/L		< 0.0031 U					
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L		< 0.0031 U					
Pesticides	N	LINDANE	58-89-9	ug/L		< 0.0031 U					
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L		< 0.063 U					
Pesticides	N	TOXAPHENE	8001-35-2	ug/L		< 0.25 U					
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L		< 0.0031 U					
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L		< 2.0 U					
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L		< 2.0 U					
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L		< 2.0 U					
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L		< 5.0 U					
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L		< 2.0 UJ					
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L		< 0.10 UJ					
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L		< 2.0 U					
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L		< 2.0 U					
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L		< 5.0 U					
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L		< 10 UJ					
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L		< 2.0 U					
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L		< 2.0 U					
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L		< 2.0 U					
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L		< 2.0 U					
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L		< 0.10 U					
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L		< 2.0 U					
SVOCs	N	2-NITROANILINE	88-74-4	ug/L		< 2.0 U					
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L		< 2.0 U					
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L							
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L		< 5.0 U					
SVOCs	N	3-NITROANILINE	99-09-2	ug/L		< 2.0 U					
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L		< 2.0 UJ					
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L		< 2.0 U					
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L		< 2.0 U					
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L		< 5.0 U					
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L		< 2.0 U					
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L		< 5.0 UJ					
SVOCs	N	4-NITROANILINE	100-01-6	ug/L		< 2.0 U					
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L		< 2.0 U					
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L		< 0.10 U					
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L		< 0.10 U					
SVOCs	N	ANTHRACENE	120-12-7	ug/L		< 0.10 U					
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L		< 0.10 U					
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L		< 0.10 UJ					
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L		< 0.10 U					
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L		< 0.10 U					
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L		< 0.10 U					
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L		< 5.0 U					
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L		< 2.0 U					

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-09	P09-09	P09-09	P09-10	P09-10	P09-10
				Sample Date	9/9/2015	9/12/2016	9/12/2016	10/1/2013	9/8/2015	9/8/2015
				Sample Type Code	N	N	N	N	N	N
				Sample ID	P09-09-090915-1-F	P09-09-ME45-1	P09-09-ME45-1-F	P09-10-100113	P09-10-090815-1	P09-10-090815-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**						
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L		0.34 J				
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L		< 2.0 U				
SVOCs	N	CARBAZOLE	86-74-8	ug/L		< 2.0 U				
SVOCs	N	CHRYSENE	218-01-9	ug/L		< 0.10 U				
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L		< 0.10 U				
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L		< 2.0 U				
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L		< 2.0 U				
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L		< 2.0 U				
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L		< 2.0 U				
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L		< 2.0 UJ				
SVOCs	N	FLUORANTHENE	206-44-0	ug/L		< 0.10 U				
SVOCs	N	FLUORENE	86-73-7	ug/L		< 0.10 U				
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L		< 0.10 U				
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L		< 2.0 UJ				
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L		< 2.0 U				
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L		< 2.0 U				
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L		< 0.10 UJ				
SVOCs	N	ISOPHORONE	78-59-1	ug/L		< 2.0 U				
SVOCs	N	NAPHTHALENE	91-20-3	ug/L		< 0.10 U				
SVOCs	N	NITROBENZENE	98-95-3	ug/L		< 5.0 U				
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L						
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L		< 2.0 U				
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L		< 5.0 U				
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L		< 1.0 UJ				
SVOCs	N	PHENANTHRENE	85-01-8	ug/L		< 0.10 U				
SVOCs	N	PHENOL	108-95-2	ug/L		< 2.0 U				
SVOCs	N	PYRENE	129-00-0	ug/L		< 0.10 U				
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L		< 1.0 UJ		< 0.50 U		
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L		< 2.0 U		< 0.50 U		
VOCs	N	2-BUTANONE	78-93-3	ug/L		< 5.0 UJ		< 2.5 UJ		
VOCs	N	2-HEXANONE	591-78-6	ug/L		< 5.0 UJ		< 2.5 U		
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L		< 2.0 U		< 2.5 U		
VOCs	N	ACETONE	67-64-1	ug/L		< 5.0 UJ		3.9 J		
VOCs	N	BENZENE	71-43-2	ug/L		< 1.0 U		1.3		
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	BROMOFORM	75-25-2	ug/L		< 2.0 U		< 0.50 U		
VOCs	N	BROMOMETHANE	74-83-9	ug/L		< 2.0 UJ		< 1.0 U		
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L		2.5 J		0.40 J		
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L		< 2.0 UJ		< 0.50 U		
VOCs	N	CHLOROBENZENE	108-90-7	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	CHLOROETHANE	75-00-3	ug/L		< 1.0 U		< 1.0 UJ		
VOCs	N	CHLOROFORM	67-66-3	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	CHLOROMETHANE	74-87-3	ug/L		< 1.0 U		< 1.0 U		
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L		< 2.0 U		< 0.50 U		
VOCs	N	ETHYLBENZENE	100-41-4	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L				< 1.0 U		
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L		< 1.0 U		< 2.5 U		

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-09	P09-09	P09-09	P09-10	P09-10	P09-10
				Sample Date	9/9/2015	9/12/2016	9/12/2016	10/1/2013	9/8/2015	9/8/2015
				Sample Type Code	N	N	N	N	N	N
				Sample ID	P09-09-090915-1-F	P09-09-ME45-1	P09-09-ME45-1-F	P09-10-100113	P09-10-090815-1	P09-10-090815-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**						
VOCs	N	O-XYLENE	95-47-6	ug/L				< 0.50 U		
VOCs	N	STYRENE	100-42-5	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L		< 2.0 U		< 0.50 U		
VOCs	N	TOLUENE	108-88-3	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L		< 2.0 U		< 0.50 U		
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L		< 1.0 U		< 0.50 U		
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L		< 1.0 U		1.1 J		
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L		< 1.0 U		< 1.5 U		

Notes:
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
F = Filtered sample.
FD = Field duplicate.
FF = Field filtered sample.
J = Estimated value.
J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
N = Normal sample.
PCBs = Polychlorinated biphenyls.
SVOC = Semivolatile organic compound.
U = Not detected.
ug/L - microgram per liter.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.
(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-10	P09-10	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-12B	P09-12B	P09-12B	P09-12B
					Sample Date	9/12/2016	9/12/2016	10/15/2013	9/24/2014	9/9/2015	9/9/2015	9/16/2016	9/16/2016	10/14/2013	9/22/2014	9/8/2015	9/8/2015
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-10-ME45-1	P09-10-ME45-1-F	P09-11B-101513	P09-11B-092414-1	P09-11B-090915-1	P09-11B-090915-1-F	P09-11B-ME45-1	P09-11B-ME45-1-F	P09-12B-101413	P09-12B-092214-1	P09-12B-090815-1	P09-12B-090815-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
Metals	F	ALUMINUM	7429-90-5	ug/L		1800							3680				
Metals	F	ANTIMONY	7440-36-0	ug/L		9.0 J							18.4 J				
Metals	F	ARSENIC	7440-38-2	ug/L		< 20.0 U							< 40.0 U				
Metals	F	BERYLLIUM	7440-41-7	ug/L		< 7.5 U							< 15.0 U				
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L		19.8 J							52.8 J				
Metals	F	COPPER	7440-50-8	ug/L		< 25.0 U							< 50.0 U				
Metals	F	IRON	7439-89-6	ug/L		13400							1730 J				
Metals	F	LEAD	7439-92-1	ug/L		< 7.5 U							< 15.0 U				
Metals	F	MANGANESE	7439-96-5	ug/L		554							752				
Metals	F	MERCURY	7439-97-6	ug/L		R							< 0.10 U				
Metals	F	NICKEL	7440-02-0	ug/L		28.0							55.8				
Metals	F	ZINC	7440-66-6	ug/L		77.1							156				
Metals	FF	ALUMINUM	7429-90-5	ug/L			< 1000 U				< 500 U						516
Metals	FF	ANTIMONY	7440-36-0	ug/L			< 1.0 U				< 40.0 U						< 16.0 U
Metals	FF	ARSENIC	7440-38-2	ug/L			10.2				< 40.0 U						< 16.0 U
Metals	FF	BERYLLIUM	7440-41-7	ug/L			< 0.20 U				< 15.0 U						< 6.0 U
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L			< 5.0 U				< 30.0 U						< 40.0 U
Metals	FF	COPPER	7440-50-8	ug/L			< 3.0 U				88.6 J						< 20.0 U
Metals	FF	IRON	7439-89-6	ug/L			1940				< 2500 U						15400
Metals	FF	LEAD	7439-92-1	ug/L			< 1.0 U				< 15.0 U						< 6.0 U
Metals	FF	MANGANESE	7439-96-5	ug/L			184				< 75.0 U						17300
Metals	FF	MERCURY	7439-97-6	ug/L			< 0.10 U				< 0.050 UJ						0.073 J-
Metals	FF	NICKEL	7440-02-0	ug/L			18.4				41.9 J						12500
Metals	FF	ZINC	7440-66-6	ug/L			14.1				< 75.0 U						33.9 J
Metals	N	ALUMINUM	7429-90-5	ug/L	2070		196 J		< 500 U			3630		622000		13500	
Metals	N	ANTIMONY	7440-36-0	ug/L	8.7 J		< 1.0 U		< 40.0 U			20.2 J		9.2		< 20.0 U	
Metals	N	ARSENIC	7440-38-2	ug/L	< 20.0 U		15.0		< 40.0 U			< 40.0 U		432		115	
Metals	N	BERYLLIUM	7440-41-7	ug/L	< 7.5 U		< 0.20 U		< 15.0 U			< 15.0 U		56.4		< 7.5 U	
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L	51.3		< 5.0 U		378			36.2 J		3810		208	
Metals	N	COPPER	7440-50-8	ug/L	6.1 J		< 3.0 U		< 50.0 U			< 50.0 U		2150		59.4	
Metals	N	IRON	7439-89-6	ug/L	22300		1970		< 10000 U			1800 J		1380000		36300	
Metals	N	LEAD	7439-92-1	ug/L	3.7 J		< 1.0 U		< 15.0 U			< 15.0 U		2280		46.2	
Metals	N	MANGANESE	7439-96-5	ug/L	607		169		88.2 J			859		10700		6830	
Metals	N	MERCURY	7439-97-6	ug/L	R		< 0.10 U		< 0.050 UJ			< 0.10 U		11.6		0.50 J-	
Metals	N	NICKEL	7440-02-0	ug/L	28.6		16.3		66.7			65.8		3080		4220	
Metals	N	ZINC	7440-66-6	ug/L	94.0		21.8		< 75.0 U			160		7260		397	
PCBs	N	AROCLOR-1016	12674-11-2	ug/L	< 0.20 U		< 0.24 U										
PCBs	N	AROCLOR-1221	11104-28-2	ug/L	< 0.10 U		< 0.24 U										
PCBs	N	AROCLOR-1232	11141-16-5	ug/L	< 0.20 U		< 0.24 U										
PCBs	N	AROCLOR-1242	53469-21-9	ug/L	< 0.10 U		< 0.24 U										
PCBs	N	AROCLOR-1248	12672-29-6	ug/L	< 0.10 U		< 0.24 U										
PCBs	N	AROCLOR-1254	11097-69-1	ug/L	< 0.20 U		< 0.24 U										
PCBs	N	AROCLOR-1260	11096-82-5	ug/L	< 0.20 U		< 0.24 U										
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L	< 0.2 U		< 0.24 U										
Pesticides	N	4,4-DDD	72-54-8	ug/L	< 0.0063 U		< 0.047 U										
Pesticides	N	4,4-DDE	72-55-9	ug/L	< 0.0063 U		< 0.047 U										
Pesticides	N	4,4-DDT	50-29-3	ug/L	< 0.0063 U		< 0.047 UJ										
Pesticides	N	ALDRIN	309-00-2	ug/L	< 0.0031 U		< 0.024 U										
Pesticides	N	ALPHA-BHC	319-84-6	ug/L	< 0.0031 U		< 0.024 UJ										
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L	< 0.0031 U		< 0.024 UJ										
Pesticides	N	BETA-BHC	319-85-7	ug/L	< 0.0031 U		< 0.024 UJ										

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-10	P09-10	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-12B	P09-12B	P09-12B	P09-12B
					Sample Date	9/12/2016	9/12/2016	10/15/2013	9/24/2014	9/9/2015	9/9/2015	9/16/2016	9/16/2016	10/14/2013	9/22/2014	9/8/2015	9/8/2015
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-10-ME45-1	P09-10-ME45-1-F	P09-11B-101513	P09-11B-092414-1	P09-11B-090915-1	P09-11B-090915-1-F	P09-11B-ME45-1	P09-11B-ME45-1-F	P09-12B-101413	P09-12B-092214-1	P09-12B-090815-1	P09-12B-090815-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
Pesticides	N	DELTA-BHC	319-86-8	ug/L	< 0.0031 U		< 0.024 UJ										
Pesticides	N	DIELDRIN	60-57-1	ug/L	< 0.0063 U		< 0.047 UJ										
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L	< 0.0031 U		< 0.024 UJ										
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L	< 0.0063 U		< 0.047 U										
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L	< 0.0063 U		< 0.047 UJ										
Pesticides	N	ENDRIN	72-20-8	ug/L	< 0.0063 U		< 0.047 UJ										
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L	< 0.031 U		< 0.047 UJ										
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L	< 0.0063 U		< 0.047 UJ										
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L			< 0.024 UJ										
Pesticides	N	HEPTACHLOR	76-44-8	ug/L	< 0.0031 U		< 0.024 UJ										
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L	< 0.0031 U		< 0.024 UJ										
Pesticides	N	LINDANE	58-89-9	ug/L	< 0.0031 U		< 0.024 U										
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L	< 0.063 U		< 0.24 UJ										
Pesticides	N	TOXAPHENE	8001-35-2	ug/L	< 0.25 U		< 0.47 U										
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L	< 0.0031 U												
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L	< 5.0 U		< 7.1 U					< 5.0 U					
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L	< 2.0 UJ							< 2.0 UJ					
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L	< 0.10 UJ		0.085 J					< 0.10 UJ					
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L	< 5.0 U		< 7.1 U					< 5.0 U					
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L	< 10 UJ		< 18 U					< 10 UJ					
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L	< 2.0 U		< 7.1 U					< 2.0 UJ					
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L	< 2.0 U		< 7.1 UJ					< 2.0 U					
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L	< 0.10 U		< 0.094 U					< 0.10 U					
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					
SVOCs	N	2-NITROANILINE	88-74-4	ug/L	< 2.0 U		< 18 U					< 2.0 U					
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L			< 7.1 UJ										
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L	< 5.0 U		< 7.1 U					< 5.0 U					
SVOCs	N	3-NITROANILINE	99-09-2	ug/L	< 2.0 U		< 18 U					< 2.0 U					
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L	< 2.0 UJ		< 18 U					< 2.0 UJ					
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L	< 2.0 U		< 7.1 UJ					< 2.0 U					
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L	< 5.0 U		< 7.1 U					< 5.0 U					
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L	< 5.0 UJ							< 5.0 UJ					
SVOCs	N	4-NITROANILINE	100-01-6	ug/L	< 2.0 U		< 18 U					< 2.0 U					
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L	< 2.0 U		< 18 U					< 2.0 U					
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L	< 0.10 U		< 0.094 U					< 0.10 U					
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L	< 0.10 U		< 0.094 UJ					< 0.10 U					
SVOCs	N	ANTHRACENE	120-12-7	ug/L	< 0.10 U		< 0.094 UJ					< 0.10 U					
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L	0.30		< 0.094 UJ					< 0.10 U					
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L	0.26 J		< 0.094 U					< 0.10 UJ					
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L	0.41		< 0.094 UJ					< 0.10 U					
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L	0.23		< 0.094 U					< 0.10 U					
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L	0.18		< 0.094 U					< 0.10 U					
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L	< 5.0 U		< 7.1 U					< 5.0 U					
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L	< 2.0 U		< 7.1 U					< 2.0 U					

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-10	P09-10	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-12B	P09-12B	P09-12B	P09-12B
					Sample Date	9/12/2016	9/12/2016	10/15/2013	9/24/2014	9/9/2015	9/9/2015	9/16/2016	9/16/2016	10/14/2013	9/22/2014	9/8/2015	9/8/2015
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-10-ME45-1	P09-10-ME45-1-F	P09-11B-101513	P09-11B-092414-1	P09-11B-090915-1	P09-11B-090915-1-F	P09-11B-ME45-1	P09-11B-ME45-1-F	P09-12B-101413	P09-12B-092214-1	P09-12B-090815-1	P09-12B-090815-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L	0.51 J		< 0.47 UJ				0.17 J					
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L	1.2 J		< 7.1 U				< 2.0 U					
SVOCs	N	CARBAZOLE	86-74-8	ug/L	< 2.0 U		< 7.1 U				< 2.0 U					
SVOCs	N	CHRYSENE	218-01-9	ug/L	0.30		< 0.094 U				< 0.10 U					
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L	< 0.10 U		< 0.094 UJ				< 0.10 U					
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L	< 2.0 U		< 7.1 U				< 2.0 U					
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L	< 2.0 U		< 7.1 U				< 2.0 U					
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L	< 2.0 U		< 7.1 U				< 2.0 U					
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L	< 2.0 U		< 7.1 U				< 2.0 U					
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L	< 2.0 UJ		< 7.1 U				< 2.0 UJ					
SVOCs	N	FLUORANTHENE	206-44-0	ug/L	0.64		< 0.094 UJ				< 0.10 U					
SVOCs	N	FLUORENE	86-73-7	ug/L	< 0.10 U		< 0.094 U				< 0.10 U					
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L	< 0.10 U		< 0.094 UJ				< 0.10 U					
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L	< 2.0 UJ		< 7.1 U				< 2.0 UJ					
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L	< 2.0 UJ		< 7.1 U				< 2.0 U					
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L	< 2.0 U		< 7.1 U				< 2.0 U					
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L	0.20 J		< 0.094 UJ				< 0.10 UJ					
SVOCs	N	ISOPHORONE	78-59-1	ug/L	< 2.0 U		< 7.1 U				< 2.0 U					
SVOCs	N	NAPHTHALENE	91-20-3	ug/L	< 0.10 U		< 0.094 U				< 0.10 U					
SVOCs	N	NITROBENZENE	98-95-3	ug/L	< 5.0 U		< 7.1 U				< 5.0 U					
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L			< 7.1 U									
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L	< 2.0 U		< 7.1 U				< 2.0 U					
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L	< 5.0 U		< 7.1 U				< 5.0 U					
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L	< 1.0 UJ		< 0.47 U				< 1.0 UJ					
SVOCs	N	PHENANTHRENE	85-01-8	ug/L	0.31		< 0.094 UJ				< 0.10 U					
SVOCs	N	PHENOL	108-95-2	ug/L	< 2.0 U		< 7.1 U				< 2.0 U					
SVOCs	N	PYRENE	129-00-0	ug/L	0.51		< 0.094 UJ				< 0.10 U					
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L	< 1.0 UJ		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 1.0 U		< 0.50 U	< 1.0 U	< 1.0 U		< 1.0 U		< 0.50 U	< 1.0 U	< 1.0 U	
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L	< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U	
VOCs	N	2-BUTANONE	78-93-3	ug/L	< 5.0 UJ		< 2.5 U	< 2.5 U	< 2.5 UJ		< 5.0 UJ		16	< 2.5 U	< 2.5 UJ	
VOCs	N	2-HEXANONE	591-78-6	ug/L	< 5.0 UJ		< 2.5 U	< 2.5 U	< 2.5 U		< 5.0 UJ		< 2.5 U	< 2.5 U	< 2.5 U	
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L	< 2.0 U		< 2.5 UJ	< 1.0 U	< 2.5 U		< 2.0 UJ		< 2.5 UJ	< 1.0 U	< 2.5 U	
VOCs	N	ACETONE	67-64-1	ug/L	< 5.0 UJ		< 2.5 U	< 2.5 U	< 2.5 UJ		< 5.0 UJ		370	15	9.2 J	
VOCs	N	BENZENE	71-43-2	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	BROMOFORM	75-25-2	ug/L	< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 UJ		< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 UJ	
VOCs	N	BROMOMETHANE	74-83-9	ug/L	< 2.0 UJ		< 1.0 U	< 1.0 U	< 1.0 UJ		< 2.0 UJ		< 1.0 U	< 1.0 U	< 1.0 UJ	
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L	< 2.0 UJ		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U	
VOCs	N	CHLOROBENZENE	108-90-7	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	CHLOROETHANE	75-00-3	ug/L	< 1.0 U		< 1.0 U	< 0.50 U	< 0.50 UJ		< 1.0 U		< 1.0 U	< 0.50 U	< 0.50 UJ	
VOCs	N	CHLOROFORM	67-66-3	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	CHLOROMETHANE	74-87-3	ug/L	< 1.0 U		< 1.0 U	< 0.50 U	< 0.50 UJ		< 1.0 U		< 1.0 U	< 0.50 U	< 0.50 UJ	
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 UJ		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L	< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U	
VOCs	N	ETHYLBENZENE	100-41-4	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L			< 1.0 U						< 1.0 U			
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L	< 1.0 U		< 2.5 U	< 0.50 U	< 0.50 U		< 1.0 U		< 2.5 UJ	< 0.50 U	< 0.50 U	

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

					Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers	RA_Site9_Piezometers
					Location ID	P09-10	P09-10	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-11B	P09-12B	P09-12B	P09-12B	P09-12B
					Sample Date	9/12/2016	9/12/2016	10/15/2013	9/24/2014	9/9/2015	9/9/2015	9/16/2016	9/16/2016	10/14/2013	9/22/2014	9/8/2015	9/8/2015
					Sample Type Code	N	N	N	N	N	N	N	N	N	N	N	N
					Sample ID	P09-10-ME45-1	P09-10-ME45-1-F	P09-11B-101513	P09-11B-092414-1	P09-11B-090915-1	P09-11B-090915-1-F	P09-11B-ME45-1	P09-11B-ME45-1-F	P09-12B-101413	P09-12B-092214-1	P09-12B-090815-1	P09-12B-090815-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**													
VOCs	N	O-XYLENE	95-47-6	ug/L			< 0.50 U						< 0.50 U			
VOCs	N	STYRENE	100-42-5	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 UJ		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L	< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U	
VOCs	N	TOLUENE	108-88-3	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U		< 2.0 U		< 0.50 U	< 1.0 U	< 1.0 U	
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 UJ		< 1.0 UJ		< 0.50 U	< 0.50 U	< 0.50 UJ	
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U		< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U		< 1.0 U	< 0.50 U	< 0.50 U		< 1.0 U		< 1.0 U	< 0.50 U	< 0.50 U	
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L	< 1.0 U		< 1.5 U	< 1.0 U	< 1.0 U		< 1.0 UJ		< 1.5 U	< 1.0 U	< 1.0 U	

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

F = Filtered sample.

FD = Field duplicate.

FF = Field filtered sample.

J = Estimated value.

J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.

J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.

N = Normal sample.

PCBs = Polychlorinated biphenyls.

SVOC = Semivolatile organic compound.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-12B	P09-12B
				Sample Date	9/13/2016	9/13/2016
				Sample Type Code	N	N
				Sample ID	P09-12B-ME45-1	P09-12B-ME45-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**		
Metals	F	ALUMINUM	7429-90-5	ug/L		43.5
Metals	F	ANTIMONY	7440-36-0	ug/L		< 0.80 U
Metals	F	ARSENIC	7440-38-2	ug/L		0.20 J-
Metals	F	BERYLLIUM	7440-41-7	ug/L		< 0.30 U
Metals	F	CHROMIUM, TOTAL	7440-47-3	ug/L		1.1 J-
Metals	F	COPPER	7440-50-8	ug/L		0.44 J
Metals	F	IRON	7439-89-6	ug/L		18600
Metals	F	LEAD	7439-92-1	ug/L		0.17 J
Metals	F	MANGANESE	7439-96-5	ug/L		1250
Metals	F	MERCURY	7439-97-6	ug/L		< 0.10 U
Metals	F	NICKEL	7440-02-0	ug/L		1.4
Metals	F	ZINC	7440-66-6	ug/L		16.9
Metals	FF	ALUMINUM	7429-90-5	ug/L		
Metals	FF	ANTIMONY	7440-36-0	ug/L		
Metals	FF	ARSENIC	7440-38-2	ug/L		
Metals	FF	BERYLLIUM	7440-41-7	ug/L		
Metals	FF	CHROMIUM, TOTAL	7440-47-3	ug/L		
Metals	FF	COPPER	7440-50-8	ug/L		
Metals	FF	IRON	7439-89-6	ug/L		
Metals	FF	LEAD	7439-92-1	ug/L		
Metals	FF	MANGANESE	7439-96-5	ug/L		
Metals	FF	MERCURY	7439-97-6	ug/L		
Metals	FF	NICKEL	7440-02-0	ug/L		
Metals	FF	ZINC	7440-66-6	ug/L		
Metals	N	ALUMINUM	7429-90-5	ug/L	332	
Metals	N	ANTIMONY	7440-36-0	ug/L	< 0.80 U	
Metals	N	ARSENIC	7440-38-2	ug/L	0.35 J-	
Metals	N	BERYLLIUM	7440-41-7	ug/L	< 0.30 U	
Metals	N	CHROMIUM, TOTAL	7440-47-3	ug/L	8.5	
Metals	N	COPPER	7440-50-8	ug/L	1.3 J	
Metals	N	IRON	7439-89-6	ug/L	43300	
Metals	N	LEAD	7439-92-1	ug/L	1.6	
Metals	N	MANGANESE	7439-96-5	ug/L	1150	
Metals	N	MERCURY	7439-97-6	ug/L	< 0.10 U	
Metals	N	NICKEL	7440-02-0	ug/L	9.0	
Metals	N	ZINC	7440-66-6	ug/L	128	
PCBs	N	AROCLOR-1016	12674-11-2	ug/L		
PCBs	N	AROCLOR-1221	11104-28-2	ug/L		
PCBs	N	AROCLOR-1232	11141-16-5	ug/L		
PCBs	N	AROCLOR-1242	53469-21-9	ug/L		
PCBs	N	AROCLOR-1248	12672-29-6	ug/L		
PCBs	N	AROCLOR-1254	11097-69-1	ug/L		
PCBs	N	AROCLOR-1260	11096-82-5	ug/L		
PCBs	N	PCB, TOTAL (a)	RA-65	ug/L		
Pesticides	N	4,4-DDD	72-54-8	ug/L		
Pesticides	N	4,4-DDE	72-55-9	ug/L		
Pesticides	N	4,4-DDT	50-29-3	ug/L		
Pesticides	N	ALDRIN	309-00-2	ug/L		
Pesticides	N	ALPHA-BHC	319-84-6	ug/L		
Pesticides	N	ALPHA-CHLORDANE	5103-71-9	ug/L		
Pesticides	N	BETA-BHC	319-85-7	ug/L		

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-12B	P09-12B
				Sample Date	9/13/2016	9/13/2016
				Sample Type Code	N	N
				Sample ID	P09-12B-ME45-1	P09-12B-ME45-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**		
Pesticides	N	DELTA-BHC	319-86-8	ug/L		
Pesticides	N	DIELDRIN	60-57-1	ug/L		
Pesticides	N	ENDOSULFAN I	959-98-8	ug/L		
Pesticides	N	ENDOSULFAN II	33213-65-9	ug/L		
Pesticides	N	ENDOSULFAN SULFATE	1031-07-8	ug/L		
Pesticides	N	ENDRIN	72-20-8	ug/L		
Pesticides	N	ENDRIN ALDEHYDE	7421-93-4	ug/L		
Pesticides	N	ENDRIN KETONE	53494-70-5	ug/L		
Pesticides	N	GAMMA-CHLORDANE	5566-34-7	ug/L		
Pesticides	N	HEPTACHLOR	76-44-8	ug/L		
Pesticides	N	HEPTACHLOR EPOXIDE	1024-57-3	ug/L		
Pesticides	N	LINDANE	58-89-9	ug/L		
Pesticides	N	METHOXYCHLOR	72-43-5	ug/L		
Pesticides	N	TOXAPHENE	8001-35-2	ug/L		
Pesticides	N	TRANS-CHLORDANE	5103-74-2	ug/L		
SVOCs	N	1,2,4-TRICHLOROBENZENE	120-82-1	ug/L	< 2.0 U	
SVOCs	N	1,2-DICHLOROBENZENE	95-50-1	ug/L	< 2.0 U	
SVOCs	N	1,3-DICHLOROBENZENE	541-73-1	ug/L	< 2.0 U	
SVOCs	N	1,4-DICHLOROBENZENE	106-46-7	ug/L	< 5.0 U	
SVOCs	N	2,2'-OXYBIS(1-CHLOROPROPANE)	108-60-1	ug/L	< 2.0 UJ	
SVOCs	N	2,4,5-TRICHLOROPHENOL	95-95-4	ug/L	< 0.10 UJ	
SVOCs	N	2,4,6-TRICHLOROPHENOL	88-06-2	ug/L	< 2.0 U	
SVOCs	N	2,4-DICHLOROPHENOL	120-83-2	ug/L	< 2.0 U	
SVOCs	N	2,4-DIMETHYLPHENOL	105-67-9	ug/L	< 5.0 U	
SVOCs	N	2,4-DINITROPHENOL	51-28-5	ug/L	< 10 UJ	
SVOCs	N	2,4-DINITROTOLUENE	121-14-2	ug/L	< 2.0 U	
SVOCs	N	2,6-DINITROTOLUENE	606-20-2	ug/L	< 2.0 U	
SVOCs	N	2-CHLORONAPHTHALENE	91-58-7	ug/L	< 2.0 U	
SVOCs	N	2-CHLOROPHENOL	95-57-8	ug/L	< 2.0 U	
SVOCs	N	2-METHYLNAPHTHALENE	91-57-6	ug/L	< 0.10 U	
SVOCs	N	2-METHYLPHENOL	95-48-7	ug/L	< 2.0 U	
SVOCs	N	2-NITROANILINE	88-74-4	ug/L	< 2.0 U	
SVOCs	N	2-NITROPHENOL	88-75-5	ug/L	< 2.0 U	
SVOCs	N	3- AND 4-METHYLPHENOL	108-39-4/106-44-5	ug/L		
SVOCs	N	3,3-DICHLOROBENZIDINE	91-94-1	ug/L	< 5.0 U	
SVOCs	N	3-NITROANILINE	99-09-2	ug/L	< 2.0 U	
SVOCs	N	4,6-DINITRO-2-METHYLPHENOL	534-52-1	ug/L	< 2.0 UJ	
SVOCs	N	4-BROMOPHENYL-PHENYLETHER	101-55-3	ug/L	< 2.0 U	
SVOCs	N	4-CHLORO-3-METHYLPHENOL	59-50-7	ug/L	< 2.0 U	
SVOCs	N	4-CHLOROANILINE	106-47-8	ug/L	< 5.0 U	
SVOCs	N	4-CHLOROPHENYL-PHENYLETHER	7005-72-3	ug/L	< 2.0 U	
SVOCs	N	4-METHYLPHENOL	106-44-5	ug/L	< 5.0 UJ	
SVOCs	N	4-NITROANILINE	100-01-6	ug/L	< 2.0 U	
SVOCs	N	4-NITROPHENOL	100-02-7	ug/L	< 2.0 U	
SVOCs	N	ACENAPHTHENE	83-32-9	ug/L	< 0.10 U	
SVOCs	N	ACENAPHTHYLENE	208-96-8	ug/L	< 0.10 U	
SVOCs	N	ANTHRACENE	120-12-7	ug/L	< 0.10 U	
SVOCs	N	BENZO[A]ANTHRACENE	56-55-3	ug/L	< 0.10 U	
SVOCs	N	BENZO[A]PYRENE	50-32-8	ug/L	< 0.10 UJ	
SVOCs	N	BENZO[B]FLUORANTHENE	205-99-2	ug/L	< 0.10 U	
SVOCs	N	BENZO[G,H,I]PERYLENE	191-24-2	ug/L	< 0.10 U	
SVOCs	N	BENZO[K]FLUORANTHENE	207-08-9	ug/L	< 0.10 U	
SVOCs	N	BIS(2-CHLOROETHOXY)METHANE	111-91-1	ug/L	< 5.0 U	
SVOCs	N	BIS(2-CHLOROETHYL)ETHER	111-44-4	ug/L	< 2.0 U	

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-12B	P09-12B
				Sample Date	9/13/2016	9/13/2016
				Sample Type Code	N	N
				Sample ID	P09-12B-ME45-1	P09-12B-ME45-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**		
SVOCs	N	BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ug/L	0.43 J	
SVOCs	N	BUTYLBENZYLPHTHALATE	85-68-7	ug/L	< 2.0 U	
SVOCs	N	CARBAZOLE	86-74-8	ug/L	< 2.0 U	
SVOCs	N	CHRYSENE	218-01-9	ug/L	0.13	
SVOCs	N	DIBENZ[A,H]ANTHRACENE	53-70-3	ug/L	< 0.10 U	
SVOCs	N	DIBENZOFURAN	132-64-9	ug/L	< 2.0 U	
SVOCs	N	DIETHYLPHTHALATE	84-66-2	ug/L	< 2.0 U	
SVOCs	N	DIMETHYL PHTHALATE	131-11-3	ug/L	< 2.0 U	
SVOCs	N	DI-N-BUTYLPHTHALATE	84-74-2	ug/L	< 2.0 U	
SVOCs	N	DI-N-OCTYLPHTHALATE	117-84-0	ug/L	< 2.0 UJ	
SVOCs	N	FLUORANTHENE	206-44-0	ug/L	< 0.10 U	
SVOCs	N	FLUORENE	86-73-7	ug/L	< 0.10 U	
SVOCs	N	HEXACHLOROBENZENE	118-74-1	ug/L	< 0.10 U	
SVOCs	N	HEXACHLOROBUTADIENE	87-68-3	ug/L	< 2.0 UJ	
SVOCs	N	HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/L	< 2.0 U	
SVOCs	N	HEXACHLOROETHANE	67-72-1	ug/L	< 2.0 U	
SVOCs	N	INDENO[1,2,3-CD]PYRENE	193-39-5	ug/L	< 0.10 UJ	
SVOCs	N	ISOPHORONE	78-59-1	ug/L	< 2.0 U	
SVOCs	N	NAPHTHALENE	91-20-3	ug/L	< 0.10 U	
SVOCs	N	NITROBENZENE	98-95-3	ug/L	< 5.0 U	
SVOCs	N	N-NITROSODIMETHYLAMINE	62-75-9	ug/L		
SVOCs	N	N-NITROSODINPROPYLAMINE	621-64-7	ug/L	< 2.0 U	
SVOCs	N	N-NITROSODIPHENYLAMINE	86-30-6	ug/L	< 5.0 U	
SVOCs	N	PENTACHLOROPHENOL	87-86-5	ug/L	< 1.0 UJ	
SVOCs	N	PHENANTHRENE	85-01-8	ug/L	< 0.10 U	
SVOCs	N	PHENOL	108-95-2	ug/L	< 2.0 U	
SVOCs	N	PYRENE	129-00-0	ug/L	< 0.10 U	
VOCs	N	1,1,1-TRICHLOROETHANE	71-55-6	ug/L	< 1.0 UJ	
VOCs	N	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 1.0 U	
VOCs	N	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 1.0 U	
VOCs	N	1,1-DICHLOROETHANE	75-34-3	ug/L	< 1.0 U	
VOCs	N	1,1-DICHLOROETHENE	75-35-4	ug/L	< 1.0 U	
VOCs	N	1,2-DICHLOROETHANE	107-06-2	ug/L	< 1.0 U	
VOCs	N	1,2-DICHLOROPROPANE	78-87-5	ug/L	< 2.0 U	
VOCs	N	2-BUTANONE	78-93-3	ug/L	< 5.0 UJ	
VOCs	N	2-HEXANONE	591-78-6	ug/L	< 5.0 UJ	
VOCs	N	4-METHYL-2-PENTANONE	108-10-1	ug/L	< 2.0 U	
VOCs	N	ACETONE	67-64-1	ug/L	< 5.0 UJ	
VOCs	N	BENZENE	71-43-2	ug/L	< 1.0 U	
VOCs	N	BROMODICHLOROMETHANE	75-27-4	ug/L	< 1.0 U	
VOCs	N	BROMOFORM	75-25-2	ug/L	< 2.0 U	
VOCs	N	BROMOMETHANE	74-83-9	ug/L	< 2.0 UJ	
VOCs	N	CARBON DISULFIDE	75-15-0	ug/L	< 1.0 U	
VOCs	N	CARBON TETRACHLORIDE	56-23-5	ug/L	< 2.0 UJ	
VOCs	N	CHLOROBENZENE	108-90-7	ug/L	< 1.0 U	
VOCs	N	CHLOROETHANE	75-00-3	ug/L	< 1.0 U	
VOCs	N	CHLOROFORM	67-66-3	ug/L	< 1.0 U	
VOCs	N	CHLOROMETHANE	74-87-3	ug/L	< 1.0 U	
VOCs	N	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 1.0 U	
VOCs	N	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L	< 1.0 U	
VOCs	N	DIBROMOCHLOROMETHANE	124-48-1	ug/L	< 2.0 U	
VOCs	N	ETHYLBENZENE	100-41-4	ug/L	< 1.0 U	
VOCs	N	M- AND P-XYLENE	108-38-3/106-42-3	ug/L		
VOCs	N	METHYLENE CHLORIDE	75-09-2	ug/L	< 1.0 U	

APPENIDX A TABLE 7
ANALYTICAL DATA SUMMARY TABLE - SHALLOW GROUNDWATER (PIEZOMETERS)
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Piezometers	RA_Site9_Piezometers
				Location ID	P09-12B	P09-12B
				Sample Date	9/13/2016	9/13/2016
				Sample Type Code	N	N
				Sample ID	P09-12B-ME45-1	P09-12B-ME45-1-F
Analyte Group	**Fraction**	**Compound**	**CAS**	**Units**		
VOCs	N	O-XYLENE	95-47-6	ug/L		
VOCs	N	STYRENE	100-42-5	ug/L	< 1.0 U	
VOCs	N	TETRACHLOROETHENE	127-18-4	ug/L	< 2.0 U	
VOCs	N	TOLUENE	108-88-3	ug/L	< 1.0 U	
VOCs	N	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 2.0 U	
VOCs	N	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L	< 1.0 U	
VOCs	N	TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U	
VOCs	N	VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U	
VOCs	N	XYLENES, TOTAL	1330-20-7	ug/L	< 1.0 U	

Notes:
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
F = Filtered sample.
FD = Field duplicate.
FF = Field filtered sample.
J = Estimated value.
J+ = The chemical was positively identified; however, the associated numerical value is a high estimated concentration.
J- = The chemical was positively identified; however, the associated numerical value is a low estimated concentration.
N = Normal sample.
PCBs = Polychlorinated biphenyls.
SVOC = Semivolatile organic compound.
U = Not detected.
ug/L - microgram per liter.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.
(a) Total concentrations were calculated per sample by summing only the detected individual compounds (i.e., Aroclor) concentrations. For samples without any detections of individual compounds (i.e., Aroclor), the maximum reporting detection limit within the sample is presented as a non-detect value.

APPENIDX A TABLE 8
ANALYTICAL DATA SUMMARY TABLE - SEEP WATER
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep
				Location ID	SP09-01	SP09-01	SP09-01	SP09-01	SP09-01	SP09-01	SP09-02	SP09-02	SP09-02	SP09-02	SP09-02	SP09-02
				Sample Date	3/28/2013	10/7/2014	9/17/2015	9/14/2016	9/14/2016	9/14/2016	3/28/2013	3/28/2013	10/7/2014	10/7/2014	9/16/2015	9/14/2016
				Sample Type Code	N	N	N	N	N	FD	N	FD	N	FD	N	N
				Sample ID	SEEP-01-032813-1	SEEP09-01-100714-1	SEEP1-091715-1	SP09-01-ME45-1	SEEP09-01-ME45-1	MW09-ME45-FD04	SEEP-02-032813-1	SEEP-02-032813-2	SEEP09-02-100714-1	SEEP09-02-100714-2	SEEP2-091615-1	SEEP09-02-ME45-1
				Depth Interval												
Analyte Group	**Compound**	**CAS**	**Units**													
Conventional	SALINITY	-3510	PPT	21.0	30	30	30			22.0		30	30	30	
Conventional	SULFIDE	18496-25-8	Mg/L	< 0.75 U	< 0.030 U	< 0.030 U	< 0.030 U		< 0.030 U	< 0.75 U	< 0.75 U	< 0.030 U	< 0.030 U	< 0.030 U	
VOCs	1,1,1-TRICHLOROETHANE	71-55-6	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 UJ			< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 0.50 U	< 0.50 UJ	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 UJ	< 0.50 UJ	< 0.50 U	
VOCs	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 0.50 U	< 1.0 U	< 1.0 UJ	< 1.0 U			< 0.50 U		< 1.0 U	< 1.0 U	< 1.0 UJ	
VOCs	1,1-DICHLOROETHANE	75-34-3	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	1,1-DICHLOROETHENE	75-35-4	ug/L	< 0.50 UL	< 0.50 U	< 0.50 U	< 1.0 U			< 0.50 UL		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	1,2-DICHLOROETHANE	107-06-2	ug/L	< 0.50 U	< 0.50 UJ	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 UJ	< 0.50 UJ	< 0.50 U	
VOCs	1,2-DICHLOROPROPANE	78-87-5	ug/L	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U			< 0.50 U		< 1.0 U	< 1.0 U	< 1.0 U	
VOCs	2-BUTANONE	78-93-3	ug/L	< 2.5 U	< 2.5 UJ	< 2.5 U	< 5.0 UJ			< 2.5 U		< 2.5 UJ	< 2.5 UJ	< 2.5 U	
VOCs	2-HEXANONE	591-78-6	ug/L	< 2.5 UL	< 2.5 UJ	< 2.5 U	< 5.0 UJ			< 2.5 U		< 2.5 UJ	< 2.5 UJ	< 2.5 U	
VOCs	4-METHYL-2-PENTANONE	108-10-1	ug/L	< 2.5 U	< 1.0 U	< 2.5 U	< 2.0 U			< 2.5 U		< 1.0 U	< 1.0 U	< 2.5 U	
VOCs	ACETONE	67-64-1	ug/L	< 2.5 UL	< 2.5 U	< 2.5 U	< 5.0 UJ			< 2.5 U		< 2.5 U	< 2.5 U	< 2.5 U	
VOCs	BENZENE	71-43-2	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	BROMODICHLOROMETHANE	75-27-4	ug/L	< 0.50 UJ	< 0.50 U	< 0.50 U	< 1.0 U			< 0.50 UJ		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	BROMOFORM	75-25-2	ug/L	< 0.50 U	< 1.0 UJ	< 1.0 U	< 2.0 U			< 0.50 U		< 1.0 UJ	< 1.0 UJ	< 1.0 U	
VOCs	BROMOMETHANE	74-83-9	ug/L	< 1.0 U	< 1.0 UJ	< 1.0 U	< 2.0 UJ			< 1.0 UJ		< 1.0 UJ	< 1.0 UJ	< 1.0 U	
VOCs	BTEX, TOTAL	-71	ug/L	< 1.5 U						< 1.5 U					
VOCs	CARBON DISULFIDE	75-15-0	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	CARBON TETRACHLORIDE	56-23-5	ug/L	< 0.50 UJ	< 1.0 U	< 1.0 U	< 2.0 UJ			< 0.50 UJ		< 1.0 U	< 1.0 U	< 1.0 U	
VOCs	CHLOROBENZENE	108-90-7	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	CHLOROETHANE	75-00-3	ug/L	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U			< 1.0 UJ		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	CHLOROFORM	67-66-3	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	CHLOROMETHANE	74-87-3	ug/L	< 1.0 U	< 0.50 U	< 0.50 UJ	< 1.0 U			< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 UJ	
VOCs	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	19	< 0.50 U	< 0.50 U	< 1.0 U			16		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L	< 0.50 UJ	< 0.50 UJ	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 UJ	< 0.50 UJ	< 0.50 U	
VOCs	DIBROMOCHLOROMETHANE	124-48-1	ug/L	< 0.50 UJ	< 1.0 U	< 1.0 U	< 2.0 U			< 0.50 UJ		< 1.0 U	< 1.0 U	< 1.0 U	
VOCs	ETHYLBENZENE	100-41-4	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	METHYLENE CHLORIDE	75-09-2	ug/L	< 2.5 U	< 0.50 U	< 0.50 U	< 1.0 U			< 2.5 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	STYRENE	100-42-5	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	TETRACHLOROETHENE	127-18-4	ug/L	< 0.50 U	< 1.0 U	< 1.0 U	< 2.0 U			< 0.50 U		< 1.0 U	< 1.0 U	< 1.0 U	
VOCs	TOLUENE	108-88-3	ug/L	< 0.50 U	< 0.50 U	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	TOTAL CVOCs	TCVOCs	ug/L	20		< 1 U	< 2 U			17				< 1 U	
VOCs	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	1.0	< 1.0 U	< 1.0 U	< 2.0 U			1.2		< 1.0 U	< 1.0 U	< 1.0 U	
VOCs	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L	< 0.50 U	< 0.50 UJ	< 0.50 U	< 1.0 U			< 0.50 U		< 0.50 UJ	< 0.50 UJ	< 0.50 U	
VOCs	TRICHLOROETHENE	79-01-6	ug/L	< 1.7 U	< 0.50 U	< 0.50 U	< 1.0 U			< 1.7 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U	< 0.50 U	< 0.50 U	< 1.0 U			< 1.0 U		< 0.50 U	< 0.50 U	< 0.50 U	
VOCs	XYLENES, TOTAL	1330-20-7	ug/L	< 1.5 U	< 1.0 U	< 1.0 U	< 1.0 U			< 1.5 U		< 1.0 U	< 1.0 U	< 1.0 U	

Notes:

< = Result not detected above laboratory reporting limit.

CAS = Chemical Abstracts Service.

FD = Field duplicate.

J = Estimated value.

mg/L - miligram per liter.

N = Normal sample.

U = Not detected.

ug/L - microgram per liter.

UJ = The analyte was not detected; and the reporting limit is approximate.

VOC = Volatile organic compound.

APPENIDX A TABLE 8
ANALYTICAL DATA SUMMARY TABLE - SEEP WATER
ECOLOGICAL RISK ASSESSMENT UPDATE
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND

				Location Group	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep	RA_Site9_Seep
				Location ID	SP09-02	SP09-03	SP09-03	SP09-03	SP09-03	SP09-03
				Sample Date	9/14/2016	10/6/2014	9/14/2015	9/14/2015	9/14/2016	9/14/2016
				Sample Type Code	N	N	N	FD	N	N
				Sample ID	SP09-02-ME45-1	SEEP 09-03-100614-1	SEEP3-091415-1	SEEP3-091415-2	SEEP09-03-ME45-1	SP09-03-ME45-1
				Depth Interval						
Analyte Group	**Compound**	**CAS**	**Units**							
Conventional	SALINITY	-3510	PPT	29	29	29	29		30
Conventional	SULFIDE	18496-25-8	Mg/L	< 0.030 U	< 0.030 U	< 0.030 U	< 0.030 U		< 0.030 U
VOCs	1,1,1-TRICHLOROETHANE	71-55-6	ug/L	< 1.0 UJ	< 0.50 U	< 0.50 U			< 1.0 UJ
VOCs	1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	1,1,2-TRICHLOROETHANE	79-00-5	ug/L	< 1.0 U	< 1.0 U	< 1.0 UJ			< 1.0 U
VOCs	1,1-DICHLOROETHANE	75-34-3	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	1,1-DICHLOROETHENE	75-35-4	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	1,2-DICHLOROETHANE	107-06-2	ug/L	< 1.0 U	< 0.50 UJ	< 0.50 U			< 1.0 U
VOCs	1,2-DICHLOROPROPANE	78-87-5	ug/L	< 2.0 U	< 1.0 U	< 1.0 U			< 2.0 U
VOCs	2-BUTANONE	78-93-3	ug/L	< 5.0 UJ	< 2.5 U	< 2.5 U			< 5.0 UJ
VOCs	2-HEXANONE	591-78-6	ug/L	< 5.0 UJ	< 2.5 U	< 2.5 U			< 5.0 UJ
VOCs	4-METHYL-2-PENTANONE	108-10-1	ug/L	< 2.0 U	< 1.0 U	< 2.5 U			< 2.0 U
VOCs	ACETONE	67-64-1	ug/L	< 5.0 UJ	< 2.5 U	< 2.5 U			< 5.0 UJ
VOCs	BENZENE	71-43-2	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	BROMODICHLOROMETHANE	75-27-4	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	BROMOFORM	75-25-2	ug/L	< 2.0 U	< 1.0 U	< 1.0 U			< 2.0 U
VOCs	BROMOMETHANE	74-83-9	ug/L	< 2.0 UJ	< 1.0 U	< 1.0 U			< 2.0 UJ
VOCs	BTEX, TOTAL	-71	ug/L						
VOCs	CARBON DISULFIDE	75-15-0	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	CARBON TETRACHLORIDE	56-23-5	ug/L	< 2.0 UJ	< 1.0 U	< 1.0 U			< 2.0 UJ
VOCs	CHLOROBENZENE	108-90-7	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	CHLOROETHANE	75-00-3	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	CHLOROFORM	67-66-3	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	CHLOROMETHANE	74-87-3	ug/L	< 1.0 U	< 0.50 U	< 0.50 UJ			< 1.0 U
VOCs	CIS-1,2-DICHLOROETHENE	156-59-2	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	DIBROMOCHLOROMETHANE	124-48-1	ug/L	< 2.0 U	< 1.0 U	< 1.0 U			< 2.0 U
VOCs	ETHYLBENZENE	100-41-4	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	METHYLENE CHLORIDE	75-09-2	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	STYRENE	100-42-5	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	TETRACHLOROETHENE	127-18-4	ug/L	< 2.0 U	< 1.0 U	< 1.0 U			< 2.0 U
VOCs	TOLUENE	108-88-3	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	TOTAL CVOCs	TCVOCs	ug/L	< 2 U		< 1 U			< 2 U
VOCs	TRANS-1,2-DICHLOROETHENE	156-60-5	ug/L	< 2.0 U	< 1.0 U	< 1.0 U			< 2.0 U
VOCs	TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	TRICHLOROETHENE	79-01-6	ug/L	< 1.0 U	0.73 J	< 0.50 U			< 1.0 U
VOCs	VINYL CHLORIDE	75-01-4	ug/L	< 1.0 U	< 0.50 U	< 0.50 U			< 1.0 U
VOCs	XYLENES, TOTAL	1330-20-7	ug/L	< 1.0 U	< 1.0 U	< 1.0 U			< 1.0 U

Notes:
< = Result not detected above laboratory reporting limit.
CAS = Chemical Abstracts Service.
FD = Field duplicate.
J = Estimated value.
mg/L - miligram per liter.
N = Normal sample.
U = Not detected.
ug/L - microgram per liter.
UJ = The analyte was not detected; and the reporting limit is approximate.
VOC = Volatile organic compound.

Attachment H

Shellfish Laboratory Audit and Shellfish Data Statistical Comparison

Attachment H-1

Shellfish Laboratory Audit

Resolution Consultants
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

Laboratory Audit Report

Project:	Former NCBC Davisville, Site 09 Allen Harbor Landfill LTM	
Laboratory:	Eurofins Spectrum Analytical, Inc., North Kingstown, RI	
Project Number:	60273164.LT.FI2	
Prepared by:	Waverly Braunstein	Date: 1/11/2017

SUMMARY/BACKGROUND

A focused laboratory audit was conducted at the Eurofins Spectrum Analytical Inc., (Eurofins) facility in North Kingston, RI, on December 15, 2016. This audit was conducted in response to recent laboratory performance issues which resulted in the rejection of the Fall 2016 Site 9 shellfish data and subsequent shellfish resampling.

Shellfish samples were collected September 13-16, 2016 and submitted to Eurofins for analysis for PCB homologues, organochlorine pesticides, semivolatile organics (SVOCs), polynuclear aromatic hydrocarbons (PAHs), and metals. The samples were appropriately logged and placed in a freezer for storage prior to preparation. After analyses were completed, it was determined that surrogate standard recoveries were less than 10 percent in approximately half of the samples analyzed for pesticides, SVOCs, and PAHs. These nonconformances were sufficiently severe that all non-detect results in these samples would be rejected and considered unusable for decision making purposes.

When the severity of these nonconformances became known, the laboratory intended to re-extract and reanalyze the affected samples. It was expected that this could be done without any concern with respect to holding times, since holding times are suspended when tissue samples are frozen. However, when laboratory personnel went to retrieve the samples, it was discovered that the unused portions had been returned to a cooler in the walk-in refrigerator rather than the freezer. This resulted in the pesticide, SVOC, and PAH holding times being grossly exceeded and the samples were unusable. As a result, it was necessary to recollect the shellfish samples.

The sections below detail the items reviewed during the audit with a focus on anything noted which may have contributed to the nonconformances noted above. Suggested corrective actions are noted where appropriate.

REVIEW ELEMENTS

The audit consisted of a laboratory tour, document review, observation of procedures, and discussions with laboratory personnel focusing on the following areas:

- ✓ Sample receiving and log-in
- ✓ Internal chain of custody/sample tracking
- ✓ Project management/communication
- ✓ Sample preparation standard operating procedures (SOPs)
- ✓ Personnel training/qualification
- ✓ Sample preparation documentation
- ✓ Spiking technique

These areas were selected since the primary purpose of the audit was to determine why the unused portion of the sample was not frozen, and why the surrogate recoveries were so poor.

In general, laboratory policies and procedures were found to be acceptable, and laboratory staff were aware of all applicable documents.

The laboratory has procedures in place to document proper storage procedures and to note project specific requirements. If the initial surrogate recoveries had been acceptable, the current procedures would have been sufficient to ensure sample integrity. However, these procedures were not robust enough to ensure that sample integrity is maintained in the instance when samples require re-extraction and re-analysis. Possible improvements to these procedures are discussed in detail in the appropriate sections below.

No obvious deficiencies were observed that suggest improper laboratory procedures led to low the surrogate recoveries. However, possible changes to the laboratory spiking procedures were discussed that may lead to improved recoveries. These changes are discussed in more detail below.

Discussion

Sample Receiving and Log-in

No deficiencies were noted in sample receiving. The space was clean, well-organized, and of sufficient size to handle expected sample capacity. Procedures were in place for documentation and resolution of sample receipt issues relating to sample integrity (i.e., temperature, headspace, preservation, etc.), and discrepancies between sample containers and chain of custody documents. It was clearly noted on the laboratory Work Order that tissue samples were to be stored in freezers until sample preparation, and this was done.

Internal Chain of Custody/Sample Tracking

Samples are appropriately signed in and out of sample storage. A bar code system is used; the record is stored electronically, and is readily accessible for review. However, there was nothing in the system that would have alerted the last sample technician that all required aliquots had been removed and the remaining sample volume should be returned to the freezer.

Suggested corrective action: The system could be modified to track the aliquots needed by each department and to alert the preparation technician taking the last aliquot to return the unused sample to the freezer. Alternatively, the estimated sample size needed to complete all analyses could be removed from the original container prior to any preparations and stored in the refrigerator, while all remaining volume could be returned to the freezer.

Project Management/Communication

The project manager was aware of the need to store the shellfish samples frozen prior to preparation, and communicated this to the staff. The samples were stored properly prior to sample preparation. However, at the time the samples underwent preparation, the project manager was out of the office and was therefore unable to provide the oversight necessary to ensure that samples were returned to the freezer.

Sample Preparation SOPs

The laboratory has an SOP (No. 110.0060, Rev. 2) dedicated to the preparation of tissue samples. The procedure is an adaptation of soil and sediment preparation procedures, and is used in conjunction with

that SOP (No. 50.0053, Rev. 4). The technicians interviewed were aware of the SOPs and verified that samples were prepared in accordance with these procedures.

The SOP clearly indicates that tissue samples are stored in the freezer until the day before preparation, and that freezing suspends the holding time indefinitely. However, it does not contain procedures for determining when all required aliquots have been obtained, nor does it explicitly instruct the technician to return the samples to the freezer once the last aliquot has been removed for analysis.

Suggested corrective action: Provide procedures in the SOP for each technician to determine if the necessary sample aliquots have been collected and to return the unused sample portion to the freezer following removal of the last required aliquot.

Personnel Training/Qualifications

Training files were reviewed and found to be acceptable. Each technician must successfully complete an initial demonstration of capability through completion of a spiking study, and performance is monitored on an ongoing basis thereafter through the use of control charts. However, as noted above, these studies are not conducted on tissue samples due to the limited number of shellfish samples analyzed annually. Proficiency is monitored using soil and sediment samples.

Sample Preparation Documentation

Sample preparation and extraction logs were reviewed and found to be comprehensive and complete. The technician performing each step is identified and spiking procedures are documented. No deficiencies were noted.

Spiking Technique

The procedure states that appropriately dried samples are transferred to filter paper, wrapped “burrito style,” and then placed in the soxhlet apparatus. The samples are spiked with surrogate solution after placing the sample in the soxhlet apparatus. The SOP does not go into additional detail, but discussions with the technician indicated that the spike is injected on the filter paper; no attempt is made to insert the needle of the syringe into the wrapped sample due to concerns with cross-contamination. It is possible that this procedure does not allow the spiking solutions the necessary contact/incorporation with the sample, thereby leading to volatilization of the spiking solutions prior to sealing the soxhlet apparatus.

An alternate procedure was discussed whereby the sample would be placed on the coffee filter, but before the sample was wrapped, the analyst would create a small depression in the sample, add the spiking solution, cover it with more sample, then proceed to wrap the sample as usual. The laboratory agreed to try this procedure with the recollected samples. The revised spiking procedure did produce acceptable surrogate recoveries in the tissue samples, but did not work well for the method blank and laboratory control sample (LCS); the spiking solution did not incorporate well into these quality control (QC) samples and yielded poor surrogate recoveries. Therefore, the samples were re-prepped using the original spiking procedure and acceptable surrogate recoveries were achieved for both the tissue and QC samples.

CONCLUSIONS

The cause of the initial poor surrogate recoveries could not be definitively determined. Tissue samples are a complex matrix and there is no readily available guidance for the preparation of this type of sample, nor could studies of expected surrogate recoveries be found. The laboratory tried modifications to its surrogate spiking procedure that were discussed during this audit. These modifications yielded acceptable surrogate recoveries for the tissue samples but not for the LCS and method blank. Therefore the samples were re-extracted and reanalyzed using the original spiking technique and acceptable

surrogate recoveries were achieved for both the tissue samples and QC samples. Based on these results, it appears that the cause of the poor surrogate recoveries in the shellfish samples collected in September 2016 was not related to the spiking technique; the source of the error is of indeterminate cause.

The failure to return unused sample aliquot to the freezer to suspend holding time was due to the fact that the last technician who removed an aliquot did not know that no further aliquots were needed. Changes to laboratory tracking procedures should be made to prevent this from happening in the future. Since the ability to suspend holding times via freezing is applicable primarily to tissue samples, and since the laboratory receives so few of these samples annually, it is important to incorporate this into written procedures rather than rely on the memory of the technicians and the oversight of the project manager.

ATTACHMENTS

SOP No. 110.0060 Rev. 2, Standard Operating Procedure for Tissue Sample Preparation

SOP No. 50.0053 Rev. 4, Organic Preparation of Soil Samples by Soxhlet (Method 3540C)

Organic Preparation of Soil Samples by Soxhlet (Method 3540C)

Contents SOP NO. 50.0053

1. Procedure Document	X
2. Training Document	N/A
3. Process Overview	X
4. Validation Document	N/A

Procedure Signatures

Title:	Signature	Date
Laboratory Director/Technical Director		1/5/16
Quality Assurance Director		1/5/16
Laboratory/Quality Designee		

Procedure Reviews

Signature	Title	Date	Signature	Title	Date

Revision Record

Revision Date	Revision Description	Comments	Initials
4/27/07	Removed filtration and concentration steps plus apparatus involved	Included reference to SOP 50.0054	SBL
1/03/08	Edited surrogate and LCS spike volumes	Concentration changes	SBL
4/20/09	TurboVap instead of RapidVap		SBL
02/02/10	Updated reagent grades	Full	SBL
05/28/10	Added info about hotplates, filters	minor	SBL
08/31/10	16 hours, cycle time, Removed re-extraction log	minor	SBL
04/25/11	TPH/DRO surrogate edited	Minor; OTP Only	TM
12/27/11	Standard storage temp	Minor; edit to refrigeration not freezer	SBL
01/05/16	Lab name change, paper filters, removed EPH	Full	SBL

Procedure Superseded By _____ Date: _____
Procedure Discontinued By:_____ Date: _____
Procedure Archived By:_____ Date:_____

EUROFINS SPECTRUM ANALYTICAL, INC. RI

STANDARD OPERATING PROCEDURE

for

Organic Preparation of Soil Samples by Soxhlet (Method 3540C)

SOP No. 50.0053
Rev. 4

	Signature	Date
QA Director:		1/5/16
Lab Director:		1/5/16
Effective Date:	1/12/16	

EUROFINS SPECTRUM ANALYTICAL, INC. RI

STANDARD OPERATING PROCEDURE

for

Organic Preparation of Soil Samples by Soxhlet (Method 3540C)
Rev 4

1. Scope and Application

This Standard Operating Procedure (SOP) pertains to the preparation of soil and sediment samples for analysis by EPA SW846 methods SW8081, SW8015, SW8082 and SW8270. Discussions include sample extraction, sample cleanup references, sample concentration technique and the preparation of standard spiking solutions for the analysis of semivolatile, Total Petroleum Hydrocarbons (TPH), Diesel Range Organics (DRO), or pesticide/PCB organic compounds in soil samples.

2. Personnel Qualifications and Responsibilities

This method is restricted to use by or under the supervision of trained analysts in the Organic Preparation Laboratory (OPREP). Each analyst must demonstrate the ability to generate acceptable results with this method. Refer to the training requirements for analysts before performing this extraction method.

3. Summary of Procedure

A 30-gram sample is mixed with anhydrous sodium sulfate to form a free-flowing mixture. This is solvent extracted overnight using soxhlet extraction. The extract is dried through powdered and granular anhydrous sodium sulfate and is ready for cleanup and/or analysis following concentration using a Caliper TurboVap or Kuderna-Danish (KD) apparatus followed by nitrogen blow down.

4. Sample Preservation, Containers, Handling, and Storage

4.1 The sample holding times are as follows:

- Sample must be extracted within 14 days from the time of sample collection
- Sample extracts must be analyzed within 40 days of sample extraction

4.2 Sediment/Soil samples – Decant and discard any water layer on the sediment sample. Mix sample thoroughly, especially composited samples. Discard any foreign objects such as sticks, leaves and rocks. Refer to SOP No. 110.0039 for more detail on sub

sampling techniques.

4.3 Waste samples consisting of multiple phases must be prepared by separating the phases and performing the appropriate extraction technique on the phase(s) of interest.

5. Interferences and Potential Problems

5.1 Solvents, reagents, glassware and other sample processing hardware can yield interferences during sample preparation; therefore, these materials must be demonstrated to be free of interferences under the conditions of the analysis by analyzing method blanks.

5.2 Interferences may be co-extracted from the sample. Additional cleanup steps may be necessary to give improved results of analysis of the analytes of interest.

5.3 Phthalate esters can contaminate sample extracts, as many products found in the laboratory contain these esters. Plastics must be avoided during the preparation steps to minimize interferences from these compounds.

6. Equipment and Apparatus

6.1 Beakers – 400ml.

6.2 Flat bottomed 250ml Boiling flasks.

6.3 Soxhlet extractor.

6.4 Condensers, 55/50.

6.5 Balance capable of weighing +/- 0.1 gram.

6.6 Glass syringes for delivering spike and surrogate solutions – 0.25ml, 0.5ml, and 1.0ml.

6.7 Volumetric flasks for making up surrogate and matrix spike solutions – 50ml, 250ml.

6.8 Aluminum Foil (Industrial Grade)

6.9 Hotplates (option instead of mantles)

6.10 Food grade paper coffee filters

7. Standards and Reagents

Reagent grade chemicals shall be used in all tests. Other grades may be used provided the reagent is first verified to be of sufficiently high purity to permit use without lessening the accuracy of the test. The following chemicals including solvents and standards are extensively used in the lab:

7.1 Methylene chloride: pesticide quality or equivalent, to be used for glassware rinsing.

7.2 Acetone: pesticide quality or equivalent, to be used for rinsing glassware.

7.3 1:1 v/v methylene chloride/acetone mixture, to be use for sample extraction.

7.4 Surrogate Standards: *Please note that standards from other vendors could be used as long as the standards are of high purity (> 96%) and traceable to reference materials*.

- Semivolatiles Full Scan: Restek BN Surrogate mix (Cat. No. 31086) at 5000µg/mL in Methylene Chloride; Restek Acid surrogate mix (Cat. No. 31087) at 10,000µg/mL in Methanol.
- Semivolatiles SIM: Cambridge Benzo (e)pyrene d-12 surrogate (Cat. No. DLM-257-S) at 200µg/mL.
- Diesel Range Organics (DRO)/TPH: o-Terphenyl at 10,000µg/mL (Made from neat source (Aldrich).
- Pesticides/PCB: Ultra Decachlorobiphenyl (DCB)(Cat. No. PPS-150) at 1000 µg/mL in Toluene, and Ultra 2,4,5,6-Tetrachloro-m-xylene (TCX)(Cat. No. IST-440) at 2000µg/mL in Acetone.

7.5 Lab Control Sample and Matrix Spike: *Please note that standards from other vendors could be used as long as the standards are of high purity (> 96%) and traceable to reference materials*.

- Semivolatile: Restek 8270 MegaMix (Cat. No. 31850) at 1000µg/mL in Methylene Chloride; Restek 3, 3’ Dichlorobenzidine (Cat. No. 31026) at 2000µg/mL in Methanol, and 8270 add-on compounds from neat. An 8270 add-on Intermediate standard is prepared for the following compounds at 1000µg/mL in Methanol: Benzaldehyde, 1, 1’ Biphenyl, Caprolactam, Acetophenone, Atrazine.
- Pesticides: Restek Single/Dual Column Organochlorine Pesticides Mix AB#2 (Cat. No. 32292) at 8- 80µg/mL.
- PCB: Restek Aroclor 1016/1260 (Cat. No. 32039) at 1000µg/mL in Hexane.
- TPH/DRO: LCS uses Diesel/gasoline.

7.9. Anhydrous sodium sulfate: granular for drying the samples and sample extracts. Baked at 400°C for four hours.

8. Procedure

8.1 Standards Preparation: All standards for the Organic Preparation Laboratory (OPREP) are prepared in the associated Instrumentation Laboratory (GC or GC/MS). The GC or GC/MS Laboratory analyzes the standards at dilution for quality control purposes prior to relinquishing the standards to OPREP. When more than one bottle is prepared, only one bottle is transferred at a time to OPREP. The OPREP technician will notify the GC or GC/MS Laboratory Analyst when new standard is needed, or the last bottle is being taken.

8.1.1 All primary standards received from vendors are logged into the LIMS Standard Logbooks. These include standards for surrogates, LCS and matrix spikes.

The standards are labeled ZPyymmddX,
where:
Z = S for Semivolatile or TPH/DRO, P for Pesticides or PCB
P= Primary standard
yymmdd = date standard is received, and
X = the order the standard is logged into the logbook on that date, in increasing alphabetical order.

The expiration date for ampulated solutions shall not exceed the manufacturer's expiration date or one year from the date of receipt, whichever comes first.

8.1.2 Preparation of Surrogate standard:

8.1.2.1. Semivolatile Full Scan: The Semivolatile working surrogate standard is prepared by combining 2.5ml of the Base/Neutral primary standard in and 2.5ml of the Acid primary standard and diluting to 250ml using methanol.

The working standard contains the following compounds:

Compound	Concentration (µg/ml)
1,2-Dichlorobenzene-d_4	50
2-Fluorobiphenyl	50
Nitrobenzene-d_5	50
p-terphenyl-d14	50
2-Chlorophenol-d_4	75
2-Fluorophenol	75
Phenol-d_6	75
2, 4, 6-Tribromophenol	75

Semivolatile SIM surrogate standard is prepared by diluting 1.25mL of the 200ug/mL primary standard in **Section 7.7** to 50mL in methanol. The resulting concentration is 5ug/mL of Benzo (e) pyrene d-12.

The working surrogate spike standard is labeled ZWyymmddX
where:
Z = S for Semivolatile or TPH/DRO, P for Pesticides or PCB
W=Working Standard
yymmdd = date working standard is prepared,
X = the order that the working standard is prepared on that date, in increasing alphabetical order.

8.1.2.2. The working Pesticide/PCB surrogate standard is prepared by combining 1.2mL of the DCB mix and 0.3mL of the TCX mix and diluting to 1000mL using acetone. The working standard contains the following compounds with the following concentrations:

Compound	Concentration (µg/mL)
Decachlorobiphenyl	1.2
2,4,5,6-Tetrachloro-m-xylene	0.6

8.1.2.3. The TPH/DRO working surrogate standard is prepared by taking 1mL of the o-Terphenyl primary standard and diluting to 200 mL using methanol. The working standard contains 50 µg/mL of o-Terphenyl.

A smaller or larger amount may be used to prepare the surrogate. The final volume of the surrogate solution will be adjusted accordingly.

The expiration date for the surrogate standard is six months from the date of preparation.

8.1.3 Preparation of Lab Control Sample (LCS) and Matrix Spike (MS) Standard:

8.1.3.1. The Semivolatile Full Scan working LCS/MS Standard is prepared by combining 2.5ml of Base/Neutral Composite Set primary standard, 2.5ml of Acid Composite Mix primary standard and 2.5ml of Composite Mix #3 primary standard and diluting to 100ml using methanol. The working Semivolatile SIM LCS/MS Standard is prepared by a further 10 times dilution of the above standard.

8.1.3.2 The working Pesticide LCS/MS Standard is prepared by taking 1.25mL of the Pest Mix AB#2, and diluting it to 50 mL in methanol. The working standard contains the full list of SW8081 individual response compounds at 2-20 µg/mL. See **Attachment 1** for a list of the individual

compounds and their concentrations.

8.1.3.3 The working PCB LCS/MS Standard is prepared by taking 0.8mL of Aroclor 1016/1260 mix and diluting it to 200mL in acetone. The working standard contains the following compounds with the following concentrations:

Compounds	Concentration(µg/mL)
Aroclor 1016	4.0
Aroclor 1260	4.0

8.1.3.4 The TPH/DRO working LCS/MS Standard is prepared by first preparing an intermediate standard and making a dilution of it.

On an analytical balance, weigh out 5.00g of diesel fuel into a 10ml Class A volumetric flask and bring to volume with Methanol.

The intermediate spike standard is labeled SIyymmddX
where:
SI = Semivolatile intermediate standard
yymmdd = date intermediate standard is prepared,
X = the order that the intermediate standard is prepared on that date, in increasing alphabetical order.

The working LCS/MS Standard is prepared by taking 1ml of the intermediate standard above, and diluting to 100ml using Methanol. The working LCS/MS Standard contains the following:

Compounds	Concentration (µg/ml)
Diesel fuel	5000

The LCS/MS Standard is labeled using the same approach discussed in **Section 8.1.2.1**.

A smaller or larger amount may be used to prepare the LCS/MS Standard. The final volume will be adjusted accordingly.

The standard solution is placed in amber bottles and stored in the freezer in the GC or GC/MS lab at –10 to –20°C. One bottle is transferred to the OPREP Lab and stored in the refrigerator at 4± 2°C. The bottles are stored in a separate location from samples or sample extracts to make sure that there is no cross contamination.

All of the appropriate standard preparation information is to be recorded in the LIMS Standard Logbook.

NOTE: All standards prepared from a primary standard expire on or before the primary standard's expiration date.

8.2 Sample Extraction Procedure:

Before starting:

- The soxhlet extractor must be inspected periodically to ensure that the glassware does not have any cracks.
- Remove the surrogate and LCS/MS spiking standards from the refrigerator and allow them to reach room temperature.

8.2.1 Pour 150mL of 1:1 v/v methylene chloride/acetone into each round bottom flask and add about 3 boiling stones.

8.2.2 The sample is mixed to ensure sample homogeneity. A representative portion of the sample is measured into a pre-weighed 400ml glass beaker. A 30 gram ± 0.5 gram sample is transferred into the beaker using a clean stainless steel scoopula. The weight measurement is recorded to the nearest 0.1 gram. Smaller portions of samples may be used. Adjust the final volume accordingly to maintain the same ratios for reporting purposes.

8.2.3 Add enough anhydrous sodium sulfate to the sample, but not more than 1:1 w/w of the sample. When mixed with the anhydrous sodium sulfate, the solid material must be a free flowing; however, it should not contain an excessive amount of anhydrous sodium sulfate. If a sample matrix presents difficulty, discuss the issue with the OPREP Supervisor or Lab Director before proceeding.

8.2.4 Pour the soil sample and anhydrous sodium sulfate mixture into the paper coffee filter and wrap up similar to how a burrito is folded. Once done, place the "burrito" into the labeled soxhlet extractor.

8.2.5 Place the soxhlet extractor vessel onto its boiling flask. Be careful not to knock the extractor over and also be sure not to get any soil into the boiling flask.

8.2.6 According to the test method being used, add the following spikes to the samples already in soxhlets.

- Use a syringe to add 1.0mL of the surrogate standard to the Blank, LCS, all samples and any MS/MSD sample.
- Use a syringe to add 1.0 mL of the LCS/MS standard to the LCS and any

MS/MSD samples.

8.2.6 The boiling flask is now placed on hotplate. The soxhlet is chained so it will not tip over. The condenser is placed on top of the extractor. Start the water running through the condensers. Turn on the hotplates to a set point of 215 degrees F. This is the setting that produces a heating surface temperature we have found to be sufficient for proper cycling. Measure the cycle/hour rate and record this in the extraction logbook. Allow the sample to extract for a **minimum of 16 hours**.

8.2.7 At the end of the extraction, turn off the hotplates. Allow the samples to cool to room temperature. Take the soxhlet out, drain the extraction solvent into the boiling flask and dump the soil mixture into solid waste container. Cover the boiling flask with aluminum foil.

8.2.8 Record all extraction information, including the Date and Time the soxhlet extraction began and ended, in the appropriate Prep Batch Logbook (**Figures 1 and 2**).

8.3 The sample extract is now ready for filtration and concentration. These procedures are found in SOP No. 50.0054, Extract Filtration and Concentration.

8.4. After concentration the extract may require cleanup. The following is a list of Cleanup Procedures**:**

8.4.1. **Sulfur cleanup** is mandatory for all Pesticide/PCB sample extracts containing sulfur. All QC samples including blanks, lab control samples, matrix spikes and duplicate matrix spikes must be subjected to the same cleanup as the field samples. Sulfur cleanup will be performed using activated copper powder. Refer to SOP No. 50.0036 Method 3660B Sulfur Cleanup, for details on activating copper and using it in a sample extract.

8.4.2. **Acid cleanup (PCB extract only)** is mandatory for all PCB sample extracts. Refer to SOP No. 50.0031 Method 3665A Sulfuric Acid Cleanup, for details on using the acid cleanup in a PCB sample extract.

8.4.3. **GPC cleanup** is useful for both Pesticide and semivolatile samples. Refer to SOP No. 50.0032 Method 3640A GPC Cleanup, for details on the procedure for cleanup and quality control criteria for GPC.

8.4.4. Other cleanup methods may be found in SOP numbers 50.0033(Florisil) and 50.0034 (Silica Gel).

8.5 The extracts are transferred to the Semivolatile lab. The extracts are stored in the refrigerator at 4^{o}C until analysis. The storage location is recorded electronically by the analyst during LIMS batch transfer.

8.6 Sample and Extract Disposal:

All samples and sample extracts are disposed of in a way in accordance with applicable OSHA and state regulations.

8.6.1 Samples – All unused portions of samples are returned to the respective storage area. Such portions are kept for 60 days after data submission. After such period, the remainder of the samples is disposed of by the Sample Custodian or his/her designee.

8.6.2 Sample Extracts – All sample extracts are kept for at least 60 days after the submittal of data for the last sample. After such period, the sample extracts are disposed of by the GC or GC/MS labs.

9. Data Reduction and Calculations

Data reduction for calculation of standard preparation:

$$\text{Concentration of working standard} = \frac{(\text{Concentration of ampule})(\text{amount used})}{\text{Final Volume}}$$

10. Quality Assurance/Quality Control

Quality assurance and quality control (QA/QC) procedures are implemented to ensure generation of data of known and documented quality. QA/QC procedures associated with the Organic Preparation Laboratory include preparation of Method Blanks, surrogate spikes, lab control sample, matrix spikes and balance checks. To trace spiking standards, the original manufacturer's list of standard compounds and concentrations are filed and the manufacturer's reference number is documented in the standard preparation log book.

10.1. Method Blank – A method blank is a weight of a clean reference matrix (granular sodium sulfate) that is carried through the entire analytical procedure.

10.1.1 Frequency of Method Blank:

A Method Blank is extracted once for the following, whichever is more frequent:

- Each SDG analysis (not to exceed 20 samples), or
- Each matrix within an SDG, or
- Each extraction procedure within an SDG, or
- Whenever samples are extracted.

10.1.2 Procedure for Method Blank:

- The Method Blank is prepared in identical fashion to the associated samples.
- The Method Blank is subjected to similar extraction, cleanup, concentration and analysis procedures.
- The Method Blank is labeled **MB** and is given a sequential number for every batch of twenty samples or less.

10.2 Lab Control Sample (LCS) – A Lab Control Sample is a weight of a clean reference matrix (granular sodium sulfate) that is spiked with all appropriate target analytes and surrogate spikes, and carried through the entire analytical procedure.

10.2.1 Frequency of LCS:

A LCS is extracted once for the following, whichever is more frequent:

- Each SDG analysis (not to exceed 20 samples), or
- Each matrix within a SDG, or
- Each extraction procedure within a SDG, or
- Whenever samples are extracted.

10.2.2 Procedure for LCS:

- The LCS is prepared in identical fashion as the associated samples; and in addition:
- 1.0mL of the surrogate solution prepared in **Section 8.1.2** and 1.0 mL of the lab control sample prepared in **Section 8.1.3** is added to the LCS sample.
- The LCS is subjected to similar extraction, cleanup, concentration and analysis procedures.
- The LCS is labeled **LCS** and is given the same numerical value as the corresponding method blank.

10.3 Duplicate Matrix Spikes – Matrix spikes and matrix spike duplicates are performed to evaluate the accuracy and precision associated with the sample batch of similar matrix.

For samples that are known to contain target analytes, the laboratory should perform one matrix spike and duplicate. For clean samples and those without documented history, a duplicate set of matrix spikes is performed. Since the majority of the samples received do not have any documented history, the lab will perform matrix spike and matrix spike duplicate.

10.3.1 Frequency of duplicate matrix spikes:

A duplicate set of matrix spikes is extracted once for the following, whichever is more frequent:

- Each SDG analysis (not to exceed 20 samples), or
- Each matrix within a SDG, or
- Each extraction procedure within a SDG.

10.3.2 Procedures for Duplicate Matrix Spikes:

- The duplicate matrix spikes are prepared in identical fashion as the associated samples; in addition
- 1.0 ml of the surrogate solution prepared in **Section 8.1.2** and 1.0 ml of lab control sample prepared in **Section 8.1.3** are added to the duplicate matrix spike samples.
- The duplicate matrix spikes are subjected to similar extraction, cleanup, concentration and analysis procedures.

11. Data Validation and Reporting

11.1 Data generated in the organic preparation laboratory will be reviewed by the supervisor. These data consist of, but are not limited to, extraction/preparation logbook entries, balance calibration logbooks, weights for soil samples, volumes and lot numbers of solvent used. The Quality Control Officer will perform periodic and unscheduled reviews.

12. Corrective Action Procedures

Corrective actions are to be taken if the QA/QC as outlined in this SOP are not adhered to:

12.1 Method Blank Analysis:

All samples that are prepared with a non-compliant Method Blank will be re-extracted and re-analyzed. The re-extracted samples will be labeled with the suffix RE. The analysis laboratory will inform the Organic Preparatory Laboratory when method blank contamination has occurred.

12.2 Surrogate Recovery:

All samples with surrogate recoveries outside of the control limits will be re-extracted and re-analyzed. The re-extracted sample is labeled with the suffix RE. If the re-extracted sample exhibits similar behavior, both data sets will be submitted to demonstrate matrix effects. The analysis laboratory will inform the Organic Preparatory Laboratory when surrogate recoveries have not met accepted criteria, and require re-extraction.

12.3 LCS Recovery:

All samples that are associated with the non-compliant LCS will be re-extracted and re-analyzed. The re-extracted samples will be labeled with the suffix RE. The analysis laboratory will instruct the Organic Preparatory Laboratory when LCS recoveries have not met accepted criteria, and require re-extraction.

12.4 Matrix Spike Recovery and RPD:

These are used as advisory limits and do not trigger sample re-extraction.

13. Health and Safety

Health and safety hazards in the Organic Prep Lab include exposure to analytical standards and solvents. Always work in under a well-ventilated hood. Lab coats, gloves and safety glasses must be worn in the lab at all times.

14. Pollution Prevention, Waste Management, Definitions and Acronyms

See sections 19.0 (Waste Management) and 20.0 (Definitions, Acronyms, and Abbreviations) of the current Quality Assurance Plan.

15. References

U.S. Environmental Protection Agency. SW-846 Test Methods for Evaluating Solid Wastes, Update III, Method 3540C, Soxhlet Extraction, Revision 3, December 1996.

Attachments:

Attachment 1: Pesticide LCS/MS List
Figure 1: Semivolatile Extraction Log
Figure 2: Pest/PCB Extraction Log

Attachment 1: Pesticide LCS/MS List

Analyte	Spike conc in ug/mL
4,4´-DDD	0.4
4,4´-DDE	0.4
4,4´-DDT	0.4
Aldrin	0.2
alpha-BHC	0.2
alpha-Chlordane	0.2
beta-BHC	0.2
delta-BHC	0.2
Dieldrin	0.4
Endosulfan I	0.2
Endosulfan II	0.4
Endosulfan sulfate	0.4
Endrin	0.4
Endrin aldehyde	0.4
Endrin ketone	0.4
gamma-BHC (Lindane)	0.2
gamma-Chlordane	0.2
Heptachlor	0.2
Heptachlor epoxide	0.2
Methoxychlor	2

Figure 1

Semivolatile Extraction Log

Spectrum Analytical, Inc. RI Division **ORGANIC PREP - SAMPLE PREPARATION: SEMIVOLATILES**

Date:	Analysis:		Method #	Aq: 3510C (SepF) 3520C (Liq/Liq) 3570(MSE) Soil: 3550B,C (Sonc) 3540C (Soxh) Other:_____				Matrix Aqueous Soil Wipe Oil Other:_____		Sodium Sulfate Lot#:	
Batch ID	LCS ID	Analyst	Spiked By	Witness	MeCl Lot#		Acetone Lot#	H_2SO_4 Lot#	NaOH Lot#	Time/Date Started:	
										Time/Date Ended:	

Lab ID	Bottle #	Sample Wt (g) / Vol (mL)	Initial pH	Surrogate Spike Added(uL)	Matrix Spike Added(uL)	H2SO4 pH<2	NaOH pH>11	Emulsion	KD Prior to GPC or Fractionation Date / Analyst		GPC or Fractionation Date / Analyst		Final Concentration Date / Analyst		Final Conc. Volume (mL)	Date Extract Trans.

Comments:

Balance ID:

Surrogate Std. ID:

Matrix Spike/LCS Std. ID:

Reviewed By:_____

Sonicator Tuned: Yes / No

Soxhlet Cycle/Hour:_____

Drip Rate_____

Water Bath Temp:_____/MT-___

Logbook ID: 50.0147-12/15

Figure 2

Pest/PCB Extraction Log

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

PREP BATCH REPORT

Prep Start Date: **11/05/2015 15:22**
Prep End Date:
Prep Code: **PCB_S_PR**
Prep Type: **SOXH/SW3540C**
Prep Factor Units: **mL / g**
Prep Batch ID: **83489**
Technician: **Joseph E Liljegren**

QC Matrix: **NA2SO4** Solvent (1): **MECL2** Solvent (3): **HEXANE** Misc (2): **N/A** Clean Up (1): **N/A** Clean Up (3): **N/A**
QC Matrix Lot: **E147-01** Solvent (1) Lot: **DN254** Solvent (3) Lot: **DL348** Misc (2) Lot: **N/A** Clean Up (1) Lot: **N/A** Clean Up (1) Lot: **N/A**

Filter?: **FILTER** Solvent (2): **ACE** Misc (1): **N/A** Misc (3): **N/A** Clean Up (2): **N/A** Clean Up (4): **N/A**
Filter Lot: **FC009469** Solvent (2) Lot: **E107-03** Misc (1) Lot: **N/A** Misc (3) Lot: **N/A** Clean Up (2) Lot: **N/A** Clean Up (4) Lot: **N/A**

Balance ID: **TL1** Sohx Start Time: **11/05/2015 15:00** Sohx Cycles/Hour **5** Sonicator Tuned? **N/A** Bath Temp1 (C): **N/A** Therm ID1: **N/A**
Sohx End Time: **11/06/2015 09:00** BalanceID: **TL1** Corr Fac: **N/A** Corrected Temp: **N/A**

Lab Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	SONC / CNCNT
P1611-09A	SB-101 PCB	S	30	10	OPW151027A	1			JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-09A): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
Soxhlet, CT-RCP																			
P1611-09AMS	SB-101 PCB	S	30	10	OPW151027A	1	OPW150622B	1	JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-09AMS): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
P1611-09AMSD	SB-101 PCB	S	30.5	10	OPW151027A	1	OPW150622B	1	JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-09AMSD): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
P1611-10A	SB-102 PCB	S	30.1	10	OPW151027A	1			JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-10A): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
Soxhlet, CT-RCP																			
P1611-11A	SB-103 PCB	S	30	10	OPW151027A	1			JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-11A): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
Soxhlet, CT-RCP																			
P1611-12A	SB-104 PCB	S	30.5	10	OPW151027A	1			JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-12A): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
Soxhlet, CT-RCP																			
P1611-13A	SB-105 PCB	S	30.3	10	OPW151027A	1			JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-13A): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
Soxhlet, CT-RCP																			
P1611-14A	SB-106 PCB	S	30.5	10	OPW151027A	1			JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-14A): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
Soxhlet, CT-RCP																			
P1611-15A	SB-107 PCB	S	30.1	10	OPW151027A	1			JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-15A): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
Soxhlet, CT-RCP																			
P1611-16A	SB-108 PCB	S	30.2	10	OPW151027A	1			JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-16A): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
Soxhlet, CT-RCP																			

Eurofins Spectrum Analytical, Inc. -- ESAI-RI

PREP BATCH REPORT

Prep Start Date: **11/05/2015 15:22**

Prep End Date:

Prep Code: **PCB_S_PR**

Prep Type: **SOXH/SW3540C**

Prep Factor Units: **mL / g**

Prep Batch ID: **83489**

Technician: **Joseph E Liljegren**

QC Matrix: **NA2SO4**	Solvent (1): **MECL2**	Solvent (3): **HEXANE**	Misc (2): **N/A**	Clean Up (1): **N/A**	Clean Up (3): **N/A**
QC Matrix Lot: **E147-01**	Solvent (1) Lot: **DN254**	Solvent (3) Lot: **DL348**	Misc (2) Lot: **N/A**	Clean Up (1) Lot: **N/A**	Clean Up (1) Lot: **N/A**
Filter?: **FILTER**	Solvent (2): **ACE**	Misc (1): **N/A**	Misc (3): **N/A**	Clean Up (2): **N/A**	Clean Up (4): **N/A**
Filter Lot: **FC009469**	Solvent (2) Lot: **E107-03**	Misc (1) Lot: **N/A**	Misc (3) Lot: **N/A**	Clean Up (2) Lot: **N/A**	Clean Up (4) Lot: **N/A**
Balance ID: **TL1**	Sohx Start Time: **11/05/2015 15:00**	Sohx Cycles/Hour **5**	Sonicator Tuned? **N/A**	Bath Temp1 (C): **N/A**	Therm ID1: **N/A**
	Sohx End Time: **11/06/2015 09:00**		BalanceID: **TL1**	Corr Fac: **N/A**	Corrected Temp: **N/A**

Lab Sample ID	Client Samp ID	M	Initial (mL/g)	Final (mL)	Surrogate Spike ID	Surr (mL)	LCS/D MS/D Spike ID	Spike (mL)	A* Init	W* Init	Due Date	Bottle Number	Trans Date	Trans By	Storage	pH	pH >11	pH <2	SONC / CNCNT
P1611-17A	SB-109 PCB	S	30.3	10	OPW151027A	1			JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-17A): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
Soxhlet, CT-RCP																			
P1611-18A	DUP	S	30.4	10	OPW151027A	1			JEL	CMP	11/17/15	01	11/06/15	CMP	R21		☐	☐	N/A / Turbo Vap 1
CLEAN UP (P1611-18A): SW3665A/ACID_151106A (LOT: 3113123) /cporter, SW3660B/CU_151106A (LOT: MKBQ0741V) /cporter																			
Soxhlet, CT-RCP																			

Clara M Porter 11/06/2015
Analyst Reviewed Date

Clara M Porter 11/06/2015
Manager Reviewed Date

Comments:

*A = Analyst (Spiked) *W = Witnessed (Spike) *T = Transferred

Tissue Sample Preparation

Contents SOP NO. 110.0060

1. Procedure Document	X
2. Training Document	N/A
3. Process Overview	X
4. Validation Document	N/A

Procedure Signatures

Title:	Signature	Date
Laboratory Director/Technical Director		6/12/15
Quality Assurance Director		6/11/15
Laboratory/Quality Designee		

Procedure Reviews

Signature	Title	Date	Signature	Title	Date

Revision Record

Revision Date	Revision Description	Comments	Initials
1/14/13	Update of lab name thru SOP plus some minor edits.	Full rev	SBL
6/04/15	Added NYSDEC SOP references, name edit again. Removed OLM references.	Full	SBL

Procedure Superseded By _____ Date: _____
Procedure Discontinued By:_____ Date: _____
Procedure Archived By:_____ Date:_____

SPECTRUM ANALYTICAL, INC

STANDARD OPERATING PROCEDURE

For

Tissue Sample Preparation

SOP No. 110.0060
Rev. 2

	Signature	Date
QA Director:	Thomas B Sawyer	6/11/15
Lab Director:		6/12/15
Effective Date:	6/19/15	

SPECTRUM ANALYTICAL, INC

STANDARD OPERATING PROCEDURE

for

Tissue Sample Preparation
Rev. 2

1. Scope and Application

This SOP described procedures for the preparation of tissue samples for analysis by the common EPA SW-846 analysis methods. The sample preparation steps have been modified to address the increased fat concentration in the samples compared to other environmental matrices. The prepared sample extracts/digestates are analyzed according to the instrumental conditions detailed in the EPA analysis methods. These methods have not been validated by the lab for biological tissue matrices. These methods are used when requested by a customer desiring protocols as similar as possible to standard EPA environmental analysis techniques. Alternative methods published by the US FDA, NYSDEC and others may be more appropriate for certain classes of compounds or for research studies on biological tissue matrices.

2. Personnel Qualifications and Responsibilities

This method is restricted to use by or under the supervision of trained analysts. Each analyst must demonstrate the ability to generate acceptable results with this method. Refer to the lab's training requirements for analysts before performing this extraction method.

3. Summary of Procedure

Tissue samples are stored frozen until just prior to preparation. Samples are reduced in size using a blender or tissue homogenizer and subsequently further prepared for analysis. Percent Lipid Determination is covered in a separate SOP (50.0102).

4. Sample Preservation, Containers, Handling, and Storage

Fish samples are stored in a freezer until the day before preparation. Tissue samples may be frozen indefinitely, holding time only advances while tissue is unfrozen.

If freeze drying is required, see NYS Department of Environmental Conservation Prep Lab SOP4 (5/28/14) Hale Creek Field Station Sections V for Freeze Drying, as well as Special Operation

Procedure (SpOP) for Freeze Drying High Moisture Solid-Matrix Samples. The SpOP details the use of our Labconco Freezone Freeze Dry System (EIA-PESFRZ1.MOD Freeze Dry, 1/00).

5. Interferences and Potential Problems

See the individual analytical methods. This preparation SOP is designed to address the matrix interferences from elevated lipid/fat content of tissue samples.

6. Equipment and Apparatus

Waring-type blender with stainless steel container and blades, or Tissue homogenizer

7. Standards and Reagents

See the individual analytical SOPs

8. Procedure

8.1 Initial Preparation:

- Fish samples are stored in freezer until the day before preparation. Tissue samples may be frozen indefinitely, holding time only advances while tissue is unfrozen.

- Thaw fish in refrigerator the day before preparation.

- Sample is homogenized in stainless steel Waring blender or tissue homogenizer. Typically the entire fish sample is homogenized. If only a portion of the sample is to be analyzed (fillet, liver, etc.) this must be identified by the Project Manager. When required, refer to NYS Department of Environmental Conservation Prep Lab SOP4 (5/28/14) Hale Creek Field Station Sections III and IV for more in depth guidance on sample dissection and homogenization. This document details several ways to filet fish prior to homogenization and specifies using the left side of the fish. This is not a routine method for preparing the filet but may be required for some projects.

- If volatile organics analysis is required, homogenization should occur in a laboratory free of volatile organic solvents. Please note that the homogenization process is likely to cause significant loss of volatile organic constituents.

- Homogenized sample is split into portions for analysis. Samples are typically retained in 4oz wide mouth glass jars with Teflon cap liners. Method holding times are applied from the time sample is thawed until analysis. If sample is refrozen, the holding time “clock” is halted at that time.

- If volatile organics analysis is required, an approximately 1 gram portion of the sample is weighed into tared pre-preserved VOC sample bottles containing 5ml sodium bisulfate solution. Two separate preserved aliquots per sample should be weighed-out so that extra sample is available if needed. A third aliquot of approximately 1 gram is also weighed into a tared methanol preserved VOC vial. The 14 day VOC holding time is applied beginning from sample thawing until the time of analysis.

8.2 Extractable Organics Preparation:

- Weigh out an approximately 10 gram wet weight aliquot for extraction.

- Aliquot is dried with diatomaceous earth to a free-flowing mixture. Anhydrous sodium sulfate may be used, but due to the additional volume required, diatomaceous earth is preferable.

- Dried sample aliquot is spiked with the appropriate volume of surrogate standard solution.

- Sample aliquot is extracted overnight (18hours +/- 2 hours) in a soxhlet extraction apparatus using 1:1 methylene chloride / hexane solvent. Alternatively sample may be extracted using a pressurized fluid extraction apparatus using the current method SW3545 with 1:1 methylene chloride / hexane solvent.

- Sample extract is filtered and dried through anhydrous sodium sulfate and concentrated using a kuderna-danish apparatus.

- For semivolatile organics the final volume is 10ml prior to GPC clean-up and 0.5ml after GPC clean-up.

- For pesticides/PCBs the final extract volume is brought to 10ml in methylene chloride prior to GPC clean-up.

8.3 Semivolatile Organics Analysis:

- The extract is cleaned using GPC.

- The extract is analyzed using a GC/MS system calibrated to the requirements of the current method SW8270. Based on past experience, samples for semivolatile organic analysis may require two injections to demonstrate matrix interference with polar surrogate recoveries.

- Reporting limits are elevated by approximately a factor of 3 from a typical soil sample due to the 10g sample size. Results are reported without correction for percent moisture, on a wet-weight basis.

8.4 PCB Only Analysis:

- 5ml of the pesticide/PCB extract is cleaned using GPC, exchanged into hexane and concentrated to 2.5ml using dry nitrogen

- The extract is cleaned using silica gel, and sulfuric acid. If necessary the extract is further cleaned using GPC.

- The cleaned extract is analyzed using GC a "Y" splitter with two dissimilar columns connected to electron capture detectors following the current method SW8082.

- Reporting limits are elevated by approximately a factor of 3 from a typical soil sample due to the 10g sample size. Results are reported without correction for percent moisture, on a wet-weight basis.

8.5 Pesticide and PCB Analysis:

- 5ml of the pesticide/PCB extract is cleaned using GPC, exchanged into hexane and concentrated to 2.5ml using dry nitrogen

- if necessary the extract is further cleaned using florisil.

- The cleaned extract is analyzed using GC a "Y" splitter with two dissimilar columns connected to electron capture detectors following the current methods SW8081 and SW8082.

- Reporting limits are elevated by approximately a factor of 3 from a typical soil sample due to the 10gram sample size. Results are reported without correction for percent moisture, on a wet-weight basis.

8.6 Volatile Organics Prep/Analysis:

- A 1 gram sample aliquot preserved in sodium bisulfate solution is analyzed by the current method SW5035 followed by the SW8260 analysis method. The sample aliquot is reduced from 5 grams to 1 gram to reduce sample foaming which will prevent future analyses until the system is decontaminated.

- If foaming is observed using the current method SW5035 – sodium bisulfate preserved sample aliquot, the analysis is immediately stopped to avoid instrument contamination. The methanol preserved aliquot is used following standard procedures.

- Reporting limits are elevated by approximately a factor of 5 due to the reduced sample size. Results are reported without correction for percent moisture, on a wet weight basis. Please note that initial homogenization of the sample could result in significant loss of volatile constituents.

8.7 Metals Analysis:

- ICP digestion uses EPA Method 200.11 modified as follows:

- Samples are pretreated prior to ICP digestion by weighing 1-2 grams of homogenized tissue into a polyethylene tube, adding approximately 5ml concentrated HNO3 to cover the tissue, covering the tube with a watch glass, and allowing to sit in a ventilated hood for approximately 24 hours.

- Place tubes in a heating block at 95 degrees C. for 30 minutes, cool.

- Add 2 ml concentrated HNO3 and heat in the heating block at 95 degrees C for another 30 minutes, cool.

- Repeat the addition of concentrated HNO3 and heating until the tissue fibers are visibly broken-down.

- Add 5 ml concentrated HCl and heat and heat in the heating block at 95 degrees for 15 minutes.

- Cool, bring to 50 ml volume with DI water, centrifuge at 3000 rpm for 2 –3 minutes.

- Digestates are decanted and analyzed by ICP following the current method SW6010 analysis method.

- Results are reported without correction for percent moisture, on a wet weight basis.

8.7 Mercury Analysis:

- Mercury analysis uses Method 245.6 modified as follows.

- Samples for mercury analysis are pretreated by placing approximately 0.20 – 0.75gram in a BOD bottle, adding approximately 4ml concentrated H2SO4 and 1ml concentrated HNO3 to cover the tissue, heat in a water bath at 80 degrees C for 30 minutes, cool sample.

- Add 15ml KmnO4 and 8ml K2S2O8 solution.

- Heat at 80 degrees C for 90 minutes.

- Calibration standards are prepared using the same procedure.

- Analyze using the cold vapor technique by the current analysis Method SW7471.

- Results are reported without correction for percent moisture, on a wet weight basis.

8.8 Cyanide Analysis:

- Sample size is reduced to 0.5g to prevent clogging of the purging apparatus during distillation.

- Distillation proceeds as typical for a soil sample using 50% sulfuric acid, magnesium chloride and sulfamic acid.

- Sample distillate is analyzed colorimetrically by current method SW9012 following standard procedures. Reporting limit is elevated by a factor of 2 from a soil sample due to reduced sample size. Results are reported without correction for percent moisture, on a wet-weight basis.

9. Data Reduction and Calculations

Percent Lipids = (A * B) / (C * D * 10,
where:

A = Residue weight following evaporation to dryness
B = Final extract volume (typically 10mL)
C = Portion of extract used for lipids determination (typically 2.5mL)
D = Tissue weight extracted (typically approx. 10g)

10. Quality Assurance/Quality Control

Quality assurance and quality control (QA/QC) procedures are implemented to ensure generation of data of known and documented quality. QA/QC procedures associated with the Organic Preparation Laboratory include preparation of Method Blanks, surrogate spikes, lab control sample, matrix spikes and balance checks.

For specific details, see the individual analytical SOPs

11. Data Validation and Reporting

N/A

12. Data Management and Records Management

Electronic data generated from tissue sample preparation is saved and managed per SOP No. 110.0029 Electronic Data Management.

13. Corrective Action Procedures

See Corrective Action Procedures for the individual analytical SOPs.

14. Health and Safety

Health and safety hazards in the Preparation Laboratories include exposure to acids, bases, analytical standards and solvents. Always work in under a well-ventilated hood. Lab coats, gloves and safety glasses must be worn in the lab at all times.

15. Pollution Prevention, Waste Management, Definitions and Acronyms

See Sections 19.0 (Waste Management) and 20.0 (Definitions, Acronyms, and Abbreviations) of the current Quality Assurance Plan

16. References

EPA SW-846 methods and associated internal SOPs.

Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry. US EPA, Office of Water, February 1999.

Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volume 1, 3rd edition (USEPA Office of Water, November 2000)

NYS Department of Environmental Conservation Prep Lab SOP4 Hale Creek Field Station (5/28/2014), Anthony Gudlewski.

Internal SpOP for Freeze Drying High Moisture Solid-Matrix Samples, Date Revised 1/10/03.

Attachment H-2

Shellfish Data Statistical Comparison

RESOLUTION CONSULTANTS

Resolution Consultants
Two City Center, Suite 200
Portland, ME 04101

207.775.2800 tel
207.775.4820 fax

To	Bob Shoemaker
Subject	2016 Shellfish Tissue Comparisons and Statistical Analyses
From	Maryann Welsch
Date	March 9, 2017

This memorandum presents the results of an evaluation of metal and total PCB concentrations in shellfish tissue collected along the shoreline of the Allen Harbor Landfill in September 2016 and December 2016. The September 2016 analytical data were collected as part of a long-term monitoring program. Due to analytical data quality issues, additional shellfish tissue samples were collected in December 2016 at the same locations as the September 2016 samples. The purpose of this evaluation is to determine if the December 2016 analytical results are representative of September 2016 analytical results for future comparisons conducted as part of the monitoring program.

Paired-sample tests were conducted on the shellfish tissue analytical data for metals and PCBs from samples collected in September 2016 and December 2016 to determine whether there is a statistically significant difference in shellfish concentrations measured at each location between the two dates. The pairs were defined based on the ten locations, e.g., aluminum concentrations detected in tissue samples collected at location ET09-03 in September 2016 and December 2016 are considered one pair of samples.

Table 1 presents the analytical data for metals and PCBs for shellfish samples collected at each location in September and December 2016. The same species of shellfish were collected at each location on both dates with the exception of two locations. At location ET09-04, quahog tissue was collected in September, whereas ribbed mussel tissue was collected in December. At ET09-06, ribbed mussel tissue was collected in September whereas quahog tissue was collected in December. For the purposes of this evaluation, the two different species were treated as paired samples at these locations.

Table 2 presents the summary statistics and the results of the paired-sample tests conducted for each parameter. The paired-sample test was selected based on the distribution of the September and December datasets for each parameter. If both the September and December datasets per parameter are normally distributed, then a paired t-test was used to determine if the mean concentrations of September and December datasets are statistically different. If one or both datasets are not normal or lack a distribution, then the nonparametric Wilcoxon signed-rank (WSR) test was used to determine if the median concentrations are statistically different between September and December datasets. The null hypothesis (H_O) and alternative hypothesis (H_A) of these tests are:

H_O = Mean/Median of September Concentrations = December Concentrations

H_A = Mean/Median of September Concentrations ≠ December Concentrations

For both tests, a p-value of less than 0.05 indicates that the null hypothesis is rejected and the alternative is accepted with 95% confidence. A p-value of greater than 0.05 indicates that the null hypothesis is not rejected and the mean/median concentrations measured in September and December are equal. In addition, the data for each parameter were plotted into two graphs, a Quartile-Quartile (Q-Q) plot and a boxplot, to illustrate the range and distribution of the September and December datasets (**Attachment A**).

Results of Metals Comparisons

Most metals were detected in all samples collected in September and December 2016 with the exception of cobalt and sodium, which were not detected in September 2016 samples. Therefore, comparisons were not made for these two metals. Total chromium and copper were detected at low frequencies (less than 5 samples) in both September and December, and as a result, statistical comparisons were not conducted for these two metals, but Q-Q plots illustrate how detected and non-detected (reporting values were used for non-detects) concentrations compare (**Attachment A**). Selenium was detected in at least five samples in both September and December, but not at the same locations (detected in both months in samples from only three locations). Therefore, due to the low frequency of detection of paired samples, statistical comparisons were not conducted for selenium.

The following metals were normally distributed with 100% detection for both September and December datasets: aluminum, arsenic, nickel, and potassium. A paired-sample t-test was conducted for these four metals. The following metals were not normally distributed and/or with less than 100% detection in one or both months: cadmium, calcium, iron, lead, magnesium, manganese, mercury, silver, and zinc. The WSR test was conducted for these metals.

The results of these tests indicate that:

- Mean or median concentrations of all but four metals are equal in September and December datasets.
- Calcium, mercury, potassium, and silver were found to be significantly different between paired samples in September and December.
- These statistical test results are supported by the Q-Q plots and boxplots, which illustrate significant overlap in the central tendencies and ranges of concentrations for most metals except for the four metals mentioned above.
- In addition, Q-Q plots and boxplot (selenium only) illustrate that detected concentrations of total chromium, copper, and selenium are similar and overlap in both September and December datasets.

Results of PCB Comparisons

The total PCB concentrations in September and December were not normally distributed. Therefore, a WSR test was conducted for this comparison. The results of the WSR test indicate that the median concentrations of total PCBs in paired samples in September and December are equal. This is supported by the Q-Q and box plots, which illustrate significant overlap in the central tendencies and ranges of concentrations of total PCBs in September and December.

Results of Physical Parameter Comparisons

Comparisons of physical parameters including lipids, shell length, and width were also conducted to determine the similarity of specimen size and lipid content in paired samples collected in September and December. Lipids were not normally distributed, and therefore, a WSR test was conducted.

Shell length and width data were normally distributed in both months, so a paired-sample t-test was conducted on both of these parameters. The results of the WSR and paired t-tests indicate that:

- Median lipids measured in paired samples collected in September and December are equal
- Mean lengths and widths measured in paired samples collected in September and December are equal.
- These findings are supported by the Q-Q and box plots, which illustrate significant overlap in the central tendencies and ranges of these parameters in September and December.

Conclusions

The results of this evaluation indicate that, with the exception of four metals (calcium, mercury, potassium, and silver), the December shellfish tissue dataset is equivalent to the September tissue dataset and can be used to represent the Fall 2016 tissue conditions in future comparisons at each location to support the long-term monitoring program.

Tables

Table 1
September 2016 and December 2016
PCB and Metals Results Comparison

LOCATION ID	ET09-03		ET09-03		ET09-03		ET09-04		ET09-04		ET09-05		ET09-05		ET09-05		ET09-06		ET09-06		ET09-07		ET09-07	
SAMPLE DATE	9/14/2016		9/14/2016		12/14/2016		9/14/2016		12/14/2016		9/16/2016		12/13/2016		12/13/2016		9/16/2016		12/13/2016		9/15/2016		12/14/2016	
NUMBER SAMPLED AND SPECIES	27 RM				30 RM		8 QH		35 RM		10 QH		14 QH				28 RM		9 QH		42 RM		45 RM	
QC IDENTIFIER	FD		N		N		N		N		N		N		FD		N		N		N		N	
PARAMETER																								
Metals (mg/kg)																								
ALUMINUM	29.2	J	43.8	J	52.3		6.2	J	128		17.4	J	21.5	J	6.8	J	42.6	J	2.1	J	31.7	J	38.3	
ANTIMONY	0.45	U	0.64	U	0.82	U	0.7	U	0.8	U	0.52	U	0.55	U	0.7	U	0.57	U	0.59	U	0.59	U	0.72	U
ARSENIC	2.6		2.6		2.4		1.9		3.4		2.6		2.9		2.9		2.8		2.6		3.7		2	
BARIUM	5.6	U	6.4	U	8.2	U	7	U	10	U	6.5	U	6.9	U	8.7	U	5.7	U	7.4	U	7.4	U	7.2	U
BERYLLIUM	0.14	U	0.16	U	0.2	U	0.18	U	0.25	U	0.16	U	0.17	U	0.22	U	0.14	U	0.18	U	0.19	U	0.18	U
CADMIUM	0.21		0.2		0.12	J	0.092	J	0.17	J	0.063	J	0.069	J	0.063	J	0.073	J	0.064	J	0.25		0.46	
CALCIUM	2300	J	1630	J	662		2660	J	2430		1990	J	1060		1300		1420	J	606		2430	J	700	
CHROMIUM, TOTAL	0.56	U	0.64	U	0.82	U	1.1		1.1		0.65	U	0.69	U	0.87	U	0.57	U	0.74	U	0.74	U	1.1	
COBALT	1.4	U	1.6	U	0.12	J	1.8	U	0.26	J	1.6	U	0.17	J	0.18	J	1.4	U	0.13	J	1.9	U	0.057	J
COPPER	2	U	2.1	U	1.4	U	2.7	U	6.4		1.3	U	1.1	U	1.3	U	1.6	U	1.8	U	2.5	U	1.9	U
IRON	204	J	263	J	262		48.5	J	599		75.8	J	71.5	J	32.8	J	178	J	15.9		165	J	113	
LEAD	0.37		0.42		0.53		0.17	J	1.2		0.16	U	0.14	J	0.22	U	0.25	J	0.14	J	0.25	J	0.26	J
MAGNESIUM	878		901		1010		958		1250		936		1000		1040		875		927		911		941	
MANGANESE	6.6		6.9		22.1		7.2		41.4		4		2.6		2.2	U	29.9		3.1		10.4		1.8	
MERCURY	0.012	J	0.011	J	0.0054	J	0.0091	J	0.0068	J	0.0098	J	0.0072	J	0.0074	J	0.01	J	0.0066	J	0.015	J	0.0096	J
NICKEL	0.2	J	0.2	J	0.2	J	0.98	J	0.7	J	0.94	J	0.87	J	0.88	J	0.32	J	0.59	J	0.34	J	0.45	J
POTASSIUM	1120		1070		901		1330		1350		1390		1120		1170		1360		1440		1340		865	
SELENIUM	0.67	J	0.53	J	0.82	U	0.7	U	1.2	J	0.45	J	0.64	J	0.57	J	0.42	J	0.62	J	0.74	U	0.72	U
SILVER	0.065	J	0.08	J	0.13	J	0.056	J	0.15	J	0.042	J	0.076	J	0.075	J	0.051	J	0.093	J	0.39	J	0.94	J
SODIUM	6820	U	7000	U	7570		7710	U	9130		6730	U	7500		7420		6940	U	6620		7490	U	7160	
THALLIUM	0.28	UJ	0.32	UJ	0.41	UJ	0.35	UJ	0.5	UJ	0.32	UJ	0.34	UJ	0.43	UJ	0.29	UJ	0.37	UJ	0.37	UJ	0.36	UJ
VANADIUM	1.4	U	1.6	U	2	U	1.8	U	2.5	U	1.6	U	1.7	U	2.2	U	1.4	U	1.8	U	1.9	U	1.8	U
ZINC	6.5	J	6.5	J	5.5		15	J	10.6		15	J	12.5		13.2		6.4	J	14.6		6.8	J	5	
PCBs (ug/kg)																								
DECACHLOROBIPHENYL	0.42	UJ	0.41	U	0.26	J	0.42	U	0.42	U	0.42	U	0.38	J	0.23	J	2		0.42	UJ	0.41	U	0.41	U
DICHLOROBIPHENYL	0.083	UJ	0.082	U	0.082	U	0.083	U	0.42		0.083	U	0.083	U	0.082	U	0.036	J	0.083	UJ	0.31	J	0.082	U
HEPTACHLOROBIPHENYL	2.4	J-	3.4		5.3		6.1		3.7		0.31	J	0.71	J	0.21	J	11		0.76	J-	1.3		1.1	
HEXACHLOROBIPHENYL	8.2	J-	13		16		7.2		15		1.3		1.5		0.96		53		1.3	J-	4		5.5	
MONOCHLOROBIPHENYL	0.17	UJ	0.16	U	0.17	U	0.17	U	0.17	U	0.17	U	0.17	U	0.16	U	0.17	U	0.17	UJ	0.17	U	0.16	U
NONACHLOROBIPHENYL	0.42	UJ	0.41	U	0.41	U	0.42	U	0.42	U	0.42	U	0.42	U	0.41	U	0.49	J	0.42	UJ	0.41	U	0.41	U
OCTACHLOROBIPHENYL	0.5	UJ	0.49	U	0.5	U	0.87	J	0.5	U	0.5	U	0.5	U	0.49	U	1.2		0.5	UJ	0.5	U	0.49	U
PENTACHLOROBIPHENYL	3.6	J-	4.5		5.1		2.1		6.6		0.34	J	0.19	J	0.15	J	72		0.21	J-	1.7		2.7	
TETRACHLOROBIPHENYL	0.36	J-	0.24	J	0.74		0.27	J	1.2		0.084	J	0.17	U	0.16	U	32		0.17	UJ	0.32	J	0.17	J
TRICHLOROBIPHENYL	0.13	J	0.55	J	0.082	U	0.099	J	0.088	J	0.12	J	0.19	J	0.082	U	4.1		0.083	UJ	0.082	U	0.082	U
TOTAL PCBS	15	J-	22		27		17		28		2.2		3.0	J	1.5	J	180		2.2	J-	7.8		9.4	
LIPIDS																								
FRACTIONAL LIPIDS	0.0026		0.002		0.0016		0.00099		0.0049		0.00033		0.00053		0.00076		0.001		0.0012		0.00066		0.0012	
PCBs (ug/kg) Lipid Normalized																								
DECACHLOROBIPHENYL	161.5	UJ	205	U	162.5	J	424.2	U	85.7	U	1272.7	U	717	J	302.6	J	2000		350	UJ	621.2	U	341.7	U
DICHLOROBIPHENYL	31.9	UJ	41	U	51.3	U	83.8	U	85.7		251.5	U	156.6	U	107.9	U	36	J	69.2	UJ	469.7	J	68.3	U
HEPTACHLOROBIPHENYL	923.1	J-	1700		3312.5		6161.6		755.1		939.4	J	1339.6	J	276.3	J	11000		633.3	J-	1969.7		916.7	
HEXACHLOROBIPHENYL	3153.8	J-	6500		10000		7272.7		3061.2		3939.4		2830.2		1263.2		53000		1083.3	J-	6060.6		4583.3	
MONOCHLOROBIPHENYL	65.4	UJ	80	U	106.3	U	171.7	U	34.7	U	515.2	U	320.8	U	210.5	U	170	U	141.7	UJ	257.6	U	133.3	U
NONACHLOROBIPHENYL	161.5	UJ	205	U	256.3	U	424.2	U	85.7	U	1272.7	U	792.5	U	539.5	U	490	J	350	UJ	621.2	U	341.7	U
OCTACHLOROBIPHENYL	192.3	UJ	245	U	312.5	U	878.8	J	102	U	1515.2	U	943.4	U	644.7	U	1200		416.7	UJ	757.6	U	408.3	U
PENTACHLOROBIPHENYL	1384.6	J-	2250		3187.5		2121.2		1346.9		1030.3	J	358.5	J	197.4	J	72000		175	J-	2575.8		2250	
TETRACHLOROBIPHENYL	138.5	J-	120	J	462.5		272.7	J	244.9		254.5	J	320.8	U	210.5	U	32000		141.7	UJ	484.8	J	141.7	J
TRICHLOROBIPHENYL	50.0	J	275	J	51.3	U	100	J	18	J	363.6	J	358.5	U	107.9	U	4100		69.2	UJ	124.2	U	68.3	U
TOTAL PCBS	5769.2	J-	11000		16875		17171.7		5714.3		6666.7		5660.4	J	1973.7	J	180000		1833.3	J-	11818.2		7833.3	

Notes:
1) U or < = Non-detect at laboratory detection limit
2) J = Estimated Value, J+ = biased high, J- = biased low, R = rejected
3) Sample Type N = normal sample, FD = duplicate sample
4) Species Collected RM = Ribbed Mussels, QH = Quahogs
5) * = MS/MSD collected

Table 1
September 2016 and December 2016
PCB and Metals Results Comparison

LOCATION ID	ET09-08		ET09-08		ET09-09		ET09-09		ET09-10		ET09-10		ET09-11		ET09-11		ET09-12		ET09-12	
SAMPLE DATE	9/15/2016		12/14/2016		9/15/2016		12/13/2016		9/15/2016		12/13/2016		9/13/2016		12/13/2016		9/15/2016		12/13/2016	
NUMBER SAMPLED AND SPECIES	39 RM		40 RM		12 QH		10 QH		19 QH*		28 QH*		30 RM		44 RM		7 QH		11 QH	
QC IDENTIFIER	N		N		N		N		N		N		N		N		N		N	
PARAMETER																				
Metals (mg/kg)																				
ALUMINUM	49.8	J	144		15.7	J	2.6	J	54	J	7.3	J	11.3	J	9.3		17.6	J	6.2	J
ANTIMONY	0.56	U	0.52	U	0.67	U	0.65	U	0.62	U	0.87	U	0.73	U	0.82	U	0.71	U	0.51	U
ARSENIC	3.5		2.5		2.4		2.9		2.9		2.8		2.4		2		2.2		3.1	
BARIUM	7	U	6.5	U	8.3	U	6.5	U	6.2	U	8.7	U	9.1	U	8.2	U	7.1	U	6.4	U
BERYLLIUM	0.17	U	0.16	U	0.21	U	0.16	U	0.16	U	0.22	U	0.23	U	0.2	U	0.18	U	0.16	U
CADMIUM	0.15	J	0.15	J	0.065	J	0.066	J	0.074	J	0.059	J	0.075	J	0.073	J	0.082	J	0.055	J
CALCIUM	2540	J	635		3020	J	494		4300	J	926		4380	J	988		3310	J	879	
CHROMIUM, TOTAL	1.1		1.4		0.83	U	0.65	U	0.62	U	0.87	U	1.6		0.82	U	1		0.64	U
COBALT	1.7	U	0.14	J	2.1	U	0.14	J	1.6	U	0.15	J	2.3	U	0.059	J	1.8	U	0.15	J
COPPER	3.4		3		2.7	U	2.8		2.8	U	2.2	U	0.23	U	1.6	U	3.8		2.7	
IRON	157	J	390		71	J	19		355	J	38		58.5	J	38		90.7	J	39.3	
LEAD	0.23	J	0.88		0.18	J	0.16	J	0.48		0.22	U	0.23	U	0.14	J	0.23	J	0.22	J
MAGNESIUM	1000		959		950		926		1030		937		925		967		955		946	
MANGANESE	6.5		6.5		6.1		3.2		12.5		4.8		12.7		11.6		7.6		4	
MERCURY	0.012	J	0.014	J	0.0095	J	0.0058	J	0.028	J	0.008	J	0.012	J-	0.0074	J	0.012	J	0.0059	J
NICKEL	0.53	J	0.65	J	0.74	J	0.61	J	1	J	0.58	J	0.76	J	0.14	J	0.84	J	0.37	J
POTASSIUM	1220		855		1320		1510		1440		1360		1260		966		1440		1310	
SELENIUM	0.7	U	0.71	J	0.54	J	0.65	U	0.62	U	0.57	J	0.78	J	0.54	J	0.71	U	0.56	J
SILVER	0.25	J	0.57	J	0.076	J	0.079	J	0.16	U	0.091	J	0.13	J	0.2	J	0.057	J	0.11	J
SODIUM	8130	U	6890		7110	U	6410		7680	U	6630		7440	U	7470		7020	U	6800	
THALLIUM	0.35	UJ	0.33	UJ	0.42	UJ	0.32	UJ	0.31	UJ	0.43	UJ	0.45	UJ	0.41	UJ	0.36	UJ	0.32	UJ
VANADIUM	1.7	U	1.6	U	2.1	U	1.6	U	1.6	U	2.2	U	2.3	U	2	U	1.8	U	1.6	U
ZINC	6.4	J	6.5		12.5	J	15.6		23.3	J	14		5.8	J	5.3		15.1	J	13.6	
PCBs (ug/kg)																				
DECACHLOROBIPHENYL	0.42	U	0.41	U	0.41	U	0.42	UJ	0.42	UJ	0.2	J	0.42	UJ	0.41	U	0.41	U	0.41	UJ
DICHLOROBIPHENYL	0.25	J	0.21	J	0.082	U	0.083	UJ	0.083	UJ	0.083	U	0.22	J-	0.082	U	0.082	U	0.082	UJ
HEPTACHLOROBIPHENYL	0.68	J	0.37	J	0.25	U	0.2	J-	0.25	UJ	0.21	J-	0.8	J-	1.7		0.64	J	0.35	J-
HEXACHLOROBIPHENYL	2.4		1.7		0.61	J	0.86	J-	0.51	J	0.63	J-	4	J-	8.3		1.1		0.51	J-
MONOCHLOROBIPHENYL	0.17	U	0.16	U	0.16	U	0.17	UJ	0.17	UJ	0.17	U	0.17	UJ	0.16	U	0.17	U	0.17	UJ
NONACHLOROBIPHENYL	0.42	U	0.41	U	0.41	U	0.42	UJ	0.42	UJ	0.42	UJ	0.42	UJ	0.41	U	0.41	U	0.41	UJ
OCTACHLOROBIPHENYL	0.5	U	0.49	U	0.49	U	0.5	UJ	0.5	UJ	0.5	UJ	0.5	UJ	0.49	U	0.5	U	0.5	UJ
PENTACHLOROBIPHENYL	0.45	J	0.99		0.19	J	0.17	UJ	0.14	J	0.18	J-	2.1	J-	4.4		0.72		0.17	UJ
TETRACHLOROBIPHENYL	0.17	U	0.087	J	0.13	J	0.17	UJ	0.17	UJ	0.17	UJ	0.34	J-	0.66		0.16	J	0.17	UJ
TRICHLOROBIPHENYL	0.075	J	0.055	J	0.1	J	0.083	UJ	0.083	UJ	0.083	UJ	0.1	J-	0.082	U	0.13	J	0.082	UJ
TOTAL PCBS	3.9		3.4		1.2		1.1	J-	0.75	J	1.2	J-	7.7	J-	15		2.9		0.86	J-
LIPIDS																				
FRACTIONAL LIPIDS	0.00066		0.0006		0.00033		0.00092		0.00066		0.0012		0.0023		0.0012		0.00066		0.0012	
PCBs (ug/kg) Lipid Normalized																				
DECACHLOROBIPHENYL	636.4	U	683.3	U	1242.4	U	456.5	UJ	636.4	UJ	166.7	J	182.6	UJ	341.7	U	621.2	U	341.7	UJ
DICHLOROBIPHENYL	378.8	J	350	J	248.5	U	90.2	UJ	125.8	UJ	69.2	U	95.7	J-	68.3	U	124.2	U	68.3	UJ
HEPTACHLOROBIPHENYL	1030.3	J	616.7	J	757.6	U	217.4	J-	378.8	UJ	175	J-	347.8	J-	1416.7		969.7	J	291.7	J-
HEXACHLOROBIPHENYL	3636.4		2833.3		1848.5	J	934.8	J-	772.7	J	525	J-	1739.1	J-	6916.7		1666.7		425	J-
MONOCHLOROBIPHENYL	257.6	U	266.7	U	484.8	U	184.8	UJ	257.6	UJ	141.7	U	73.9	UJ	133.3	U	257.6	U	141.7	UJ
NONACHLOROBIPHENYL	636.4	U	683.3	U	1242.4	U	456.5	UJ	636.4	UJ	350	UJ	182.6	UJ	341.7	U	621.2	U	341.7	UJ
OCTACHLOROBIPHENYL	757.6	U	816.7	U	1484.8	U	543.5	UJ	757.6	UJ	416.7	UJ	217.4	UJ	408.3	U	757.6	U	416.7	UJ
PENTACHLOROBIPHENYL	681.8	J	1650		575.8	J	184.8	UJ	212.1	J	150	J-	913	J-	3666.7		1090.9		141.7	UJ
TETRACHLOROBIPHENYL	257.6	U	145	J	393.9	J	184.8	UJ	257.6	UJ	141.7	UJ	147.8	J-	550		242.4	J	141.7	UJ
TRICHLOROBIPHENYL	113.6	J	91.7	J	303	J	90.2	UJ	125.8	UJ	69.2	UJ	43.5	J-	68.3	U	197	J	68.3	UJ
TOTAL PCBS	5909.1		5666.7		3636.4		1195.7	J-	1136.4	J	1000	J-	3347.8	J-	12500		4393.9		716.7	J-

Notes:
1) U or < = Non-detect at laboratory detection limi
2) J = Estimated Value, J+ = biased high, J- = bia
3) Sample Type N = normal sample, FD = duplicat
4) Species Collected RM = Ribbed Mussels, QH = C
5) * = MS/MSD collected

Table 2
Statistical Comparisons of September 2016 and December 2016 Shellfish Data
Metals and PCBs

	Sep-16					Dec-16				
PARAMETER	**FOD**	**Minimum**	**Mean**	**Maximum**	**Distribution**	**FOD**	**Minimum**	**Mean**	**Maximum**	**Distribution**
Physical Measurements										
LIPIDS (fraction)	10:10	0.033	0.1	0.26	Normal	10:10	0.06	0.15	0.49	Not Normal
LENGTH FINAL (inch)	10:10	2.04	2.65	3.33	Normal	10:10	2.17	2.53	3.16	Normal
SHELL WEIGHT (grams)	10:10	15.3	87.3	200.4	Normal	10:10	15	83.1	175	Normal
Metals (mg/kg)										
ALUMINUM	10:10	6.2	29	54	Normal	10:10	2.1	41.16	144	Normal
ARSENIC	10:10	1.9	2.7	3.7	Normal	10:10	2	2.7	3.4	Normal
CADMIUM	10:10	0.063	0.11	0.25	No distribution	10:10	0.055	0.13	0.46	No distribution
CALCIUM	10:10	1420	2840	4380	Normal	10:10	494	962	2430	Gamma/Lognormal
CHROMIUM, TOTAL	4:10	1	1.2	1.6	Normal	3:10	1.1	1.2	1.4	Normal
COBALT	0:10	0	0	0	ND	10:10	0.057	0.14	0.26	Normal
COPPER	2:10	3.4	3.6	3.8	Normal	4:10	2.7	3.7	6.4	Lognormal
IRON	10:10	48.5	146	355	Normal	10:10	15.9	158.6	599	Gamma/Lognormal
LEAD	8:10	0.17	0.28	0.48	Lognormal	9:10	0.14	0.41	1.2	Lognormal
MAGNESIUM	10:10	875	944	1030	Normal	10:10	926	990	1250	No distribution
MANGANESE	10:10	4	10.4	29.9	Gamma/Lognormal	10:10	1.8	10.1	41.4	Gamma/Lognormal
MERCURY	10:10	0.0091	0.013	0.028	No distribution	10:10	0.0054	0.0077	0.014	Normal
NICKEL	10:10	0.2	0.67	1	Normal	10:10	0.14	0.52	0.88	Normal
POTASSIUM	10:10	1120	1320	1440	Normal	10:10	855	1170	1510	Normal
SELENIUM	5:10	0.42	0.57	0.78	Normal	7:10	0.54	0.69	1.2	Lognormal
SILVER	9:10	0.042	0.13	0.39	Lognormal	10:10	0.076	0.24	0.94	Lognormal
SODIUM	0:10	0	0	0	ND	10:10	6410	7218	9130	Normal
ZINC	10:10	5.8	11.3	23.3	Lognormal	10:10	5	10.4	15.6	Normal
PCBs (ug/kg)										
TOTAL PCBs	10:10	0.75	25	180	Gamma/Lognormal	10:10	0.86	9.1	28	Gamma/Lognormal

Notes:

NC - Not calculated.

ND - Not detected.

WSR - Wilcoxon Signed-Rank test.

The paired-sample test was selected based on the distribution of the September and December datasets. If both are normally distributed with 100% detection, a paired t-test was selected. If one or both datasets were not normal and/or with less than 100% detection, the nonparametric Wilcoxon signed-rank test was selected.

The paired-sample test null hypothesis is the true mean/median difference is equal to zero. The alternative hypothesis (two-tailed) is that the true mean/median difference is not equal to zero.

A p-value of less than 0.05 indicates statistical significance (approximately 95% confidence).

If the p-value of the paired-sample test is > 0.05, then the null hypothesis is not rejected and the September and December mean/median concentrations are considered equal.

If the p-value of the paired-sample test is < 0.05, then the null hypothesis is rejected and the alternative hypothesis is accepted, which is that the September and December mean/median concentrations are not equal.

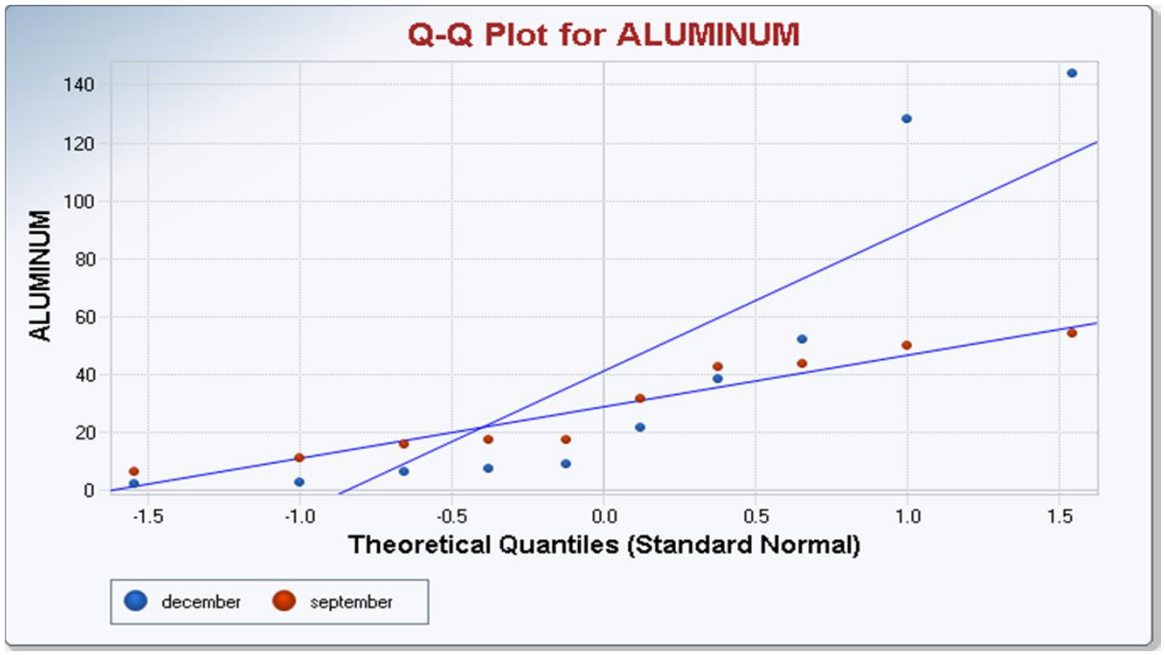
Table 2
Statistical Comparisons of September 2016 and
Metals and PCBs

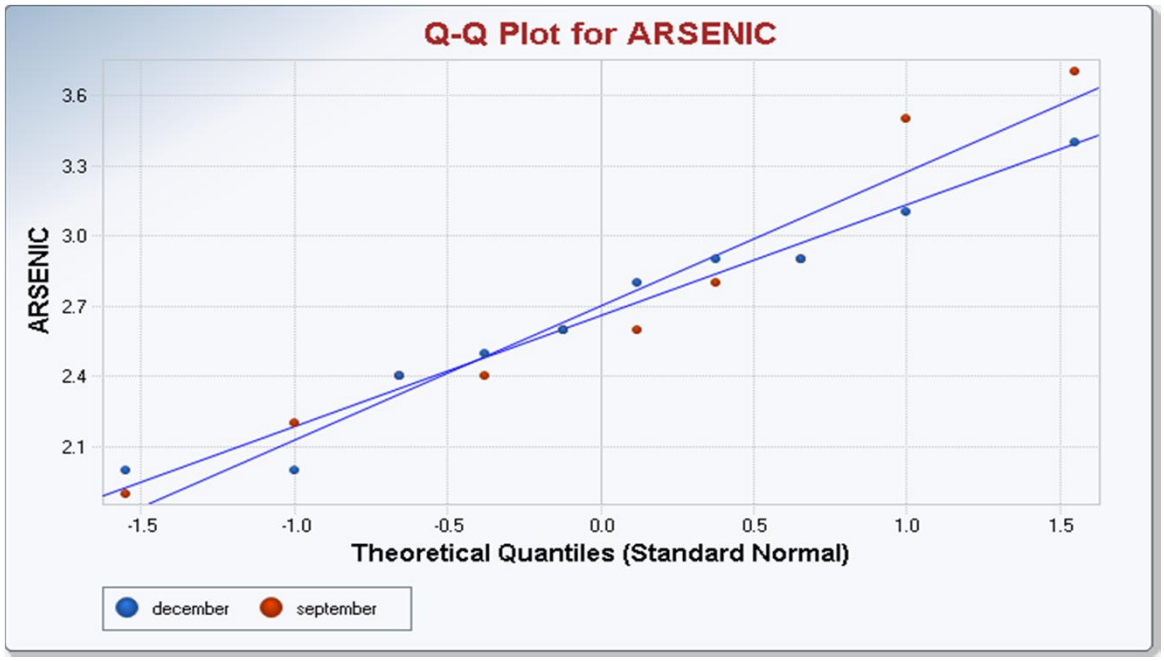
PARAMETER	Paired-Sample Tests				
	Test	Test Statistic	p-value	Reject the Null Hypothesis?	Result
Physical Measurements					
LIPIDS (fraction)	WSR	37	0.359	No	Sept and Dec are the same
LENGTH FINAL (inch)	Paired t-test	1.26	0.239	No	Sept and Dec are the same
SHELL WEIGHT (grams)	Paired t-test	0.3	0.77	No	Sept and Dec are the same
Metals (mg/kg)					
ALUMINUM	Paired t-test	0.71	0.5	No	Sept and Dec are the same
ARSENIC	Paired t-test	-0.14	0.893	No	Sept and Dec are the same
CADMIUM	WSR	25	0.813	No	Sept and Dec are the same
CALCIUM	WSR	0	0.006	Yes	Sept and Dec are different
CHROMIUM, TOTAL	NC	--	--	--	--
COBALT	NC	--	--	--	--
COPPER	NC	--	--	--	--
IRON	WSR	18	0.359	No	Sept and Dec are the same
LEAD	WSR	20.5	0.78	No	Sept and Dec are the same
MAGNESIUM	WSR	41	0.185	No	Sept and Dec are the same
MANGANESE	WSR	16	0.48	No	Sept and Dec are the same
MERCURY	WSR	1	0.008	Yes	Sept and Dec are different
NICKEL	Paired t-test	-1.61	0.142	No	Sept and Dec are the same
POTASSIUM	Paired t-test	-2.28	0.048	Yes	Sept and Dec are different
SELENIUM	NC	--	--	--	--
SILVER	WSR	45	0.009	Yes	Sept and Dec are different
SODIUM	NC	--	--		--
ZINC	WSR	17	0.308	No	Sept and Dec are the same
PCBs (ug/kg)					
TOTAL PCBs	WSR	35	0.476	No	Sept and Dec are the same

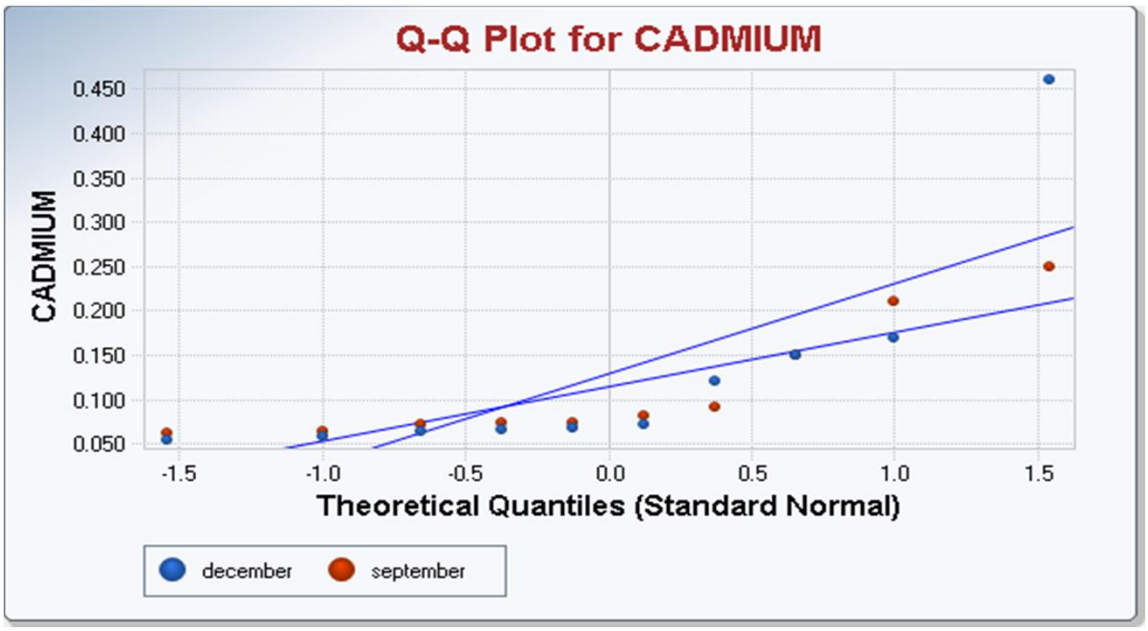
Notes:
NC - Not calculated.
ND - Not detected.
WSR - Wilcoxon Signed-Rank test.
The paired-sample test was selected based on th
detection, a paired t-test was selected. If one or b
The paired-sample test null hypothesis is the true
equal to zero.
A p-value of less than 0.05 indicates statistical si
If the p-value of the paired-sample test is > 0.05,
If the p-value of the paired-sample test is < 0.05,
mean/median concentrations are not equal.

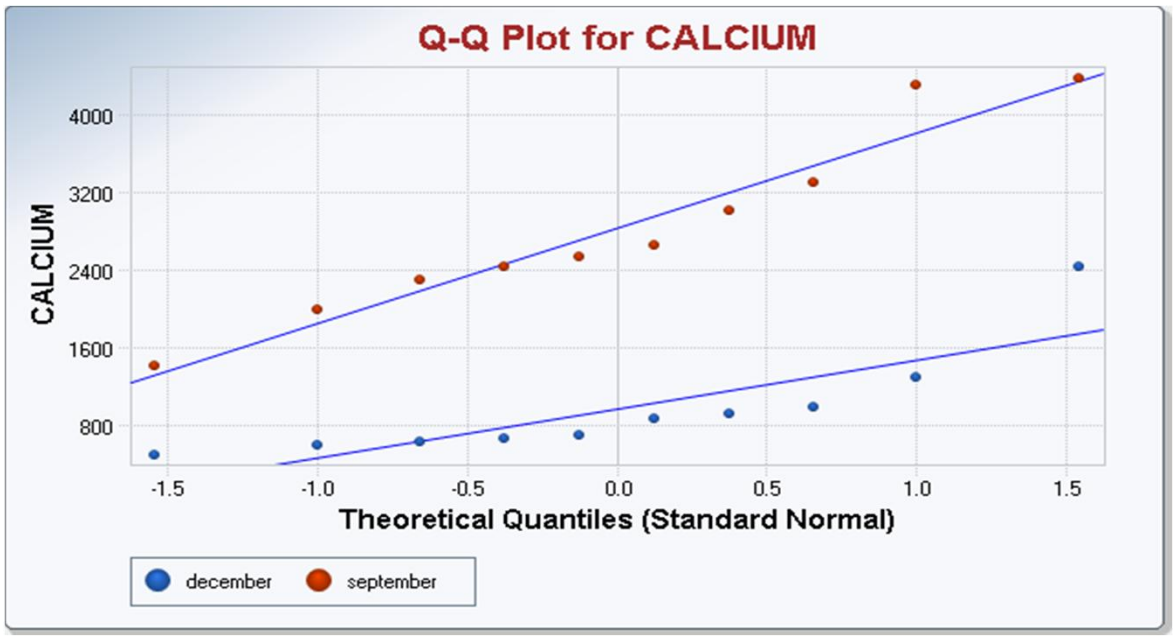
Attachment A

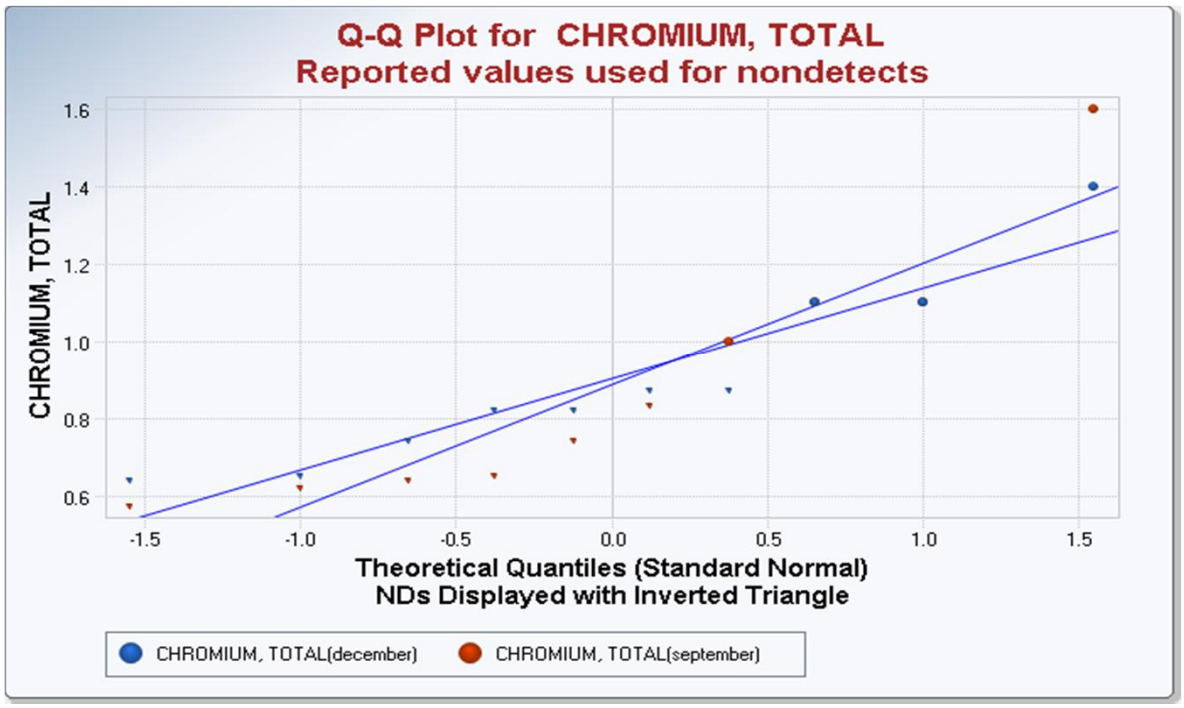
Quartile-Quartile Plots and Boxplots

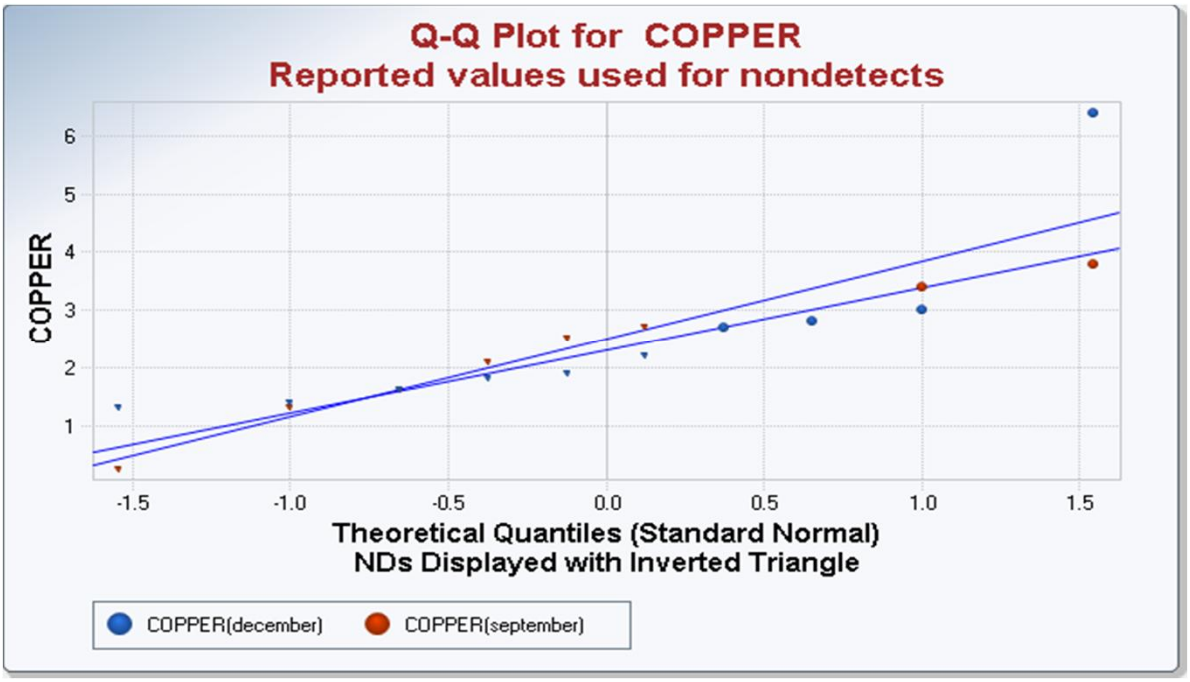

Q-Q Plot for ALUMINUM
ALUMINUM
140
120
100
80
60
40
20
0
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

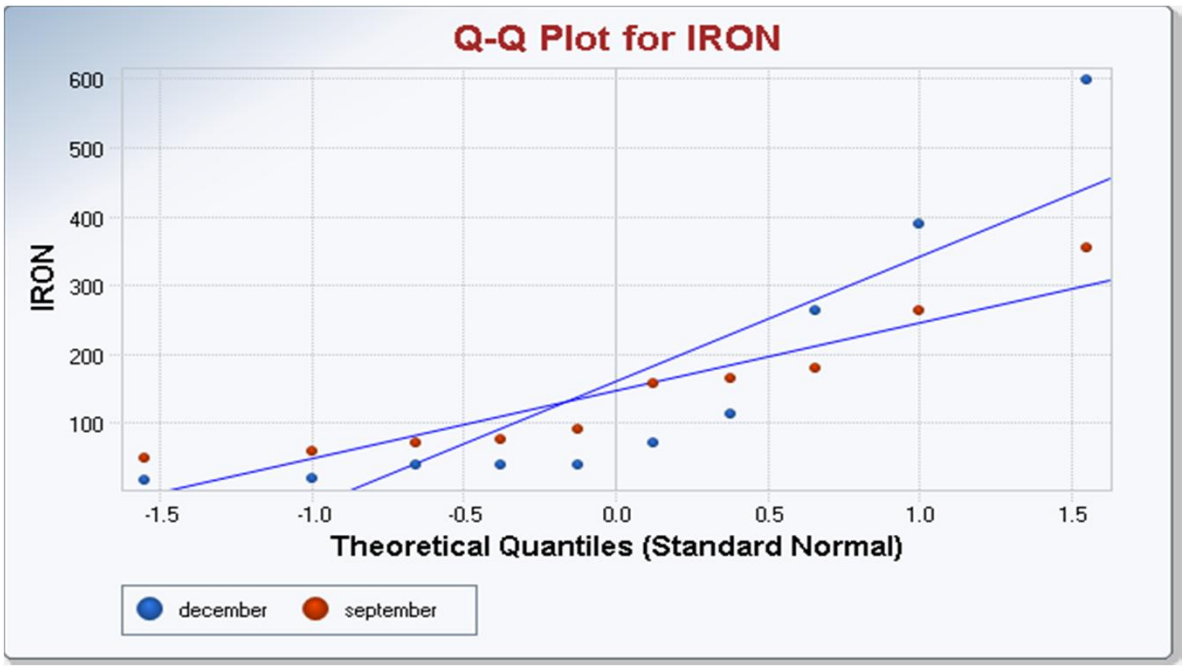

Q-Q Plot for ARSENIC
ARSENIC
3.6
3.3
3.0
2.7
2.4
2.1
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

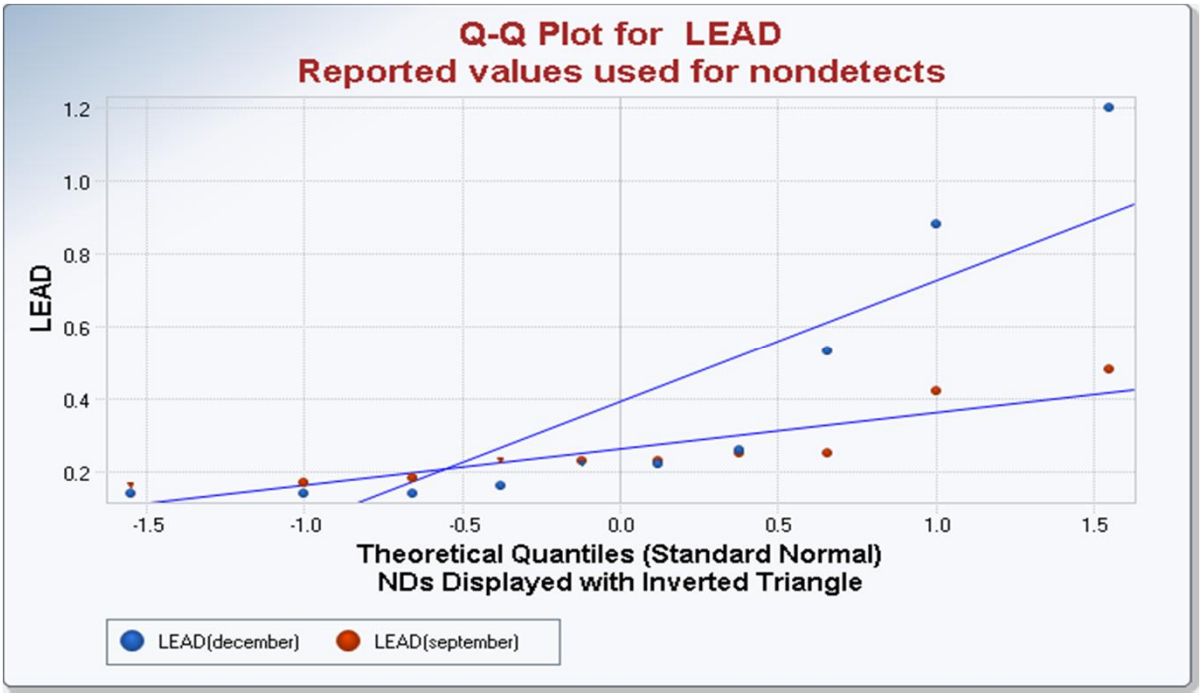

Q-Q Plot for CADMIUM
CADMIUM
0.450
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

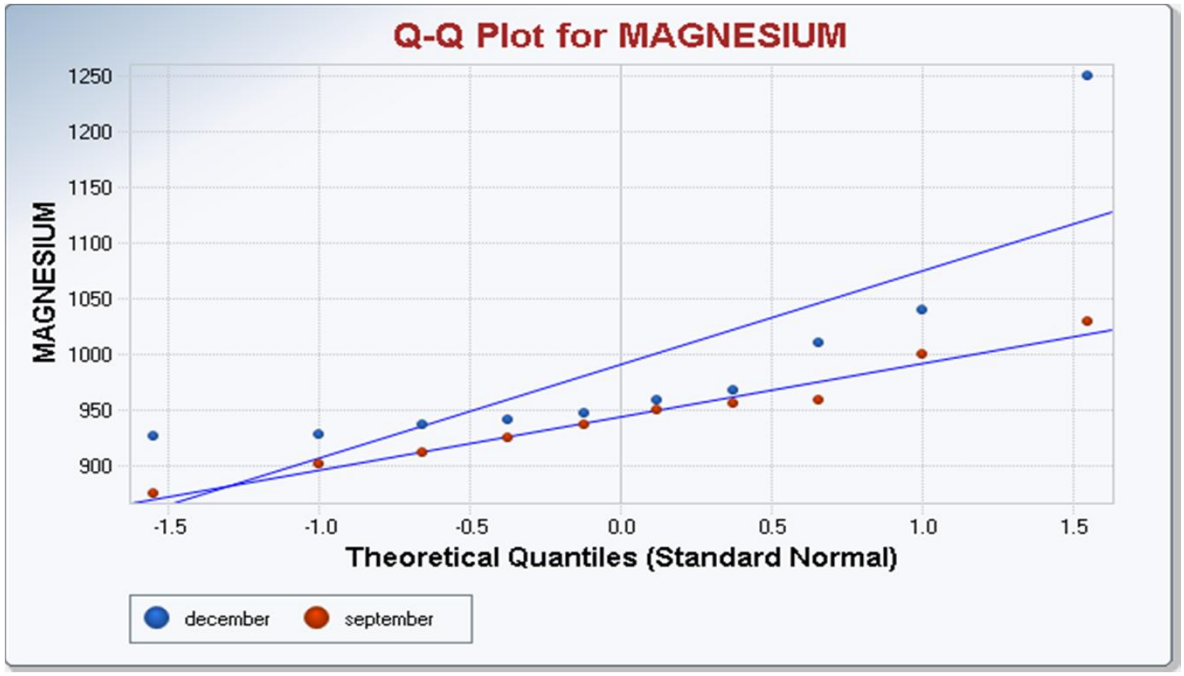

Q-Q Plot for CALCIUM
CALCIUM
4000
3200
2400
1600
800
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

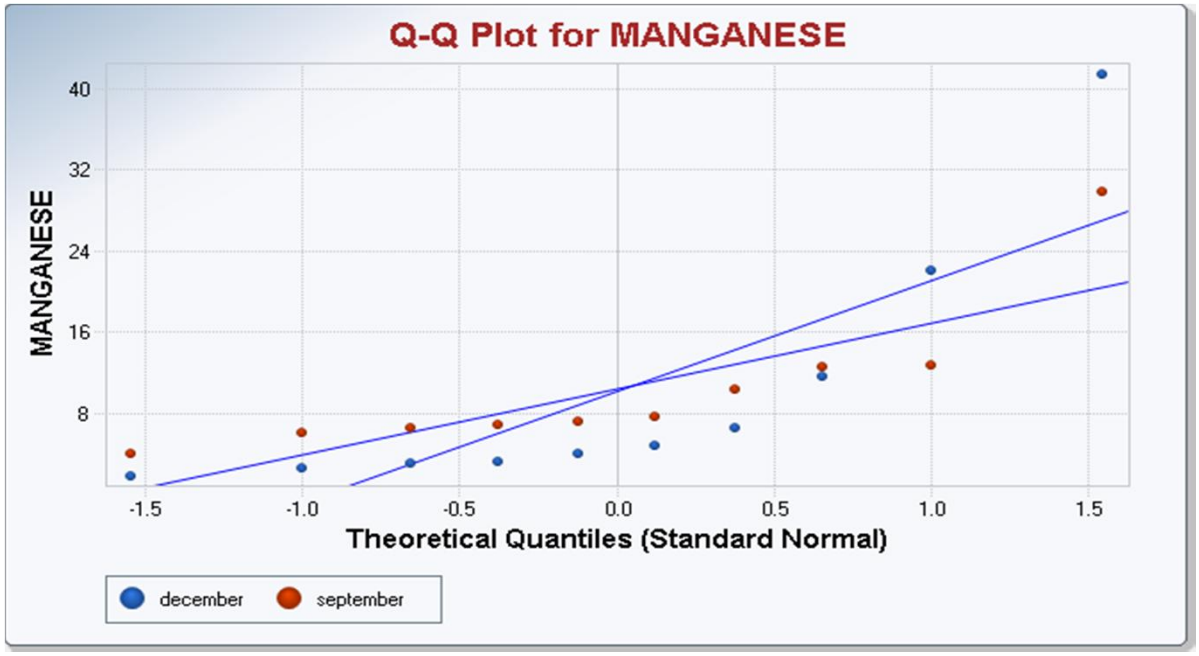

Q-Q Plot for CHROMIUM, TOTAL
Reported values used for nondetects
CHROMIUM, TOTAL
1.6
1.4
1.2
1.0
0.8
0.6
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
NDs Displayed with Inverted Triangle
CHROMIUM, TOTAL(december)
CHROMIUM, TOTAL(september)

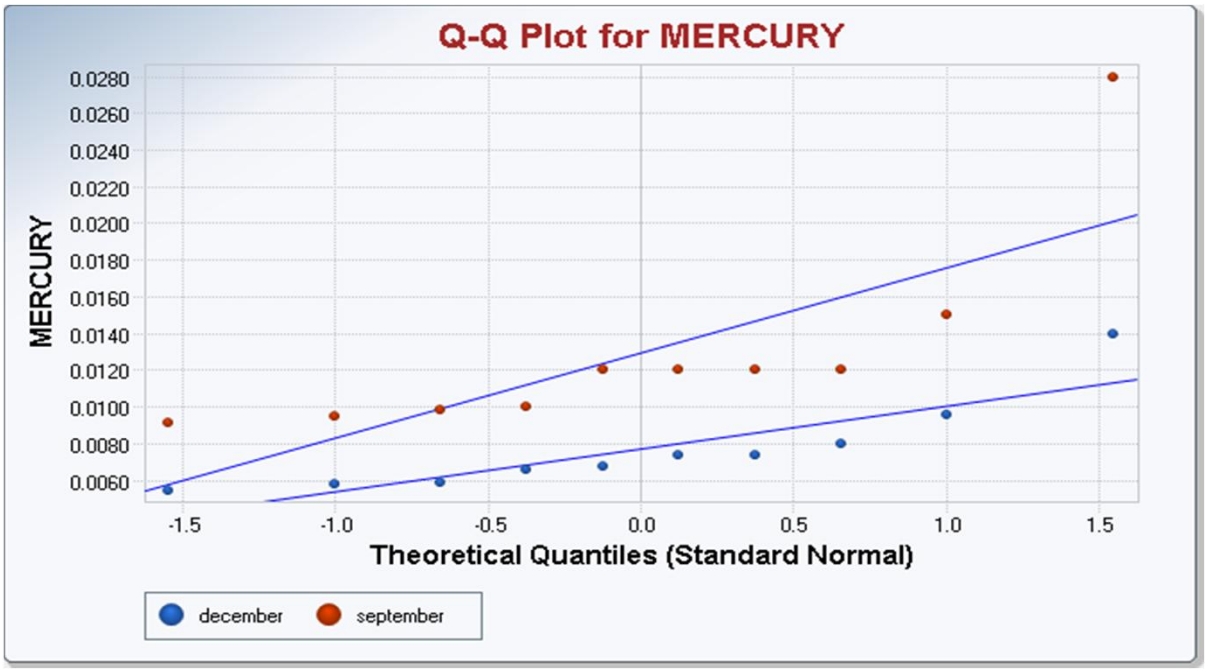

Q-Q Plot for COPPER
Reported values used for nondetects
COPPER
6
5
4
3
2
1
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
NDs Displayed with Inverted Triangle
COPPER(december)
COPPER(september)

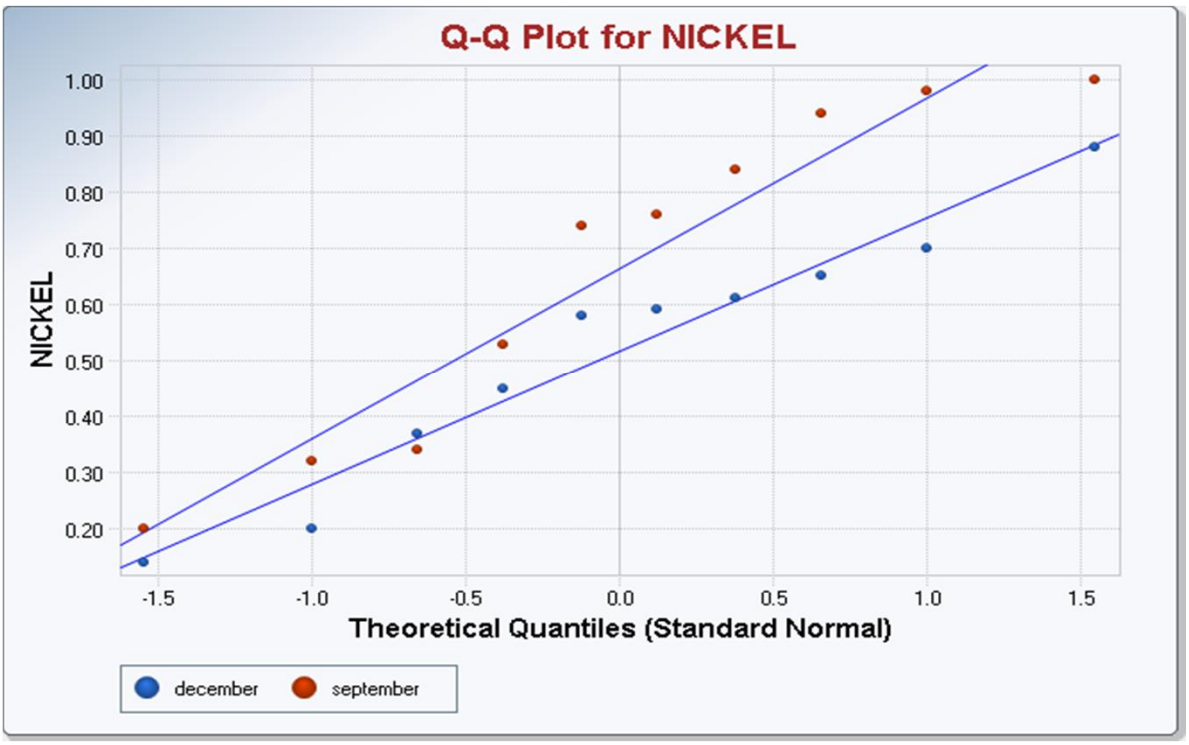

Q-Q Plot for IRON
IRON
600
500
400
300
200
100
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

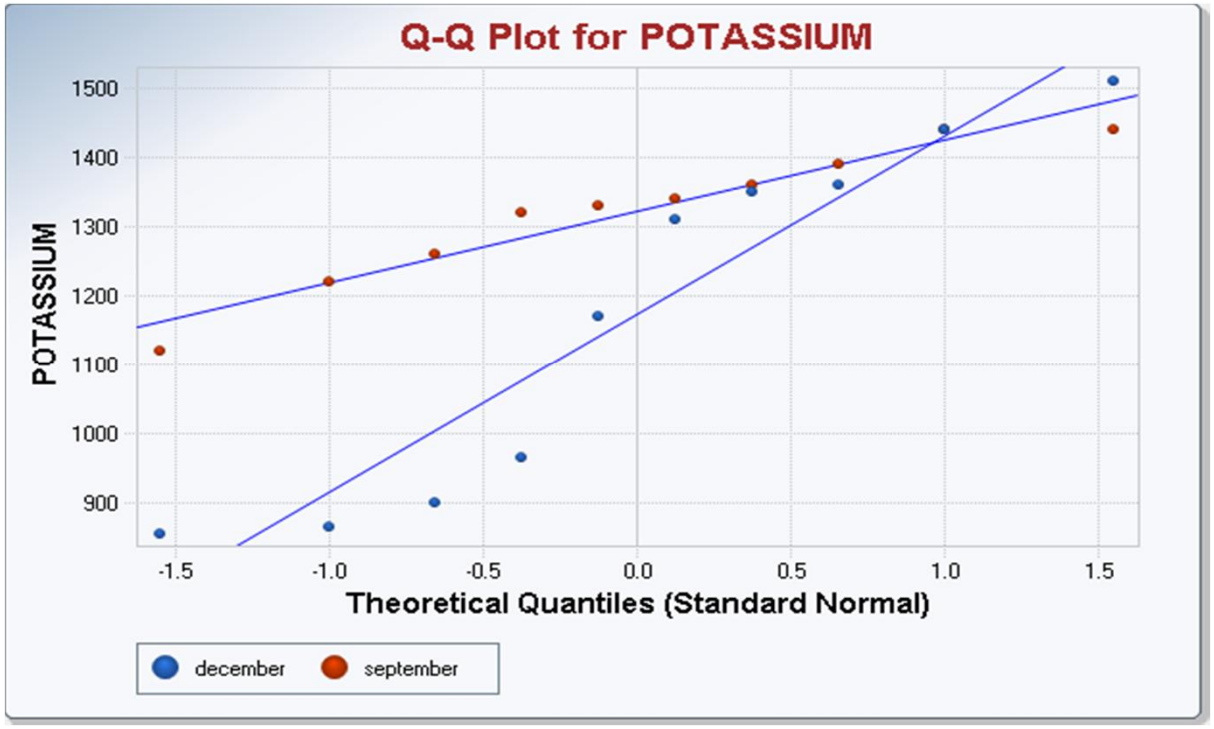

Q-Q Plot for LEAD
Reported values used for nondetects
LEAD
1.2
1.0
0.8
0.6
0.4
0.2
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
NDs Displayed with Inverted Triangle
LEAD(december)
LEAD(september)

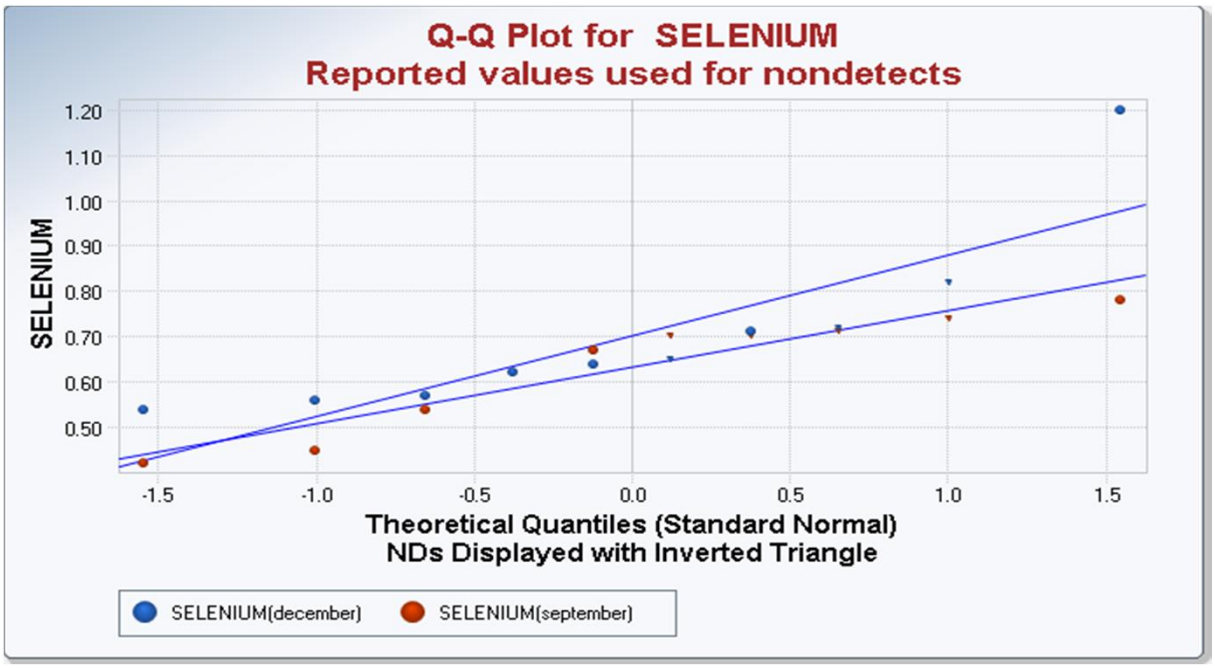

Q-Q Plot for MAGNESIUM
MAGNESIUM
1250
1200
1150
1100
1050
1000
950
900
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

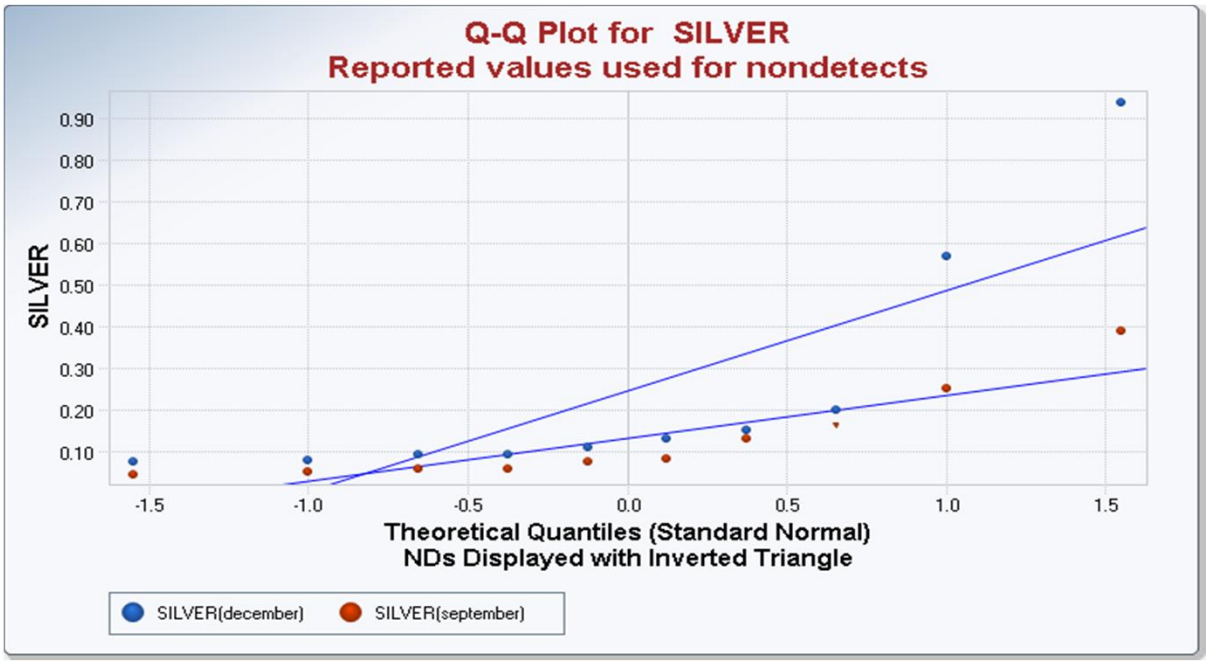

Q-Q Plot for MANGANESE
MANGANESE
40
32
24
16
8
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

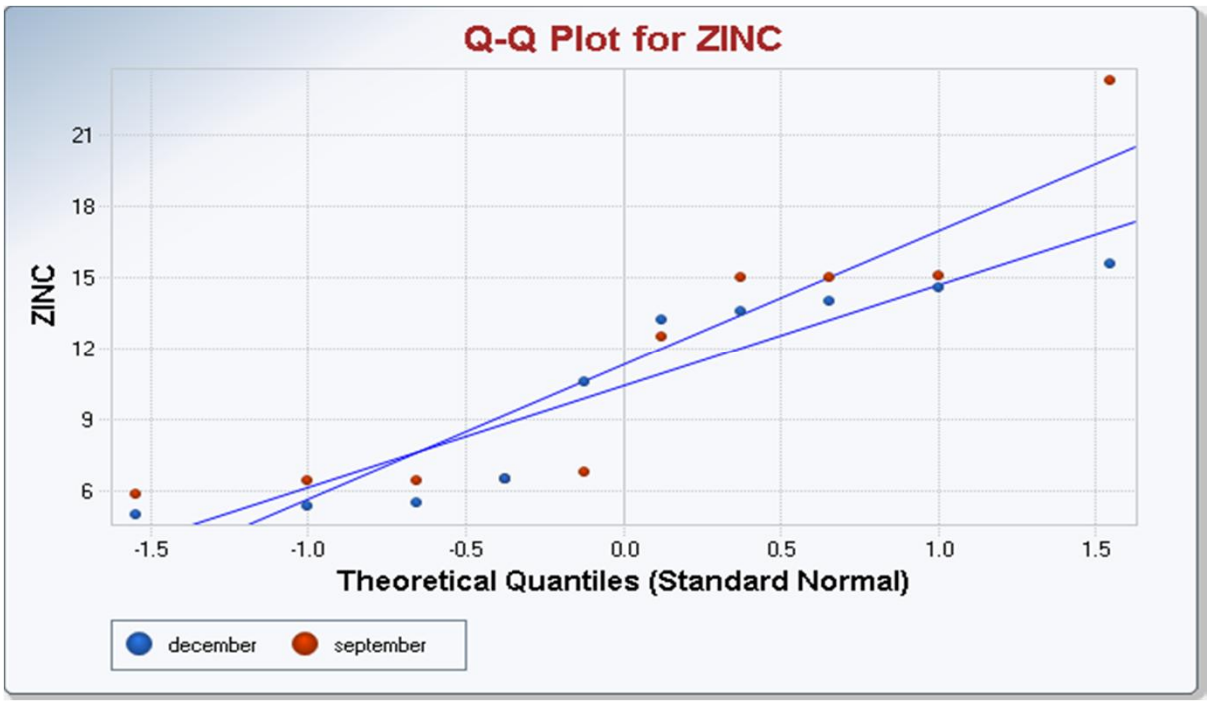

Q-Q Plot for MERCURY
MERCURY
0.0280
0.0260
0.0240
0.0220
0.0200
0.0180
0.0160
0.0140
0.0120
0.0100
0.0080
0.0060
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

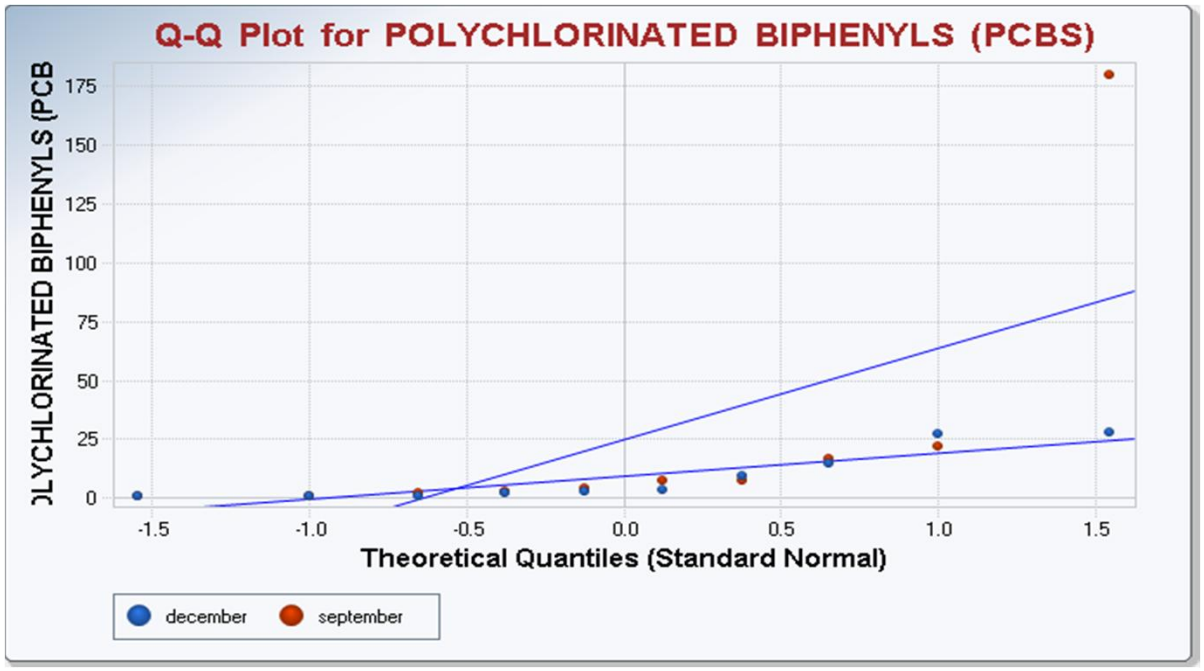

Q-Q Plot for NICKEL
NICKEL
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

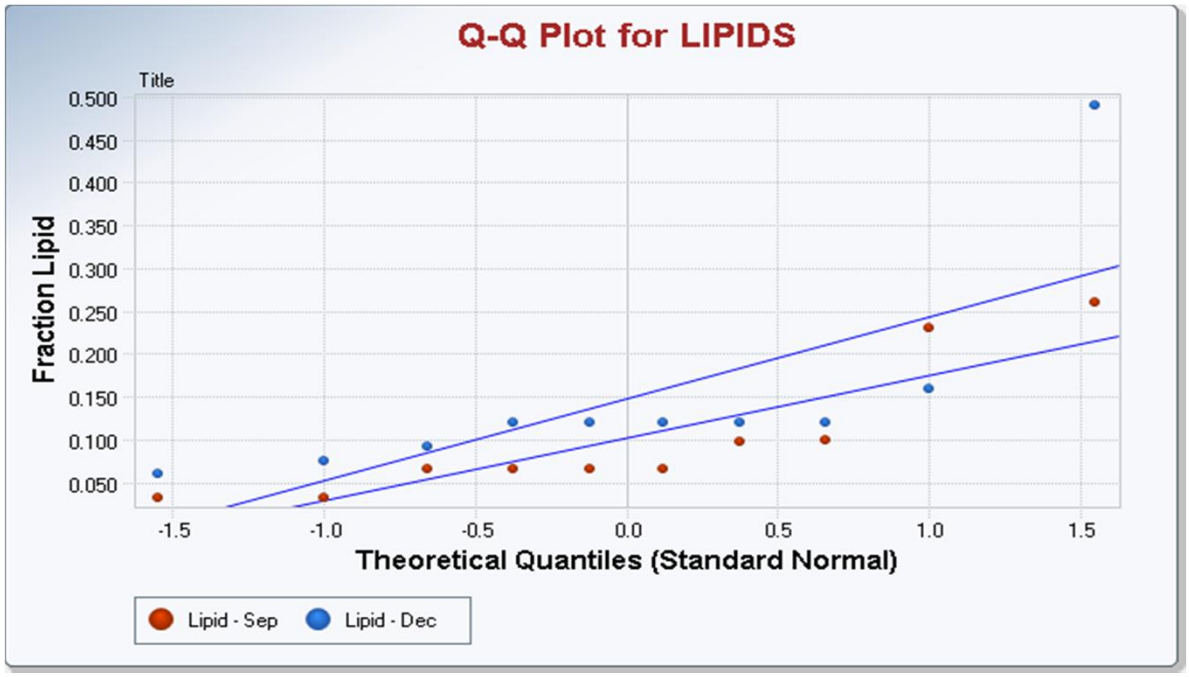

Q-Q Plot for POTASSIUM
POTASSIUM
1500
1400
1300
1200
1100
1000
900
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

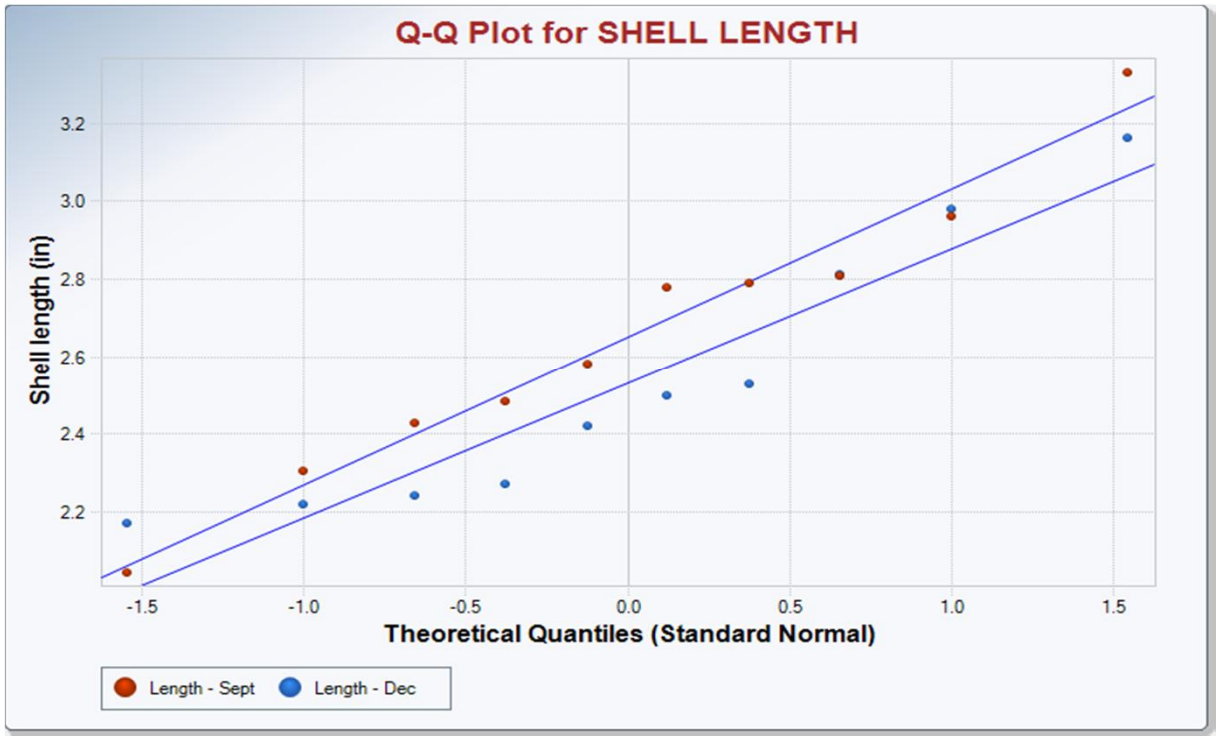

Q-Q Plot for SELENIUM
Reported values used for nondetects
SELENIUM
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
NDs Displayed with Inverted Triangle
SELENIUM(december)
SELENIUM(september)

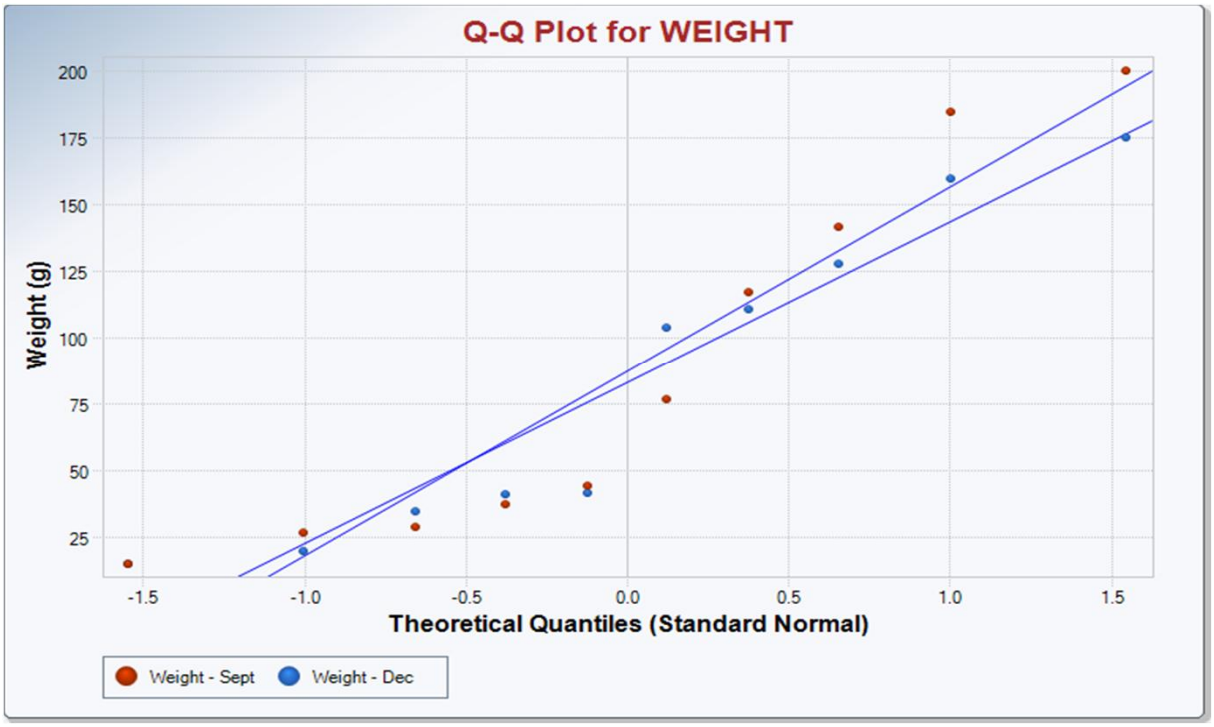

Q-Q Plot for SILVER
Reported values used for nondetects
SILVER
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
NDs Displayed with Inverted Triangle
SILVER(december)
SILVER(september)

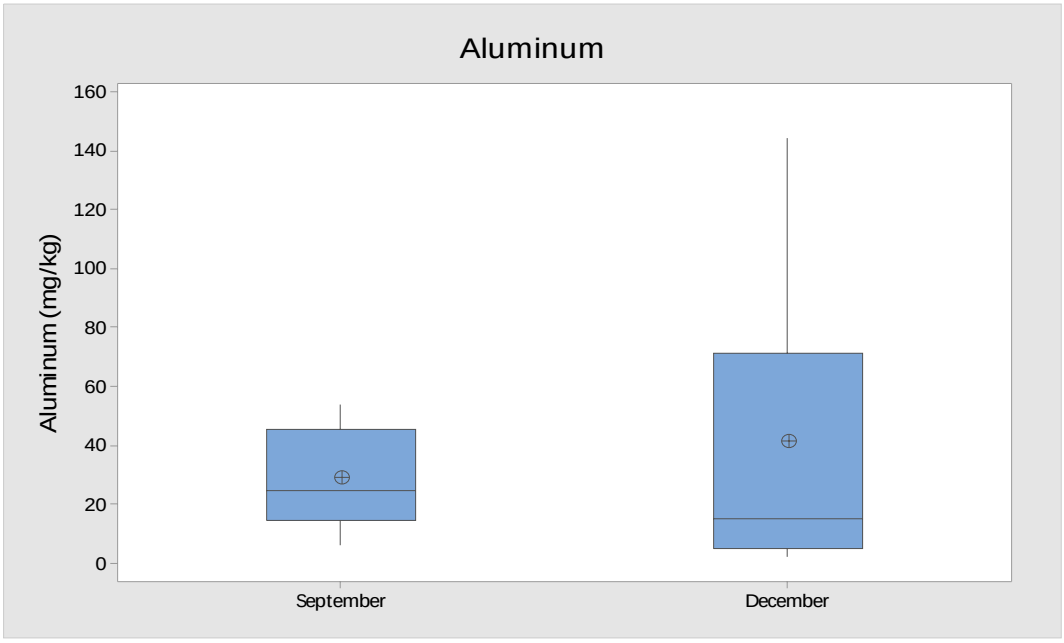

Q-Q Plot for ZINC
ZINC
21
18
15
12
9
6
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

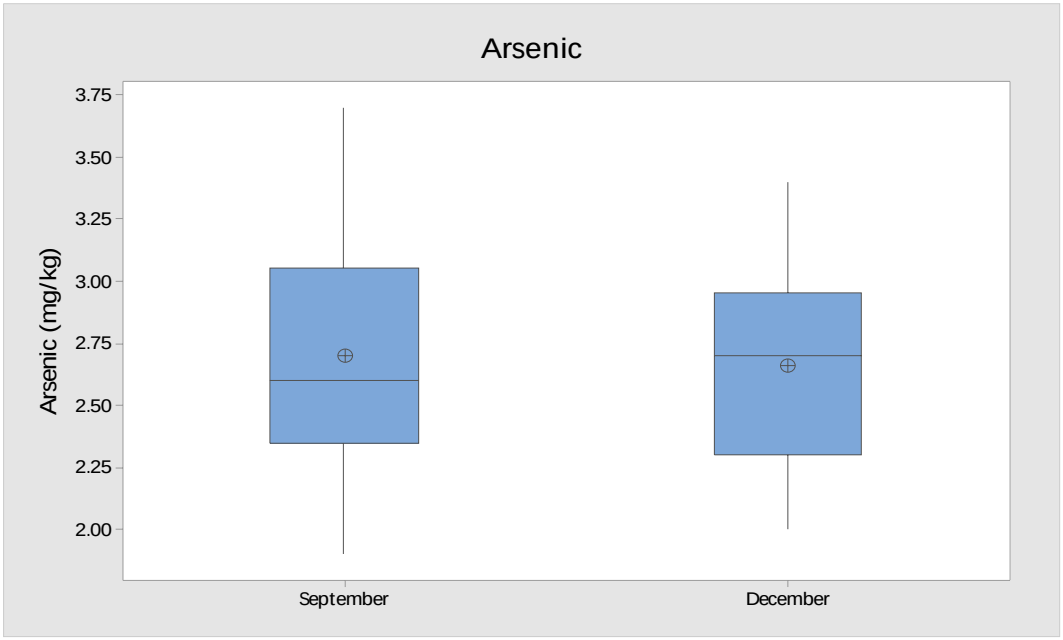

Q-Q Plot for POLYCHLORINATED BIPHENYLS (PCBS)
OLYCHLORINATED BIPHENYLS (PCB
175
150
125
100
75
50
25
0
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
december
september

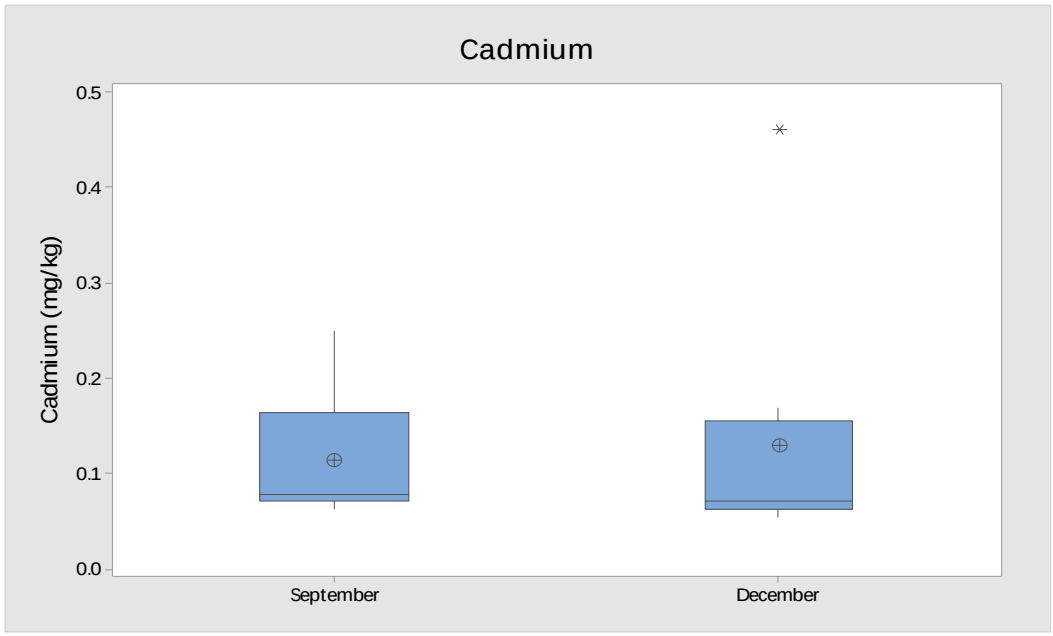

Q-Q Plot for LIPIDS
Title
Fraction Lipid
0.500
0.450
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
Lipid - Sep
Lipid - Dec

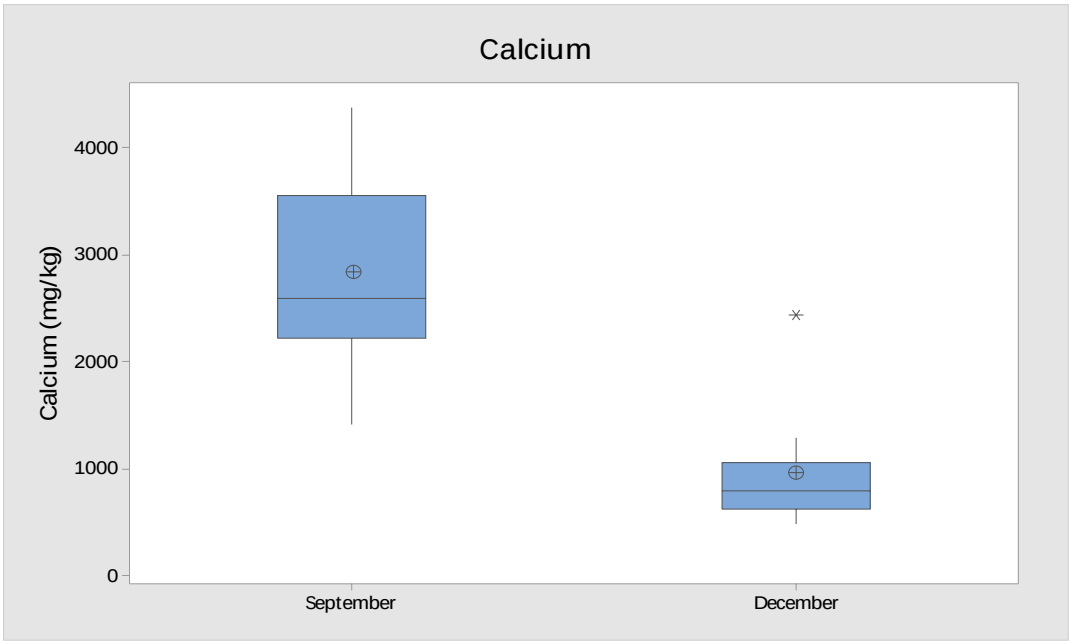

Q-Q Plot for SHELL LENGTH
Shell length (in)
3.2
3.0
2.8
2.6
2.4
2.2
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
Length - Sept
Length - Dec

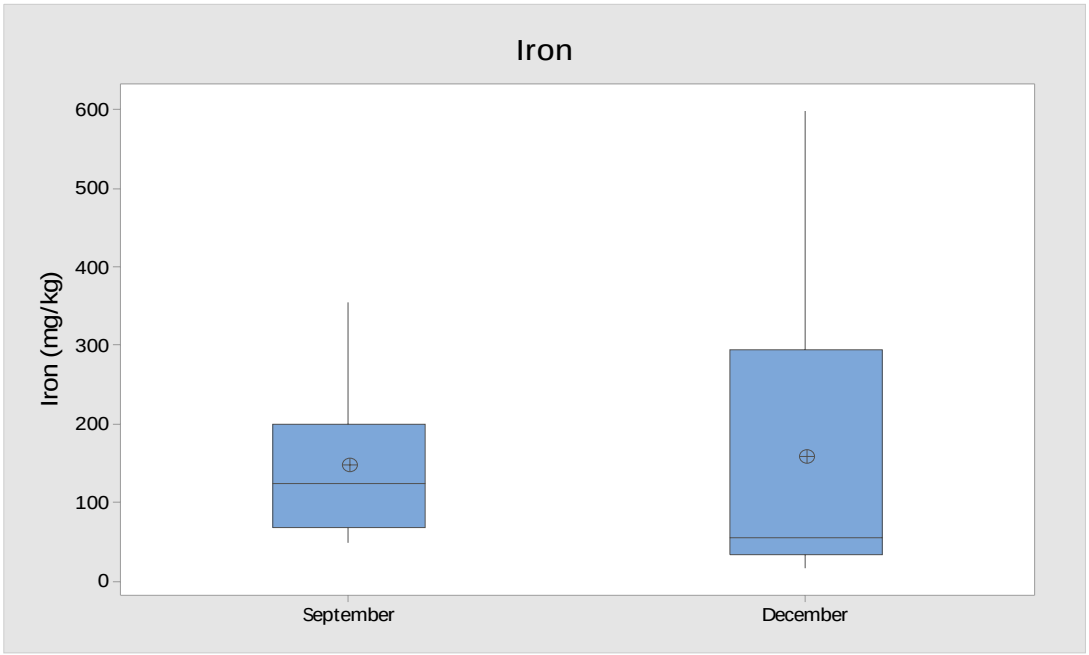

Q-Q Plot for WEIGHT
Weight (g)
200
175
150
125
100
75
50
25
-1.5
-1.0
-0.5
0.0
0.5
1.0
1.5
Theoretical Quantiles (Standard Normal)
Weight - Sept
Weight - Dec

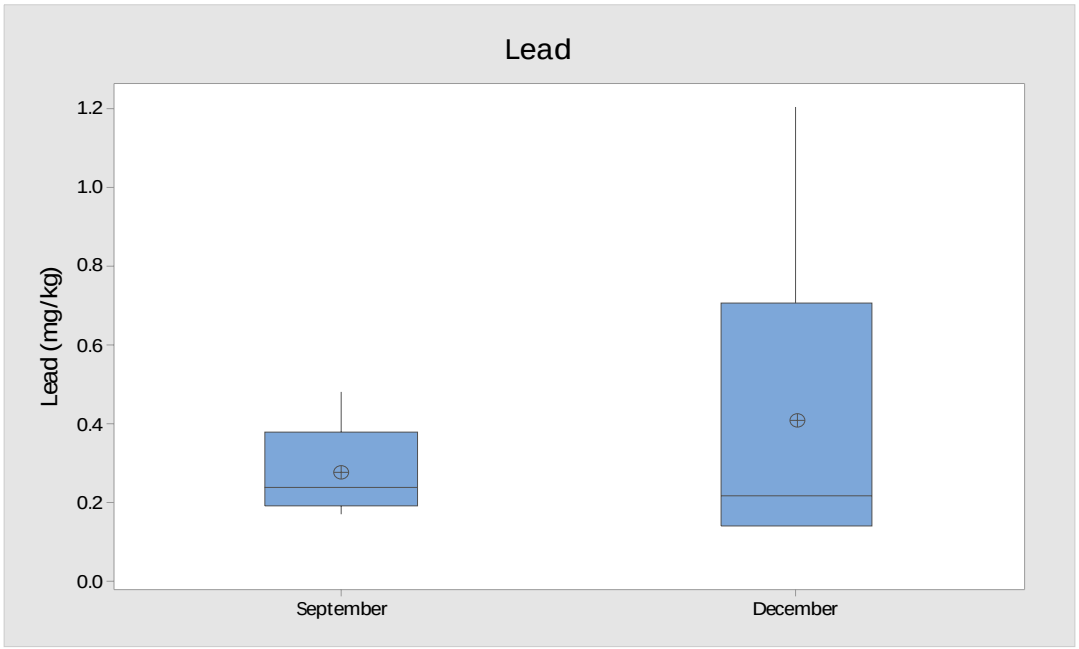

Aluminum
Aluminum (mg/kg)
160
140
120
100
80
60
40
20
0
September
December


Arsenic
Arsenic (mg/kg)
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.00
September
December

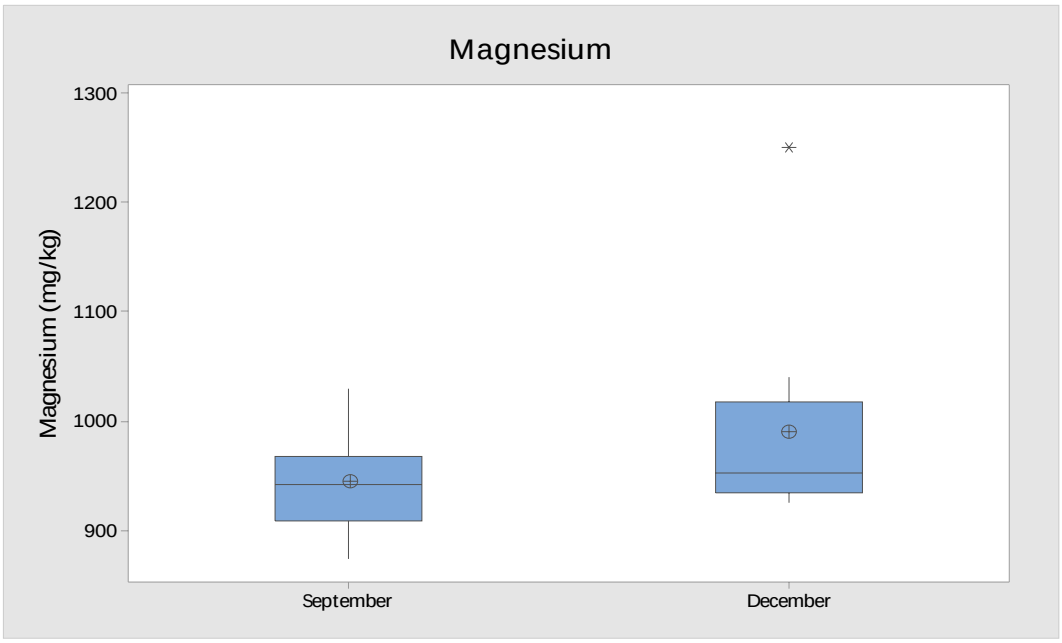

Cadmium
Cadmium (mg/kg)
0.5
0.4
0.3
0.2
0.1
0.0
September
December

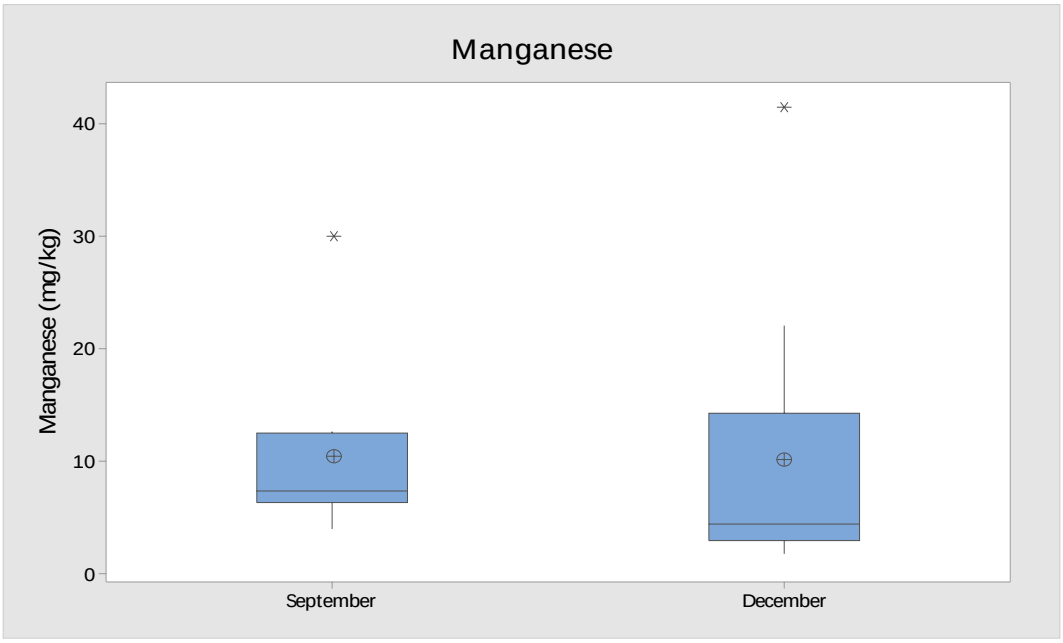

Calcium
Calcium (mg/kg)
4000
3000
2000
1000
0
September
December

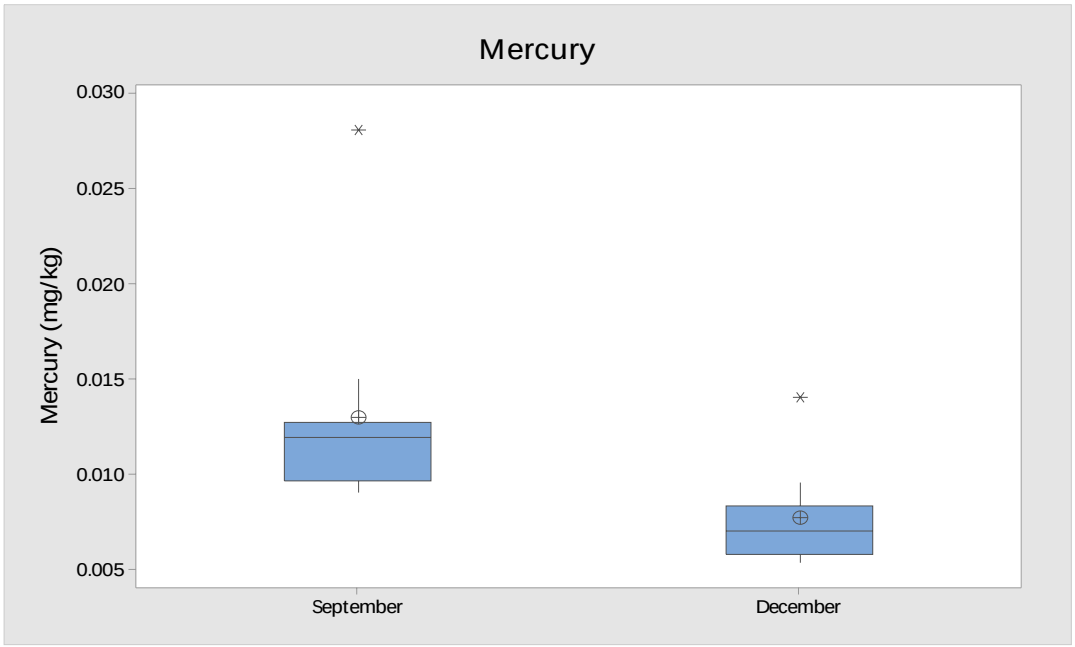


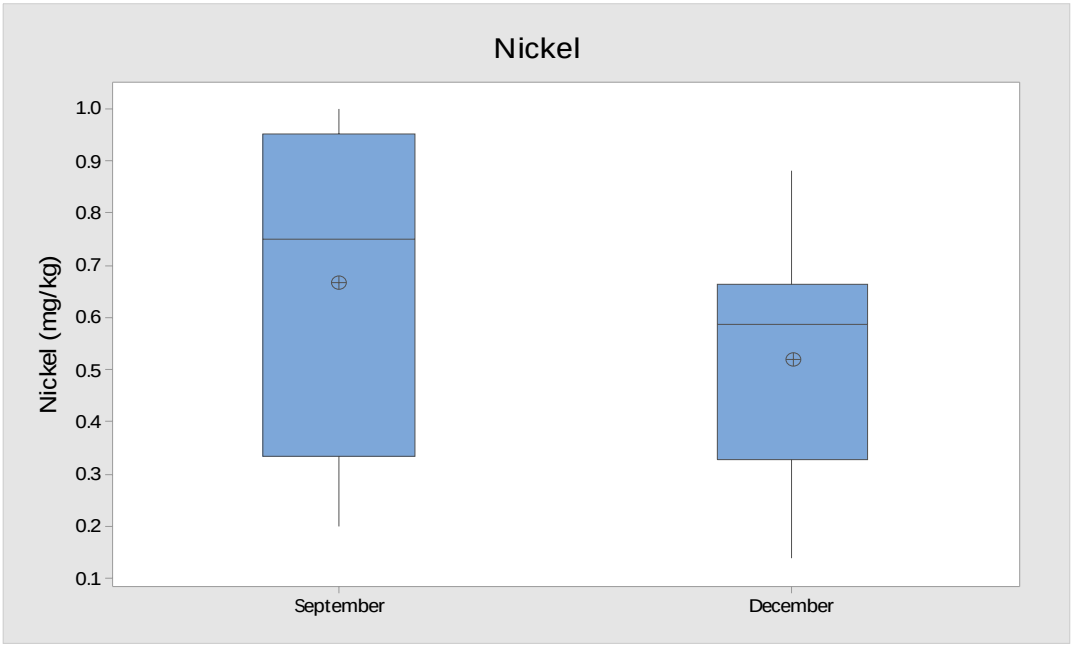


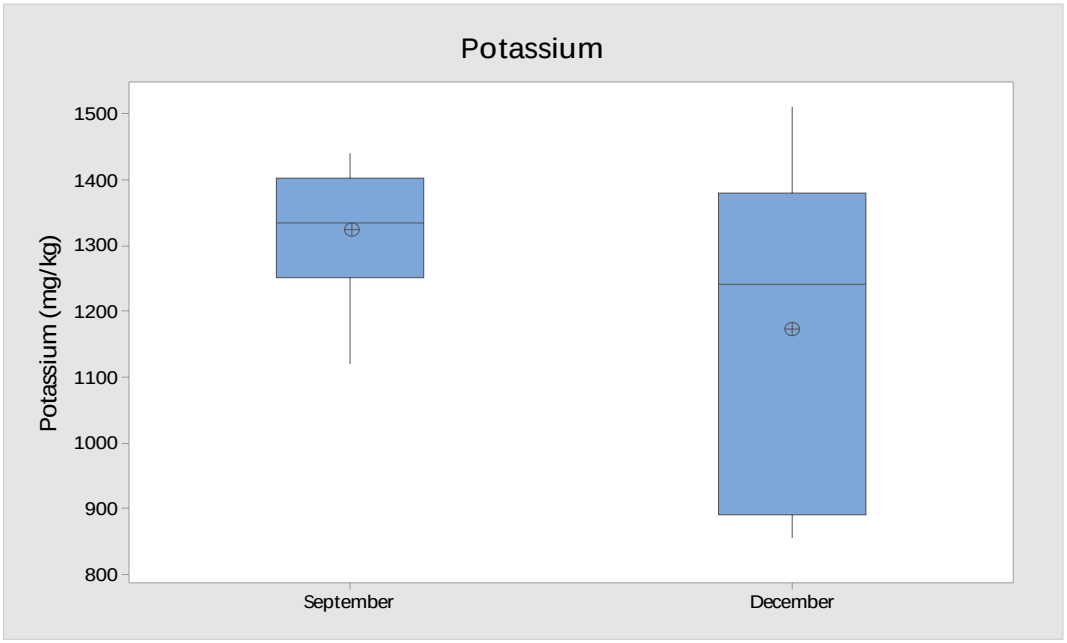
Only detected values displayed (non-detects not included).

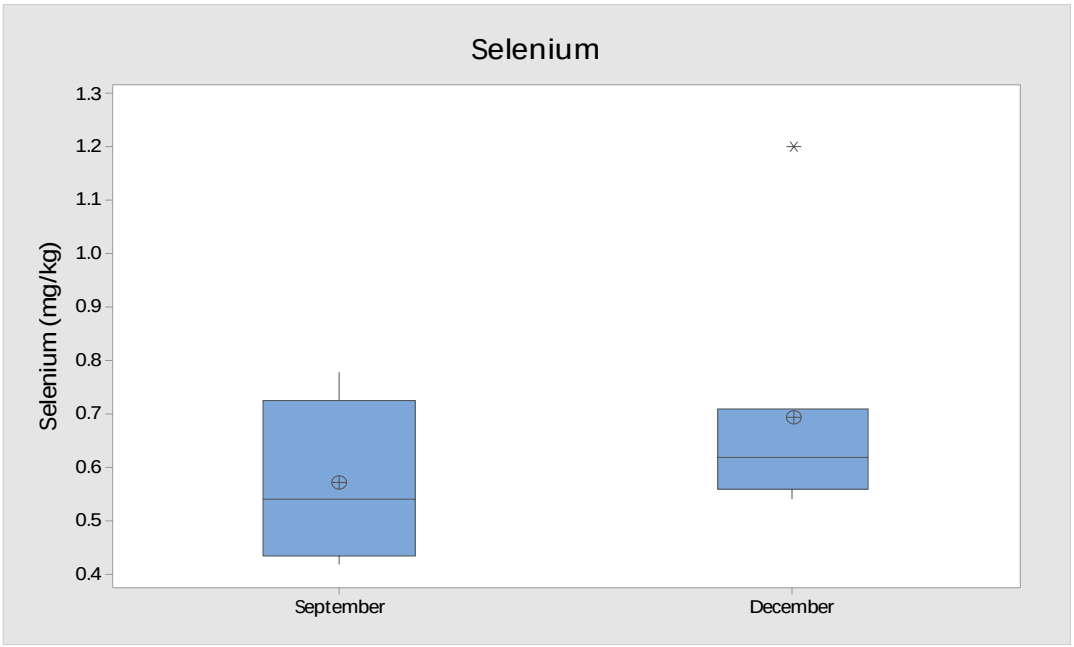

Magnesium
Magnesium (mg/kg)
1300
1200
1100
1000
900
September
December


Manganese
Manganese (mg/kg)
40
30
20
10
0
September
December

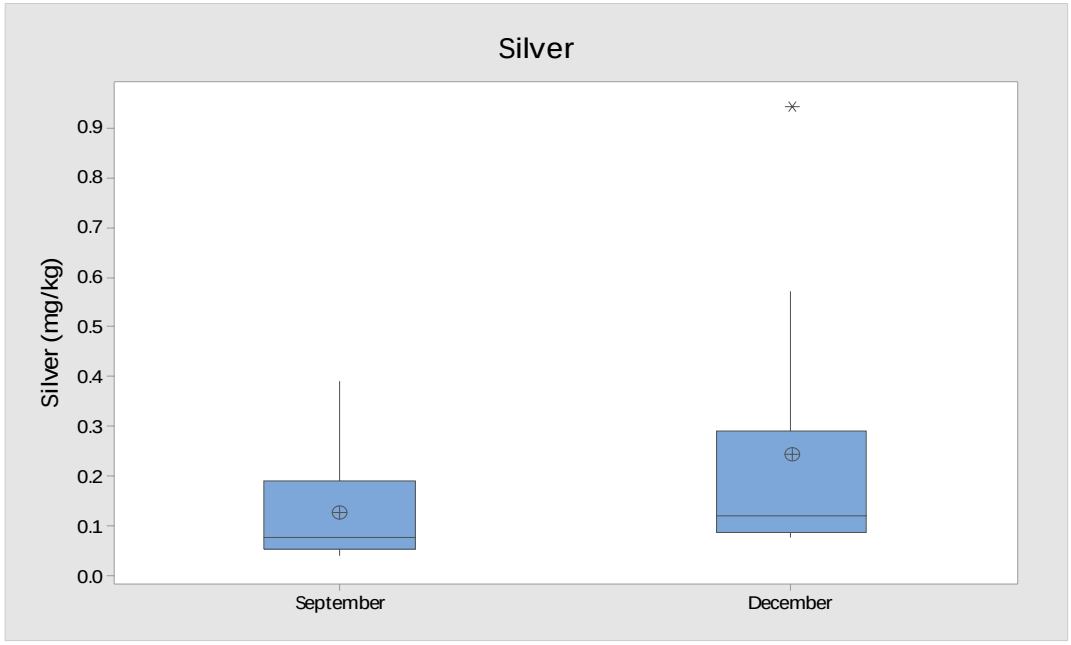

Mercury
Mercury (mg/kg)
0.030
0.025
0.020
0.015
0.010
0.005
September
December


Nickel
Nickel (mg/kg)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
September
December

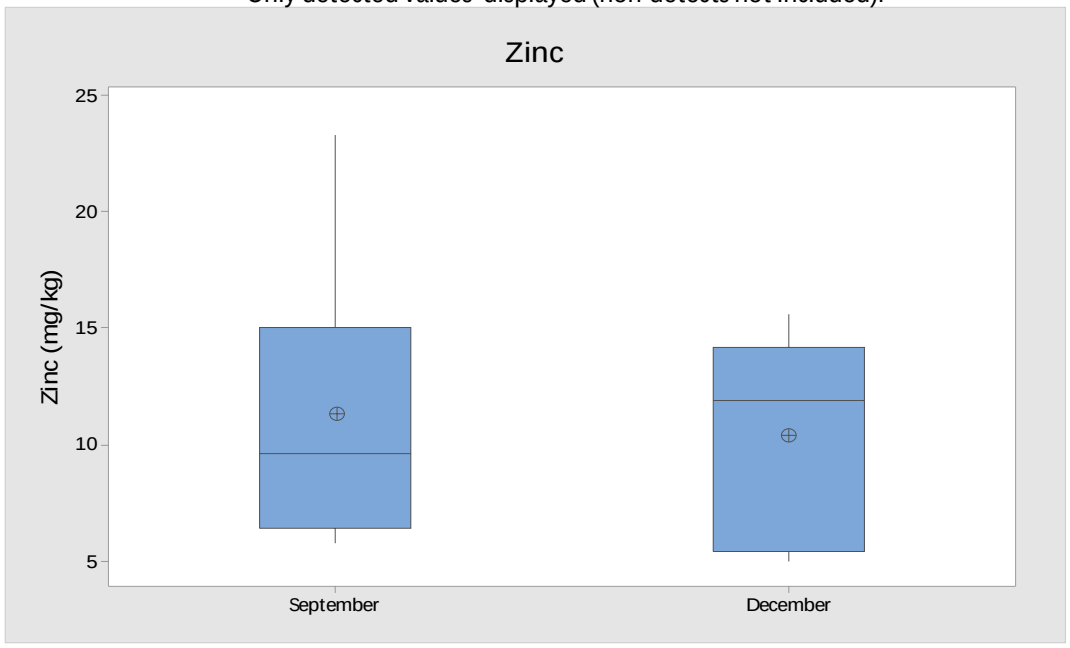


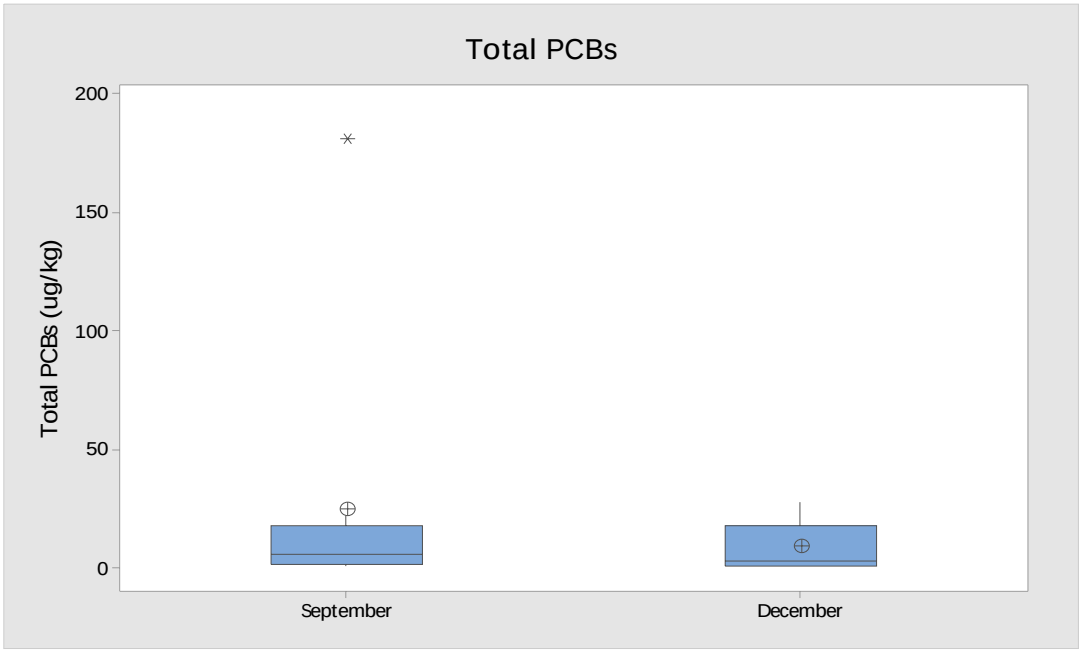


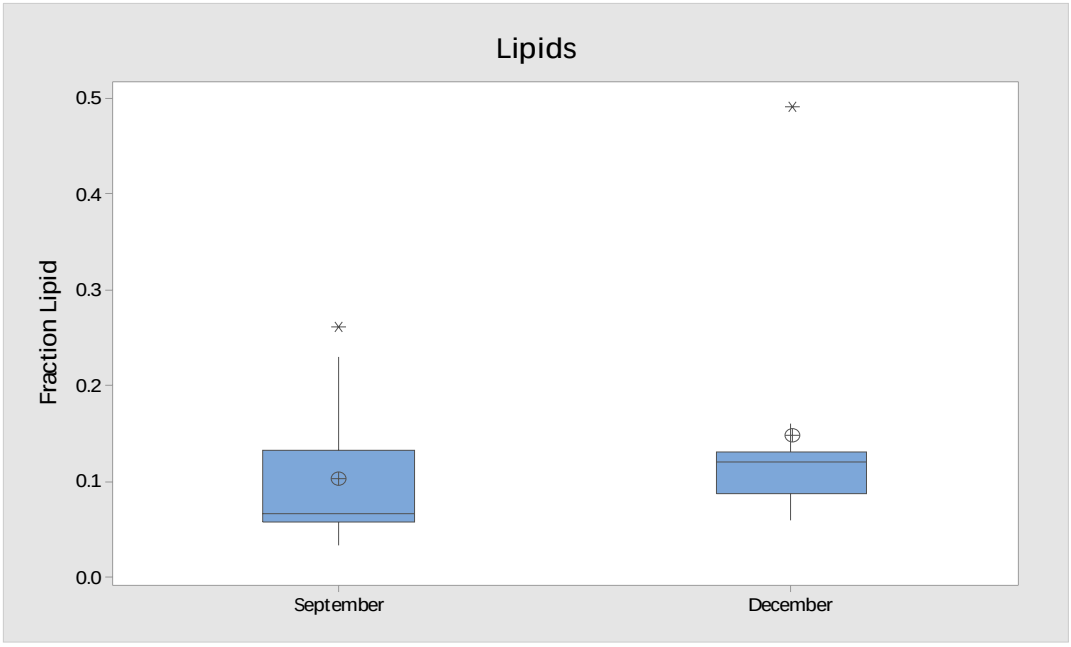
Only detected values displayed (non-detects not included).

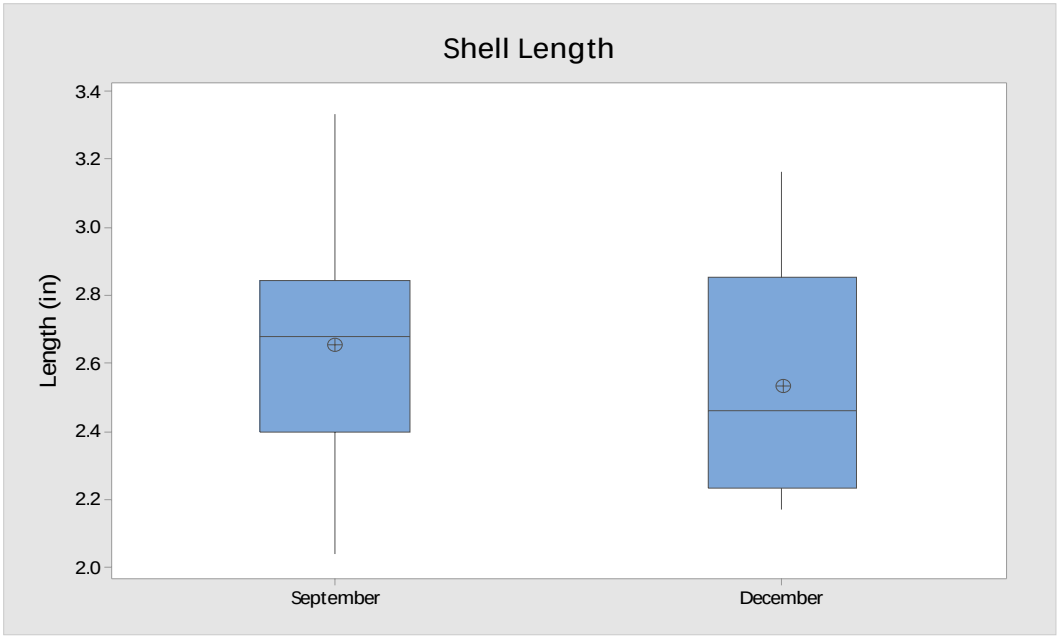


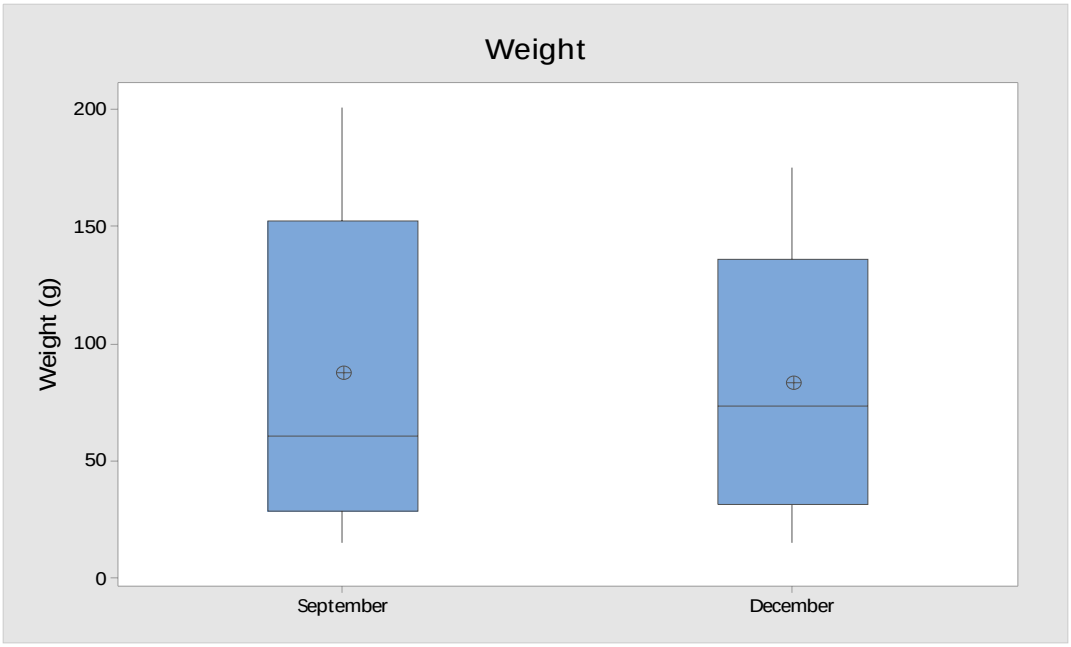
Only detected values displayed (non-detects not included).




Total PCBs
Total PCBs (ug/kg)
200
150
100
50
0
September
December


Lipids
Fraction Lipid
0.5
0.4
0.3
0.2
0.1
0.0
September
December


Shell Length
Length (in)
3.4
3.2
3.0
2.8
2.6
2.4
2.2
2.0
September
December


Weight
Weight (g)
200
150
100
50
0
September
December

Attachment I

Allowable Air Toxic Emission Rate Development and Gas Vent Emissions Comparison

ATTACHMENT I

Developing Allowable Air Toxic Emission Rates for Allen Harbor Landfill Gas Vents

Resolution Consultants (Resolution) back-calculated allowable air toxic gram per second (g/s) emission rates for the landfill vents using Rhode Island Department of Environmental Management (RIDEM) acceptable ambient levels (AALs) and AERSCREEN. AERSCREEN[1] is the United States Environmental Protection Agency (USEPA) recommended screening-level air quality model based on the AERMOD[2] modeling system. The AERSCREEN model consists of two main components: 1) the MAKEMET program which generates a site-specific matrix of screening-level meteorological conditions for input to the AERMOD model; and 2) the AERSCREEN command-prompt interface program. AERSCREEN interfaces with MAKEMET for generating the meteorological matrix, with AERMAP the terrain processor, and AERMOD dispersion model itself. For this application AERSCREEN was applied using model defaults for a screening level model.

Each vent was simulated in the model as a point source with a 1 g/s emission rate and 4-foot release height with no buoyancy or momentum out of the vent. This conservatism is included in the model since the vents do not release vertically to the atmosphere. Modeled concentrations were estimated by AERSCREEN at the nearest ambient boundary point determined to represent an approximate "worst case". For this application that point was determined to be almost due east of Vent GV09-05 at a distance of approximately 40 meters (see Figure 1). A total worst-case concentration from all five vents was then calculated based on the downwind distance from each vent to the point due east of GV09-05. This corresponds to a wind from the southwest which could cause overlap of the five plumes at this point. Each vent was modeled separately and the results were summed up to represent the total concentration at the worst case point as shown below.

Vent	Distance (m)	AERSCREEN 1-hour Result (ug/m3)
GV09-05	40	31,760
GV09-04	65	25,215
GV09-03	115	17,480
GV09-02	150	14,885
GV09-01	225	11,751
	Total	101,091

The AERSCREEN model provided results for the 1-hour averaging period. Scaling ratios from the AERSCREEN User's Guide were used to determine the 24-hour and annual averaging period using values of 0.6 and 0.1, respectively.

1 AERSCREEN User's Guide. USEPA-454/B-16-004 (December 2016). Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina.

2 User's Guide for the AMS/EPA Regulatory Model (AERMOD). USEPA-454/B-16-011 (December 2016). Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina.

3 State of Rhode Island and Providence Plantations Department of Environmental Management Office of Air Resources, Air Pollution Control Regulation No. 22, Air Toxics. October 9, 2008.

The AERSCREEN results in micrograms per cubic meter (ug/m3) were divided by the AAL for each air toxic compound. This was performed for each applicable averaging period: 1-hour, 24-hour, and annual. The AALs are taken from RIDEM Air Regulation 22[3], Table 1. Since the AERSCREEN model was used with a 1 g/s emission rate, the equation below results in the allowable emission rate in g/s which corresponds to the RIDEM AAL for each air toxic.

$$Allowable\ emission\ rate\ \left(\frac{g}{s}\right) = AERSCREEN\ 1\frac{g}{s} * \frac{RIDEM\ AAL\ \frac{ug}{m3}}{AERSCREEN\ \frac{ug}{m3}}$$

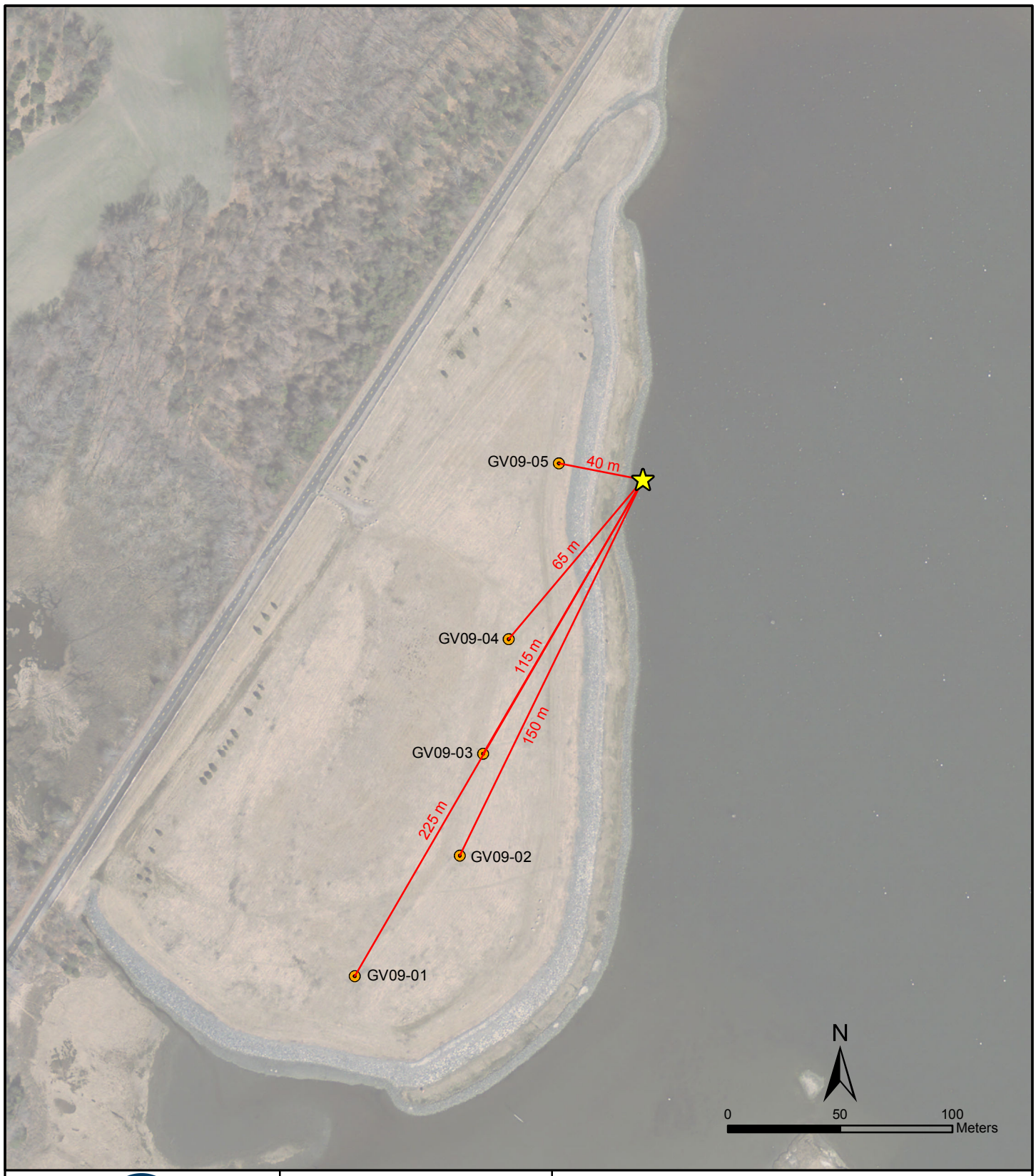
The minimum allowable g/s emission rate was chosen in instances where an air toxic has multiple AALs based on different averaging periods. All of the calculated g/s values from the five vents were added together and compared against the AAL based allowable emission rates for each compound as shown in Table 1. As a conservative measure, when adding the calculated g/s values from the five vents, the reporting limits for the nondetect results were used in the summation, and a total sum of the nondetect reporting limits and detected results (if any) for each compound was used for comparison against the AAL-based calculated allowable emission rates. For the field duplicate pair, the highest of the detected result or reporting limit was chosen for the summation. None of the summed calculated air toxic emission rates are above the AAL-based calculated allowable emission rate.

TABLE 1
DERIVATION OF RIDEM AAL BASED ALLOWABLE EMSSION RATES AND COMPARISON TO GAS VENT RESULTS
SITE 09 - ALLEN HARBOR LANDFILL
FORMER NCBC DAVISVILLE, NORTH KINGSTOWN, RHODE ISLAND

	1-hr	24-hr	Annual	
Screening Modeling results using 1 g/s	101,091	60,655	10,109	ug/m3

Chemical Name	Synonyms	CAS	Reg.22 Table I 1-hr AAL ug/m3	Reg.22 Table I 24-hr AAL ug/m3	Reg.22 Table I Annual AAL ug/m3	1 hour calculated *see note 1* g/s	24 hour calculated *see note 1* g/s	Annual calculated *see note 1* g/s	Allowable calculated *see note 3* g/s	Sum of five sampled vents g/s	Sampled g/s below allowable?
1,1,1,2-TETRACHLOROETHANE		630206	NA	100	NA	NA	1.65E-03	NA	1.65E-03	1.54E-08	Yes
1,1,1-TRICHLOROETHANE	Methyl Chloroform	71556	9,000	6,000	5,000	8.90E-02	9.89E-02	4.95E-01	8.90E-02	1.22E-08	Yes
1,1,2-TRICHLOROETHANE		79005	NA	10	NA	NA	1.65E-04	NA	1.65E-04	1.22E-08	Yes
1,1-DICHLOROETHANE	Ethyldiene Chloride	75343	NA	NA	1	NA	NA	5.94E-05	5.94E-05	9.06E-09	Yes
1,1-DICHLOROETHENE	Vinyldiene Chloride	75354	NA	200	70	NA	3.30E-03	6.92E-03	3.30E-03	8.88E-09	Yes
1,2-DICHLOROETHANE	Ethylene Dichloride	107062	NA	NA	0	NA	NA	3.96E-06	3.96E-06	9.06E-09	Yes
1,2-DICHLOROPROPANE	Propylene Dichloride	78875	200	4	0	1.98E-03	6.59E-05	9.89E-06	9.89E-06	1.03E-08	Yes
2-BUTANONE	Methyl Ethyl Ketone	78933	10,000	5,000	NA	9.89E-02	8.24E-02	NA	8.24E-02	1.13E-08	Yes
2-HEXANONE	Methyl Butyl Ketone	591786	NA	NA	NA	*NA, See Note 4*			NC	9.61E-09	Not Applicable
4-METHYL-2-PENTANONE	Methyl Isobutyl Ketone (Hexanone)	108101	NA	3,000	NA	NA	4.95E-02	NA	4.95E-02	9.17E-09	Yes
ACETONE		67641	60,000	30,000	NA	5.94E-01	4.95E-01	NA	4.95E-01	7.69E-08	Yes
BENZENE		71432	30	20	0	2.97E-04	3.30E-04	9.89E-06	9.89E-06	7.15E-09	Yes
BROMODICHLOROMETHANE		75274	100	70	0	9.89E-04	1.15E-03	2.97E-06	2.97E-06	1.50E-08	Yes
BROMOFORM		75252	2,000	70	1	1.98E-02	1.15E-03	8.90E-05	8.90E-05	2.31E-08	Yes
CARBON DISULFIDE		75150	6,000	NA	700	5.94E-02	NA	6.92E-02	5.94E-02	1.59E-08	Yes
CARBON TETRACHLORIDE		56235	2,000	200	0	1.98E-02	3.30E-03	6.92E-06	6.92E-06	1.41E-08	Yes
CHLOROBENZENE		108907	NA	NA	1,000	NA	NA	9.89E-02	9.89E-02	1.03E-08	Yes
CHLOROETHANE	Ethyl Chloride	75003	40,000	10,000	NA	3.96E-01	1.65E-01	NA	1.65E-01	5.91E-09	Yes
CHLOROFORM		67663	100	NA	0	9.89E-04	NA	1.98E-05	1.98E-05	1.09E-08	Yes
CHLOROMETHANE	Methyl Chloride	74873	1,000	400	90	9.89E-03	6.59E-03	8.90E-03	6.59E-03	4.63E-09	Yes
CIS-1,2-DICHLOROETHENE		156592	3,000	1,000	NA	2.97E-02	1.65E-02	NA	1.65E-02	9.05E-09	Yes
CIS-1,3-DICHLOROPROPENE	*1,3-Dichloropropene - See Note 5*	542756	NA	20	0	NA	3.30E-04	1.98E-05	1.98E-05	1.02E-08	Yes
DIBROMOCHLOROMETHANE		124481	300	70	NA	2.97E-03	1.15E-03	NA	1.15E-03	1.91E-08	Yes
ETHYLBENZENE		100414	40,000	3,000	1,000	3.96E-01	4.95E-02	9.89E-02	4.95E-02	9.72E-09	Yes
METHANE		74828	NA	NA	NA	*NA, See Note 6*			NC	6.21E-03	Not Applicable
METHYLENE CHLORIDE		75092	2,000	1,000	2	1.98E-02	1.65E-02	1.98E-04	1.98E-04	7.78E-09	Yes
O-XYLENE	Xylenes, isomers and mixtures	1330207	9,000	3,000	100	8.90E-02	4.95E-02	9.89E-03	9.89E-03	9.72E-09	Yes
P-XYLENE	Xylenes, isomers and mixtures	1330207	9,000	3,000	100	8.90E-02	4.95E-02	9.89E-03	9.89E-03	1.94E-08	Yes
STYRENE		100425	9,000	1,000	100	8.90E-02	1.65E-02	9.89E-03	9.89E-03	9.54E-09	Yes
TETRACHLOROETHENE	Tetrachloroethylene	127184	1,000	NA	0	9.89E-03	NA	1.98E-05	1.98E-05	1.52E-08	Yes
TOLUENE		108883	4,000	NA	300	3.96E-02	NA	2.97E-02	2.97E-02	8.44E-09	Yes
TRANS-1,2-DICHLOROETHENE		156605	800	NA	70	7.91E-03	NA	6.92E-03	6.92E-03	8.88E-09	Yes
TRANS-1,3-DICHLOROPROPENE	*1,3-Dichloropropene - See Note 7*	542756	NA	20	2	NA	3.30E-04	1.98E-04	1.98E-04	1.02E-08	Yes
TRICHLOROETHENE	Trichloroethylene	79016	10,000	500	1	9.89E-02	8.24E-03	4.95E-05	4.95E-05	1.27E-08	Yes
VINYL CHLORIDE		75014	1,000	100	0	9.89E-03	1.65E-03	1.98E-05	1.98E-05	1.11E-08	Yes

Notes
1 : Calculated g/s values are RIDEM Aceptable Ambient Level (AAL) divided by the screening model result
2: NA - There is no established AAL for this time period.
3 : Allowable calculated g/s based on minimum calculated g/s for the 1-hour, 24-hour, and annual modeling time periods
4 : 2-HEXANONE / Methyl Butyl Ketone not found in Regulation 22 Table I
5 : Used non-specific 1,3-Dichloropropene because CAS 10061015 specific to cis-, not in Regulation 22 Table I
6 : METHANE not found in Regulation 22 Table I
7 : Used non-specific 1,3-Dichloropropene because CAS 10061026 specific to trans-, not in Regulation 22 Table I
8 : For nondetect results, the reporting limits were used in the summation of the five gas vent results
9: NC - Not Calculated
Units
ug/m3 - Microgram per cubic meter
g/s - Gram per second



RESOLUTION CONSULTANTS

Drawn:	JB	05/08/2017
Approved:	MS	05/08/2017
Project #:	60273164	

Legend

- Gas Vent
- Maximum Point for Modeling

FIGURE 1
AEROSCREEN MODEL DISTANCES

IRP SITE 09, NCBC DAVISVILLE
NORTH KINGSTOWN,
RHODE ISLAND

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